

Antenna Assembly Specifications

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 V.S.W.R.	1H Cable Loss (dBi)
(P/N:CP115436-01 R side)	NISSEI ELECTRIC CO..	Inverted-F	P/N: RF-MF50161G 50 ohm Coaxial. length: 700mm diameter: 1.13mm Connector: U.FL	2400-2500MHz 1.91 dBi (peak)	2400-2500MHz 4.24 dBi (peak)	2400-2500MHz 2.00 max	2400-2500MHz 2.33 dB (peak)
				5150-5350MHz -1.49 dBi (peak)	5150-5350MHz 2.10 dBi (peak)	5150-5350MHz 2.00 max	5150-5350MHz 3.59 dB (peak)
				5470-5725MHz 0.38 dBi (peak)	5470-5725MHz 4.12 dBi (peak)	5470-5725MHz 2.00 max	5470-5725MHz 3.74 dB (peak)
				5725-5850MHz 0.38 dBi (peak)	5725-5850MHz 4.29 dBi (peak)	5725-5850MHz 2.00 max	5725-5850MHz 3.91 dB (peak)
(P/N:CP115431-01 L side)	NISSEI ELECTRIC CO..	Inverted-F	P/N: RF-MF50161B 50 ohm Coaxial. length: 555mm diameter: 1.13mm Connector: U.FL	2400-2500MHz 2.47 dBi (peak)	2400-2500MHz 4.32 dBi (peak)	2400-2500MHz 2.00 max	2400-2500MHz 1.85 dB (peak)
				5150-5350MHz -0.44 dBi (peak)	5150-5350MHz 2.41 dBi (peak)	5150-5350MHz 2.00 max	5150-5350MHz 2.85 dB (peak)
				5470-5725MHz 0.19 dBi (peak)	5470-5725MHz 3.15 dBi (peak)	5470-5725MHz 2.00 max	5470-5725MHz 2.96 dB (peak)
				5725-5850MHz 0.19 dBi (peak)	5725-5850MHz 3.29 dBi (peak)	5725-5850MHz 2.00 max	5725-5850MHz 3.10 dB (peak)

Antenna Average & Peak Gain (XY plane)

Right Antenna

Frequency [MHz]	Polarization	Peak Gain [dBi]	Average Gain [dBi]
2400	Horizontal	1.91	-5.13
	Vertical	0.15	-5.41
2450	Horizontal	1.85	-5.29
	Vertical	0.89	-5.12
2500	Horizontal	0.83	-6.21
	Vertical	-0.47	-5.99
5150	Horizontal	-1.85	-7.64
	Vertical	-2.22	-6.37
5250	Horizontal	-1.49	-7.01
	Vertical	-2.26	-6.25
5350	Horizontal	-2.09	-7.25
	Vertical	-1.63	-5.81
5470	Horizontal	-0.85	-6.76
	Vertical	-1.52	-5.79
5730	Horizontal	0.38	-6.54
	Vertical	-1.56	-5.48
5875	Horizontal	-0.58	-7.43
	Vertical	-2.52	-6.12

* Antenna gain includes the connector and cable loss.

Left Antenna

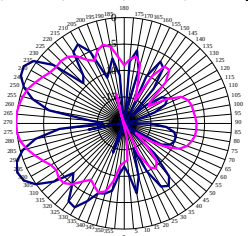
Frequency [MHz]	Polarization	Peak Gain [dBi]	Average Gain [dBi]
2400	Horizontal	2.11	-4.52
	Vertical	0.18	-5.13
2450	Horizontal	2.47	-4.97
	Vertical	0.05	-5.14
2500	Horizontal	2.29	-4.99
	Vertical	-0.69	-5.47
5150	Horizontal	-1.41	-6.44
	Vertical	-2.26	-6.29
5250	Horizontal	-1.52	-6.69
	Vertical	-1.36	-5.77
5350	Horizontal	-0.44	-6.70
	Vertical	-0.52	-5.22
5470	Horizontal	-1.60	-7.60
	Vertical	-0.45	-5.45
5730	Horizontal	-2.31	-7.76
	Vertical	0.19	-5.45
5875	Horizontal	-2.91	-7.94
	Vertical	-1.27	-6.08

* Antenna gain includes the connector and cable loss.

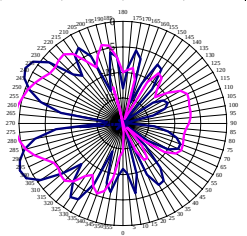
Radiation Pattern (XY plane)

f=2400MHz / 2450MHz / 2500MHz

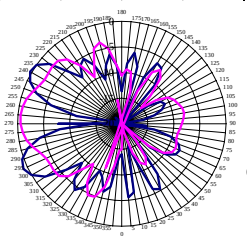
2400 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-5.13	1.91	-5.41	0.15



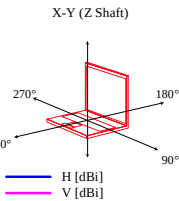
2450 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-5.29	1.85	-5.12	0.89



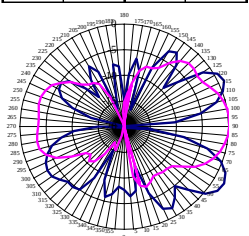
2500 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.21	0.83	-5.99	-0.47



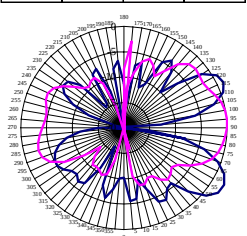
The Measurement Result
Antenna Radiation Pattern
X-Y



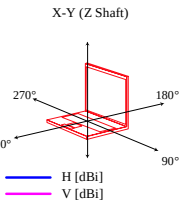
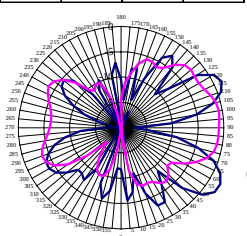
2400 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-4.52	2.11	-5.13	0.18



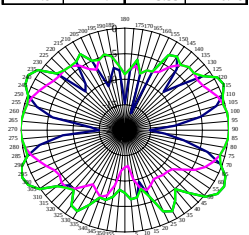
2450 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-4.97	2.47	-5.14	0.05



2500 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-4.99	2.29	-5.47	-0.69

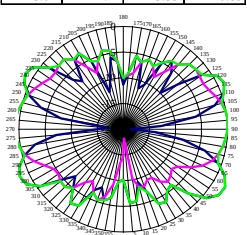


2400 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-2.81	2.11	-3.53	0.18



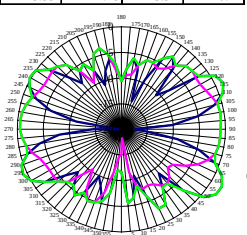
Pol Sel Ave. [dBi] -1.64
Equal to or more than -5 dBi [%] 73.6

2450 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-3.02	2.47	-3.33	0.89



Pol Sel Ave. [dBi] -1.62
Equal to or more than -5 dBi [%] 68.1

2500 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-3.59	2.29	-3.94	-0.47

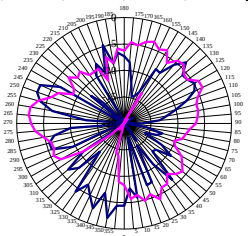


Pol Sel Ave. [dBi] -2.23
Equal to or more than -5 dBi [%] 66.7

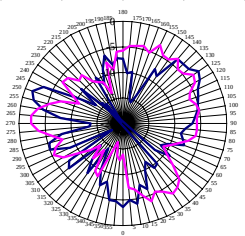
Radiation Pattern (XY plane)

f=5150MHz / 5250MHz / 5350MHz

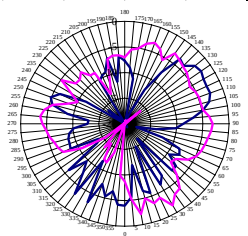
5150 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.64	-1.85	-6.37	-2.22



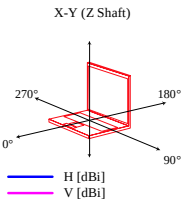
5250 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.01	-1.49	-6.25	-2.26



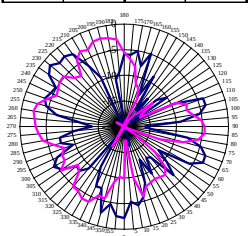
5350 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.25	-2.09	-5.81	-1.63



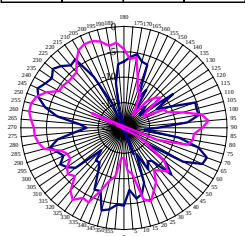
The Measurement Result
Antenna Radiation Pattern
X-Y



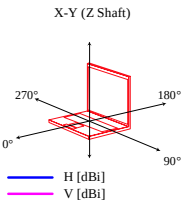
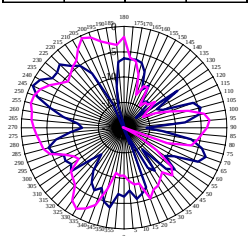
5150 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.44	-1.41	-6.29	-2.26



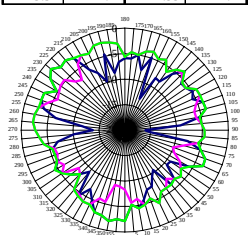
5250 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.69	-1.52	-5.77	-1.36



5350 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.70	-0.44	-5.22	-0.52

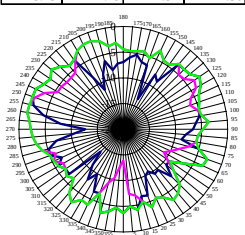


5150 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-5.34	-1.41	-4.95	-2.22



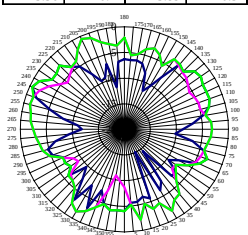
Pol Sel Ave. [dBi] -3.98
Equal to or more than -5 dBi [%] 68.1

