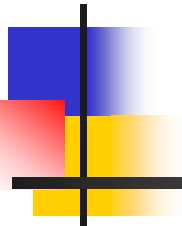


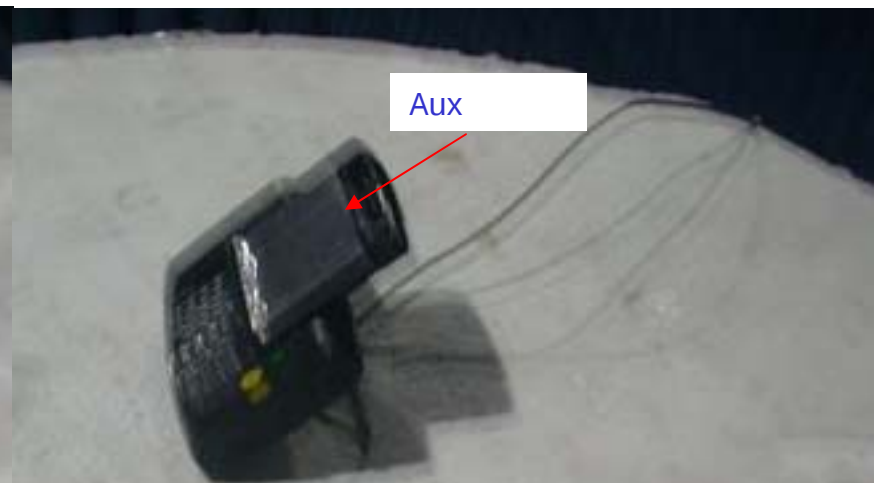
U560 WLAN & Bluetooth Antenna Test Report



