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Antenna Evaluation Report

Customer : Mitac

Project : DODGE500

Product : WiFi Antenna



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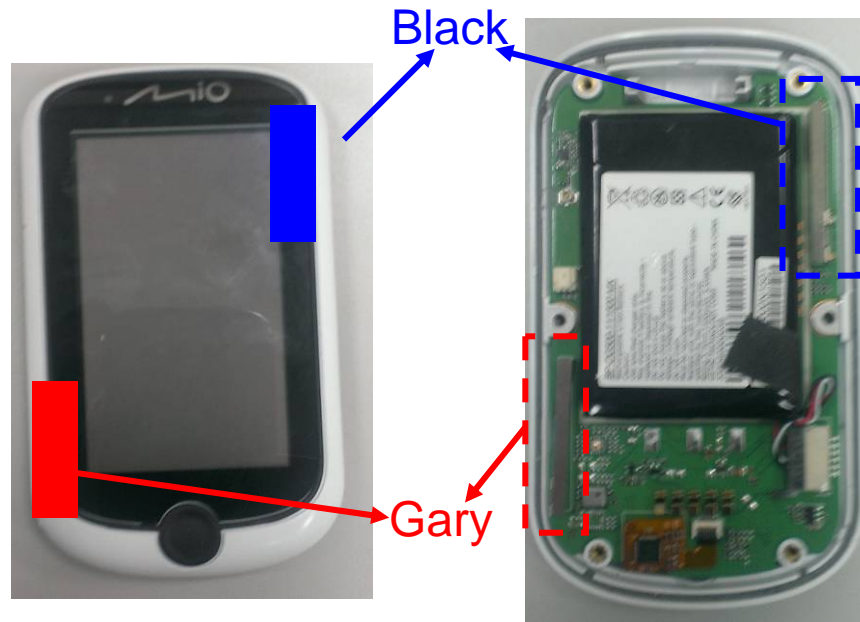


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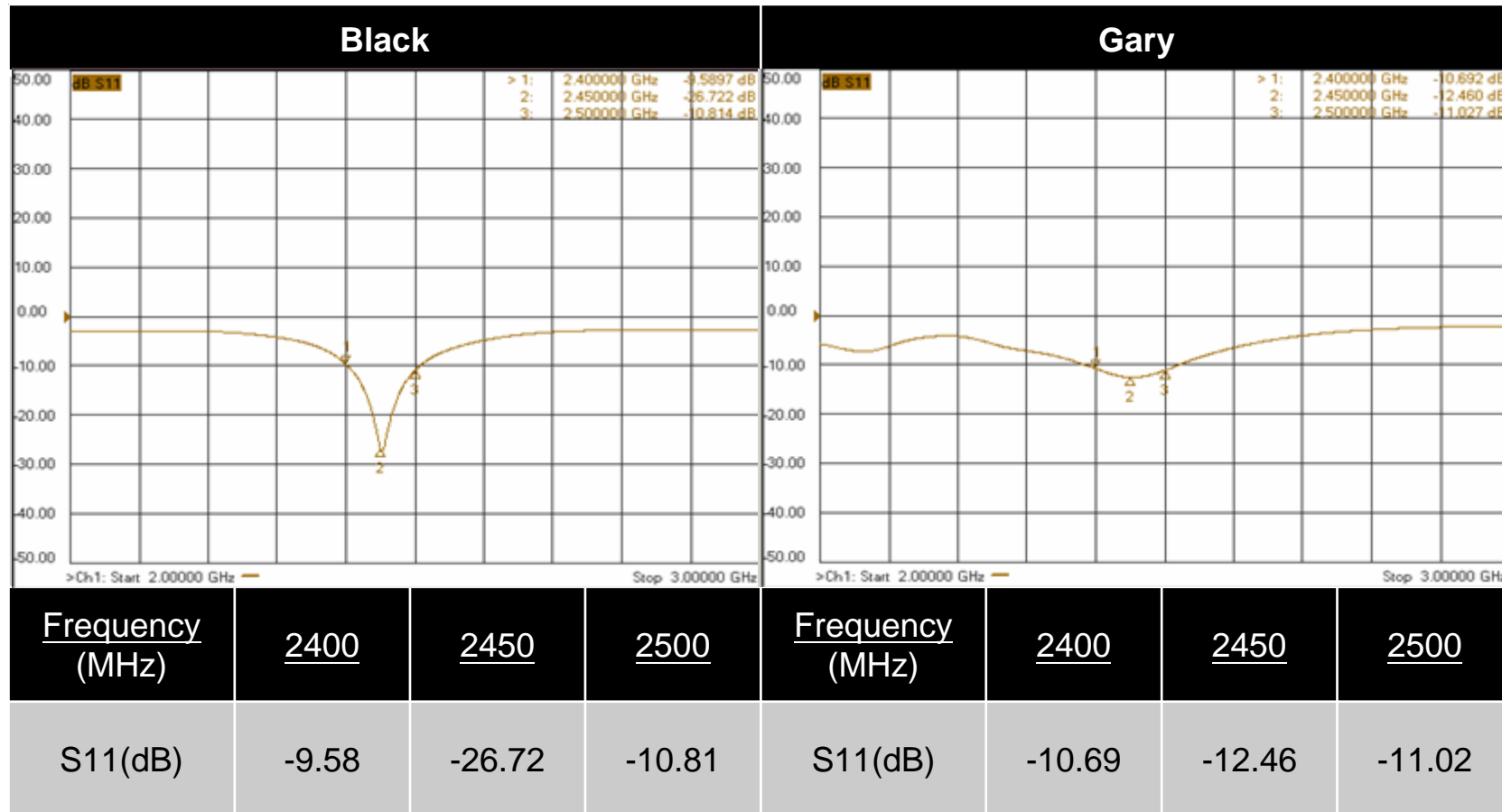
Product / Antenna Overview



