



PWB/WIRE
Halogen-free
Etc, Part
TBBP-A-free

SPECIFICATION

Messrs. : BLUECOM Co., Ltd.

We have the pleasure of submitting you of the following(s) for your approval.

Part Name: Monopole Antenna

Model No. : BWA047211

Submit Date: December 26, 2008

BLUECOM BLUETOOTH R&D		Prepared	Checked	Approved
	Name	KWON JI	PARK SJ	PARK KE
	Signature			
BLUECOM QA/QC		Approved		
	Name	WOO JH		
	Signature			

LEAD-FREE Approved	Application					
Authentic test result	Pb	Cd	Hg	Cr+6	PBB	PBDE
	N.D	N.D	N.D	N.D	N.D	N.D

|주| 블루콤

BLUECOM

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History list

Revision	Date	Item	Description	Note
Ver 1.0	2008. 12. 26	issue		

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1. Name of goods

- Type : Monopole Antenna
- Model name : **BWA047211**

2. Parts information

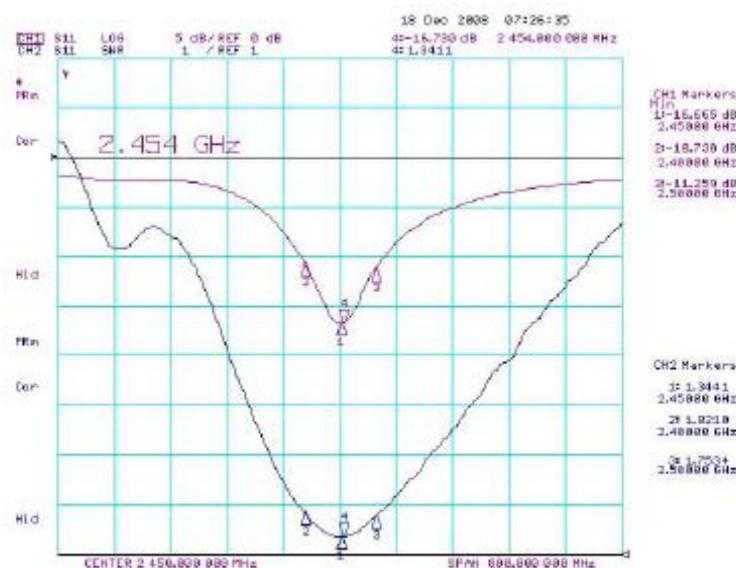
- This product is monopole type antenna of Bluetooth bandwidth.

3. Electronically specification

Temp. = 23±2°C, Room Humidity = 65± 5%

ITEM		SPEC
Frequency Range [MHz]		2400 ~ 2485
Impedance		50 Ω
VSWR[MAX]		3 : 1
Bandwidth [MHz]		100
Polarization		Linear
Gain (dBi)	Average	-0.3
	Peak	1.5

