



SmartAnt Telecom Co., Ltd.

6F, No.12, Li-Hsin Road., Science-Based
Industrial Park, Hsinchu Taiwan, R.O.C.
Tel: 886-3-5783188 Fax: 886-3-5783189

HR60 (Presario)

Antenna Test Report

RD Manager	Supervisor	RD engineer	Project Manager
Leo	Sigma	Romeo	Lance



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I. Antenna Assembly Specifications

Antenna assembly overview: Peak Gain including cable loss.

Designator	Manufacture	Antenna type	Cable Assembly Info.	Peak Gain With Cable loss (dBi)
(P/N: R0322-031R) Main antenna	SmartAnt Telecom Co.	Inverted F	(P/N: U.FL-2LP-5016B-620) 50 ohm Coaxial. length: 620mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.15 dBi (peak)
				5150-5350MHz 2.43 dBi (peak)
				5475-5725MHz 0.544 dBi (peak)
				5725-5875MHz 0.933 dBi (peak)
(P/N: R0322-031L) Auxiliary antenna	SmartAnt Telecom Co.	Inverted F	(P/N: U.FL-2LP-5016-670) 50 ohm Coaxial. length: 670mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.27 dBi (peak)
				5150-5350MHz 1.118 dBi (peak)
				5475-5725MHz 1.334 dBi (peak)
				5725-5875MHz 0.949 dBi (peak)



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Antenna overview: Peak Gain not including cable loss.

Designator	Manufacture	Antenna type	Cable Assembly Info.	Peak Gain Without Cable loss (dBi)
(P/N: R0322-031R) Main antenna	SmartAnt Telecom Co.	Inverted F	(P/N: U.FL-2LP-5016B-620) 50 ohm Coaxial. length: 620mm diameter: 1.13mm Connector: HRS	2400-2500MHz 3.04 dBi (peak)
				5150-5350MHz 5.37 dBi (peak)
				5475-5725MHz 3.564 dBi (peak)
				5725-5875MHz 4.013 dBi (peak)
(P/N: R0322-031L) Auxiliary antenna	SmartAnt Telecom Co.	Inverted F	(P/N: U.FL-2LP-5016-670) 50 ohm Coaxial. length: 670mm diameter: 1.13mm Connector: HRS	2400-2500MHz 3.31 dBi (peak)
				5150-5350MHz 4.298 dBi (peak)
				5475-5725MHz 4.594 dBi (peak)
				5725-5875MHz 4.279 dBi (peak)



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Cable assembly overview: Cable loss (including connector).

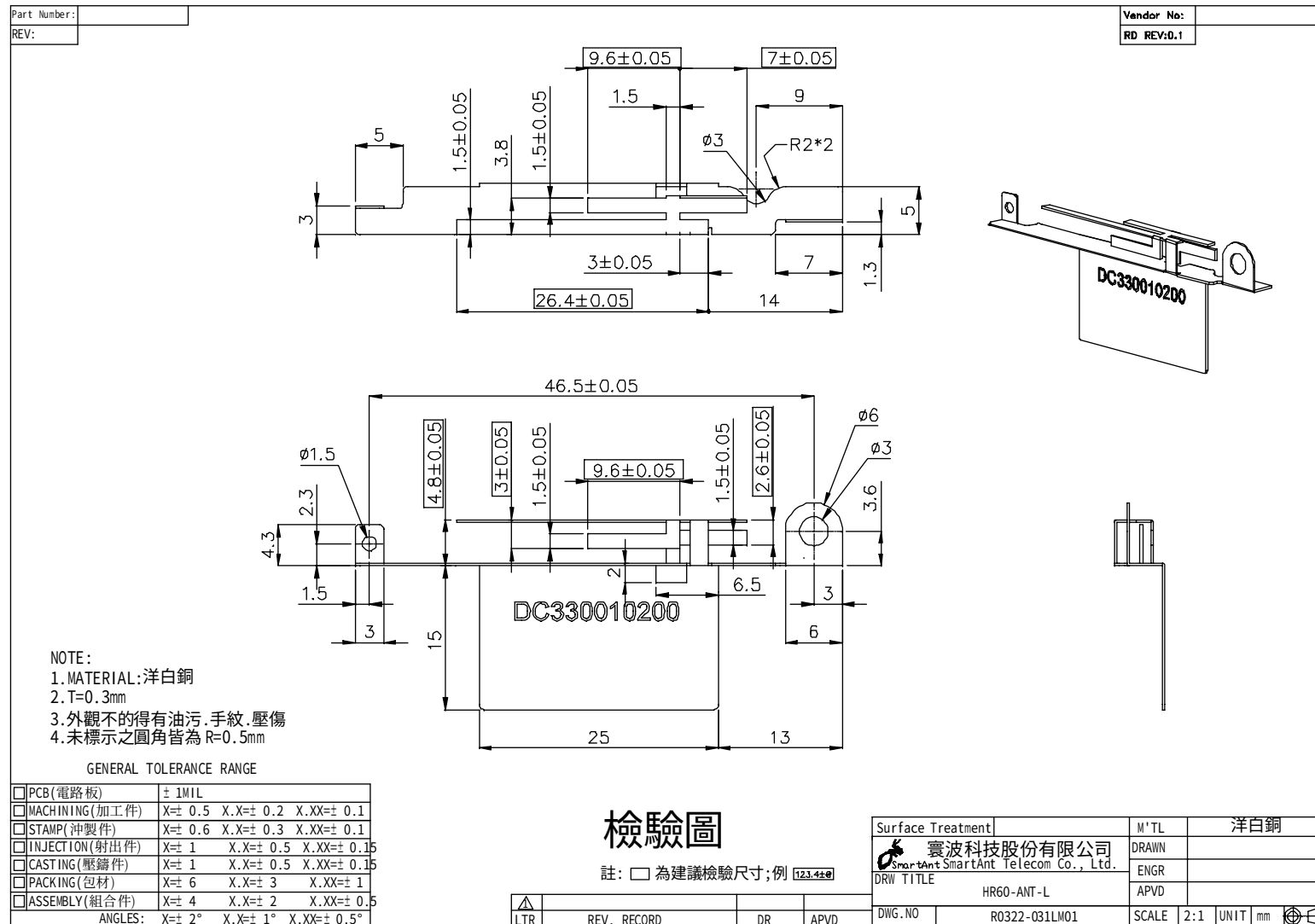
Designator	Manufacture	Cable type and length	VSWR	Cable Loss (dB)
For use with the Main antenna	Hirose Electric Co.	(P/N: RF-MF5016) 50 ohm Coaxial. length: 620mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.16 max	2400-2500MHz 1.89 dB (peak)
			5150-5350MHz 1.30 max	5150-5350MHz 2.94 dB (peak)
			5475-5725MHz 1.30 max	5475-5725MHz 3.02 dB (peak)
			5725-5875MHz 1.34 max	5725-5875MHz 3.08 dB (peak)
For use with the Auxiliary antenna	Hirose Electric Co.	(P/N: RF-MF5016) 50 ohm Coaxial. length: 670mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.16 max	2400-2500MHz 2.04 dB (peak)
			5150-5350MHz 1.30 max	5150-5350MHz 3.18 dB (peak)
			5475-5725MHz 1.30 max	5475-5725MHz 3.26 dB (peak)
			5725-5875MHz 1.34 max	5725-5875MHz 3.33 dB (peak)



