

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:X-2134031 -X 175mm	Tyco Electronics CC	Inverted-F Antenna	50 ohm Coaxial. length: 175mm diameter: 1.13mm Connector: Miniature Coax II	2400-2500MHz -4.56(peak)	2400-2500MHz -4.17(peak)	2400-2500MHz 11.0max	2400-2500MHz 0.39 dBi (peak)
P/N:X-2134031 -X 1000mm	Tyco Electronics CC	Inverted-F Antenna	50 ohm Coaxial. length: 1000mm diameter: 1.13mm Connector: Miniature Coax II	2400-2500MHz -8.62(peak)	2400-2500MHz -5.62(peak)	2400-2500MHz 3.3max	2400-2500MHz 3.0 dBi (peak)

※Cable Loss per unit length

Frequency Band	Cable Loss (dBi/m)
2400-2500MHz	2400-2500MHz 3.0 dBi (peak)

Per unit length's cable loss could be calculated by using the following calculation formula (1)

Per unit length's cable loss=Cable Loss/ Cable Length · · · calculation formula (1)

※In case calculating certain Peak Gain, calculate using X-2134031-X 175mm's Peak Gain value.

Antenna Peak Gain Table:

X-Y Plane

	X-2134031-X 175mm		X-2134031-X 1000mm	
Frequency (MHz)	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
2400	-6.37	-11.83	-10.28	-12.90
2450	-5.68	-10.99	-9.73	-11.91
2500	-4.94	-10.09	-10.41	-13.34

Y-Z Plane

	X-2134031-X 175mm		X-2134031-X 1000mm	
Frequency (MHz)	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
2400	-11.17	-6.66	-16.26	-10.17
2450	-10.59	-5.71	-14.79	-8.62
2500	-9.58	-4.56	-15.57	-8.89

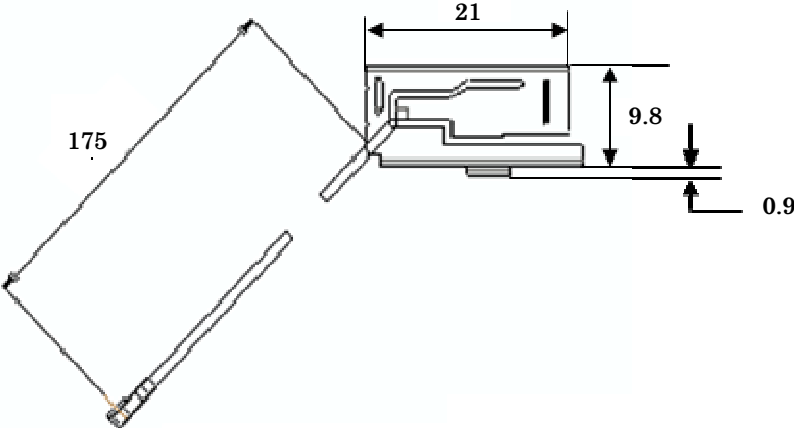
Z-X Plane

	X-2134031-X 175mm		X-2134031-X 1000mm	
Frequency (MHz)	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
2400	-6.89	-8.98	-10.84	-11.74
2450	-5.71	-8.46	-9.74	-10.62
2500	-4.56	-8.61	-9.60	-11.26

Section 2. Dimensioned Photos or Drawings of Antennas

Include a dimensioned photo and dimensioned drawing of X-2134031-X 175mm

X-2134031-X 175mm Dimensioned Drawing:

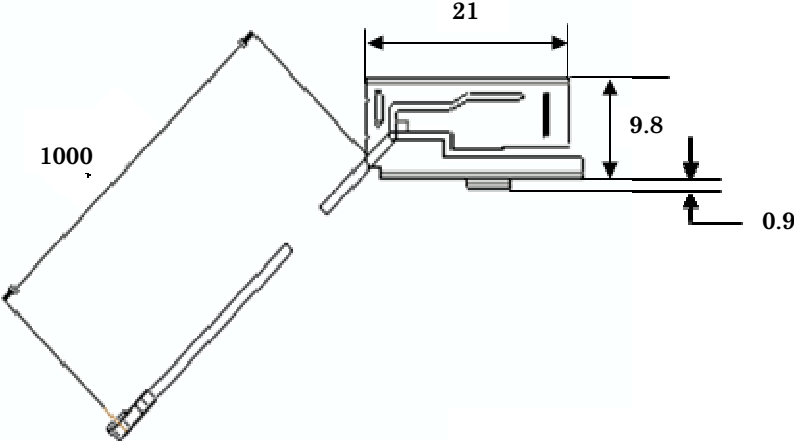


X-2134031-X 175mm Antenna Photo:



Include a dimensioned photo and dimensioned drawing of X-2134031-X 1000mm.

X-2134031-X 1000mm Dimensioned Drawing:



X-2134031-X 1000mm Antenna Photo:

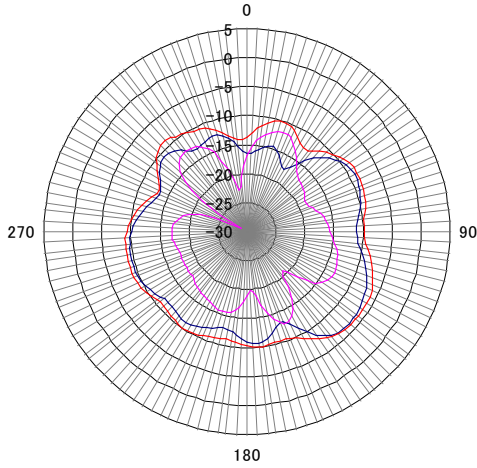


Section 3. Radiation characteristics of antenna

2400-2500MHz radiation characteristic

X-Y plane

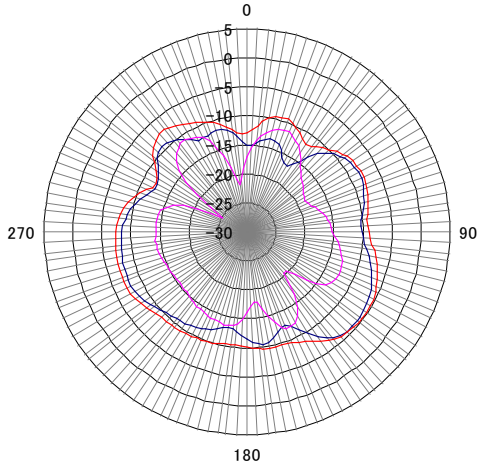
X-2134031-X (175mm): 2400 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2400 MHz
Horizontal (dBi) peak	-6.37
Vertical (dBi) peak	-11.83

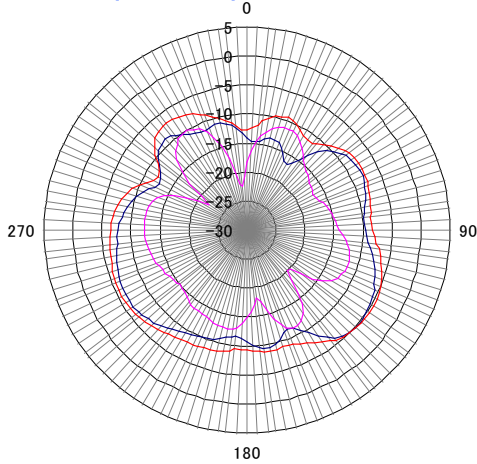
X-2134031-X (175mm): 2450 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2450 MHz
Horizontal (dBi) peak	-5.68
Vertical (dBi) peak	-10.99