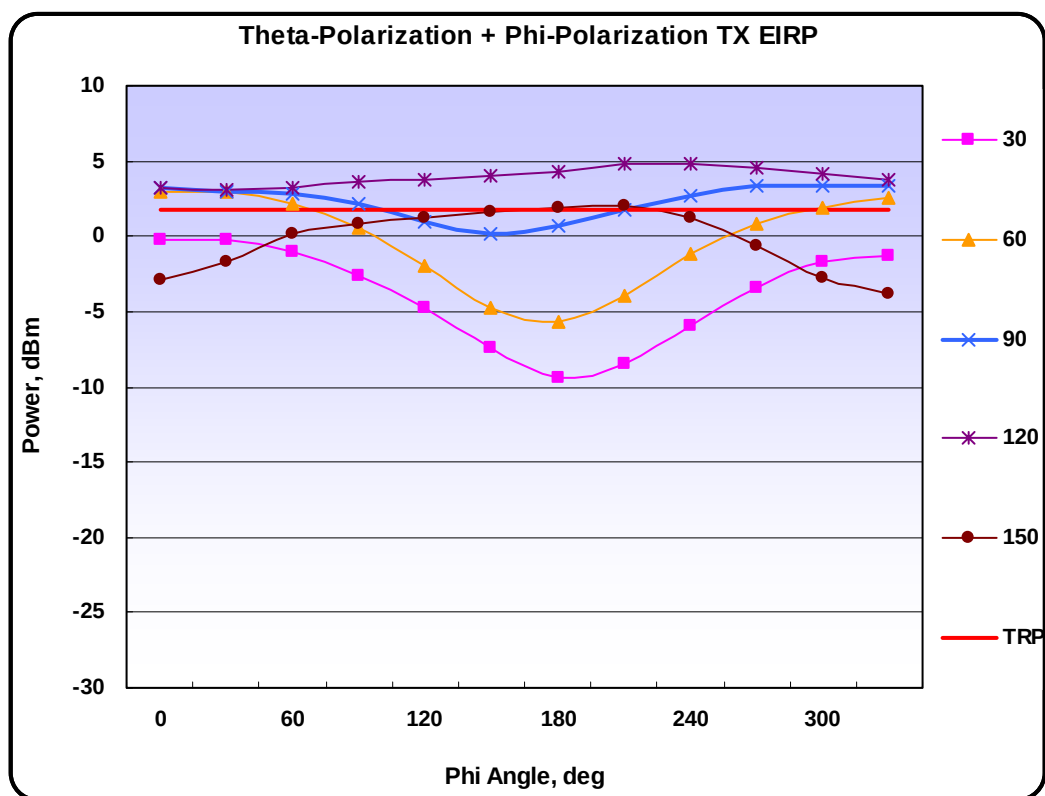
3-1. VSWR



3-2. Radiation pattern

Total Radiated Power

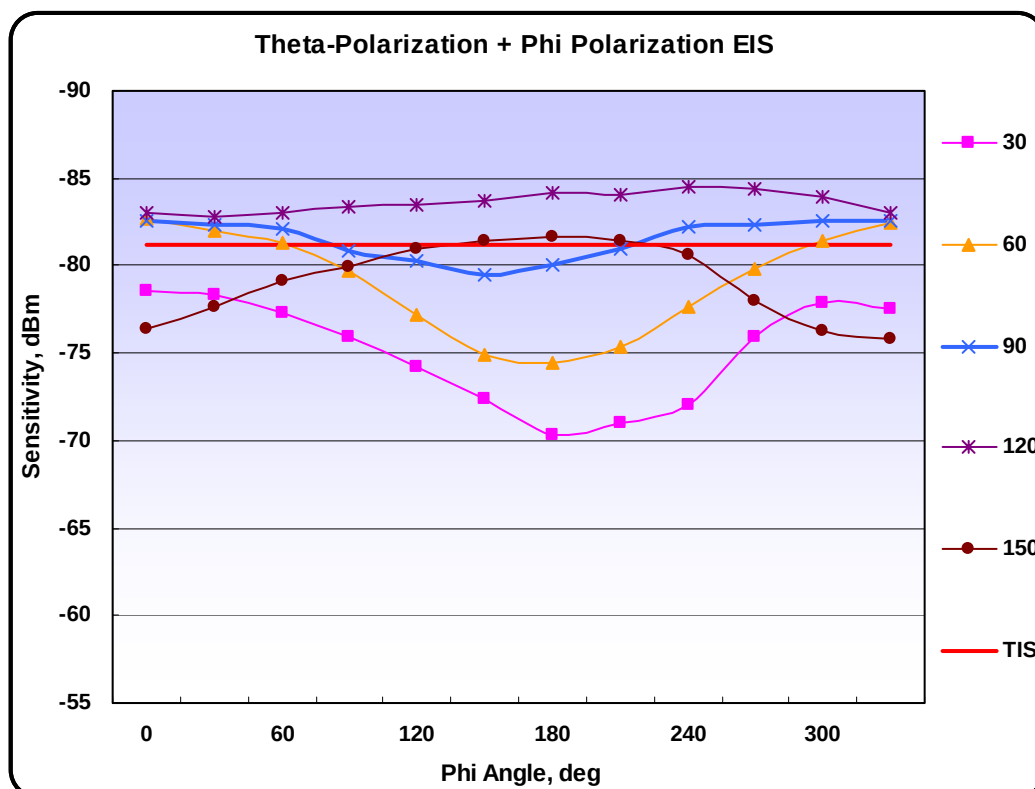
Theta-Polarization + Phi-Polarization(dBm)												
θ_N (deg)	ϕ_M (deg)											
	0	30	60	90	120	150	180	210	240	270	300	330
0												
30	-0.17	-0.23	-1.05	-2.59	-4.79	-7.38	-9.37	-8.43	-5.88	-3.41	-1.75	-1.25
60	2.98	2.93	2.19	0.59	-1.95	-4.74	-5.72	-3.89	-1.15	0.78	1.94	2.62
90	3.21	3.02	2.86	2.13	0.98	0.15	0.74	1.80	2.70	3.29	3.42	3.30
120	3.25	3.05	3.22	3.64	3.78	3.96	4.34	4.78	4.84	4.60	4.15	3.70
150	-2.87	-1.66	0.19	0.86	1.24	1.60	1.93	1.98	1.17	-0.58	-2.79	-3.84
180												