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Left Antenna

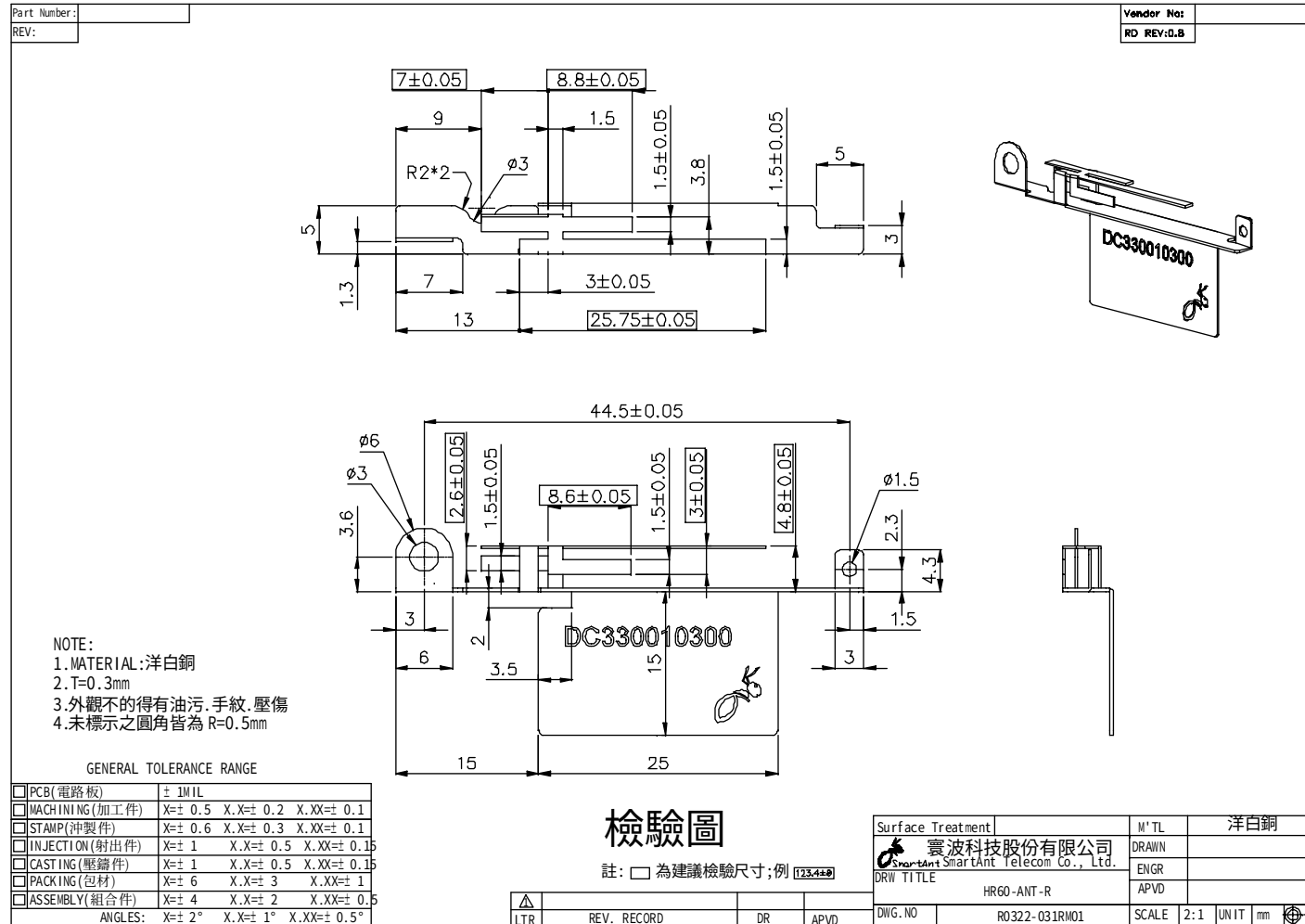




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Right Antenna





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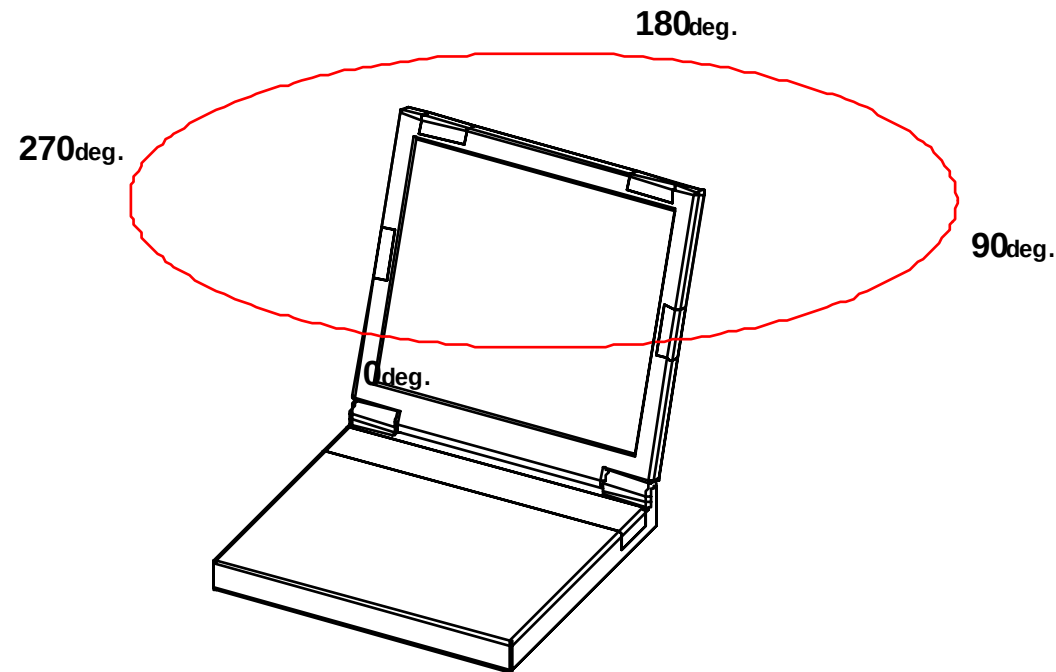
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Radiation characteristic of antennae

Loaded (In Host System)





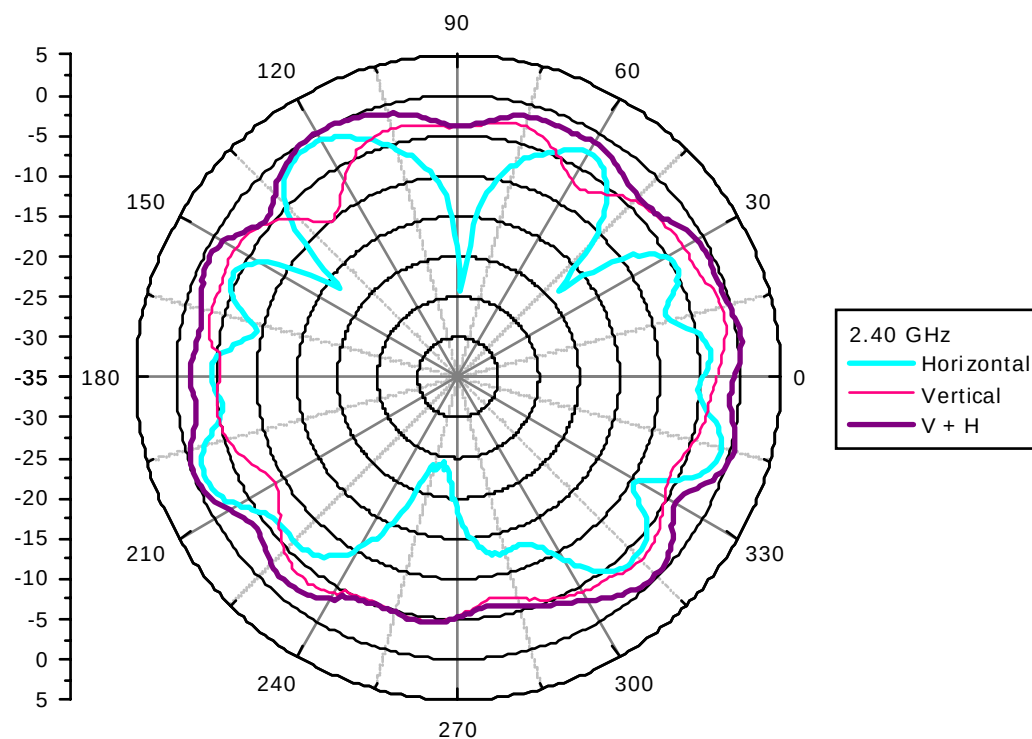
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2400~2500MHz radiation characteristic

Main antenna: 2400 MHz

Center Frequency	2400 MHz
Horizontal (dBi) peak	-0.7861
Vertical (dBi) peak	-1.1118
Horz+Vert (dBi) peak	0.42



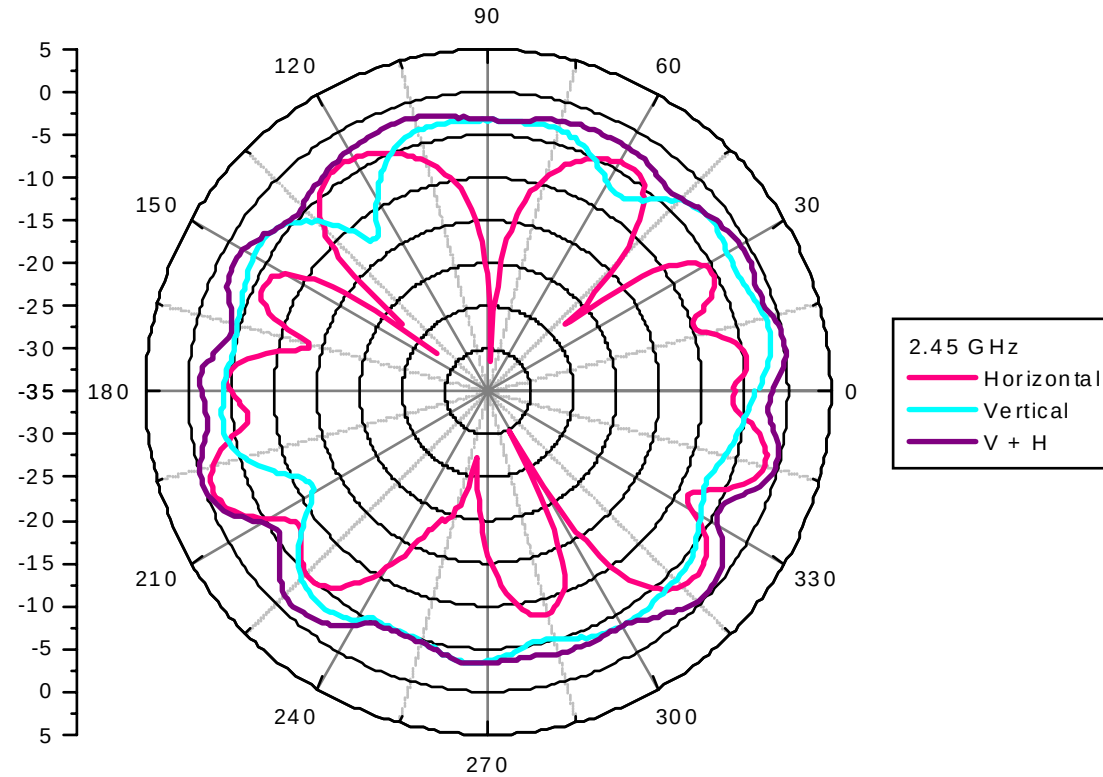


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Main antenna: 2450 MHz

Center Frequency	2450 MHz
Horizontal (dBi) peak	-0.8531
Vertical (dBi) peak	-1.3858
Horz+Vert (dBi) peak	0.084



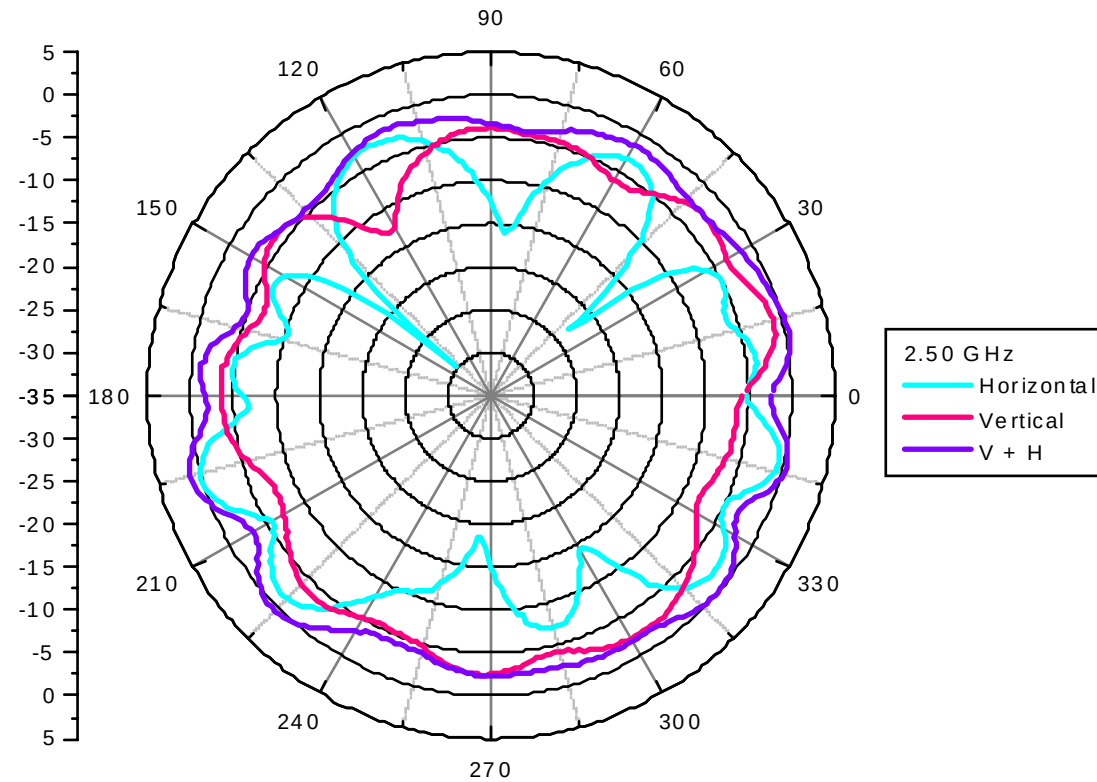


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Main antenna: 2500 MHz

Center Frequency	2500 MHz
Horizontal (dBi) peak	0.1459
Vertical (dBi) peak	-1.0058
Horz+Vert (dBi) peak	1.15



