Antenna Datasheet

Remote Plus - Antenna Approval sheet

- PCB Overview & Matching Value
- VSWR & Smith Chart / 3D Gain data
- 2D Radiation Pattern & Gain
- 3D Radiation pattern

By designed	By checked	By approved
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Rev 1.0

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Specification

1. Features and Application :

This product is for BT band (2402 ~ 2480 MHz)

Measurement Process

SWR / Return Loss
Use Network Analyzer when measuring SWR/Return loss and selecting standard SPL.

E5071B Agilent Network Analyzer

Additional Features:

300 kHz to 8.5 GHz

125 dB dynamic range at test port (typical)

9.6 us/point sweep speed

0.001 dB RMS trace noise

Integrated 2-, 3- and 4-ports with balanced measurements

Fixture embedding/de-embedding and port characteristic impedance conversion

Frequency-offset mode for frequency translated devices.

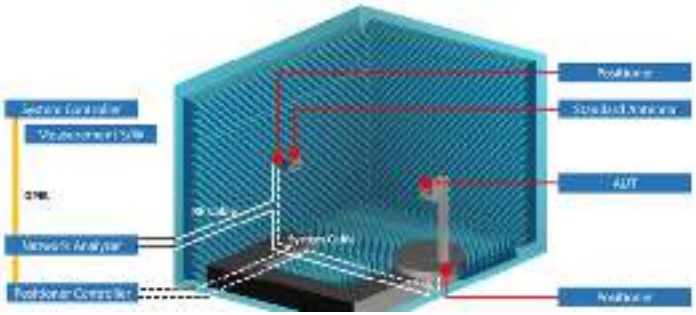
Built-in Visual Basic for Applications (VBA)

Measurement Wizard Assistant (MWA) software

Measurement Process

Gain
Antenna gain is measured in the Anechoic Chamber

o Size: 5.5(L) m × 5.5(W) m × 5.0(H) m
o Frequency range: 700 MHz to 8.0 GHz (Far Field)



Electrical Characteristics

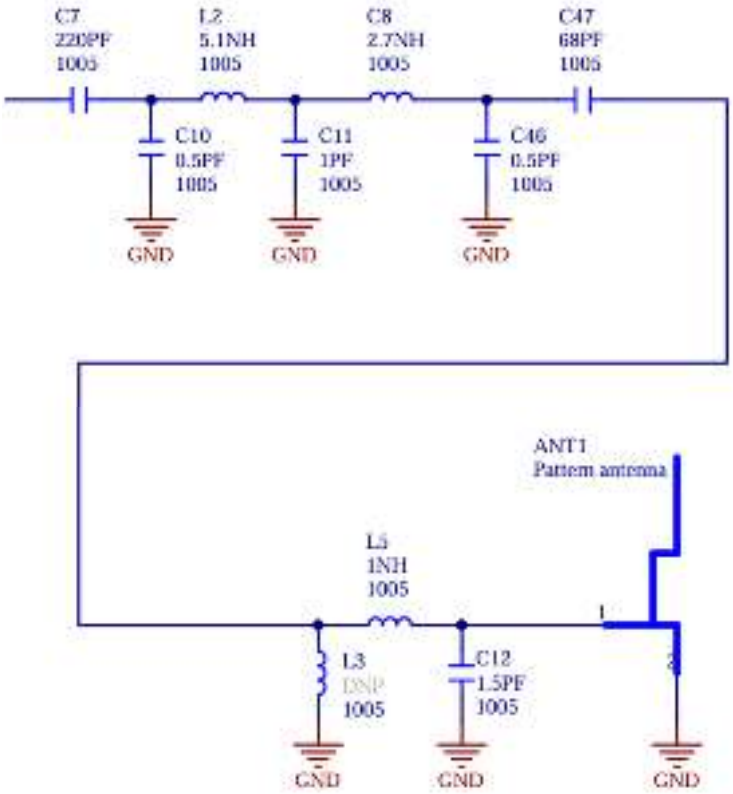
This specification covers the dielectric pattern antenna **Remote Plus** used in Bluetooth

Manufacturer : Remote Solution

Name : RS ANT1

ITEM		SPECIFICATION				
Frequency Range		2402 ~ 2480 MHz				
VSWR		2.5 : 1 Max				
Polarization		Linear				
Frequency [MHz]		2410	2430	2450	2470	2480
Gain [dBi]	Peak	3.39	3.51	3.11	2.86	2.89
	Average	-1.42	-1.42	-1.66	-1.79	-1.85
Efficiency [%]		72.06	72.19	68.22	66.21	65.31

