



RTK-ANT-0021 PIFA measurement report

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RTK-ANT-0021 PIFA measurement report

- **Antenna Structure**

Antenna brand: REALTEK
Part number: RTK-ANT-0021
Antenna type: PIFA
Connector type: Ipex4
Cable length: 30cm

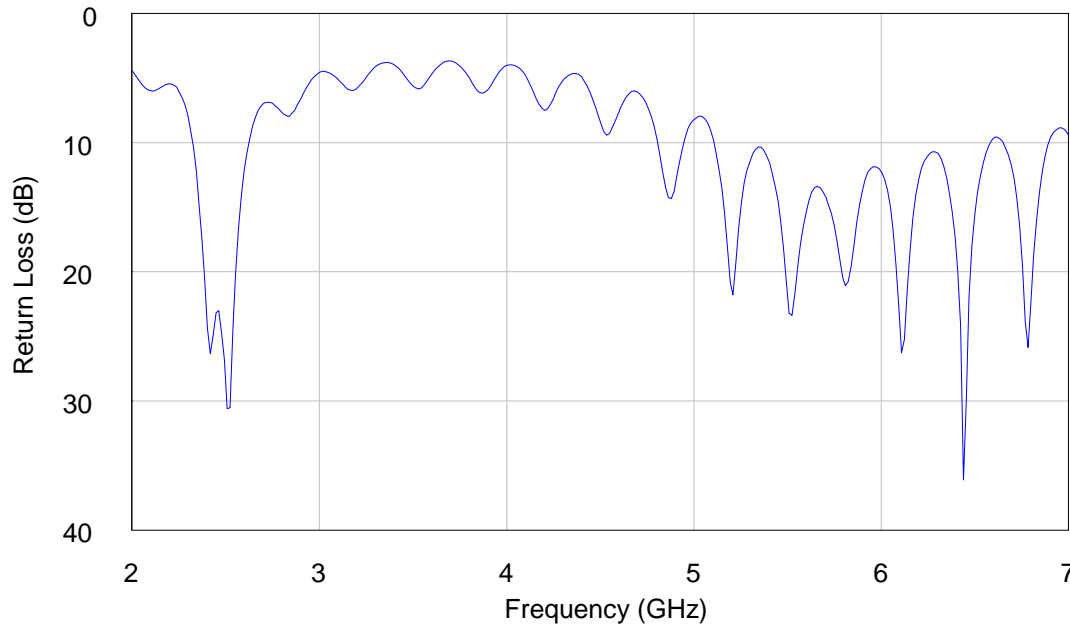




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- Return Loss

10-dB BW	2.32 ~ 2.62 GHz	5.10 ~ 6.58 GHz
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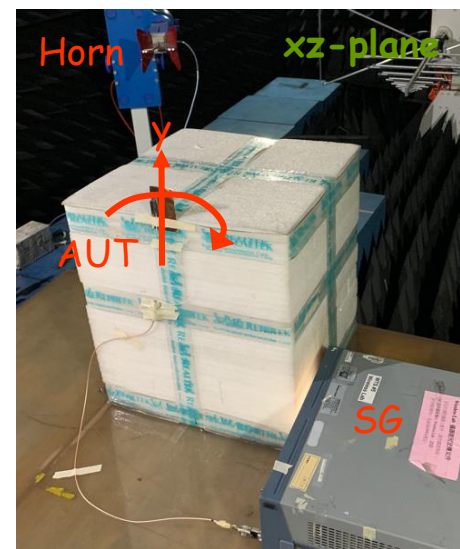
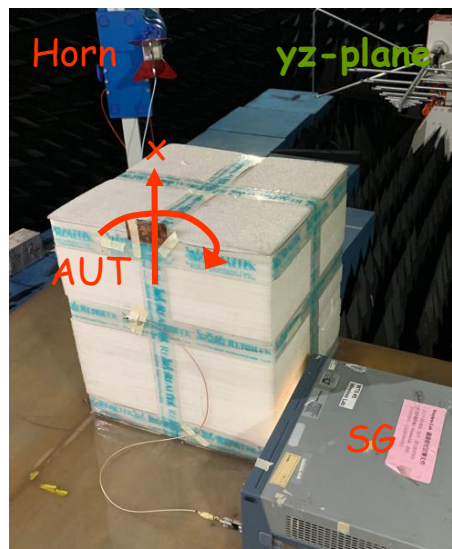
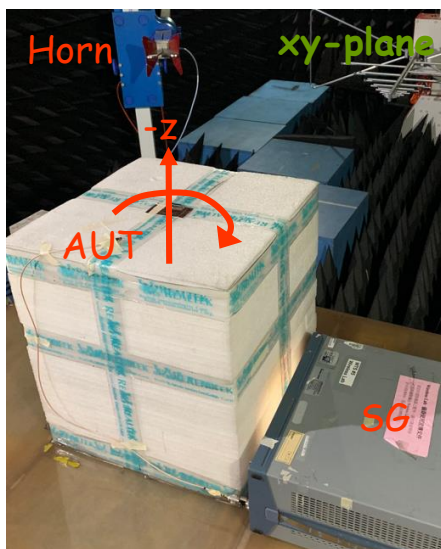




