



Antenna Composite Gain Test Report

FCC ID	Z3WAIR4981
Equipment	AT&T ALL Fi Booster
Brand Name	AirTies
Model Name	Air4981-41
Applicant	AirTies Wireless Networks Sehit Mehmet Mikdat Uluunlu Sokagi No:23 Esentepe, Sisli İstanbul, 34394 Turkey
Manufacturer	AirTies Wireless Networks Sehit Mehmet Mikdat Uluunlu Sokagi No:23 Esentepe, Sisli İstanbul, 34394 Turkey
Sample Received	Jul. 21, 2022
Start Test Date	Aug. 24, 2022
Final Test Date	Aug. 24, 2022

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory
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History of this test report

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1. Operation Mode and Antenna Information

Antenna Position	RF Port	Brand Name	Model Name	Ant. Type	Connector	Modes of Operation
2G 5GAnt1	1	Galtronics	A00	Off-Board Internal Dipole	I-PEX MHF (u.FL)	2.4GHz, 5GHz UNII 1~3
2G 5GAnt2	2	Galtronics	A11	Off-Board Internal Dipole	I-PEX MHF (u.FL)	2.4GHz, 5GHz UNII 1~3
6G Ant1	1	Galtronics	A0X	Off-Board Internal Dipole	I-PEX MHF (u.FL)	6GHz
6G Ant2	2	Galtronics	A1X	Off-Board Internal Dipole	I-PEX MHF (u.FL)	6GHz
6G Ant3	3	Galtronics	A2X	Off-Board Internal Dipole	I-PEX MHF (u.FL)	6GHz
6G Ant4	4	Galtronics	A3X	Off-Board Internal Dipole	I-PEX MHF (u.FL)	6GHz

Note:

2.4GHz and 5GHz Operation Mode (2TX/2RX)

2G 5GAnt1~2 can be used as transmitting/receiving antenna.

2G 5GAnt1~2 could transmit/receive simultaneously.

6GHz Operation Mode (4TX/4RX)

6G Ant1~4 can be used as transmitting/receiving antenna.

6G Ant1~4 could transmit/receive simultaneously.



2. Test Frequency

The listed frequency of each bands are selected to represent each frequency bands

Band [MHz]	Test Frequency [MHz]
2400-2483.5	2450
5150-5250	5200
5250-5350	5300
5470-5725	5600
5725-5850	5785
5850-5895	5885
5925-6425	6175
6425-6525	6475
6525-6875	6695
6875-7125	6995

3. Testing Location

Testing Location		
Sporton International Inc. Hsinhua Laboratory		
☒	HWA YA	ADD : No.13-1 & 14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan R.O.C.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
Radiated	05CH03-HY	Rex Liao	23-24 / 40-50	Aug. 24, 2022

Note:

Testing Site Information

Brand Name: TDK

Dimension: 11m*6m*6m

Characteristic: Fully Anechoic Chamber

4. Test Facility and Configuration

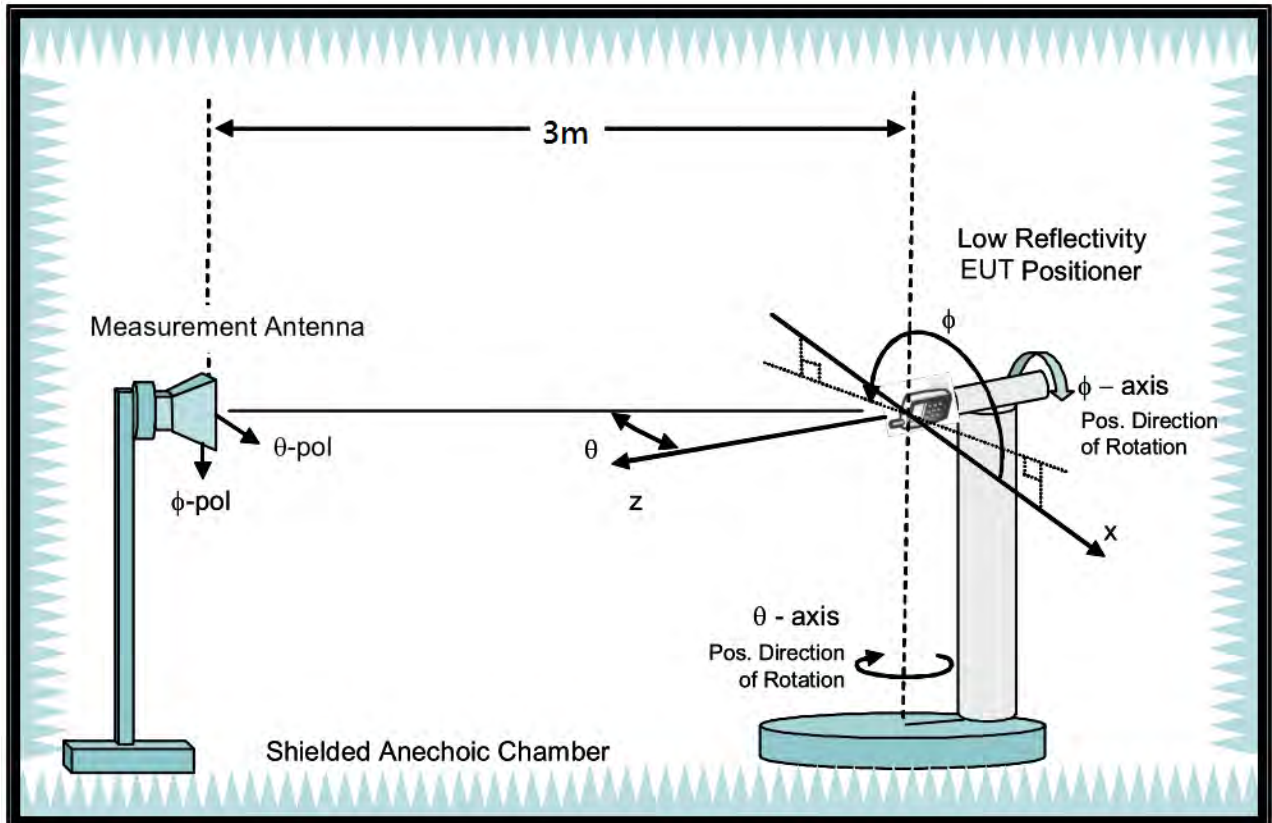
Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Measurement antenna: Dual Polarization Horn antenna

Turntable: Multi-axis positioner (Theta and Phi angle).

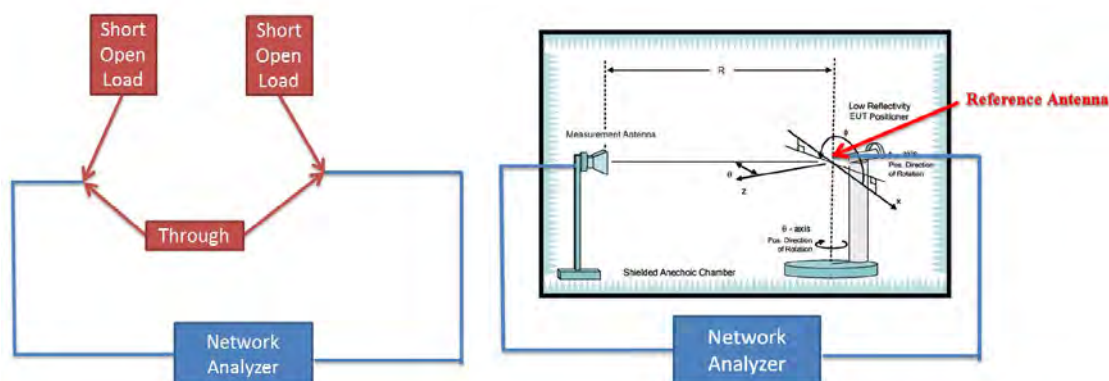
#Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1"



5. Reference Calibration

Connected cables to VNA calibration kit and use network analyzer internal function to do calibration. Do short, open and load to each side. Then connect through to both side and calibrate G values. The cable loss is calibrated and set inside the network analyzer.

Measurement Antenna is connected to port1 of Network analyzer and reference antenna connected to port 2 of Network Analyzer. Record G values and used with reference antenna gain to calculate gain factor.



Frequency (MHz)	2400	2450	2500	5150	5200	5300	5600	5750	5800	5900	6000	6500	7000	7200
G(theta) reading (dB)	-33.55	-33.27	-32.92	-32.91	-32.73	-32.02	-32.67	-32.82	-32.98	-33.18	-32.8	-33.92	-34.62	-35.57
G(phi) reading (dB)	-33.15	-32.7	-32.41	-32.61	-32.43	-31.72	-32.37	-32.51	-32.52	-32.66	-32.5	-33.62	-34.32	-35.48
Reference gain (dBi)	10.1	10.4	10.7	12.5	12.7	13.5	13.4	13.3	13.3	13.2	13.4	12.5	12.1	11.4
Factor(theta) (dB)	43.65	43.67	43.62	45.41	45.43	45.52	46.07	46.12	46.28	46.38	46.2	46.42	46.72	46.97
Factor(phi) (dB)	43.25	43.1	43.11	45.11	45.13	45.22	45.77	45.81	45.82	45.86	45.9	46.12	46.42	46.88

Note:

$$G \text{ reading (dB)} = 20 \cdot \log(V_2/V_1) = 10 \cdot \log(P_2/P_1)$$

V2 is the voltage of VNA port2 is measured, V1 is the voltage of VNA port1 is the reference source.

P2 is the power of VNA port2 is measured, P1 is the power of VNA port1 is the reference source.

$$\text{Factor} = \text{gain factor} + \text{power gain conversion} = (\text{Reference antenna gain}) - (G \text{ reading})$$

6. Test Method

EUT set on multi-axis positioner and adjust EUT's physical center to measurement reference center. Measurement antenna set at phi polarization and 1.5 meter height. Port 1 of Network analyzer connect to antenna 1 of EUT. Record G value every 7.5 degree from 0 to 352.5 degree on Phi angle and 0 to 180 on theta angle of multi-axis positioner. Then set measurement antenna to theta polarization and repeat process. Repeat process to each antenna of EUT.

DG steps:

1. Each Phi and Theta polarization antenna gain are measured for all test angles.
2. Composite Phi and Theta antenna gain are computed, using formula in KDB662911 D01 d) (i) and e) (ii), for all angles.
3. Composite antenna gain are examined for all angles to determine max gain and Phi/Theta position. Max gain and phi/theta position are listed in section 7 tables.

Note: Antenna gain = G reading + factor, The factor of chapter five includes reference antenna gain factor and power gain conversion.

7. Measured Values and Calculation of Maximum Gain Positions

<For 2.4GHz and 5GHz>

DG_1SS max value position

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 (dBi)	4.84	5.06	3.9	5	4.33
Ant. 2 (dBi)	-0.87	-2.41	-1.96	-1.7	-1.86
DG [1SS] (dBi)	5.46	5.11	4.47	5.29	4.79
Polarization	Phi	Phi	Phi	Phi	Phi
Θ (°)	97.5	135	135	150	150
Φ (°)	180	157.5	172.5	150	150

Note: The DG 1SS max value position is the maximum value of section 11 table DG 1SS Result.

DG_1SS max value position calculation

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 [$10^{(G/20)}$]	$10^{(4.84/20)}$	$10^{(5.06/20)}$	$10^{(3.9/20)}$	$10^{(5/20)}$	$10^{(4.33/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(-0.87/20)}$	$10^{(-2.41/20)}$	$10^{(-1.96/20)}$	$10^{(-1.7/20)}$	$10^{(-1.86/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.746	1.791	1.567	1.778	1.646
Ant. 2 [$10^{(G/20)}$] value	0.905	0.758	0.798	0.822	0.807
Sum All Antenna [Amax]	2.651	2.548	2.365	2.601	2.454
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.46	5.11	4.47	5.29	4.79

Note:

Directional Gain (1SS) is the max value of every look angle. Each position value is calculated by KDB662911 D01 d) (i).

Directional gain (1SS) = $10 \cdot \log(10^{(G_{ant1}/20)} + 10^{(G_{ant2}/20)} + 10^{(G_{ant3}/20)} + 10^{(G_{ant4}/20)} + \dots)^{2/N_{ant}}$

<For 6GHz>

DG_1SS max value position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-2.05	2.79	-3.93	2
Ant. 2 (dBi)	-1.14	-6.77	1.97	-4.93
Ant. 3 (dBi)	-1.94	-13.53	-0.48	-9.85
Ant. 4 (dBi)	-1.73	0.91	-6.81	0.01
DG [1SS] (dBi)	4.31	3.97	4.33	3.94
Polarization	Theta	Phi	Theta	Phi
$\Theta (^{\circ})$	52.5	0	135	37.5
$\Phi (^{\circ})$	120	22.5	157.5	22.5

Note: The DG 1SS max value position is the maximum value of section 11 table DG 1SS Result.

DG_1SS max value position calculation

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 [$10^{(G/20)}$]	$10^{(-2.05/20)}$	$10^{(2.79/20)}$	$10^{(-3.93/20)}$	$10^{(2/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(-1.14/20)}$	$10^{(-6.77/20)}$	$10^{(1.97/20)}$	$10^{(-4.93/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-1.94/20)}$	$10^{(-13.53/20)}$	$10^{(-0.48/20)}$	$10^{(-9.85/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-1.73/20)}$	$10^{(0.91/20)}$	$10^{(-6.81/20)}$	$10^{(0.01/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.79	1.379	0.636	1.259
Ant. 2 [$10^{(G/20)}$] value	0.877	0.459	1.255	0.567
Ant. 3 [$10^{(G/20)}$] value	0.8	0.211	0.946	0.322
Ant. 4 [$10^{(G/20)}$] value	0.819	1.11	0.457	1.001
Sum All Antenna [Amax]	3.286	3.159	3.293	3.149
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.31	3.97	4.33	3.94

Note:

Directional Gain (1SS) is the max value of every look angle. Each position value is calculated by KDB662911 D01 d) (i).

Directional gain (1SS) = $10 \cdot \log(10^{(G_{ant1}/20)} + 10^{(G_{ant2}/20)} + 10^{(G_{ant3}/20)} + 10^{(G_{ant4}/20)} + \dots)^2/N_{ant}$

8. Summary of Test Result

<For 2.4GHz and 5GHz>

Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	5.41	5.06	4.26	5.01	4.76
Ant. 2 Max Gain (dBi)	2.96	2.91	3.33	3.97	3.8
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/157.5/150	Phi/135/157.5	Phi/135/165	Theta/150/232.5	Theta/150/232.5
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/52.5/30	Theta/30/105	Theta/30/112.5	Theta/22.5/120	Phi/45/15
Max Gain (dBi)	5.41	5.06	4.26	5.01	4.76
DG [1SS] (dBi)	5.46	5.11	4.47	5.29	4.79
DG [2SS] (dBi)	5.41	5.06	4.26	5.01	4.76

