

1.6~5Ghz Broadband Gooseneck Antenna

MODEL: TH-1650



1.. GENERAL DESCRIPTION

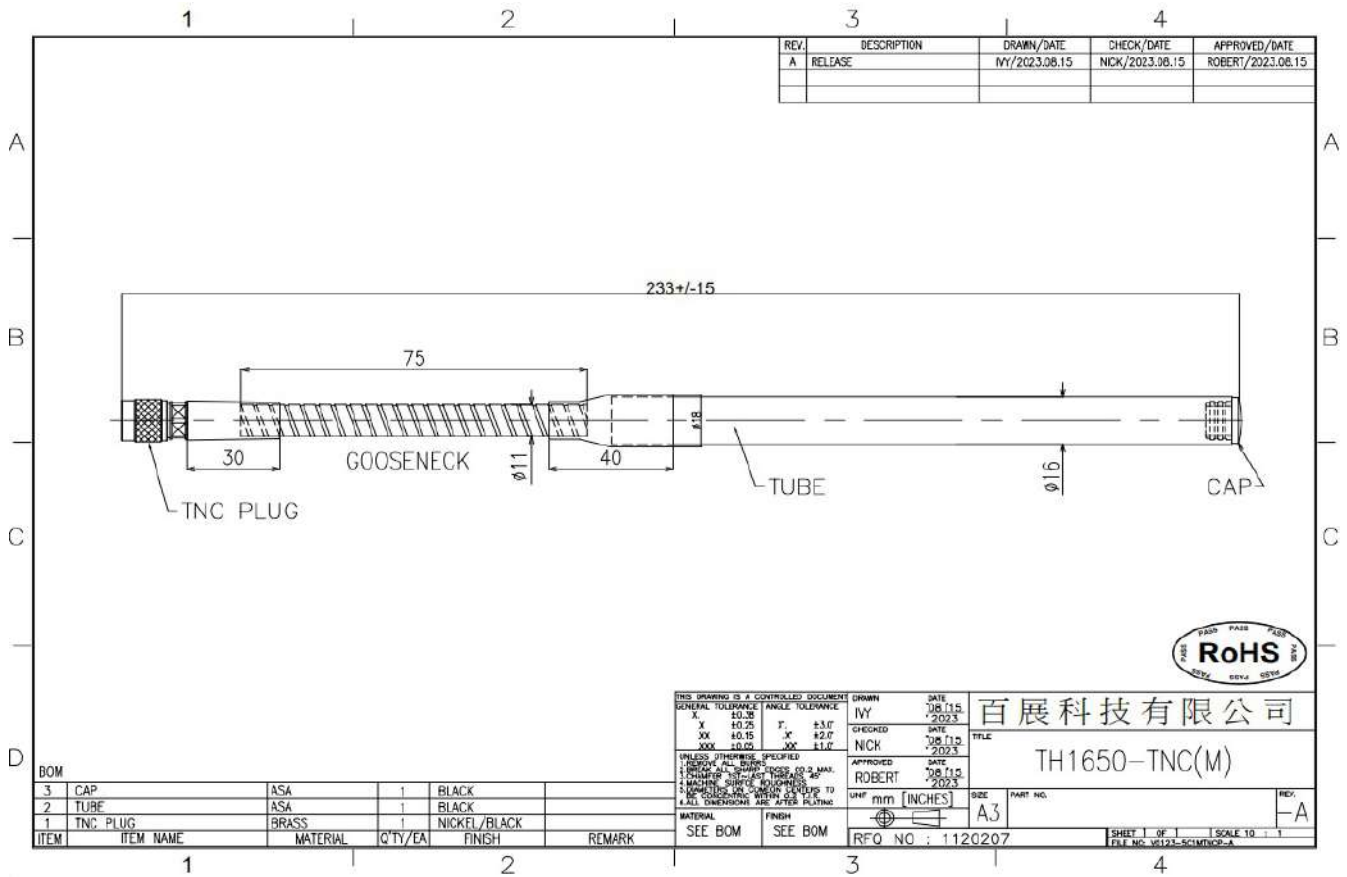
Model No
TH1650-TNC(M)

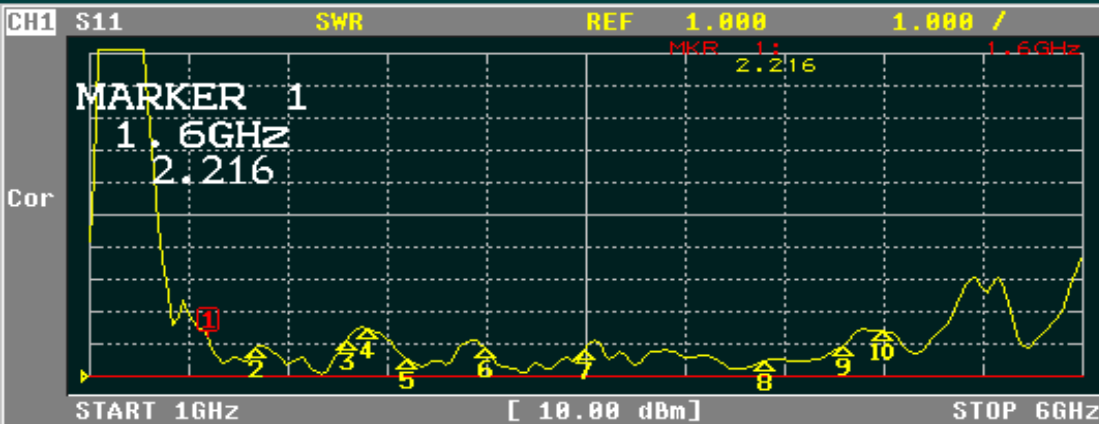
1.1 Electrical Properties

Parameter	Description
Frequency Band	1600~5000Mhz
Nominal Impedance	50 ohm
Polarization	Vertical
V.S.W.R	2.5:1

1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Material	ASA
Touch Type	Screw Type
Connector Type	SMA connector (Male)
Antenna Dimensions	Ø16 x 233mm ±15
Weight	115g
Antenna Color	Black
Operating Temperature Range	-40°C~+85°C
Storage Temperature Range	-40°C~+85°C



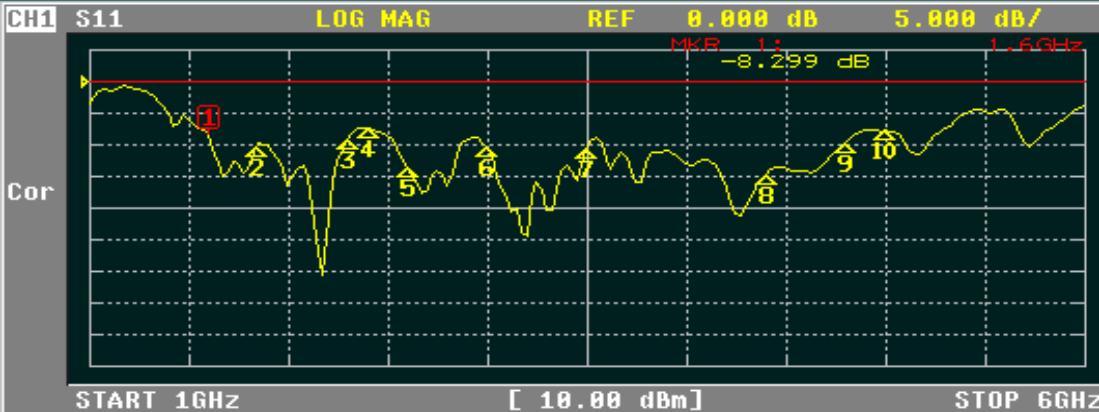


CH1 MARKER LIST

1:	1.600 000GHZ	2.216
2:	1.841 666GHZ	1.880
3:	2.300 000GHZ	2.122
4:	2.400 000GHZ	2.493
5:	2.600 000GHZ	1.540
6:	3.000 000GHZ	1.883
7:	3.500 000GHZ	1.834
8:	4.400 000GHZ	1.459
9:	4.800 000GHZ	1.960
10:	5.000 000GHZ	2.394

ACTIVATE MARKER

- MARKER 1
- MARKER 2
- MARKER 3
- MARKER 4
- MARKER 5
- ACTIVATE MKR OFF
- Return
- More 1/2

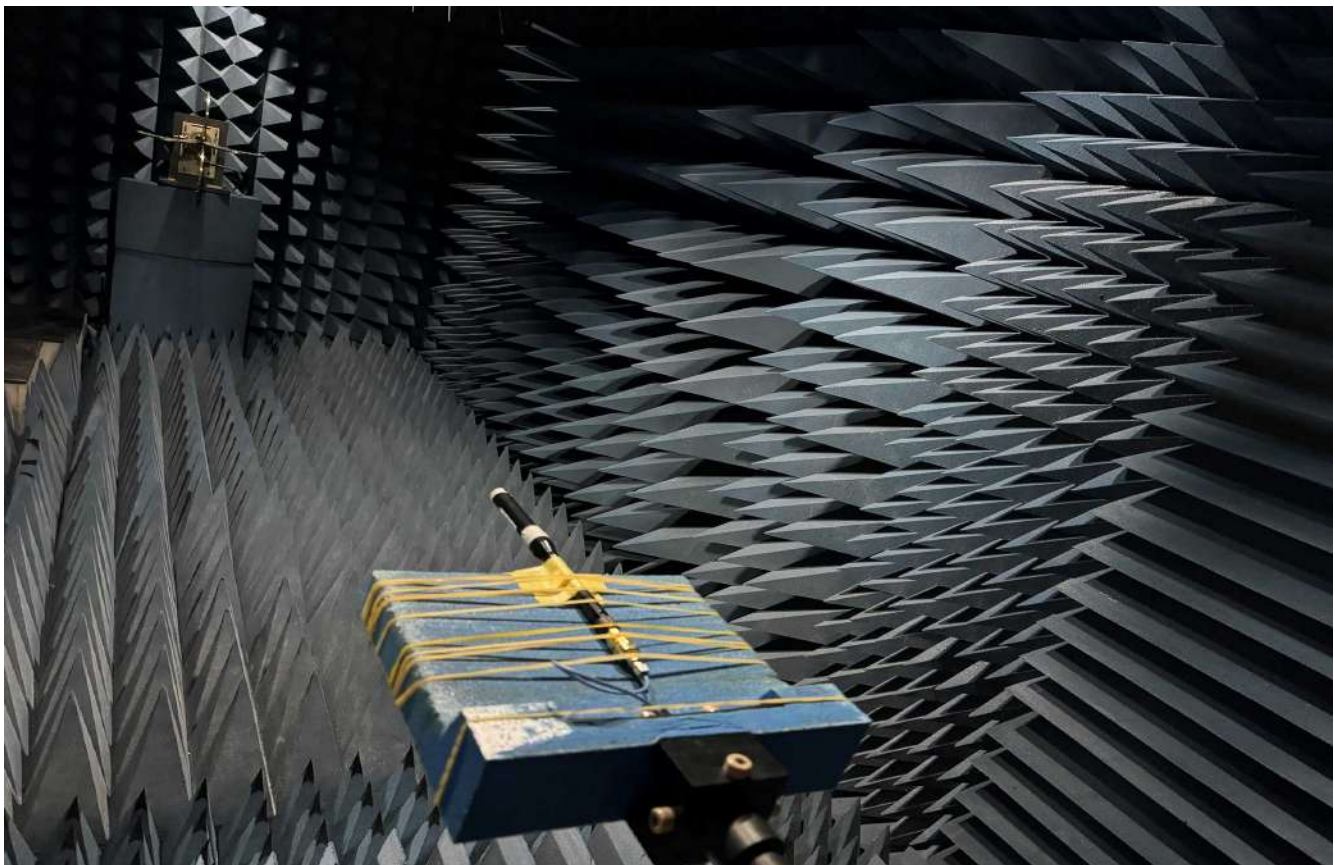
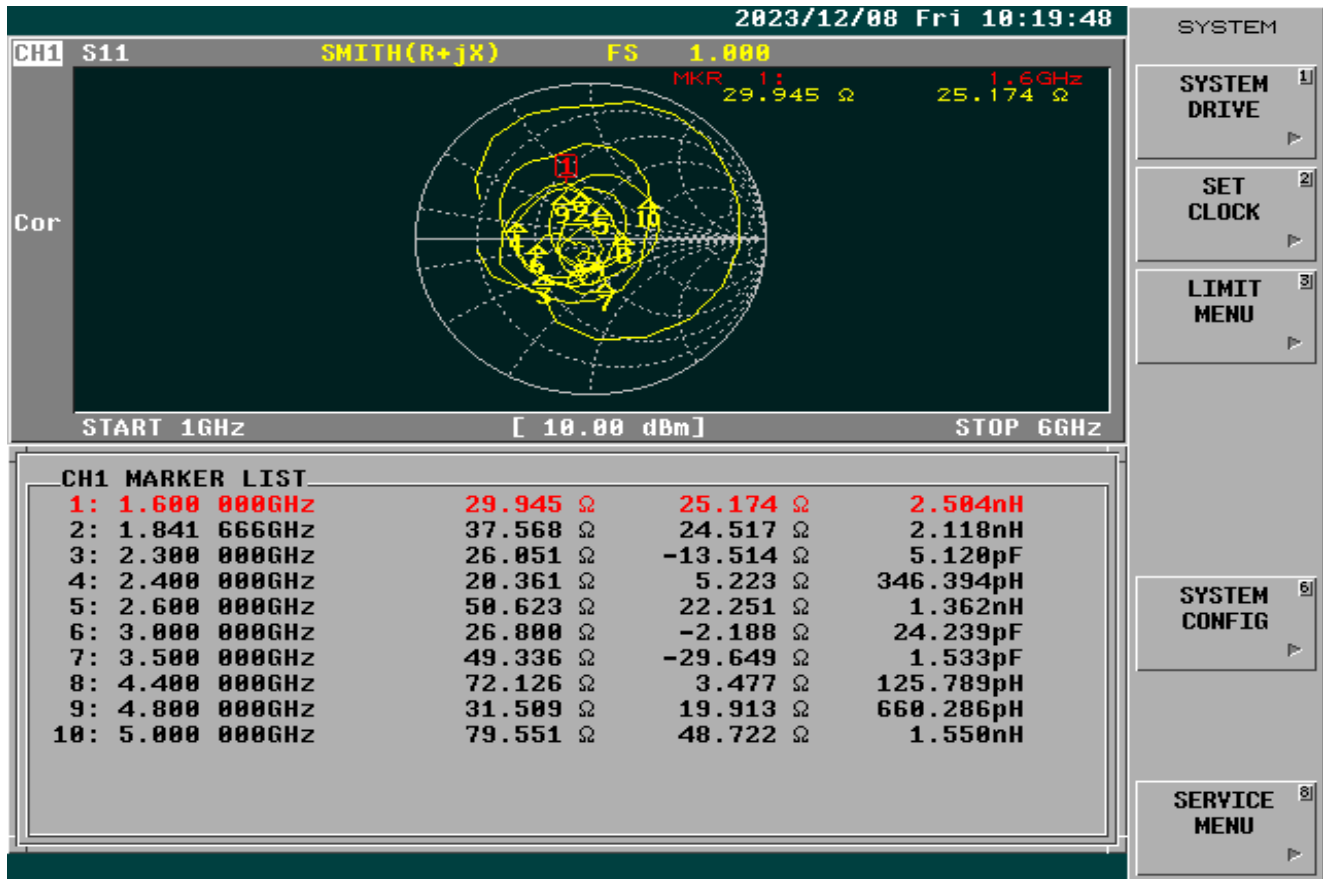


CH1 MARKER LIST

1:	1.600 000GHZ	-8.299 dB
2:	1.841 666GHZ	-10.330 dB
3:	2.300 000GHZ	-9.011 dB
4:	2.400 000GHZ	-7.290 dB
5:	2.600 000GHZ	-13.492 dB
6:	3.000 000GHZ	-10.274 dB
7:	3.500 000GHZ	-10.634 dB
8:	4.400 000GHZ	-14.606 dB
9:	4.800 000GHZ	-9.713 dB
10:	5.000 000GHZ	-7.744 dB

