

Regulatory WLAN Antenna Information HTL004

Toshiba Corporation

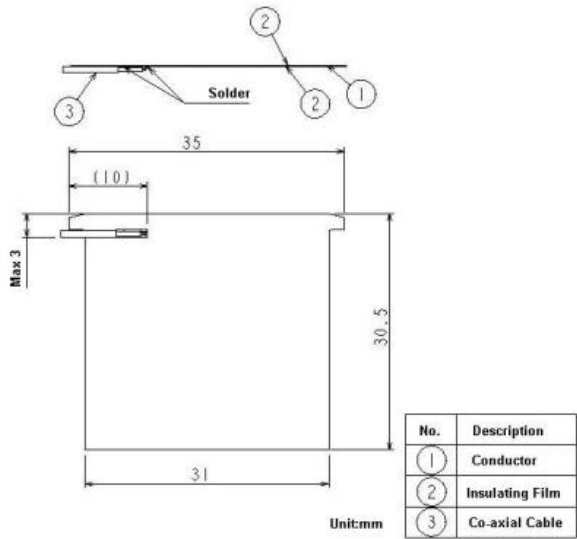
Section 1. Antenna Assembly Specifications

Antenna Assembly Summary:

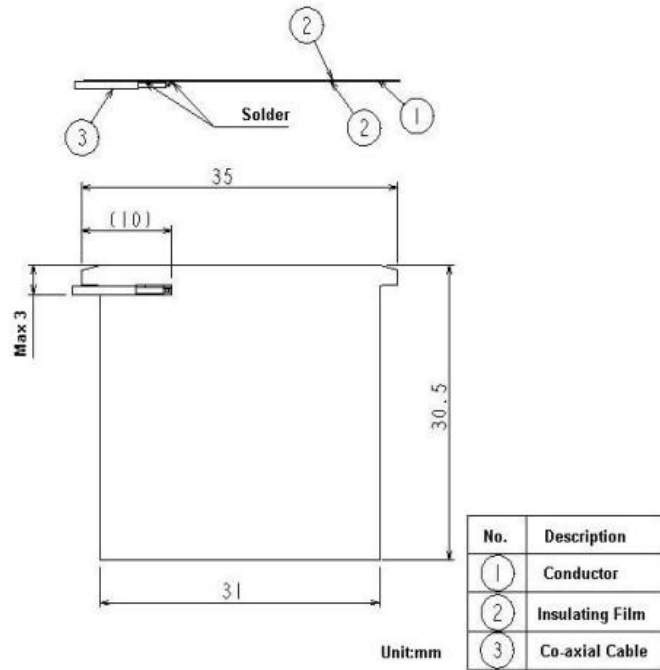
1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss: (dBi)
HTL004	HitachiCable,Ltd	PIFA	P/N: HTL004-510 50 ohm Coaxial. length: 510mm diameter: 1.0mm Connector: U.FL	2400-2500MHz 1.5 dBi (peak)	2400-2500MHz 4.18 dBi (peak)	2400-2500MHz 1.49 max	2400-2500MHz 2.68 dBi (peak)
				5150-5350MHz ... dBi (peak)	5150-5350MHz ... dBi (peak)	5150-5350MHz ... max	5150-5350MHz ... dBi (peak)
				5470-5725MHz ... dBi (peak)	5470-5725MHz ... dBi (peak)	5470-5725MHz ... max	5470-5725MHz ... dBi (peak)
				5725-5850MHz ... dBi (peak)	5725-5850MHz ... dBi (peak)	5725-5850MHz ... max	5725-5850MHz ... dBi (peak)
HTL004	HitachiCable,Ltd	PIFA	P/N: HTL004-510 50 ohm Coaxial. length: 510mm diameter: 1.0mm Connector: U.FL	2400-2500MHz -0.5 dBi (peak)	2400-2500MHz 2.18 dBi (peak)	2400-2500MHz 1.37 max	2400-2500MHz 2.68 dBi (peak)
				5150-5350MHz ... dBi (peak)	5150-5350MHz ... dBi (peak)	5150-5350MHz ... max	5150-5350MHz ... dBi (peak)
				5470-5725MHz ... dBi (peak)	5470-5725MHz ... dBi (peak)	5470-5725MHz ... max	5470-5725MHz ... dBi (peak)
				5725-5850MHz ... dBi (peak)	5725-5850MHz ... dBi (peak)	5725-5850MHz ... max	5725-5850MHz ... dBi (peak)