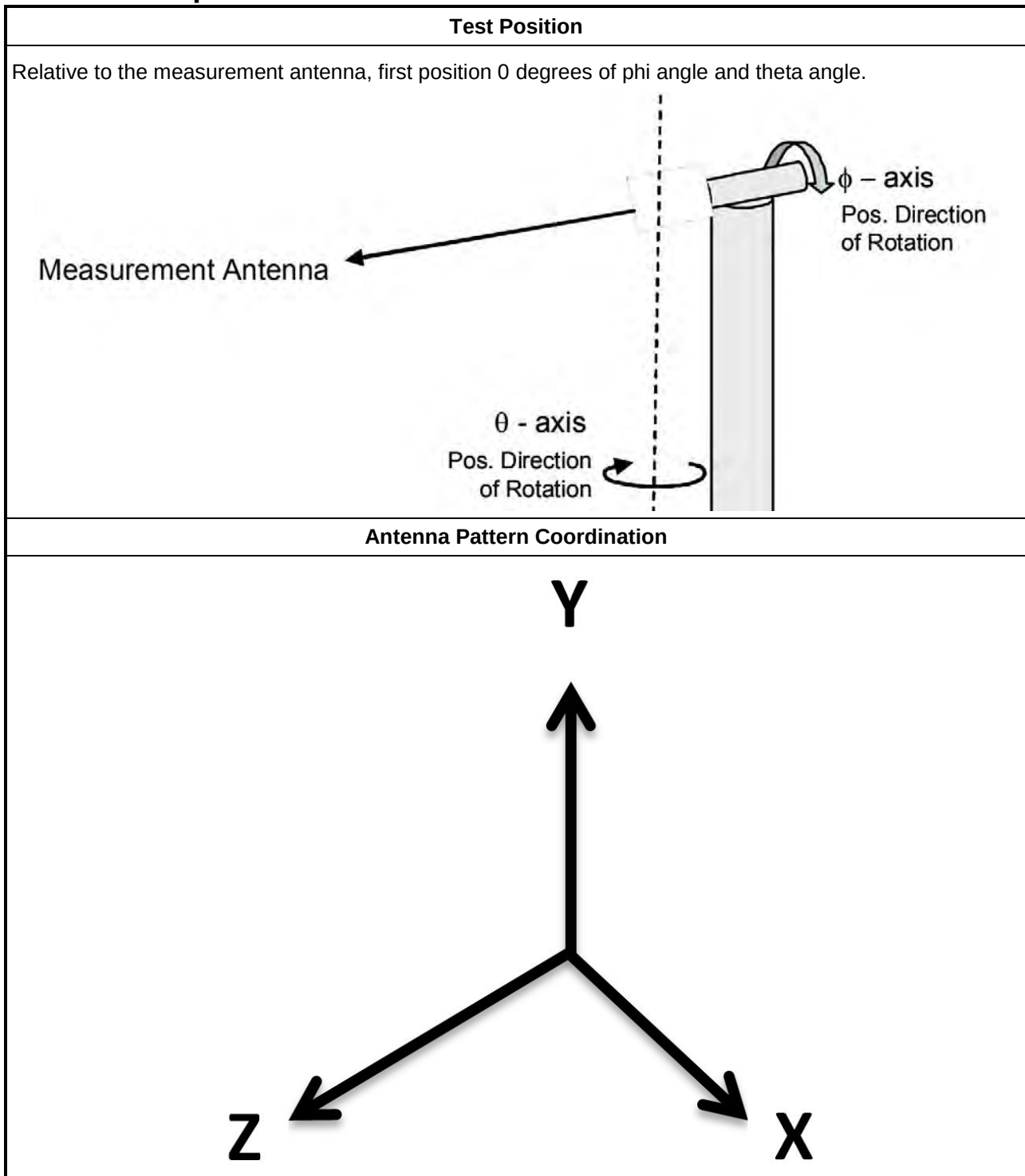
<For 6GHz>

Freq(Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	4.06	3.64	4.3	3.51
Ant. 2 Max Gain (dBi)	1.65	1.44	2.31	2.08
Ant. 3 Max Gain (dBi)	2.58	1.31	2.03	2.7
Ant. 4 Max Gain (dBi)	2.51	2.82	3.53	3.79
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/150/247.5	Phi/112.5/330	Phi/127.5/322.5	Theta/157.5/240
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/127.5/142.5	Theta/105/142.5	Theta/105/142.5	Theta/105/15
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/127.5/37.5	Theta/120/30	Theta/82.5/172.5	Theta/97.5/172.5
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/60/202.5	Phi/52.5/202.5	Phi/37.5/165	Phi/30/165
Max Gain (dBi)	4.06	3.64	4.30	3.79
DG [1SS] (dBi)	4.31	3.97	4.33	3.94
DG [2SS] (dBi)	4.06	3.64	4.30	3.79
DG [4SS] (dBi)	4.06	3.64	4.30	3.79

Note:

1. Antenna max gain is the max value of each individual antenna through all measurement angles.
2. The max gain is the max value of all antennas.
3. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
4. Directional Gain (4SS) = Directional Gain (1SS) – 6dB. If directional gain is less than max gain, use max gain as directional gain.

9. Test Setup



Note:

Photos of Test Position: Please refer to the test photos in the appendix.

**10. Test Equipment and Calibration Data**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1543	1GHz~18GHz	May 31, 2022	May 30, 2023
Dual Polarization Horn Antenna	Sporton	S0209DP	S0209DP-001	2GHz~9GHz	N.C.R.	N.C.R.
ENA Series Network Analyzer	AGILENT	E5071C	MY46419201	100kHz~8.5GHz	Feb. 21, 2022	Feb. 20, 2023
VNA Calibration Kit	TS RF	TS85033E-F	-	DC~9GHz	N.C.R.	N.C.R.
Multi-axis positioner	Sporton	MAPS01	MAPS01-001	Theta / Phi axis	N.C.R.	N.C.R.
Test Software	SPORTON	SENSE-RDG	V1.0.8	-	N.C.R.	N.C.R.

Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.



11. Test Results

Please refer to the appendix.

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Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	5.41	5.06	4.26	5.01	4.76
Ant. 2 Max Gain (dBi)	2.96	2.91	3.33	3.97	3.8
Ant. 1 Polarization/θ(°)/Φ(°)	Phi/157.5/150	Phi/135/157.5	Phi/135/165	Theta/150/232.5	Theta/150/232.5
Ant. 2 Polarization/θ(°)/Φ(°)	Phi/52.5/30	Theta/30/105	Theta/30/112.5	Theta/22.5/120	Phi/45/15
Max Gain (dBi)	5.41	5.06	4.26	5.01	4.76
DG [1SS] (dBi)	5.46	5.11	4.47	5.29	4.79
DG [2SS] (dBi)	5.41	5.06	4.26	5.01	4.76



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

DG 1SS Result

Freq(Hz)	2.45GPol.	PhiH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	0.09/-0.02	-0.19/-0.61	-1.1/-1.29	-0.95/-0.65	-0.43/-0.53	-0.77/-1.01	-1.44/-1.84	-2.58/-3.64	-4.44/-3.93	-3.67/-2.5	-1.49/-0.59	0.03/0.58	0.93/1.08	1.04/0.97	0.82/0.48	0.28/0.06	0.04/-0.2	-0.39/-0.84	-1.45/-2.22	-3.32/-4.27	-4.53/-3.91	-2.83/-1.82	-1.16/-0.77	-0.33/0.04
Θ(7.5°)	1.44/1.29	1.14/0.91	0.64/0.43	0.31/0.39	0.44/0.52	0.42/0.28	-0.2/-0.61	-1.2/-1.9	-2.61/-3.18	-3.13/-2.47	-1.98/-1.36	-0.91/-0.36	-0.15/-0.05	-0.46/-0.81	-1.26/-1.65	-1.96/-1.92	-2.54/-3.07	-3.61/-4.68	-5.35/-6.56	-6.15/-5.27	-3.5/-2.19	-1.01/-0.11	0.69/1.14	
Θ(15°)	2.65/2.76	2.67/2.54	2.31/1.81	1.39/0.88	0.63/0.48	0.39/0.24	-0.1/-0.41	-0.84/-1.37	-1.81/-2.42	-2.69/-2.24	-1.66/-0.92	-0.36/0.14	0.42/0.43	0.08/-0.73	-1.74/-3.03	-3.91/-4.59	-5.05/-5.79	-6.82/-7.82	-8.71/-7.71	-6.94/-6.17	-5.42/-4.24	-2.61/-1.26	0.12/1.17	2.05/2.56
Θ(22.5°)	3.23/3.3	3.39/3.43	3.13/2.57	1.88/1.06	0.74/0.66	0.63/0.41	0.23/0.6	-0.48/-1.02	-1.8/-2.48	-2.62/-1.76	-0.93/-0.06	0.72/1.41	1.84/1.89	1.40/0.57	-0.82/-2.45	-4.34/-5.39	-6.31/-7.24	-8.19/-8.9	-8.79/-7.28	-5.5/-4.35	-3.68/-3.07	-1.9/-0.62	0.67/1.76	2.46/3.04
Θ(30°)	2.46/2.8	3.23/3.3	3.06/2.72	2.05/1.32	0.86/0.7	0.47/0.56	0.55/0.51	0.26/0.45	-1.49/-2.39	-2.29/-1.42	-0.44/0.46	1.12/1.8	2.35/2.55	2.39/1.73	0.64/-1.03	-3.29/-5.38	-6.45/-7.59	-8.46/-8.85	-8.65/-7.01	-5.22/-4.28	-3.74/-0.9	-3.5/-1.61	-0.38/0.76	1.65/2.15
Θ(37.5°)	1.27/1.88	2.52/8.1	2.87/2.58	1.92/1.23	0.89/0.7	0.61/0.44	0.46/0.88	1.03/0.69	0/-0.71	-0.84/-0.06	0.25/0.48	0.71/1.12	1.63/1.78	1.77/1.48	0.49/-1.11	-3.35/-5.61	-7.11/-8.41	-8.59/-8.56	-7.69/-6.51	-5.51/-4.77	-4.76/-5.22	-4.75/-2.93	-1.53/-0.31	0.36/0.82
Θ(45°)	0.77/1.6	2.49/2.93	3.04/2.79	2.37/1.8	1.41/1.4	0.97/0.63	0.46/0.64	0.83/1.13	0.93/0.73	0.92/1.2	1.06/0.7	0.32/-0.16	-0.16/0.43	0.76/0.93	0.41/-0.86	-2.55/-4.27	-6.1/6.79	-6.5/-5.8	-5.46/-5.23	-4.58/-4.63	-5.21/-5.83	-5.11/-3.31	-1.72/-0.8	-0.34/0.03
Θ(52.5°)	0.71/0.8	2.11/2.88	3.38/3.42	3.13/2.62	2.35/2.1	2.03/1.75	1.43/1.08	1.02/1.16	1.36/1.72	2.22/3.1	1.96/1.43	0.63/-0.42	-1.4/-1.83	-1.17/-0.37	-0.48/-1.42	-3.34/-5.52	-6.75/-7.03	-6.35/-6.17	-6.4/-6.6	-6.26/-5.78	-8.02/-11.52	-12.04/-8.94	-5.39/-3.48	-2.31/-1.81
Θ(60°)	0.30/0.1	0.35/1.41	2.45/3.11	3.02/2.72	2.39/2.19	2.11/1.86	1.59/1.46	1.49/1.65	1.86/2.11	2.69/2.85	2.76/2.25	1.36/-0.11	-2.11/-3.89	-3.29/-1.95	-1.66/-2.99	-5.83/-7.93	-7.55/-5.94	-5.65/-6.26	-6.4/-7.44	-7.01/-5.95	-7.47/-8.8	-4.67/-1.86	-0.37/0.38	0.83/0.62
Θ(67.5°)	3.12/2.49	1.64/0.78	0.96/1.76	1.91/1.78	1.69/1.57	1.42/1.24	1.12/1.41	2.03/2.32	2.82/3.18	3.73/3.78	3.57/2.96	2.27/1.03	-0.03/-0.7	-1.06/-0.82	-1.11/-3.04	-6.17/-7.55	-6.06/-4.28	-3.96/-4.28	-4.7/-6.52	-6.86/-6.72	-7.33/-5.85	-1.83/0.82	2.11/2.77	3.21/3.25
Θ(75°)	4/3.78	3.22/1.4	1.56/1.61	1.62/1.41	1.12/0.98	0.78/0.82	1/1.54	2.19/2.62	3.15/3.66	3.96/4.02	3.54/0.38	2.57/2.49	2.49/1.87	0.7/-0.1	-0.7/-2.14	-5.84/-8.64	-6.33/-3.96	-4.11/4.91	-6.25/-9.36	-8.84/-9.3	-9.09/-8.42	-4.39/-0.91	1.19/2.15	3.06/3.73
Θ(82.5°)	3.72/3.73	3.17/1.97	1.49/1.91	1.20/9.2	0.49/0.23	0.23/0.6	1.13/1.45	1.68/2.15	2.58/2.97	2.29/1.73	2.52/2.53	3.54/1.2	4.15/3.47	1.85/0.19	-0.57/-1.76	-5.5/-12.43	-8.21/-4.09	-2.46/-1.9	-2.54/-4.86	-5.49/-5.25	-5.5/-5.97	-4.89/-2.83	-0.74/0.72	1.97/3.04
