

Regulatory HMB/BT Antenna Information

(English Language Required for Module Vendor Regulatory Review / Approval)

Platform information					
Brand	ODM	Platform model name	Platform type (ex: regular NB, convertible PC, AIO...etc)		'SAR minimum separation (mm)
Sony	Inventec Appliances Corp.	SH01			
Antenna information					Peak gain w/ cable loss (dBi)
Vendor	Type	Antenna Part number(Tx1)	Antenna Part number(Tx2)	Antenna Part number(Tx3)	2.4GHz
Pulse A YAGEO COMPANY	PIFA/Couple	6036A0188903 (TZ26023)	6036A0189002 (TZ26033)	6036A0195701 (TZ26773)	1.49
Module information (Pls check with "x" when applies)					
Model	Form factor and suffixes (NGW/ HMW AND AN/ NB/ BN....)				

Antenna Sample / Antenna Data Requirements for worldwide regulatory approval

Section	Description of Required OEM / ODM Antenna Information	US / IC	EU	Japan	Taiwan	S.Korea
1A	Part Number for Antenna only	Required	Required	Required	Required	Required
1B	Antenna Manufacturer Name	Required	Required	Required	Required	Required
1C	Description of Antenna Type	Required	N/A	N/A	N/A	N/A
1D	Part number of Antenna Assembly / cable impedance, length & diameter.	Required	Desired	Desired	Desired	Desired
1E	Tx1, Tx2 & Tx3 antenna (Peak Gain W/ cable loss) *	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Tx1, Tx2 & Tx3 antenna (Peak Gain only) *	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Tx1, Tx2 & Tx3 antenna (Cable loss W/ connector) *	Required	Required	Required	Required	Required
2	Dimensioned Photographs <u>and</u> Drawings of Tx1, Tx2, and Tx3 (or Rx3) antennas	Required	Required	Required	Required	Required
3	Radiation patterns of antennas loaded in the host platform.	Required	Desired	Required	N/A	Required
4	Platform model name / number - correlated to antenna manufacturer and antenna part number	Required	Required	Desired	Required	Desired
5	Photograph(s) or Drawings showing location of antennas in platform. (S. Korea requires <u>photographs of antennas for approval submission</u>). <u>Taiwan requires pictures of each antenna type shown in the system.</u>	Required	Required	Desired	<u>Required (Photos)</u>	<u>Required (Photos)</u>
6	Mech. drawings / photos with dimensions of antenna locations and distance from end-user (For evaluation of SAR testing requirement).	Required	N/A	N/A	N/A	N/A
7	Photograph(s) or Drawings showing the location of all antennas (WLAN, other) and distance between those transmitting antennas. Information will be used to evaluate whether co-location testing is required.	Required	N/A	N/A	N/A	N/A
8	Local representative contact information for LMA/ PARS process.	Required	N/A	N/A	N/A	N/A

Antenna Information

Section 1. Antenna Assembly Specifications

1A	1B	1C	1D	1E	1F	1G	1H
Antenna Part Number	Manufacture	Antenna Type	Cable Assembly Part Number and Information	*Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	VSWR	Cable Loss (dBi)
6036A0188903 (TZ26023) Tx1 Antenna	Pulse A YAGEO COMPANY Address:99 HuoJu RD. SuZhou P.R. China	PIFA	None	2400-2500MHz 0.19 dBi (peak)	2400-2500MHz 0.39 dBi (peak)	2400-2500MHz 3.00 max	2400-2500MHz 0.20 dBi (peak)
6036A0189002 (TZ26033) Tx2 Antenna	Pulse A YAGEO COMPANY Address:99 HuoJu RD. SuZhou P.R. China	PIFA	None	2400-2500MHz -2.37 dBi (peak)	2400-2500MHz -2.07 dBi (peak)	2400-2500MHz 3.00 max	2400-2500MHz 0.20 dBi (peak)
6036A0195701 (TZ26773) Tx3 Antenna	Pulse A YAGEO COMPANY Address:99 HuoJu RD. SuZhou P.R. China	Couple	50 ohm Coaxial length: 58cm diameter: 0.81mm LLS	2400-2500MHz 1.49 dBi (peak)	2400-2500MHz 1.69 dBi (peak)	2400-2500MHz 3.00 max	2400-2500MHz 0.20 dBi (peak)

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V

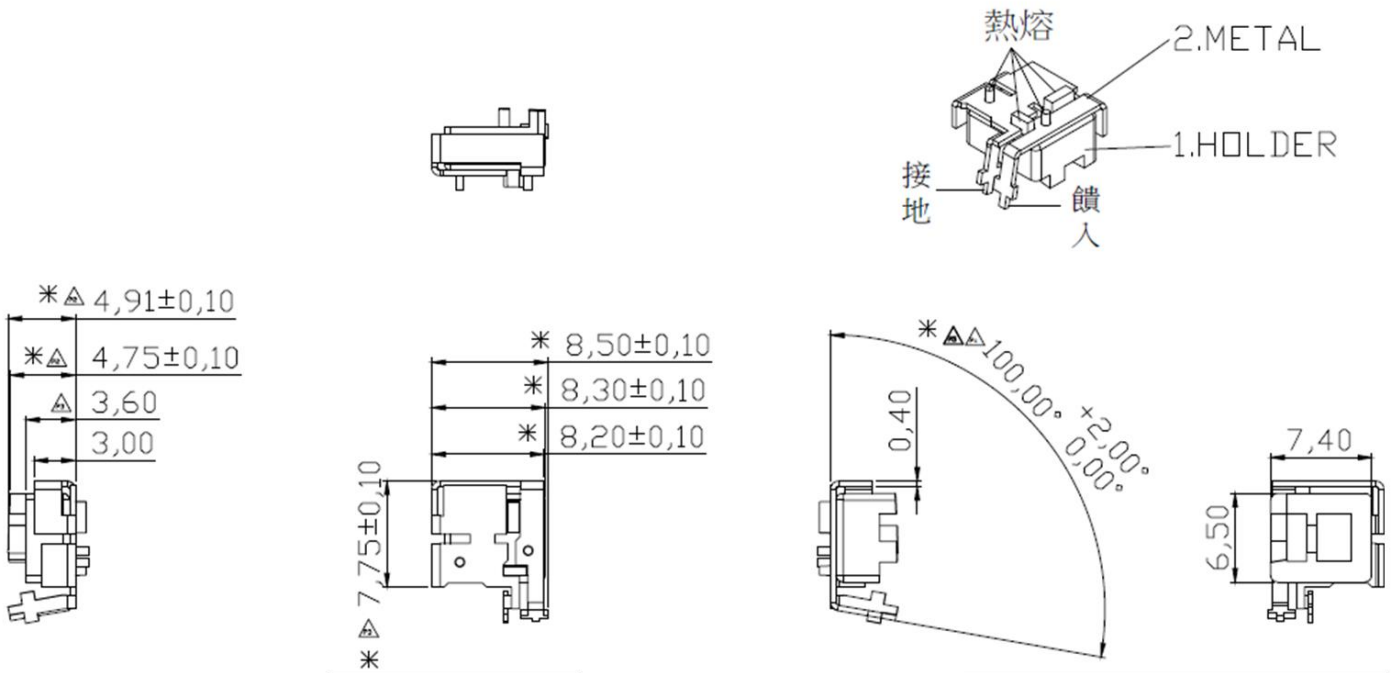
Antenna Peak Gain Table:

	Tx1 antenna		Tx2 Antenna		Tx3 Antenna	
Frequency (MHz)	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
	(dBi)	(dBi)	(dBi)	(dBi)	(dBi)	(dBi)
2400	0.19	-0.97	-3.08	-5.12	-2.48	0.35
2450	-0.19	-1.65	-2.49	-5.76	-2.43	1.39
2500	-0.46	-1.43	-2.37	-5.35	-1.20	1.49

Section 2. Dimensioned Photos or Drawings of Antennas

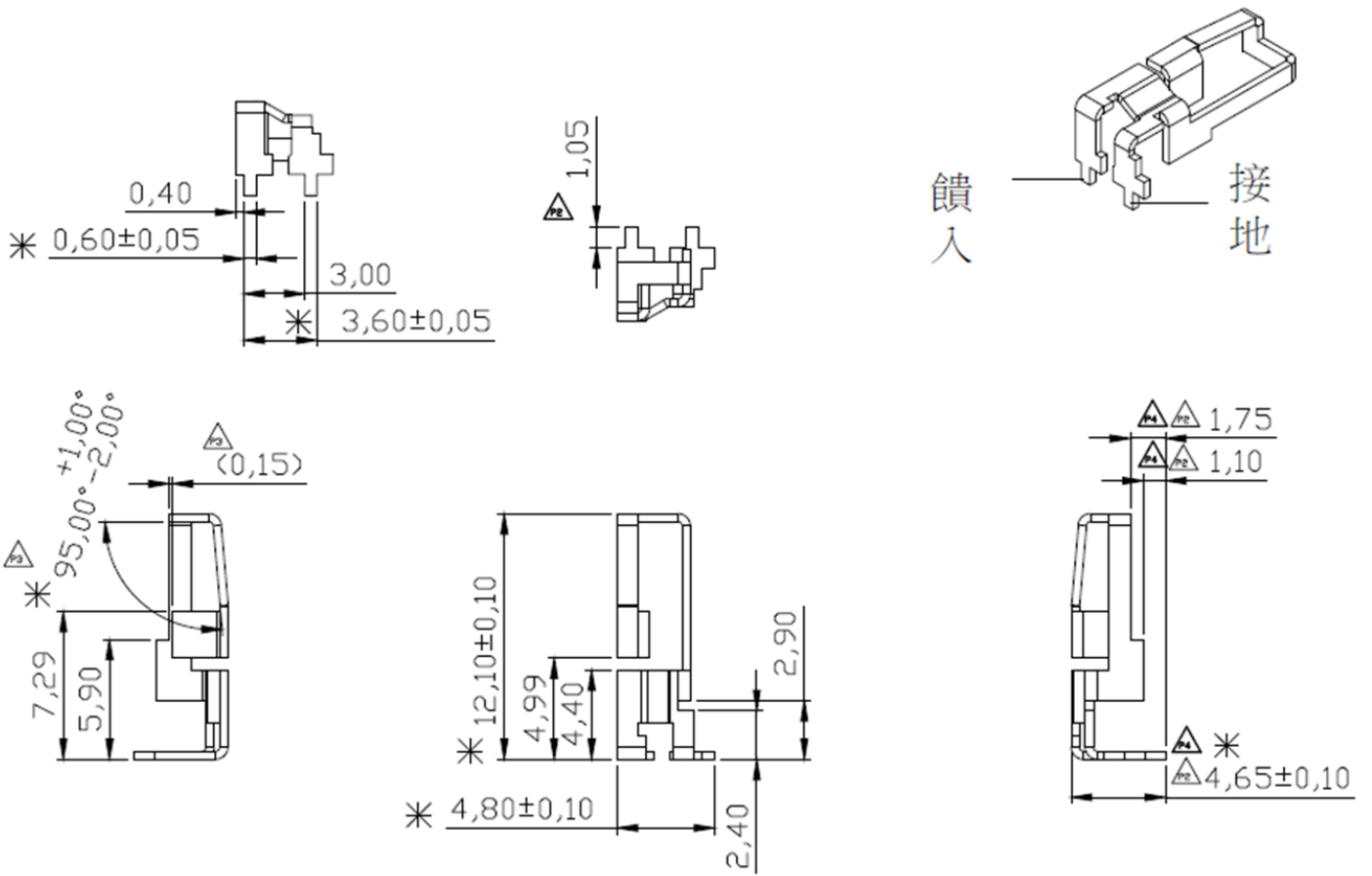
Include a dimensioned photo and dimensioned drawing of Tx1 antenna here.

Tx1 Antenna Dimensioned Drawing:



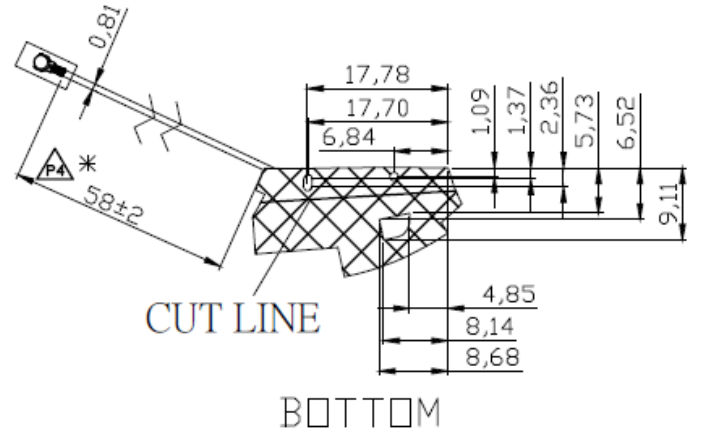
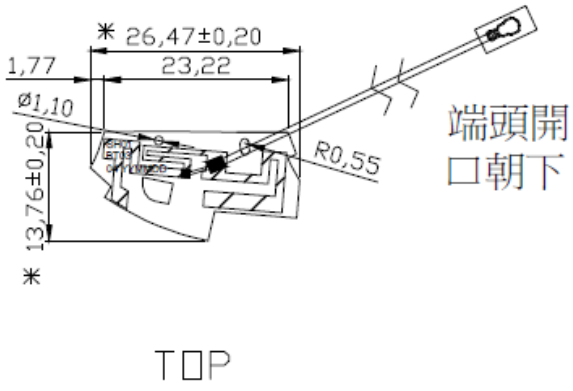
Include a dimensioned photo and dimensioned drawing of Tx2 antenna here.