Antenna	Material	Frequency (MHz)
Black	Metal	2400~2500
Gary	Metal	2400~2500

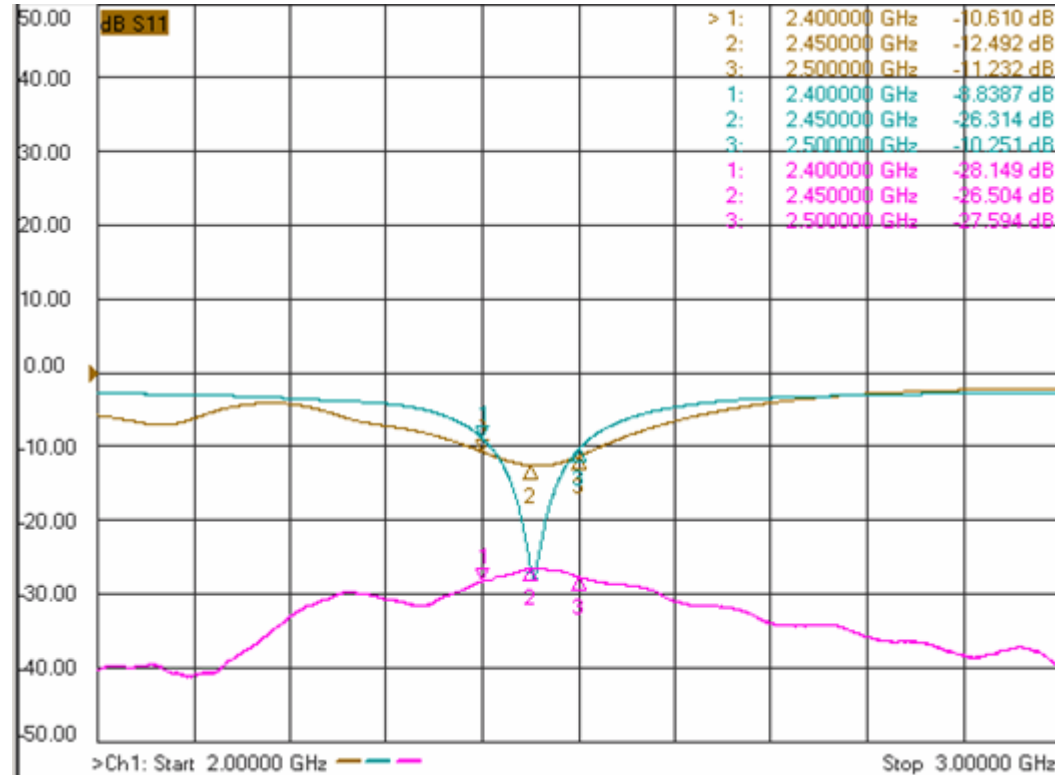


Test Results — S11





Test Results – Isolation



