



# 百展科技有限公司

## BJTEK NAVIGATION, INC.

2F., No.129, University Rd., Sanxia Dist., New Taipei City 23741, Taiwan (R.O.C.)

23741 新北市三峽區大學路 129 號 2 樓

Tel: +886-2-86720160

Fax: +886-2-86720161

E-mail: [lotus@bjtek.com.tw](mailto:lotus@bjtek.com.tw)

<http://www.bjtek.com.tw>

### L Band Passive ANTENNA

MODEL: TH-680D

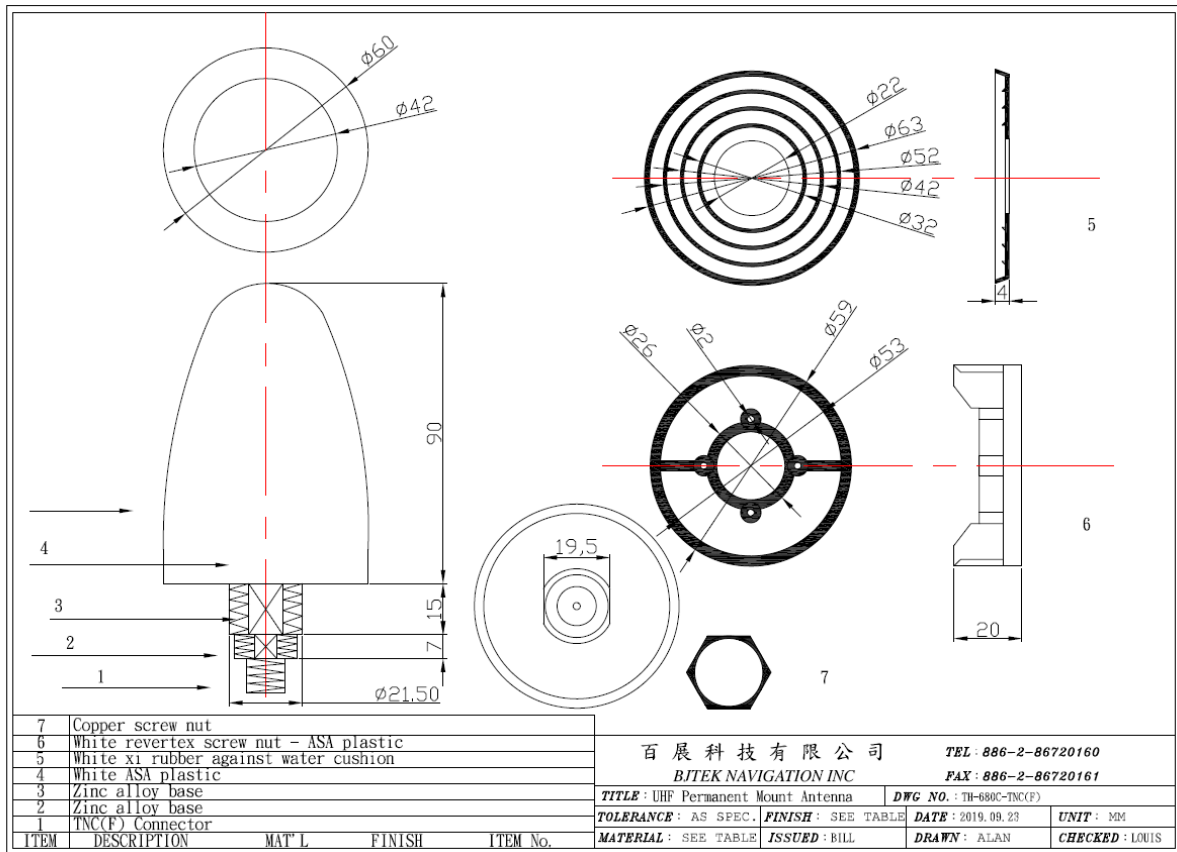
FOR IRIDIUM / INMARSAT / L1/L2 GPS/GLONASS



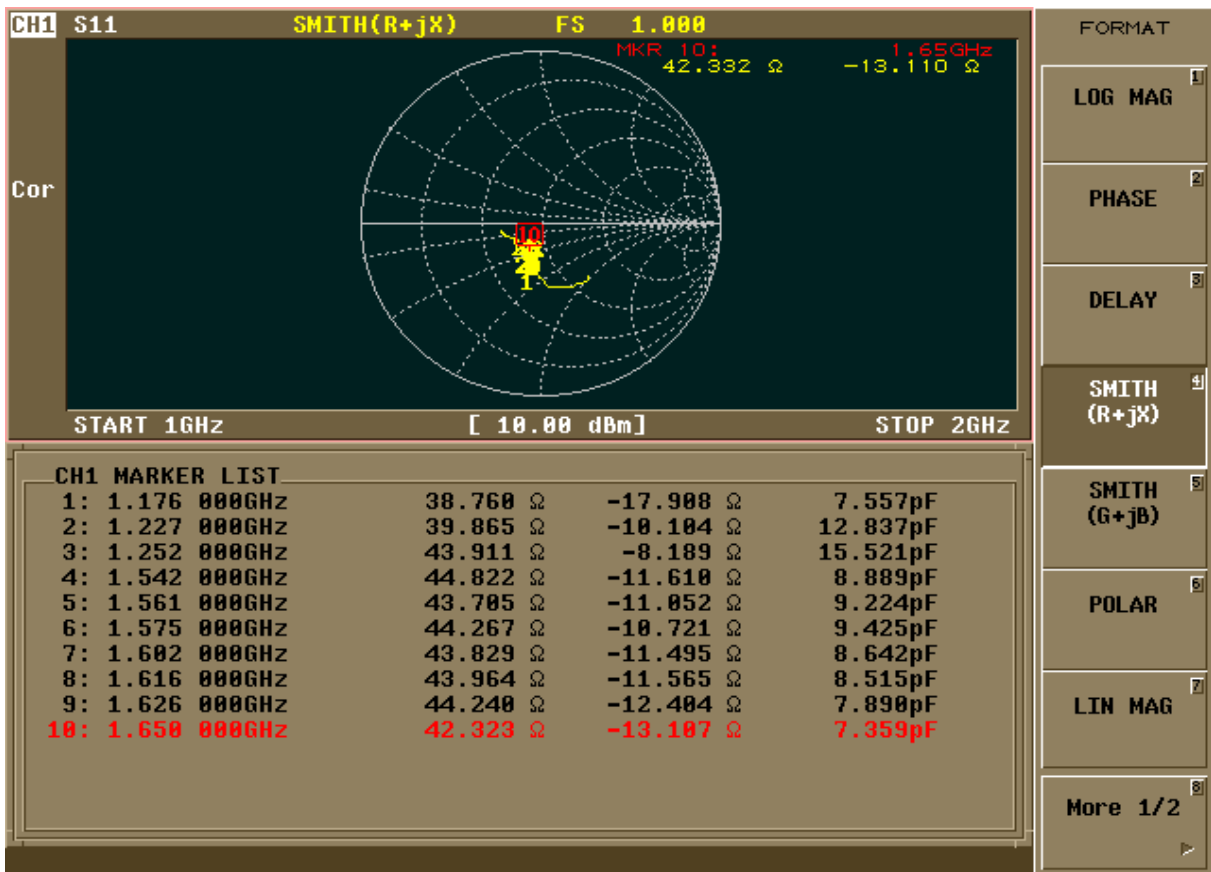
#### Specifications:

Frequency range:	1100~1700Mhz
Gain:	1-3dBi
V.S.W.R:	<2.0 ( ON 320x 240mm GND)
Impedance :	50 ohm
Connector:	TNC(F) or SMA(F)
Dimension:	60mm(Dia.) x 90mm(H)
Weight:	180g ( with Accessories)
Polarization :	Vertical & RHCP
Power handling :	50W
Color :	white
Rated wind velocity :	60m/s
Working Temperature :	-40~85°C
Mounting Function	Ceiling Mount
Water Resistance	100% waterproof , IPX8

\* This specification is subject to change without prior notice





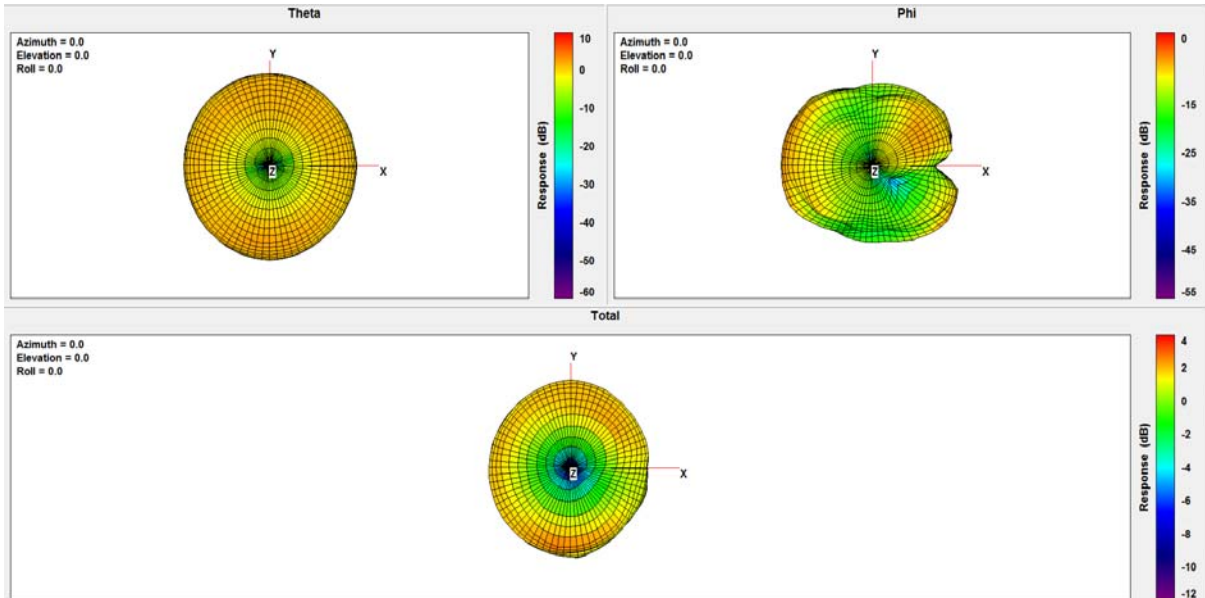


### Vertical Test:

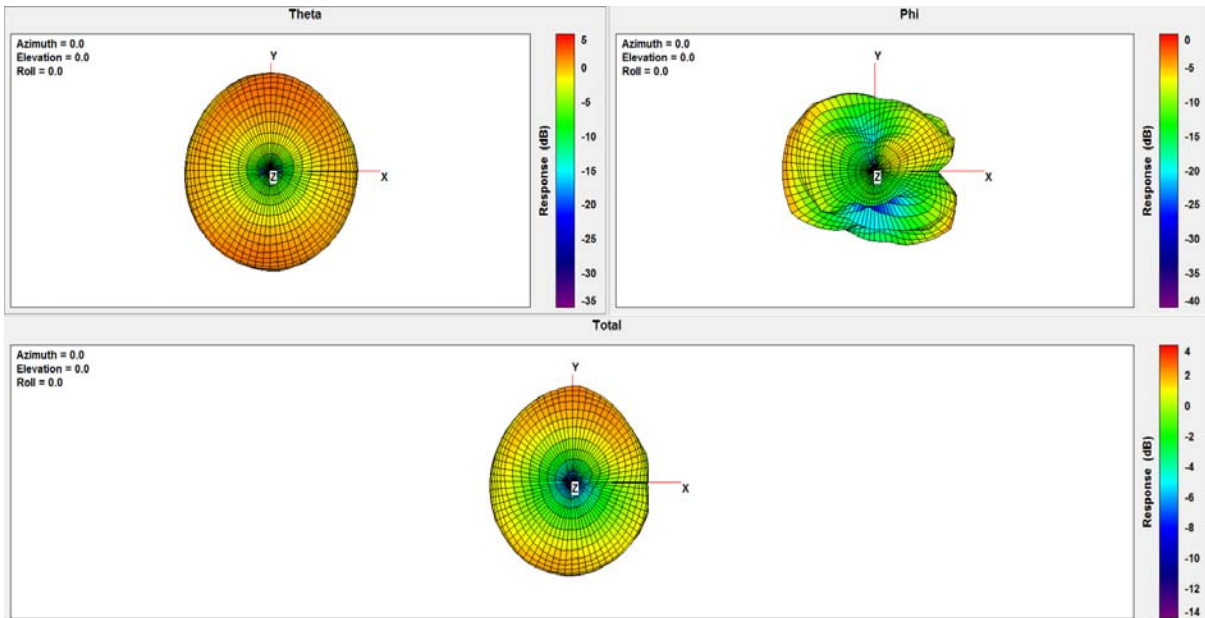
Frequency (MHz)	1100	1176	1227	1252	1542	1561	1575	1602	1616	1620	1626
Peak Gain (dBi)	2.93	2.63	2.57	2.41	1.64	1.52	1.24	1.39	1.34	1.32	1.38
Efficiency (%)	87.37	80.59	75.33	72.96	57.81	55.91	54.28	56.25	55.34	55.39	56.02

Frequency (MHz)	1630	1642	1650	1710	1880	1990	2170	2200	2300	2400	2500
Peak Gain (dBi)	1.31	1.38	1.42	2.28	3.13	2.46	1.54	1.86	2.71	2.39	1.85
Efficiency (%)	55.20	55.46	55.98	58.58	68.99	61.51	50.75	53.41	59.17	60.29	54.58
Frequency (MHz)	2600	2700									
Peak Gain (dBi)	2.66	3.05									
Efficiency (%)	59.65	53.91									

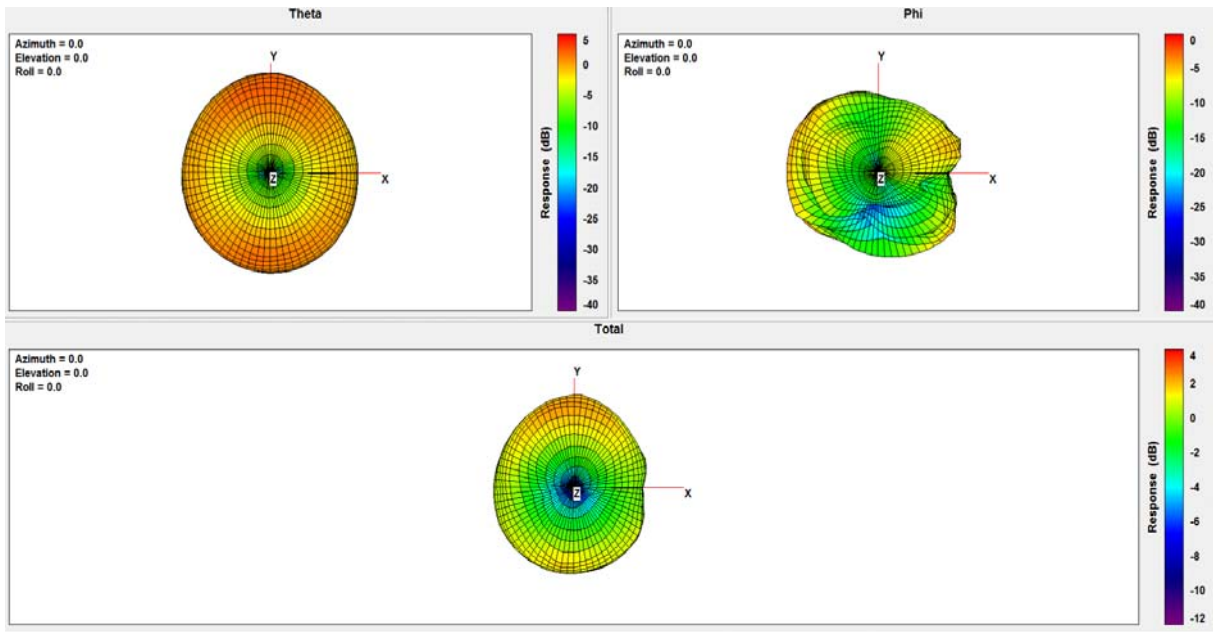
### 1100Mhz:



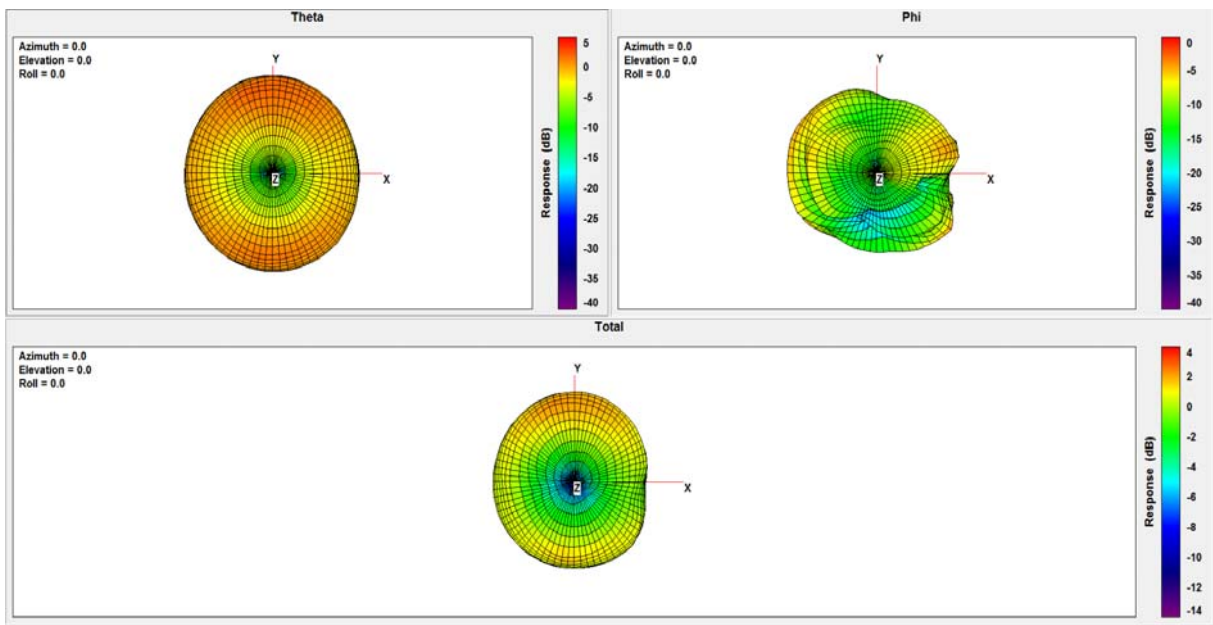
### 1176Mhz:



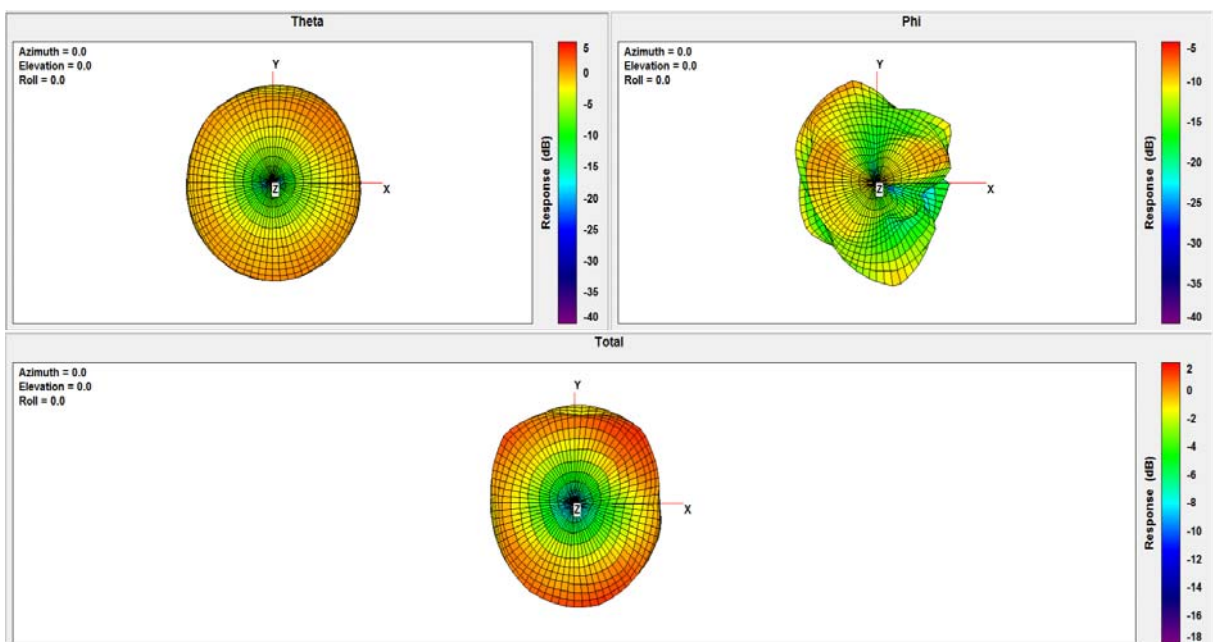
### 1227Mhz:



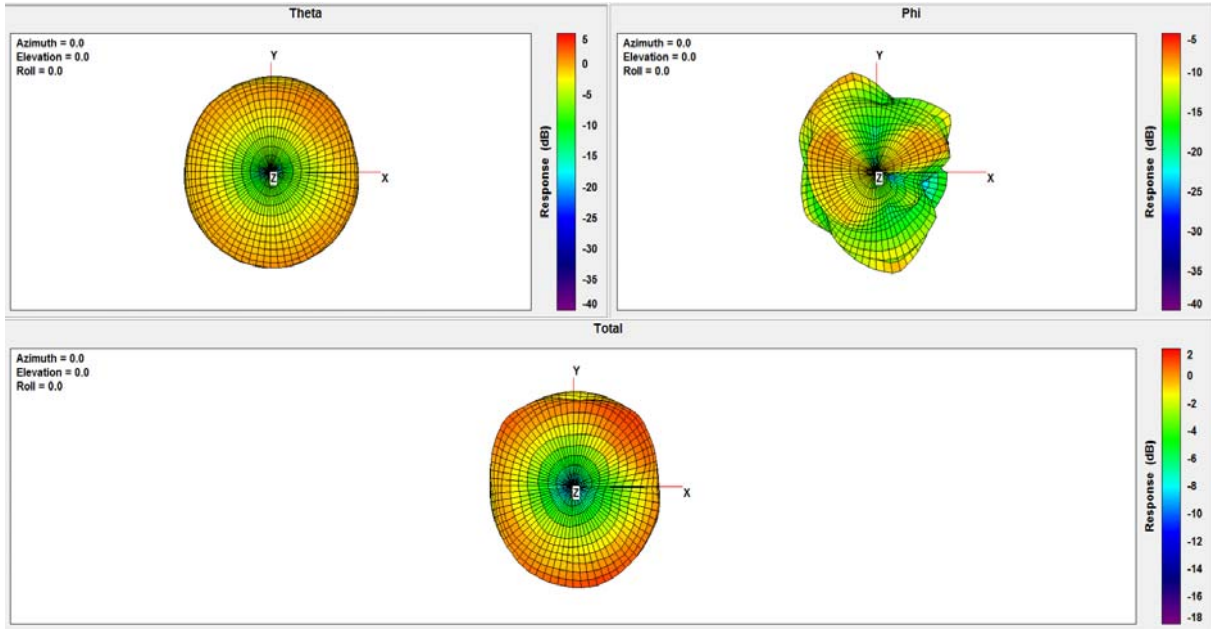
### 1252Mhz:



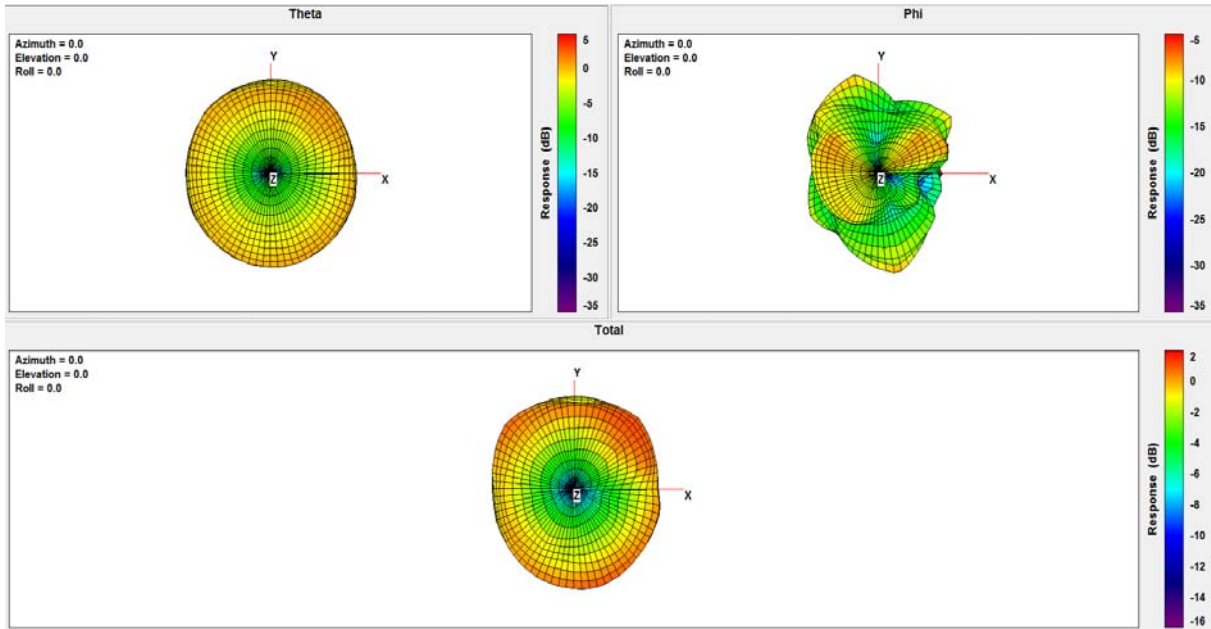
### 1542Mhz:



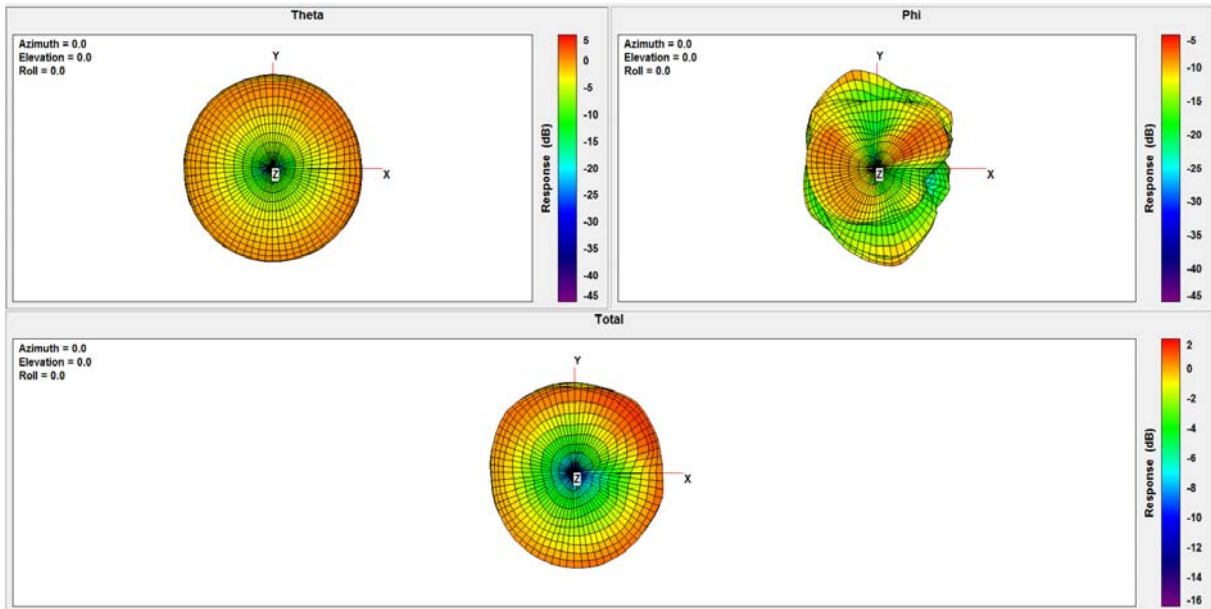
### 1561Mhz:



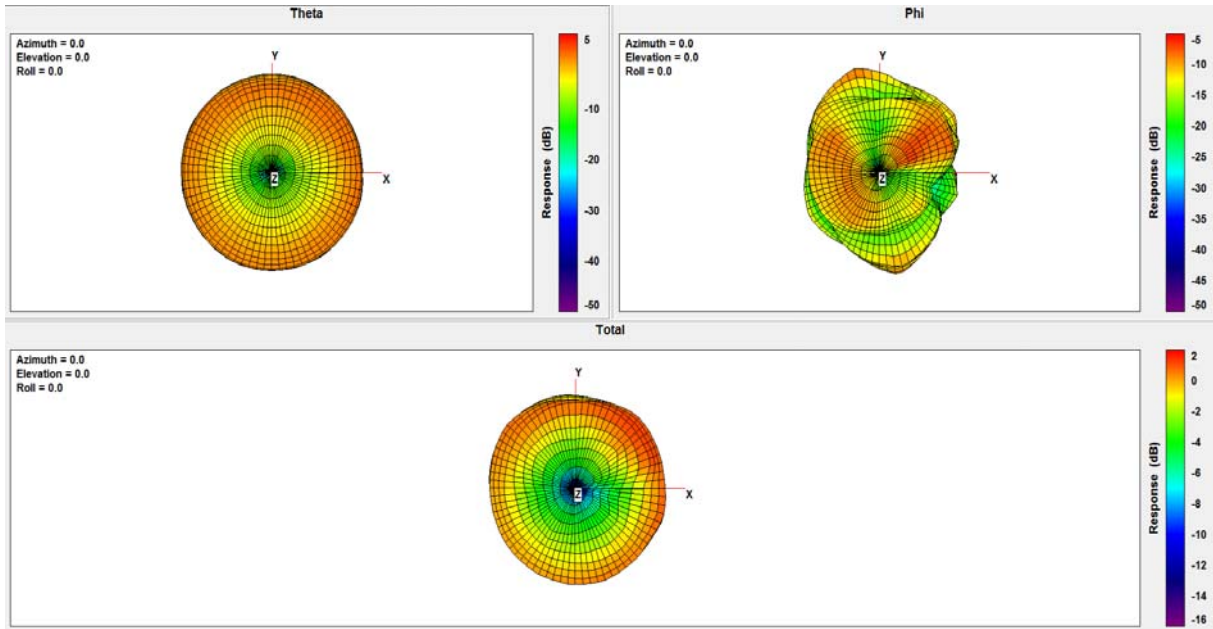
### 1575Mhz:



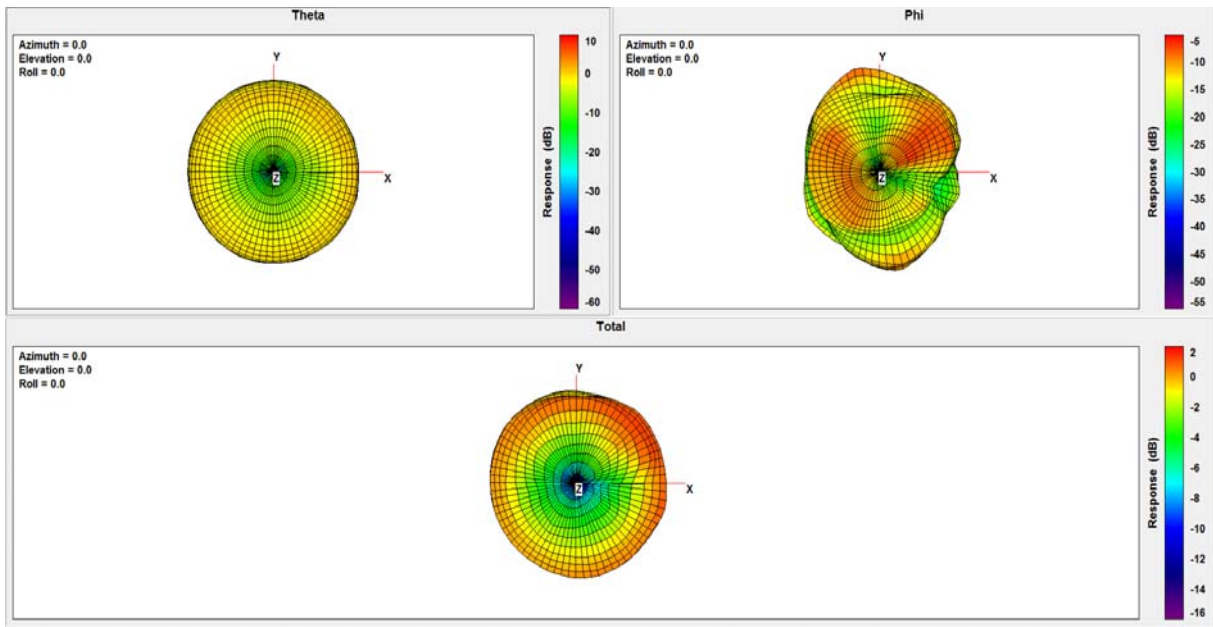
### 1602Mhz:



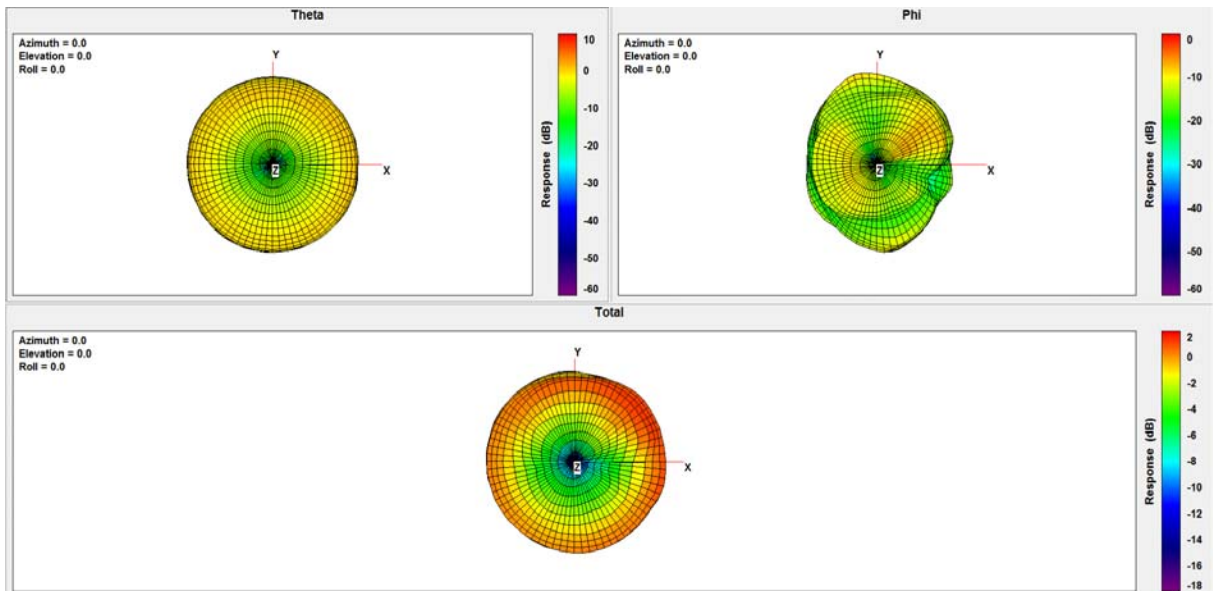
### 1616Mhz:



### 1620Mhz:

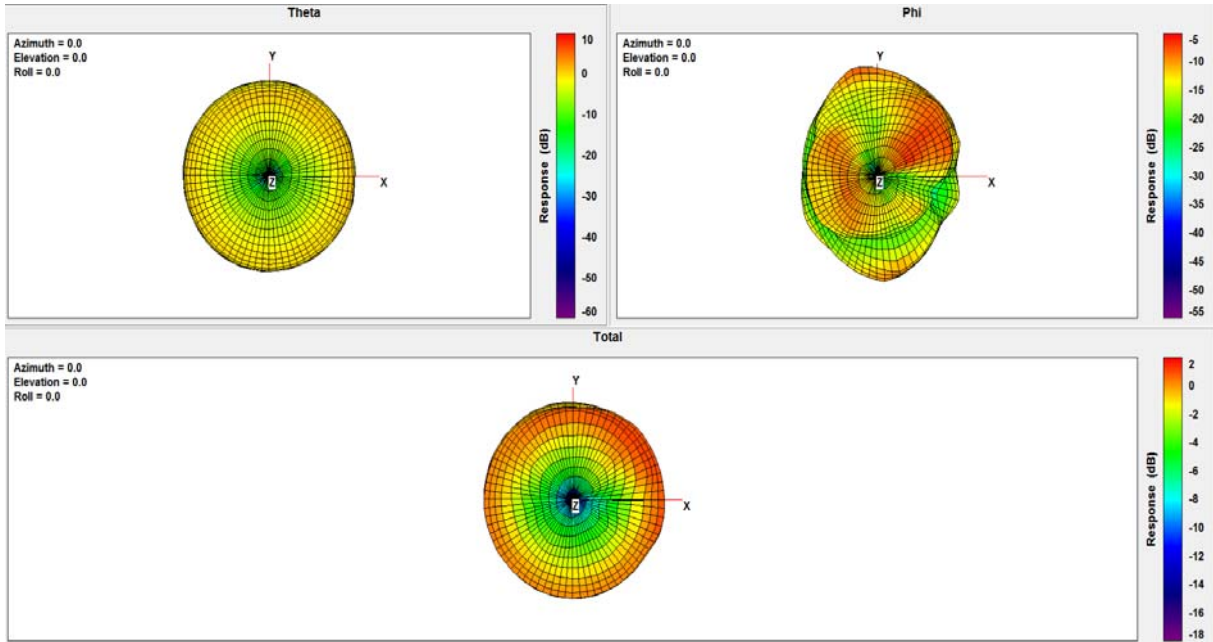


### 1626Mhz:

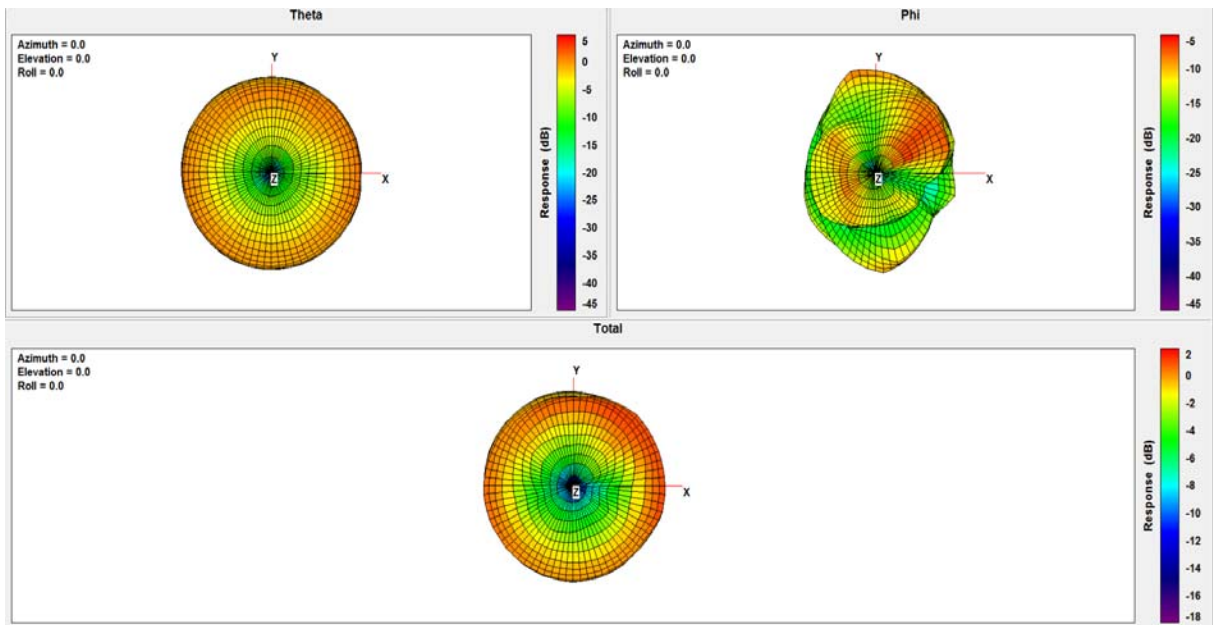




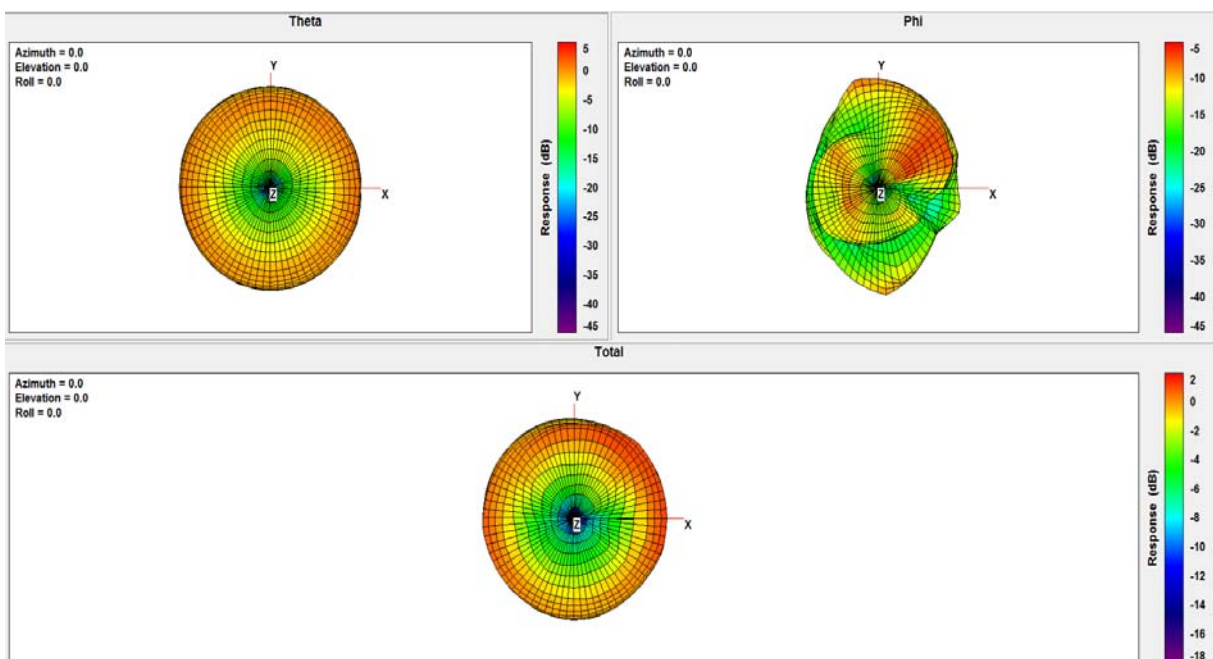
### 1630Mhz:



### 1642Mhz:



### 1650Mhz:



## RHCP & LHCP Test :

3D Total						
Frequency (MHz)	Upper Hem. PRP (dB)	Lower HEM. PRP (dB)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Tot. Rad.Pwr. (dBm)
1100 MHz	-3.66	-7.42	-2.14	61.14	2.60	-2.14
1176 MHz	-4.50	-8.28	-2.98	50.32	1.88	-2.98
1227 MHz	-4.21	-8.19	-2.75	53.06	2.16	-2.75
1252 MHz	-3.85	-7.91	-2.41	57.42	2.16	-2.41
1542 MHz	-3.00	-6.92	-1.52	70.44	3.53	-1.52
1561 MHz	-3.25	-7.16	-1.77	66.55	3.37	-1.77
1575 MHz	-3.40	-7.30	-1.91	64.36	3.07	-1.91
1602 MHz	-3.38	-7.27	-1.90	64.64	2.72	-1.90