FORMAT

- LOG MAG
- PHASE
- DELAY
- SMITH (R+jX)
- SMITH (G+jB)
- POLAR
- LIN MAG
- More 1/2



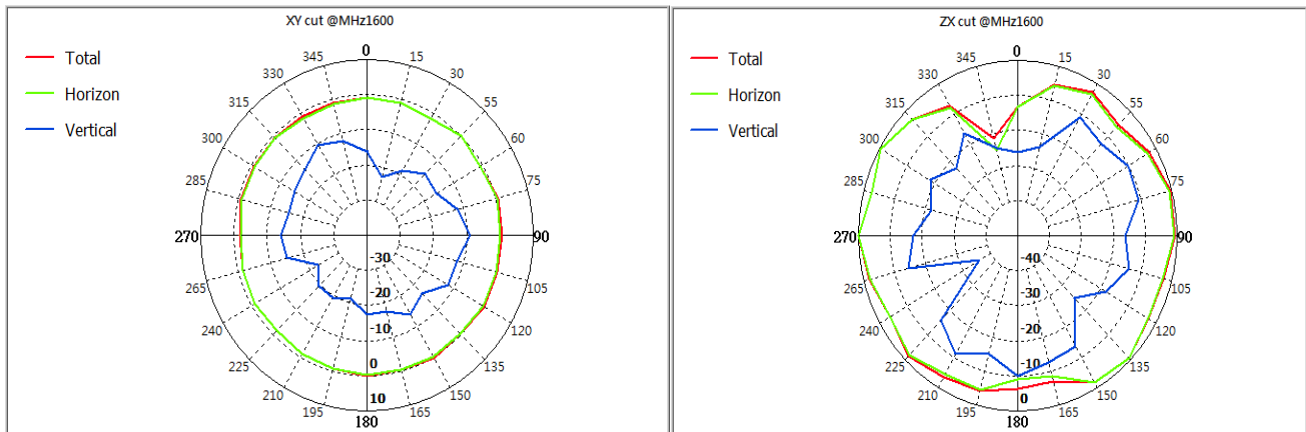
3D Total

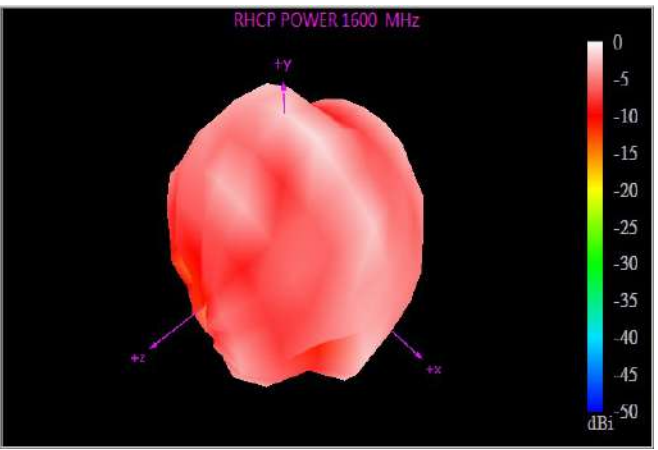
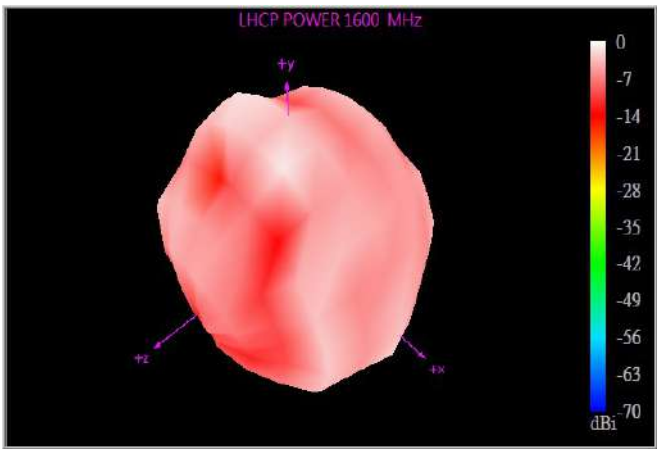
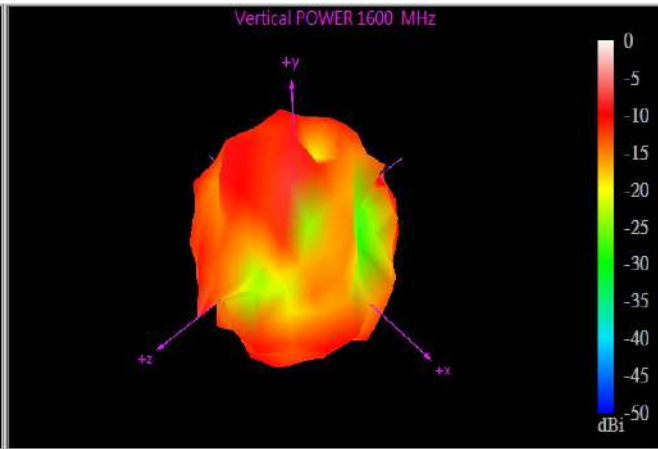
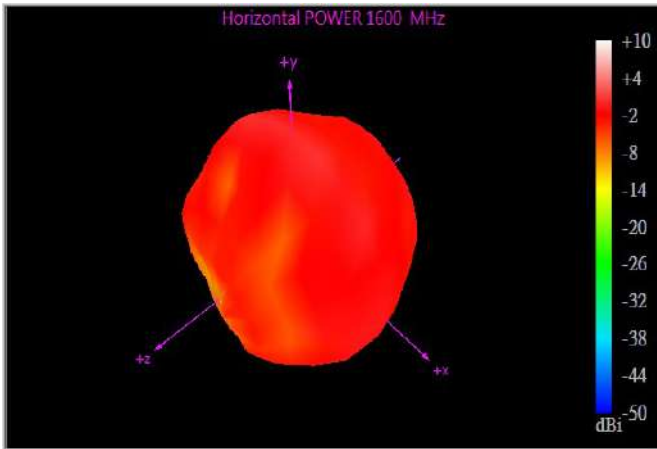
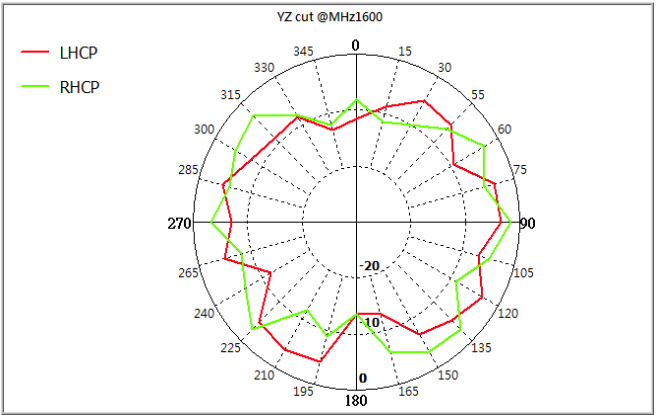
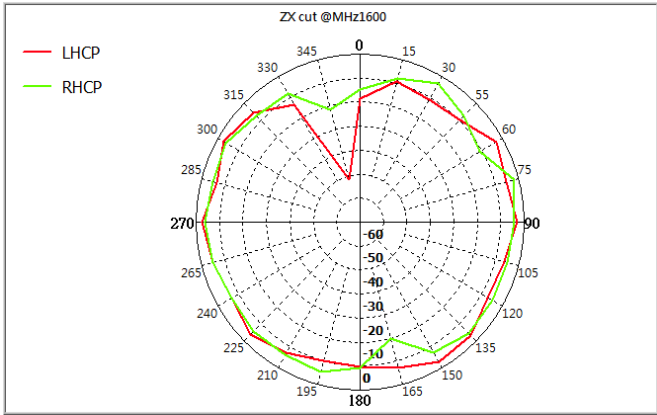
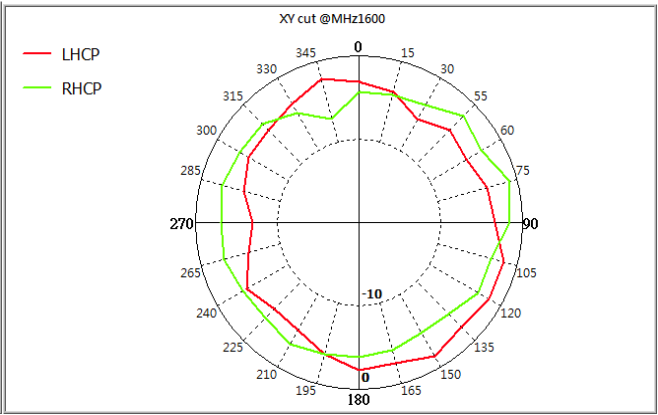
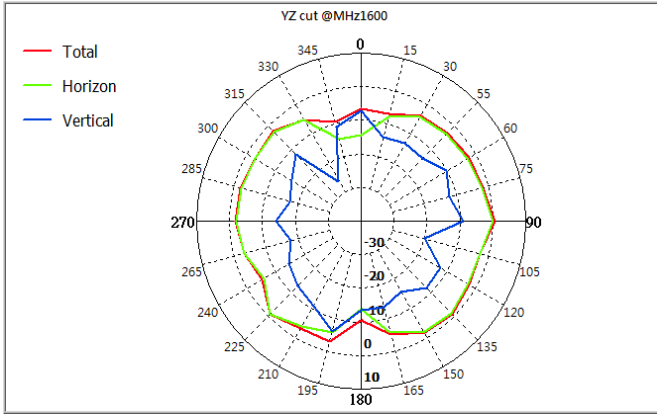


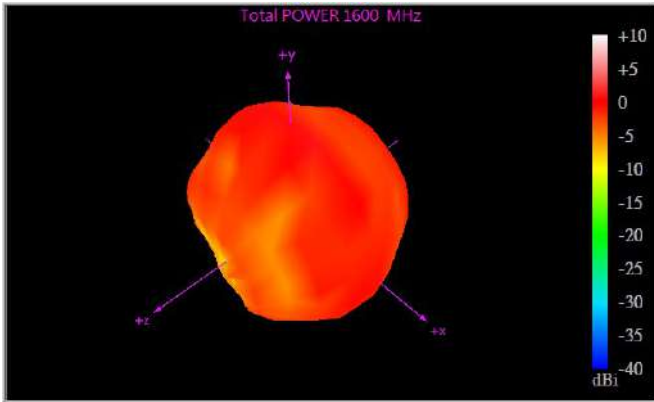
Frequency (MHz)	Upper Hem. PRP (dBm)	Lower HEM. PRP (dBm)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Tot. Rad.Pwr. (dBm)
1600 MHz	-5.64	-5.53	-2.58	55.27	0.85	-2.58
1605 MHz	-5.85	-5.72	-2.77	52.84	0.91	-2.77
1610 MHz	-5.91	-5.80	-2.84	51.95	0.89	-2.84
1710 MHz	-4.94	-4.57	-1.74	66.98	1.83	-1.74
1730 MHz	-4.88	-4.43	-1.64	68.56	2.12	-1.64
1750 MHz	-5.80	-5.19	-2.48	56.55	1.23	-2.48
1770 MHz	-5.85	-5.43	-2.62	54.70	0.95	-2.62
1785 MHz	-5.73	-5.30	-2.50	56.21	1.28	-2.50
1805 MHz	-6.86	-6.09	-3.45	45.18	0.08	-3.45
1840 MHz	-6.63	-5.42	-2.97	50.45	0.75	-2.97
1850 MHz	-6.21	-4.79	-2.43	57.08	1.35	-2.43
1880 MHz	-6.99	-5.22	-3.01	50.03	0.75	-3.01
1910 MHz	-7.06	-4.90	-2.84	52.05	1.78	-2.84
1920 MHz	-6.81	-4.64	-2.58	55.18	1.75	-2.58
1930 MHz	-7.34	-4.75	-2.84	51.99	2.18	-2.84
1950 MHz	-7.54	-4.10	-2.48	56.50	3.36	-2.48
1960 MHz	-8.07	-4.05	-2.60	54.99	3.09	-2.60
1980 MHz	-9.08	-3.76	-2.64	54.46	3.69	-2.64
1995 MHz	-9.76	-3.76	-2.79	52.66	4.13	-2.79
2110 MHz	-4.47	-4.52	-1.49	71.03	3.07	-1.49
2140 MHz	-4.32	-5.13	-1.70	67.60	2.25	-1.70
2170 MHz	-4.79	-5.86	-2.28	59.14	1.84	-2.28
2300 MHz	-5.71	-6.10	-2.89	51.42	0.92	-2.89
2325 MHz	-5.11	-5.07	-2.08	61.95	1.89	-2.08
2350 MHz	-6.09	-5.60	-2.83	52.14	1.33	-2.83
2375 MHz	-6.37	-5.50	-2.90	51.27	1.42	-2.90
2400 MHz	-6.96	-5.64	-3.24	47.42	1.38	-3.24
2500 MHz	-7.67	-4.62	-2.87	51.60	1.45	-2.87
2515 MHz	-7.55	-4.30	-2.62	54.69	1.86	-2.62
2535 MHz	-7.71	-4.59	-2.86	51.72	1.62	-2.86
2555 MHz	-7.60	-4.40	-2.70	53.67	2.17	-2.70
2570 MHz	-7.25	-4.35	-2.55	55.60	2.32	-2.55
2595 MHz	-6.81	-4.61	-2.56	55.46	1.85	-2.56
2620 MHz	-6.89	-5.11	-2.90	51.34	2.19	-2.90
2630 MHz	-6.95	-5.28	-3.02	49.86	1.50	-3.02
2655 MHz	-6.50	-4.69	-2.49	56.38	1.64	-2.49
2680 MHz	-6.68	-4.80	-2.63	54.61	1.63	-2.63
2690 MHz	-6.94	-4.99	-2.85	51.92	1.64	-2.85
3300 MHz	-6.27	-3.93	-1.93	64.06	4.55	-1.93
3350 MHz	-5.14	-3.14	-1.02	79.08	5.16	-1.02

3400 MHz	-7.56	-5.74	-3.54	44.22	2.77	-3.54
3450 MHz	-7.04	-4.08	-2.30	58.89	4.50	-2.30
3500 MHz	-7.33	-3.64	-2.09	61.74	3.87	-2.09
3550 MHz	-7.52	-4.35	-2.64	54.41	2.48	-2.64
3600 MHz	-6.90	-4.80	-2.71	53.55	2.30	-2.71
3650 MHz	-4.14	-3.20	-0.63	86.48	3.97	-0.63
3700 MHz	-5.98	-5.51	-2.73	53.34	1.54	-2.73
3750 MHz	-5.83	-5.33	-2.56	55.40	1.84	-2.56
3800 MHz	-6.60	-5.96	-3.26	47.21	0.20	-3.26
3850 MHz	-5.02	-4.84	-1.92	64.25	1.58	-1.92
4400 MHz	-4.90	-6.35	-2.55	55.53	1.04	-2.55
4450 MHz	-6.79	-8.39	-4.50	35.44	-0.70	-4.50
4500 MHz	-6.30	-8.42	-4.22	37.81	-0.54	-4.22
4550 MHz	-5.90	-8.21	-3.89	40.83	-0.37	-3.89
4600 MHz	-6.08	-8.48	-4.11	38.83	-0.32	-4.11
4650 MHz	-5.80	-8.48	-3.93	40.49	-0.53	-3.93
4700 MHz	-6.26	-8.36	-4.17	38.28	5.7	-4.17
4750 MHz	-5.59	-8.85	-3.91	40.62	0.76	-3.91
4850 MHz	-4.76	-7.78	-3.00	50.10	2.04	-3.00
4900 MHz	-5.00	-7.94	-3.21	47.72	1.21	-3.21
5000 MHz	-5.29	-7.14	-3.8	41.69	1.99	-3.8

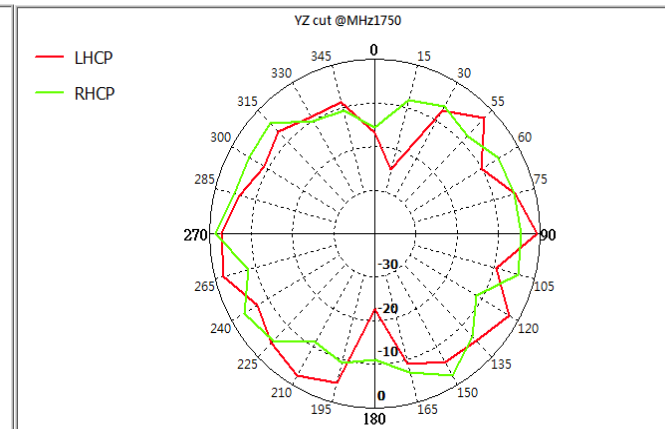
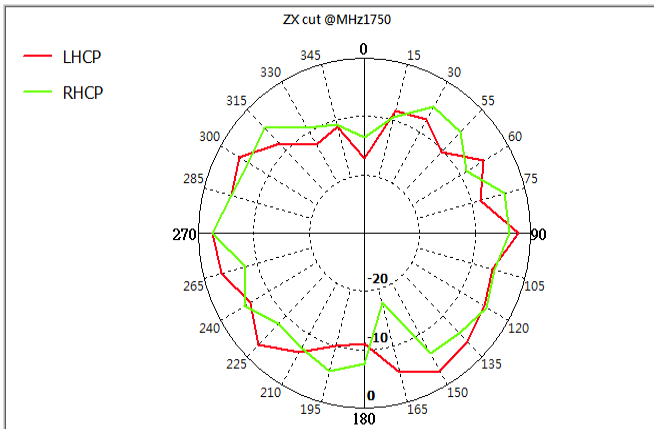
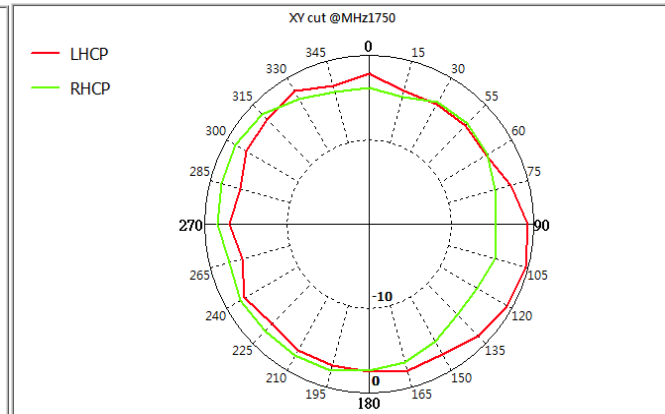
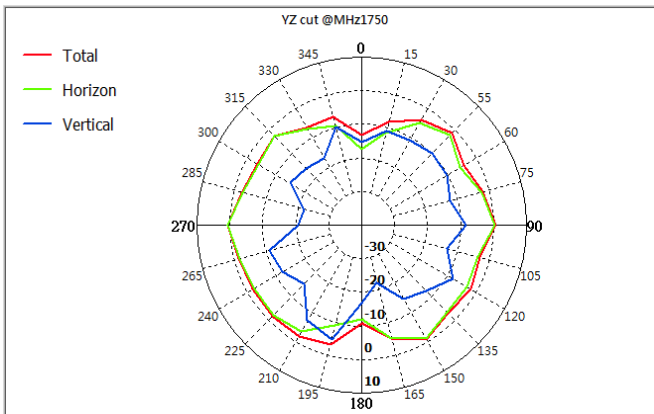
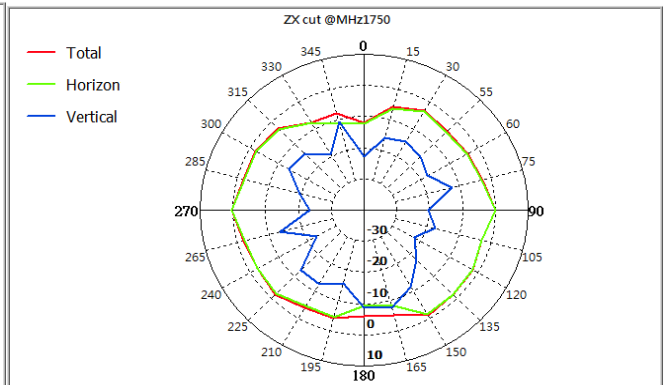
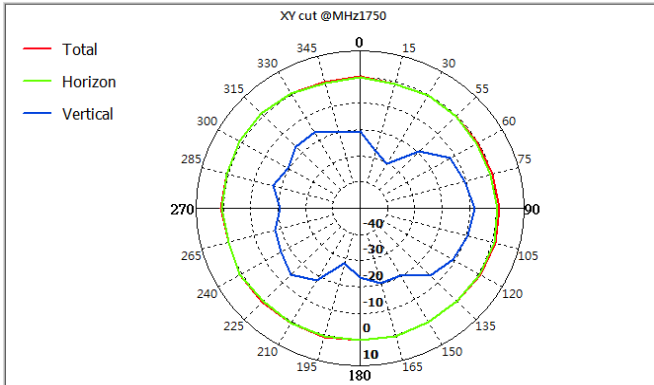
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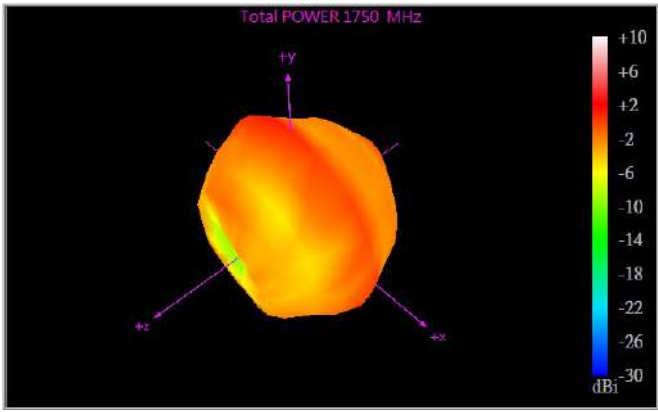
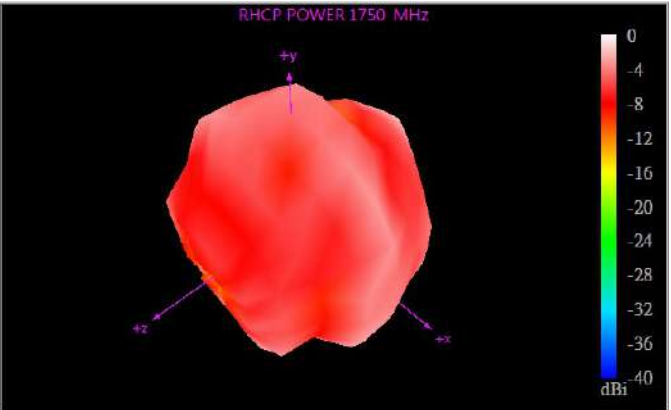
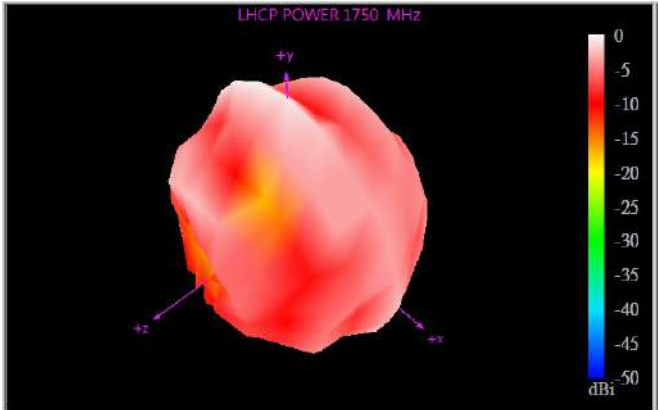
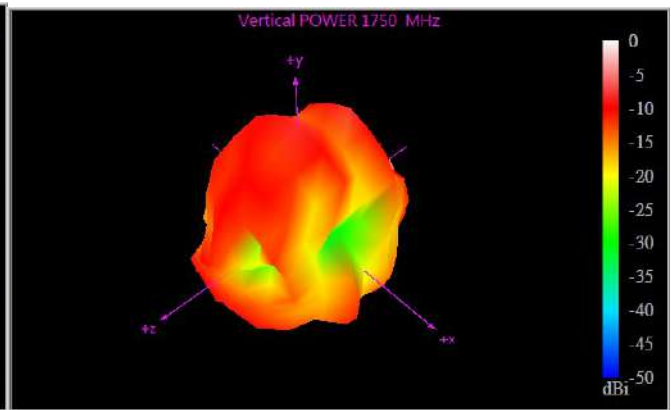
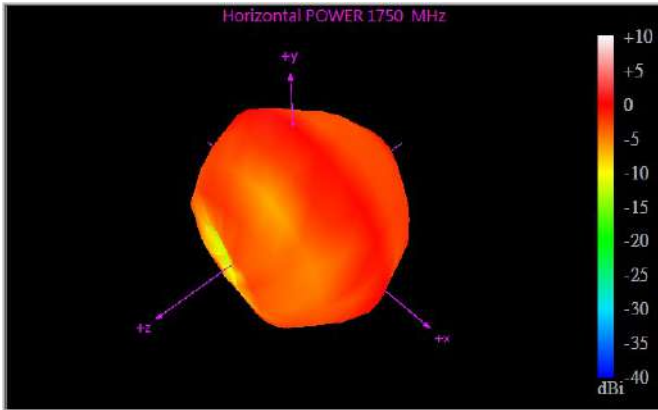




