

規 格 承 認 書
SPECIFICATION FOR APPROVAL

客戶名稱：
CUSTOMER:

客戶料號：
CUSTOMER NO:

品 名
PATR NAME: 4G/5G SUB6 Antenna

RS 料號
RS NO: D410.C2.0.999

SUPPLIER SIGNATURE (供方確認)		
APPROVAL	CHECK	DESIGN
king	Frank	HZH

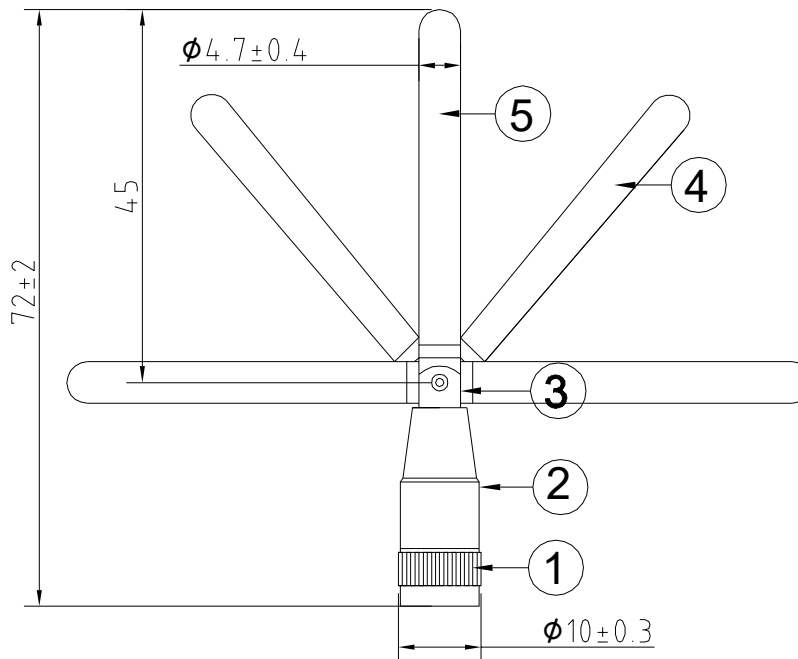
CUSTOMER APPROVED BY (客戶確認)		
APPROVAL	CHIEF	SUPERVISOR

規 格 承 認 書
SPECIFICATION FOR APPROVAL

NO.	Contents(內容)	Number of Page(頁數)	Page Code(頁碼)
1	Spec Cover(承認書封面)		
2	Spec Item(承認書項目表)		
3	Product pictures(產品圖片)		
4	Product specification description(產品規格描述)		
5	Drawing(工程圖)		
6	Packing specification(包裝規範)		
7	Network test(測試)		

产品照片
Product Photos





ENVIRONMENTAL

Temperature Range	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

ELECTRICAL

Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni Directional
Input Power	10W

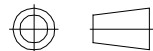
MECHNICAL

Antenna Length	72mm
Antenna Diameter	10mm
Casing	ABS
Connector	SMA(M)
Weigth	8.2g

BOM

NO	Name	Material	Finish	QTY
1	SMA Male	BRASS	NI	1
2	Base	ABS	BLACK	1
3	Hinge	BRASS	NI	1
4	Whip	ABS	BLACK	1
5	ANTENNA	BRASS		1

THIRD ANGLE
PROJECTION



Tolerance
 . X ±0.1
 . XX ±0.05
 . x ±1°

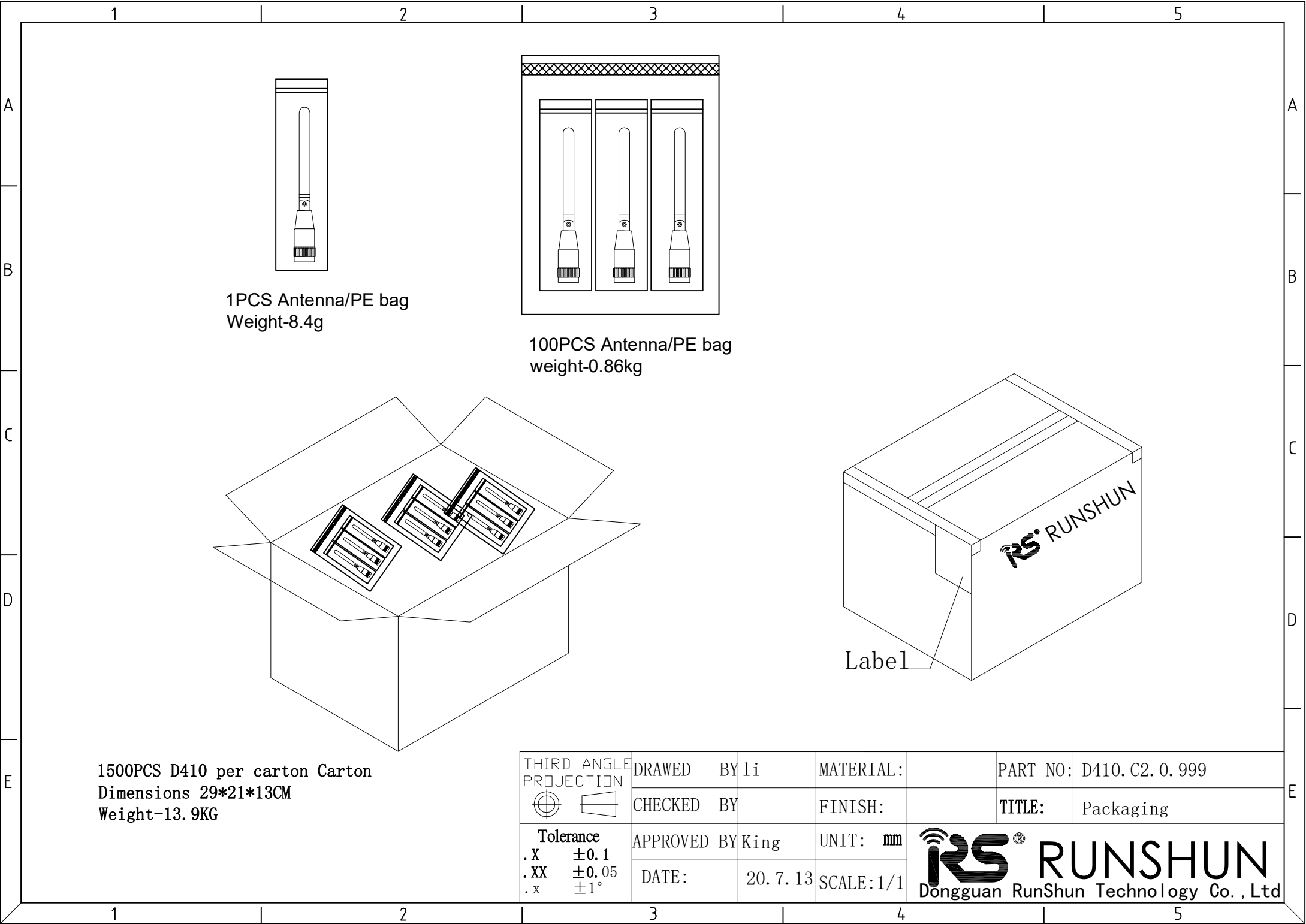
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CHECKED BY FINISH: TITLE: 3G/4G/5G Antenna

APPROVED BY King UNIT: mm

DATE: 20.7.13 SCALE: 1/1



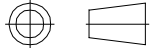



1PCS Antenna/PE bag
Weight-8.4g

100PCS Antenna/PE bag
weight-0.86kg

1500PCS D410 per carton Carton
Dimensions 29*21*13CM
Weight-13.9KG

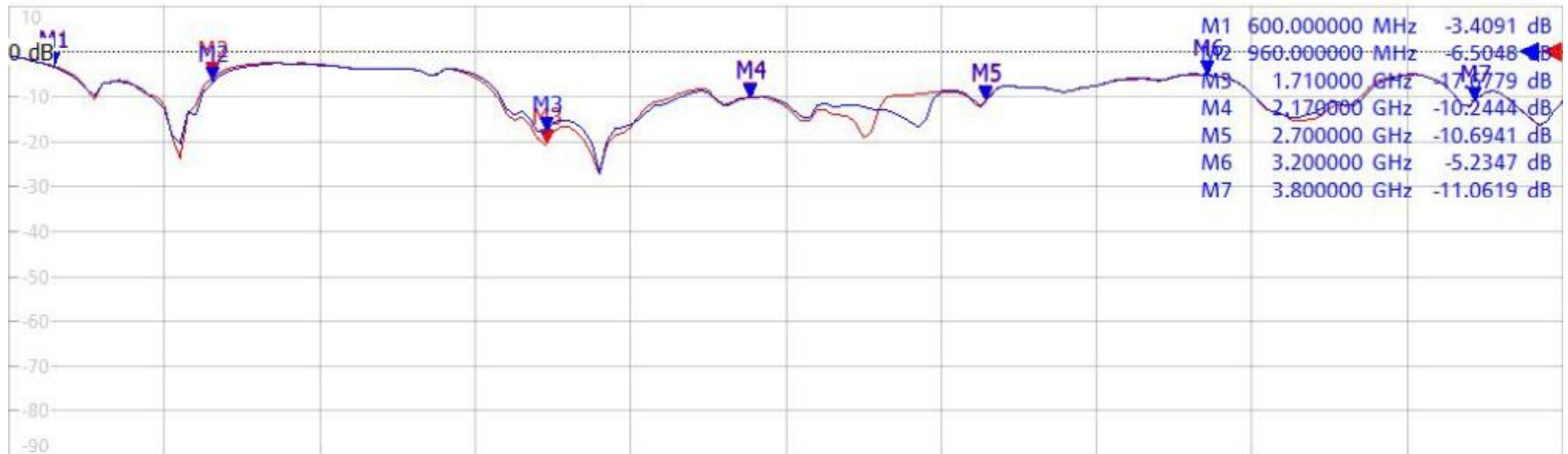
Label

THIRD ANGLE PROJECTION  Tolerance .X ±0.1 .XX ±0.05 .x ±1°	DRAWN BY li	MATERIAL:	PART NO: D410.C2.0.999	
	CHECKED BY	FINISH:	TITLE: Packaging	
	APPROVED BY King	UNIT: mm	 Dongguan RunShun Technology Co., Ltd	
	DATE: 20.7.13	SCALE: 1/1		



Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal Mem3[Trc1] — S11 dB Mag 10 dB/ Ref 0 dB

1



Ch1 Start 500 MHz Pwr -10 dBm Bw 10 kHz Stop 4 GHz

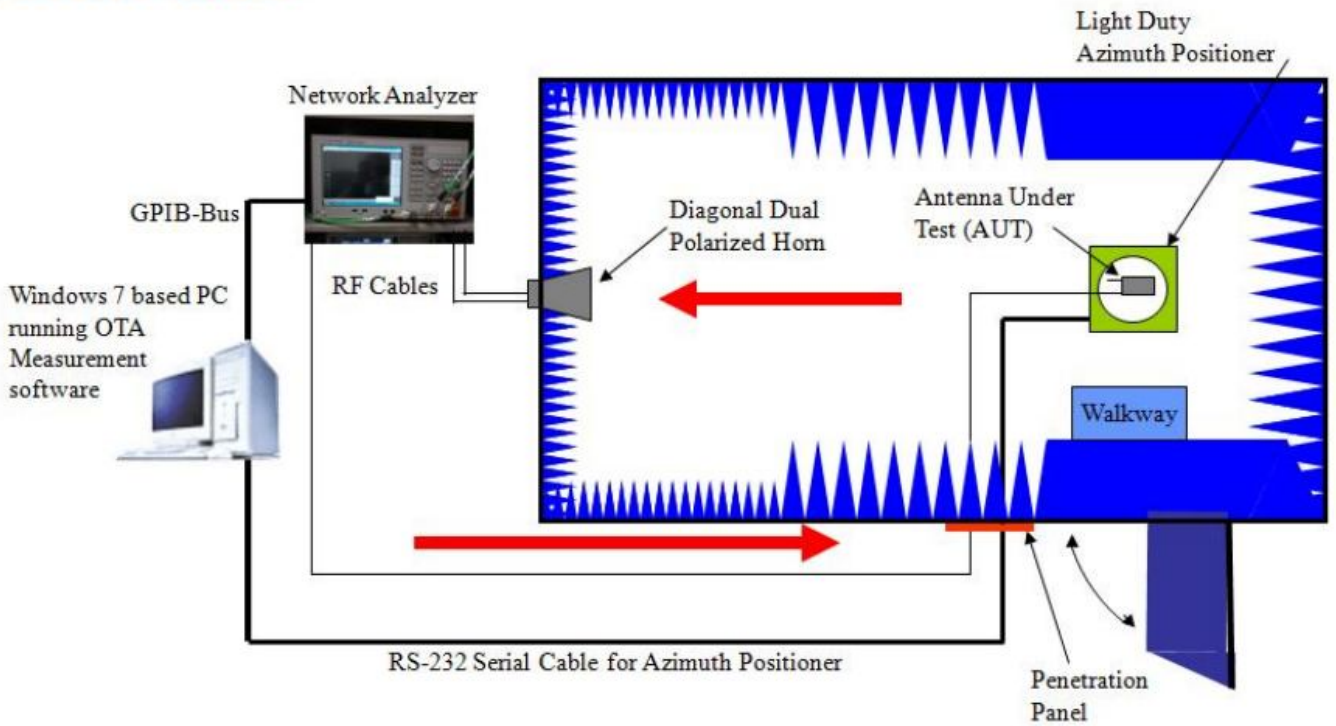
Trc2 — S11 SWR 1 U/ Ref 1 U Cal Mem4[Trc2] — S11 SWR 1 U/ Ref 1 U

2



Ch1 Start 500 MHz Pwr -10 dBm Bw 10 kHz Stop 4 GHz

Passive mode

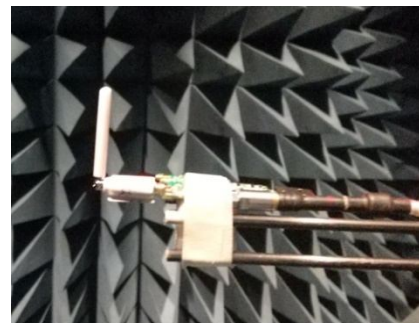
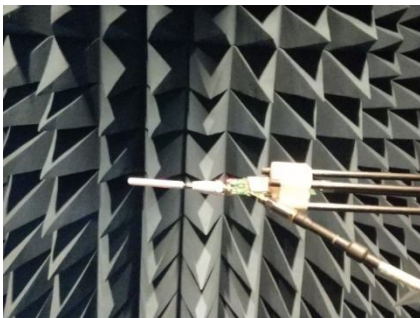
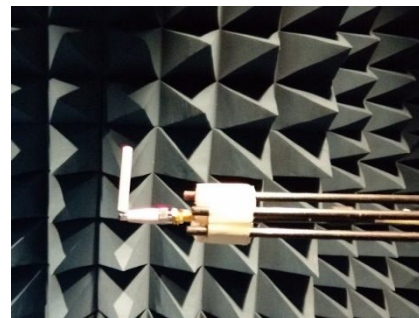
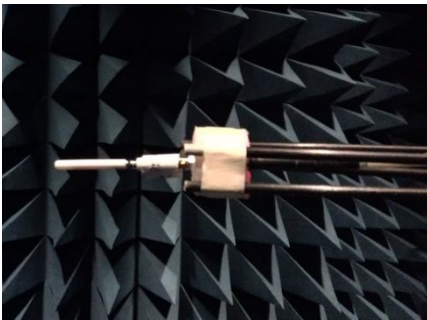


TEST INSTRUMENT :

1. AGILENT E5071C NETWORK ANALYZER
2. 3D OTA Chamber(WanShih)

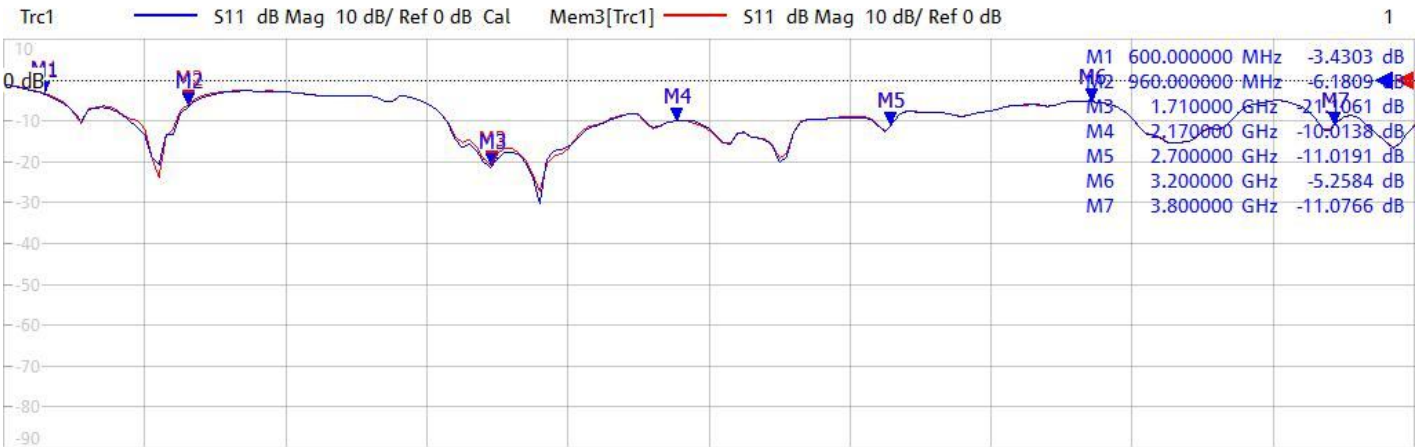
Anechoic Chamber External Dimensions

(L x W x H): 8m x 4m x 4m

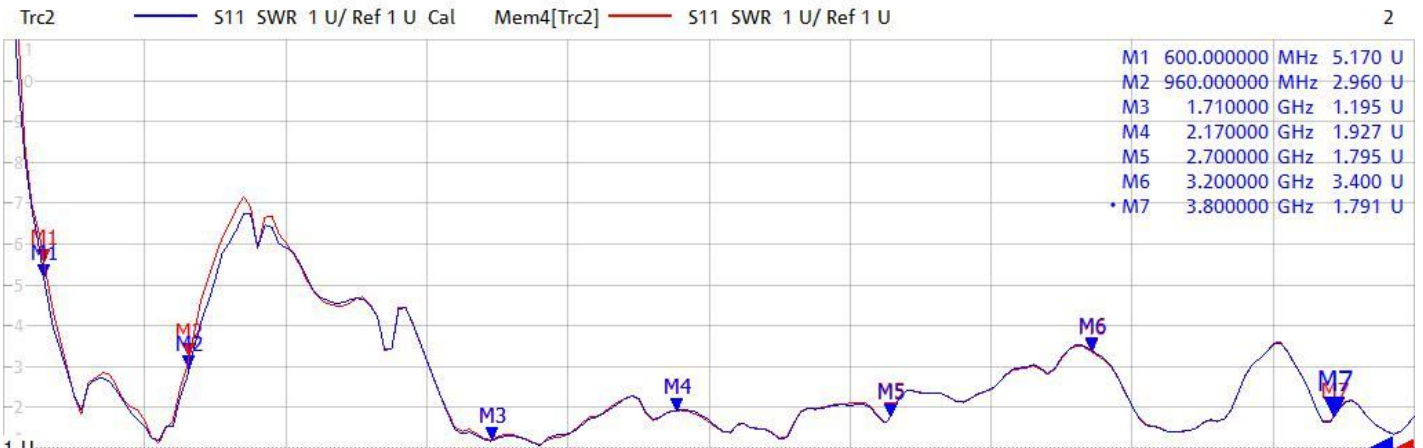


VSWR

5/28/2020 9:04:55 AM
1328.5170K92-101595-Kd



Ch1 Start 500 MHz Pwr -10 dBm Bw 10 kHz Stop 4 GHz



Ch1 Start 500 MHz Pwr -10 dBm Bw 10 kHz Stop 4 GHz

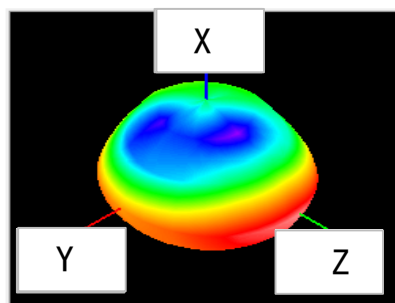
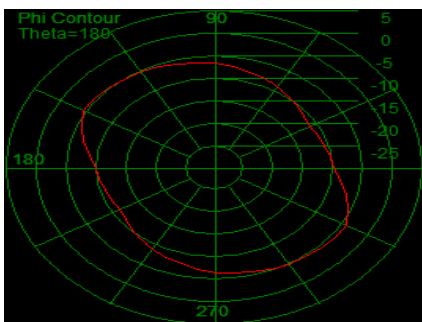
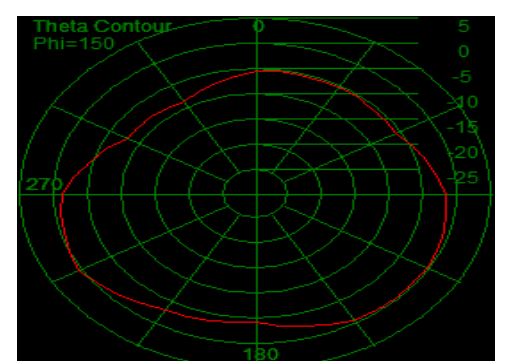
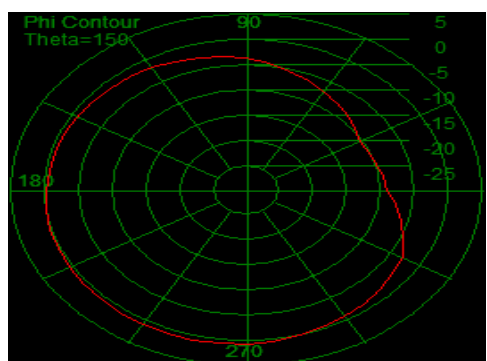
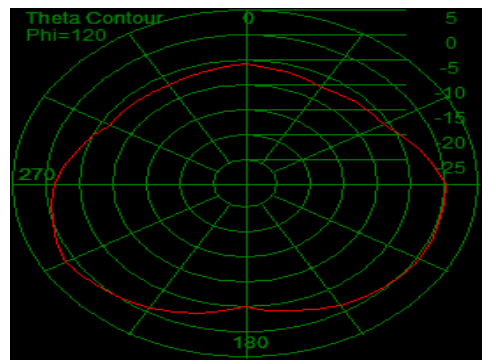
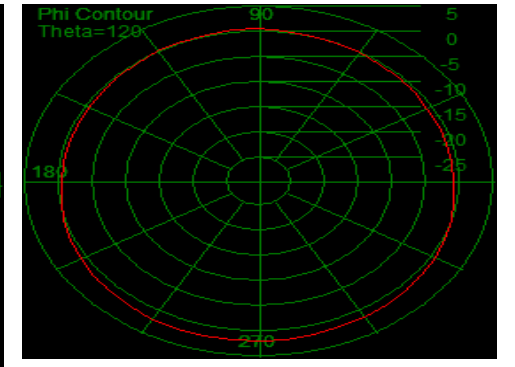
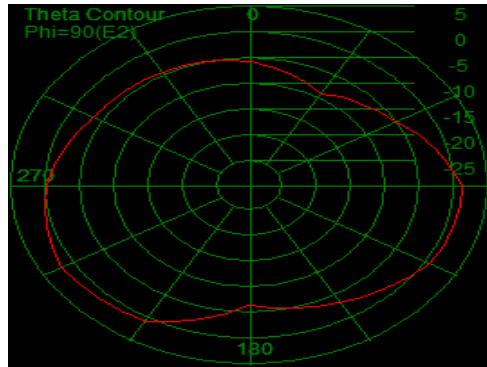
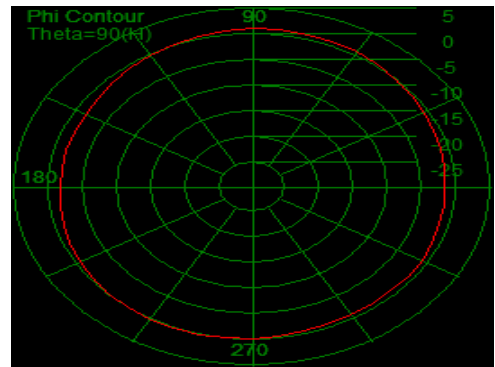
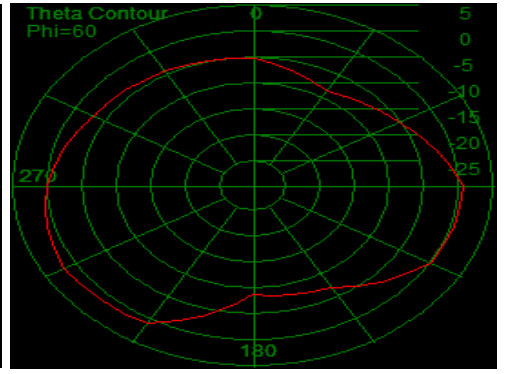
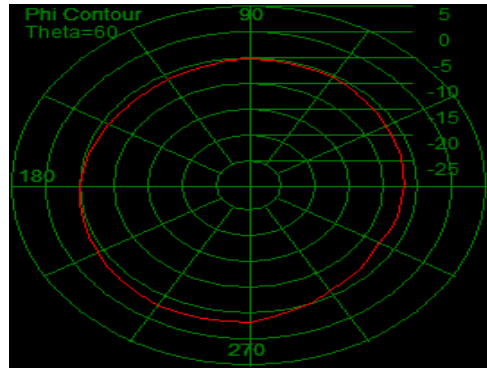
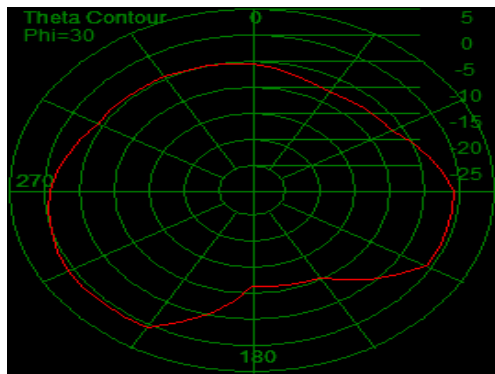
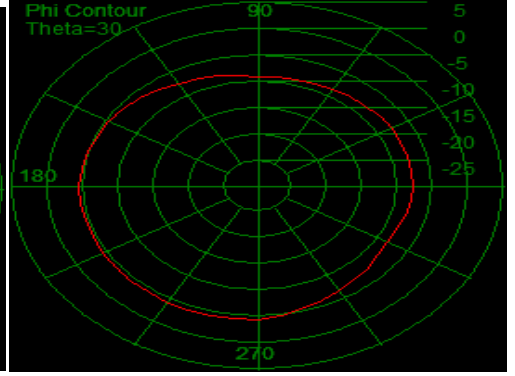
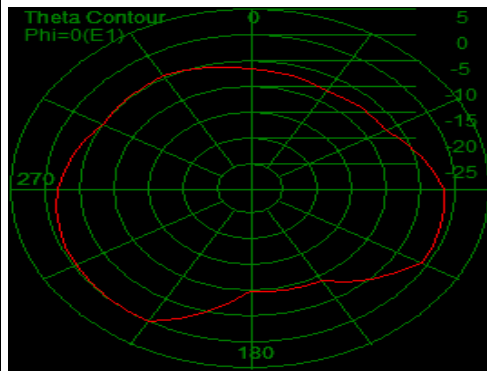
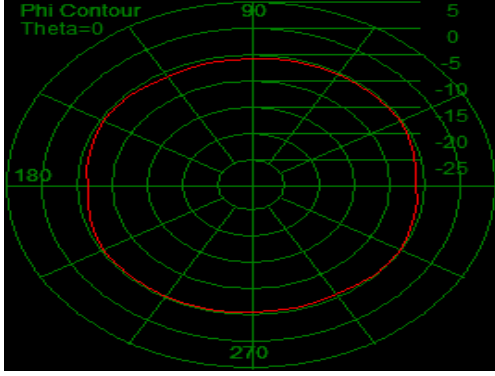


Parameter

Antenna-90° Gain table				Antenna-180° Gain table			
Frequency	Gain (dBi)	Efficiency (%)	Efficiency (dB)	Frequency	Gain (dBi)	Efficiency (%)	Efficiency (dB)
698MHZ	1.53	51%	-4.08	698MHZ	1.38	42.8%	3.69
704MHZ	0.5	37.3%	4.3	704MHZ	0.49	40.3%	3.86
751MHZ	0.87	46.6%	-4.36	751MHZ	1.66	51.6%	-2.87
824MHZ	2.35	63.6%	-1.97	824MHZ	2.79	65.0%	-1.87
960MHZ	2.56	61.6%	-2.1	960MHZ	2.89	65.0%	-1.87
1710MHZ	3.94	61.7%	-2.09	1710MHZ	4.17	64.0%	-1.94
1880MHZ	4.31	64.5%	-1.9	1880MHZ	4.27	58.4%	-2.33
1990MHZ	4.37	66.9%	-1.75	1990MHZ	3.28	58.3%	-2.34
2170MHZ	2.42	43.9%	-3.58	2170MHZ	0.36	39.6%	-4.02
2300MHZ	0.45	30.9%	-5.1	2300MHZ	1.22	50.6%	-2.95
2500MHZ	0.71	56.1%	-2.51	2500MHZ	1.86	59.4%	-2.26
2690MHZ	0.8	45.1%	-3.46	2690MHZ	1.27	48.5%	-3.154
3400MHZ	4.0	46.1%	-3.37	3400MHZ	3.8	48.4%	-3.15
3500MHZ	5.32	54.9%	-2.6	3500MHZ	4.52	57.0%	-2.44
3600MHZ	5.15	52.9%	-2.76	3600MHZ	3.02	52.2%	-2.83
4000MHZ	2.8	48.0%	-3.19	4000MHZ	2.66	50.4%	-2.97

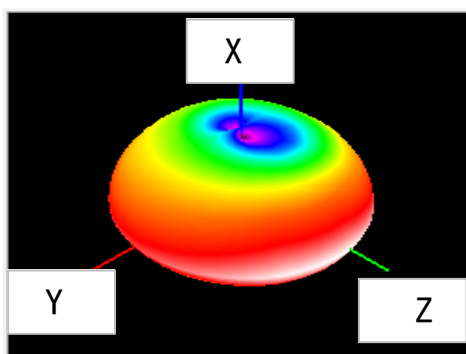
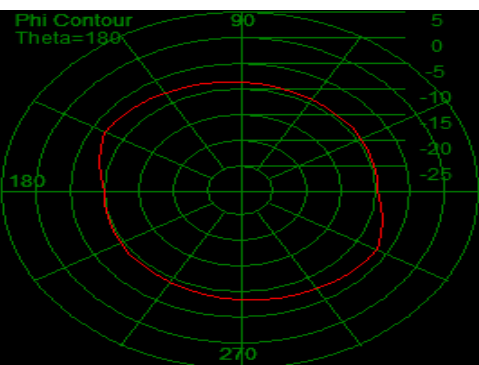
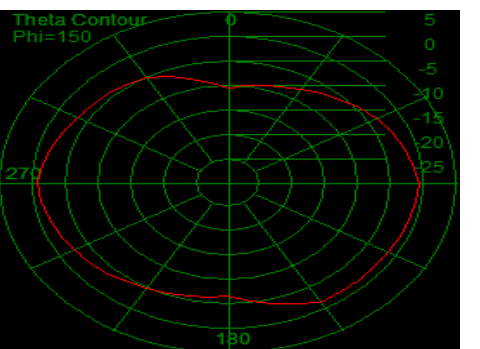
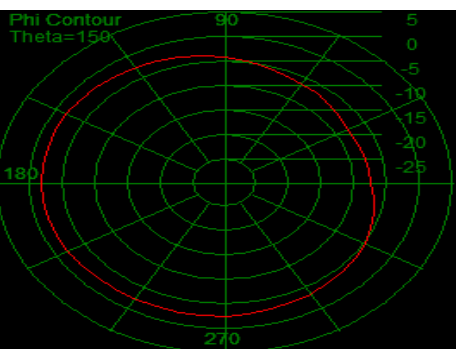
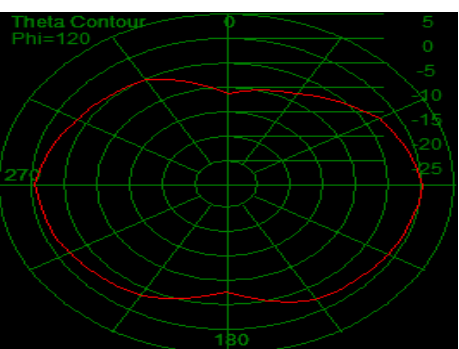
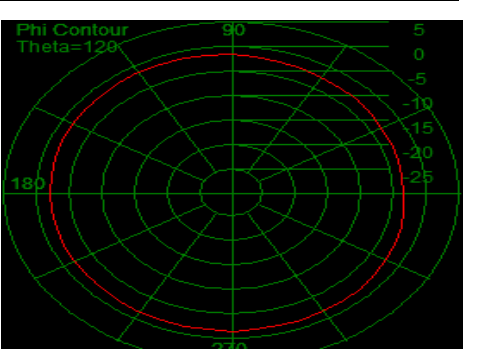
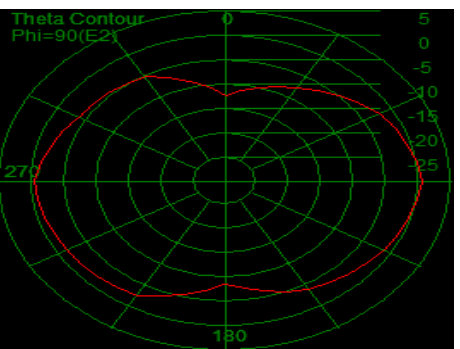
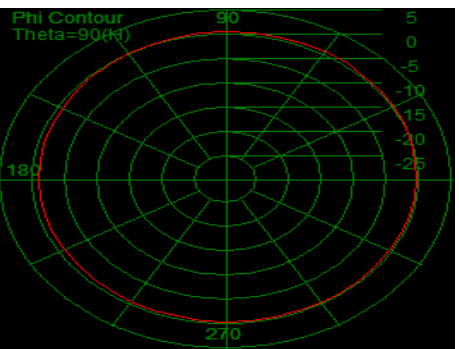
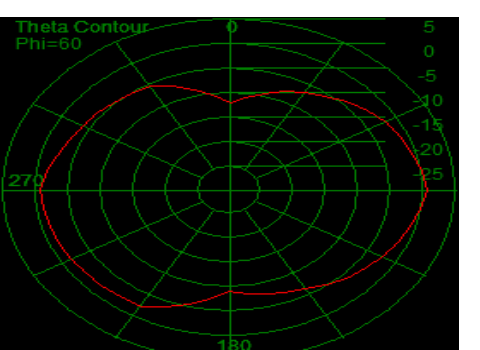
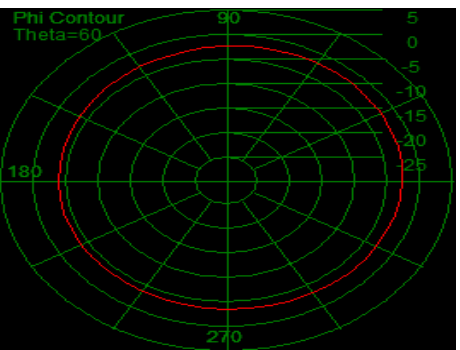
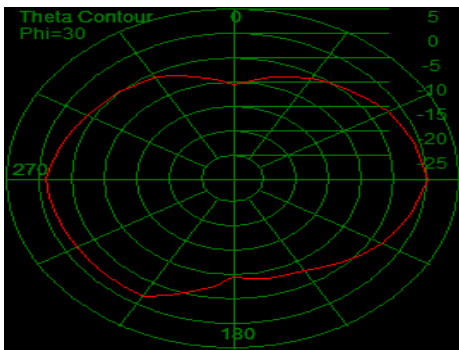
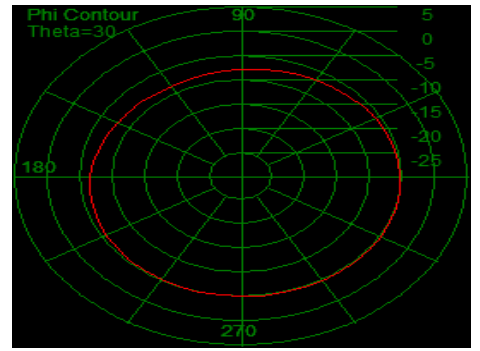
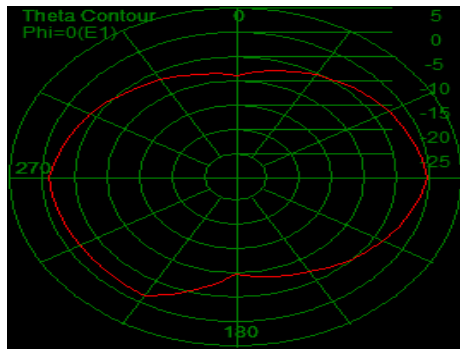
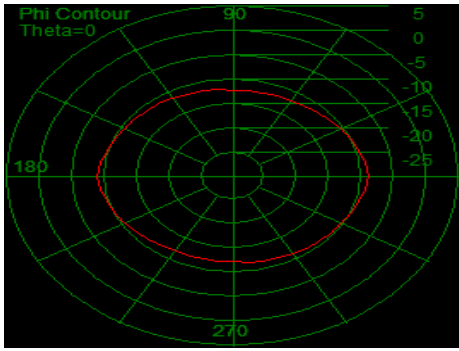
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