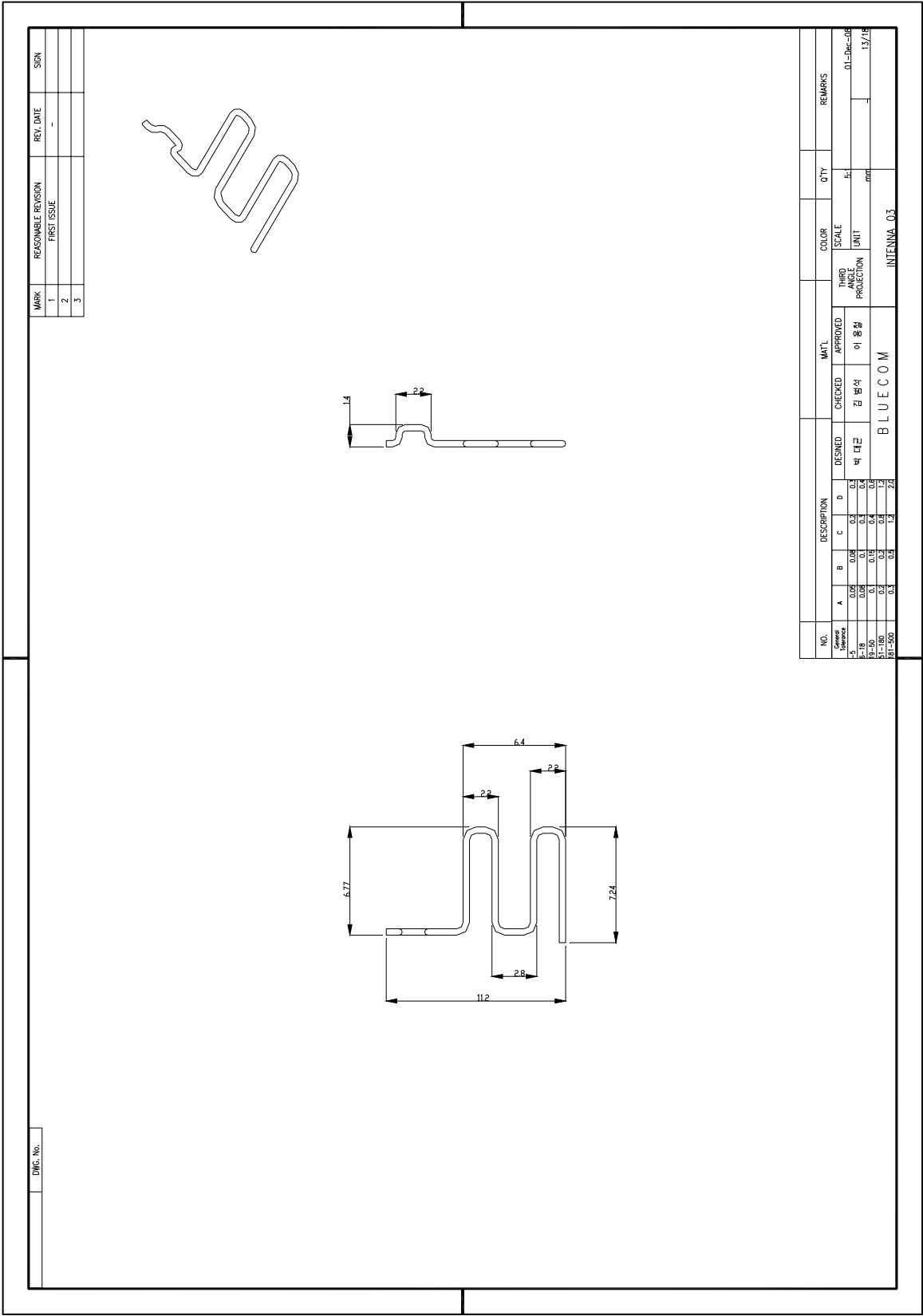
3-3. Radiation pattern

Total Isotropic sensitivity(Theta-Polarization + Phi-Polarization)

Theta-Polarization + Phi-Polarization EIS(dBm)												
θ_N (deg)	ϕ_M (deg)											
	0	30	60	90	120	150	180	210	240	270	300	330
0												
30	-78.5	-78.3	-77.3	-75.9	-74.2	-72.4	-70.4	-71.0	-72.0	-76.0	-77.9	-77.5
60	-82.7	-82.0	-81.3	-79.7	-77.2	-74.9	-74.4	-75.4	-77.6	-79.9	-81.4	-82.4
90	-82.6	-82.4	-82.1	-80.9	-80.3	-79.5	-80.0	-80.9	-82.2	-82.3	-82.5	-82.6
120	-83.0	-82.8	-83.0	-83.4	-83.5	-83.7	-84.1	-84.1	-84.5	-84.4	-83.9	-83.0
150	-76.4	-77.6	-79.2	-79.9	-81.0	-81.4	-81.7	-81.4	-80.6	-78.0	-76.3	-75.9
180												



4. Mechanical Specification



5. Authentic test

(It will not have any changes after electronic and mechanical feature for all items.)

5.1. Temperature test

5.1.1 High temperature test

We should test how this item endures in 80 degree for 200 hours.

(measure the temperature after being taken out for 4 hours later.)

5.1.2 Low temperature test

We should test how this item endures in 80 degree for 200 hours.

(measure the temperature after being taken out for 4 hours later.)

5.2. High temperature and humidity test

We should test how this item endures in 60 degree and 95% humidity for 200 hours

5.3. Thermal shock test

32 times repetition in 1 hour interval - the temperature change -40 ~ 80 degree

(Chang time : 20sec).

(Measure the temperature after the sample is being taken out on the normal temperature for 2 hours)

5.4. Drop test

We freefall the sample without a wrapping from 150 cm height to the 10mm iron sheet.

5.5. Oscillation test

The sample should be librated in 1.52mm(x,y,z) amplitude and 10 ~55Hz / minute frequency for 2 hours.

6. Packing description

