

# **Regulatory WWAN Antenna Information**

(English Language Required for Regulatory Review / Approval)

<b>Platform</b>	
Platform Owner	Hewlett-Packard International Pte. Ltd.
Brand Name	Hewlett-Packard International Pte. Ltd.
Model Name	
ODM	
Target Launch Date	
<b>Antenna</b>	
Brand Name	<b>Amphenol</b>
Part Number	■ Main Antenna:
	■ AUX Antenna:
<b>Module</b>	
With WWAN Module	■ MC5725
(Check Box)	■ MC8775
	<input type="checkbox"/> MC8765

## **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	Main antenna (Peak Gain W/ cable loss) *	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Main and AUX antenna (Peak Gain only) *	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Main antenna (Cable loss W/ connector) *	Required	Required	Required	Required	Required
2	Dimensioned Photographs and Drawings of Main and AUX 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 photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.	Required	Required	Desired	Required (Photos)	Required (Photos)
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

# Antenna Information

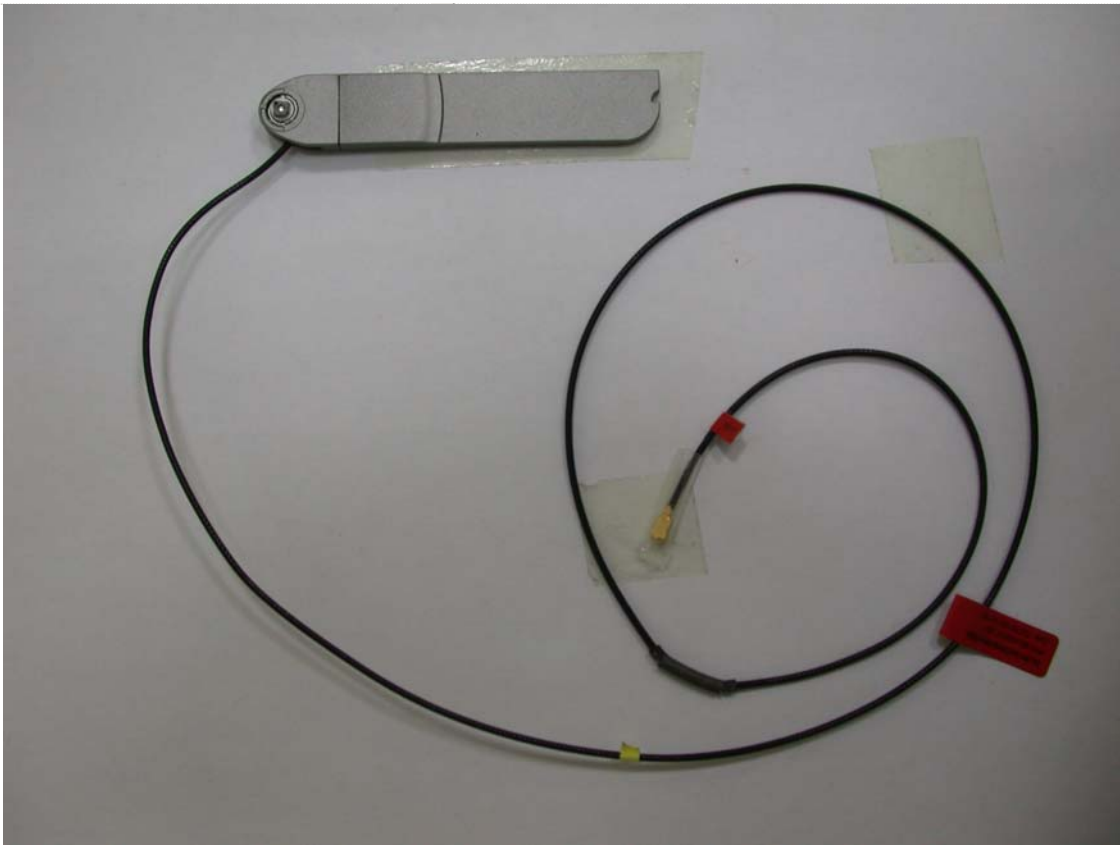
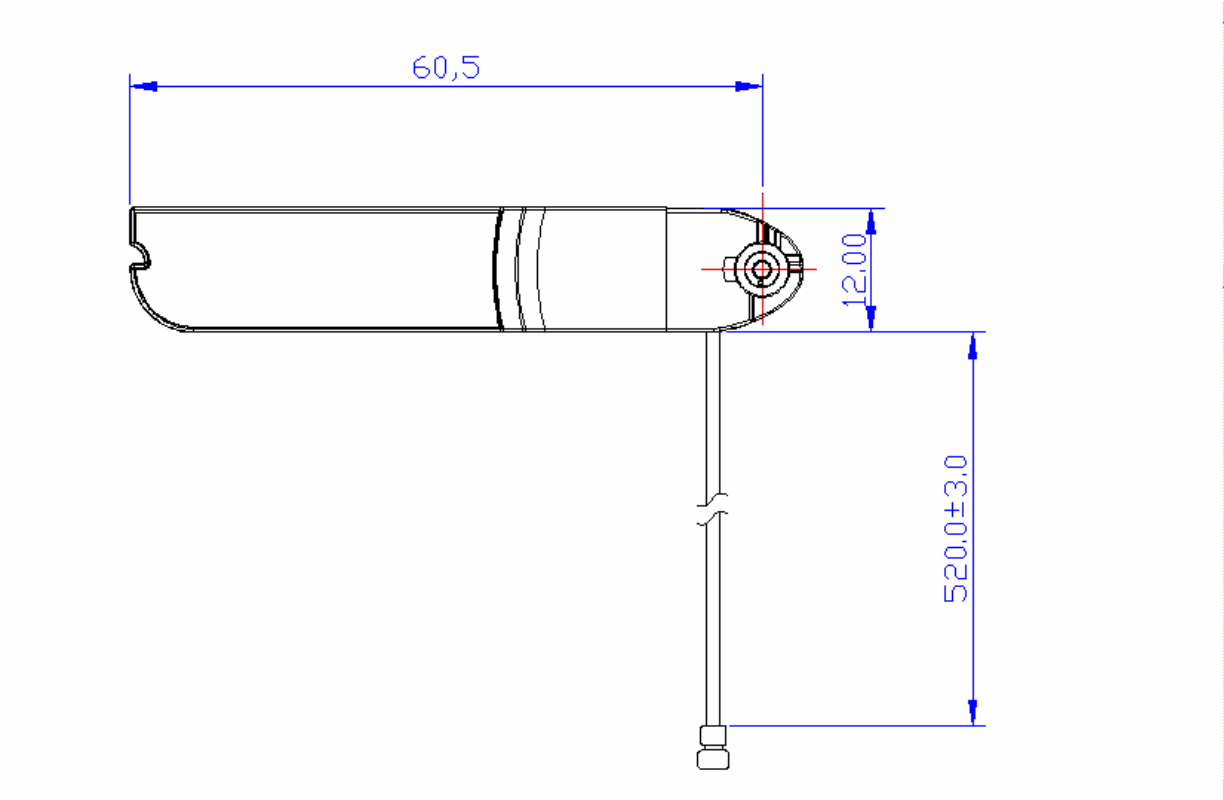
## Section 1. Antenna Assembly Specifications

