



品名：WAG-B1.01.L.0806 工規

History List

[illegible]

WAG-B.01.L.0806 Specification

1. Explanation of part number :

WAG B 01 L 0806
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material : FPC

(3) Frequency : 699-960Mhz, 1710-2690 Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 088

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
GSM	699-960Mhz, 1710-2690 Mhz

UNLESS OTHER SPECIFIED TOLERANCES ON:

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±

NHAIT 浙江海通通讯电子股份有限公司

SCALE:

UNIT: mm

DRAWN BY: 张有远

CHECKED BY: 蒋代勇

DESIGNED BY: 蒋代勇

APPROVED BY: 周振邦

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TITLE: WAG-F-LTE12-00-052 Specification

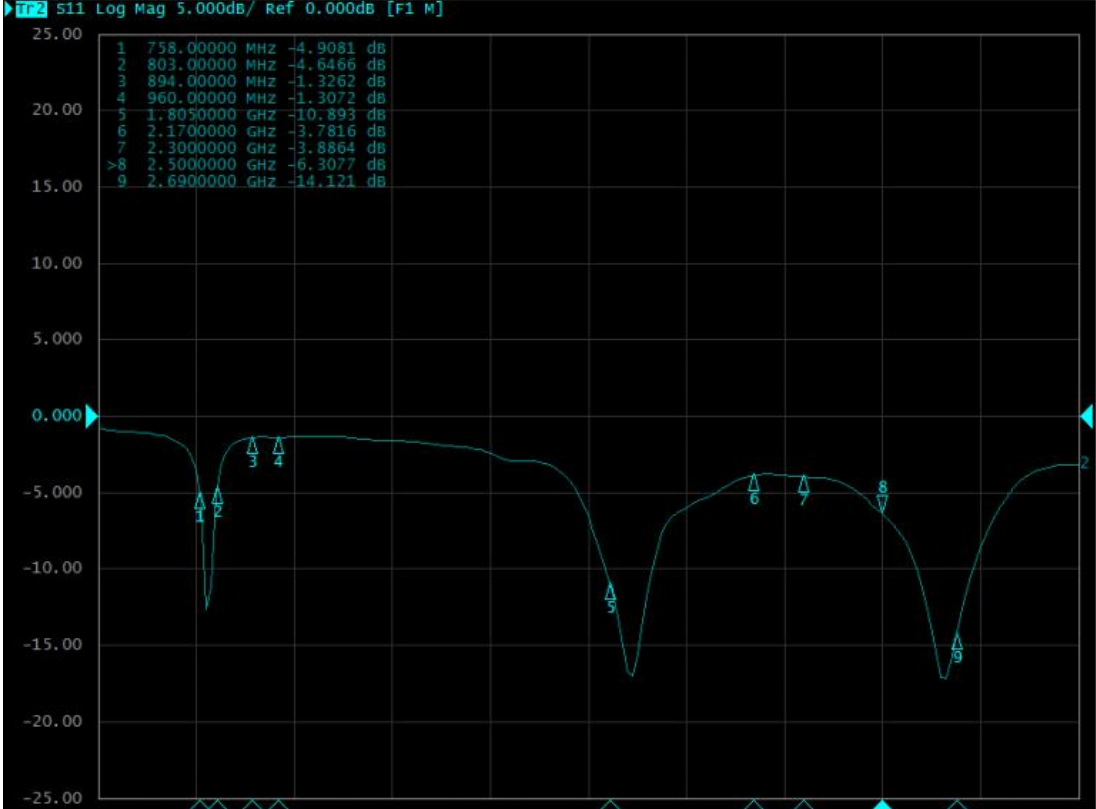
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PAGE REV.
P0

2-2. Impedance

50 ohm nominal

2-3 VSWR:

Frequency Band	758	960	1800	2170	2300	2690																																													
2-3-1. Typical Value:	-4.9	-1.3	-10.8	-3.7	-3.8	-14.1																																													
2-3-2Measuring Method	1. A 50 Ω coaxial cable is connected to the fpcb antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm.																																																		
2-3-3Picture	511 Log Mag 5.000dB/ Ref 0.000dB [F1 M] <table><tr><td>1</td><td>758.00000</td><td>MHZ</td><td>-4.9081</td><td>dB</td></tr><tr><td>2</td><td>803.00000</td><td>MHZ</td><td>-4.6466</td><td>dB</td></tr><tr><td>3</td><td>894.00000</td><td>MHZ</td><td>-1.3262</td><td>dB</td></tr><tr><td>4</td><td>960.00000</td><td>MHZ</td><td>-1.3072</td><td>dB</td></tr><tr><td>5</td><td>1.8050000</td><td>GHZ</td><td>-10.893</td><td>dB</td></tr><tr><td>6</td><td>2.1700000</td><td>GHZ</td><td>-3.7816</td><td>dB</td></tr><tr><td>7</td><td>2.3000000</td><td>GHZ</td><td>-3.8864</td><td>dB</td></tr><tr><td>8</td><td>2.5000000</td><td>GHZ</td><td>-6.3077</td><td>dB</td></tr><tr><td>9</td><td>2.6900000</td><td>GHZ</td><td>-14.121</td><td>dB</td></tr></table>						1	758.00000	MHZ	-4.9081	dB	2	803.00000	MHZ	-4.6466	dB	3	894.00000	MHZ	-1.3262	dB	4	960.00000	MHZ	-1.3072	dB	5	1.8050000	GHZ	-10.893	dB	6	2.1700000	GHZ	-3.7816	dB	7	2.3000000	GHZ	-3.8864	dB	8	2.5000000	GHZ	-6.3077	dB	9	2.6900000	GHZ	-14.121	dB
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SCALE:

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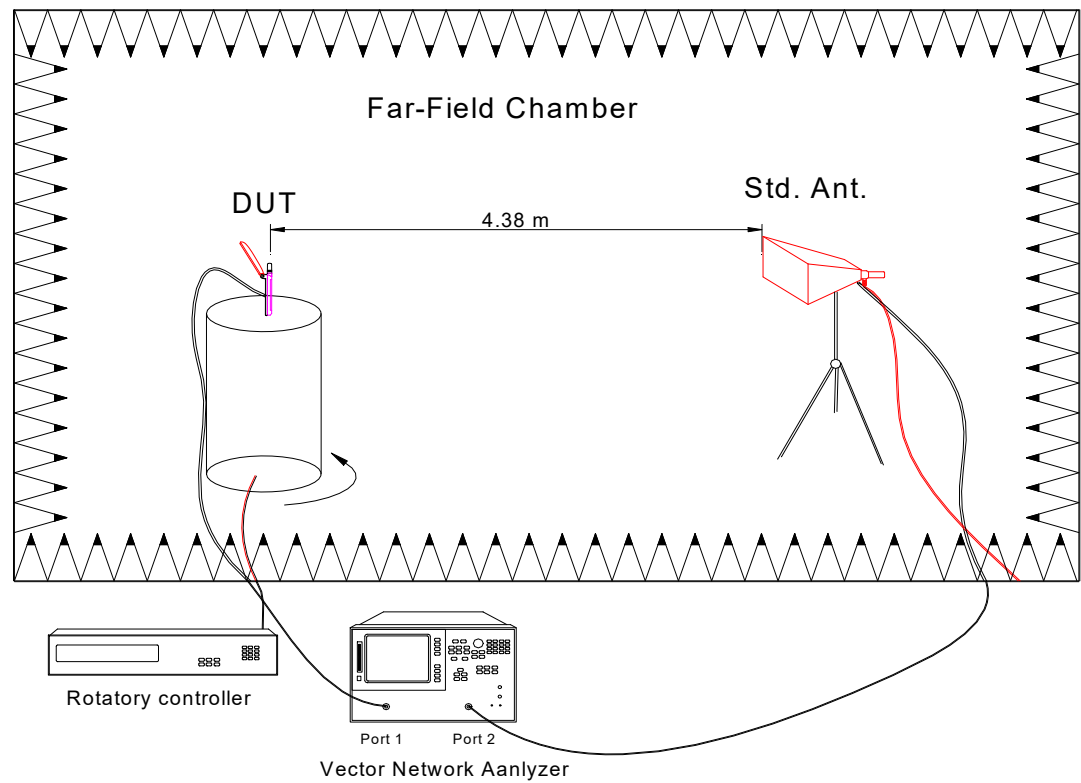
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2-4. Measure and Chamber