Section 2. Dimensioned Photos or Drawings of Antennas

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



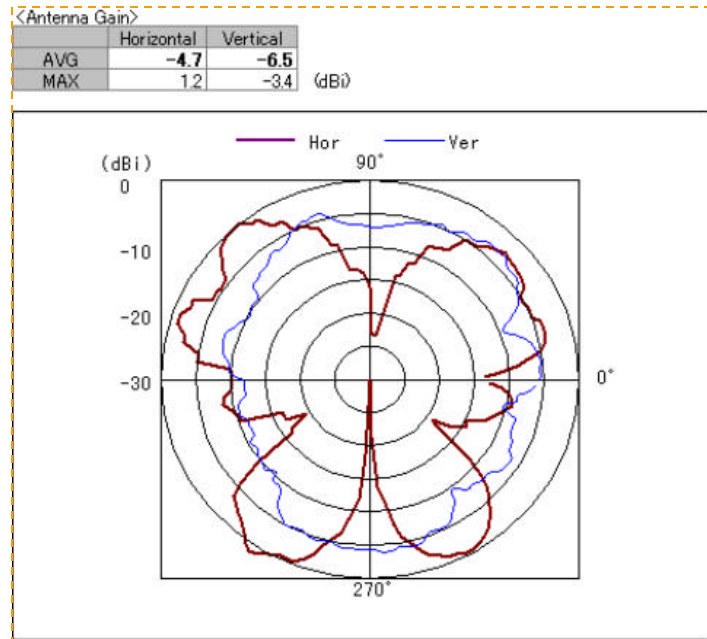
include a dimensioned photo or dimensioned drawing of aux antenna here.



Section 3. Radiation characteristics of antennae Loaded in Host Platform

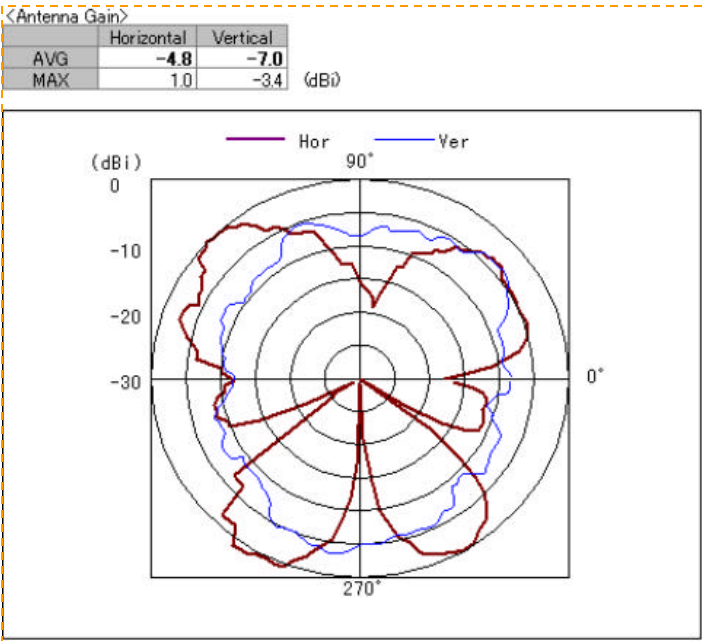
2400-2500MHz radiation characteristic

Main antenna: 2400 MHz



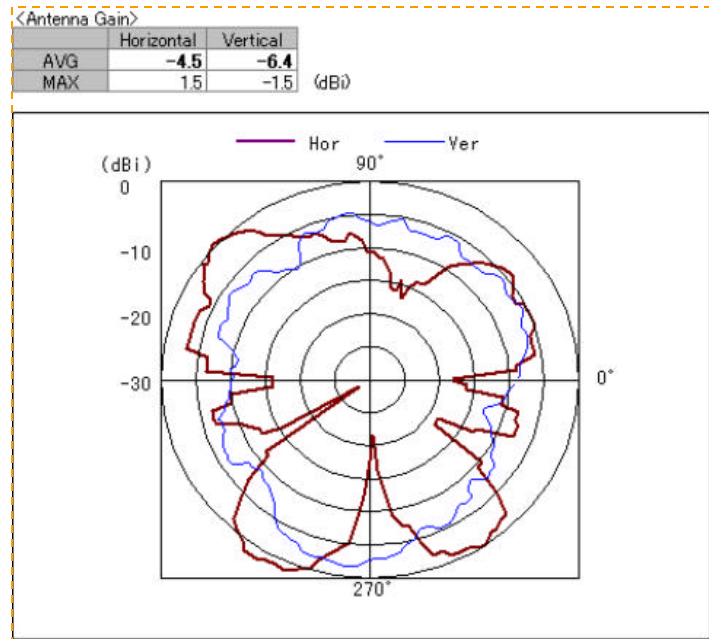
Center Frequency	2400 MHz
Horizontal (dBi) peak	1.2
Vertical (dBi) peak	-3.4
Horz+Vert (dBi) peak	1.2

