

Antenna Test Report

apply for WBU058-BGA

Test Date: 2024/07/08

Issue Date: 2024/10/11

Tested by: Randy Liao Approved by: Frank Wen
Randy Liao (Staff Engineer) *Frank Wen (Assistant Manager)*

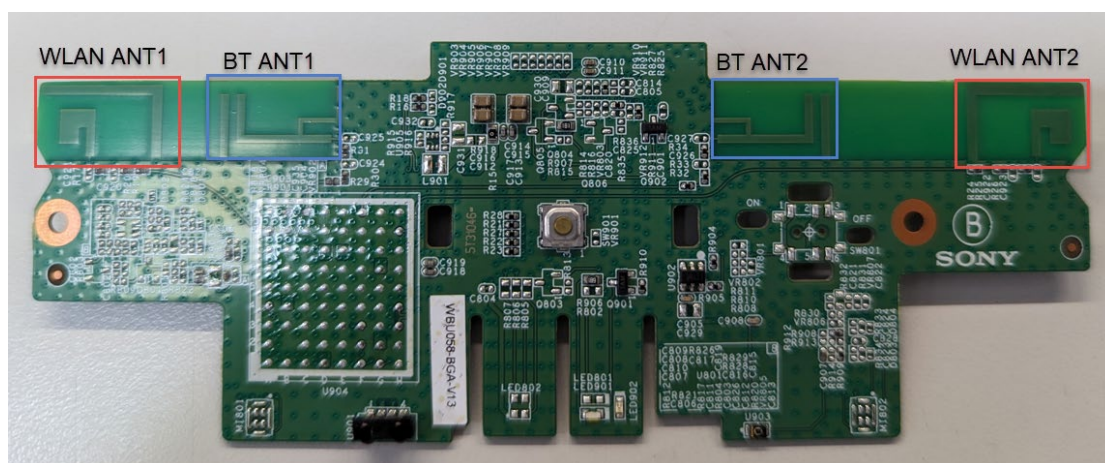
1. Antenna Description

1.1 Antenna List and Max. Peak Gain

Antenna Name	Brand	Model	Max. Gain(dBi)					
			2412-2462MHz	2412-2472MHz	5150-5250MHz	5250-5350MHz	5470-5725MHz	5725-5850MHz
WLAN ANT1	FOXCONN	WBU058-BGA	3.91	3.91	4.11	5.18	4.62	4.28
WLAN ANT2	FOXCONN	WBU058-BGA	4.94	4.80	3.80	3.76	3.36	3.34
BT ANT1	FOXCONN	WBU058-BGA	2.81					
BT ANT2	FOXCONN	WBU058-BGA	1.53					

Antenna Name	Brand	Model	Max. Gain(dBi)					Antenna Type
			5925-6425MHz	6425-6525MHz	6525-6875MHz	6875-7125MHz		
WLAN ANT1	FOXCONN	WBU058-BGA	3.34	3.35	4.88	4.72		Printing
WLAN ANT2	FOXCONN	WBU058-BGA	3.07	3.39	4.01	2.97		Printing

1.2 Antenna Location and Pattern



2. Measurement Channel List

2.1 BT

Frequency
2402MHz
2441MHz
2480MHz

2.2 WLAN

Frequency	Frequency	Frequency
2412 MHz	5150MHz	5925MHz
2437 MHz	5200MHz	6175MHz
2442MHz	5250MHz	6425MHz
2462 MHz	5300MHz	6475MHz
2472MHz	5350MHz	6525MHz
	5470MHz	6700MHz
	5600MHz	6875MHz
	5725MHz	7000MHz
	5785MHz	7125MHz
	5850MHz	

3. Test Program Used

1. EMQuest 1.08

4. Test Instruments

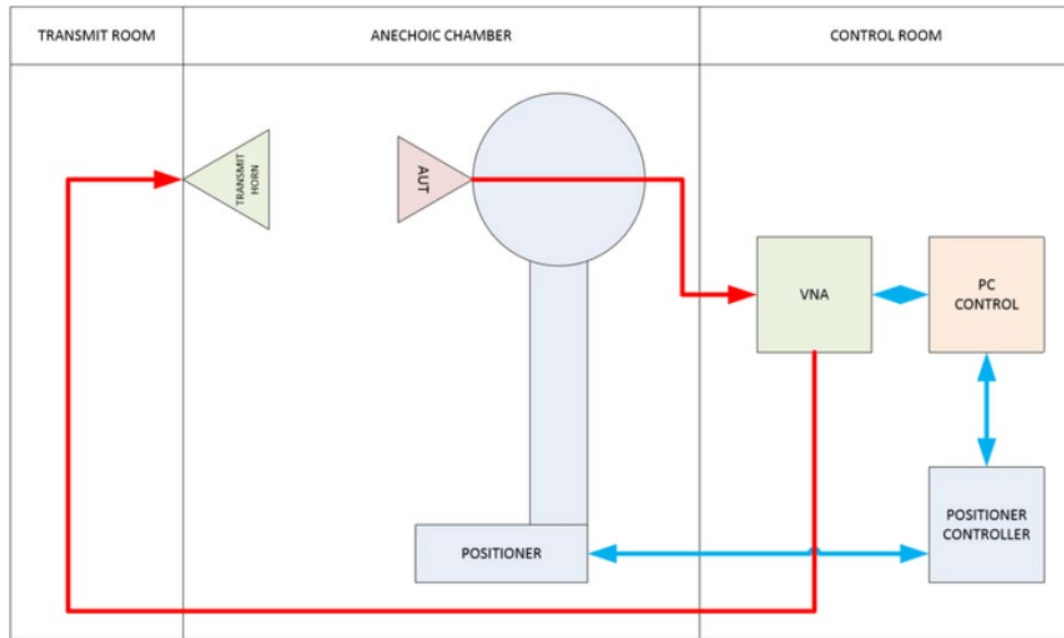
Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
ETS	AMS-8500	N/A	2024/3/17	2025/3/16
Keysight	5071B	N/A	2024/3/15	2025/3/14
Keysight	3499B	N/A	2021/10/30	N/A

Note:

1. The test was performed in AMS-8500 anechoic chamber
2. Tested Date: 2024/07/08

5. Test Arrangements

5.1 Test setup



5.2 Test Procedure

- Setup DUT into the antenna chamber and place the DUT in the center of table, and
- Connect it to the test equipment through the IPEX connector;
- Open the EMQuest software, set the test frequency band, and start the test;
- In EMQuest Perform data post-processing, generate the required data, and export the data.

6. Test Results

6.1 Antenna Gain Summary Table

6.1.1 WLAN ANT1

	XY Plane		ZY Plane		ZX Plane	
Frequency [MHz]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]
2412	-0.50	-4.00	3.22	-2.92	1.98	-2.89
2437	-0.32	-3.72	3.66	-2.66	2.15	-2.60
2442	-0.38	-3.69	3.68	-2.66	2.33	-2.54
2462	-0.10	-3.50	3.91	-2.40	2.78	-2.20
2472	-0.33	-3.55	3.82	-2.44	2.88	-2.17
5150	2.70	0.86	3.24	-1.05	2.38	-0.87
5200	2.25	0.75	3.90	-0.90	2.26	-0.84
5250	2.37	0.51	4.11	-1.18	1.62	-1.20
5300	2.94	0.55	4.83	-1.05	2.32	-1.11
5350	2.95	0.79	5.18	-0.83	2.68	-0.76
5470	3.50	0.75	4.62	-1.05	2.83	-0.99
5600	3.00	0.18	4.33	-1.84	2.85	-1.31
5725	2.98	0.24	4.28	-1.65	2.53	-1.16
5785	1.80	-0.73	2.81	-2.69	1.59	-2.18
5850	3.16	-0.23	3.38	-2.11	2.77	-1.40
5925	2.88	-0.74	2.16	-2.74	2.88	-1.92
6175	2.78	-0.91	1.79	-2.65	2.07	-1.50
6425	1.36	-0.99	3.34	-2.64	2.03	-0.69
6475	1.21	-1.13	2.38	-3.31	2.48	-1.14
6525	2.16	-1.13	3.35	-2.05	3.11	-0.28
6700	1.98	-0.86	4.88	-1.57	4.03	0.37
6875	0.90	-2.22	4.72	-2.57	3.38	-1.01
7000	-0.23	-2.72	4.20	-2.44	3.10	-1.11
7125	0.08	-3.09	3.46	-3.00	1.77	-2.27