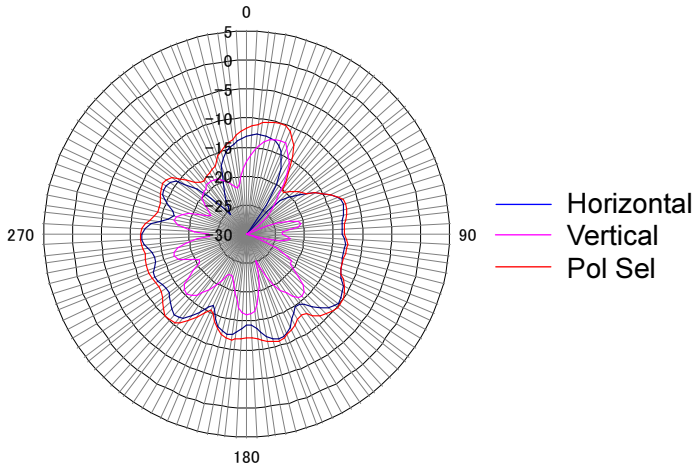
X-2134031-X (175mm): 2500 MHz



— Horizontal
— Vertical
— Pol Sel

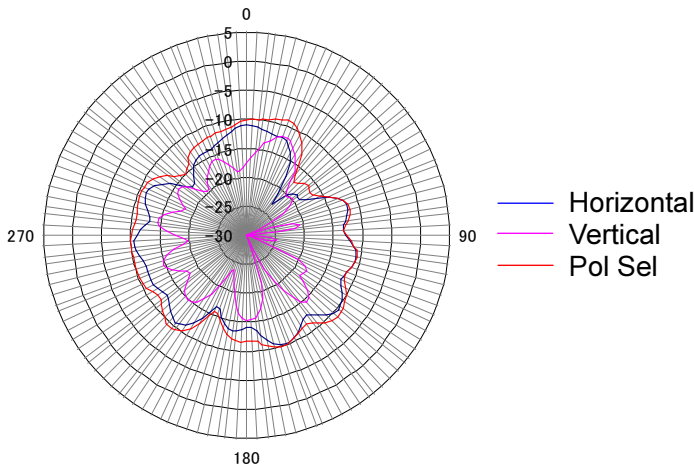
Frequency	2500 MHz
Horizontal (dBi) peak	-4.94
Vertical (dBi) peak	-10.09

X-2134031-X (1000mm): 2400 MHz



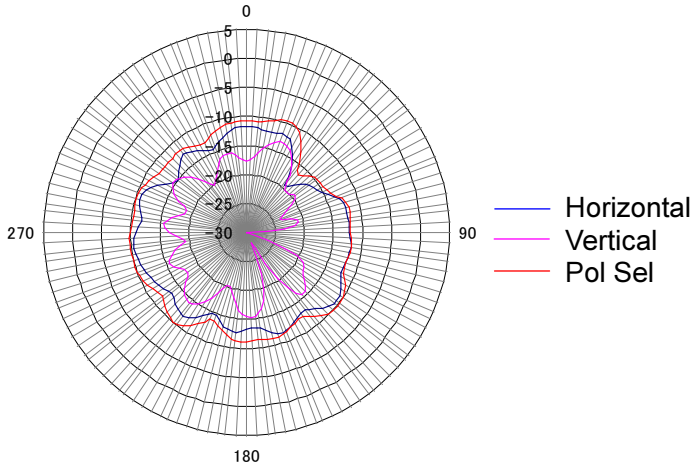
Frequency	2400 MHz
Horizontal (dBi) peak	-10.28
Vertical (dBi) peak	-12.90

