

Regulatory WWAN Antenna Information TMZ001 (Primary Antenna)

Toshiba Corporation

Section 1. Antenna Assembly Specifications

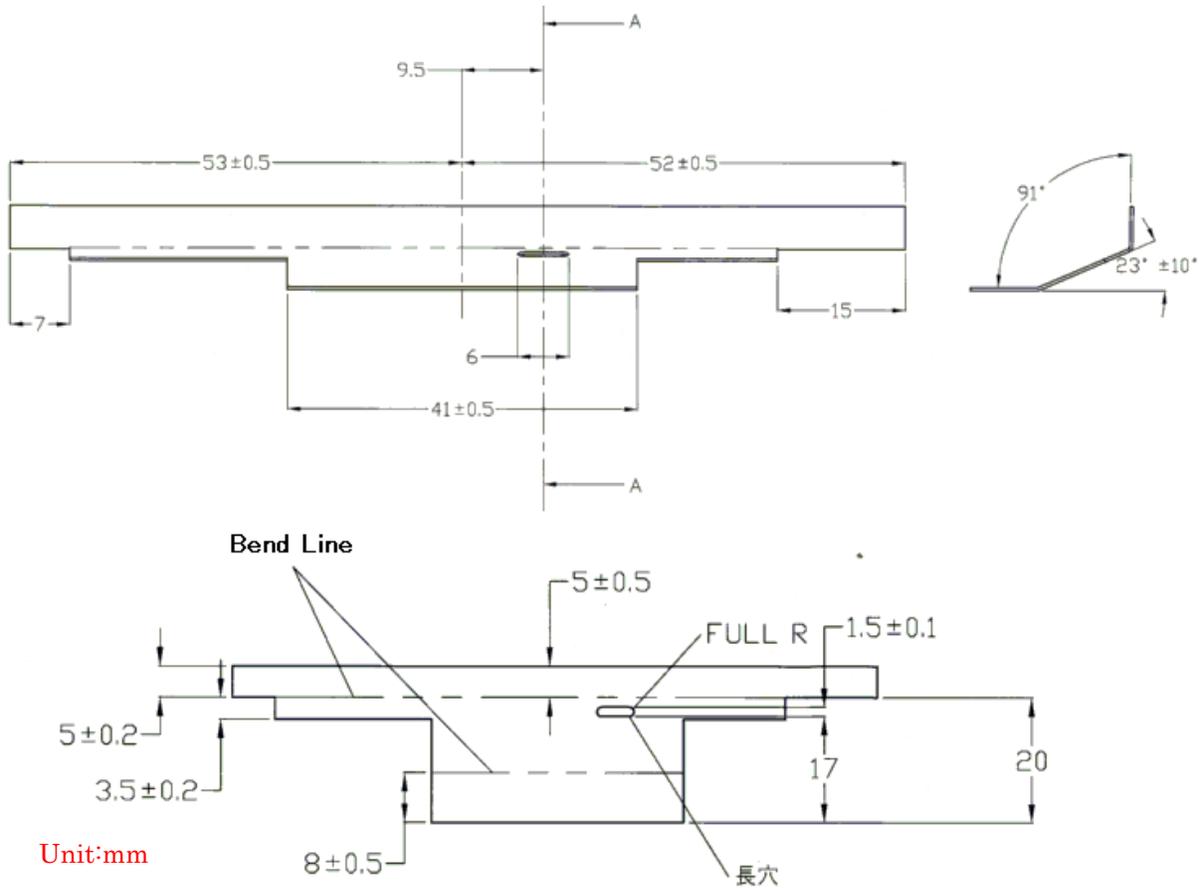
Antenna Assembly Summary:

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)
TMZ001	Tyco Electronics AMP K.K.	Monopole	P/N: TMZ001-*** 50 ohm Coaxial. length: 470mm diameter:1.33mm Connector: U.FL	824-848MHz 0.8 dBi (peak)
				869-893MHz -0.3 dBi (peak)
				1850-1909MHz 1.6 dBi (peak)
				1931-1988MHz 1.3 dBi (peak)