Frequency (MHz)	2400	2450	2500
S21(dB)	-28.14	-26.50	-27.59

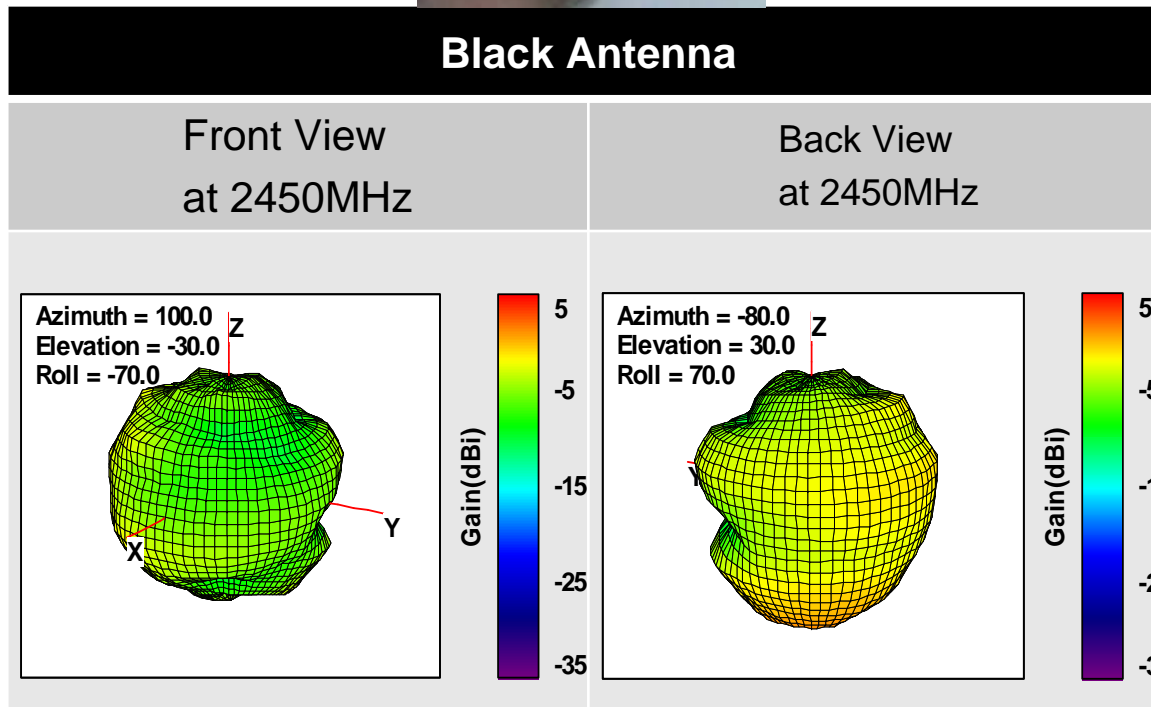
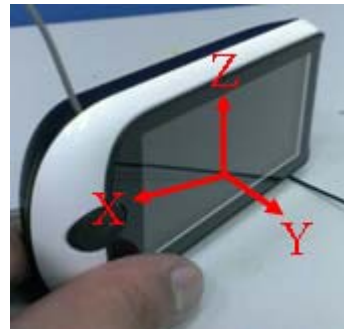