6.1.2 WLAN ANT2

	XY Plane		ZY Plane		ZX Plane	
Frequency [MHz]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]
2412	-2.64	-5.23	3.33	-3.02	2.06	-3.44
2437	-1.86	-4.79	4.10	-2.47	2.65	-2.89
2442	-1.89	-4.76	4.21	-2.38	2.79	-2.82
2462	-1.48	-4.36	4.80	-1.93	3.34	-2.32
2472	-1.17	-4.30	4.94	-1.87	3.46	-2.24
5150	2.97	0.00	3.16	-1.31	2.81	-0.49
5200	2.99	-0.02	3.80	-1.39	2.81	-0.50
5250	3.22	0.02	3.53	-1.44	3.11	-0.60
5300	3.28	-0.07	3.76	-1.38	3.21	-0.71
5350	3.36	0.24	3.38	-1.38	3.42	-0.46
5470	3.36	0.15	2.42	-1.99	3.01	-0.76
5600	3.12	-0.39	2.14	-2.81	2.42	-1.32
5725	3.08	0.06	2.71	-2.59	2.81	-0.70
5785	2.48	-0.68	1.81	-3.36	2.23	-1.47
5850	2.78	-0.08	2.33	-2.88	3.34	-0.47
5925	3.05	-0.45	1.38	-3.58	2.49	-1.03
6175	3.07	-0.62	0.76	-3.84	2.78	-1.19
6425	2.21	-0.11	1.09	-3.82	2.54	-1.09
6475	1.34	-1.13	0.71	-3.97	2.19	-1.79
6525	2.56	0.48	2.26	-2.96	3.39	-0.65
6700	3.76	1.36	2.70	-1.90	4.01	0.18
6875	2.94	-0.40	2.65	-2.62	2.76	-1.12
7000	2.97	-0.60	2.26	-2.53	2.66	-1.34
7125	1.48	-1.68	1.55	-3.01	1.69	-2.25

6.1.3 BT ANT1

	XY Plane		ZY Plane		ZX Plane	
Frequency [MHz]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]
2402	0.10	-3.17	2.63	-3.31	-0.96	-3.11
2441	0.43	-3.02	2.81	-3.15	-1.09	-3.22
2480	0.76	-2.73	2.52	-3.16	-0.92	-3.14

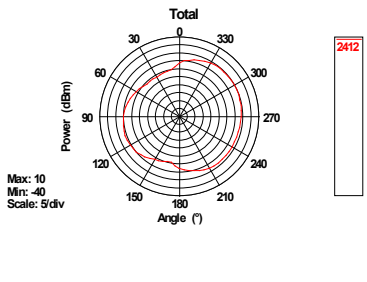
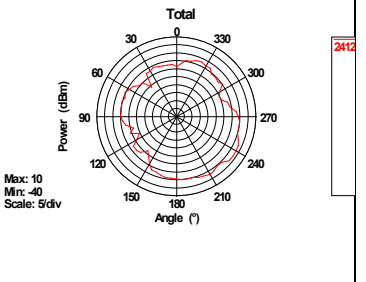
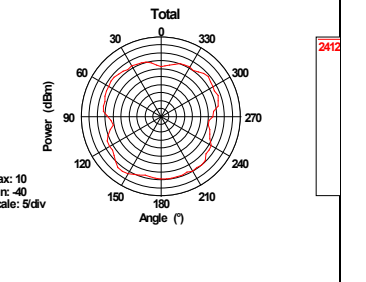
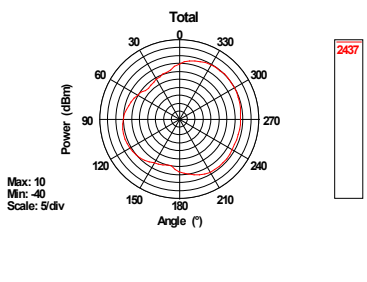
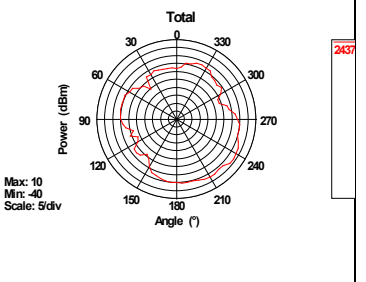
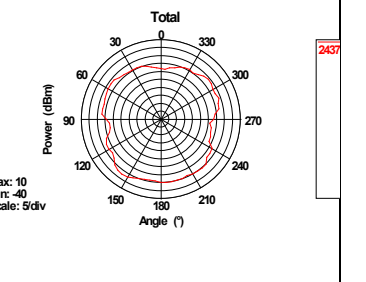
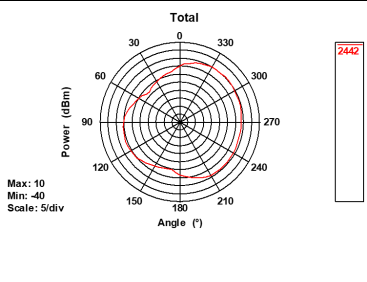
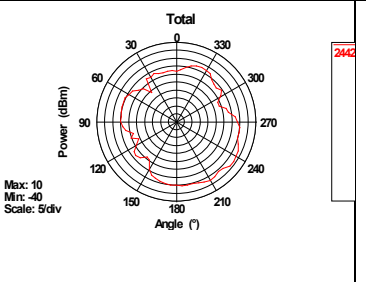
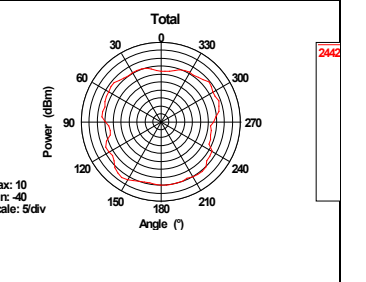
6.1.4 BT ANT2

	XY Plane		ZY Plane		ZX Plane	
Frequency [MHz]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]	Peak Gain [dBi]	Average Gain [dBi]
2402	0.87	-2.27	0.46	-4.36	0.35	-2.79
2441	0.94	-2.15	1.42	-3.97	0.67	-2.46
2480	0.72	-2.01	1.53	-3.79	0.90	-2.14

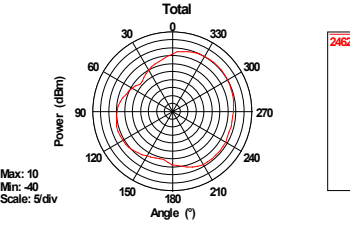
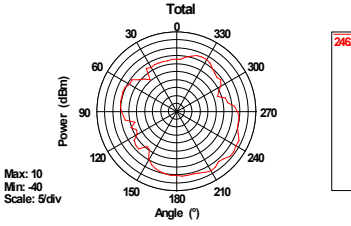
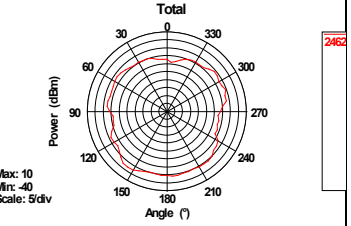
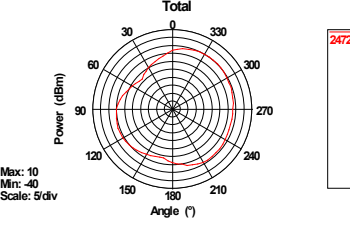
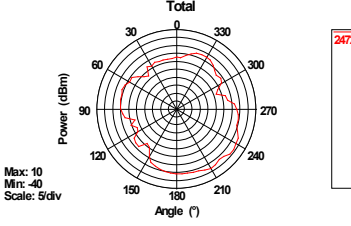
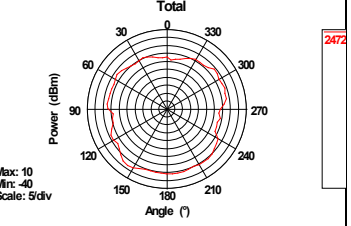
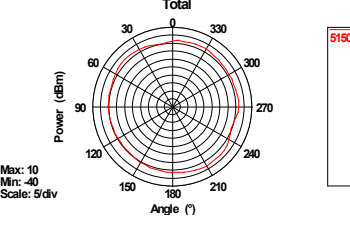
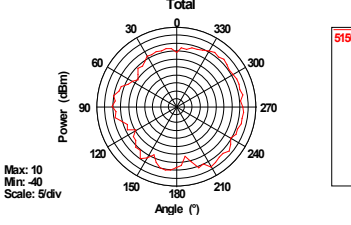
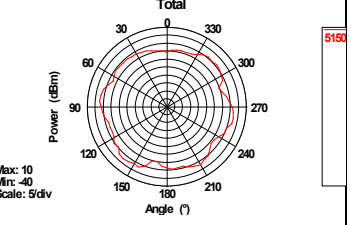
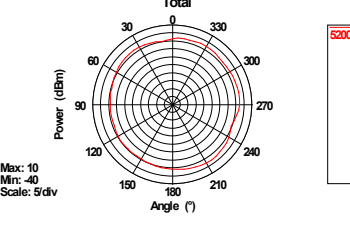
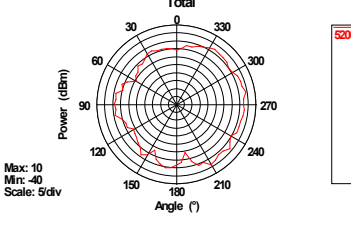
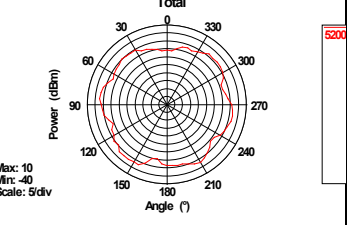
6.2 Measurement Pattern

6.2.1 WLAN ANT1

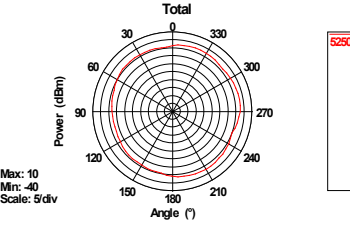
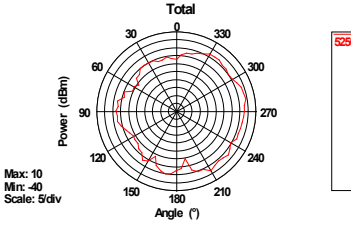
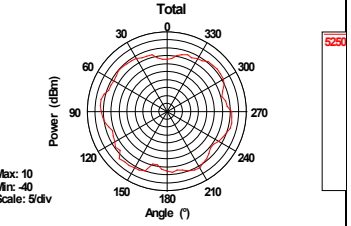
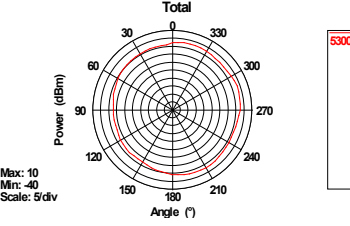
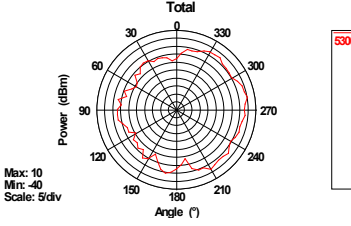
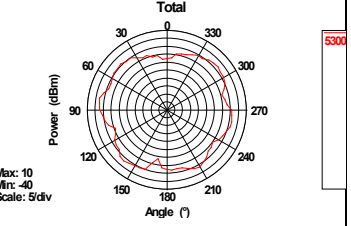
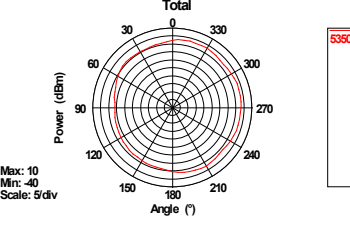
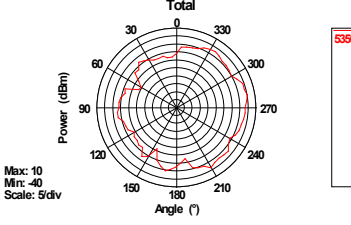
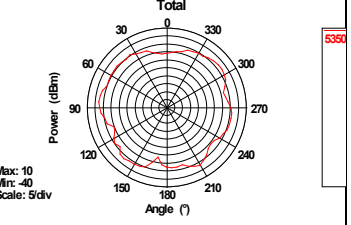
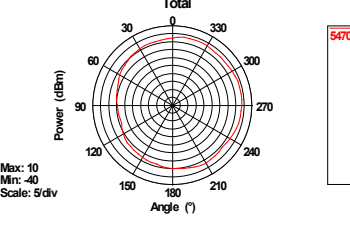
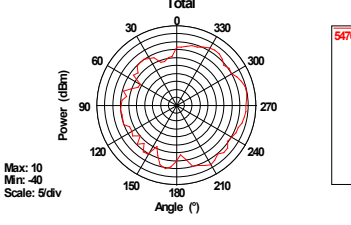
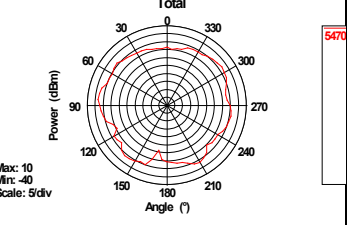
Environmental Conditions:	23 °C, 55%RH	Brand/Model	FOXCONN/WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	-------------	--------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2412MHz	Frequency	2412MHz	Frequency	2412MHz
Peak Gain(dBi)	-0.5	Peak	3.22	Peak	1.98
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2437MHz	Frequency	2437MHz	Frequency	2437MHz
Peak Gain(dBi)	-0.32	Peak	3.66	Peak	2.15
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2442MHz	Frequency	2442MHz	Frequency	2442MHz
Peak Gain(dBi)	-0.38	Peak	3.68	Peak	2.33

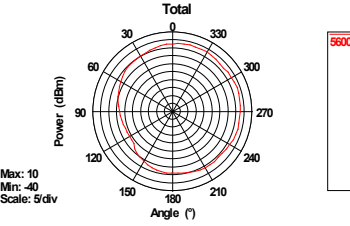
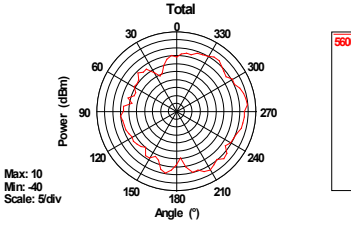
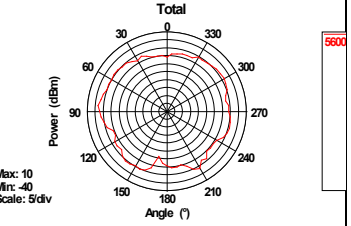
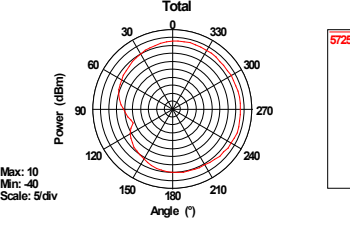
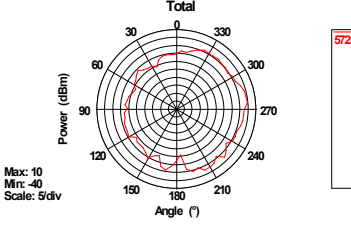
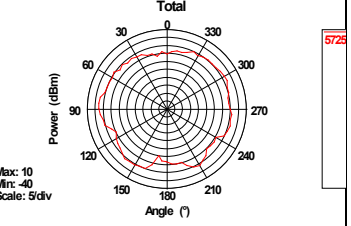
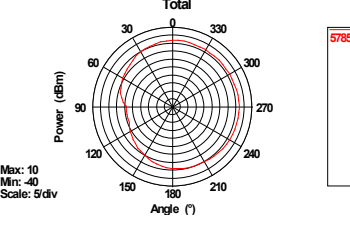
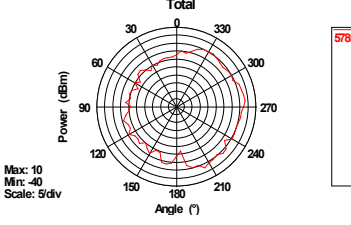
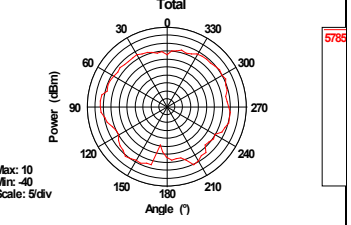
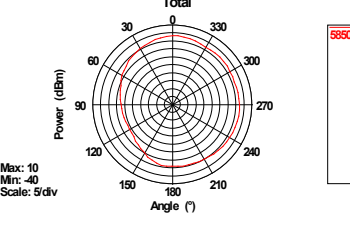
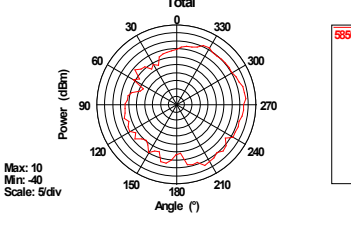
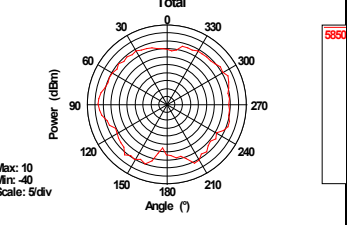
Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2462MHz	Frequency	2462MHz	Frequency	2462MHz
Peak Gain(dBi)	-0.10	Peak	3.91	Peak	2.78
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2472MHz	Frequency	2472MHz	Frequency	2472MHz
Peak Gain(dBi)	-0.33	Peak	3.82	Peak	2.88
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5150MHz	Frequency	5150MHz	Frequency	5150MHz
Peak Gain(dBi)	2.70	Peak	3.24	Peak	2.38
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5200MHz	Frequency	5200MHz	Frequency	5200MHz
Peak Gain(dBi)	2.25	Peak	3.90	Peak	2.26

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

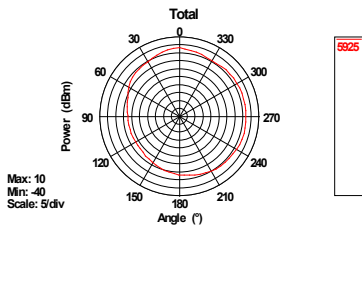
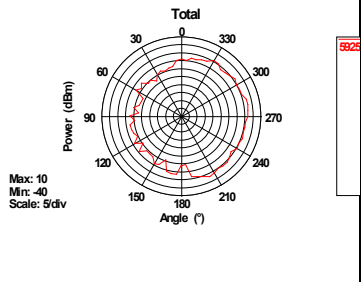
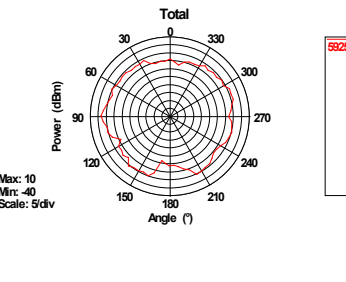
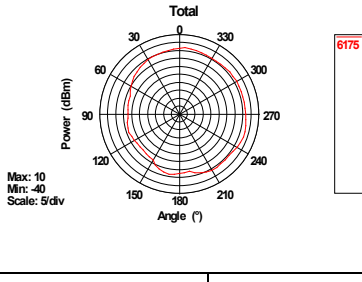
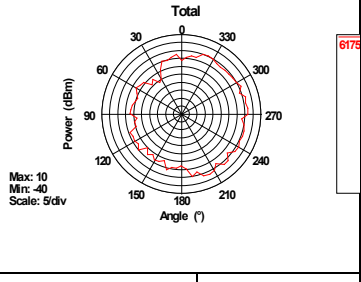
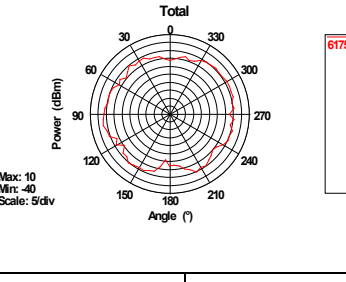
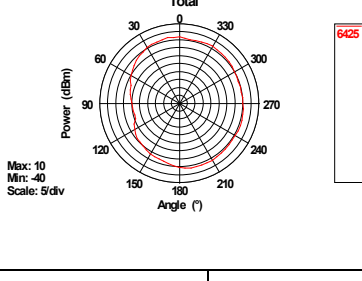
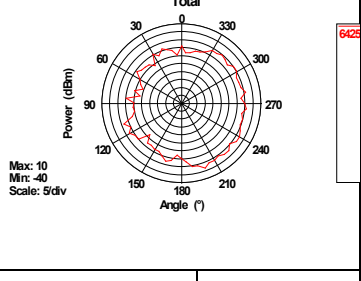
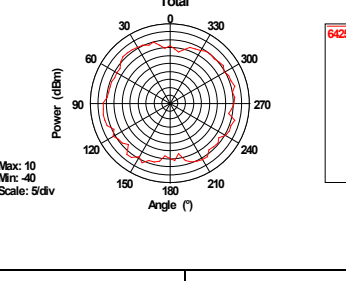
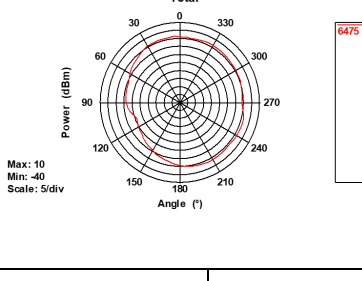
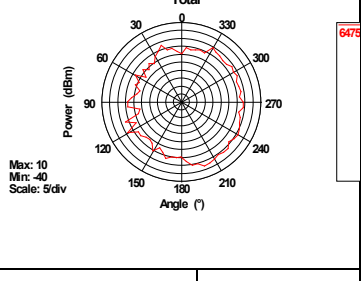
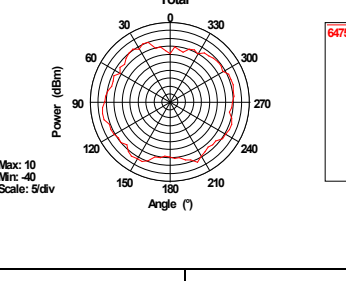
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5250MHz	Frequency	5250MHz	Frequency	5250MHz
Peak Gain(dBi)	2.37	Peak	4.11	Peak	1.62
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5300MHz	Frequency	5300MHz	Frequency	5300MHz
Peak Gain(dBi)	2.94	Peak	4.83	Peak	2.32
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5350MHz	Frequency	5350MHz	Frequency	5350MHz
Peak Gain(dBi)	2.95	Peak	5.18	Peak	2.68
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5470MHz	Frequency	5470MHz	Frequency	5470MHz
Peak Gain(dBi)	3.50	Peak	4.62	Peak	2.83

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5600MHz	Frequency	5600MHz	Frequency	5600MHz
Peak Gain(dBi)	3.00	Peak	4.33	Peak	2.85
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5725MHz	Frequency	5725MHz	Frequency	5725MHz
Peak Gain(dBi)	2.98	Peak	4.28	Peak	2.53
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5785MHz	Frequency	5785MHz	Frequency	5785MHz
Peak Gain(dBi)	1.80	Peak	2.81	Peak	1.59
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5850MHz	Frequency	5850MHz	Frequency	5850MHz
Peak Gain(dBi)	3.16	Peak	3.38	Peak	2.77



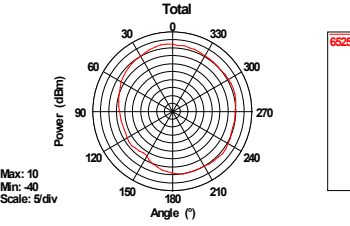
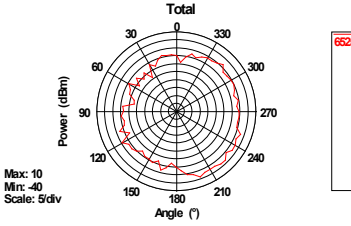
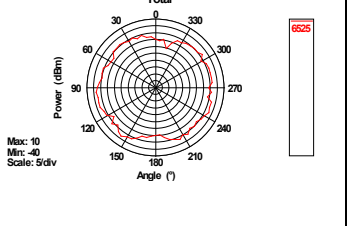
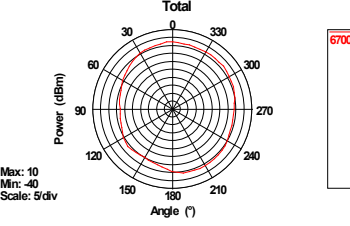
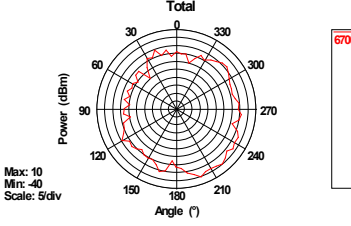
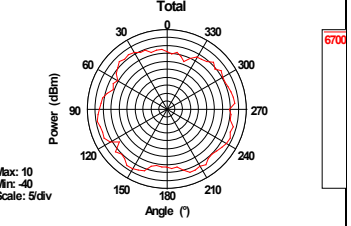
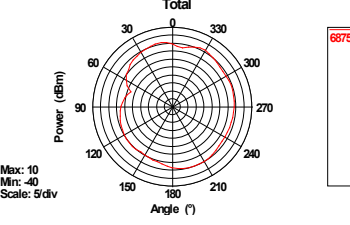
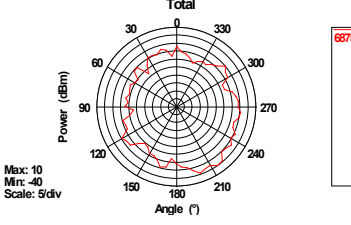
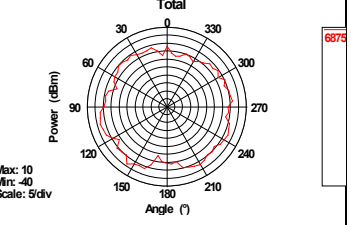
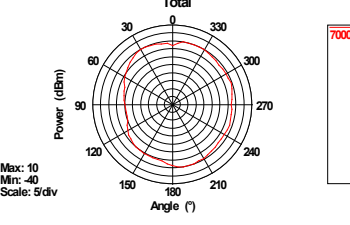
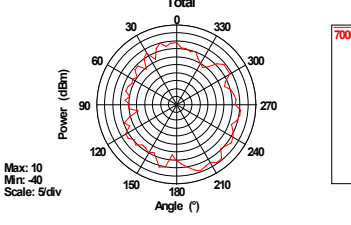
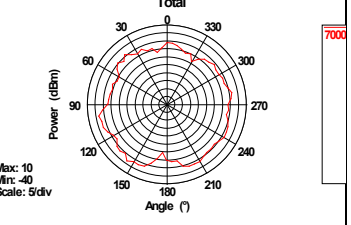
Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	------------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5925MHz	Frequency	5925MHz	Frequency	5925MHz
Peak Gain(dBi)	2.88	Peak	2.16	Peak	2.88
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6175MHz	Frequency	6175MHz	Frequency	6175MHz
Peak Gain(dBi)	2.78	Peak	1.79	Peak	2.07
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6425MHz	Frequency	6425MHz	Frequency	6425MHz
Peak Gain(dBi)	1.36	Peak	3.34	Peak	2.03
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6475MHz	Frequency	6475MHz	Frequency	6475MHz
Peak Gain(dBi)	1.21	Peak	2.38	Peak	2.48

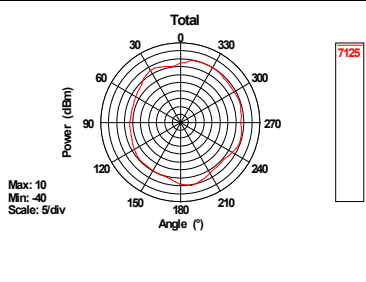
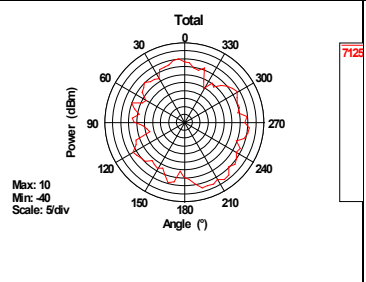
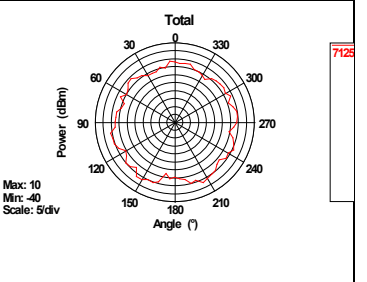


FOXCONN
HON HAI TECHNOLOGY GROUP

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

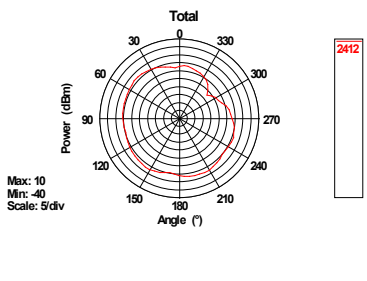
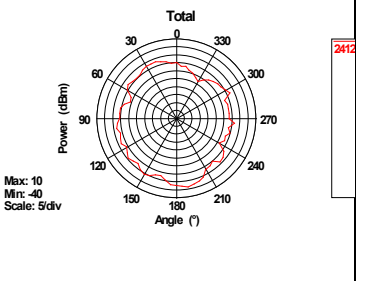
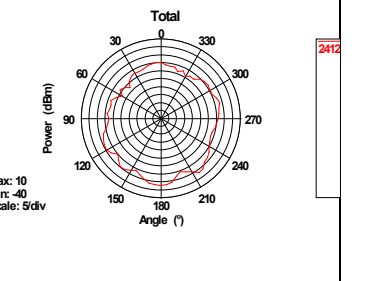
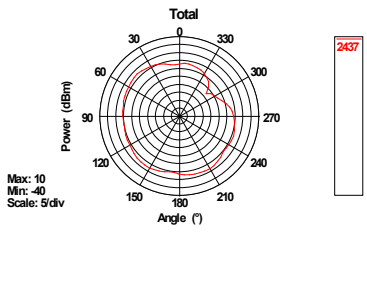
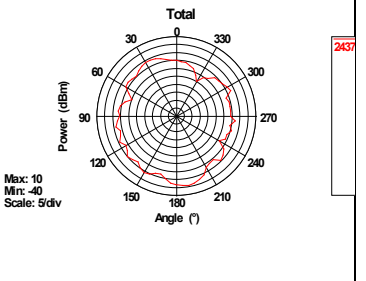
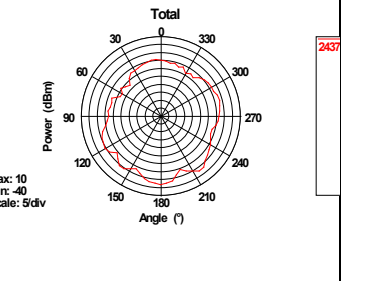
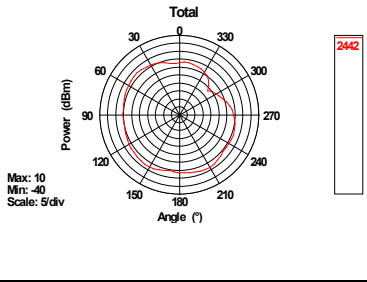
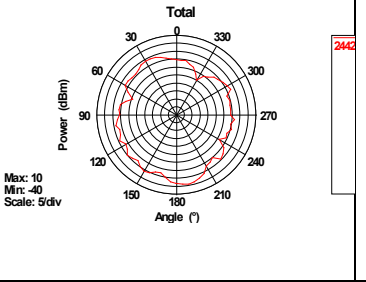
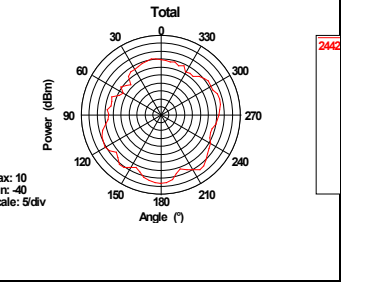
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6525MHz	Frequency	6525MHz	Frequency	6525MHz
Peak Gain(dBi)	2.16	Peak	3.35	Peak	3.11
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6700MHz	Frequency	6700MHz	Frequency	6700MHz
Peak Gain(dBi)	1.98	Peak	4.88	Peak	4.03
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6875MHz	Frequency	6875MHz	Frequency	6875MHz
Peak Gain(dBi)	0.90	Peak	4.72	Peak	3.38
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	7000MHz	Frequency	7000MHz	Frequency	7000MHz
Peak Gain(dBi)	-0.23	Peak	4.20	Peak	3.10

Environmental Conditions:	23 °C, 55%RH	Brand/Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	-------------	------------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	7125MHz	Frequency	7125MHz	Frequency	7125MHz
Peak Gain(dBi)	0.08	Peak	3.46	Peak	1.77

6.2.2 WLAN ANT2

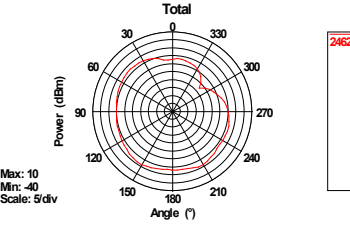
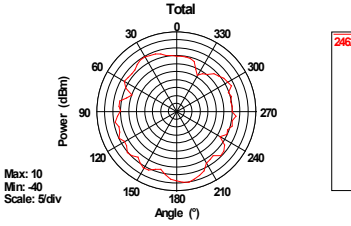
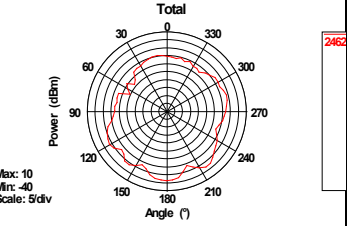
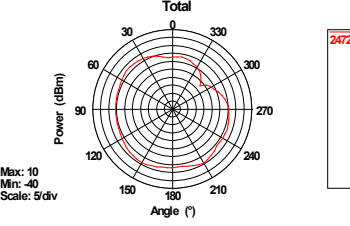
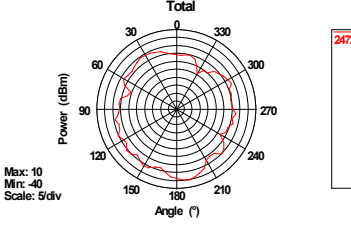
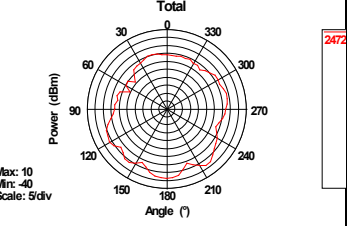
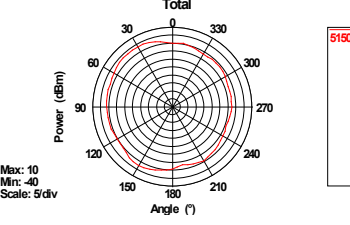
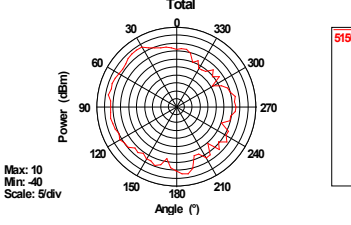
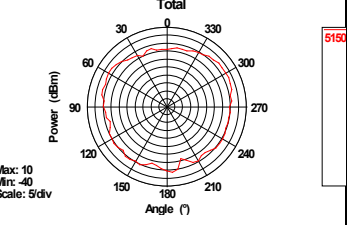
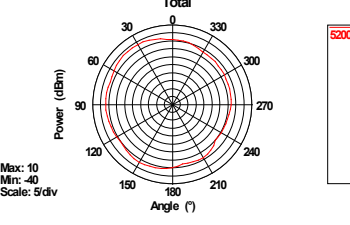
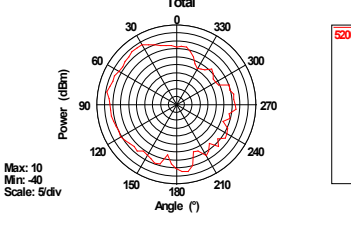
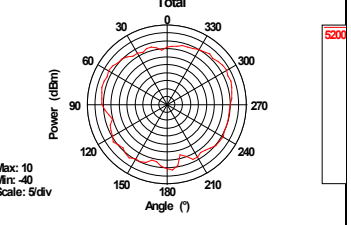
Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2412MHz	Frequency	2412MHz	Frequency	2412MHz
Peak Gain(dBi)	-2.64	Peak	3.33	Peak	2.06
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2437MHz	Frequency	2437MHz	Frequency	2437MHz
Peak Gain(dBi)	-1.86	Peak	4.10	Peak	2.65
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2442MHz	Frequency	2442MHz	Frequency	2442MHz
Peak Gain(dBi)	-1.89	Peak	4.21	Peak	2.79

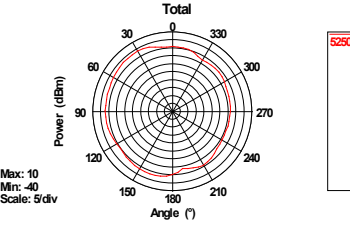
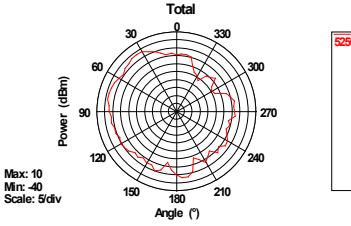
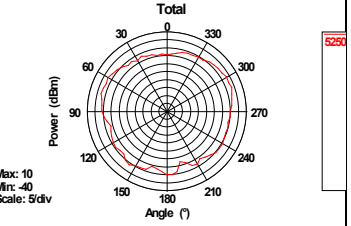
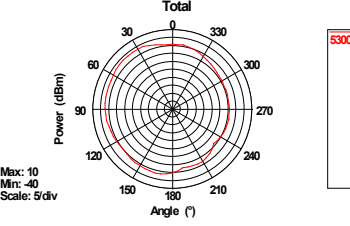
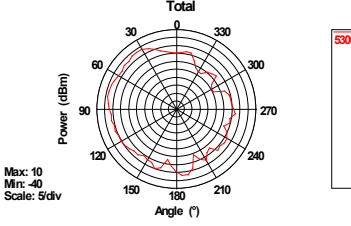
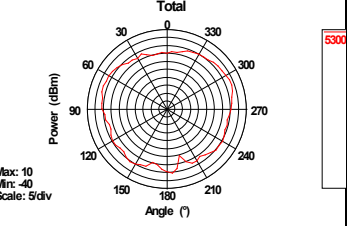
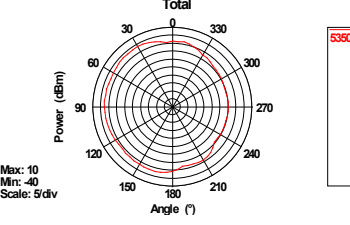
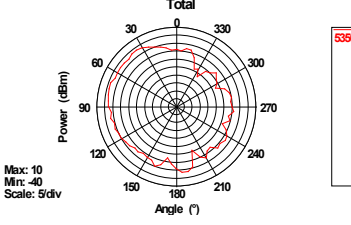
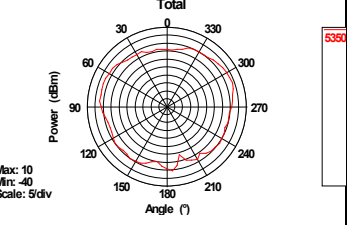
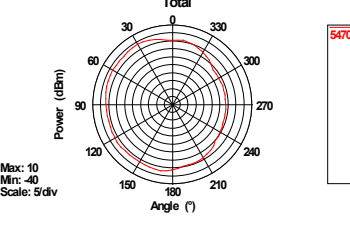
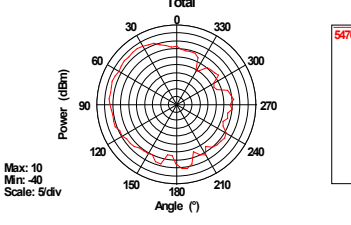
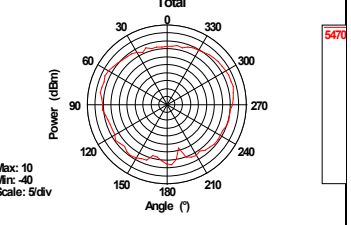


FOXCONN
HON HAI TECHNOLOGY GROUP

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

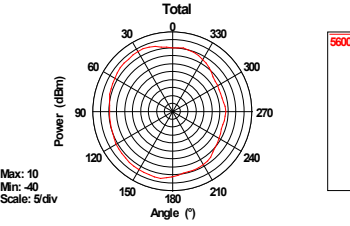
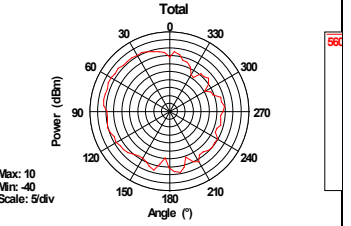
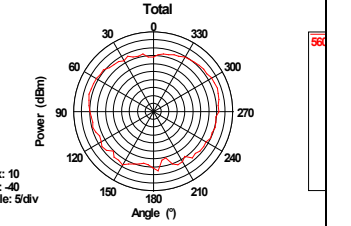
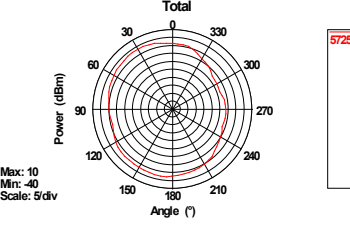
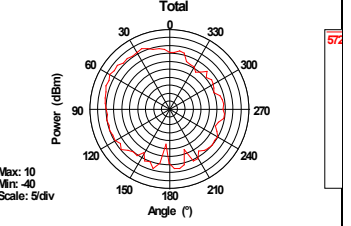
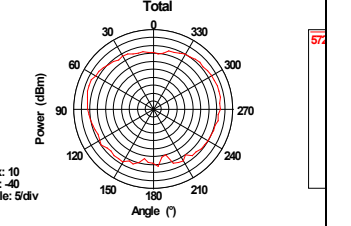
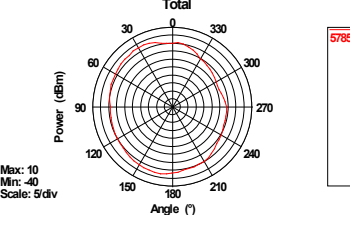
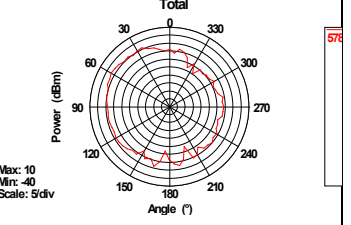
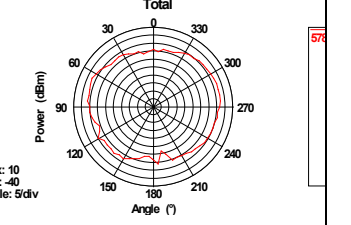
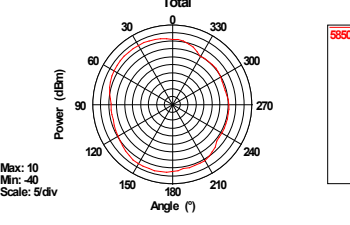
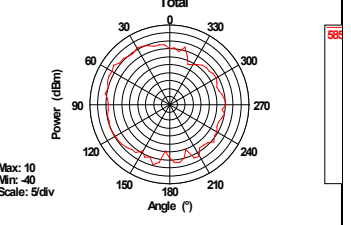
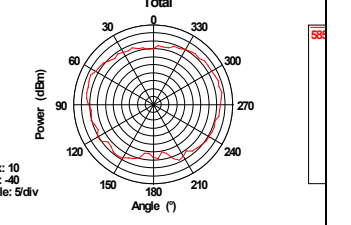
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2462MHz	Frequency	2462MHz	Frequency	2462MHz
Peak Gain(dBi)	-1.48	Peak	4.80	Peak	3.34
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2472MHz	Frequency	2472MHz	Frequency	2472MHz
Peak Gain(dBi)	-1.17	Peak	4.94	Peak	3.46
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5150MHz	Frequency	5150MHz	Frequency	5150MHz
Peak Gain(dBi)	2.97	Peak	3.16	Peak	2.81
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5200MHz	Frequency	5200MHz	Frequency	5200MHz
Peak Gain(dBi)	2.99	Peak	3.80	Peak	2.81

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

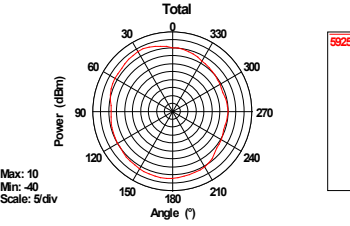
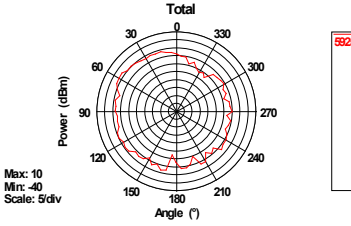
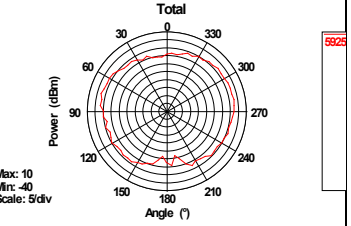
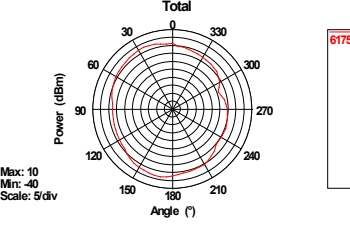
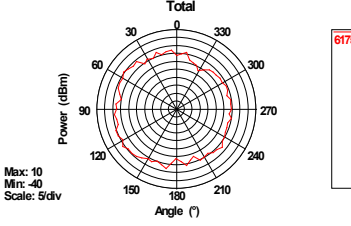
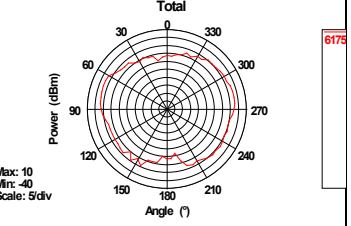
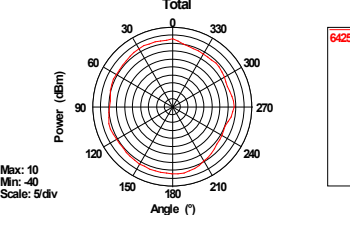
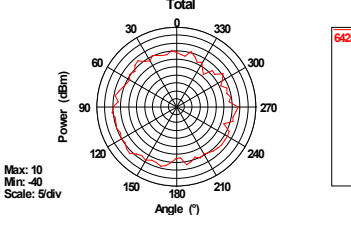
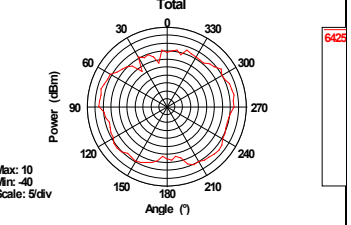
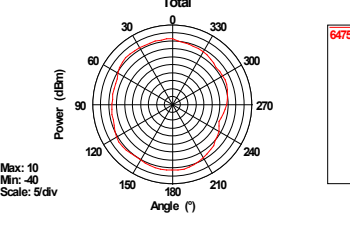
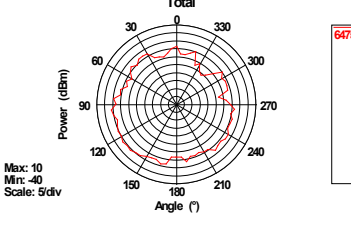
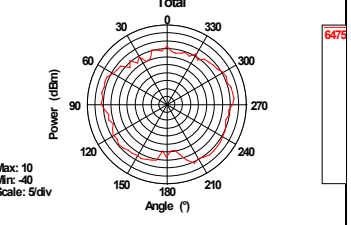
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5250MHz	Frequency	5250MHz	Frequency	5250MHz
Peak Gain(dBi)	3.22	Peak	3.53	Peak	3.11
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5300MHz	Frequency	5300MHz	Frequency	5300MHz
Peak Gain(dBi)	3.28	Peak	3.76	Peak	3.21
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5350MHz	Frequency	5350MHz	Frequency	5350MHz
Peak Gain(dBi)	3.36	Peak	3.38	Peak	3.42
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5470MHz	Frequency	5470MHz	Frequency	5470MHz
Peak Gain(dBi)	3.36	Peak	2.42	Peak	3.01



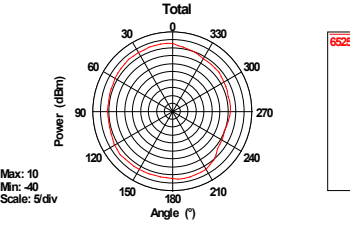
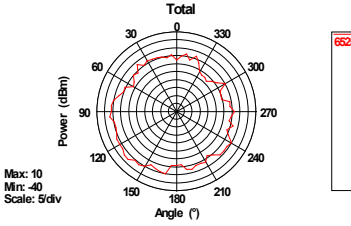
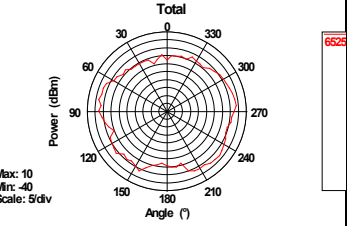
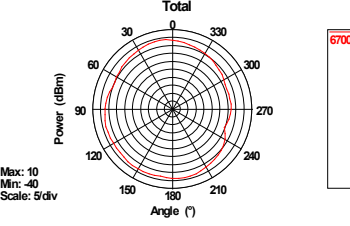
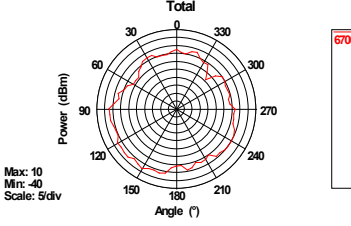
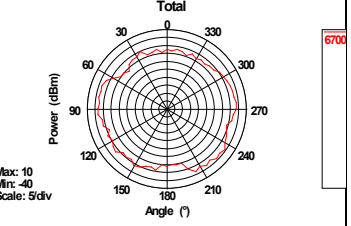
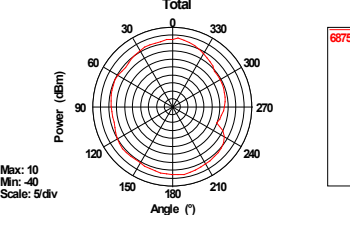
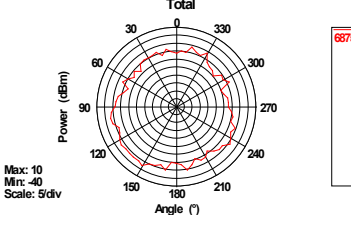
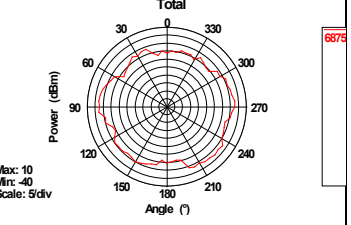
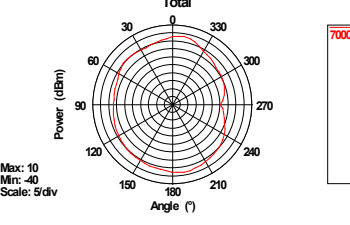
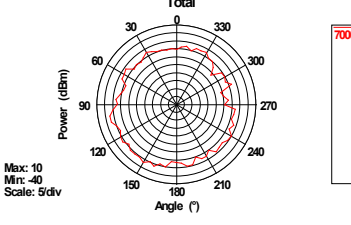
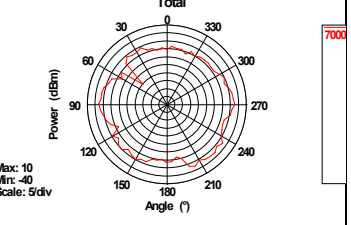
Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5600MHz	Frequency	5600MHz	Frequency	5600MHz
Peak Gain(dBi)	3.12	Peak	2.14	Peak	2.42
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5725MHz	Frequency	5725MHz	Frequency	5725MHz
Peak Gain(dBi)	3.08	Peak	2.71	Peak	2.81
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5785MHz	Frequency	5785MHz	Frequency	5785MHz
Peak Gain(dBi)	2.48	Peak	1.81	Peak	2.23
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5850MHz	Frequency	5850MHz	Frequency	5850MHz
Peak Gain(dBi)	2.78	Peak	2.33	Peak	3.34

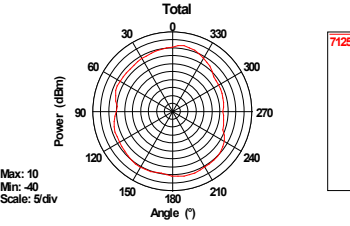
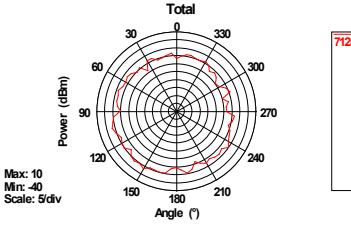
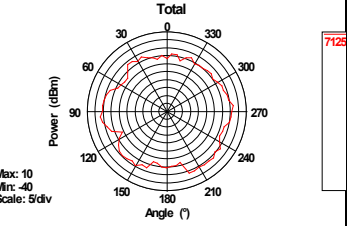
Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	5925MHz	Frequency	5925MHz	Frequency	5925MHz
Peak Gain(dBi)	3.05	Peak	1.38	Peak	2.49
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6175MHz	Frequency	6175MHz	Frequency	6175MHz
Peak Gain(dBi)	3.07	Peak	0.76	Peak	2.78
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6425MHz	Frequency	6425MHz	Frequency	6425MHz
Peak Gain(dBi)	2.21	Peak	1.09	Peak	2.54
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6475MHz	Frequency	6475MHz	Frequency	6475MHz
Peak Gain(dBi)	1.34	Peak	0.71	Peak	2.19

Environmental Conditions:	23 °C, 55%RH	Brand/ Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	--------------	---------------------	------------	------------

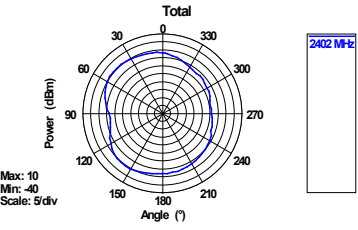
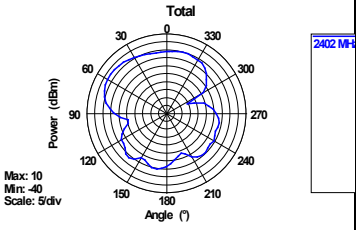
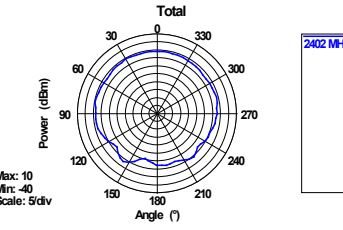
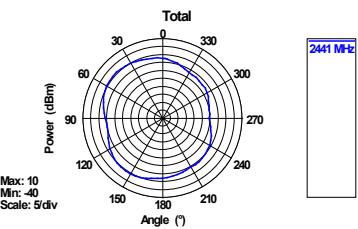
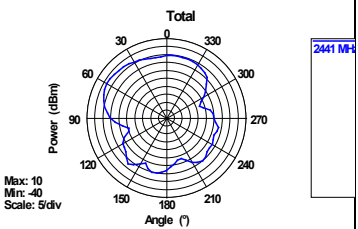
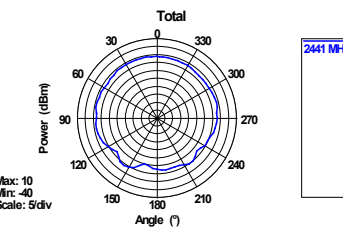
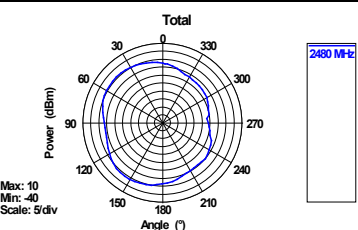
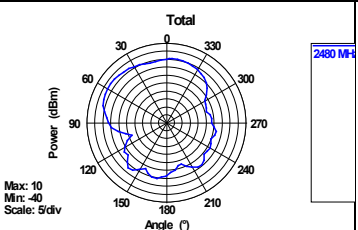
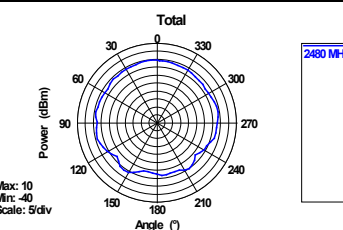
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6525MHz	Frequency	6525MHz	Frequency	6525MHz
Peak Gain(dBi)	2.56	Peak	2.26	Peak	3.39
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6700MHz	Frequency	6700MHz	Frequency	6700MHz
Peak Gain(dBi)	3.76	Peak	2.70	Peak	4.01
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	6875MHz	Frequency	6875MHz	Frequency	6875MHz
Peak Gain(dBi)	2.94	Peak	2.65	Peak	2.76
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	7000MHz	Frequency	7000MHz	Frequency	7000MHz
Peak Gain(dBi)	2.97	Peak	2.26	Peak	2.66

Environmental Conditions:	23 °C, 55%RH	Brand/Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	-------------	------------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	7125MHz	Frequency	7125MHz	Frequency	7125MHz
Peak Gain(dBi)	1.48	Peak	1.55	Peak	1.69

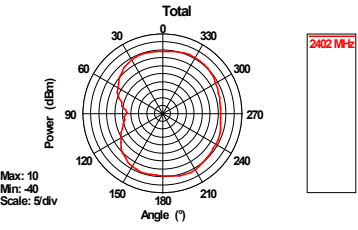
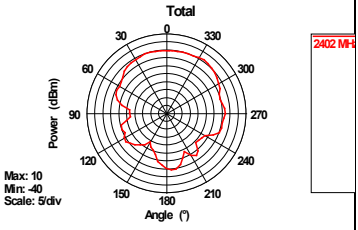
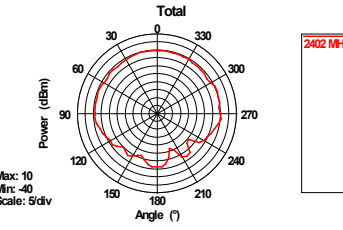
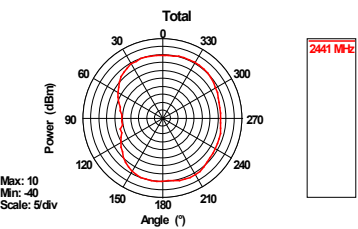
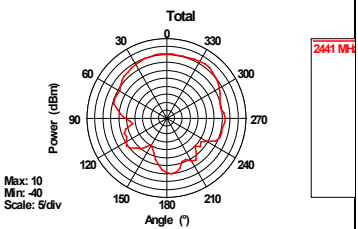
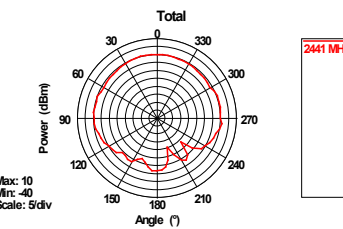
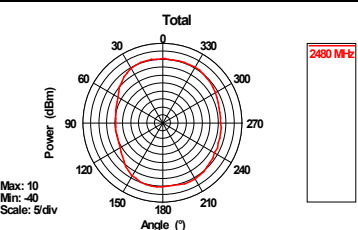
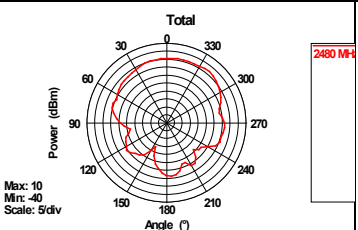
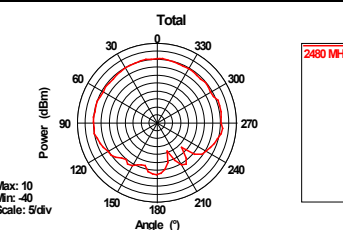
6.2.3 BT ANT1

Environmental Conditions:	23 °C, 55%RH	Brand/Model	FOXCONN/WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	-------------	--------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2402MHz	Frequency	2402MHz	Frequency	2402MHz
Peak Gain(dBi)	0.10	Peak	2.63	Peak	-0.96
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2441MHz	Frequency	2441MHz	Frequency	2441MHz
Peak Gain(dBi)	0.43	Peak	2.81	Peak	-1.09
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2480MHz	Frequency	2480MHz	Frequency	2480MHz
Peak Gain(dBi)	0.76	Peak	2.52	Peak	-0.92

6.2.4 BT ANT2

Environmental Conditions:	23 °C, 55%RH	Brand/Model	FOXCONN/ WBU058-BGA	Tested By:	Randy Liao
---------------------------	--------------	-------------	------------------------	------------	------------

					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2402MHz	Frequency	2402MHz	Frequency	2402MHz
Peak Gain(dBi)	0.87	Peak	0.46	Peak	0.35
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2441MHz	Frequency	2441MHz	Frequency	2441MHz
Peak Gain(dBi)	0.94	Peak	1.42	Peak	0.67
					
Plane	XY	Plane	ZY	Plane	ZX
Frequency	2480MHz	Frequency	2480MHz	Frequency	2480MHz
Peak Gain(dBi)	0.72	Peak	1.53	Peak	0.90

7. Test Setup Photo