PCB Overview & Matching Value



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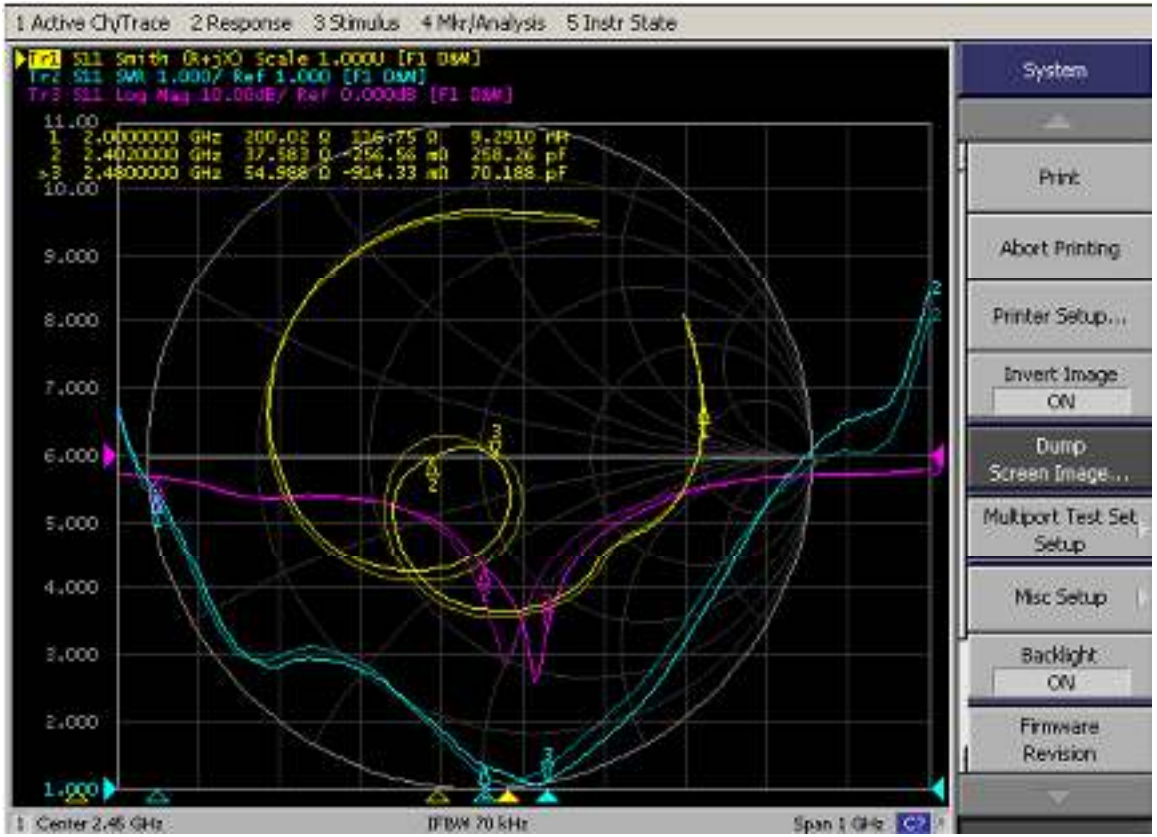
Remote Solution

VSWR & Smith Chart / 3D Gain data



[RS ANT1]