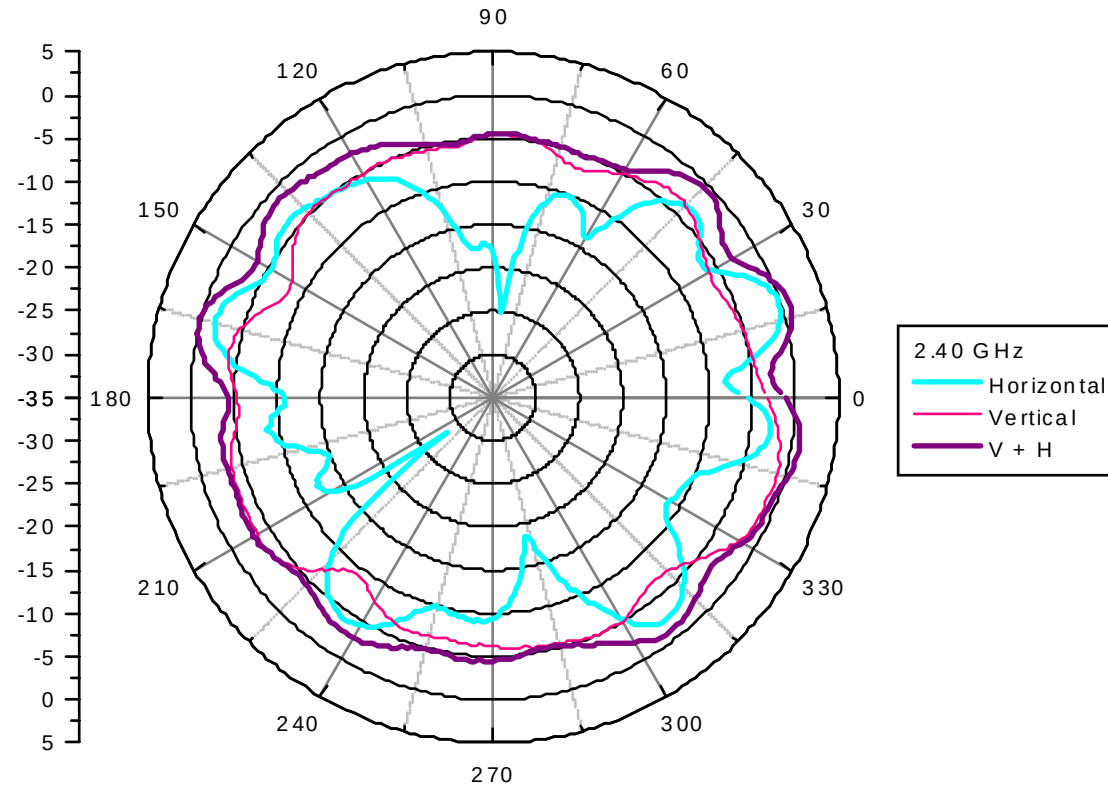


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Auxiliary antenna: 2400 MHz

Center Frequency	2400 MHz
Horizontal (dBi) peak	-0.1817
Vertical (dBi) peak	-0.9581
Horz+Vert (dBi) peak	0.989



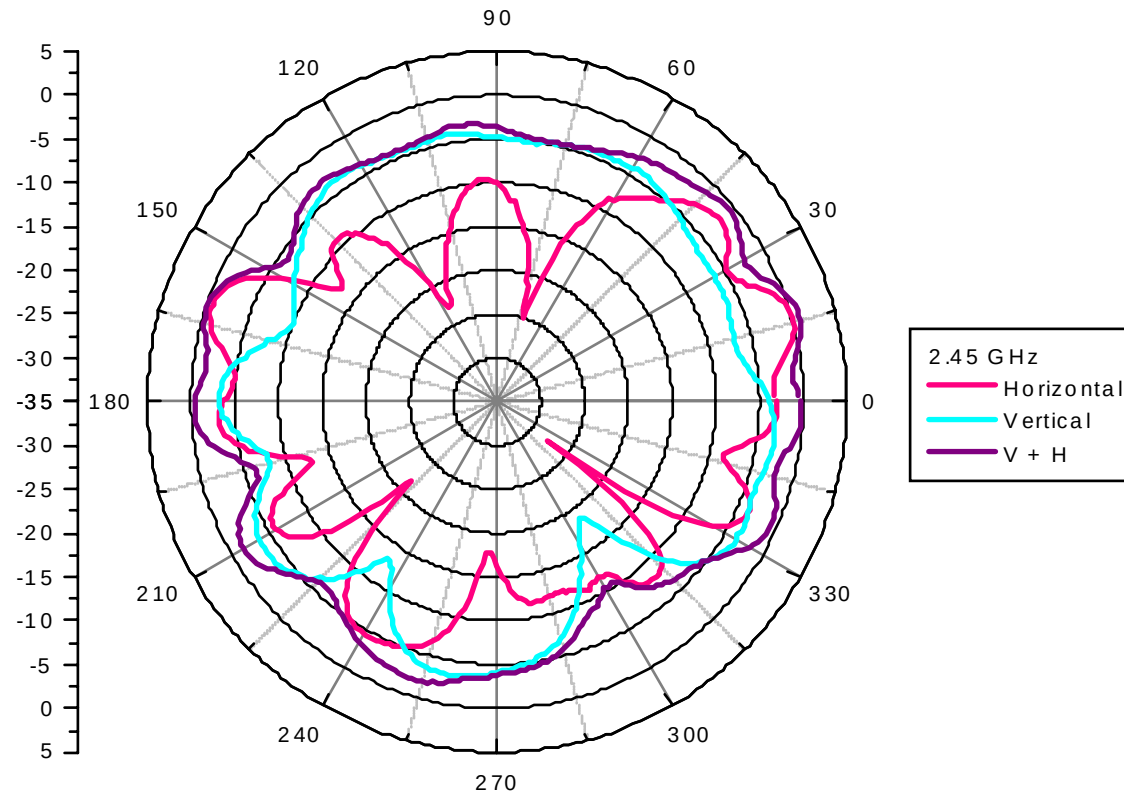


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Auxiliary antenna: 2450 MHz

Center Frequency	2450 MHz
Horizontal (dBi) peak	0.1133
Vertical (dBi) peak	-3.0201
Horz+Vert (dBi) peak	0.889



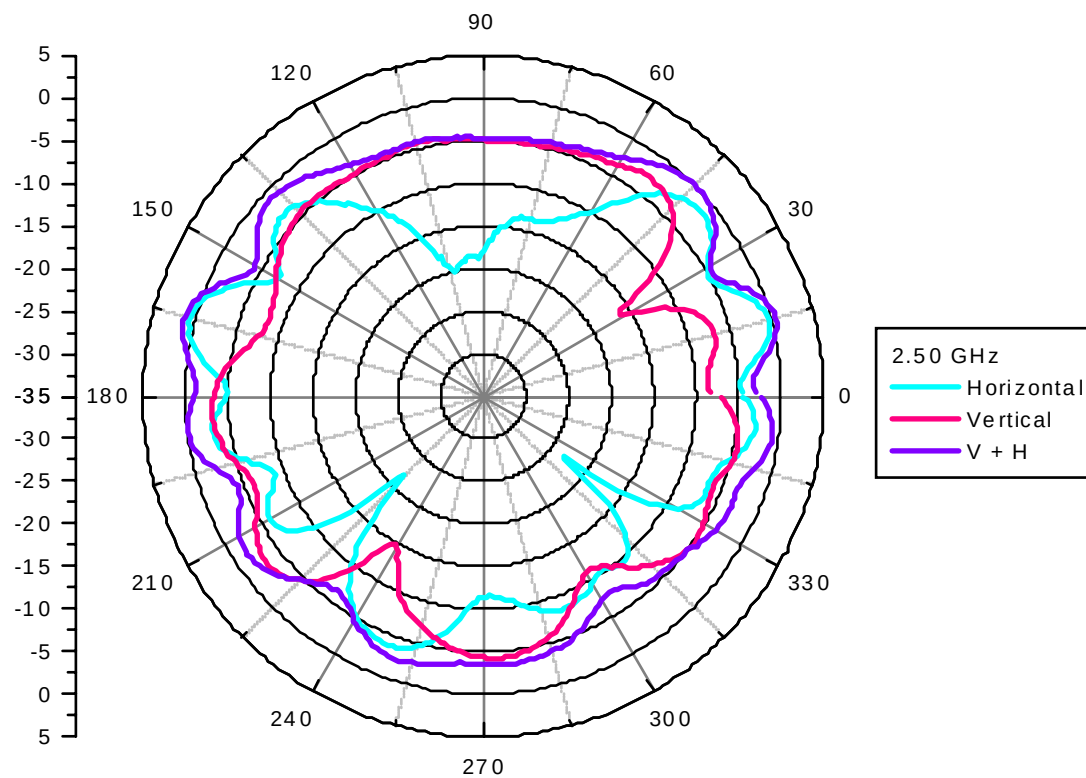


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Auxiliary antenna: 2500 MHz

Center Frequency	2500 MHz
Horizontal (dBi) peak	0.6283
Vertical (dBi) peak	-2.6721
Horz+Vert (dBi) peak	1.27





