



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 (Pavilion)

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 1.6353 dBi (peak)
				5150-5350MHz 1.0269 dBi (peak)
				5475-5725MHz 1.3764 dBi (peak)
				5725-5875MHz 2.1262 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 0.9795 dBi (peak)
				5150-5350MHz 0.4739 dBi (peak)
				5475-5725MHz 0.7783 dBi (peak)
				5725-5875MHz 0.8873 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 3.4853 dBi (peak)
				5150-5350MHz 3.7669 dBi (peak)
				5475-5725MHz 4.4064 dBi (peak)
				5725-5875MHz 5.2162 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 3.1195 dBi (peak)
				5150-5350MHz 3.6339 dBi (peak)
				5475-5725MHz 3.9883 dBi (peak)
				5725-5875MHz 4.3173 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	Nirose Electric Co.	(P/N: RF-MF5016) 50 ohm Coaxial. length: 620mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.21 max	2400-2500MHz 1.85 dB (peak)
			5150-5350MHz 1.4 max	5150-5350MHz 2.74 dB (peak)
			5475-5725MHz 1.52 max	5475-5725MHz 3.03 dB (peak)
			5725-5875MHz 1.61 max	5725-5875MHz 3.09 dB (peak)
For use with the Auxiliary antenna	Nirose Electric Co.	(P/N: RF-MF5016) 50 ohm Coaxial. length: 670mm diameter: 1.13mm Connector: HRS	2400-2500MHz 1.31 max	2400-2500MHz 2.14 dB (peak)
			5150-5350MHz 1.39 max	5150-5350MHz 3.16 dB (peak)
			5475-5725MHz 1.27 max	5475-5725MHz 3.21 dB (peak)
			5725-5875MHz 1.12 max	5725-5875MHz 3.43 dB (peak)



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Right Antenna(Main Antenna)

Part Number:

REV:

Vendor No:

RD REV:0.4

③ sponge 8*5 T=4.2mm

正面

① antenna "R"

DC330010300

④ twin adhesive ; 25*10mm

背面

② cable length is 620±4mm , color=black
(from O.D. jacket center)

⑤ label ; 30*5mm

SMARTANT

Rev:1

GENERAL TOLERANCE RANGE

PCB(电路板)	± 1MIL
MACHINING(加工件)	X=± 0.5 X.X=± 0.2 X.XX=± 0.1
STAMP(冲製件)	X=± 0.6 X.X=± 0.3 X.XX=± 0.1
INJECTION(射出件)	X=± 1 X.X=± 0.5 X.XX=± 0.15
CASTING(壓鑄件)	X=± 1 X.X=± 0.5 X.XX=± 0.15
PACKING(包材)	X=± 6 X.X=± 3 X.XX=± 1
ASSEMBLY(組合件)	X=± 4 X.X=± 2 X.XX=± 0.5

ANGLES: X=± 2° X.X=± 1° X.XX=± 0.5°

5		HR60_版本貼紙	1
4		HR60_重複黏貼雙面膠	1
3	8605-0004	HR60_介質	1
2		HR60_CABLE_R	1
1		HR60_銅片_R	1
件號	料號	名稱	件數

Surface Treatment	M' TL				
SmartAnt 寰波科技股份有限公司 SmartAnt Telecom Co., Ltd. DRW TITLE	DRAWN				
	ENGR				
	APVD				
DWG. NO	R0322-031A02	SCALE	1:1	UNIT	mm

LTR	REV. RECORD	DR	APVD
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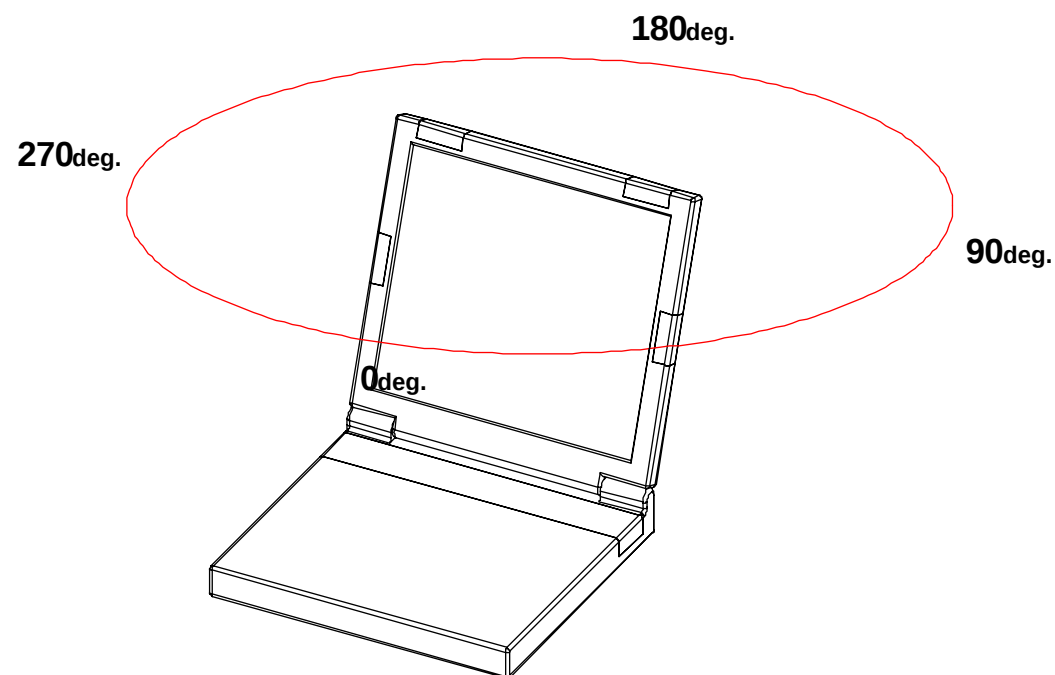


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Radiation characteristic of antennae

Loaded (In Host System)





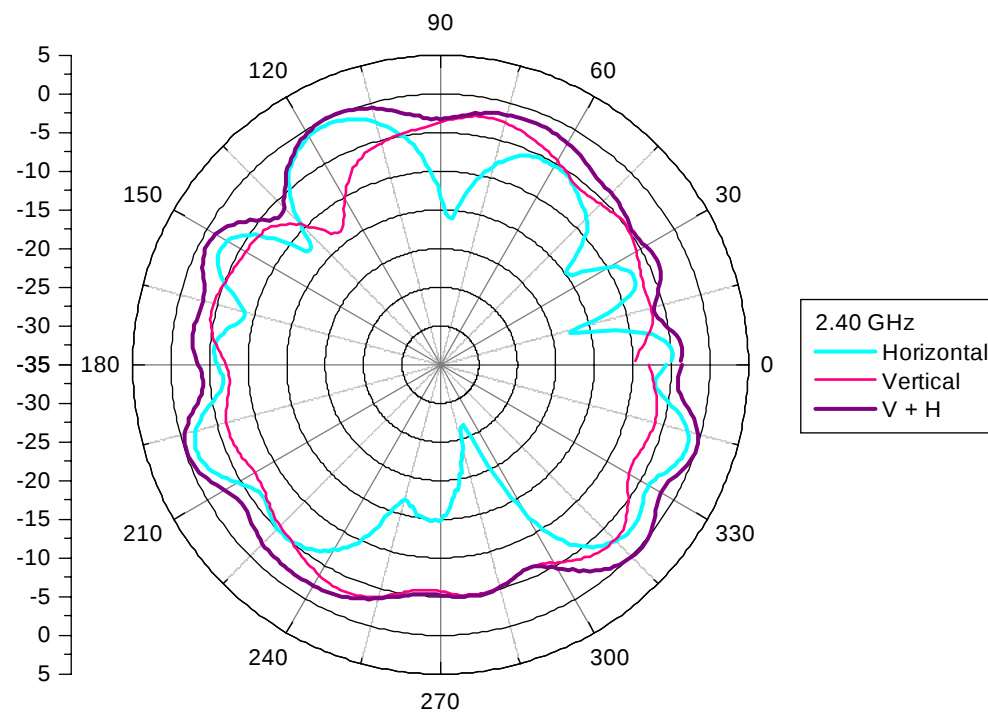
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2400~2500MHz radiation characteristic

Main antenna: 2400 MHz

Center Frequency	2400 MHz
Horizontal (dBi) peak	-0.6376
Vertical (dBi) peak	-2.4503
Horz+Vert (dBi) peak	0.3332



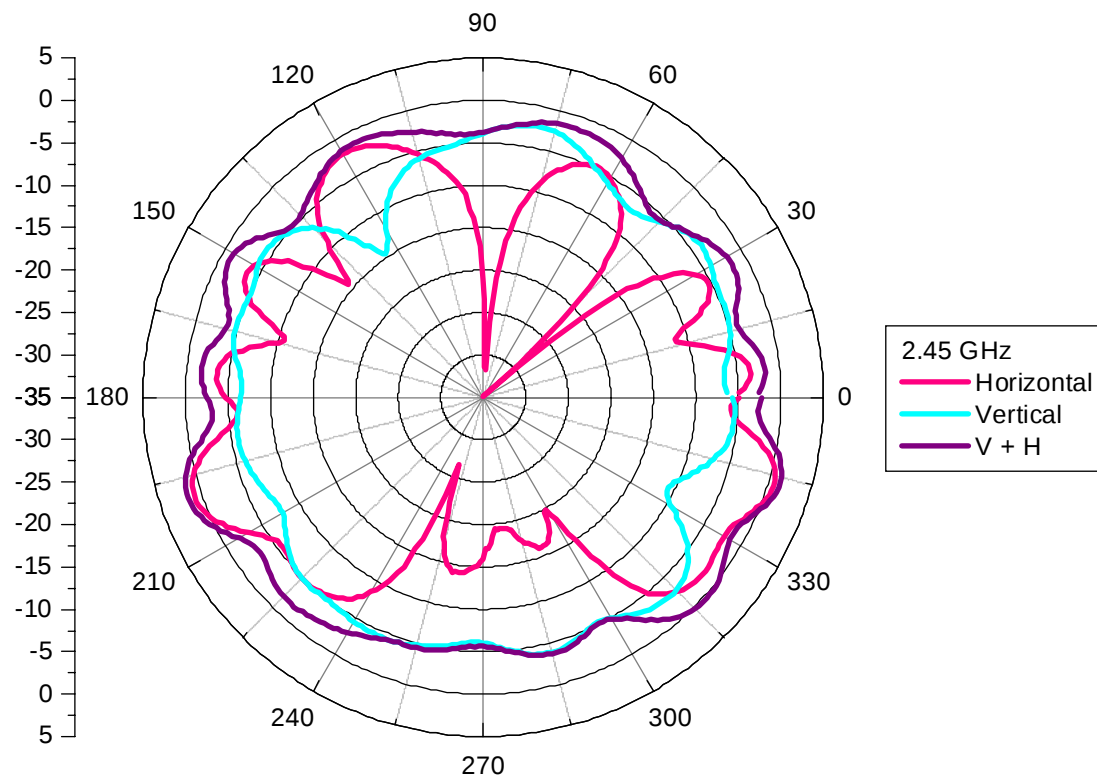


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Main antenna: 2450 MHz

Center Frequency	2450 MHz
Horizontal (dBi) peak	0.9174
Vertical (dBi) peak	-2.3783
Horz+Vert (dBi) peak	1.6353