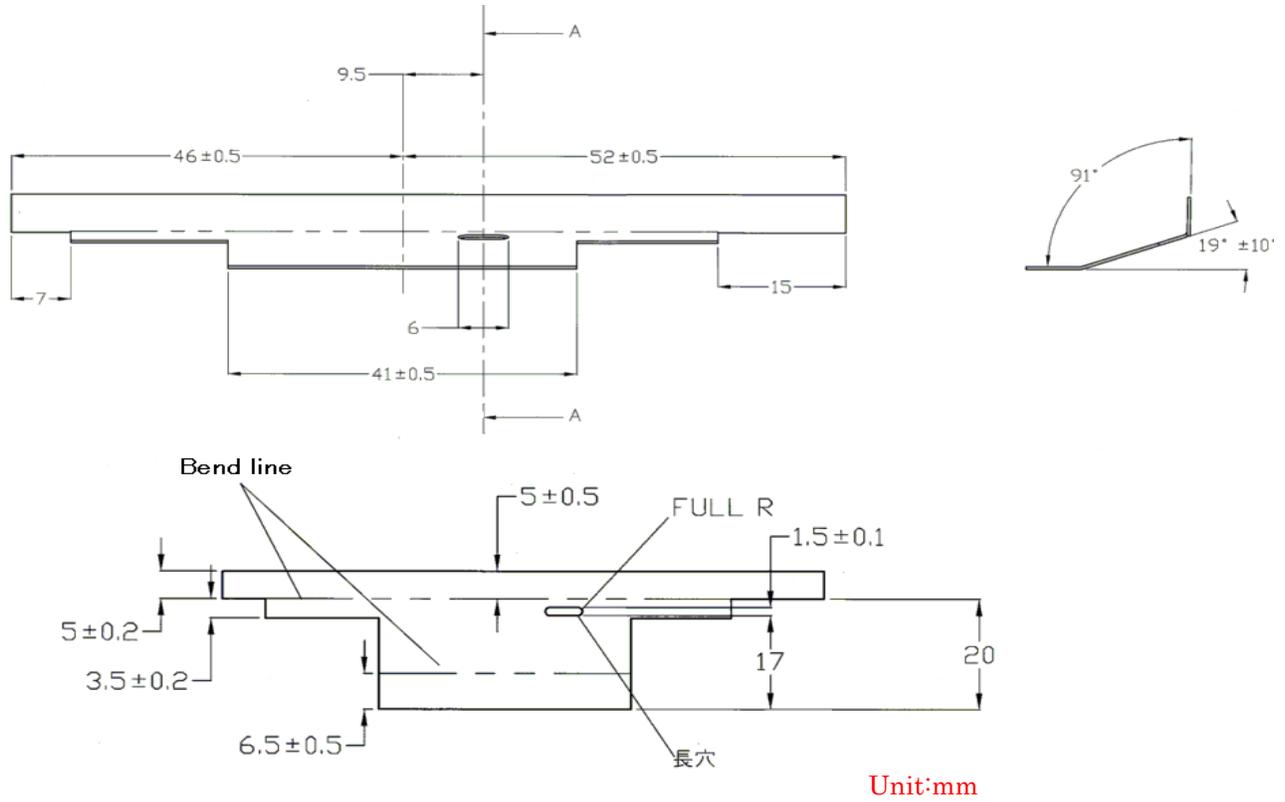
The function of secondary antenna is receiving only. The name of secondary antenna is "TMZ002".

Section 2. Dimensioned Photos or Drawings of Antennas

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



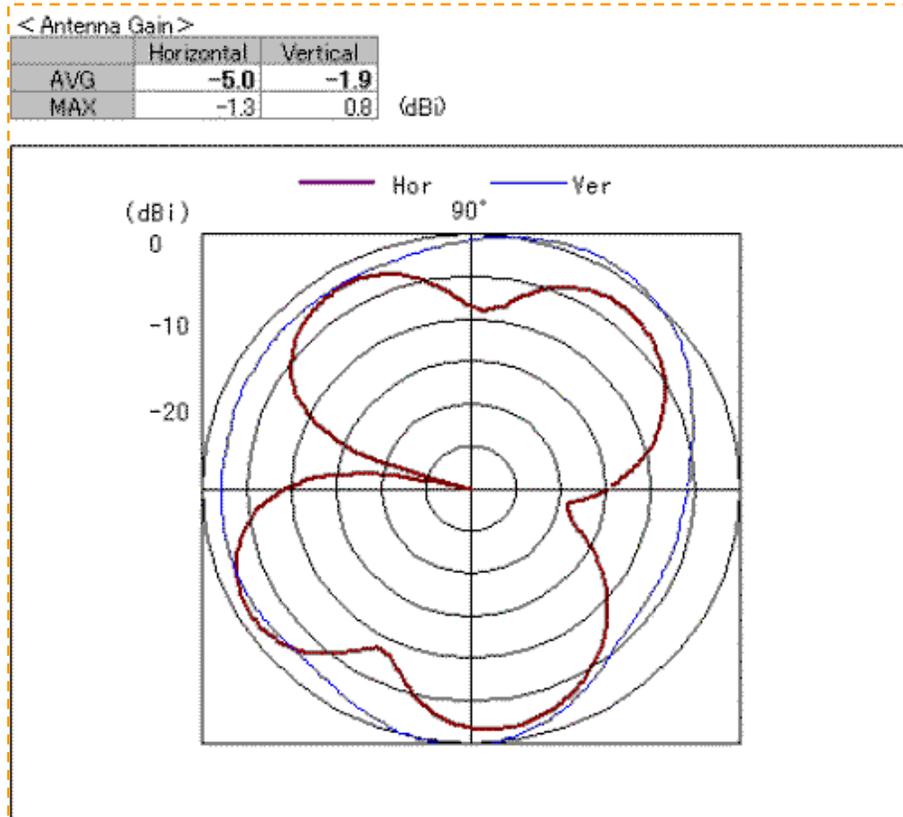
Include a dimensioned photo or dimensioned drawing of AUX antenna here.