698MHZ



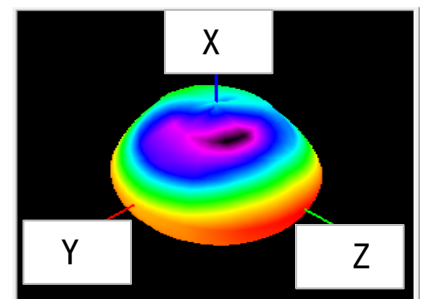
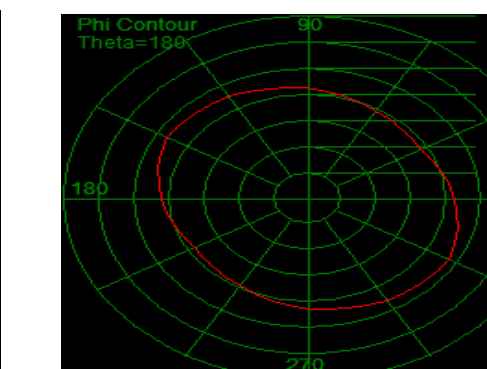
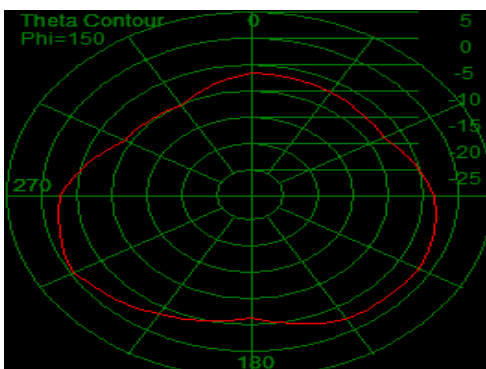
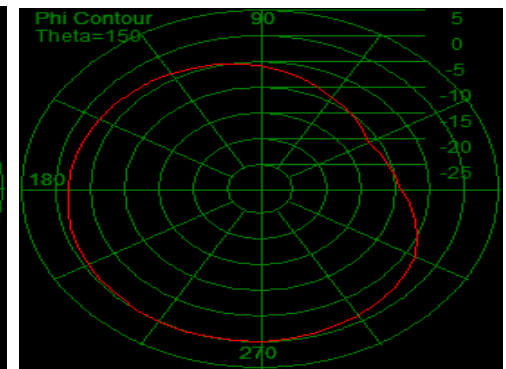
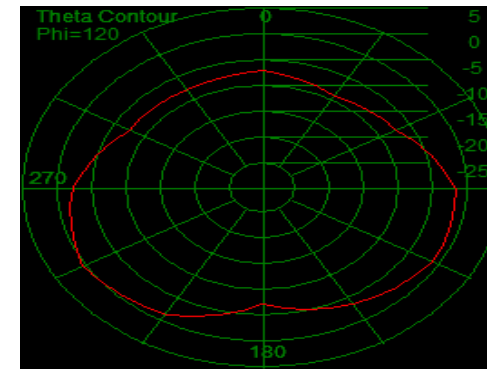
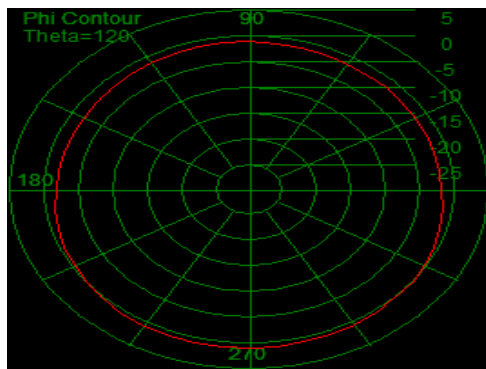
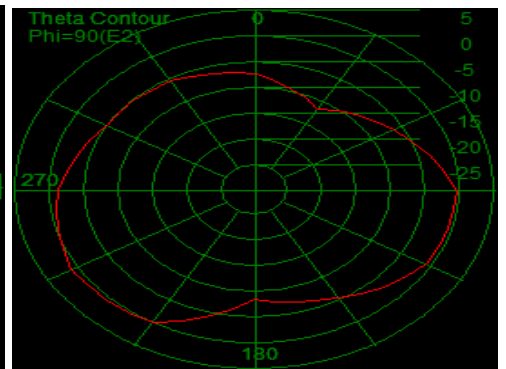
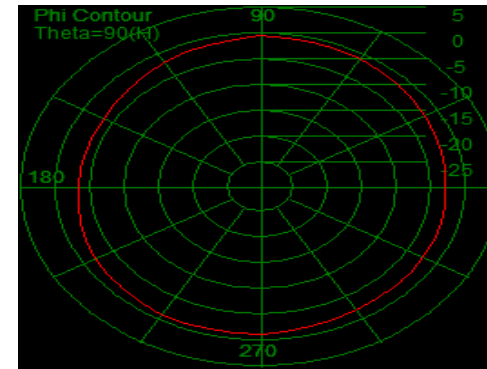
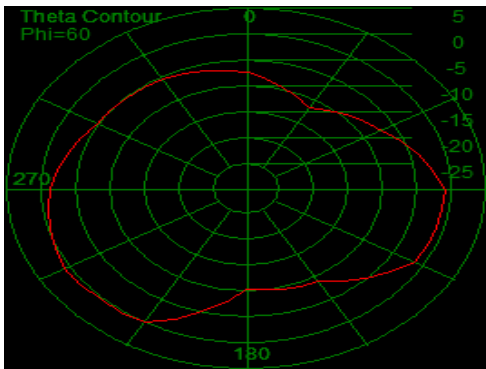
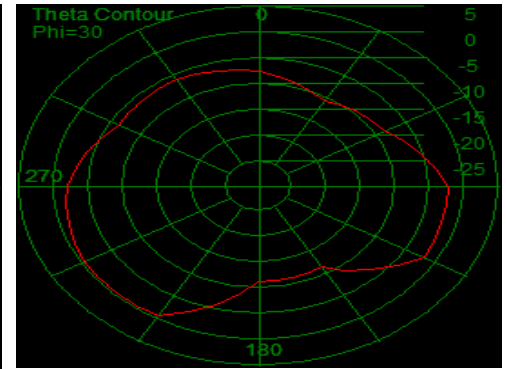
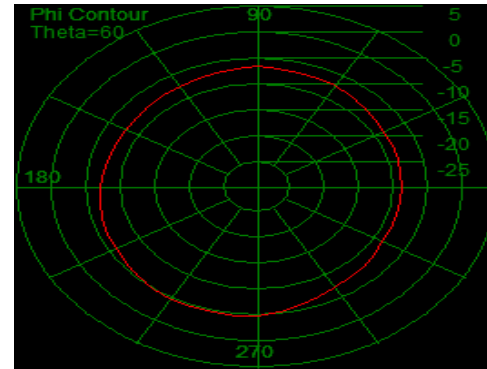
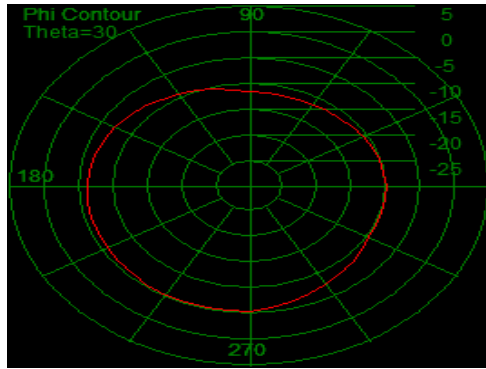
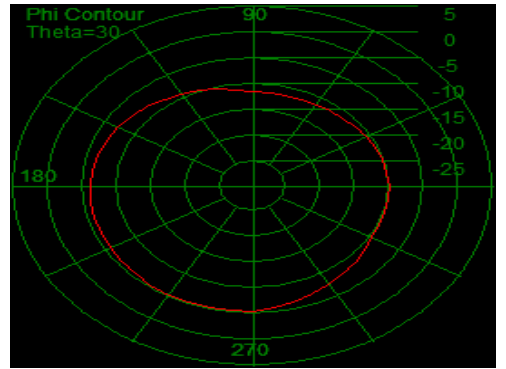
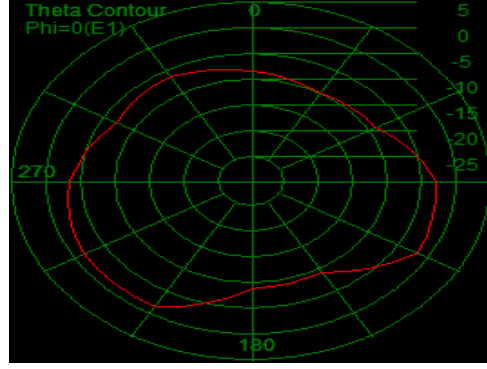
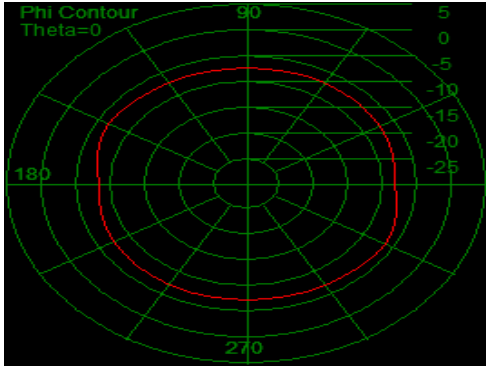
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

704MHZ



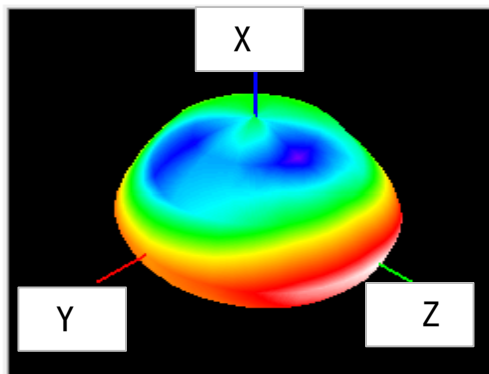
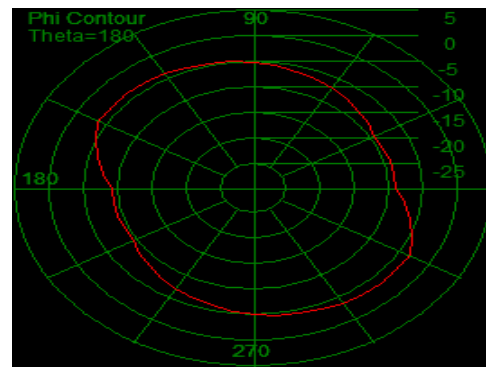
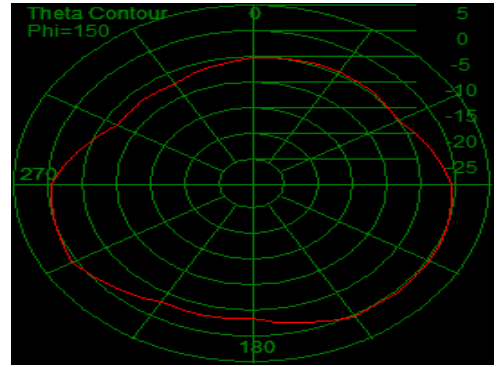
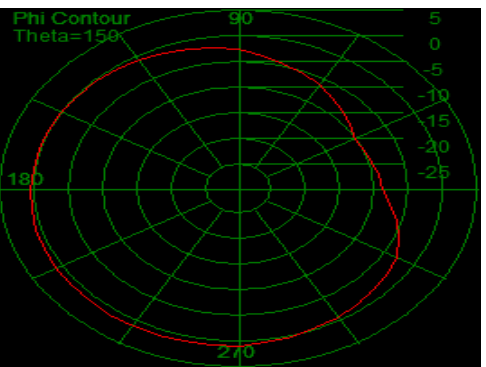
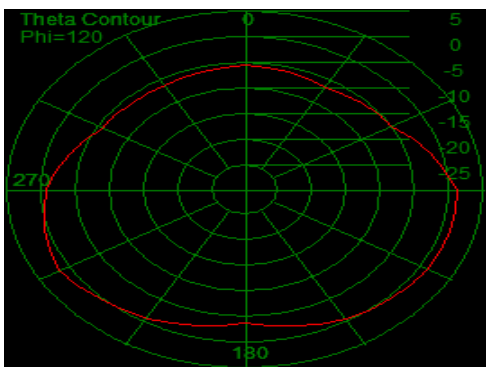
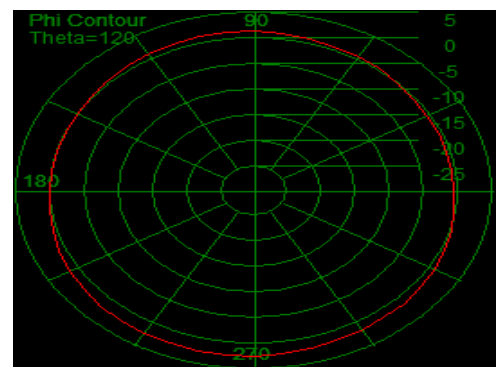
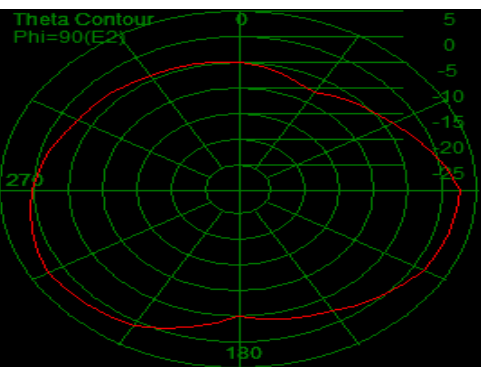
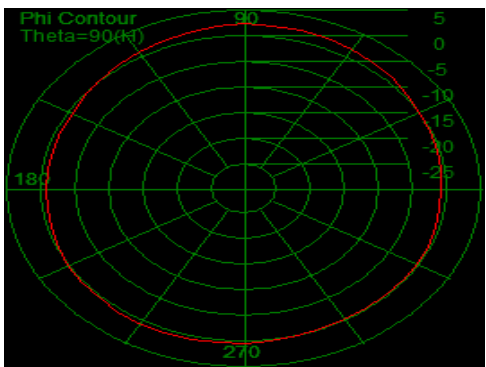
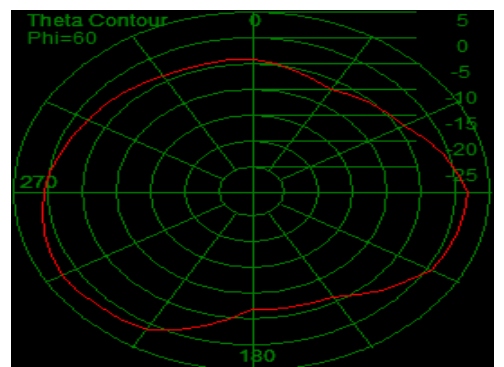
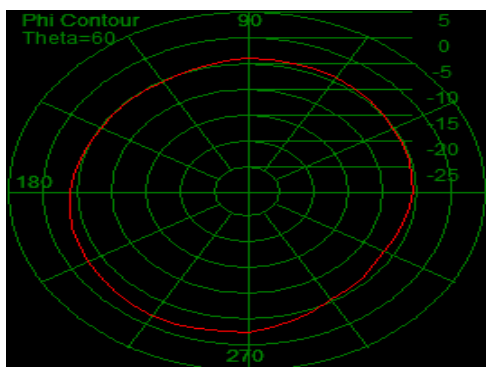
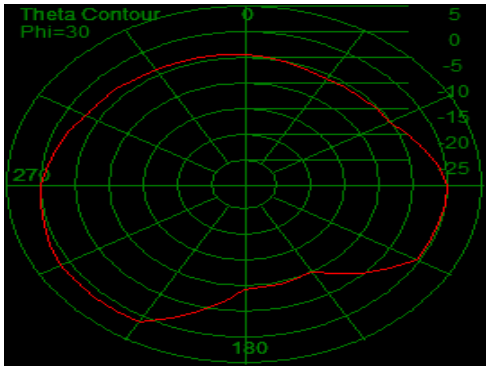
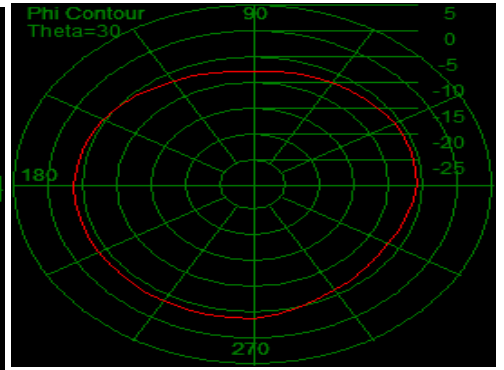
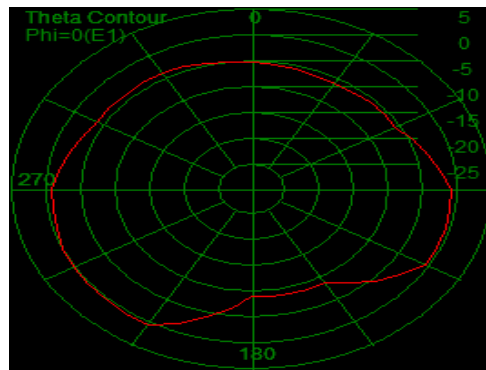
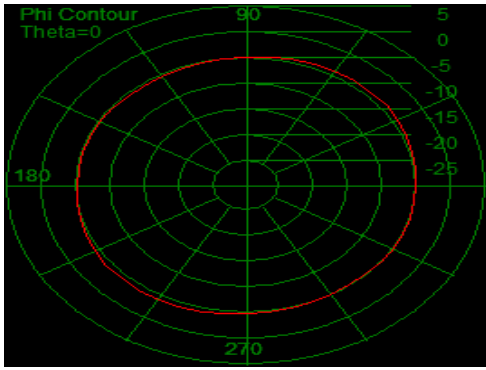
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

751MHZ



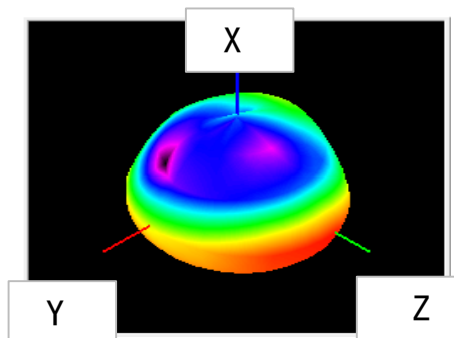
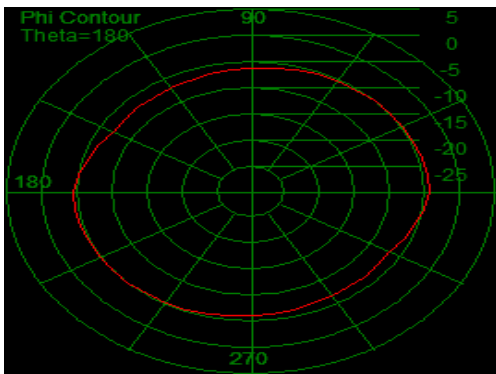
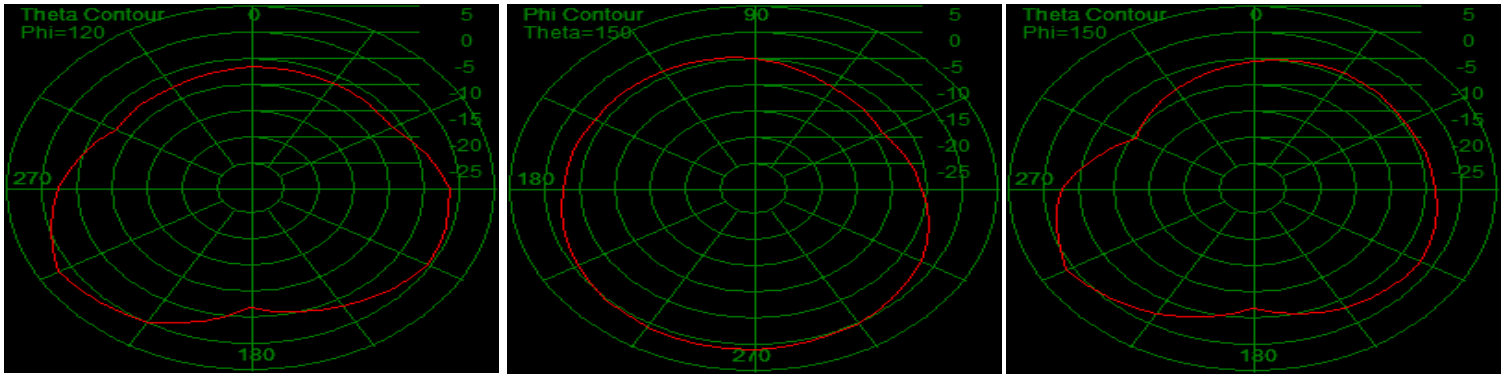
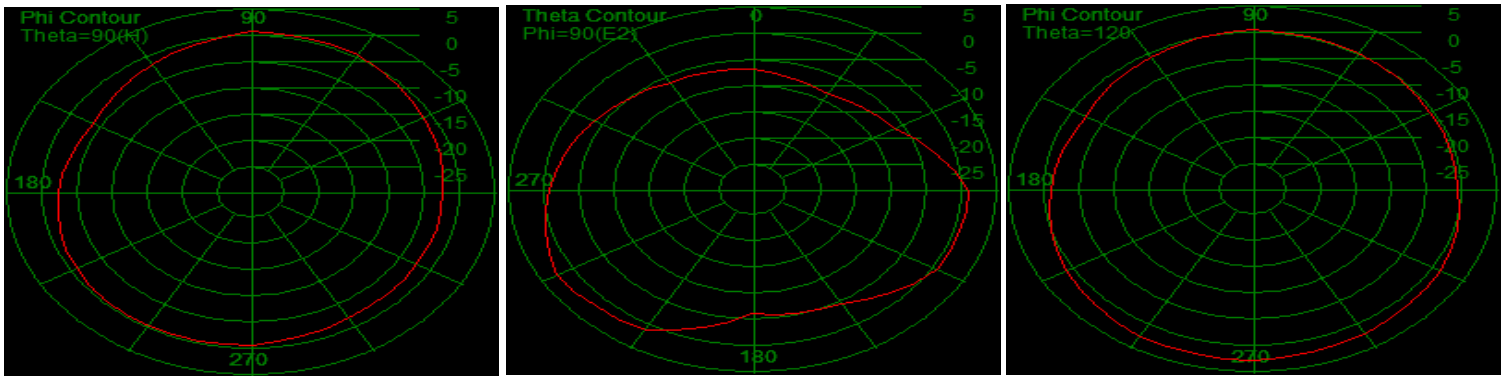
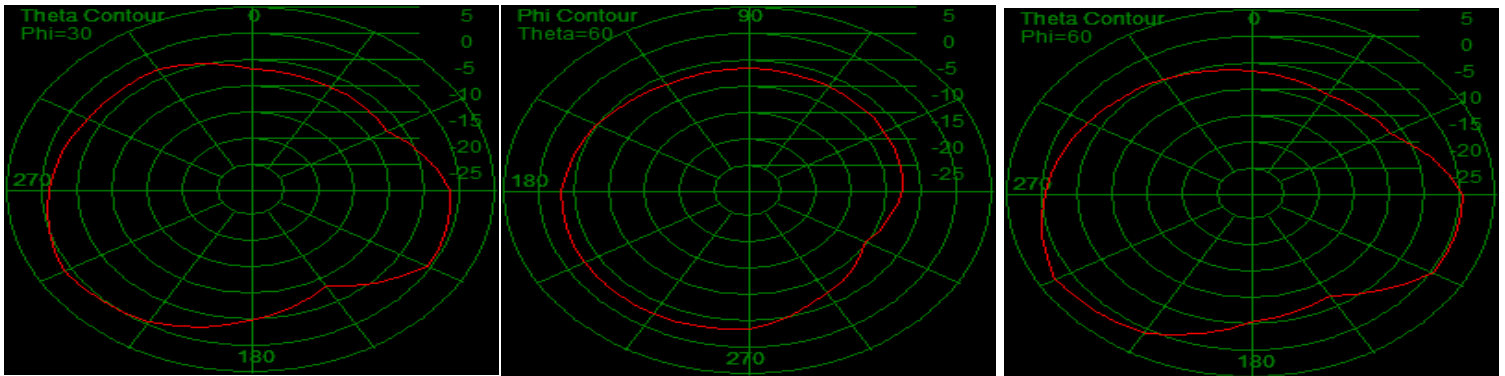
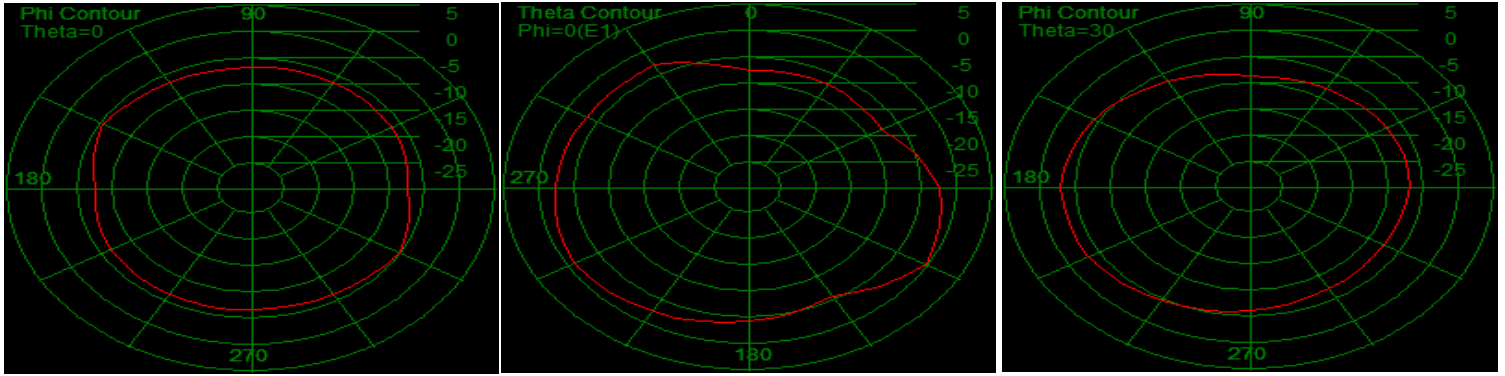
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

824MHZ



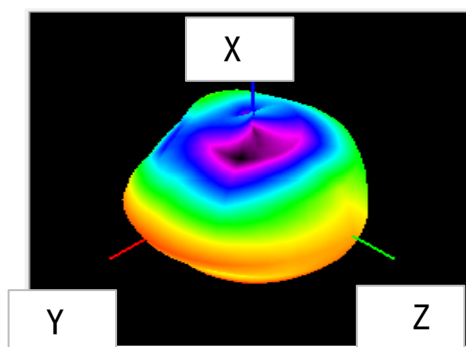
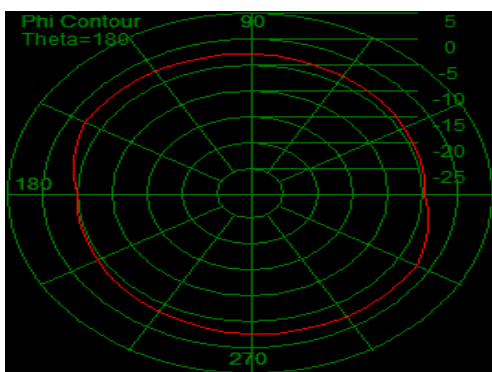
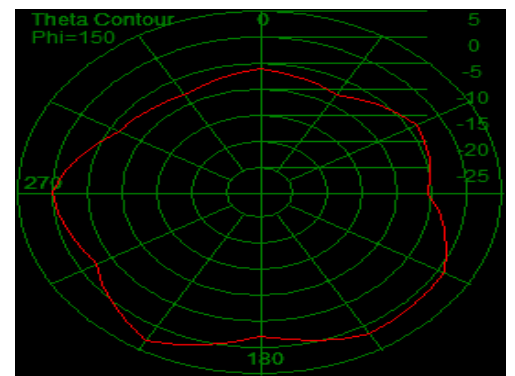
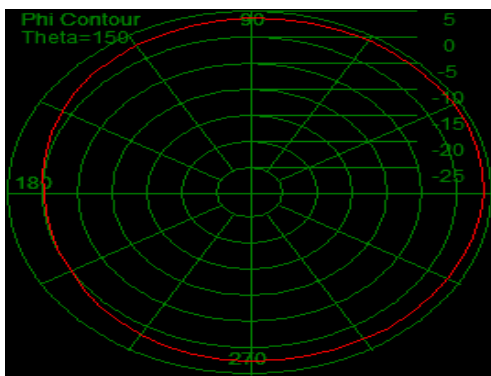
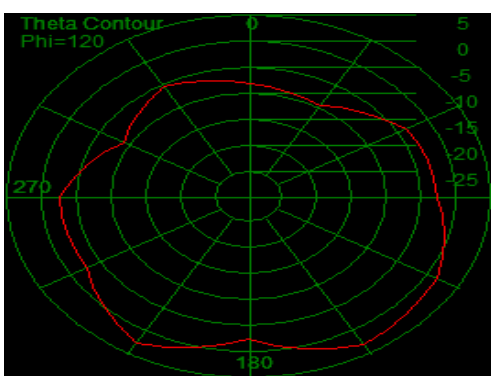
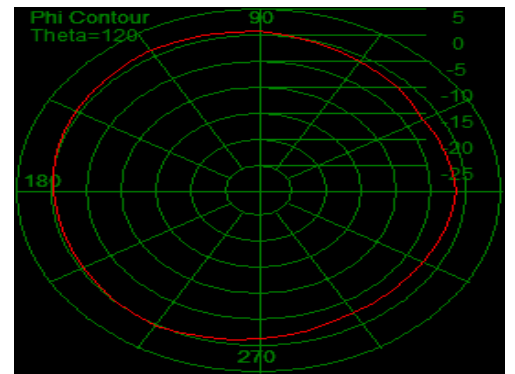
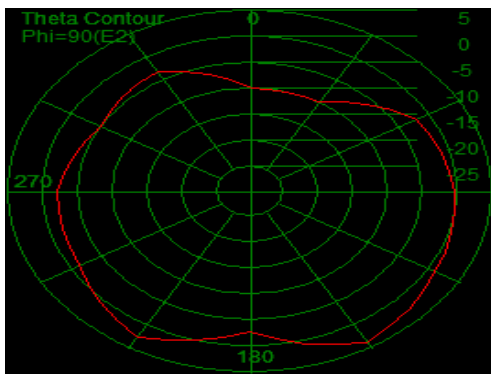
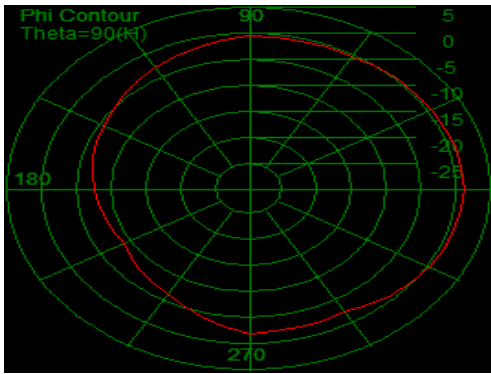
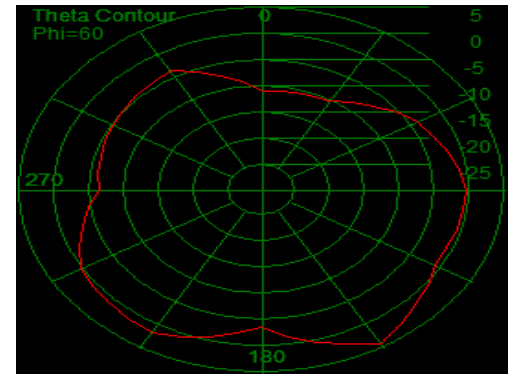
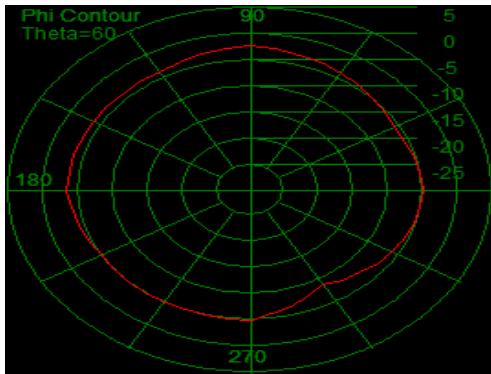
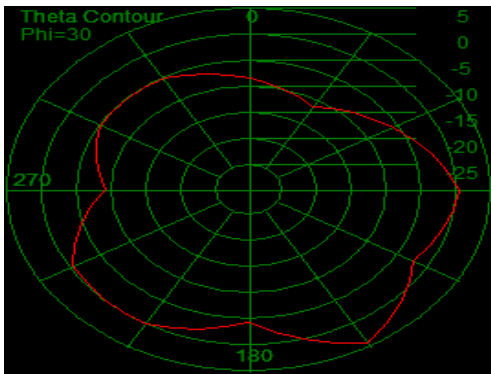
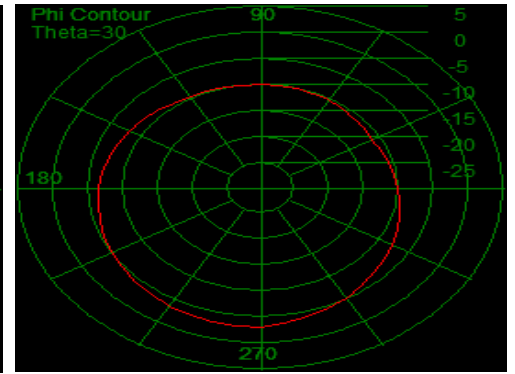
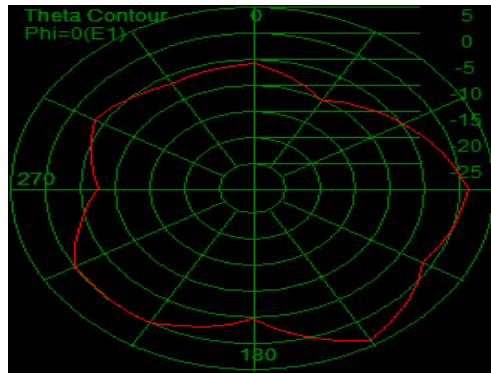
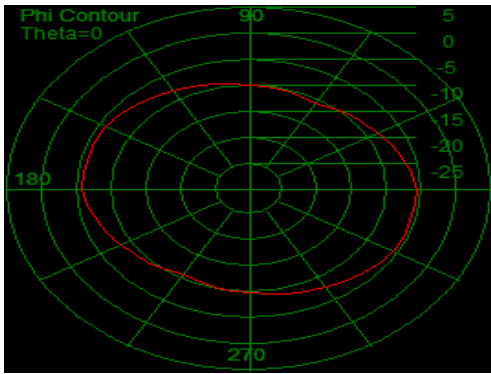
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