### Antenna Assembly Summary:

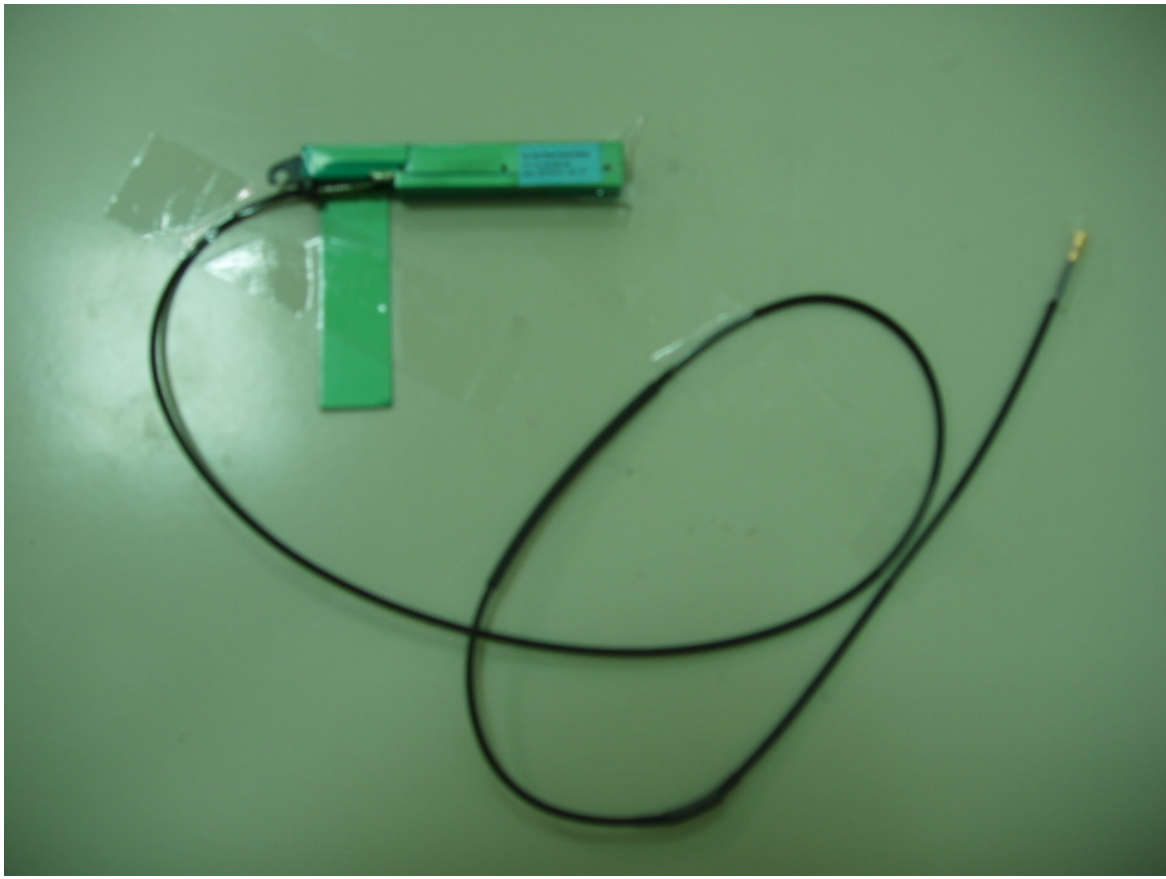
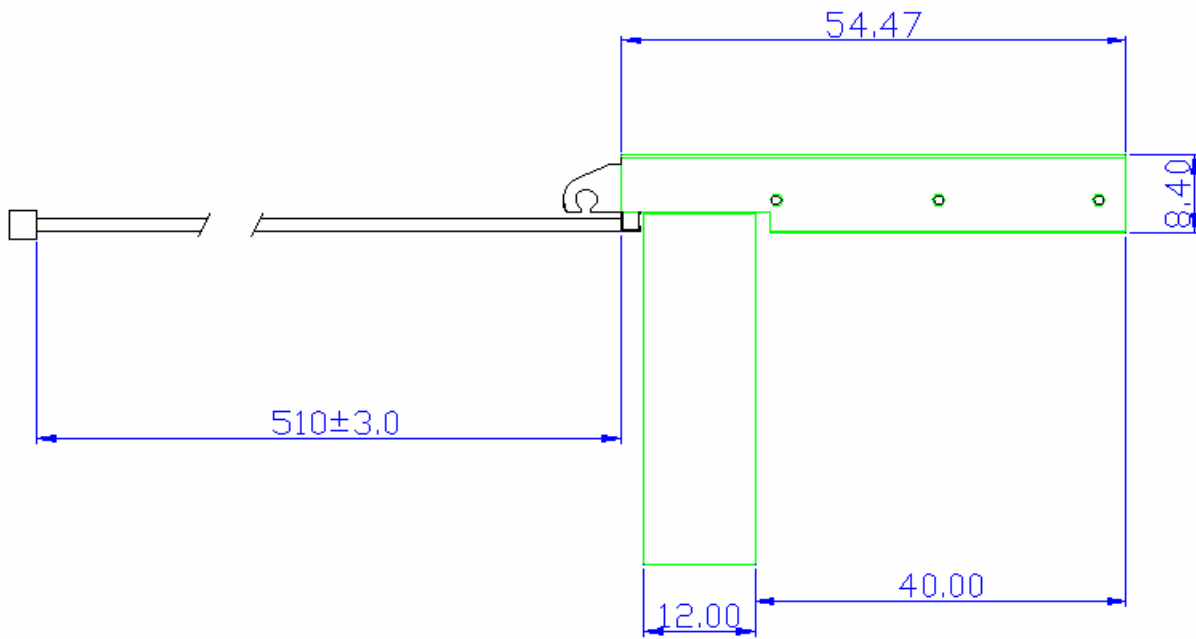
1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
(P/N:WT0544-12-000-R) Main Antenna 90 Degrees Laptop Mode	Amphenol	PCB	<b>Example:</b> (P/N: R-0544-12-000-78) 50 ohm Coaxial. length: 520cm diameter: 1.13mm Connector: IPEX	824-894MHz 2.6 dBi (peak)	824-894MHz 3.55 dBi (peak)	824-849MHz 3 max	824-894MHz 0.95 dBi (peak)
				880-960MHz 2.59 dBi (peak)	880-960MHz 3.54 dBi (peak)	880-960MHz 3 max	880-960MHz 0.95 dBi (peak)
				1710-1880MHz 3.28 dBi (peak)	1710-1880MHz 4.63 dBi (peak)	1710-1880MHz 2 max	1710-1880MHz 1.35 dBi (peak)
				1850-1990MHz 2.65 dBi (peak)	1850-1990MHz 4 dBi (peak)	1850-1990MHz 2 max	1850-1990MHz 1.35 dBi (peak)
				1920-2170MHz 2.6 dBi (peak)	1920-2170MHz 3.95 dBi (peak)	1920-2170MHz 2 max	1920-2170MHz 1.35 dBi (peak)
(P/N:WT0544-12-000-R) Main Antenna 180 Degrees Tablet Mode	Amphenol	PCB	<b>Example:</b> (P/N: R-0544-12-000-78) 50 ohm Coaxial. length: 520cm diameter: 1.13mm Connector: IPEX	824-894MHz 3.04 dBi (peak)	824-894MHz 3.99 dBi (peak)	824-849MHz 3 max	824-894MHz 0.95 dBi (peak)
				880-960MHz 2.92 dBi (peak)	880-960MHz 3.87 dBi (peak)	880-960MHz 3 max	880-960MHz 0.95 dBi (peak)
				1710-1880MHz 2.38 dBi (peak)	1710-1880MHz 3.73 dBi (peak)	1710-1880MHz 2 max	1710-1880MHz 1.35 dBi (peak)
				1850-1990MHz 2.45 dBi (peak)	1850-1990MHz 3.8 dBi (peak)	1850-1990MHz 2 max	1850-1990MHz 1.35 dBi (peak)
				1920-2170MHz 2.6 dBi (peak)	1920-2170MHz 3.95 dBi (peak)	1920-2170MHz 2 max	1920-2170MHz 1.35 dBi (peak)
(P/N: WT0460-11-000-R) Diversity antenna Laptop Mode	Amphenol	FPCB	<b>Example:</b> (P/N: R-0460-11-000-96) 50 ohm Coaxial. length: 510cm diameter: 1.37mm Connector: IPEX	824-894MHz -0.46 dBi (peak)	824-894MHz 0.34 dBi (peak)	824-849MHz 3 max	824-894MHz 0.8 dBi (peak)
				880-960MHz 0.48 dBi (peak)	880-960MHz 1.28 dBi (peak)	880-960MHz 3 max	880-960MHz 0.8 dBi (peak)
				1710-1880MHz 0.68 dBi (peak)	1710-1880MHz 1.98 dBi (peak)	1710-1880MHz 2 max	1710-1880MHz 1.3 dBi (peak)
				1850-1990MHz 2.69 dBi (peak)	1850-1990MHz 3.99 dBi (peak)	1850-1990MHz 2 max	1850-1990MHz 1.3 dBi (peak)
				1920-2170MHz 2.69 dBi (peak)	1920-2170MHz 3.99 dBi (peak)	1920-2170MHz 2 max	1920-2170MHz 1.3 dBi (peak)
(P/N: WT0460-11-000-R) Diversity antenna Tablet Mode	Amphenol	FPCB	<b>Example:</b> (P/N: R-0460-11-000-96) 50 ohm Coaxial. length: 510cm diameter: 1.37mm Connector: IPEX	824-894MHz -5.32 dBi (peak)	824-894MHz -4.52 dBi (peak)	824-849MHz 3 max	824-894MHz 0.8 dBi (peak)
				880-960MHz -5.11 dBi (peak)	880-960MHz -4.31 dBi (peak)	880-960MHz 3 max	880-960MHz 0.8 dBi (peak)
				1710-1880MHz -2.02 dBi (peak)	1710-1880MHz -0.72 dBi (peak)	1710-1880MHz 2 max	1710-1880MHz 1.3 dBi (peak)
				1850-1990MHz -0.89dBi (peak)	1850-1990MHz 0.41 dBi (peak)	1850-1990MHz 2 max	1850-1990MHz 1.3 dBi (peak)
				1920-2170MHz 0.2 dBi (peak)	1920-2170MHz 1.5 dBi (peak)	1920-2170MHz 2 max	1920-2170MHz 1.3 dBi (peak)

## Section 2. Dimensioned Photos or Drawings of Antennas

Include a dimensioned photo or dimensioned drawing of main antenna here.



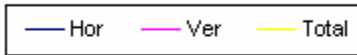
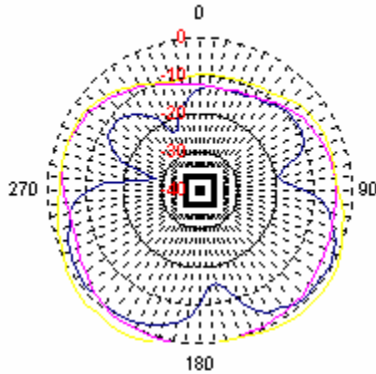
Include a dimensioned photo or dimensioned drawing of diversity antenna here.



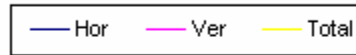
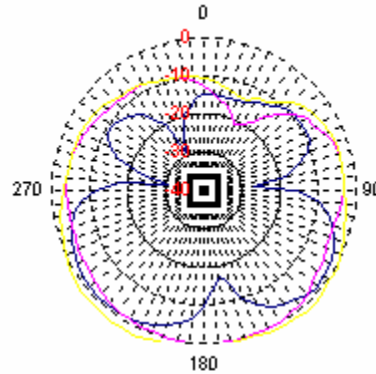
## Section 3. Radiation Characteristics of Antennae Loaded in Host Platform

Main antenna (Laptop mode with antenna positioned at 90-degree):

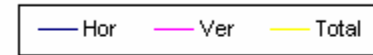
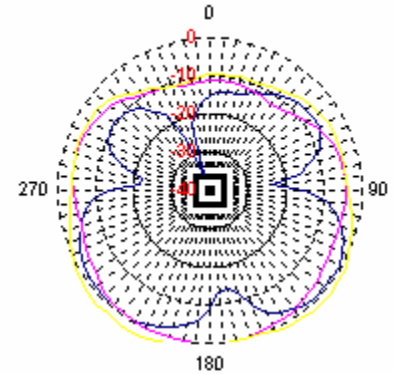
### 824-894MHz radiation characteristic



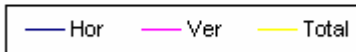
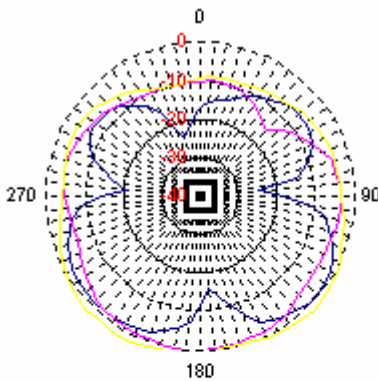
Centre Frequency	824.2 MHz
Horizontal peak gain (dBi)	-0.30
Vertical peak gain (dBi)	0.38
Hori + Vert peak gain (dBi)	2.41



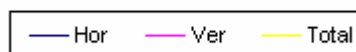
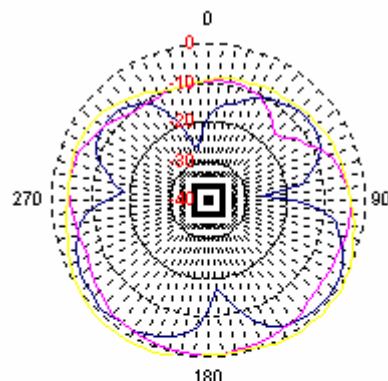
Centre Frequency	836.6 MHz
Horizontal peak gain (dBi)	-0.76
Vertical peak gain (dBi)	0.26
Hori + Vert peak gain (dBi)	1.97



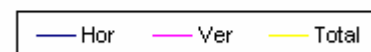
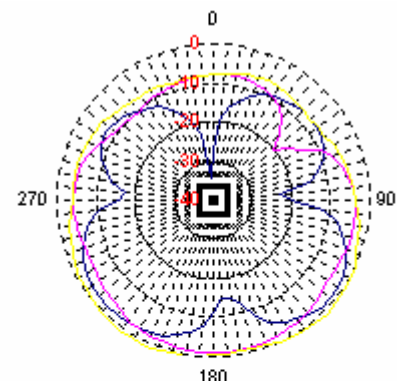
Centre Frequency	848.8 MHz
Horizontal peak gain (dBi)	-0.32
Vertical peak gain (dBi)	0.20
Hori + Vert peak gain (dBi)	2.49



Centre Frequency	869.2 MHz
Horizontal peak gain (dBi)	-0.39
Vertical peak gain (dBi)	-0.18
Hori + Vert peak gain (dBi)	1.93



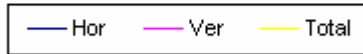
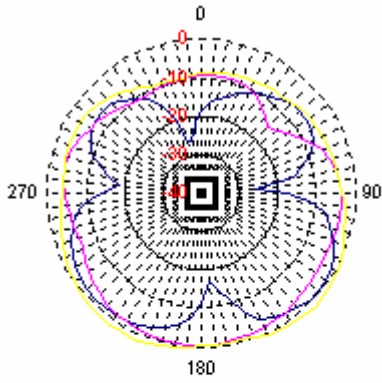
Centre Frequency	881.6 MHz
Horizontal peak gain (dBi)	-0.37
Vertical peak gain (dBi)	-0.56
Hori + Vert peak gain (dBi)	1.59



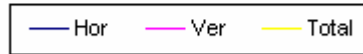
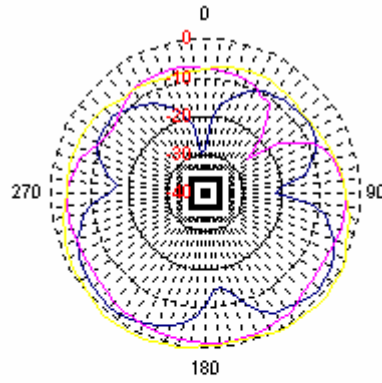
Centre Frequency	893.8 MHz
Horizontal peak gain (dBi)	-1.02
Vertical peak gain (dBi)	-0.92
Hori + Vert peak gain (dBi)	1.07