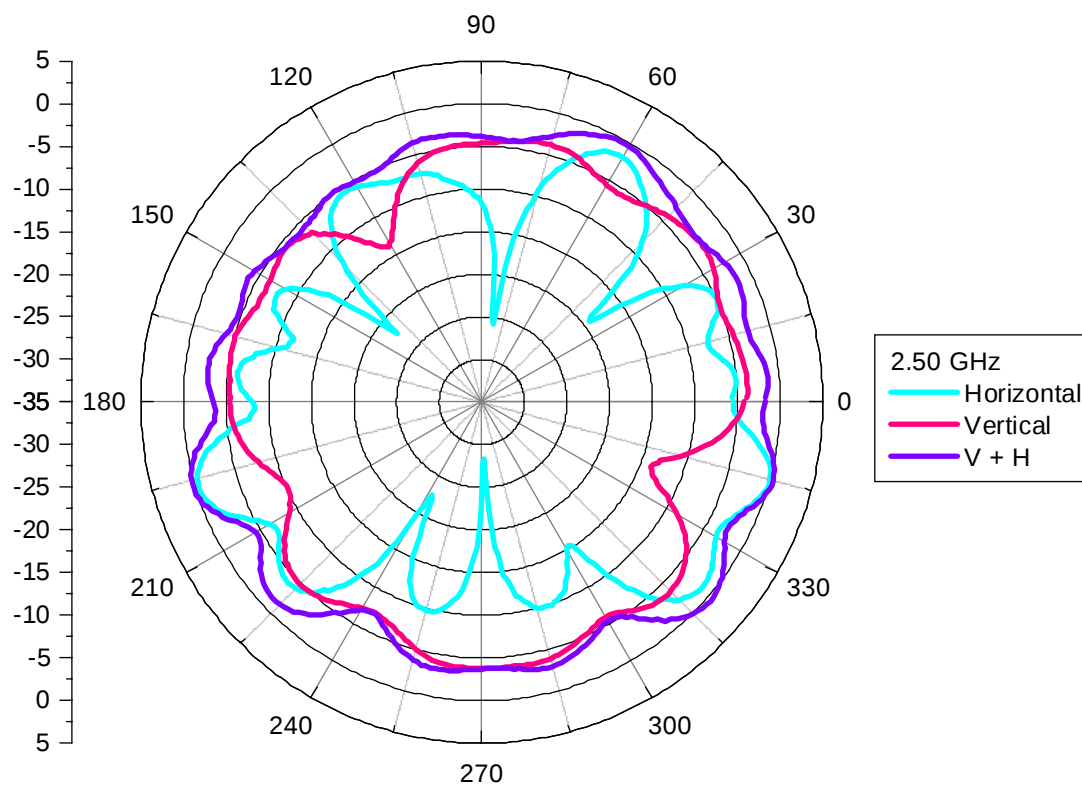


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Main antenna: 2500 MHz

Center Frequency	2500 MHz
Horizontal (dBi) peak	0.0264
Vertical (dBi) peak	-3.2563
Horz+Vert (dBi) peak	0.5306



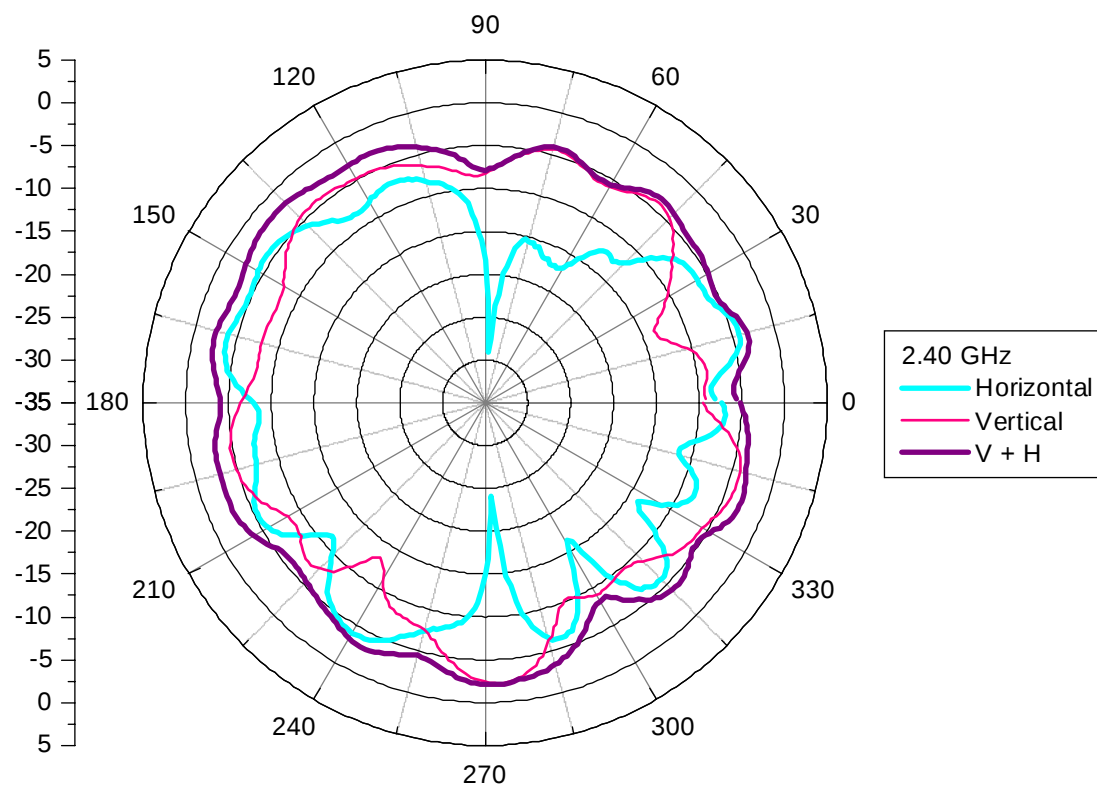


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Auxiliary antenna: 2400 MHz

Center Frequency	2400 MHz
Horizontal (dBi) peak	-3.9014
Vertical (dBi) peak	-2.1518
Horz+Vert (dBi) peak	-1.9533.



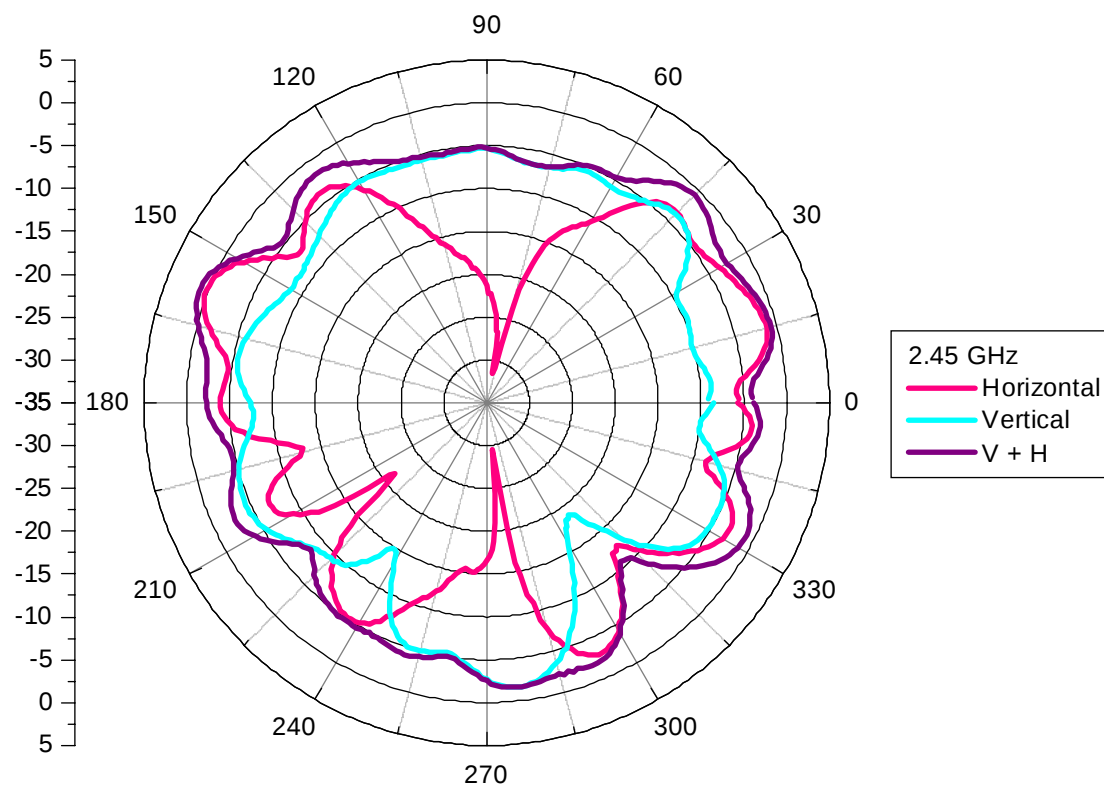


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Auxiliary antenna: 2450 MHz

Center Frequency	2450 MHz
Horizontal (dBi) peak	0.2186
Vertical (dBi) peak	-1.6228
Horz+Vert (dBi) peak	0.9795