5250 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-5.45	-1.49	-4.57	-1.36

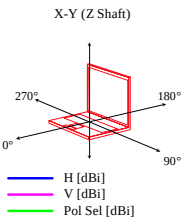


Pol Sel Ave. [dBi] -3.74
Equal to or more than -5 dBi [%] 76.4

5350 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-5.36	-0.44	-3.89	-0.52



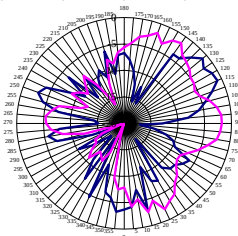
Pol Sel Ave. [dBi] -3.32
Equal to or more than -5 dBi [%] 80.6



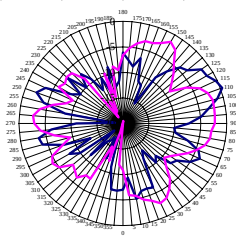
Radiation Pattern (XY plane)

f=5470MHz / 5730MHz / 5875MHz

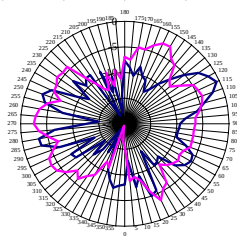
5470 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.76	-0.85	-5.79	-1.52



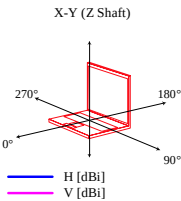
5730 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-6.54	0.38	-5.48	-1.56



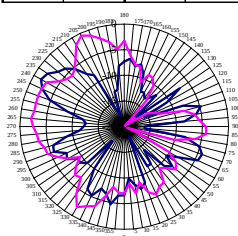
5875 MHz			
R Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.43	-0.58	-6.12	-2.52



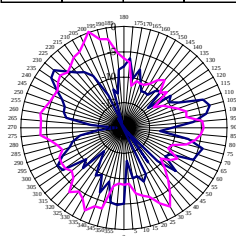
The Measurement Result
Antenna Radiation Pattern
X-Y



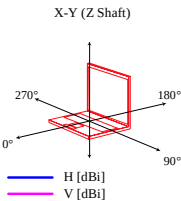
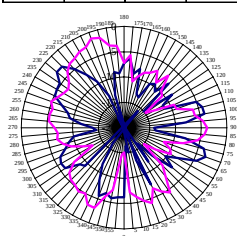
5470 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.60	-1.60	-5.45	-0.45



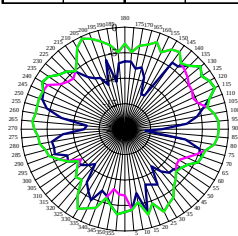
5730 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.76	-2.31	-5.45	0.19



5875 MHz			
L Antenna			
H Ave.	H Peak	V Ave.	V Peak
-7.94	-2.91	-6.08	-1.27

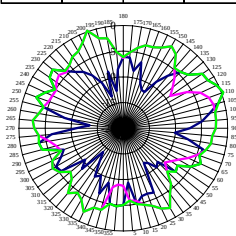


5470 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-5.57	-0.85	-3.76	-0.45



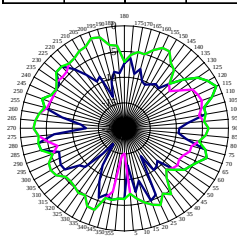
Pol Sel Ave. [dBi] -3.22
Equal to or more than -5 dBi [%] 80.6

5730 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-5.68	0.38	-4.08	0.19

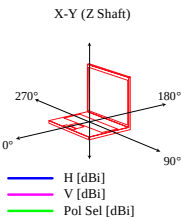


Pol Sel Ave. [dBi] -3.39
Equal to or more than -5 dBi [%] 76.4

5875 MHz			
Diversity			
H Ave.	H Peak	V Ave.	V Peak
-6.23	-0.58	-4.71	-1.27

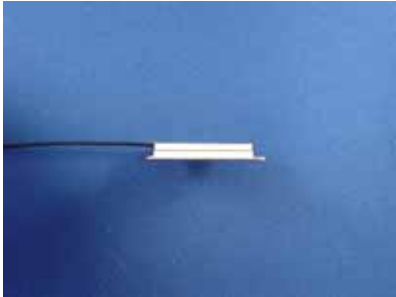
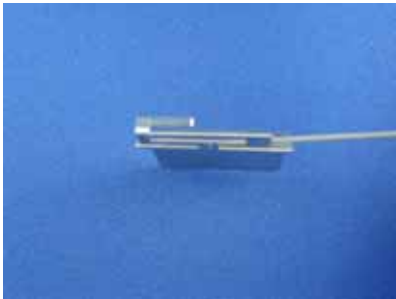


Pol Sel Ave. [dBi] -4.04
Equal to or more than -5 dBi [%] 66.7



Antenna Pic

Right Antenna



Left Antenna