Tx2 Antenna Dimensioned Drawing:



Include a dimensioned photo and dimensioned drawing of Tx3 (or Rx3) antenna here.

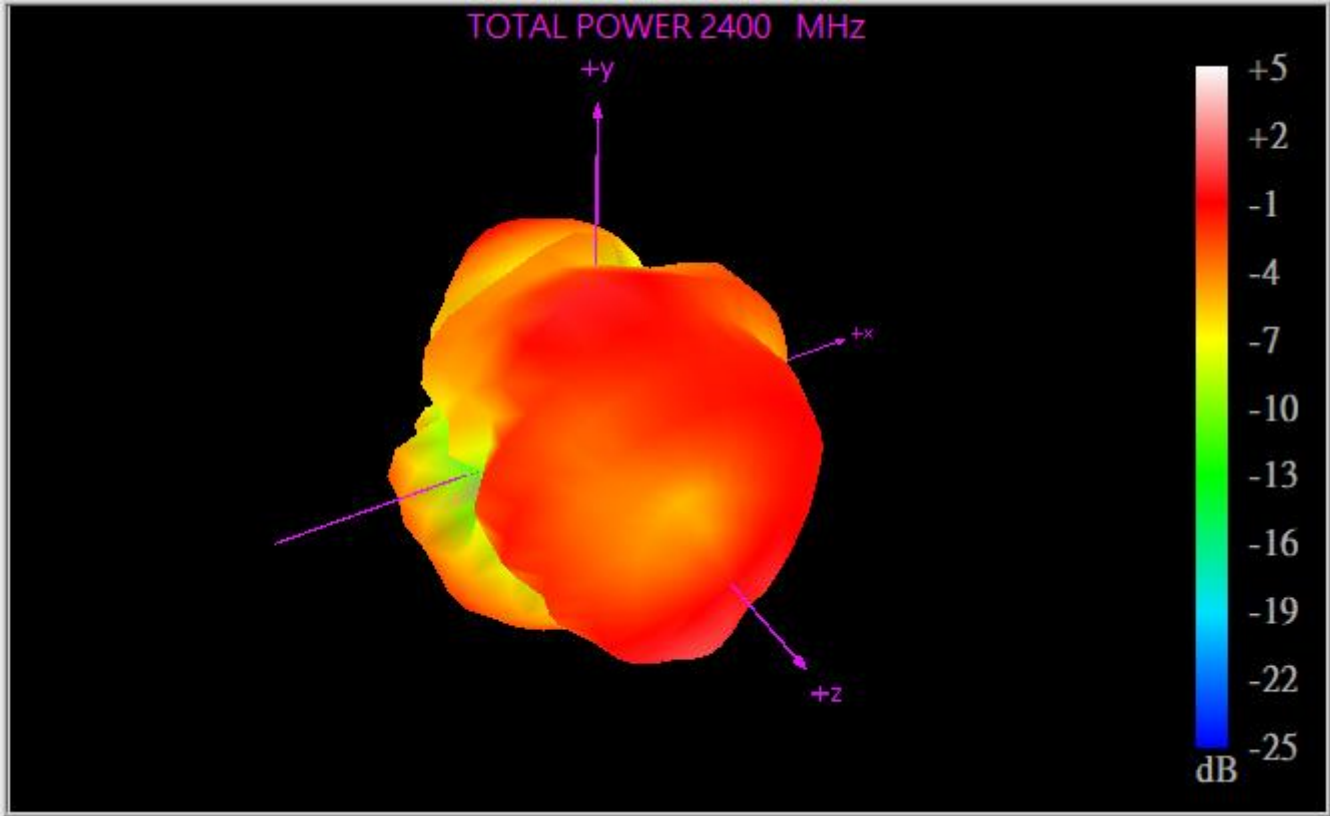
Tx3 Antenna Dimensioned Drawing:



Section 3. Radiation characteristics of antennae Loaded in Host Platform

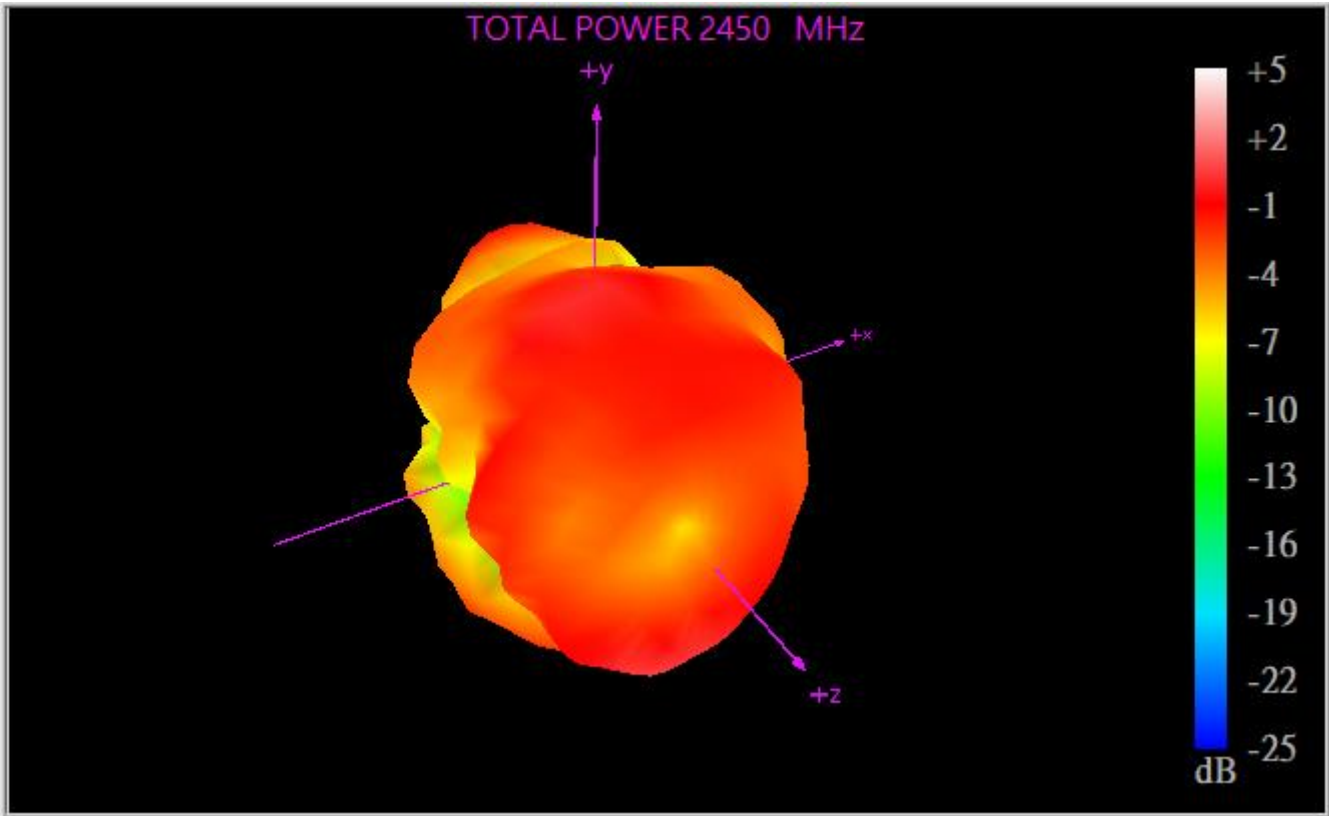
2400-2500MHz radiation characteristic

Tx1 antenna: 2400 MHz



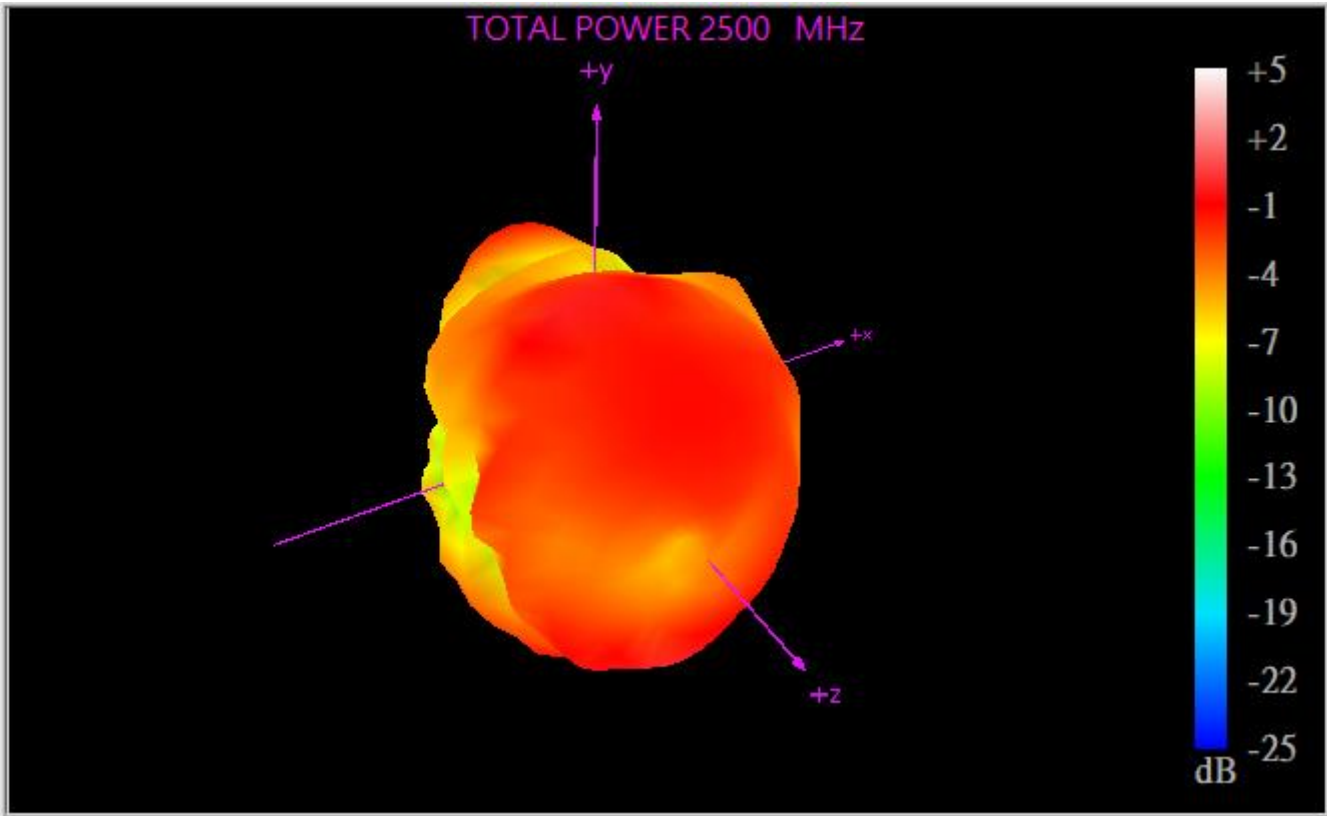
Center Frequency	2400 MHz
Horizontal (dBi) peak	0.19
Vertical (dBi) peak	-0.97