Θ(90°)	2.77/3.34	2.93/1.95	1.52/1.21	0.87/0.58	0.35/0.35	0.83/1.61	2.22/2.46	2.54/2.71	2.96/3.06	2.89/2.81	2.93/3.43	4.09/4.68	4.79/4.31	2.77/0.96	0.36/-0.43	-3.08/-9.12	-12.3/-7.2	-3.53/-1.6	-1.4/-3.12	-4.63/-4.68	-7.04/-3.33	-4.81/-3.15	-2.36/-0.9	0.64/1.79
Θ(97.5°)	2/2.54	2.22/1.75	1.96/2.13	2.04/1.79	1.52/1.43	1.66/2.28	2.73/2.96	3.39/3.32	3.13/1.77	3.33/3.6	4.334/9.7	5.46/4.74	3.17/1.09	0.1/-0.52	-2.7/-6.87	-9.97/-6.45	-3.91/-2.81	-2.88/-5.08	-6.14/-6.33	-10.77/-10	-3.92/-1.8	-2.07/-1.31	0.28/1.39	
Θ(105°)	1.92/2.29	2.01/1.13	0.88/0.91	0.60/2.6	0.08/0.27	0.56/1	1.63/1.78	2.01/2.34	2.75/2.85	2.81/3.09	3.44/3.43	3.99/4.48	4.73/4.25	2.89/1.3	0.22/-0.08	-1.86/-6.07	-9.37/-6.68	-4.31/-2.98	-3.7/-6.85	-8.71/-8.45	-8.93/-8.94	-5.76/-3.01	-3.18/-2.82	-0.04/1.38
Θ(112.5°)	1.25/1.66	1.89/1.79	1.71/1.59	0.81/0.14	0.09/0.36	0.52/0.68	0.88/1	1.21/6.2	2.17/2.43	2.64/3.04	32.85	3.74/5.8	4.92/4.81	4.02/2.47	0.83/-0.25	-2.95/-8.85	-11.81/-7.67	4.92/-4.2	-5.02/-8.32	-10.54/-12.6	-11.06/-10.69	-9.38/-6.68	-5.12/-4.63	-1.52/0.39
Θ(120°)	1.3/0.96	0.94/0.98	1.47/1.56	1.06/0.25	-0.05/0.28	0.57/0.71	0.63/0.58	0.74/1.13	1.89/2.56	3.09/3.56	3.62/3.26	4.17/4.78	4.66/4.81	3.4/0.61	-2.91/-4.36	-6.9/-12.67	-14.51/-8.57	-5.66/-4.72	-5.62/-7.19	-6.82/-6.8	-7.84/-7.76	-5.42/-3.08	-1.72/-0.96	0.03/1.01
Θ(127.5°)	3.13/2.87	2.58/2.2	2.17/1.86	1.28/0.66	0.53/0.88	1.36/1.65	1.63/1.69	1.85/2.24	2.66/3.19	3.69/3.92	3.984/21	4.35/3.77	2.69/1.04	-0.86/-3.21	-3.21/-3.28	-4.45/-7.33	-9.13/-9.79	-8.29/-8.8	-12.23/-12.09	-7.24/5.4	-4.86/-4.16	-1.92/-0.04	1.13/1.88	2.55/2.96
Θ(135°)	2.99/3.2	3.31/3.21	3.06/2.66	1.81/0.3	0.55/0.59	0.85/1.28	1.52/1.62	1.91/2.39	2.93/5.3	3.96/4.17	4.17/4.14	3.65/2.66	1.58/0.84	0.11/-0.56	-0.98/-2.04	-4.45/-7.66	-11.33/-8.41	-5.22/-4.99	-7.53/-11.37	-12.8/-12.21	-14.77/-10.25	-5.86/-2.39	-0.40/8.1	1.79/2.53
Θ(142.5°)	1.34/1.84	2.1/2.06	1.55/0.83	-0.31/-1.68	-2.18/-1.87	-1.48/-1.11	-0.62/-0.35	0.25/0.96	1.87/2.54	3.07/3.28	3.22/2.98	2.55/1.98	1.51/1.31	0.73/-0.05	-1.45/-3.56	-6.58/-11.03	-11.69/-7.68	-5.6/-5.1	-5.7/-6.46	-6.16/-6.41	-7.27/-8.7	-8.33/-6.57	-4.09/-2.41	-0.88/0.42
Θ(150°)	-0.22/-0.01	-0.16/-0.47	-1.16/-2.04	-3.39/-3.48	-2.46/-1.6	-0.86/-0.39	0.12/0.4	0.82/1.28	1.91/2.43	3.063/5.3	3.36/2.99	2.41/1.84	1.31/0.43	-0.58/-2.03	-3.55/-4.91	-5.46/-5.67	-6.08/-6.67	-6.99/-6.19	-4.87/-3.54	-3.16/-2.35	-1.94/-1.4	-1.0/-0.86	-0.67/-0.35	
Θ(157.5°)	1.07/0.45	-0.67/-1.05	-1.66/-1.21	-1.25/0.91	-0.78/-0.17	0.09/0.44	0.81/2.6	1.78/2.35	2.21/2.9	3.44/3.84	3.88/3.65	3.16/2.62	2.23/2.54	2.01/1.18	0.34/-0.79	-1.67/-2.35	-3.08/-3.96	-5.23/-6.1	-6.53/-6.04	-4.75/-3.29	-2.45/-1.26	-0.27/0.34	0.93/1.28	1.42/1.36
Θ(165°)	1.37/0.6	-0.33/-1.44	-1.44/-1.56	-1.14/-1.27	-1.31/-1.57	-2.08/-2.23	-2.17/-1.62	-0.81/-0.03	1.02/2.02	2.75/3.09	3.26/3.22	2.76/2.25	1.66/0.92	0.22/-0.51	-0.92/-1.29	-1.78/-2.38	-3.34/-4.49	-5.84/-6.48	-6.23/-5.19	-4.18/-2.46	-1.99/-1.22	-0.33/0.55	1.22/1.66	1.87/1.67
Θ(172.5°)	-0.05/-0.94	-1.86/-2.81	-3.98/-4.19	-4.71/-9.8	-5.43/-6.32	-6.76/-7.69	-7.92/-5.66	-3.64/-1.13	-3.06/-2.5	-1.62/-1.12	-1.29/1.161	-1.89/-2.35	-2.12/-0.9	-3.83/-1.56	-1.58/-2.04	-2.92/-4.17	-5.67/-1.12	-7.73/-6.82	-5.51/-4.35	-1.81/-1.51	-1.05/-0.37	0.27/0.55	0.67/0.43	
Θ(180°)	-1.54/-1.95	-2.9/-3.58	-4.7/-5.96	-7.36/-9.73	-11.48/-11.59	-10.43/-9.14	-7.83/-6.98	-6.14/-6.03	-5.75/-5.41	-5.14/-3.8	-3.73/-3.04	-2.56/-1.91	-1.62/-1.57	-1.71/-2.15	-2.83/-4.12	-5.66/-7.99	-9.86/-9.66	-7.51/-6.26	-5.17/-4.72	-4.59/-4.36	-3.85/-3.62	-3.27/-2.63	-2.06/-1.62	-1.46/-1.52
Freq(Hz)	2.45GPol.	ThetaH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-2.71/-2.97	-3.49/-4.02	-4.6/-5.41	-3.8/-2.64	-1.97/-1.71	-1.67/-1.79	-2.31/-2.57	-2.41/-2.36	-2.05/-2.03	-2.02/-2.16	-2.31/-2.52	-2.63/-2.84	-3.06/-3.41	-3.97/-4.95	-4.81/-4.62	-3.39/-2.29	-1.72/-1.19	-0.72/-0.57	-0.45/-0.6	-0.91/-1.36	-1.77/-2.12	-2.55/-2.41	-2.23/-2.38	-2.16/-2.32
Θ(7.5°)	-2.75/-3.25	-3.43/-3.65	-3.58/-3.14	-2.2/-2.13	-0.51/-0.2	-0.13/-0.53	-1.28/-1.81	-2.61/-2.9	-3.11/-3.17	-3.1/-3.07	-3.07/-2.86	-3.18/-3.47	-4.08/-4.66	-5.74/-6.24	-6.05/-5.79	-4.41/-3.57	-2.79/-2.2	-1.82/-1.39	-1.04/-0.96	-0.96/-0.96	-1.18/-1.42	-1.69/-1.87	-2.06/-2.16	-2.2/-2.3
Θ(15°)	-3.06/-3.56	-3.82/-3.23	-2.2/-1.42	-0.4/0.1	1.03/1.32	1.26/0.92	0.18/-0.63	-1.39/-2.08	-2.57/-2.74	-2.95/-3.07	-2.32/-3.32	-3.48/-3.88	-4.46/-4.81	-5.94/-6.89	-6.46/-5.94	-4.58/-3.76	-3.12/-2.7	-2.02/-1.66	-1.23/-0.79	-0.71/-0.61	-0.84/-1.12	-1.69/-1.84	-2.23/-2.63	-2.64/-2.79
Θ(22.5°)	-3.52/-3.75	-3.92/-2.6	-1.17/0.11	0.76/1.45	1.95/2.11	1.97/1.31	0.58/-0.31	-0.99/-1.55	-1.72/-1.96	-2.24/-2.58	-2.96/-3.06	-3.58/-3.63	-3.97/-4.64	-4.8/-5.08	-5.34/-5.24	-4.98/-4.1	-3.72/-2.56	-1.99/-1.64	-1.13/-0.93	-0.78/-0.92	-1.12/-1.5	-2.05/-2.46	-2.78/-2.76	-2.89/-3.19
Θ(30°)	-3.58/-4.34	-3.82/-2.52	-0.93/0.21	1.16/1.97	2.47/2.51	2.32/1.65	0.87/-0.17	-0.65/-0.94	-0.9/-0.69	-0.64/-1.03	-1.32/-1.65	-2.12/-2.61	-2.78/-2.83	-2.77/-2.84	-3.14/-3.91	-4.5/-5.46	-3.71/-3.16	-2.62/-2.52	-2.65/-2.98	-3.38/-3.38	-3.26/-3.16	-3.02/-2.71	-2.61/-2.69	-2.78/-3.14
Θ(37.5°)	-4.17/-4.68	-4.23/-2.9	-1.46/-0.16	1.08/1.95	2.41/2.69	2.16/1.67	1.44/0.64	0.14/0.04	-0.13/-0.34	-0.28/-0.73	-0.82/-1.32	-2.2/-2.61	-2.84/-2.83	-2.04/-1.93	-2.16/-2.83	-3.93/-4.75	-4.71/-4.36	-4.25/-4.52	-4.5/-6.77	-6.97/-6.11	-4.56/-5.53	-2.91/-2.48	-2.3/-2.61	-2.96/-3.57
Θ(45°)	-5.76/-6.1	-6.1/-5.37	-3.81/-2.2	-0.62/0.63	1.34/1.9	2.03/2.07	1.86/1.41	0.97/0.55	0.19/-0.23	-0.93/-1.7	-2.1/-2.81	-3.15/-3.49	-3.45/-3.02	-2.86/-2.55	-2.63/-3.42	-5.07/-6.49	-6.7/-6.22	-						



