



Product Name: 14 Series _ Adhesive Mount T-bar 5GNR / LTE and WiFi Antenna

Part Number: MT-14B-AS-2LW01

Features:

- WiFi 2.4GHz/5.8FHz Dual Bands Operation
- 2*4G LTE Bands,698-960MHz, 1550-1620MHz, 1710-2690MHz, 3300-3800MHz Supporting
- 3M Adhesive Mount Method
- Cable Length & Connector are customizable
- RoHS & REACH Compliant

Applications:

- Vehicle or Trucking Fleet Management
- Wireless LAN Dual Bands Application
- 3C Device Application

Adhesive Mount T-bar 5GNR / LTE and WiFi Antenna

MODEL: MT-14B-AS-2LW01

WI-RD-D-265 V1.0

I. Specifications:

Category	MIMO LTE						
Application Band	LTE 700	GSM 850/900	DCS	PCS	UMTS1	LTE2600	5G NR Band
Frequency (MHz)	698~824	824~960	1710~1880	1850~1990	1920~2170	2300~2690	3300~3800
LTE1	Efficiency(%)						
30cm	52.45	44.41	45.10	60.15	57.92	53.10	48.17
1m	49.17	41.36	40.95	54.51	52.09	46.67	41.66
2m	44.85	37.36	35.66	47.35	44.76	38.82	33.86
3m	40.90	33.75	31.06	41.14	38.47	32.29	27.53
5m	34.02	27.54	23.56	31.05	28.41	22.34	18.19
LTE1	Average Gain(dBi)						
30cm	-2.80	-3.53	-3.46	-2.21	-2.37	-2.75	-3.17
1m	-3.08	-3.83	-3.88	-2.64	-2.83	-3.31	-3.80
2m	-3.48	-4.28	-4.48	-3.25	-3.49	-4.11	-4.70
3m	-3.88	-4.72	-5.08	-3.86	-4.15	-4.91	-5.60
5m	-4.68	-5.60	-6.28	-5.08	-5.47	-6.51	-7.40
LTE1	Peak Gain(dBi)						
30cm	3.42	3.66	2.87	4.64	4.64	3.97	4.07
1m	3.14	3.31	2.45	4.15	4.15	3.41	3.44
2m	2.74	2.81	1.85	3.45	3.45	2.61	2.54
3m	2.34	2.31	1.25	2.84	2.84	1.81	1.64
5m	1.54	1.31	0.05	1.64	1.64	0.21	-0.16

© Unictron Technologies Corp.
All specifications subject to change without notice.

LTE2	Efficiency(%)						
30cm	53.45	44.45	47.29	60.26	57.31	60.95	47.37
1m	50.11	41.40	42.93	54.60	51.54	53.58	40.97
2m	45.70	37.40	37.39	47.44	44.29	44.57	33.30
3m	41.68	33.78	32.57	41.21	38.06	37.07	27.07
5m	34.67	27.56	24.70	31.10	28.11	25.64	17.89
LTE2	Average Gain(dBi)						
30cm	-2.72	-3.52	-3.25	-2.20	-2.42	-2.15	-3.25
1m	-3.00	-3.83	-3.67	-2.63	-2.88	-2.71	-3.88
2m	-3.40	-4.27	-4.27	-3.24	-3.54	-3.51	-4.78
3m	-3.80	-4.71	-4.87	-3.85	-4.20	-4.31	-5.68
5m	-4.60	-5.60	-6.07	-5.07	-5.51	-5.91	-7.48
LTE2	Peak Gain(dBi)						
30cm	3.16	4.39	2.87	3.82	3.82	4.96	4.10
1m	2.88	4.04	2.45	3.40	3.40	4.40	3.47
2m	2.48	3.54	1.85	2.80	2.80	3.60	2.57
3m	2.08	3.04	1.25	2.20	2.20	2.80	1.67
5m	1.28	2.04	0.05	1.00	1.00	1.20	-0.13
VSWR	< 3						
Return loss	< -6						
Test Condition	Free space						
Impedance	50Ω						
Polarization	Linear						

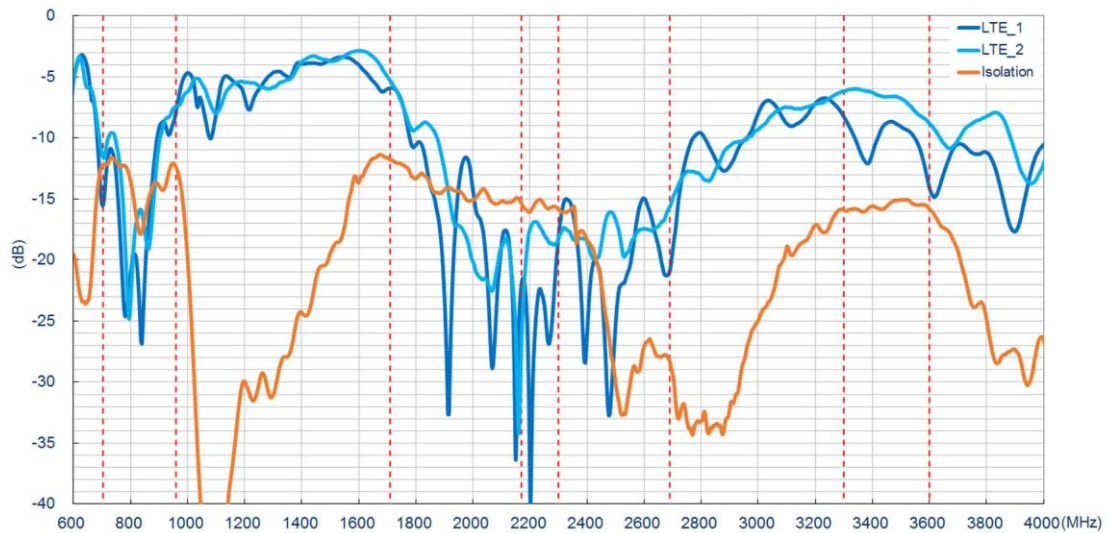
Category	WIFI						
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
WIFI	Efficiency(%)						
30cm	55.59	58.08	55.98	58.08	54.58	53.58	55.98
1M	44.16	46.13	44.46	41.11	38.64	37.07	38.73
2M	31.99	33.42	32.21	25.35	23.82	21.33	22.28
3M	22.65	23.66	22.80	15.63	14.69	12.56	13.12

5M	11.89	12.42	11.97	5.81	5.46	4.26	4.45
WIFI	Average Gain(dBi)						
30cm	-2.55	-2.36	-2.52	-2.36	-2.63	-2.71	-2.52
1M	-3.55	-3.36	-3.52	-3.86	-4.13	-4.31	-4.12
2M	-4.95	-4.76	-4.92	-5.96	-6.23	-6.71	-6.52
3M	-6.45	-6.26	-6.42	-8.06	-8.33	-9.01	-8.82
5M	-9.25	-9.06	-9.22	-12.36	-12.63	-13.71	-13.52
WIFI	Peak Gain(dBi)						
30cm	4.21	4.31	4.91	4.63	3.98	3.84	4.01
1M	3.21	3.31	3.91	3.13	2.48	2.24	2.41
2M	1.81	1.91	2.51	1.03	0.38	-0.16	0.01
3M	0.31	0.41	1.01	-1.07	-1.72	-2.46	-2.29
5M	-2.49	-2.39	-1.79	-5.37	-6.02	-7.16	-6.99
VSWR	< 2						
Return loss	< -10						
Test Condition	Free space						
Impedance	50Ω						
Polarization	Linear						
Physical Construction							
Dimension	226.8 x 26.5 x 7.55 mm						
Environmental Conditions							
Operation Temperature	-40 ~ +85 °C						
Storage Temperature	-40 ~ +85 °C						

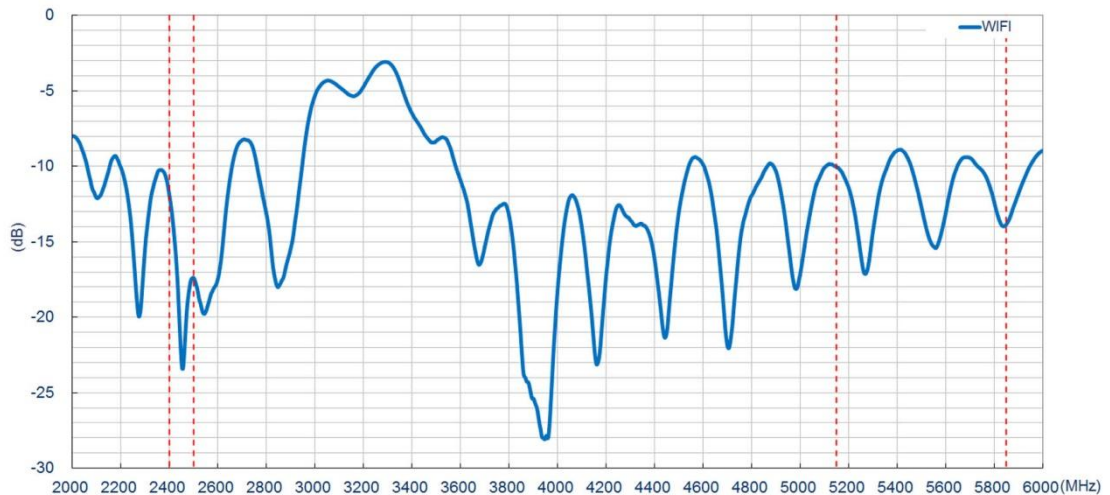
II. Analysis Antenna Performance:

S-parameters:

LTE

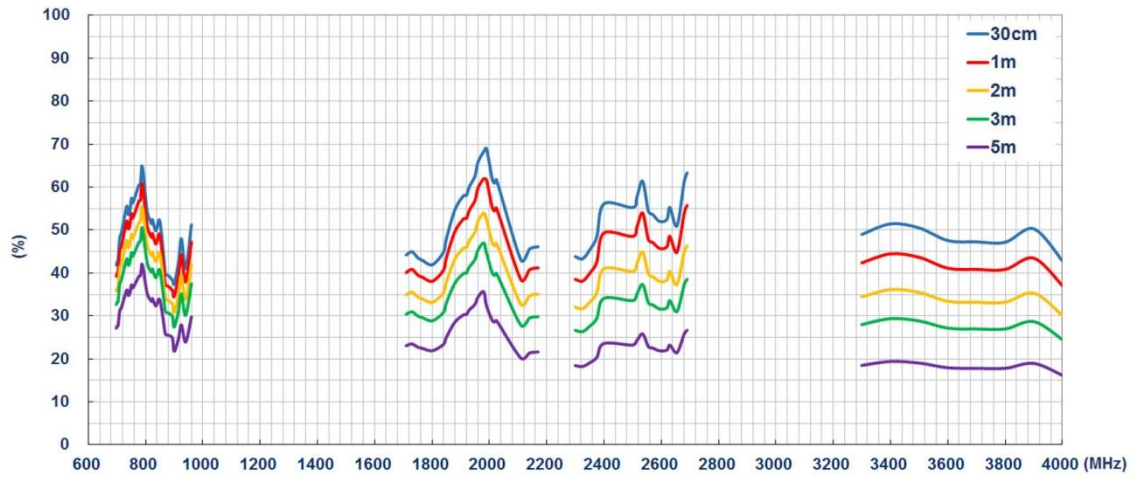


WIFI

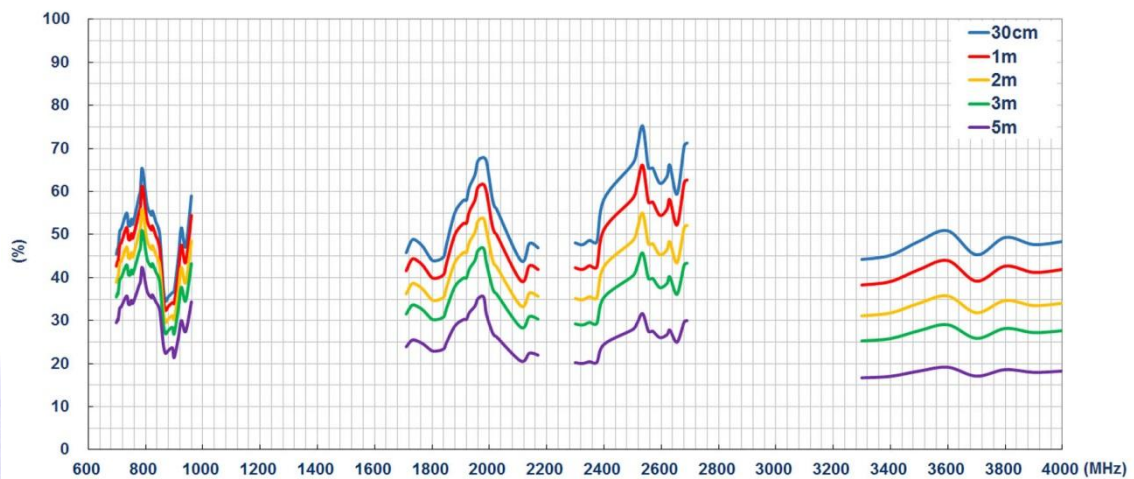


Efficiency:

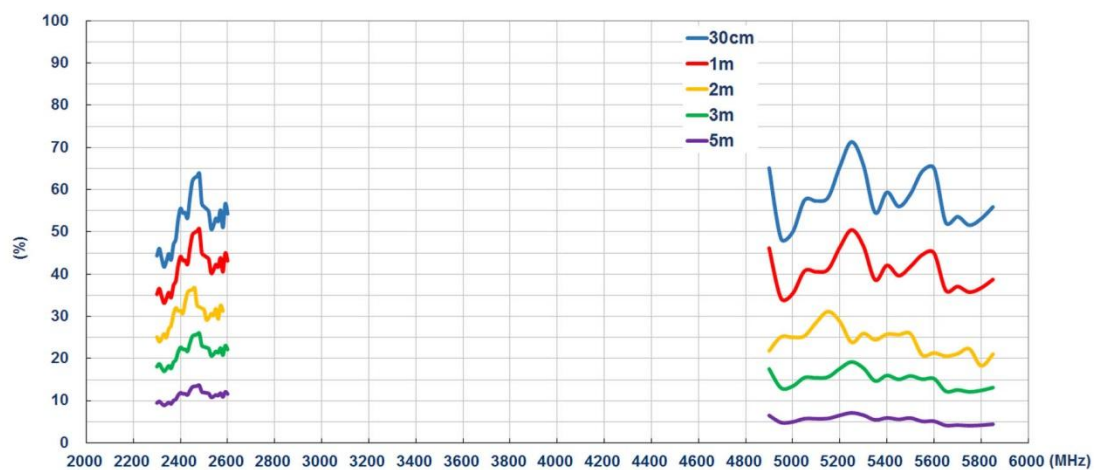
LTE1



LTE2

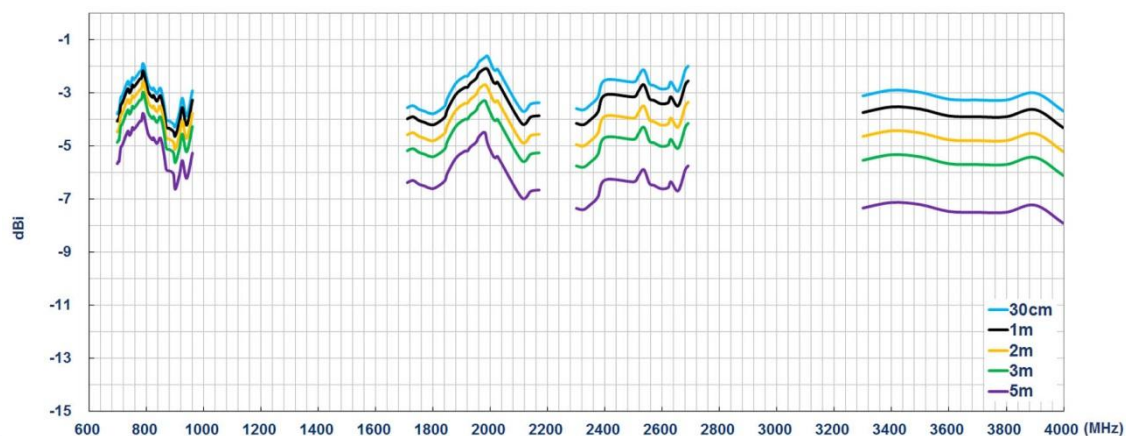


WIFI

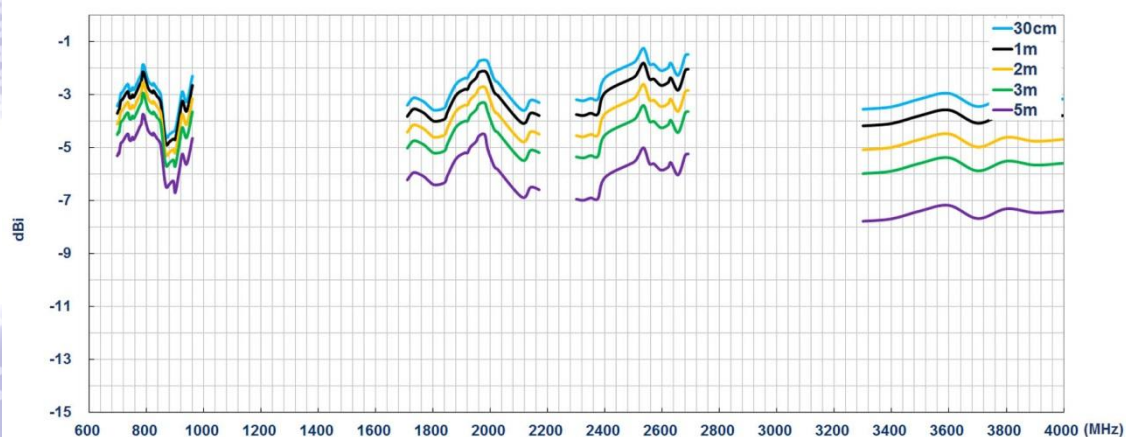


Average Gain:

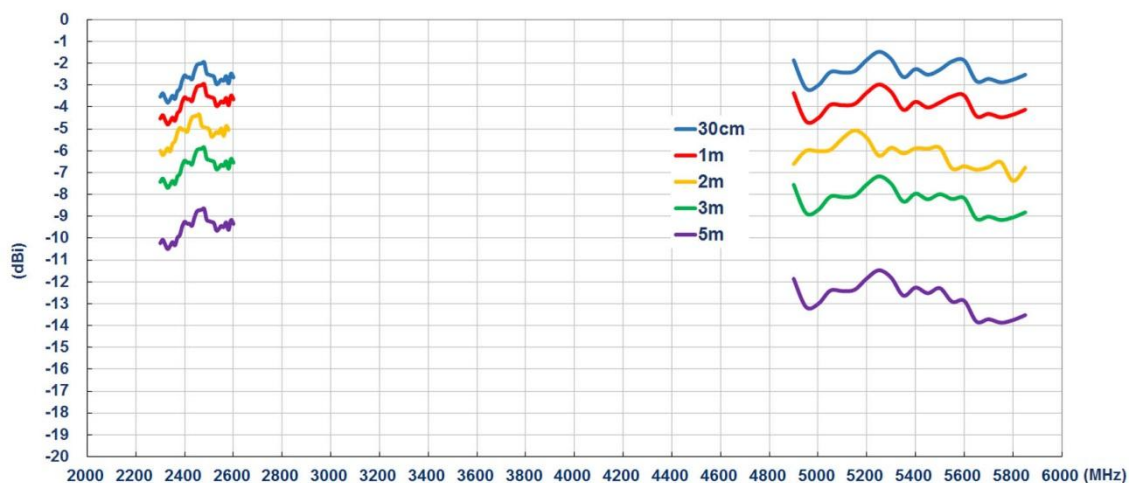
LTE1



LTE2



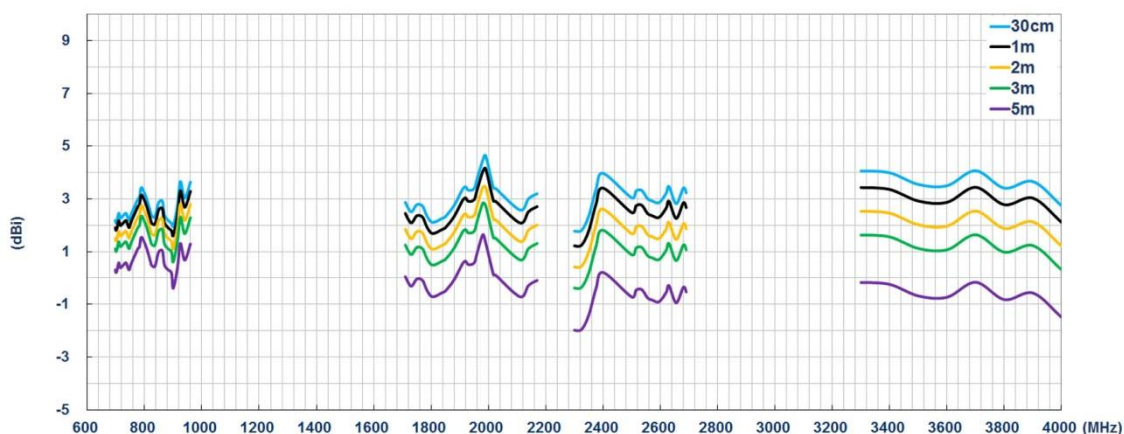
WIFI



© Unictron Technologies Corp.
All specifications subject to change without notice.