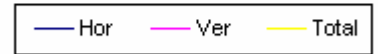
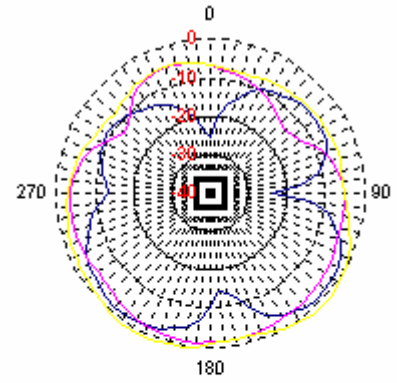
880-960MHz radiation characteristic



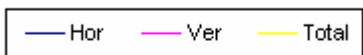
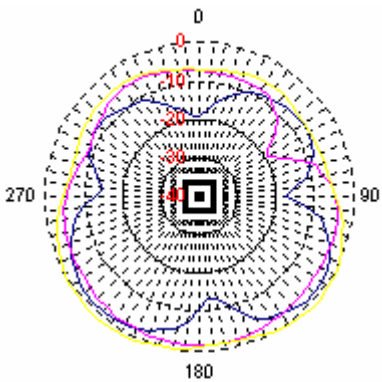
<b>Centre Frequency</b>	<b>880.2 MHz</b>
Horizontal peak gain (dBi)	-0.37
Vertical peak gain (dBi)	-0.56
Hori + Vert peak gain (dBi)	1.59



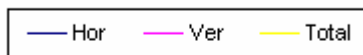
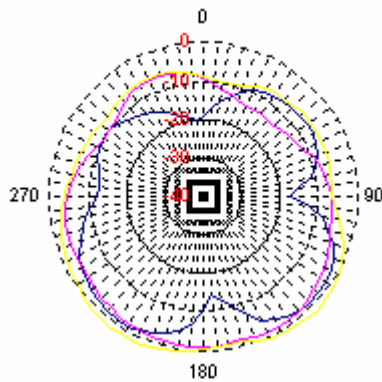
<b>Centre Frequency</b>	<b>897.4 MHz</b>
Horizontal peak gain (dBi)	-1.64
Vertical peak gain (dBi)	-1.08
Hori + Vert peak gain (dBi)	1.07



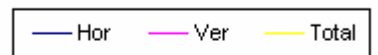
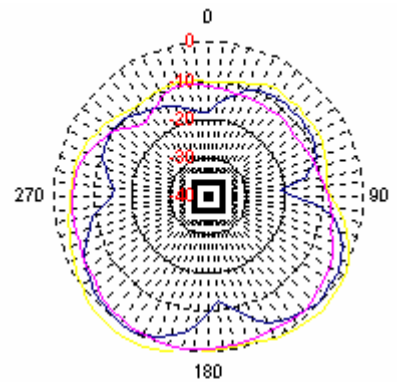
<b>Centre Frequency</b>	<b>914.8 MHz</b>
Horizontal peak gain (dBi)	-1.02
Vertical peak gain (dBi)	-1.16
Hori + Vert peak gain (dBi)	1.17



<b>Centre Frequency</b>	<b>925.2 MHz</b>
Horizontal peak gain (dBi)	-1.03
Vertical peak gain (dBi)	-1.55
Hori + Vert peak gain (dBi)	1.30

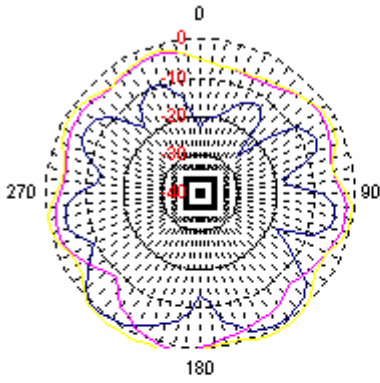


<b>Centre Frequency</b>	<b>942.4 MHz</b>
Horizontal peak gain (dBi)	-0.92
Vertical peak gain (dBi)	-1.01
Hori + Vert peak gain (dBi)	1.65



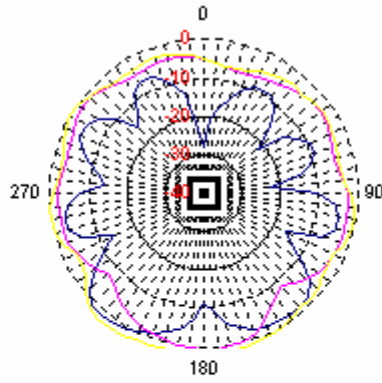
<b>Centre Frequency</b>	<b>958.8 MHz</b>
Horizontal peak gain (dBi)	-0.16
Vertical peak gain (dBi)	-0.15
Hori + Vert peak gain (dBi)	2.59

1710-1880MHz radiation characteristic



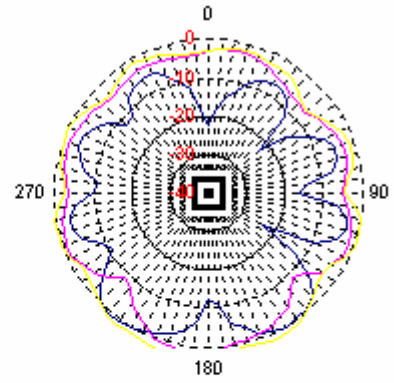
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1710.2 MHz</b>
Horizontal peak gain (dBi)	0.72
Vertical peak gain (dBi)	0.99
Hori + Vert peak gain (dBi)	1.87



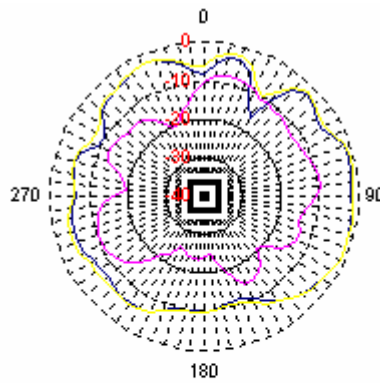
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<b>Centre Frequency</b>	<b>1747.4 MHz</b>
Horizontal peak gain (dBi)	1.57
Vertical peak gain (dBi)	0.45
Hori + Vert peak gain (dBi)	2.48



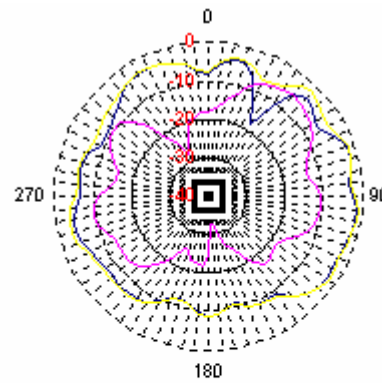
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<b>Centre Frequency</b>	<b>1784.8 MHz</b>
Horizontal peak gain (dBi)	0.47
Vertical peak gain (dBi)	1.42
Hori + Vert peak gain (dBi)	2.64



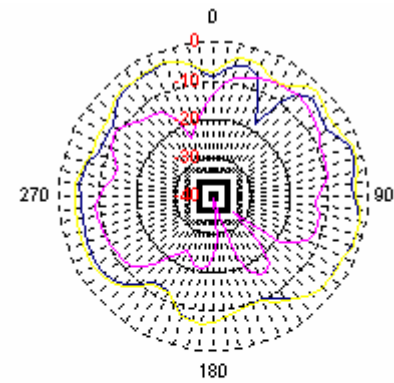
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<b>Centre Frequency</b>	<b>1805.2 MHz</b>
Horizontal peak gain (dBi)	-1.02
Vertical peak gain (dBi)	-8.18
Hori + Vert peak gain (dBi)	-0.76



— Hor — Ver — Total

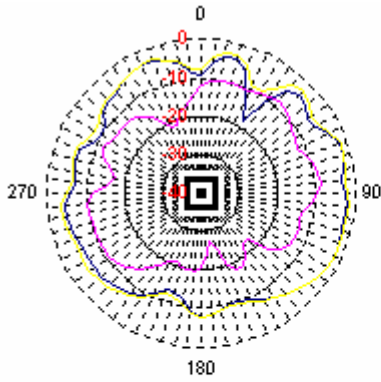
<b>Centre Frequency</b>	<b>1842.4 MHz</b>
Horizontal peak gain (dBi)	-1.68
Vertical peak gain (dBi)	-5.91
Hori + Vert peak gain (dBi)	-1.17



— Hor — Ver — Total

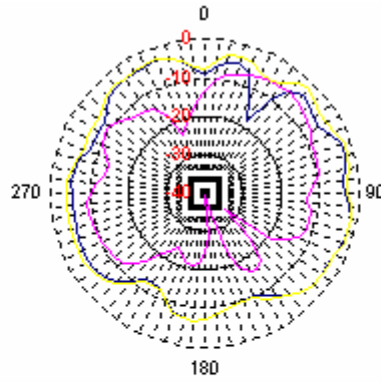
<b>Centre Frequency</b>	<b>1897.8 MHz</b>
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-5.95
Hori + Vert peak gain (dBi)	-1.30

1850-1990MHz radiation characteristic



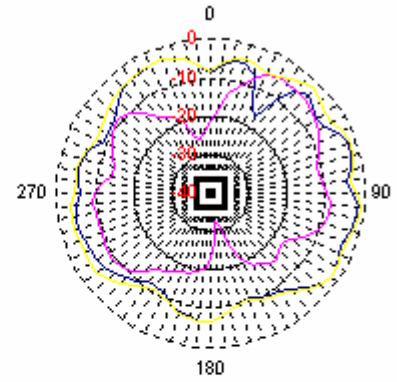
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Centre Frequency	1850.2 MHz
Horizontal peak gain (dBi)	-1.76
Vertical peak gain (dBi)	-8.74
Hori + Vert peak gain (dBi)	-1.43



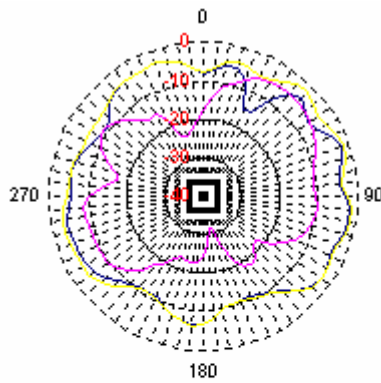
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Centre Frequency	1880 MHz
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-5.95
Hori + Vert peak gain (dBi)	-1.30



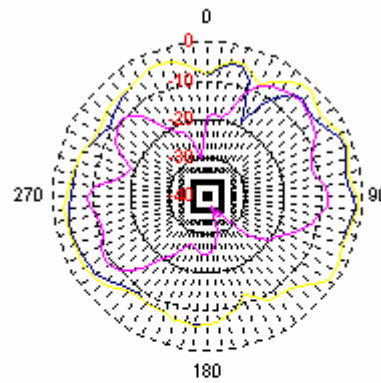
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Centre Frequency	1909.8 MHz
Horizontal peak gain (dBi)	-1.81
Vertical peak gain (dBi)	-5.02
Hori + Vert peak gain (dBi)	-1.05



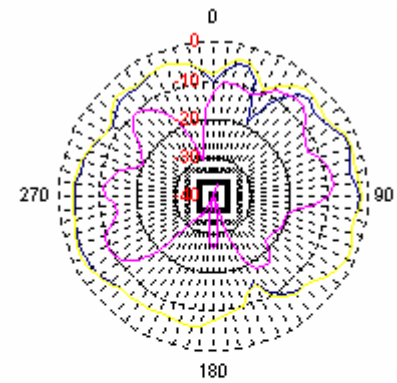
— Hor — Ver — Total

Centre Frequency	1930.2 MHz
Horizontal peak gain (dBi)	-1.85
Vertical peak gain (dBi)	-5.15
Hori + Vert peak gain (dBi)	-1.30