2-4-1 Measure method

- 1. Using a low loss coaxial cable to link a standard handset jig
- 2. Fixed this handset jig on chamber's rotator plane
- 3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
- 4. Using another standard gain horn antenna to calibrated those data

2-4-2 Chamber definition



- 1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
- 2. The quite room region is 40cmx40cmx40cm at the center of rotator
- 3. The distance between DUT and standard antenna is 4.38 m
- 4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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2-4-3 Antenna OTA

2-4- Antenna Efficiency

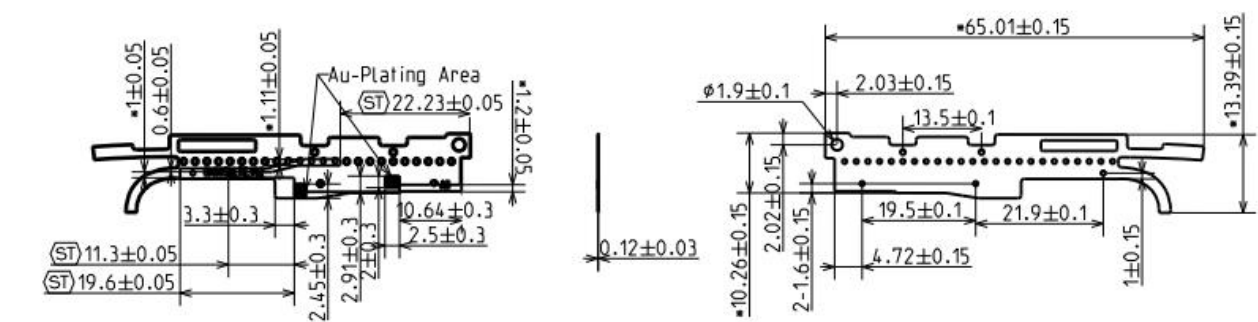
Frequency	Efficiency	Efficiency . dB	Gain . dBi
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750	5.4%	-12.7	-10.8
760	12.2%	-9.1	-5.6
770	16.4%	-7.9	-4.2
780	17.8%	-7.5	-4.7
790	13.8%	-8.6	-5.8
800	11.0%	-9.6	-6.9
810	9.1%	-10.4	-8.8
820	7.0%	-11.5	-9.7
830	4.7%	-13.3	-11.0
840	3.2%	-14.9	-12.6
850	2.7%	-15.7	-13.8
860	1.4%	-18.5	-14.7
870	1.2%	-19.2	-15.2
880	1.1%	-19.6	-15.8
890	1.0%	-20.0	-16.1
910	0.9%	-20.5	17.6

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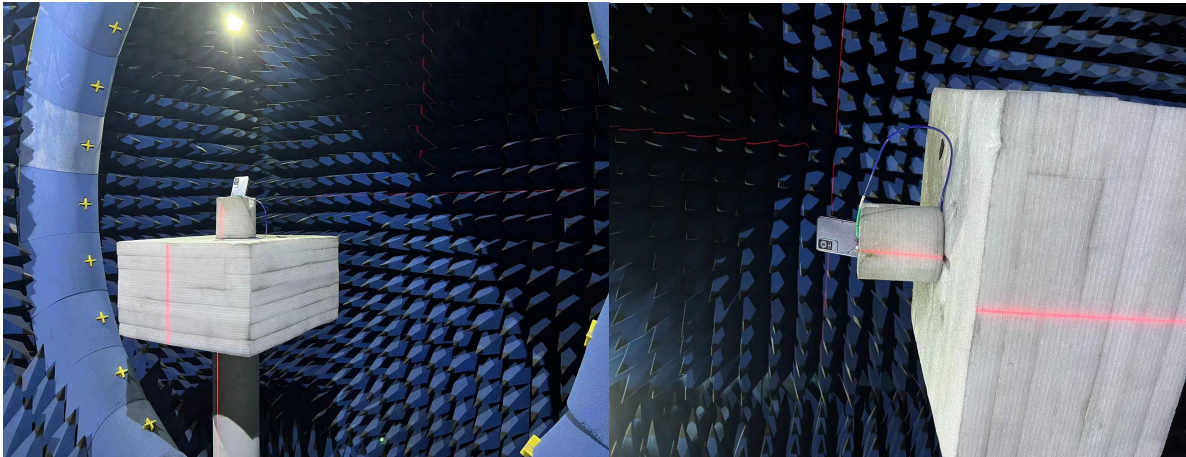
2650	29.9%	-5.2	-0.8
2670	28.2%	-5.5	-0.8
2690	26.5%	-5.8	-1.0