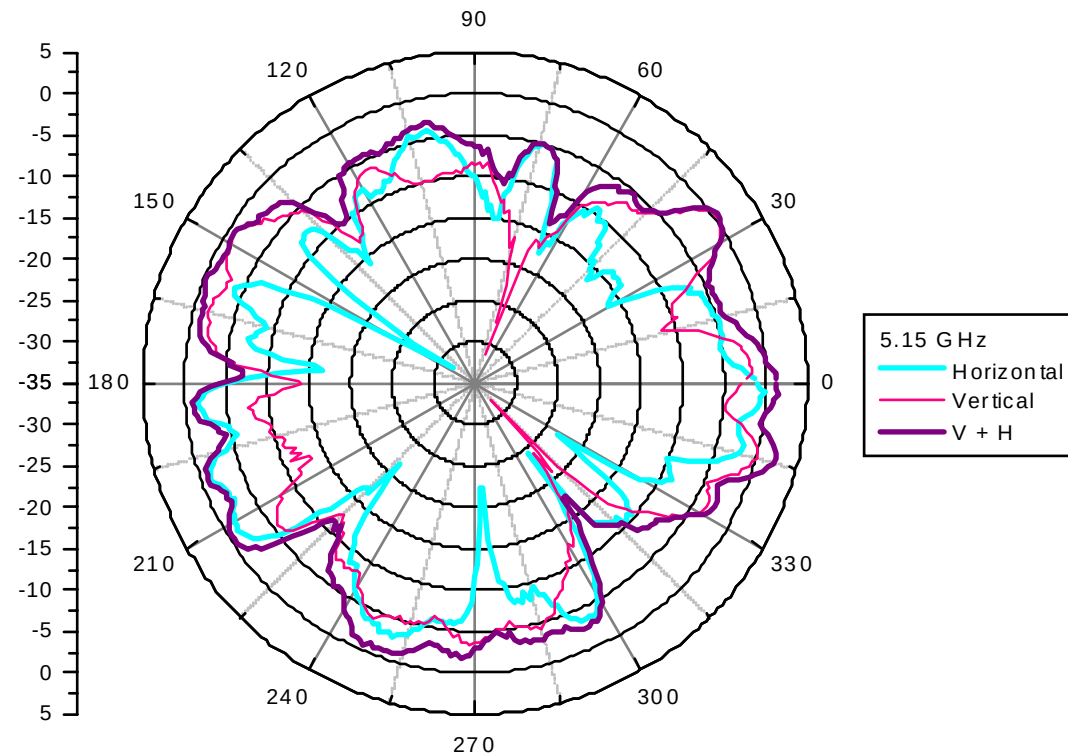
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5150~5135 MHz radiation characteristic

Main antenna: 5150 MHz

Center Frequency	5150 MHz
Horizontal (dBi) peak	-0.1307
Vertical (dBi) peak	0.4131
Horz+Vert (dBi) peak	2.165



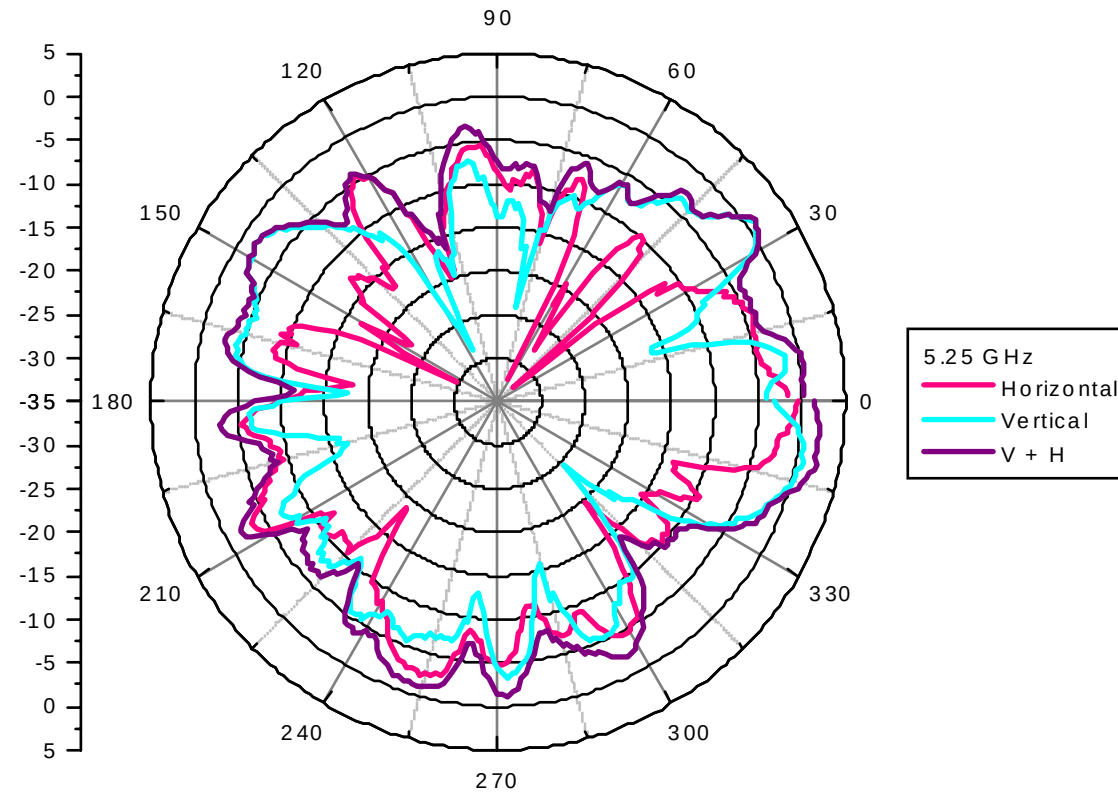


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Main antenna: 5250 MHz

Center Frequency	5250 MHz
Horizontal (dBi) peak	-0.2867
Vertical (dBi) peak	1.0801
Horz+Vert (dBi) peak	2.43



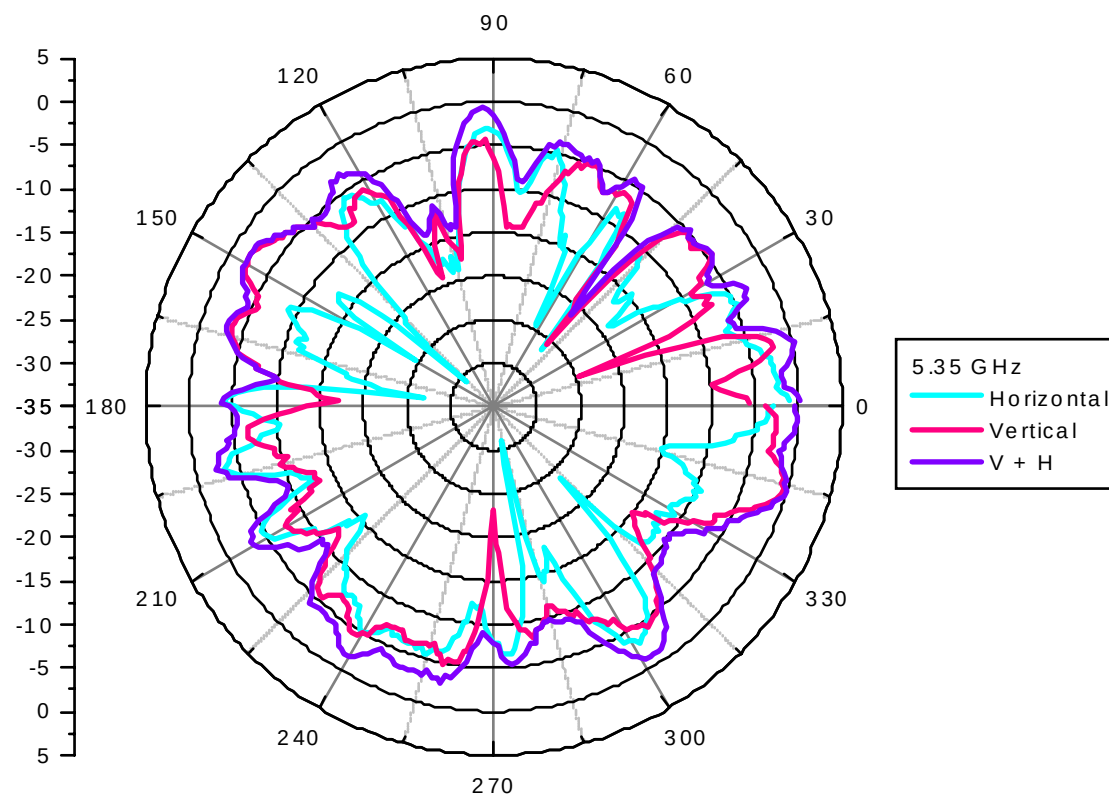


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Main antenna: 5350 MHz

Center Frequency	5350 MHz
Horizontal (dBi) peak	-1.1357
Vertical (dBi) peak	-0.3629
Horz+Vert (dBi) peak	0.207



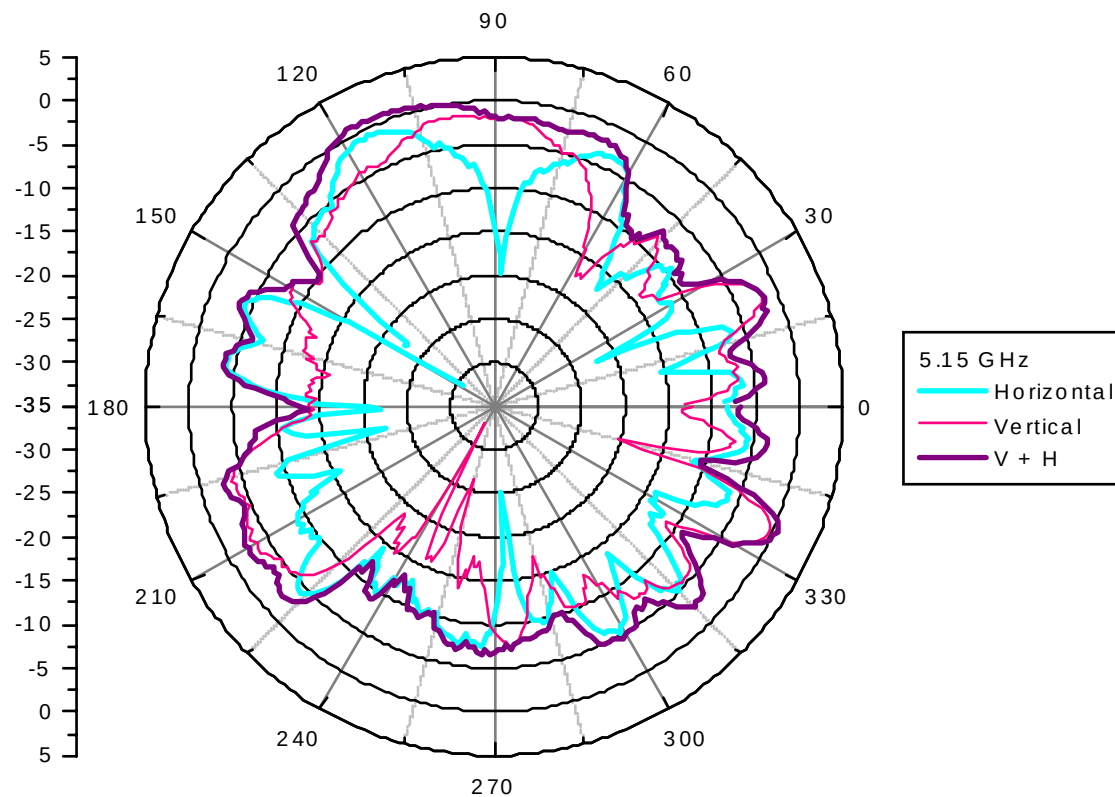


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Auxiliary antenna: 5150 MHz

Center Frequency	5150 MHz
Horizontal (dBi) peak	-0.7213
Vertical (dBi) peak	-0.3691
Horz+Vert (dBi) peak	0.901