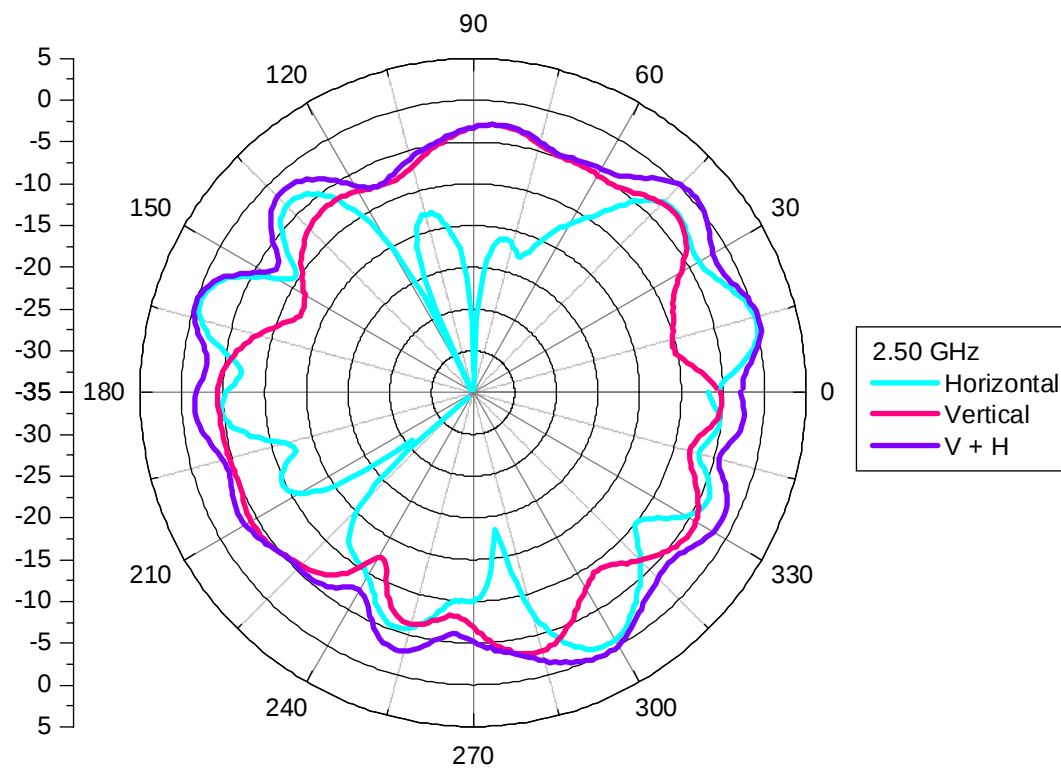


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Auxiliary antenna: 2500 MHz

Center Frequency	2500 MHz
Horizontal (dBi) peak	0.0866
Vertical (dBi) peak	-2.6708
Horz+Vert (dBi) peak	0.4897





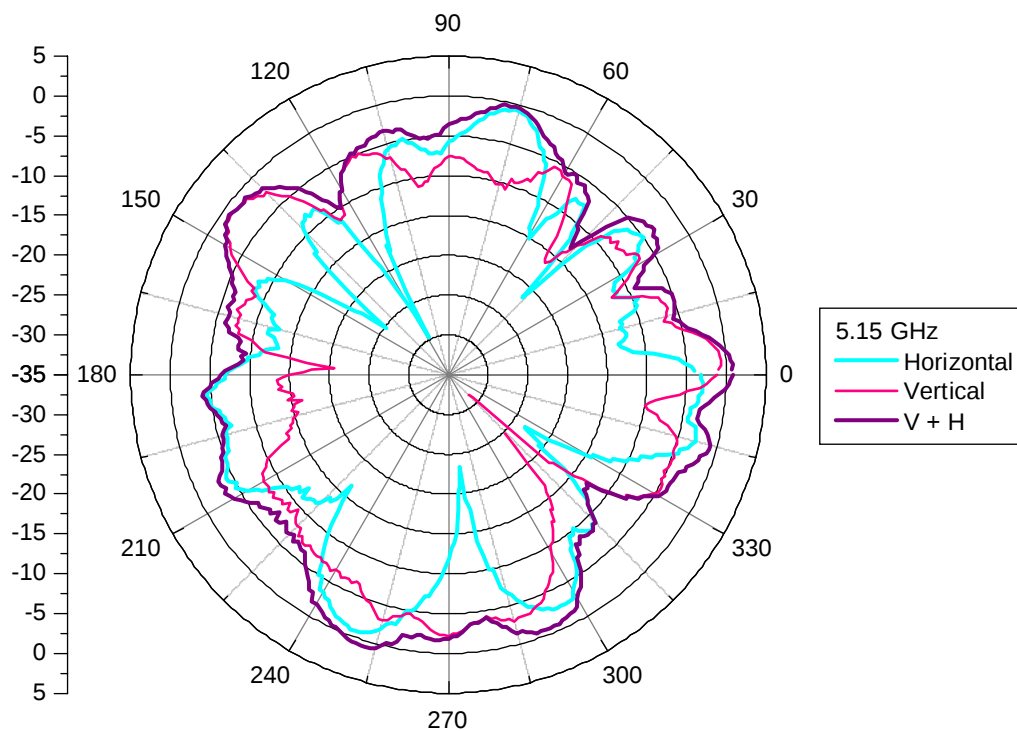
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5150~5135 MHz radiation characteristic

Main antenna: 5150 MHz

Center Frequency	5150 MHz
Horizontal (dBi) peak	-0.7356
Vertical (dBi) peak	-0.6836
Horz+Vert (dBi) peak	1.0269



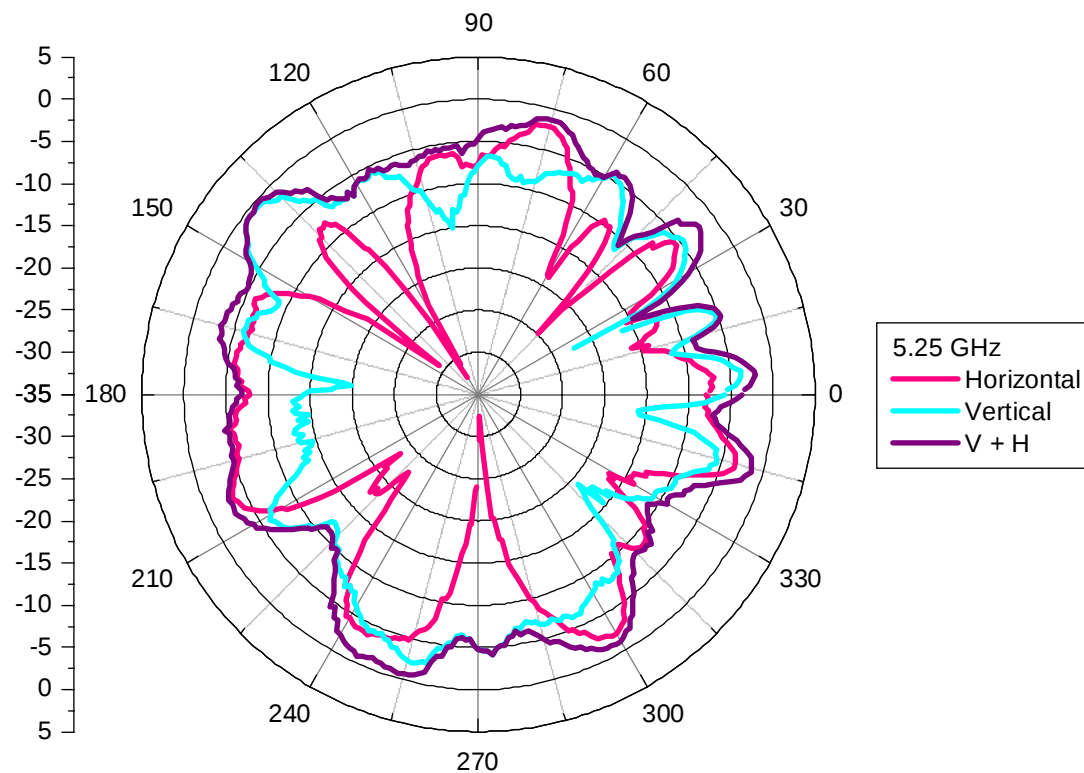


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Main antenna: 5250 MHz

Center Frequency	5250 MHz
Horizontal (dBi) peak	-2.1266
Vertical (dBi) peak	-0.5426
Horz+Vert (dBi) peak	-0.3733