960MHZ



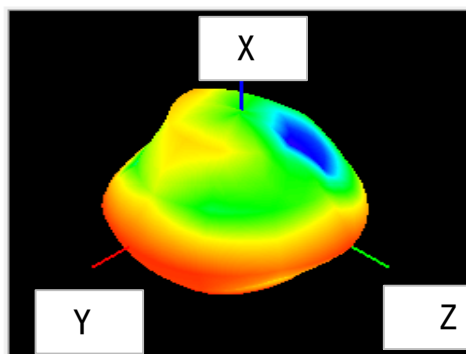
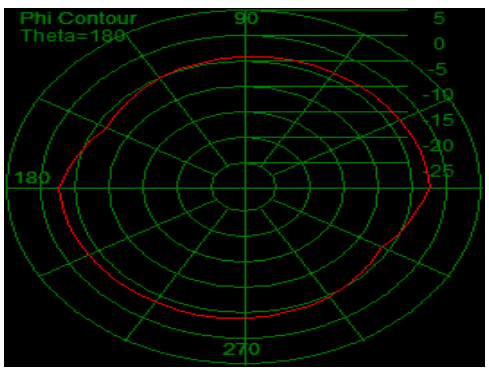
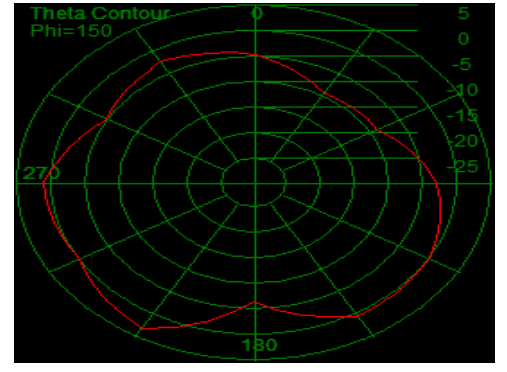
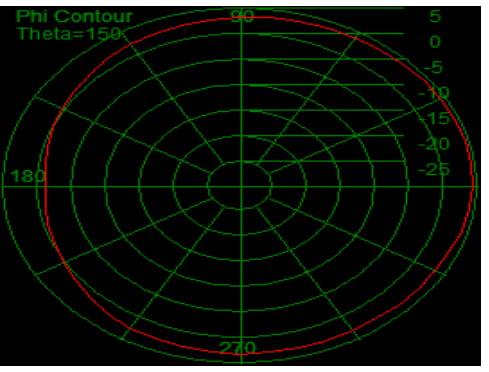
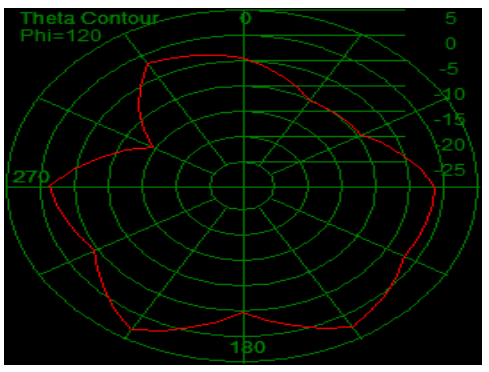
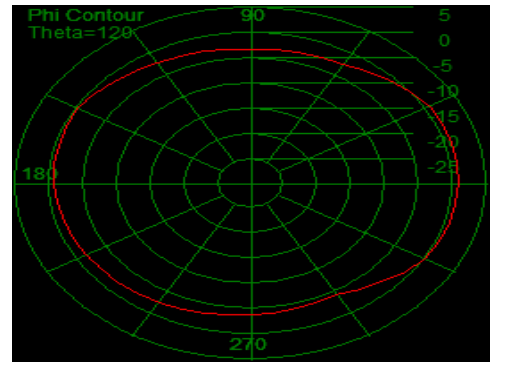
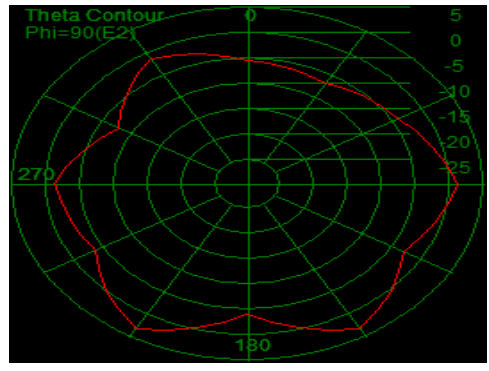
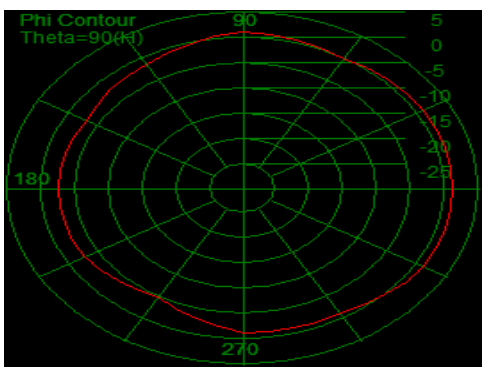
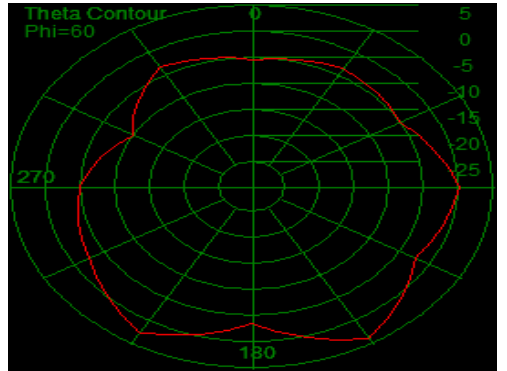
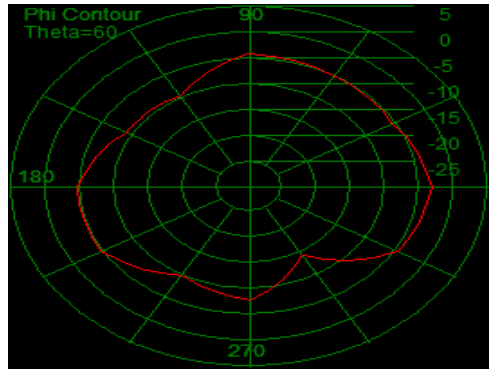
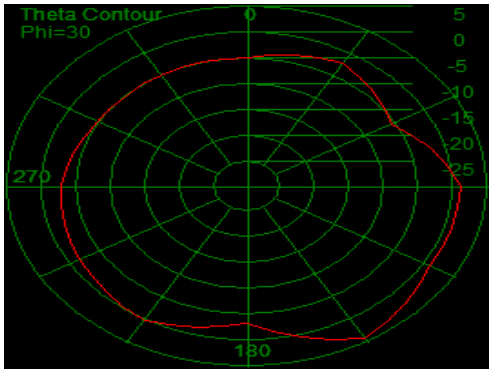
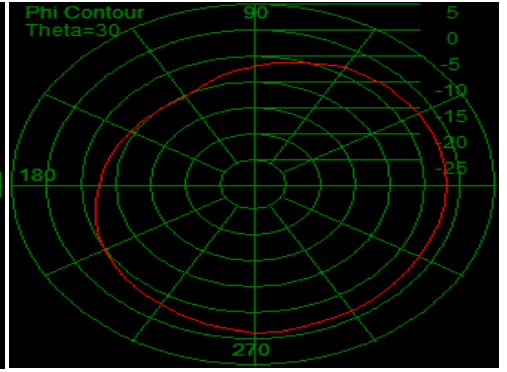
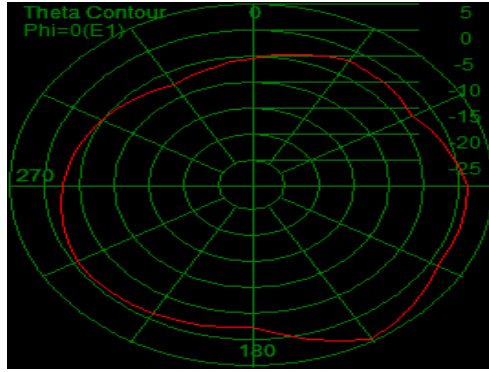
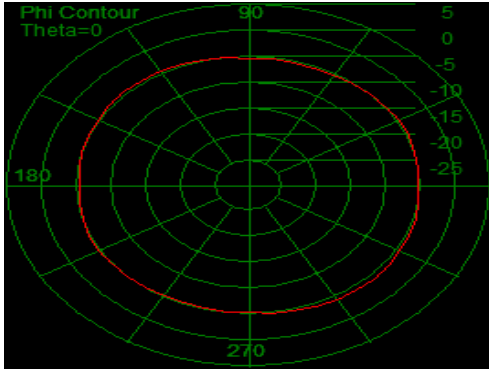
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

1710MHZ



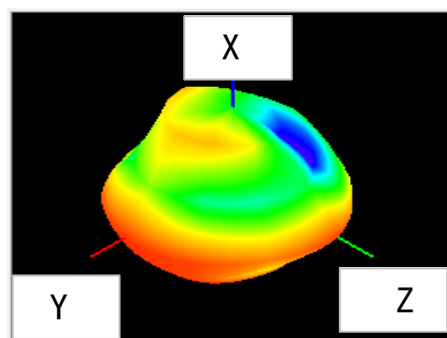
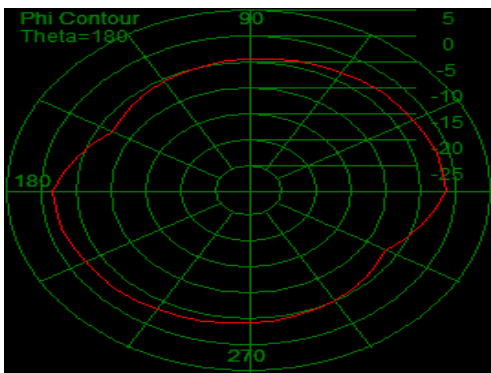
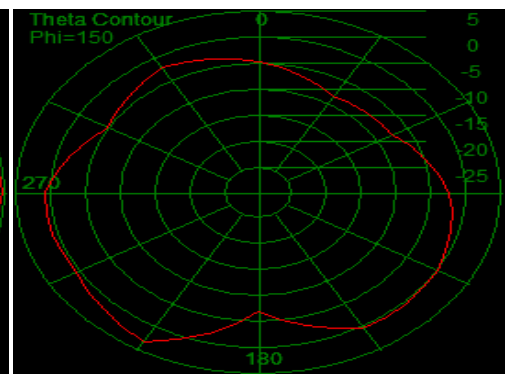
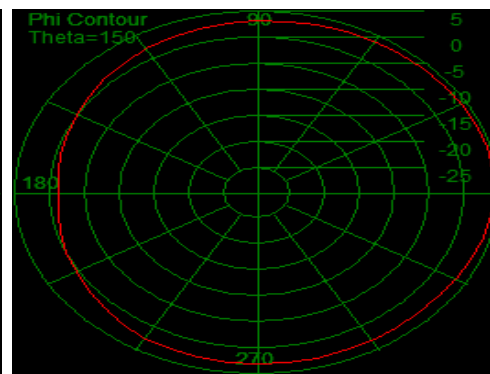
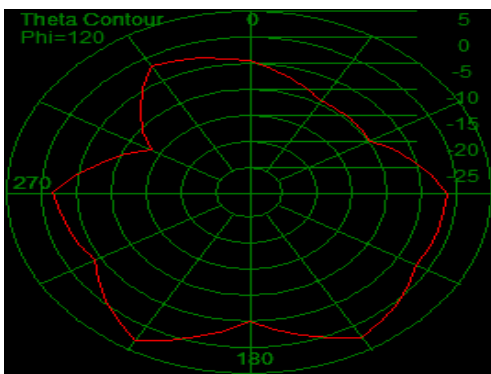
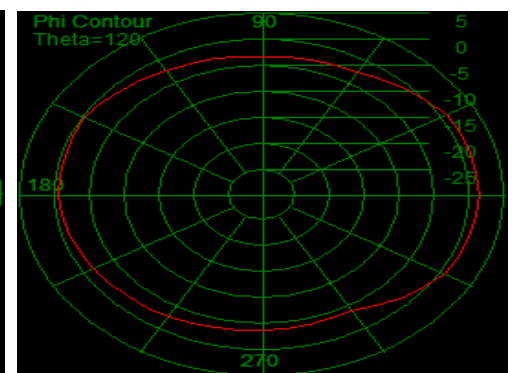
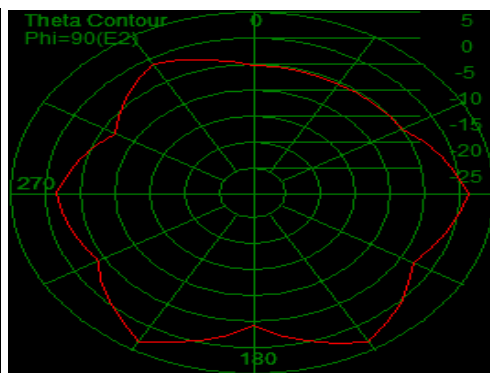
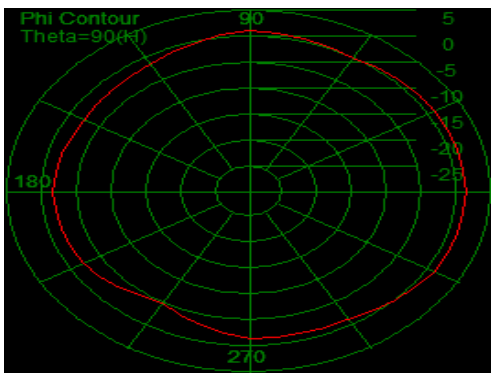
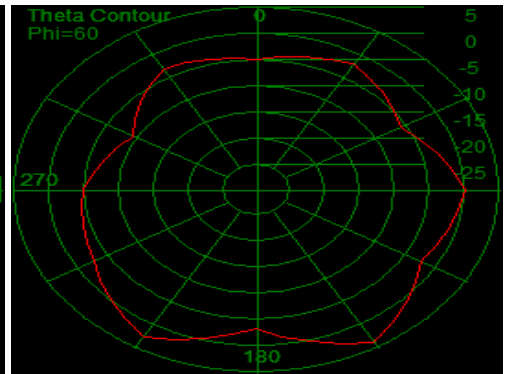
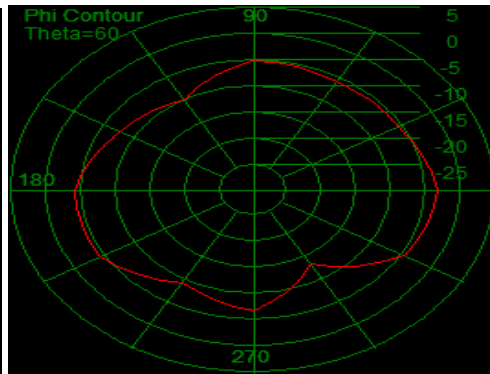
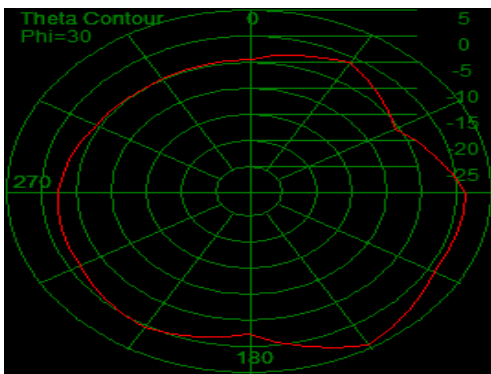
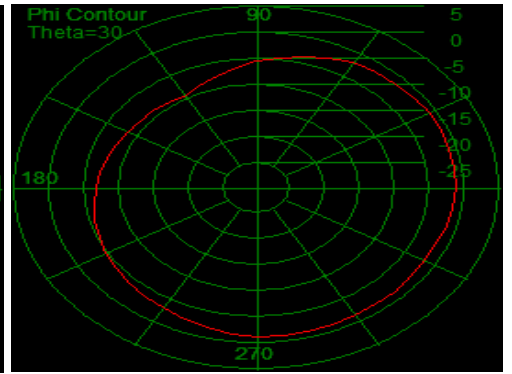
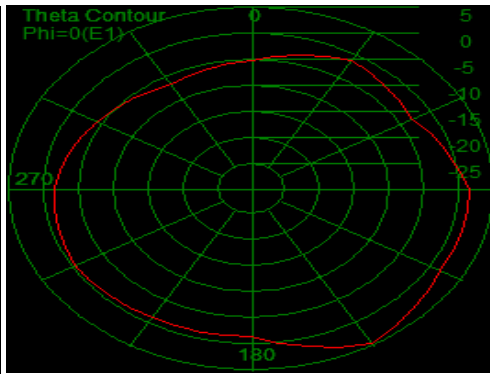
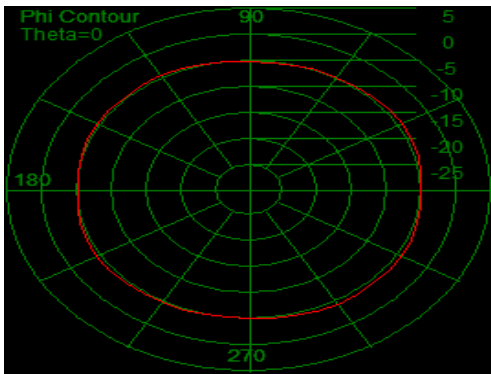
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

1880MHZ



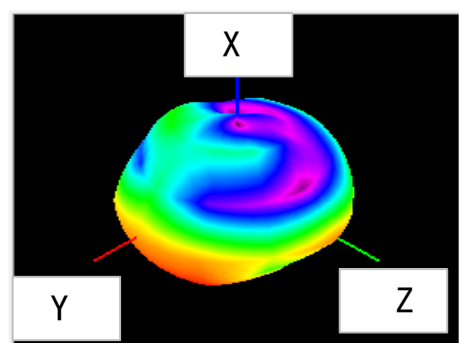
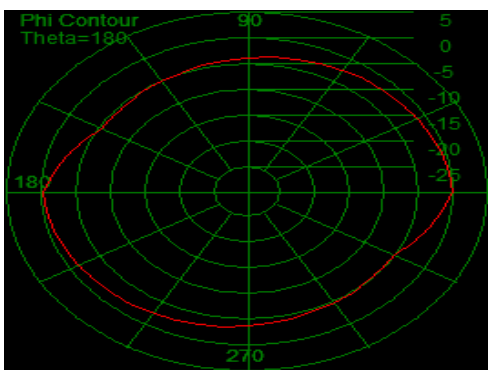
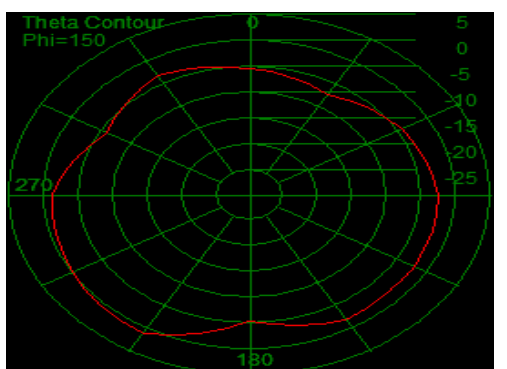
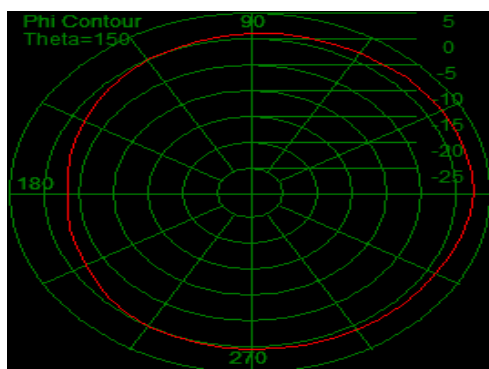
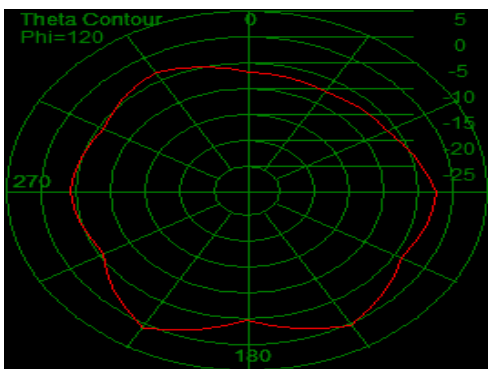
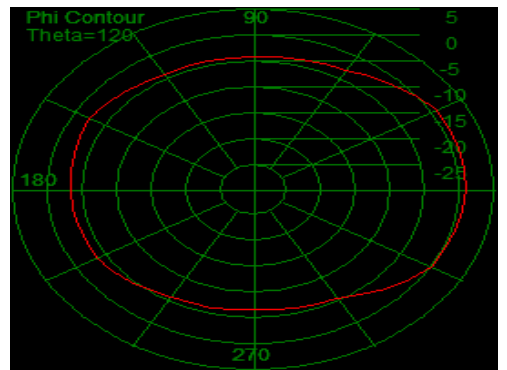
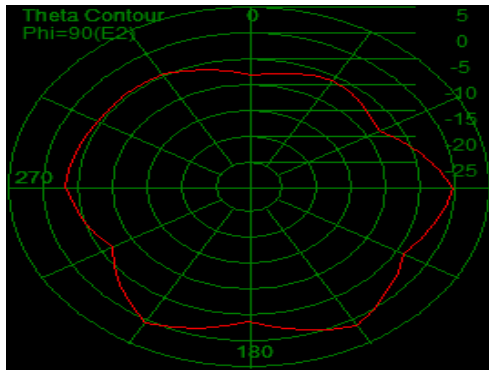
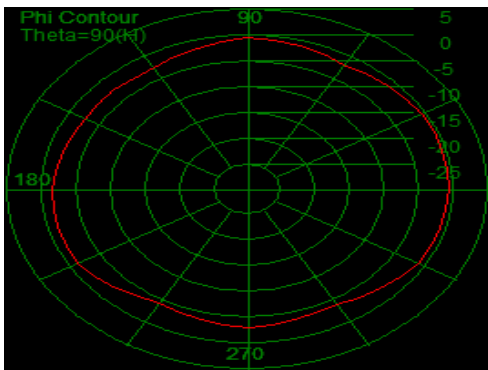
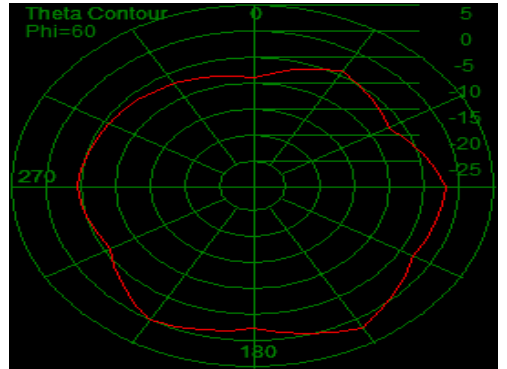
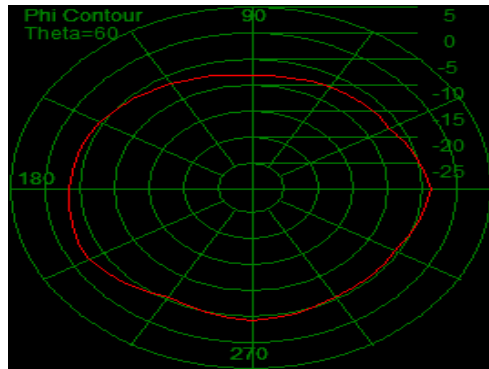
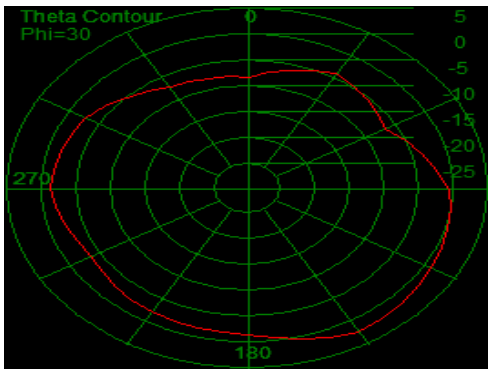
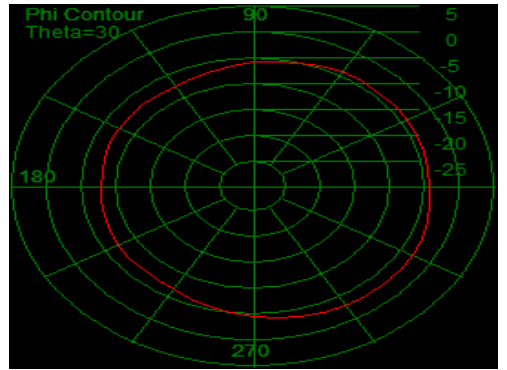
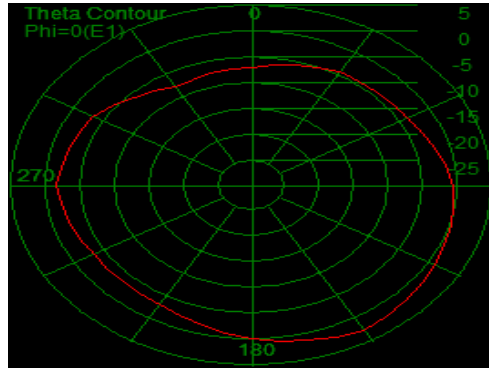
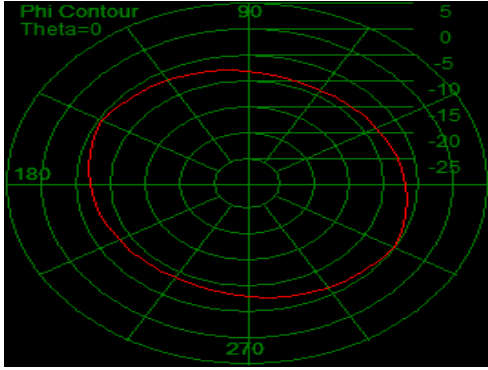
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

1990MHZ



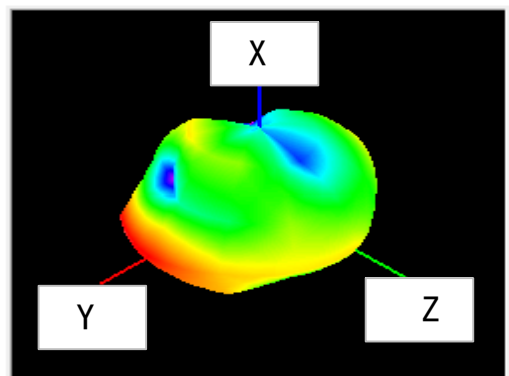
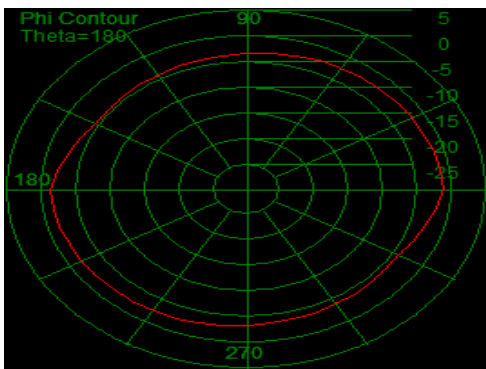
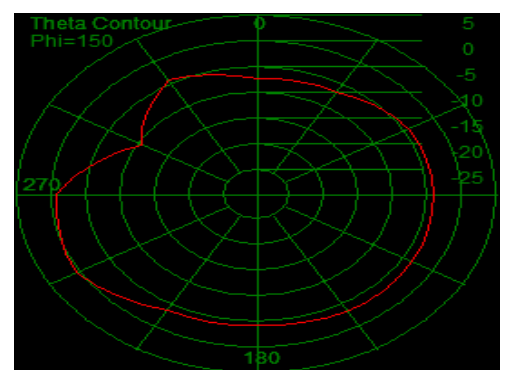
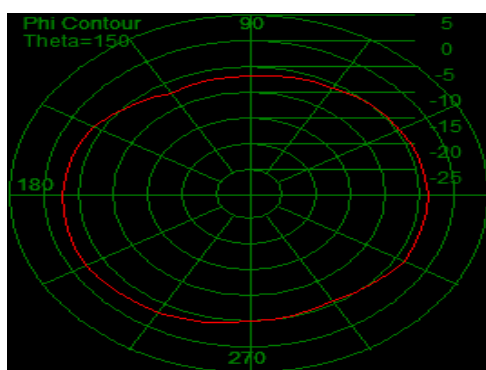
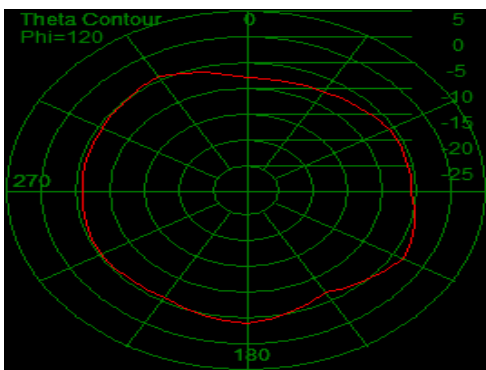
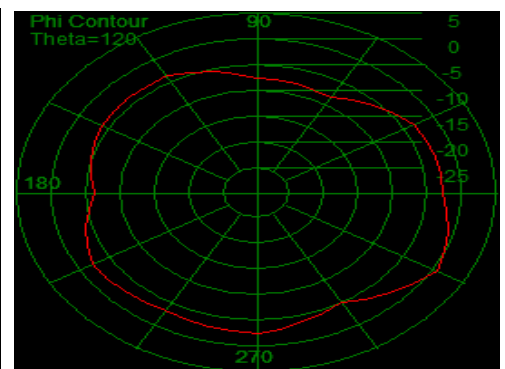
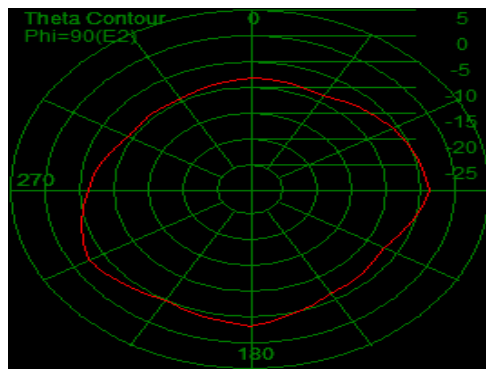
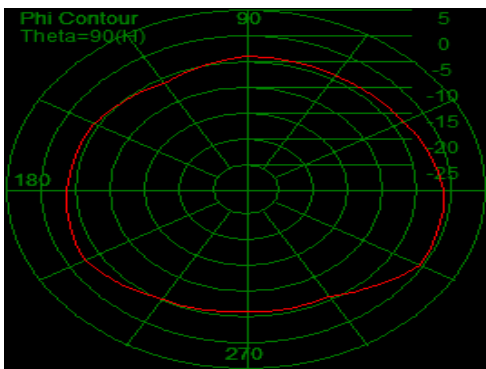
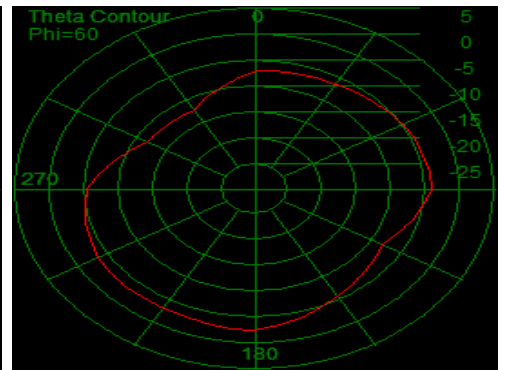
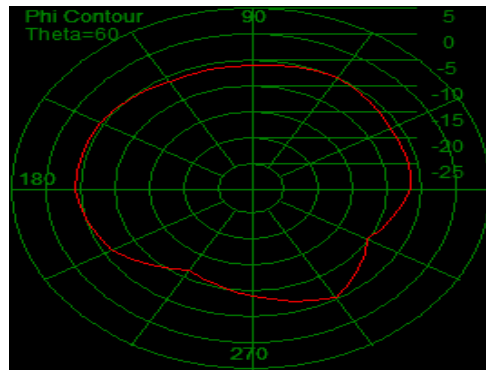
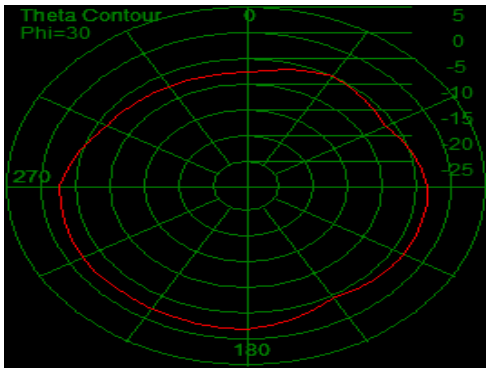
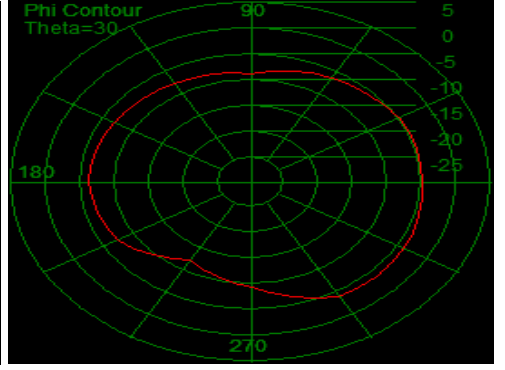
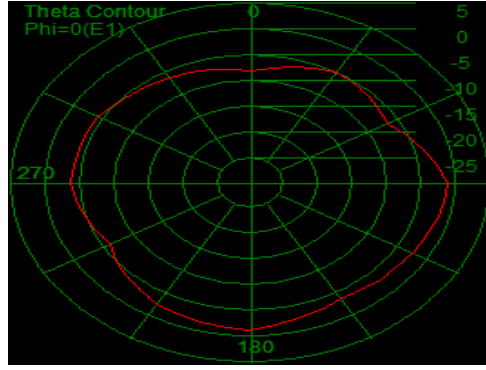
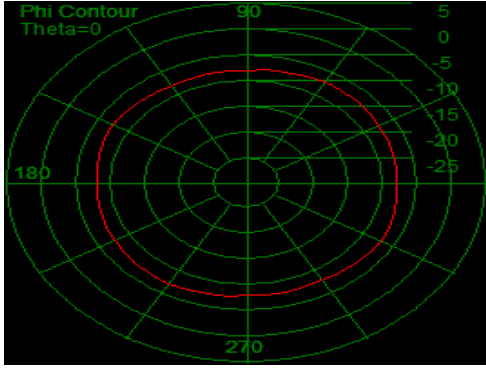
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

