DLRx (Curve) Dual-band WIFI antenna 2.4GHz and 5GHz Measurement report

Summary

The WIFI antenna is attached to the WIFI module (P2) for measurement

The WIFI module was fixtured for antenna measurement

The main antenna port was terminated with 50 Ohms load

The measurement was conducted in free space

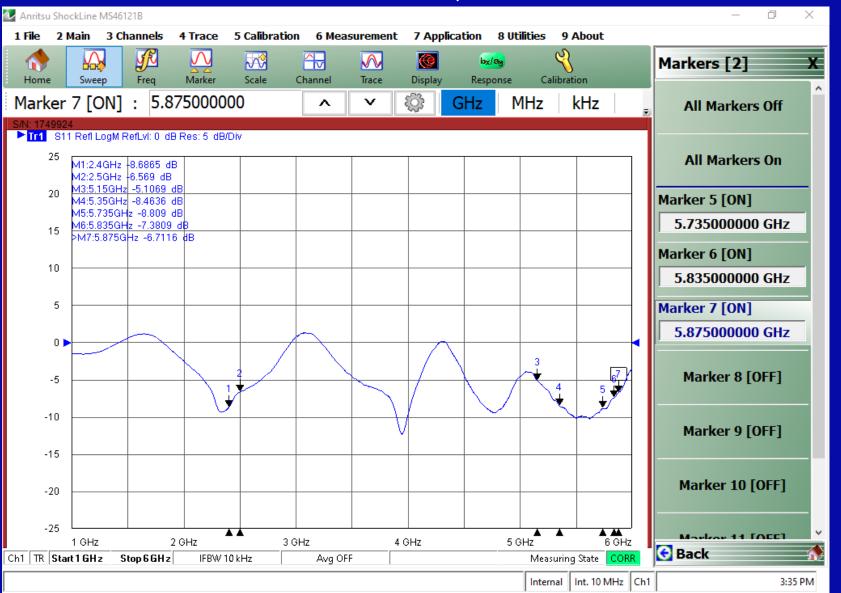


Photo of fixture



Emits Technology Sdn Bhd

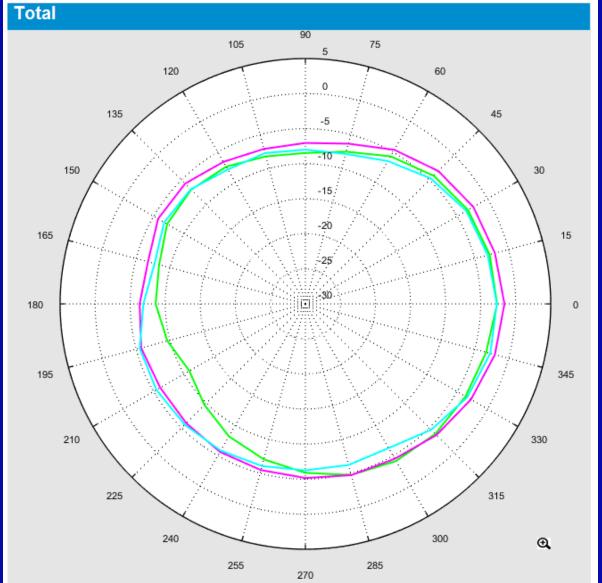
Return-loss plot

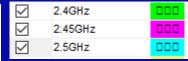


Measurement Summary

Frequency	2.4GHz	2.45GHz	2.5GHz	5.15GHz	5.2GHz	5.25GHz	5.3GHz	5.35GHz	5.7GHz	5.735GHz	5.785GHz	5.825GHz	5.835GHz	5.85GHz	5.875GHz
Efficiency (dB)	-3.83	-3.3	-3.84	-3.24	-3.52	-3.49	-3.28	-3.92	-3.42	-3.08	-3.25	-3.44	-3.72	-3.29	-3.75
Efficiency (%)	41.4	46.77	41.3	47.42	44.46	44.77	46.99	40.55	45.5	49.2	47.32	45.29	42.46	46.88	42.17
Gain (dBi)	2.49	2.85	1.99	1.44	1.27	1.45	1.22	0.52	1.14	1.53	1.63	1.19	0.87	1.16	0.72