— Hor — Ver — Total

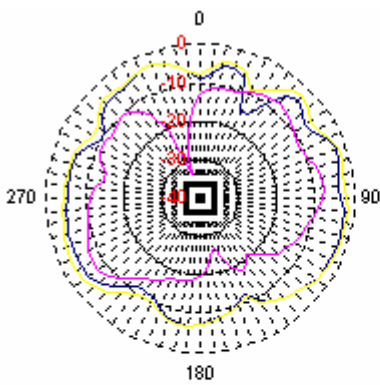
Centre Frequency	1960 MHz
Horizontal peak gain (dBi)	-1.64
Vertical peak gain (dBi)	-5.61
Hori + Vert peak gain (dBi)	-0.92



— Hor — Ver — Total

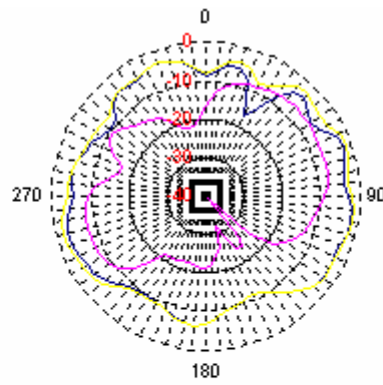
Centre Frequency	1989.8 MHz
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-6.98
Hori + Vert peak gain (dBi)	-1.35

1920-2170MHz radiation characteristic



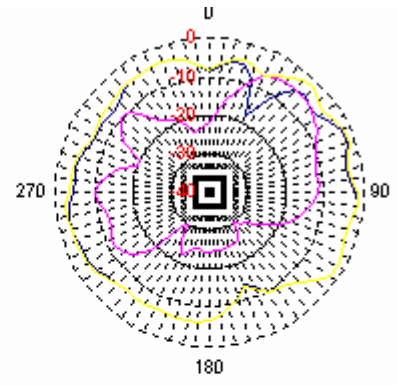
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Centre Frequency	1922.4MHz
Horizontal peak gain (dBi)	-2.47
Vertical peak gain (dBi)	-7.57
Hori + Vert peak gain (dBi)	-1.78



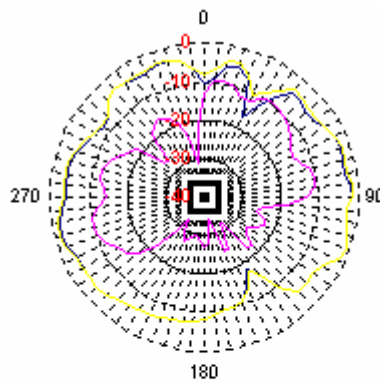
— Hor — Ver — Total

Centre Frequency	1950MHz
Horizontal peak gain (dBi)	-1.92
Vertical peak gain (dBi)	-6.92
Hori + Vert peak gain (dBi)	-0.94



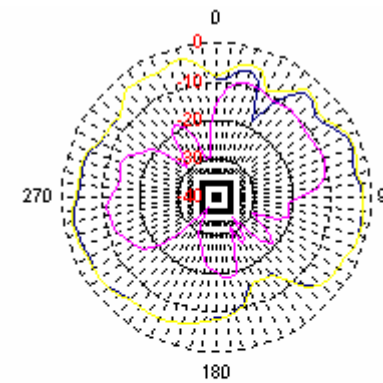
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Centre Frequency	1977.6MHz
Horizontal peak gain (dBi)	-1.64
Vertical peak gain (dBi)	-5.02
Hori + Vert peak gain (dBi)	-1.33



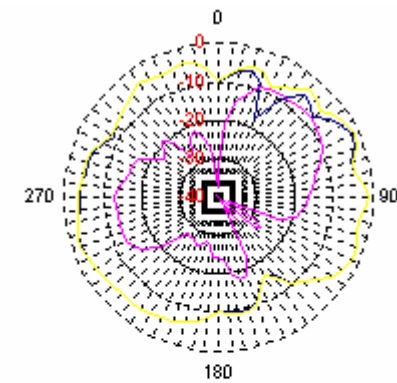
— Hor — Ver — Total

Centre Frequency	2112.4MHz
Horizontal peak gain (dBi)	-0.63
Vertical peak gain (dBi)	-9.52
Hori + Vert peak gain (dBi)	-0.61



— Hor — Ver — Total

Centre Frequency	2140 MHz
Horizontal peak gain (dBi)	-1.76
Vertical peak gain (dBi)	-9.12
Hori + Vert peak gain (dBi)	-1.71

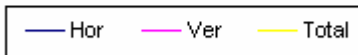
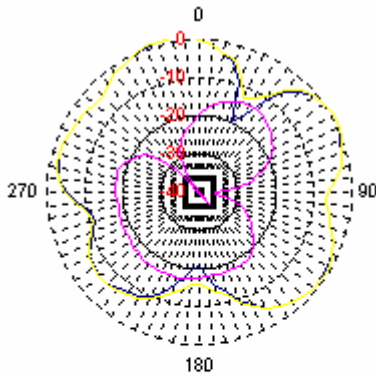


— Hor — Ver — Total

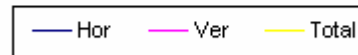
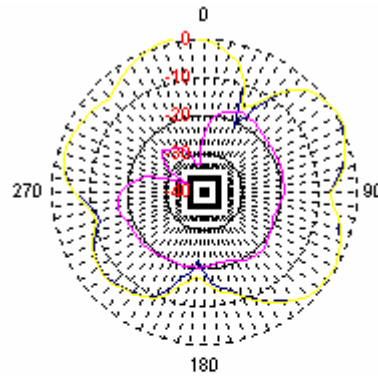
Centre Frequency	2167.6MHz
Horizontal peak gain (dBi)	-1.25
Vertical peak gain (dBi)	-8.46
Hori + Vert peak gain (dBi)	-0.92

**Main antenna (Tablet mode with antenna positioned at 180-degree):**

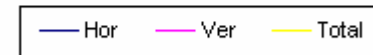
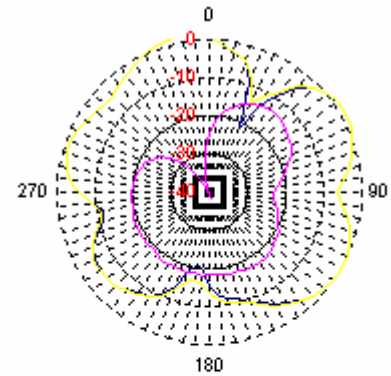
824-894MHz radiation characteristic



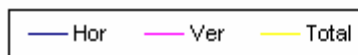
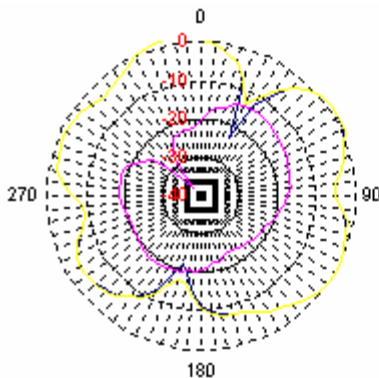
<b>Centre Frequency</b>	<b>824.2 MHz</b>
Horizontal peak gain (dBi)	1.12
Vertical peak gain (dBi)	-13.64
Hori + Vert peak gain (dBi)	1.13



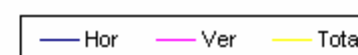
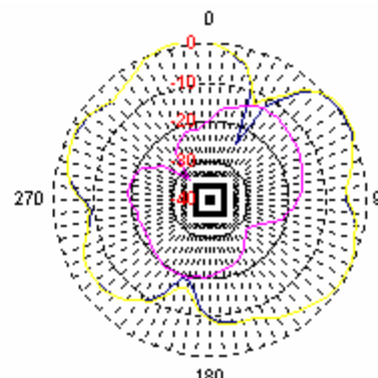
<b>Centre Frequency</b>	<b>836.6 MHz</b>
Horizontal peak gain (dBi)	1.00
Vertical peak gain (dBi)	-17.03
Hori + Vert peak gain (dBi)	1.01



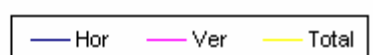
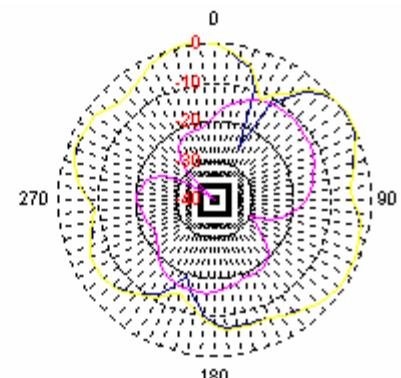
<b>Centre Frequency</b>	<b>848.8 MHz</b>
Horizontal peak gain (dBi)	1.37
Vertical peak gain (dBi)	-13.05
Hori + Vert peak gain (dBi)	1.37



<b>Centre Frequency</b>	<b>869.2 MHz</b>
Horizontal peak gain (dBi)	1.48
Vertical peak gain (dBi)	-13.82
Hori + Vert peak gain (dBi)	1.49

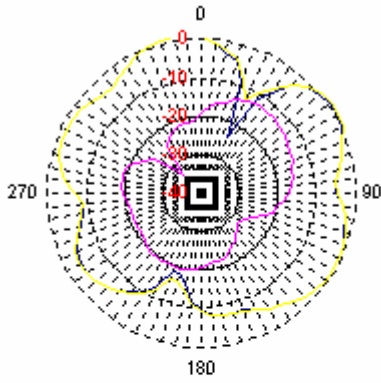


<b>Centre Frequency</b>	<b>881.6 MHz</b>
Horizontal peak gain (dBi)	1.16
Vertical peak gain (dBi)	-12.76
Hori + Vert peak gain (dBi)	1.18



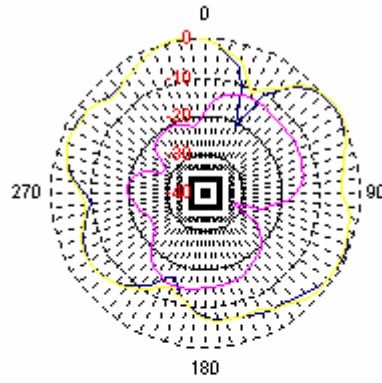
<b>Centre Frequency</b>	<b>893.8 MHz</b>
Horizontal peak gain (dBi)	0.45
Vertical peak gain (dBi)	-11.05
Hori + Vert peak gain (dBi)	0.51

880-960MHz radiation characteristic



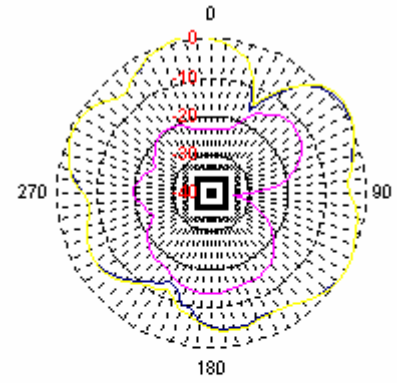
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>880.2 MHz</b>
Horizontal peak gain (dBi)	1.16
Vertical peak gain (dBi)	-12.76
Hori + Vert peak gain (dBi)	1.18



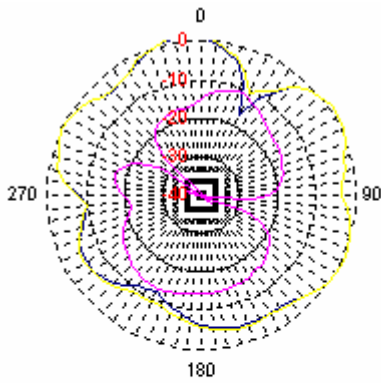
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>897.4 MHz</b>
Horizontal peak gain (dBi)	0.65
Vertical peak gain (dBi)	-12.71
Hori + Vert peak gain (dBi)	0.51