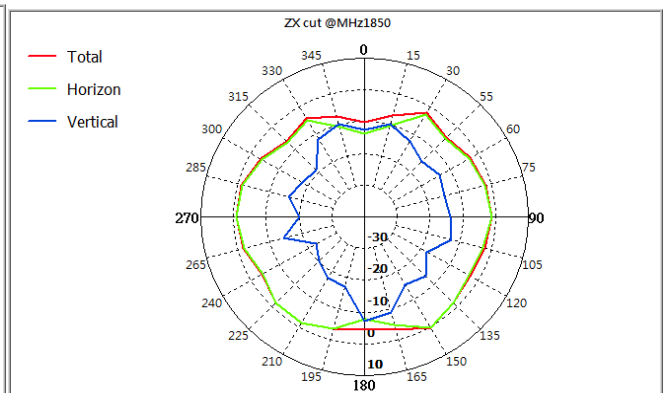
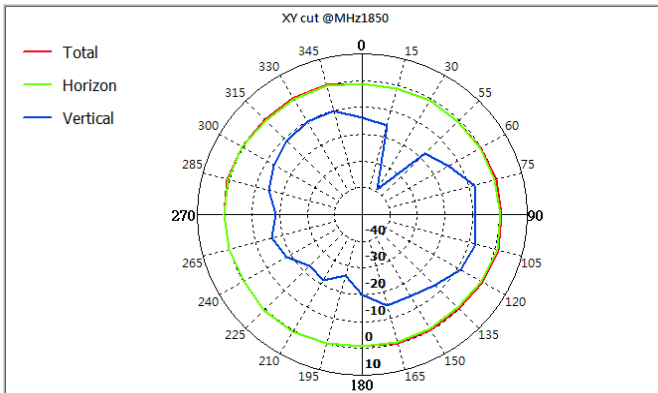


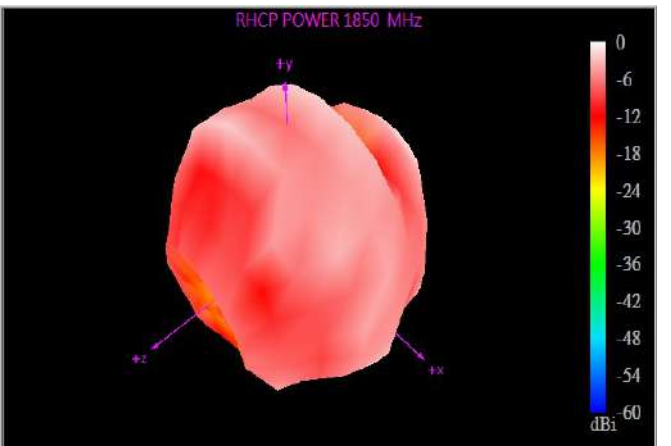
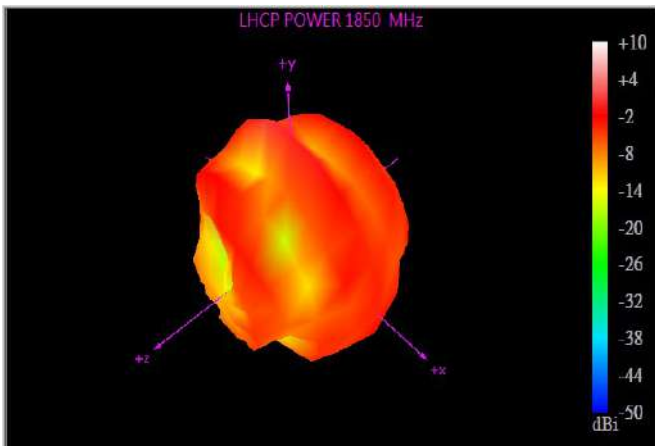
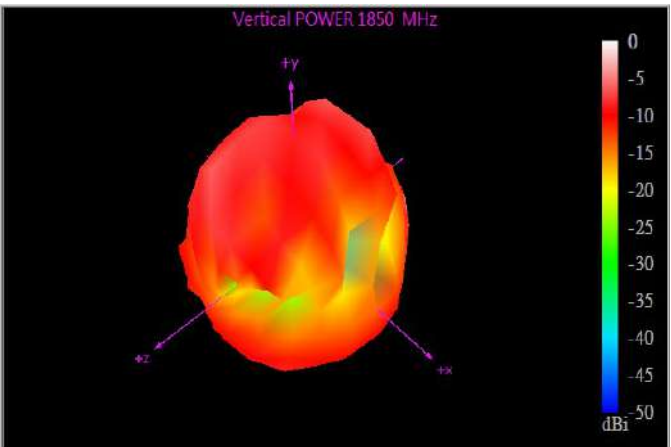
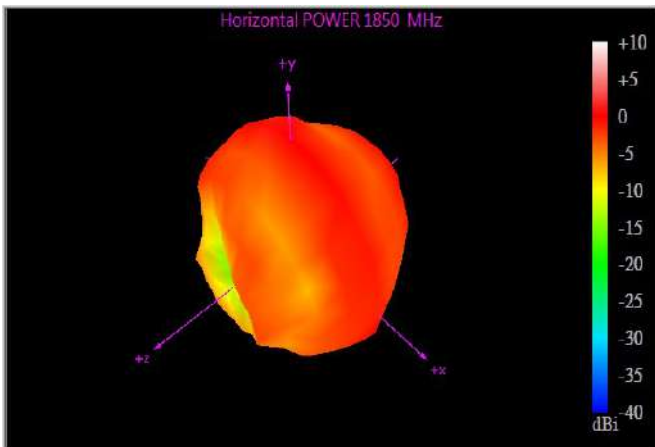
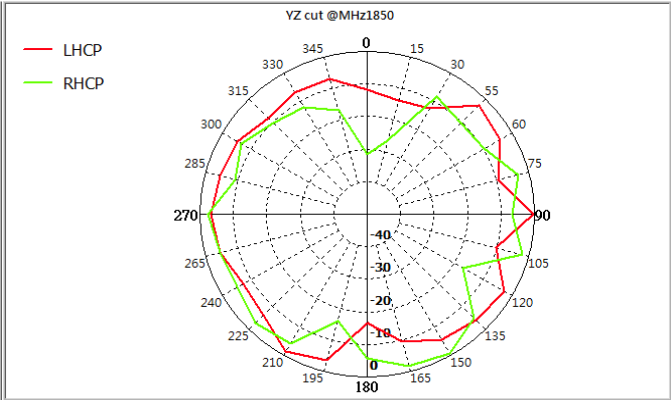
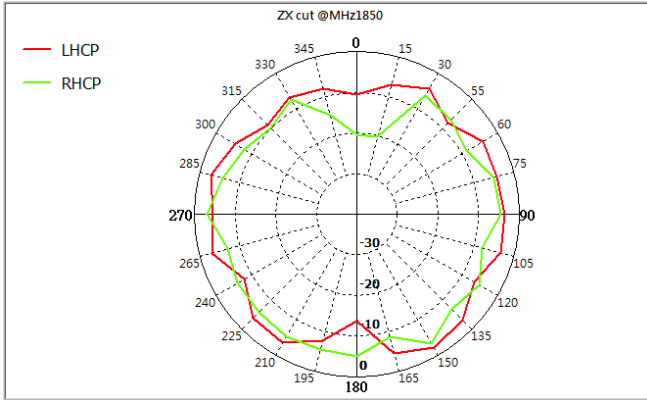
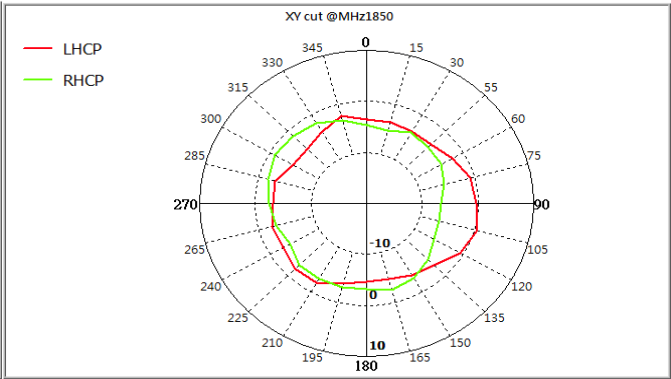
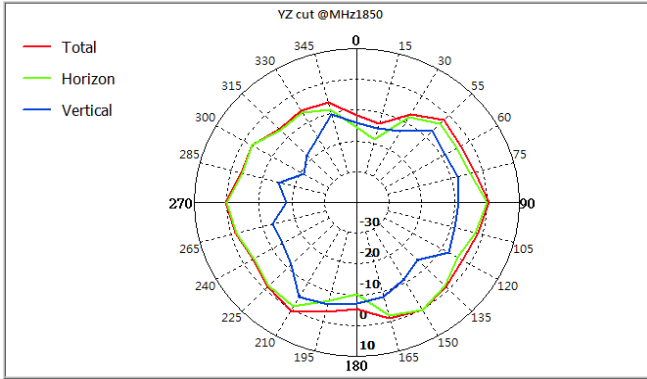
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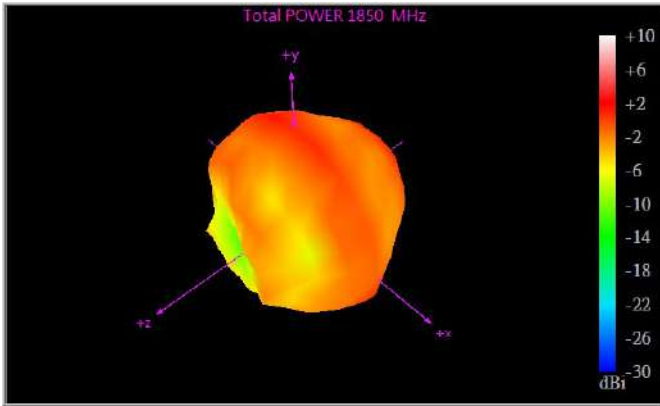