Tx1 antenna: 2450 MHz



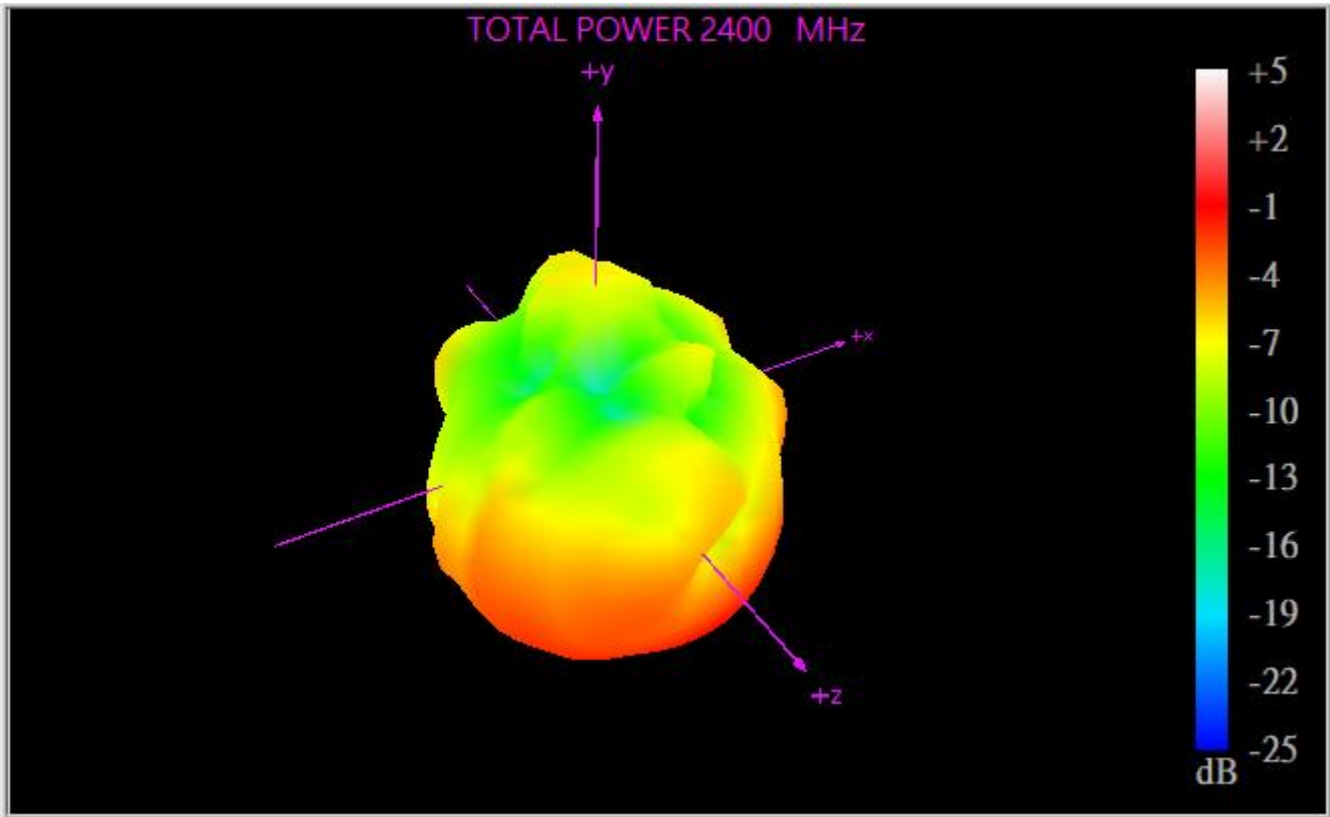
Center Frequency	2450 MHz
Horizontal (dBi) peak	-0.19
Vertical (dBi) peak	-1.65

Tx1 antenna: 2500 MHz



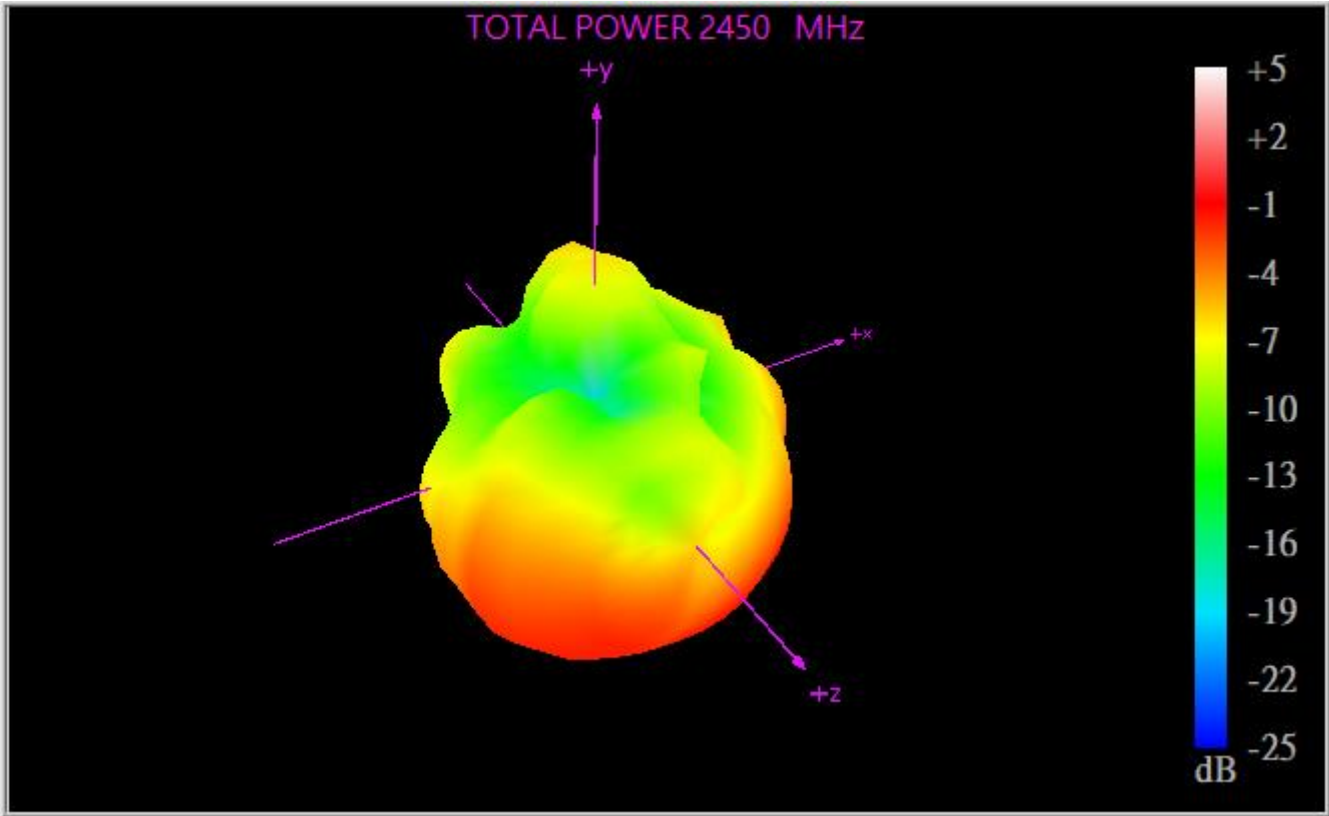
Center Frequency	2500 MHz
Horizontal (dBi) peak	-0.46
Vertical (dBi) peak	-1.43