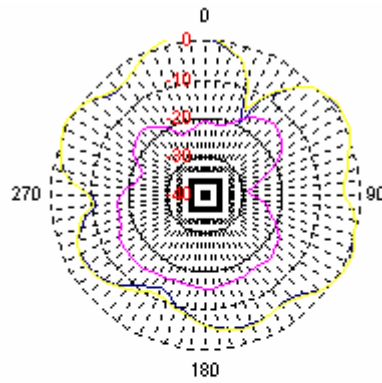
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>914.8 MHz</b>
Horizontal peak gain (dBi)	1.14
Vertical peak gain (dBi)	-12.22
Hori + Vert peak gain (dBi)	1.33



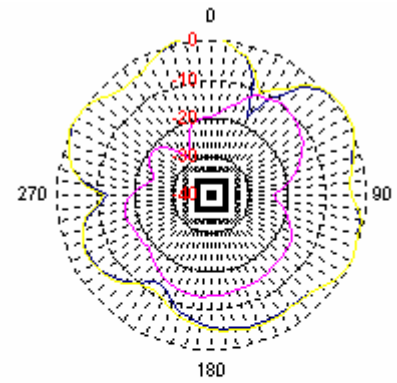
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>925.2 MHz</b>
Horizontal peak gain (dBi)	1.36
Vertical peak gain (dBi)	-11.65
Hori + Vert peak gain (dBi)	1.43



— Hor — Ver — Total

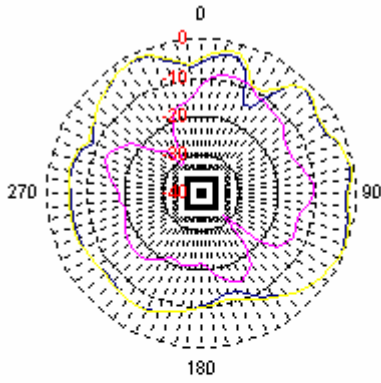
<b>Centre Frequency</b>	<b>942.4 MHz</b>
Horizontal peak gain (dBi)	1.53
Vertical peak gain (dBi)	-14.64
Hori + Vert peak gain (dBi)	1.55



— Hor — Ver — Total

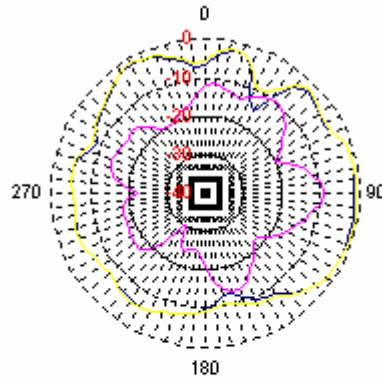
<b>Centre Frequency</b>	<b>958.8 MHz</b>
Horizontal peak gain (dBi)	1.37
Vertical peak gain (dBi)	-10.19
Hori + Vert peak gain (dBi)	1.40

1710-1880MHz radiation characteristic



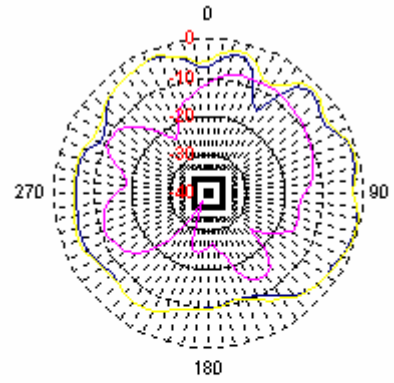
— Hor — Ver — Total

Centre Frequency	1710.2 MHz
Horizontal peak gain (dBi)	-0.38
Vertical peak gain (dBi)	-8.65
Hori + Vert peak gain (dBi)	-0.19



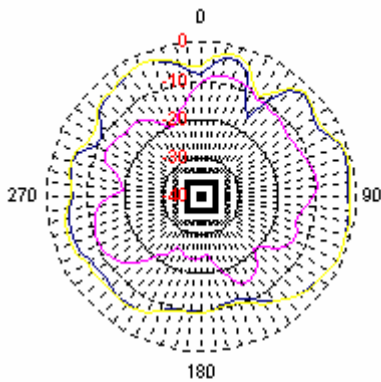
— Hor — Ver — Total

Centre Frequency	1747.4 MHz
Horizontal peak gain (dBi)	-0.89
Vertical peak gain (dBi)	-9.37
Hori + Vert peak gain (dBi)	-0.62



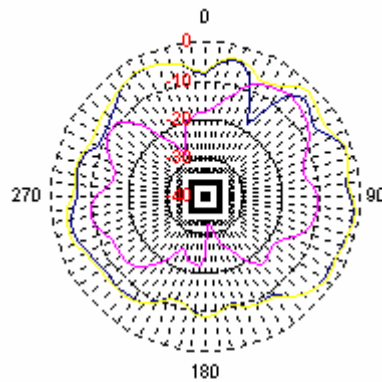
— Hor — Ver — Total

Centre Frequency	1784.8 MHz
Horizontal peak gain (dBi)	-0.70
Vertical peak gain (dBi)	-8.08
Hori + Vert peak gain (dBi)	-0.57



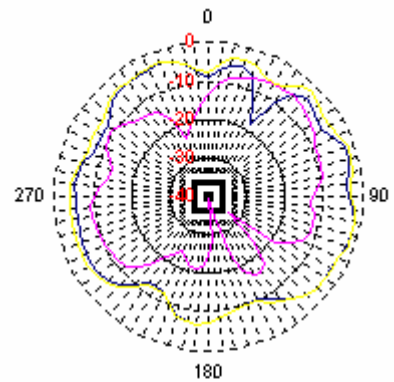
— Hor — Ver — Total

Centre Frequency	1805.2 MHz
Horizontal peak gain (dBi)	-1.02
Vertical peak gain (dBi)	-8.18
Hori + Vert peak gain (dBi)	-0.76



— Hor — Ver — Total

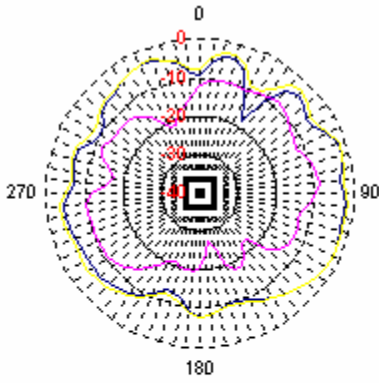
Centre Frequency	1842.4 MHz
Horizontal peak gain (dBi)	-1.68
Vertical peak gain (dBi)	-5.91
Hori + Vert peak gain (dBi)	-1.17



— Hor — Ver — Total

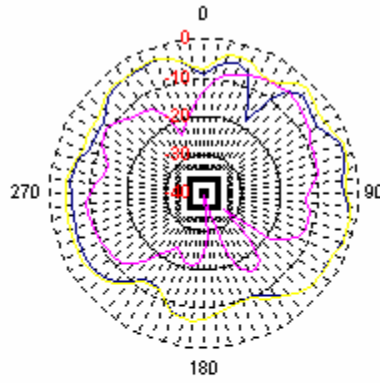
Centre Frequency	1897.8 MHz
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-5.95
Hori + Vert peak gain (dBi)	-1.30

1850-1990MHz radiation characteristic



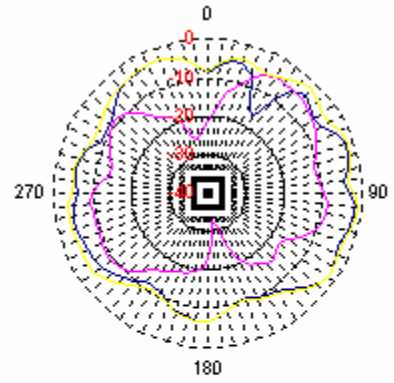
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1850.2 MHz</b>
Horizontal peak gain (dBi)	-1.76
Vertical peak gain (dBi)	-8.74
Hori + Vert peak gain (dBi)	-1.43



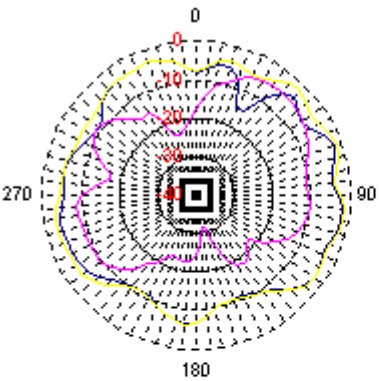
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1880 MHz</b>
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-5.95
Hori + Vert peak gain (dBi)	-1.30



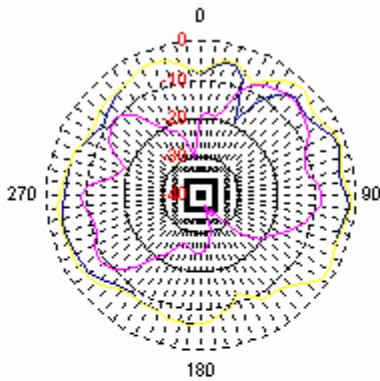
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1909.8 MHz</b>
Horizontal peak gain (dBi)	-1.81
Vertical peak gain (dBi)	-5.02
Hori + Vert peak gain (dBi)	-1.05



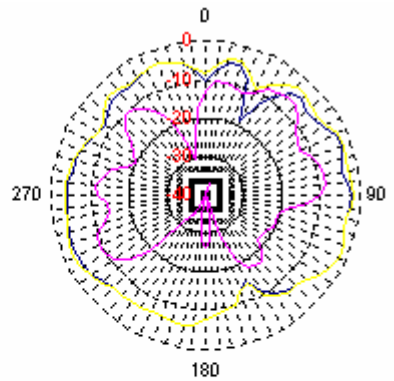
— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1930.2 MHz</b>
Horizontal peak gain (dBi)	-1.85
Vertical peak gain (dBi)	-5.15
Hori + Vert peak gain (dBi)	-1.30



— Hor — Ver — Total

<b>Centre Frequency</b>	<b>1960 MHz</b>
Horizontal peak gain (dBi)	-1.64
Vertical peak gain (dBi)	-5.61
Hori + Vert peak gain (dBi)	-0.92

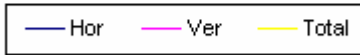
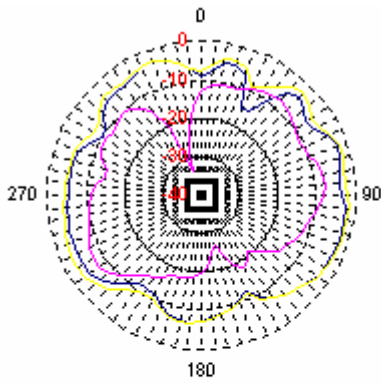


— Hor — Ver — Total

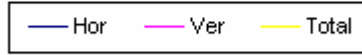
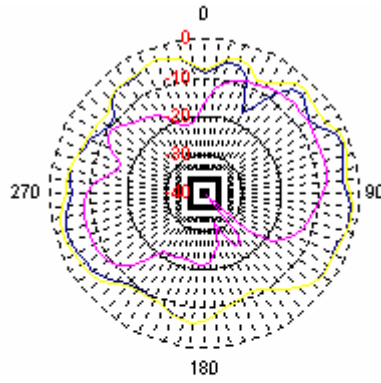
<b>Centre Frequency</b>	<b>1989.8 MHz</b>
Horizontal peak gain (dBi)	-1.67
Vertical peak gain (dBi)	-6.98
Hori + Vert peak gain (dBi)	-1.35



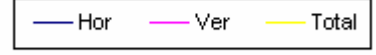
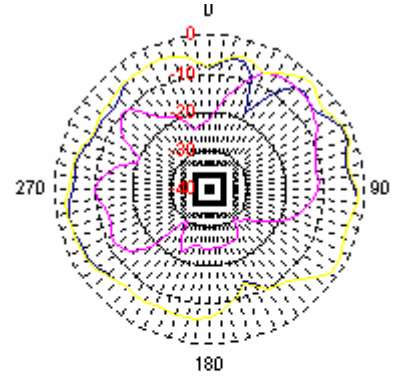
1920-2170MHz radiation characteristic