Prepared By Justin Chang

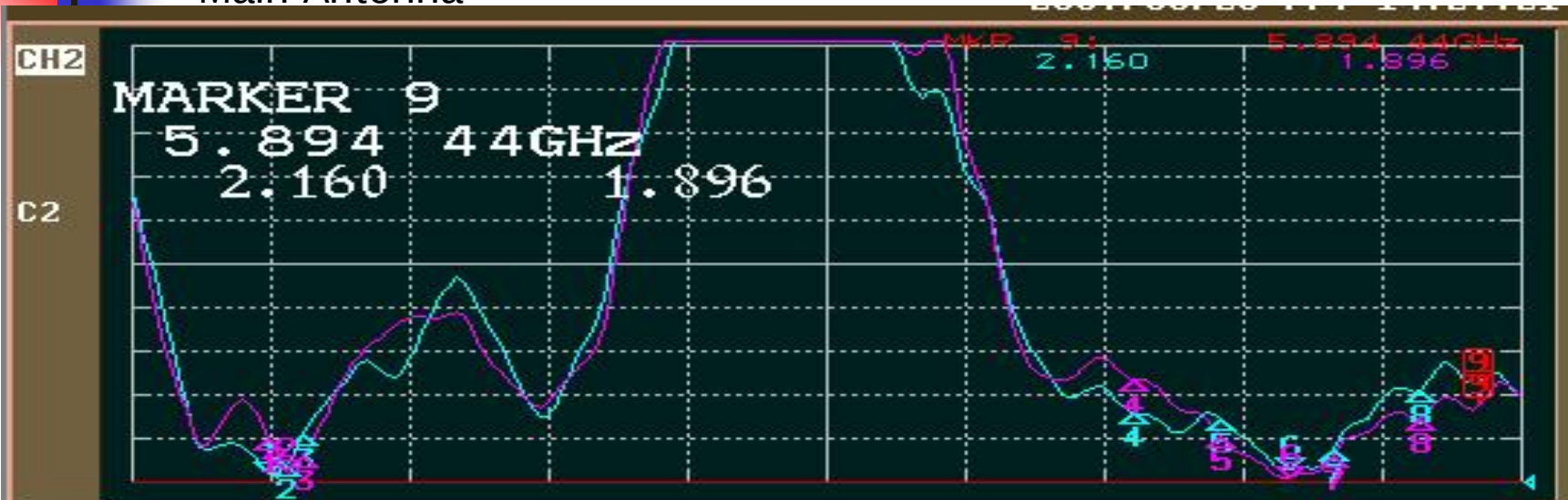
Antenna Configuration

Configuration	Notes
Main	Dual-band antenna in IFA Type 1. Test platform: U560 2. Location: Upper-Left side 4. Cable: 1.13 (dia) x 80 mm White cable length + IPEX connector
Aux	Dual-band antenna in IFA Type 1. Test platform: U560 2. Location: Upper-Front side 4. Cable: 1.13 (dia) x 80 mm Black cable length + IPEX connector
Bluetooth	Single antenna in Monopole Type 1. Test platform: U560 2. Location: Top Camera Side 4. Cable: 0.81 (dia) x 85 mm Gray cable length + IPEX connector



Test Result -- VSWR

Main Antenna

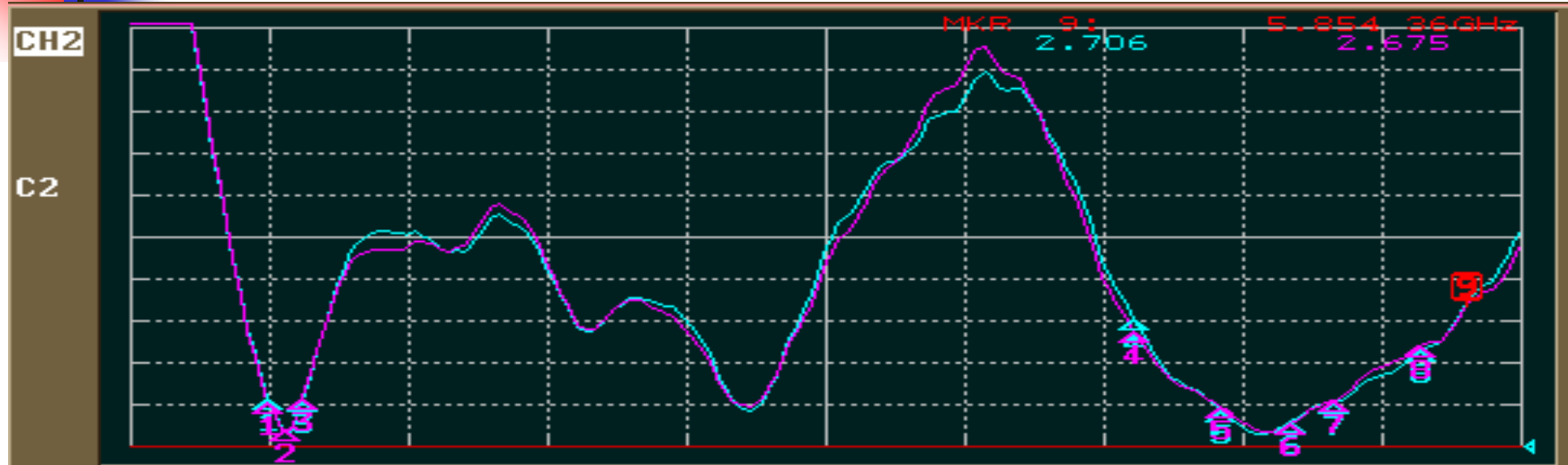


CH2 MARKER LIST

1:	2.400	000GHz	1.092	1.497
2:	2.450	000GHz	1.192	1.125
3:	2.500	000GHz	1.552	1.289
4:	4.900	000GHz	1.782	2.170
5:	5.150	000GHz	1.704	1.499
6:	5.350	000GHz	1.147	1.066
7:	5.470	000GHz	1.394	1.321
8:	5.725	000GHz	2.070	1.749
9:	5.894	440GHz	2.160	1.896
10:				

Test Result -- VSWR

Aux Antenna



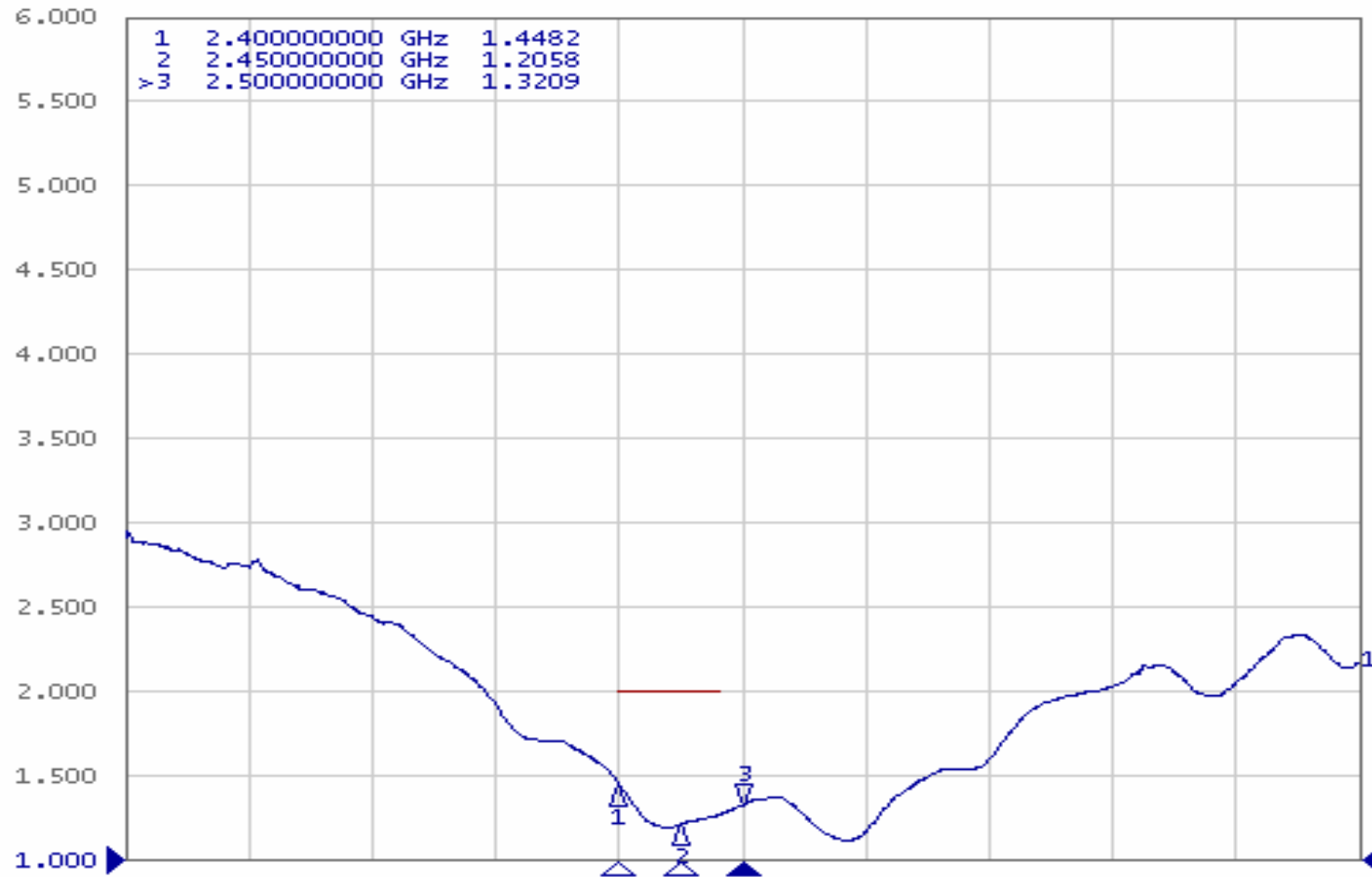
CH2 MARKER LIST

1:	2.400	000GHz	1.491	1.545
2:	2.450	000GHz	1.098	1.192
3:	2.500	000GHz	1.446	1.574
4:	4.900	000GHz	2.532	2.365
5:	5.150	000GHz	1.398	1.456
6:	5.350	000GHz	1.312	1.283
7:	5.470	000GHz	1.532	1.551
8:	5.725	000GHz	2.161	2.220
9:	5.854	360GHz	2.706	2.675
10:				