Peak Gain

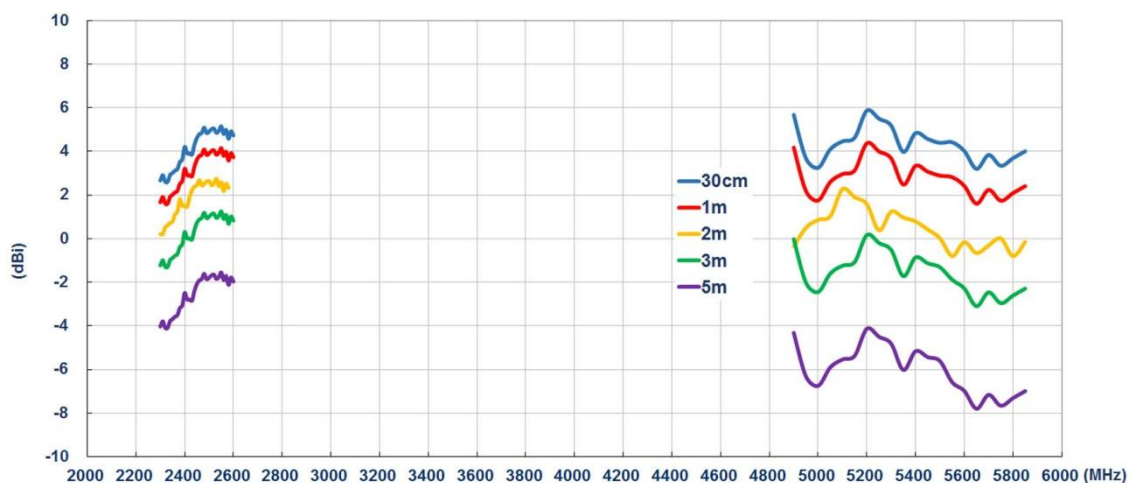
LTE1



LTE2

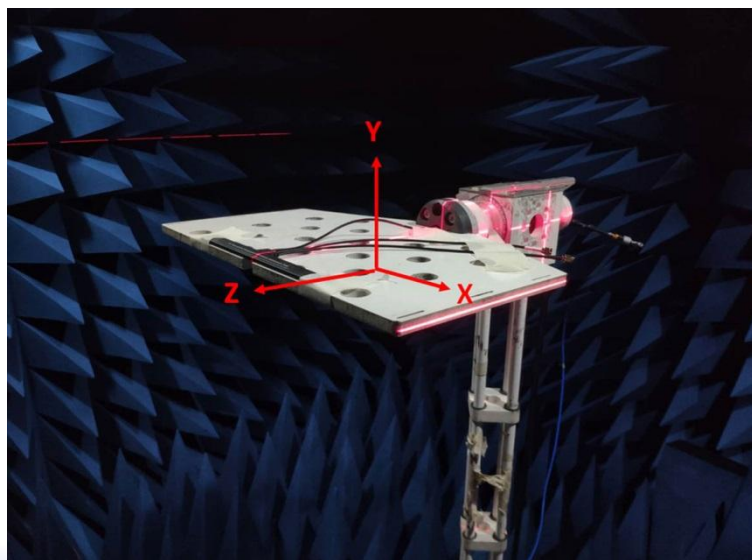


WIFI



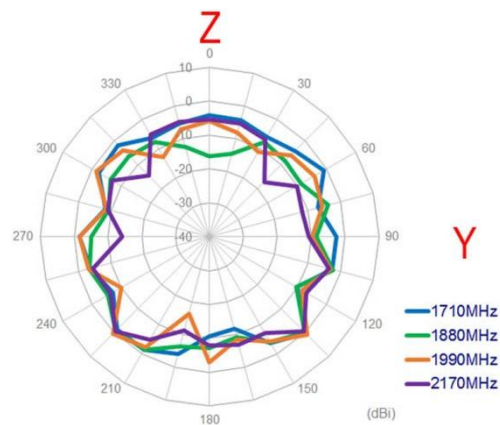
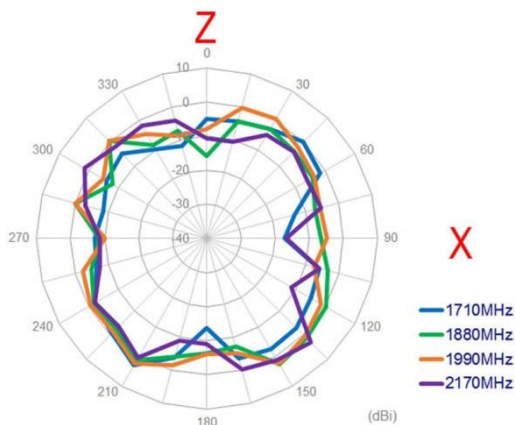
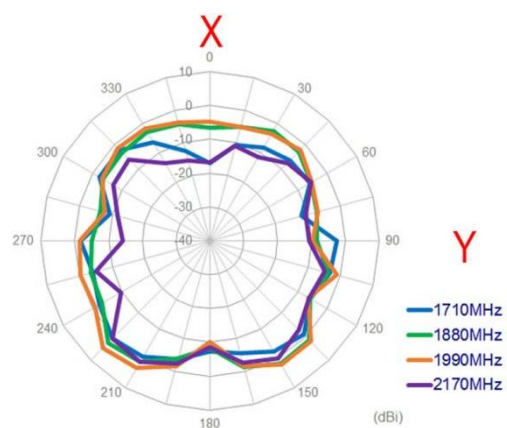
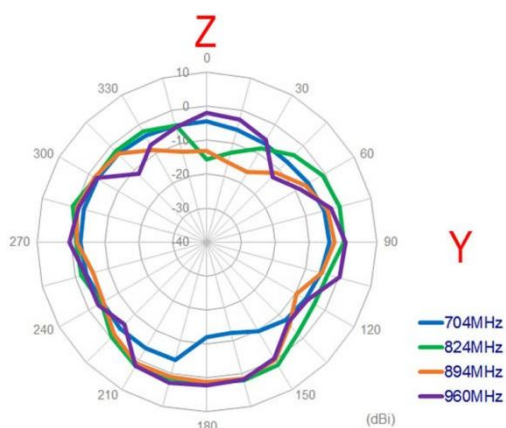
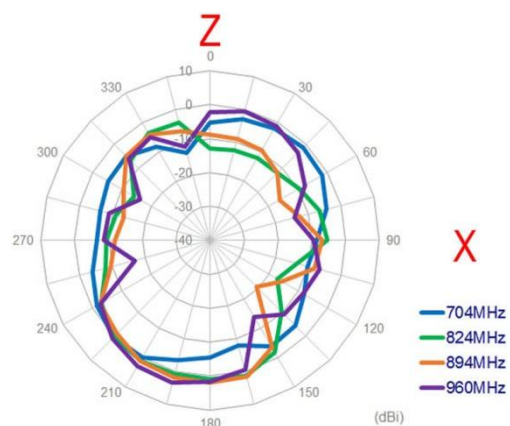
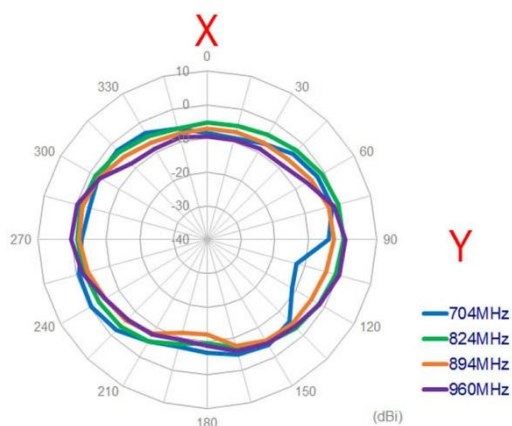
© Unictron Technologies Corp.
All specifications subject to change without notice.

III. Antenna Radiation Pattern Measurement:

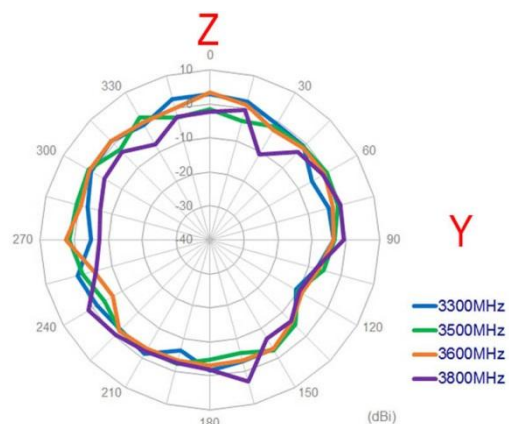
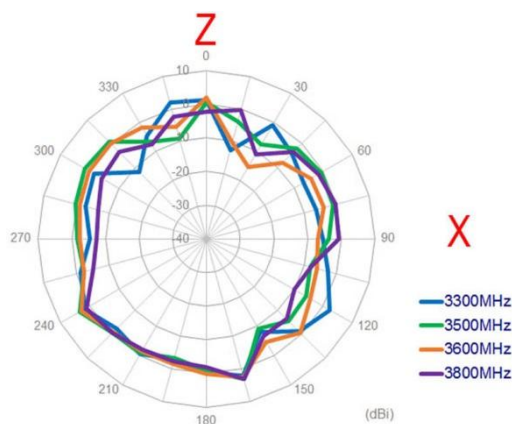
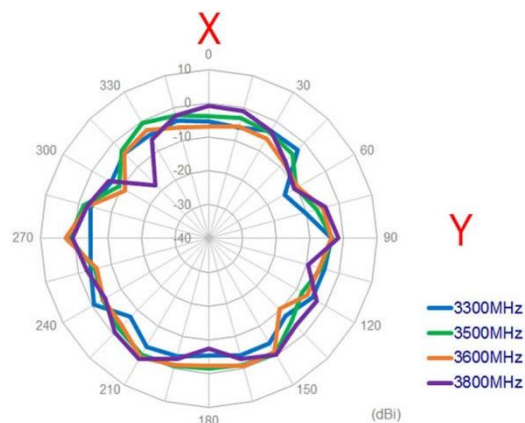
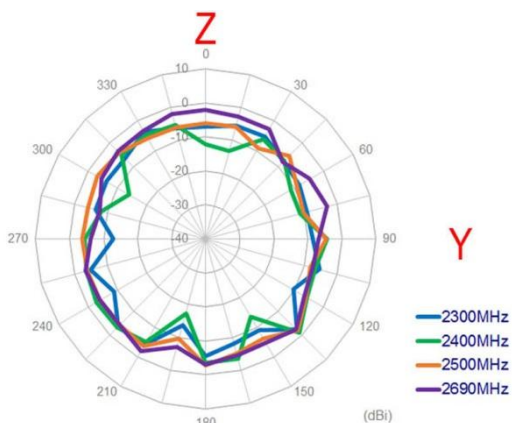
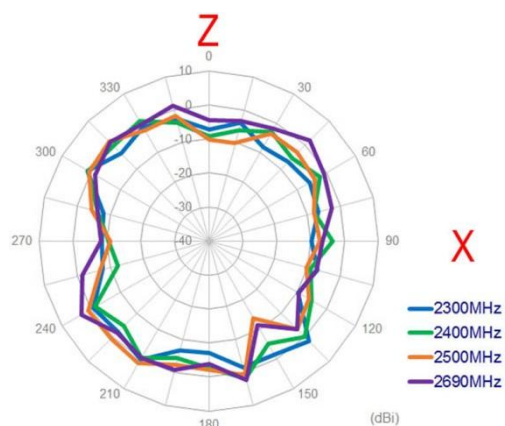
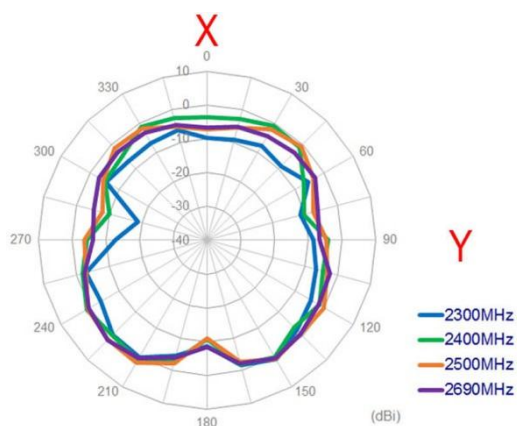