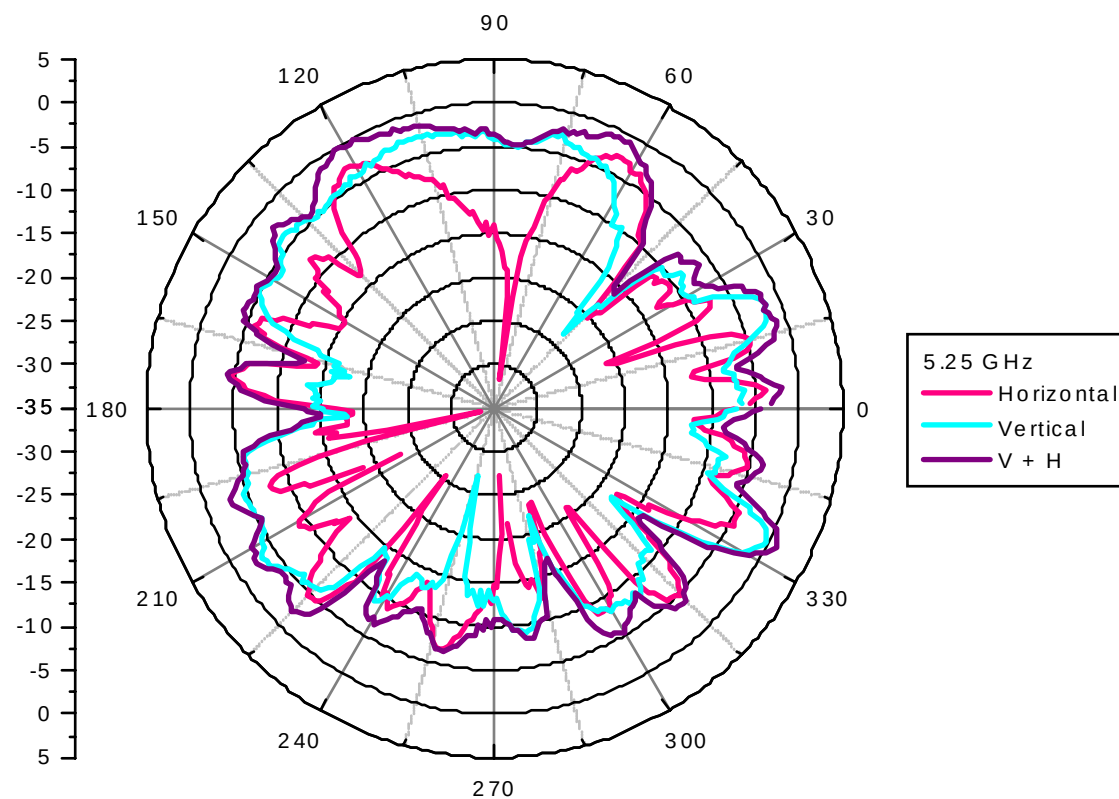


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Auxiliary antenna: 5250 MHz

Center Frequency	5250 MHz
Horizontal (dBi) peak	-2.5853
Vertical (dBi) peak	-0.2711
Horz+Vert (dBi) peak	1.118



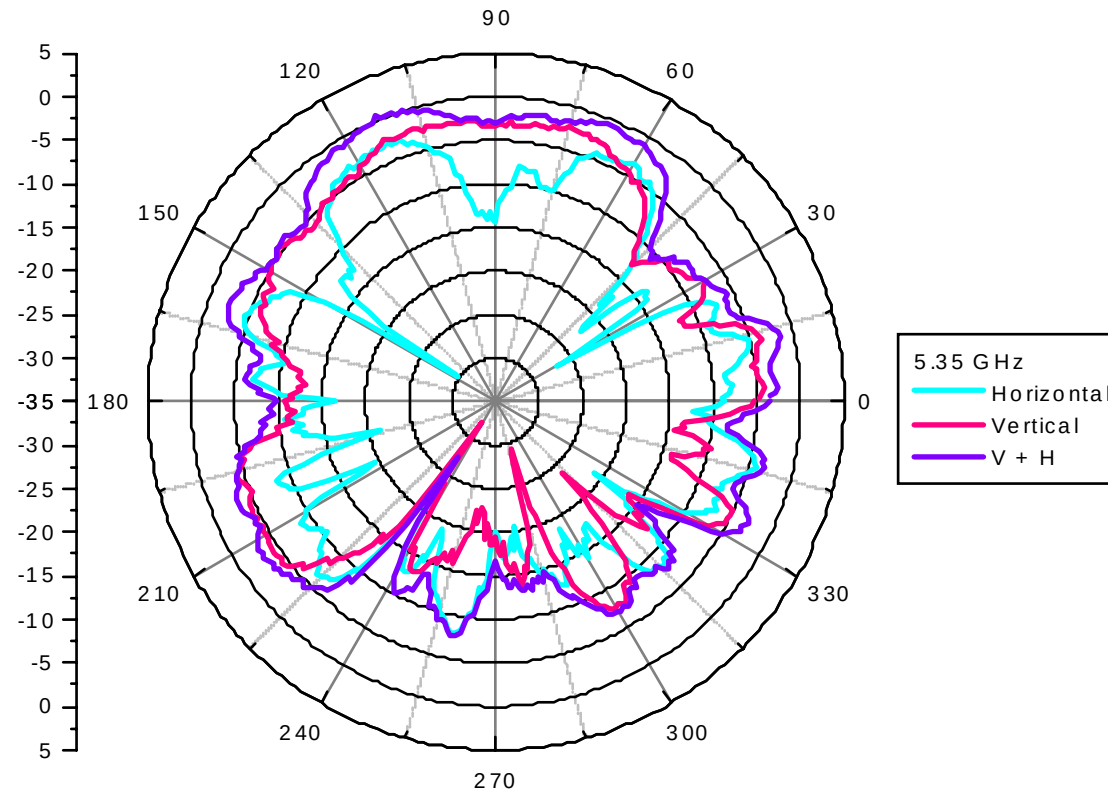


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Auxiliary antenna: 5350 MHz

Center Frequency	5350 MHz
Horizontal (dBi) peak	-2.5863
Vertical (dBi) peak	-2.2761
Horz+Vert (dBi) peak	0.572





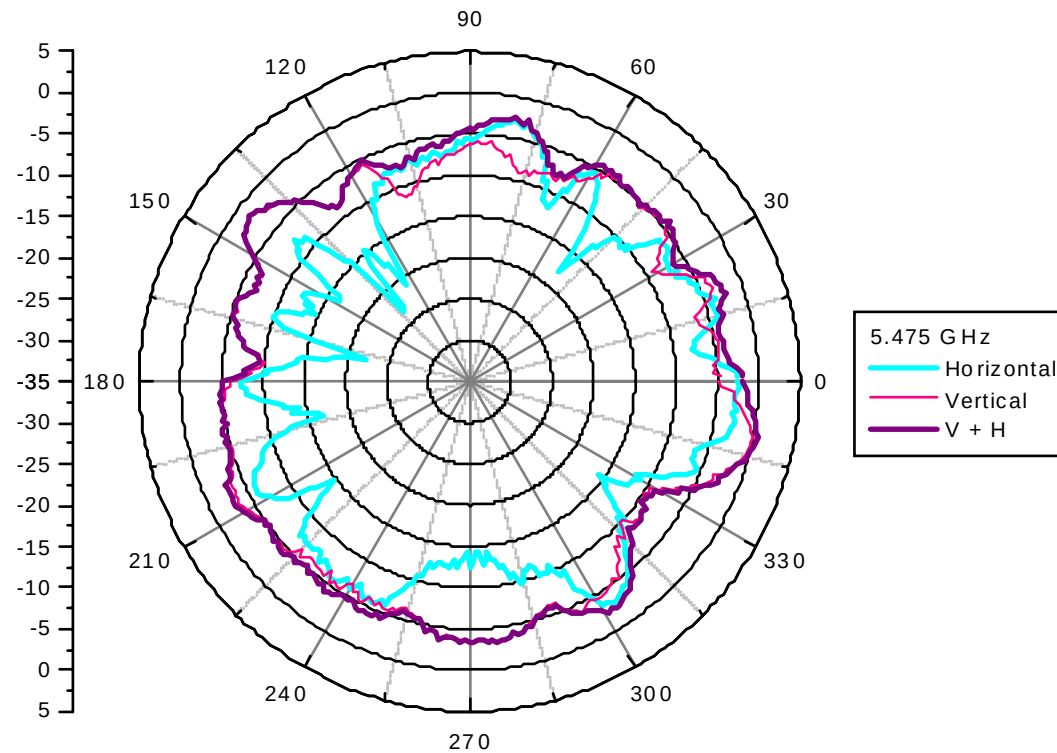
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5475~5725MHz radiation characteristic

Main antenna: 5475 MHz

Center Frequency	5475 MHz
Horizontal (dBi) peak	-2.3268
Vertical (dBi) peak	0.0384
Horz+Vert (dBi) peak	0.544