Main antenna: 2450 MHz



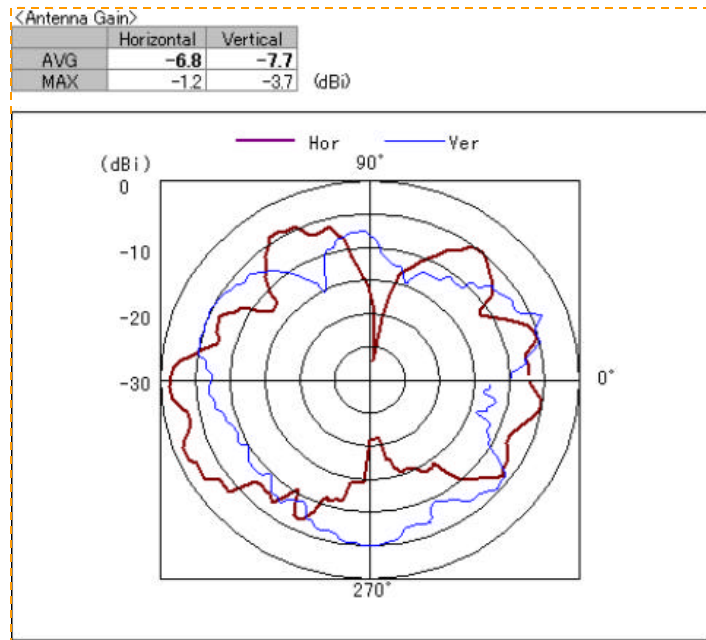
Center Frequency	2450 MHz
Horizontal (dBi) peak	1.0
Vertical (dBi) peak	-3.4
Horz+Vert (dBi) peak	1.0

Main antenna: 2500 MHz



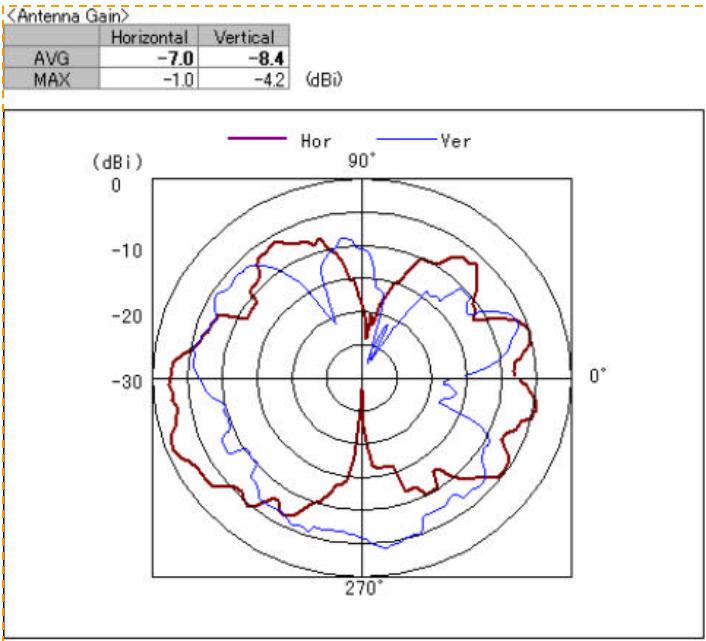
Center Frequency	2500 MHz
Horizontal (dBi) peak	1.5
Vertical (dBi) peak	-1.5
Horz+Vert (dBi) peak	1.5

Auxiliary antenna: 2400 MHz



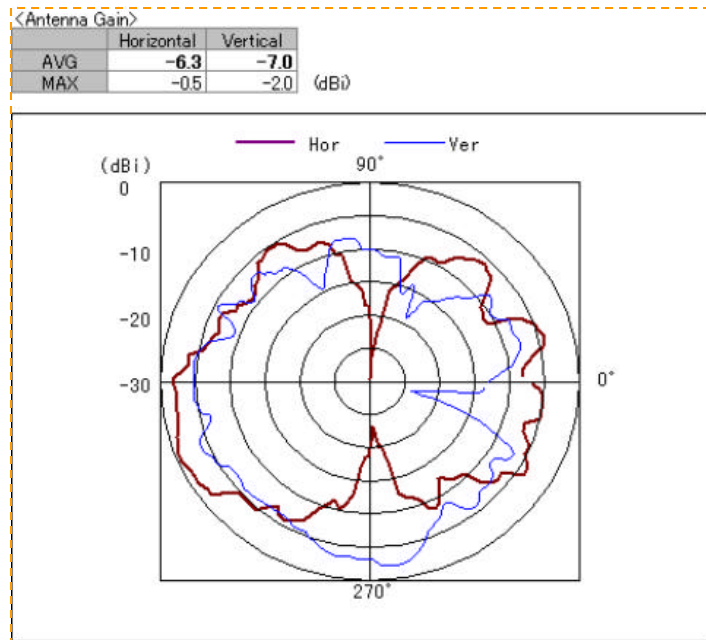
Center Frequency	2400 MHz
Horizontal (dBi) peak	-1.2
Vertical (dBi) peak	-3.7
Horz+Vert (dBi) peak	-1.2

Auxiliary antenna : 2450 MHz



Center Frequency	2450 MHz
Horizontal (dBi) peak	-1.0
Vertical (dBi) peak	-4.2
Horz+Vert (dBi) peak	-1.0

Auxiliary antenna : 2500 MHz



Center Frequency	2500 MHz
Horizontal (dBi) peak	-0.5
Vertical (dBi) peak	-2.0
Horz+Vert (dBi) peak	-0.5