3. Antenna Dimensions (mm) :



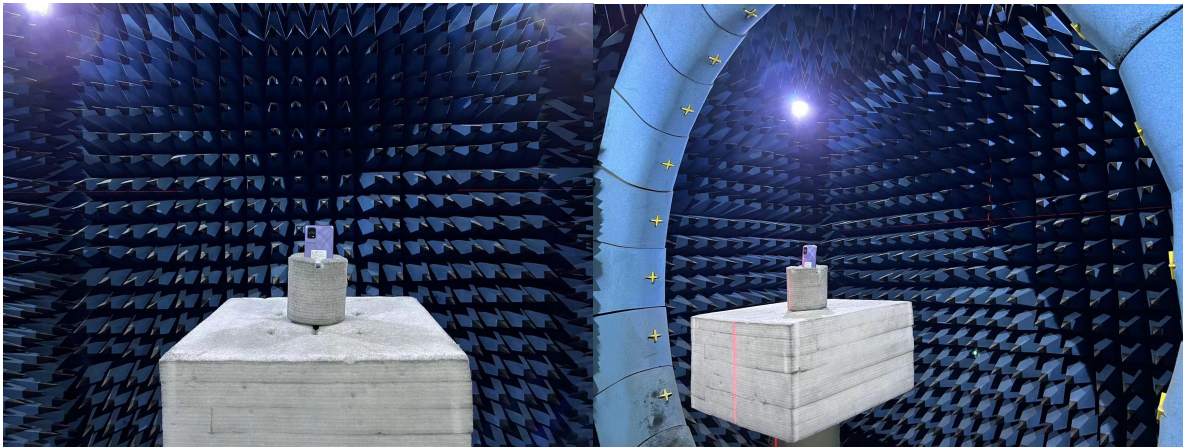
4. Testing Environment

Passive Test



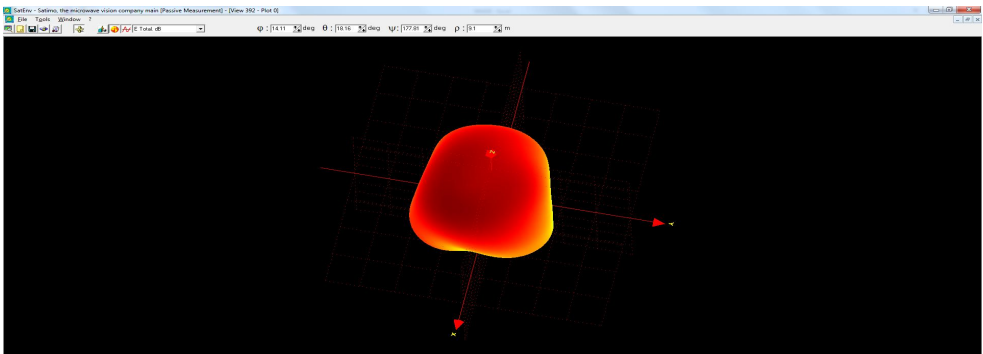
Active Test

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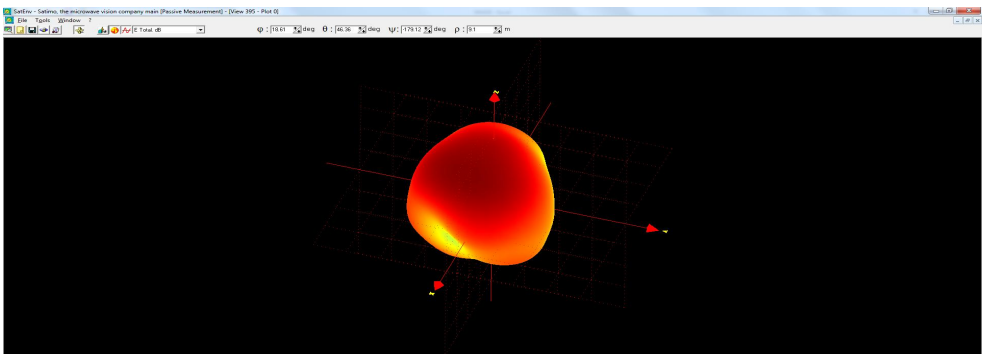


5.3D Radiation Pattern

- LTE B28

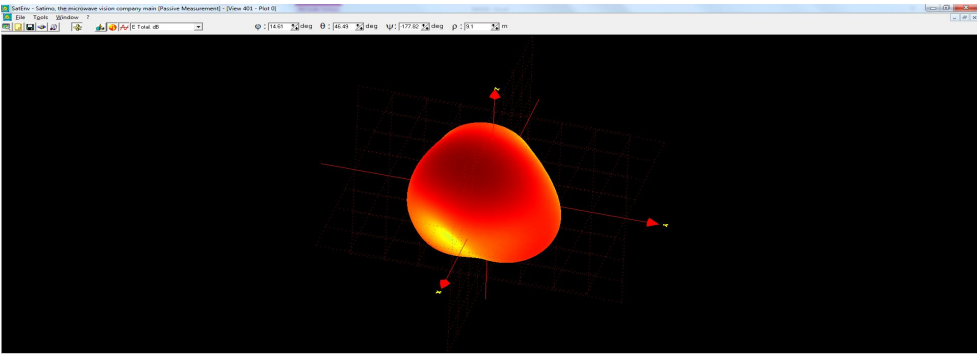


- LTE B20

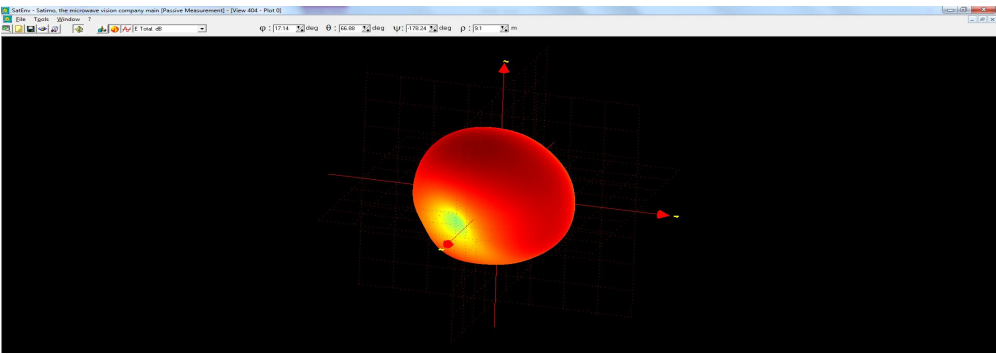


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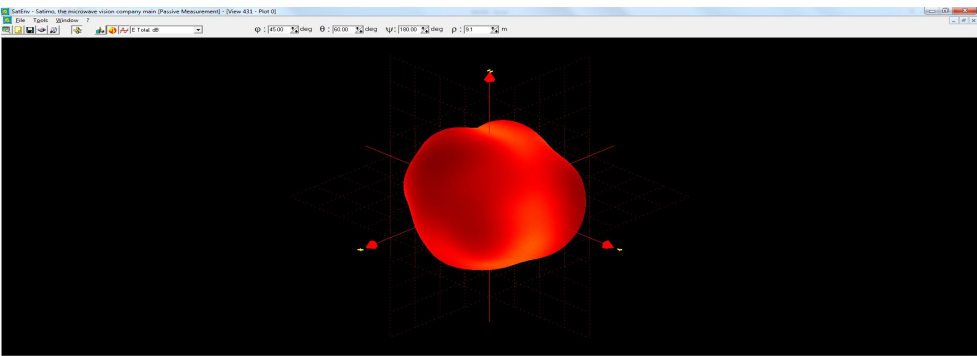
- LTE B5,



- LTE B8,

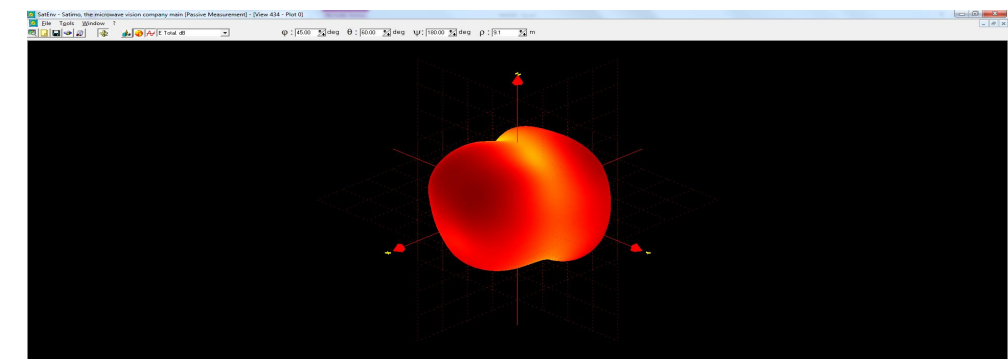


- LTE B1

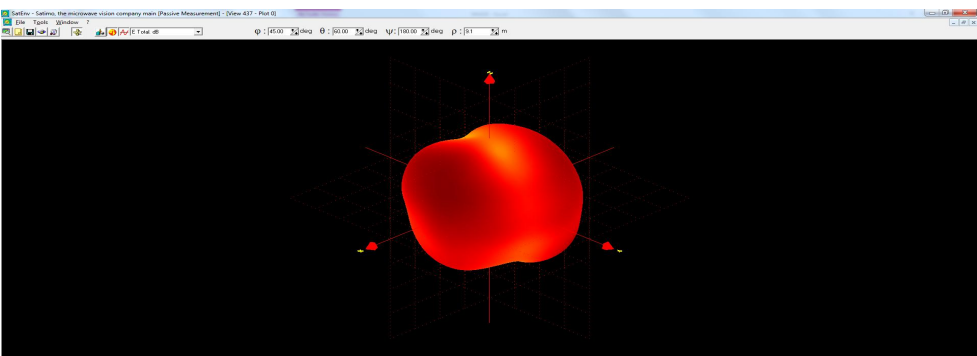


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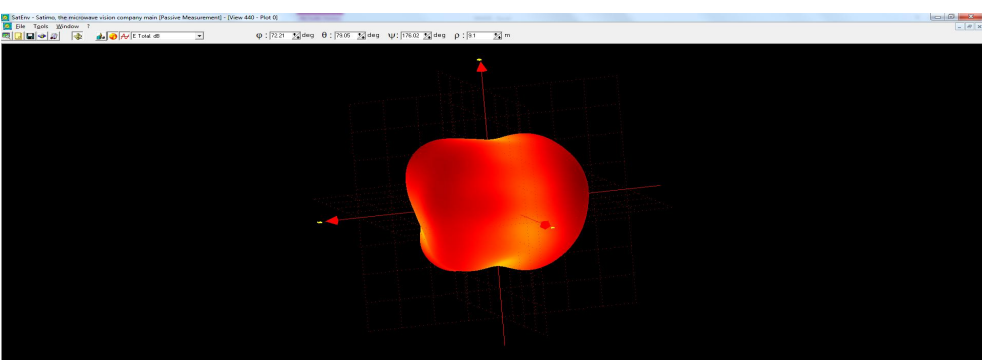
- LTE B2



- LTE B3,B4

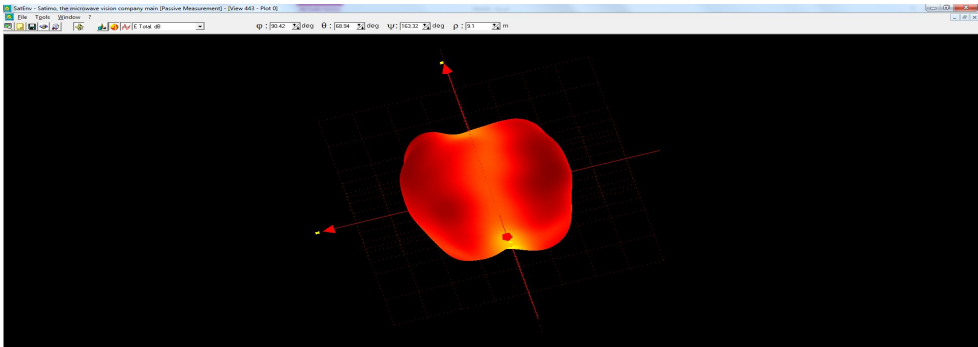


- LTE B40



- LTE B7, B38

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