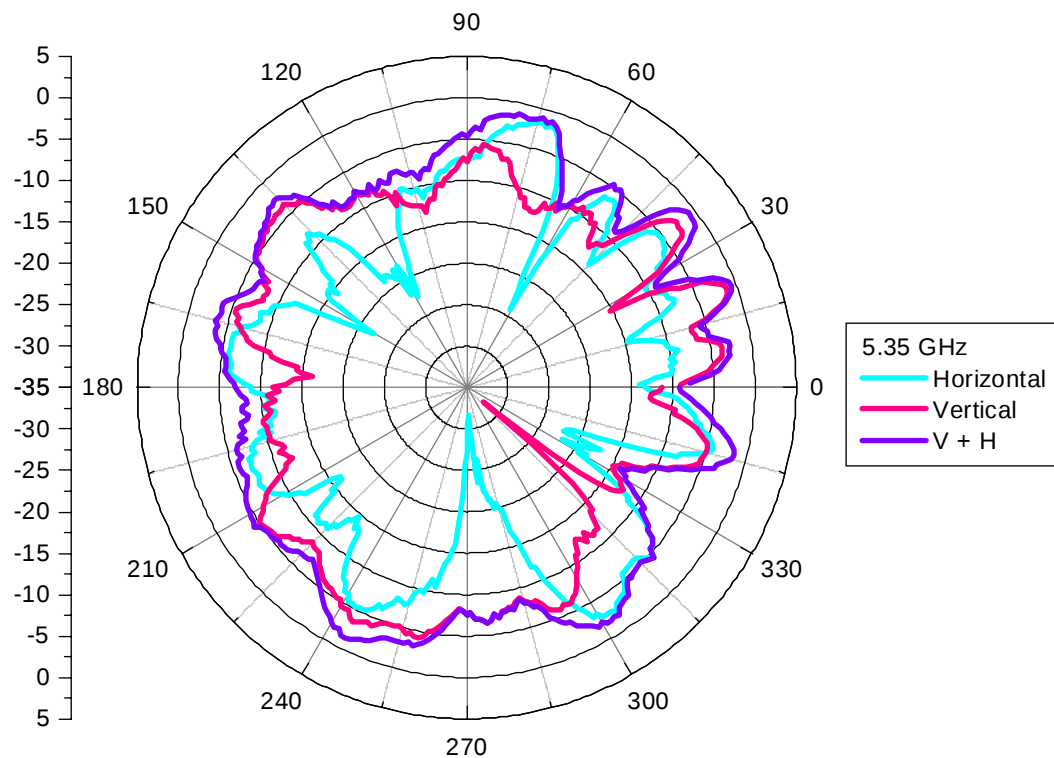


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Main antenna: 5350 MHz

Center Frequency	5350 MHz
Horizontal (dBi) peak	-1.5736
Vertical (dBi) peak	-1.1986
Horz+Vert (dBi) peak	-0.5240



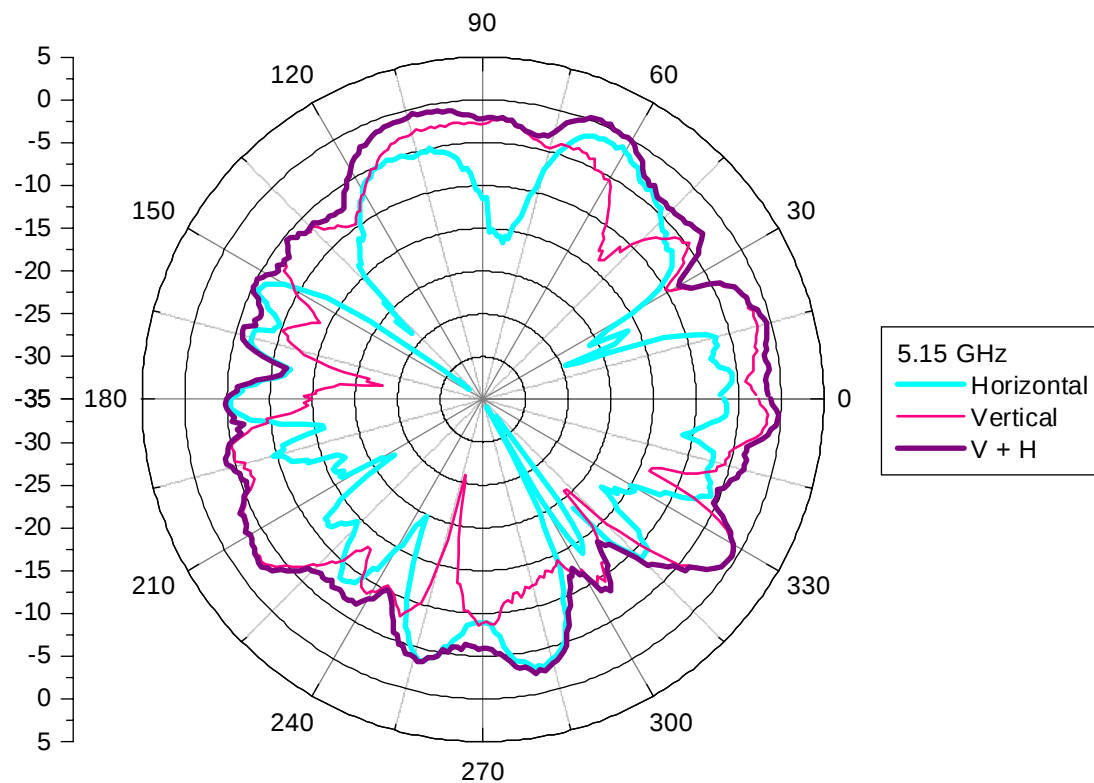


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Auxiliary antenna: 5150 MHz

Center Frequency	5150 MHz
Horizontal (dBi) peak	-1.3164
Vertical (dBi) peak	-0.7162
Horz+Vert (dBi) peak	0.4739



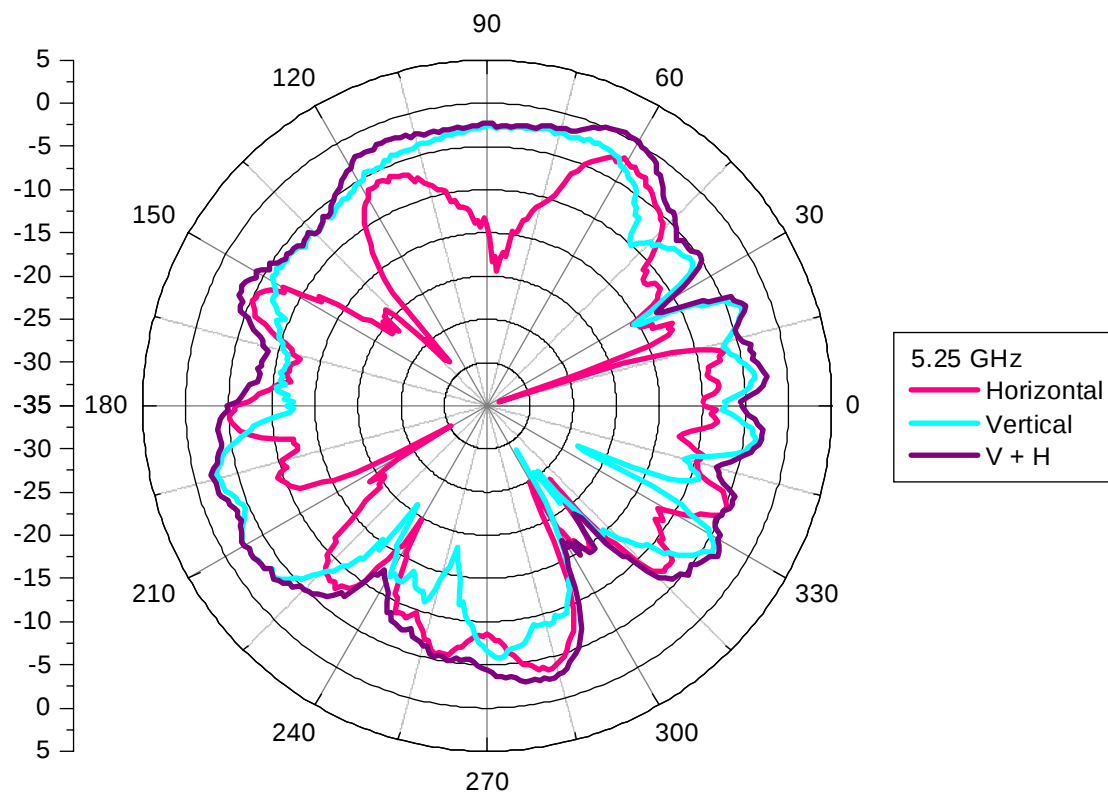


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Auxiliary antenna: 5250 MHz

Center Frequency	5250 MHz
Horizontal (dBi) peak	-2.2744
Vertical (dBi) peak	-1.9272
Horz+Vert (dBi) peak	0.4704



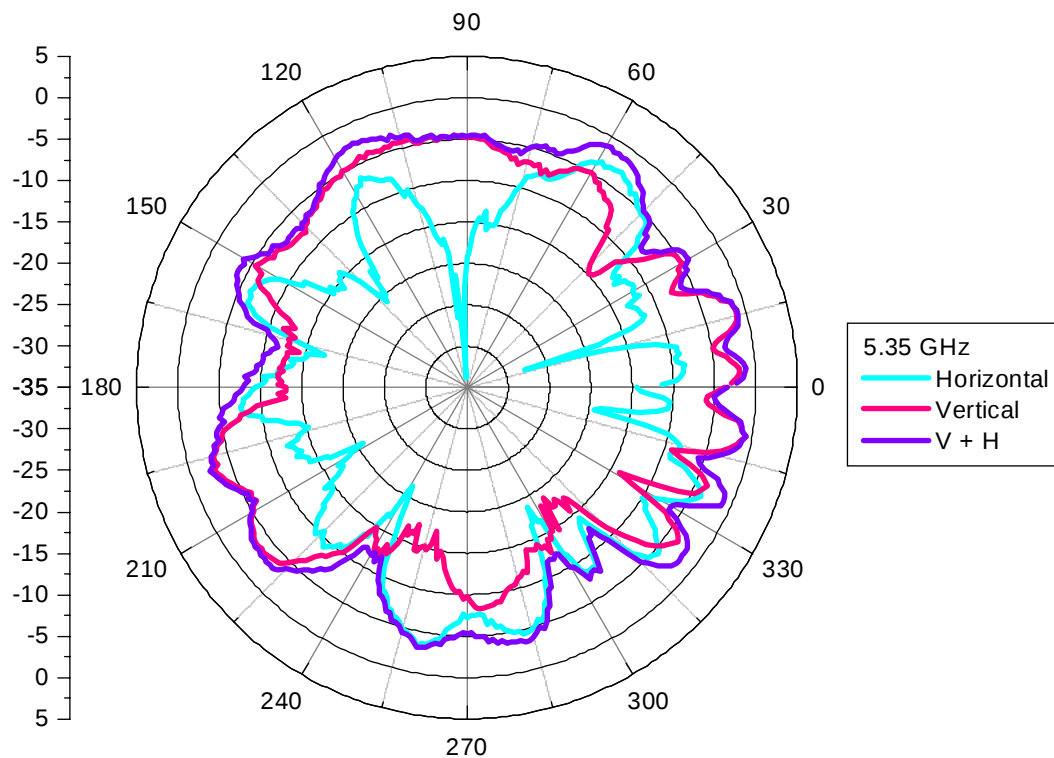


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Auxiliary antenna: 5350 MHz

Center Frequency	5350 MHz
Horizontal (dBi) peak	-2.9414
Vertical (dBi) peak	-0.7042
Horz+Vert (dBi) peak	0.6463