Section 3. Radiation characteristics of antennae Loaded in Host Platform

Cellular Transmit Band radiation characteristic

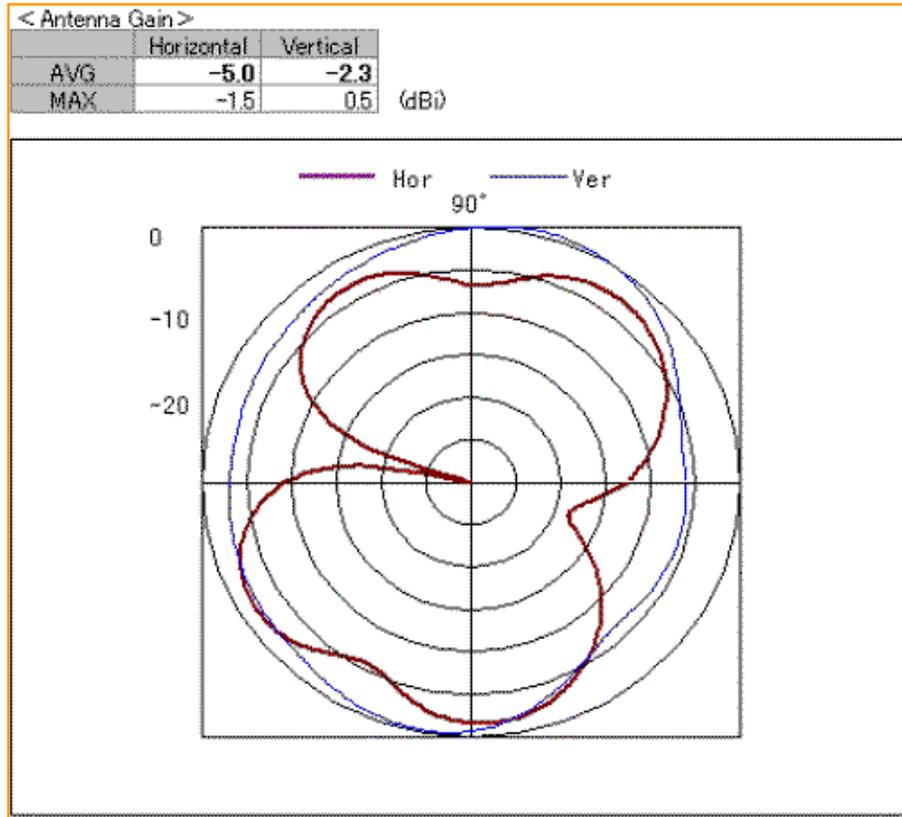
Primary antenna: 824.7 MHz (Low)



Center Frequency	824.7 MHz
Horizontal (dBi) peak	-1.3
Vertical (dBi) peak	0.8
Horz+Vert (dBi) peak	0.8

Cellular Transmit Band radiation characteristic

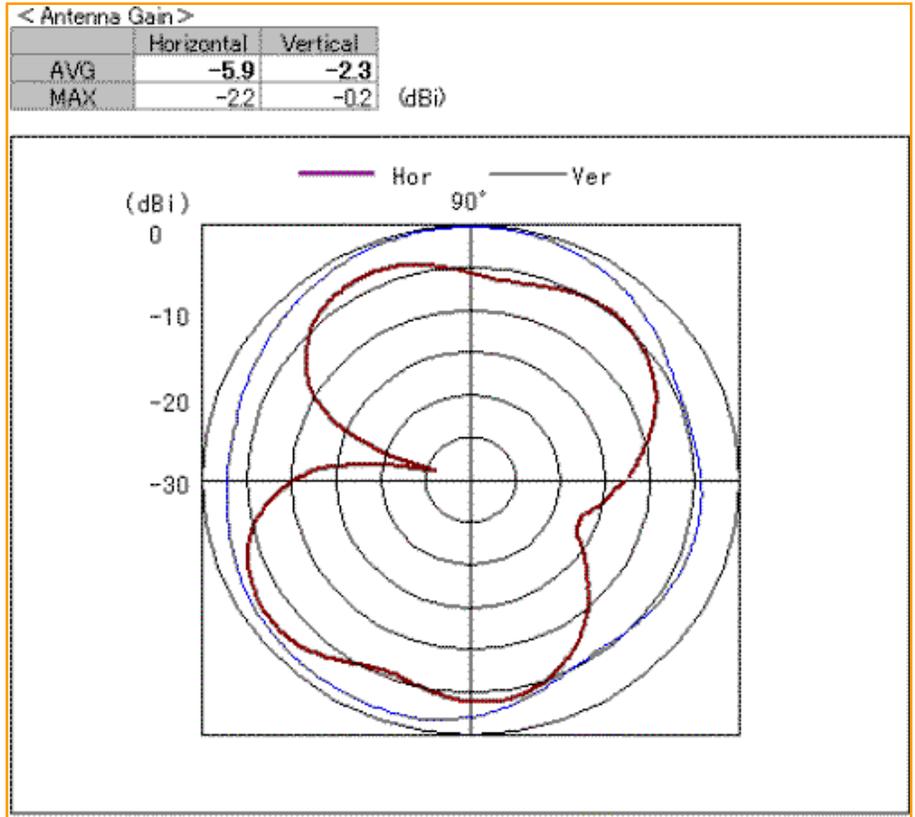
Primary antenna: 836.5 MHz (Mid)



Center Frequency	836.5 MHz
Horizontal (dBi) peak	-1.5
Vertical (dBi) peak	0.5
Horz+Vert (dBi) peak	0.5