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- **Radiation Patterns**

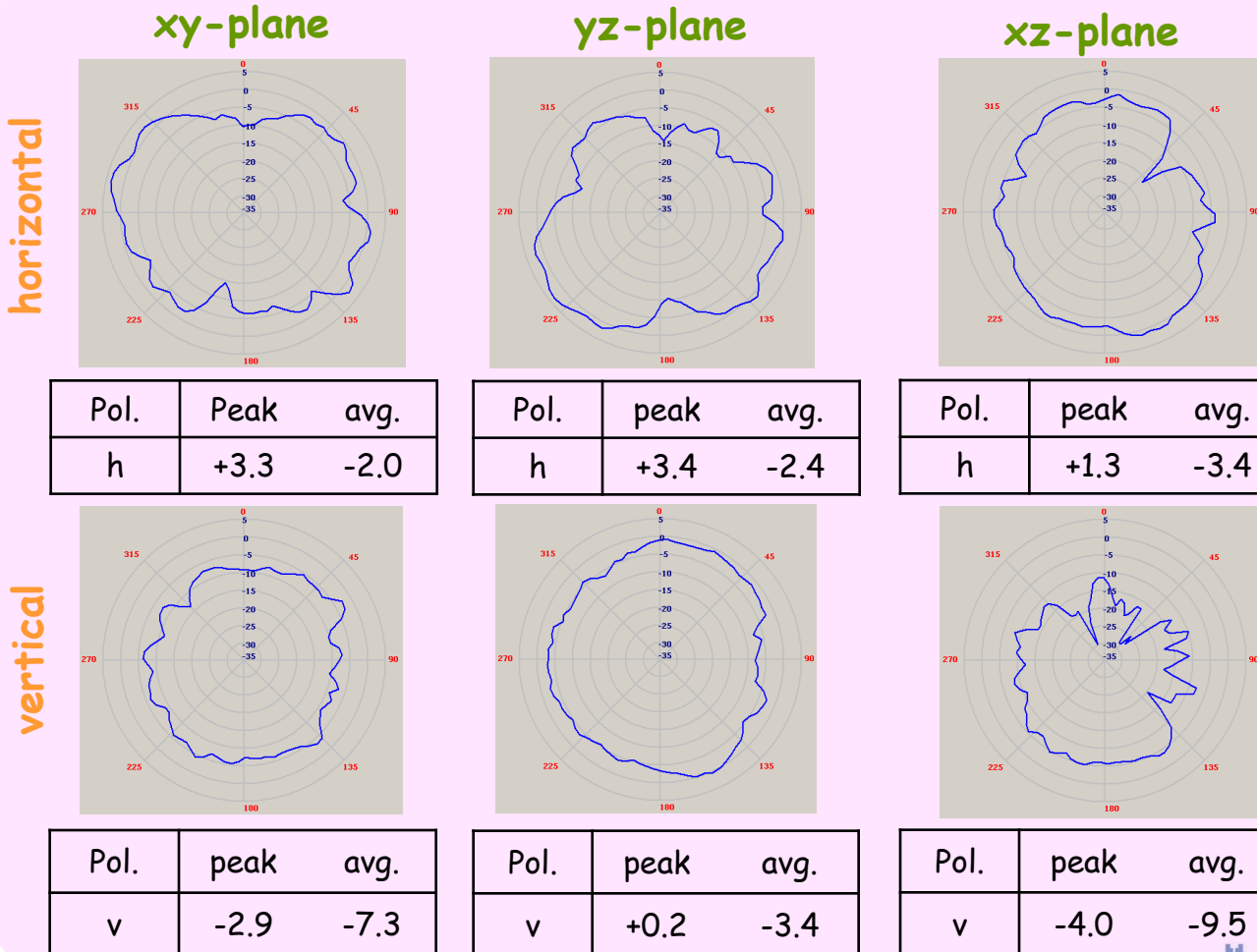
- Frequency : 2400MHz, 2450MHz, 2480MHz, 5150MHz, 5500MHz, 5850MHz and 5900MHz
- Test plane : xy-plane, xz-plane and yz-plane
- Input power : SG 0dBm
- Place: RTK 4F chamber
- Horn h: horizontal polarization
- Horn v: vertical polarization