IV. 2D radiation pattern :

LTE1

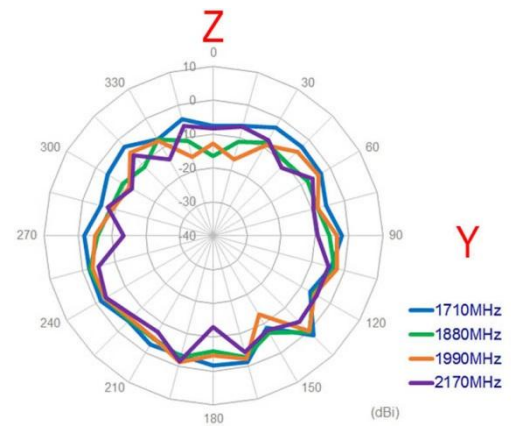
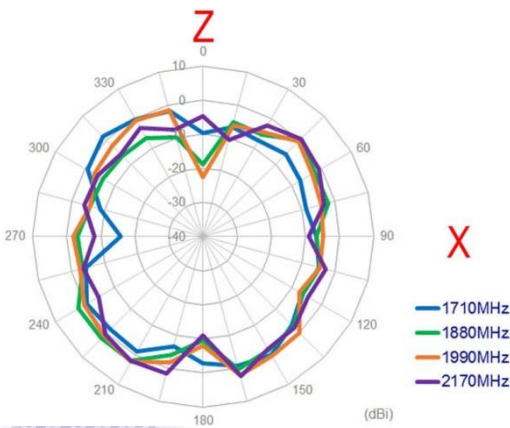
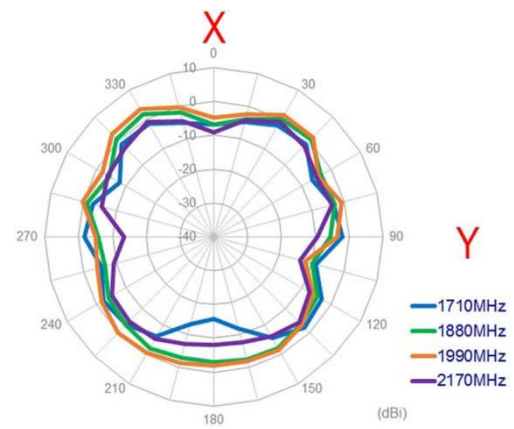
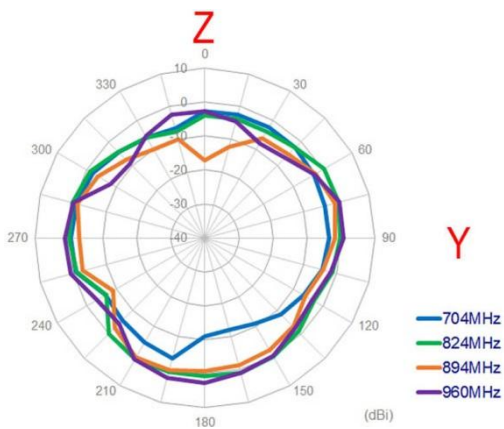
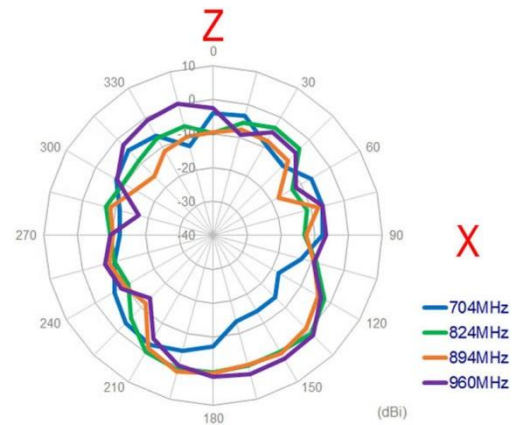
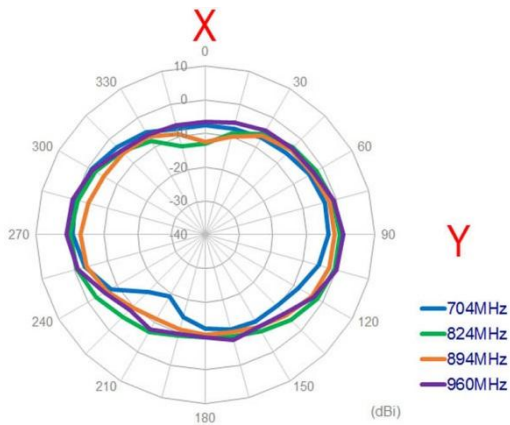


© Unictron Technologies Corp.
All specifications subject to change without notice.

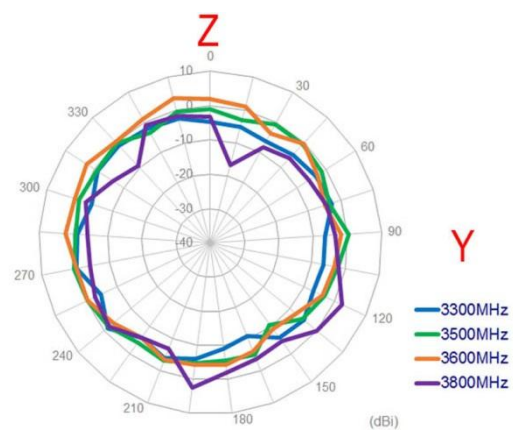
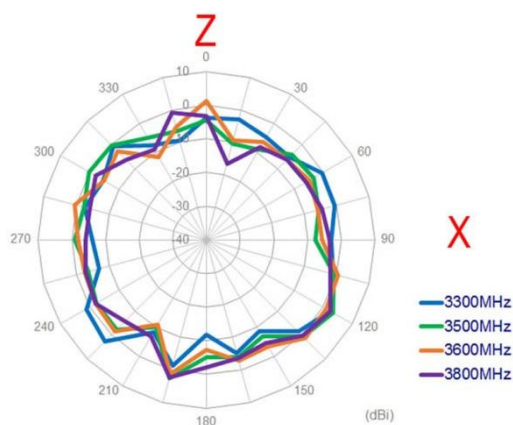
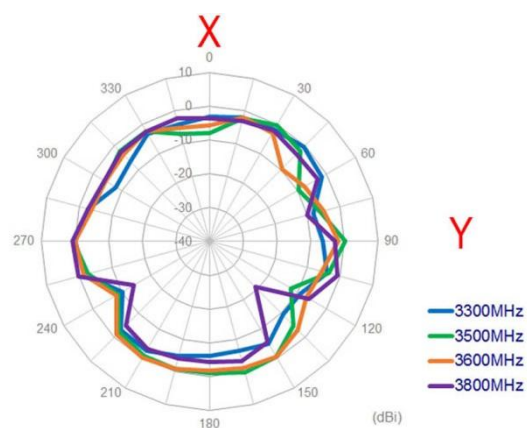
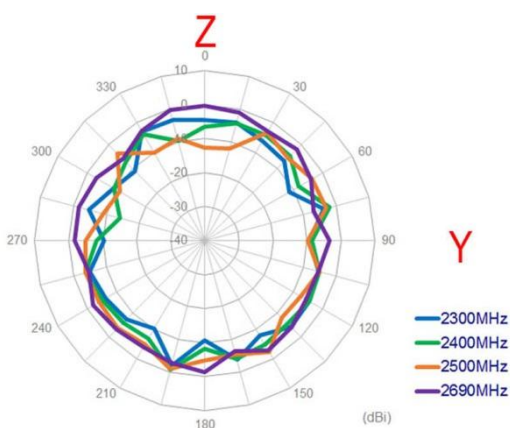
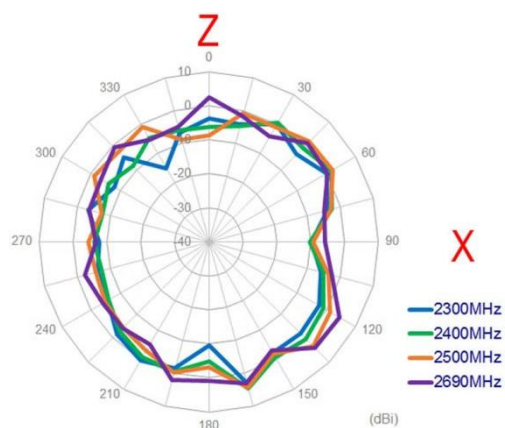
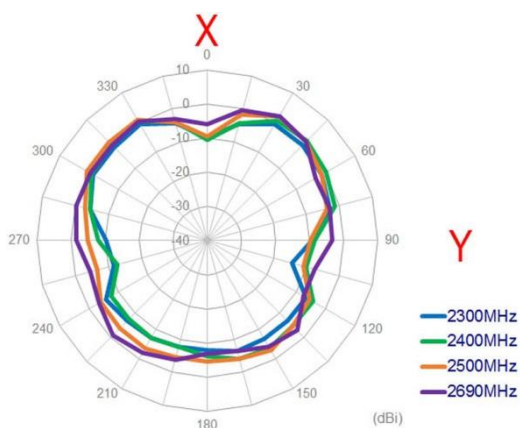