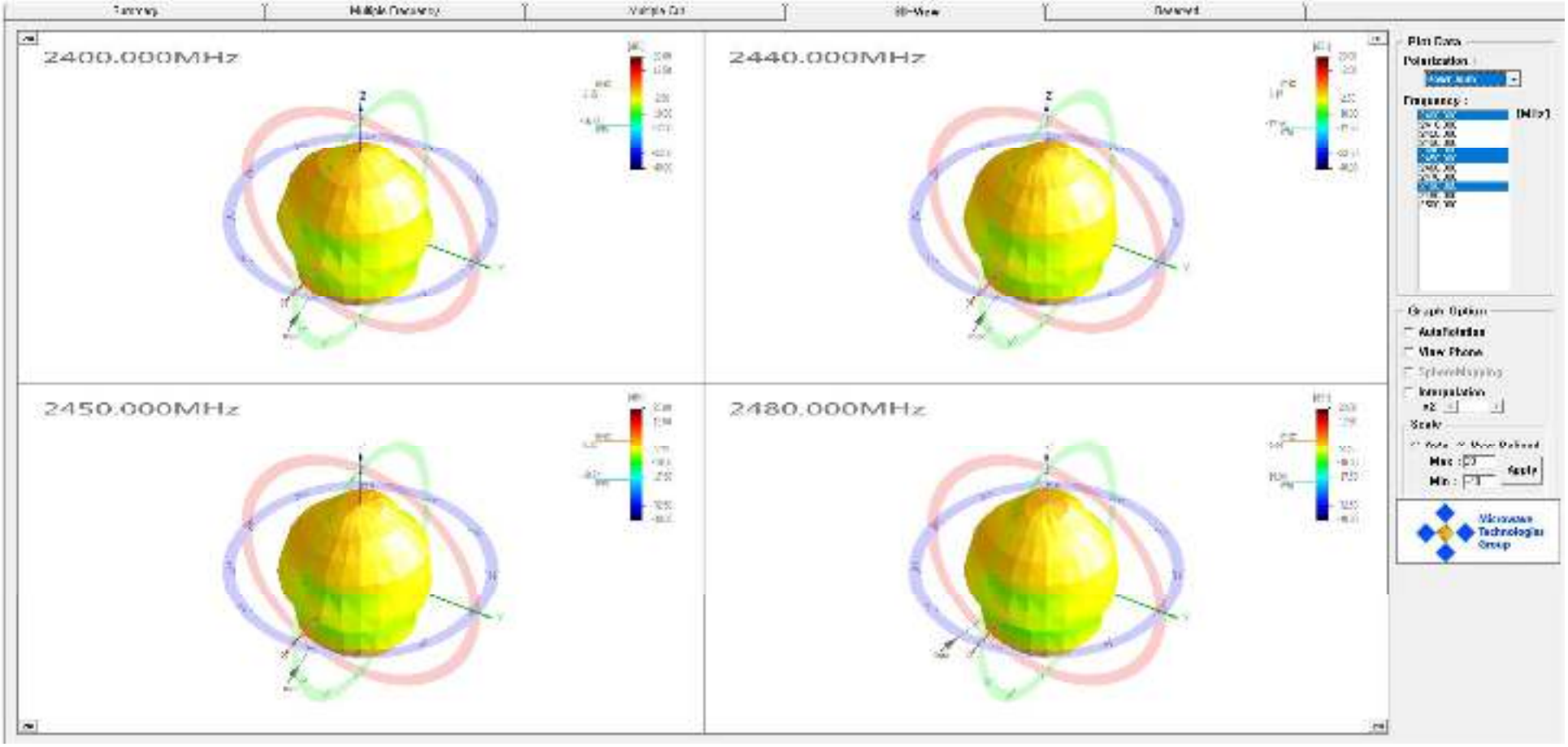
Remote Solution

2D Radiation Pattern & Gain (RS ANT1)

3D Result Summary :

		Theta-Pc					Phi-Pol(\					PwrSum				
No	Freq.[MHz]	Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de	Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de	Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de
1	2400.000	45.02	-3.47	2.97	150.00	330.00	24.86	-6.04	1.99	0.00	270.00	69.88	-1.56	3.15	150.00	315.00
2	2410.000	46.23	-3.35	3.24	150.00	330.00	25.83	-5.88	2.30	0.00	270.00	72.06	-1.42	3.39	150.00	315.00
3	2420.000	45.86	-3.39	3.29	150.00	315.00	26.04	-5.84	2.50	0.00	270.00	71.90	-1.43	3.49	150.00	315.00
4	2430.000	45.39	-3.43	3.32	150.00	315.00	26.80	-5.72	2.57	0.00	270.00	72.19	-1.42	3.51	150.00	315.00
5	2440.000	42.18	-3.75	2.99	150.00	315.00	25.76	-5.89	2.26	0.00	270.00	67.94	-1.68	3.17	150.00	315.00
6	2450.000	41.66	-3.80	2.91	150.00	315.00	26.56	-5.76	2.26	0.00	270.00	68.22	-1.66	3.11	150.00	315.00
7	2460.000	40.43	-3.93	2.69	150.00	315.00	26.40	-5.78	2.08	0.00	270.00	66.82	-1.75	2.91	150.00	315.00
8	2470.000	40.13	-3.97	2.53	150.00	330.00	26.08	-5.84	2.07	15.00	270.00	66.21	-1.79	2.86	135.00	300.00
9	2480.000	39.67	-4.02	2.44	150.00	315.00	25.65	-5.91	2.05	15.00	270.00	65.31	-1.85	2.89	135.00	300.00
10	2490.000	40.06	-3.97	2.51	150.00	315.00	26.16	-5.82	2.20	15.00	270.00	66.22	-1.79	3.01	135.00	300.00
11	2500.000	38.74	-4.12	2.38	150.00	315.00	25.28	-5.97	1.98	15.00	270.00	64.03	-1.94	2.84	135.00	300.00

3D Radiation pattern (RS ANT1)



Thank you