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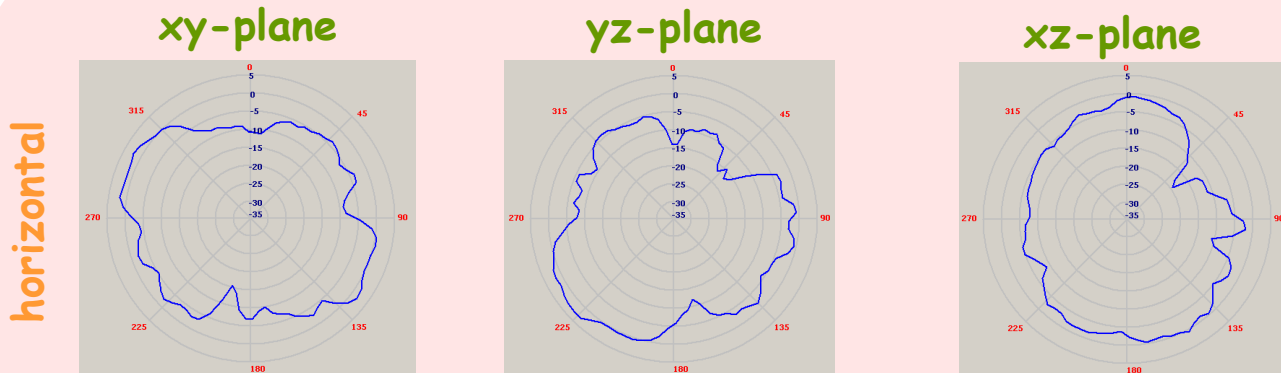
- Radiation Patterns – 2400 MHz





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- Radiation Patterns – 2450 MHz