LTE2

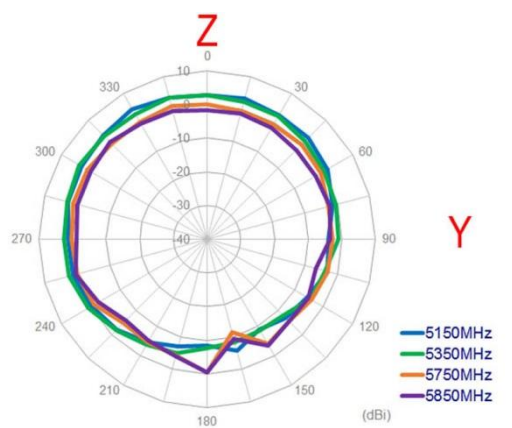
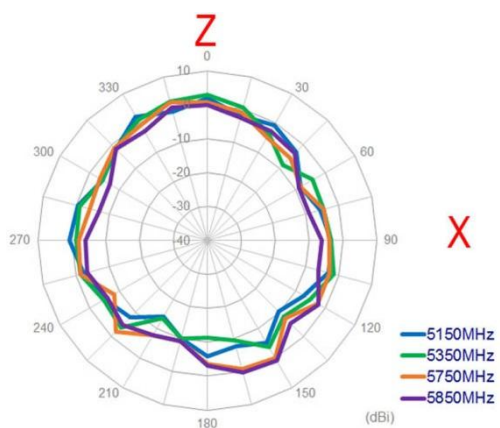
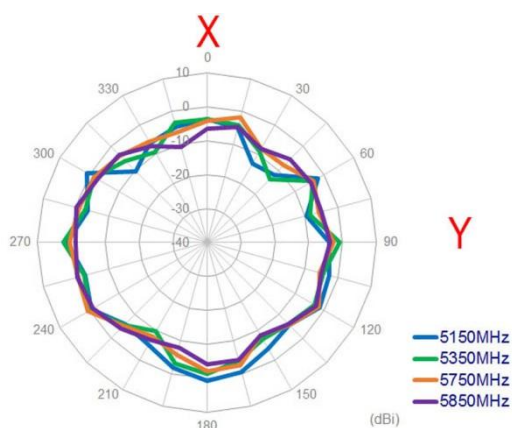
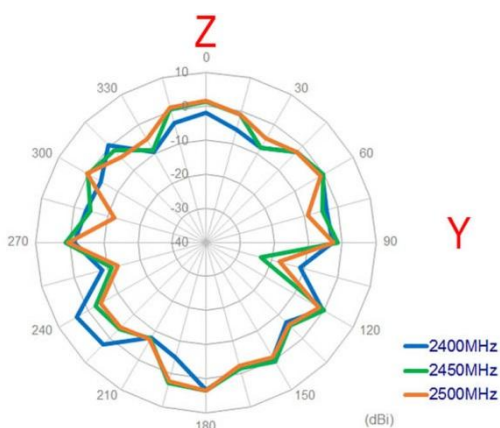
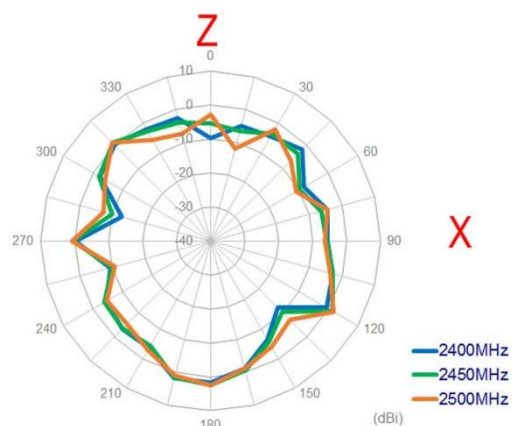
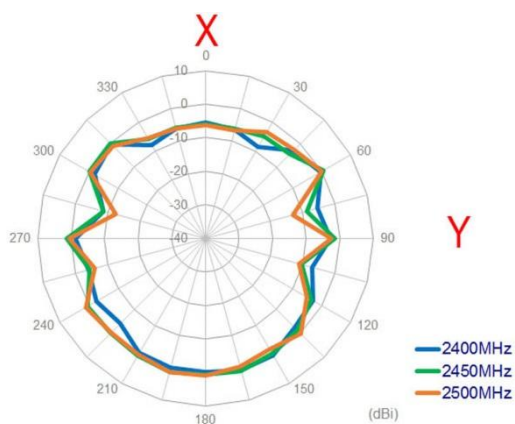
© Unictron Technologies Corp.
All specifications subject to change without notice.



© Unictron Technologies Corp.
All specifications subject to change without notice.