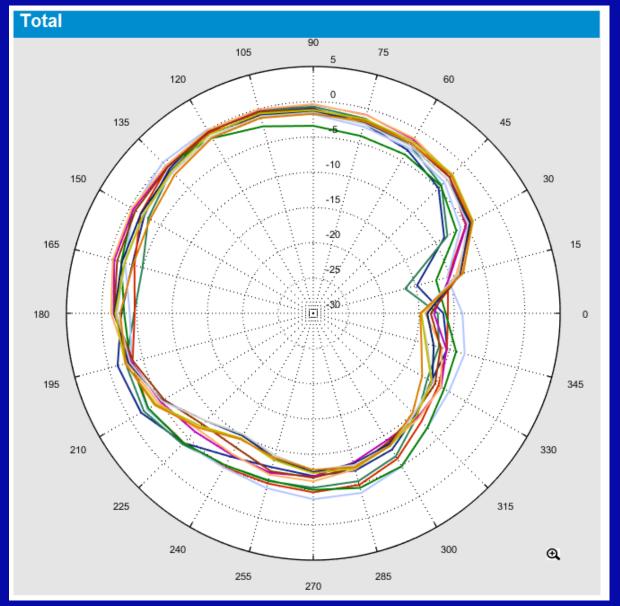
2D radiation pattern (Az plane - 2.4GHz band)





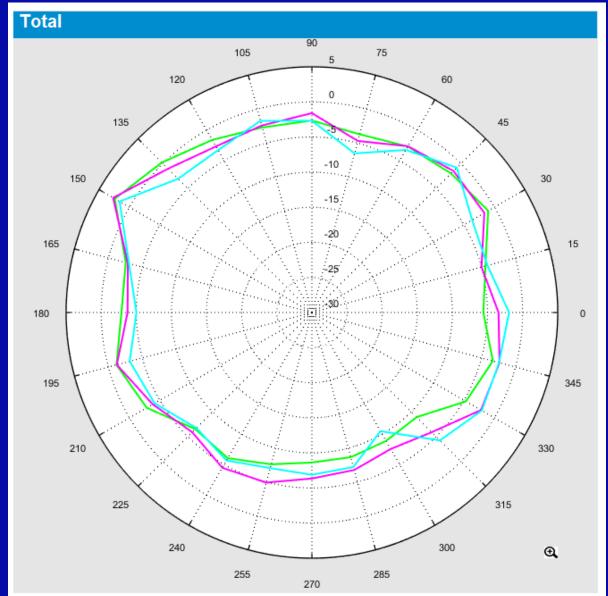


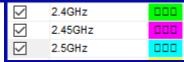
2D radiation pattern (Az plane – 5GHz band)



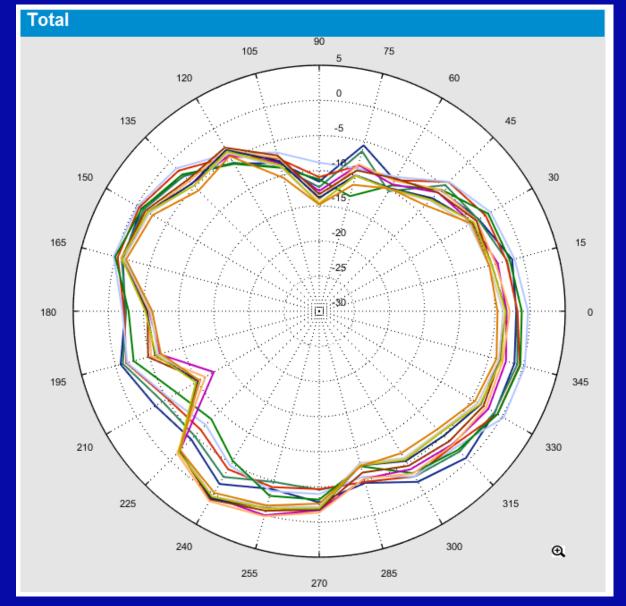
~	5.15GHz	000
~	5.2GHz	000
~	5.25GHz	000
~	5.3GHz	000
~	5.35GHz	
~	5.7GHz	
~	5.735GHz	
~	5.785GHz	000
~	5.825GHz	000
~	5.835GHz	
~	5.85GHz	
\checkmark	5.875GHz	000

2D radiation pattern (ELO plane – 2.4GHz band)



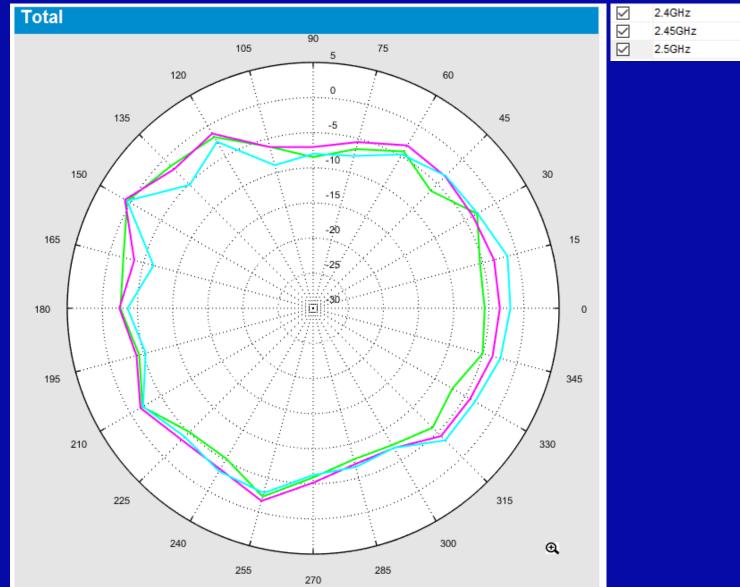


2D radiation pattern (ELO plane – 5GHz band)

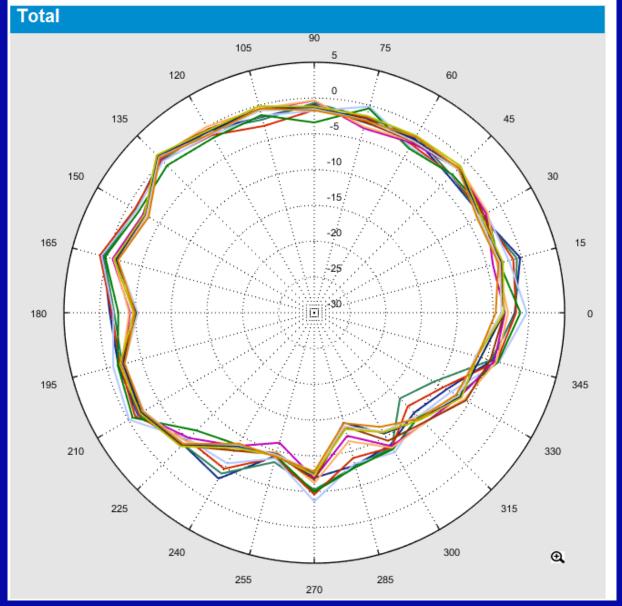


~	5.15GHz	000
~	5.2GHz	000
~	5.25GHz	000
~	5.3GHz	000
~	5.35GHz	000
~	5.7GHz	
~	5.735GHz	
~	5.785GHz	000
~	5.825GHz	000
~	5.835GHz	
~	5.85GHz	
\checkmark	5.875GHz	000

2D radiation pattern (EL90 plane – 2.4GHz band)



2D radiation pattern (EL90 plane – 5GHz band)



~	5.15GHz	000
~	5.2GHz	000
~	5.25GHz	000
~	5.3GHz	000
~	5.35GHz	000
~	5.7GHz	
✓	5.735GHz	
~	5.785GHz	000
~	5.825GHz	000
~	5.835GHz	
~	5.85GHz	
\checkmark	5.875GHz	000