

# Data Sheet

CUSTOMER: ASUS

MODEL NAME: B7402

CUSTOMER P/N: 14008-04680700

ICT P/N: LA9RF391-CS-H

<b>APPROVED</b>	
MANUFACTURER	CUSTOMER
<i>PREPARED BY:</i>	<i>APPROVED BY:</i>
<i>CHECK BY:</i>	
<i>APPROVED BY:</i>	

# Description

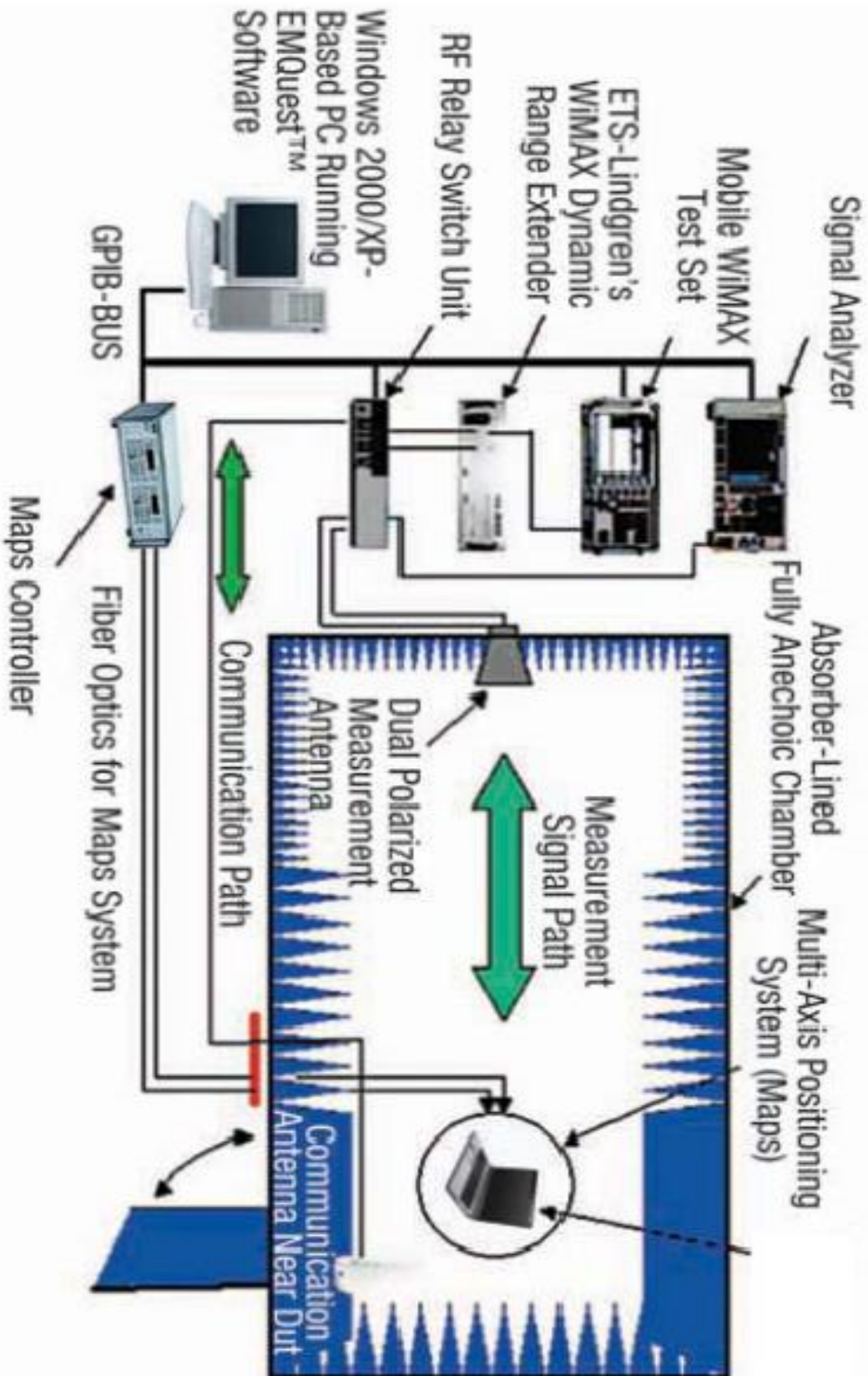
## Specifications

### ANT0 (Main) Antenna

Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information	Frequency (MHz)		Cable Loss (dB)	Peak Gain (including cable loss)	
							PEAK GAIN	TX PEAK GAIN
14008-04680700	LUXSHARE-ICT.	Couple Type FPCB ANTENNA ANT0(MAIN)	1. Cable P/N: 012-323H-0020 2. Diameter:1.13mm 50 ohm coaxial cable 3. Cable length: 148 mm 4. Connector P/N: IPEX 20565-001R-13	WCDMA I	1920	0.32	-0.95	-0.95
				Band 1	1950	0.32	-1.84	
				NR Band 1	1980	0.32	-0.97	
				WCDMA II	1850	0.31	-1.29	-1.18
				Band 2	1880	0.31	-1.92	
				NR Band 2	1910	0.31	-1.18	
				Band 3	1710	0.30	1.22	1.22
				NR Band 3	1748	0.30	-0.14	
					1785	0.30	-0.70	
				WCDMA IV	1710	0.30	1.22	1.22
				Band 4	1733	0.30	0.67	
					1755	0.30	-0.14	
				WCDMA V	824	0.22	-4.68	-3.96
				Band 5	837	0.22	-4.58	
				NR Band 5	849	0.22	-3.96	
				Band 7	2500	0.36	0.29	0.29
				NR Band 7	2535	0.37	-0.45	
					2570	0.37	-0.15	
				WCDMA VIII	880	0.22	-2.48	-2.48
				Band 8	898	0.23	-3.31	
				NR Band 8	915	0.23	-5.09	
Band 12	698	0.21	-4.88	-1.05				
	708	0.21	-2.90					
	716	0.21	-1.05					
			777	0.21	0.23			

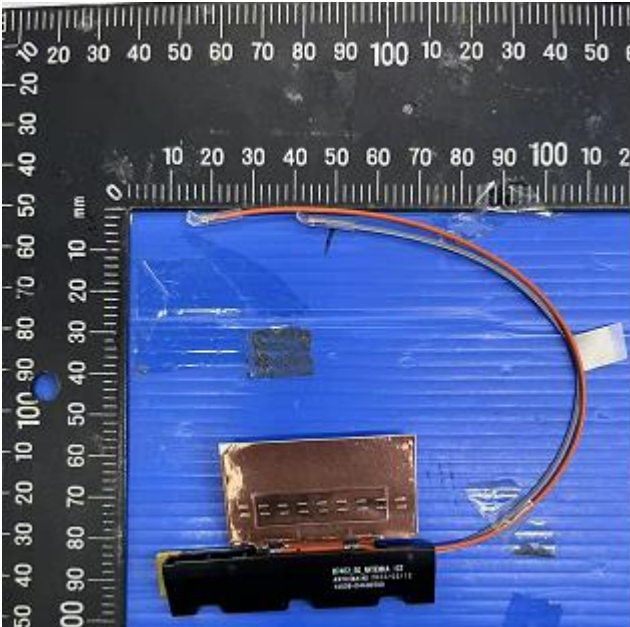
Band 13	782	0.21	-0.09	0.23
	787	0.21	-0.67	
	Band 14	788	0.22	-0.78
793		0.22	-1.23	
798		0.22	-1.69	
Band 17	704	0.21	-3.84	-1.05
	710	0.21	-2.26	
	716	0.21	-1.05	
Band 18	815	0.22	-3.80	-3.80
	823	0.22	-4.66	
	830	0.22	-4.69	
Band 19	830	0.22	-4.69	-4.13
	838	0.22	-4.52	
	845	0.22	-4.13	
Band 20 NR Band 20	832	0.22	-4.67	-3.54
	847	0.22	-4.04	
	862	0.22	-3.54	
Band 25	1850	0.31	-1.29	-1.04
	1883	0.31	-1.81	
	1915	0.31	-1.04	
Band 26	814	0.22	-3.72	-3.72
	832	0.22	-4.67	
	849	0.22	-3.96	
Band 28 NR Band 28	703	0.21	-4.01	-0.46
	726	0.21	-1.42	
	748	0.21	-0.46	
Band 30	2305	0.35	0.49	0.49
	2310	0.35	0.46	
	2315	0.35	0.08	
Band 34	2010	0.32	-0.78	-0.47
	2018	0.32	-0.69	
	2025	0.32	-0.47	
Band 38 NR Band 38	2570	0.37	-0.15	0.80
	2595	0.37	0.80	
	2620	0.37	0.54	