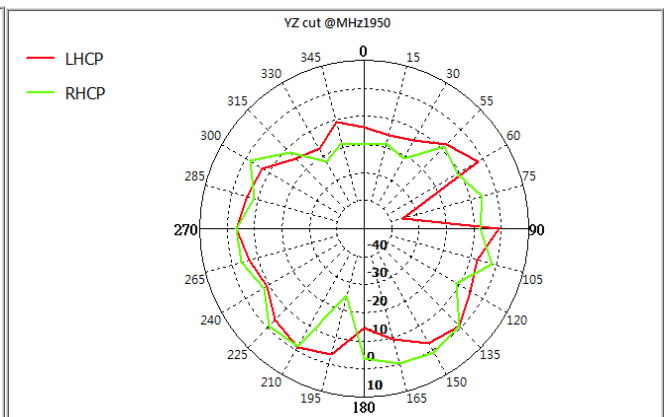
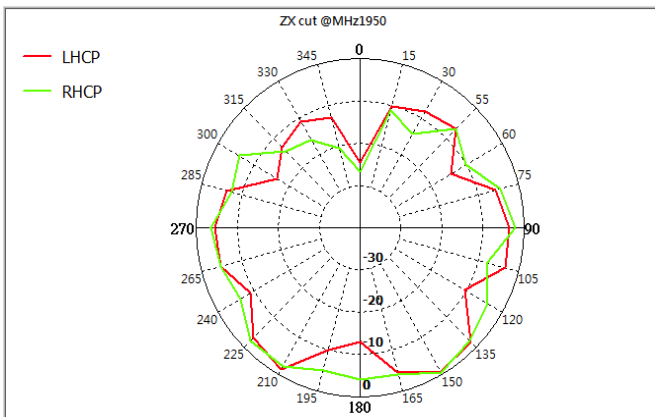
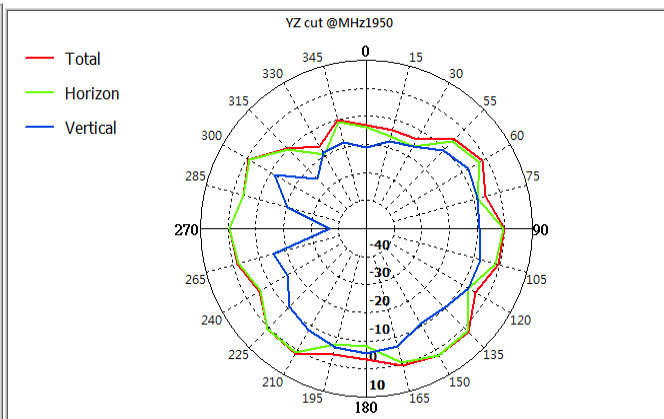
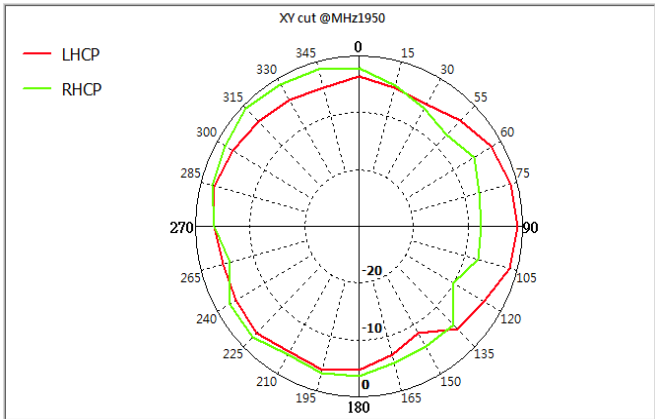
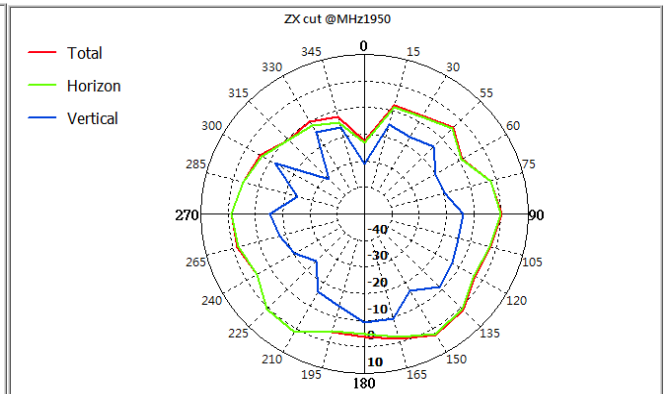
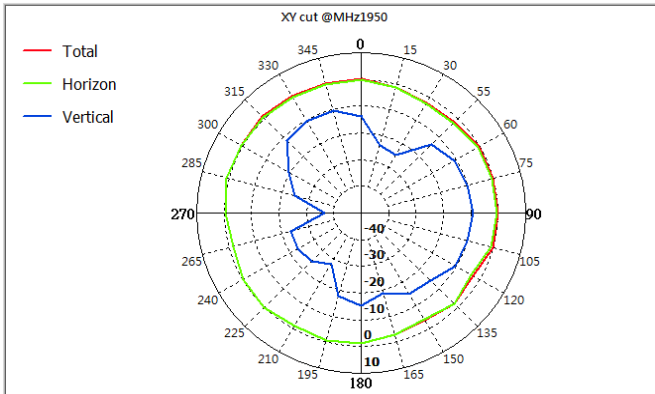
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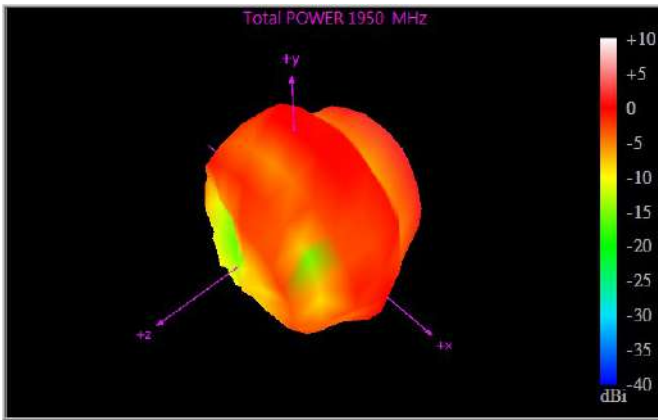
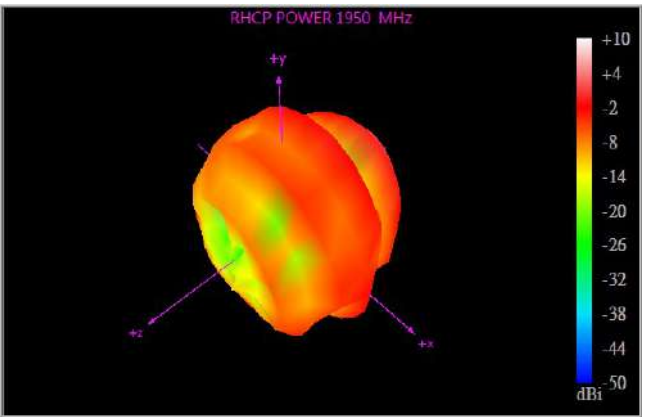
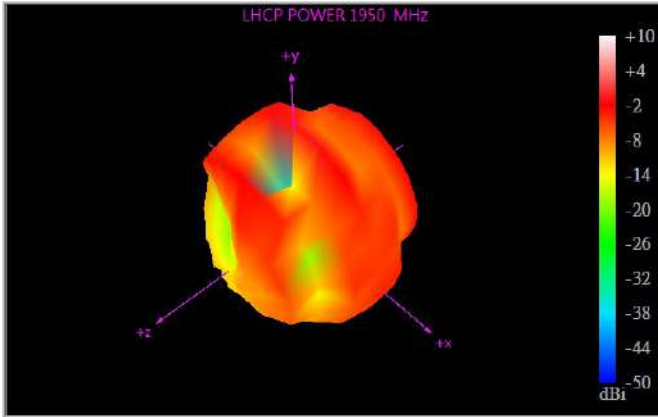
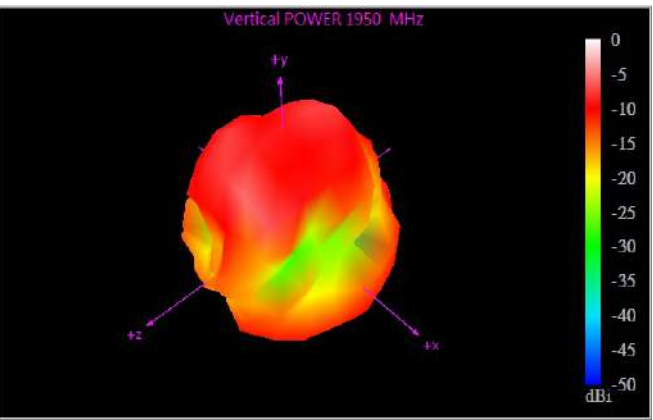
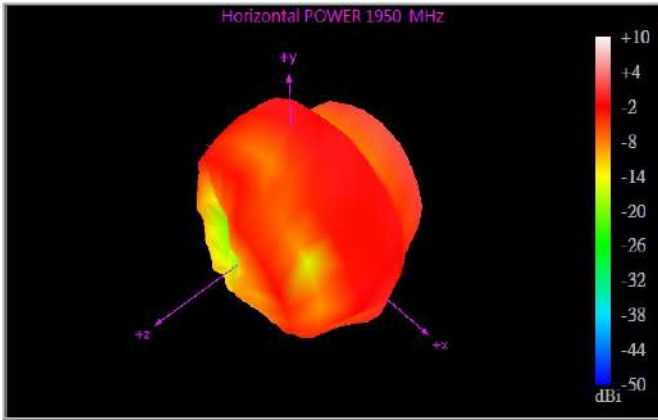




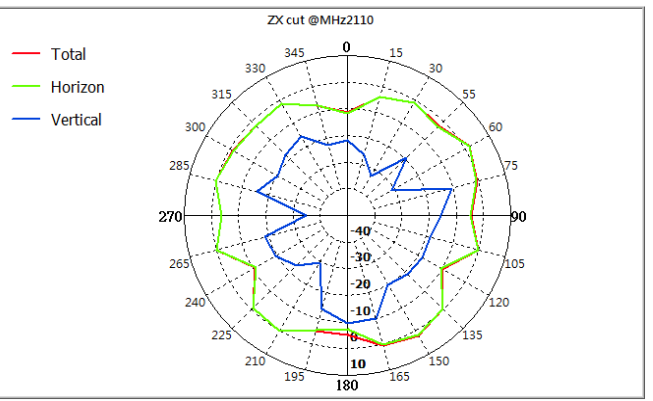
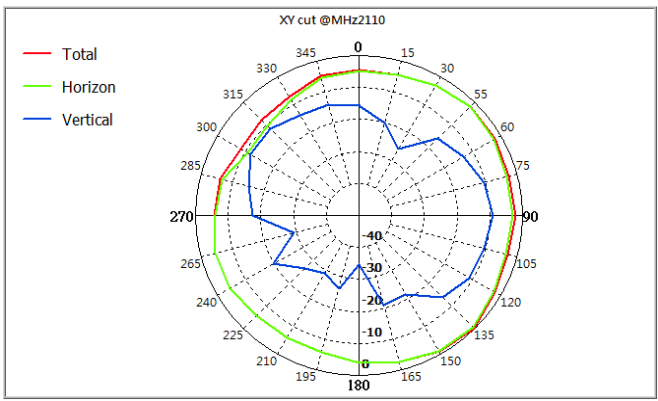


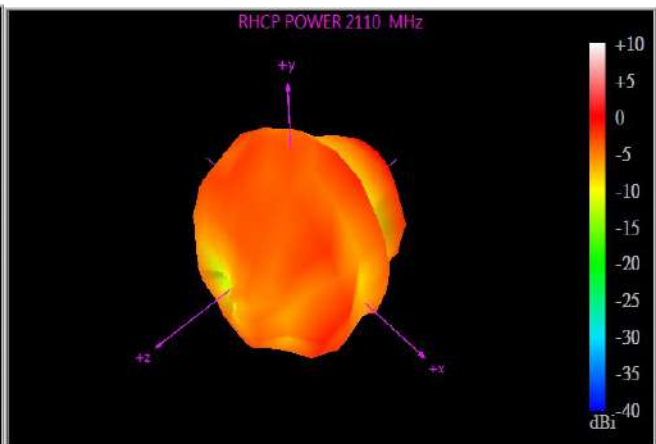
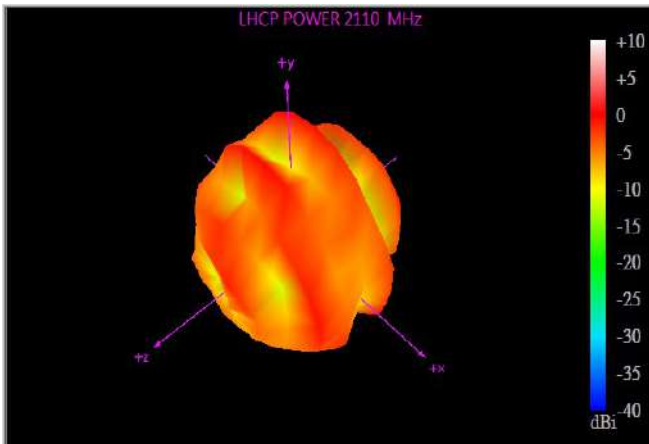
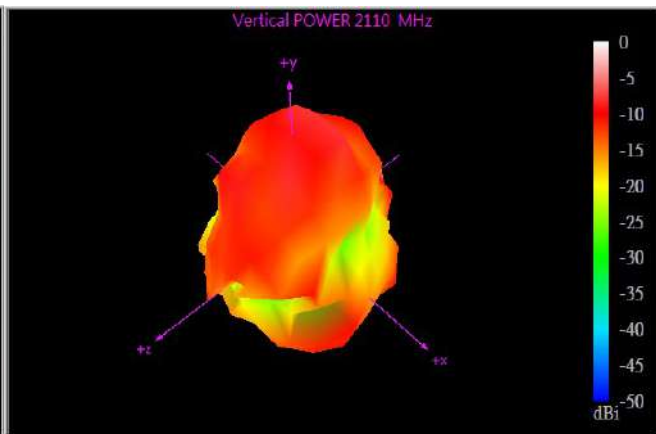
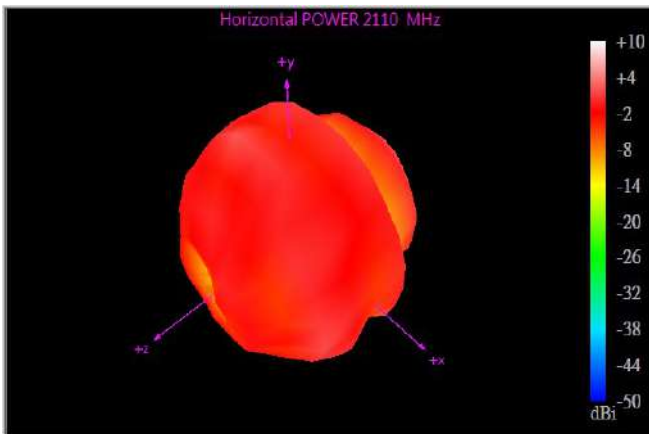
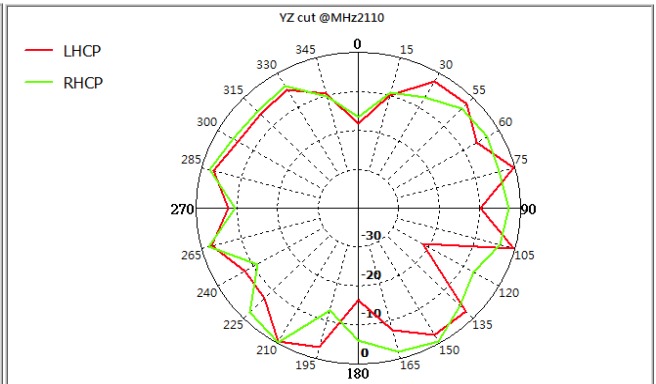
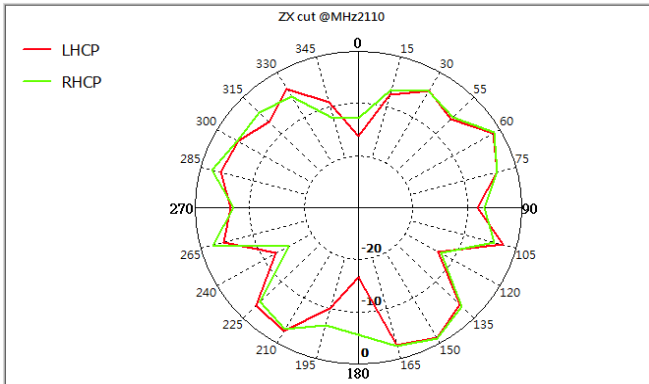
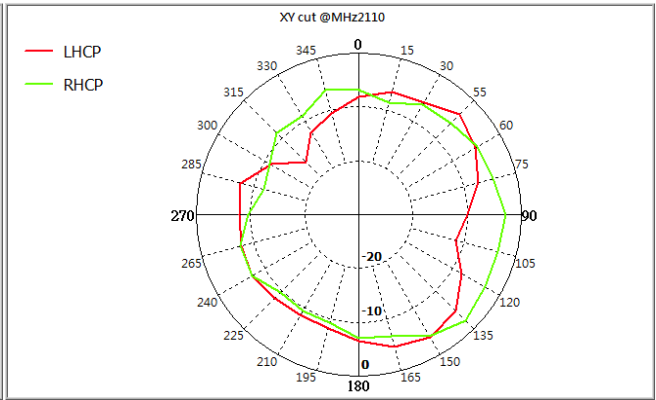
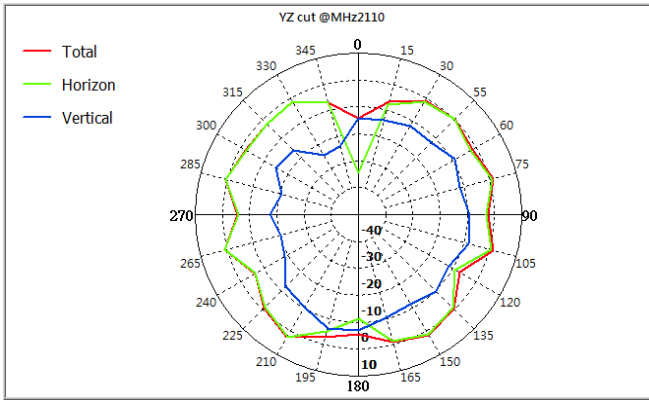
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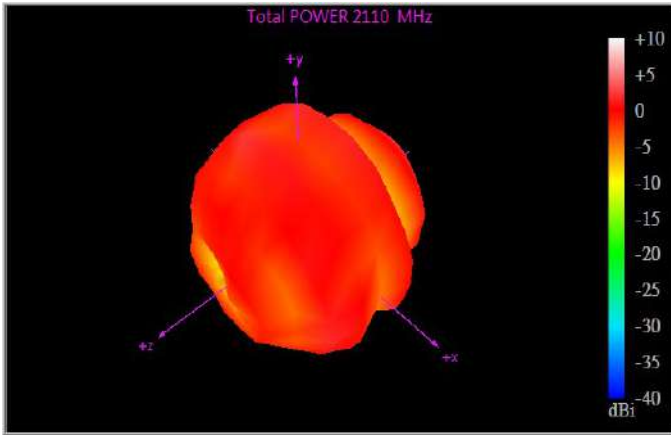