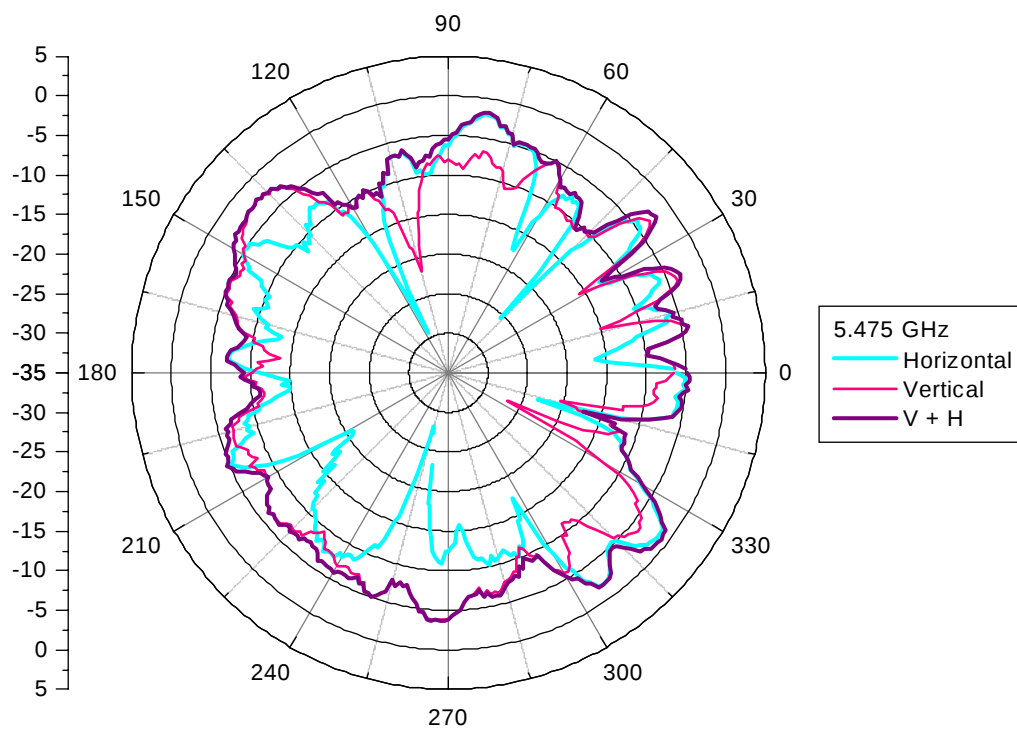
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5475~5725MHz radiation characteristic

Main antenna: 5475 MHz

Center Frequency	5475 MHz
Horizontal (dBi) peak	-1.3901
Vertical (dBi) peak	-2.3696
Horz+Vert (dBi) peak	0.9011



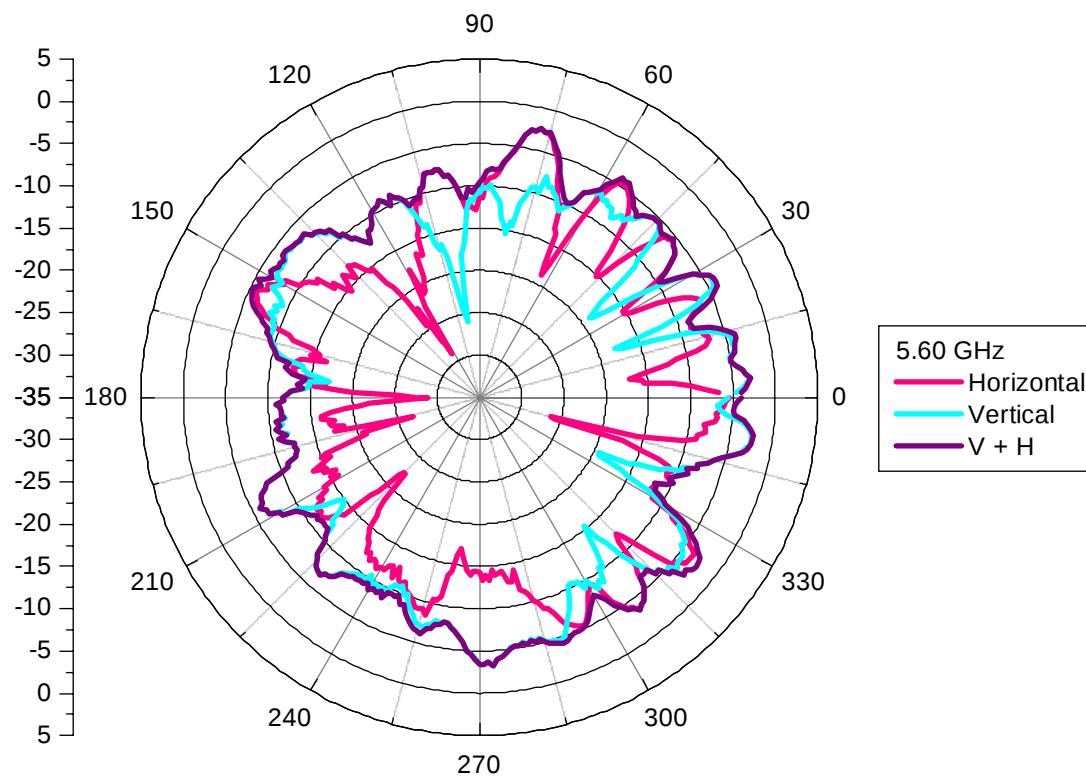


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Main antenna: 5600 MHz

Center Frequency	5600 MHz
Horizontal (dBi) peak	-2.4271
Vertical (dBi) peak	-2.4936
Horz+Vert (dBi) peak	-2.3306



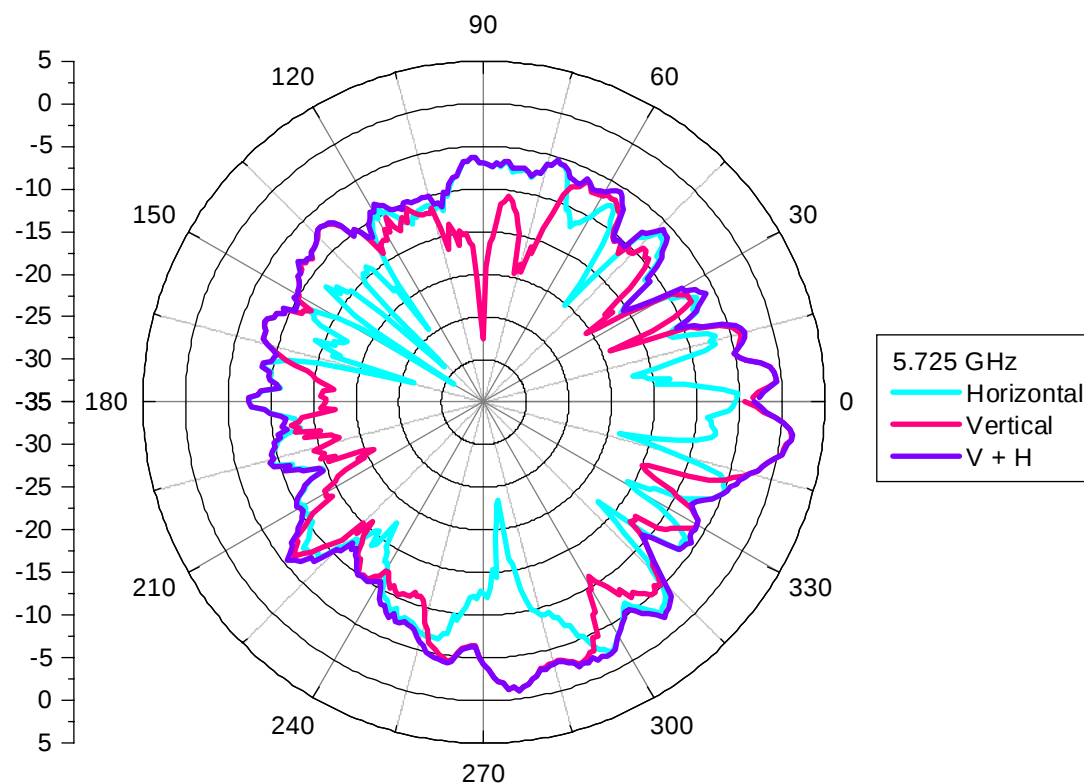


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Main antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-2.1005
Vertical (dBi) peak	1.349
Horz+Vert (dBi) peak	1.3764