Band 39	1880	0.31	-1.92	-0.95
	1900	0.31	-1.42	
	1920	0.32	-0.95	
Band 40 NR Band 40	2300	0.35	0.67	0.67
	2350	0.35	-0.77	
	2400	0.35	-1.58	
Band 41 NR Band 41	2496	0.36	0.62	1.82
	2593	0.37	0.65	
	2690	0.38	1.82	
Band 42	3400	0.43	1.82	1.94
	3500	0.44	1.94	
	3600	0.45	0.79	
Band 43	3600	0.45	0.79	1.98
	3700	0.45	1.68	
	3800	0.46	1.98	
Band 48 NR Band 48	3550	0.44	1.84	1.84
	3625	0.45	0.93	
	3700	0.45	1.68	
Band 66 NR Band 66	1710	0.30	1.22	1.22
	1745	0.30	-0.19	
	1780	0.30	-0.59	
NR Band 77	3300	0.42	1.80	1.80
	3750	0.46	1.57	
	4200	0.49	1.50	
NR Band 78	3300	0.42	1.80	1.98
	3550	0.44	1.84	
	3800	0.46	1.98	
NR Band 79	4400	0.50	1.59	1.87
	4700	0.52	1.80	
	5000	0.53	1.87	

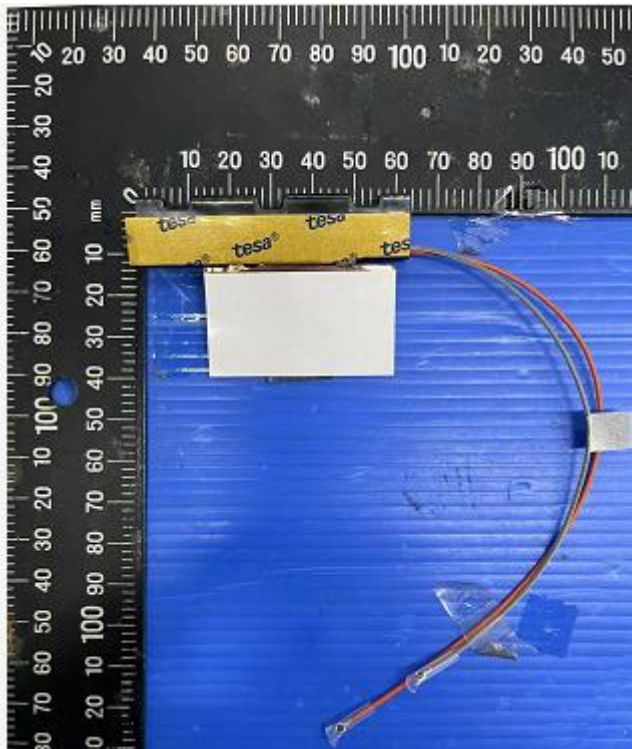


## Description

### Antenna Picture1:

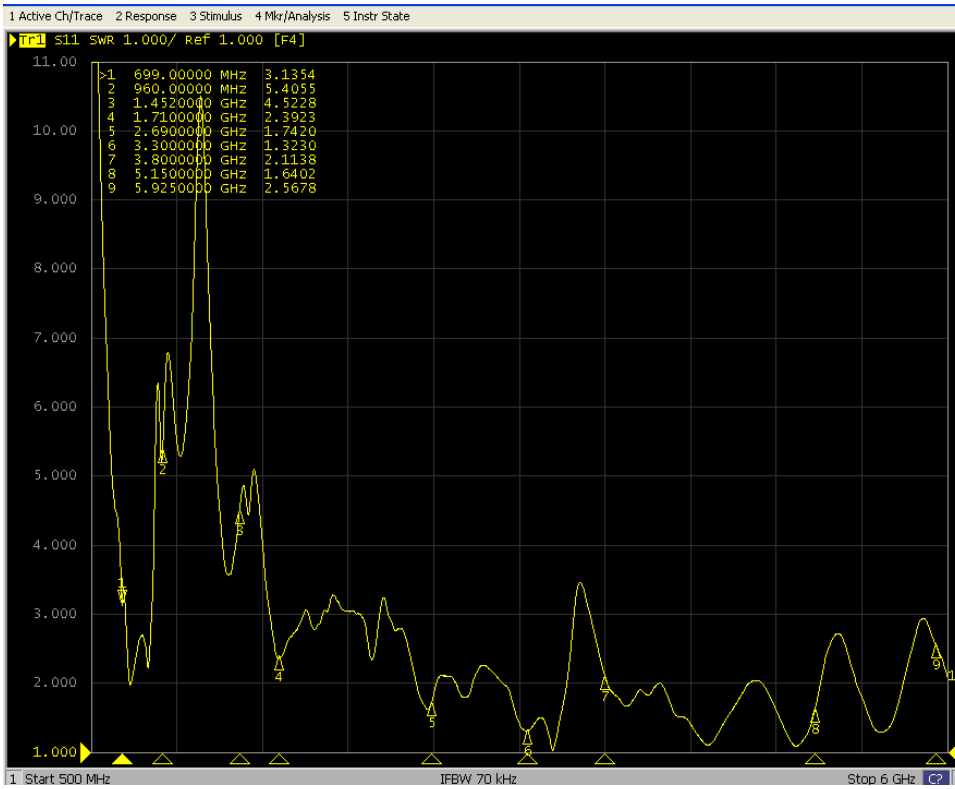


### Antenna Picture2



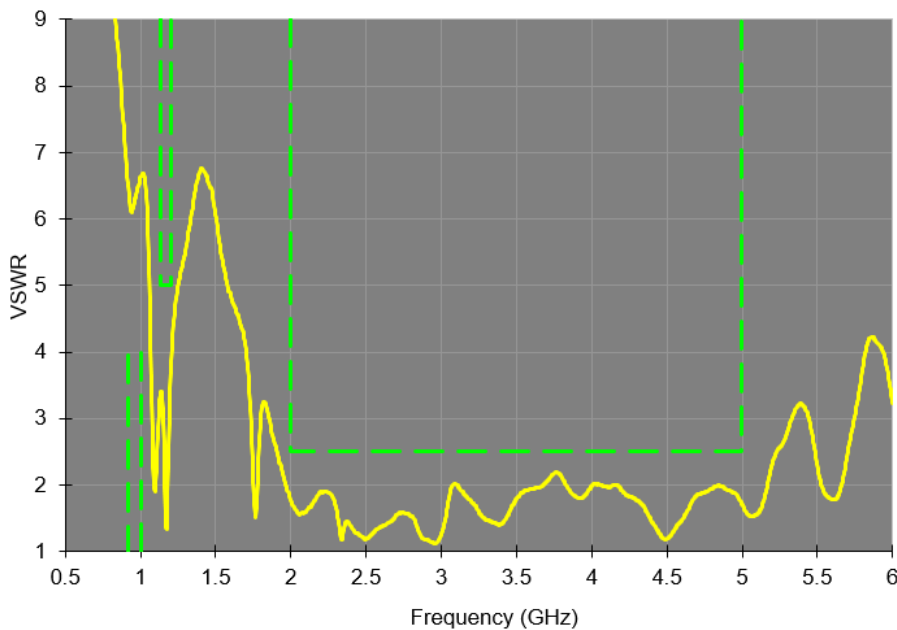
# Performance Data

## 1. VSWR



## 2. SPEC

VSWR ANT1(MAIN)



Spec:

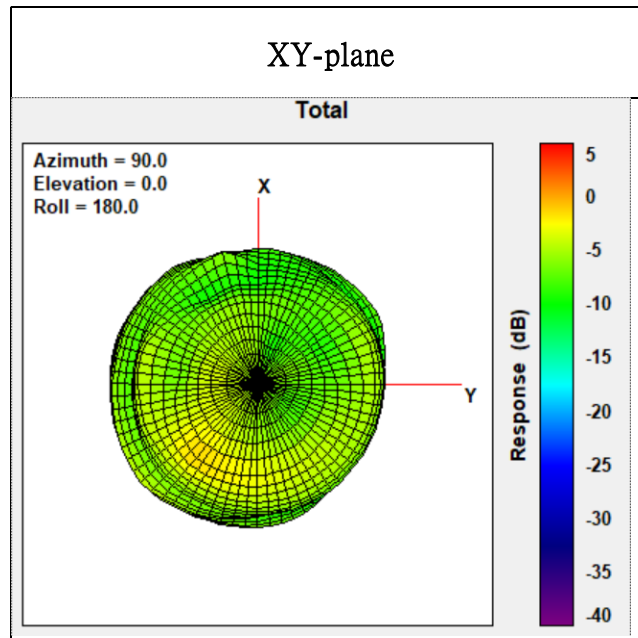
0.90 ~ 1.00 GHz > 4

1.13 ~ 1.20 GHz < 5

2.00 ~ 5.00 GHz < 2.5

**Radiation characteristic in 1920MHz ~ 1980MHz (WCDMA I , Band 1, NR Band 1)**

**Antenna: 1920MHz**

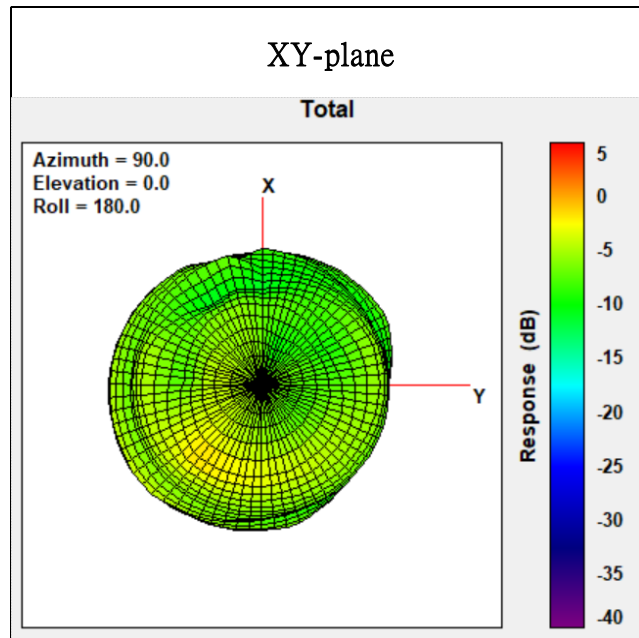


Center Frequency	<b>1920 MHz</b>
Three-dimensional (dBi) peak	-0.95



Radiation characteristic in 1850MHz ~ 1910MHz (WCDMA II, Band 2, NR Band 2)

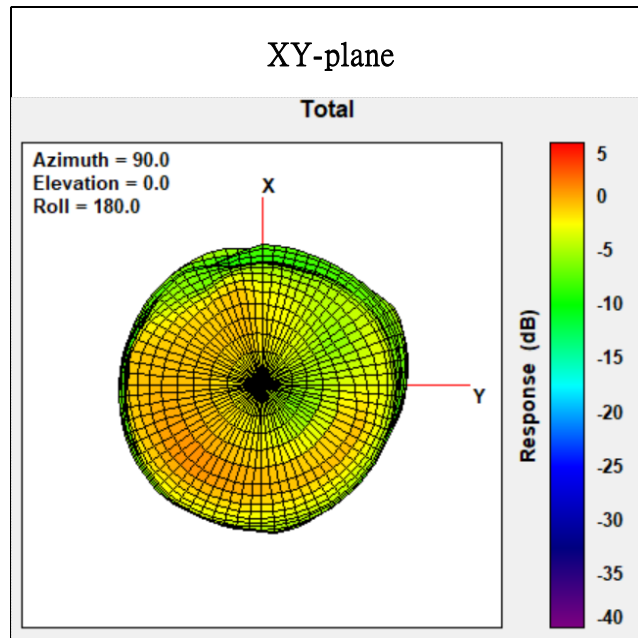
Antenna: 1910MHz



Center Frequency	<b>1910 MHz</b>
Three-dimensional (dBi) peak	-1.18

**Radiation characteristic in 1710MHz ~ 1785MHz (Band 3, NR Band 3)**

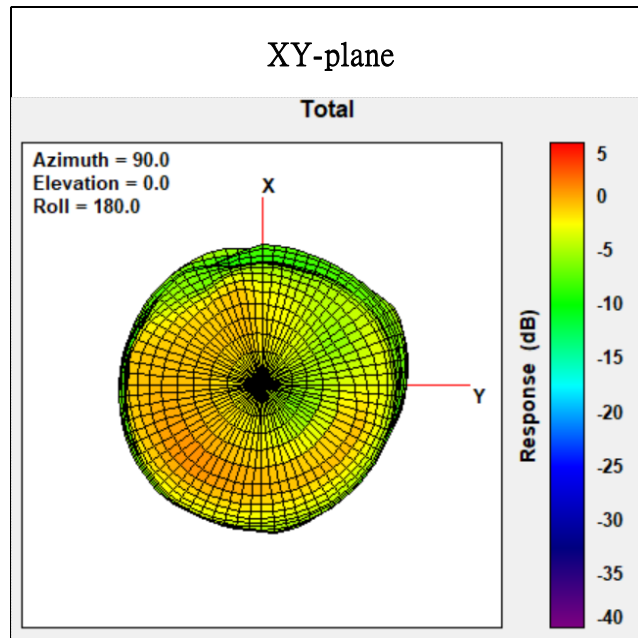
Antenna: 1710MHz



Center Frequency	<b>1710 MHz</b>
Three-dimensional (dBi) peak	1.22

**Radiation characteristic in 1710MHz ~ 1755MHz (WCDMA IV, Band 4)**

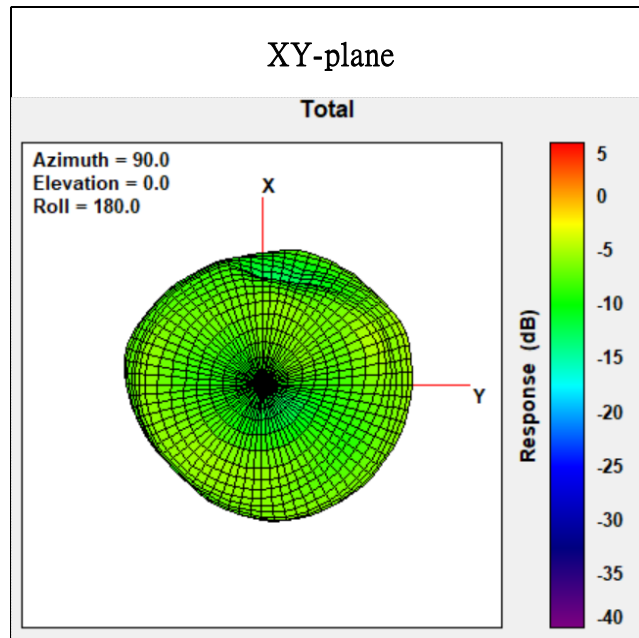
Antenna: 1710MHz



Center Frequency	<b>1710 MHz</b>
Three-dimensional (dBi) peak	1.22

Radiation characteristic in 824MHz ~ 849MHz (WCDMA V, Band 5, NR Band 5)

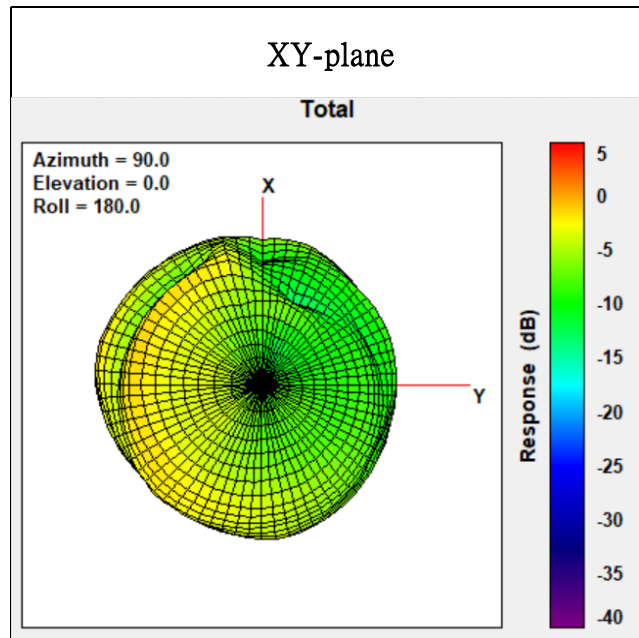
Antenna: 849MHz



Center Frequency	<b>849 MHz</b>
Three-dimensional (dBi) peak	-3.96

Radiation characteristic in 2500MHz ~ 2570MHz (Band 7, NR Band 7)