Cellular Transmit Band radiation characteristic

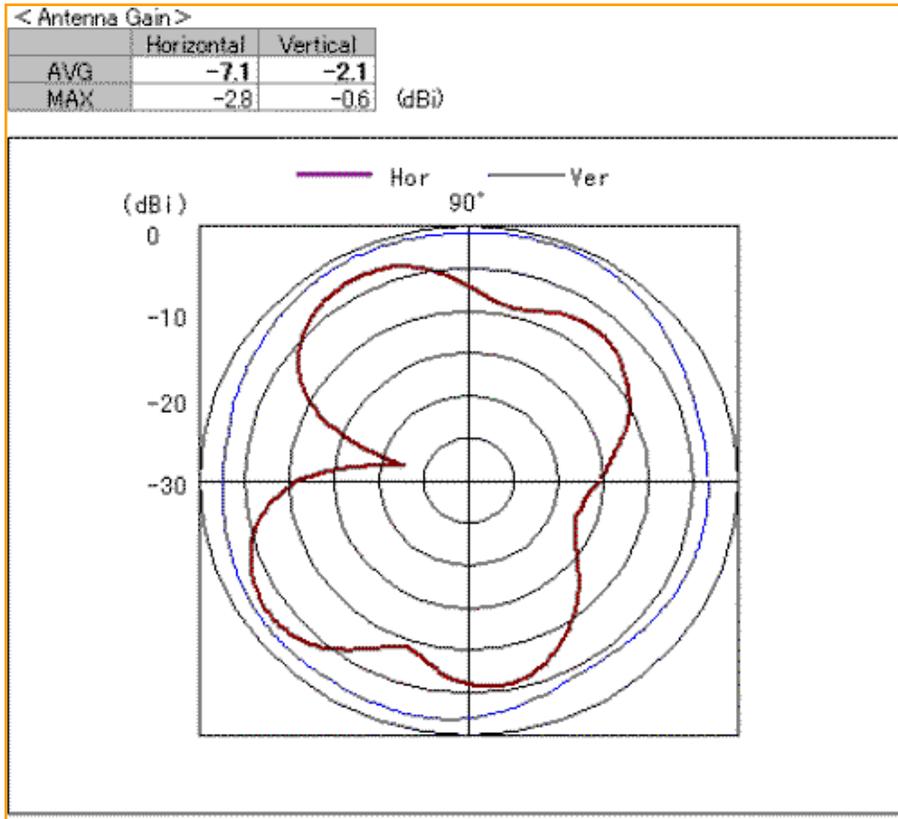
Primary antenna: 848.3 MHz (High)



Center Frequency	848.3 MHz
Horizontal (dBi) peak	-2.2
Vertical (dBi) peak	-0.2
Horz+Vert (dBi) peak	-0.2

Cellular Receive Band radiation characteristic

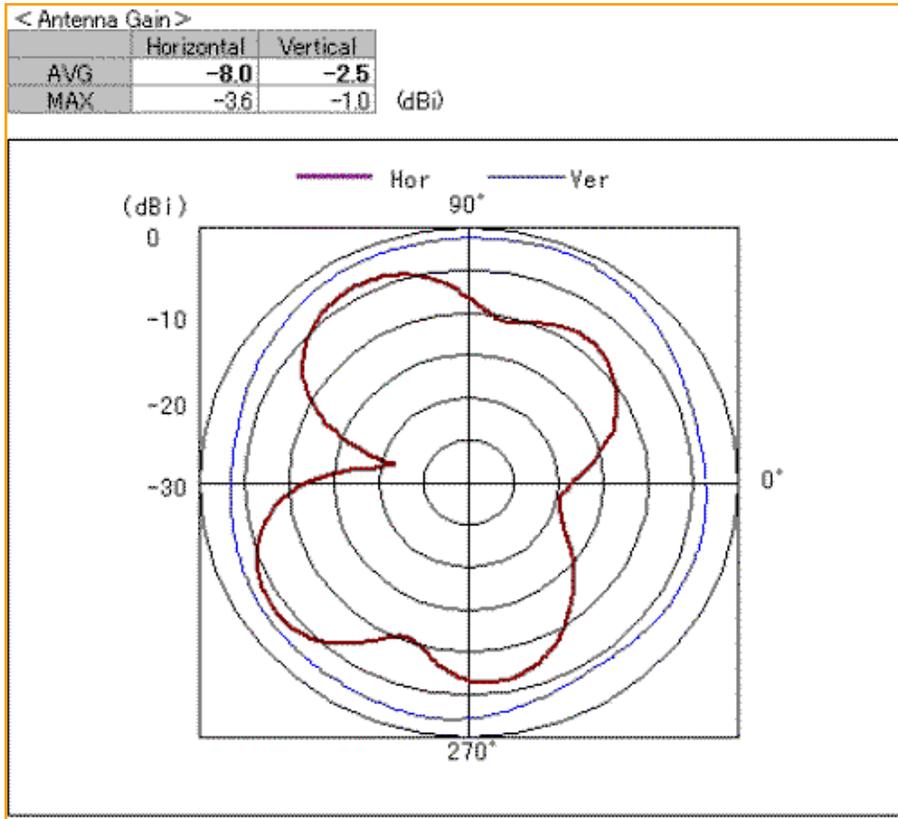
Primary antenna: 869.7 MHz (Low)



Center Frequency	869.7 MHz
Horizontal (dBi) peak	-2.8
Vertical (dBi) peak	-0.6
Horz+Vert (dBi) peak	-0.6