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ(15°)	-0.03/-0.08	0.01/-0.13	-0.57/-1.42	-2.44/-3.84	-4.58/-4.56	-4.85/-6.13	-7.06/-7.29	-6.44/-5.39	-3.47/-2.07	-0.63/0.21	0.72/1.45	1.92/1.84	1.91/1.92	1.76/1.03	0.04/-1.3	-2.74/-4.24	-5.55/-5.57	-6.11/-7.35	-8.56/-8.32	-8.14/-6.74	-5.33/-3.91	-2.98/-2.41	-1.57/-0.65	-0.85/-0.38
Θ(22.5°)	0.38/-0.25	-0.10/-10	0.08/-0.47	-1.03/-2.04	-3.32/-4.47	-4.46/-4.1	-4.79/-5.89	-6.13/-5.26	-3.6/-2.27	-1.08/0.26	1.21/61	1.61/1.7	1.58/1.34	0.96/-0.03	-1.72/-3.57	-5.06/-6.65	-7.59/-7.87	-6.47/-6.67	-9.15/-11.68	-12.96/-11.95	-8.24/-4.69	-3.03/-1.91	-1.05/-0.29	0.18/0.39
Θ(30°)	-0.21/-0.09	-0.07/-0.21	-0.08/-0.98	-1.67/-2.33	-3/-3.33	-4.35/-4.32	-5.41/-4.41	-4.34/-4.43	-2.71/-1.43	-0.86/-0.14	0.98/1.59	1.92/3	2.03/1.12	0.33/-0.16	-0.23/-0.63	-1.81/-3.58	-5.65/-7.96	-9.63/-9.23	-9.86/-10.56	-10.15/-8.7	-7.46/-6.63	-5.4/-4.74	-2.93/-1.49	-0.55/0.02
Θ(37.5°)	0.07/-1.39	-1.47/-0.14	0.28/-0.19	-1.22/-2.2	-3.13/-4.12	-4.61/-4.04	-4.01/-5.4	-6.04/-5.28	-4.02/-2.32	-1.02/-0.63	-0.22/0.2	0.59/0.7	0.38/-0.16	-0.05/-0.23	-0.61/-1.25	-2.73/-4.58	-6.8/-8.35	-7.51/-6.57	-7.42/-8.14	-8.6/-8.38	-5.85/-4.84	-5.62/-4.71	-3.18/-1.54	0.07/0.44
Θ(45°)	0.06/-0.66	-0.77/-0.5	-0.04/-0.27	-1.12/-1.77	-2.44/-4.23	-5.61/-6.8	-4.22/-4.77	-5.99/-5.62	-4.18/-3.19	-2.05/-1.41	-1.41/-1.05	-0.45/0.09	0.57/-0.22	-1.57/-1.92	-1.37/-1.57	-2.93/-4.62	-4.95/-6.58	-9.86/-9.14	-8.98/-10.4	-8.34/-7.56	-9.58/-12.2	-10.55/-8.42	-4.82/-3.64	-1.81/-0.63
Θ(52.5°)	0.02/0.29	-0.37/-0.1	-0.12/-0.91	-1.8/-2.52	-2.86/-3.71	-3.67/-4.52	-4.66/-4.54	-4.23/-3.63	-2.91/-2.06	-1.48/-0.94	-1.05/-0.31	-0.22/-1.24	-2.29/-2.28	-1.91/-1.55	-2.15/-4.13	-5.38/-5.83	-5.86/-7.53	-10.45/-11.92	-9.21/-9.73	-12.25/-12.96	-10.69/-9.12	-6.5/-4.23	-2.51/-1.32	-0.31/-0.41
Θ(60°)	-0.49/0.52	0.47/-0.11	-0.72/-1.28	-1.78/-2.08	-2.71/-2.74	-2.4/-3.68	-5.2/-5.24	-4.38/-5.01	-4.6/-4.6	-4.22/-2.96	-3.52/-2.96	-2.29/-0.36	0.73/0.97	0.23/-0.98	-2.64/-4.18	-6.77/-8.02	-8.53/-8.33	-14.4/-14.02	-10.96/-11.54	-10.95/-11.12	-10.01/-10.16	-12.1/-6.42	-3.26/-1.04	-0.94/-1.16
Θ(67.5°)	-1.47/0.34	0.29/-0.6	-1.61/-1.94	-2.22/-2.65	-3.06/-2.9	-3.24/-2.96	-2.95/-3.14	-2.63/-2.89	-3.61/-3.54	-2.83/-2.51	-2.18/0.52	1.74/0.86	-0.44/-2.75	-1.45/-1.32	-1.96/-4.2	-4.78/-7	-11.17/-9.92	-11.63/-14.52	-11.26/-12.66	-12.63/-10.93	-10.2/-10.26	-8.93/-7.58	-3.99/-1.81	-1.69/-2.94
Θ(75°)	-1.36/-0.7	-1.16/-1.32	-1.44/-1.26	-1.34/-1.63	-2.34/-1.87	-2.53/-2.32	-1.84/-2.35	-2.14/-1.82	-2.77/-3.3	-1.3/-0.02	-0.36/0.2	-0.6/-2.2	-1.27/-1.06	-1.29/-2.44	-3.47/-8.49	-10.62/-10.45	-10.14/-6	-7.88/-12.75	-14.04/-11.56	-10.8/-9.57	-5.58/-6	-7/-4.68	-2.55/-3.1	-3.54/-2.98
Θ(82.5°)	-0.91/-1.59	-2.09/-2.1	-0.48/0.03	-1.52/-2.4	-2.03/-2	-3.11/-2.38	-2.02/-2.31	-2.11/-1.43	-3.13/-3.96	-1.99/-1.23	-1.84/-0.03	1.08/0.59	0.09/-1.54	-3.74/-4.76	-4.94/-6.35	-8.87/-5.48	-8.61/-9.94	-6.21/-12.08	-13.63/-10.05	-15.14/-11.23	-10.03/-5.45	-2.63/-1.99	-2.83/-4.93	-2.91/-1.43
Θ(90°)	-0.57/-3.33	-1.47/-0.39	-0.44/0.06	-0.89/-2.15	-1.63/-1.75	-2.52/-1.8	-1.24/-1.61	-0.86/-0.44	-0.9/-0.95	-0.05/0.07	-0.48/-0.08	-0.52/-1.06	1.52/64	0.53/-5.43	-6.81/-6.54	-4.51/-4.25	-6.99/-12.99	-11.17/-12.79	-13.95/-11.73	-9.5/-15.92	-8.62/-8.35	-6.24/-5.88	-4.37/-3.85	-1.53/0.23
Θ(97.5°)	-3.55/-2.09	-0.37/-1.83	-0.87/-0.2	-1.57/-2.25	-2.32/-2.31	-1.46/-1.29	-2.48/-2.97	-1.19/-0.14	-0.86/-2.12	-0.46/0.57	0.85/1.7	0.75/0.5	0.34/-1	-3.05/-6.02	-8.6/-5.96	-4.19/-7.78	-14.27/-13.77	-15.12/-15.05	-12.95/-16.13	-13.57/-6.79	-6.82/-4.6	-4.32/-3.09	-0.79/-0.74	
Θ(105°)	-2.89/-2.22	-0.89/-1.71	-1.87/-0.91	-1.66/-1.9	-2.33/-2.38	-2.21/-1.51	-1.82/-2.24	-0.75/0.21	-0.27/-0.32	0.43/-0.03	-0.84/0.5	1.64/1.41	1.81/1.94	1.65/-1.88	-4.74/-6.72	-4.66/-8.39	-7.98/-7.36	-7.64/-14.1	-15.67/-10.14	-11.15/-9.87	-6.93/-9.5	-9.86/-7.42	-7.51/-4.3	-1.81/-1.27
Θ(112.5°)	-4.67/-1.86	-0.89/-2.25	-1.57/-0.62	-1.45/-2.34	-3.03/-3.07	-2.58/-2.22	-2.94/-3.43	-1.58/0.27	0.27/-1.03	-0.79/0.61	1.422/37	2.15/0.5	-0.69/-1.51	-1.17/-1.99	-5.65/-8.05	-4.95/-7.54	-13.13/-12.47	-11.63/-15.14	-13.95/-11.69	-10.9/-12.48	-10.95/-4.51	-7.64/-8.96	-7.09/-6.22	-2.96/-2.77
Θ(120°)	-5.01/-2.41	-1.73/-2.98	-2.91/-0.92	-0.89/-1.89	-3.04/-3.5	-3.66/-3.97	-4.18/-3.52	-1.42/-0.06	0.13/1.01	2.02/1.58	-0.86/0.66	1.42/0.53	-5.88/-1.16	-2.93/-3.45	-3.23/-3.34	-5.47/-9.65	-9.74/-10.65	-12.77/-12.53	-12.48/-15.41	-15.39/-15.87	-10.71/-12.31	-12.43/-11.81	-8.16/-9.01	-5.73/-1.64
Θ(127.5°)	-2.01/-2.22	-1.37/-0.89	-1.16/-3.29	-3.24/-2.68	-3.31/-4.22	-4.51/-4.55	-4.54/-3.46	-1.17/0.61	1.6/2.01	1.97/2.05	2.773/0.1	1.97/-0.53	-1.18/0.94	0.12/-1.61	-2.61/-5.88	-9.21/-10.75	-15.22/-14.41	-14.74/-13.73	-9.86/-12.48	-13.44/-12.09	-14.02/-15.4	-9.39/-4.16	-2.84/-2.35	-1.97/-1.66
Θ(135°)	-1.23/-0.93	-1.97/-2.6	-4.02/-4.67	-4.45/-4.13	-6.23/-8.18	-6.5/-3.99	-3.25/-2.99	-2.13/-1.6	-0.46/0.4	1.06/1.88	2.473/63	4.34/4.47	3.03/1.3	-0.48/-0.44	-3.69/-6.98	-8.91/-13.91	-7.65/-8.9	-14.81/-15.28	-14.77/-15.27	-12.99/-13.51	-11.74/-12.31	-12.43/-11.82	-8.16/-9.01	-5.73/-1.64
Θ(142.5°)	-6.33/-2.78	-0.19/0.36	-1.08/-2.22	-6.82/-6.13	-6.77/-9.1	-8.65/-8.1	-7.45/-5.83	-4.72/-2.85	-1.15/-0.22	0.55/1.56	2.32/55	2.57/2.23	2.14/1.7	0.53/-0.71	-1.35/-2.33	-6.31/-11.47	-13.16/-9.31	-9.94/-12.25	-12.49/-15.41	-10.77/-9.51	-9.2/-10.61	-8.31/-5.6	-3.64/-2.96	-2.84/-5.04
Θ(150°)	-6.69/-6.03	-2.37/-0.22	0.6/0.24	-1.35/-3.97	-7.82/-9.5	-10.62/-10.64	-7.64/-4.69	-2.35/-0.6	0.71/1.82	2.773/47	3.372/95	2.01/1.12	0.1/-1.5	-2.85/-2.83	-3.14/-3.43	-6.34/-3.77	-6.32/-9.48	-9.7/-13.07	-15.06/-15.42	-14.39/-12.81	-11.62/-10.09	-7.61/-5.67	-4.1/-3.71	-0.42/-5.09
Θ(157.5°)	-2.39/-3.03	-3.12/-2.56	-2.11/-1.77	-2.18/-3.71	-6.38/-10.06	-10.65/-8.6	-6.71/-4.77	-3.09/-1.13	0.57/1.94	2.562/29	1.6/0.49	-0.77/-2.25	-2.13/-1.32	-0.48/-0.23	-0.32/-1.18	-3.08/-6.54	-11.8/-14.12	-14.79/-12.68	-12.41/-11.3	-16.12/-14.69	-11.79/-9.52	-6.61/-4.58	-3.14/-2.21	-1.71/-1.82
Θ(165°)	-2.59/-2.91	-3.29/-2.65	-2.07/-1.73	-2.04/-3.41	-5.39/-8.94	-10.17/-8.77	-7.91/-5.77	-3.94/-2.19	-1/0.35	-0.24/-0.42	-0.94/-1.39	-1.45/-1.31	-0.98/-0.62	-0.34/-0.58	-1.65/-3.87	-7.46/-12.06	-14.15/-13.21	-11.59/-10.35	-9.03/-9.51	-9.84/-9.31	-7.14/-5.89	-4.14/-3.58	-2.13/-1.55	-1.45/-1.7
Θ(172.5°)	-4/-3.4	-2.44/-1.87	-2.09/-2.91	-4/-5.5	-7.28/-9.84	-9.36/-7.03	-5.9/-5.89	-5.04/-4.12	-2.72/-2.08	-1.15/-1.65	-1.87/-1.82	-1.04/-0.71	-1.15/-2.52	-10.42/-14.02	-13.64/-13.4	-13.66/-13.79	-12.71/-11.2	-11.35/-12.37	-11.49/-10.24	-9.67/-9.53	-9.07/-7.74	-5.93/-4.88	-4.47/-4.4	
Θ(180°)	-3.09/-2.96	-3.18/-3.35	-3.71/-4.75	-6.7/-8.46	-9.96/-12.04	-12.25/-10.71	-9.57/-9.54	-8.24/-7.21	-5.72/-4.14	-3.51/-4.05	-4.55/-4.51	-4.98/-6.25	-7.51/-9.92	-11.95/-12.65	-10.99/-9.89	-8.87/-9.17	-11.71/-15.5	-15.32/-15.82	-15.19/-14.36	-12.28/-10.69	-9.36/-8.79	-6.31/-4.46	-3.08/-3.08	-3.02/-2.96
Freq(Hz)	5.30GPol.	ThetaL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-5.82/-6.33	-7.45/-7.22	-7/-5.53	-4.24/-3.04	-2.19/-0.87	-1.0/0.44	0.66/0.43	0.14/-0.2	-0.66/-0.85	-1.95/-3.16	-4.08/-4.6	-5.63/-6.21	-7.81/-9.21	-11.2/-10.23	-7.94/-5.41	-3.54/-2.8	-2.24/-1.45	-0.73/-0.55	-0.32/0.09	0.61/0.58	0.01/-0.75	-1.02/-1.83	-2.67/-3.46	-4.53/-5.59
Θ(7.5°)	-7.93/-8.7	-8.97/-8.82	-8.55/-8.61	-4.66/-3.14	-2.53/-1.58	-0.43/0.4	0.77/0.43	0.02/-0.09	-0.35/-0.45	-1.28/-2.26	-3/-3.93	-4.37/-5.39	-6.55/-7.75	-8.69/-6.99	4.91/-2.86	-1.64/-0.59	0.09/0.18	0.45/0.49	0.28/0.04	-0.17/0.32	-0.72/-1.32	-1.78/-2.43	-3.38/-4.93	-6.06/-7.17
Θ(15°)	-9.46/-10.1	-10.13/-7.83	-6.38/-4.97	-2.73/-0.9	-0.07/0.01	0.2/0.86	1.47/1.61	1.21/0.62	0.53/0.53	0.3/-0.42	-1.44/-1.9	-2.89/-3.49	-4.48/-5.67	-7.06/-5.5	-4.13/-2.65	-1.33/-0.06	0.78/0.86	0.63/1.04	1.05/0.31	-1.22/-1.54	-1.69/-2.03	-2.66/-3.49	-4.16/-5.75	-6.74/-8.14
Θ(22.5°)	-9.41/-10.57	-8.77/-7.82	-5.88/-4.08	-2.14/-0.51	0.35/1.05	1.31/1.89	2.532/8.8	2.61/1.94	0.92/0.61	0.35/-0.35	-1.03/-1.7	-2.69/-3.2	-4.85/-6.63	-6.42/-6.17	-5.67/-5.07	-4.21/-3.47	-2.42/-1.89	-1.54/-1.04	-0.83/-1.93	-2.95/-3.19	-2.82/-2.58	-2.53/-3.18	-4.71/-6.46	-7.77/-8.72
Θ(30°)	-11.26/-14.89	-12.85/-9	-5.05/-3.72	-2.98/-1.96	-0.47/0.89	1.23/1.63	2.182/7.6	2.732/4.9	1.77/0.62	-0.61/-1.45	-1.69/-2.27	-2.69/-3.95	-6.95/-10.2	-10.82/-10.03	-8.62/-8.73	-7.89/-6.22	-4.56/-3.61	-3.52/-4.44	-5.18/-5.55	-5.4/-4.58	-5.02/-4.67	-4.2/-4.55	-5.29/-5.93	-7.58/-9.34
Θ(37.5°)	-10.44/-12.87	-13.59/-12.05	-5.59/-3.57	-2.53/-0.66	0.19/1.15	0.85/0.39	0.56/1.44	2.04/2.18	1.41/-0.16	-2.1/-2.8	-2.61/-3.47	-4.98/-7.5	-10.77/-10.22	-10.48/-9.21	-8.19/-6.48	-4.85/-4.54	-5.11/-4.87	-5.38/-6.32	-6.52/-6.27	-5.67/-6.09	-6.1/-6.3	-6.87/-7.21	-7.32/-8.86	
Θ(45°)	-10.75/-10.49	-9.64/-10.17	-7.38/-5.04	-0.76/0.54	0.79/0.53	-0.1/0.26	0.29/0.8	0.87/0.84	0.8/0.25	-1.64/-3.03	-3.63/-5.03	-7.68/-7.91	-6.74/-6.58	-10.32/-9.31	-7.29/-7.86	-7.3/-7.85	-9.23/-8.28	-8.83/-10.78	-7.43/-4.87	-5.75/-5.54	-8.84/-8.44	-7.62/-7.4	-8.04/-10.66	
Θ(52.5°)	-10.44/-9.72	-10.19/-7.58	-4.04/-4.2	-5.55/-2.11	-0.24/-0.23	-1.07/-0.82	0.05/0.13	-0.39/-0.27	0.1/-0.59	-2.23/-4.48	-5.02/-5.64	-6.22/-5.28	-5.21/-7.9	-12.48/-13.93	-8.57/-7.83	-10.9/-10.03	-11.47/-9.26	-8.66/-9.51	-9.7/-11.04	-9.29/-8.86	-6.9/-8.34	-10.07/-10.04	-9.6/-7.58	-8.9/-11.02
Θ(60°)	-13.57/-8.64	-6.32/-6.42	-4.68/-3.33	-3.63/-2.77	-1.99/-1.57	-1.86/-1.69	-1.75/-2.39	-2.54/-2.82	-2.6/-2.47	-3.78/-3.9	-3.68/-1.1	-8.64/-6.14	-6.15/-8.19	-12.47/-10.52	-7.13/-7.31	-7.93/-8.54	-10.68/-12.11	-12.89/-13.1	-15.36/-13.03	-11.14/-5.74	-7.46/-12.55	-11.11/-9.39	-7.79/-6.15	-8.19/-14.42
Θ(67.5°)	-11.53/-9.97	-10.09/-6.27	-3.63/-3.48	-3.85/-3.83	-3.09/-2.54	-2/-2.15	-3.1/-3	-4.09/-5.73	-4.69/-4.85	-4.95/-5.64	-6.47/-7.83	-8.26/-10.67	-12.29/-10.91	-7.55/-5.67	-8.55/-12.41	-10.19/-9.06	-7.47/-8.11	-9.71/-14.85	-11.58/-9.65	-8.09/-8.4	-9.27/-10.05	-9.58/-6.17	-9.65/-11.78	
Θ(75°)	-13.44/-10.68	-10.28/-8.67	-5.95/-4.94	-5.28																				