WIFI

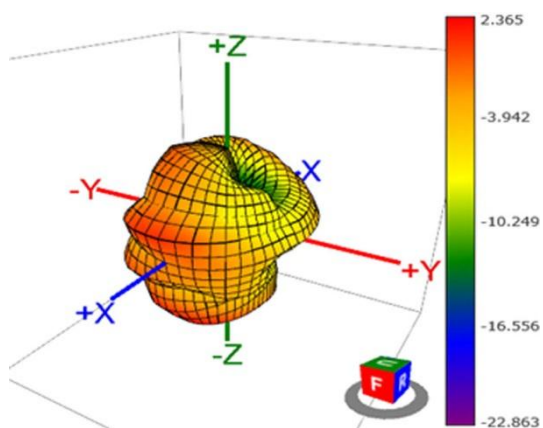


V. 3D radiation pattern :

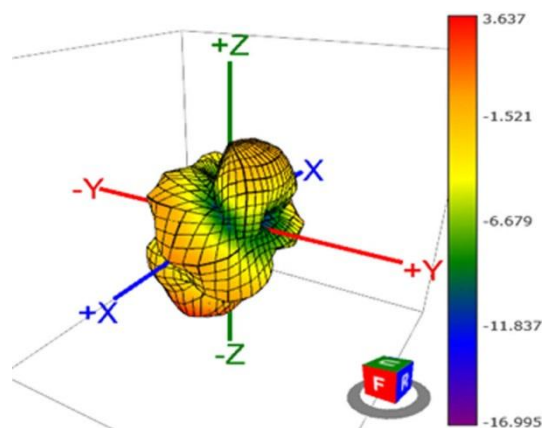
LTE1

704 MHz

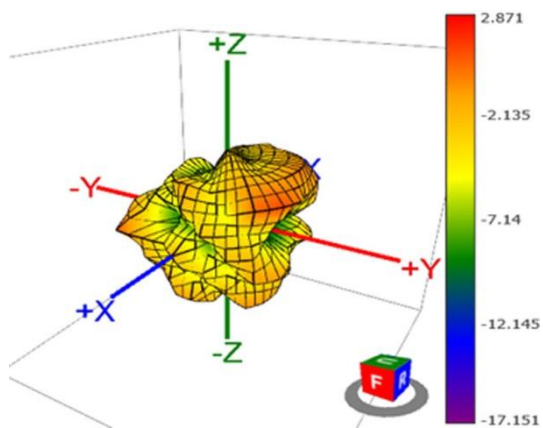
960 MHz



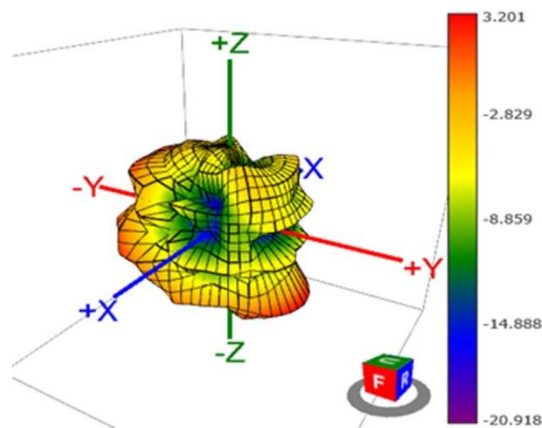
1710 MHz



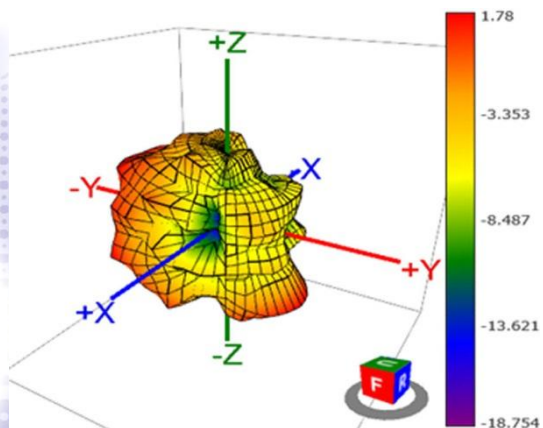
2170 MHz



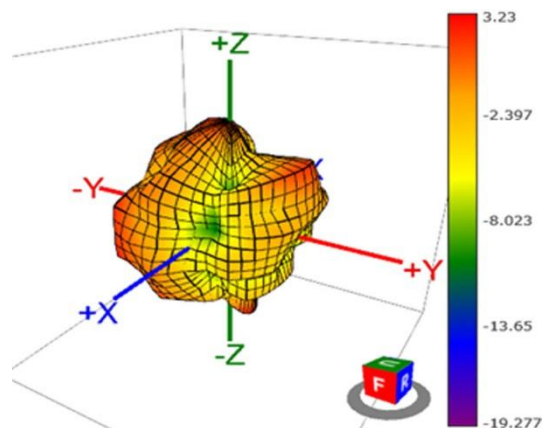
2300 MHz



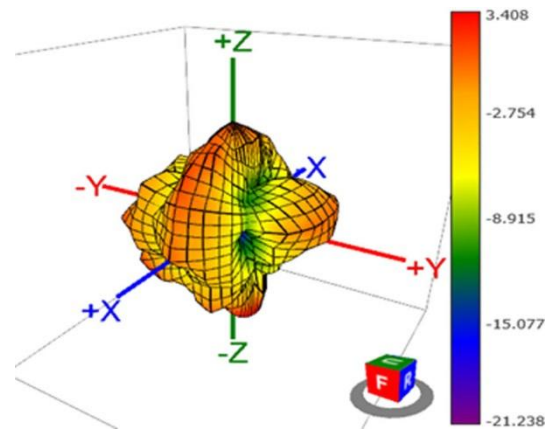
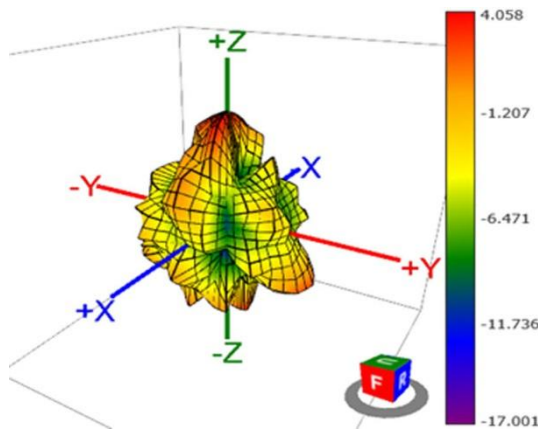
2690 MHz