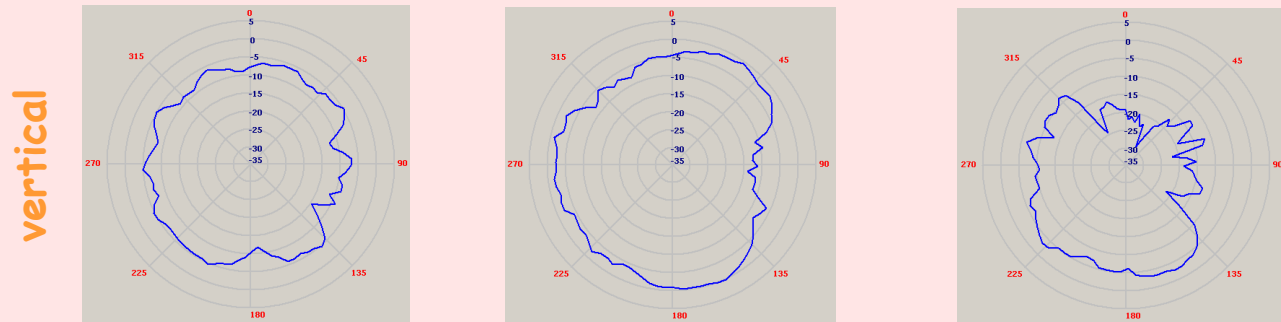


horizontal

Pol.	Peak	avg.
h	+2.1	-3.0

Pol.	peak	avg.
h	+2.8	-3.3

Pol.	peak	avg.
h	+0.5	-4.0



vertical

Pol.	peak	avg.
v	-4.9	-7.2

Pol.	peak	avg.
v	+0.1	-3.5

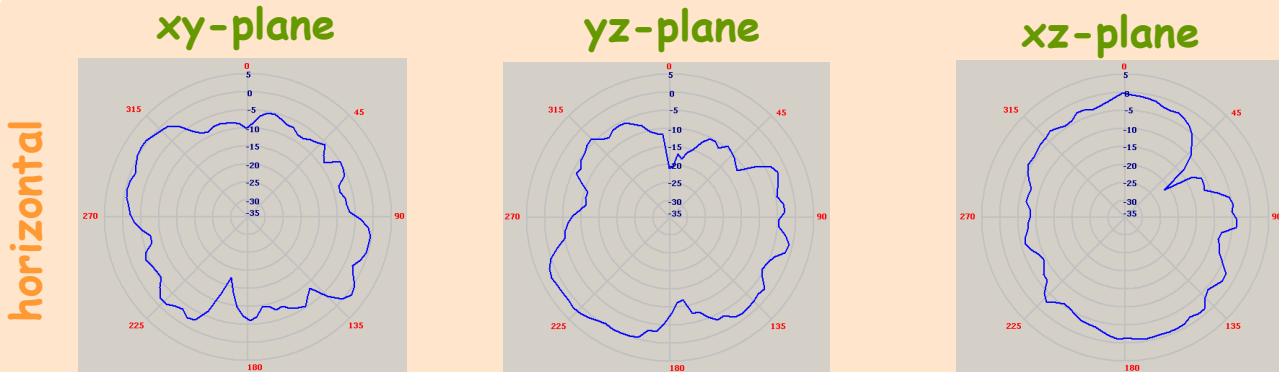
Pol.	peak	avg.
v	-3.0	-8.5





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- Radiation Patterns – 2480 MHz