Cellular Receive Band radiation characteristic

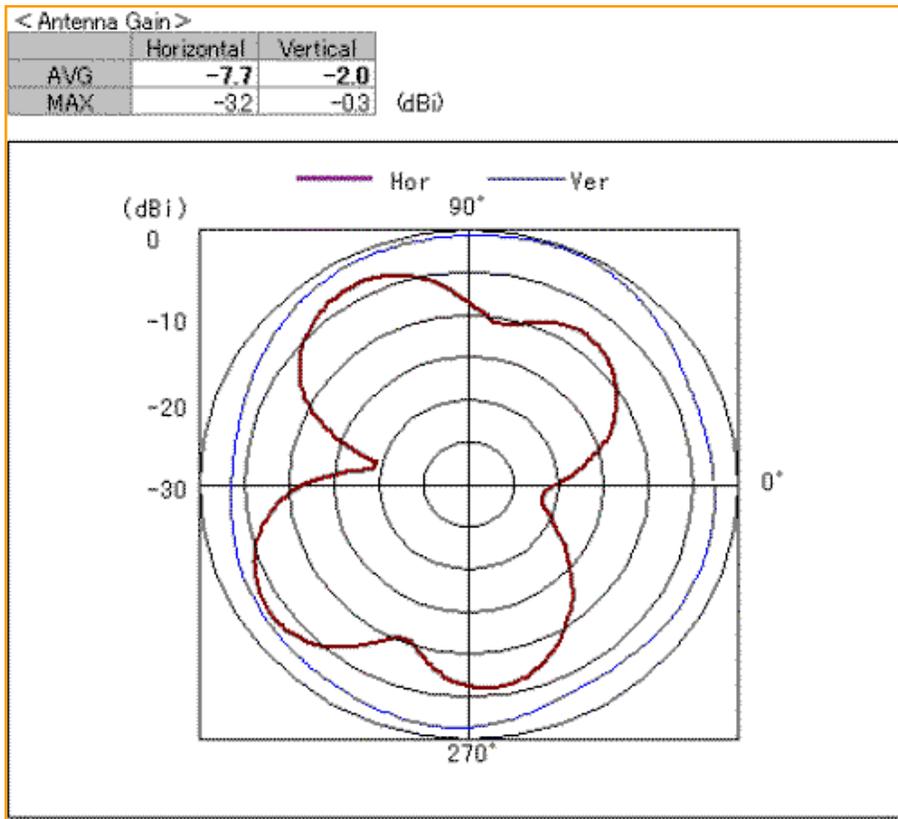
Primary antenna: 881.5 MHz (Mid)



Center Frequency	881.5 MHz
Horizontal (dBi) peak	-3.6
Vertical (dBi) peak	-1.0
Horz+Vert (dBi) peak	-1.0

Cellular Receive Band radiation characteristic

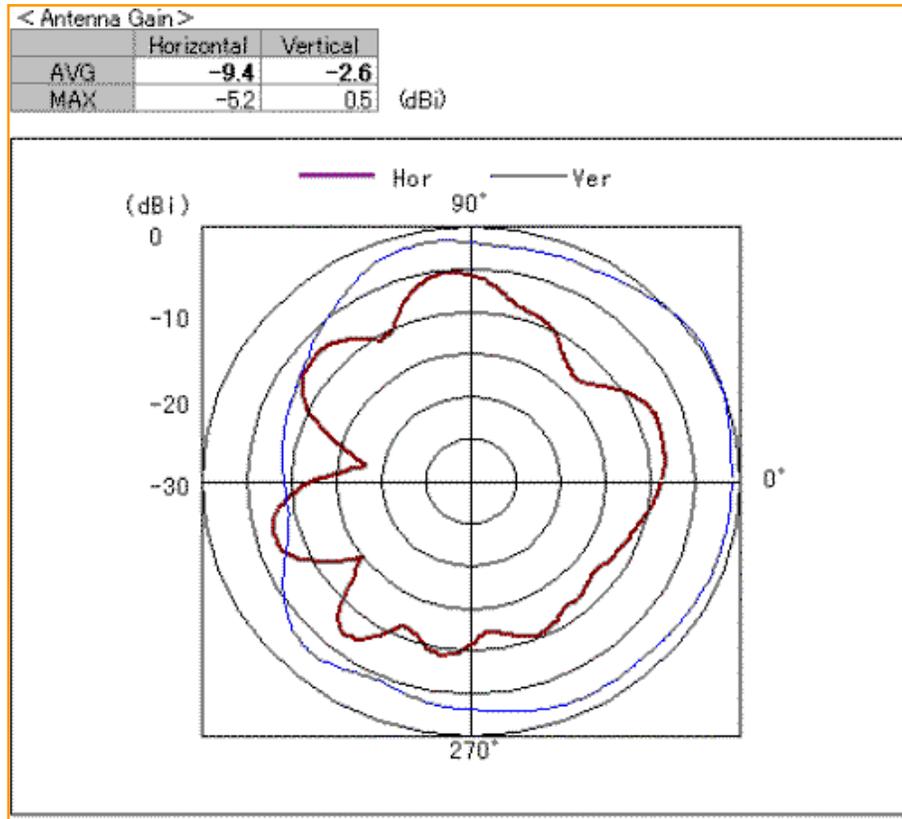
Primary antenna: 893.3 MHz (High)



Center Frequency	893.3 MHz
Horizontal (dBi) peak	-3.2
Vertical (dBi) peak	-0.3
Horz+Vert (dBi) peak	-0.3