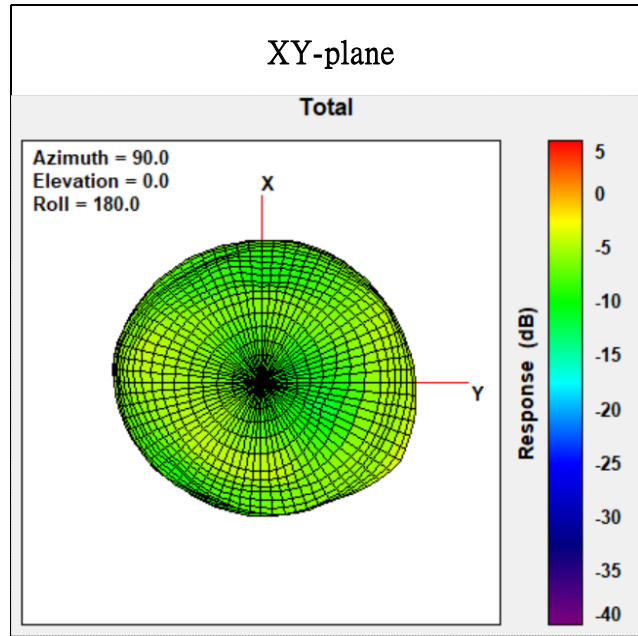
Antenna: 2500MHz



Center Frequency	<b>2500 MHz</b>
Three-dimensional (dBi) peak	0.29

**Radiation characteristic in 880MHz ~ 915MHz (WCDMA VIII, Band 8, NR Band 8)**

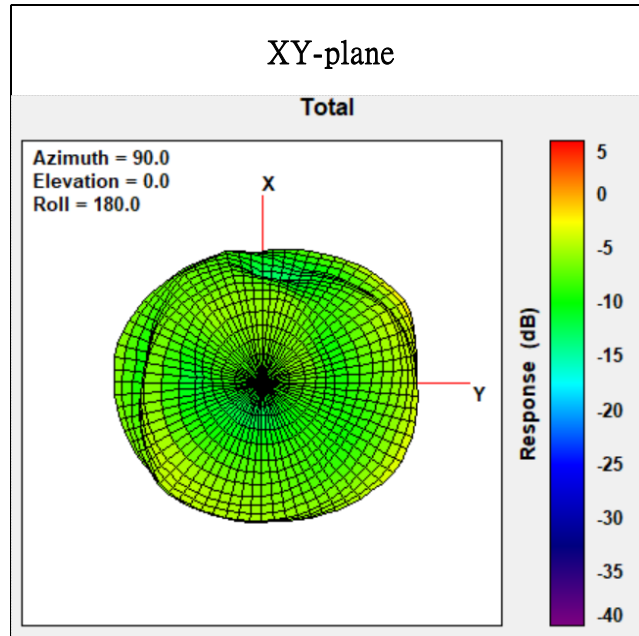
Antenna: 880MHz



Center Frequency	<b>880 MHz</b>
Three-dimensional (dBi) peak	-2.48

Radiation characteristic in 698MHz ~ 716MHz (Band 12)

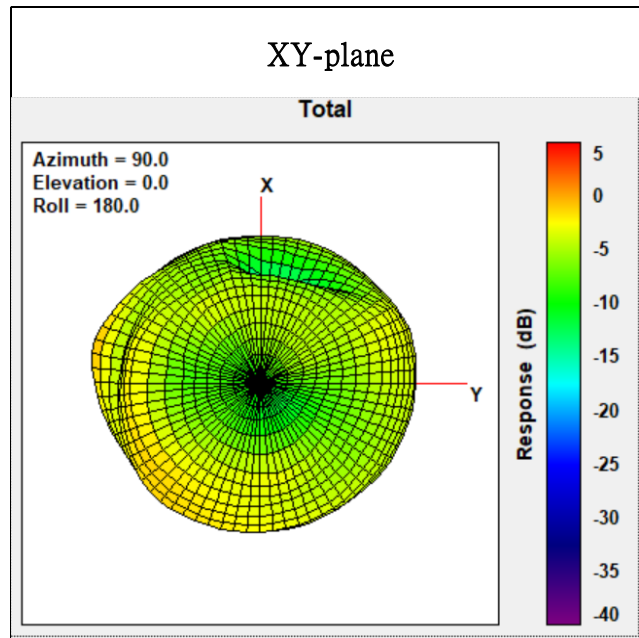
Antenna: 716MHz



Center Frequency	<b>716 MHz</b>
Three-dimensional (dBi) peak	-1.05

Radiation characteristic in 777MHz ~ 787MHz (Band 13)