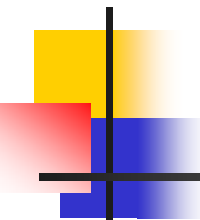
Test Result -- VSWR

Bluetooth Antenna

► Tr1 S22 SWR 500.0m/ Ref 1.000 [F1]



Test Result – Antenna Gain



WLAN Antenna

Antenna Gain		2G4 ISM (2.400 GHz - 2.4835 GHz)			(4.90 GHz - 5.350 GHz)			HyperLAN (5.470 GHz - 5.875 GHz)		
		2.40 GHz	2.45 GHz	2.50GHz	4.90 GHz	5.15 GHz	5.35 GHz	5.47 GHz	5.725 GHz	5.875 GHz
Main	Peak dBi	0.10	0.13	-0.75	1.94	1.76	1.39	2.09	2.62	1.08
	Avg dBi	-2.68	-2.47	-2.76	-2.36	-2.19	-2.40	-3.36	-3.64	-3.47
Aux	Peak dBi	-1.17	-1.24	-1.22	2.39	1.29	1.06	2.8	2.39	2.71
	Avg dBi	-3.96	-3.84	-3.77	-2.77	-3.48	-3.66	-4.17	-4.58	-4.48

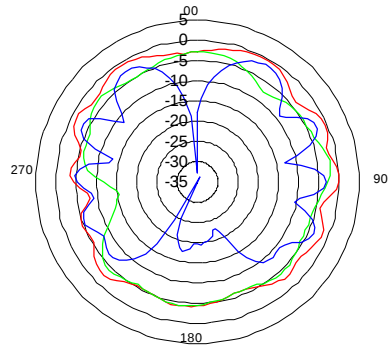
BT antenna Gain

Frequency	Max value			Average		
	H-pol	V pol	Total	H-pol	V pol	Total
2400(MHz)	0.83	-0.93	1.84	-10.00	-5.93	-3.73
2450(MHz)	0.38	0.07	1.73	-10.29	-5.58	-3.49
2500(MHz)	-1.25	0.04	2.23	-9.91	-6.71	-4.14