2170MHZ



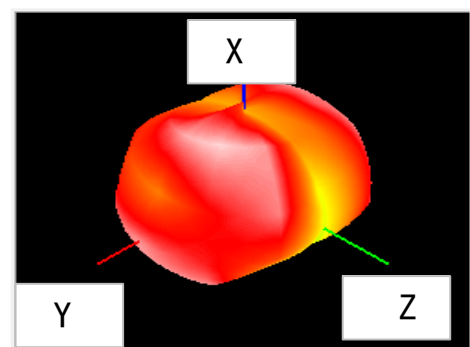
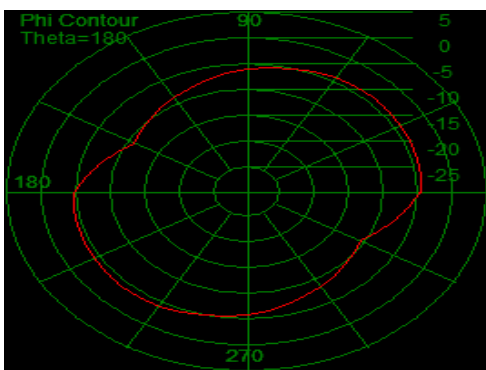
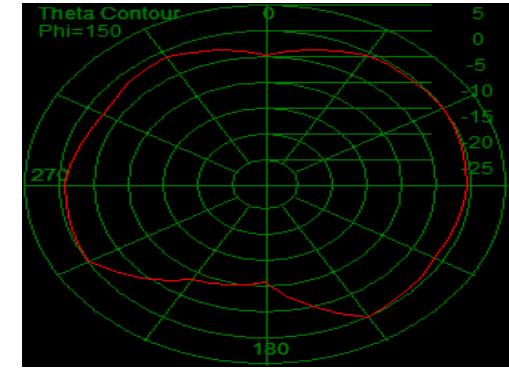
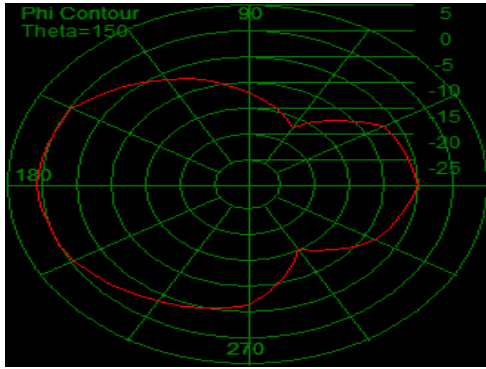
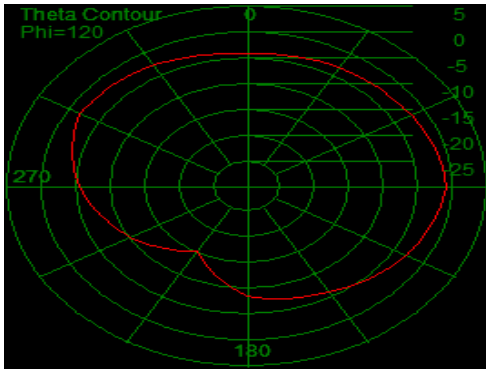
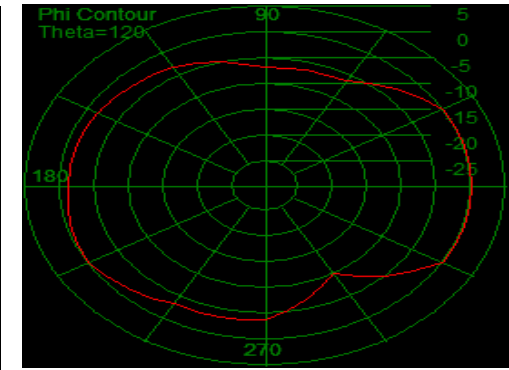
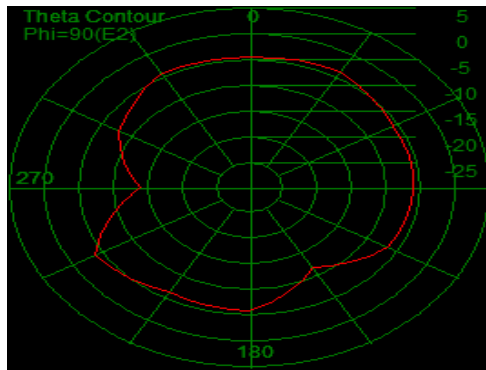
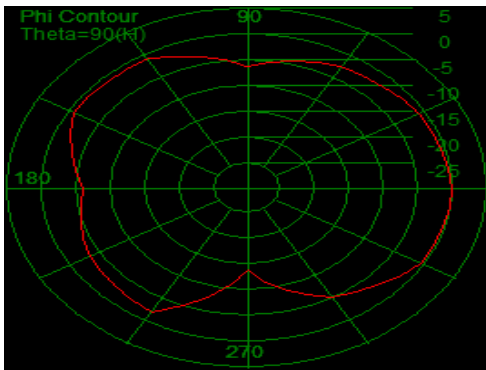
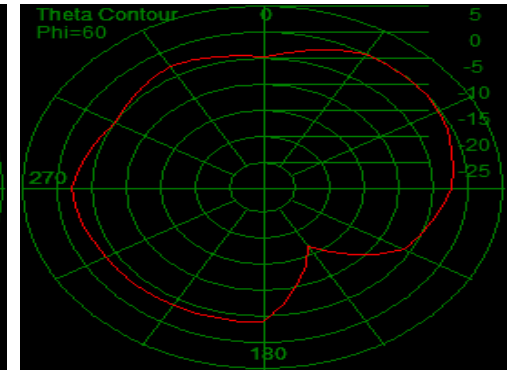
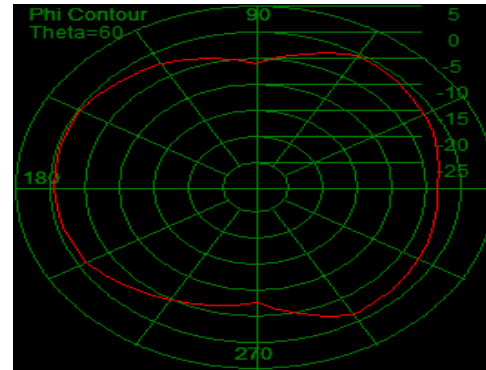
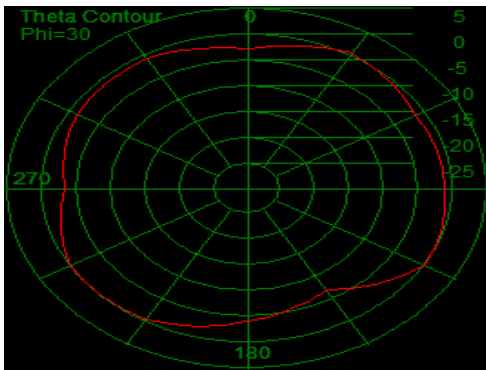
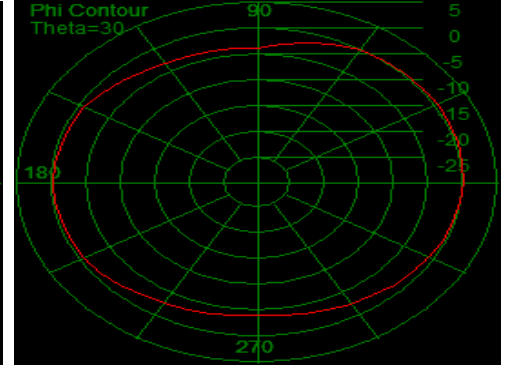
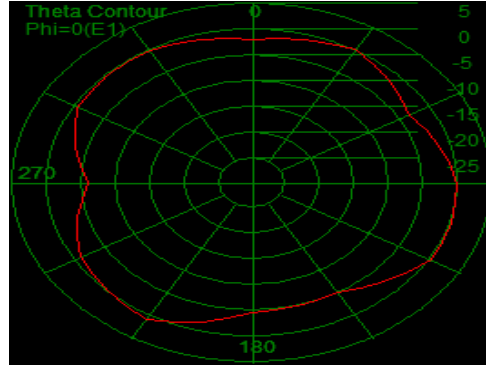
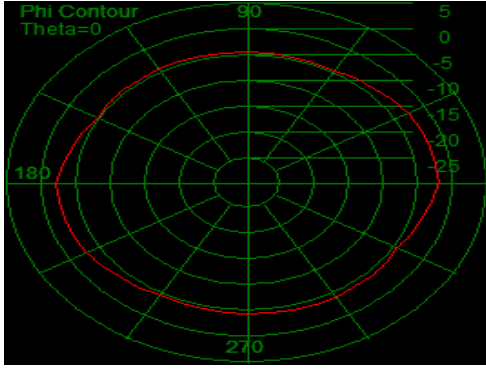
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

2300MHZ



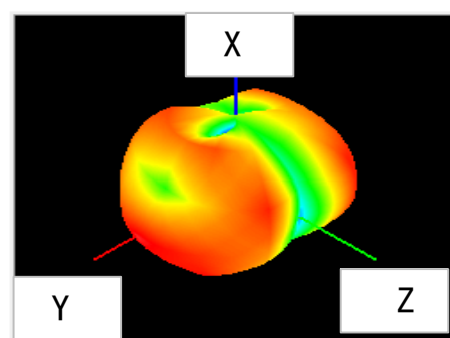
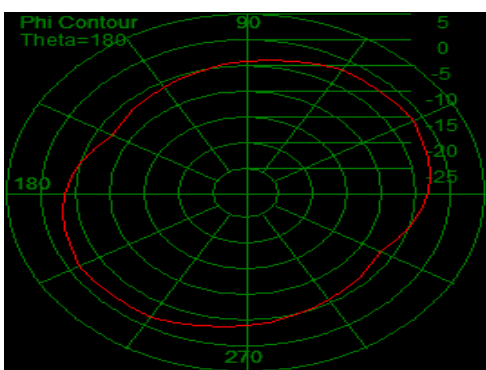
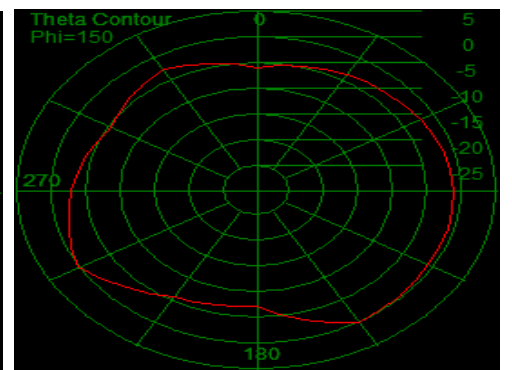
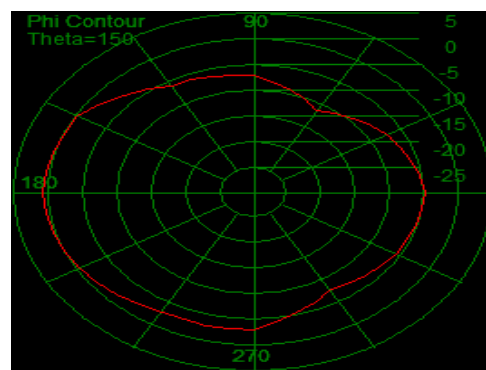
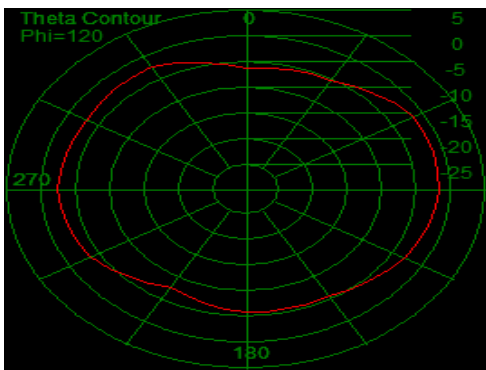
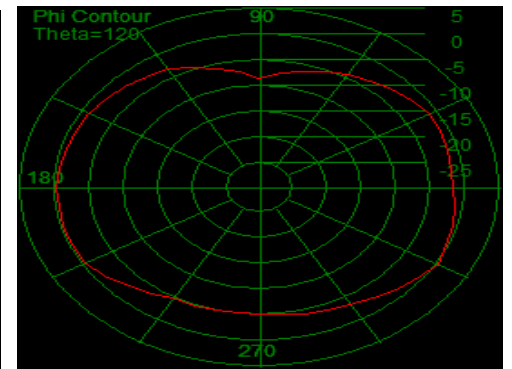
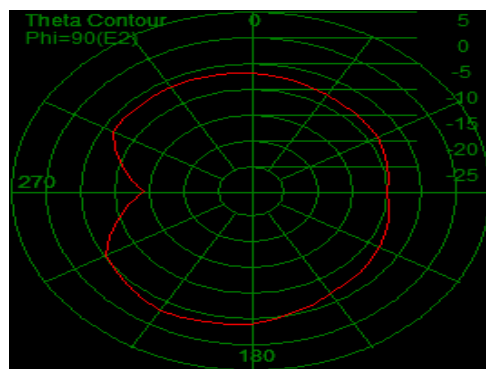
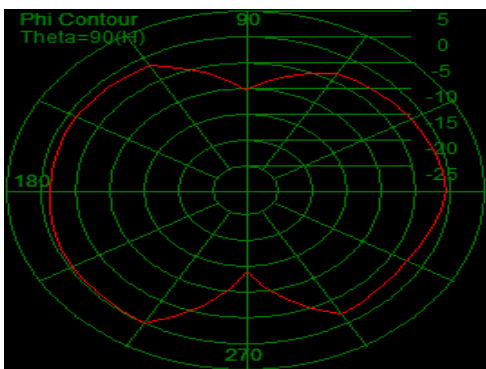
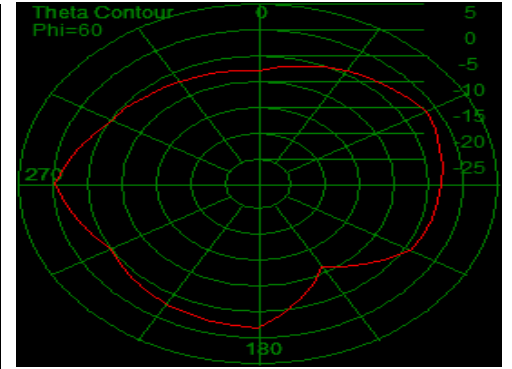
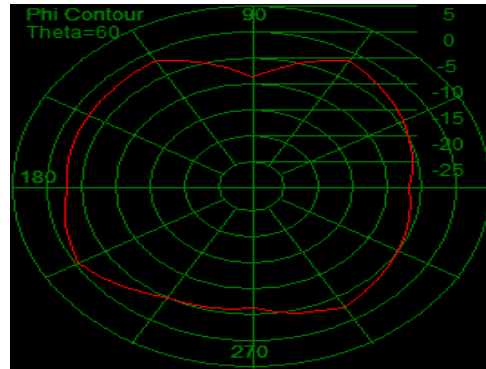
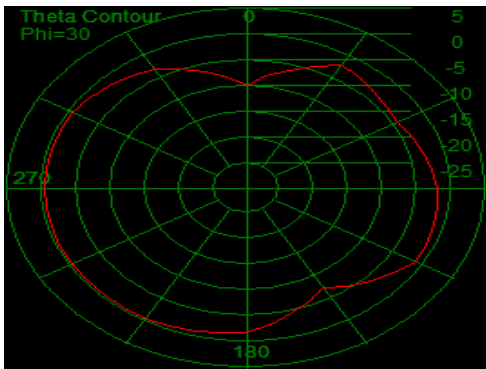
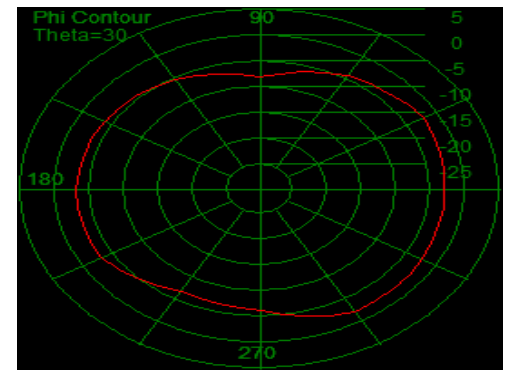
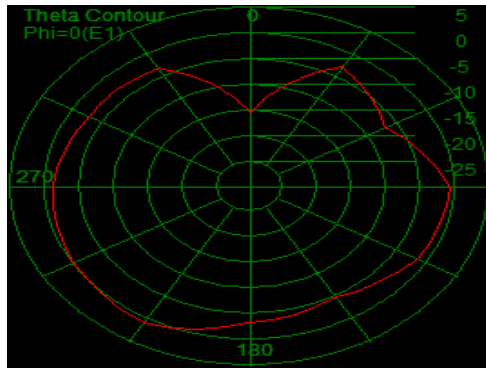
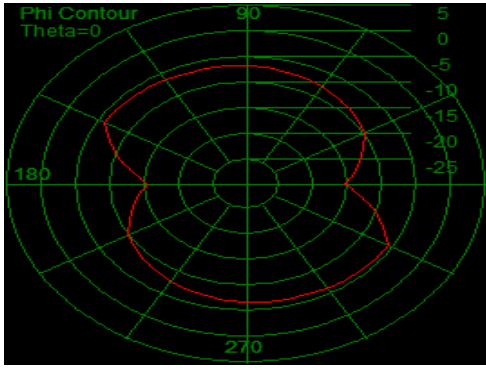
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

2500MHZ



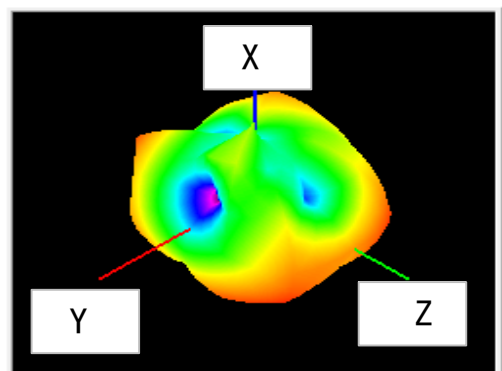
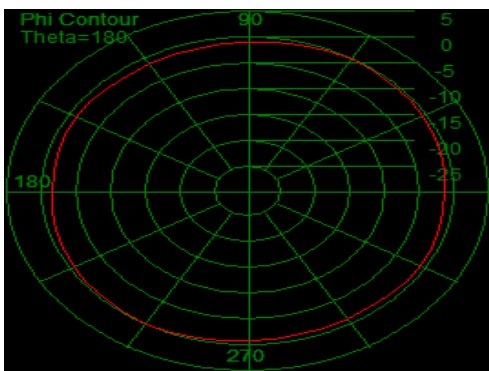
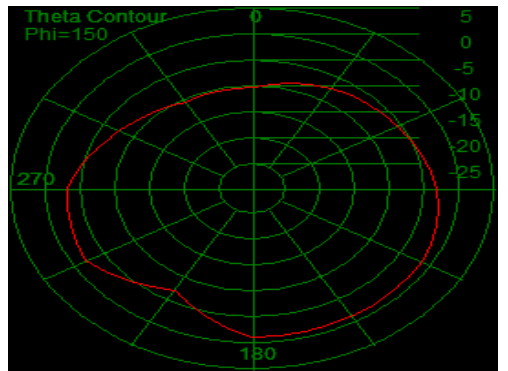
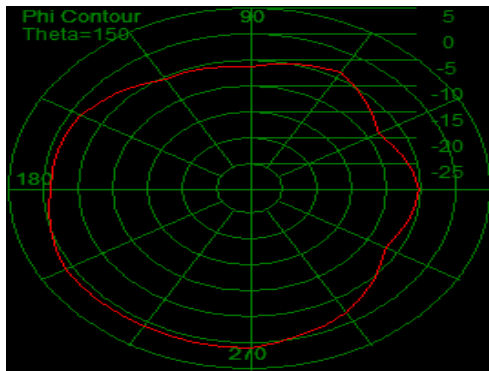
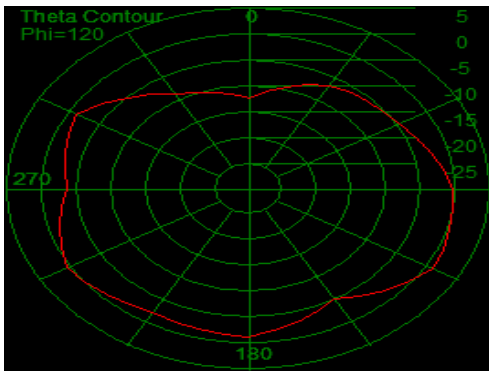
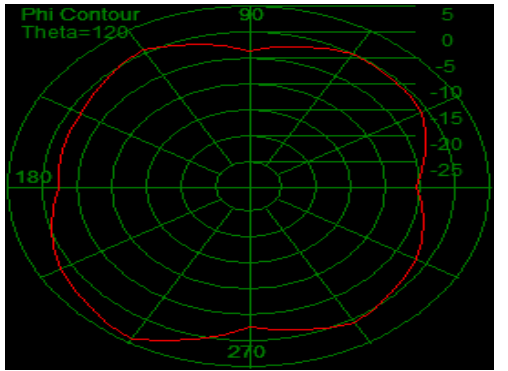
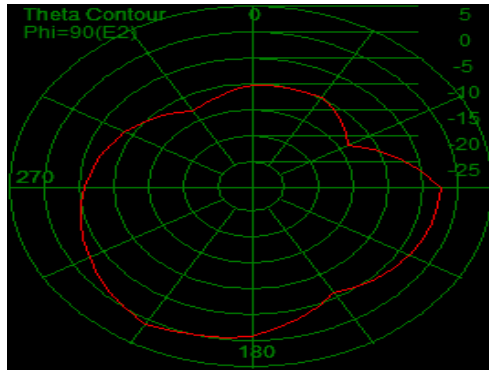
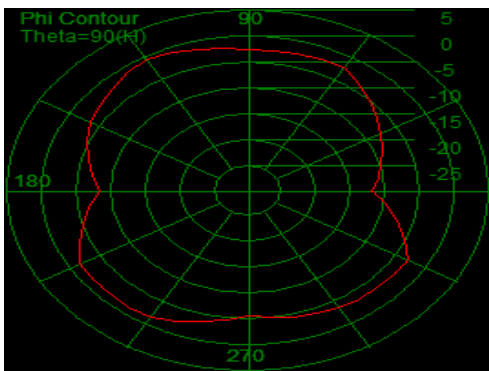
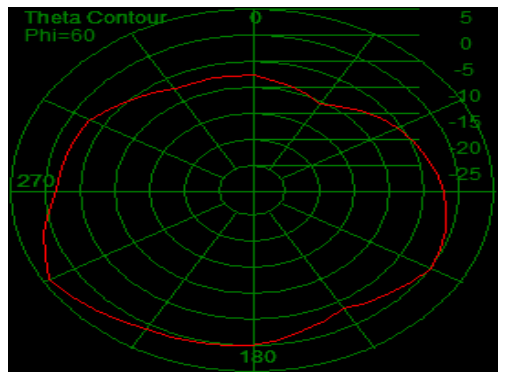
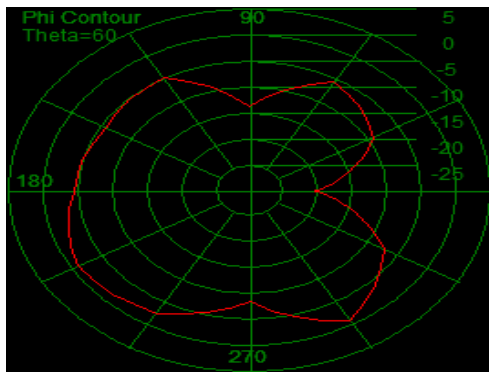
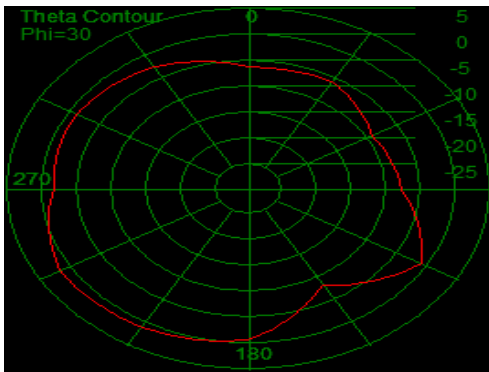
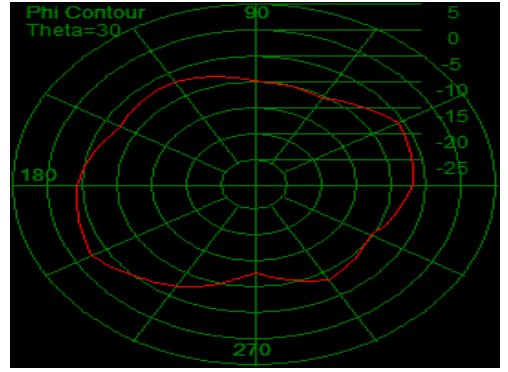
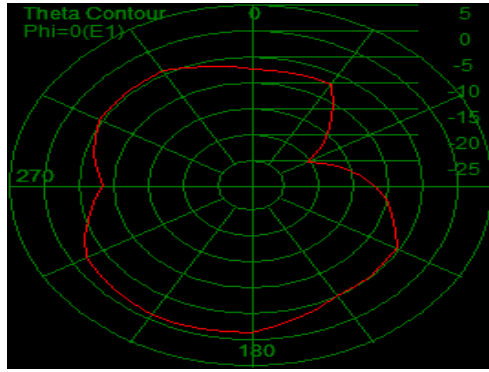
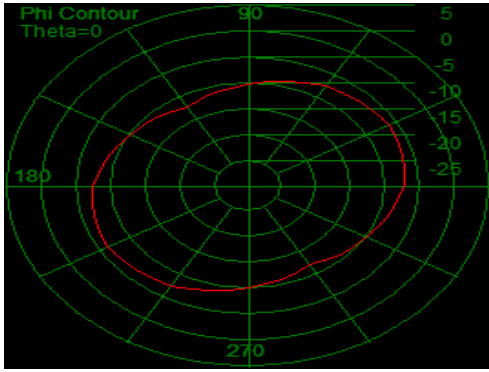
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

2690MHZ



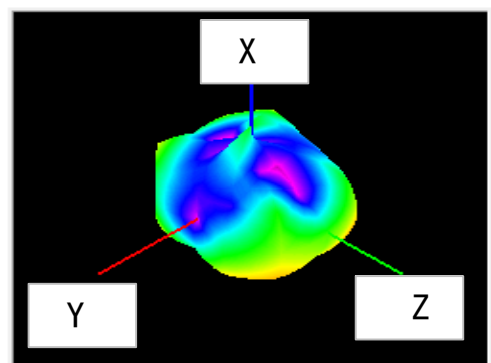
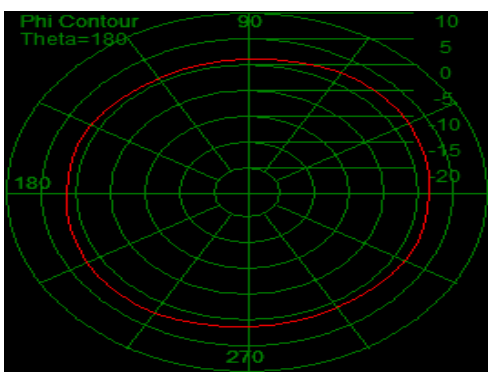
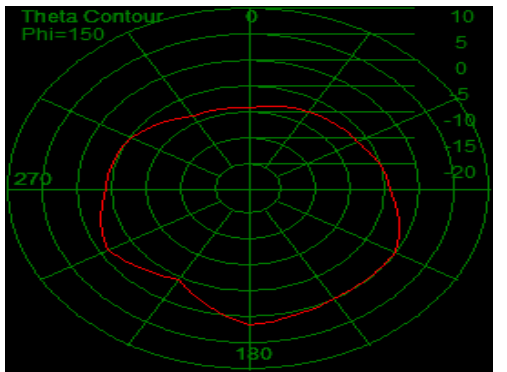
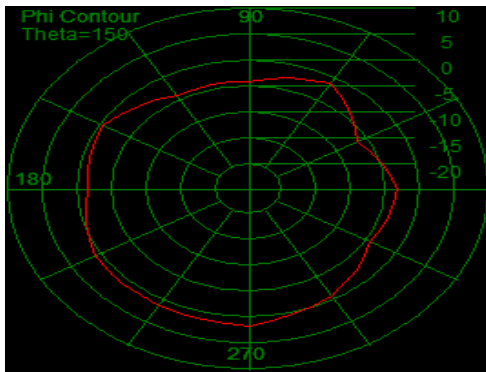
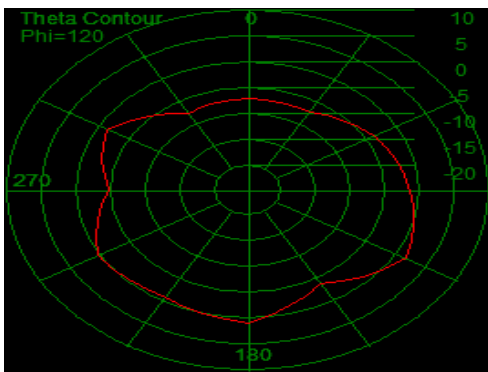
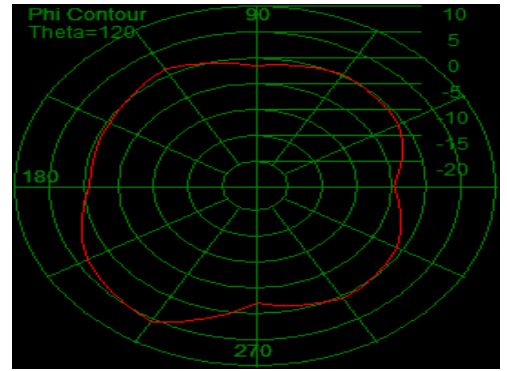
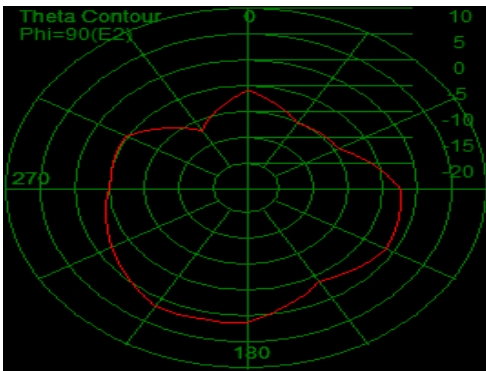
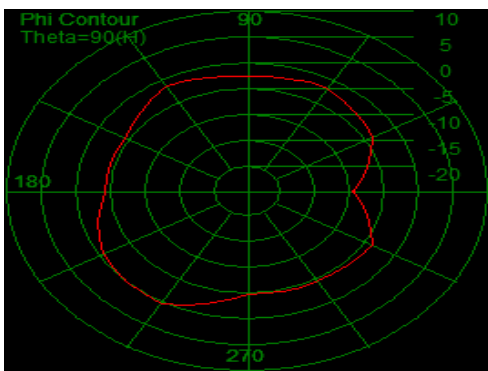
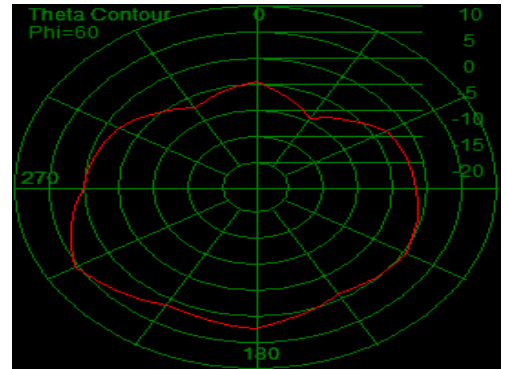
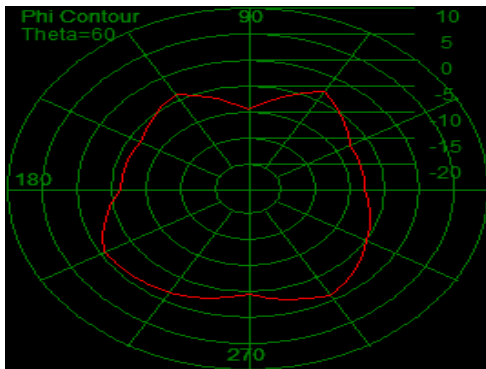
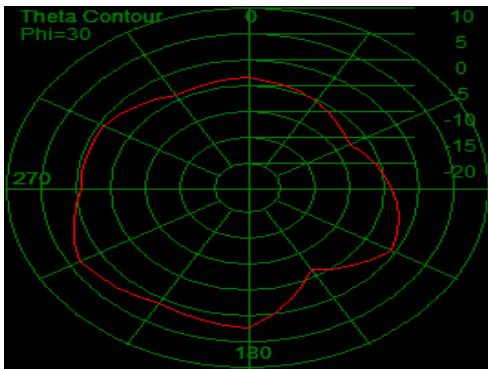
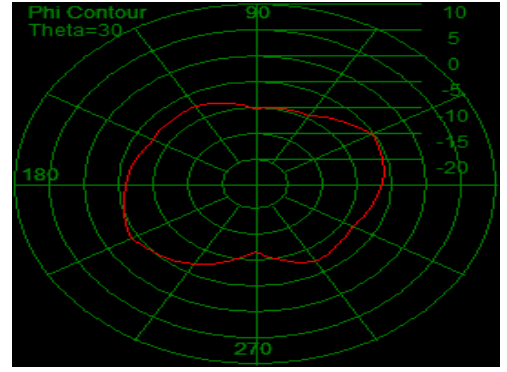
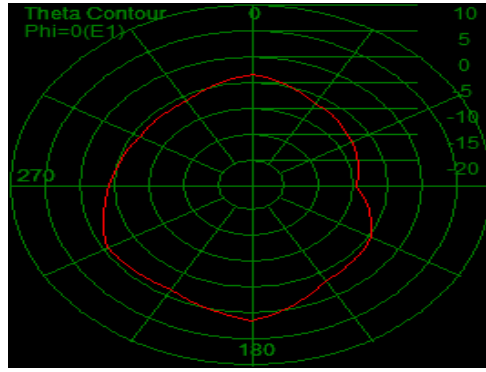
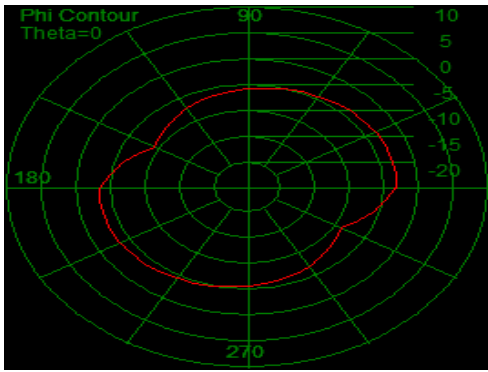
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