Antenna: 777MHz

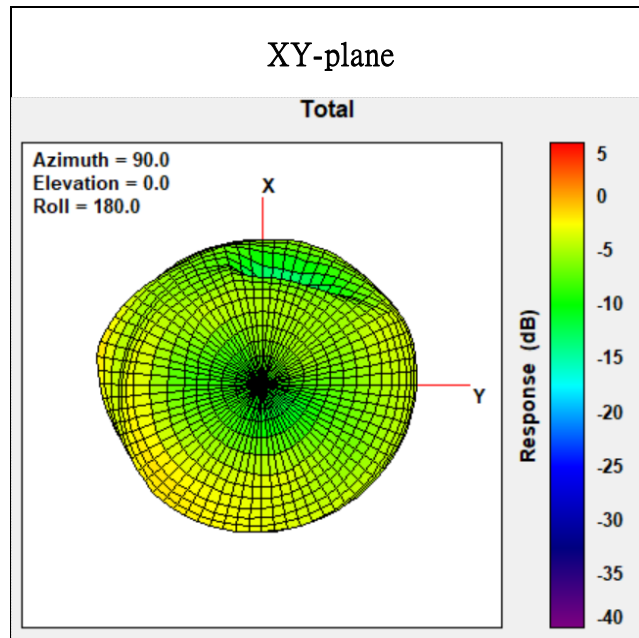


Center Frequency	<b>777 MHz</b>
Three-dimensional (dBi) peak	0.23



**Radiation characteristic in 788MHz ~ 798MHz (Band 14)**

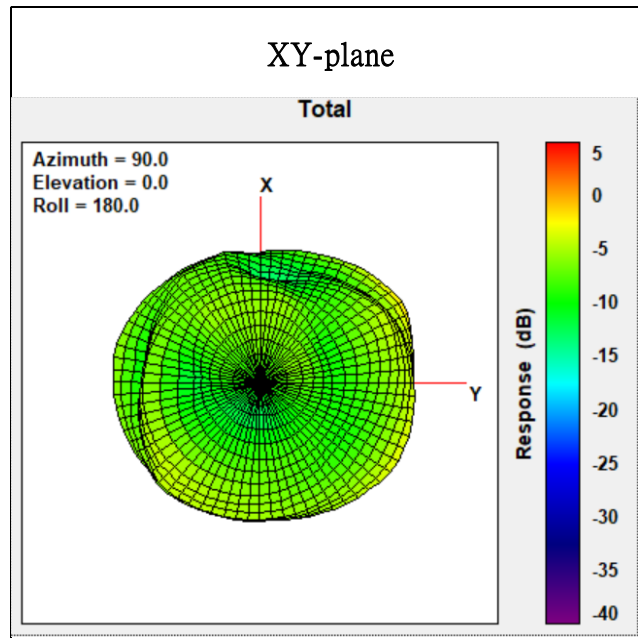
**Antenna: 788MHz**



Center Frequency	<b>788 MHz</b>
Three-dimensional (dBi) peak	-0.78

**Radiation characteristic in 704MHz ~ 716MHz (Band 17)**

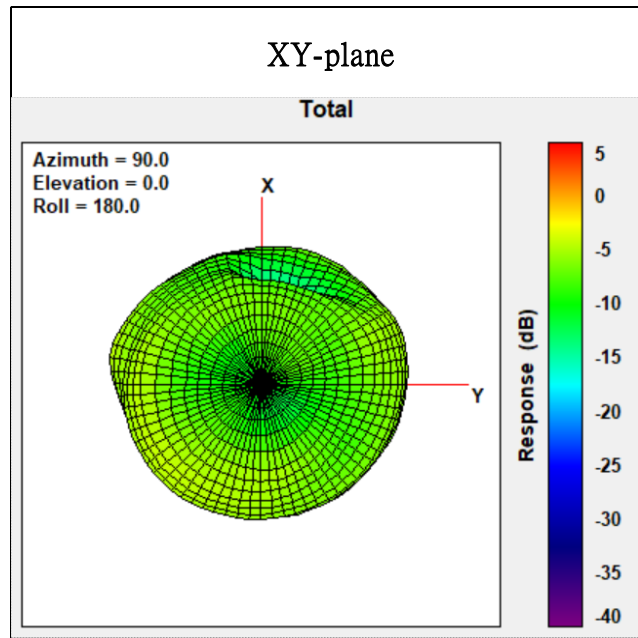
**Antenna: 716MHz**



Center Frequency	<b>716 MHz</b>
Three-dimensional (dBi) peak	-1.05

Radiation characteristic in 815MHz ~ 830MHz (Band 18)

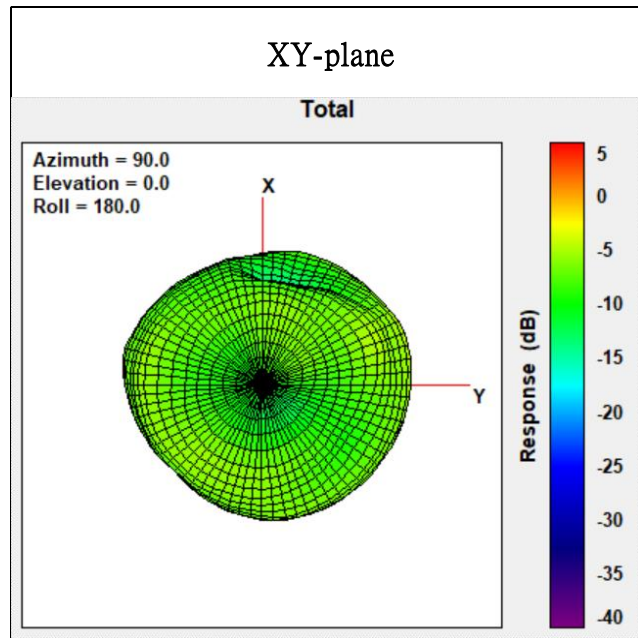
Antenna: 815MHz



Center Frequency	<b>815 MHz</b>
Three-dimensional (dBi) peak	-3.80

Radiation characteristic in 830MHz ~ 845MHz (Band 19)

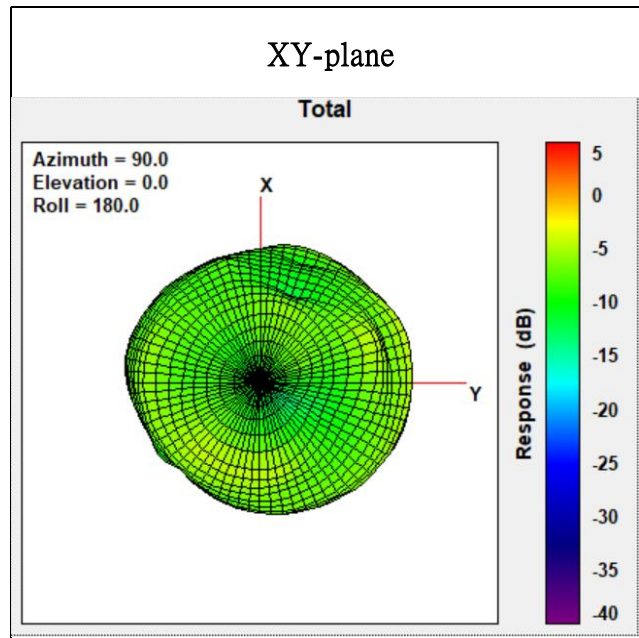
Antenna: 845MHz



Center Frequency	<b>845 MHz</b>
Three-dimensional (dBi) peak	-4.13

**Radiation characteristic in 832MHz ~ 862MHz (Band 20, NR Band 20)**

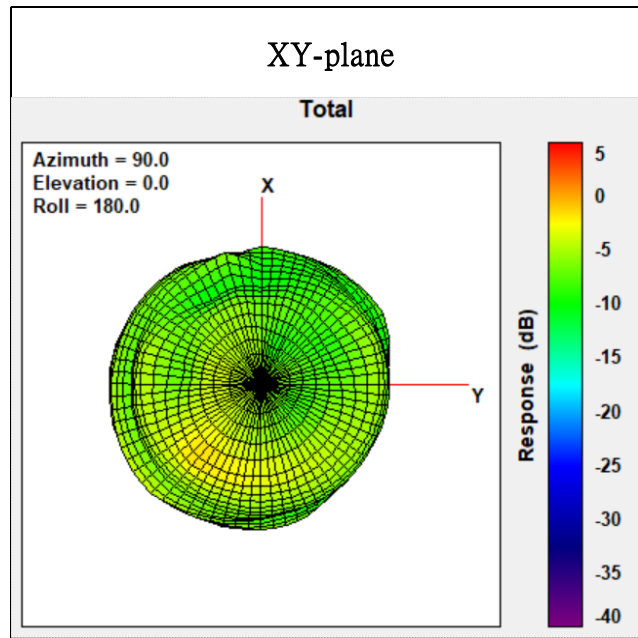
Antenna: 862MHz



Center Frequency	<b>862 MHz</b>
Three-dimensional (dBi) peak	-3.54

Radiation characteristic in 1850MHz ~ 1915MHz (Band 25)

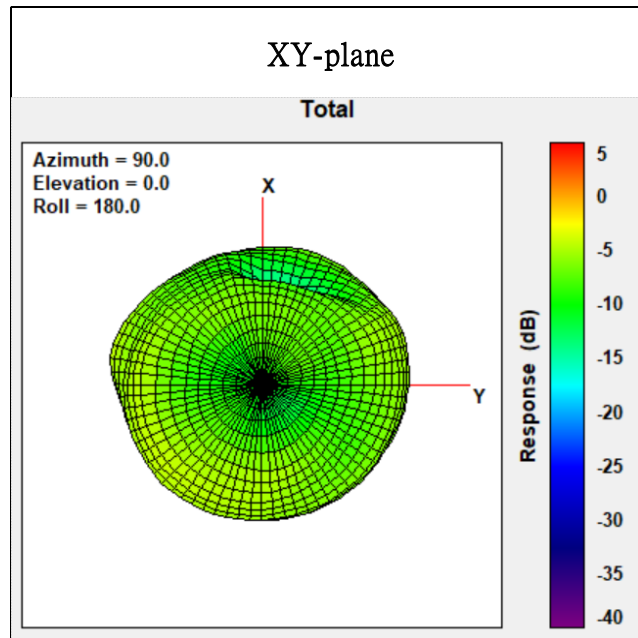
Antenna: 1915MHz



Center Frequency	<b>1915 MHz</b>
Three-dimensional (dBi) peak	-1.04

Radiation characteristic in 814MHz ~ 849MHz (Band 26)