Tx2 (or Rx2) antenna: 2400 MHz (Plot is not required if 2nd Antenna is receive only e.g. Rx2 for 512 family)



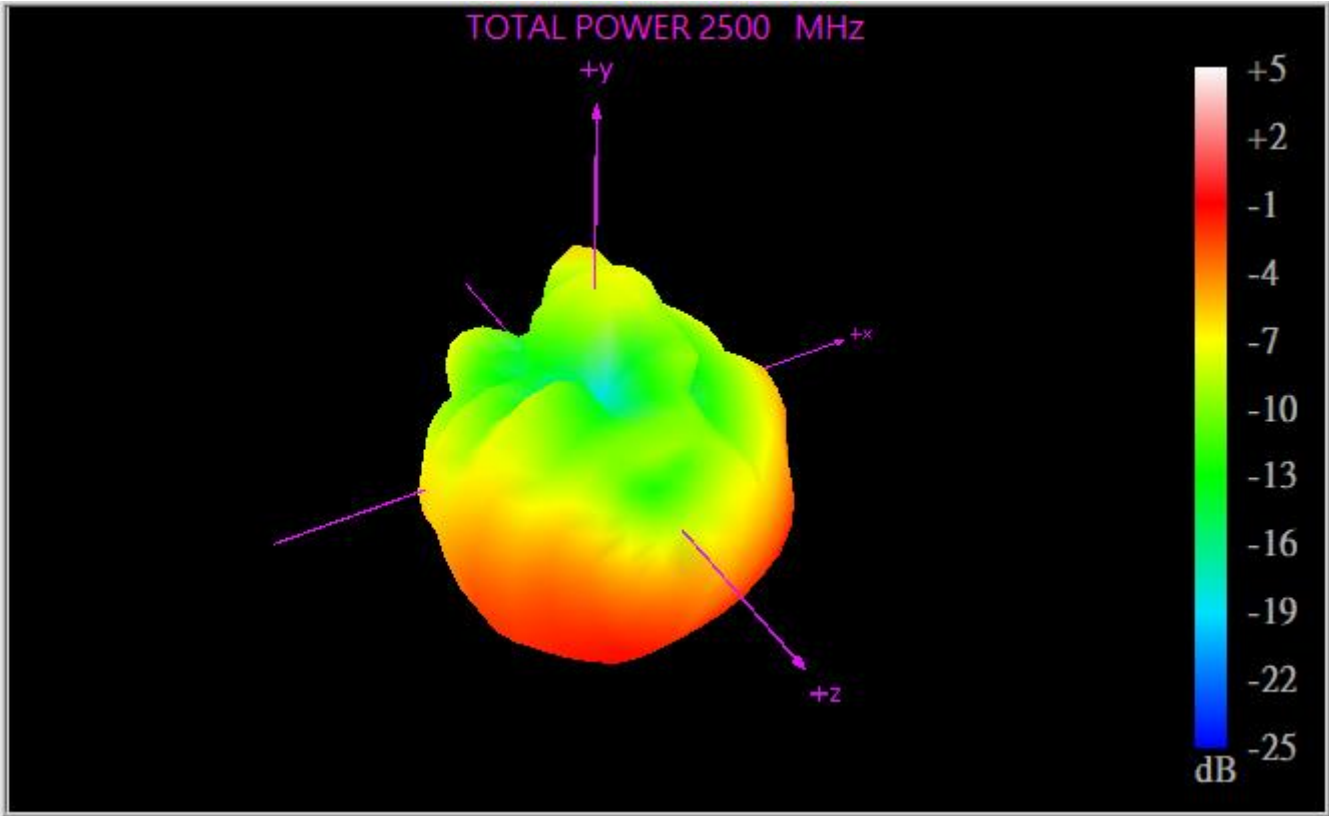
Center Frequency	2400 MHz
Horizontal (dBi) peak	-3.08
Vertical (dBi) peak	-5.12

Tx2 (or Rx2) antenna: 2450 MHz (Plot is not required if 2nd Antenna is receive only e.g. Rx2 for 512 family)



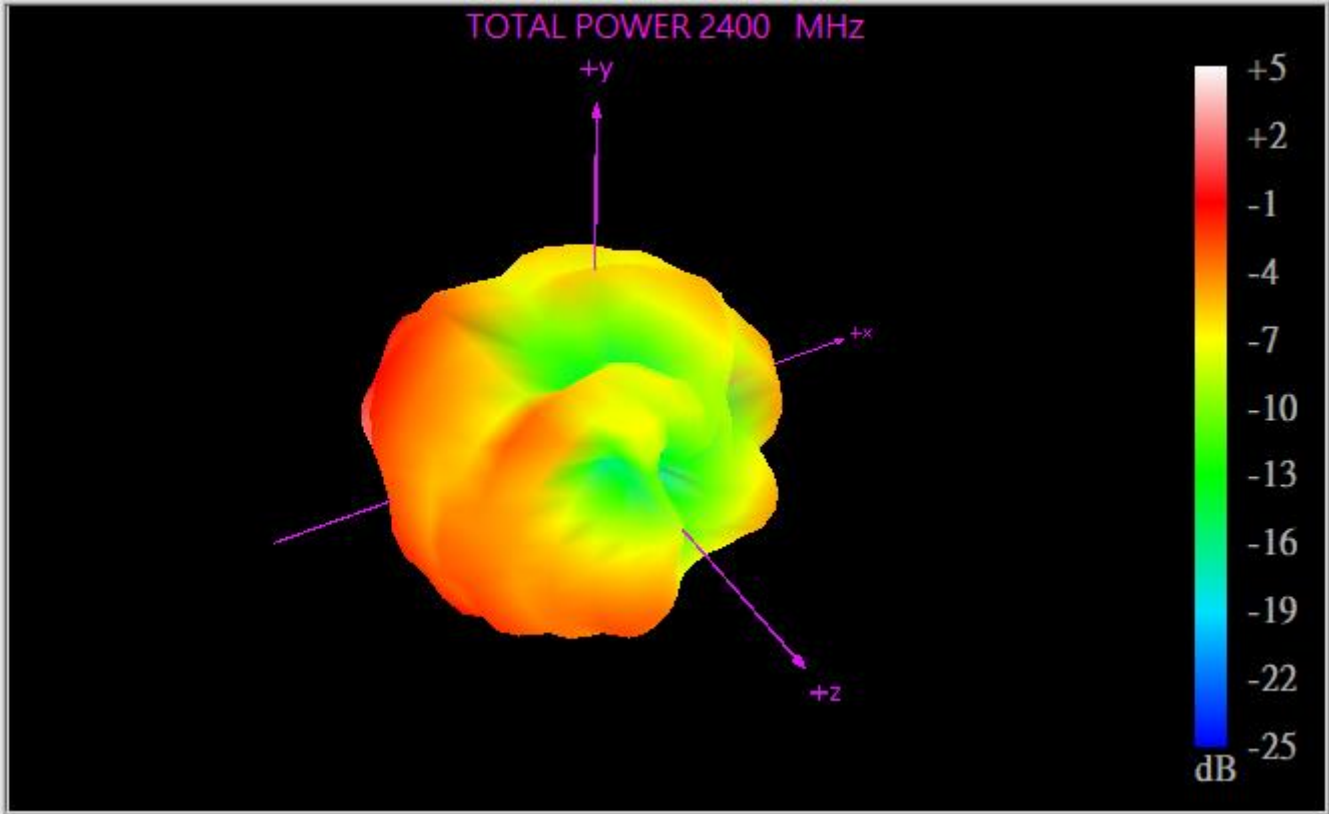
Center Frequency	2450 MHz
Horizontal (dBi) peak	-2.49
Vertical (dBi) peak	-5.76