PCS Transmit Band radiation characteristic

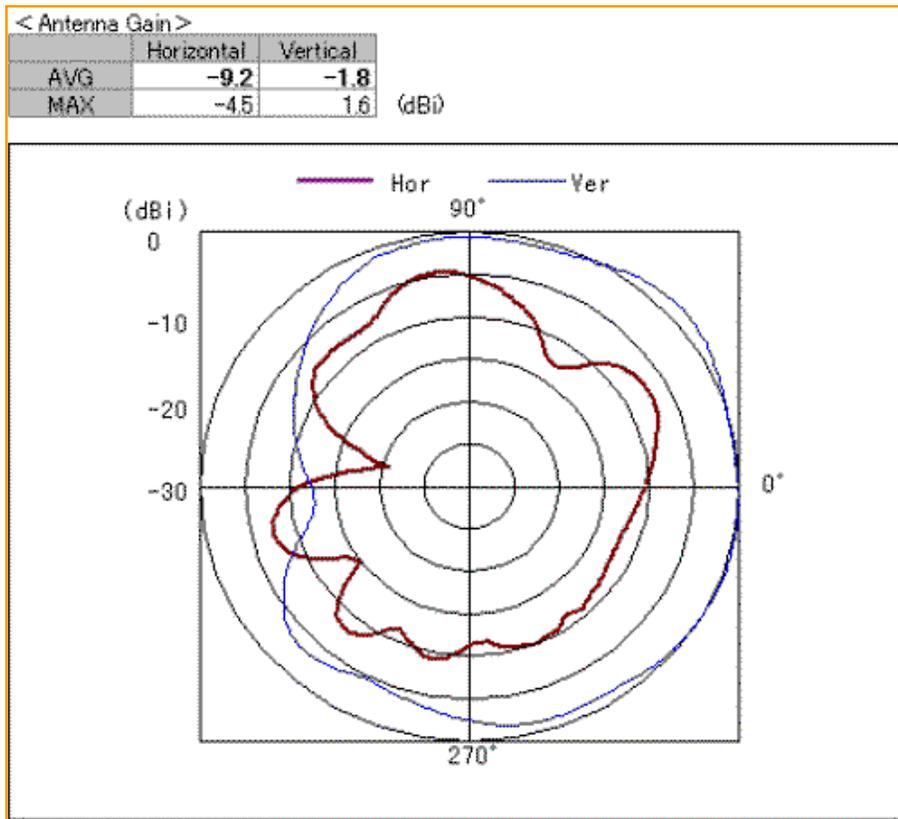
Primary antenna: 1850.2 MHz (Low)



Center Frequency	1850.2 MHz
Horizontal (dBi) peak	-5.2
Vertical (dBi) peak	0.5
Horz+Vert (dBi) peak	0.5

PCS Transmit Band radiation characteristic

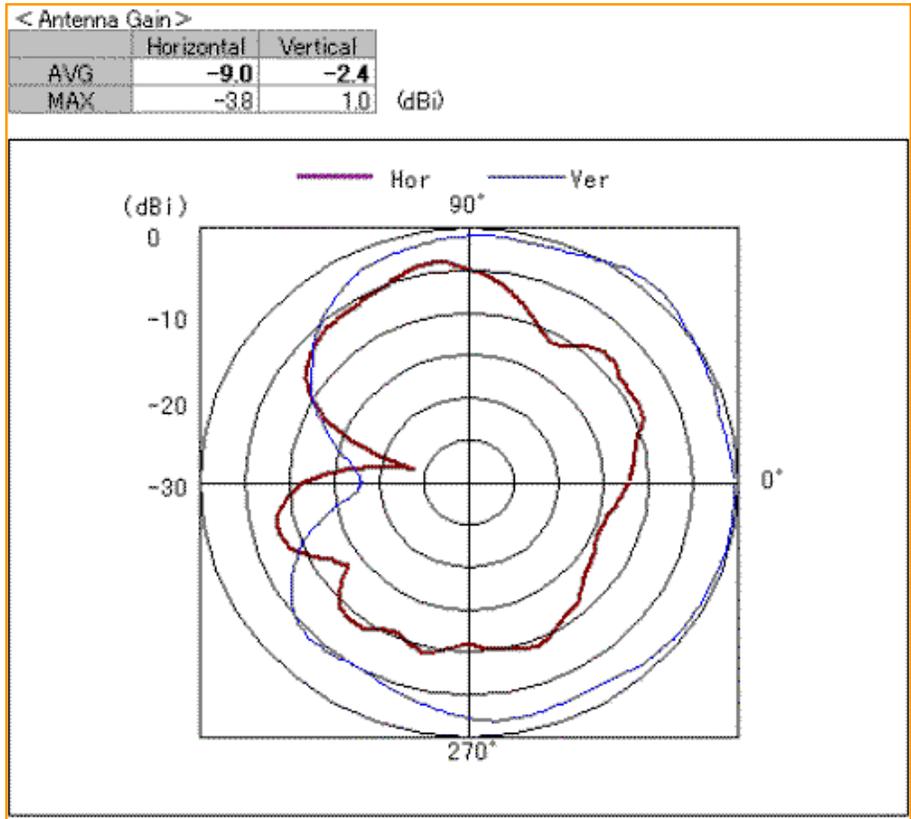
Primary antenna: 1880 MHz (Mid)



Center Frequency	1880 MHz
Horizontal (dBi) peak	-4.5
Vertical (dBi) peak	1.6
Horz+Vert (dBi) peak	1.6