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ(52.5°)	1.99/-1.74	1.85/-1.2	0.67/-1.1	-0.17/-1.92	-3.07/-4.03	-4.1/-2.27	-0.85/-0.49	-0.78/-1.22	-0.74/-0.46	1.56/-1.75	2.11/-1.86	1.79/-2.87	3.47/-3.12	2.11/-1.63	0.1/-2.42	-4.01/-3.1	-2.64/-6.28	-10.63/-8.55	-10.7/-14.61	-15.73/-13.37	-10.06/-5.08	-3.65/-3.15	-0.87/-0.1	-0.01/-1.2
Θ(60°)	1.55/-0.88	1.34/-1.63	1.55/-1.06	0.25/-0.24	-1.52/-2.4	-1.6/-1.6	-2.6/-3.32	-2.64/-1.99	-1.01/-0.4	1.23/-1.65	1.28/-0.89	1.33/-1.52	1.64/-1.7	1.78/-0.43	-0.73/-1.64	-1.67/-3.23	-6.2/-7.02	-7.95/-9.59	-8.81/-13.29	-14.01/-8.98	-13.73/-7.27	-3/-2.41	-1.77/-0.09	-0.17/-1.49
Θ(67.5°)	0.25/-0.84	-0.1/-1.45	1.39/-0.44	-1.17/-1.32	-0.93/-1.84	-2.48/-1.97	-1.63/-2.08	-2.62/-2.43	-2.26/-0.51	0.54/-0.83	0.47/-0.01	1.28/-2.1	1.90/-33	0.47/-1.89	0.49/-1.94	-6.08/-7.25	-5.51/-6.7	-13.93/-10.81	-10.14/-13.54	-10.84/-14.14	-8.74/-4.16	-6.08/-6.87	-4.63/-2.28	-0.55/-0.44
Θ(75°)	-1.61/-0.92	0.99/-1.26	0.8/-0.77	-0.93/-0.89	-0.29/-1.03	-1.91/-2.29	-2.49/-1.83	-2.92/-3.72	-2.68/-1.11	-1.19/-0.96	-0.10/-65	1.84/-2.23	1.87/-0.03	-1.05/-58	1.64/-0.22	-4.22/-5.27	-6.97/-9.46	-12.16/-9.37	-13.86/-8.2	-7.4/-10.26	-6.52/-1.78	-1.12/-4.58	-5.31/-2.51	0.04/-0.12
Θ(82.5°)	-2.61/-0.6	1.45/-1.52	0.9/-1.01	-1.81/-0.31	-0.98/-2.32	-2.08/-2.06	-2.07/-2.1	-3.12/-2.64	-1.41/-1.5	-1.64/-0.18	1.94/-1.43	2.07/-2.02	1.35/-0.21	-1.52/-3.37	-3.34/-5.17	-2.93/-6.74	-11.74/-10.15	-14.95/-11.99	-11.8/-11.78	-8.07/-14.97	-3.42/-3.64	-4.76/-7.35	-4.05/-1.57	1.1/-0.58
Θ(90°)	-1.21/-1.26	0.56/-0.77	-0.54/-0.72	-1.41/-1.89	-1.74/-1.9	-2.17/-2.69	-2.08/-1.43	-3.07/-2.1	-0.84/-0.68	0.37/-1.39	1.79/-1.54	1.57/-2.27	1.44/-0.36	-1.65/-4.83	-3.65/-3.6	-5.86/-4.53	-8.54/-13.95	-11.74/-8.86	-15.47/-11.75	-9.25/-12.57	-6.95/-6.92	-5.29/-6.39	-4.48/-1.64	0.58/-1.14
Θ(97.5°)	-2.49/-0.06	0.29/-0.44	-0.4/-2.18	-1.83/-1.74	-3.01/-2.87	-3.35/-3.23	-2.09/-1.65	-2.79/-2.16	0.28/-0.77	0.88/-1.63	2.68/-1.55	-0.12/-0.07	1.71/-4	0.02/-5.46	-6.7/-4.64	-7.21/-4.62	-5.22/-8.94	-13.66/-9.57	-12.44/-12.08	-7.64/-7.96	-10.6/-4.21	-4.2/-5.04	-7.23/-1.79	-0.7/-1.38
Θ(105°)	-2.96/-1.94	-0.26/-1.89	-1.72/-1.48	-2.25/-2.32	-2.67/-1.65	-2.94/-3.86	-3.48/-1.91	-2.32/-0.95	-0/-1.22	2.55/-3.44	2.78/-1.3	0.35/-0.77	0.37/-1.52	1.59/-1.13	-3.59/-6.74	-9.45/-6.23	-6.45/-7.32	-15/-10.81	-11.93/-12.27	-9.73/-13.09	-7.57/-6.29	-6.43/-9.7	-7.85/-4.79	-1.22/-0.3
Θ(112.5°)	-1.12/-0.22	-1.26/-2.07	-2.04/-3.18	-2.92/-3.06	-4.07/-3.58	-3.18/-2.84	-2.83/-2.27	-1.78/-0.28	0.74/-1.33	1.97/-2.8	2.37/-2.18	2.68/-0.63	-2.63/-2.97	-2.69/-2.74	-5.75/-7.7	-8.64/-8.87	-8.24/-12.43	-13.35/-10.87	-13.17/-13.59	-11.37/-11.17	-11.46/-1.81	-6.83/-6.64	-4.44/-5.28	-5.87/-4.15
Θ(120°)	-2.72/-3.03	-1.38/-0.77	-1.35/-2.17	-4.77/-4.84	-4.48/-4.55	-4.42/-5.08	-3.7/-2.62	-1.05/-0.05	0.84/-0.72	2.03/-3.54	2.81/-0.8	0.20/-74	-1.39/-1.03	-2.7/-5.41	-5.52/-8.01	-4.81/-6.14	-9.17/-10.59	-11.99/-13.77	-9.68/-14.78	-6/-6.92	-9.94/-5.71	-6.22/-7.56	-6.51/-3.98	-2.34/-1.98
Θ(127.5°)	-2.68/-1.23	0.41/-0.56	-4.29/-5.16	-3.85/-4.72	-5.4/-5.67	-5.42/-3.77	-2.91/-2.63	-3.39/-1.42	0.95/-2.12	2.46/-2.06	2.24/-2.27	1.37/-0.82	-0.38/-4.33	-0.49/-0.76	-2.54/-6.58	-12.47/-9.47	-9.17/-9.6	-8.76/-9.42	-10.92/-10.01	-10.3/-7.16	-11.7/-15.42	-9.35/-6.16	-3.72/-0.96	-0.62/-1.07
Θ(135°)	-1.59/-1.52	-0.03/-0.79	-0.51/-3.02	-5.09/-6.57	-7.09/-10.43	-9.09/-7.49	-5.27/-3.91	-2.66/-0.95	1.12/-1.6	1.46/-1.61	2.86/-2.46	0.79/-0.36	1.36/-0.35	-2.96/-0.57	-1.34/-6.44	-10.08/-14.76	-12.99/-12.11	-10.31/-10.59	-13.45/-11.65	-9.4/-9.21	-15.1/-14.41	-15.29/-9.58	-6.46/-2.65	-0.69/-0.73
Θ(142.5°)	-1.18/-0.14	1.1/-1.79	0.37/-1.73	-3.14/-3.91	-4.68/-6.14	-6.7/-6.43	-6.15/-3.56	-1.68/-0.33	1.5/-2.48	2.77/-2.43	2.85/-6.7	3.49/-2.76	2.3/-1.99	0.66/-2.97	-9.6/-5.87	-5.54/-7.78	-11.38/-10.77	-9.22/-12.8	-15.42/-15.45	-12.27/-9.18	-8.68/-7.4	-7.4/-5.4	-5.01/-4.89	-4.86/-2.27
Θ(150°)	-3.54/-2.39	1.14/-2.93	2.73/-1.31	-1.64/-4.68	-7.61/-8.73	-9.64/-7.63	-4.97/-2.75	-2.1/-1.17	-0.22/-1.66	2.78/-3.84	4.79/-6.8	2.63/-1.38	-1.24/-2.54	-4.15/-4.56	-4.45/-5.21	-4.34/-5.82	-10.9/-8.03	-6.12/-7.25	-7.91/-8.62	-6.33/-6.27	-5.47/-7.21	-9.71/-6.99	-3.51/-1.67	-1.37/-2.4
Θ(157.5°)	-4.33/-3.52	-1.78/-0.47	0.49/-0.12	-0.33/-0.61	-1.89/-4.24	-5.86/-8.32	-7.05/-4.83	-2.42/-1.57	-0.43/-1.25	2.43/-3.13	2.60/-95	-1.21/-2.26	-2.43/-2.75	-2.99/-3.94	-4.69/-4	-5.41/-8.42	-11.51/-13.54	-14.74/-16.2	-14.92/-11.3	-11.63/-14.86	-11.39/-6.74	-5.07/-3.07	-1.64/-0.61	-0.49/-1.44
Θ(165°)	-1.87/-1.7	-1.4/-1.3	-1.1/-1.61	-1.87/-2.51	-4.2/-6.2	-6.98/-5.69	-4.69/-3.66	-1.93/-0.43	0.6/-1.26	1.63/-1.34	-0.04/-1.09	-1.63/-1.01	-0.34/-0.26	-0.66/-1.47	-3.07/-5.56	-9.76/-15.73	-15.29/-15.63	-13.37/-13.59	-14.4/-13.12	-10.32/-8.32	-6.28/-4.16	-3.62/-2.57	-1.69/-1.49	-2.05/-2.15
Θ(172.5°)	-3.9/-3.62	-2.45/-2.02	-1.82/-2	-2.85/-4.49	-6.38/-7.5	-6.75/-5.96	-5.8/-6.49	-5.6/-4.53	-3.25/-2.65	-2.6/-2.1	-1.45/-0.99	-0.68/-0.61	-1.1/-2.03	-3.35/-5.29	-8.07/-11.25	-11.74/-12.45	-12.02/-1.64	-11.76/-12.35	-12.95/-13.73	-12.7/-11.34	-10.09/-9.98	-9.33/-6.72	-6.15/-5.12	-4.6/-4.15
Θ(180°)	-2.17/-2.5	-2.77/-2.87	-3.78/-4.25	-5.04/-6.41	-8.38/-10.2	-10.1/-10.09	-9.37/-8.87	-7.75/-6.12	-5/-4.27	-3.65/-2.92	-3.03/-3.13	-3.98/-5.25	-6.42/-7.04	-8.63/-10.42	-10.02/-9	-8.68/-8.6	-10.06/-12.38	-13.8/-14.94	-15.48/-13.48	-11.39/-8.49	-7.79/-6.18	-5.18/-3.88	-2.67/-1.99	-1.88/-2.15
Freq(Hz)	5.785G/Pol.	Theta-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-8.54/-9.36	-9.2/-6.86	-4.12/-2.72	-1.89/-0.61	-0.06/-0.33	0.66/-0.47	0.88/-1.48	1.64/-1.62	1.31/-0.68	-0.25/-1.29	-2.58/-4.08	-5.61/-6.93	-6.95/-7.29	-7.2/-6.29	-4.58/-3.52	-1.79/-0.02	1.06/-1.81	2.14/-2.59	2.53/-1.91	1.53/-1.33	1.33/-0.45	-0.65/-1.98	-2.95/-4.38	-6.14/-7.24
Θ(7.5°)	-6.4/-6.92	-6.89/-6.19	-3.79/-2.43	-1.42/-0.58	0.48/-1.6	1.84/-2.2	2.38/-2.35	2.36/-2.17	1.54/-1.1	-0.09/-1.55	-3.06/-4.34	-5.66/-5.87	-6.71/-7.13	-7.11/-5.93	-5.1/-3.86	-2.82/-0.96	-0.31/-0.39	0.92/-2	2.41/-1.81	1.06/-0.67	0.68/-0.03	-1.06/-2.26	-2.67/-3.65	-5.44/-6.19
Θ(15°)	-5.68/-5.38	-5.53/-5.89	-5.42/-3.74	-2.08/-0.79	0.31/-1.55	2.37/-3.02	3.14/-2.91	2.73/-2.67	2.31/-1.67	0.87/-0.58	-1.63/-2.6	-3.44/-3.97	-4.4/-5.22	-6.48/-6.54	-5.43/-4.37	-2.77/-0.92	-0.14/-0.08	0.32/-0.34	0.39/-0.76	0.62/-0.54	-0.05/-0.33	-0.95/-1.77	-3.06/-4.28	-5.42/-6.03
Θ(22.5°)	-7.07/-6.99	-7.38/-8.36	-7/-2.08	-0.20/-77	1.52/-55	3.27/-3.36	2.85/-2.79	2.81/-2.48	2.06/-1.37	0.35/-0.83	-1.57/-2.14	-3.25/-4.03	-3.96/-4.93	-5.92/-5.96	-5.11/-4.09	-2.57/-1.29	-0.69/-0.57	-0.58/-1.5	-0.9/-0.05	0.42/-0.22	-0.33/-1.76	-2.58/-3.07	-4.18/-5.42	-5.4/-5.88
Θ(30°)	-6.51/-7.37	-9.9/-11.06	-6.22/-2.91	-0.88/-0.65	1.86/-2.71	2.58/-2.32	2.25/-2.98	3.58/-3.42	2.63/-1.45	0.45/-1.02	-2.37/-4.11	-5.53/-5.82	-7.05/-6.81	-6.46/-5.67	-3.63/-3.71	-4.19/-3.6	-1.91/-1.63	-2.4/-1.88	-1.13/-0.42	-0.62/-1.35	-1.99/-2.35	-3.8/-4.47	-4.63/-5	-5.73/-6.22
Θ(37.5°)	-8.85/-11.38	-10.4/-5.9	-3.57/-3.45	-2.21/-0.38	0.34/-0.06	0.06/-0.9	2.47/-3.07	3.16/-2.78	2.08/-1.38	0.94/-1.54	-3.37/-4.69	-4.52/-4.89	-7.17/-10.48	-7.52/-3.78	-2.49/-3.07	-3.67/-2.82	-2.7/-2.86	-2.15/-2.22	-1.69/-0.66	-0.64/-1.74	-2.91/-3.35	-3.55/-3.99	-4.25/-4.47	-6.24/-7.58
Θ(45°)	-10.46/-15.39	-12.09/-6.65	-4.52/-4.55	-2.02/-0.34	-0.26/-0.37	0.21/-48	2.1/-1.78	1.46/-0.83	0.50/-13	-0.58/-2.43	-4.47/-3.97	-3.05/-4.75	-9.47/-7.57	-6.41/-4.59	-5.66/-7.74	-9.43/-11.55	-7.25/-3.33	-4.26/-8.09	-5.39/-4.81	-5.05/-4.2	-4.41/-2.65	-2.2/-3.03	-3.86/-4.95	-7.41/-8.22
Θ(52.5°)	-13.75/-12.91	-9.5/-7.91	-6.1/-4.74	-2.27/-1.16	-0.99/-0.12	0.95/-1.24	1.1/-1.4	1.6/-1.39	0.1/-1.1	-2.5/-3.83	-5.07/-2.62	-2.72/-6.03	-7.48/-6.05	-5.8/-7.9	-7.21/-8.09	-7.49/-6.4	-5.97/-4.66	-4.38/-5.99	-7.75/-4.4	-4.82/-9.89	-6.68/-4.41	-3.58/-4	-4.85/-6.25	-7.38/-9.25
Θ(60°)	-10.15/-6.35	-9.77/-8.96	-5.1/-2.71	-0.55/-0.71	-1.31/-0.07	0.41/-0.18	0.37/-0.98	0.44/-0.92	-2.2/-1.96	-2.69/-5.51	-8.57/-7.95	-7.93/-8.67	-6.6/-8.71	-11.14/-10.1	-5.5/-5.67	-11.2/-12.61	-14.91/-11.22	-8.71/-7.8	-9.91/-8.85	-7.38/-7.34	-6.95/-4.1	-5.43/-5.91	-6.61/-5.29	-7.08/-10.27
Θ(67.5°)	-8.39/-6.01	-10.45/-10.17	-4.35/-2.62	-3.53/-2.76	-1.92/-0.84	-1.48/-1.91	-0.61/-0.98	-2.33/-3.94	-4.71/-4	-6.19/-9.03	-6.85/-8.04	-8.18/-6.95	-6.29/-8.25	-11.75/-9.02	-6.93/-7.5	-12.78/-13.94	-11.34/-8.28	-10.28/-11.64	-10.35/-7.01	-9.96/-12.43	-7.08/-7.48	-8.18/-8.98	-6.41/-8.62	-5.13/-11.18
Θ(75°)	-7.59/-8.75	-11.74/-5.76	-3.83/-3.95	-3.89/-2.88	-2.78/-2.26	-3.21/-2.89	-2.71/-3.37	-4.19/-6.68	-8.72/-4.55	-5.29/-11.24	-8.79/-7.29	-8.21/-7.37	-7.43/-12.77	-15.02/-10.63	-7.76/-10.66	-11.95/-13.81	-9.92/-5.24	-8.44/-12.17	-8.63/-7.55	-6.3/-11.72	-14.68/-9.48	-11.65/-11.59	-7.94/-9.76	-8.96/-7.46
Θ(82.5°)	-11.65/-12	-7.88/-6.1	-5.89/-4.72	-4.89/-6.06	-6.89/-5.09	-2.1/-1.36	-3.16/-5.48	-7.88/-8.99	-12.94/-6.61	-5.79/-9.61	-5.52/-3.7	-5.59/-7.02	-6.81/-9.67	-15.39/-9.03	-7.11/-11.65	-13.17/-11.4	-9.78/-4.13	-6.83/-11.33	-5.08/-8.29	-7.78/-10.17	-13.05/-14.7	-9.86/-13.26	-12.2/-10.81	-10.36/-7.7
Θ(90°)	-11.8/-10.04	-7.55/-7.94	-7.32/-4.44	-4.63/-4.99	-5.17/-4.64	-4.51/-4	-3.46/-5.94	-8.73/-5.32	-7.3/-8.86	-5.15/-4.31	-2.63/-4.55	-6.42/-5.47	-7.15/-6.88	-7.84/-10.2	-7.14/-3.33	-5.83/-9.06	-8.51/-9.65	-13.28/-7.24	-8.06/-6.18	-9.1/-10.93	-8.69/-12.18	-15.48/-12.69	-14.78/-8.82	-8.25/-9.45
Θ(97.5°)	-8/-6.65	-8.43/-5.82	-5.04/-6.15	-4.4/-2.47	-3.07/-4.87	-6.74/-7.46	-5.74/-5.55	-4.54/-4.68	-5.67/-8.08	-3.96/-4.23	-4.32/-3.94	-5.78/-6.61	-6.19/-4.89	-5.91/-8.14	-6.09/-3.89	-3.6/-7.61	-11.46/-10.74	-8.78/-9.23	-7.08/-13.15	-11.05/-7.33	-8.84/-14.37	-11.12/-11.64	-11.53/-11.3	-9.13/-11.69
Θ(105°)	-7.7/-4.35	-6.5/-8.55	-4.82/-2.98	-1.91/-1.83	-1.96/-3.61	-4.49/-5.27	-4.43/-4.7	-4.11/-4.34	-4.98/-9.36	-5.42/-4.94	-4.46/-3.91	-6.13/-6.37	-6.05/-5.7	-3.86/-5.09	-5.18/-6.03	-2.67/-1.94	-4.55/-7.77	-6.79/-4.9	-7.87/-8.54	-10.35/-12.13	-14.07/-14	-10.56/-10.68	-7.19/-8.5	-8.93/-13.32
Θ(112.5°)	-9.7/-4.93																							





Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ(22.5°)	-9.13/-12	-10.69/-10.42	-9.86/-10.84	-11.87/-14.68	-17.39/-19.18	-14.79/-10.3	-7.74/-6.26	-4.79/-3.71	-3.62/-3.22	-2.8/-1.97	-1.7/-2.1	-2.9/-3.31	-4.12/-4.45	-5.33/-6.51	-8.59/-11.5	-16.03/-19.55	-17.74/-18.44	-12.08/-11.39	-10.77/-12.39	-14.5/-13.64	-10.68/-6.64	-4.86/-4.51	-5.19/-5.65	-5.87/-7.16
Θ(30°)	-11.91/-11.7	-9.77/-10.51	-9.59/-12.84	-15.8/-17.88	-18.1/-17.87	-18.7/-13.51	-9.31/-6.38	-4.76/-3.4	-2.86/-2.34	-2.13/-1.71	-1.39/-1.73	-2.38/-2.49	-3.09/-5.37	-7.7/-7.72	-6.73/-6.94	-9.75/-13.87	-17.39/-18.19	-18.75/-16.3	-14.6/-13.01	-10.55/-9.59	-9.51/-9.45	-7.92/-9.5	-8.75/-8.6	-9.35/-9.9
Θ(37.5°)	-9.9/-15.81	-16.62/-9.93	-8.16/-10.57	-16.07/-18.38	-17.94/-18.1	-18.31/-12.21	-8.52/-6.55	-4.56/-3.78	-3.16/-2.46	-2.44/-3.12	-3.72/-4.12	-3.68/-3.33	-3.95/-5.45	-6.04/-6.73	-8.92/-9.24	-11.66/-15.83	-18.31/-16.21	-12.25/-9.83	-10.29/-12.51	-11.1/-20.8	-7.73/-7.08	-8.06/-7.74	-9.02/-8.09	-7.07/-7.42
Θ(45°)	-8.55/-9.46	-12/-14.45	-13.42/-14.13	-18.93/-19.2	-16.09/-18.62	-16.79/-10.1	-6.65/-5.59	-4.87/-4.22	-3.46/-3.46	-3.96/-3.97	-4.07/-3.4	-2.69/-2.35	-2.83/-4.88	-8.04/-8.66	-7.06/-6.37	-8.88/-14.78	-18.01/-19.07	-18.22/-17.51	-18.16/-16.32	-9.78/-8.02	-11.28/-15.47	-14.39/-15.4	-15.01/-17.37	-18.5/-12.43
Θ(52.5°)	-10.05/-9.64	-13.6/-14.64	-13.47/-15.1	-17.74/-18.55	-18.17/-19.08	-14.41/-11.72	-8.34/-5.42	-2.94/-2.05	-1.71/-1.71	-1.66/-0.96	-0.47/-0.08	-1.12/-1.46	-1.17/-6.35	-4.49/-2.98	-3.63/-6.27	-10.97/-17.02	-19.02/-19.19	-19.06/-19.09	-16.65/-15.47	-16.46/-18.92	-18.24/-12.91	-7.85/-6.41	-5.75/-7.42	-9.5/-13.31
Θ(60°)	-8.31/-7.93	-10.46/-16.01	-16.75/-17.02	-18.21/-17.82	-18.29/-16.35	-10.96/-10.95	-8.94/-6.03	-3.93/-3.5	-3.6/-3.6	-3.29/-2.65	-2.44/-2.54	-7.14/-4.36	-2.09/-1.22	-2.58/-6.19	-10.89/-13.53	-18.42/-12.07	-18.17/-3.34	-17.96/-19.19	-18.18/-16.83	-10.78/-11.01	-8.93/-10.09	-18.75/-16.33	-11.64/-8.09	-10.95/-11.67
Θ(67.5°)	-16.74/-10.73	-10.12/-13.03	-17.29/-17.57	-19.26/-18.55	-15.71/-10.98	-9.99/-8.21	-5.21/-3.36	-2.24/-1.89	-1.92/-1.77	-1.71/-1.82	-1.47/-0.87	-0.31/-1.02	-2.69/-5.94	-4.86/-5.11	-5.89/-7.79	-7.57/-10.59	-18.74/-19.46	-18.81/-17.58	-18.83/-14.34	-13.59/-11	-11.12/-10.76	-11.63/-19.03	-12.32/-10.39	-10.79/-18.79
Θ(75°)	-13.37/-11.43	-11.88/-13.37	-17.4/-17.83	-19.27/-18.26	-17.68/-10.59	-9.56/-6.85	-3.67/-2.63	-1.69/-1.12	-1.28/-1.63	-0.85/-0.23	-0.26/-1.24	-3.48/-4.12	-2.9/-2.46	-2.92/-9.46	-6.08/-11	-17.82/-16.5	-12.62/-10.11	-11.96/-13.32	-10.76/-9.17	-4.23/-2.69	-14.43/-11.75	-9.27/-12.72	-17.48/-17.46	
Θ(82.5°)	-10.31/-12.55	-12.31/-15.21	-10.51/-9.36	-16.06/-18.91	-13.68/-10.04	-9.29/-6.72	-5.31/-3.46	-1.61/-1.22	-2.44/-2.65	-2.18/-2.4	-2.49/-1.55	-0.4/-0.09	-1.92/-5.03	-4.78/-4.27	-7.36/-8.09	-9.66/-12.22	-17.91/-11.32	-10.12/-12.56	-16.58/-9.67	-18.06/-12.26	-9.45/-4.85	-3.27/-3.99	-7.27/-14.65	-8.4/-7.92
Θ(90°)	-5.06/-11.22	-7.92/-8.07	-11.64/-9.78	-13.47/-19.35	-12.73/-10.9	-9.92/-4.66	-3.03/-2.73	-0.74/-0.3	-0.21/-0.27	0.38/-0.25	-0.69/-1.81	-3.27/-2.26	-1/-1.17	-2.95/-5.46	-7.89/-11.1	-8.3/-11.08	-15.39/-17.35	-16.58/-18.83	-15.87/-12.62	-10.5/-18.44	-8.71/-12.84	-11.39/-12.66	-10.53/-9.16	-4.93/-3.7
Θ(97.5°)	-10.27/-5.57	-3.94/-11.19	-9.89/-7.27	-12.55/-15.85	-13.29/-11.23	-7.51/-5.47	-5.63/-3.93	-1.24/-0.43	-1.03/-1.16	0.19/-1.06	0.68/-0.3	-0.9/-0.82	-2.38/-4.44	-3.78/-1.95	-4.3/-12.61	-16/-12.61	-10.7/-11.1	-17.34/-15.57	-17.99/-18.42	-14.37/-19.6	-17.44/-8.38	-9.43/-8.57	-10.29/-5.93	-2.31/-3.56
Θ(105°)	-5.86/-5.04	-3.85/-8.13	-11.32/-9.1	-13.03/-10.97	-11.73/-12.71	-9.94/-5.35	-4.47/-3.9	-1.18/-0.03	0.03/-0.39	0.97/-1.02	-0.36/-0.35	-0.19/-1.43	-2.47/-2.47	-3.28/-5.59	-6.83/-6.6	-6.53/-10.43	-9.8/-8.56	-10.38/-15.92	-18.79/-9.74	-11.12/-12.21	-10.04/-13.12	-15.43/-13.58	-14.32/-7.16	-3.33/-3.12
Θ(112.5°)	-8.17/-3.98	-3.66/-9.44	-9.09/-6.4	-8.5/-11.18	-12.23/-11.76	-9.11/-6.34	-5.31/-3.98	-1.34/-0.26	0.04/-0.41	0.1/-1.2	2.02/-0.02	0.93/-0.46	-2.8/-3.6	-3.01/-2.12	-4.28/-7.78	-7.08/-8.64	-14.39/-18.82	-18.13/-18.34	-15.82/-12.83	-11.01/-14.5	-12.63/-3.96	-9.23/-15.29	-13.84/-10.59	-5.23/-5.52
Θ(120°)	-8.02/-1.46	-3.76/-7.96	-10.92/-6.83	-5.49/-7.1	-11.09/-12.53	-10.92/-8.18	-6.92/-4.9	-1.84/-0.17	0.77/-1.46	2.14/-2.3	1.32/-0.59	0.52/-0.56	0.08/-1.93	-2.45/-1.52	-1.86/-1.61	-1.74/-14.72	-12.85/-11.4	-18.04/-11.4	-18.61/-19.1	-14.82/-16.64	-12.45/-13.07	-11.84/-6.55	-6.13/-9.02	
Θ(127.5°)	-5.19/-6.89	-4.82/-2.83	-3.95/-9.12	-10.16/-9.17	-11.35/-12.79	-10.89/-7.98	-5.21/-2.83	-0.56/-1.15	2.12/-2.66	3.11/-3.6	3.83/-76	2.85/-1.01	0.46/-1.2	-0.15/-2.34	-5.23/-4.44	-8.55/-14.27	-18.5/-18.14	-17.6/-14.77	-14.68/-16.19	-15.45/-13.04	-16.34/-18.17	-10.27/-5.78	-3.4/-2.27	-2.61/-2.97
Θ(135°)	-3.56/-3.26	-4.06/-3.34	-4.31/-5.52	-6.03/-7.57	-12.22/-16.27	-10.99/-5.61	-3.47/-1.98	-0.54/-0.06	0.23/-0.01	0.24/-1.49	2.87/-3.8	4.26/-3.9	2.51/-0.68	-0.65/-1.46	-5.7/-10.59	-12.43/-15.25	-13.23/-15.61	-18.72/-19.33	-18.96/-18.13	-14.39/-14.52	-13.83/-13.35	-14.34/-13.4	-9.03/-10.43	-8.38/-3.66
Θ(142.5°)	-11.96/-8.43	-0.73/-0.25	-1.68/-6.52	-10.99/-9.93	-11.25/-15.31	-14.84/-9.64	-6.44/-4.48	-0.31/-2.15	-1.13/-0.11	1.11/-9.8	2.61/-2.77	2.54/-1.78	1.57/-1.48	0.2/-1.94	-3.34/-5.8	-11.38/-12.04	-16.81/-8.99	-9.55/-13.3	-18.76/-17.97	-10.64/-8.33	-9.13/-10.59	-9.74/-7.12	-3.9/-2.95	-3.47/-8.21
Θ(150°)	-6.94/-9.09	-3.89/-1.4	-1.02/-7.57	-4.45/-3.87	-16.68/-17.7	-18.19/-15.92	-7.94/-3.63	-1.04/-0.46	1.55/-2.25	2.73/-1.8	3.25/-3	2.61/-1.49	-0.52/-2.96	-4.14/-2.89	-3.06/-3.28	-3.15/-4.87	-9.11/-14.92	-10.21/-14.32	-17.95/-18.66	-17.55/-13.88	-12.44/-11.42	-9.75/-7.58	-5.28/-3.85	-3.68/-6
Θ(157.5°)	-5.98/-6.64	-5.62/-4.33	-3.38/-3.4	-4.56/-7.54	-12.35/-15.89	-11.75/-8.09	-4.52/-3.16	-1.21/-0.34	1.63/-2.6	3.06/-2.83	2.07/-8.3	-0.07/-0.75	-1.07/-0.65	0.94/-1.24	1.33/-0.77	-1.12/-5.31	-12.81/-17.69	-17.4/-15.21	-17.61/-18.15	-19.14/-16.79	-12.64/-9.39	-7.78/-6.91	-5.91/-5.03	-4.85/-5.27
Θ(165°)	-4.91/-4.76	-4.02/-2.57	-1.98/-2.11	-3.15/-5.5	-8.8/-14.36	-15.64/-10.33	-7.09/-4.33	-2.13/-0.94	-0.09/-0.41	0.58/-0.69	0.49/-0.17	0.23/-0.76	1.13/-1.53	1.36/-0.81	-0.66/-3.26	-7.36/-12.75	-16.66/-16.08	-13.57/-13.37	-13.03/-14.77	-13.54/-10.24	-6.58/-4.56	-3.38/-3.75	-3.32/-3.2	-3.3/-3.98
Θ(172.5°)	-6.65/-6.07	-4.27/-3.06	-2.88/-3.78	-5/-7.25	-10.67/-18.36	-16.39/-9.74	-6.35/-4.67	-3.72/-2.84	-1.89/-1.2	-0.47/-0.23	-0.21/-0.21	0.94/-1.09	0.68/-0.7	-2.91/-6.61	-11.38/-17.72	-16.65/-17.24	-18.84/-19.11	-18.23/-15.52	-14.63/-13.77	-12.39/-10.68	-9.07/-8.92	-9.3/-9.62	-8.11/-7.47	-7.43/-7.01
Θ(180°)	-3.83/-3.92	-4.54/-4.9	-5.59/-6.56	-8.27/-10.57	-12.54/-16.6	-18.65/-14.23	-11.42/-9.91	-7.83/-6.18	-4.53/-3.04	-2.52/-2.82	-3.09/-3.05	-3.43/-4.77	-6.53/-9.6	-14.22/-16.23	-12.72/-11.91	-11.43/-12.66	-14.93/-19.02	-18.79/-18.58	-17.61/-16.27	-13.22/-10.53	-9.1/-8.03	-5.91/-4.29	-3.09/-3.28	-3.5/-3.34
Freq(Hz)	5.3GPol.	Theta/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-9.98/-8.67	-7.2/-6.11	-6/-6.18	-6.53/-6.35	-6.29/-5.31	-5.33/-5.01	-5.51/-6.1	-7.24/-7.88	-8.83/-9.1	-12.41/-17	-19.25/-15.77	-18.95/-18.31	-17.51/-14.81	-12.26/-10.26	-7.81/-6.79	-5.78/-5.53	-5.46/-5.89	-6.37/-7.18	-6.67/-6.3	-6.32/-7.27	-8.91/-10.79	-11.1/-12.57	-13.98/-15.2	-14.04/-12.44
Θ(7.5°)	-17.52/-13.6	-11.29/-9.16	-8.47/-8.13	-7.71/-5.68	-5.46/-5.38	-5.36/-5.32	-5.46/-4.49	-7.89/-9.09	-9.7/-10.38	-13.79/-18.22	-18.68/-18.62	-14.54/-12.84	-12.23/-10.04	-7.98/-6.57	-4.32/-3.53	-3.28/-2.93	-2.88/-2.59	-2.93/-4	-4.89/-5.67	-6.9/-8.27	-9.57/-10.89	-12.42/-14.31	-16.18/-18.79	-14.34/-17.53
Θ(15°)	-15.97/-14.82	-13.2/-10.99	-9.89/-9.57	-8.27/-6.18	-5.08/-4.79	-5.08/-5.51	-5.74/-5.34	-6.22/-7.78	-9.35/-9.95	-11.09/-14.03	-18.36/-17.87	-16.39/-12.33	-10.44/-8.26	-6.03/-4.1	-3.25/-2.61	-2.21/-1.65	-1.39/-1.58	-2.22/-2.59	-3.48/-5.26	-8.07/-9.07	-9.88/-11.55	-15.48/-18.62	-18.47/-19.04	-17.19/-15.3
Θ(22.5°)	-11.51/-10.39	-10.62/-10.42	-9.4/-8.58	-7.34/-6.18	-5.32/-4.29	-3.91/-3.87	-3.84/-3.67	-3.91/-5.06	-7.2/-8.19	-9.84/-14.03	-18.36/-18.99	-16.31/-11.55	-9.5/-8.31	-7.78/-6.47	-5.42/-5.15	-5.24/-5.37	-5.38/-5.77	-6.47/-9.54	-12.71/-15.36	-13.38/-12.16	-12.25/-13.64	-15.79/-15.83	-18.1/-16.26	
Θ(30°)	-17.55/-17.4	-13.44/-9.74	-6.43/-7.1	-8.94/-8.84	-7.3/-5.11	-4.36/-4.29	-4.27/-3.97	-5.5/-7.62	-9.96/-10.55	-13.03/-17.68	-17.38/-18.99	-16.95/-14.05	-13.45/-12.47	-10.99/-8.95	-9.35/-10.5	-11.84/-18.55	-16.51/-8.86	-6.79/-9.65	-11.84/-13.44	-15.03/-14.4	-16.78/-18.24	-16.53/-17.36	-17.42/-17.46	-18.18/-16.26
Θ(37.5°)	-16.75/-17.39	-18.06/-17.51	-8.48/-9.32	-8.96/-7.49	-7.43/-5.77	-5.54/-5.86	-6.27/-6.66	-6.79/-8.36	-11.22/-15.78	-18.82/-18.62	-17.28/-18.42	-17.23/-18.49	-18.48/-15.71	-12.73/-11.92	-10.18/-8.43	-7.23/-5.78	-3.83/-3.58	-4.15/-4.34	-5.89/-9.65	-13.44/-14.99	-15.4/-19.02	-17.36/-18.22	-17.77/-18.44	-18.97/-18.1
Θ(45°)	-14.41/-11.61	-11.1/-14.32	-14.13/-12.41	-9.1/-6.82	-5.3/-6.67	-8.64/-7.36	-5.95/-5.33	-6.65/-8.61	-11.06/-13.31	-18.39/-18.1	-18.57/-18.18	-17.6/-18.41	-18.48/-13.95	-12.99/-13.31	-11.18/-11.91	-8.67/-9.19	-4.91/-9.61	-11.21/-11.4	-12.58/-14.11	-13.51/-11.44	-13.35/-14.74	-18.24/-18.23	-18.1/-16.26	-17.02/-18.54
Θ(52.5°)	-13.55/-10.59	-11.09/-11.23	-6.94/-8.99	-17.47/-8	-5.42/-6.74	-11.52/-11.82	-9.47/-7.5	-6.68/-6.83	-9.03/-12.42	-13.64/-15.56	-18.41/-19.04	-18.17/-17.39	-17.96/-19.34	-16.08/-11.2	-14.79/-11	-9.1/-10.57	-12.5/-18.29	-15.25/-18.29	-17.71/-19.24	-17.71/-17.56	-17.73/-15.4	-19.03/-13.47	-17.62/-17.87	
Θ(60°)	-14.54/-7.93	-7.74/-12.55	-12.12/-9.73	-11.42/-9.59	-10.54/-11.43	-11.83/-10.88	-13.49/-17.97	-13.2/-12.89	-14.25/-14.16	-12.81/-14.2	-17.67/-19.39	-17.9/-18.83	-18.69/-18.84	-17.13/-18.33	-18.62/-18.23	-17.98/-10.66	-11.09/-14.09	-18.44/-19.19	-18.62/-15.79	-12.83/-9.13	-12.32/-18.47	-14.46/-18.9	-17.51/-11.69	-10.96/-18.26
Θ(67.5°)	-13.69/-11.89	-18.76/-11.7	-7.93/-9.06	-12.37/-15.35	-13.35/-11.36	-9.99/-11.71	-17.37/-16.19	-14.66/-19.15	-18.77/-18.49	-18.54/-17.76	-16.33/-18.62	-17.49/-18.34	-16.17/-15.13	-15.57/-15.1	-15.87/-16.69	-17.39/-17.66	-13.18/-12.61	-13.3/-13.93	-12.61/-16.8	-17				



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ (67.5°)	-10.48/-12.48	-18.23/-12.81	-11.07/-15.45	-18.37/-16.04	-12.76/-13.58	-8.82/-4.96	-4.24/-2.72	-1.03/-0.41	-0.29/0.58	1.23/1.47	1.10/9.4	1.37/1.69	1.25/-1.15	-2.24/-1.44	-4.56/-9.52	-18.79/-16.82	-14.22/-11.89	-15.71/-18.34	-13.61/-15.67	-12.05/-11.79	-9.37/-7.53	-12.63/-17.58	-18.28/-13.52	-13.33/-15.24
Θ (75°)	-13.55/-11.2	-13.34/-16.3	-12.57/-17.59	-18.06/-16.26	-11.01/-8.8	-8.89/-4.84	-4.95/-2.46	-1.45/-1.87	-0.76/0.67	0.33/0.3	0.77/0.84	0.49/0.37	1.39/0.12	-2.97/-1.59	-0.3/-1.62	-9.14/-15.27	-18.59/-16.95	-12.61/-14.5	-18.12/-12.17	-11.11/-11.09	-8.31/-3.64	-4.3/-10.53	-18.58/-9.62	-7.79/-11.02
Θ (82.5°)	-11.88/-7.39	-12.56/-12.15	-7.76/-13.36	-18.45/-11.54	-12.61/-11.96	-7.84/-6.15	-4.23/-2.06	-1.3/-0.68	0.63/0.46	-0.01/0.18	0.98/0.78	0.36/-0.28	-0.12/-0.5	-2.63/-5	-0.12/-7.55	-8.83/-13.81	-16.63/-19.51	-17.56/-17.62	-13.62/-18.76	-11.9/-18.15	-5.41/-1.18	-8.71/-15.81	-9.85/-6.94	-5.43/-10.65
Θ (90°)	-5.39/-4.19	-9.63/-12.86	-9.49/-12.41	-18.94/-18.07	-13.71/-10.26	-7.35/-6.3	-3.73/-1.41	-1.23/-1	-0.51/-0.01	0.94/0.1	-0.84/0.15	0.83/0.93	0.51/-1.14	-3.37/-3.9	-3.06/-4.44	-9.05/-9.54	-14.81/-18.64	-14.07/-17.24	-19.07/-17.56	-19.02/-14.92	-11.66/-10.32	-14.31/-12.82	-8.14/-8.56	-5.42/-7.89
Θ (97.5°)	-6.79/-6.43	-9.33/-7.38	-6.66/-13.26	-15.53/-13.9	-16.75/-11.41	-9.08/-4.71	-2.98/-2.1	-1.72/-0.73	0.94/0.95	0.33/0.49	0.83/-0.69	-2.91/-2.14	0.54/0.04	-2.63/-7.31	-6.95/-4.67	-5.51/-14.1	-14.6/-14.91	-15.16/-13.79	-15.89/-16.41	-10.42/-8.73	-13.98/-8.01	-10.15/-7.47	-19.17/-9.29	-6.52/-5.68
Θ (105°)	-8.83/-8	-5.7/-8.8	-8.89/-9.89	-17.49/-18.08	-17.25/-8.85	-6.66/-7.28	-5.71/-2.81	-1.92/-0.4	0.051/1.2	2.19/2.21	1.12/0.03	-2.12/-1.18	-0.45/-0.83	-2.03/-4.21	-6.09/-10.67	-1.66/-8.1	-10.83/-13.95	-17.51/-14.97	-13.02/-12.7	-16.87/-14.58	-8.29/-11.81	-15.19/-18.89	-18.01/-18.36	-4.59/-2.66
Θ (112.5°)	-4.34/-2.7	-6.41/-7.66	-5.8/-9.82	-15.55/-18.13	-18.66/-12.41	-7.98/-5.08	-3.95/-2.31	-1.76/-0.39	1.56/2.33	1.95/1.96	2.09/1.99	0.59/-1.26	-2.52/-3.68	-2.02/-3.74	-5.48/-7.46	-11.07/-13.45	-15.35/-18.51	-14.16/-12.15	-16.39/-14.71	-11.92/-13.15	-17.99/-4.33	-18.17/-9.39	-6.82/-14.41	-12.34/-13.04
Θ (120°)	-7.4/-6.98	-5.01/-4.82	-6.02/-7.62	-15.46/-15.73	-17.93/-16.29	-10.87/-8.66	-4.61/-1.97	-0.43/0.43	0.76/0.91	1.71/2.73	2.62/1.11	-0.03/0.61	0.33/-1.26	-2.72/-4.02	-4.03/-3.74	-6.75/-17.74	-17.92/-10.89	-19.13/-15.44	-10.58/-16.54	-7.94/-7.75	-13.25/-7.23	-11.06/-10.21	-9.45/-7.54	-6.93/-7.17
Θ (127.5°)	-7.19/-3.3	-0.93/-2.18	-9.95/-13.68	-9.05/-10.76	-13.37/-13.48	-10.72/-6.65	-4.43/-2.78	-1.68/-0.49	1.07/2.56	3.55/3.24	2.61/1.86	1.021/0.9	0.32/-2.7	0.18/0.76	-2.33/-6.43	-19.02/-18.73	-18.78/-12.33	-8.95/-8.69	-9.78/-11.79	-12.48/-18.32	-16.57/-7.06	-5.31/-3.56	-3.89/-5.31	
Θ (135°)	-4.51/-5.7	-3.16/-1.22	-1.68/-5.11	-9.27/-16.06	-16.16/-19.69	-12.42/-9.3	-5.35/-2.67	-1.39/0.24	1.65/2.08	1.92/2.18	2.88/2.25	2.14/2.07	0.82/-2.45	-6.37/-3.97	-3.01/-8.9	-13.23/-18.29	-15.94/-13.65	-13.83/-13.96	-17.99/-14.83	-9.1/-12.94	-18.28/-16.05	-17.94/-9.17	-7.34/-3.45	-1.49/-2.47
Θ (142.5°)	-5.52/-3.46	-2.26/-1.54	-3.56/-7.67	-8.67/-9.06	-10.29/-14.21	-12.42/-7.89	-5/-1.79	0.41/1.53	2.33/2.89	3.79/4.23	4.09/4.2	3.35/2.35	1.41/0.7	-0.38/-4.97	-18.49/-10.43	-8.74/-8.33	-11.74/-13.36	-11.89/-14.71	-18.02/-18.24	-13.85/-8.81	-8.84/-8.14	-7.66/-4.31	-3.69/-5.76	-10.64/-7.53
Θ (150°)	-6.63/-6.78	-1.08/1.41	0.95/-1.35	-6.62/-12.03	-15.27/-16.4	-3.53/-1.38	-0.21/0.83	2.3/11	3.84/05	4.333-39	2.26/1.02	-1.58/-3.48	-6.06/-5.78	-6.14/-8.07	-1.61/-6.82	-10.71/-10.15	-7.35/-7.28	-8.06/-8.99	-6.53/-5.21	-5.57/-9.75	-10.46/-6.29	-3.18/-1.96	-2.98/-6.16	
Θ (157.5°)	-10.49/-7.48	-3.37/-1.83	-1.16/-2.29	-4.11/-5.65	-8.2/-11.73	-10.45/-8.96	-5.82/-3.4	-1.17/0.45	1.31/2.22	2.64/2.77	1.94/0.25	-1.34/-1.64	-1.43/-1.22	-0.99/-2.26	-2.94/-2.55	-4.19/-7.52	-12.22/-14.92	-16.65/-19.2	-16.84/-14.78	-15.9/-17.96	-14.45/-8.97	-6.94/-5.16	-2.86/-1.44	-1.38/-3.88
Θ (165°)	-5.81/-5.95	-4.92/-3.95	-3.69/-4.83	-8.81/-7.13	-9.41/-10.96	-11.06/-7.38	-4.58/-1.94	0.151/1	2.51/3	2.84/2.3	1.36/0.59	0.51/0.78	0.93/0.77	-0.03/-0.66	-1.86/-4.21	-9.66/-19.86	-18.09/-18.83	-18.04/-17.71	-17/-14.16	-10.83/-7.41	-4.76/-7.38	-3.4/-3.65	-3.41/-3.46	-4.18/-5.29
Θ (172.5°)	-4.83/-4.54	-3.81/-3.61	-3.72/-4.02	-5.42/-7.64	-11.15/-14.63	-12.44/-8.52	-6.39/-5.72	-4.21/-3.44	-2.35/-1.52	-1.04/-0.16	0.45/0.71	0.74/0.59	0.21/-1.3	-3.06/-6.11	-10.38/-17.59	-18.35/-19.45	-19.12/-18.84	-19.02/-16.84	-15.17/-15.64	-13.98/-11.96	-12.47/-9.46	-8.26/-7.1	-5.93/-5.41	
Θ (180°)	-3.02/-3.39	-3.83/-4.38	-5.39/-6.85	-8.28/-9.98	-14.16/-16.67	-14.4/-11.62	-9.65/-8.02	-6.71/-5.13	-3.89/-3	-2.3/-1.71	-1.79/-1.99	-2.5/-3.67	-5.03/-7.28	-10.95/-14.55	-15.24/-15.14	-15.25/-16.66	-17.73/-18.83	-18.17/-19.1	-19.1/-15.64	-11.66/-8.55	-7.24/-5.67	-5.18/-4.66	-3.45/-2.85	-2.97/-2.98
Freq(Hz)	5.785GHz	Thetaz/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-11.56/-9.65	-8.49/-6.42	-4.86/-3.98	-3.62/-3.2	-3.74/-4.24	-3.82/-4.07	-4.47/-5.41	-6.14/-6.6	-6.89/-8.33	-10.92/-13.07	-16.16/-17.87	-18.7/-15.64	-10.27/-8.1	-7.09/-6.87	-6.15/-6.01	-5.36/-4.09	-3.06/-2.32	-2.82/-4.6	-5.74/-5.91	-5.63/-8.01	-11.18/-13.48	-15.62/-18.69	-18.95/-14.16	
Θ (7.5°)	-10.99/-9.66	-8.46/-7.28	-5.16/-3.97	-3.53/-3.54	-2.91/-2.07	-1.91/-1.43	-1.7/-2.2	-2.6/-3.26	-4.82/-5.8	-8.14/-12.02	-16.91/-18.65	-18.95/-12.17	-9.22/-6.77	-5.9/-5.55	-5.99/-6.08	-6.39/-4.96	-4.68/-3.84	-3.16/-2.22	-2.51/-4.1	-6.79/-8.33	-8.68/-9.91	-13.09/-17.65	-17.75/-17.76	-18.77/-14.72
Θ (15°)	-10.88/-8.56	-7.18/-6.48	-5.25/-4.71	-3.75/-3.11	-2.4/-1.73	-1.71/-1.09	-1.06/-1.57	-2.21/-2.69	-3.74/-5.18	-7.61/-11.28	-15.37/-18.19	-17.87/-12.78	-8.42/-6.24	-5.06/-5.16	-5.73/-7.1	-6.3/-4.43	-3.85/-4.05	-4.37/-5.41	-4.67/-5.29	-6.74/-8.1	-10.16/-11.11	-13.01/-14.67	-18.77/-18.62	-18.41/-15.37
Θ (22.5°)	-18.77/-12.86	-9.1/-7.68	-6.1/-3.42	-2.2/-1.9	-2.01/-2.2	-2.61/-2.67	-4.26/-5.31	-5.91/-7.18	-7.9/-9.82	-12.93/-16.15	-19.8/-19.9	-19.22/-16.41	-9.43/-6.1	-4.97/-4.49	-4.66/-5.54	-5.37/-4.55	-4.33/-4.17	-3.86/-5.58	-5.55/-5.08	-5.89/-8.09	-10.92/-18.62	-19.8/-18.15	-18.58/-18.75	-18.49/-18.83
Θ (30°)	-13.26/-10.61	-9.87/-10.84	-3.69/-4.83	-9.86/-7.27	-4.77/-3.25	-2.44/-2.65	-3.79/-4.58	-5.97/-7.77	-11.85/-7.77	-10.14/-14.1	-18.02/-18.65	-17.95/-15.62	-11.85/-7.93	-6.37/-5.05	-2.87/-3.03	-3.92/-3.5	-2.14/-2.57	-4.53/-3.44	-3.27/-4.92	-9.46/-14.56	-16.99/-15.21	-16.56/-16.44	-18/-18.45	-16.86/-18.47
Θ (37.5°)	-18.64/-15.27	-10.2/-6.99	-5.8/-6.15	-7.71/-5.72	-5.58/-6.23	-6.26/-4.66	-2.43/-2.04	-2.46/-3.77	-5.76/-7.12	-8.71/-13.15	-18.28/-18.65	-17.56/-13.39	-11.82/-12.9	-6.62/-3.27	-1.9/-2.71	-3.89/-3.46	-3.48/-4.13	-2.95/-2.96	-5.13/-6.91	-6.67/-9.95	-15.02/-19.35	-18.35/-15.94	-15.67/-16.87	-17.42/-18.72
Θ (45°)	-18.98/-18.49	-18.25/-11.16	-9.18/-10.8	-7/-5.26	-6.48/-6.84	-6.27/-5.51	-5.02/-5.02	-5.36/-6.38	-6.64/-6.87	-8.62/-13.6	-19.19/-18.96	-11.18/-11.99	-18.38/-10.14	-5.78/-3.71	-4.13/-6.93	-9.74/-12.07	-9.63/-5.96	-6.74/-9.85	-9.98/-11.21	-19.04/-16.85	-12.7/-13.81	-15.59/-18.87	-18/-18.49	-16.64/-17.48
Θ (52.5°)	-18.37/-15.52	-17.32/-12.11	-9.42/-10.55	-8.64/-9.07	-10.62/-5.84	-8.88/-5.72	-7.18/-5.76	-5.57/-5.73	-6.86/-6.74	-8.42/-12.98	-17.37/-11.51	-9/-11.32	-14.49/-9.21	-7.13/-7.55	-10.26/-12.05	-9.43/-7.04	-6.05/-5.21	-6.12/-9.06	-10.7/-9.75	-12.49/-19.07	-18.98/-18.3	-16.02/-18.27	-18.96/-16.22	-12.41/-17.94
Θ (60°)	-9.57/-6.68	-13.85/-12.06	-10.14/-10.04	-6.71/-9.15	-14.11/-7.91	-5.73/-6.89	-7.41/-7.02	-6.26/-7.82	-7.64/-7.72	-11.13/-16.17	-18.93/-18.55	-12.07/-10.43	-10.55/-18.72	-19.08/-9.61	-7.63/-7.78	-11.03/-14.14	-17.44/-11.57	-10.67/-10.61	-12.91/-18.11	-14.23/-14.76	-18.28/-16.32	-18.09/-16.56	-13.06/-16.36	-10.73/-17.24
Θ (67.5°)	-9.4/-7.1	-13.41/-16.43	-11.83/-11.2	-15.33/-12.19	-8.79/-7.82	-9.46/-12.56	-8.65/-8.29	-9.97/-11.63	-11.63/-11.19	-15.96/-18.93	-15.34/-16.78	-10.65/-9.47	-10.13/-16.67	-16.71/-10.44	-13.01/-16.47	-18.17/-16.07	-18.33/-12.07	-10.38/-18.11	-18.88/-11.18	-18.12/-14.61	-11.04/-18.63	-18.78/-18.12	-10.36/-10.56	-7.34/-13.7
Θ (75°)	-8.77/-10.07	-13.40/-10.39	-11.4/-16.41	-12.72/-18.4	-8.61/-11.78	-15.3/-14.72	-12.61/-12.47	-13.55/-13.4	-14.6/-18.41	-18.8/-19.26	-18.24/-15.66	-17.7/-11.61	-11.61/-16.24	-18.88/-10.54	-10.95/-19.32	-17.69/-17.37	-13.97/-10.55	-12.29/-16.79	-18.12/-16.42	-12.97/-14.79	-17.66/-19.26	-14.63/-16.28	-9.28/-10.35	-10.09/-6.63
Θ (82.5°)	-14.81/-13.52	-12.28/-14.51	-18.88/-11.49	-8.39/-11.41	-17.65/-16.95	-11.72/-12.8	-16.95/-14.64	-18.45/-18.37	-19.2/-16.44	-14.01/-19.27	-15.09/-10.86	-13.59/-17.86	-10.92/-10.35	-17.99/-8.36	-7.81/-19.58	-14.61/-16.26	-13.06/-9.51	-16.65/-11.9	-9.59/-17.69	-12.65/-14.77	-14.54/-17.28	-9.75/-14.26	-12.33/-10.57	-12.04/-9.9
Θ (90°)	-16.65/-12.5	-11.82/-15.66	-16.01/-8.91	-8.47/-10.11	-13.11/-11.59	-14.21/-16.96	-16.88/-15.33	-11.64/-10.35	-12.22/-10.99	-10.64/-9.68	-10.22/-15.66	-18.96/-17.94	-12.52/-9.65	-7.88/-5.5	-10.45/-8.46	-11.47/-11.01	-16.58/-10.49	-12.27/-13.47	-10.25/-14.06	-10.9/-13.3	-18.19/-13.31	-17.25/-9.35	-9.15/-12.6	
Θ (97.5°)	-9.21/-8.91	-16.1/-14.44	-8.96/-10.79	-7.36/-4.76	-6.54/-11.62	-17.65/-16.68	-12.09/-10.64	-6.63/-7.77	-6.67/-8.95	-9.53/-11.47	-12.31/-15.66	-19.16/-19.2	-10.79/-10.63	-11.52/-7.4	-6.25/-5.23	-8.62/-7.38	-17.99/-10.95	-7.89/-8.73	-9.57/-19.52	-11.36/-10.03	-10.93/-18.63	-11.41/-14.99	-16.84/-14.25	-13.23/-17.08
Θ (105°)	-8.84/-5.21	-8.93/-10.79	-7.87/-6.16	-3.74/-2.87	-3.5/-7.19	-9.07/-7.73	-6.38/-5.58	-4.77/-5.3	-5.46/-8.78	-8.23/-10.43	-9.4/-13.52	-18.7/-11.32	-7.59/-6.92	-7.07/-3.8	-5.28/-5.67	-4.47/-2.4	-4.85/-8.71	-6.11/-3.15	-6.91/-8.65	-10.45/-18.72	-18.15/-16.21	-12.59/-19.07	-9.88/-10.58	-11.9/-19.26
Θ (112.5°)	-11.46/-8.01	-8.26/-7.18	-3.87/-3.01	-4.22/-4.27	-3.6/-3.12	-4.18/-5.14	-3.95/-3.39	-2.69/-1.7	-4.12/-5.75	-8.53/-9.1	-10.96/-10.81	-17.72/-13.42	-7.34/-5.21	-7.82/-8.01	-2.37/-3.73	0.15/-3.22	-7.14/-12.13	-10.23/-8.1	-12.97/-9.07	-4.				