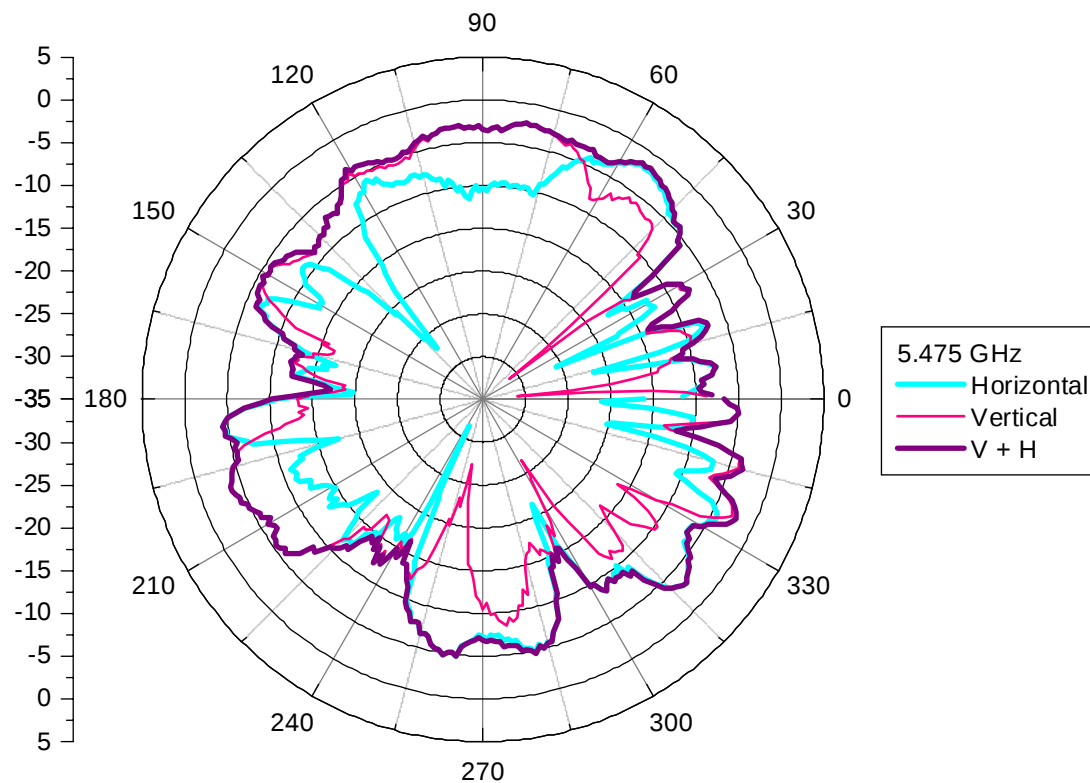


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Auxiliary antenna: 5475 MHz

Center Frequency	5475 MHz
Horizontal (dBi) peak	-1.8406
Vertical (dBi) peak	-2.3491
Horz+Vert (dBi) peak	-1.5929



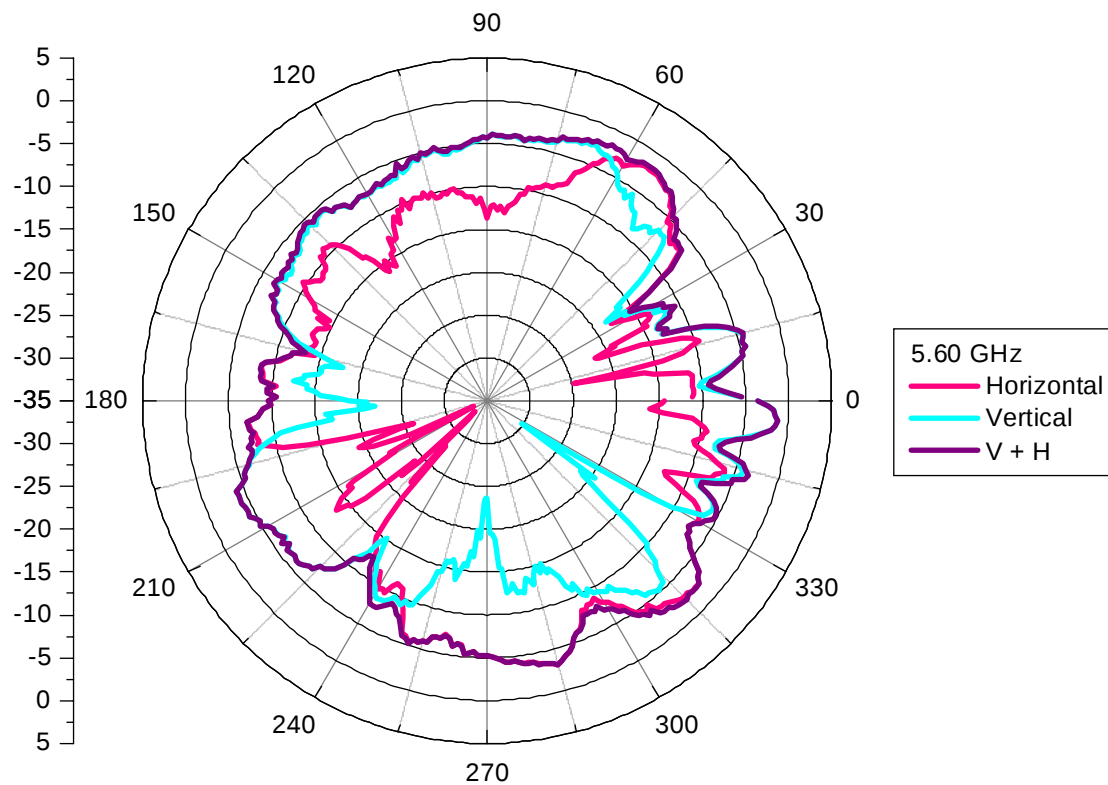


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Auxiliary antenna: 5600 MHz

Center Frequency	5600 MHz
Horizontal (dBi) peak	-2.0206
Vertical (dBi) peak	-1.2721
Horz+Vert (dBi) peak	-1.2671



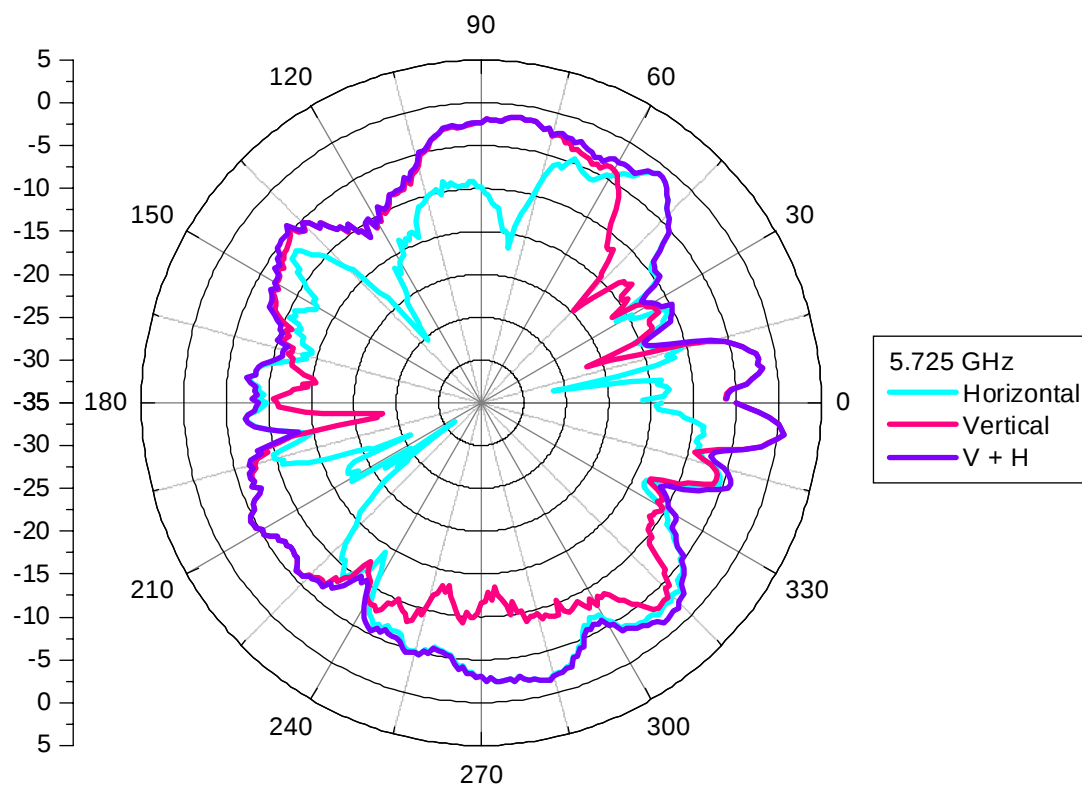


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Auxiliary antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-1.081
Vertical (dBi) peak	0.7505
Horz+Vert (dBi) peak	0.7783





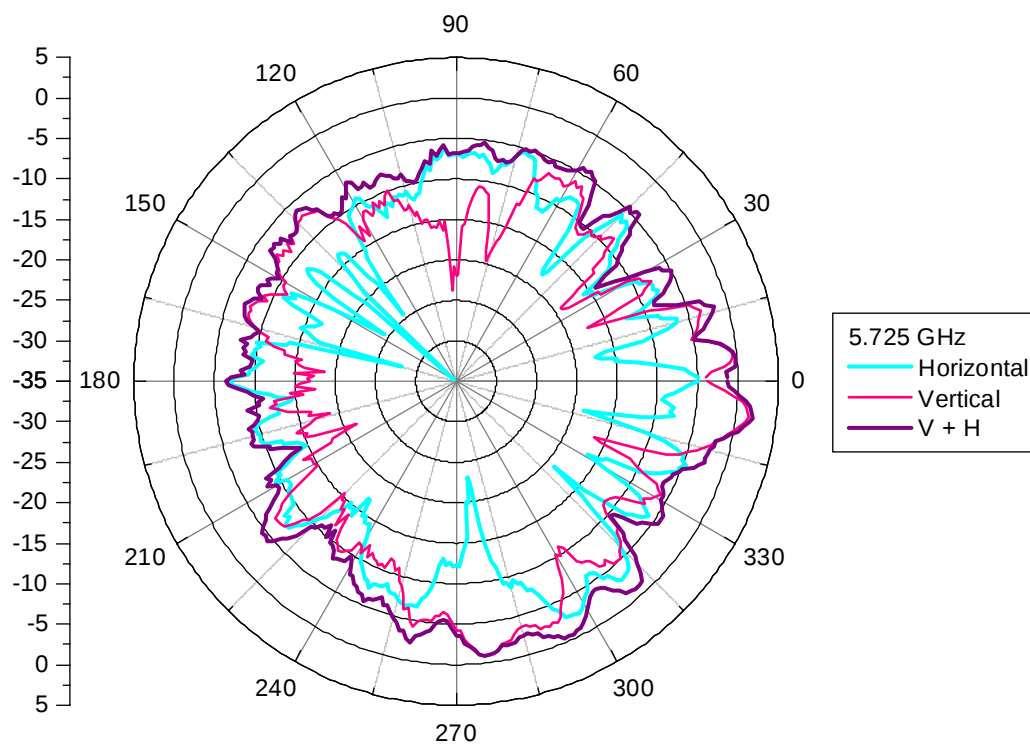
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5725~5875 MHz radiation characteristic