X-2134031-X (1000mm): 2450 MHz



Frequency	2450 MHz
Horizontal (dBi) peak	-9.73
Vertical (dBi) peak	-11.91

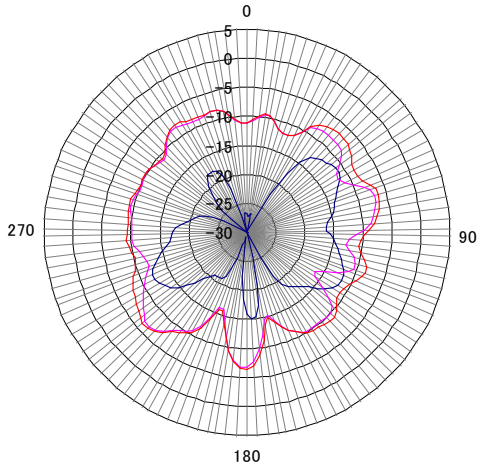
X-2134031-X (1000mm): 2500 MHz



Frequency	2500 MHz
Horizontal (dBi) peak	-10.41
Vertical (dBi) peak	-13.34

Y-Z plane

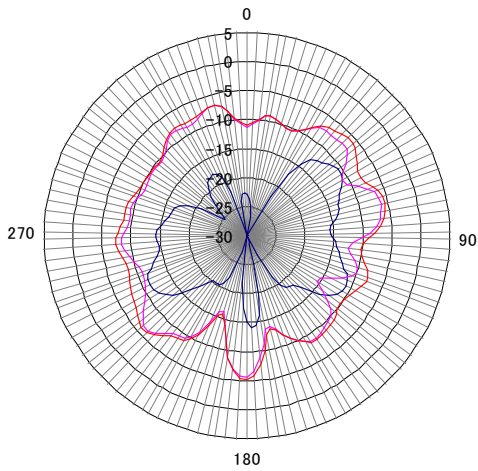
X-2134031-X (175mm): 2400 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2400 MHz
Horizontal (dBi) peak	-11.17
Vertical (dBi) peak	-6.66

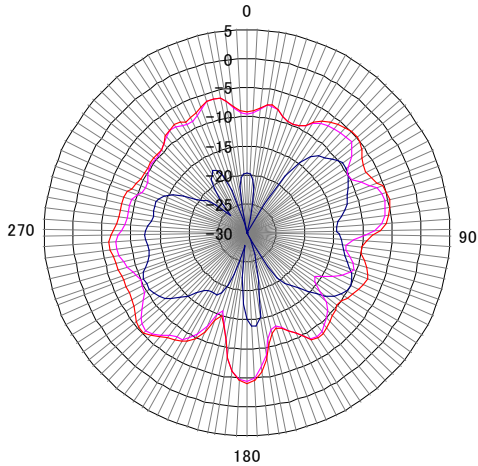
X-2134031-X (175mm): 2450 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2450 MHz
Horizontal (dBi) peak	-10.59
Vertical (dBi) peak	-5.71