3300 MHz

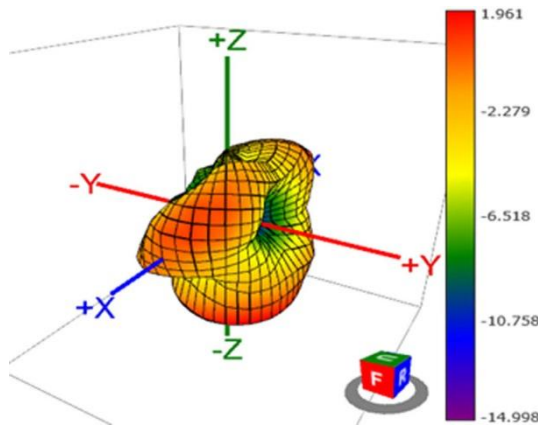


3800 MHz

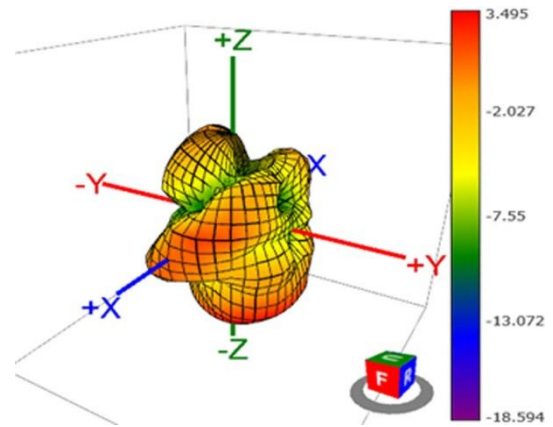


LTE2

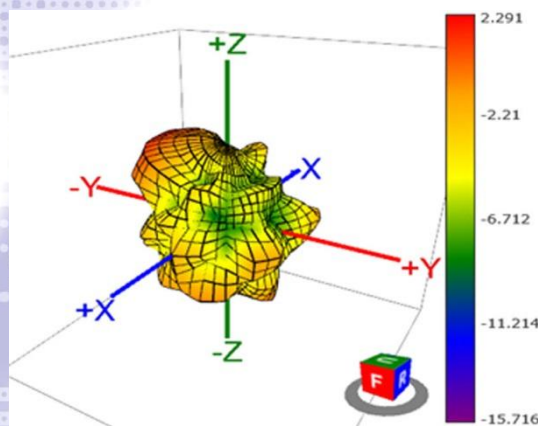
704 MHz



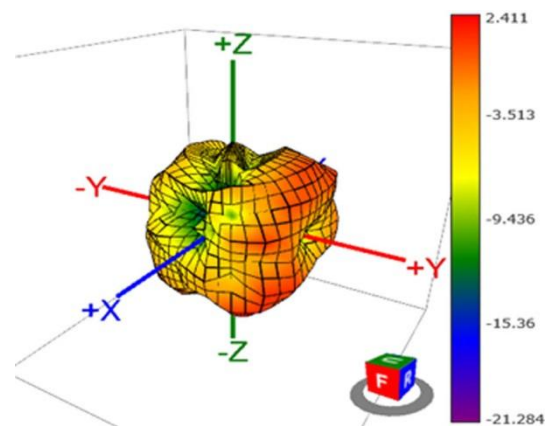
960 MHz



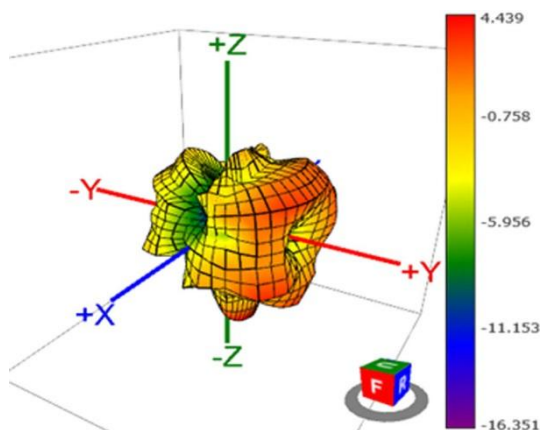
1710 MHz



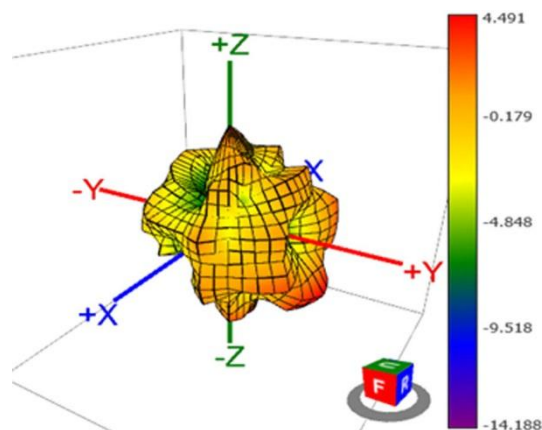
2170 MHz



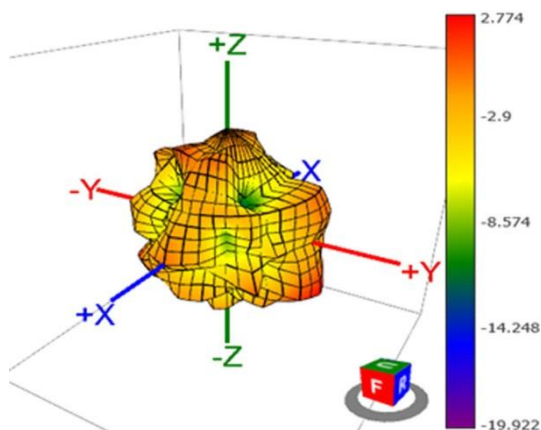
2300 MHz



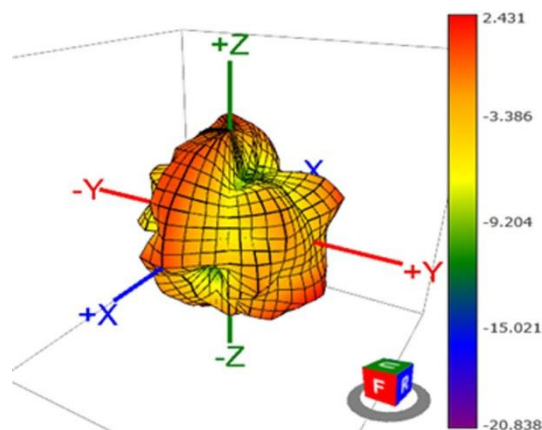
2690 MHz



3300 MHz

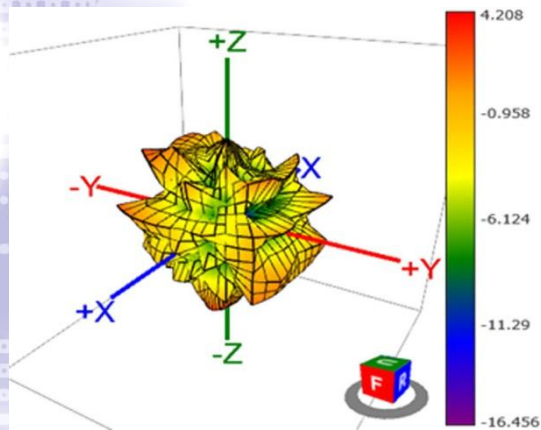


3800 MHz

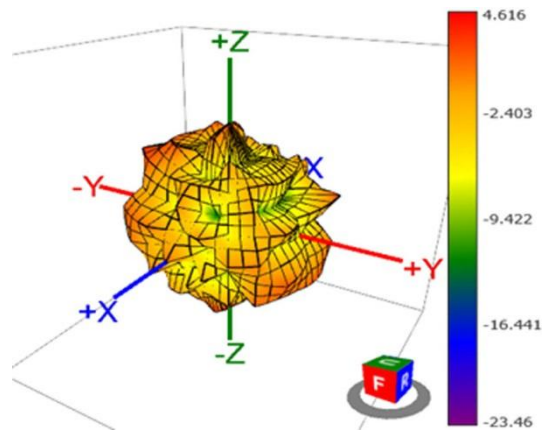


WIFI

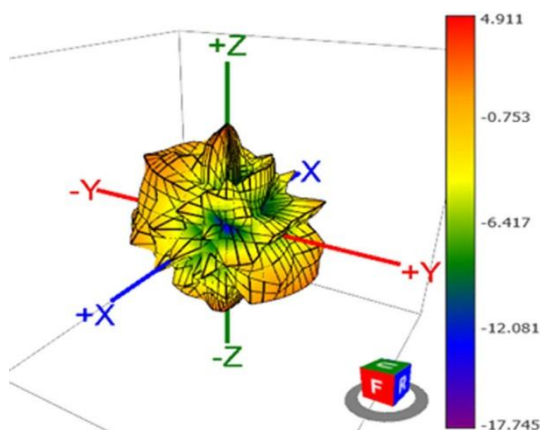
2400 MHz



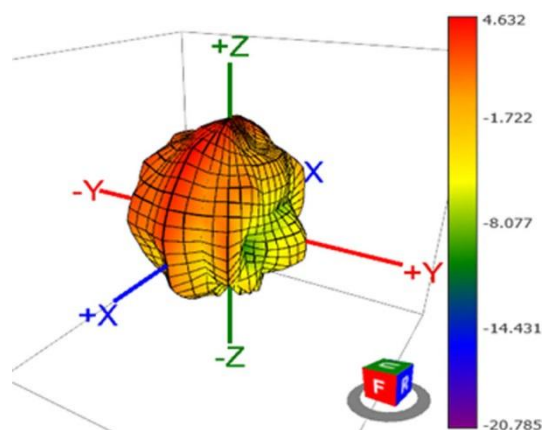
2450 MHz



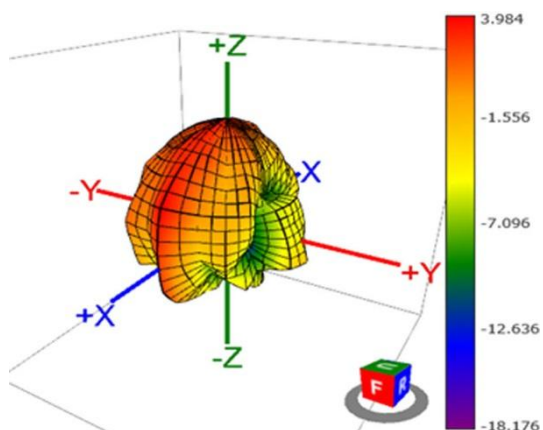
2500 MHz



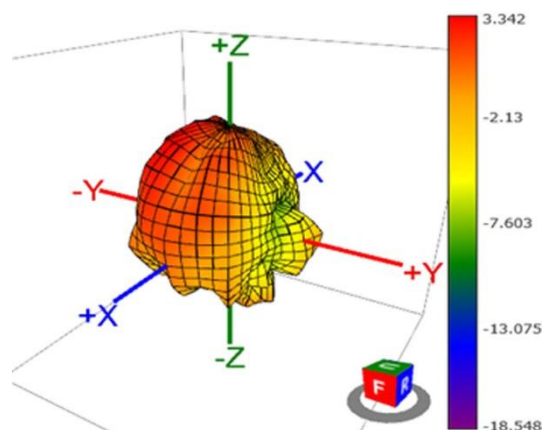
5150 MHz



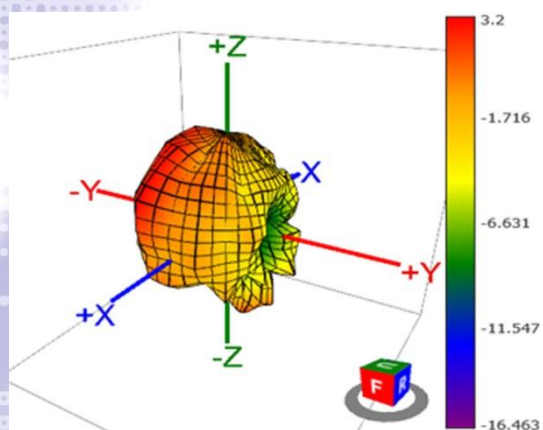
5350 MHz



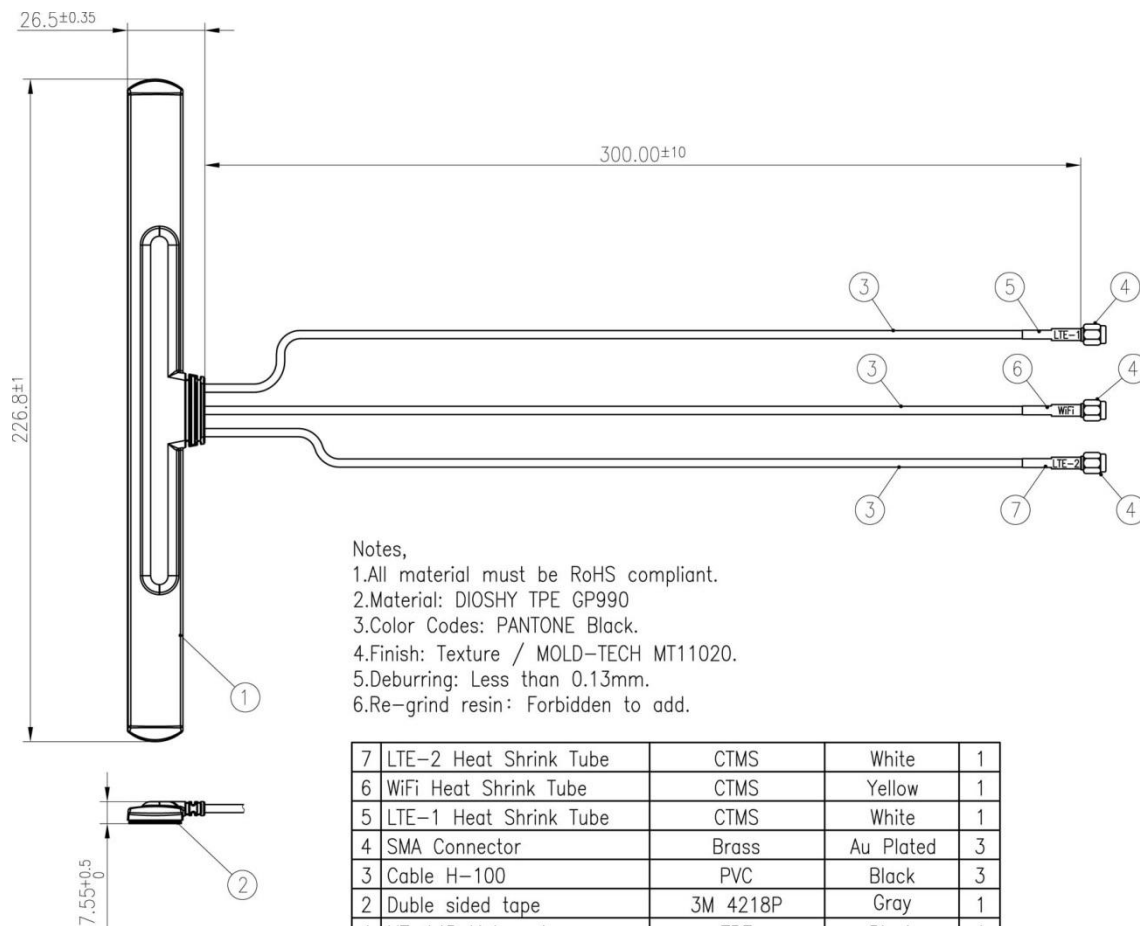
5725 MHz



5850 MHz



VI. Mechanical Drawing (Unit:mm):



© Unictron Technologies Corp.
All specifications subject to change without notice.