PCS Transmit Band radiation characteristic

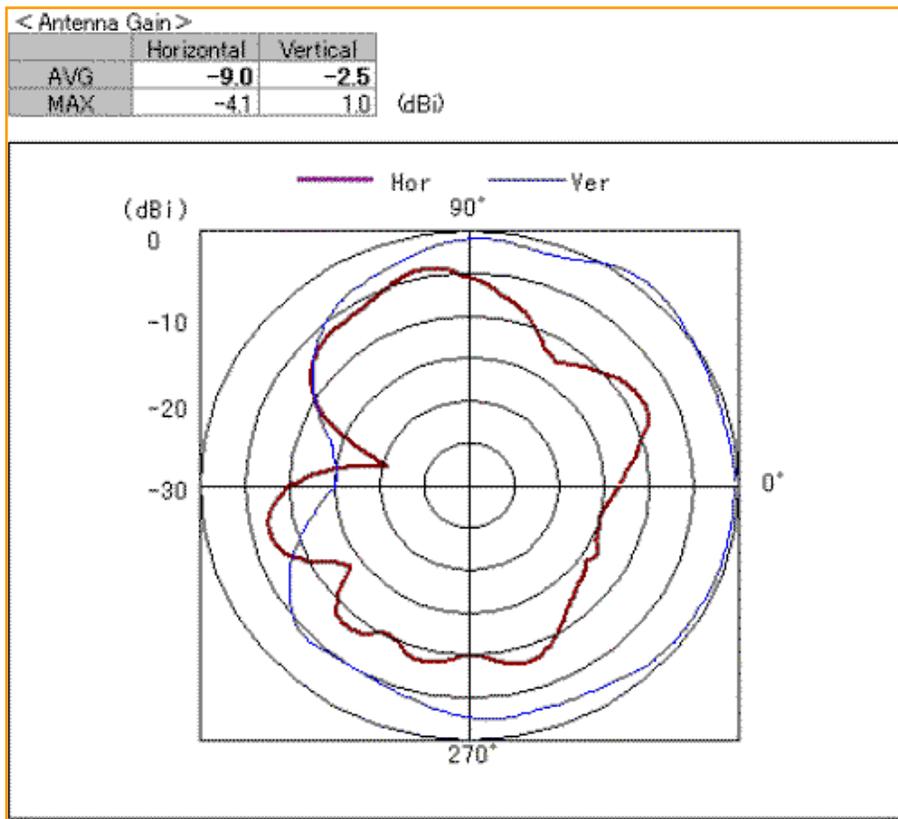
Primary antenna: 1909.8 MHz (High)



Center Frequency	1909.8 MHz
Horizontal (dBi) peak	-3.8
Vertical (dBi) peak	1.0
Horz+Vert (dBi) peak	1.0

PCS Receive Band radiation characteristic

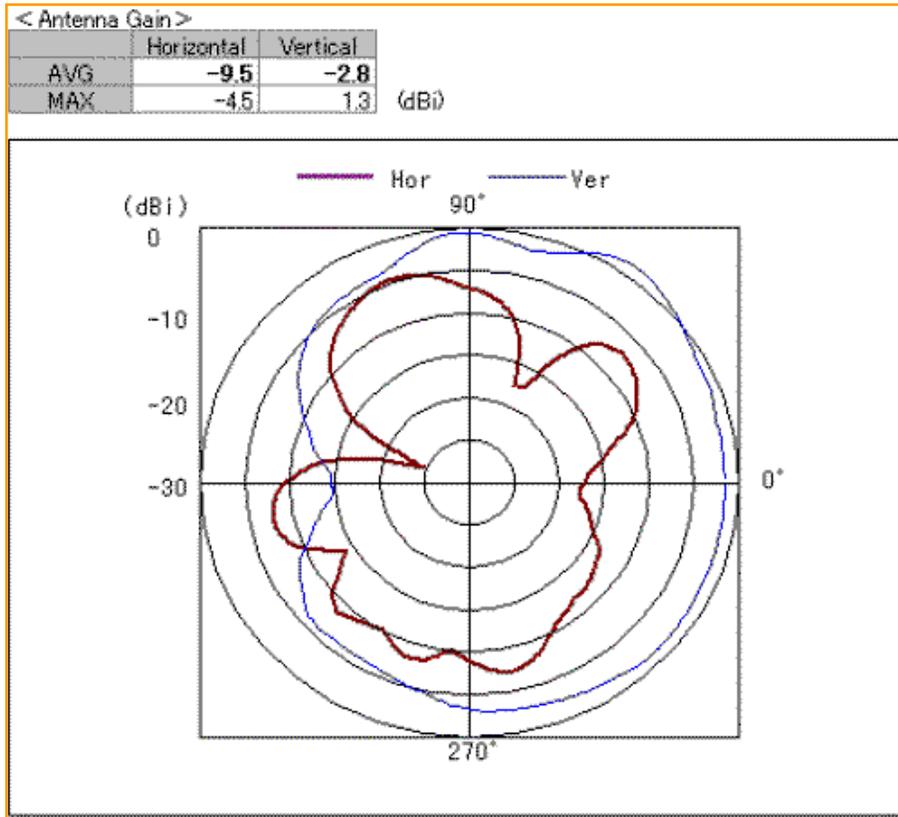
Primary antenna: 1931.2 MHz (Low)



Center Frequency	1931.2 MHz
Horizontal (dBi) peak	-4.1
Vertical (dBi) peak	1.0
Horz+Vert (dBi) peak	1.0

