

# Regulatory WLAN Antenna Information HTL004

**Toshiba Corporation**

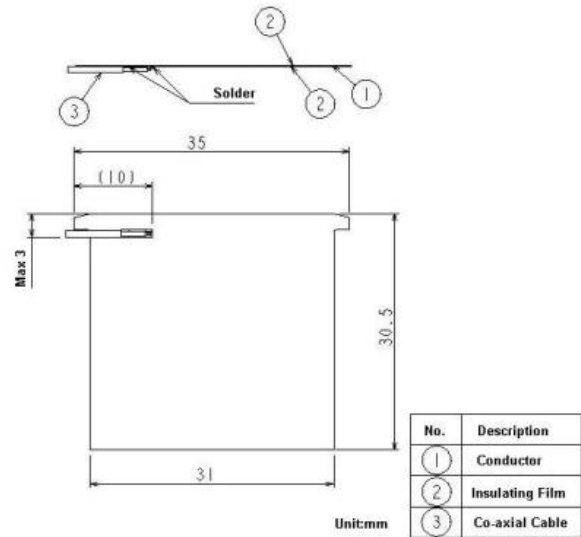
## Section 1. Antenna Assembly Specifications

### Antenna Assembly Summary:

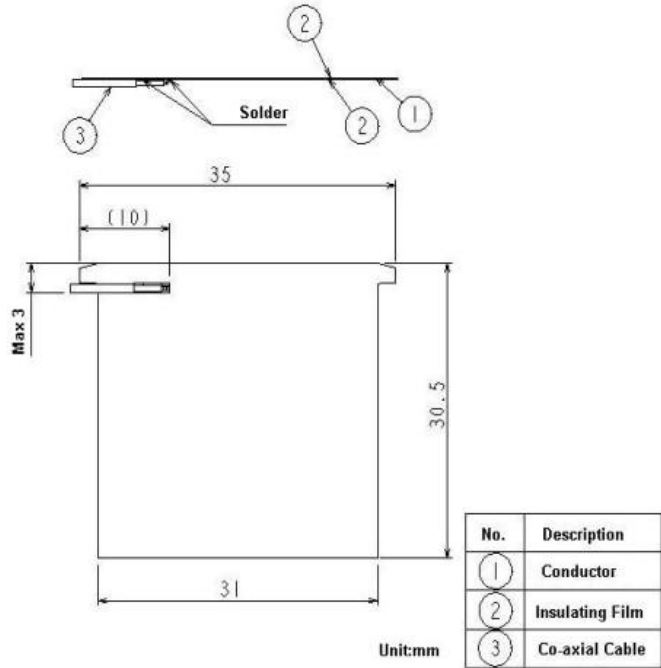
1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
HTL004	HitachiCable,Ltd	PIFA	P/N: HTL004-510 50 ohm Coaxial. length: 510mm diameter: 1.0mm Connector: U.FL	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.



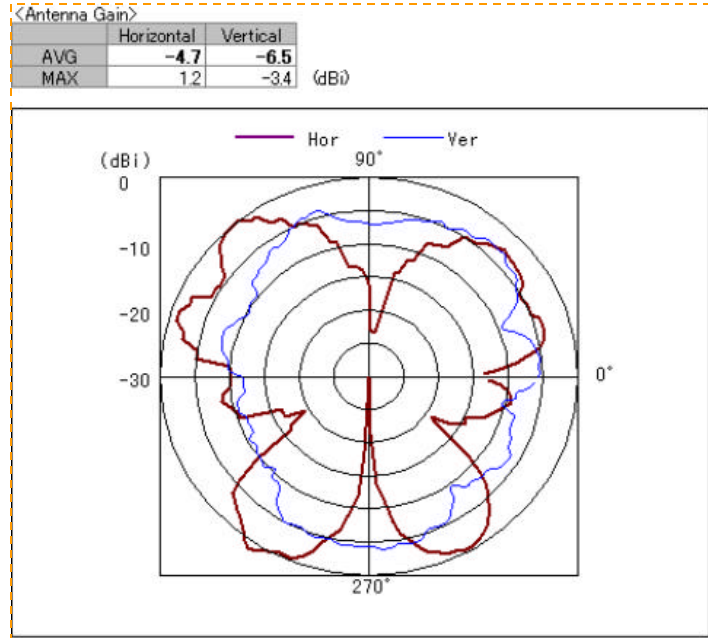
include a dimensioned photo or dimensioned drawing of aux antenna here.