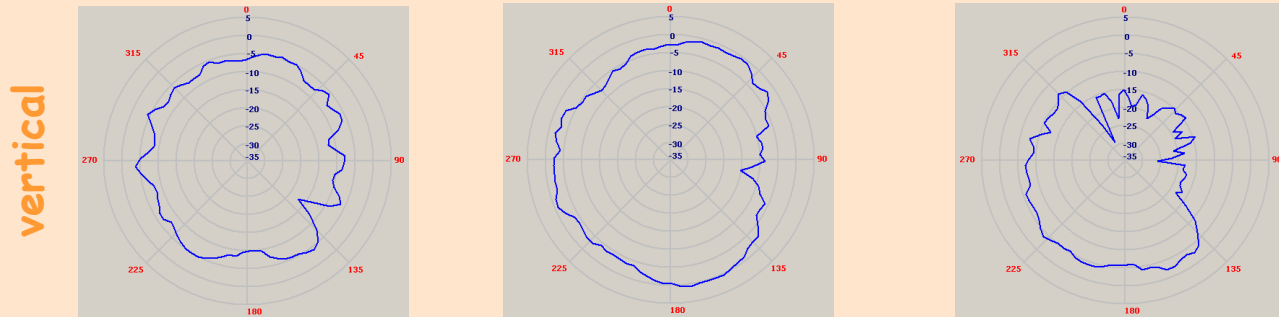


horizontal

Pol.	Peak	avg.
h	+1.0	-4.1

Pol.	peak	avg.
h	+2.0	-3.8

Pol.	peak	avg.
h	+0.4	-4.0



vertical

Pol.	peak	avg.
v	-3.9	-7.0

Pol.	peak	avg.
v	+0.7	-3.1

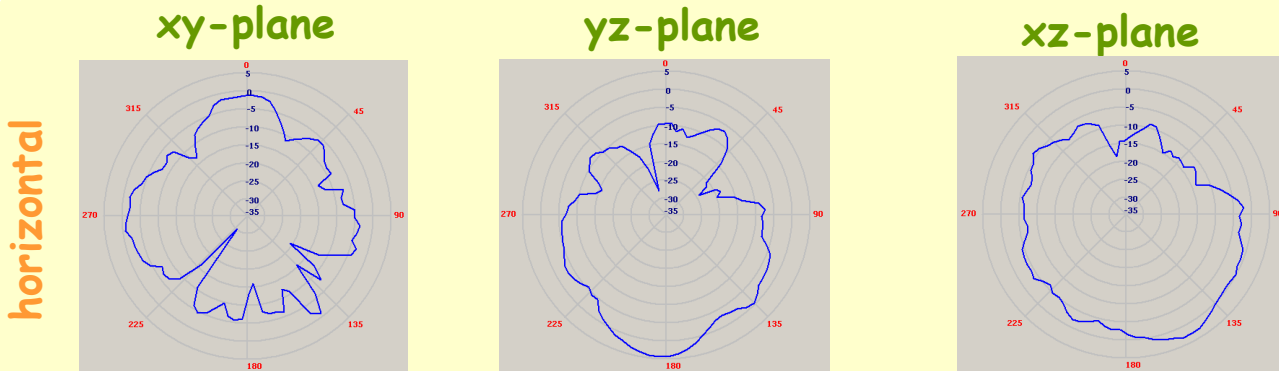
Pol.	peak	avg.
v	-2.5	-8.4





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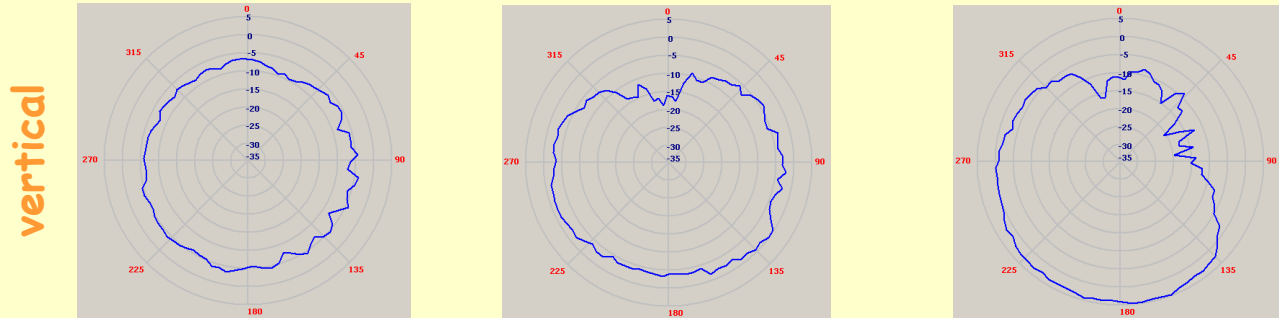
- Radiation Patterns – 5150 MHz



Pol.	Peak	avg.
h	-1.0	-5.6

Pol.	peak	avg.
h	+4.3	-3.6

Pol.	peak	avg.
h	+2.8	-3.7



Pol.	peak	avg.
v	-3.6	-6.2

Pol.	peak	avg.
v	-0.3	-4.2

Pol.	peak	avg.
v	+4.6	-0.6

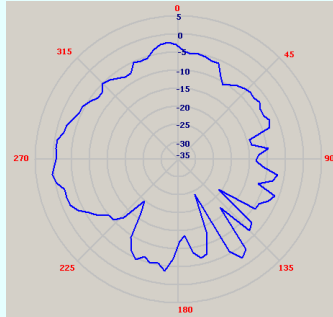




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- Radiation Patterns – 5500 MHz

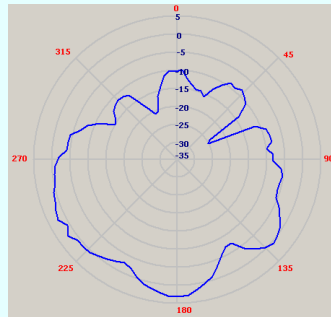
xy-plane



horizontal

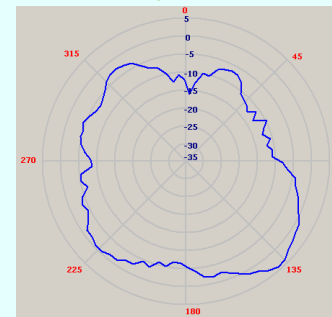
Pol.	Peak	avg.
h	+0.2	-5.7

yz-plane



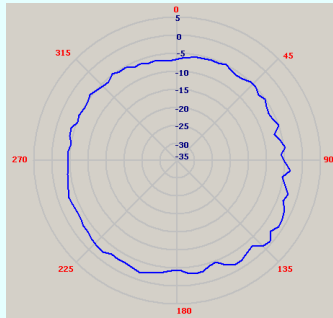
Pol.	peak	avg.
h	+3.6	-3.4

xz-plane

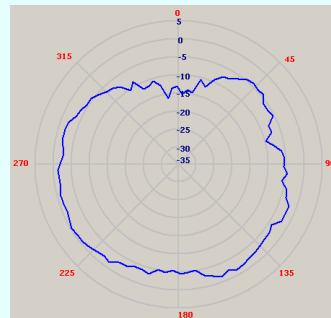


Pol.	peak	avg.
h	+4.0	-3.5

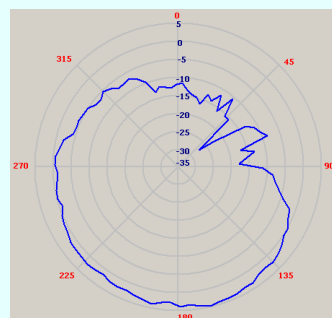
vertical



Pol.	peak	avg.
v	-0.9	-4.2



Pol.	peak	avg.
v	-0.5	-4.1



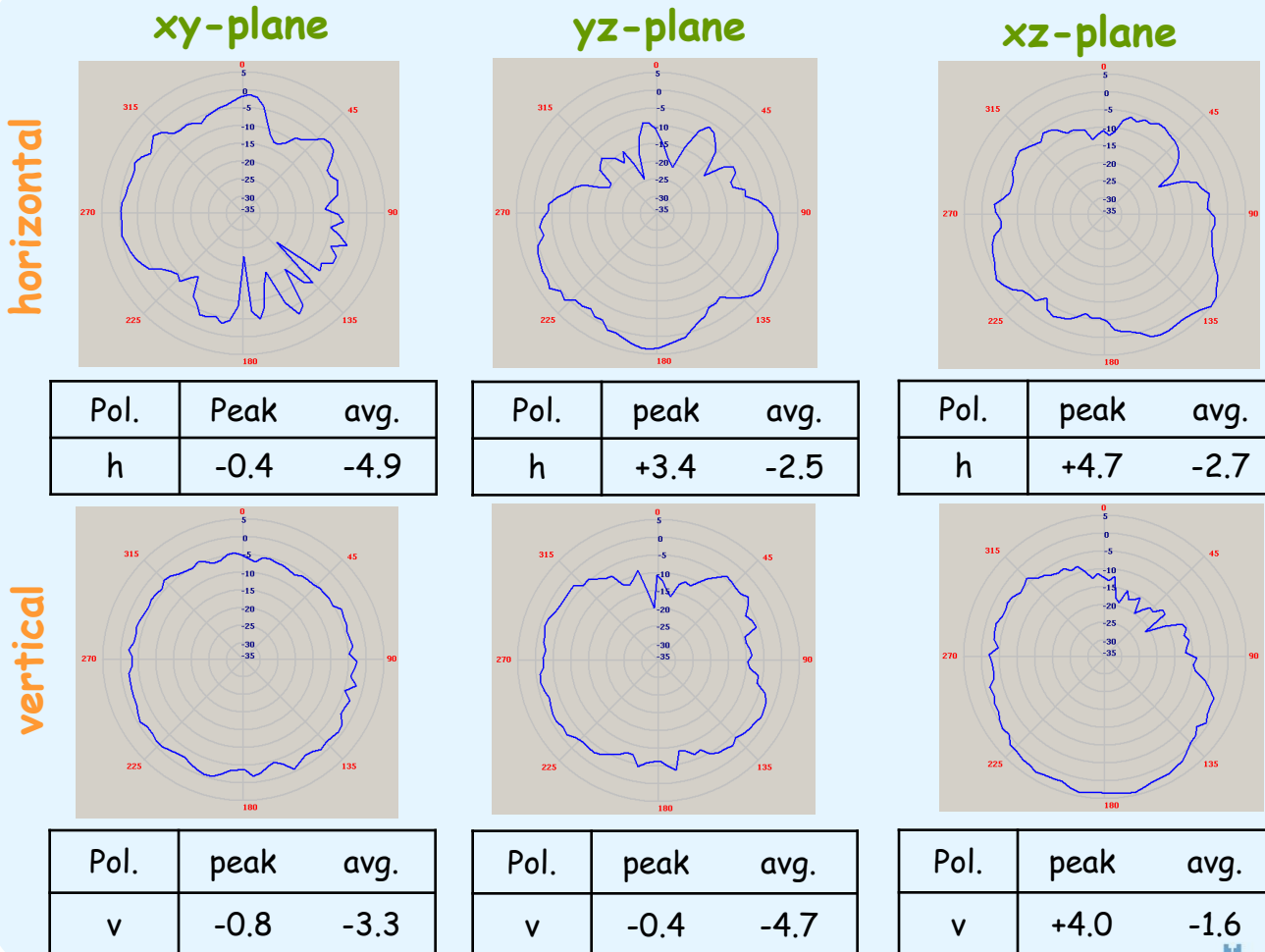