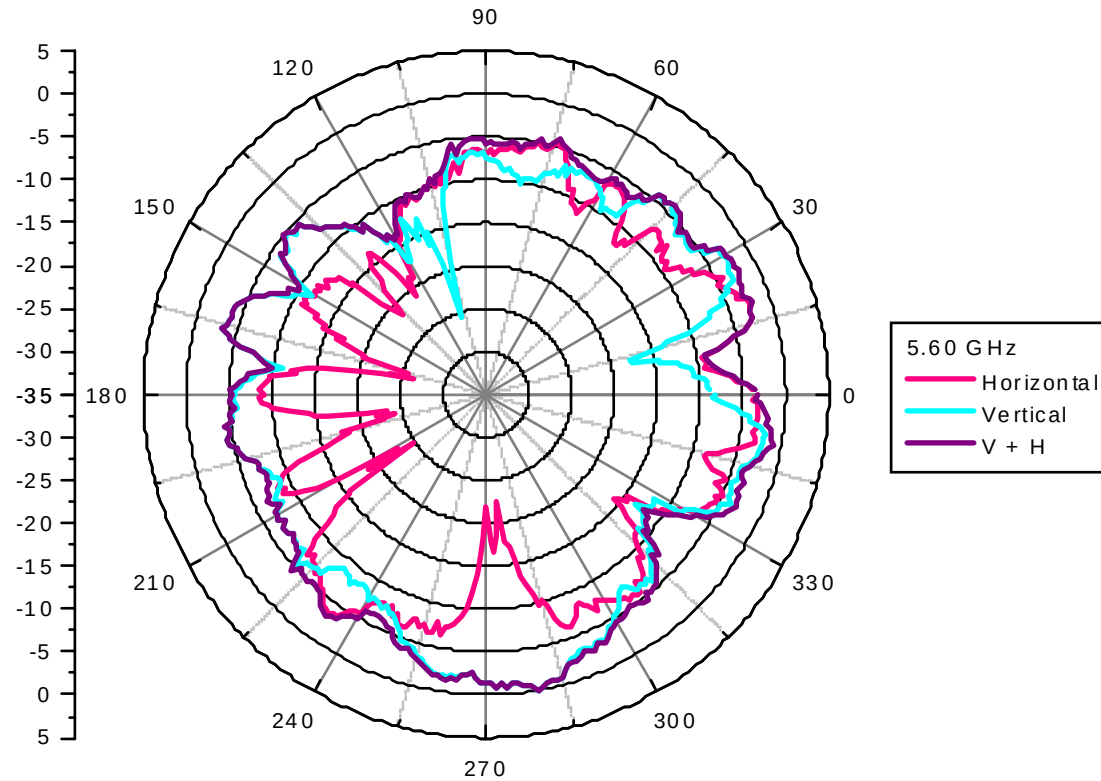


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Main antenna: 5600 MHz

Center Frequency	5600 MHz
Horizontal (dBi) peak	-2.3818
Vertical (dBi) peak	0.0524
Horz+Vert (dBi) peak	0.054



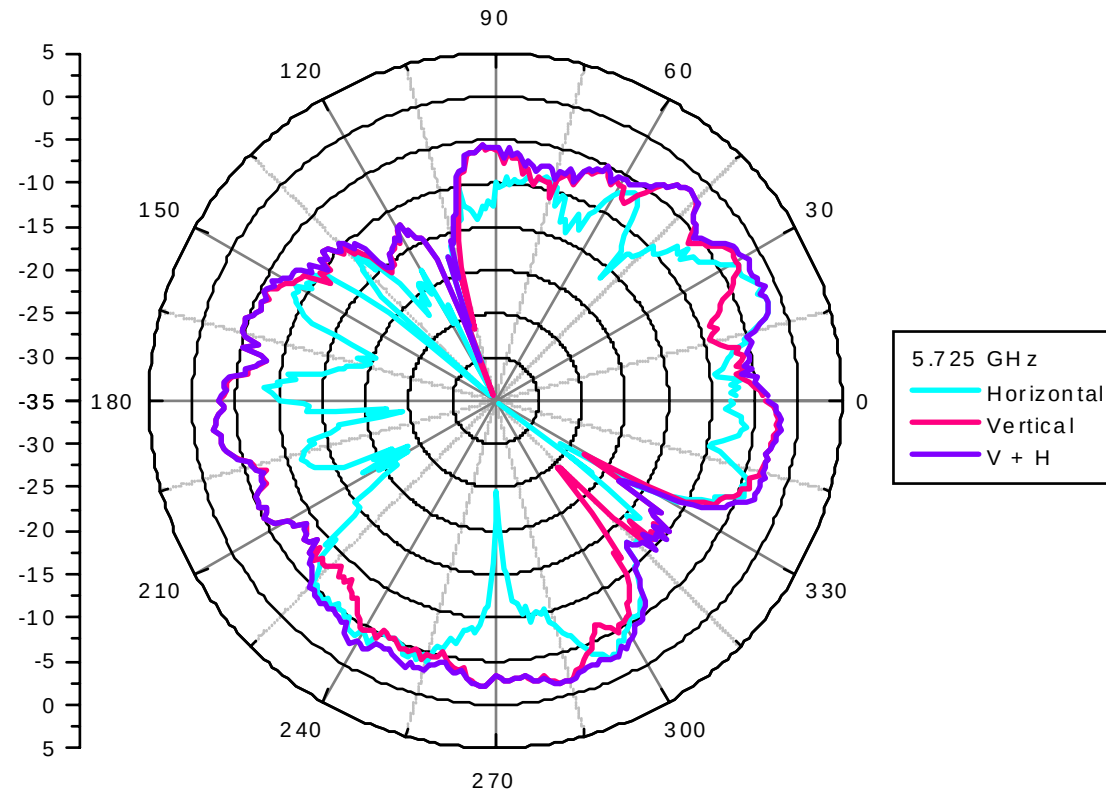


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Main antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-1.3848
Vertical (dBi) peak	-1.6446
Horz+Vert (dBi) peak	-1.214



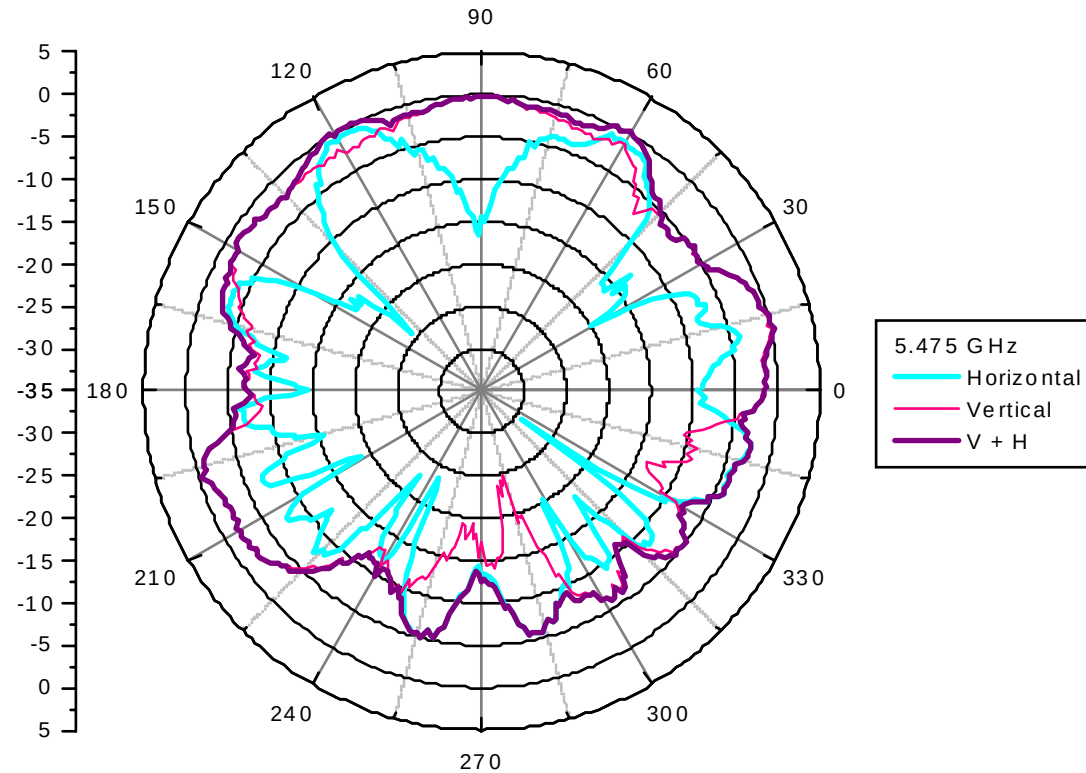


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Auxiliary antenna: 5475 MHz

Center Frequency	5475 MHz
Horizontal (dBi) peak	-0.5149
Vertical (dBi) peak	0.0086
Horz+Vert (dBi) peak	0.332



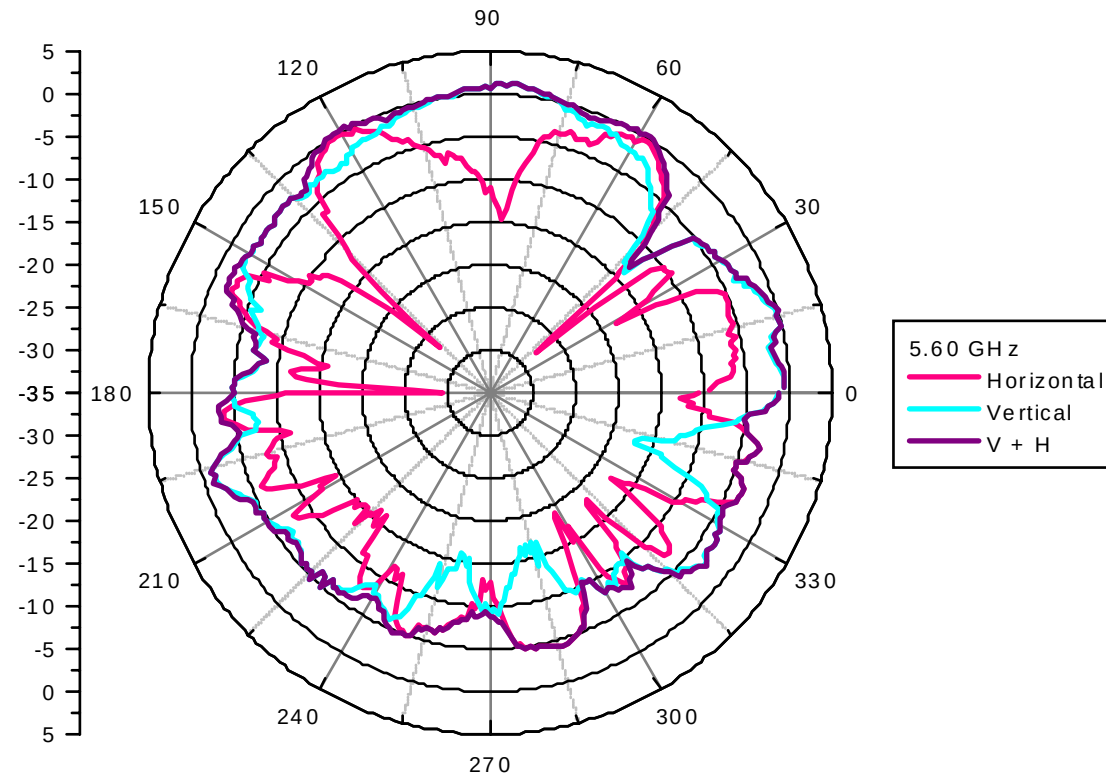


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Auxiliary antenna: 5600 MHz

Center Frequency	5600 MHz
Horizontal (dBi) peak	0.0631
Vertical (dBi) peak	1.3316
Horz+Vert (dBi) peak	1.334