3400MHZ



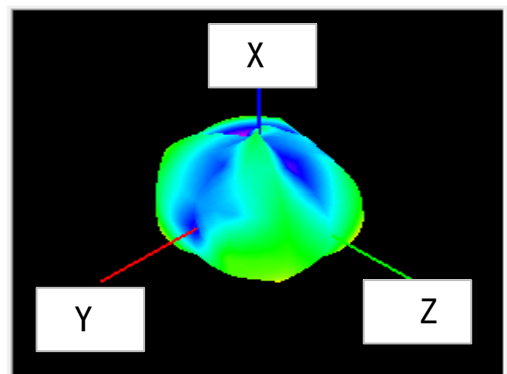
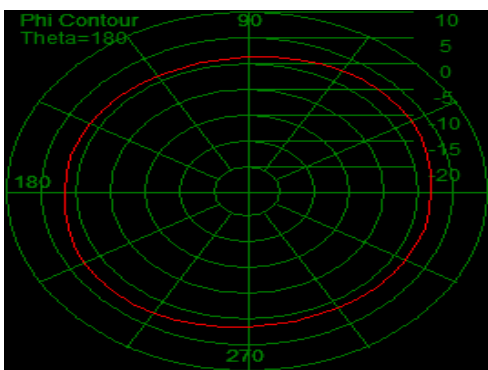
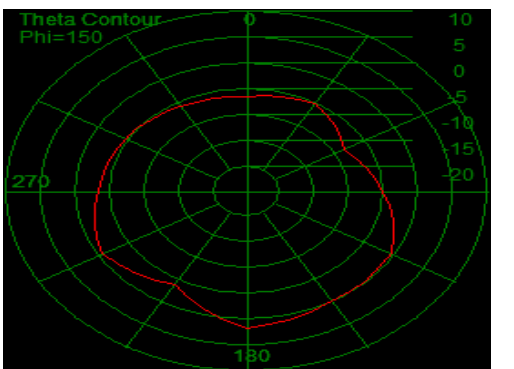
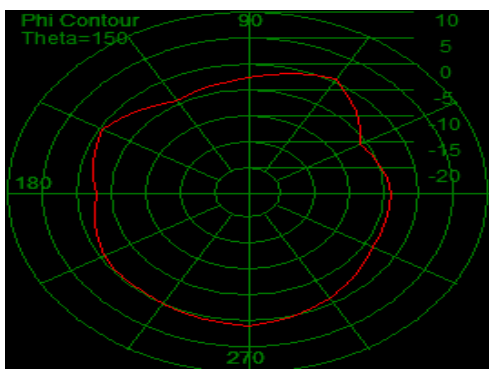
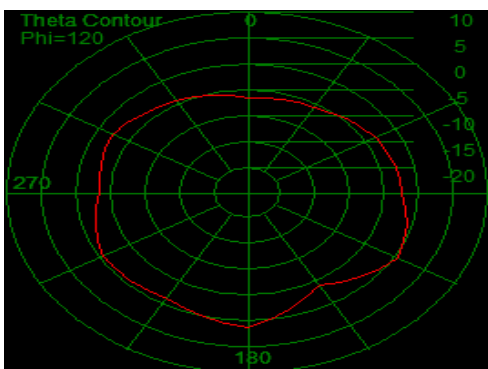
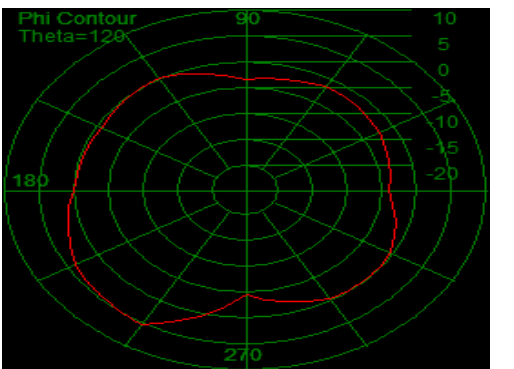
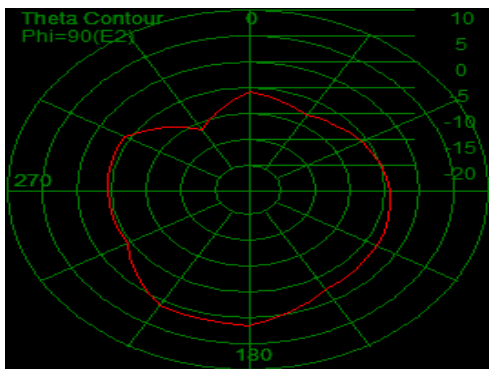
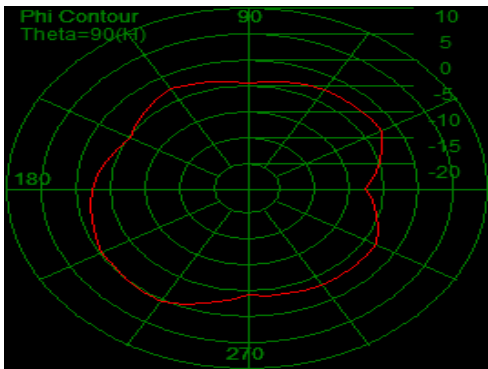
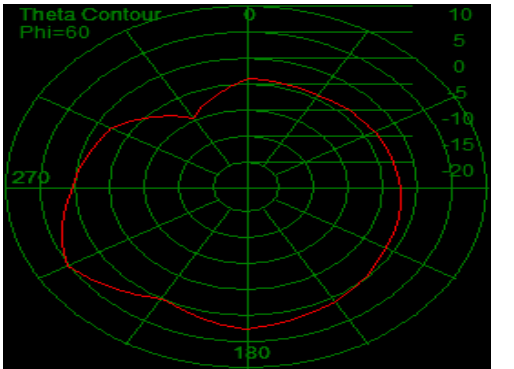
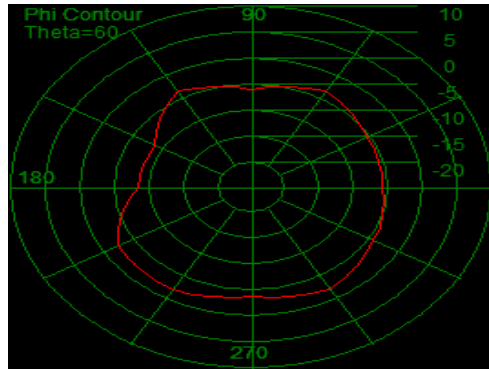
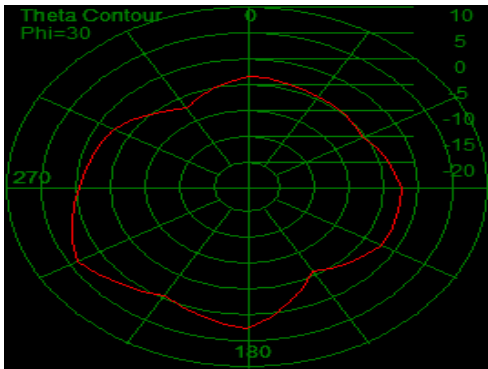
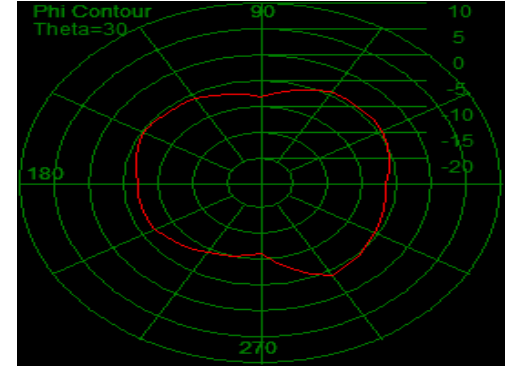
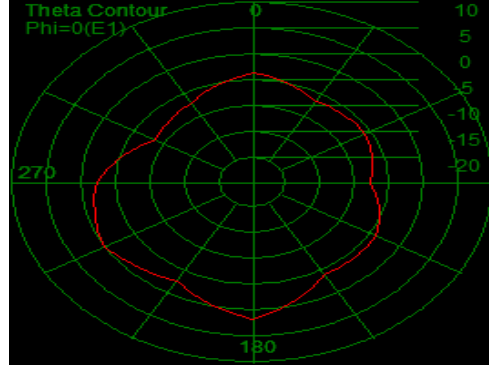
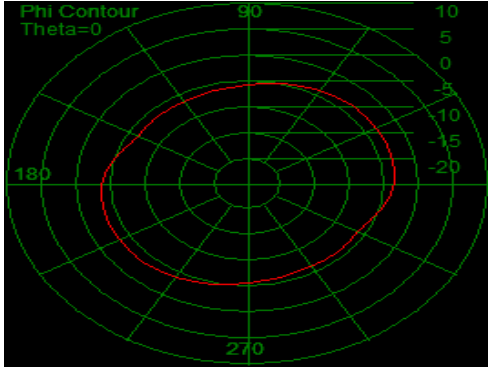
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

3500MHZ



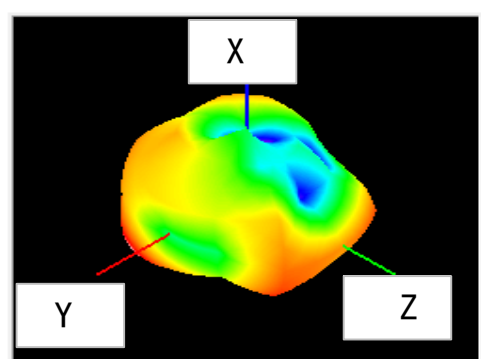
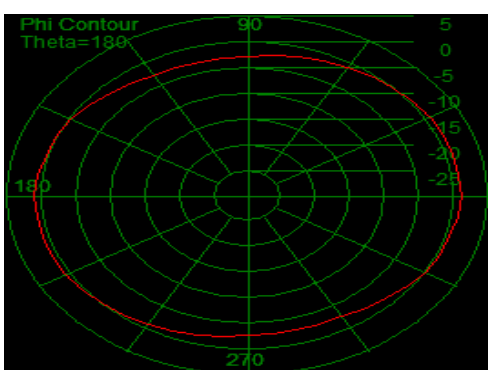
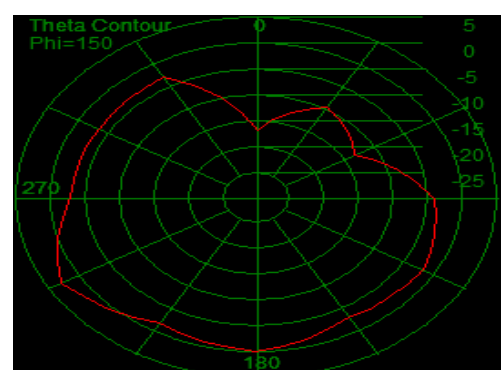
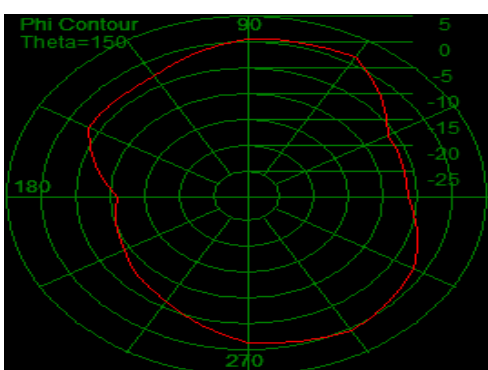
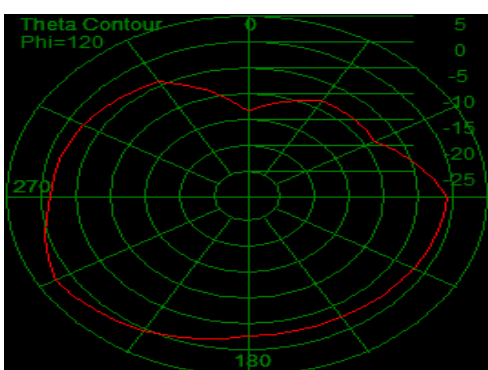
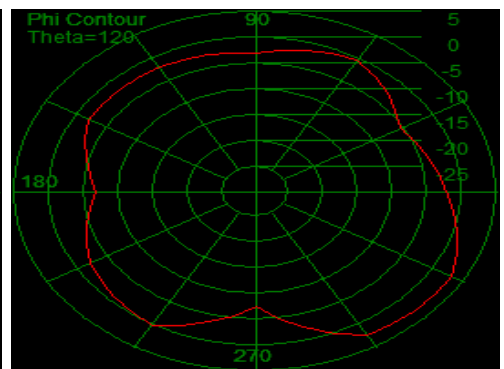
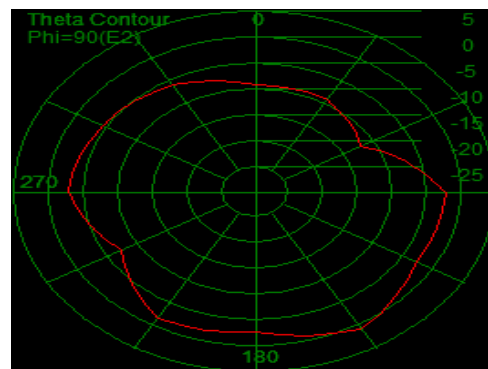
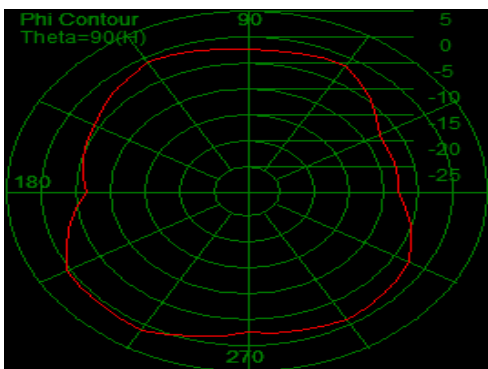
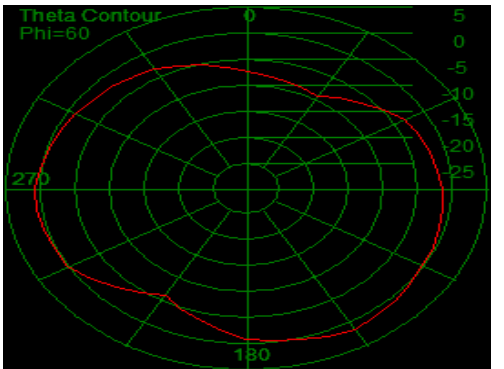
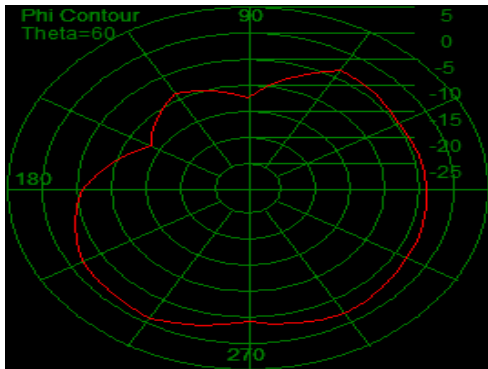
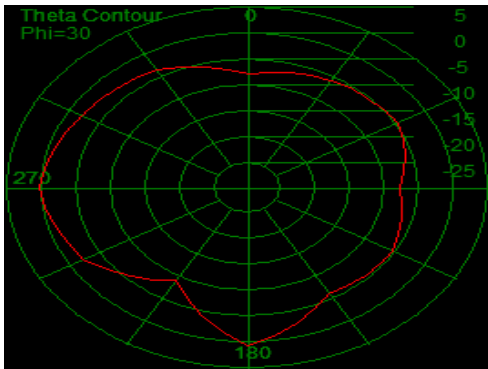
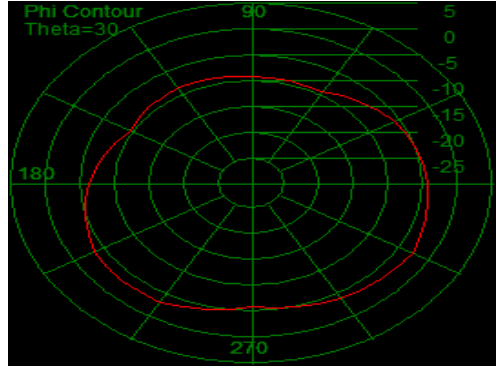
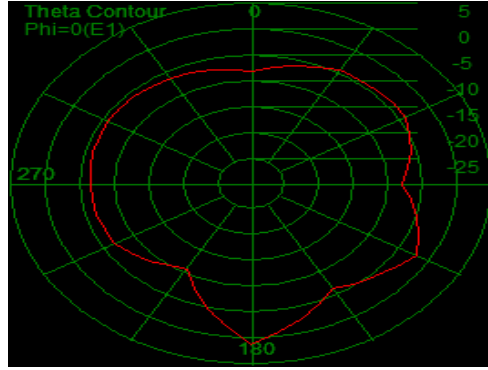
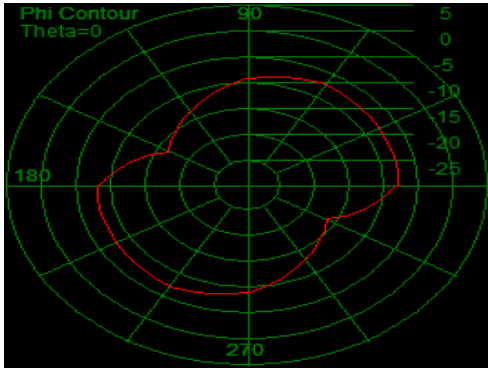
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

3600MHZ



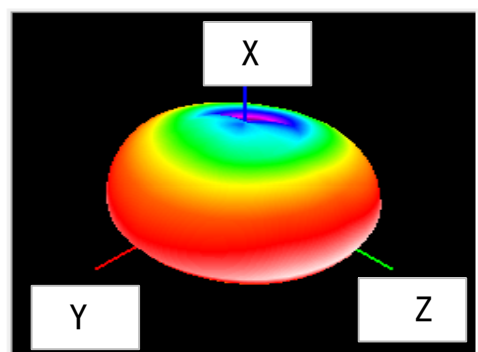
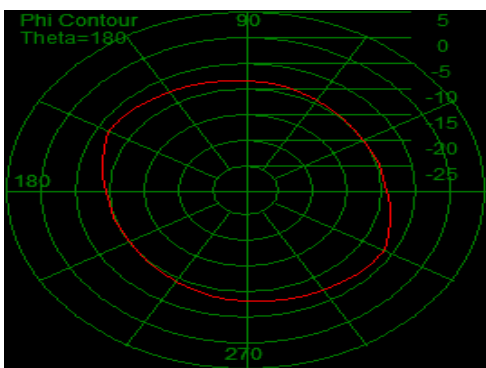
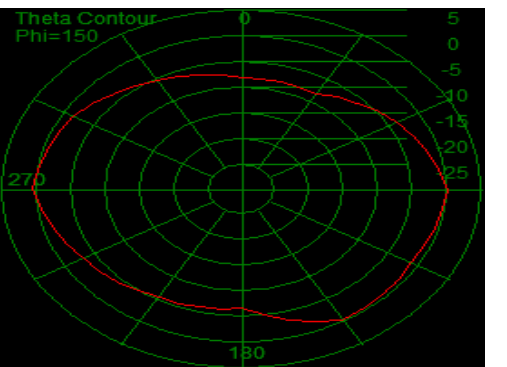
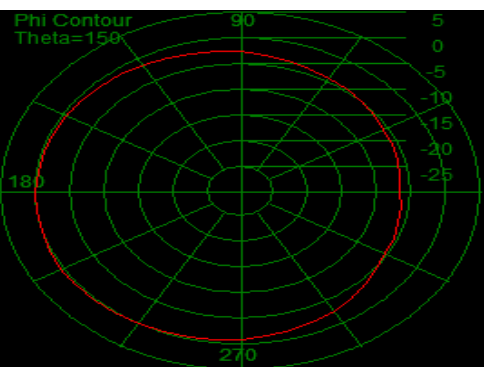
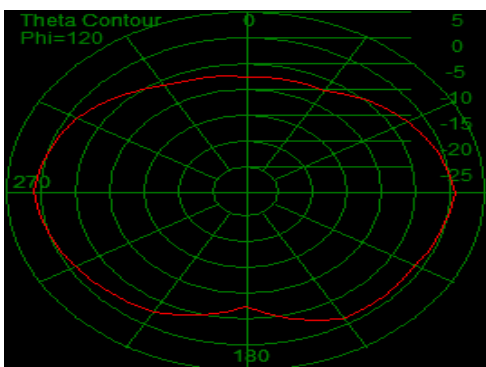
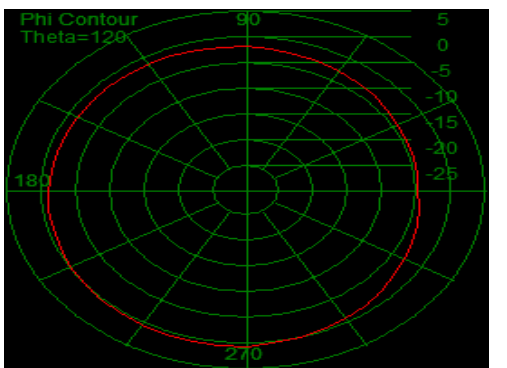
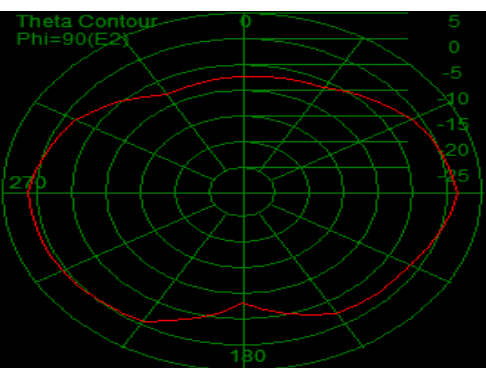
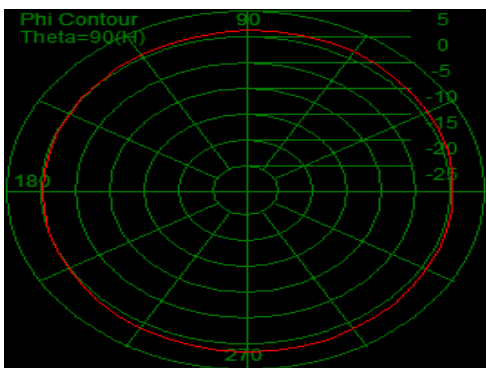
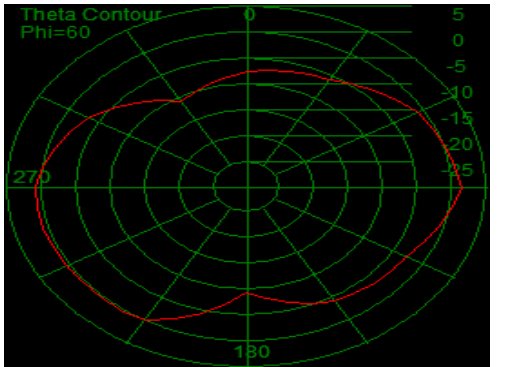
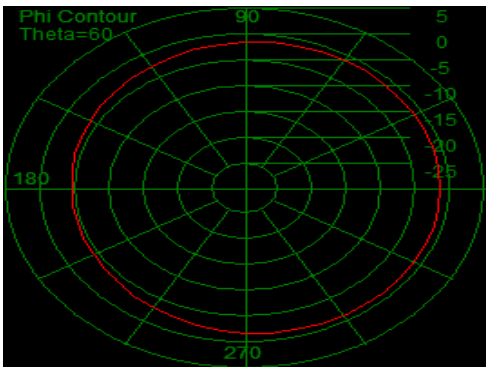
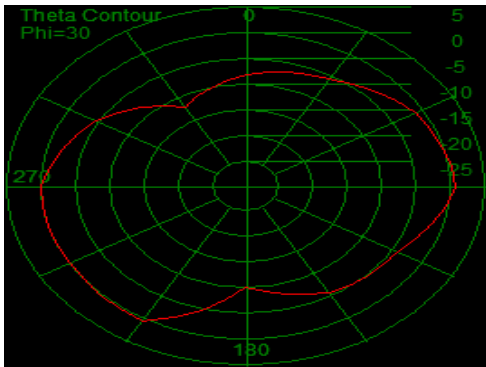
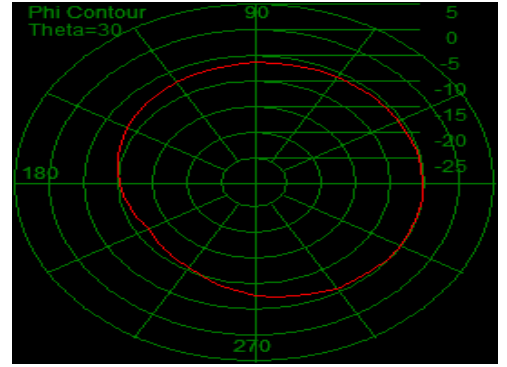
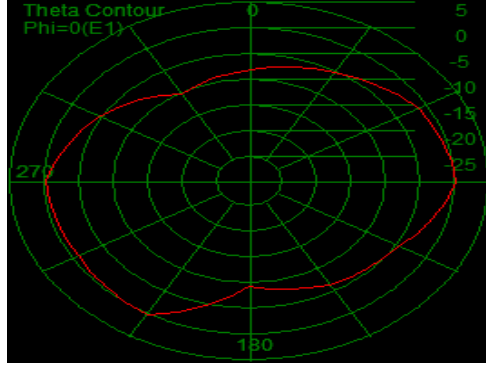
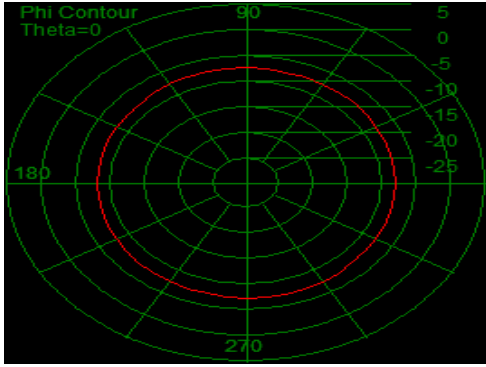
150*90mm – Bent 2D Radiation Patterns Straight Pose -90°

4000MHZ



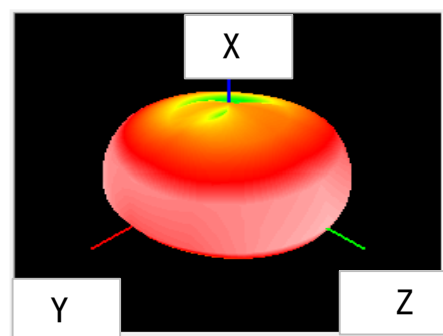
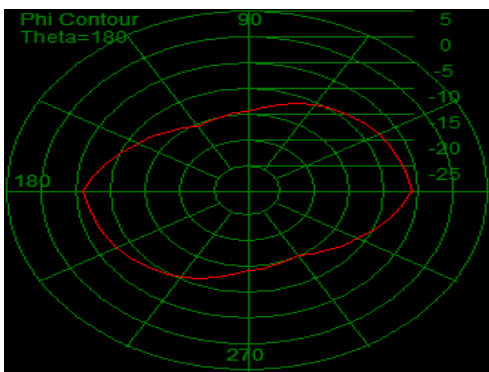
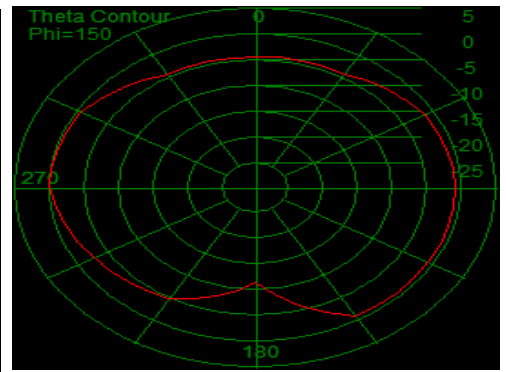
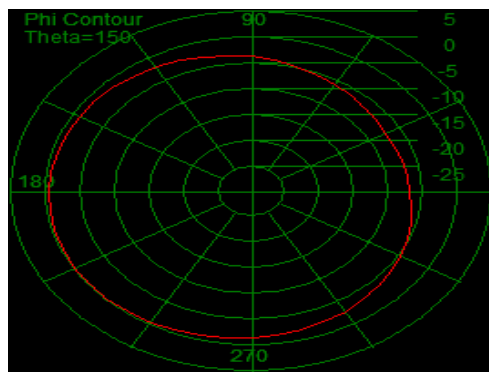
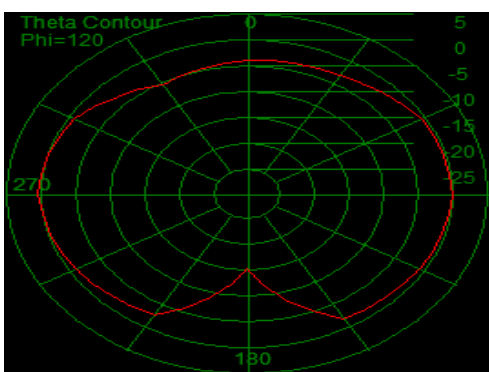
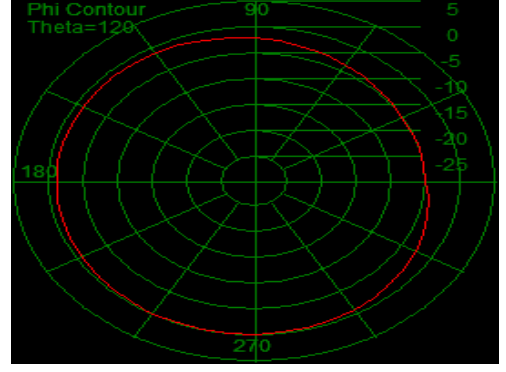
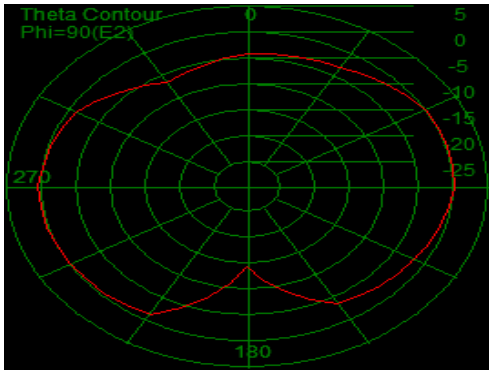
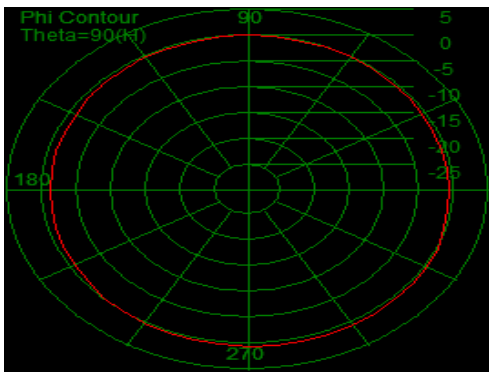
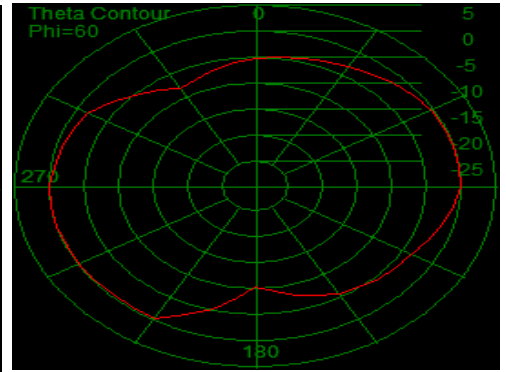
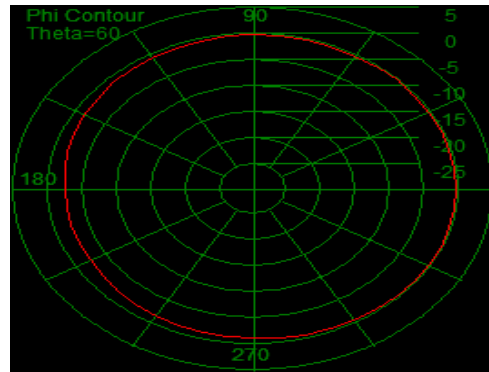
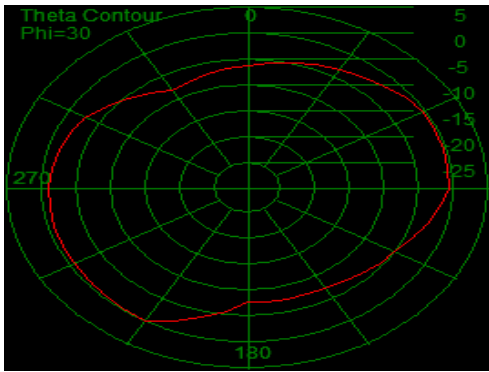
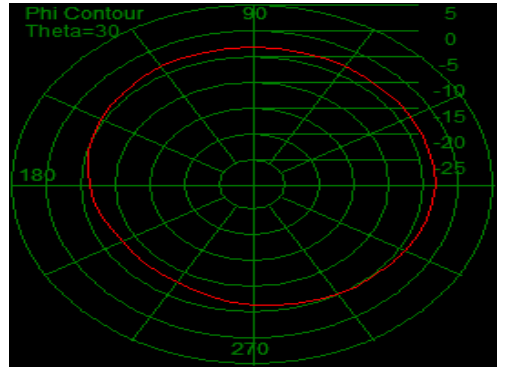
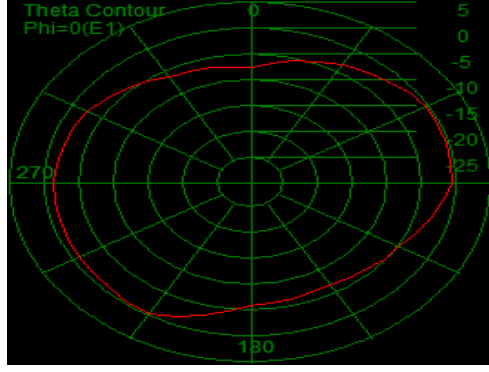
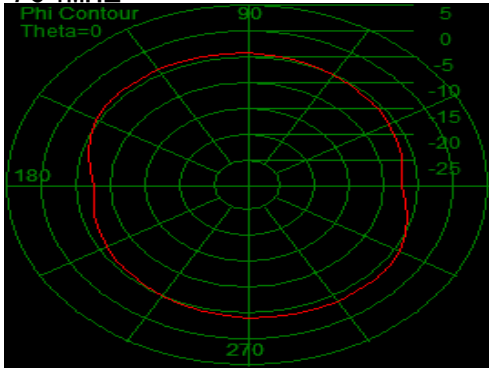
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

698MHZ



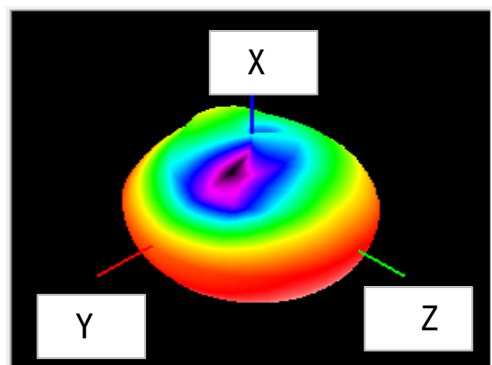
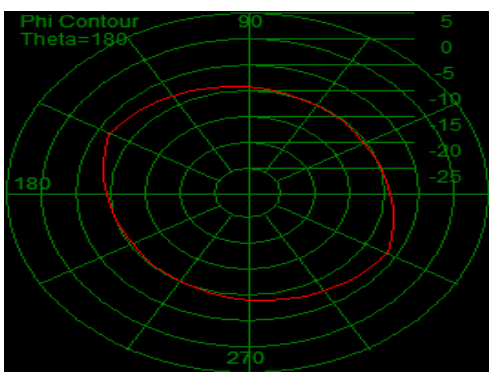
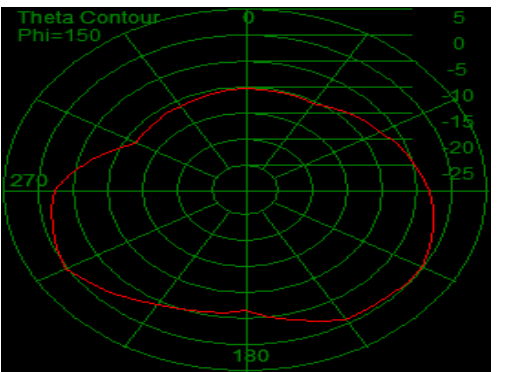
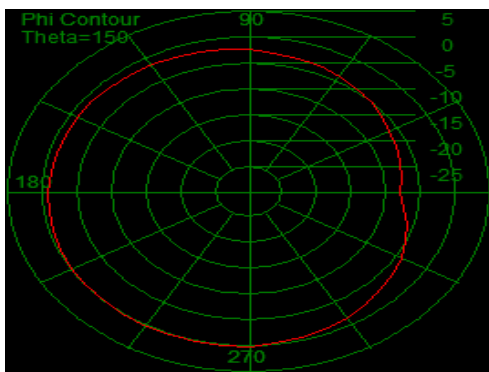
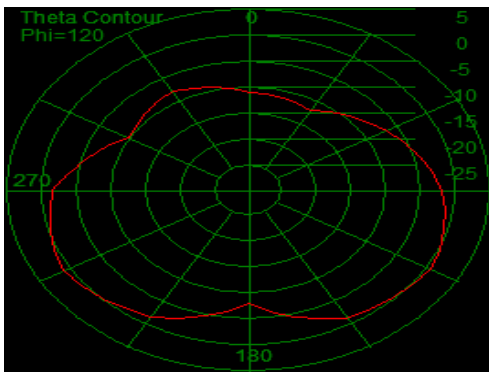
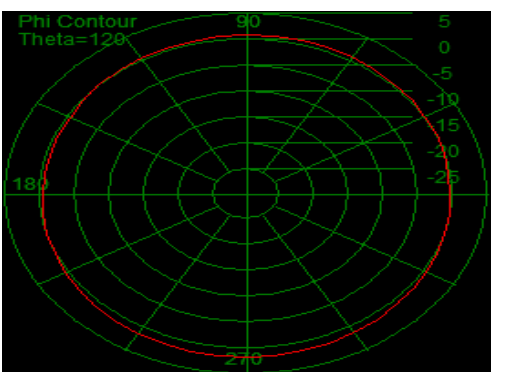
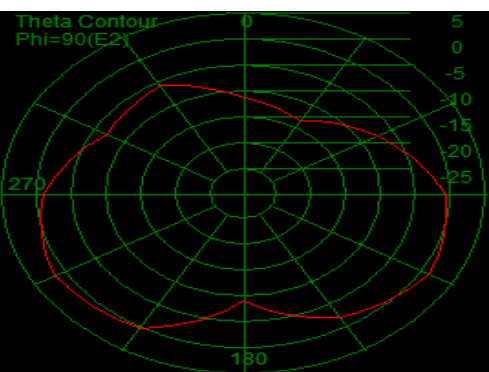
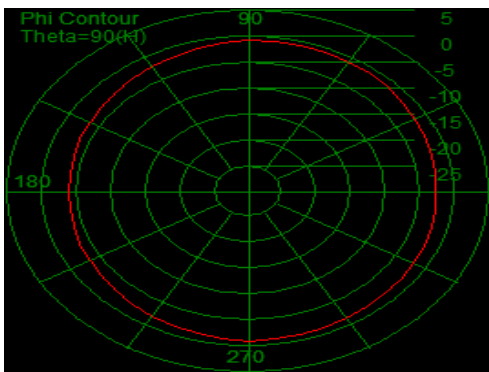
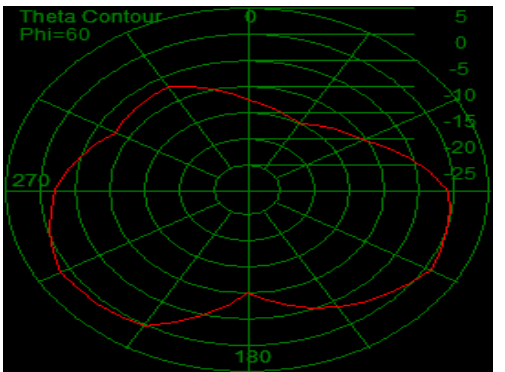
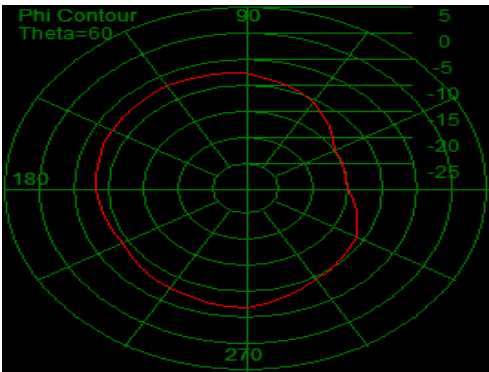
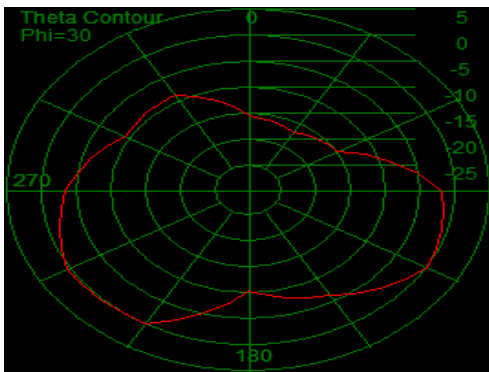
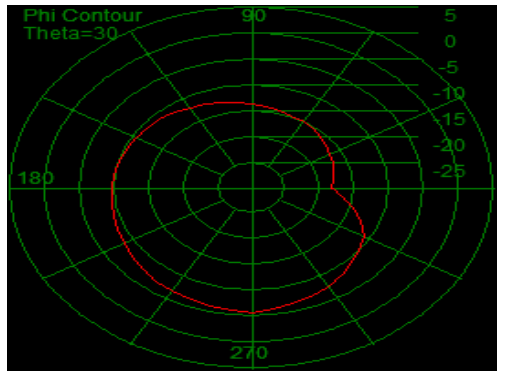
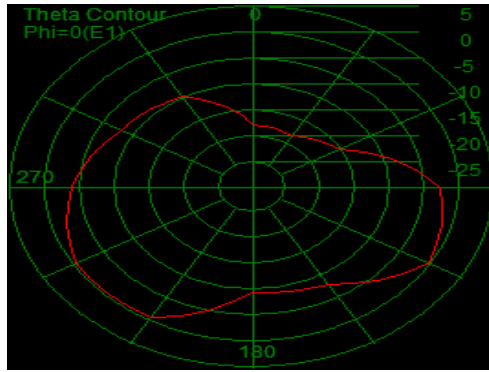
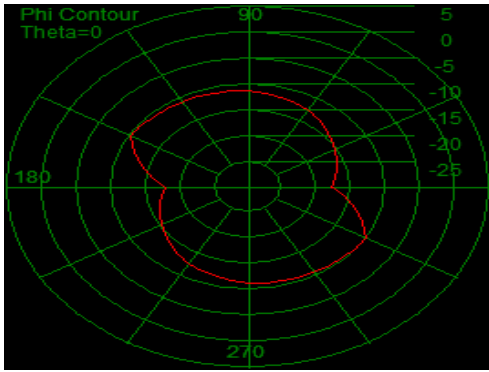
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

704MHZ



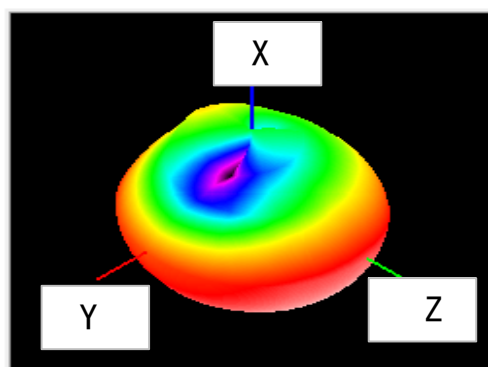
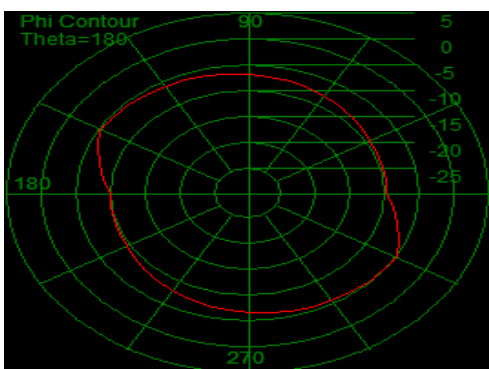
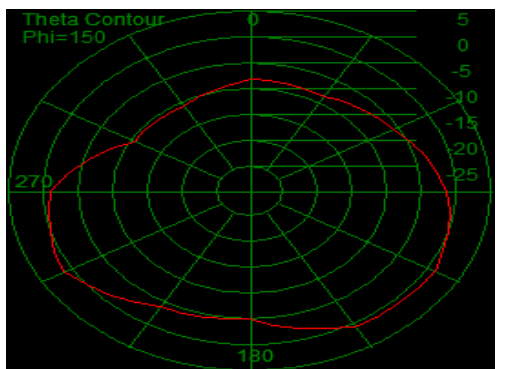
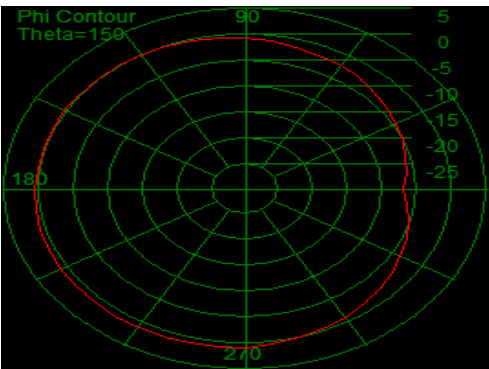
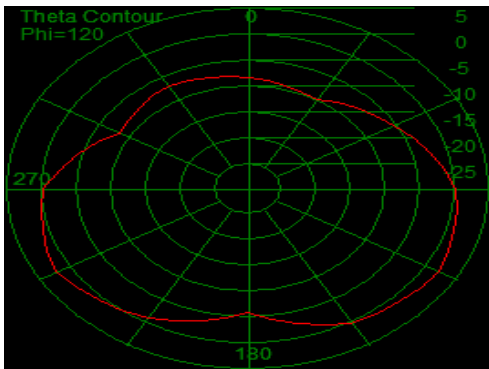
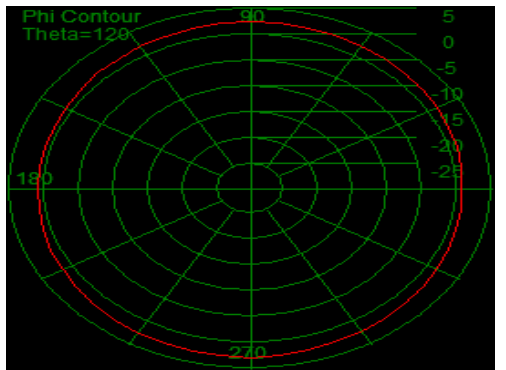
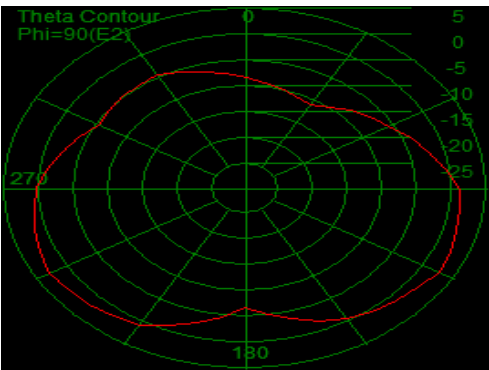
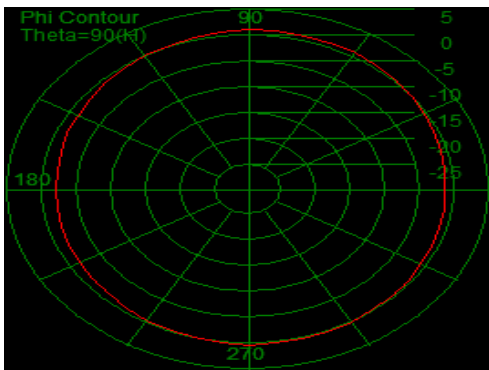
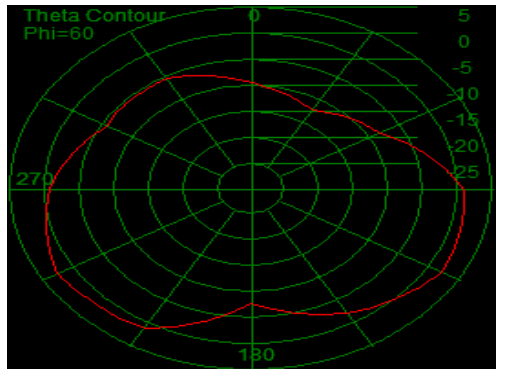
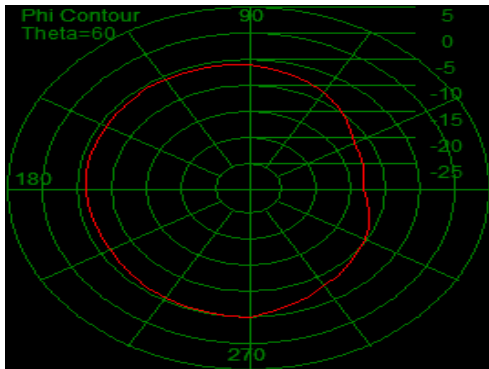
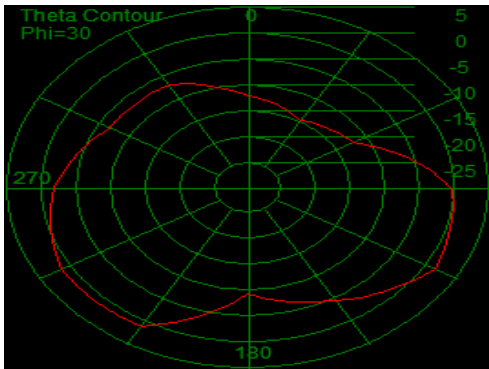
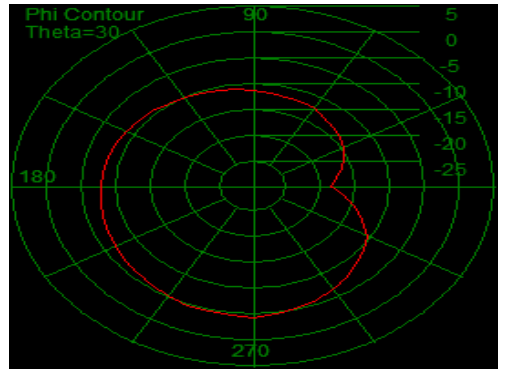
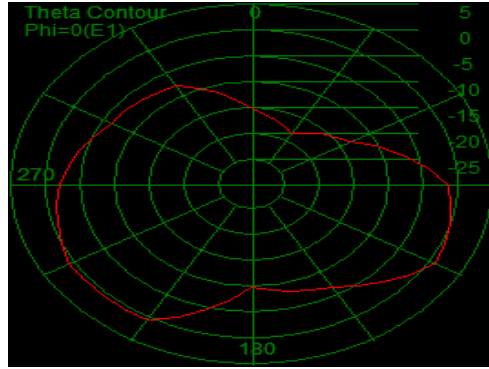
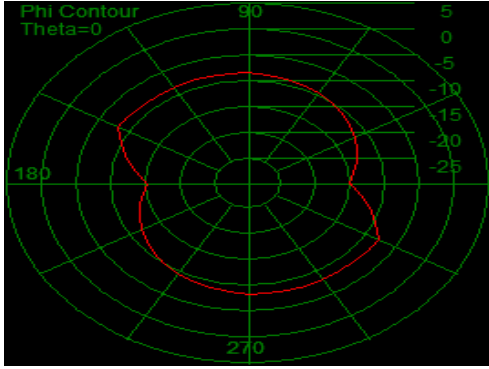
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

751MHZ



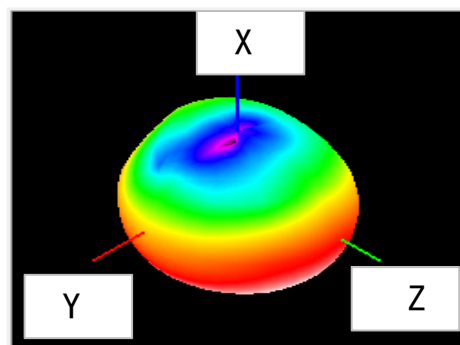
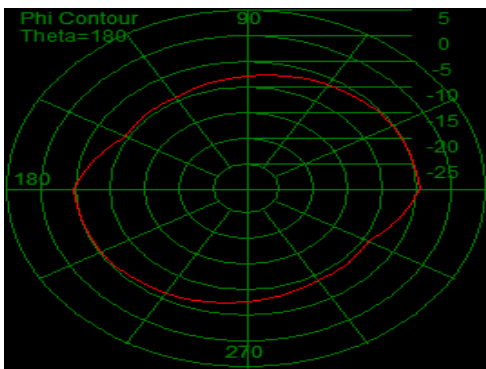
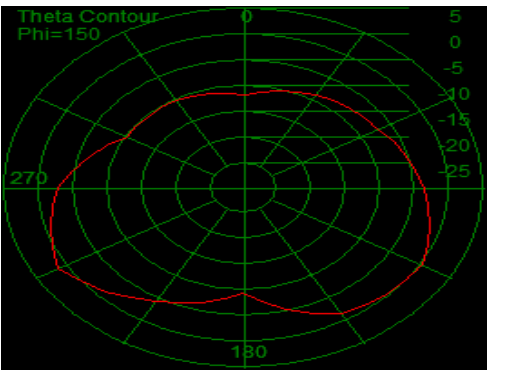
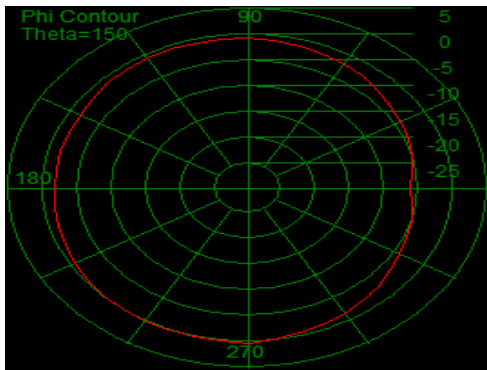
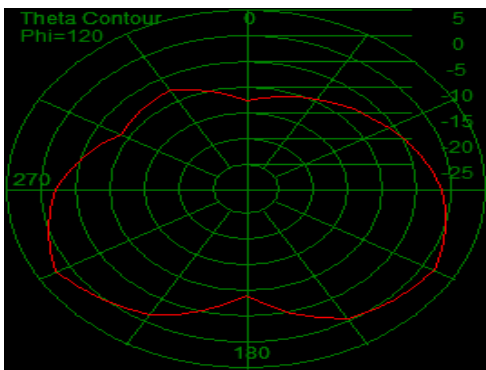
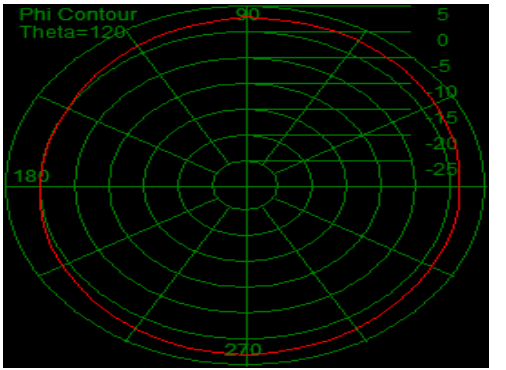
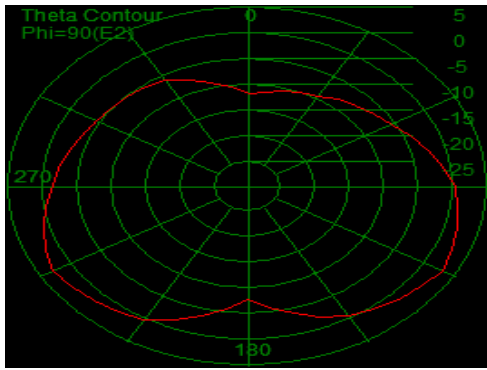
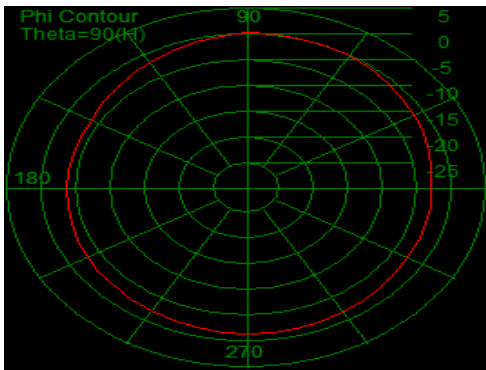
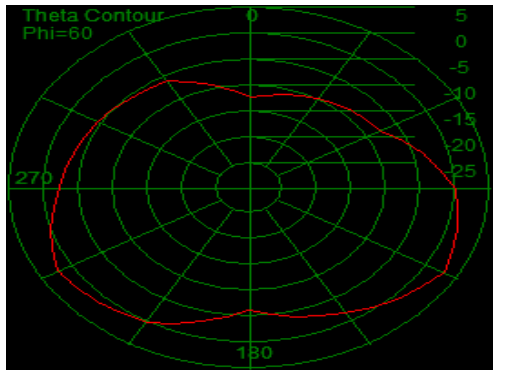
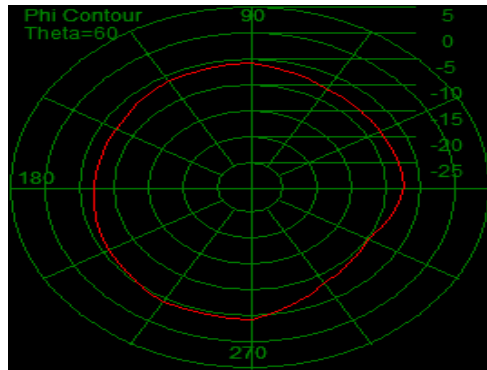
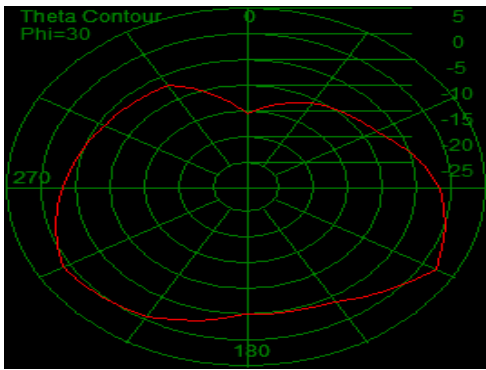
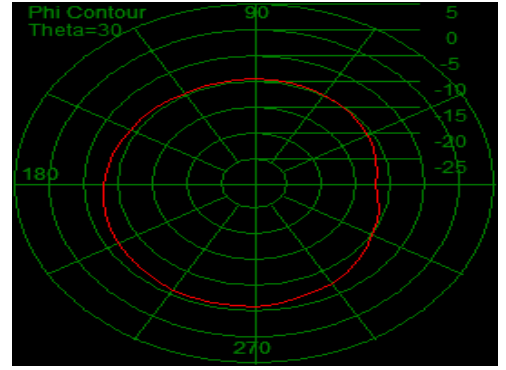
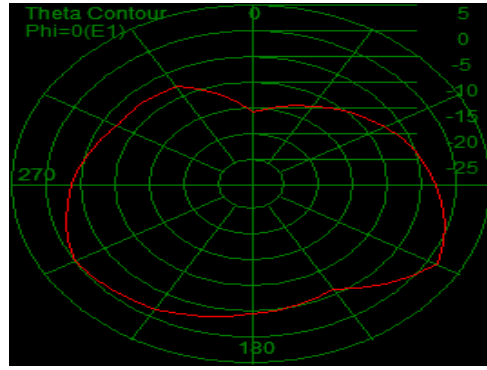
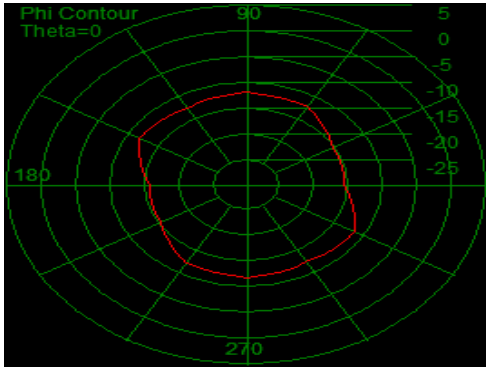
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

824MHZ



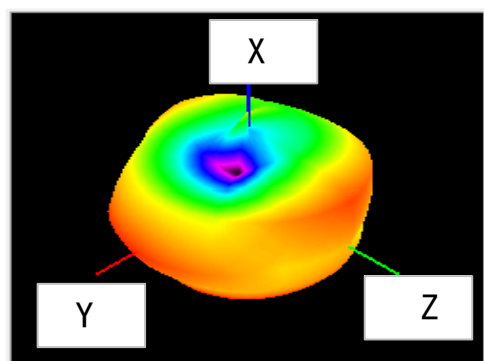
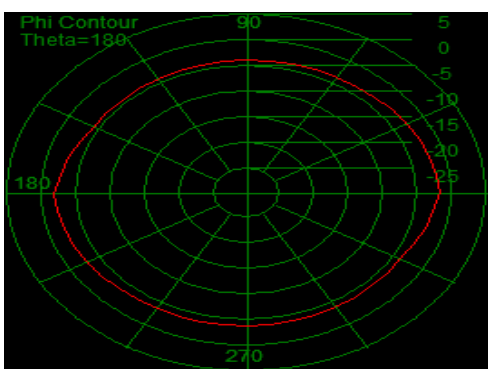
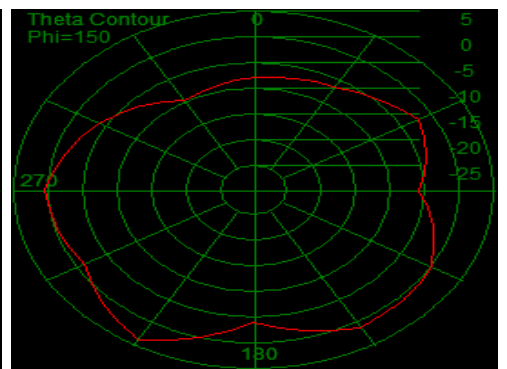
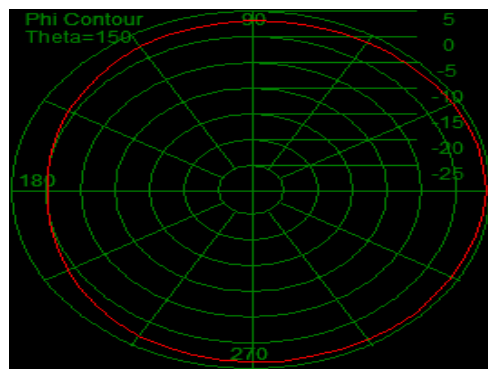
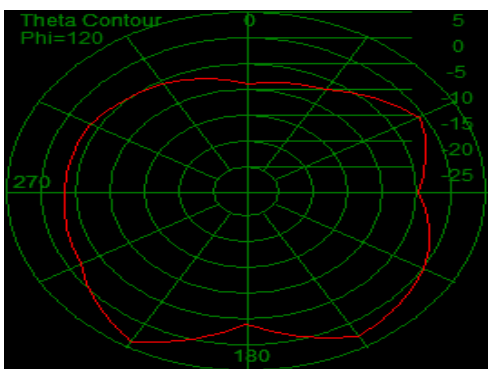
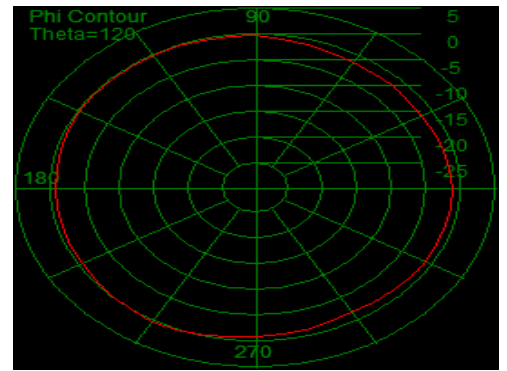
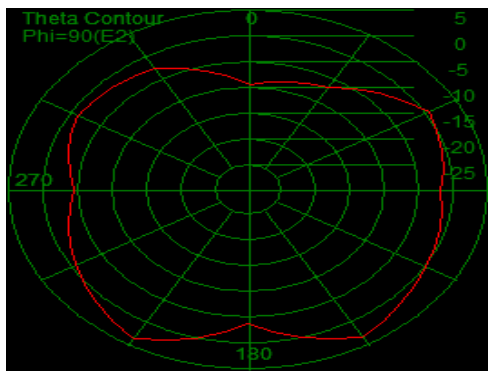
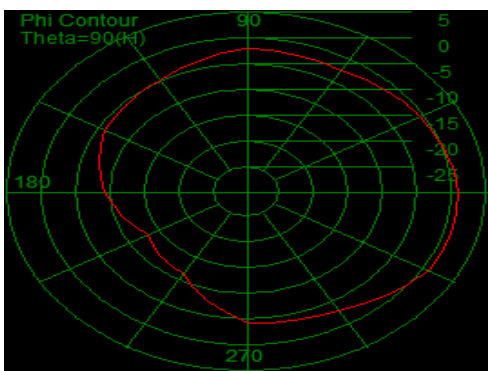
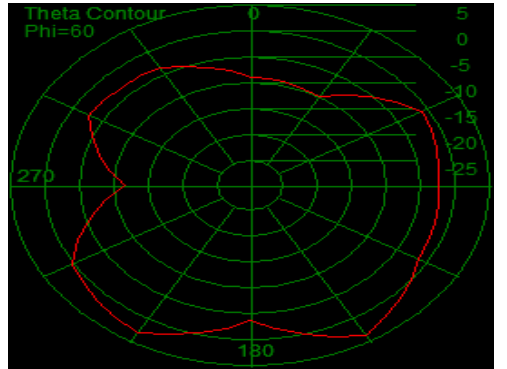
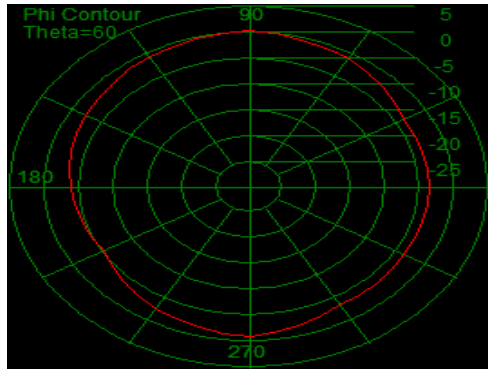
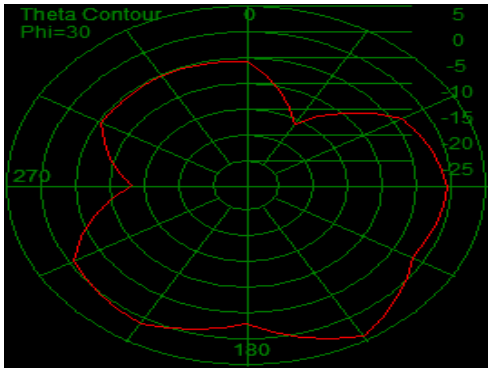
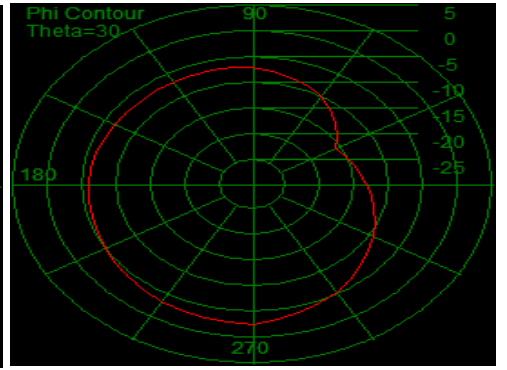
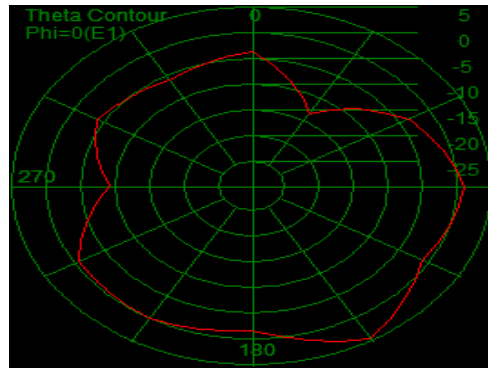
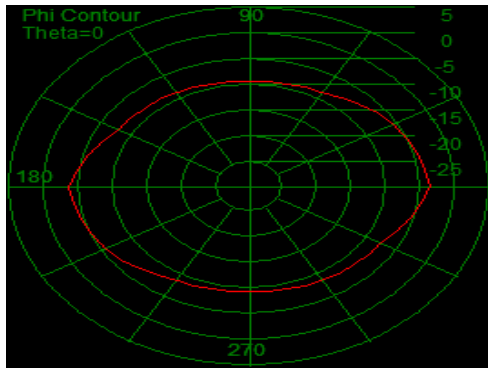
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

960MHZ



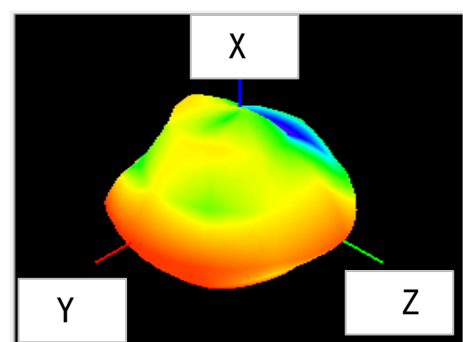
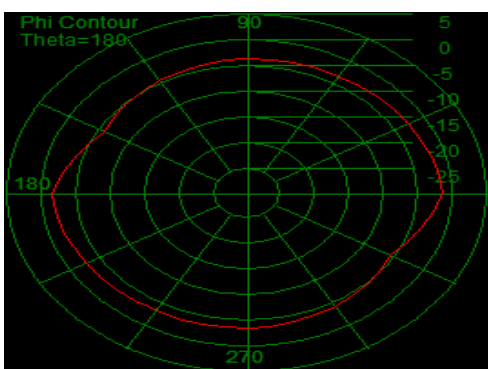
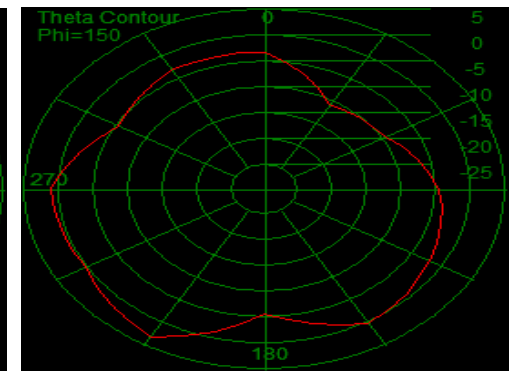
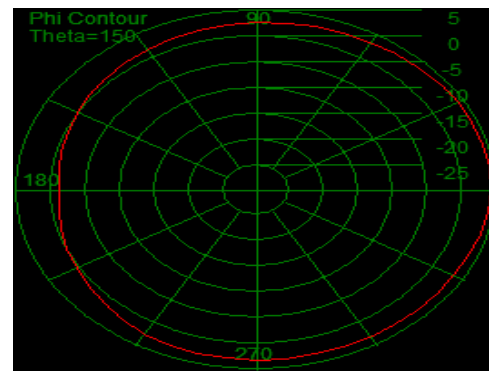
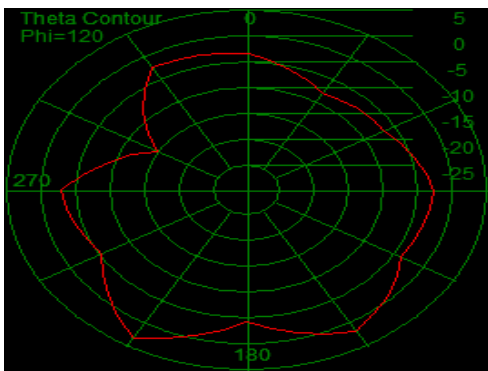
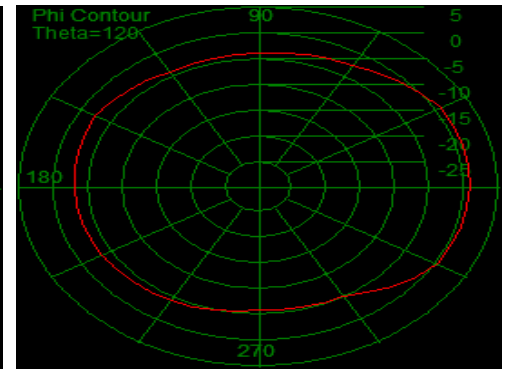
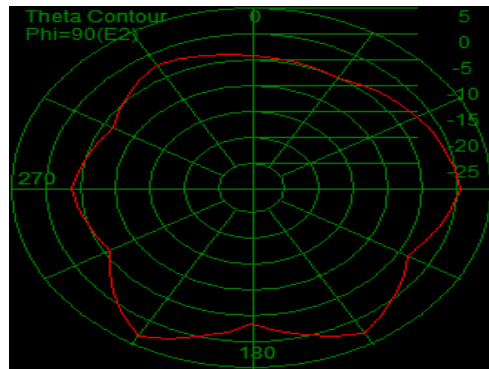
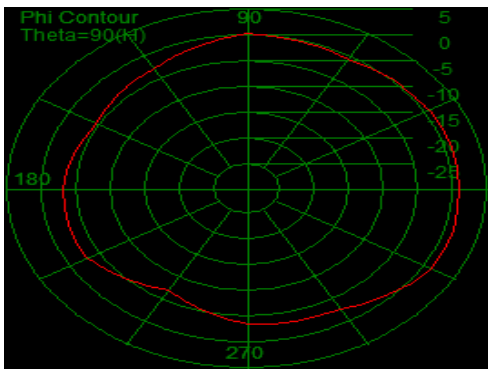
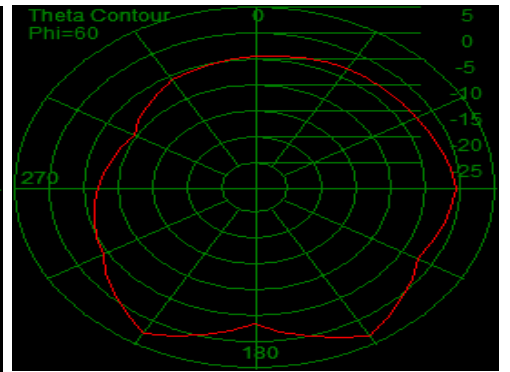
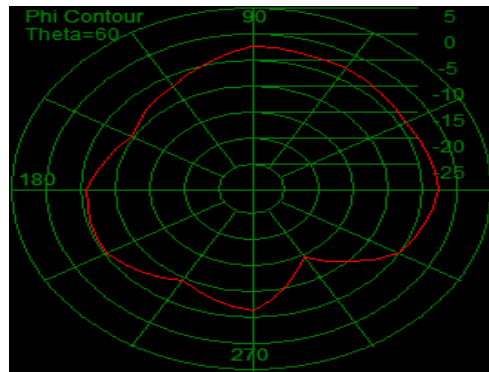
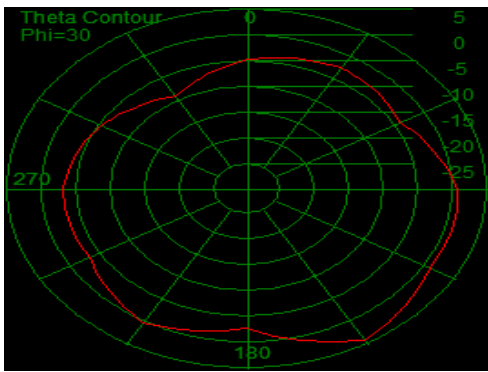
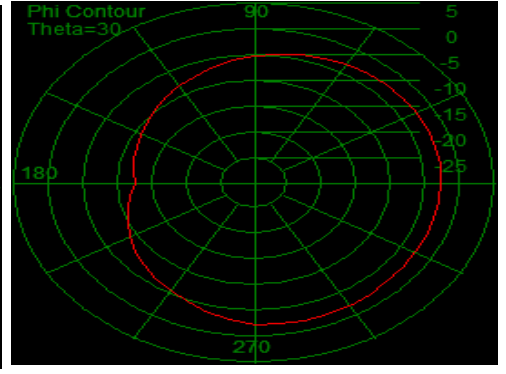
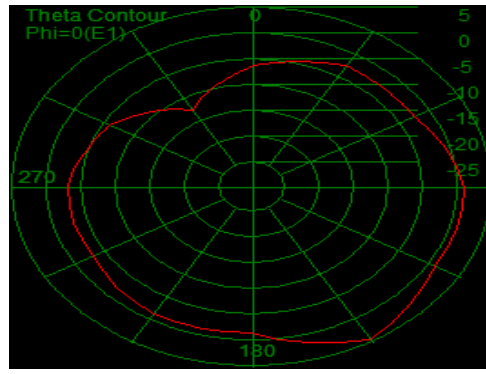
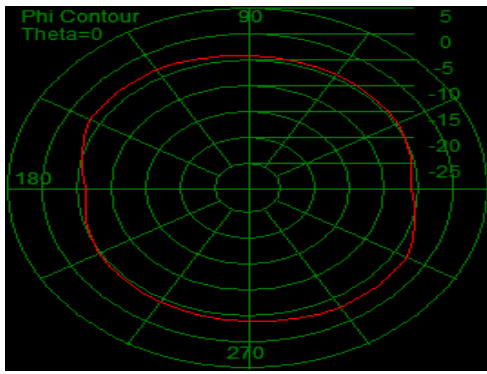
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

1710MHZ



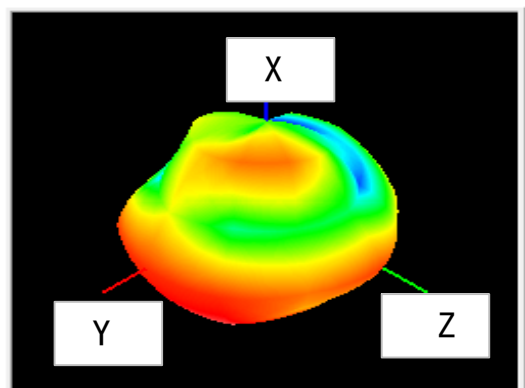
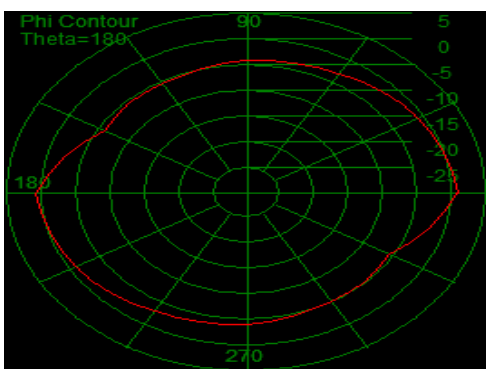
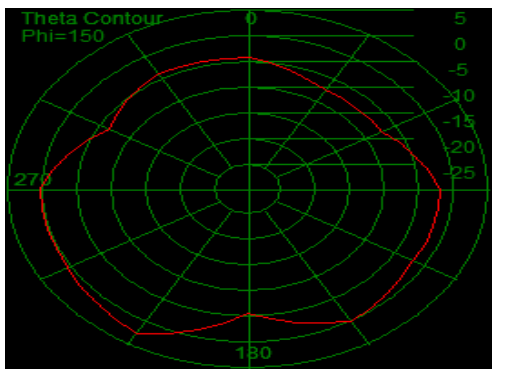
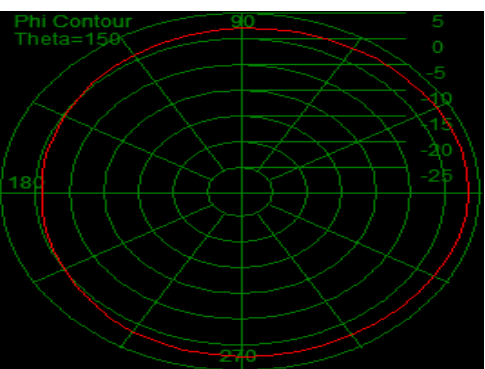
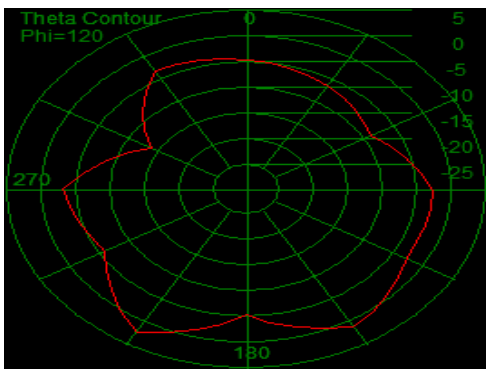
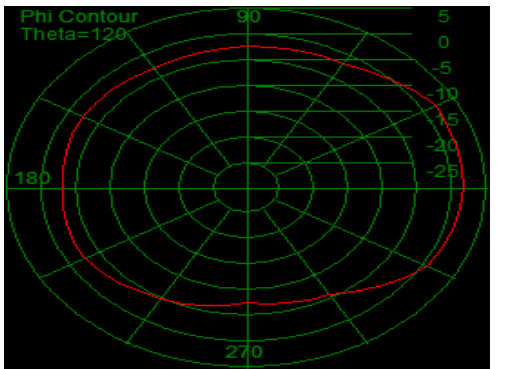
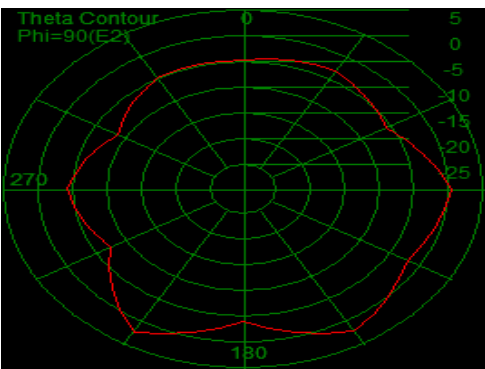
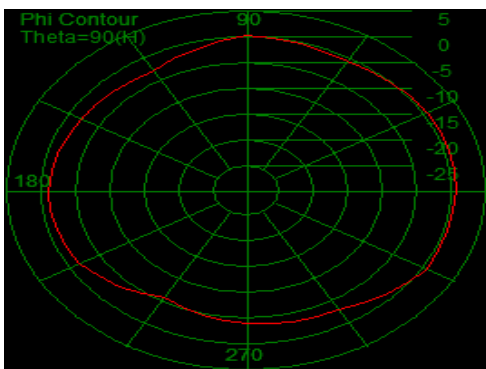
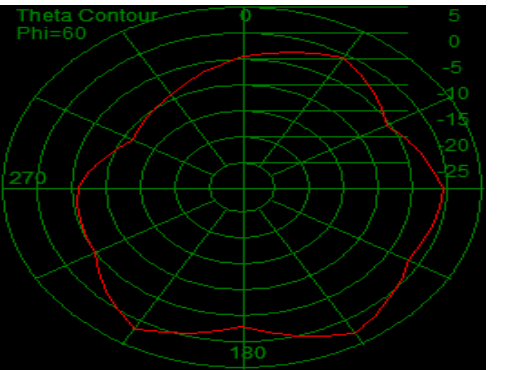
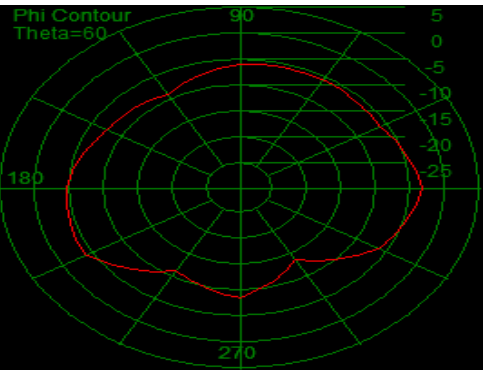
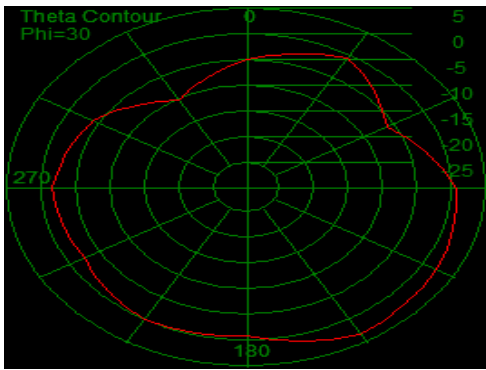
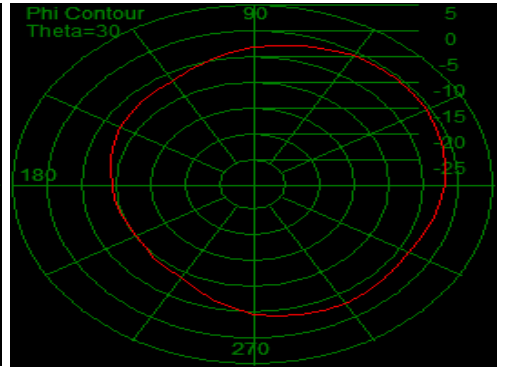
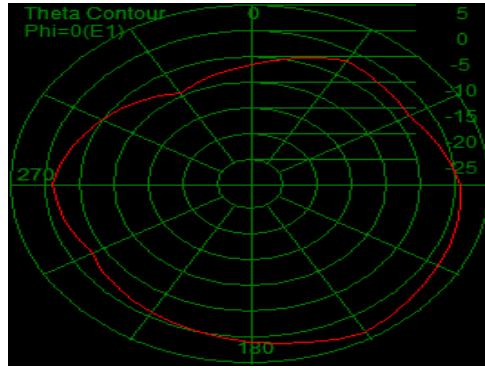
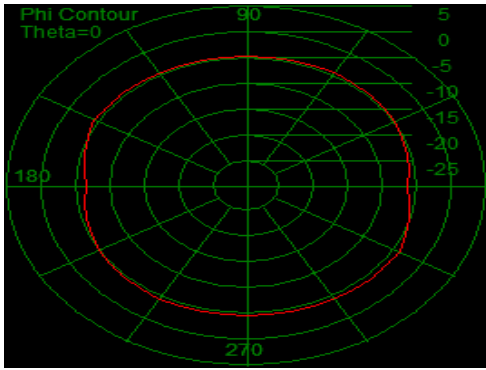
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

1880MHZ



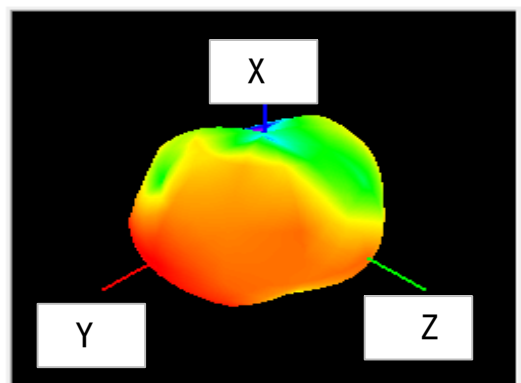
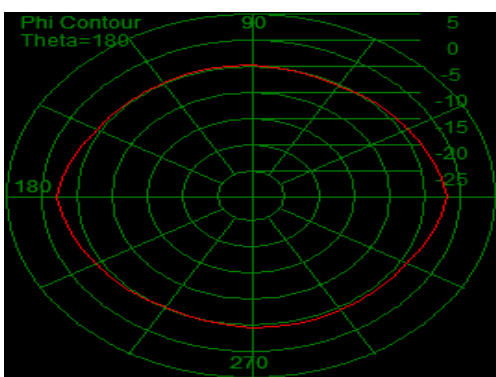
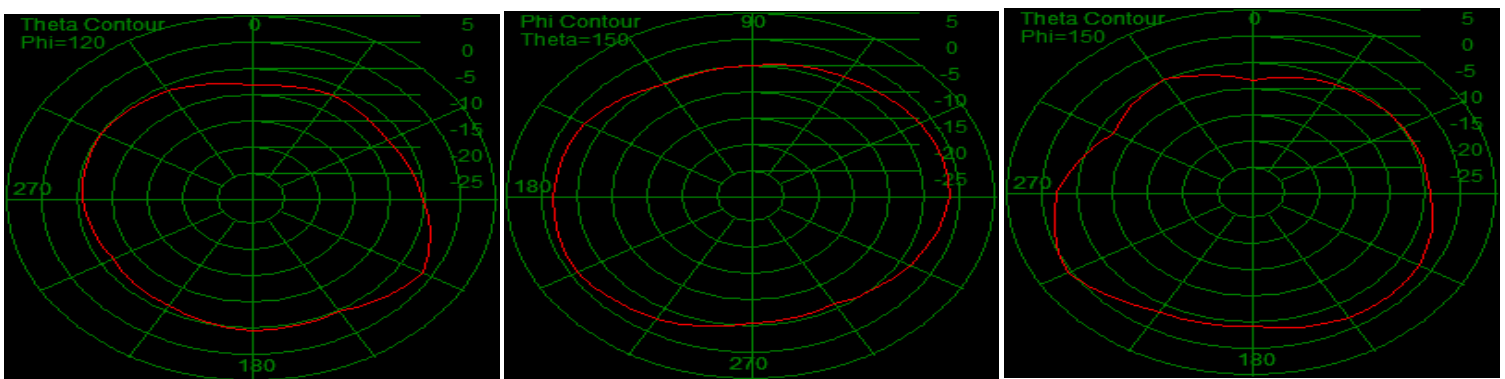
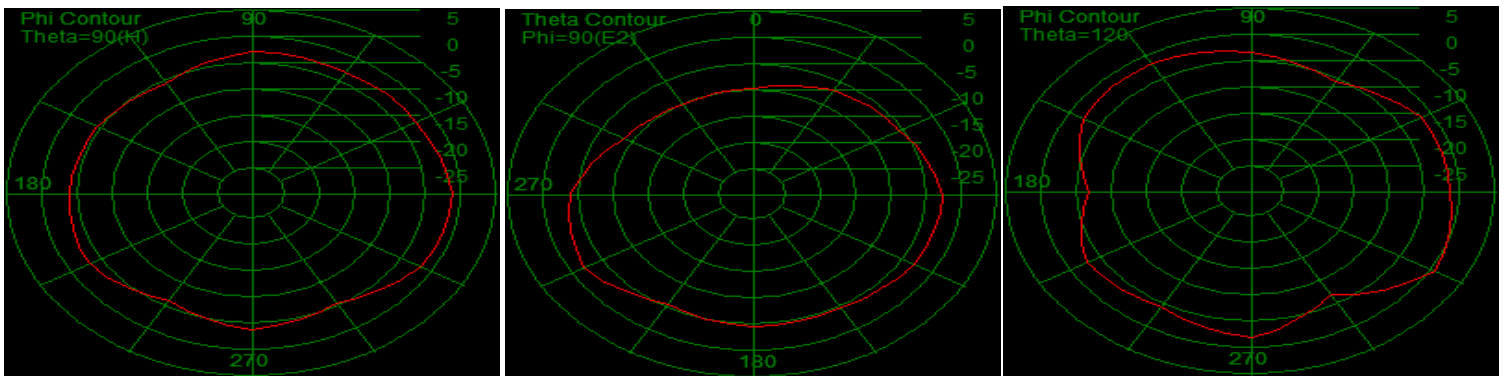
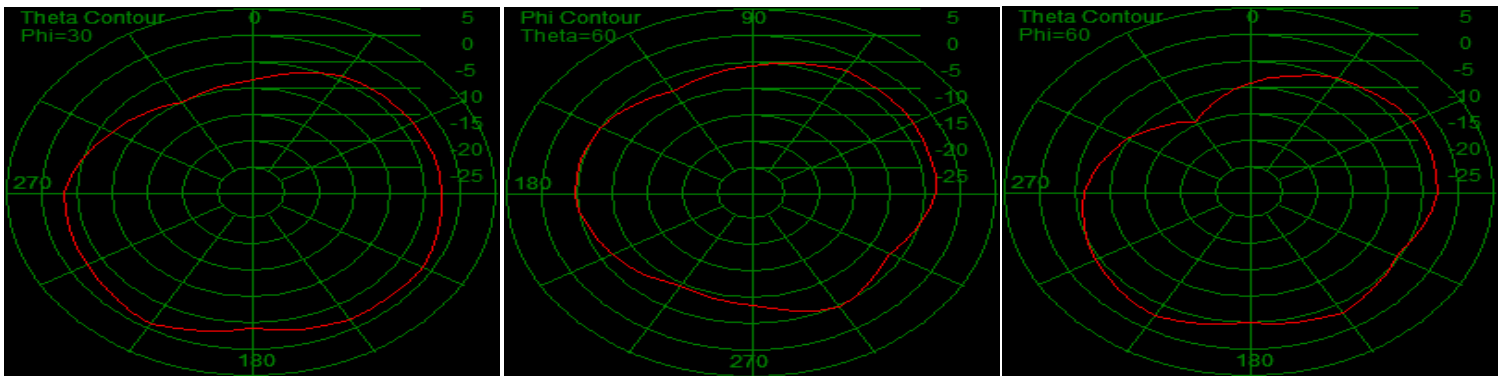
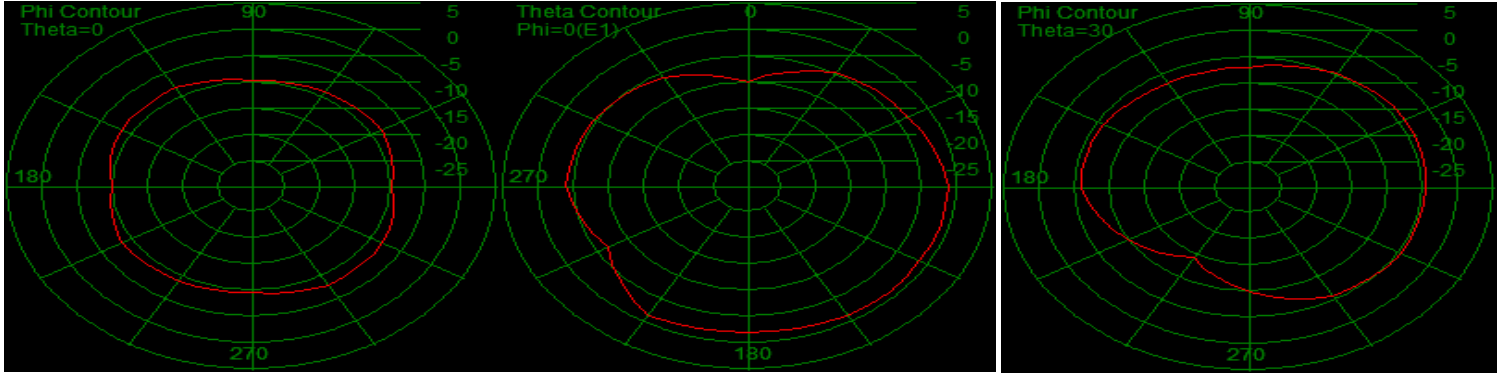
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

1990MHZ



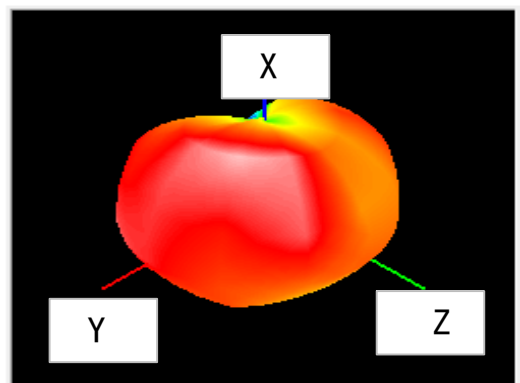
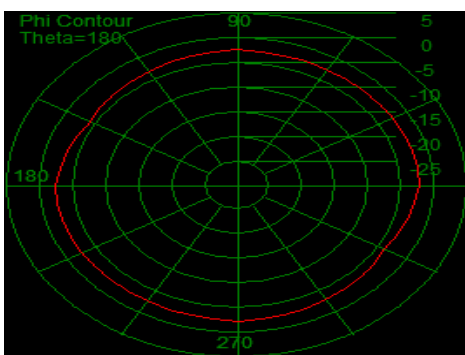
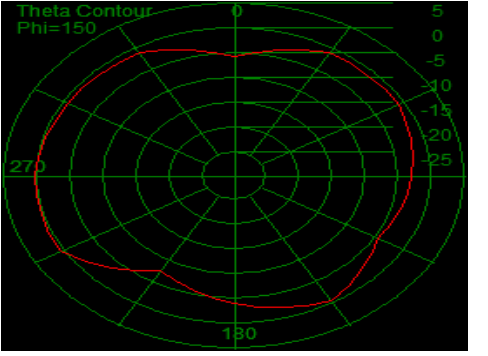
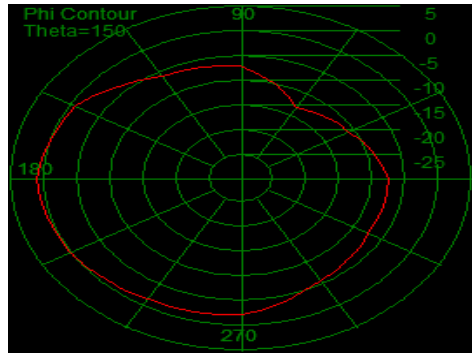
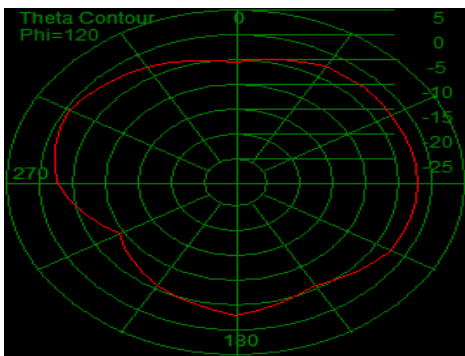
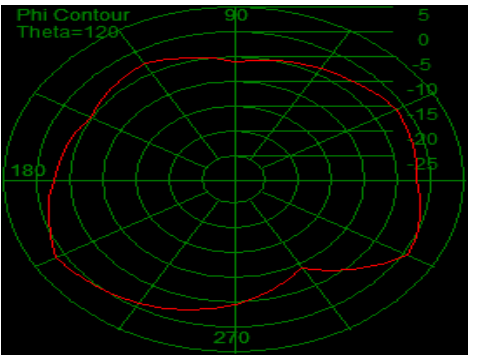
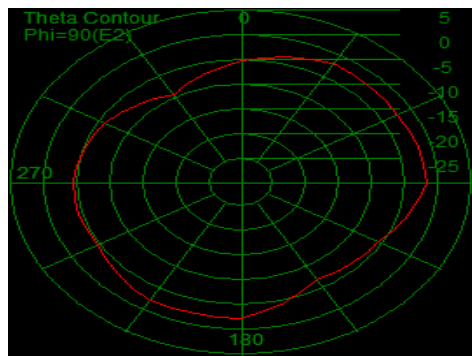
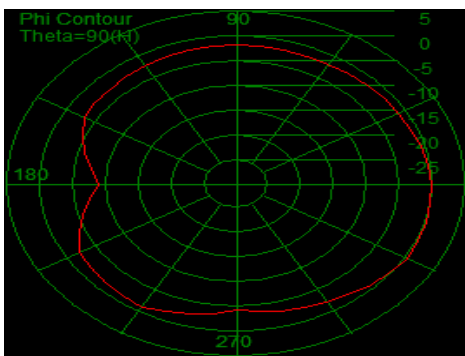
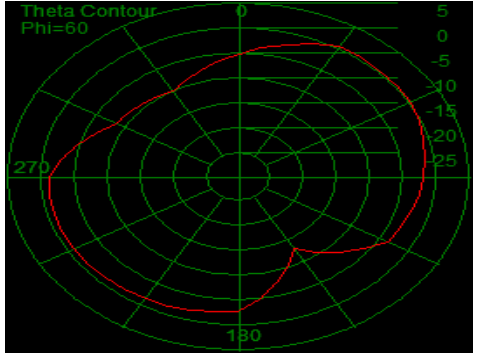
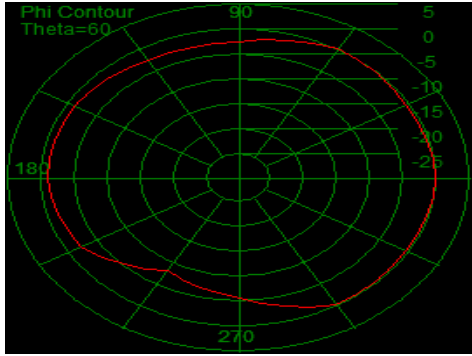
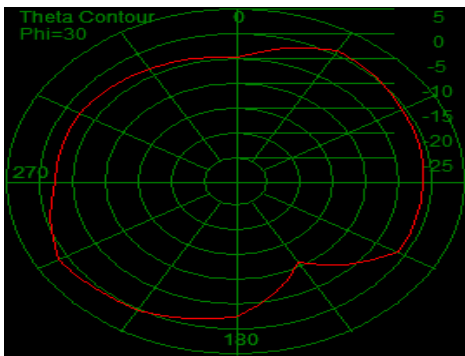
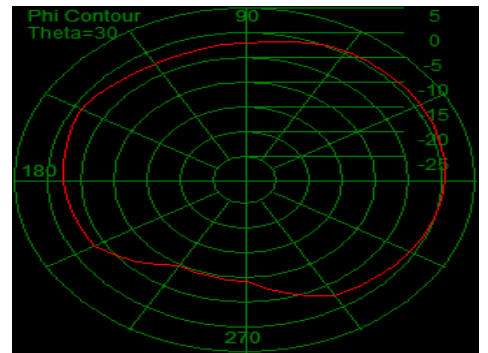
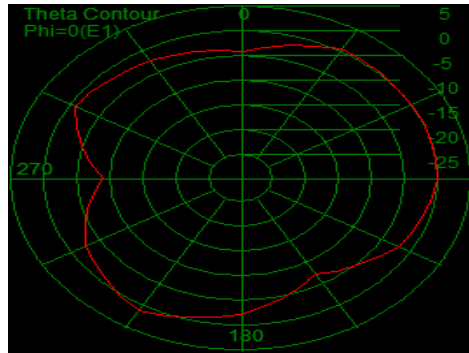
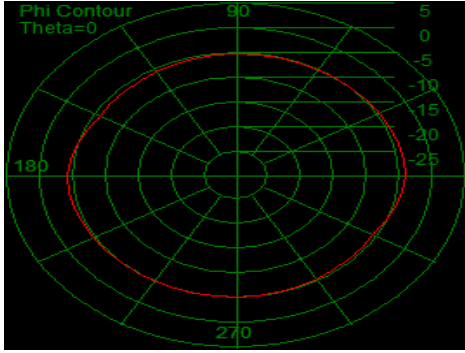
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

2170MHZ



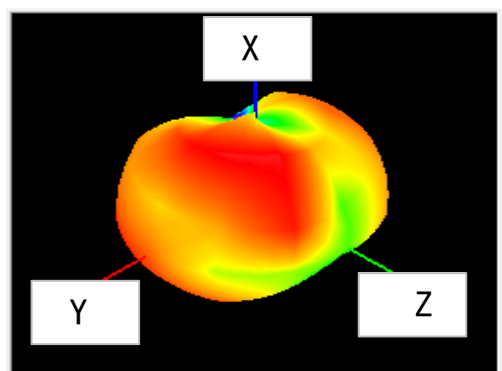
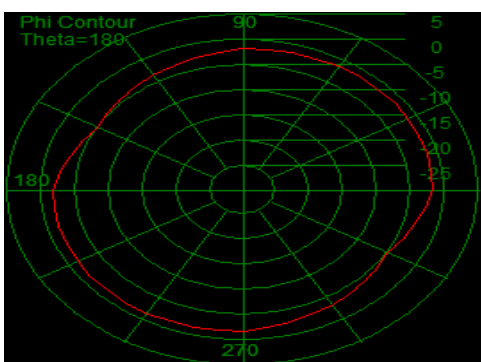
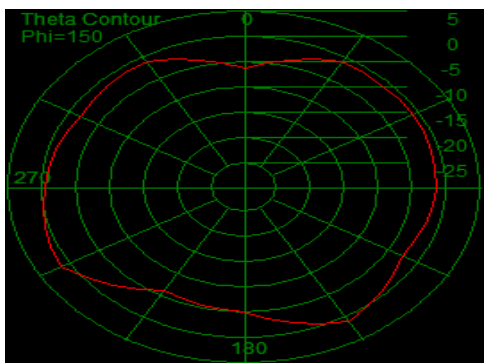
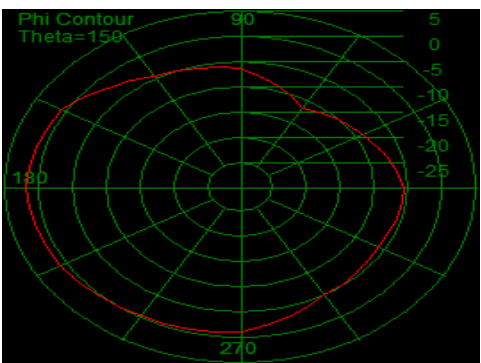
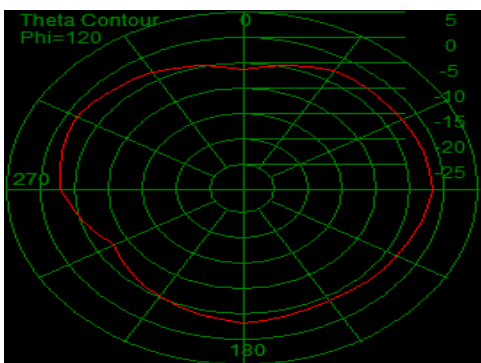
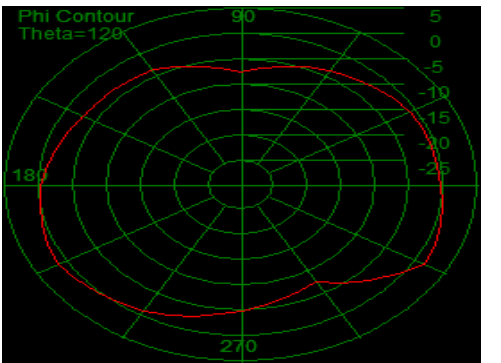
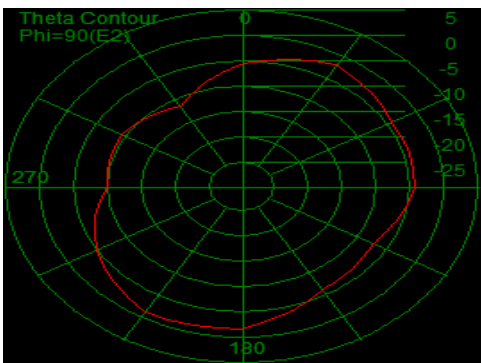
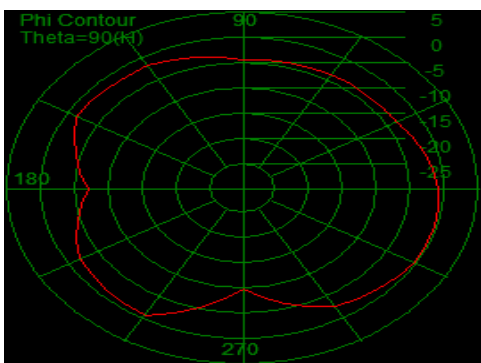
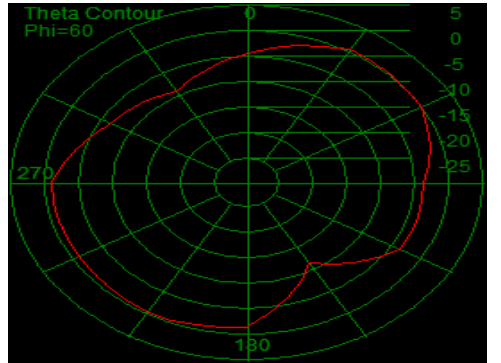
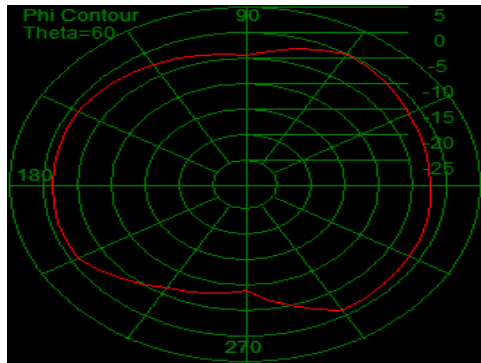
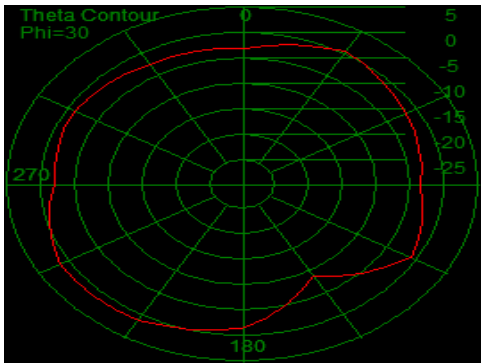
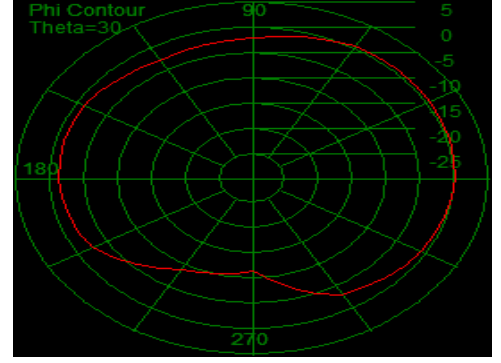
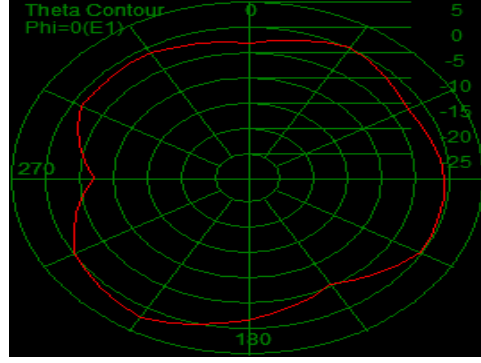
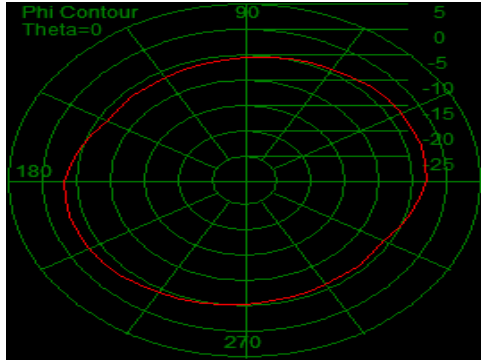
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

2300MHZ



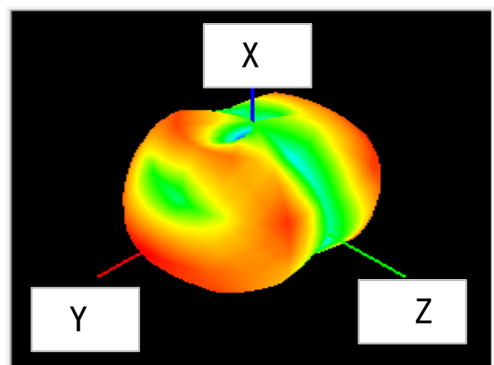
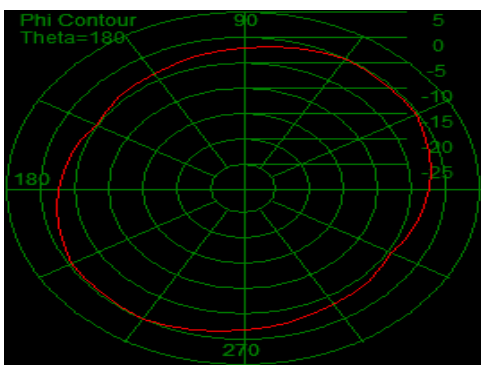
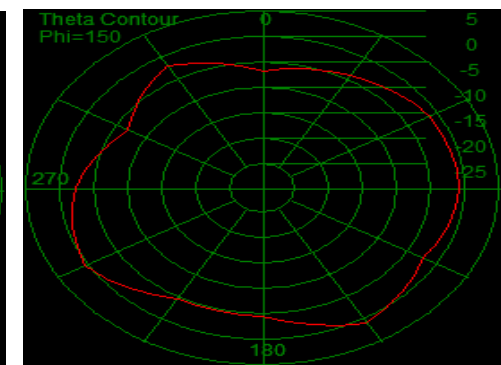
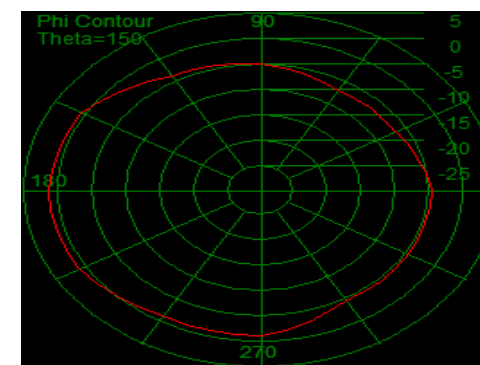
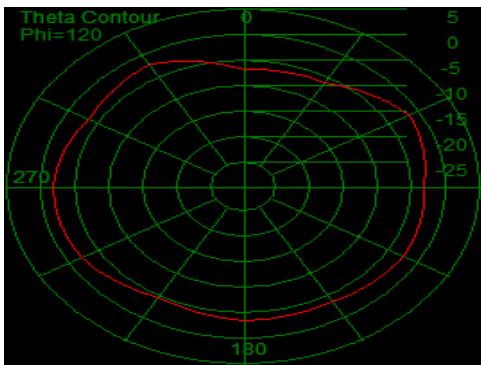
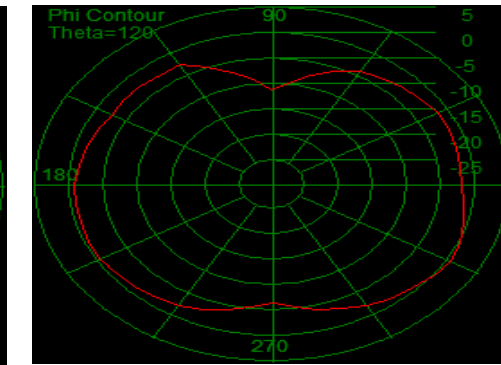
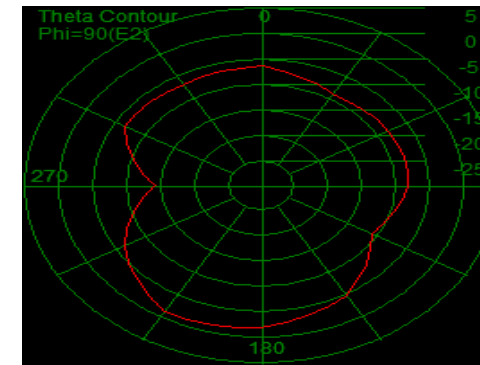
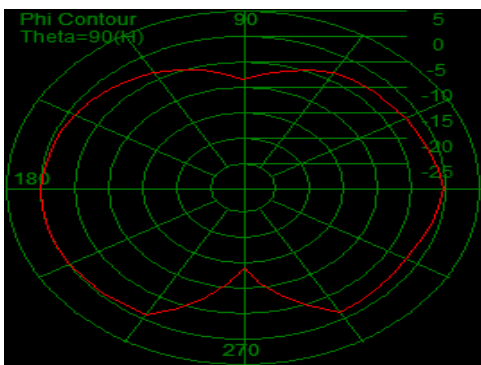
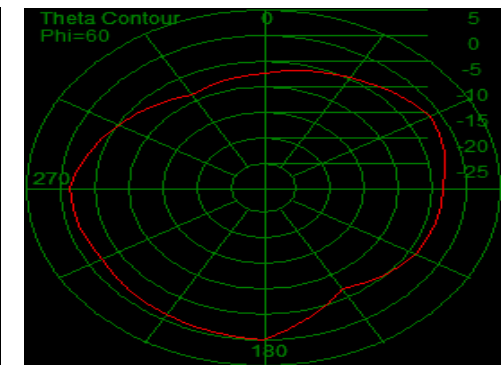
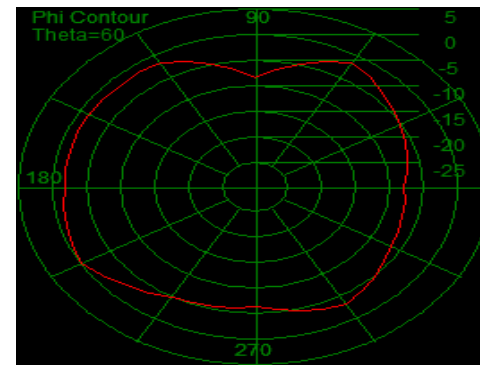
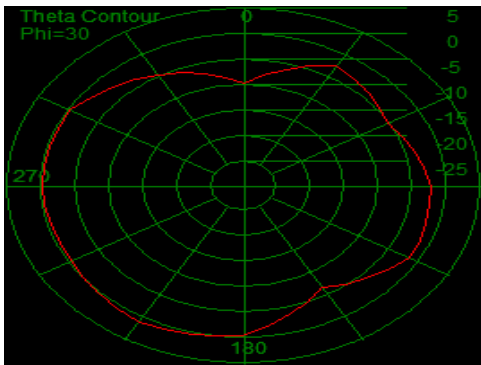
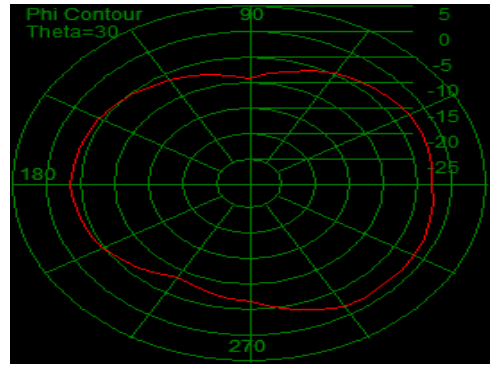
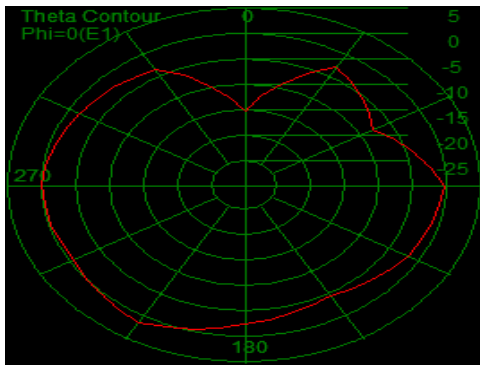
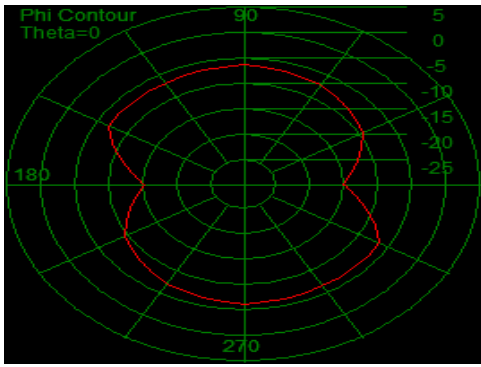
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

2500MHZ



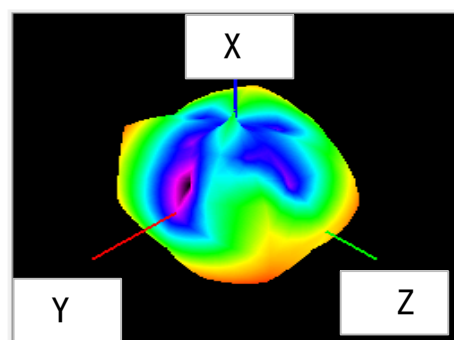
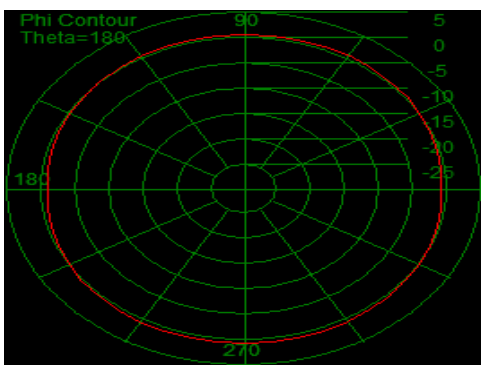
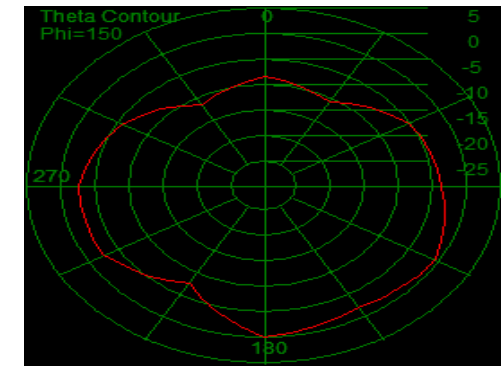
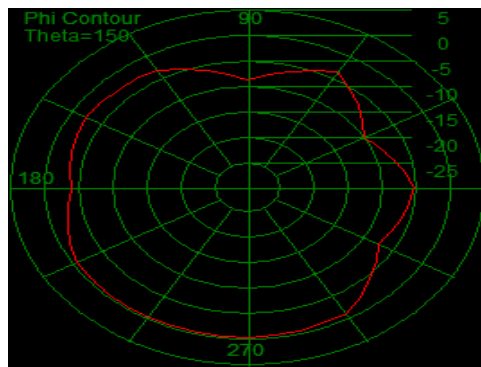
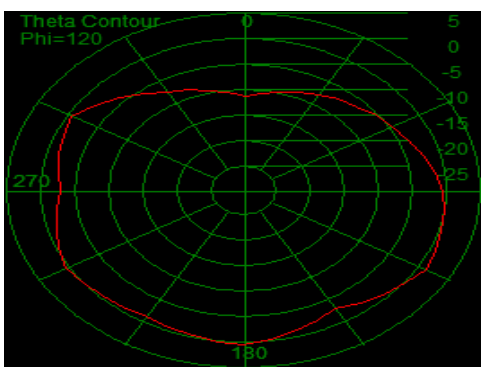
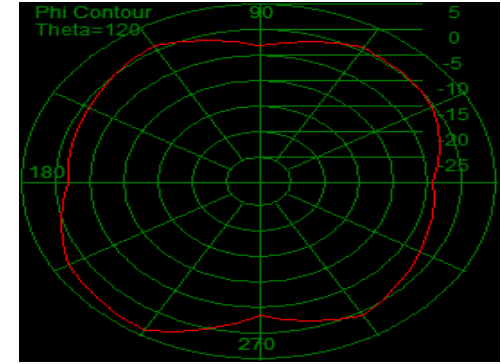
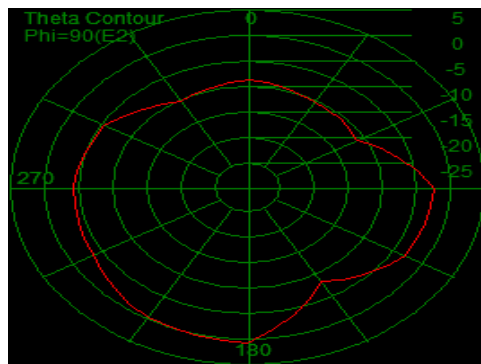
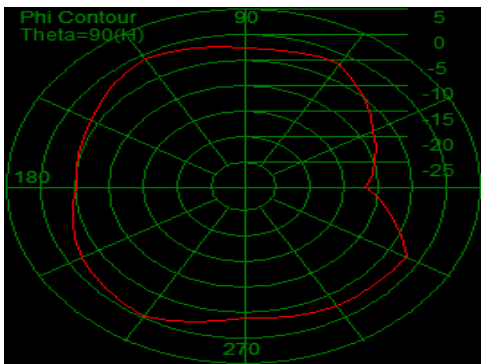
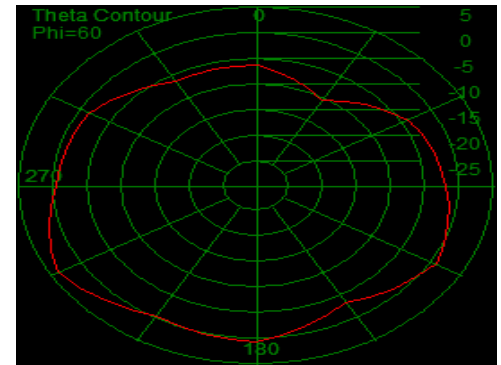
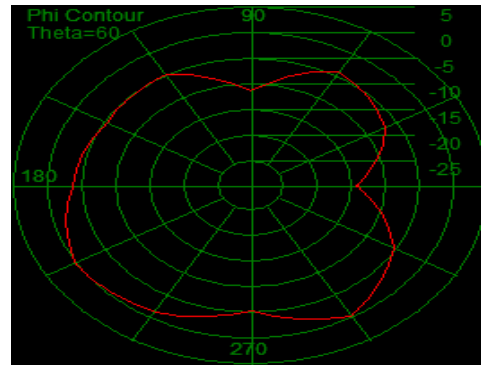
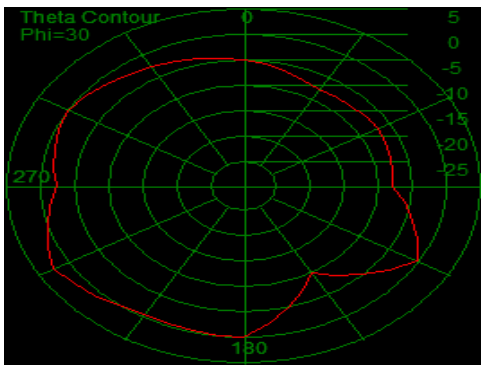
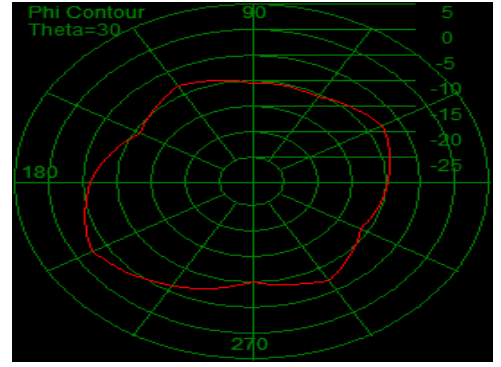
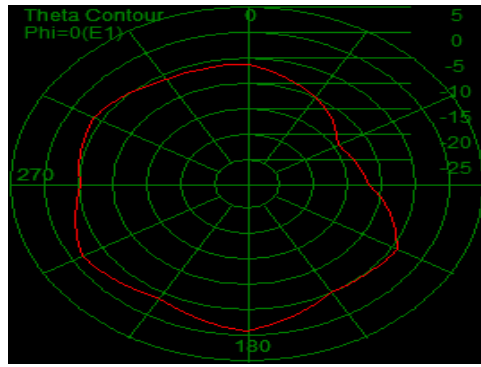
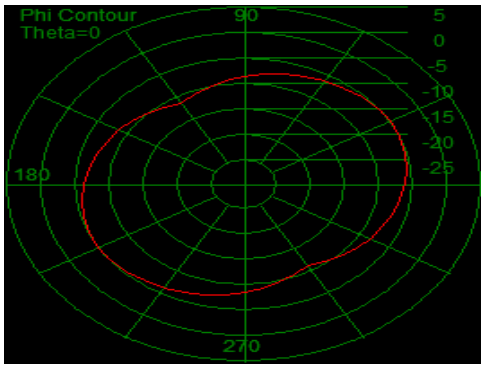
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

2690MHZ



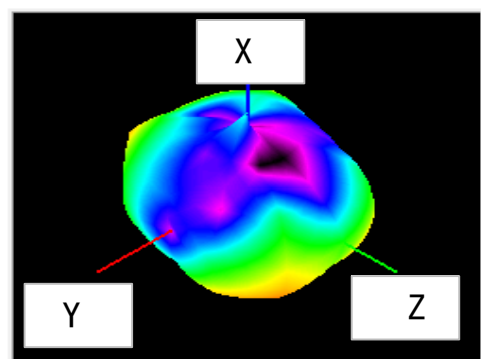
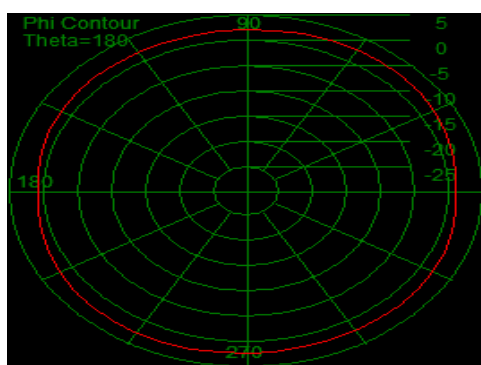
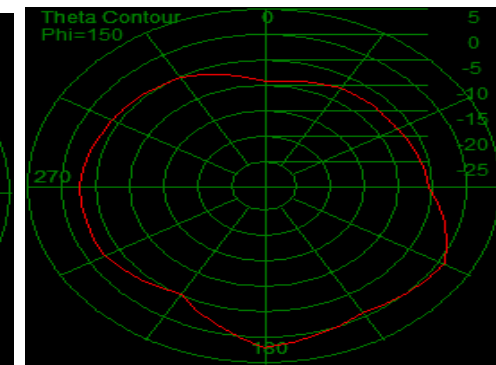
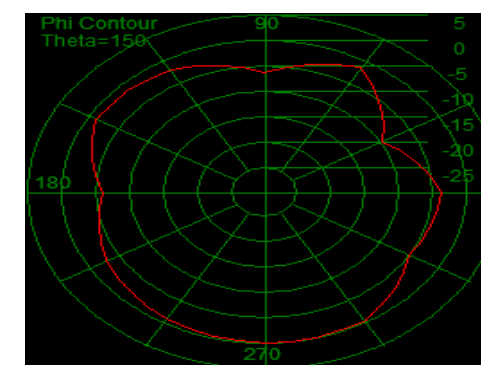
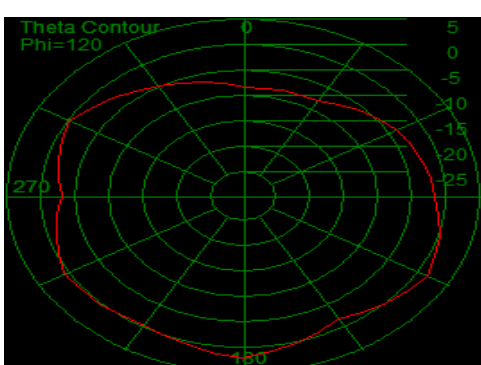
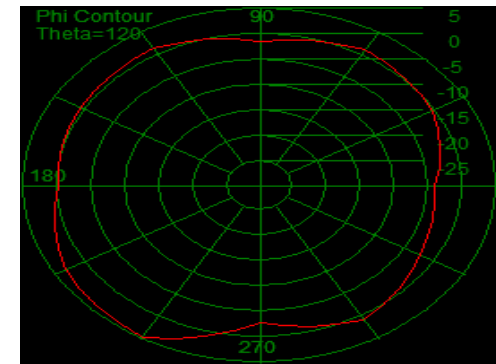
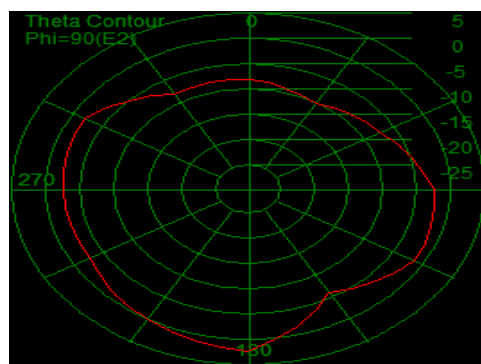
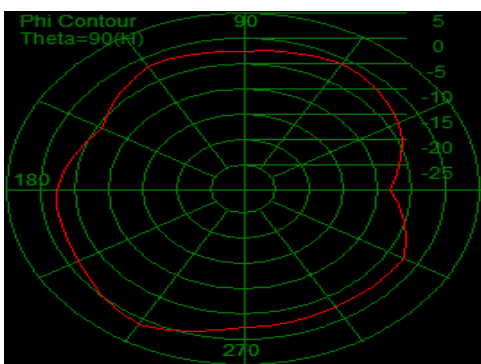
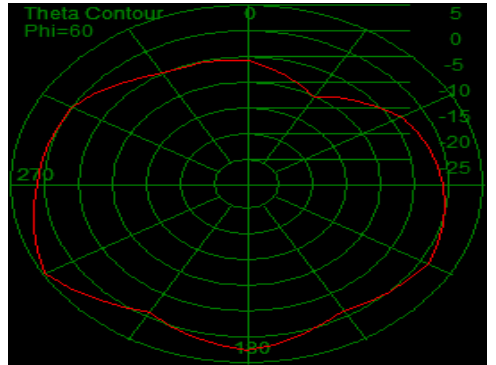
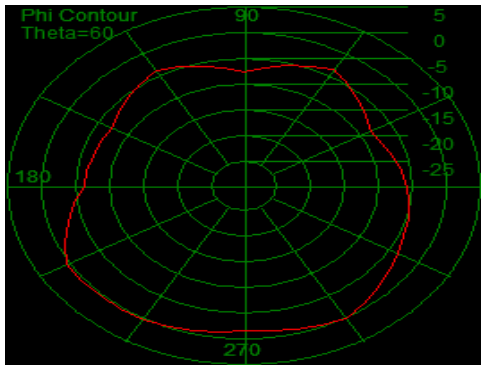
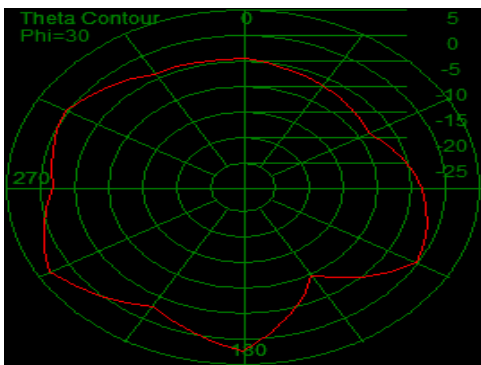
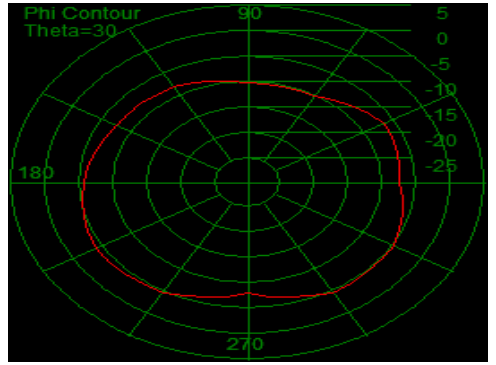
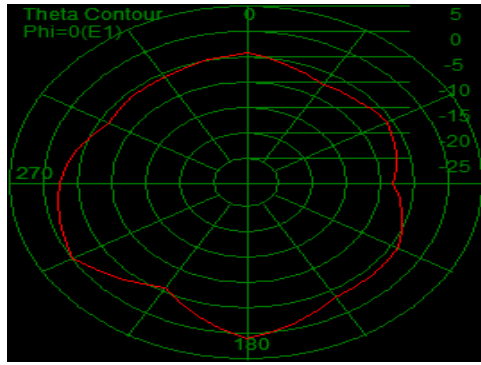
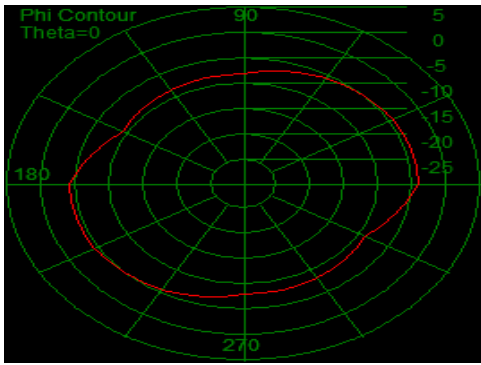
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

3400MHZ



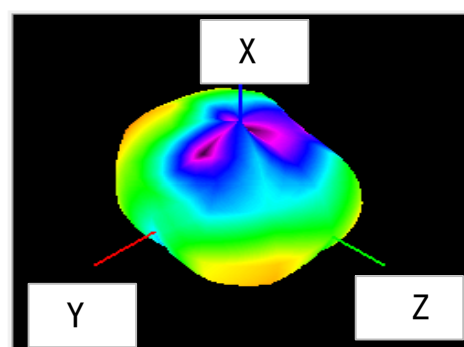
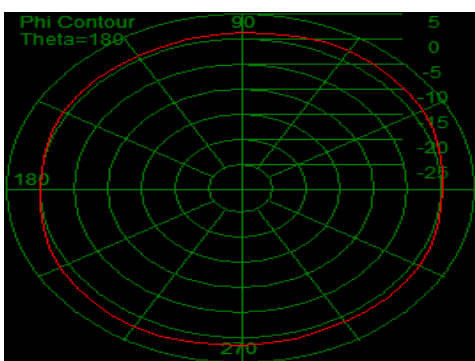
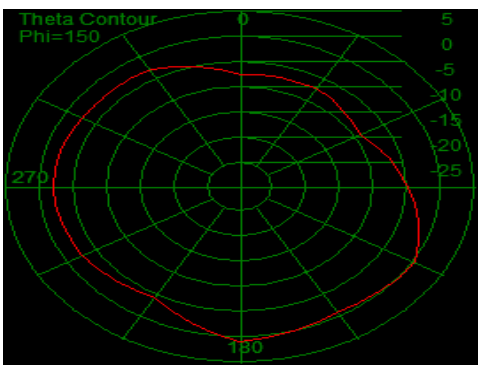
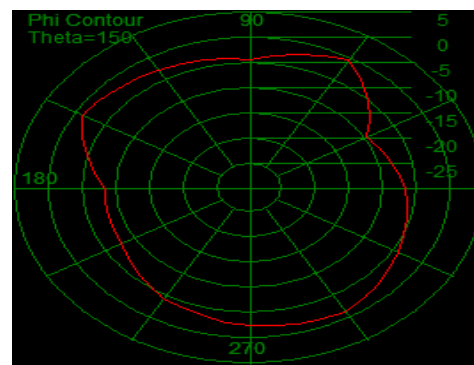
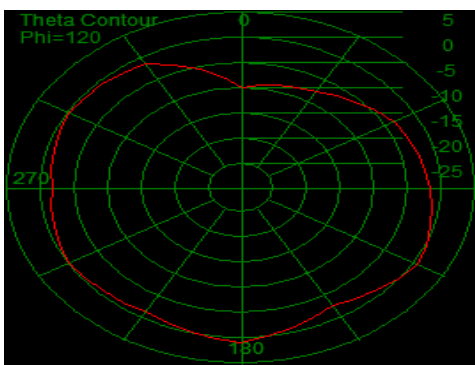
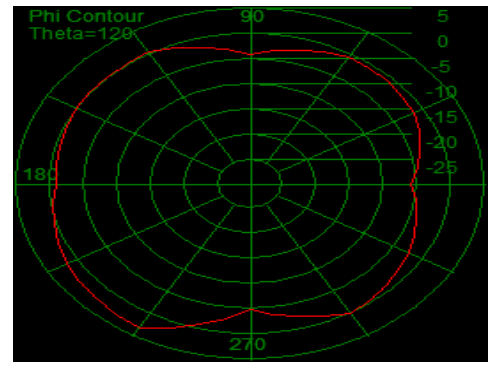
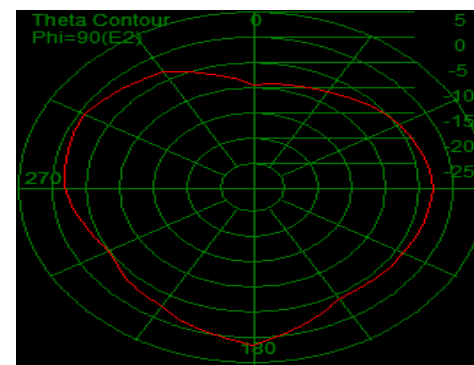
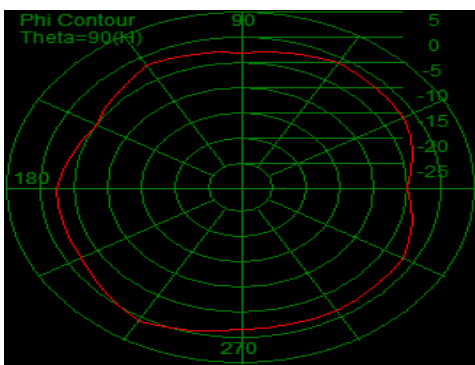
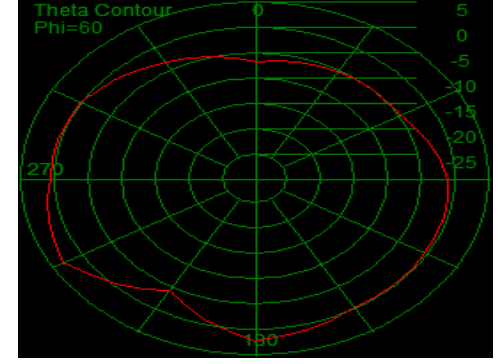
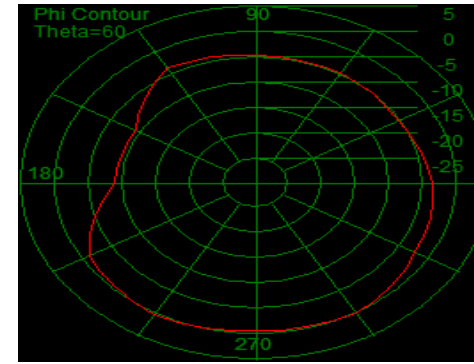
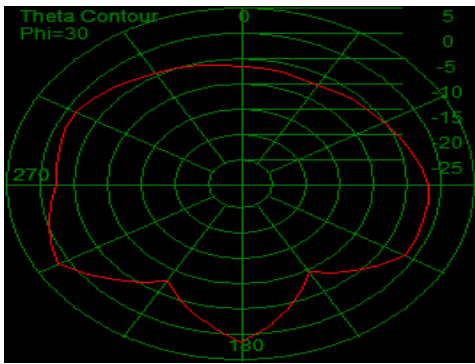
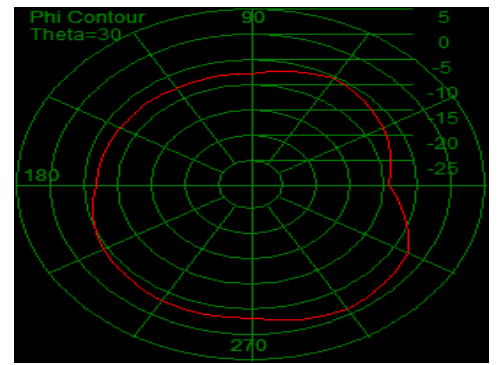
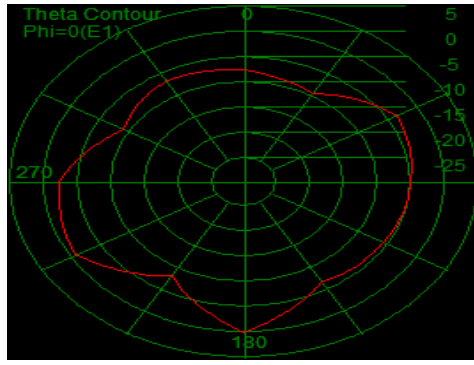
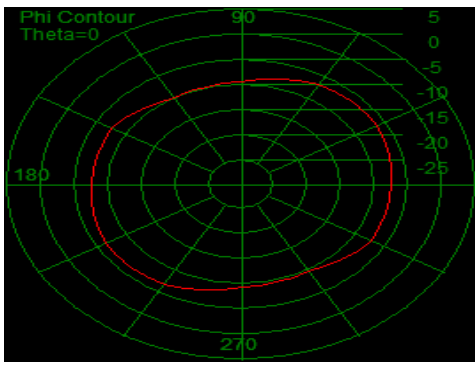
150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

3500MHZ



150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

3600MHZ



150*90mm – Straight 2D Radiation Patterns Straight Pose -180°

4000MHZ