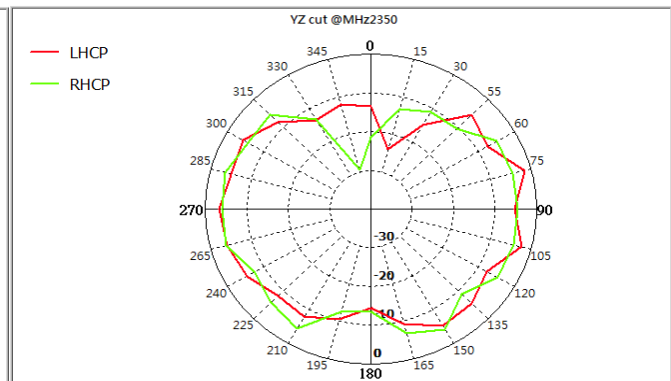
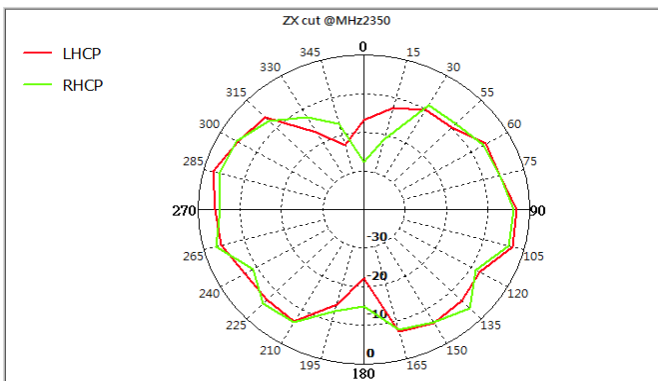
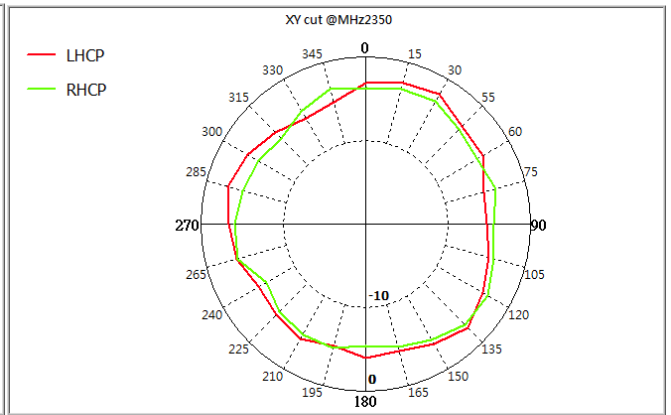
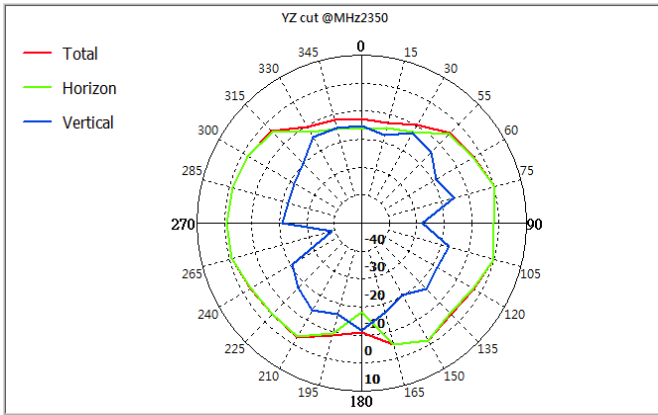
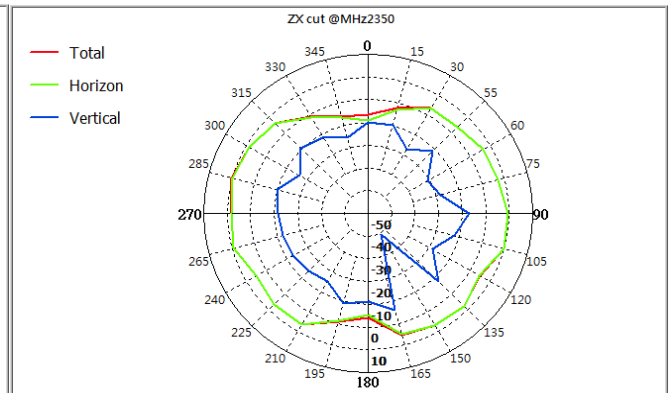
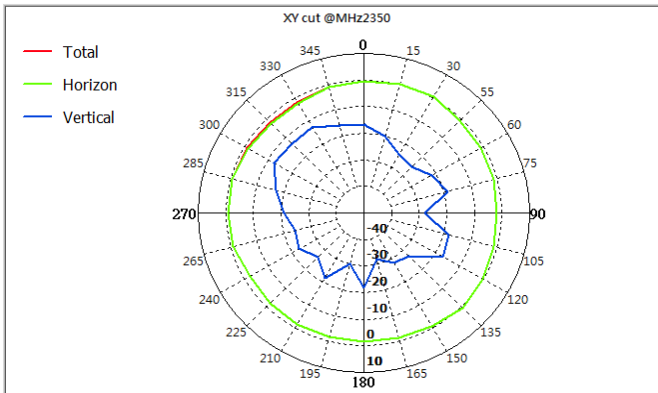
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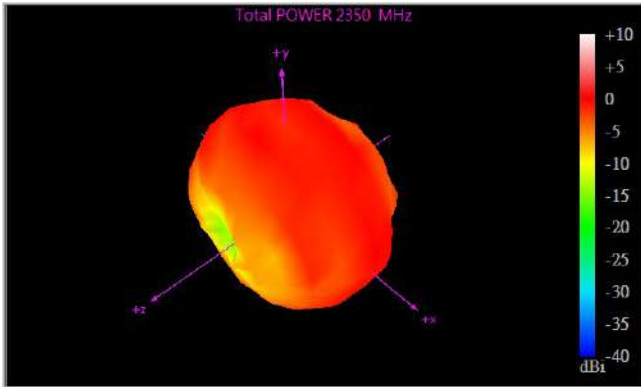
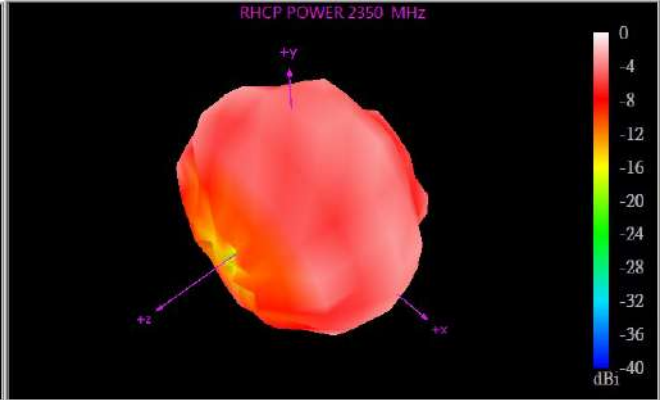
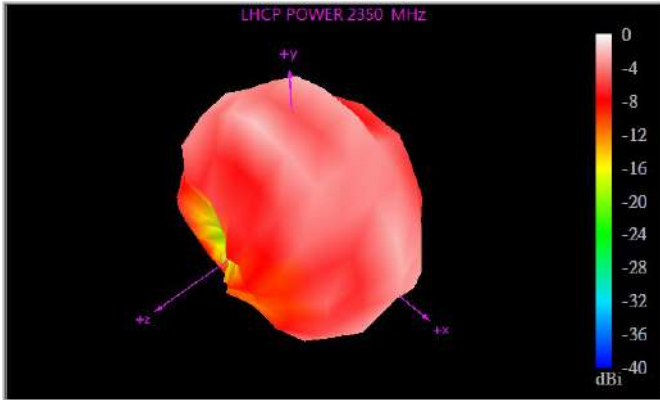
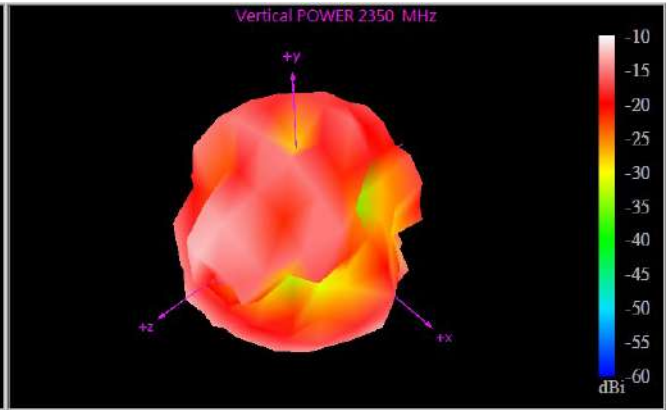
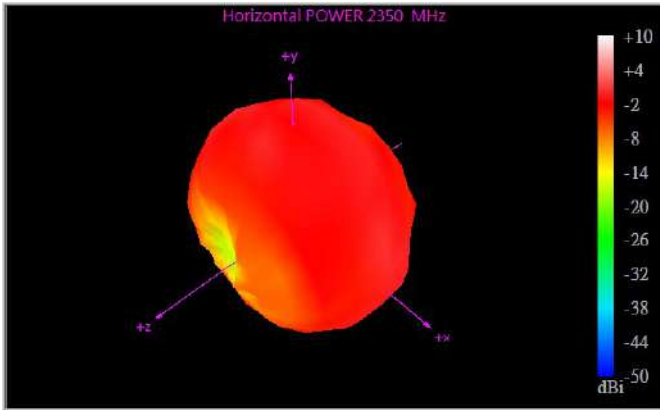




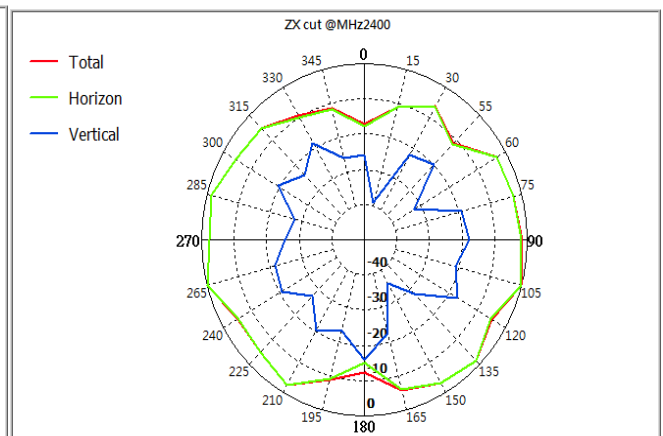
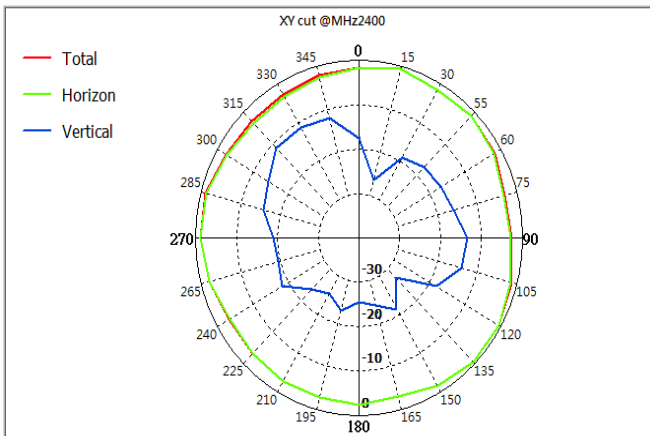


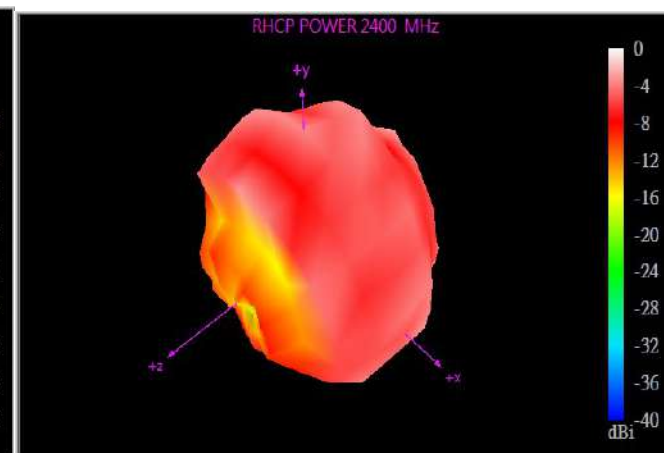
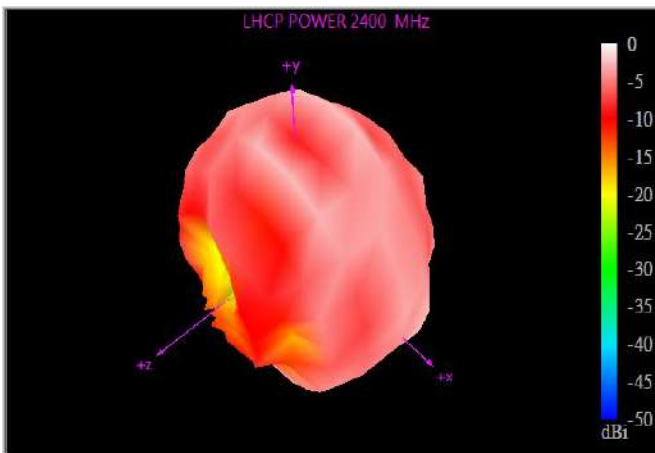
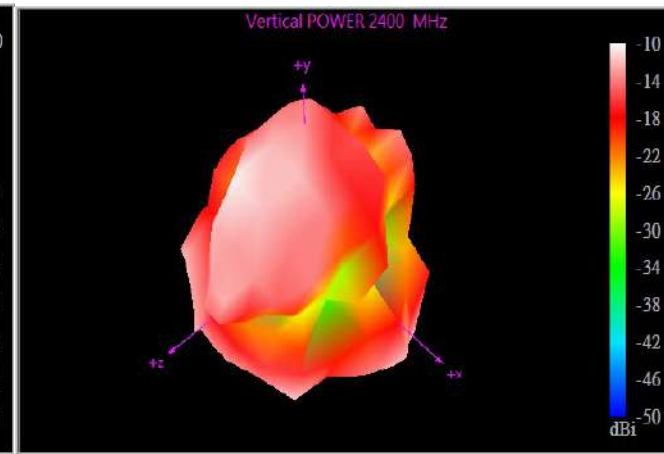
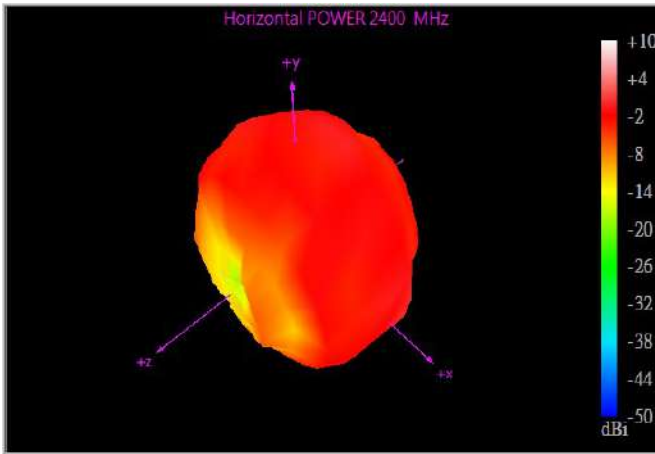
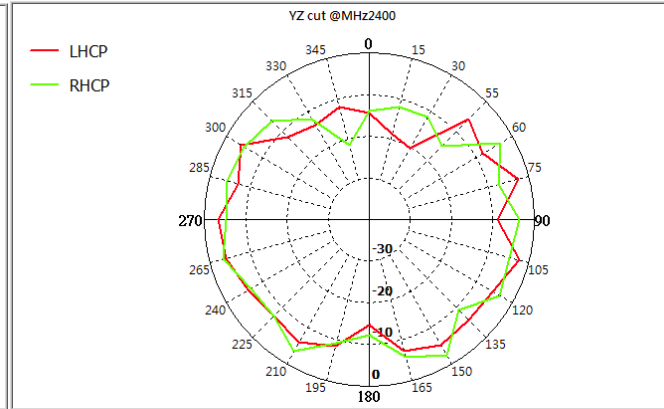
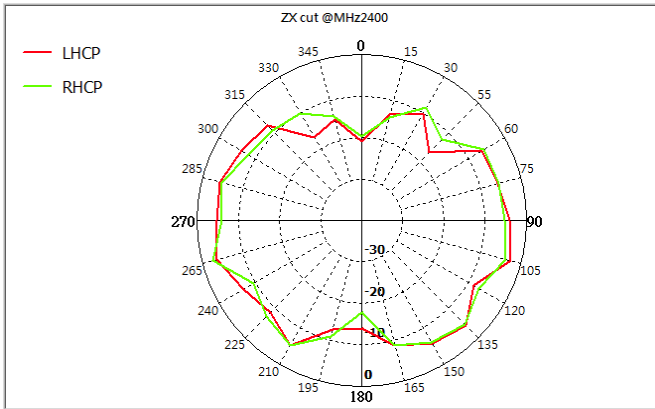
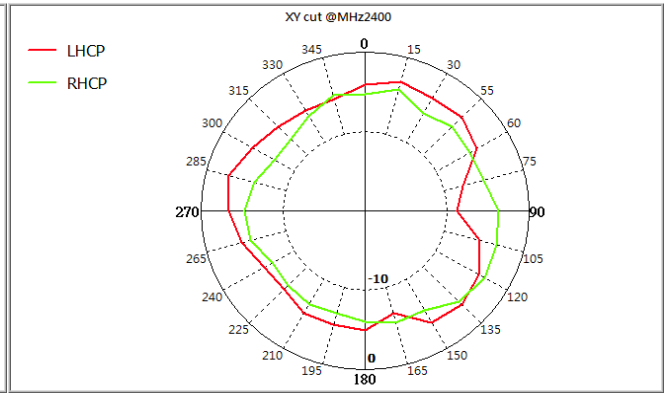
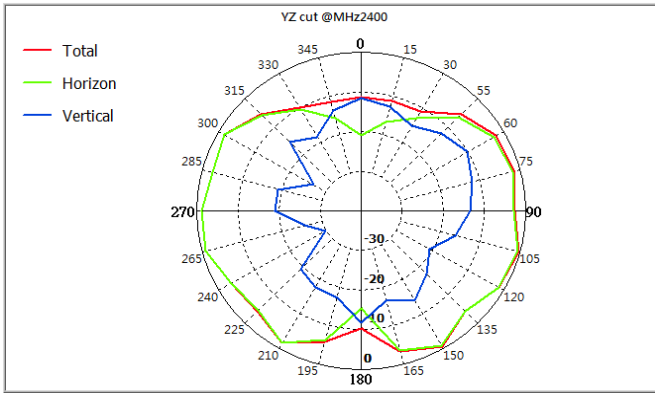
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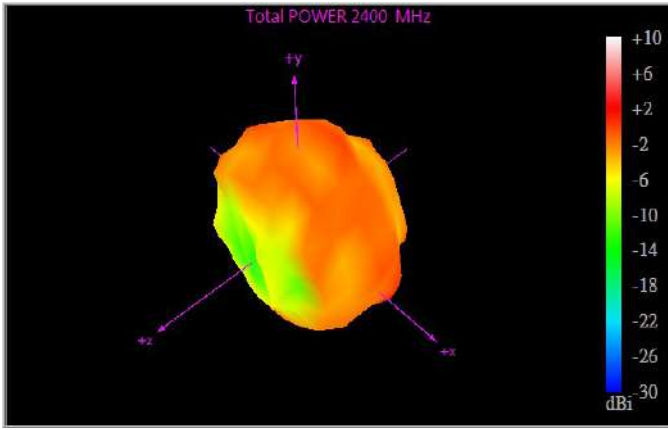




