

# Regulatory WLAN Antenna Information

(English Language Required for Intel Regulatory Review / Approval)

<b>Platform</b>	
Platform Owner	
Brand Name	
Model Name	Hanks-MLK
ODM	Quanta
Target Launch Date	
<b>Antenna</b>	
Brand Name	ACON
Part Number	<input checked="" type="checkbox"/> Tx1 Antenna: APP8P-700087
	<input checked="" type="checkbox"/> Tx2 Antenna: APP8P-700087
	<input checked="" type="checkbox"/> Tx3 (or Rx3) Antenna : APP8P-700086
<b>Module</b>	
With WLAN Module	<input type="checkbox"/> WM3B2200BG
(Check Box)	<input type="checkbox"/> WM3B2915ABG
	<input type="checkbox"/> WM3945ABG
	<input type="checkbox"/> 4965AGN
	<input type="checkbox"/> 4965AG_
	<input type="checkbox"/> 533ANX Family
	<input type="checkbox"/> 512ANX Family
	<input type="checkbox"/> 533AN Family
	<input type="checkbox"/> 512AN Family

## 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

**NOTE:**

(\*) if 3<sup>rd</sup> antenna is Rx only (e.g. receive only for 4965AGN) then peak gain and cable loss not required

# Antenna Information

## Section 1. Antenna Assembly Specifications

### Antenna Assembly Summary:

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E *Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
Tx1 Antenna APP6P-700087 <b>Main White</b>	ACON Corporation	PIFA	1) cable p/n: /GBE RF113WL5 2) O,D. 1.13mm 50 ohm coaxial cable 3) length: 698mm 4) Connector P/N:I-PEX-MHF 20278-112R-13	2400-2500MHz 0.70 dBi (peak)	2400-2500MHz 2.67 dBi (peak)	2400-2500MHz 3.0 max	2400-2500MHz 1.97dBi (peak)
				2500-2700MHz 1.26 dBi (peak)	2500-2700MHz 3.31 dBi (peak)	2500-2700MHz 3.0 max	2500-2700MHz 2.05dBi (peak)
				5150-5350MHz -0.50dBi (peak)	5150-5350MHz 2.11 dBi (peak)	5150-5350MHz 3.0 max	5150-5350MHz 2.61dBi (peak)
				5470-5725MHz -0.90 dBi (peak)	5470-5725MHz 1.83 dBi (peak)	5470-5725MHz 3.0 max	5470-5725MHz 2.73dBi (peak)
				5725-5850MHz -1.88 dBi (peak)	5725-5850MHz 0.93 dBi (peak)	5725-5850MHz 3.0 max	5725-5850MHz 2.81dBi (peak)
Tx2 antenna APP6P-700087 <b>Aux black</b>	ACON Corporation	PIFA	1) cable p/n: /GBE RF113BL5 2) O,D. 1.13mm 50 ohm coaxial cable 3) length: 758mm 4) Connector P/N:I-PEX-MHF 20278-112R-13	2400-2500MHz 0.86 (peak) *	2400-2500MHz 2.99 dBi (peak) *	2400-2500MHz 3.0 max *	2400-2500MHz 2.13dBi (peak) *
				2500-2700MHz 1.43 dBi (peak) *	2500-2700MHz 3.61dBi (peak) *	2500-2700MHz 3.0 max *	2500-2700MHz 2.18dBi (peak) *
				5150-5350MHz 0.09 dBi (peak) *	5150-5350MHz 2.91 dBi (peak) *	5150-5350MHz 3.0 max *	5150-5350MHz 2.82dBi (peak) *
				5470-5725MHz -0.03 dBi (peak) *	5470-5725MHz 2.90 dBi (peak) *	5470-5725MHz 3.0 max *	5470-5725MHz 2.93dBi (peak) *
				5725-5850MHz -0.03 dBi (peak) *	5725-5850MHz 3.14 dBi (peak) *	5725-5850MHz 3.0 max *	5725-5850MHz 3.17dBi (peak) *
Tx3 antenna APP6P-700086 <b>MIMO Gray</b>	ACON Corporation	PIFA	1) cable p/n: /GBE RF113GL5 2) O,D. 1.13mm 50 ohm coaxial cable 3) length:638.5mm 4) Connector P/N:I-PEX-MHF 20278-112R-13	2400-2500MHz -0.46 dBi (peak) *	2400-2500MHz 1.33 dBi (peak)	2400-2500MHz 3.0 max *	2400-2500MHz 1.79dBi (peak) *
				5150-5350MHz 1.89 dBi (peak) *	5150-5350MHz 4.27dBi (peak) *	5150-5350MHz 3.0 max *	5150-5350MHz 2.38dBi (peak) *
				5470-5725MHz 2.11 dBi (peak) *	5470-5725MHz 4.68 dBi (peak) *	5470-5725MHz 3.0 max *	5470-5725MHz 2.57dBi (peak) *
				5725-5850MHz 2.11 dBi (peak) *	5725-5850MHz 4.78 dBi (peak) *	5725-5850MHz 3.0 max *	5725-5850MHz 2.67dBi (peak) *

#### NOTE:

(\*) If **Rx2/Rx3** only (2<sup>nd</sup> or 3<sup>rd</sup> antenna receives only, e.g. for **512 family & 4965AGN**) then the information marked with \* is not required

**Antenna Peak Gain Table:**

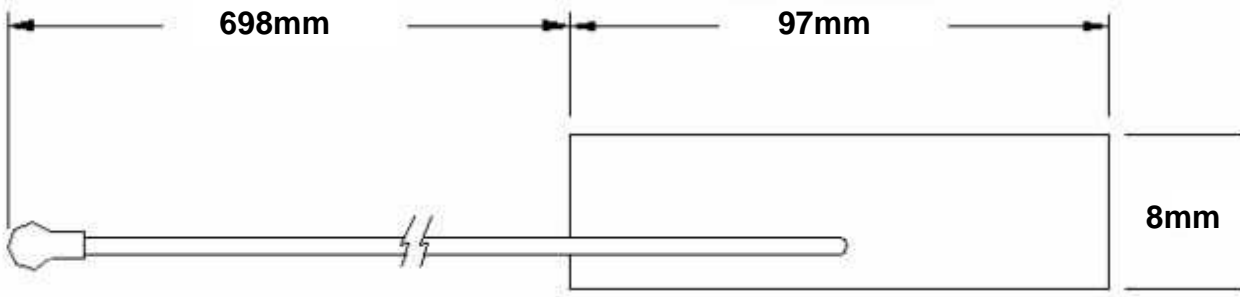
Frequency (MHz)	Tx1 antenna		Tx2 (or Rx2) Antenna		Tx3 (or Rx3) Antenna	
	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
2400	-2.50	-1.40	0.86	-0.75	-0.46	-2.41
2442	-0.54	-0.54	-0.05	-0.94	-0.27	-1.50
2484	0.50	0.70	0.46	-0.54	-0.69	-0.60
2500	-0.03	-0.07	0.96	-0.22	X	X
2525	-0.70	-0.31	1.43	0.50	X	X
2550	-0.19	0.71	1.19	0.49	X	X
2575	-0.23	0.93	0.67	0.18	X	X
2600	0.18	-0.27	0.20	-0.24	X	X
2625	-0.42	-0.18	-0.54	-1.60	X	X
2650	-0.93	0.03	-0.80	-1.82	X	X
2675	-0.97	0.22	-0.10	-0.58	X	X
2700	0.78	1.26	0.06	-0.51	X	X
5150	-0.50	-1.37	0.09	-0.60	1.81	1.63
5350	-1.09	-1.68	0.02	-0.02	0.73	1.89
5470	-0.90	-1.73	-0.08	-0.32	0.39	1.39
5725	-2.51	-1.88	-0.03	-1.31	1.30	2.11
5875	-2.03	-2.89	-0.37	-1.58	1.50	1.88

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V
- If Rx2 only (2<sup>nd</sup> antenna receives only, e.g. for 512 family) then the information is not required for Rx2.
- If Rx3 only (3<sup>rd</sup> antenna receives only, e.g. for 4965AGN) then the information is not required for Rx3.

## Section 2. Dimensioned Photos or Drawings of Antennas

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

### Tx1 Antenna Dimensioned Drawing:

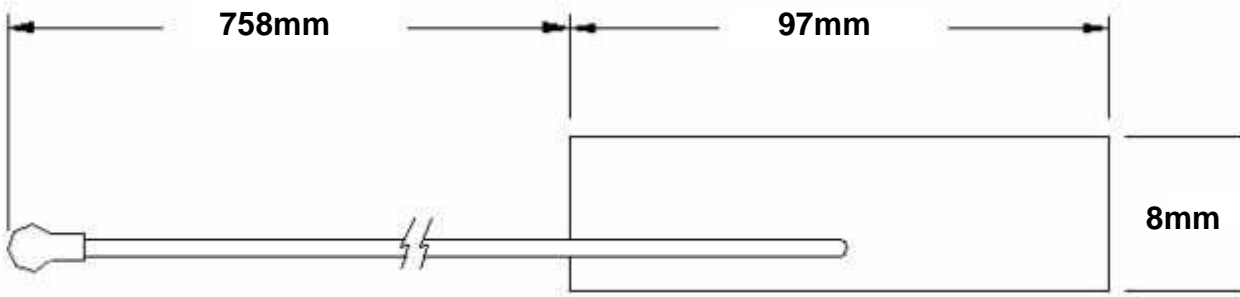


### Tx1 Antenna Photo:



Include a dimensioned photo and dimensioned drawing of Tx2 (or Rx2) antenna here.

Tx2 (or Rx2) Antenna Dimensioned Drawing:

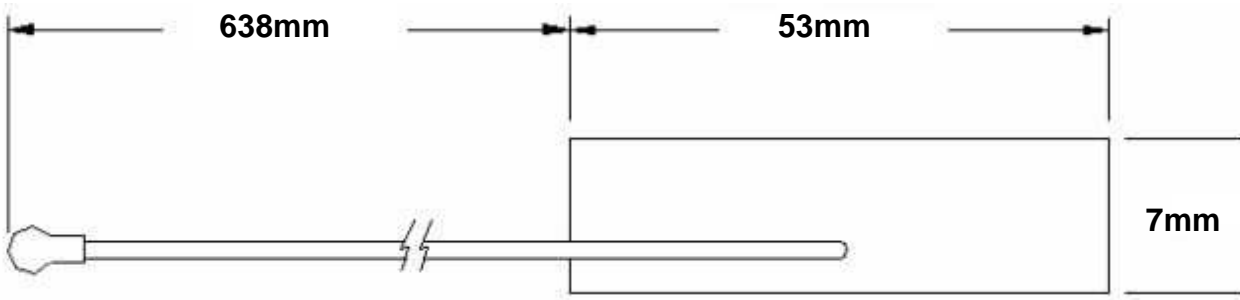


Tx2 (or Rx2) Antenna Photo:



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

**Tx3 (or Rx3) Antenna Dimensioned Drawing:**



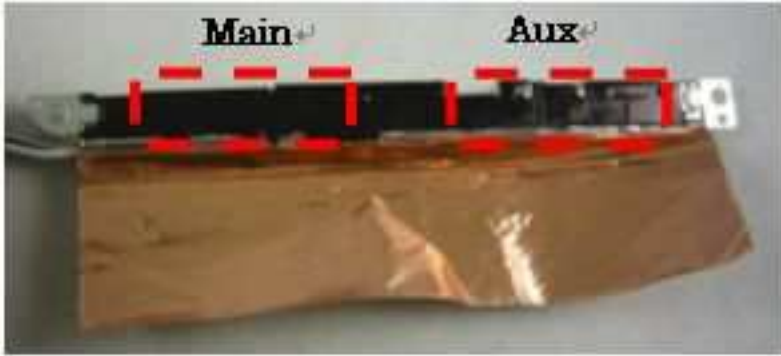
**Tx3 (or Rx3) Antenna Photo:**



**Include front view photo of all 3 antennas here.**

Antenna Manufacturer: ACON

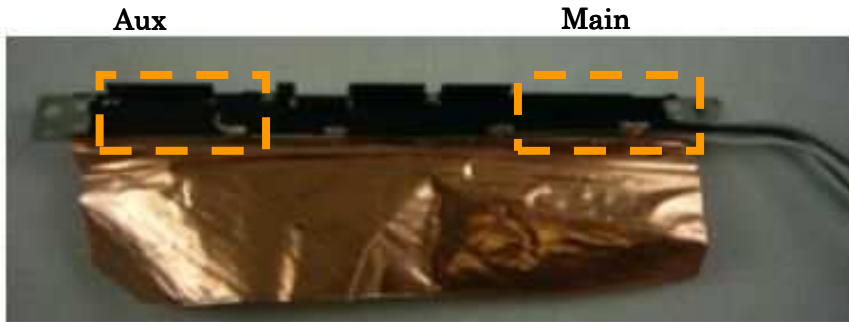
Antenna Part Number: APP6P-700087 (Main), APP6P-700087 (Aux), APP6P-700086 (MIMO)



**Include back view photo of all 3 antennas here.**

Antenna Manufacturer: ACON

Antenna Part Number: APP6P-700087 (Main), APP6P-700087 (Aux), APP6P-700086 (MIMO)

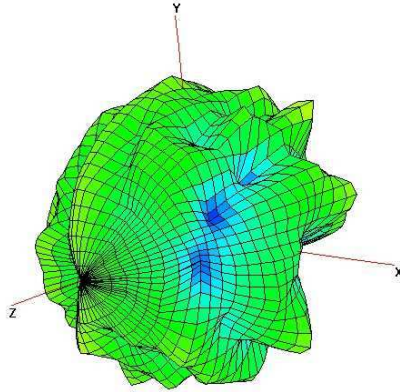




## Section 3. Radiation characteristics of antennae Loaded in Host Platform

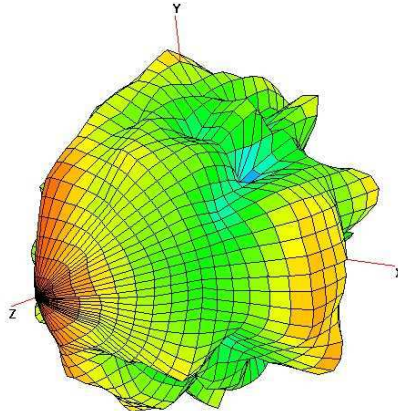
### 2400-2500MHz radiation characteristic

Tx1 antenna: 2400 MHz



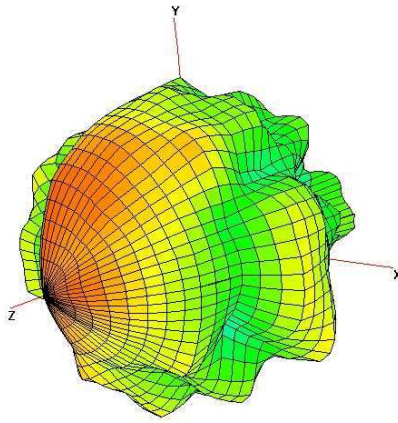
Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>-2.50</b>
Vertical (dBi) peak	<b>-1.40</b>

Tx1 antenna: 2442 MHz



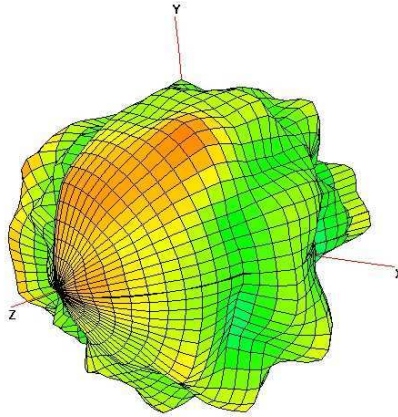
Center Frequency	<b>2442 MHz</b>
Horizontal (dBi) peak	<b>-0.54</b>
Vertical (dBi) peak	<b>-0.54</b>

**Tx1 antenna: 2484 MHz**



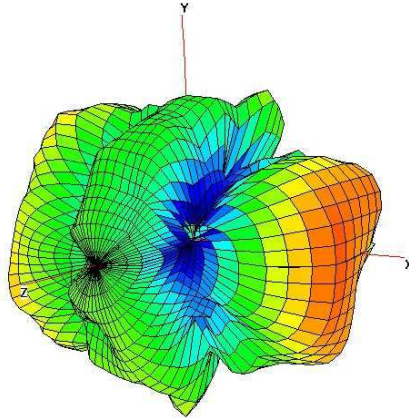
Center Frequency	<b>2484 MHz</b>
Horizontal (dBi) peak	<b>0.50</b>
Vertical (dBi) peak	<b>0.70</b>

**Tx1 antenna: 2500 MHz**



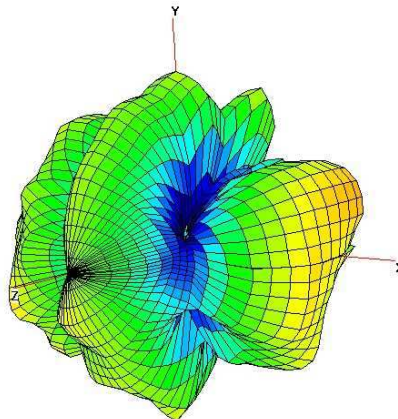
Center Frequency	<b>2500MHz</b>
Horizontal (dBi) peak	<b>-0.03</b>
Vertical (dBi) peak	<b>-0.07</b>

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



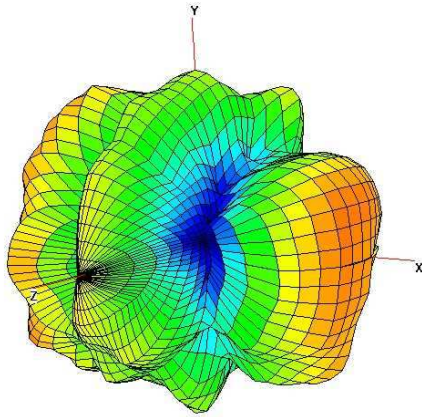
Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>0.86</b>
Vertical (dBi) peak	<b>-0.75</b>

**Tx2 (or Rx2) antenna: 2442 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



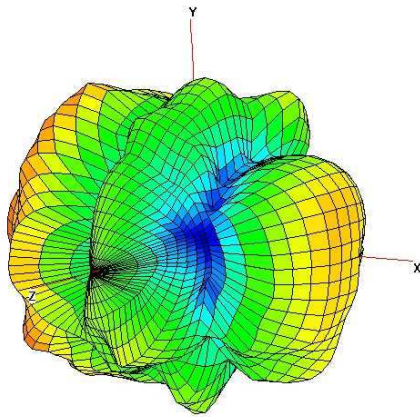
Center Frequency	<b>2442 MHz</b>
Horizontal (dBi) peak	<b>-0.05</b>
Vertical (dBi) peak	<b>-0.94</b>

**Tx2 (or Rx2) antenna: 2484 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



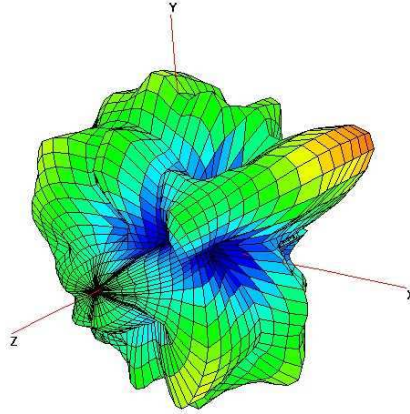
Center Frequency	<b>2484 MHz</b>
Horizontal (dBi) peak	<b>0.46</b>
Vertical (dBi) peak	<b>-0.54</b>

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



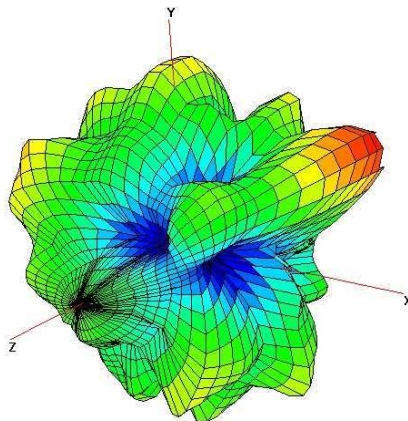
Center Frequency	<b>2500 MHz</b>
Horizontal (dBi) peak	<b>0.96</b>
Vertical (dBi) peak	<b>-0.22</b>

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



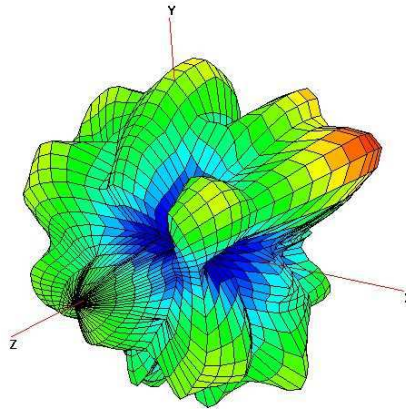
Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>-0.46</b>
Vertical (dBi) peak	<b>-2.41</b>

**Tx3 (or Rx3) antenna: 2442 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>2442 MHz</b>
Horizontal (dBi) peak	<b>-0.27</b>
Vertical (dBi) peak	<b>-1.50</b>

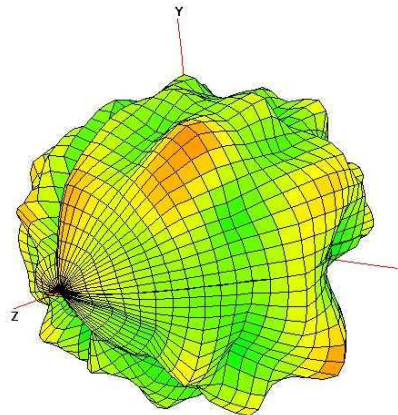
**Tx3 (or Rx3) antenna: 2484 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>2484 MHz</b>
Horizontal (dBi) peak	<b>-0.69</b>
Vertical (dBi) peak	<b>-0.60</b>

**2525-2700MHz radiation characteristic**

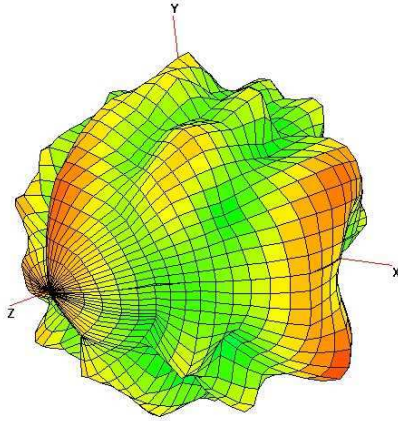
**Tx1 antenna: 2525MHz**



Center Frequency	<b>2525MHz</b>
Horizontal (dBi) peak	<b>-0.70</b>
Vertical (dBi) peak	<b>-0.31</b>

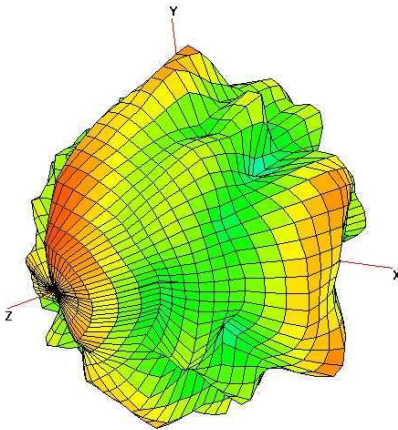


**Tx1 antenna: 2550MHz**



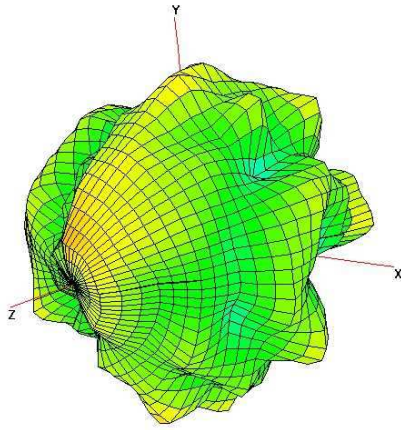
Center Frequency	<b>2550 MHz</b>
Horizontal (dBi) peak	<b>-0.19</b>
Vertical (dBi) peak	<b>0.71</b>

**Tx1 antenna: 2575 MHz**



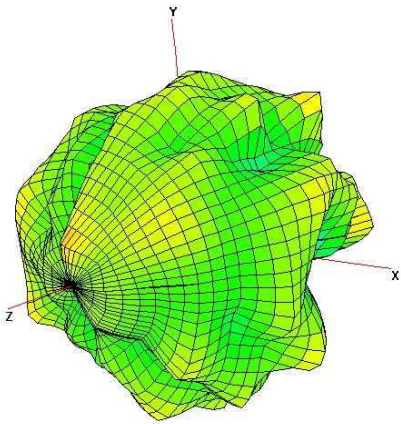
Center Frequency	<b>2575 MHz</b>
Horizontal (dBi) peak	<b>-0.23</b>
Vertical (dBi) peak	<b>0.93</b>

**Tx1 antenna: 2600 MHz**



Center Frequency	<b>2600 MHz</b>
Horizontal (dBi) peak	<b>0.18</b>
Vertical (dBi) peak	<b>-0.27</b>

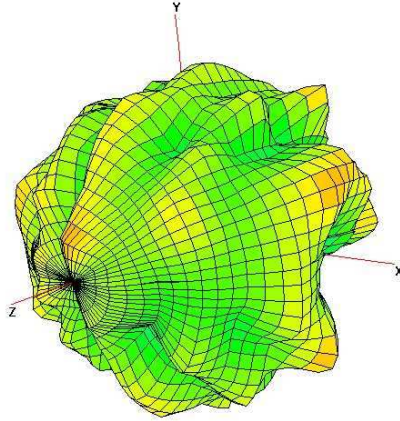
**Tx1 antenna: 2625 MHz**



Center Frequency	<b>2625 MHz</b>
Horizontal (dBi) peak	<b>-0.42</b>
Vertical (dBi) peak	<b>-0.18</b>

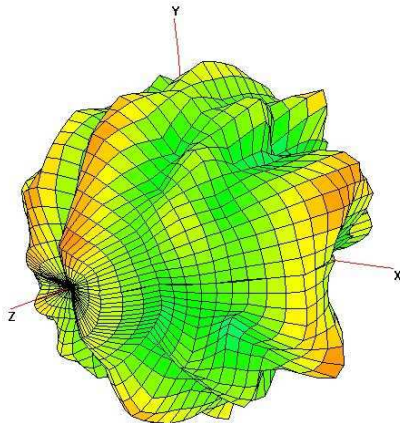


**Tx1 antenna: 2650 MHz**



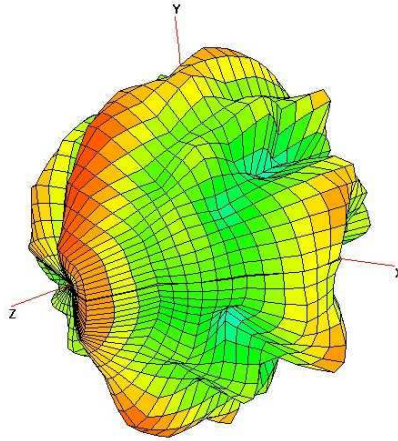
Center Frequency	<b>2650 MHz</b>
Horizontal (dBi) peak	<b>-0.93</b>
Vertical (dBi) peak	<b>0.03</b>

**Tx1 antenna: 2675 MHz**



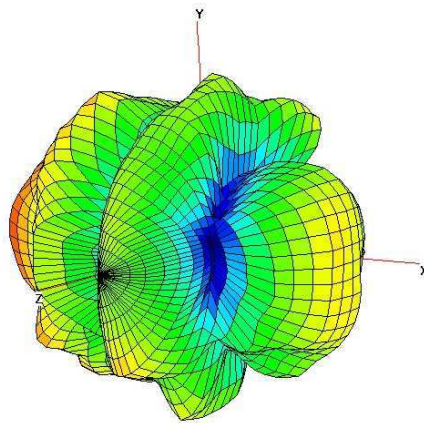
Center Frequency	<b>2675 MHz</b>
Horizontal (dBi) peak	<b>-0.97</b>
Vertical (dBi) peak	<b>0.22</b>

**Tx1 antenna: 2700 MHz**



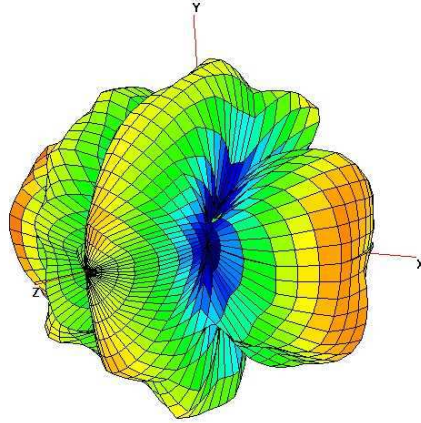
Center Frequency	<b>2700 MHz</b>
Horizontal (dBi) peak	<b>0.78</b>
Vertical (dBi) peak	<b>1.26</b>

**Tx2 (or Rx2) antenna: 2525MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



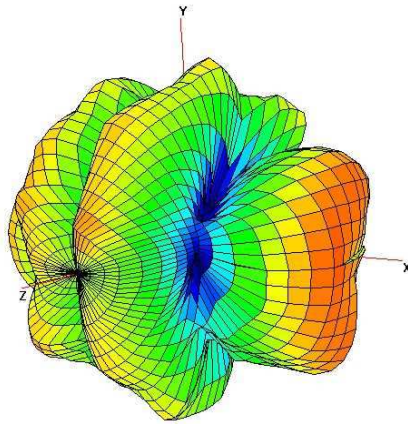
Center Frequency	<b>2525 MHz</b>
Horizontal (dBi) peak	<b>1.43</b>
Vertical (dBi) peak	<b>0.50</b>