Test Results – Gain Data

Black				Gary			
Freq. (MHz)	Peak Gain (dBi)	Average Gain (dBi)	Efficiency (%)	Freq. (MHz)	Peak Gain (dBi)	Average Gain (dBi)	Efficiency (%)
2400	1.23	-3.92	40.58	2400	0.82	-3.72	42.44
2410	1.34	-3.83	41.41	2410	0.73	-3.83	41.40
2420	1.40	-3.59	43.72	2420	0.74	-3.81	41.62
2430	1.47	-3.48	44.88	2430	0.69	-3.85	41.20
2440	1.57	-3.40	45.75	2440	0.66	-3.87	41.05
2450	1.55	-3.43	45.43	2450	0.60	-3.91	40.66
2460	1.43	-3.54	44.23	2460	0.51	-4.00	39.85
2470	1.28	-3.70	42.67	2470	0.44	-4.09	38.95
2480	1.06	-3.93	40.46	2480	0.39	-4.18	38.17
2490	0.83	-4.19	38.10	2490	0.33	-4.28	37.31
2500	0.51	-4.52	35.31	2500	0.22	-4.43	36.07

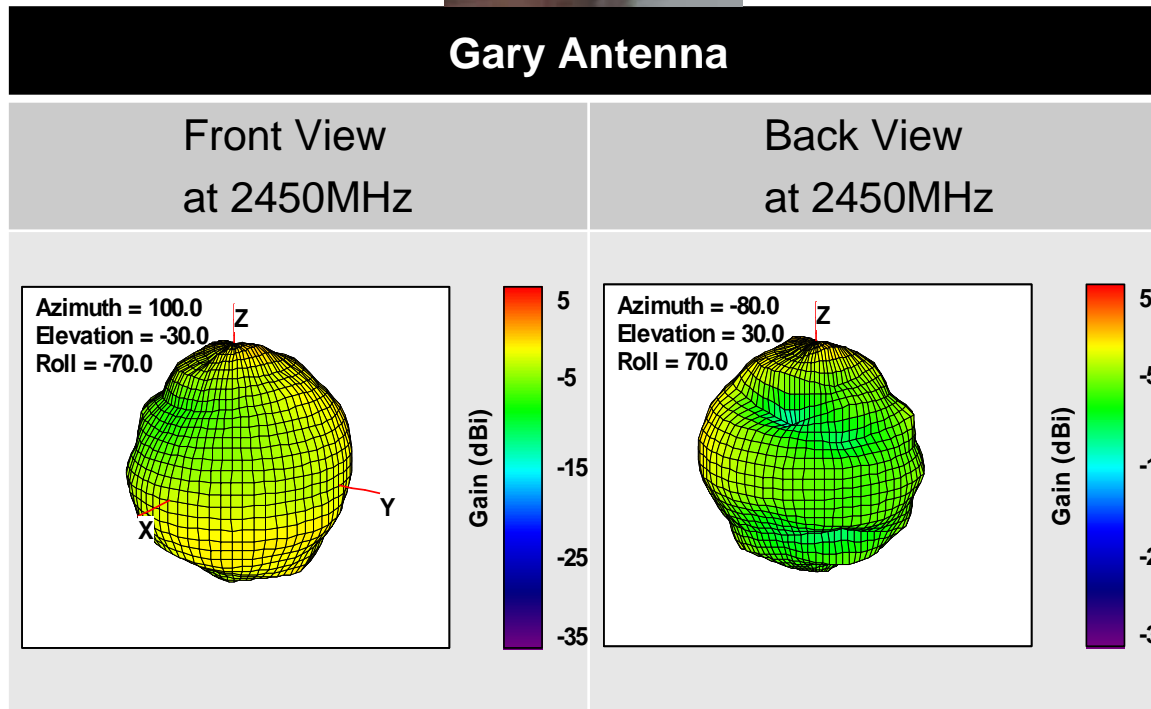


Test Results – 3D Radiation Pattern





Test Results – 3D Radiation Pattern





Conclusions

1. The efficiency of Black antenna is 35%~45% in 2400MHz~2500MHz.
The peak gain of Black antenna is 0.5dBi~1.5dBi in 2400MHz~2500MHz.
2. The efficiency of Gary antenna is 36%~42% in 2400MHz~2500MHz.
The peak gain of Gary antenna is 0.2dBi~0.8dBi in 2400MHz~2500MHz.