1616 MHz	-3.95	-7.88	-2.47	56.56	2.07	-2.47
1620 MHz	-3.94	-7.89	-2.47	56.62	2.09	-2.47
1626 MHz	-3.99	-7.98	-2.53	55.85	2.08	-2.53
1630 MHz	-3.90	-7.91	-2.45	56.93	2.17	-2.45
1642 MHz	-4.59	-8.69	-3.16	48.29	1.52	-3.16
1650 MHz	-4.50	-8.62	-3.07	49.27	1.61	-3.07
1710 MHz	-4.21	-8.36	-2.80	52.54	2.40	-2.80
1880 MHz	-5.09	-9.11	-3.64	43.25	1.50	-3.64
1990 MHz	-4.33	-8.24	-2.85	51.93	3.07	-2.85
2170 MHz	-6.12	-10.01	-4.64	34.39	1.22	-4.64
2200 MHz	-7.43	-11.23	-5.92	25.59	-0.08	-5.92
2300 MHz	-4.52	-8.21	-2.97	50.45	3.04	-2.97
2400 MHz	-4.60	-8.20	-3.03	49.83	2.36	-3.03
2500 MHz	-4.72	-8.18	-3.10	48.95	2.44	-3.10
2600 MHz	-5.19	-8.99	-3.68	42.88	1.91	-3.68
2700 MHz	-4.82	-9.44	-3.53	44.33	2.32	-3.53