Main antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-2.4885
Vertical (dBi) peak	1.6467
Horz+Vert (dBi) peak	2.1262



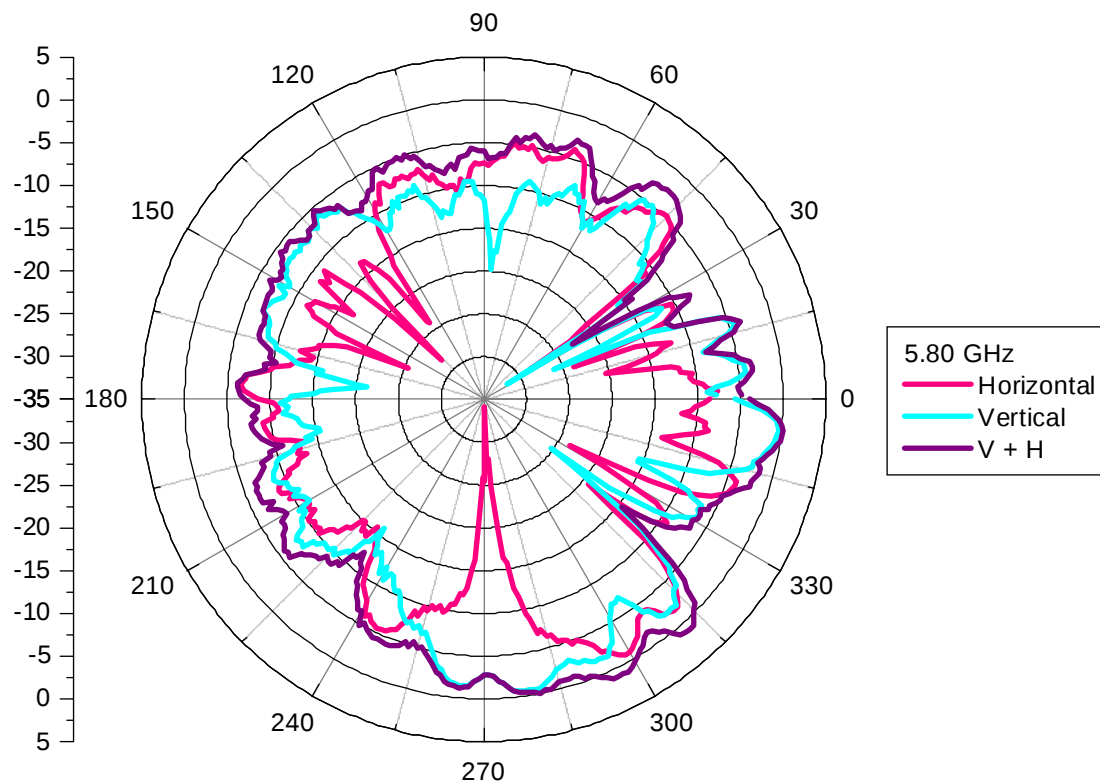


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Main antenna: 5800 MHz

Center Frequency	5800 MHz
Horizontal (dBi) peak	-0.8405
Vertical (dBi) peak	-0.3353
Horz+Vert (dBi) peak	1.0963



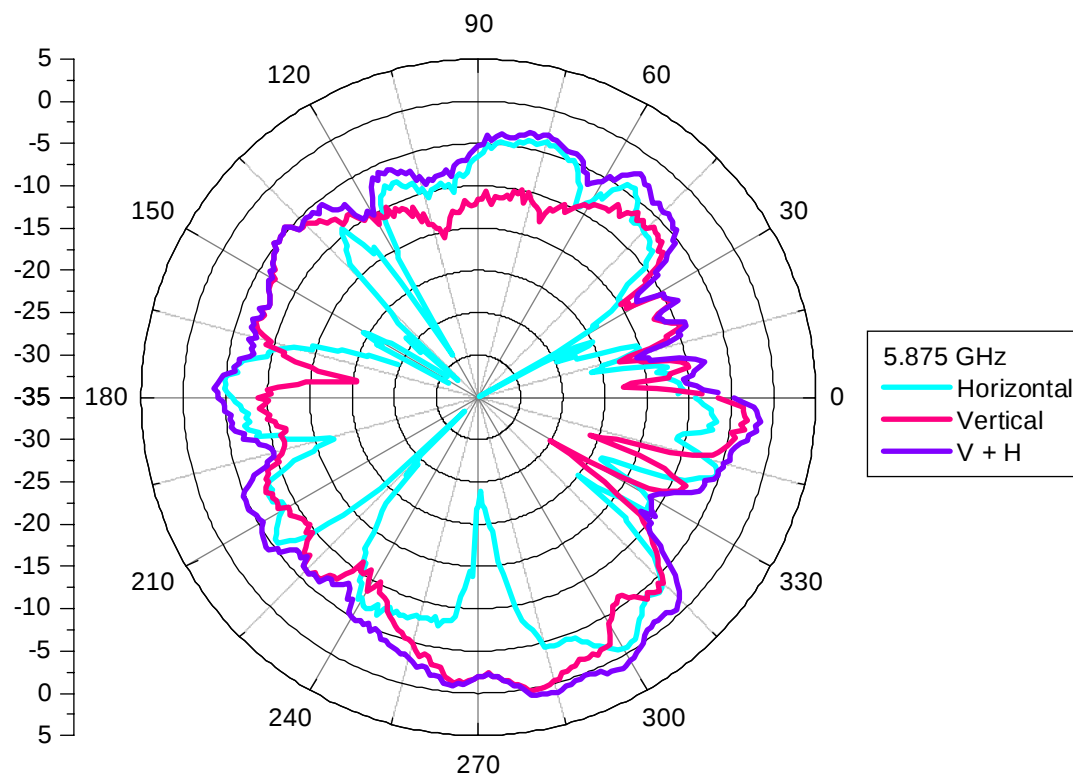


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Main antenna: 5875 MHz

Center Frequency	5875 MHz
Horizontal (dBi) peak	-0.5805
Vertical (dBi) peak	0.3097
Horz+Vert (dBi) peak	1.4238



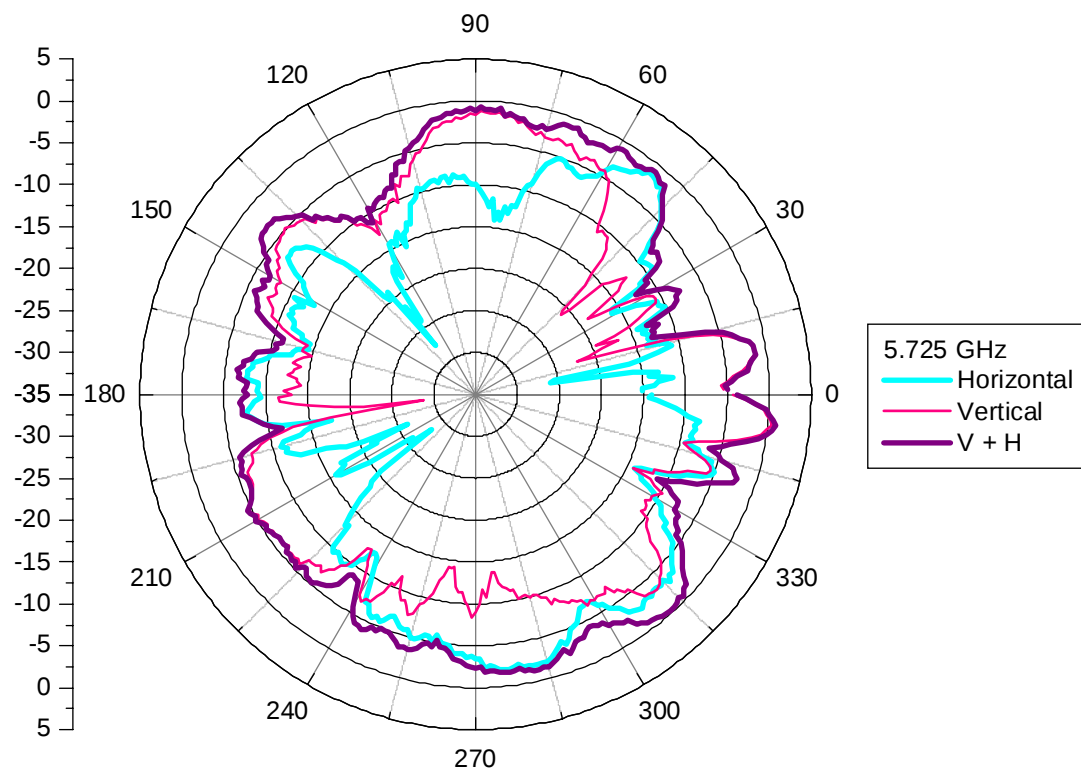


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Auxiliary antenna: 5725 MHz

Center Frequency	5725 MHz
Horizontal (dBi) peak	-1.4331
Vertical (dBi) peak	0.478
Horz+Vert (dBi) peak	0.8873



