

Titan Antenna (DVT Dual-Band Non-matching)

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Rev.1.2



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Summary – 2.4G/5G Dual Band (non matching)

- **The summary antenna performance results shown in below.**

- VSWR

- WNC Dual Band ANT : Under 3.6 @ 2GHz_Encoder brush left
- WNC Dual Band ANT : Under 5.4 @ 5GHz_Encoder brush left
- WNC Dual Band ANT : Under 2.6 @ 2GHz_Encoder brush right
- WNC Dual Band ANT : Under 4.9 @ 5GHz_Encoder brush right

- Radiation efficiency

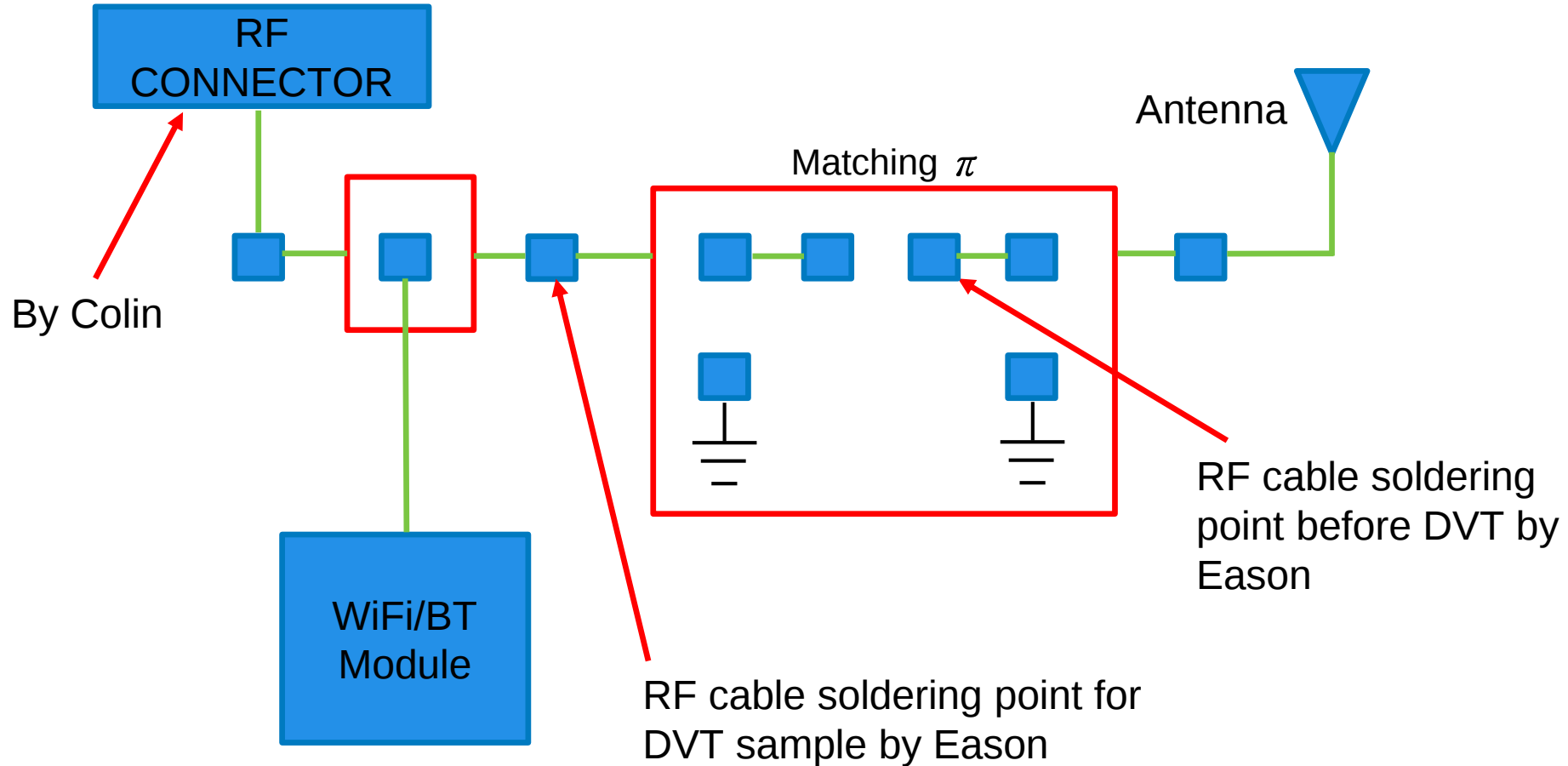
- WNC Dual Band ANT : 11~12% @ 2GHz_Encoder brush left
- WNC Dual Band ANT : 12~29% @ 5GHz_Encoder brush left
- WNC Dual Band ANT : 15~22% @ 2GHz_Encoder brush right
- WNC Dual Band ANT : 13~25% @ 5GHz_Encoder brush right

- Peak gain

- WNC Dual Band ANT : Max -3.8dBi @ 2GH_Encoder brush left
- WNC Dual Band ANT : Max 1.2dBi @ 5GH_Encoder brush left
- WNC Dual Band ANT : Max -0.8dBi @ 2GH_Encoder brush right
- WNC Dual Band ANT : Max 0.6dBi @ 5GH_Encoder brush right



RF Cable Soldering Point

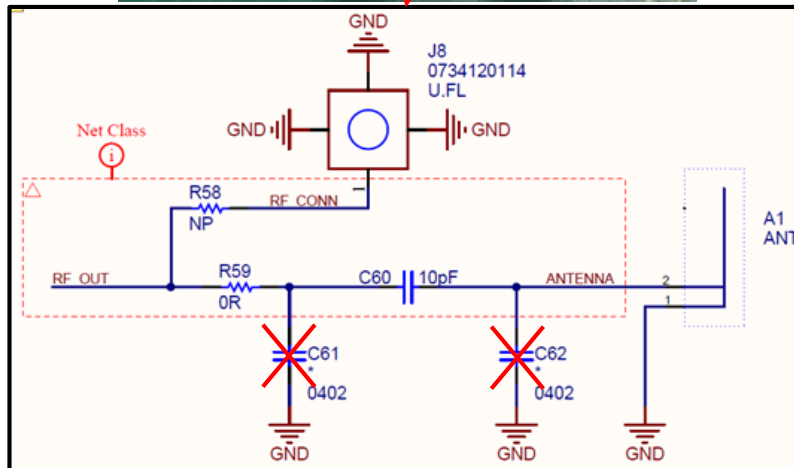
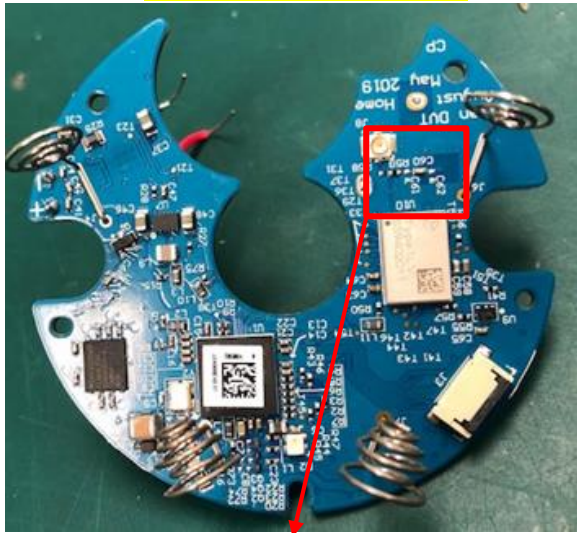


Dual Band 2.4/5 GHz Antenna (non matching)



Antenna Information

Non Matching



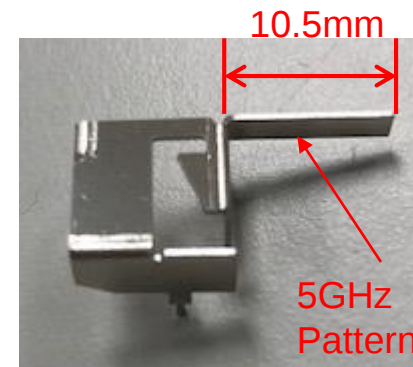
C60	10 pF
C61	NC
C62	NC

WNC_Dual Band ANT



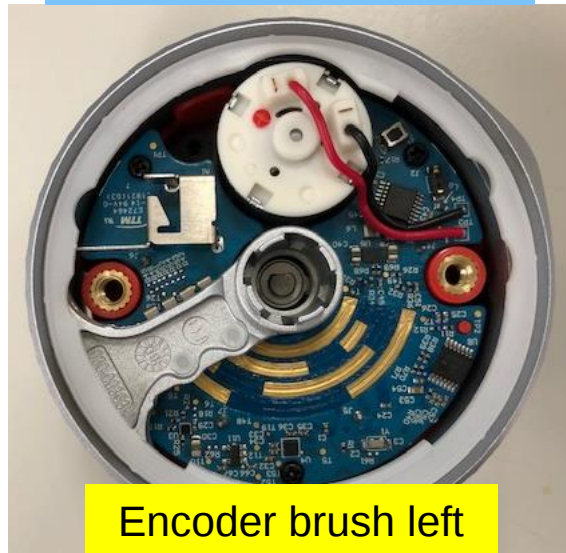
Dual Band Antenna

Antenna height (max) : 7.0mm

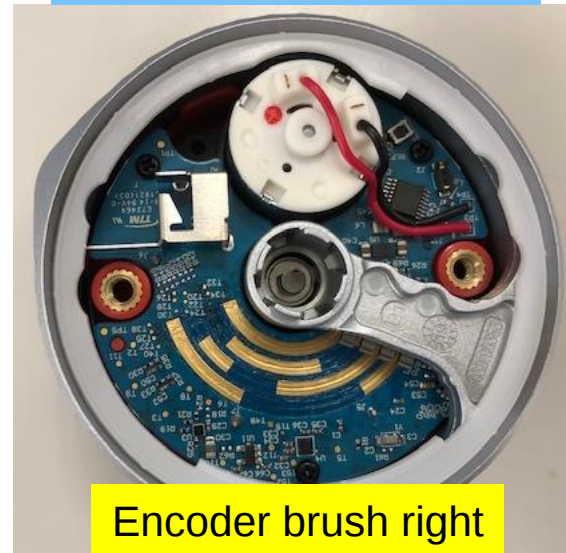


VSWR

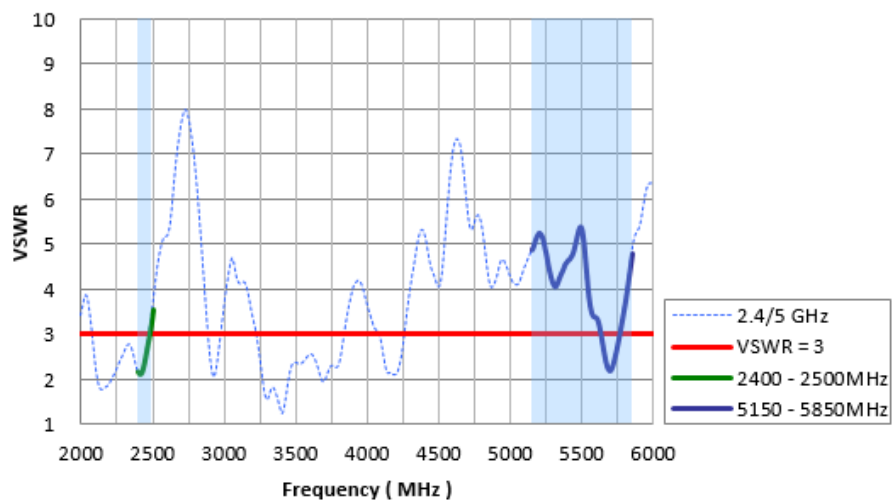
WNC_Dual Band ANT



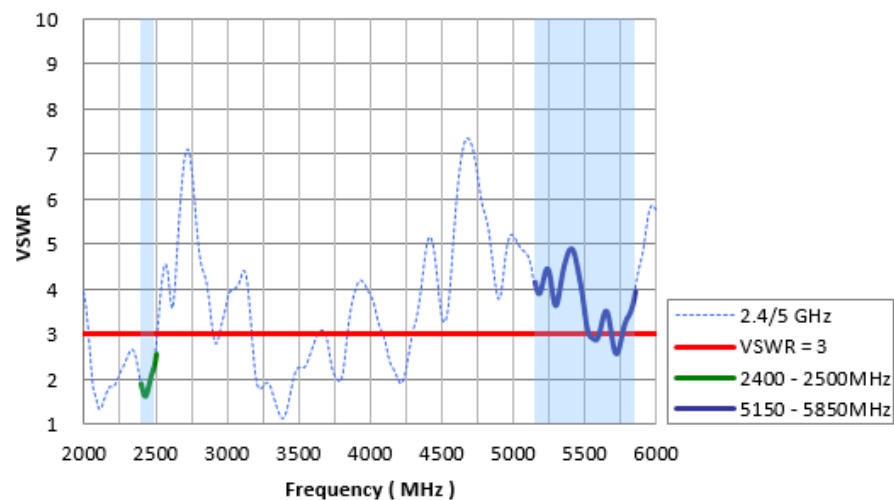
WNC_Dual Band ANT



WNC_Dual Band ANT



WNC_Dual Band ANT



Efficiency & Peak Gain

WNC_Dual Band ANT



Encoder brush left



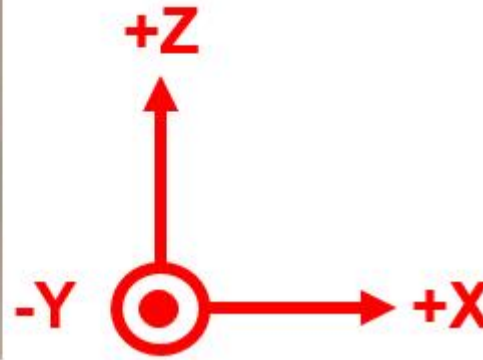
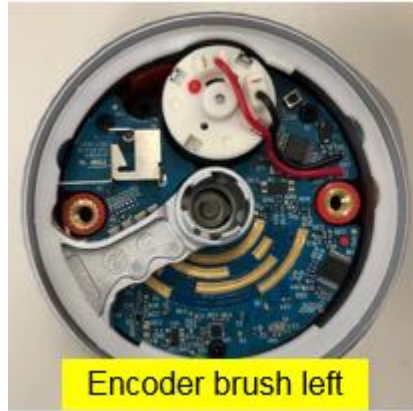
Encoder brush right

		2400	2450	2500	Avg.	5150	5250	5350	5550	5850	Avg.
WNC Dual Band ANT Encoder brush left	Eff.	12%	12%	11%	12%	19%	25%	29%	15%	12%	20%
	Eff. dB	-9.32	-9.04	-9.75		-7.32	-5.99	-5.41	-8.36	-9.25	
	Peak Gain	-4.12	-3.82	-4.92	-4.29	-1.60	-0.63	1.25	-2.77	-2.36	-1.22
		2400	2450	2500	Avg.	5150	5250	5350	5550	5850	Avg.
WNC Dual Band ANT Encoder brush right	Eff.	15%	22%	18%	19%	15%	25%	22%	21%	13%	19%
	Eff. dB	-8.15	-6.51	-7.42		-8.19	-6.03	-6.61	-6.87	-8.71	
	Peak Gain	-2.82	-0.87	-2.06	-1.92	-2.53	-1.11	-0.10	0.67	-3.11	-1.24



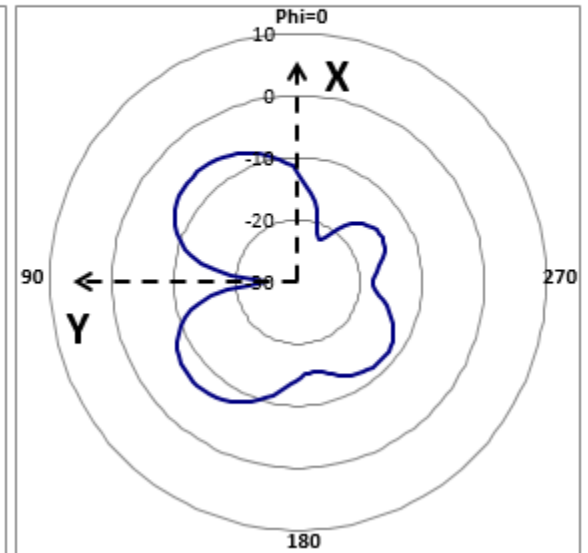
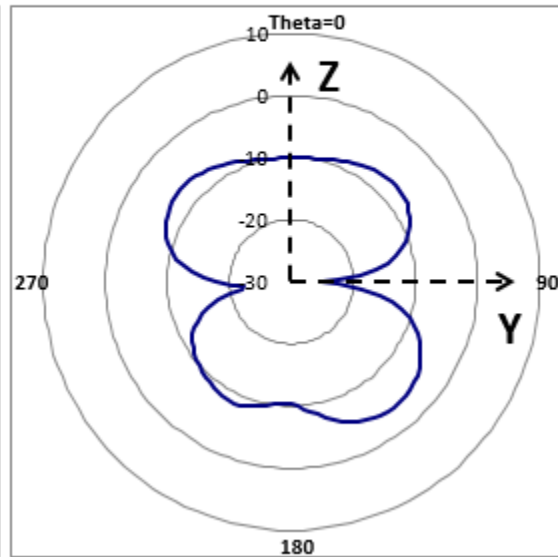
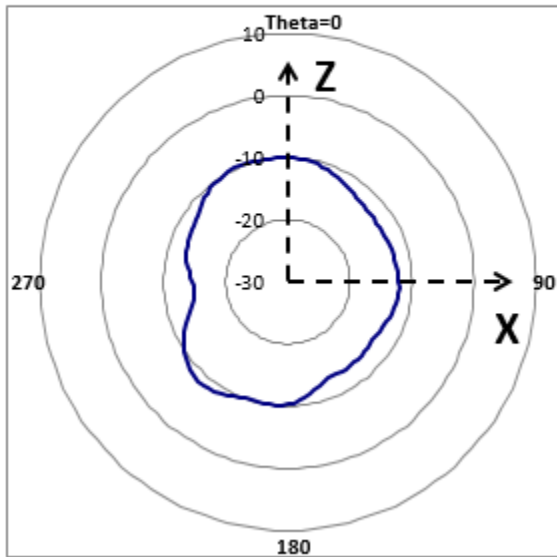
2D Radiation Pattern

WNC_Dual Band 2G ANT



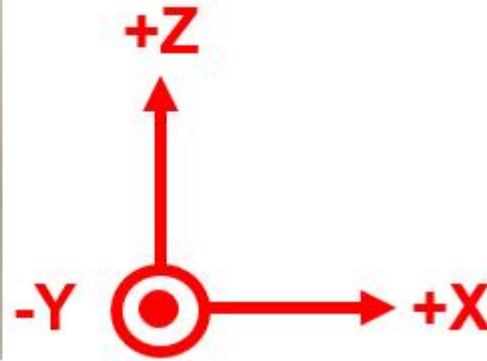
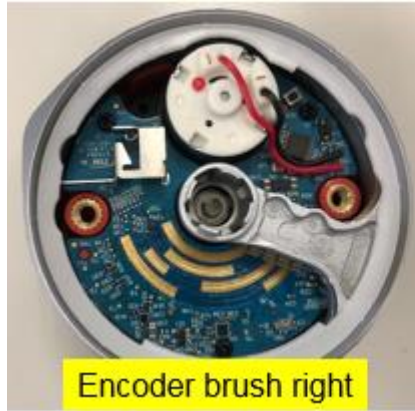
2 GHz Radio Radiation Pattern

— WNC_Dual Band 2GHz ANT



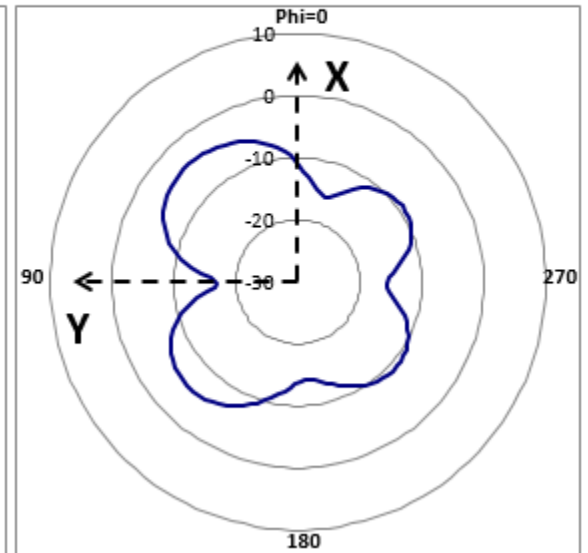
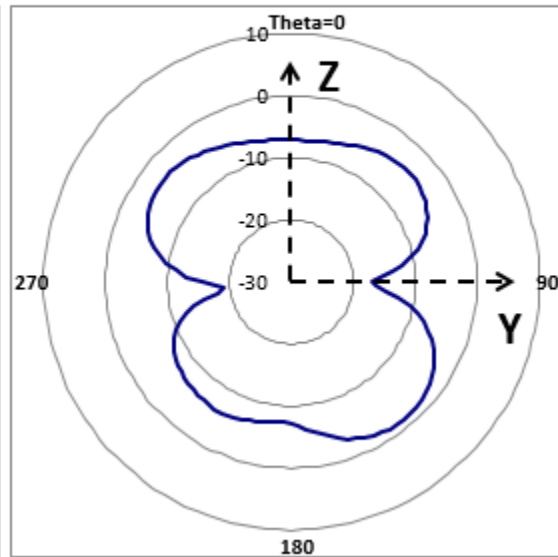
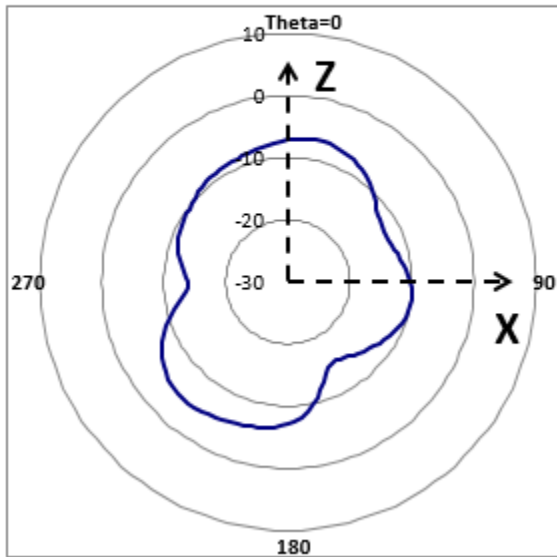
2D Radiation Pattern

WNC_Dual Band 2G ANT



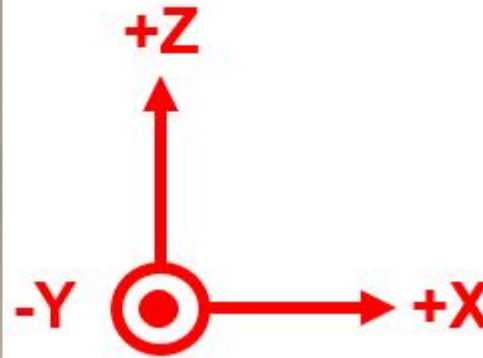
2 GHz Radio Radiation Pattern

— WNC_Dual Band 2GHz ANT



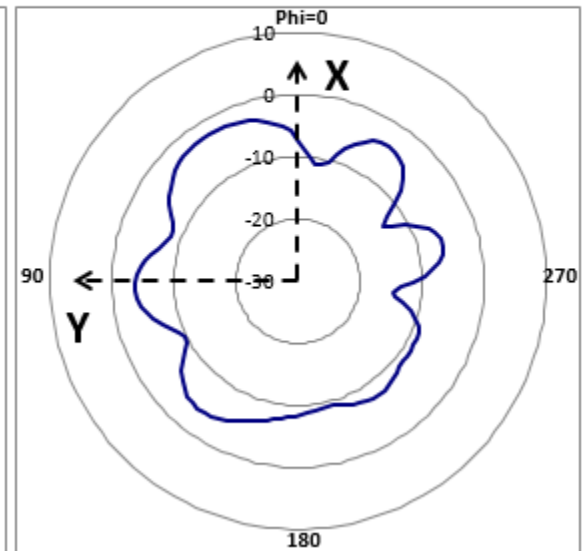
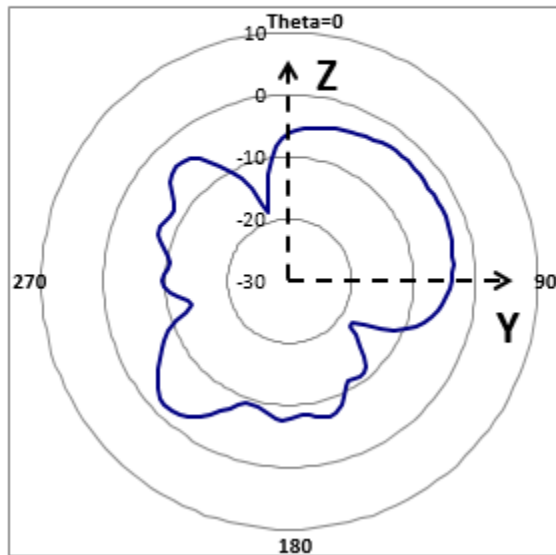
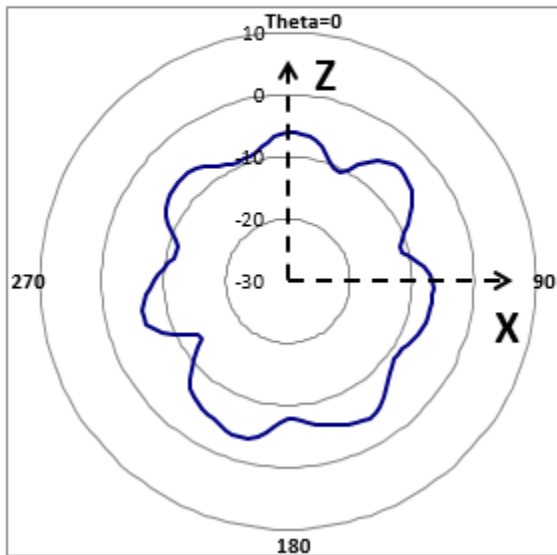
2D Radiation Pattern

WNC_Dual Band 5G ANT



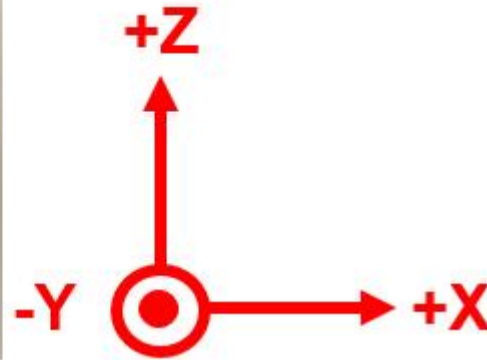
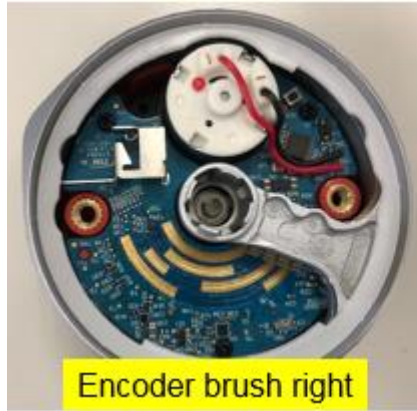
5 GHz Radio Radiation Pattern

— WNC_Dual Band 5GHz ANT



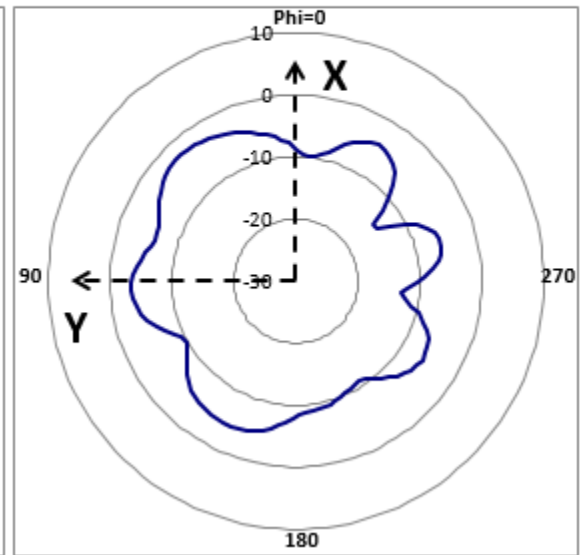
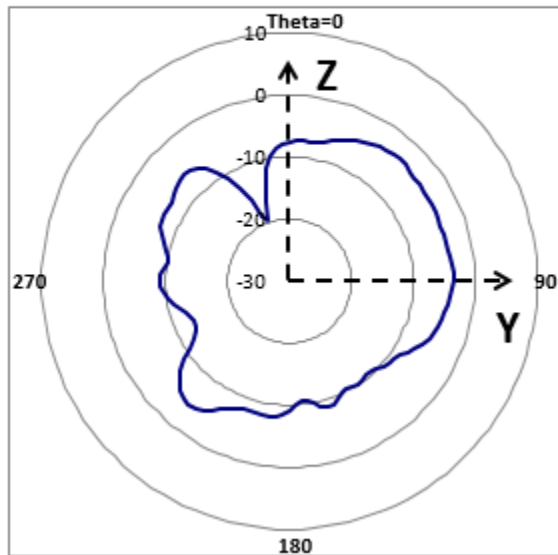
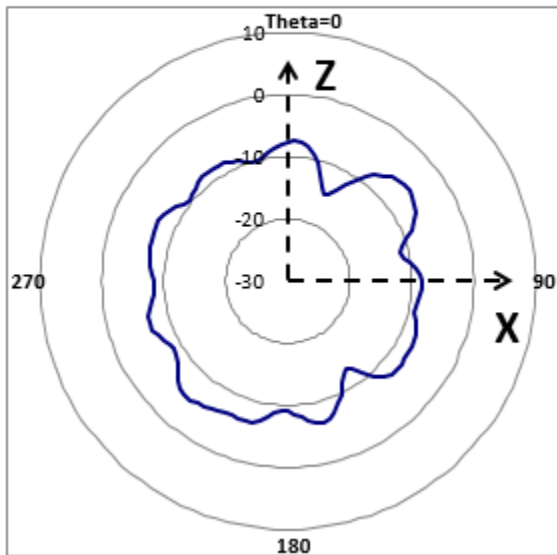
2D Radiation Pattern

WNC_Dual Band 5G ANT



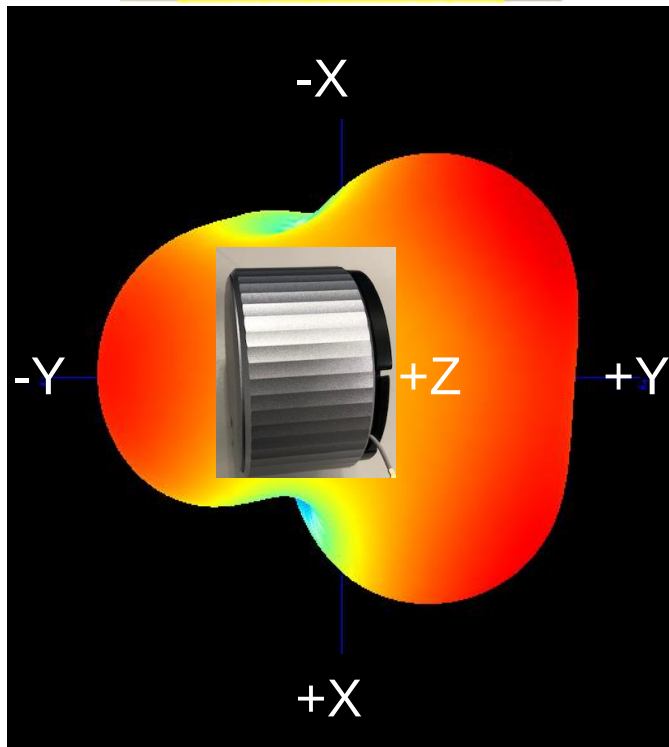
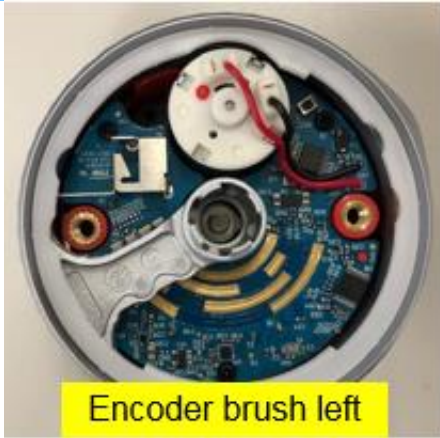
5 GHz Radio Radiation Pattern

— WNC_Dual Band 5GHz ANT

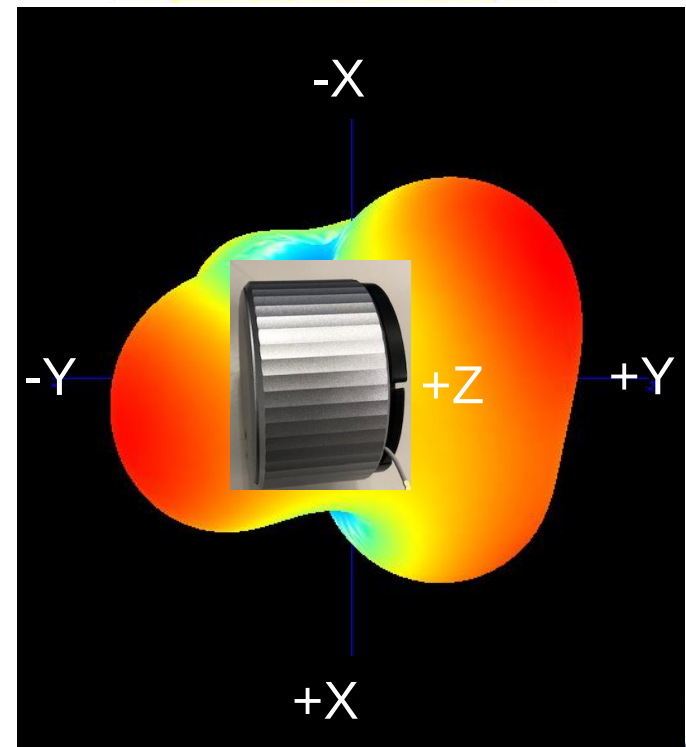
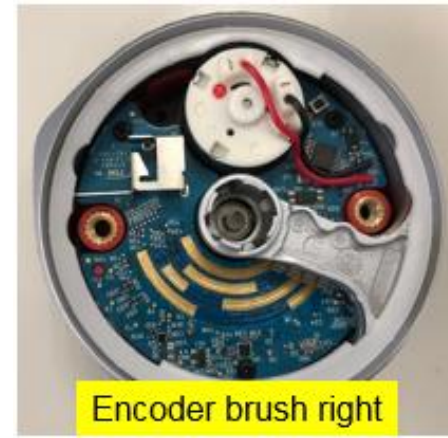


3D Radiation Pattern

WNC_Dual Band 2G ANT

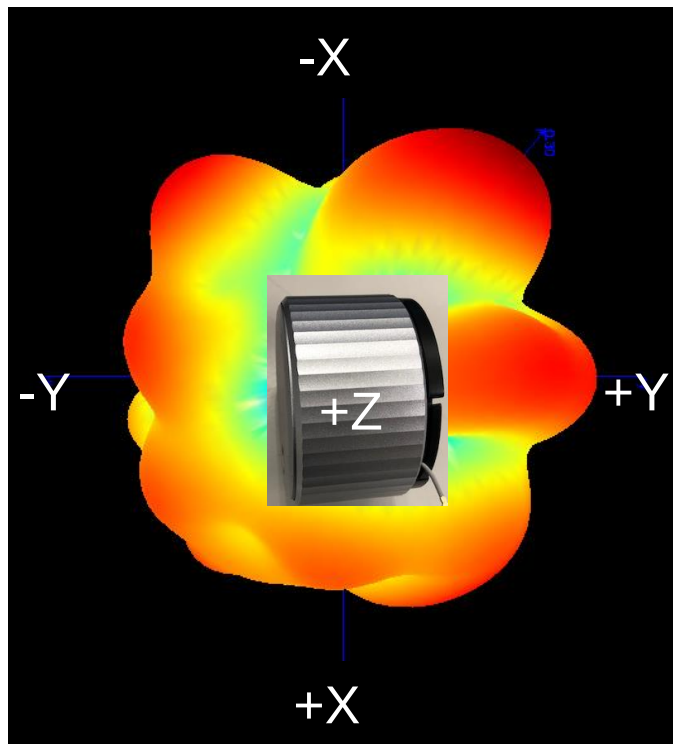
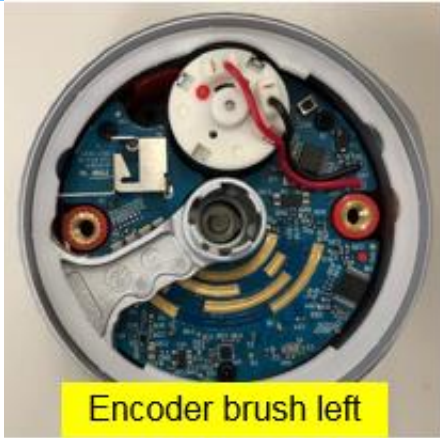


WNC_Dual Band 2G ANT

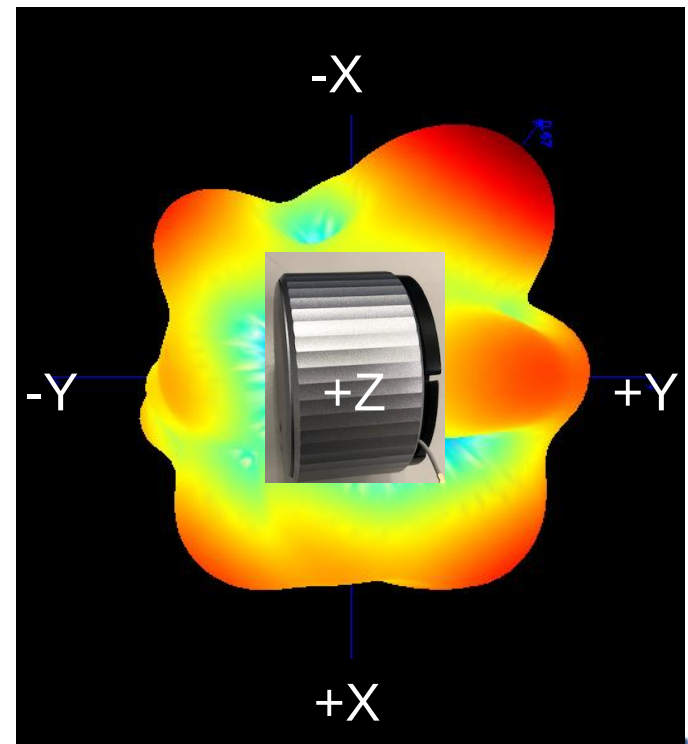
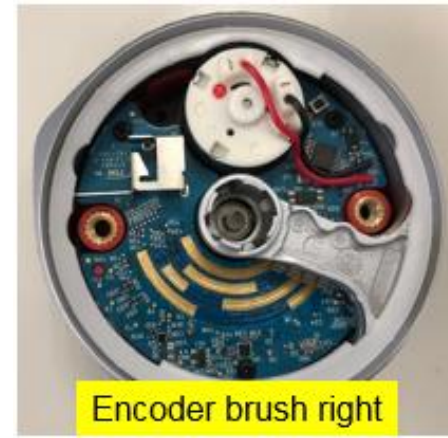


3D Radiation Pattern

WNC_Dual Band 5G ANT



WNC_Dual Band 5G ANT



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