Tx2 (or Rx2) antenna: 2500 MHz (Plot is not required if 2nd Antenna is receive only e.g. Rx2 for 512 family)



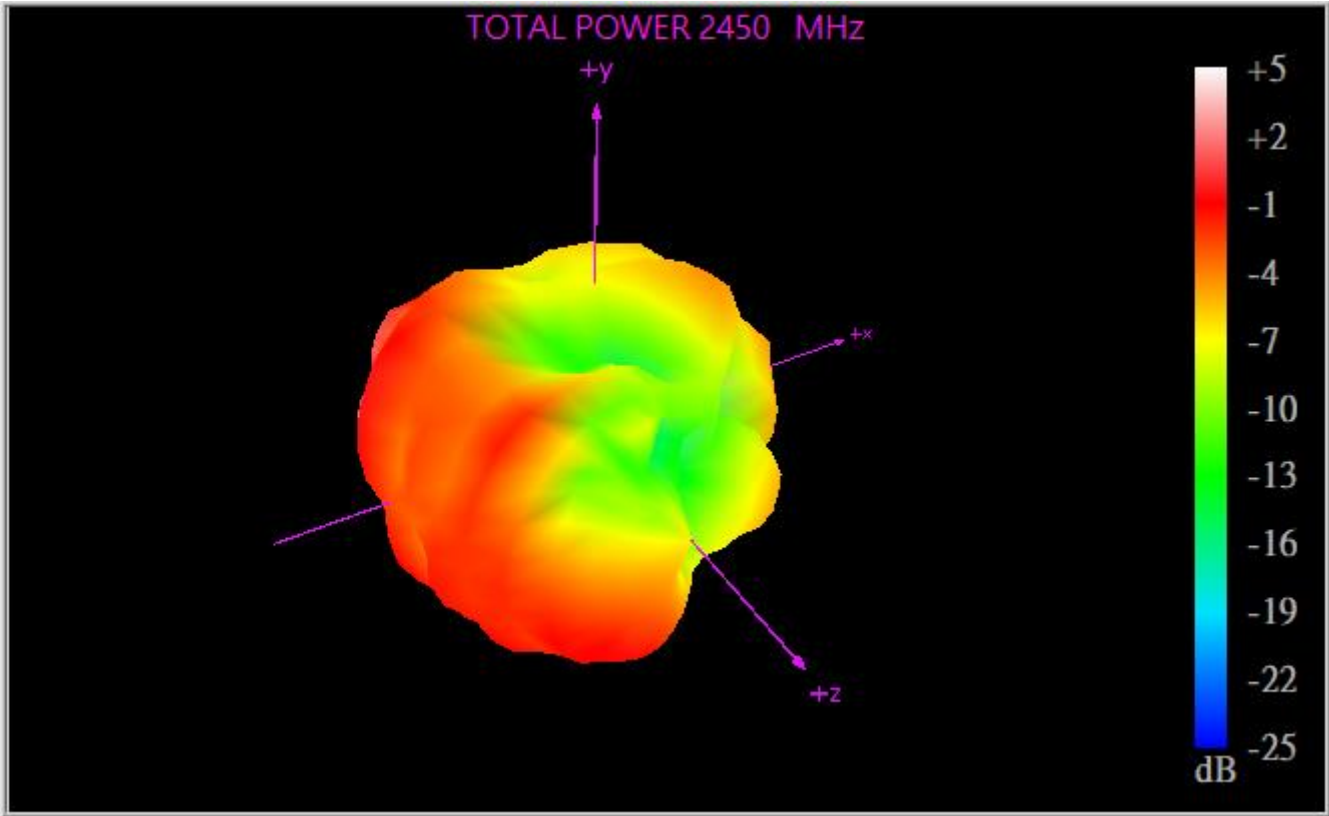
Center Frequency	2500 MHz
Horizontal (dBi) peak	-2.37
Vertical (dBi) peak	-5.35

Tx3 (or Rx3) antenna: 2400 MHz (Plot is not required if 3rd Antenna is receive only e.g. Rx3 for 4965AGN)