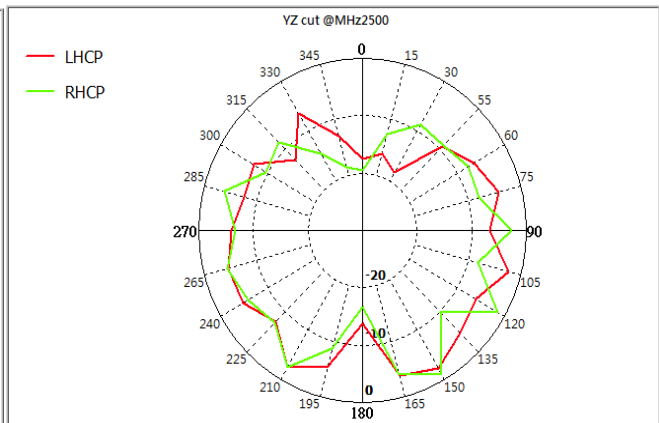
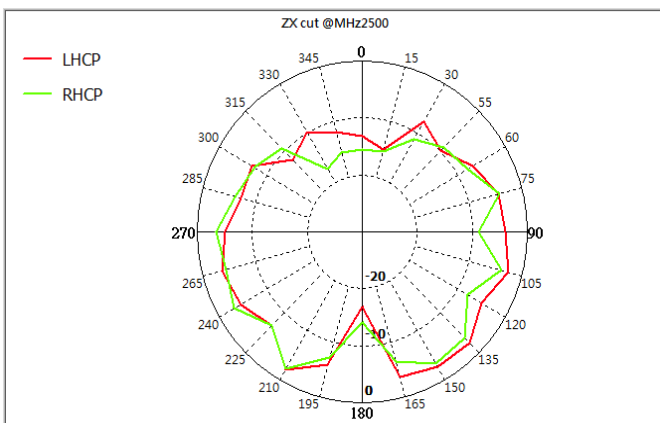
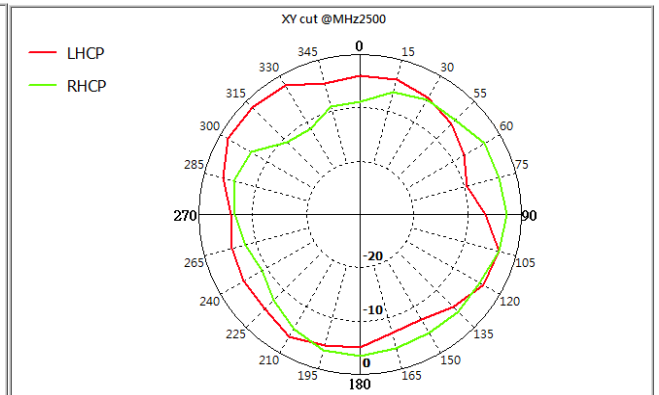
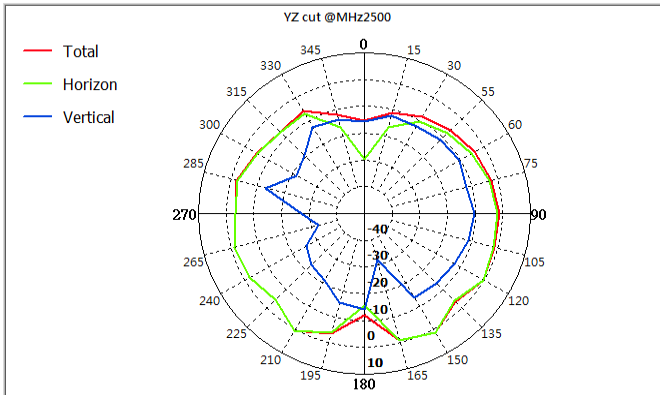
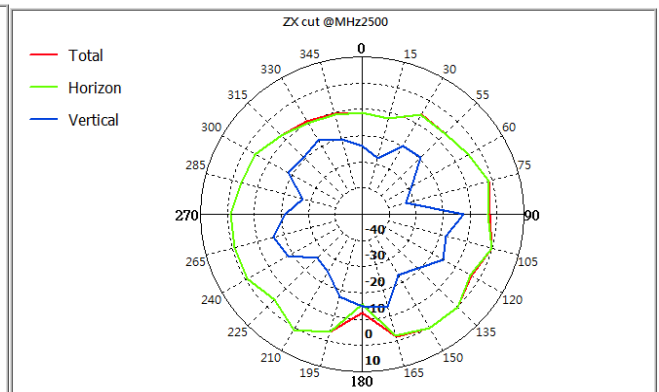
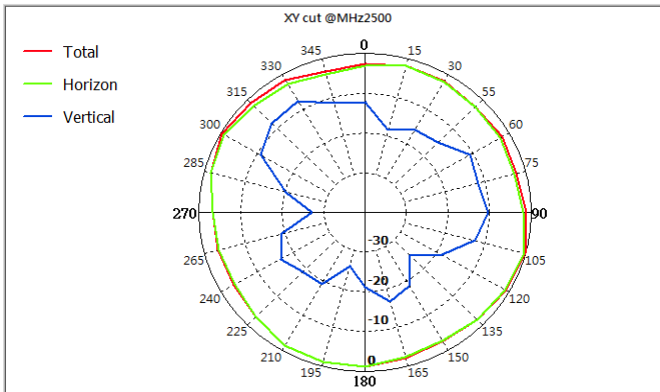
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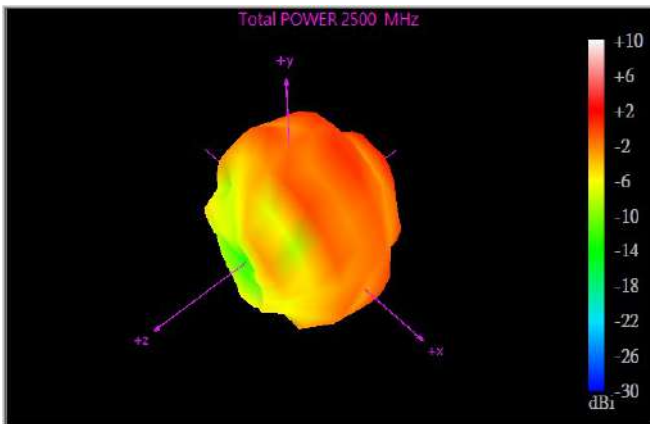
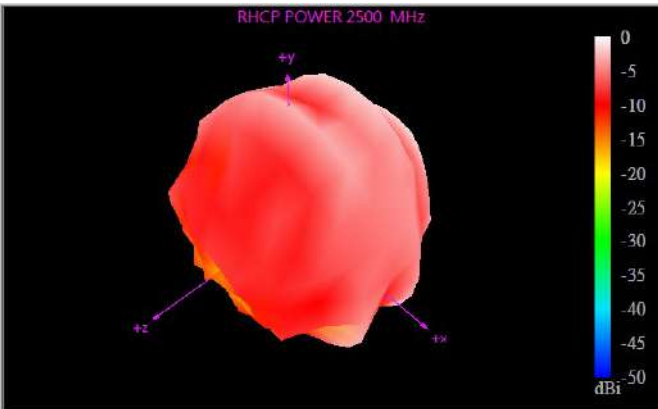
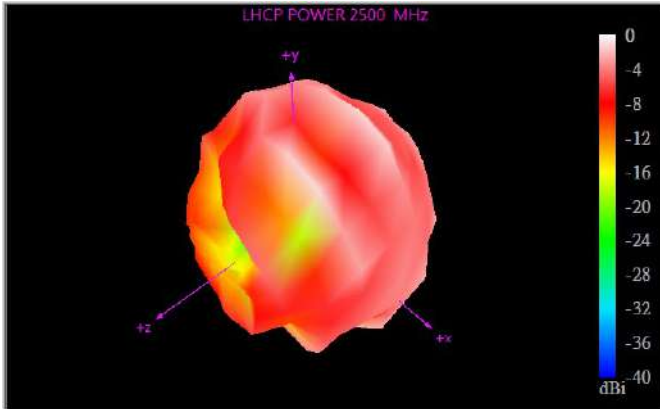
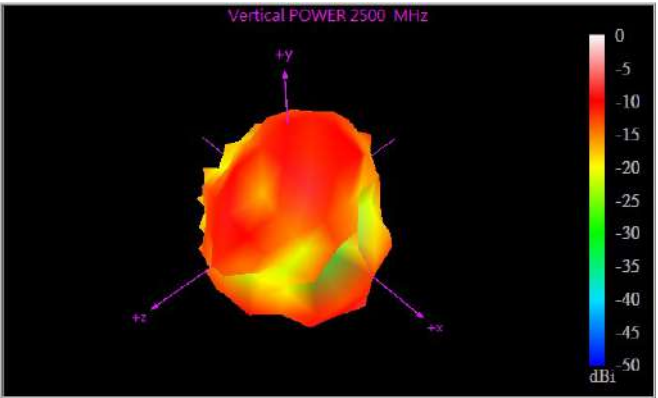
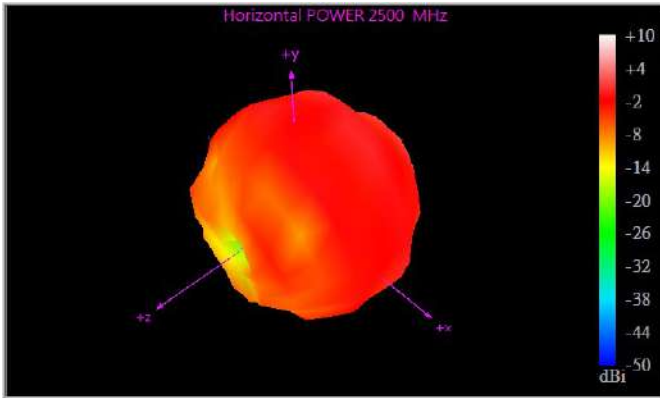




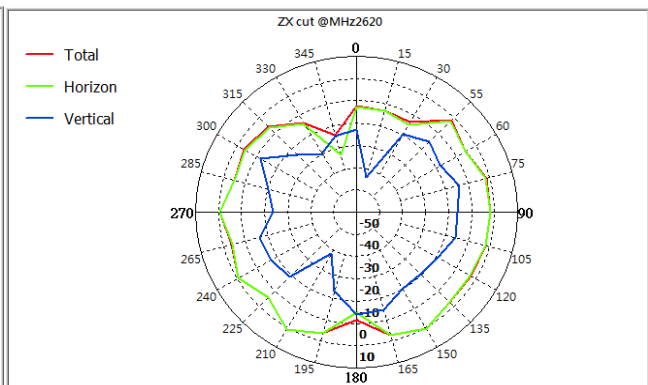
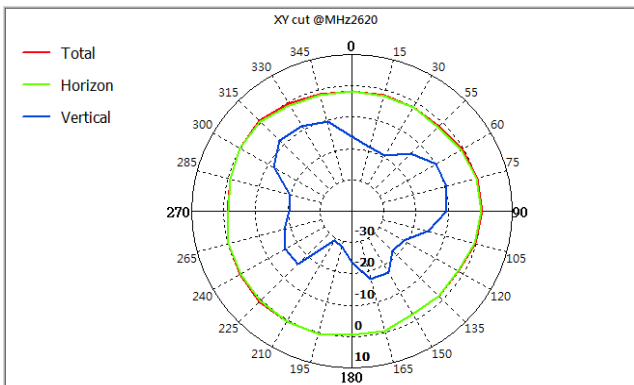


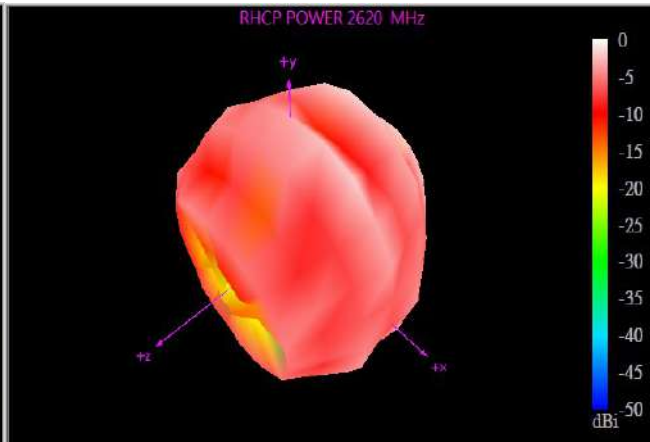
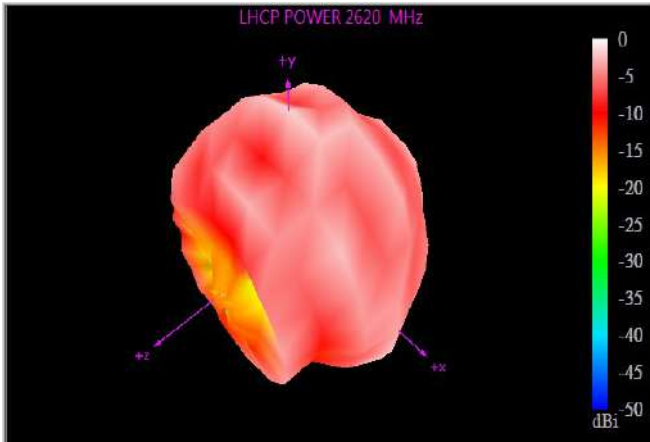
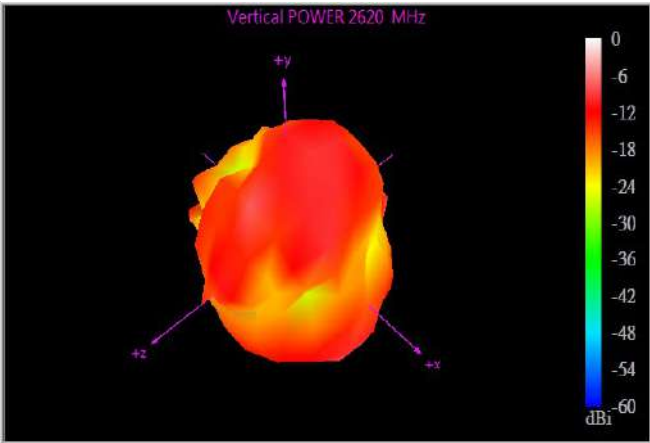
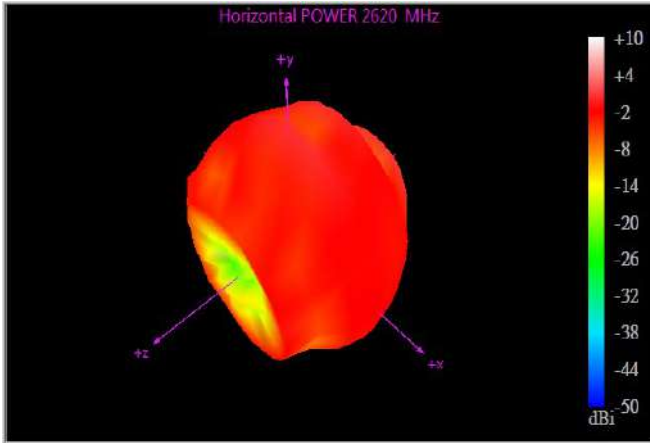
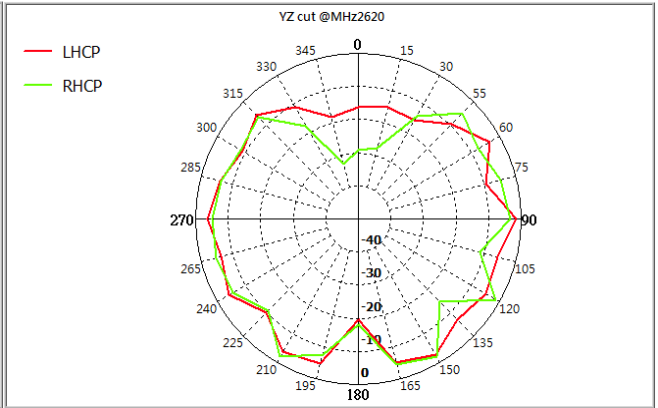
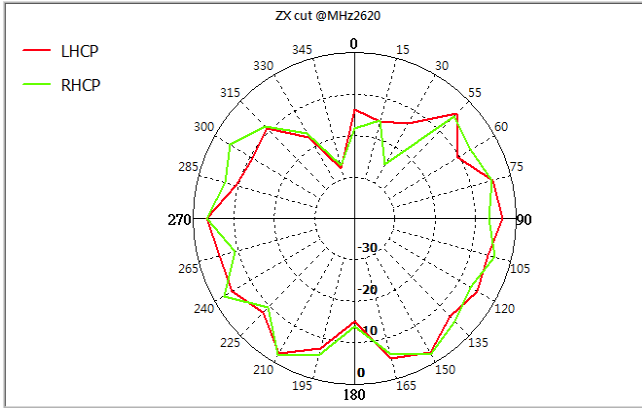
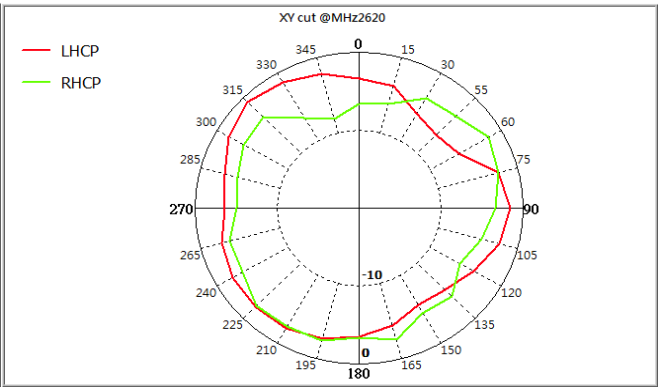
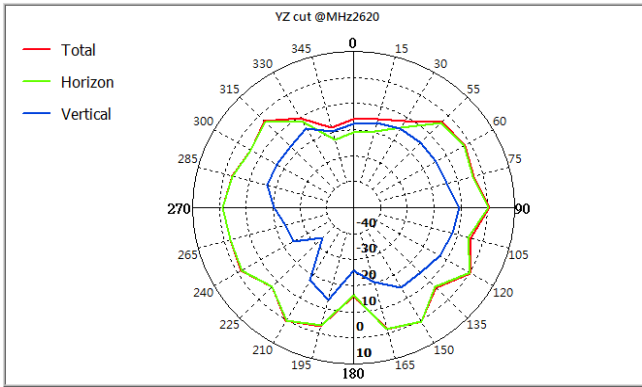
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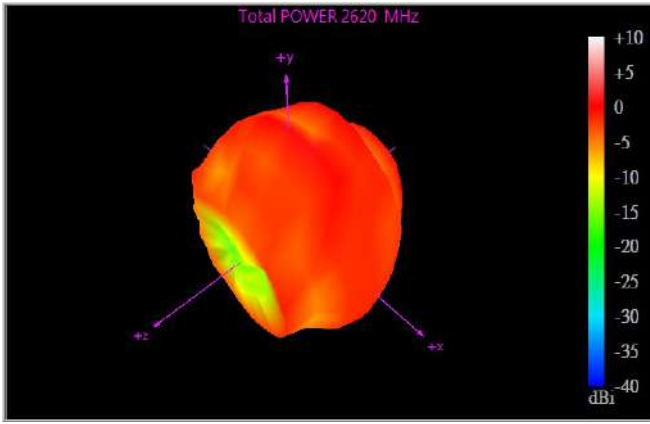