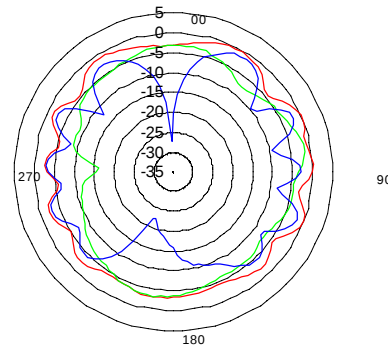
Test Result – Gain Pattern

ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns

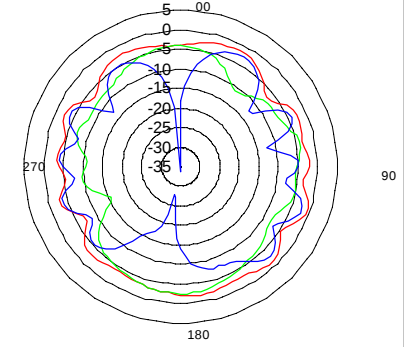
antenna @2.40 GHz



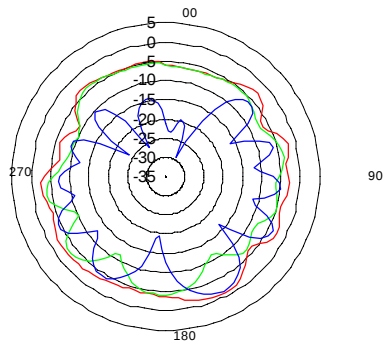
antenna @2.45 GHz



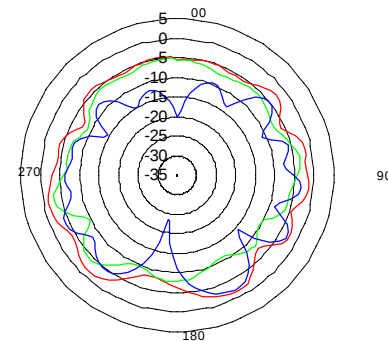
antenna @2.50 GHz



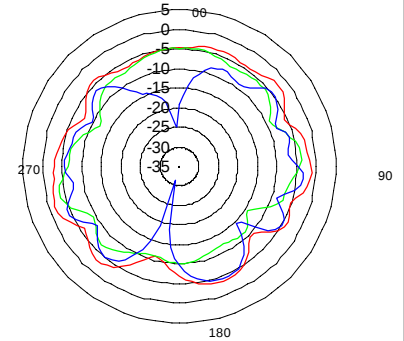
antenna @2.40 GHz



antenna @2.45 GHz



antenna @2.50 GHz



	H-pol	V-pol	Total
Peak Gain	-1.98	-1.47	0.10
Average Gain	-4.93	-6.62	-2.68

	H-pol	V-pol	Total
Peak Gain	-1.72	-1.43	0.13
Average Gain	-5.37	-5.60	-2.47

	H-pol	V-pol	Total
Peak Gain	-2.49	-2.20	-0.75
Average Gain	-6.20	-5.37	-2.76

	H-pol	V-pol	Total
Peak Gain	-3.11	-1.68	-1.17
Average Gain	-6.09	-8.07	-3.96

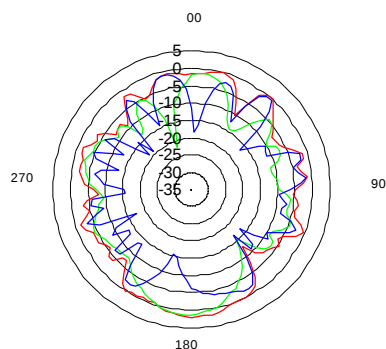
	H-pol	V-pol	Total
Peak Gain	-2.99	-2.14	-1.24
Average Gain	-6.54	-7.17	-3.84

	H-pol	V-pol	Total
Peak Gain	-3.63	-3.20	-1.22
Average Gain	-6.44	-7.16	-3.77

Test Result – Gain Pattern

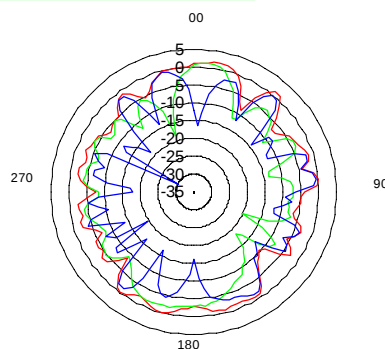
UII (4.90~5.350 GHz) Antenna Radiation Patterns

antenna @4.90 GHz



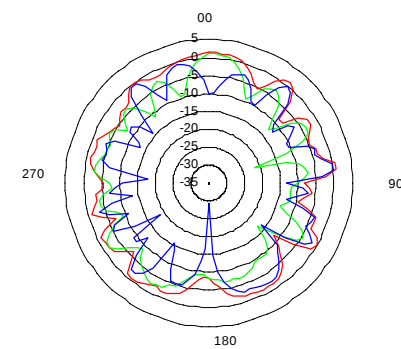
	H-pol	V-pol	Total
Peak Gain	1.28	-1.43	1.94
Average Gain	-4.85	-5.60	-2.36

antenna @5.15 GHz



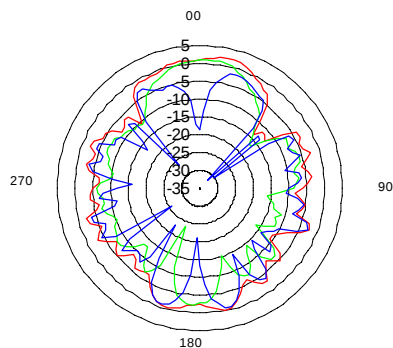
	H-pol	V-pol	Total
Peak Gain	1.31	0.10	1.76
Average Gain	-5.07	-5.34	-2.19

antenna @5.35 GHz



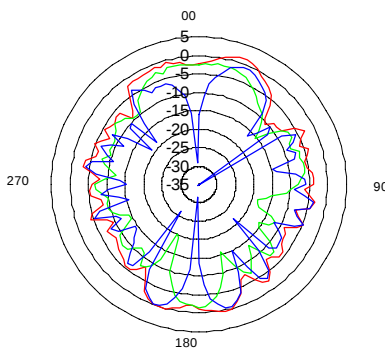
	H-pol	V-pol	Total
Peak Gain	1.08	0.01	1.39
Average Gain	-5.43	-5.39	-2.40

antenna @4.90 GHz



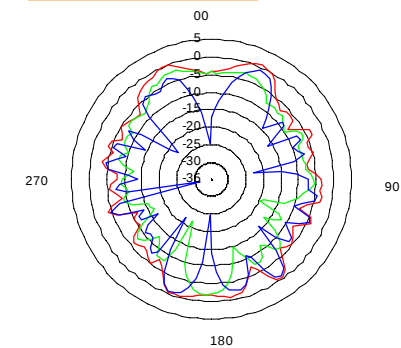
	H-pol	V-pol	Total
Peak Gain	1.20	-0.66	2.39
Average Gain	-5.58	-6.00	-2.77

antenna @5.15 GHz



	H-pol	V-pol	Total
Peak Gain	-1.56	-0.32	1.29
Average Gain	-6.64	-6.35	-3.48

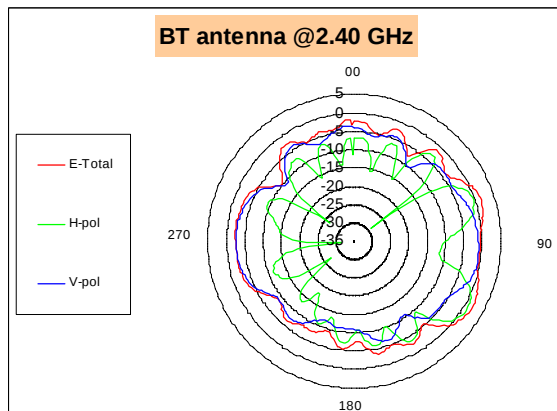
antenna @5.35 GHz



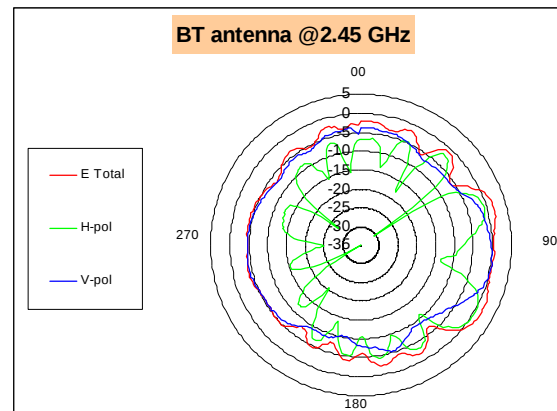
	H-pol	V-pol	Total
Peak Gain	-2.00	-0.65	1.06
Average Gain	-6.80	-6.53	-3.66

Test Result – Gain Pattern

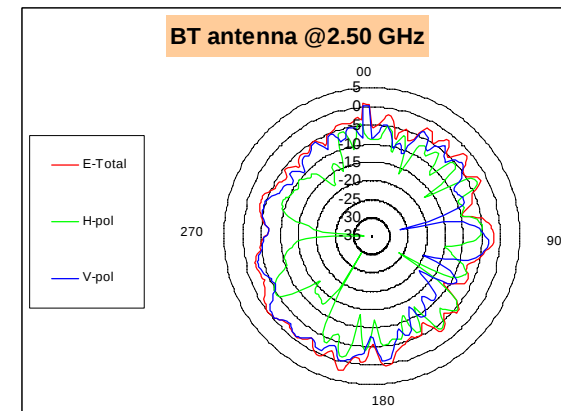
Bluetooth Antenna Radiation Patterns



	H-pol	V-pol	Total
Peak Gain	0.83	-0.93	1.84
Average Gain	-10.00	-5.93	-3.73



	H-pol	V-pol	Total
Peak Gain	0.38	0.07	1.73
Average Gain	-10.29	-5.58	-3.49



	H-pol	V-pol	Total
Peak Gain	-1.25	0.04	2.23
Average Gain	-9.91	-6.71	-4.14