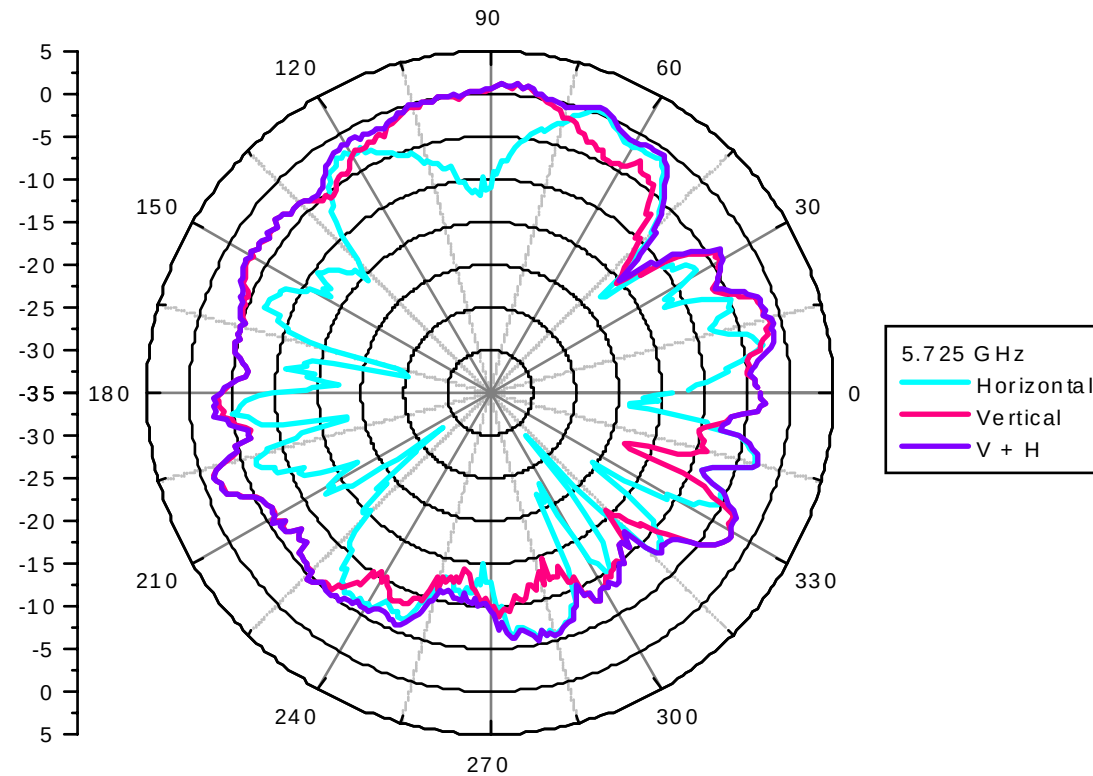


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Auxiliary antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	0.3021
Vertical (dBi) peak	1.2836
Horz+Vert (dBi) peak	1.3





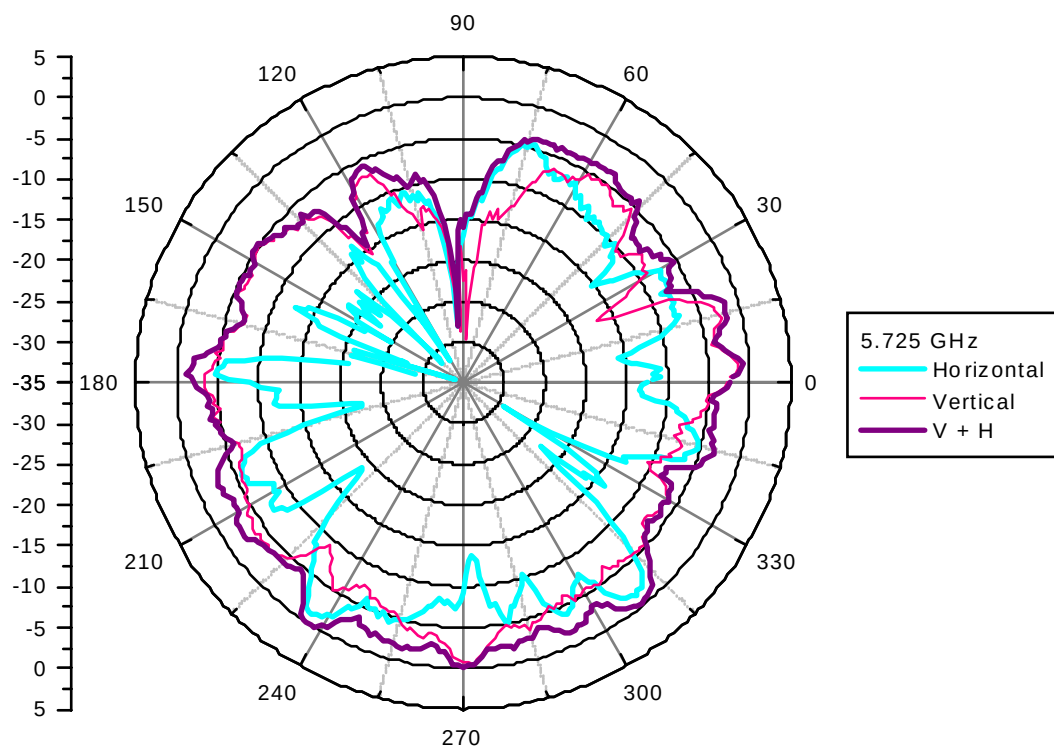
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5725~5875 MHz radiation characteristic

Main antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-1.0918
Vertical (dBi) peak	-0.5394
Horz+Vert (dBi) peak	0.15



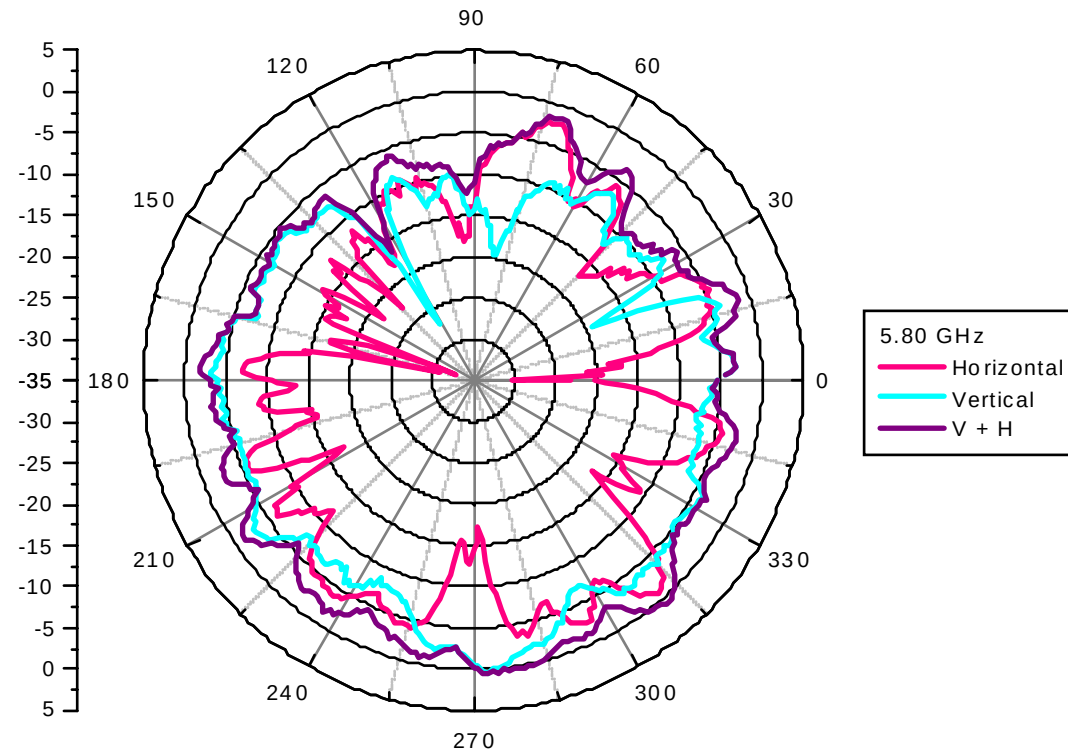


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Main antenna: 5800 MHz

Center Frequency	5800 MHz
Horizontal (dBi) peak	-0.9778
Vertical (dBi) peak	0.6306
Horz+Vert (dBi) peak	0.813