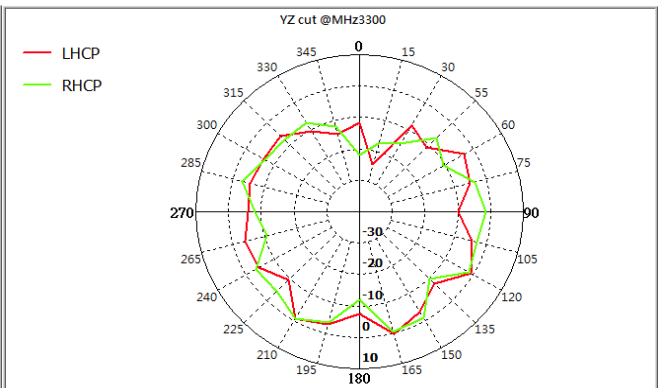
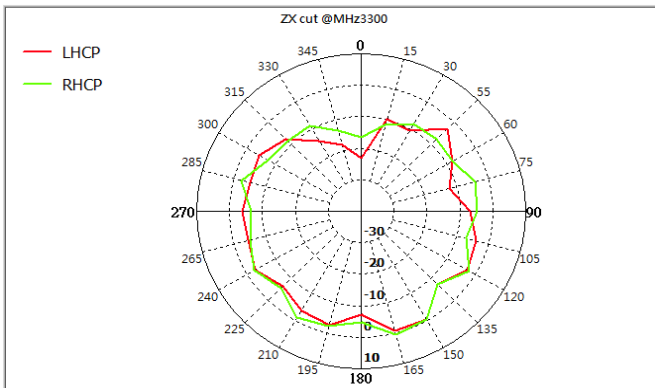
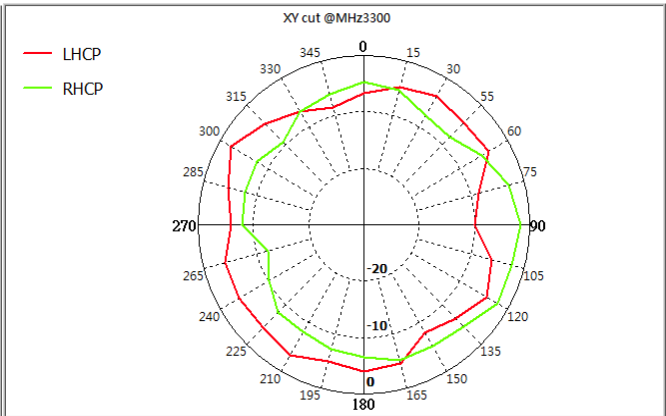
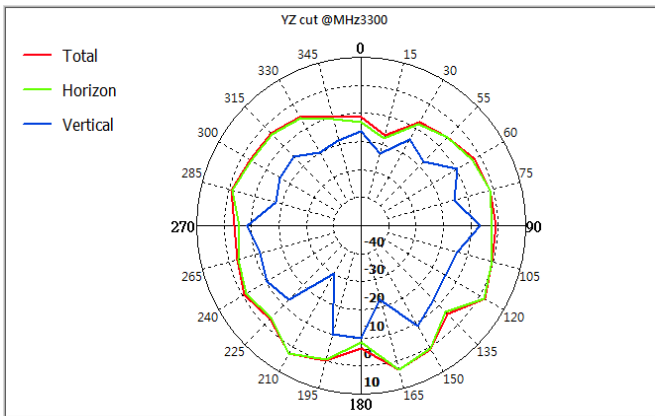
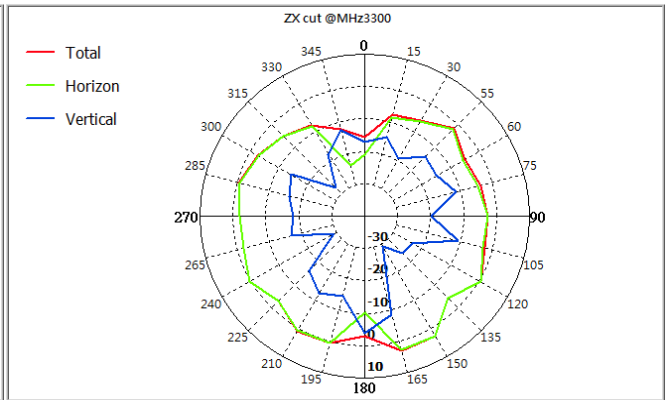
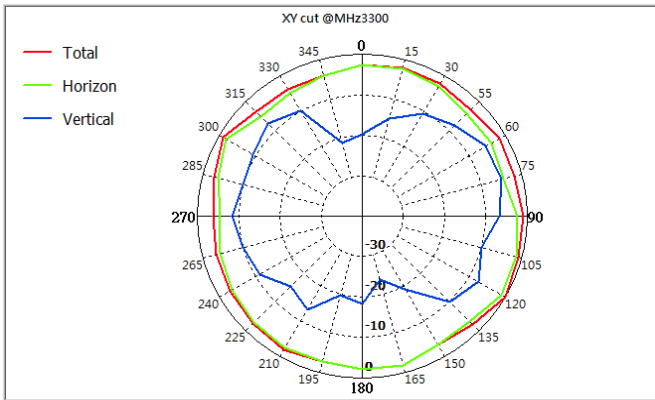
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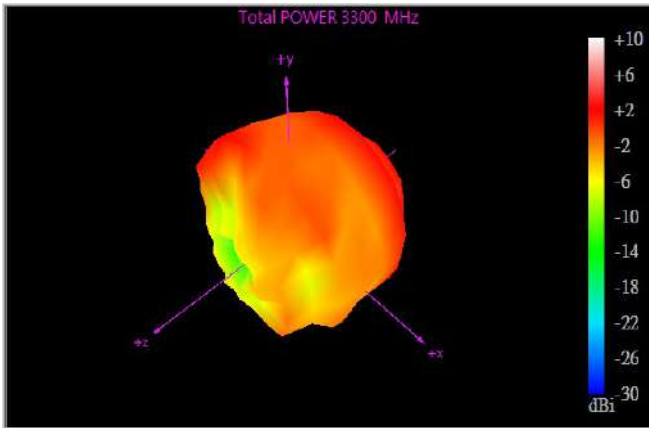
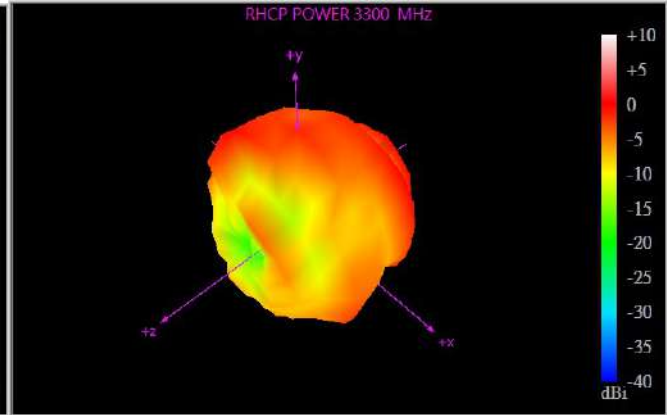
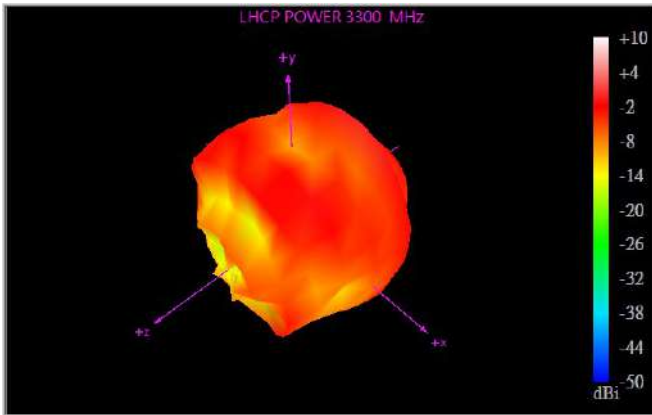
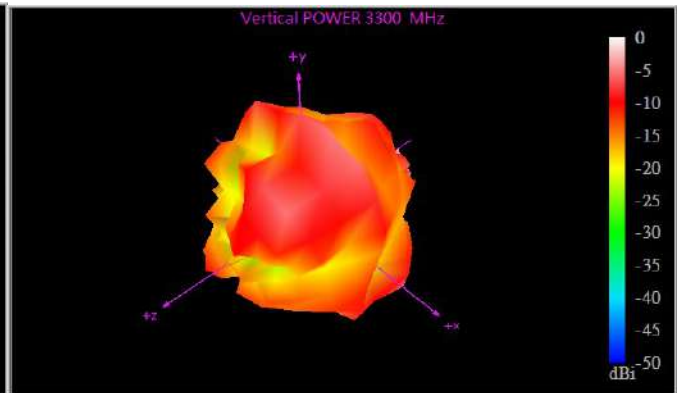
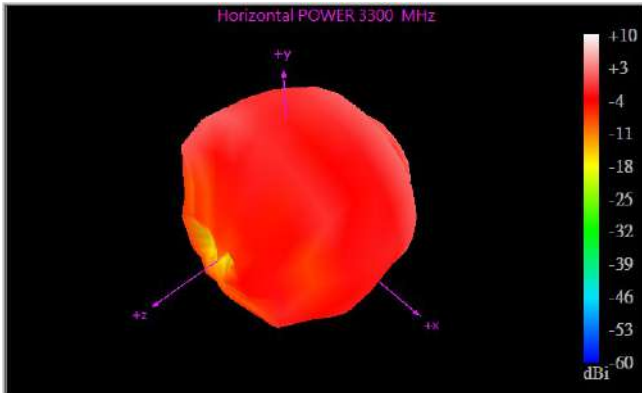




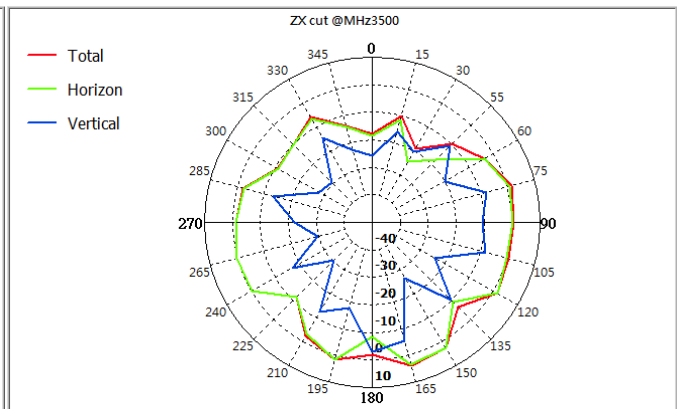
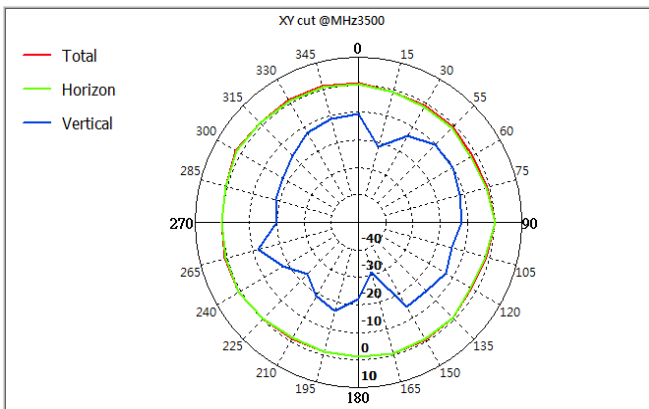


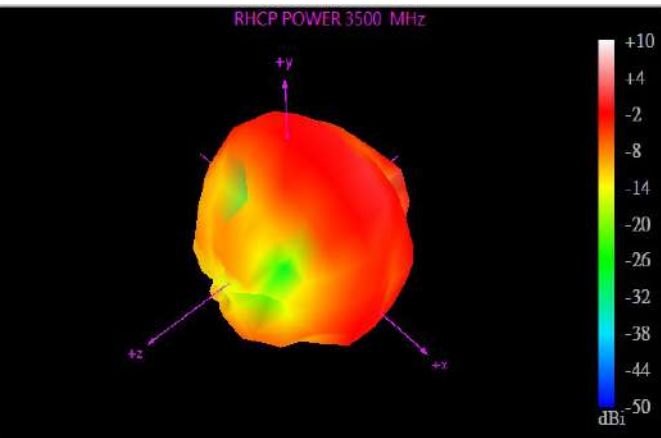
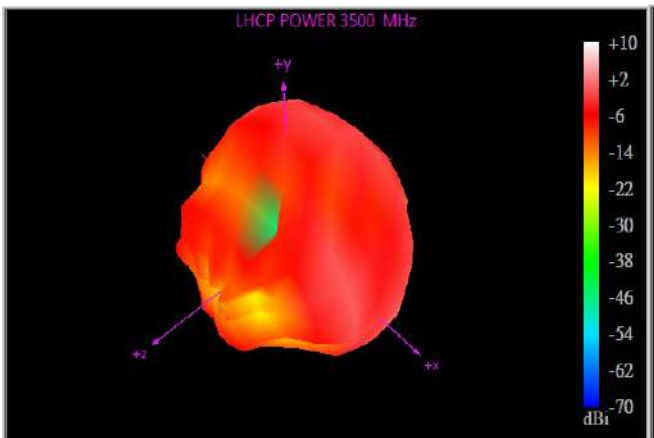
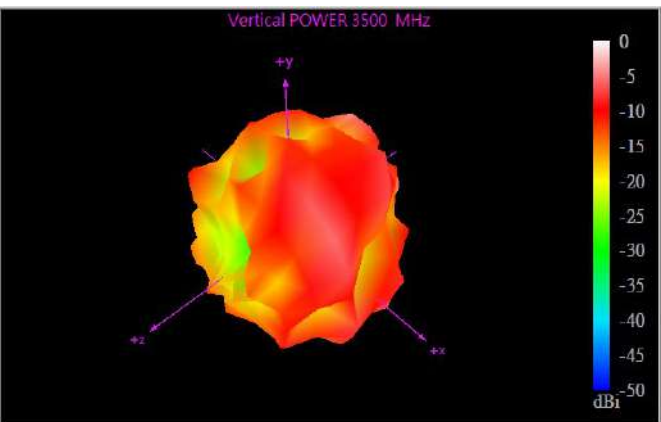
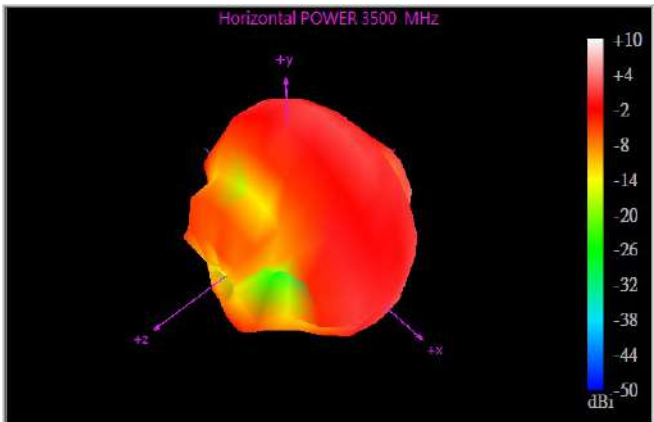
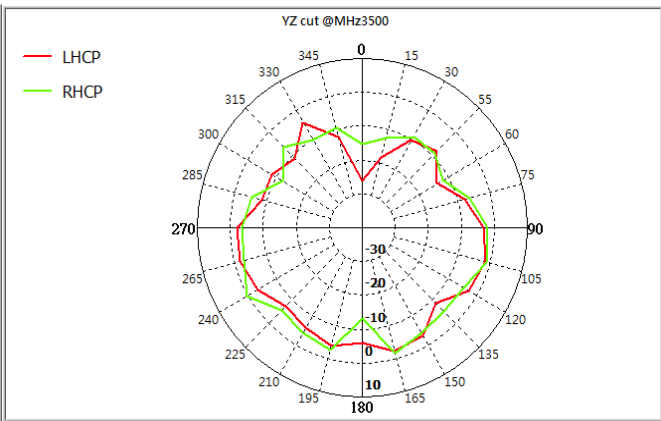
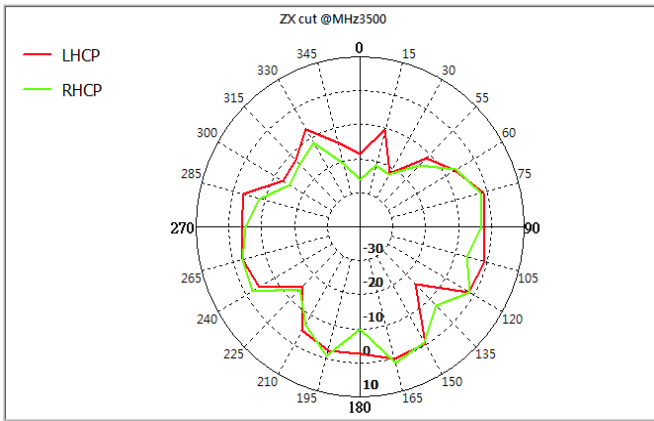
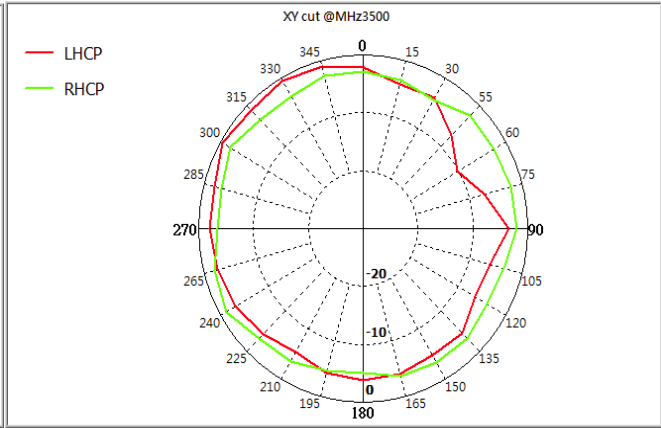
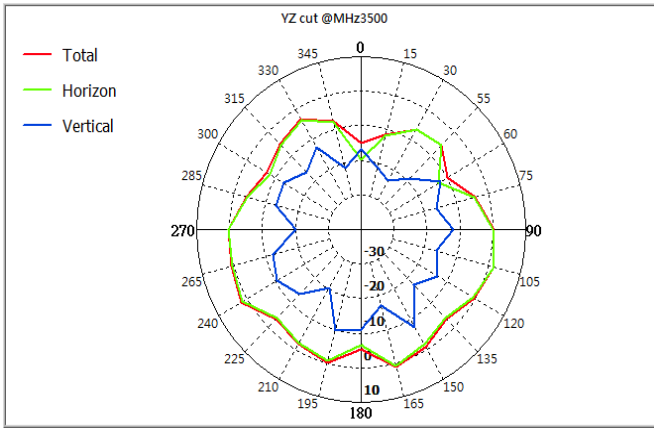
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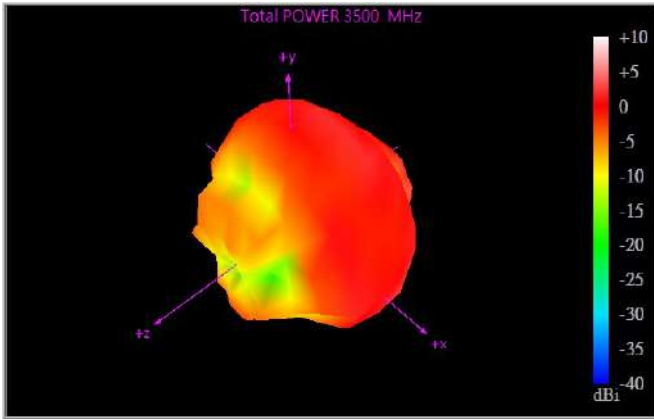