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

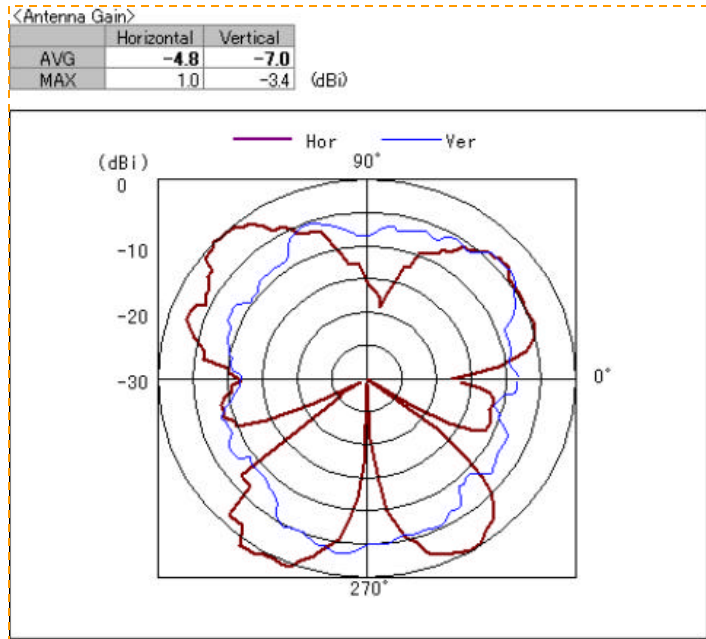
#### 1400-2500MHz radiation characteristic

Main antenna: 2400 MHz



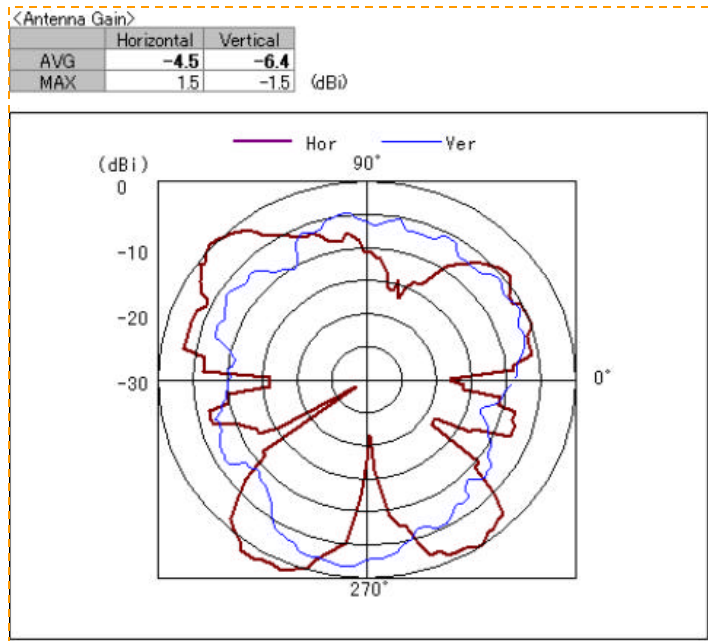
Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>1.2</b>
Vertical (dBi) peak	<b>-3.4</b>
Horz+Vert (dBi) peak	<b>1.2</b>

**Main antenna: 2450 MHz**



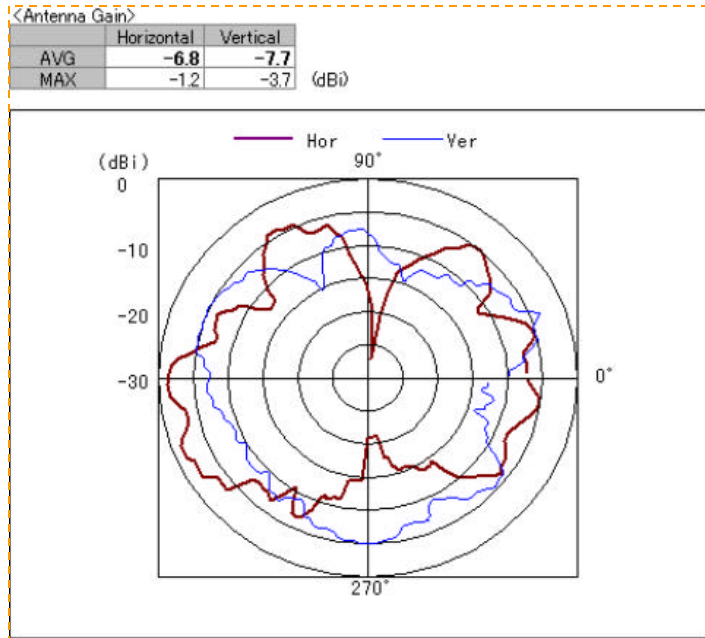
Center Frequency	<b>2450 MHz</b>
Horizontal (dBi) peak	<b>1.0</b>
Vertical (dBi) peak	<b>-3.4</b>
Horz+Vert (dBi) peak	<b>1.0</b>

**Main antenna: 2500 MHz**



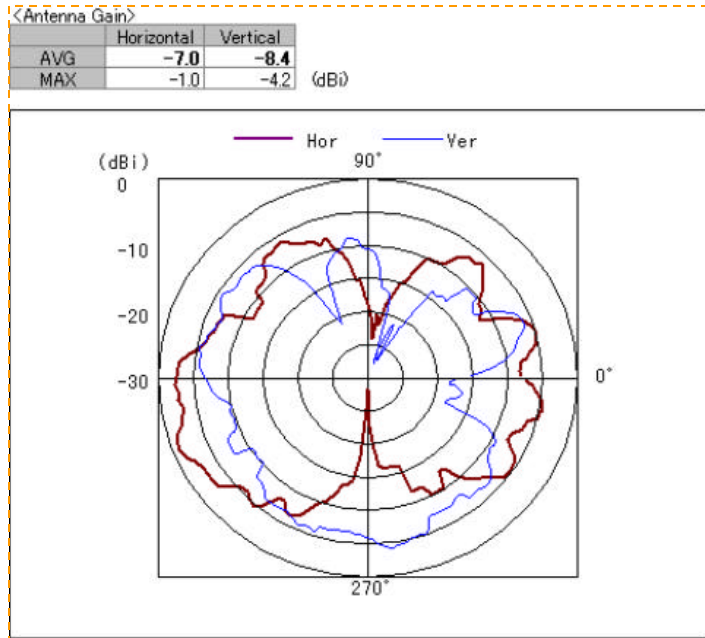
Center Frequency	<b>2500 MHz</b>
Horizontal (dBi) peak	<b>1.5</b>
Vertical (dBi) peak	<b>-1.5</b>
Horz+Vert (dBi) peak	<b>1.5</b>

Auxiliary antenna: 2400 MHz



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

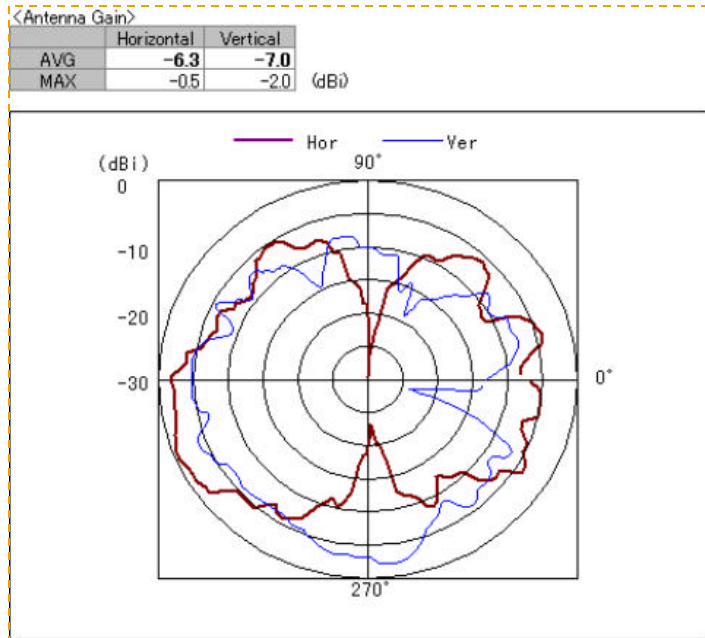
Auxiliary antenna : 2450 MHz



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



Auxiliary antenna : 2500 MHz



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