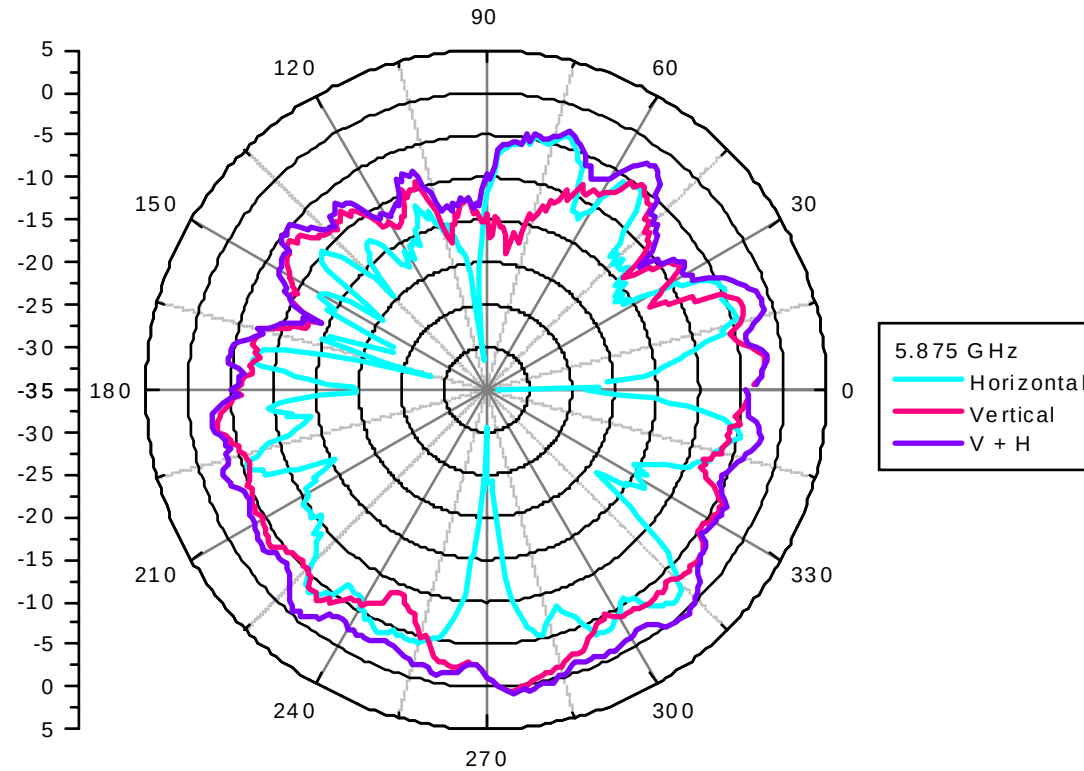


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Main antenna: 5875 MHz

Center Frequency	5875 MHz
Horizontal (dBi) peak	-1.4168
Vertical (dBi) peak	0.8046
Horz+Vert (dBi) peak	0.933



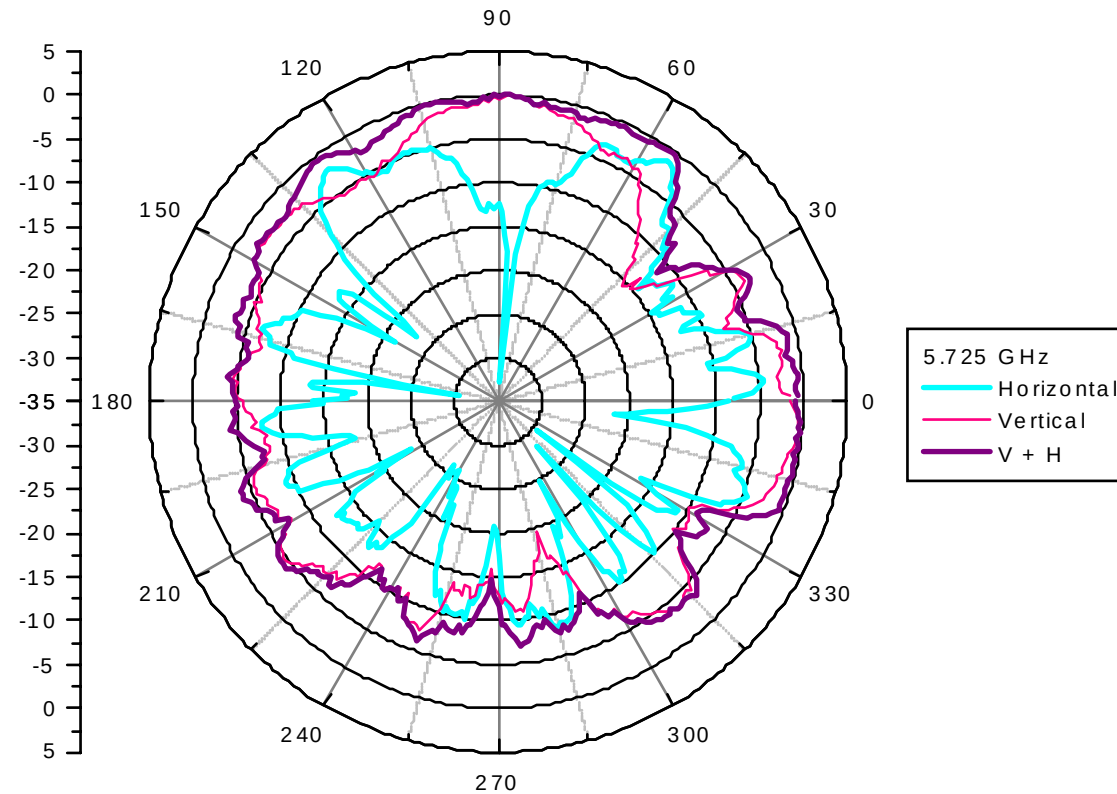


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Auxiliary antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-1.3355
Vertical (dBi) peak	0.0091
Horz+Vert (dBi) peak	0.117



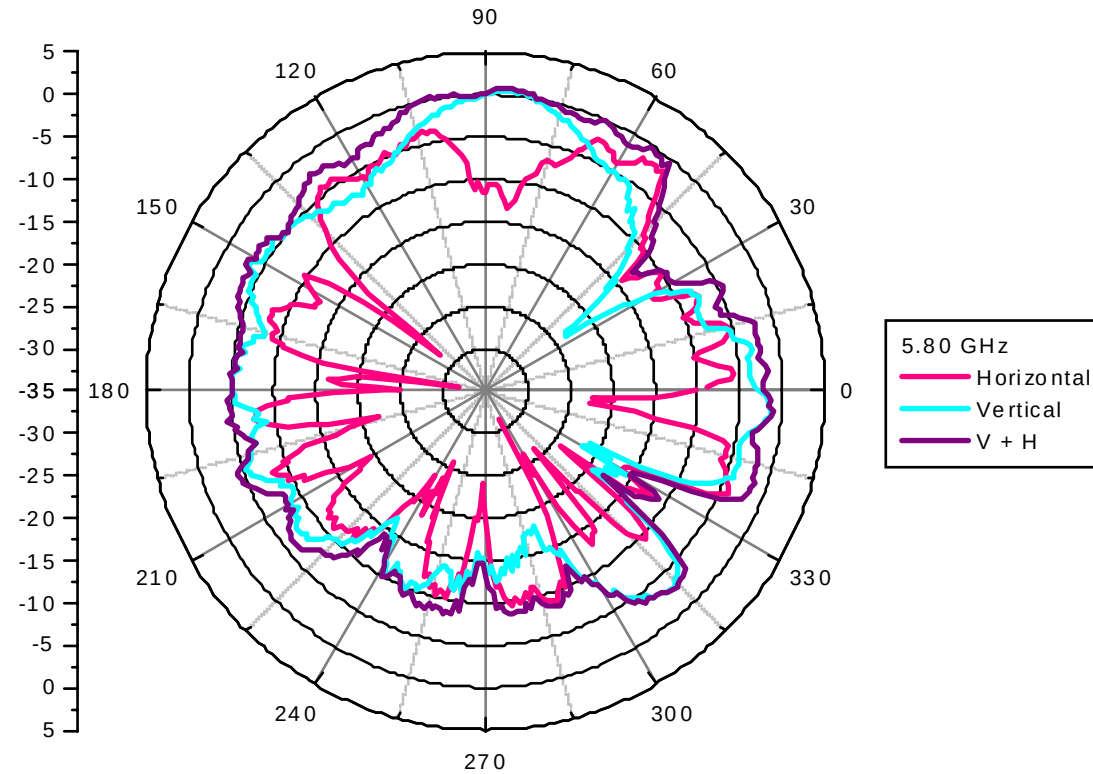


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Auxiliary antenna: 5800 MHz

Center Frequency	5800 MHz
Horizontal (dBi) peak	-1.5615
Vertical (dBi) peak	0.7161
Horz+Vert (dBi) peak	0.949



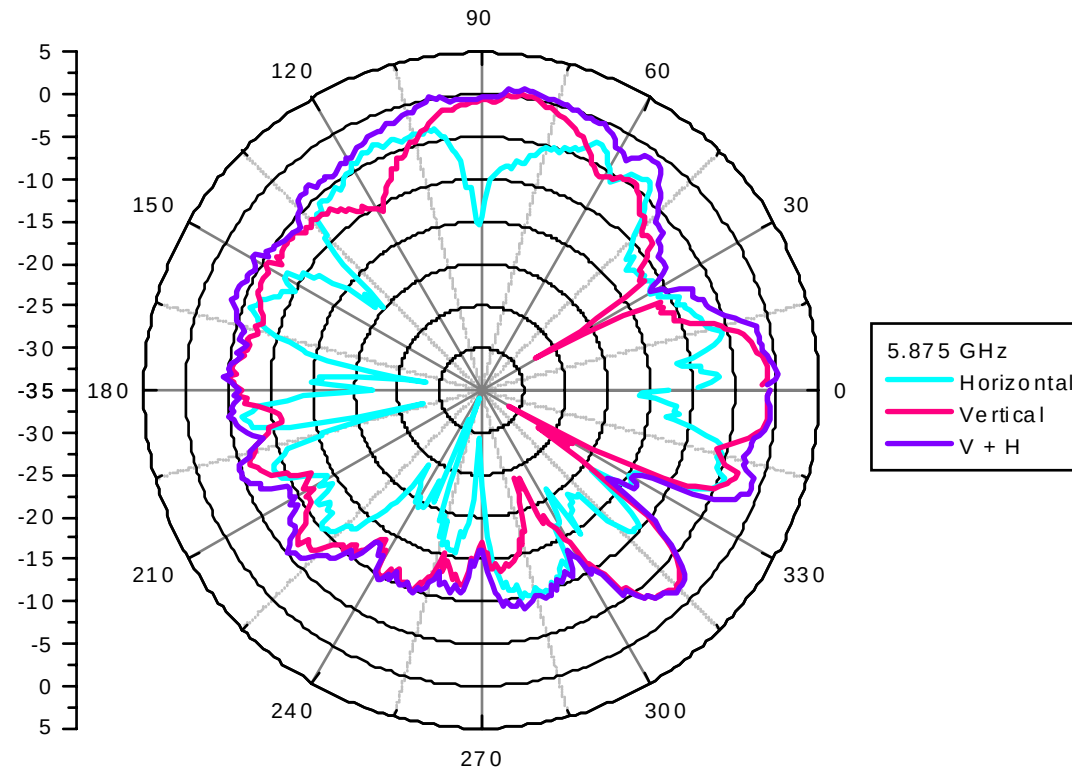


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Auxiliary antenna: 5875 MHz

Center Frequency	5875 MHz
Horizontal (dBi) peak	-2.4615
Vertical (dBi) peak	0.4031
Horz+Vert (dBi) peak	0.932





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Host PC Information

Host model: Compal HR60 Pavilion





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Main Antenna





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Auxiliary Antenna