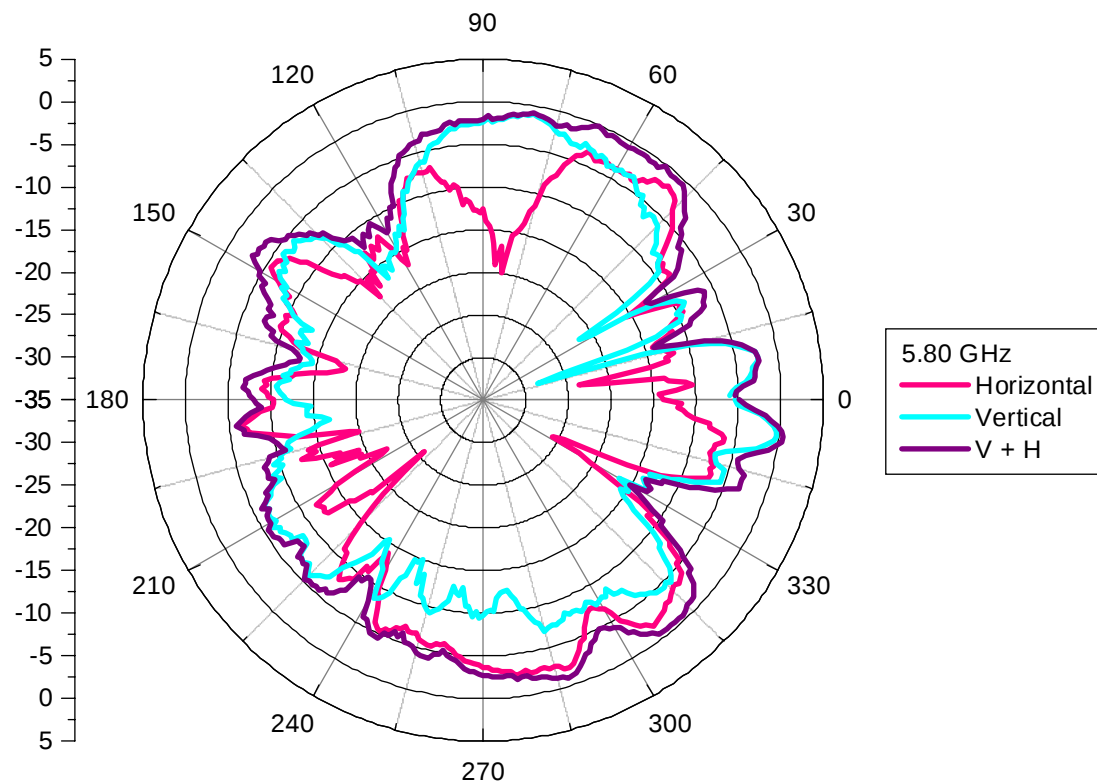


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Auxiliary antenna: 5800 MHz

Center Frequency	5800 MHz
Horizontal (dBi) peak	-1.7871
Vertical (dBi) peak	-0.198
Horz+Vert (dBi) peak	0.4476



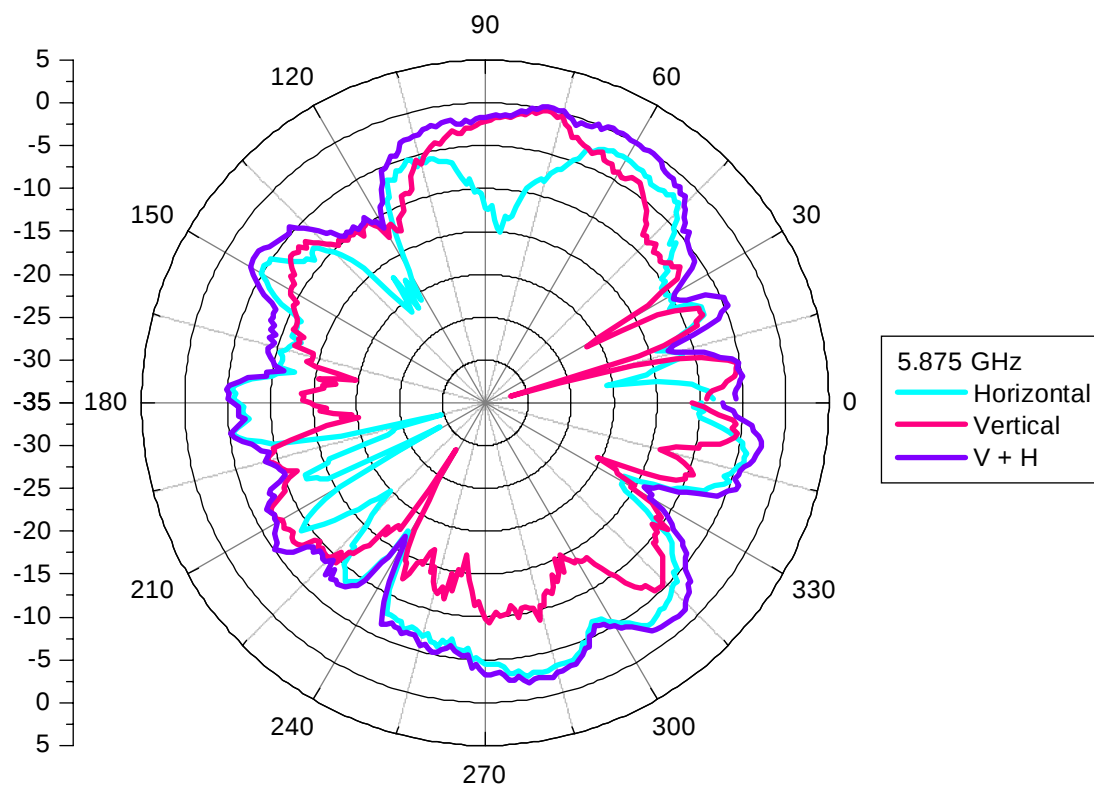


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Auxiliary antenna: 5875 MHz

Center Frequency	5875 MHz
Horizontal (dBi) peak	-2.0061
Vertical (dBi) peak	-0.217
Horz+Vert (dBi) peak	0.4373



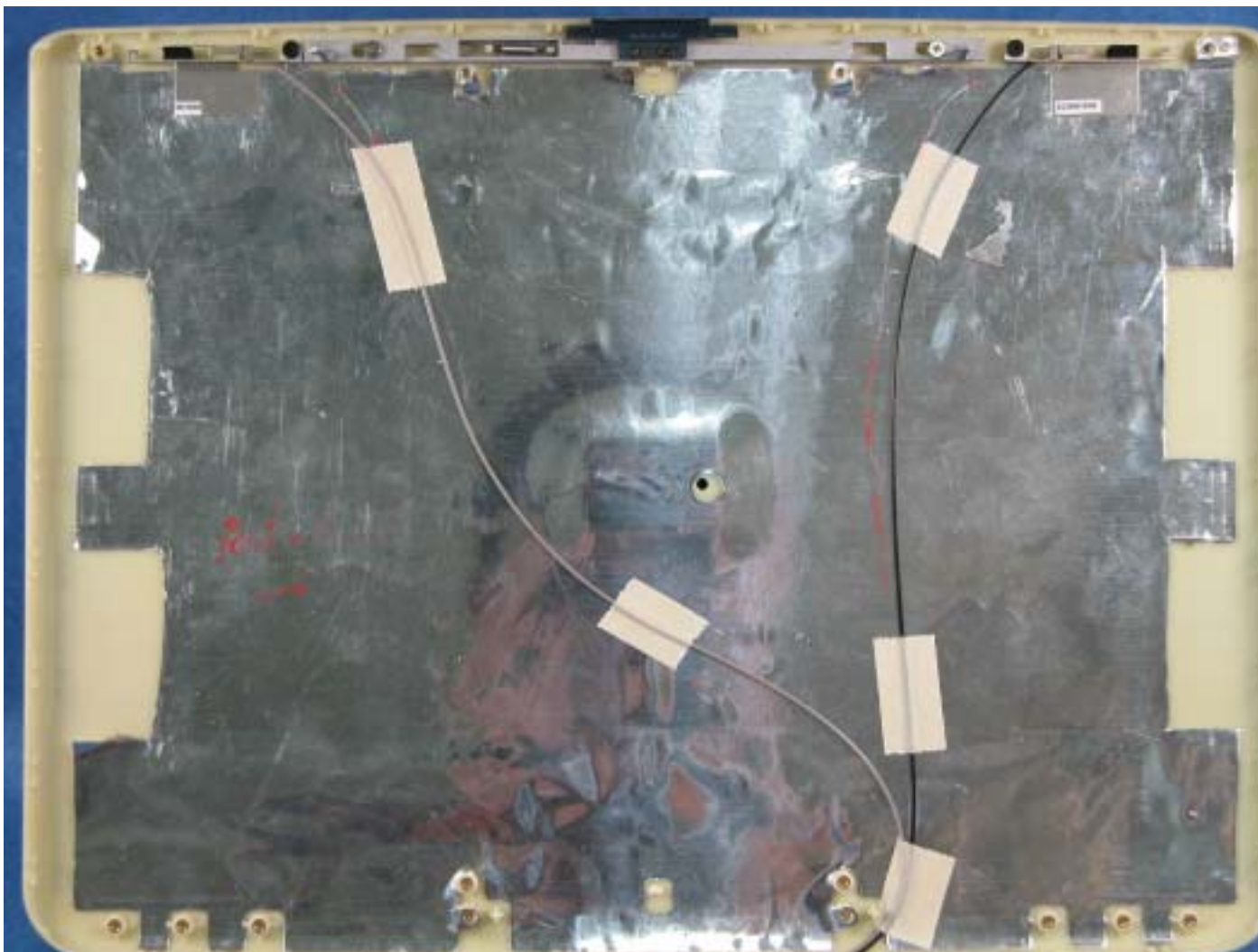


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Host PC Information

Host model: Compal HR60 Pavilion





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Main Antenna





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Auxiliary Antenna