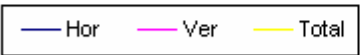
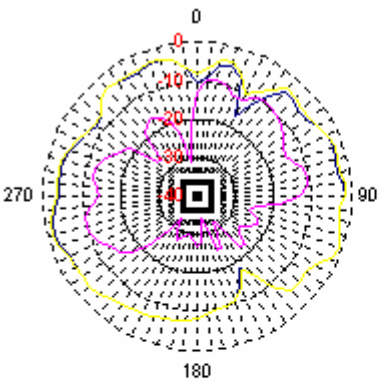
Centre Frequency	1922.4MHz
Horizontal peak gain (dBi)	-2.47
Vertical peak gain (dBi)	-7.57
Hori + Vert peak gain (dBi)	-1.78



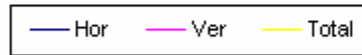
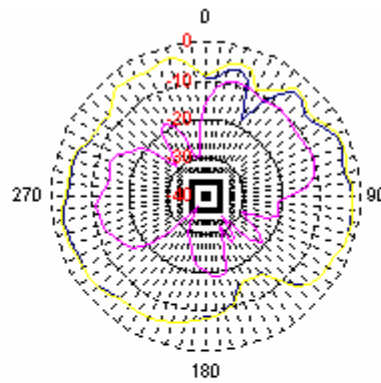
Centre Frequency	1950MHz
Horizontal peak gain (dBi)	-1.92
Vertical peak gain (dBi)	-6.92
Hori + Vert peak gain (dBi)	-0.94



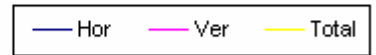
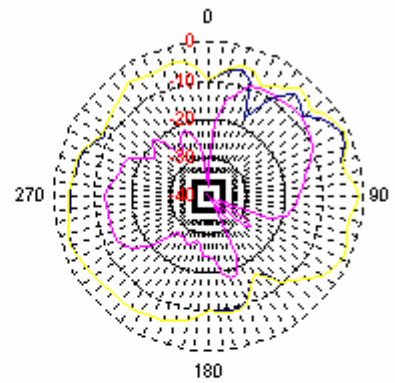
Centre Frequency	1977.6MHz
Horizontal peak gain (dBi)	-1.64
Vertical peak gain (dBi)	-5.02
Hori + Vert peak gain (dBi)	-1.33



Centre Frequency	2112.4MHz
Horizontal peak gain (dBi)	-0.63
Vertical peak gain (dBi)	-9.52
Hori + Vert peak gain (dBi)	-0.61



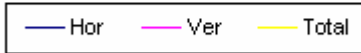
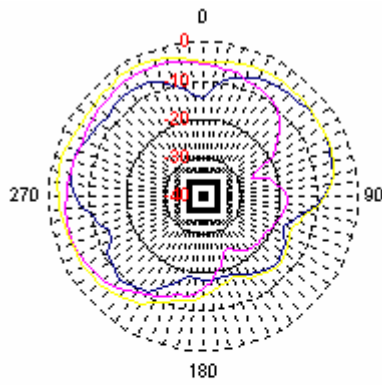
Centre Frequency	2140 MHz
Horizontal peak gain (dBi)	-1.76
Vertical peak gain (dBi)	-9.12
Hori + Vert peak gain (dBi)	-1.71



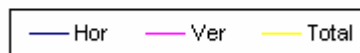
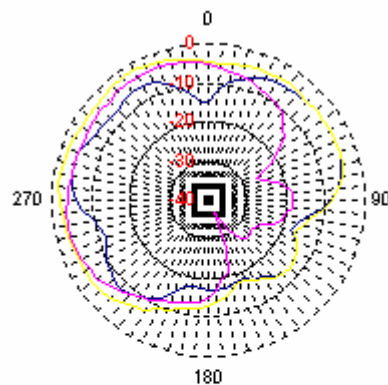
Centre Frequency	2167.6MHz
Horizontal peak gain (dBi)	-1.25
Vertical peak gain (dBi)	-8.46
Hori + Vert peak gain (dBi)	-0.92

## Diversity antenna (Laptop mode):

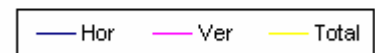
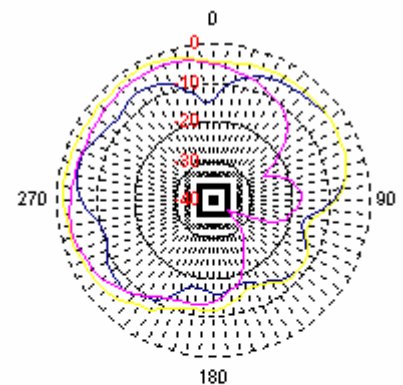
### 869-894MHz radiation characteristic



Centre Frequency	869.2 MHz
Horizontal peak gain (dBi)	-4.70
Vertical peak gain (dBi)	-4.00
Hori + Vert peak gain (dBi)	-2.08

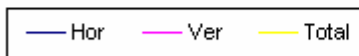
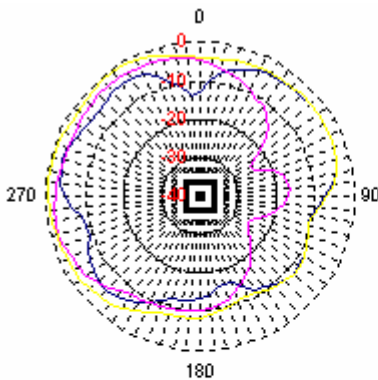


Centre Frequency	881.6 MHz
Horizontal peak gain (dBi)	-3.99
Vertical peak gain (dBi)	-3.61
Hori + Vert peak gain (dBi)	-1.53

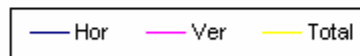
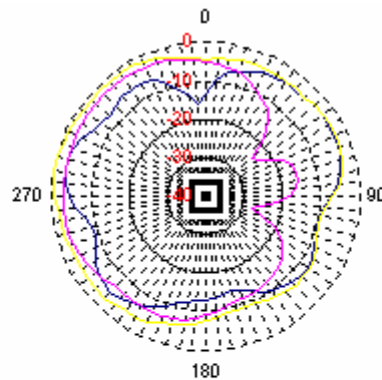


Centre Frequency	893.8 MHz
Horizontal peak gain (dBi)	-3.80
Vertical peak gain (dBi)	-2.99
Hori + Vert peak gain (dBi)	-1.35

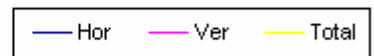
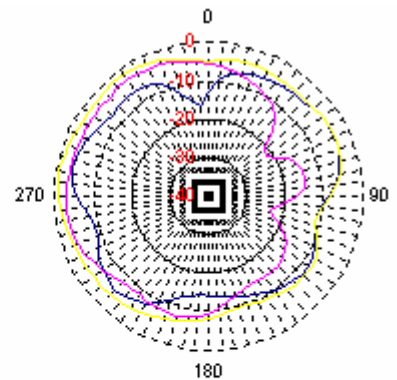
### 925-960MHz radiation characteristic



Centre Frequency	925.2 MHz
Horizontal peak gain (dBi)	-2.48
Vertical peak gain (dBi)	-2.11
Hori + Vert peak gain (dBi)	-0.32

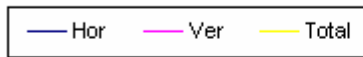
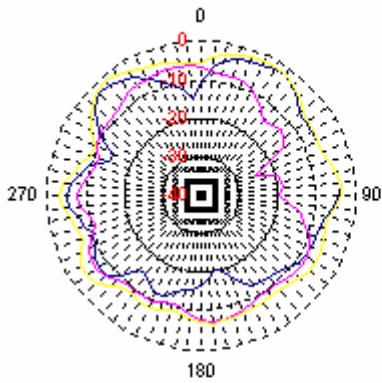


Centre Frequency	942.4 MHz
Horizontal peak gain (dBi)	-2.88
Vertical peak gain (dBi)	-2.36
Hori + Vert peak gain (dBi)	-0.15

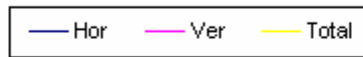
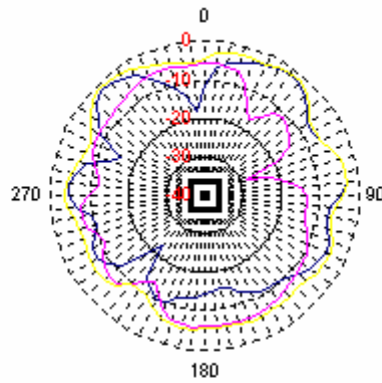


Centre Frequency	958.8 MHz
Horizontal peak gain (dBi)	-3.99
Vertical peak gain (dBi)	-3.07
Hori + Vert peak gain (dBi)	-0.75

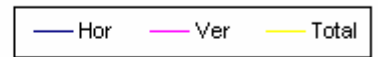
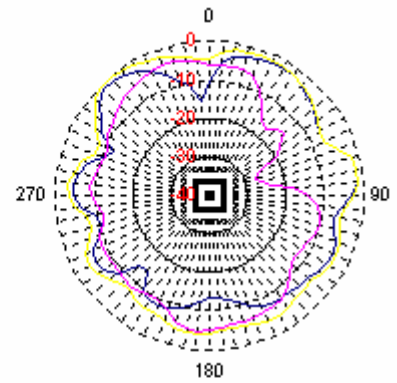
**1805-1880MHz radiation characteristic**



Centre Frequency	1805.2 MHz
Horizontal peak gain (dBi)	-2.22
Vertical peak gain (dBi)	-6.19
Hori + Vert peak gain (dBi)	-1.37

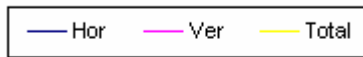
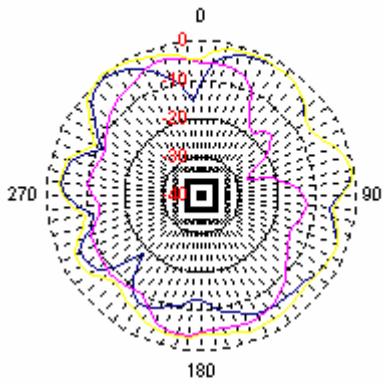


Centre Frequency	1842.4 MHz
Horizontal peak gain (dBi)	-1.59
Vertical peak gain (dBi)	-5.63
Hori + Vert peak gain (dBi)	-0.90

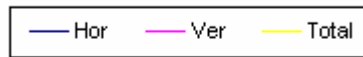
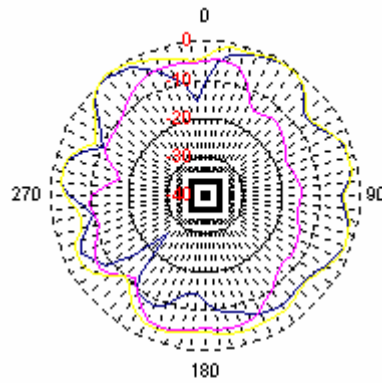


Centre Frequency	1897.8 MHz
Horizontal peak gain (dBi)	-0.89
Vertical peak gain (dBi)	-4.29
Hori + Vert peak gain (dBi)	0.18

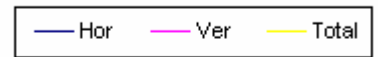
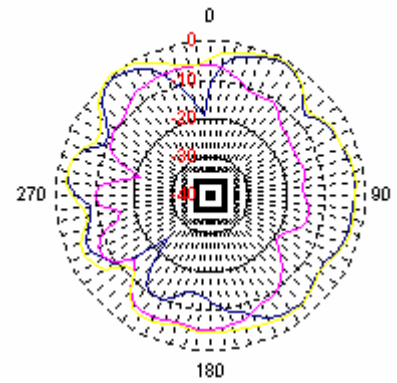
**1930-1990MHz radiation characteristic**