PCS Receive Band radiation characteristic

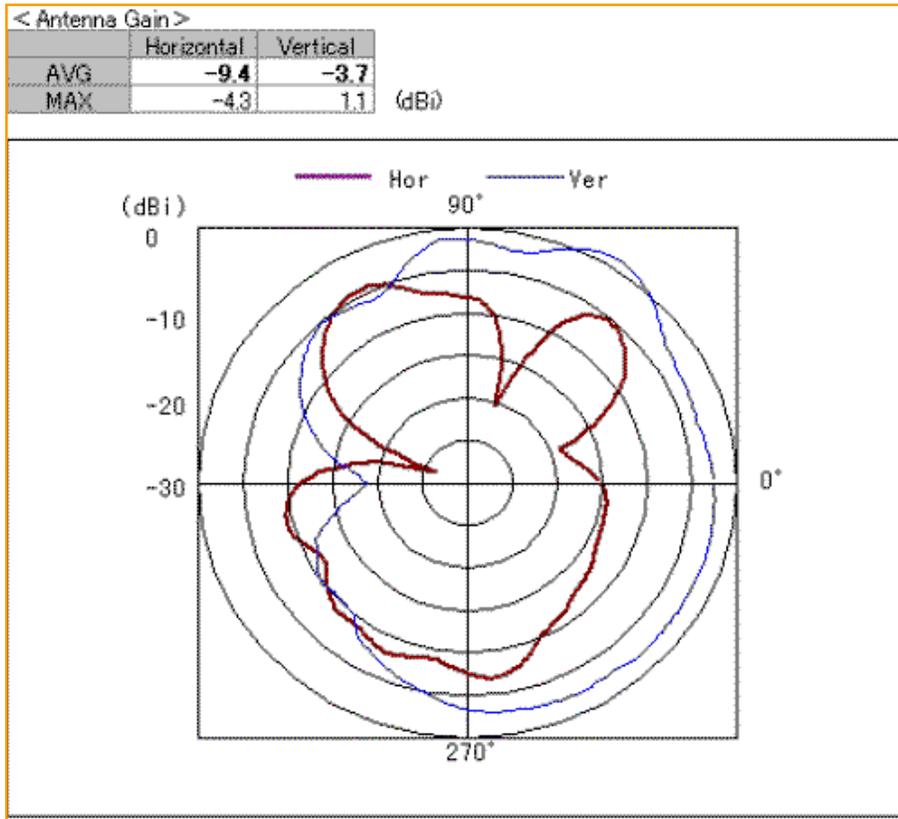
Primary antenna: 1960 MHz (Mid)



Center Frequency	1960 MHz
Horizontal (dBi) peak	-4.5
Vertical (dBi) peak	1.3
Horz+Vert (dBi) peak	1.3

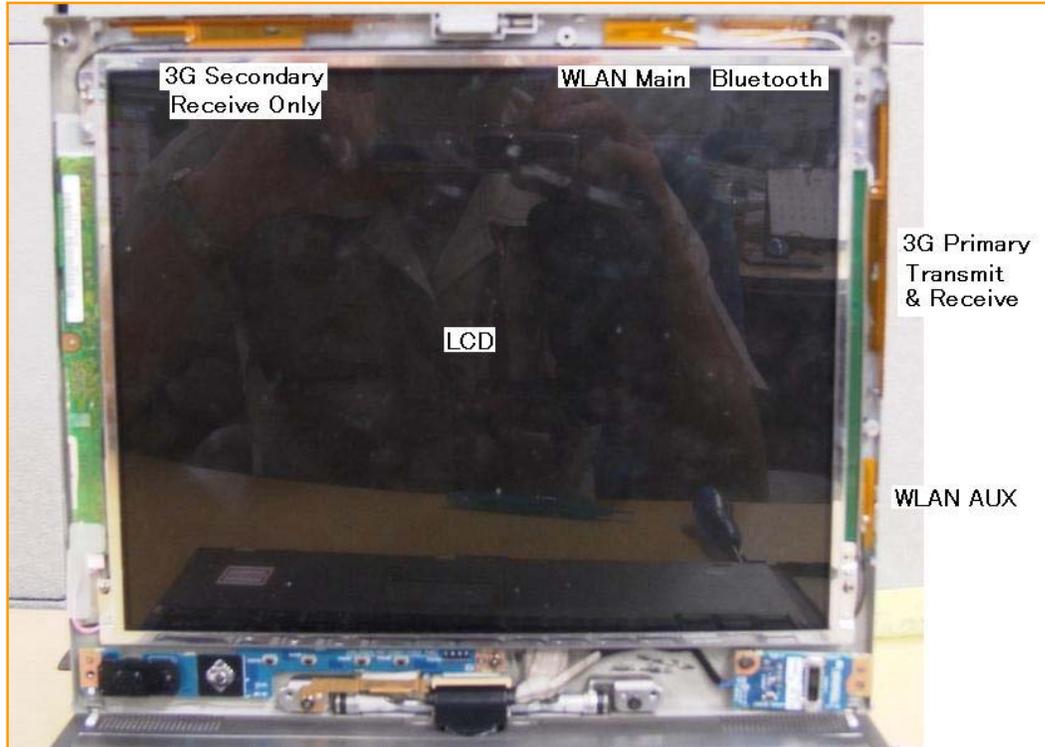
PCS Receive Band radiation characteristic

Primary antenna: 1988.8 MHz (High)



Center Frequency	1988.8 MHz
Horizontal (dBi) peak	-4.3
Vertical (dBi) peak	1.1
Horz+Vert (dBi) peak	1.1

Section 4. Antenna Position



Section 5. Module Position