Pol.	peak	avg.
v	+4.8	-1.0





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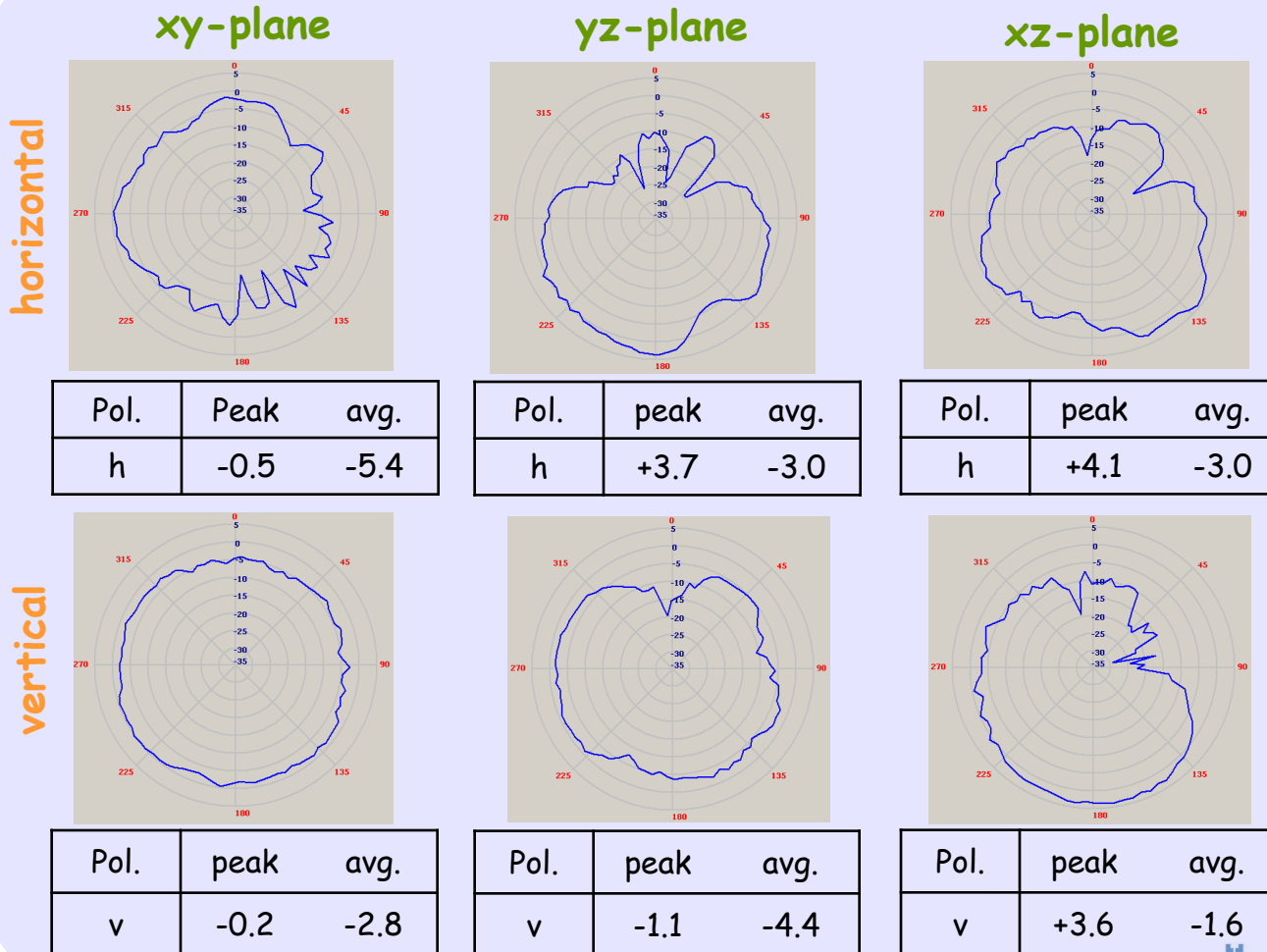
- Radiation Patterns – 5850 MHz





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- Radiation Patterns – 5900 MHz





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- **Antenna gain table**

Frequency (MHz)	Peak gain (dBi)
2400	+3.4
2450	+2.8
2480	+2.0
5150	+4.6
5500	+4.8
5850	+4.7
5900	+4.1