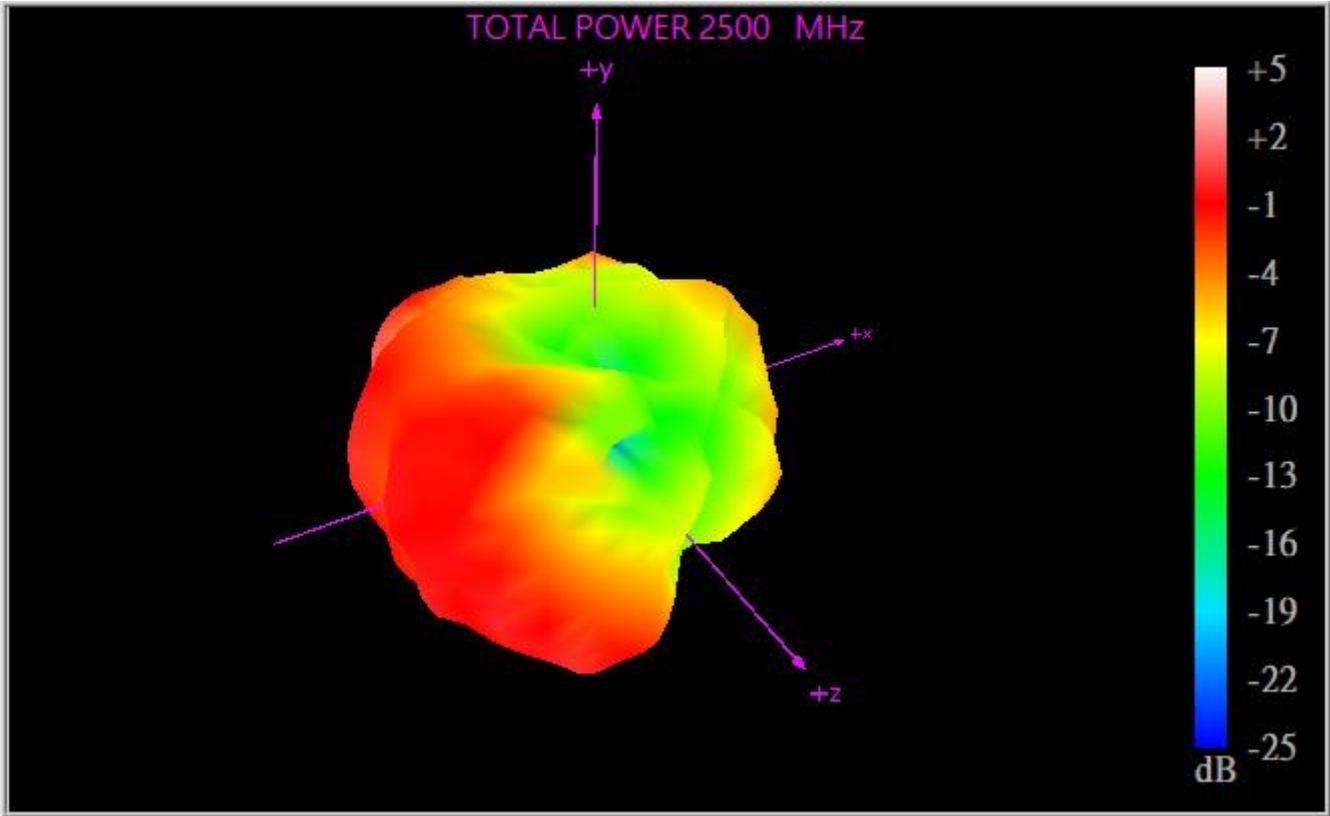
Center Frequency	2400 MHz
Horizontal (dBi) peak	-2.48
Vertical (dBi) peak	0.35

Tx3 (or Rx3) antenna: 2450 MHz (Plot is not required if 3rd Antenna is receive only e.g. Rx3 for 4965AGN)



Center Frequency	2450 MHz
Horizontal (dBi) peak	-2.43
Vertical (dBi) peak	1.39

Tx3 (or Rx3) antenna: 2500 MHz (Plot is not required if 3rd Antenna is receive only e.g. Rx3 for 4965AGN)



Center Frequency	2500 MHz
Horizontal (dBi) peak	-1.20
Vertical (dBi) peak	1.49

Section 4. Host Platform Information

OEM / ODM Host platform: (XXXXXXX) platform correlated to antenna data

Rating Label Photo:

Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo(s) or dimensioned drawing(s)** of Tx1, Tx2 and Tx3 antenna placements (measurements are not required for receive-only antenna). Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.

Section 6. Antenna dimensional information for SAR evaluation

Include a **dimensioned photo(s) or dimensioned drawing(s)** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, and ankle). For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape positions. Include a description of any proximity sensors or power throttling implementations that limit or exclude use of any host orientation.

Section 7. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between **all WLAN transmit antennas** and other co-located radiator transmit antenna such as Bluetooth, WWAN,..

(Note: Due to the evolving rules regarding co-location, each platform will need to be reviewed on a case by case basis)

Section 8. Local representative contact information

Local representative contact information is required for regulatory support for target countries below.

	Local company name	Contact name	Phone number	FAX Number	e-Mail Address	Notes
Argentina						
Azerbaijan						
Cambodia						
Indonesia						
Israel						
Malaysia						
Philippines						
Singapore						Telecommunication Equipment Dealer License Required
South Africa						
USA, Canada						
Vietnam						

- [Document](#)
- [Company Information](#)

Appliance Wiring Material - Component

SHENYU COMMUNICATION TECHNOLOGY INC

275 E Waihuan Rd
Jiangyin, Jiangsu 214400 China
E318898

Table of Recognized Styles

Single-conductor, thermoplastic insulation							
1226	1354	1592	1727	1860	1979	10111	11149
1227	1371	1708	1766	1882	10005	10231	11180
1330	1538	1709	1847	1886	10008	10248	
1331	1577	1710	1857	1887	10011	10362	
1332	1589	1723	1858	1901	10064	10518	
1333	1591	1726	1859	1927	10072	11085	
Multiple-conductor, thermoplastic insulation							
20276	21100	21533	21572				

Style(s) 11149 can be assigned the IEC 60332-2 flammability rating

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper,.

Last Updated on 2021-09-16
SHENYU COMMUNICATION TECHNOLOGY INC
275 E Waihuan Rd
Jiangyin, Jiangsu 214400 China

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APPLIANCE WIRING MATERIAL

Subj.758

Section 1

Page 10005

Issued:1986-12-29

Revised:2013-01-28

Style 10005

Single conductor with other-than-extruded jacket or non-integral jacket.

Rating 80 deg C, 30 Vac, Horizontal flame.

Conductor 50 AWG minimum, solid or stranded.

Insulation Inner layer: Extruded PTFE, extruded PFA, extruded FEP, extruded foamed PE, extruded PE, extruded XLPTFE, extruded XLPE, extruded XLFEP, extruded foamed XLPE or extruded XLPE, 2 mils minimum thickness at any point; or foamed PTFE tape wrap, one or more layers, overall insulation thickness 2 mils minimum at any point. Outer layer: (Optional) Polyester tape, overall thickness 0.2 mils minimum thickness at any point and heat sealed.

Shield Optional.

Jacket Inner jacket - Spirally wrapped, two or more layers of polyester, ETFE, PTFE, foamed PTFE, or composite tape, and heat sealed, overall thickness minimum 0.2 mils at any point, or extruded PFA, extruded FEP, or extruded PVDF, 1 mil minimum at any point.

Shield Optional.

Jacket Optional, outer jacket, same as inner jacket.

Standard Appliance Wiring Material UL 758.

Marking General.

Use Internal wiring.