**Tx2 (or Rx2) antenna: 2550MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



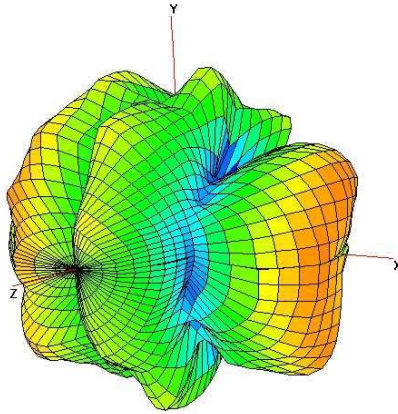
Center Frequency	<b>2550 MHz</b>
Horizontal (dBi) peak	<b>1.19</b>
Vertical (dBi) peak	<b>0.49</b>

**Tx2 (or Rx2) antenna: 2575 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



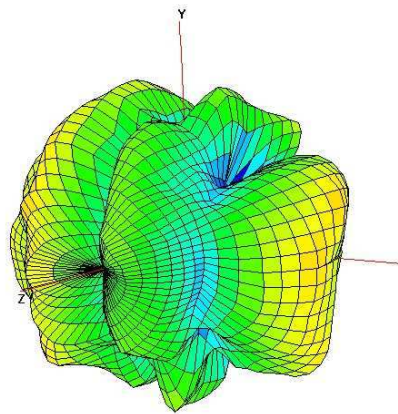
Center Frequency	<b>2575 MHz</b>
Horizontal (dBi) peak	<b>0.67</b>
Vertical (dBi) peak	<b>0.18</b>

**Tx2 (or Rx2) antenna: 2600 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



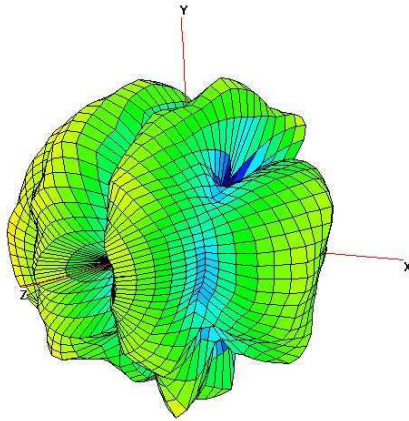
Center Frequency	<b>2600 MHz</b>
Horizontal (dBi) peak	<b>0.20</b>
Vertical (dBi) peak	<b>-0.24</b>

**Tx2 (or Rx2) antenna: 2625 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



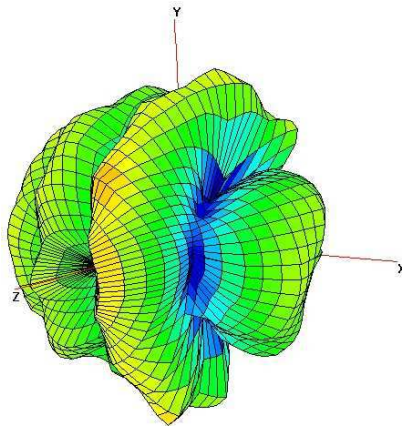
Center Frequency	<b>2625 MHz</b>
Horizontal (dBi) peak	<b>-0.54</b>
Vertical (dBi) peak	<b>-1.60</b>

**Tx2 (or Rx2) antenna: 2650 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



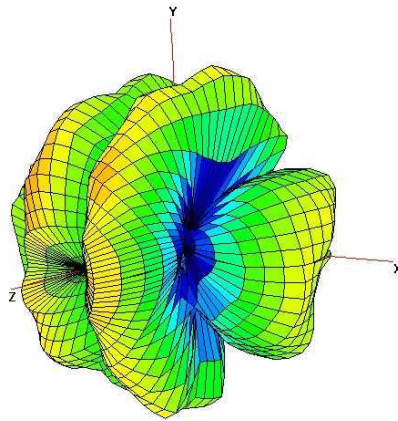
Center Frequency	<b>2650 MHz</b>
Horizontal (dBi) peak	<b>-0.80</b>
Vertical (dBi) peak	<b>-1.82</b>

**Tx2 (or Rx2) antenna: 2675 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



Center Frequency	<b>2675 MHz</b>
Horizontal (dBi) peak	<b>-0.10</b>
Vertical (dBi) peak	<b>-0.58</b>

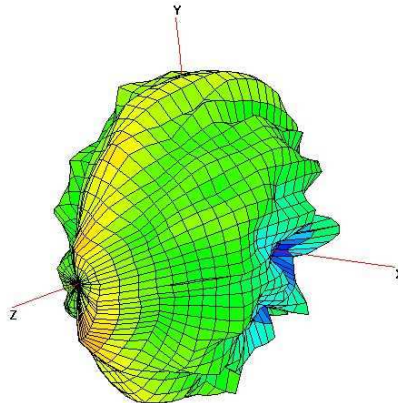
**Tx2 (or Rx2) antenna: 2700 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



Center Frequency	<b>2700 MHz</b>
Horizontal (dBi) peak	<b>0.06</b>
Vertical (dBi) peak	<b>-0.51</b>

5150-5350 MHz radiation characteristic

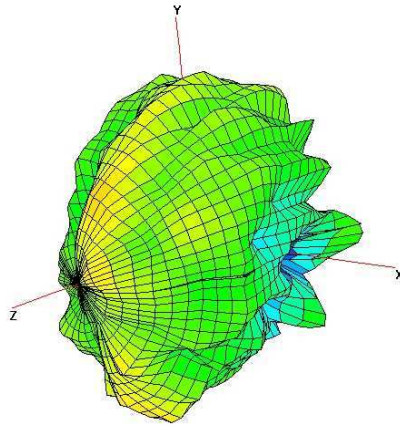
**Tx1 antenna: 5150 MHz**



Center Frequency	<b>5150 MHz</b>
Horizontal (dBi) peak	<b>-0.50</b>
Vertical (dBi) peak	<b>-1.37</b>

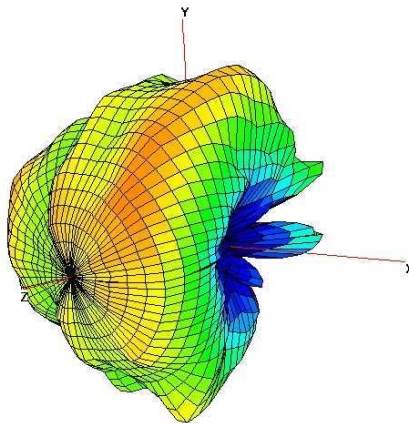


**Tx1 antenna: 5350 MHz**



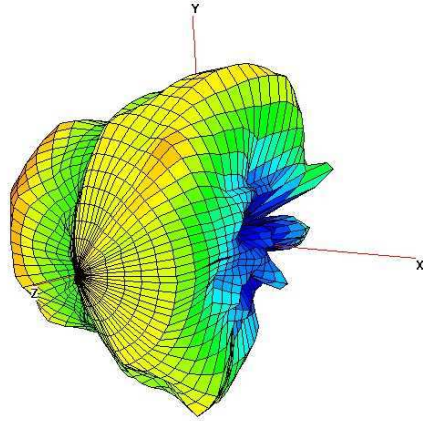
Center Frequency	<b>5350 MHz</b>
Horizontal (dBi) peak	<b>-1.09</b>
Vertical (dBi) peak	<b>-1.68</b>

**Tx2 (or Rx2) antenna: 5150 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



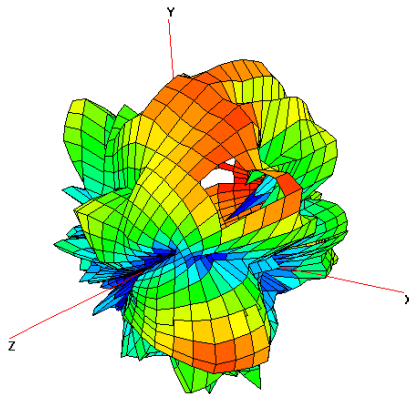
Center Frequency	<b>5150 MHz</b>
Horizontal (dBi) peak	<b>0.09</b>
Vertical (dBi) peak	<b>-0.60</b>

**Tx2 (or Rx2) antenna: 5350 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



Center Frequency	<b>5350 MHz</b>
Horizontal (dBi) peak	<b>0.02</b>
Vertical (dBi) peak	<b>-0.02</b>

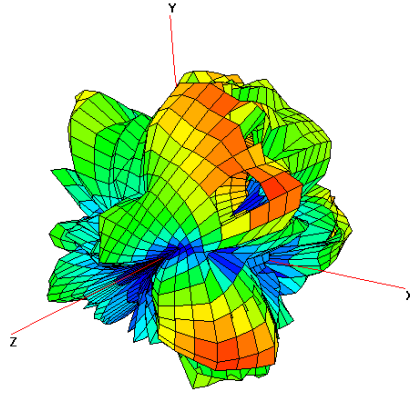
**Tx3 (or Rx3) antenna: 5150 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5150 MHz</b>
Horizontal (dBi) peak	<b>1.81</b>
Vertical (dBi) peak	<b>1.63</b>



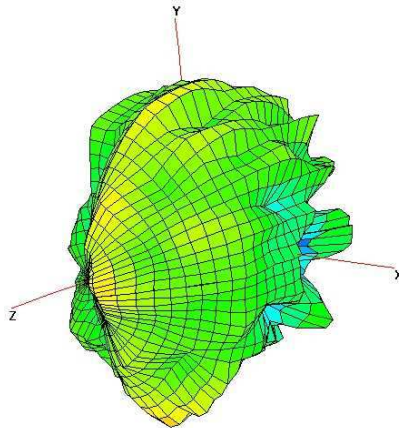
**Tx3 (or Rx3) antenna: 5350 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5350 MHz</b>
Horizontal (dBi) peak	<b>0.73</b>
Vertical (dBi) peak	<b>1.89</b>

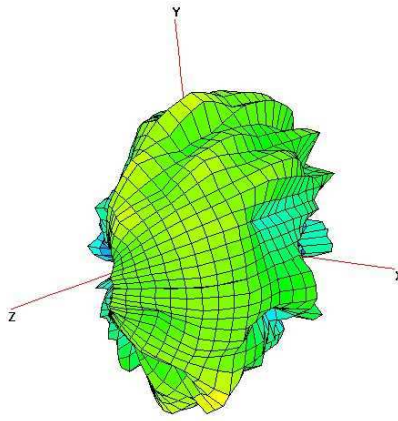
**5470-5725MHz radiation characteristic**

**Tx1 antenna: 5470 MHz**



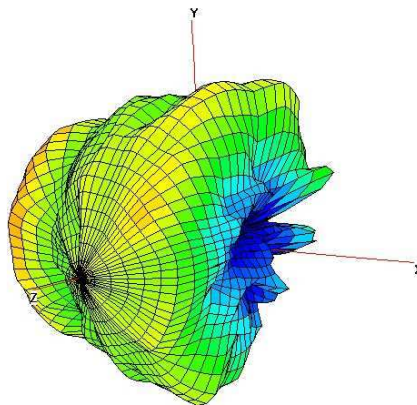
Center Frequency	<b>5470 MHz</b>
Horizontal (dBi) peak	<b>-0.90</b>
Vertical (dBi) peak	<b>-1.73</b>

**Tx1 antenna: 5725 MHz**



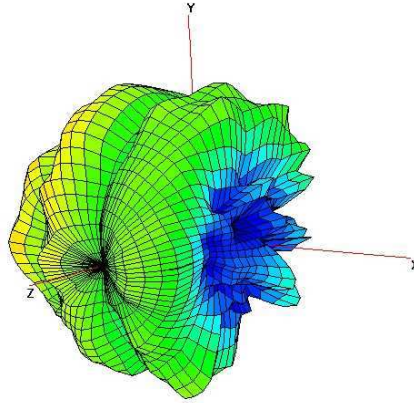
Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-2.51</b>
Vertical (dBi) peak	<b>-1.88</b>

**Tx2 (or Rx2) antenna: 5470 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



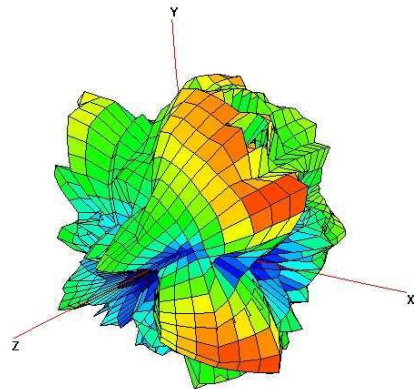
Center Frequency	<b>5470 MHz</b>
Horizontal (dBi) peak	<b>-0.08</b>
Vertical (dBi) peak	<b>-0.32</b>

**Tx2 (or Rx2) antenna: 5725 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



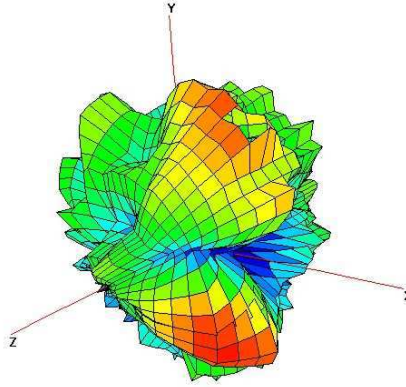
Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-0.03</b>
Vertical (dBi) peak	<b>-1.31</b>

**Tx3 (or Rx3): 5470 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5470 MHz</b>
Horizontal (dBi) peak	<b>0.39</b>
Vertical (dBi) peak	<b>1.39</b>

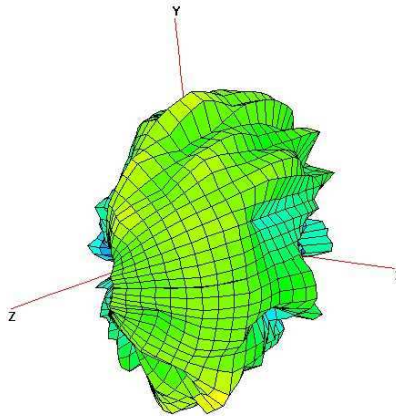
**Tx3 (or Rx3) antenna: 5725 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>1.30</b>
Vertical (dBi) peak	<b>2.11</b>

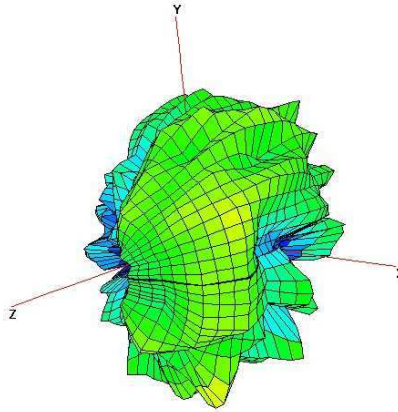
**5725-5875 MHz radiation characteristic**

**Tx1 antenna: 5725 MHz**



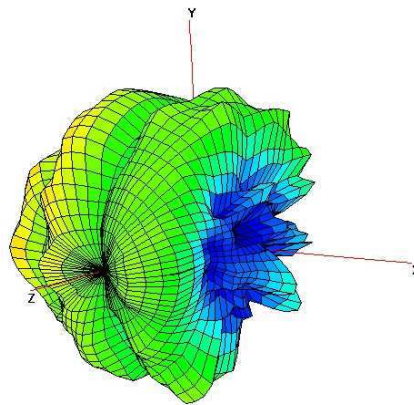
Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-2.51</b>
Vertical (dBi) peak	<b>-1.88</b>

**Tx1 antenna: 5875 MHz**



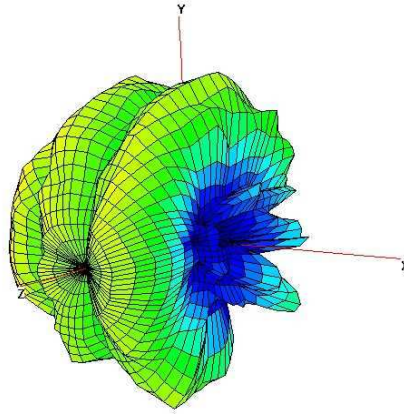
Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>-2.03</b>
Vertical (dBi) peak	<b>-2.89</b>

**Tx2 (or Rx2) antenna: 5725 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



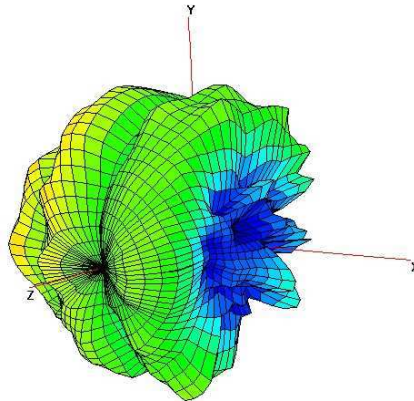
Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-0.03</b>
Vertical (dBi) peak	<b>-1.31</b>

**Tx2 (or Rx2) antenna: 5875 MHz (Plot is not required if 2<sup>nd</sup> Antenna is receive only e.g. Rx2 for 512 family)**



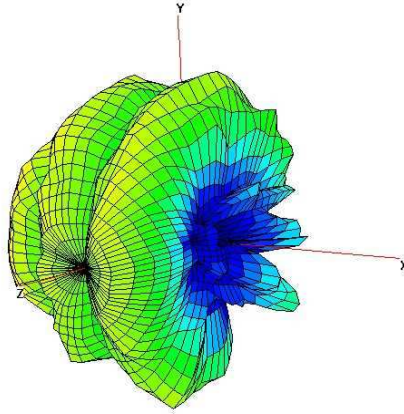
Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>-0.37</b>
Vertical (dBi) peak	<b>-1.58</b>

**Tx3 (or Rx3) antenna: 5725 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>1.30</b>
Vertical (dBi) peak	<b>2.11</b>

**Tx3 (or Rx3) antenna: 5875 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx 3 for 4965AGN)**



Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>1.50</b>
Vertical (dBi) peak	<b>1.88</b>

## Section 4. Host Platform Information

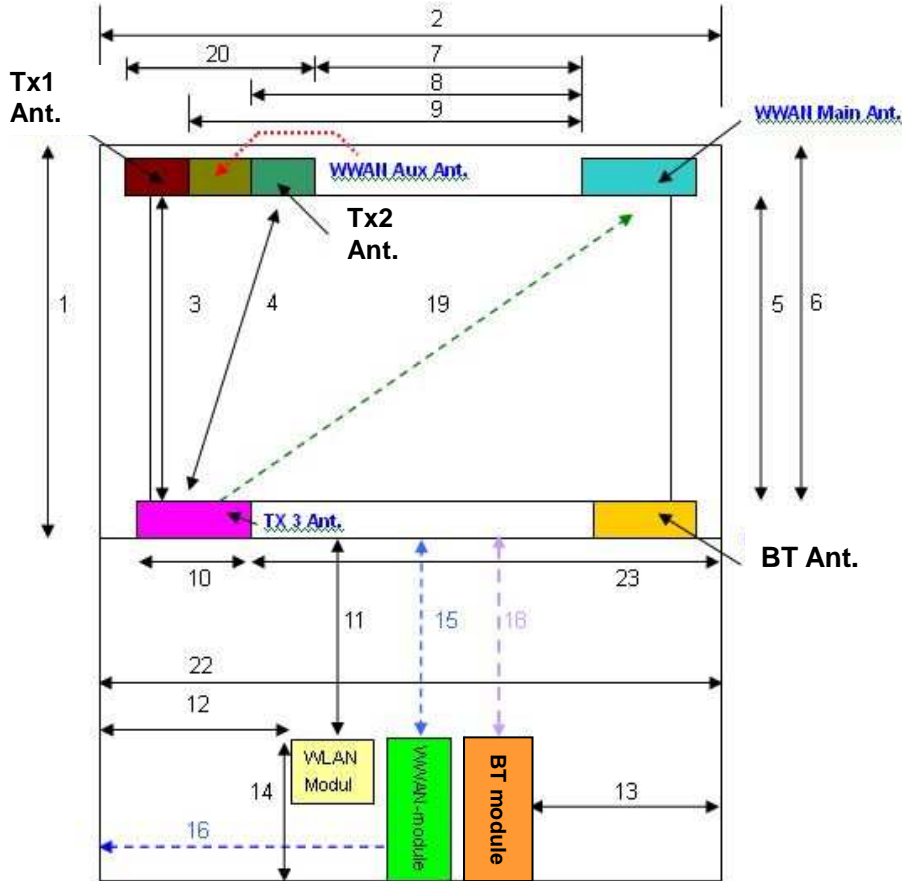
OEM / ODM Host platform: (DELL) platform correlated to antenna data

Rating Label Photo:



## Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo or dimensioned drawing** 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.



Antenna placement  
 Tx1 Antenna : WLAN main  
 Tx2 Antenna : WLAN Aux  
 Tx3 Antenna : MIMO

Antenna distance

- ,1:250mm
- ,2:370mm
- ,3:220mm
- ,4:230mm
- ,5:215mm
- ,6:232mm
- ,7:131mm
- ,8:165mm
- ,9:207mm
- ,19:320mm
- ,23:275mm

Antenna size

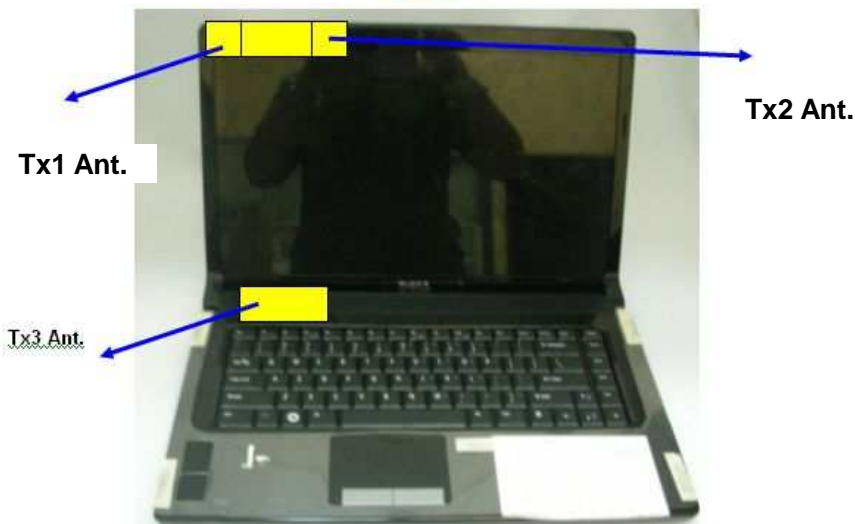
- ,10:70mm
- ,20:105mm

Module to base distance

- ,11:165mm
- ,12:140mm
- ,13:143mm
- ,14:75mm
- ,15:153mm
- ,16:157mm
- ,18:153mm

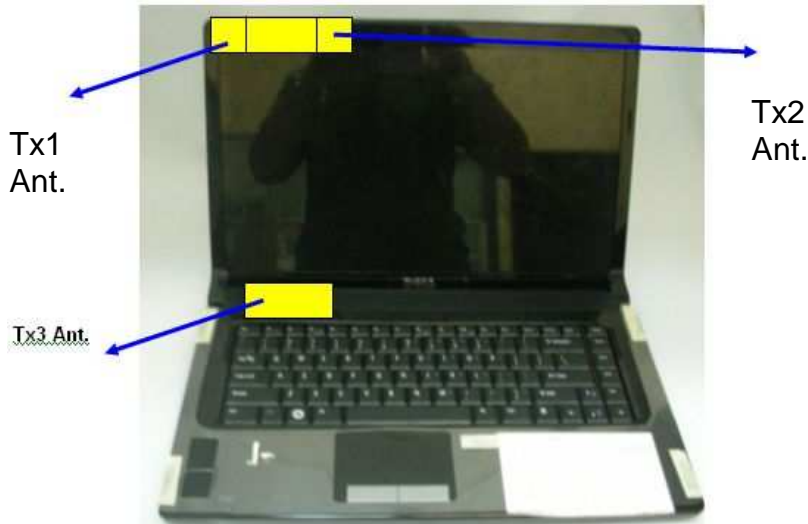
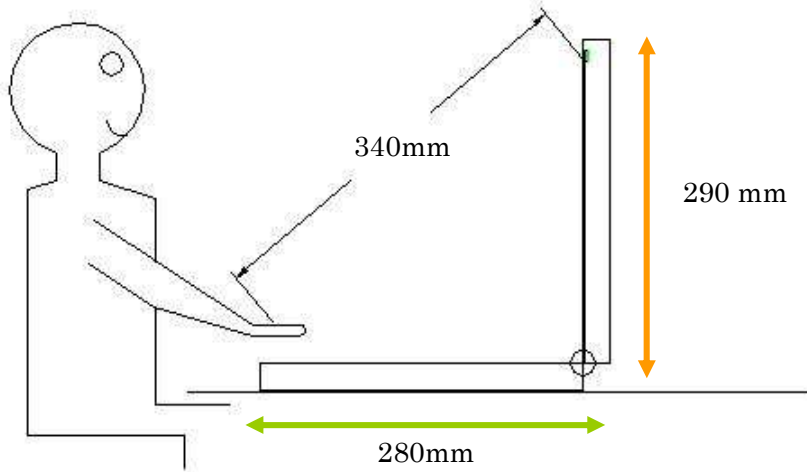
Base size

- ,17:250mm
- ,22:370mm



## **Section 6. Antenna dimensional information for SAR evaluation**

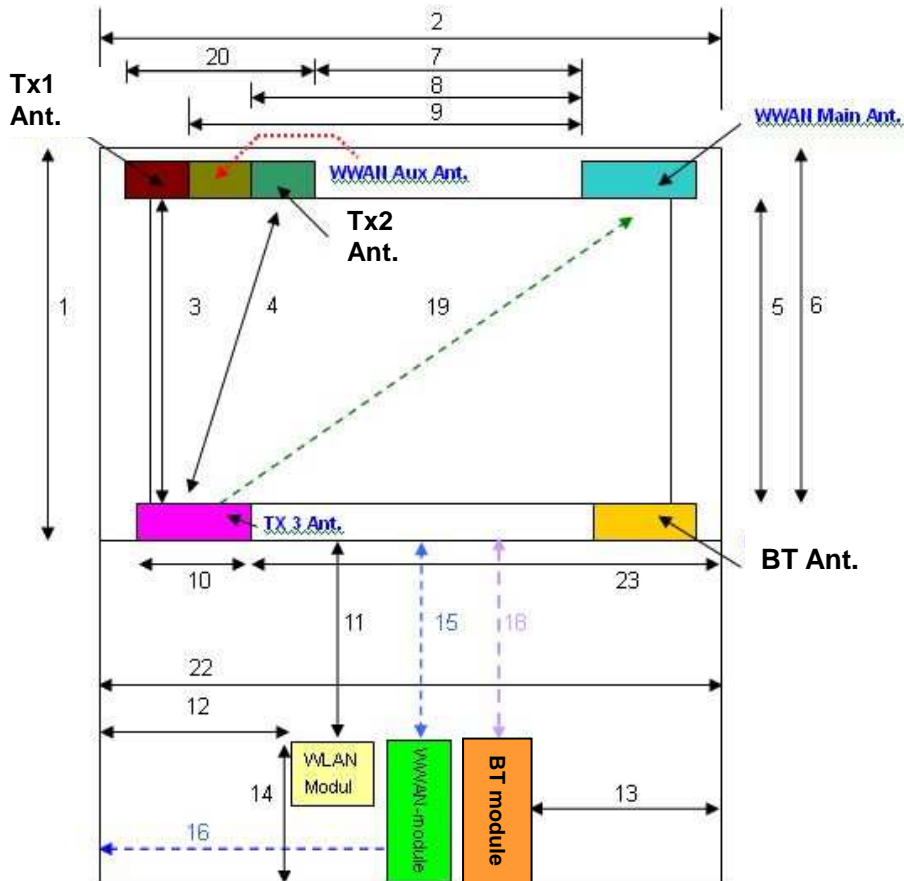
Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, lap/ thigh, and ankle)



## 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)



Antenna placement  
 Tx1 Antenna : WLAN main  
 Tx2 Antenna : WLAN Aux  
 Tx3 Antenna : MIMO

Antenna distance

- ,1:250mm
- ,2:370mm
- ,3:220mm
- ,4:230mm
- ,5:215mm
- ,6:232mm
- ,7:131mm
- ,8:165mm
- ,9:207mm
- ,19:320mm
- ,23:275mm

Antenna size

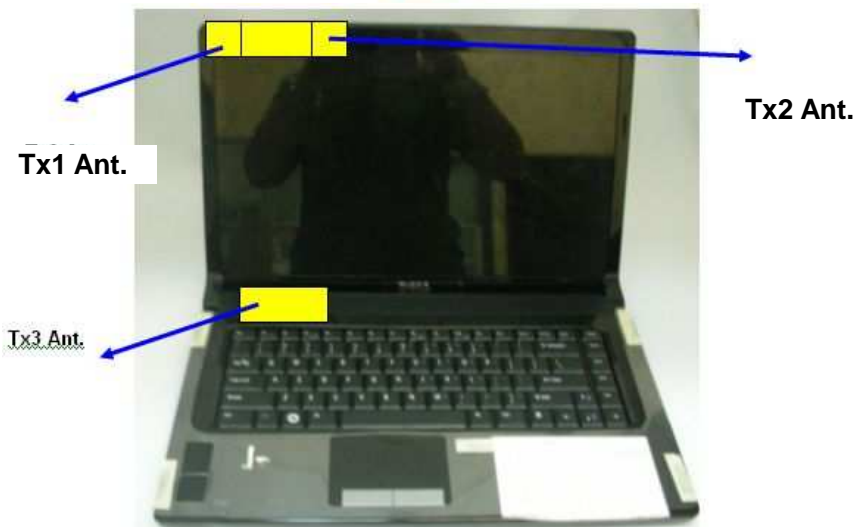
- ,10:70mm
- ,20:105mm

Module to base distance

- ,11:165mm
- ,12:140mm
- ,13:143mm
- ,14:75mm
- ,15:153mm
- ,16:157mm
- ,18:153mm

Base size

- ,17:250mm
- ,22:370mm



## 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						
Brazil						
Indonesia						
Israel						
Malaysia						
Mexico						
Singapore						
South Africa						
USA, Canada						