Centre Frequency	1930.2 MHz
Horizontal peak gain (dBi)	-0.45
Vertical peak gain (dBi)	-3.66
Hori + Vert peak gain (dBi)	0.43

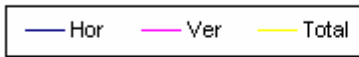
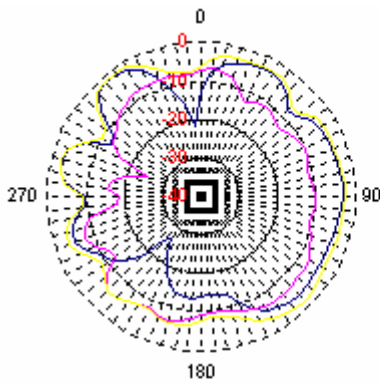


Centre Frequency	1960 MHz
Horizontal peak gain (dBi)	-0.21
Vertical peak gain (dBi)	-4.06
Hori + Vert peak gain (dBi)	0.40

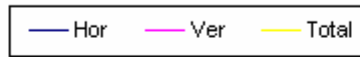
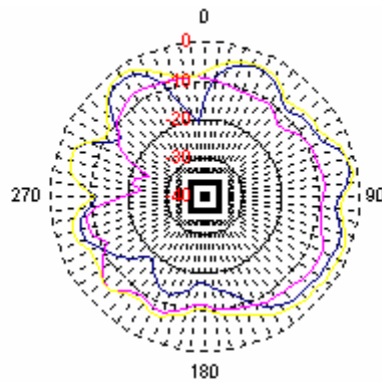


Centre Frequency	1989.8 MHz
Horizontal peak gain (dBi)	-0.50
Vertical peak gain (dBi)	-5.16
Hori + Vert peak gain (dBi)	0.28

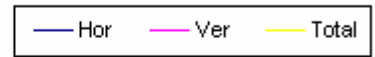
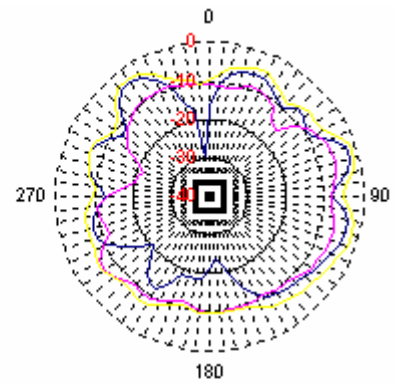
2110-2170MHz radiation characteristic



Centre Frequency	2112.4MHz
Horizontal peak gain (dBi)	-1.51
Vertical peak gain (dBi)	-5.60
Hori + Vert peak gain (dBi)	-0.82



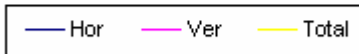
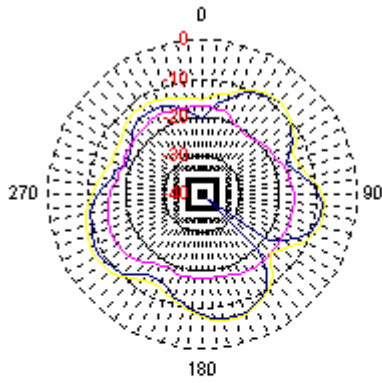
Centre Frequency	2140 MHz
Horizontal peak gain (dBi)	-2.05
Vertical peak gain (dBi)	-5.84
Hori + Vert peak gain (dBi)	-1.26



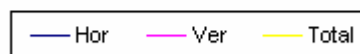
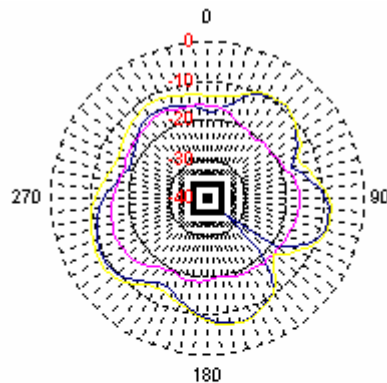
Centre Frequency	2167.6MHz
Horizontal peak gain (dBi)	-2.69
Vertical peak gain (dBi)	-6.46
Hori + Vert peak gain (dBi)	-1.17

## Diversity antenna (Tablet mode):

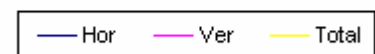
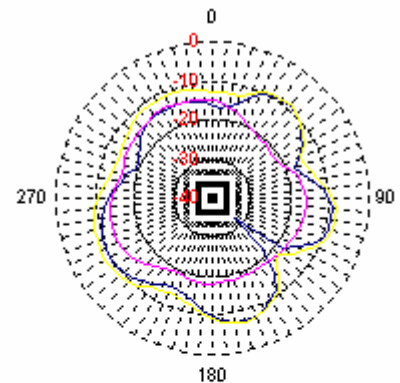
### 869-894MHz radiation characteristic



Centre Frequency	869.2 MHz
Horizontal peak gain (dBi)	-7.22
Vertical peak gain (dBi)	-14.26
Hori + Vert peak gain (dBi)	-6.87

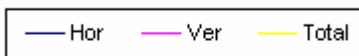
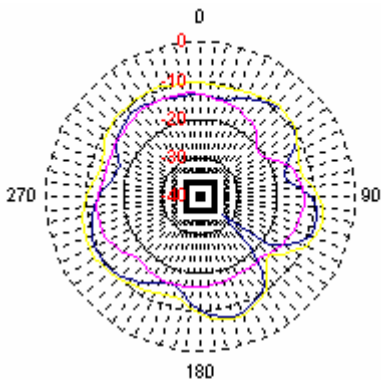


Centre Frequency	881.6 MHz
Horizontal peak gain (dBi)	-7.40
Vertical peak gain (dBi)	-14.55
Hori + Vert peak gain (dBi)	-7.14

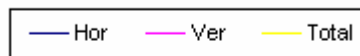
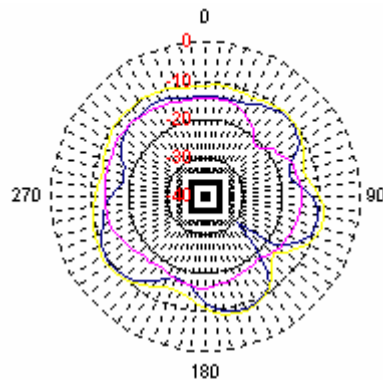


Centre Frequency	893.8 MHz
Horizontal peak gain (dBi)	-7.67
Vertical peak gain (dBi)	-13.30
Hori + Vert peak gain (dBi)	-7.34

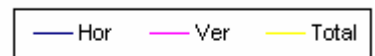
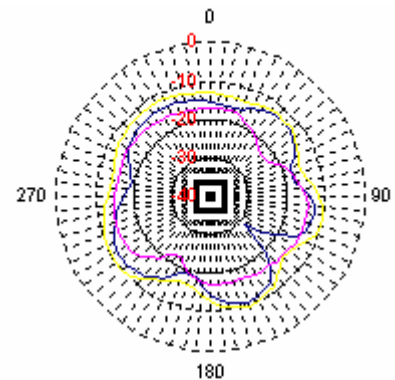
### 925-960MHz radiation characteristic



Centre Frequency	925.2 MHz
Horizontal peak gain (dBi)	-7.97
Vertical peak gain (dBi)	-12.73
Hori + Vert peak gain (dBi)	-7.45

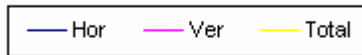
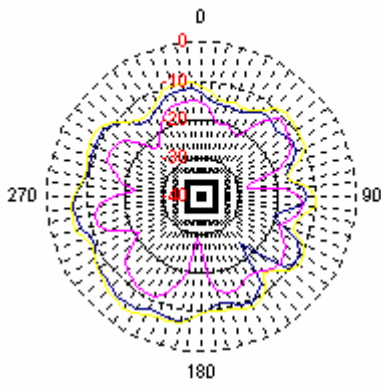


Centre Frequency	942.4 MHz
Horizontal peak gain (dBi)	-8.99
Vertical peak gain (dBi)	-13.15
Hori + Vert peak gain (dBi)	-8.46

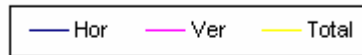
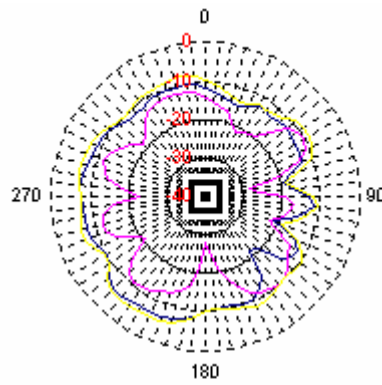


Centre Frequency	958.8 MHz
Horizontal peak gain (dBi)	-10.97
Vertical peak gain (dBi)	-14.31
Hori + Vert peak gain (dBi)	-10.03

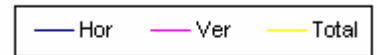
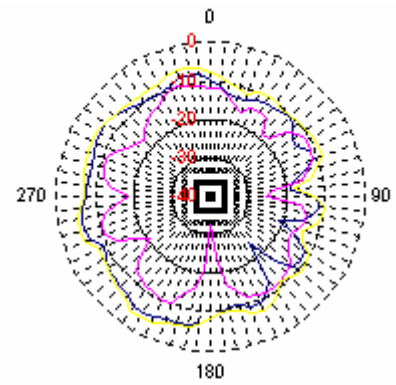
**1805-1880MHz radiation characteristic**



Centre Frequency	1805.2 MHz
Horizontal peak gain (dBi)	-6.06
Vertical peak gain (dBi)	-10.97
Hori + Vert peak gain (dBi)	-4.92

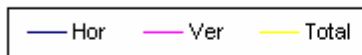
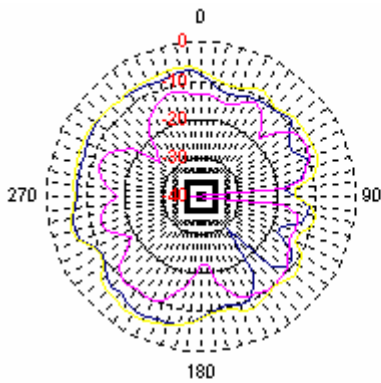


Centre Frequency	1842.4 MHz
Horizontal peak gain (dBi)	-6.30
Vertical peak gain (dBi)	-10.47
Hori + Vert peak gain (dBi)	-4.96

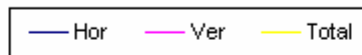
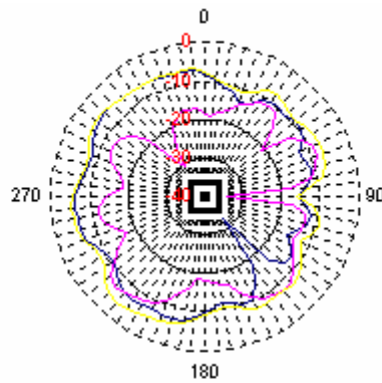


Centre Frequency	1897.8 MHz
Horizontal peak gain (dBi)	-4.99
Vertical peak gain (dBi)	-10.37
Hori + Vert peak gain (dBi)	-4.03

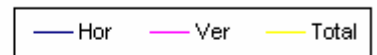
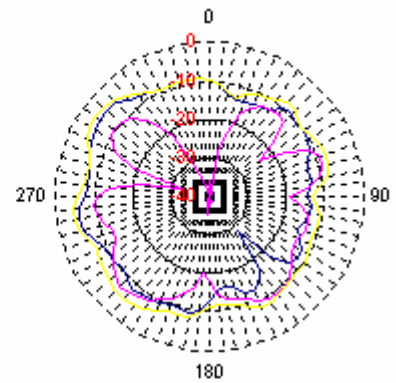
**1930-1990MHz radiation characteristic**



Centre Frequency	1930.2 MHz
Horizontal peak gain (dBi)	-5.79
Vertical peak gain (dBi)	-9.66
Hori + Vert peak gain (dBi)	-4.52

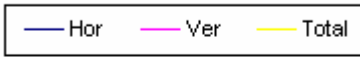
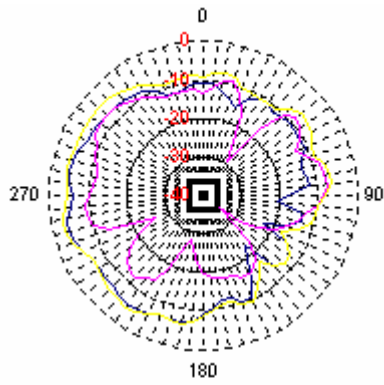


Centre Frequency	1960 MHz
Horizontal peak gain (dBi)	-6.25
Vertical peak gain (dBi)	-6.90
Hori + Vert peak gain (dBi)	-4.22

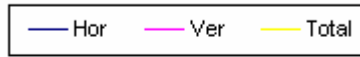
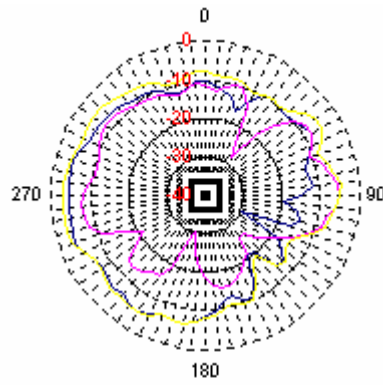


Centre Frequency	1989.8 MHz
Horizontal peak gain (dBi)	-5.25
Vertical peak gain (dBi)	-7.37
Hori + Vert peak gain (dBi)	-3.99

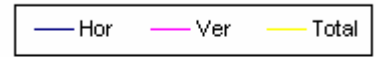
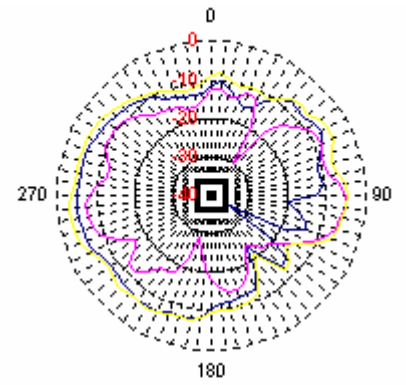
2110-2170MHz radiation characteristic



Centre Frequency	2112.4MHz
Horizontal peak gain (dBi)	-4.04
Vertical peak gain (dBi)	-7.53
Hori + Vert peak gain (dBi)	-3.11



Centre Frequency	2140 MHz
Horizontal peak gain (dBi)	-4.35
Vertical peak gain (dBi)	-5.44
Hori + Vert peak gain (dBi)	-2.95



Centre Frequency	2167.6MHz
Horizontal peak gain (dBi)	-5.08
Vertical peak gain (dBi)	-5.13
Hori + Vert peak gain (dBi)	-3.05

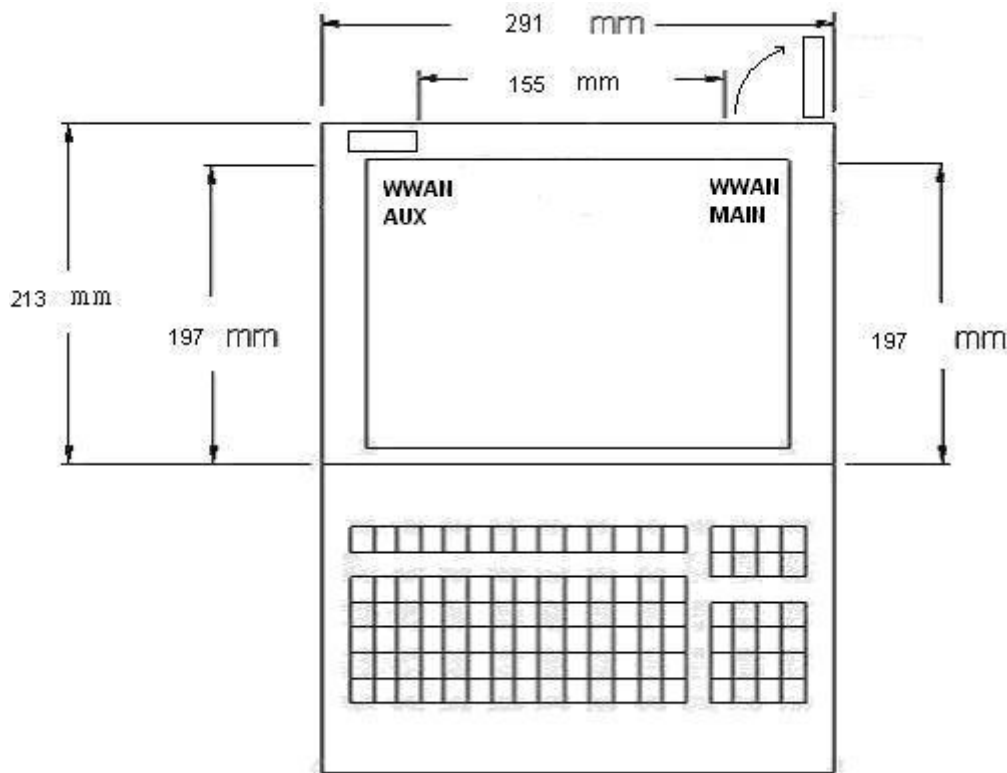
## Section 4. Host Platform Information

OEM / ODM Host platform: platform correlated to antenna data  
Rating Label Photo:



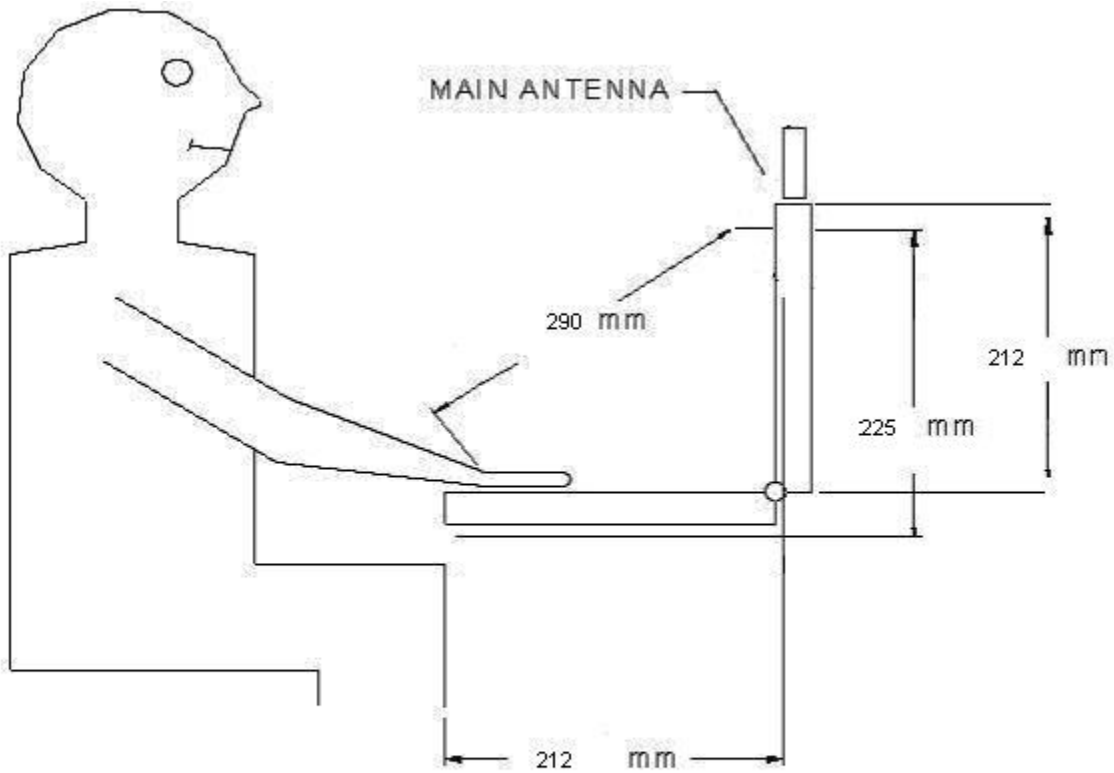
## Section 5. Antenna Host Platform Location Information

Include a **dimensioned photo or dimensioned drawing** of Main and AUX antenna placements. (Not applicable for receive-only antenna)



## Section 6. Antenna dimensional information for SAR evaluation

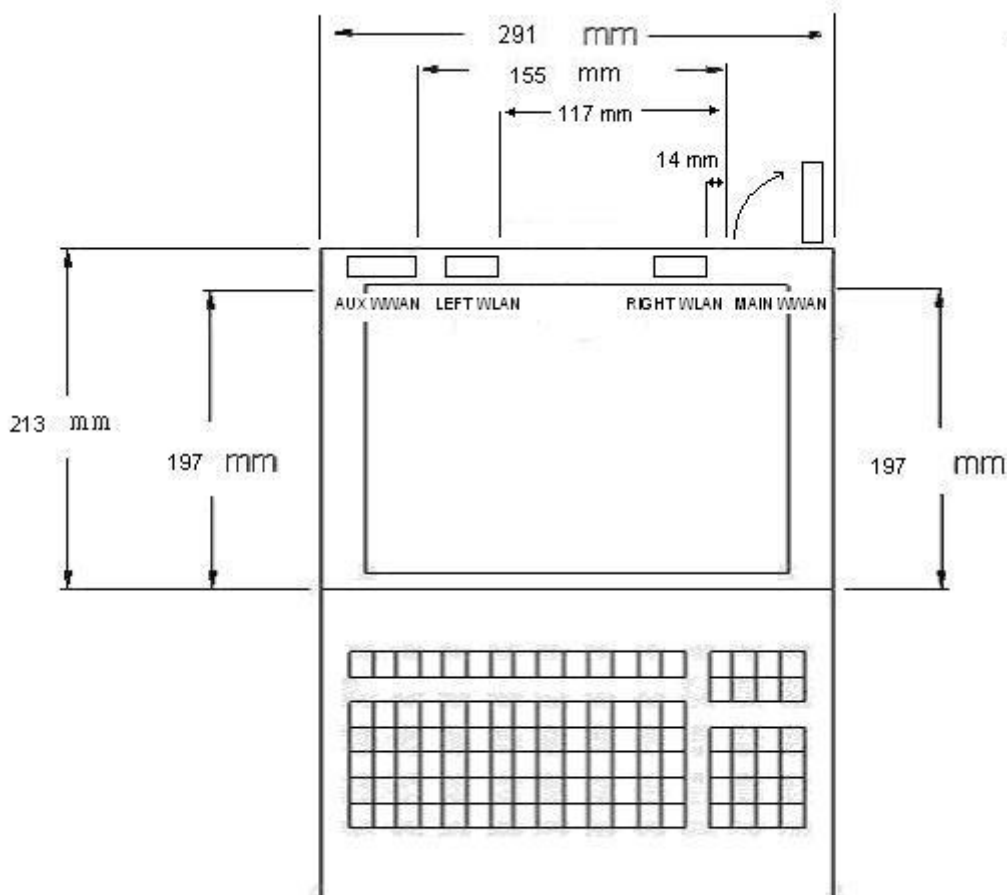
Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, lap/ thigh, and ankle)



## Section 7. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between all WWAN 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
Taiwan	Amphenol	Claire Cheng	+886 3 3786960 - 152	+886 3 3786955	claire.cheng@amphenolmcp.com	