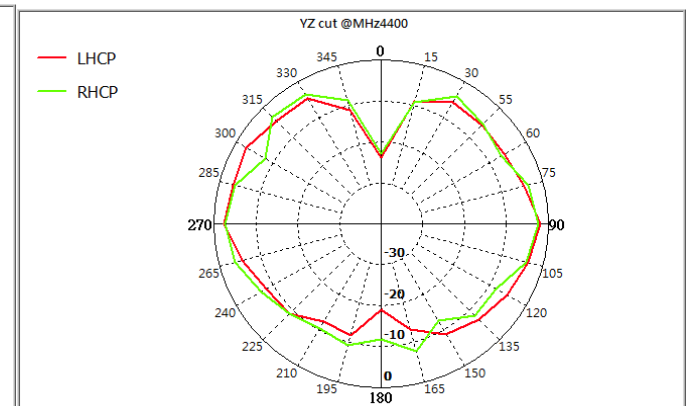
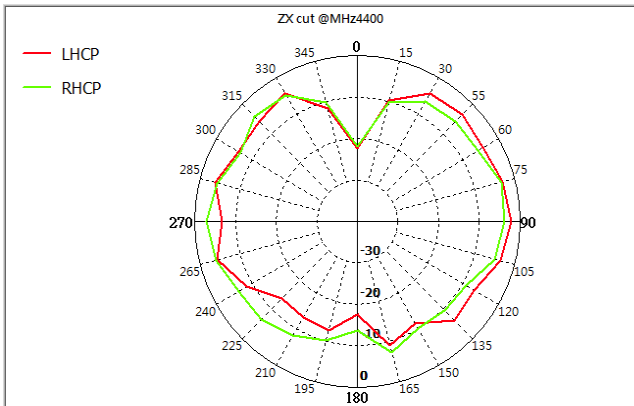
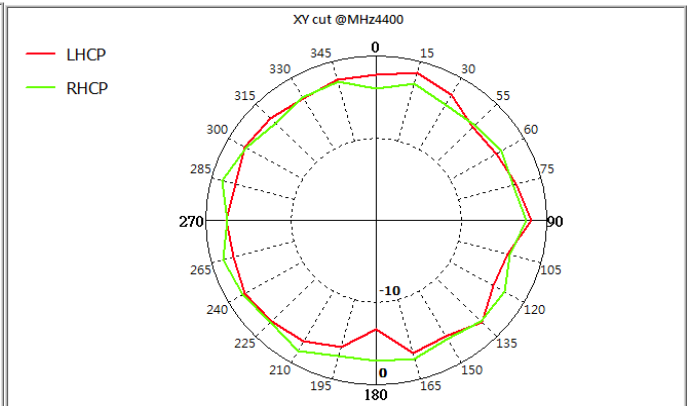
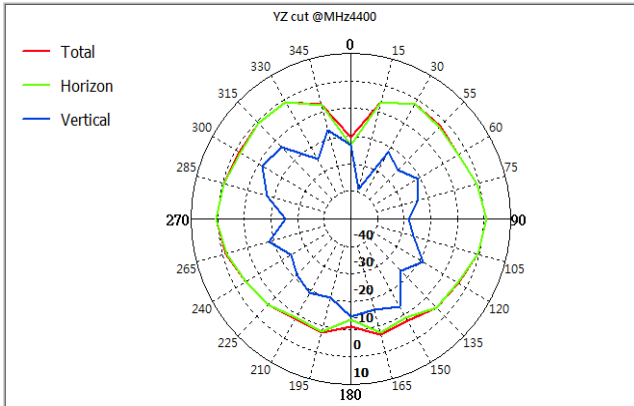
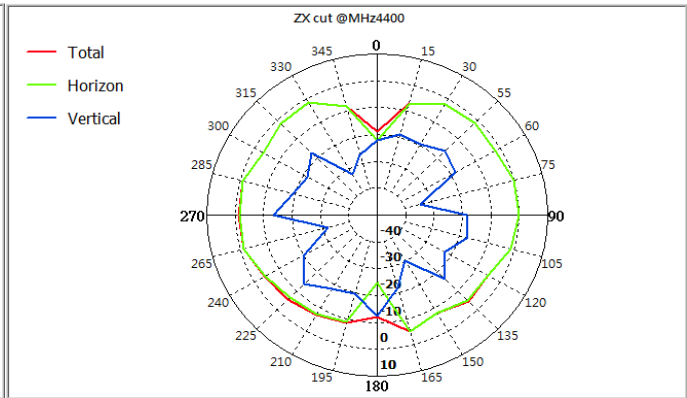
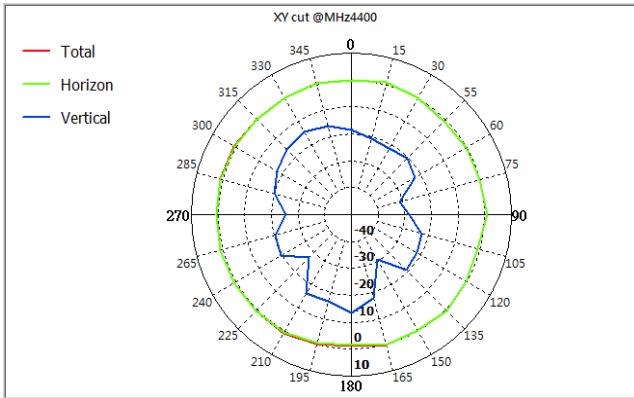
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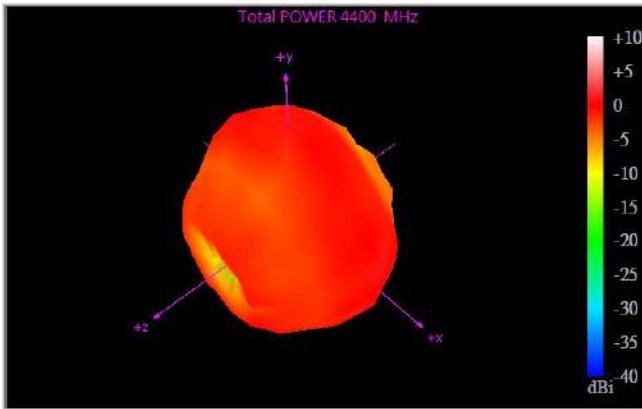
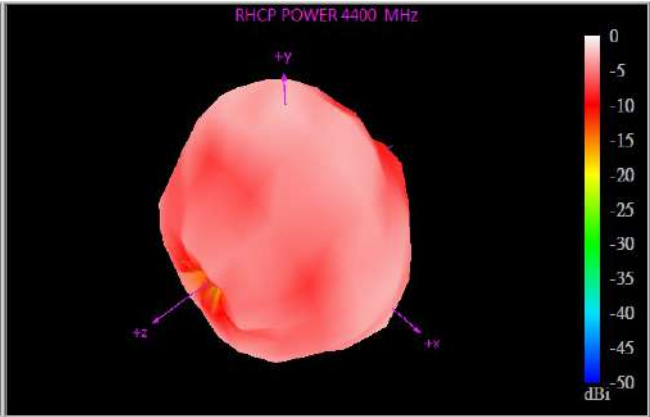
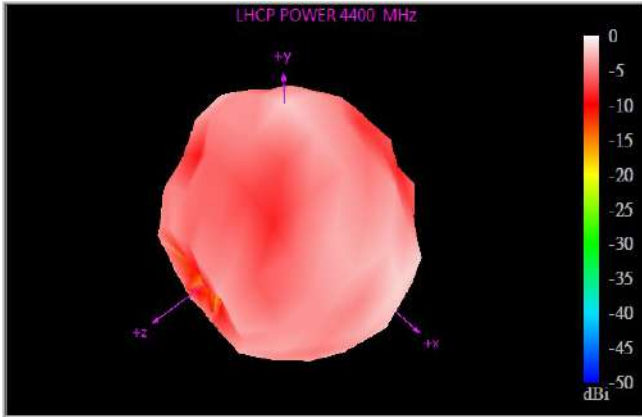
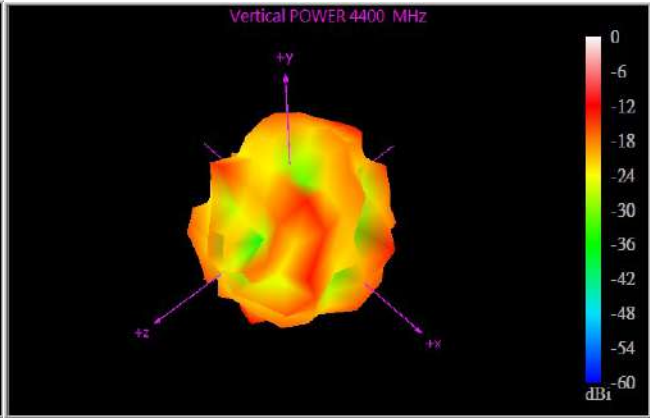
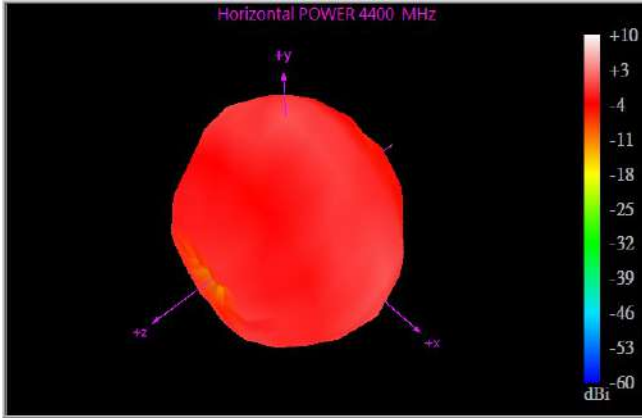




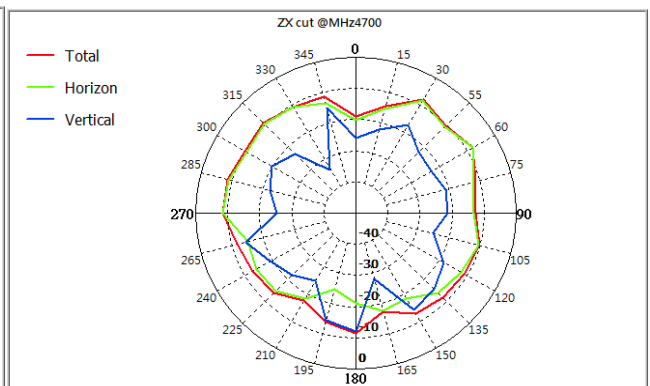
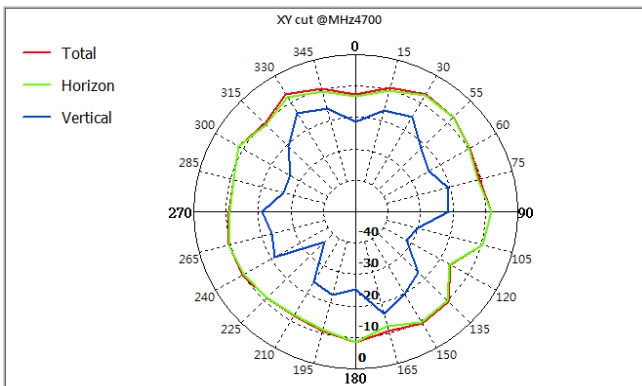


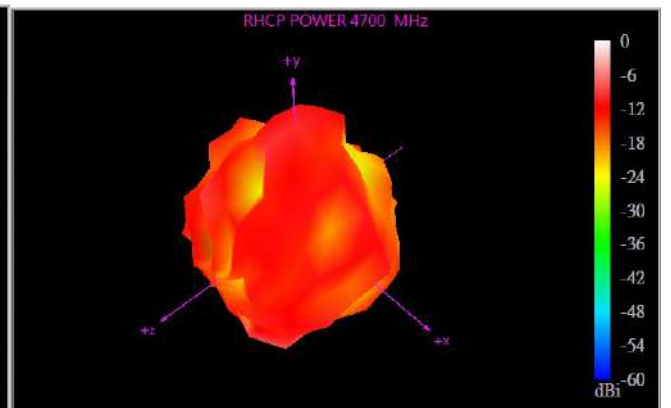
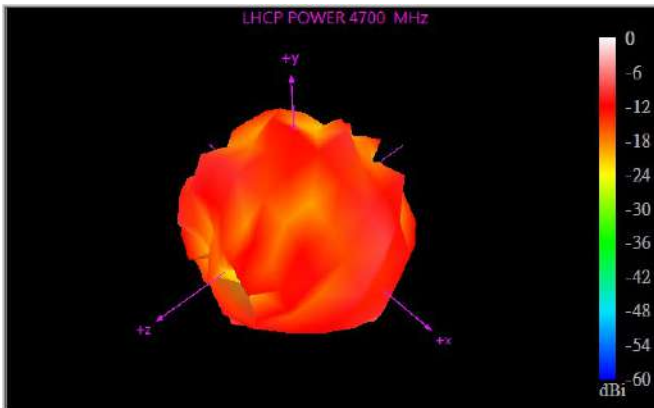
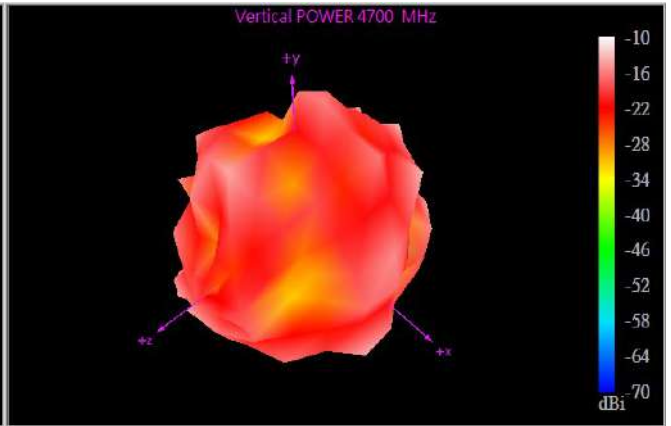
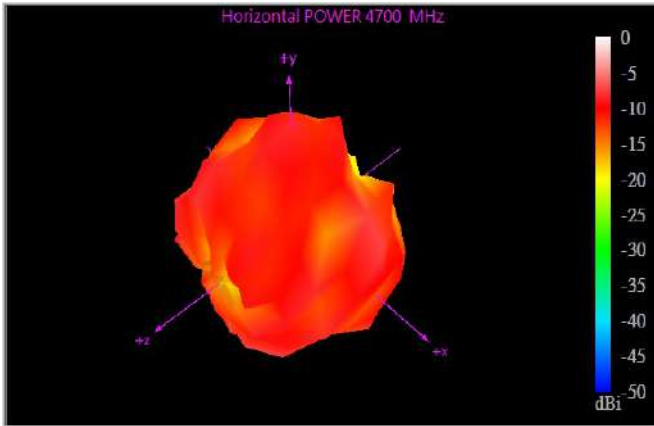
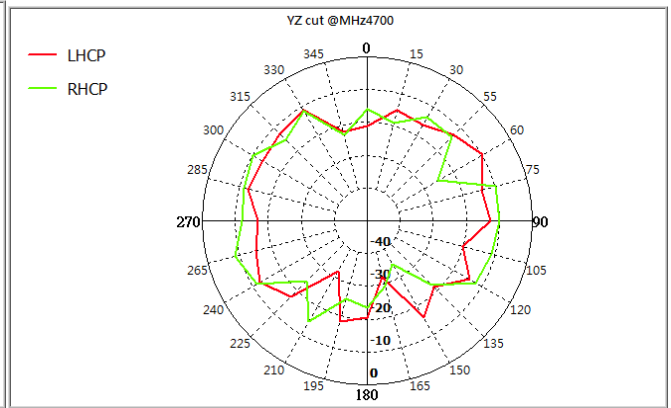
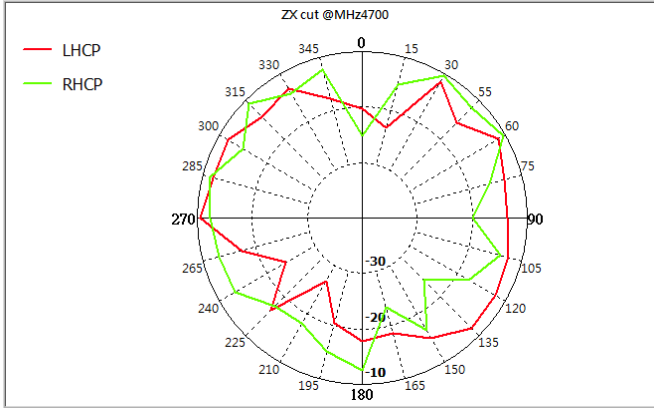
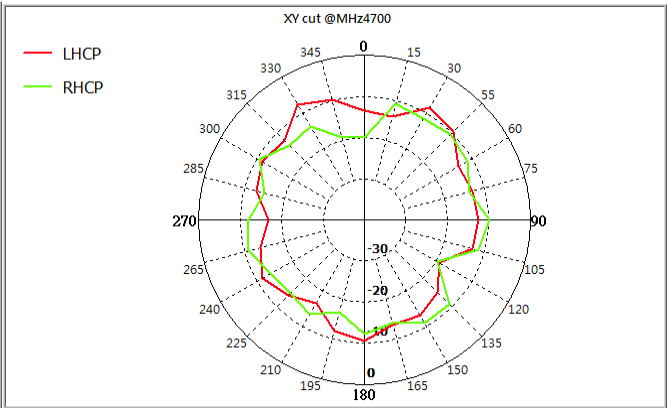
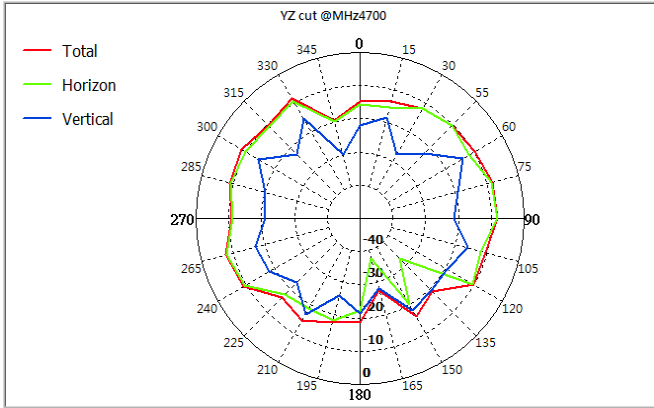
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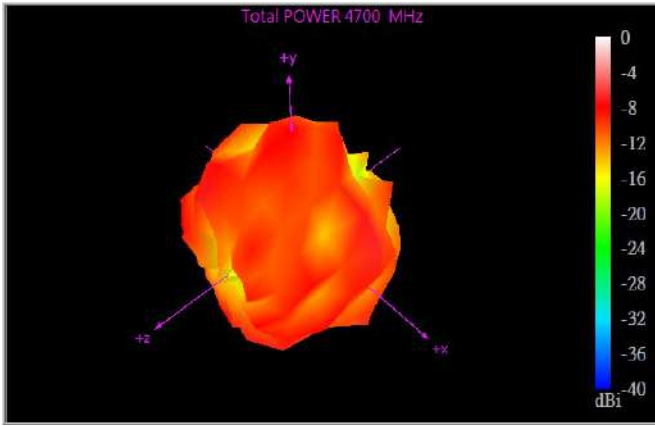




4700Mhz:







5000Mhz:

