LITE-ON TECHNOLOGY CORPORATION
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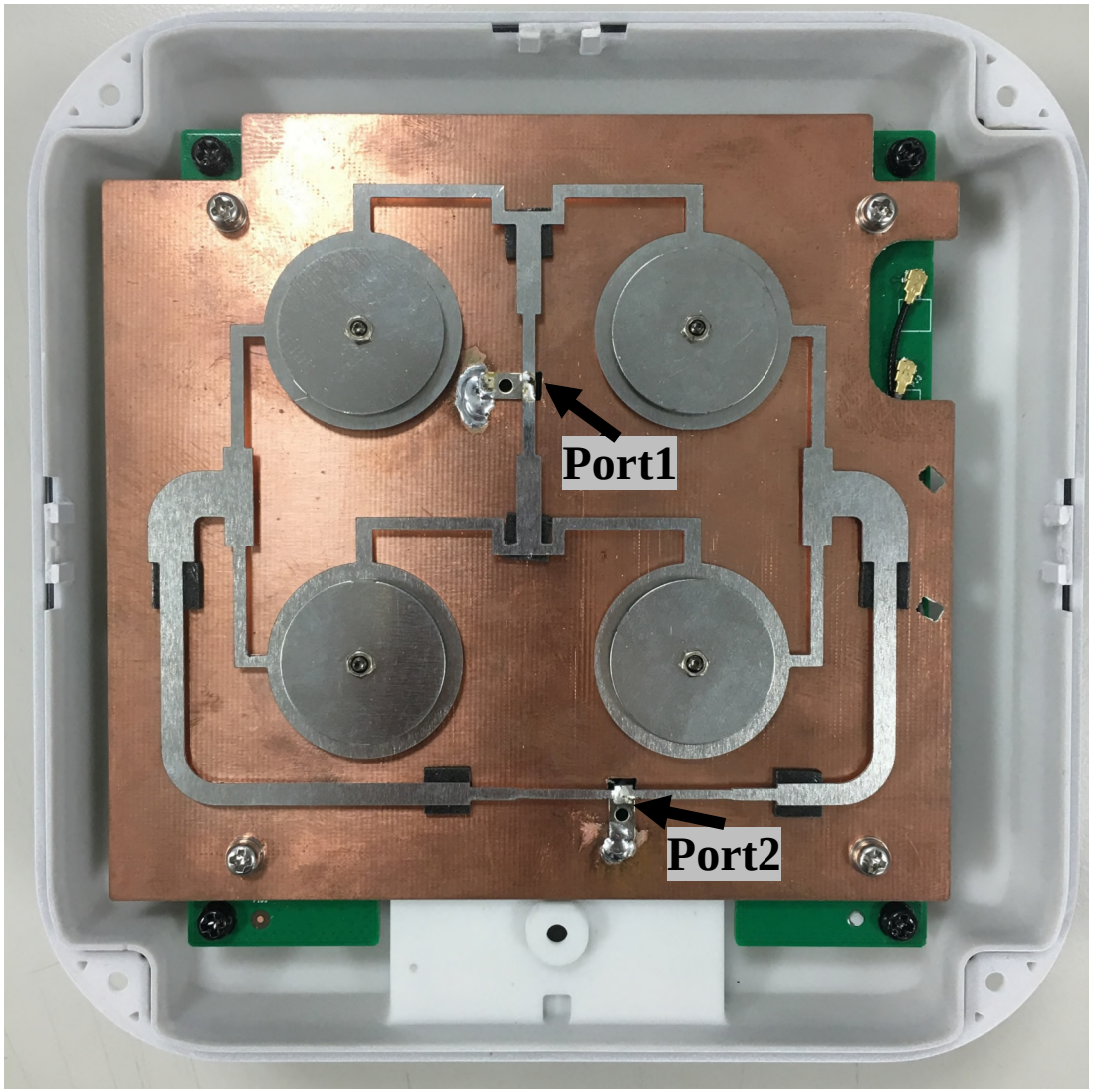
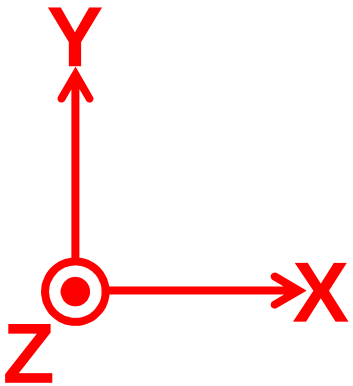
WP9822 Antenna Test Report

2019/10/3

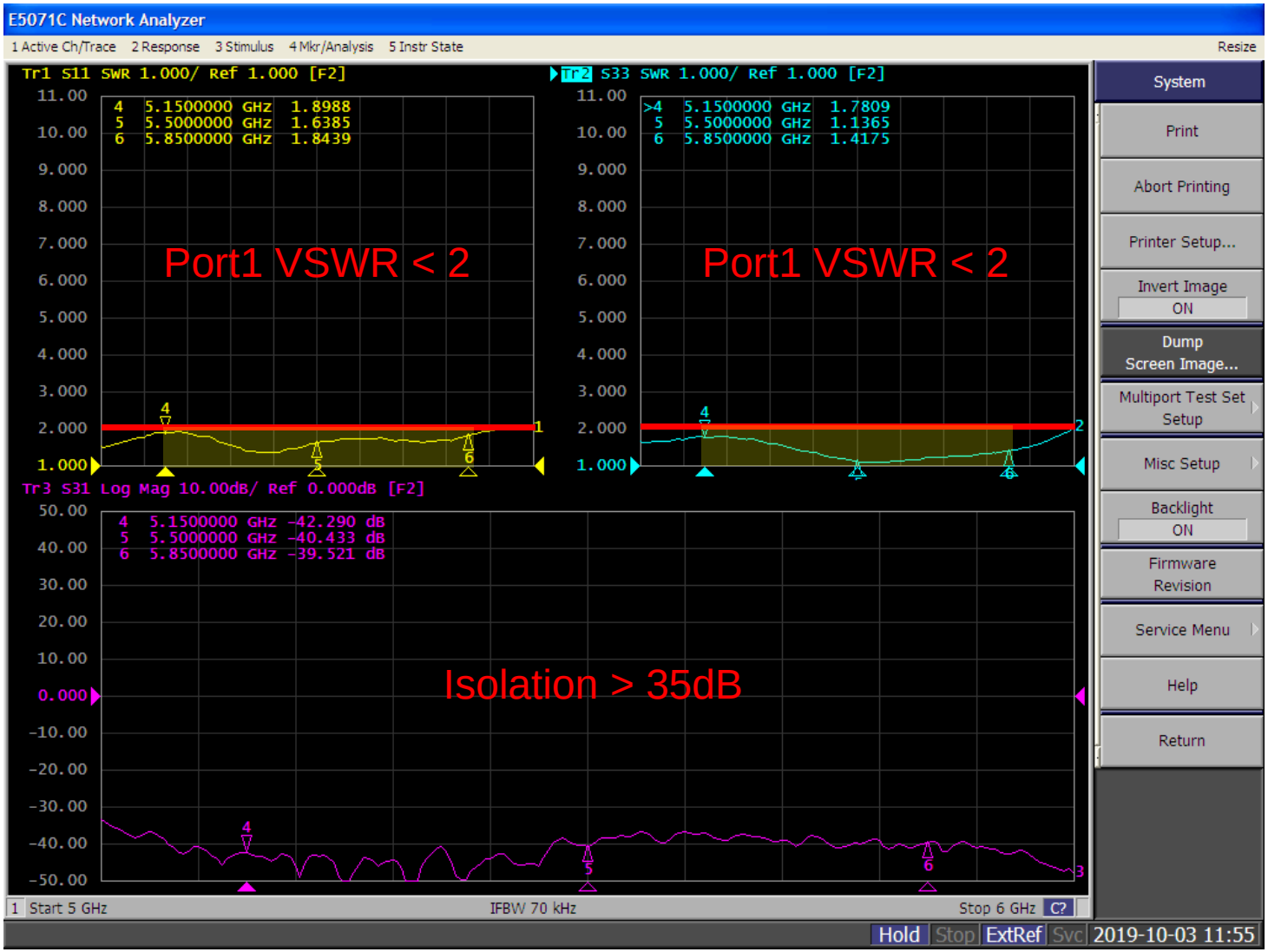
John Hsieh

Antenna Placement and Coordinate





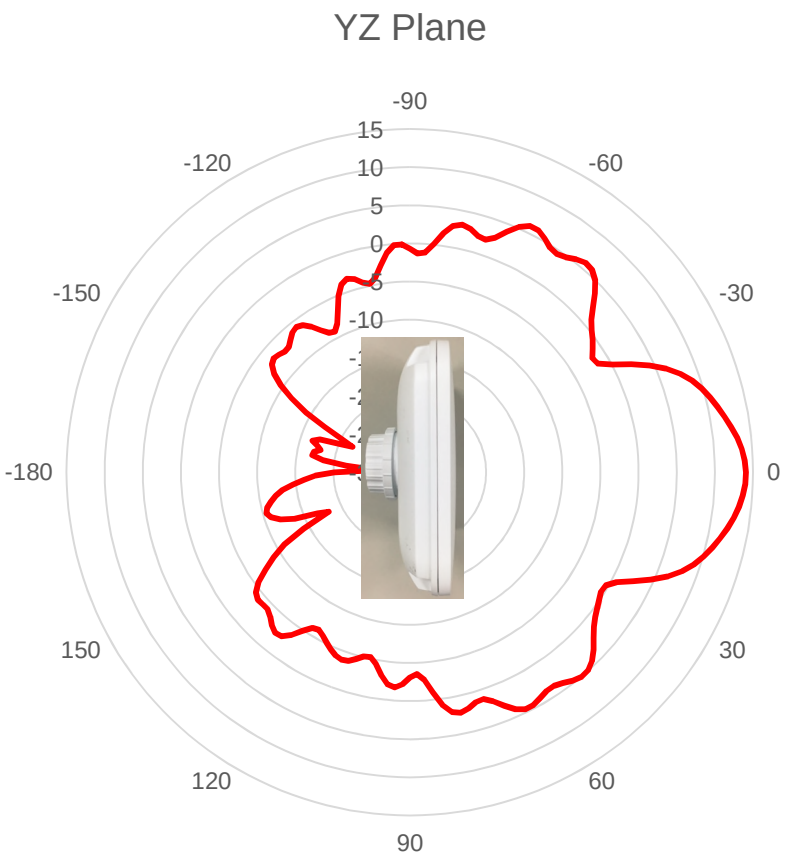
VSWR and Isolation

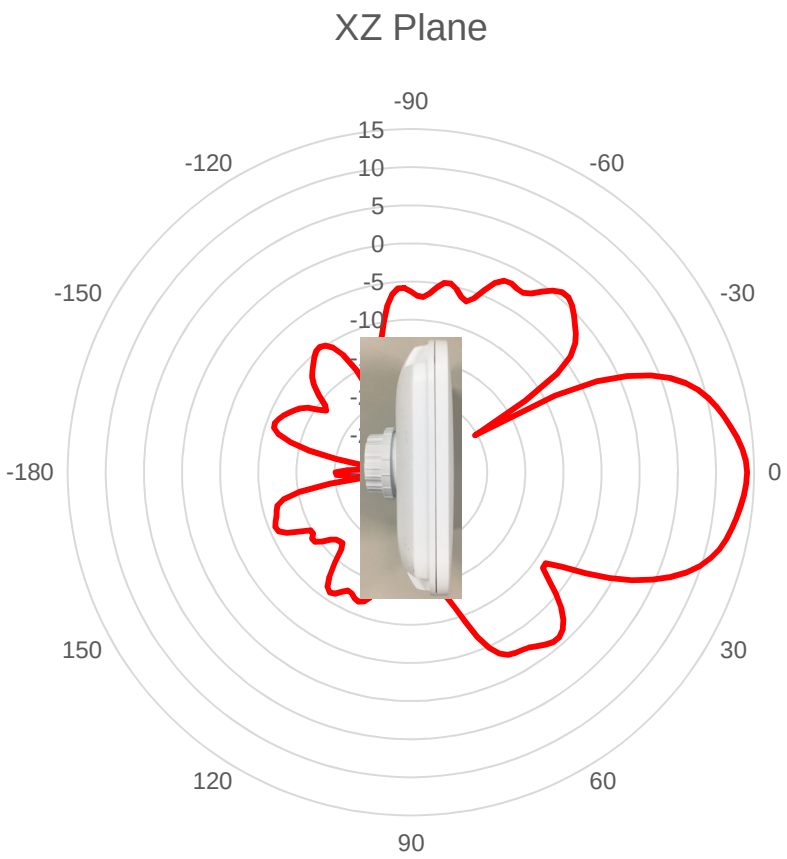


Antenna Peak Gain and Efficiency

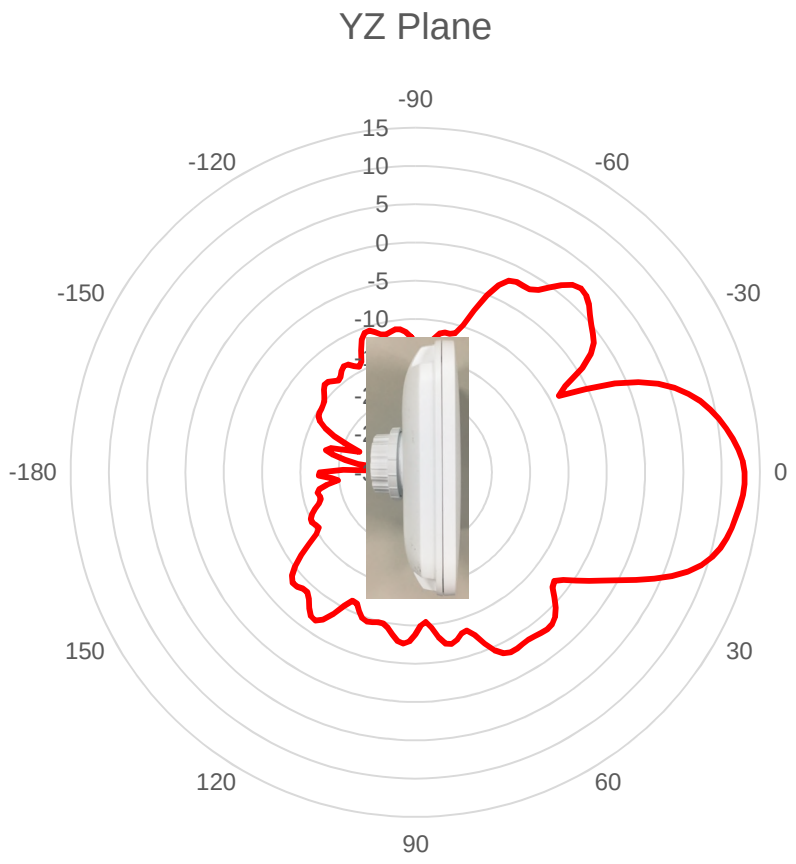
Freq.	Port1		Port2	
	efficiency	Peak Gain (dBi)	efficiency	Peak Gain (dBi)
5.15 GHz	68.2%	13.7	65.0%	13.2
5.2 GHz	65.4%	13.7	63.8%	13.8
5.25 GHz	71.3%	14.4	70.6%	13.7
5.3 GHz	77.6%	14.7	77.9%	14.1
5.35 GHz	80.4%	14.8	78.2%	14.1
5.4 GHz	81.2%	14.4	78.3%	13.8
5.45 GHz	81.3%	14.2	74.9%	13.7
5.5 GHz	81.0%	14.1	70.7%	13.6
5.55 GHz	81.4%	14.0	69.7%	13.7
5.6 GHz	74.9%	13.6	63.8%	13.3
5.65 GHz	79.0%	13.8	64.6%	13.3
5.7 GHz	74.9%	13.7	62.4%	13.3
5.75 GHz	72.8%	13.6	62.8%	13.2
5.8 GHz	68.7%	13.4	61.6%	13.1
5.85 GHz	69.5%	13.1	63.1%	13.1

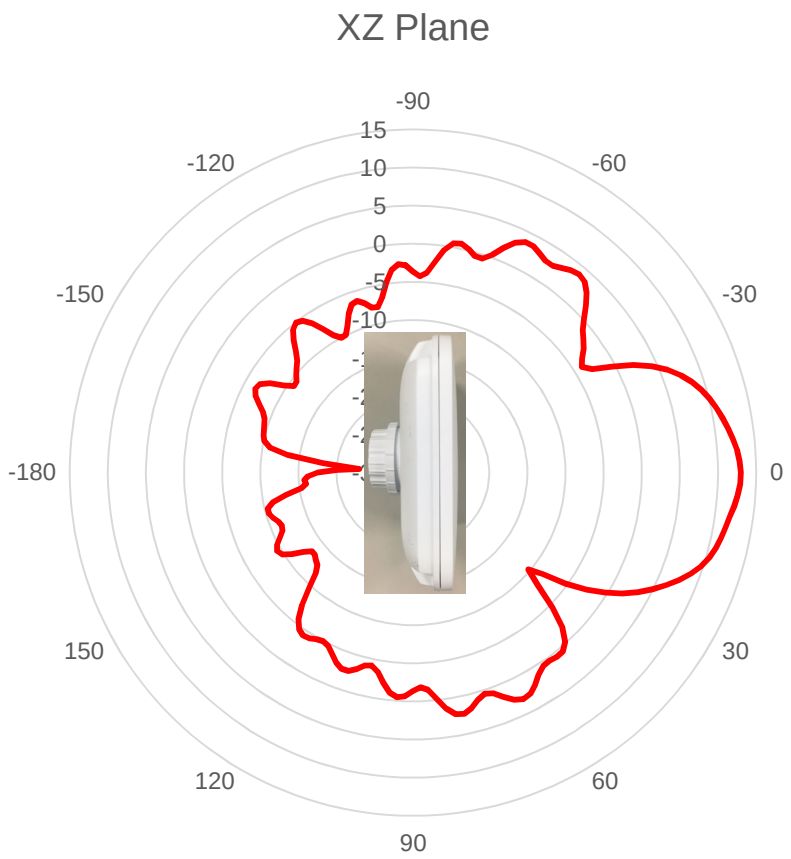
Port1 Gain Pattern





Port2 Gain Pattern





Summary

- This antenna measurement report is measured using a PC cover, and the result is closer to mass production.
- The antenna VSWR is less than 2 in all frequency bands, and the port to port isolation is greater than 35dB, which is a very good feature for MIMO.
- The peak gain is greater than 13dBi in the full frequency band, and even in some frequency bands up to 14dBi.
- Half-power beam width is 30±5 degree and the side level is close to 10dB, which meets the specifications. Front to Back can reach 25dB.