



Kenbotong Technology Co., Ltd.

SPECIFICATION

Vendor Name	Shenzhen kenhaitong antenna technology co,Ltd.				
Customer Name	Particle				
Sample Name	FPC Antenna				
Part Number	G142-10005-A				
Specification					
Inspection Item	Performance	Total Appearance	structure	Others	Inspection Result
Remark					
QA Audit		Engineer Audit		Sales Confirm	
The following are filled by Customer					
Customer Evaluation					
Signation/ Chapter by Customer	date:				



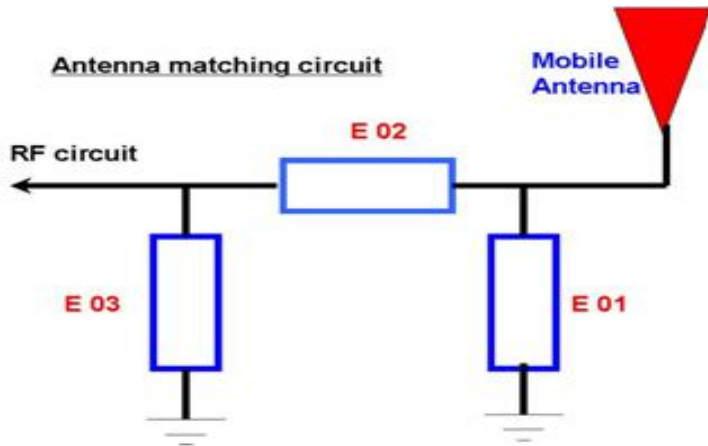
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Antenna Test Report

Test by : Shenzhen kenhaitong antenna technology co,ltd			
Material	FPC+IPEX Connector		
Antenna Type	MonopoleType	Polarization mode	Linear
Band	CAT/B2/4/12	VSWR	≤2.5
Power	Max : 5W	Impedance	50Ω
Peak Gain dBi	4.71dBi		
Test Equipment	HPE5071C、Shielding Room、3D automatic turntable		
Antenna Description: : 1. Grounding processing and picture description: no 2. Need to change the motherboard to match: no <ul style="list-style-type: none">● Test voltage: 3.6V, check the antenna contact is good before testing.● The RF cable of the integrated tester is kept in a natural state and can not be curled. Specification:test the specified power level, all indicators must conform to the specifications.			
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Antenna Matching Circuit



E01	E02	E03
No	No	No





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Band	700/850/900	1575	1700/1800/1900	2100	2400	2600
Standard	CELL	GPS	CELL	CELL	ISM	CELL
Frequency(MHz)	698-960	1575.42	1710-1990	1755-2170	2400-2500	2500-2690
Max VSWR	2:1	2.5:1	2.3:1	2.1:1	1.8:1	2:1
Max Return Loss(dB)	-10	-6	-9	-9	-11	-10
Peak Gain(dBi)	1.42	2.61	3.77	4.62	4.71	4.66
Efficiency(%)	50.23	60	69.37	62.63	70.28	60.52
Average Gain(dB)	-2.8	-1	-1.9	-2.65	-2.1	-2.2
Radiation Properties	Omnidirectional					
Max Input Power	5W					
Polarization	Linear					
Impedance	50 Ohms					

Item	Measurement	Band	Channel	Frequency	Max	Min	Total
1	TRP	CATM1_B1	18050	1925	23.08	0.74	19.25
2	TRP	CATM1_B1	18550	1975	23.56	1.62	19.55
3	TRP	CATM1_B3	19250	1715	22.78	-6.07	18.78
4	TRP	CATM1_B3	19900	1780	20.75	-12.32	17.87
5	TRP	CATM1_B5	20450	829	20.84	2.02	18.12
6	TRP	CATM1_B5	20600	844	23.32	1.45	19.96
7	TRP	CATM1_B8	21500	885	22.84	-2.68	20.53
8	TRP	CATM1_B8	21750	910	22.03	-0.4	19.88
9	TRP	CATM1_B13	23230	782	19.94	-6.04	17.17
10	TRP	CATM1_B18	23900	820	20.92	0.6	17.48
11	TRP	CATM1_B18	23950	825	21.27	2.39	18.44
12	TRP	CATM1_B19	24050	835	22.83	1.88	19.2
13	TRP	CATM1_B19	24100	840	22.87	2.08	19.68
14	TRP	CATM1_B20	24200	837	22.63	2.26	19.17



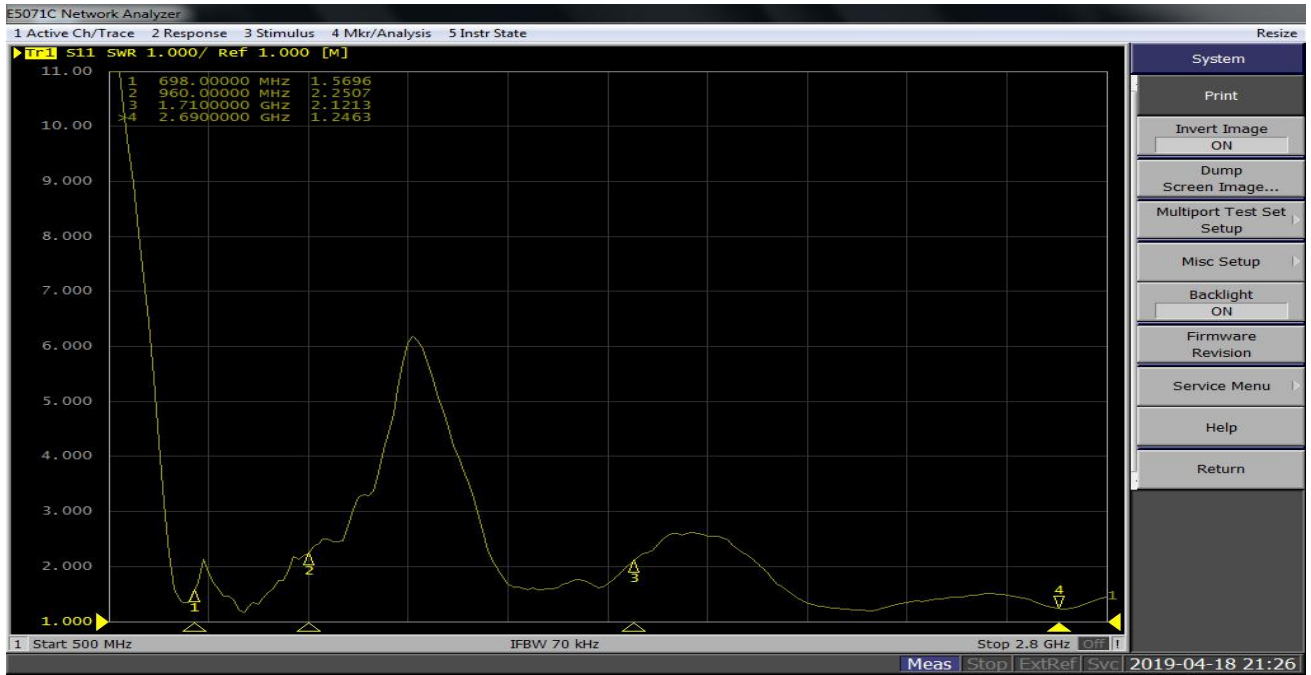
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15	TRP	CATM1_B20	24400	857	21.98	1.1	18.99
16	TRP	CATM1_B26	26740	819	21.42	-1.04	18.64
17	TRP	CATM1_B26	26990	844	22.23	2.99	19.67
18	TRP	CATM1_B28	27260	708	21.33	-0.18	18.91
19	TRP	CATM1_B28	27610	743	19.75	-6.05	17.34

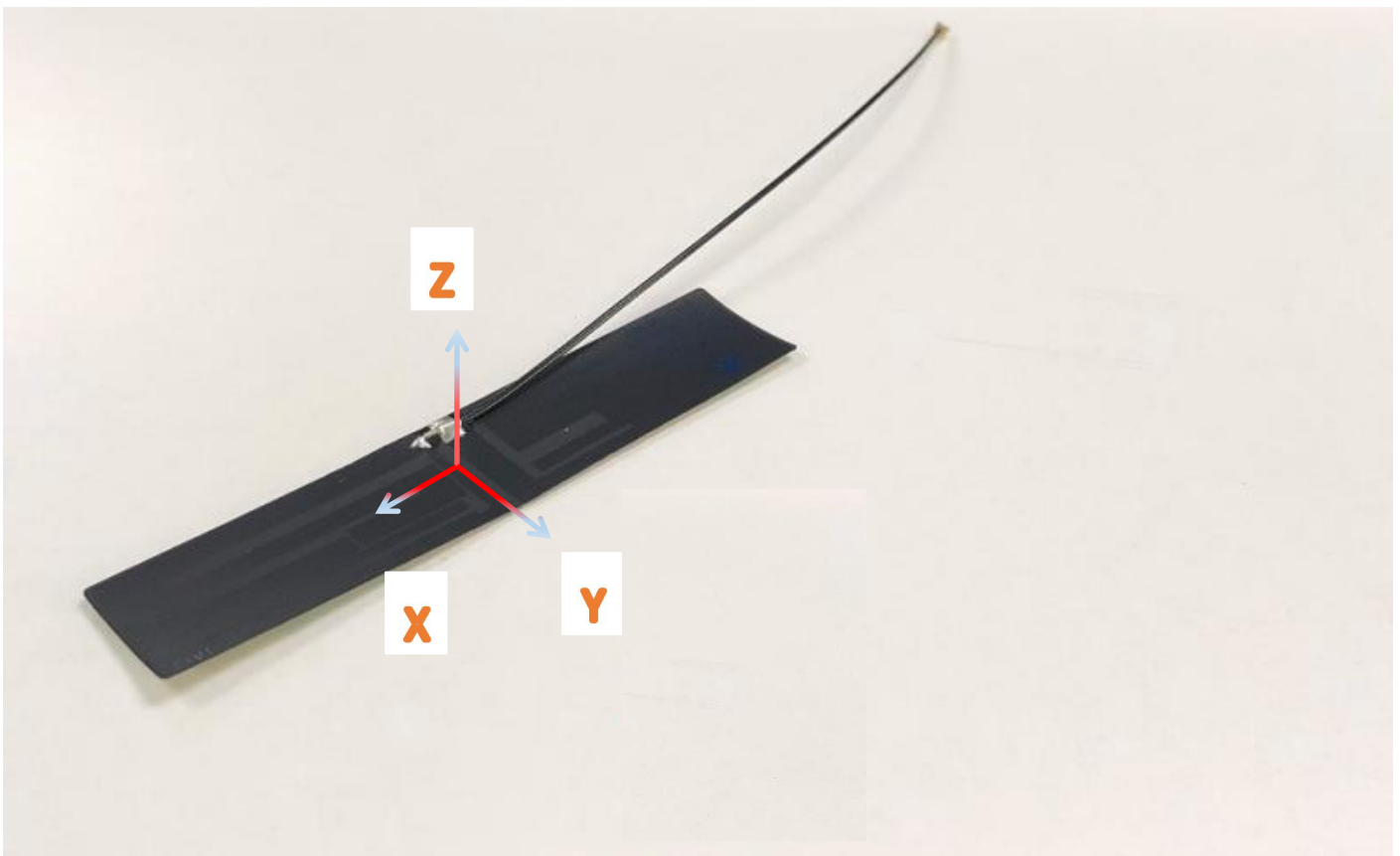
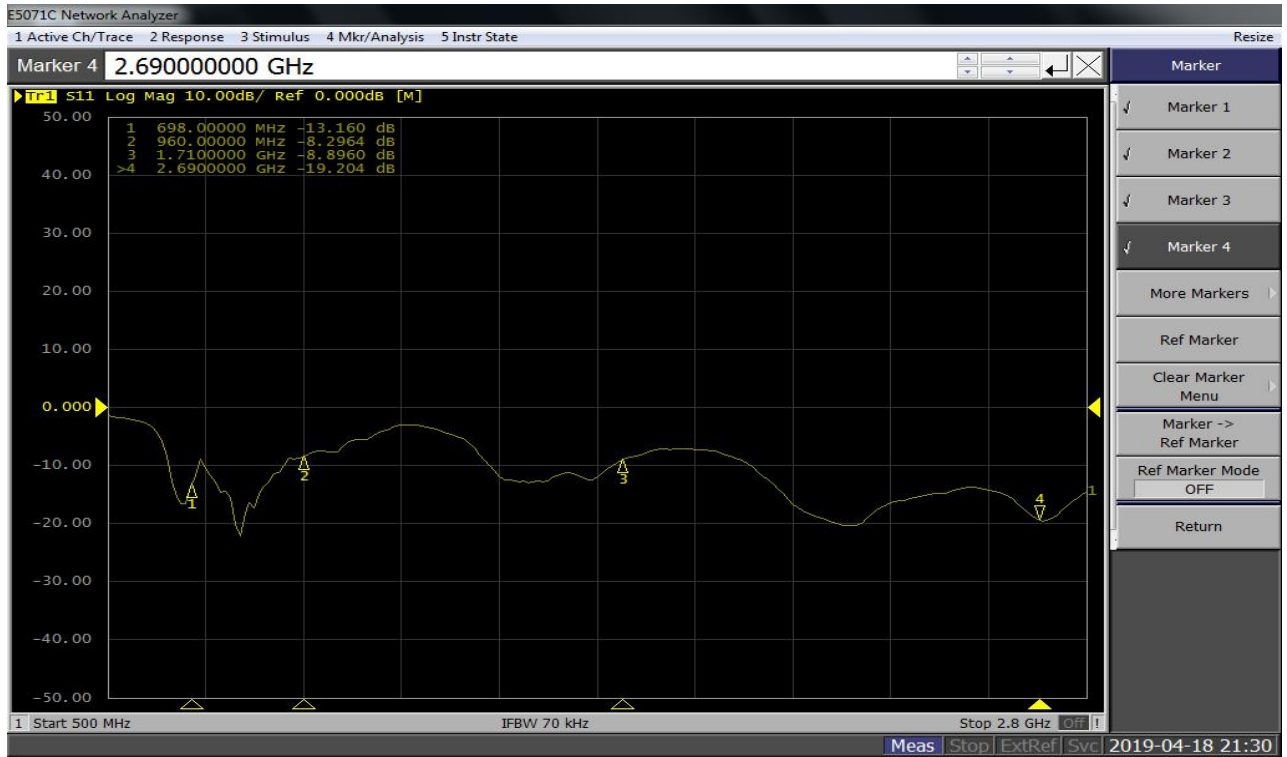
Item	Measurement	Standard	Band	Channel	Frequency	Max	Min	Total
1	TIS	CAT_M1	CATM1_B1	550	2165	101.58	67.62	97.81
2	TIS	CAT_M1	CATM1_B3	1900	1875	99.11	74.19	95.6
3	TIS	CAT_M1	CATM1_B5	2600	889	99.19	72.86	96.76
4	TIS	CAT_M1	CATM1_B8	3750	955	97.79	67.38	95.46
5	TIS	CAT_M1	CATM1_B13	5230	751	90.05	66.2	86.9
6	TIS	CAT_M1	CATM1_B18	5950	870	99.5	73.46	96.77
1	TIS	CAT_M1	CATM1_B19	6100	885	98.35	68.94	96.46
2	TIS	CAT_M1	CATM1_B20	6400	816	93.83	67.79	91.78
3	TIS	CAT_M1	CATM1_B26	8990	889	98.25	67.16	96.13
4	TIS	CAT_M1	CATM1_B28	9610	798	91.13	68.43	89.9



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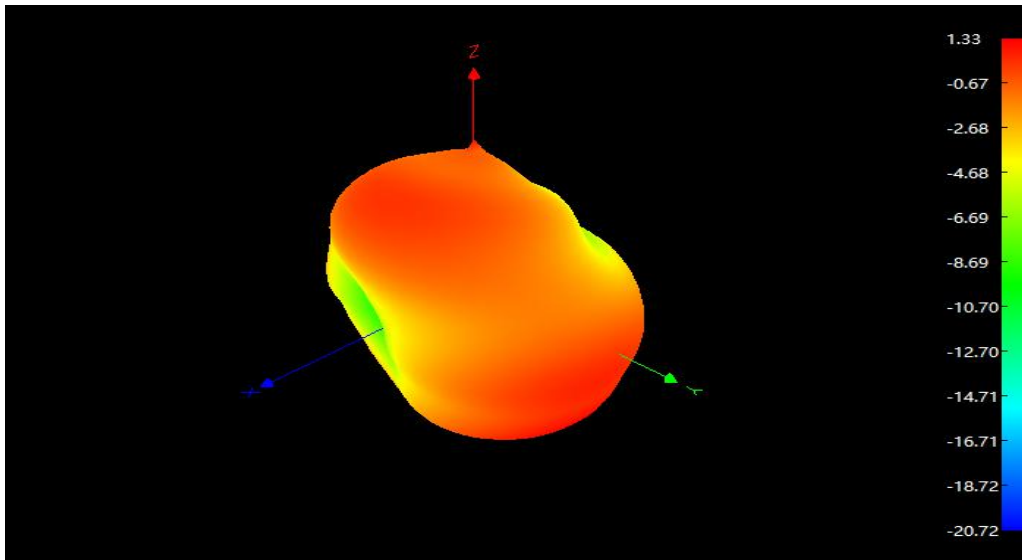


Figure 1. Radiation Pattern at 698MHz of KBT Antenna.

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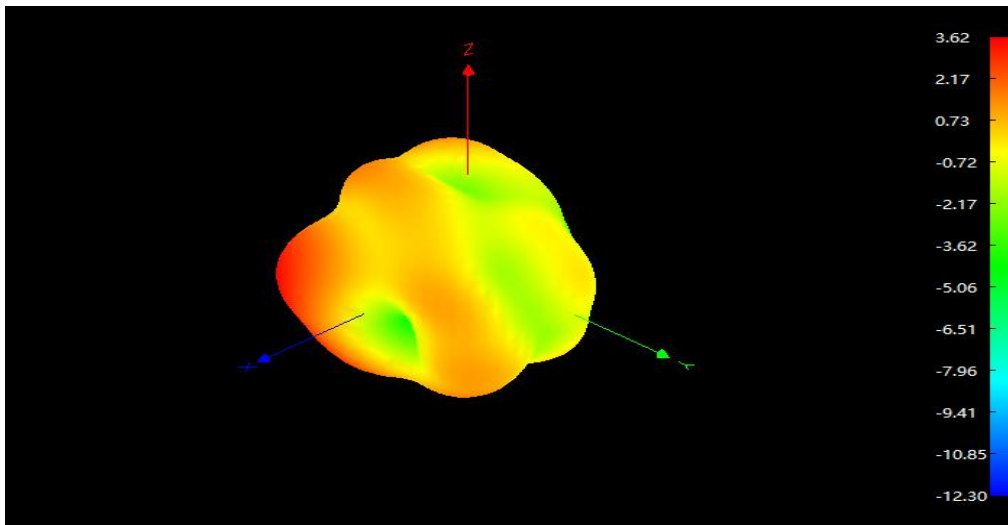


Figure 2. Radiation Pattern at 1710 MHz of KBT Antenna.

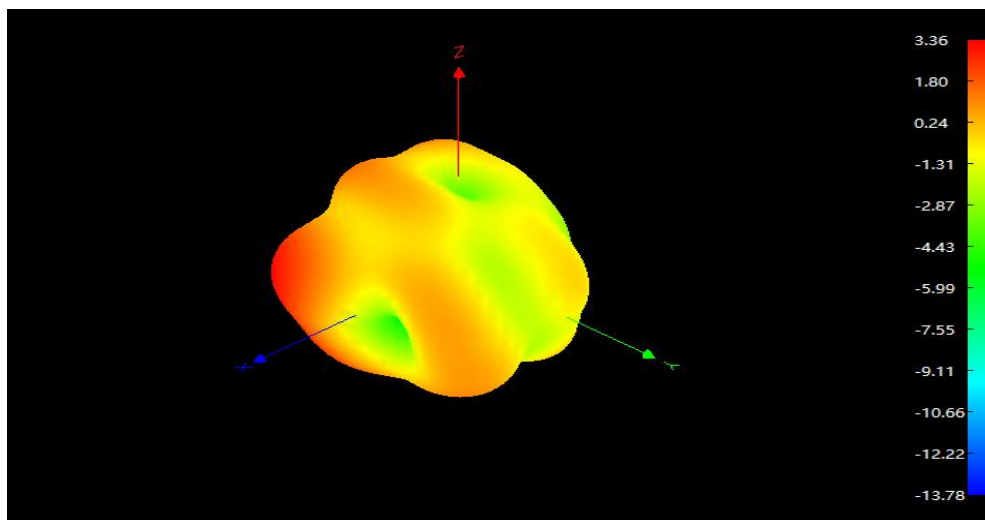


Figure 3. Radiation Pattern at 2170MHz of KBT Antenna.

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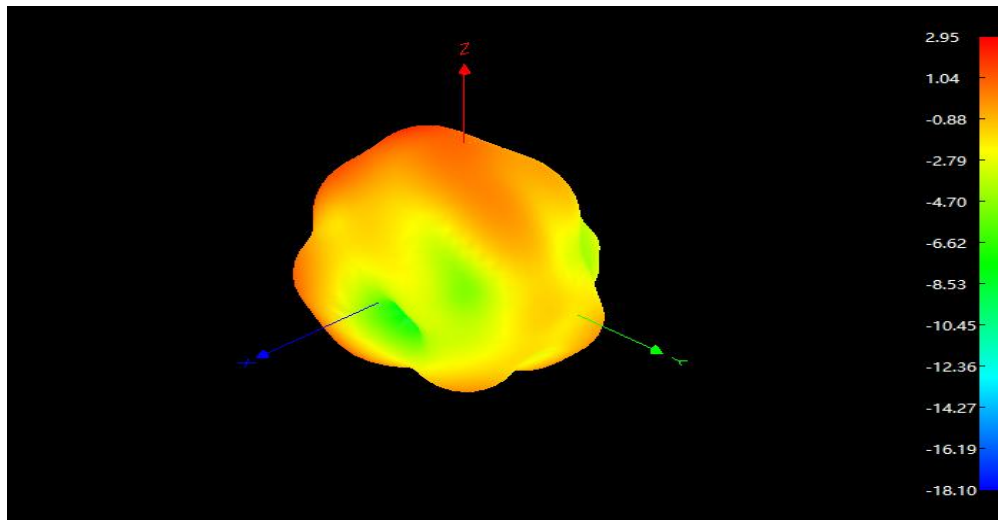


Figure 4. Radiation Pattern at 2450 MHz of KBT Antenna.

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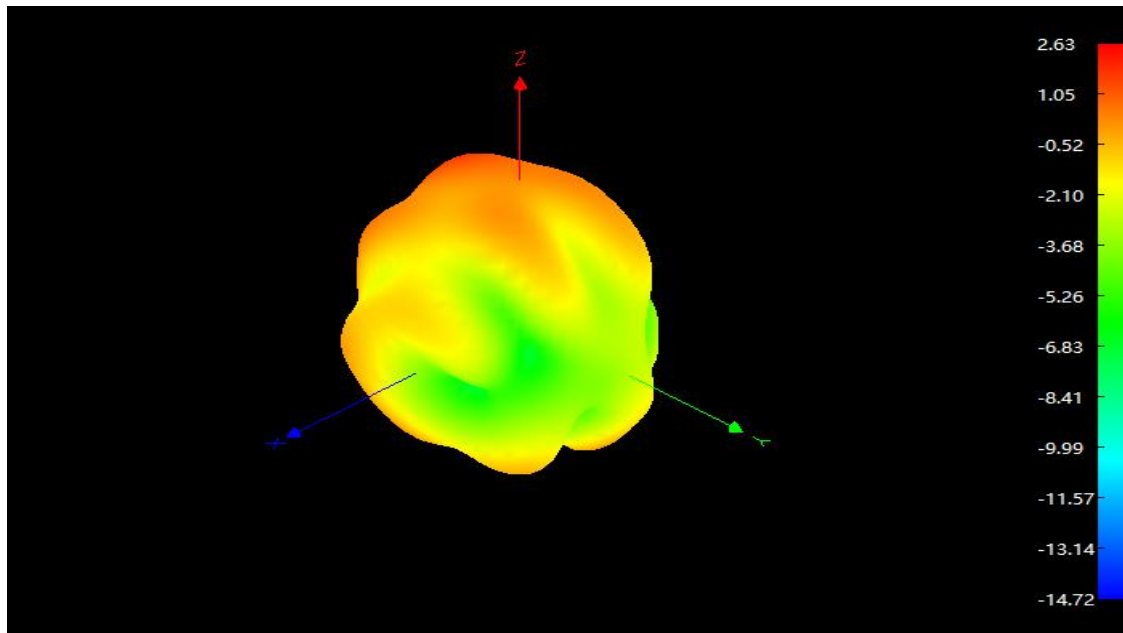


Figure 5. Radiation Pattern at 2690 MHz of KBT Antenna.

MECHANICAL	
Dimensions(mm)	97*21*0.2
material	Flexible polymer
Connector and cable	IPEX1 and 1.13 coax



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Cable length	160mm
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ENVIRONMENTAL	
Operation temperature	-40°C to 85°C
Storage temperature	-40°C to 85°C
Relative Humidity	40% to 95%
Rohs Compliant	yes