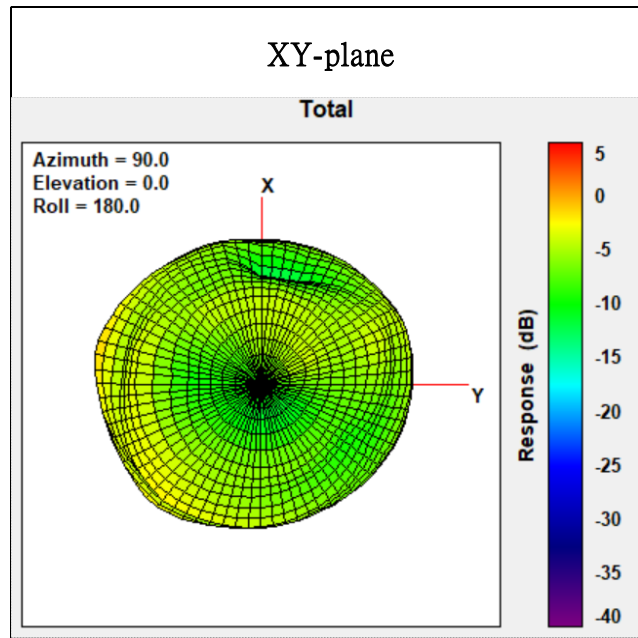
Antenna: 814MHz



Center Frequency	<b>814 MHz</b>
Three-dimensional (dBi) peak	-3.72

Radiation characteristic in 703MHz ~ 748MHz (Band 28, NR Band 28)

Antenna: 748MHz

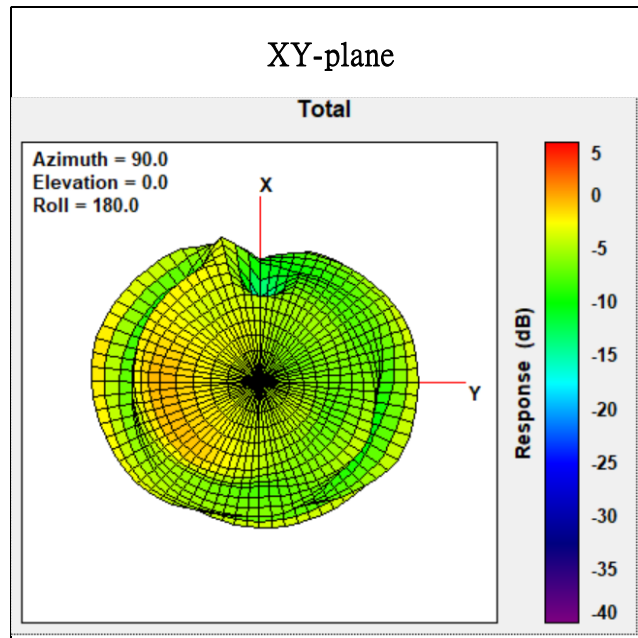


Center Frequency	<b>748 MHz</b>
Three-dimensional (dBi) peak	-0.46



Radiation characteristic in 2305MHz ~ 2315MHz (Band 30)

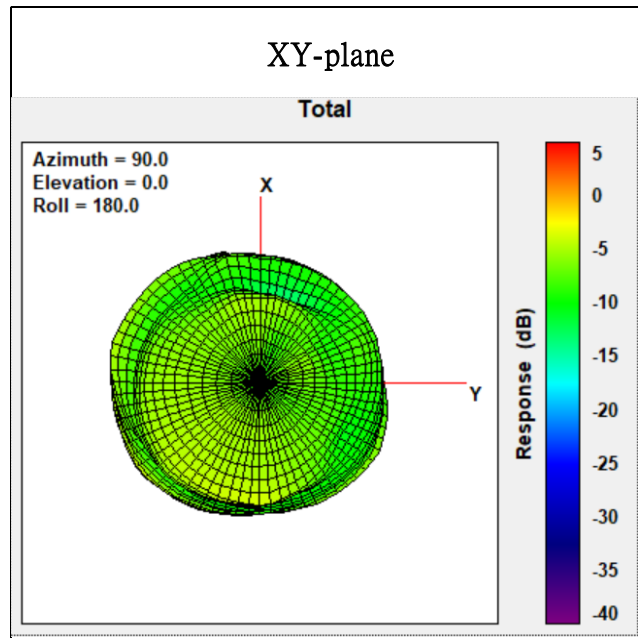
Antenna: 2305MHz



Center Frequency	<b>2305 MHz</b>
Three-dimensional (dBi) peak	0.49

Radiation characteristic in 2010MHz ~ 2025MHz (Band 34)

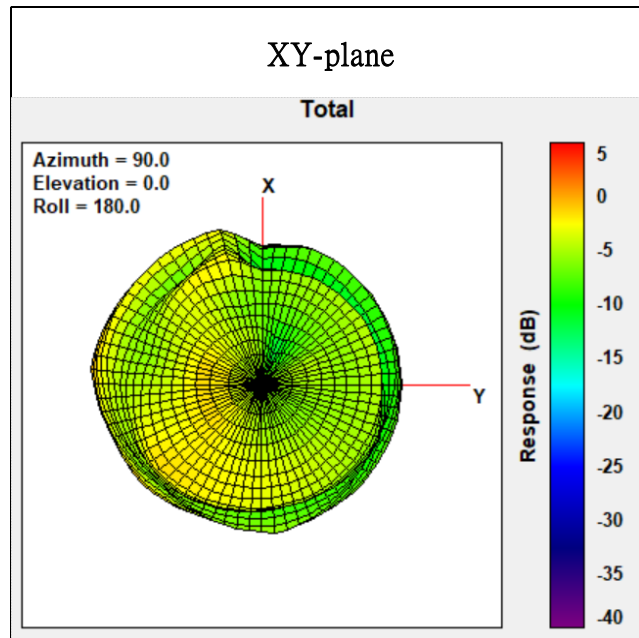
Antenna: 2025MHz



Center Frequency	<b>2025 MHz</b>
Three-dimensional (dBi) peak	-0.47

**Radiation characteristic in 2570MHz ~ 2620MHz (Band 38, NR Band 38)**

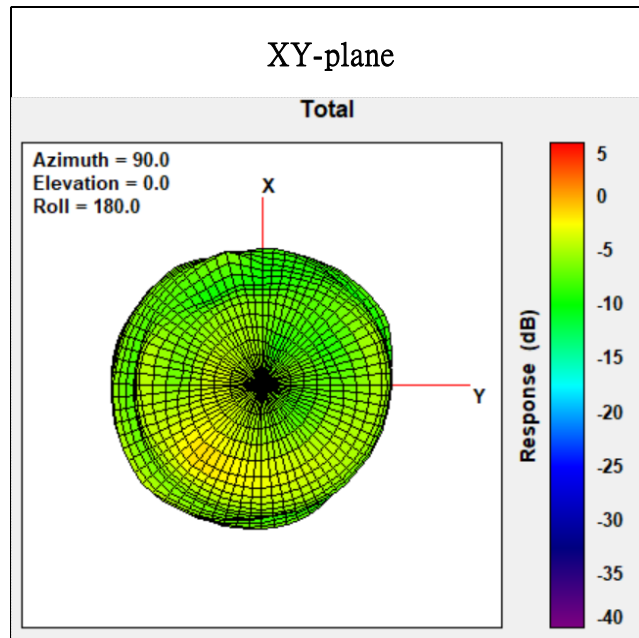
Antenna: 2595MHz



Center Frequency	<b>2595 MHz</b>
Three-dimensional (dBi) peak	0.80

Radiation characteristic in 1880MHz ~ 1920MHz (Band 39)