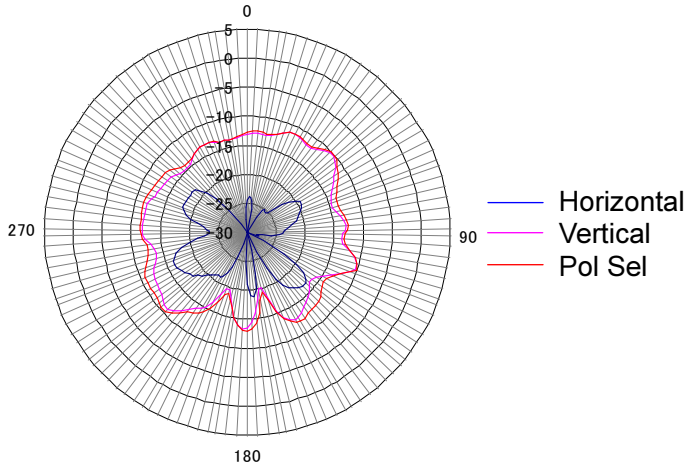
X-2134031-X (175mm): 2500 MHz



— Horizontal
— Vertical
— Pol Sel

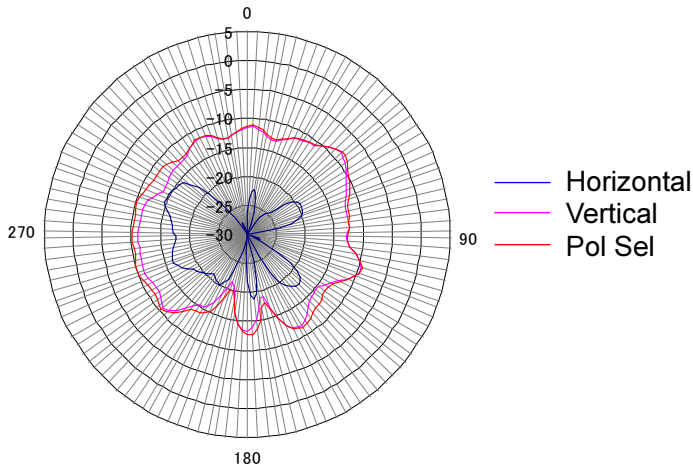
Frequency	2500 MHz
Horizontal (dBi) peak	-9.58
Vertical (dBi) peak	-4.56

X-2134031-X (1000mm): 2400 MHz



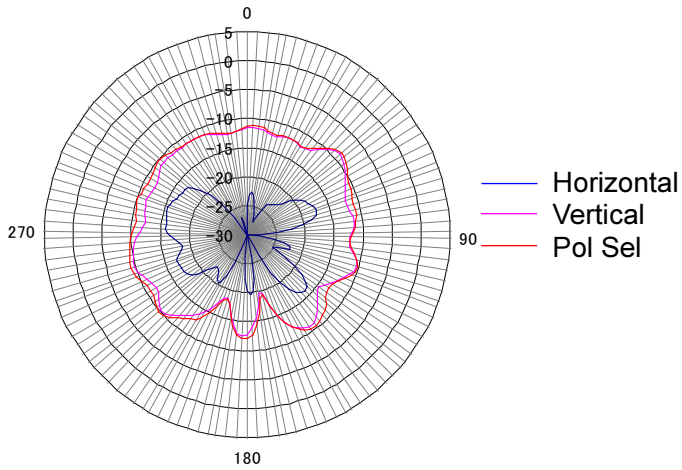
Frequency	2400 MHz
Horizontal (dBi) peak	-16.26
Vertical (dBi) peak	-10.17

X-2134031-X (1000mm): 2450 MHz



Frequency	2450 MHz
Horizontal (dBi) peak	-14.79
Vertical (dBi) peak	-8.62

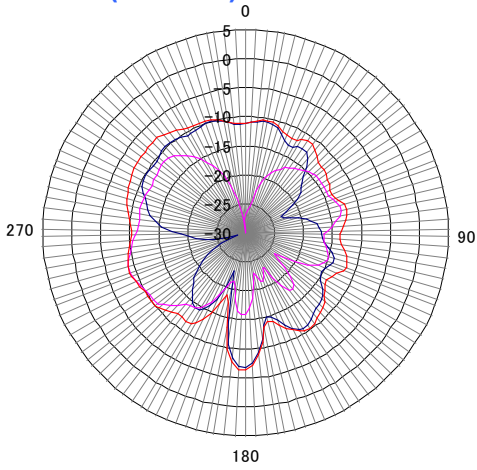
X-2134031-X (1000mm): 2500 MHz



Frequency	2500 MHz
Horizontal (dBi) peak	-15.57
Vertical (dBi) peak	-8.89

Z-X plane

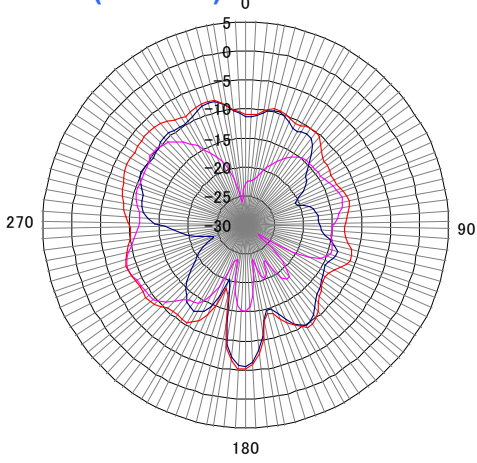
X-2134031-X (175mm): 2400 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2400 MHz
Horizontal (dBi) peak	-6.89
Vertical (dBi) peak	-8.98

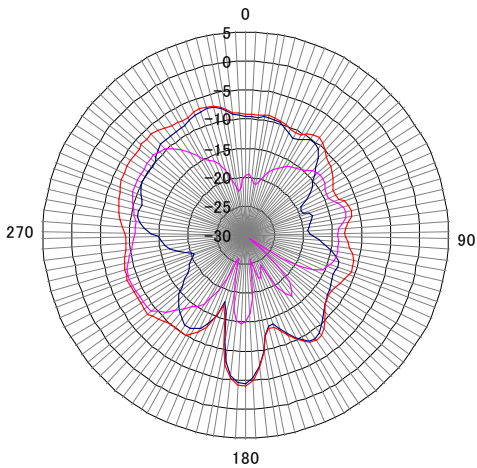
X-2134031-X (175mm): 2450 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2450 MHz
Horizontal (dBi) peak	-5.71
Vertical (dBi) peak	-8.46

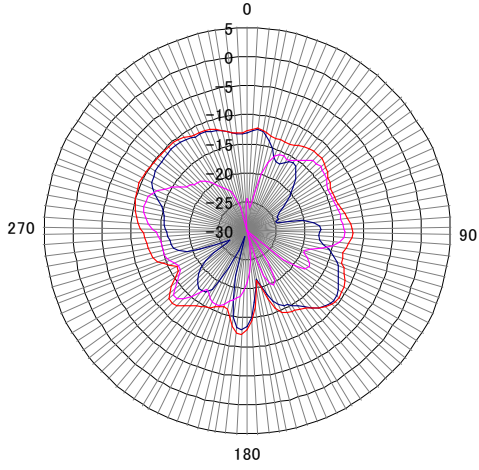
X-2134031-X (175mm): 2500 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2500 MHz
Horizontal (dBi) peak	-4.56
Vertical (dBi) peak	-8.61

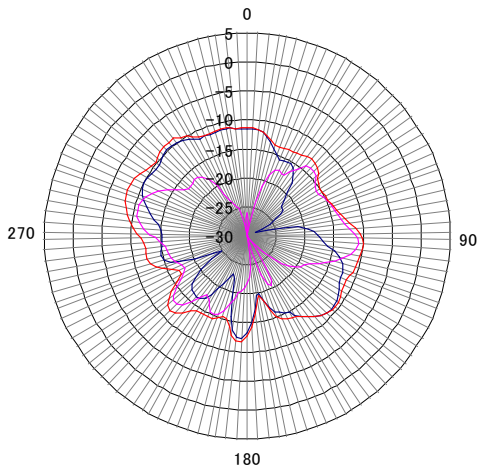
X-2134031-X (1000mm): 2400 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2400 MHz
Horizontal (dBi) peak	-10.84
Vertical (dBi) peak	-11.74

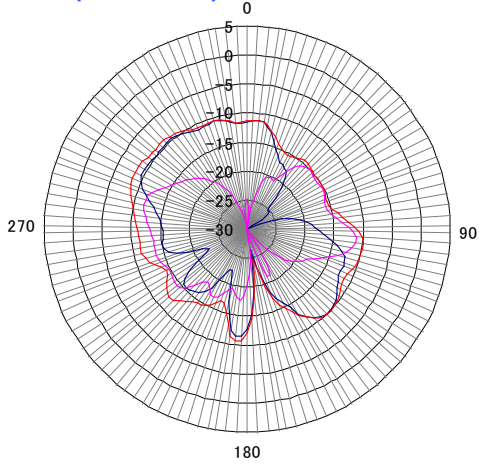
X-2134031-X (1000mm): 2450 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2450 MHz
Horizontal (dBi) peak	-9.74
Vertical (dBi) peak	-10.62

X-2134031-X (1000mm): 2500 MHz



— Horizontal
— Vertical
— Pol Sel

Frequency	2500 MHz
Horizontal (dBi) peak	-9.60
Vertical (dBi) peak	-11.26