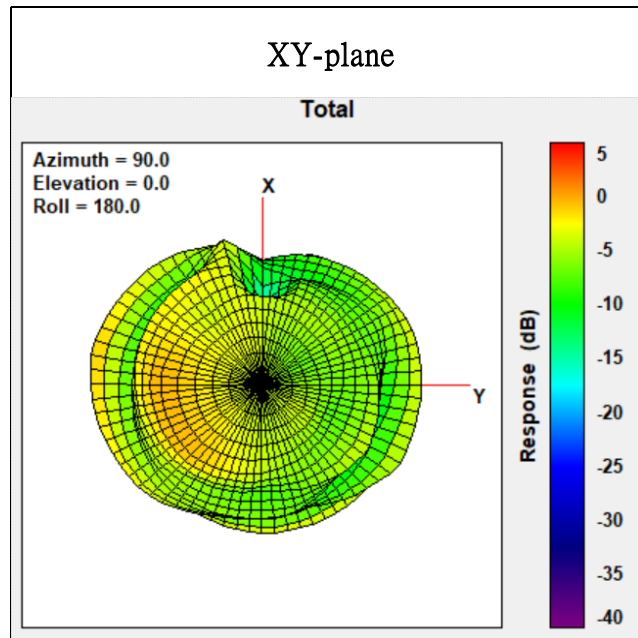
Antenna: 1920MHz



Center Frequency	<b>1920 MHz</b>
Three-dimensional (dBi) peak	-0.95

**Radiation characteristic in 2300MHz ~ 2350MHz (Band 40, NR Band 40)**

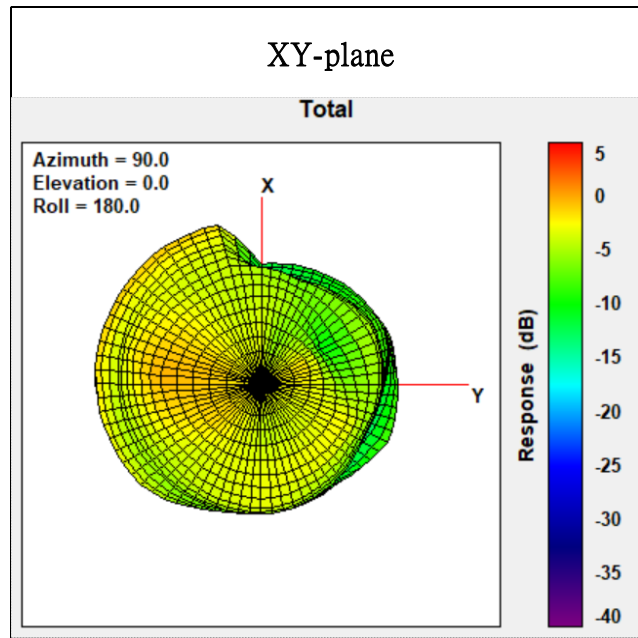
**Antenna: 2300MHz**



Center Frequency	<b>2300 MHz</b>
Three-dimensional (dBi) peak	0.67

**Radiation characteristic in 2496MHz ~ 2690MHz (Band 41, NR Band 41)**

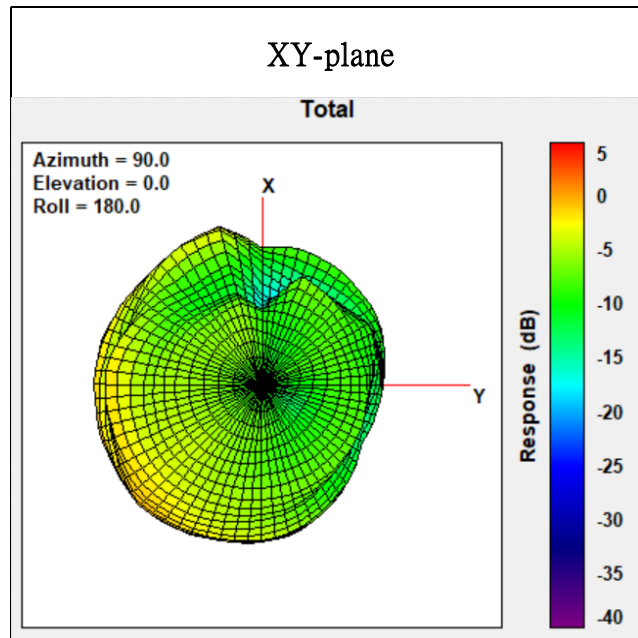
**Antenna: 2690MHz**



Center Frequency	<b>2690 MHz</b>
Three-dimensional (dBi) peak	1.82

Radiation characteristic in 3400MHz ~ 3600MHz (Band 42)

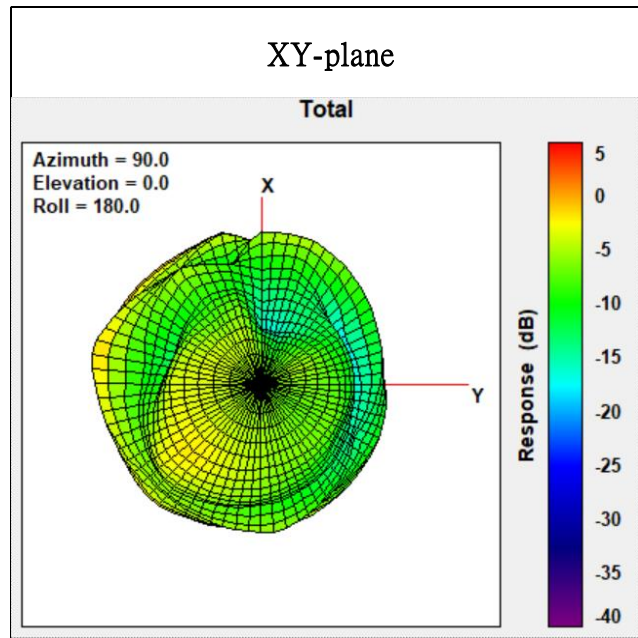
Antenna: 3500MHz



Center Frequency	<b>3500 MHz</b>
Three-dimensional (dBi) peak	1.94

Radiation characteristic in 3600MHz ~ 3800MHz (Band 43)

Antenna: 3800MHz

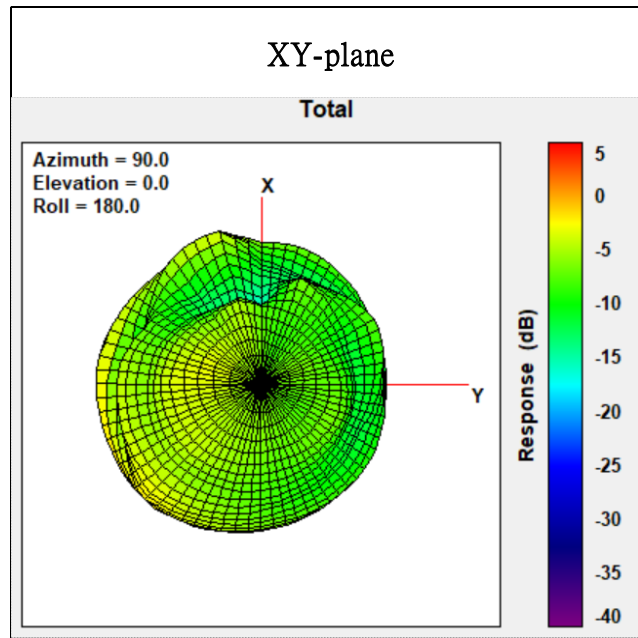


Center Frequency	<b>3800 MHz</b>
Three-dimensional (dBi) peak	1.98



Radiation characteristic in 3550MHz ~ 3700MHz (Band 48, NR Band 48)

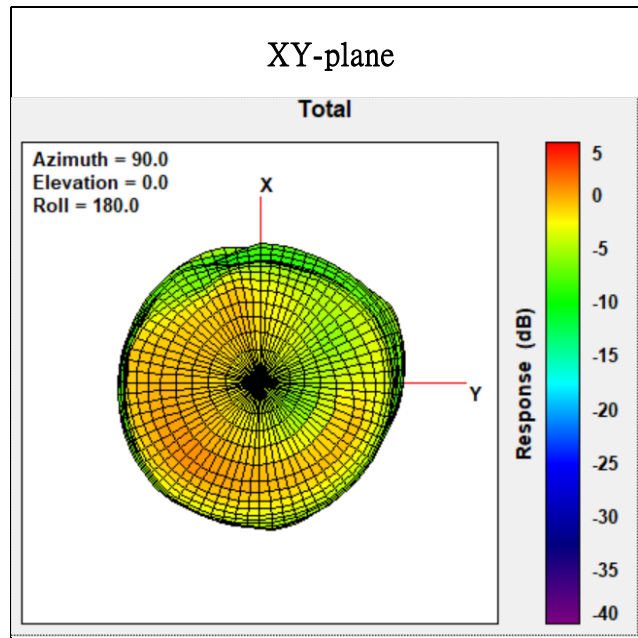
Antenna: 3550MHz



Center Frequency	<b>3550 MHz</b>
Three-dimensional (dBi) peak	1.84

**Radiation characteristic in 1710MHz ~ 1780MHz (Band 66, NR Band 66)**

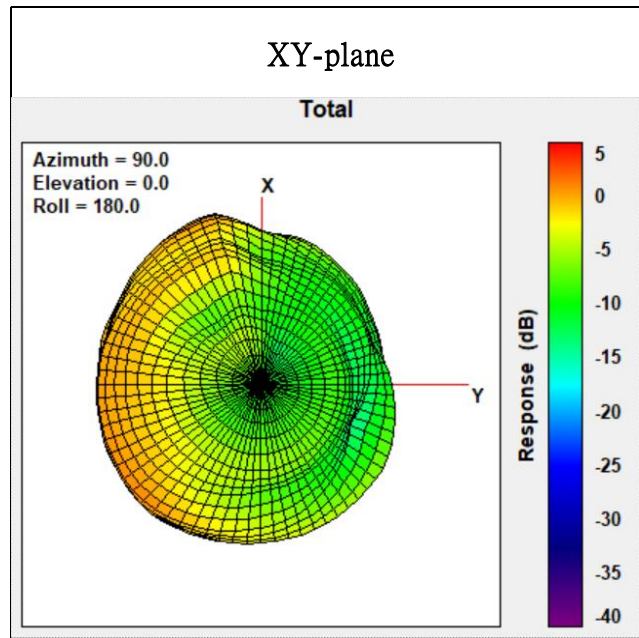
**Antenna: 1710MHz**



Center Frequency	<b>1710 MHz</b>
Three-dimensional (dBi) peak	1.22

Radiation characteristic in 3300MHz ~ 4200MHz (NR Band 77)

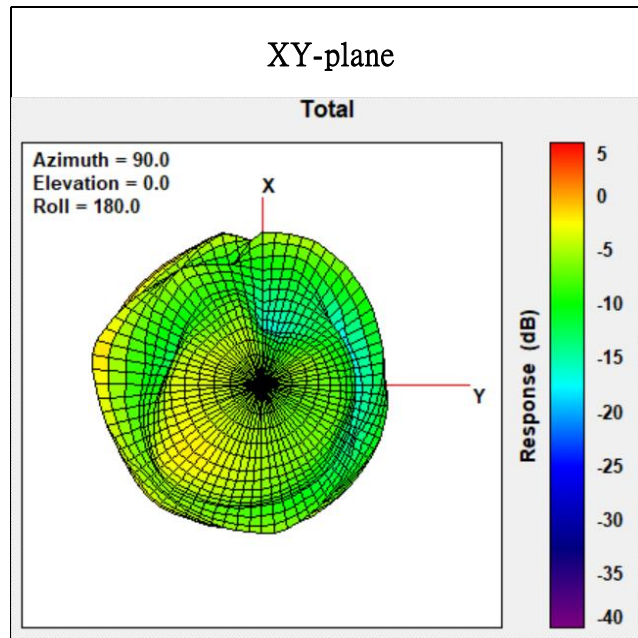
Antenna: 3300MHz



Center Frequency	<b>3300 MHz</b>
Three-dimensional (dBi) peak	1.80

Radiation characteristic in 3300MHz ~ 3800MHz (NR Band 78)

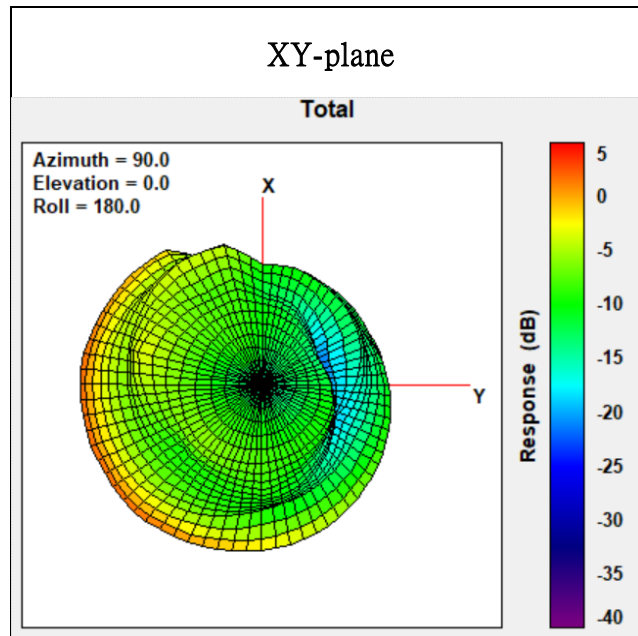
Antenna: 3800MHz



Center Frequency	<b>3800 MHz</b>
Three-dimensional (dBi) peak	1.98

Radiation characteristic in 4400MHz ~ 5000MHz (NR Band 79)

Antenna: 5000MHz



Center Frequency	<b>5000 MHz</b>
Three-dimensional (dBi) peak	1.87

## Open Mode Gain Table (dBi)

	3D Peak Gain	3D Gain	Cable Loss
Frequency (MHZ)	Total (dBi)	Efficiency [%]	Loss (dBi)
1920	-0.95	22.70	0.32
1950	-1.84	23.68	0.32
1980	-0.97	26.75	0.32
1850	-1.29	25.48	0.31
1880	-1.92	24.23	0.31
1910	-1.18	22.98	0.31
1710	1.22	35.40	0.30
1748	-0.14	30.01	0.30
1785	-0.7	26.75	0.30
1710	1.22	35.40	0.30
1733	0.67	33.00	0.30
1755	-0.14	29.21	0.30
824	-4.68	14.06	0.22
837	-4.58	13.08	0.22
849	-3.96	13.33	0.22
2500	0.29	31.56	0.36
2535	-0.45	33.60	0.37
2570	-0.15	35.97	0.37

880	-2.48	18.82	0.22
898	-3.31	15.48	0.23
915	-5.09	9.76	0.23
698	-4.88	13.47	0.21
708	-2.9	17.14	0.21
716	-1.05	18.80	0.21
777	0.23	29.77	0.21
782	-0.09	28.61	0.21
787	-0.67	25.84	0.21
788	-0.78	25.43	0.22
793	-1.23	23.64	0.22
798	-1.69	21.66	0.22
704	-3.84	15.54	0.21
710	-2.26	17.90	0.21
716	-1.05	18.80	0.21
815	-3.8	15.42	0.22
823	-4.66	14.12	0.22
830	-4.69	13.53	0.22
830	-4.69	13.53	0.22
838	-4.52	13.06	0.22
845	-4.13	12.91	0.22
832	-4.67	13.27	0.22

847	-4.04	13.08	0.22
862	-3.54	14.96	0.22
1850	-1.29	25.48	0.31
1883	-1.81	23.95	0.31
1915	-1.04	23.03	0.31
814	-3.72	15.62	0.22
832	-4.67	13.27	0.22
849	-3.96	13.33	0.22
703	-4.01	15.19	0.21
726	-1.42	18.19	0.21
748	-0.46	26.55	0.21
2305	0.49	37.65	0.35
2310	0.46	37.35	0.35
2315	0.08	36.47	0.35
2010	-0.78	24.44	0.32
2018	-0.69	24.21	0.32
2025	-0.47	24.36	0.32
2570	-0.15	35.97	0.37
2595	0.8	37.31	0.37
2620	0.54	39.16	0.37
1880	-1.92	24.23	0.31
1900	-1.42	23.30	0.31



1920	-0.95	22.70	0.32
2300	0.67	38.28	0.35
2350	-0.77	30.17	0.35
2400	-1.58	24.59	0.35
2496	0.62	31.85	0.36
2593	0.65	37.22	0.37
2690	1.82	36.49	0.38
3400	1.82	43.73	0.43
3500	1.94	40.61	0.44
3600	0.79	25.43	0.45
3600	0.79	25.43	0.45
3700	1.68	27.71	0.45
3800	1.98	40.05	0.46
3550	1.84	34.88	0.44
3625	0.93	24.00	0.45
3700	1.68	27.71	0.45
1710	1.22	35.40	0.30
1745	-0.19	30.76	0.30
1780	-0.59	26.93	0.30
3300	1.8	46.01	0.42
3750	1.57	32.51	0.46
4200	1.5	40.67	0.49

3300	1.8	46.01	0.42
3550	1.84	34.88	0.44
3800	1.98	40.05	0.46
4400	1.59	31.47	0.50
4700	1.8	25.55	0.52
5000	1.87	44.13	0.53

# Assembly Drawing