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ (112.5°)	-9.03/-7.62	-4.89/-2.96	-2.03/-2.4	-3.17/-2.71	-1.99/-1.57	-2.45/-3.97	-5.26/-6.39	-7.74/-10.19	-11.5/-10.75	-6.23/-6.18	-7.73/-4.68	-3.53/-4.59	-3.88/-4.2	-4.25/-9.17	-18.53/-18.83	-9.62/-13.75	-14.89/-9	-10.67/-14.68	-18.19/-18.61	-17.97/-15.09	-14.13/-12.01	-12.24/-11.55	-8.35/-8.35	-8.78/-7.14
Θ (120°)	-12.26/-13.12	-7.77/-5.05	-3.24/-2.73	-3.31/-3.46	-2.91/-3.42	-4.47/-4.85	-5.28/-6.33	-8.22/-9.3	-11.67/-9.48	-7.31/-11.81	-13.76/-13.63	-3.5/-5.04	-6.27/-6.04	-9.26/-17.14	-16.66/-17.4	-10.46/-14.63	-14.5/-17.46	-14.8/-13.85	-14.45/-18.8	-15.22/-17.88	-12.15/-13.15	-14.37/-8.42	-9.75/-7.05	-7.98/-9.46
Θ (127.5°)	-9.4/-9.02	-8.3/-6.91	-3.99/-3.3	-2.6/-2.18	-2.23/-2.85	-4.75/-7.09	-2.92/-1.02	-8.32/-8.25	-10.98/-13.25	-11.06/-10.48	-8.28/-1.74	-10.75/-13.92	-8.33/-5.68	-5.81/-7.7	-17.88/-8.42	-16.88/-16.91	-17.88/-19.09	-18.52/-15.31	-12.29/-14.04	-18.74/-13.84	-18.83/-13.59	-10.89/-8.88	-10.65/-8.46	
Θ (135°)	-6.51/-6.2	-6.92/-9.98	-14.67/-13.84	-10.71/-7.87	-6.47/-5.92	-6.47/-6	-9.81/-10.64	-12.33/-12.69	-10.08/-8.33	-7.33/-5.7	-3.75/-2.41	-3.92/-5.47	-7.69/-8.83	-6.29/-5.05	-7.85/-11.44	-13.49/-18.88	-8.01/-7.22	-9.92/-12.96	-16.87/-14.81	-17.01/-15.88	-15.5/-17.26	-16.35/-14.87	-14.21/-13.56	-11.63/-7.92
Θ (142.5°)	-6.32/-7.01	-7.45/-8.6	-10.84/-11.97	-12.23/-10.84	-10/-10.73	-13.82/-16.61	-18.55/-18.14	-18.45/-13.62	-11.73/-12.08	-13.68/-9.7	-6.77/-4.94	-4.78/-3.56	-6.04/-6.6	-5.6/-8.29	-3.79/-4.04	-6.72/-13.96	-13.56/-10.21	-11.74/-13.42	-16.31/-18.36	-17.74/-15.96	-16.29/-17.84	-19.35/-12.47	-11.54/-10.05	-7.87/-6.38
Θ (150°)	-11.12/-11.89	-10.5/-8.86	-6.59/-5.5	-5.48/-6.99	-9.49/-10.63	-11.23/-11.7	-15.36/-16.02	-15.8/-14.1	-10.89/-9.02	-7.5/-6.83	-6.08/-1.79	-9.02/-7.86	-7.06/-7.25	-10.22/-10.62	-10.51/-12.53	-14.72/-14.81	-17.02/-13.61	-11.95/-13.05	-16.65/-16.87	-14.9/-12.45	-10.92/-12.42	-12.45/-11.61		
Θ (157.5°)	-5.15/-5.46	-6.21/-7.58	-8.53/-8.34	-7.74/-7.86	-8.79/-11.19	-16.17/-18.46	-17.45/-17.29	-19.2/-18.21	-12.44/-9.32	-9.02/-8.82	-9.51/-11.06	-13.85/-17.62	-18.2/-15.71	-11.21/-11	-11.73/-13.98	-17.02/-16.93	-15.53/-13.79	-12.4/-12.72	-12.16/-11.87	-11.22/-12.36	-17.06/-18.73	-17.29/-12.71	-9.95/-9.18	-7/-5.58
Θ (165°)	-7.03/-8.01	-9.76/-11.21	-13.01/-13.02	-12.68/-12.51	-12.49/-12.71	-12.32/-14.04	-16.43/-18.7	-18.04/-17.15	-13.03/-10.49	-10.34/-10.55	-11.02/-13.36	-17.43/-19.18	-18.95/-15.64	-11.17/-9.82	-10.64/-12.07	-13.01/-12.69	-13.51/-13.89	-13.69/-13.6	-12.34/-10.02	-9.67/-11.45	-14.87/-19.13	-18/-12.07	-12.52/-10.25	-8.26/-7.18
Θ (172.5°)	-6.59/-6.6	-6.45/-7.05	-7.7/-9.4	-8.88/-8.93	-8.1/-8	-9.61/-11.01	-14.14/-17.27	-18.44/-15.67	-13.12/-12.64	-12.85/-13.98	-15.75/-18.64	-18.57/-18.1	-15.43/-15.32	-14.79/-14.76	-14.8/-14.23	-13.8/-13.19	-13.43/-14.26	-13.72/-13.68	-15.36/-17.63	-18.8/-17.76	-17.93/-14.85	-11.63/-9.6	-8.15/-7.43	
Θ (180°)	-9.71/-9.94	-10.63/-10.68	-11.06/-11.76	-12.59/-14.08	-16.33/-18.01	-18.69/-16.71	-16.9/-19.44	-18.26/-17.95	-17.64/-18.68	-18.57/-18.25	-17.83/-17.13	-19.14/-18.45	-18.1/-18.51	-18.53/-17.43	-15.86/-14.48	-14.68/-13.52	-13.27/-15.27	-18.5/-18.41	-18.11/-18.02	-17.78/-17.46	-19.1/-18.91	-17.04/-13.9	-12/-10.8	-10.41/-9.83
Freq(Hz)	5.2/GPol.	Theta/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-9.72/-14.15	-17.88/-19.18	-12.94/-9.31	-7.03/-4.87	-3.19/-2.01	-1.54/-1.17	-0.84/-0.41	-0.160/0.08	-0.05/-0.06	-0.49/-1.24	-2.11/-3.65	-5.65/-8.27	-11.73/-16.46	-17.93/-17.81	-12.23/-9.15	-7.36/-4.99	-3.1/-1.78	-1.56/-1.43	-0.86/-0.33	-0.3/-0.51	-0.87/-1.06	-1.62/-2.21	-3.02/-4.16	-5.29/-7.58
Θ (7.5°)	-11.41/-15.51	-18.28/-18.37	-16.1/-11.91	-9.67/-6.55	-4.27/-1.65	-2.45/-2.14	-1.48/-0.58	0.020/0.46	0.340/-0.9	-0.49/-0.81	-1.49/-2.69	-4.08/-5.66	-9.53/-13.32	-18.12/-18.81	-12.08/-8.02	-6.57/-4.63	-2.65/-1.3	-0.61/-0.49	-0.49/-0.61	-1.01/-1.6	-2.34/-2.76	-3.83/-4.72	-6.46/-9.24	
Θ (15°)	-12.4/-14.28	-16.41/-15.58	-11.33/-8.47	-7.48/-6.23	-4.05/-1.74	-0.79/-0.99	-0.92/-0.44	-0.35/0.83	0.820/0.52	-0.02/-0.27	-0.77/-1.34	-2.13/-3.95	-6.49/-10.64	-18.74/-17.99	-13.45/-8.07	-3.02/-1.66	-0.54/-0.38	-0.71/-0.85	-0.94/-1.09	-1.53/-2.19	-2.59/-3.11	-3.81/-4.94	-6.5/-9.07	
Θ (22.5°)	-13.89/-16.8	-13.77/-9.84	-6.33/-4.16	-2.72/-1.79	-1.010/0.6	0.91/-1	1.05/-1.04	1.231/3.36	1.271.12	0.830/0.26	-0.44/-1.04	-1.83/-3.35	-6.67/-12.71	-18.29/-17.99	-11.99/-8.68	-7.11/-5.95	-5.15/-3.94	-3.19/-2.64	-2.82/-2.77	-2.28/-2.34	-2.44/-2.55	-2.28/-2.66	-3.49/-4.84	-6.74/-9.71
Θ (30°)	-12.87/-17.65	-13.25/-8.68	-5.91/-3.62	-1.87/-1.25	-0.88/-0.59	0.261/0.23	2.222/9	2.912/3.36	1.599/6.9	0.470/36	-0.41/-1.08	-2.43/-5.59	-11.02/-12.15	-18.49/-12.77	-11.17/-11.23	-10.76/-9.69	-8.27/-7.88	-7.86/-6.3	-6.58/-5.61	-5.44/-5.25	-4.27/-2.38	-3.32/-0.48	-4.58/-5.66	-6.85/-9
Θ (37.5°)	-11.67/-16.22	-15.02/-11.06	-8.25/-4.7	-3.51/-2.29	-1.69/-1.9	0.169/-0.54	1.32/0.6	1.861/7.9	1.831.58	0.880/0.5	-0.47/-2.94	-5.43/-8.07	-14.27/-16.14	-19.17/-12.12	-17.71/-18.69	-17.17/-13.13	-13.69/-11.43	-13.96/-12.19	-8.86/-4.34	-3.83/-4.88	-6.59/-7.07	-8.11/-8.38		
Θ (45°)	-12.15/-14.04	-12.73/-11.33	-9.15/-6.08	-3.8/-2.24	-1.37/-1.95	-2.32/-1.26	0.230/0.64	0.410/0.87	1.391/0.2	0.02/-2.03	-3.59/-6.16	-5.87/-5.01	-5.3/-7.49	-12.83/-16.83	-15.71/-12.13	-12.52/-14.72	-14.59/-10.64	-10.85/-12.28	-12.17/-12.97	-18.29/-7.3	-3.69/-4.34	-6.75/-6.84	-6.65/-6.67	-6.62/-9.15
Θ (52.5°)	-11.12/-11.19	-9.52/-7.29	-5.68/-3.98	-2.86/-1.63	-0.810/-0.5	-0.3/-0.55	0.130/31	0.83/-1.69	-0.390/0.3	-1.12/-3.52	-4/-5.14	-5.08/-4.5	-5.61/-9.56	-18.3/-17.54	-9.89/-16.9	-14.49/-17.97	-15.42/-12.6	-13.61/-15.17	-11.68/-9.89	-6.89/-6.82	-7.93/-8.35	-7.29/-8.1	-8.44/-11.87	
Θ (60°)	-12.34/-13.62	-8.87/-7.75	-5.45/-3.98	-3.11/-2.71	-2.37/-1.7	-1.44/-1.15	-0.560/0.27	-1.44/-1.52	-3.25/-3.84	-3.57/-7.72	-3.19/-5.58	-6.34/-5.2	-8.92/-9.87	-18.65/-11.62	-8.2/-9.79	-18.49/-17.31	-18.49/-14.68	-11.46/-10.78	-12.92/-15.08	-16.84/-10.77	-6.66/-6.21	-7.19/-11.26	-7.61/-7.4	-9.47/-12.27
Θ (67.5°)	-13.34/-11.06	-8.1/-7.04	-5.35/-5.25	-4.65/-4.4	-4.18/-4.14	-3.87/-3.27	-0.87/-0.61	-2.43/-2.93	-3.4/-3.71	-5.33/-5.01	-5.34/-6.68	-7.79/-9.41	-10.3/-15.33	-14.93/-11.45	-10.66/-8.96	-12.61/-14.91	-17.96/-12.9	-8.48/-7.01	-6.69/-8.91	-18.07/-14.88	-9.16/-9.69	-15.48/-10.72	-8.31/-10.28	-11.94/-15.14
Θ (75°)	-17.03/-11.03	-9.35/-7.45	-6.2/-5.19	-4.01/-3.96	-4.06/-4.48	-5.46/-4.9	-3.37/-3.26	-3.85/-2.99	-3.13/-6.36	-4.89/-5.01	-4.6/-6.41	-9.81/-12.75	-13.56/-16.03	-15.54/-12.24	-11.34/-8.9	-12.08/-15.4	-11.95/-8.4	-6.92/-6.36	-7.42/-6.98	-13.22/-11.73	-7.92/-12.3	-17.48/-13.36	-10.05/-8.49	-12.07/-14.43
Θ (82.5°)	-15.5/-12.07	-8.47/-4.94	-4.93/-0.01	-3.31/-3.52	-4.15/-8.7	-6.9/-6.1	-5.38/-6	-5.87/-3.67	-3.71/-9.27	-9.08/-6.02	-7.29/-7.83	-8.04/-11.56	-13.35/-14.09	-18.49/-18.33	-15.53/-8.35	-11.92/-18.3	-8.36/-8.21	-8.88/-6.26	-7.67/-7.28	-9.4/-15.2	-11.82/-13.7	-14.14/-14.65	-12.87/-10.75	-14.21/-14.57
Θ (90°)	-11.87/-8.14	-7.25/-7.6	-5.51/-5.07	-4.23/-4.5	-5.07/-6.32	-7.82/-7.73	-7.23/-7.54	-7.09/-7.44	-7.49/-7.65	-7.67/-8.96	-11.21/-7.62	-6.1/-8.84	-9.26/-8.63	-11.07/-18.19	-14.72/-10.2	-7.36/-18.12	-14.19/-6.84	-12.94/-15.48	-12.9/-10.5	-9.54/-9.92	-13.89/-11.6	-11.85/-11.84	-11.74/-11.6	-13.92/-12.96
Θ (97.5°)	-11.14/-8.73	-6.73/-6.1	-5.23/-4.62	-4.51/-6.43	-5.25/-6.63	-6.65/-4.73	-9.97/-11.62	-10.2/-9.62	-8.64/-7.89	-8.99/-13.16	-10.16/-6.52	-6.22/-6.69	-7.42/-8.14	-9.34/-17.66	-15.09/-8.34	-7.56/-10.57	-12.3/-12.73	-15.67/-16.27	-10.88/-16.35	-10.79/-10.42	-17.96/-13.52	-9.49/-12.01	-12.63/-12.41	-11.95/-11.17
Θ (105°)	-9.86/-8.36	-7.28/-7.34	-5.69/-5.84	-4.51/-5.5	-6.59/-8.75	-8.69/-8.79	-11.11/-14.84	-10.05/-9.33	-14.6/-12.23	-8.23/-11.27	-7.22/-9.36	-17.73/-10.97	-10.04/-16.68	-17.17/-14.04	-11.09/-7.57	-10.79/-18.45	-19.05/-17.1	-14.18/-18.18	-9.56/-8.51	-18.31/-12.16	-8.31/-11.8	-17.5/-17.7	-9.61/-9.99	
Θ (112.5°)	-6.85/-5.56	-5/-5.49	-6.24/-6.46	-6.7/-8.47	-11.54/-11.56	-8.7/-8.85	-12.51/-14.48	-15.2/-19.47	-18.23/-14.73	-11.09/-16.8	-15.58/-12.44	-9.84/-10.04	-12.96/-18.8	-17.82/-19.85	-10.17/-7.91	-10.95/-19.16	-11.98/-18.31	-17.57/-19.11	-18.14/-16.34	-11.15/-17.96	-15.82/-10.32	-11.56/-14.13	-6.75/-10.06	-9.07/-11.08
Θ (120°)	-6.07/-6.75	-6.88/-6.58	-5.81/-6.64	-8.28/-10.8	-15.24/-12.86	-9.84/-16.99	-12.94/-15.04	-15.39/-18.1	-18.05/-17.72	-16.95/-17.56	-18.73/-14.87	-18.2/-15.88	-12.78/-18.12	-19.12/-18.6	-13.77/-9.13	-8.18/-18.91	-14.57/-9.47	-16.94/-15.25	-18.19/-13.21	-11.27/-15.17	-13.29/-14.18	-9.73/-7.01	-6.71/-8.93	-10.46/-9.72
Θ (127.5°)	-6/-7.21	-7.76/-9.95	-9/-10.45	-13.23/-18.26	-17.9/-14.66	-13.61/-14.62	-18/-18.68	-15.28/-12.38	-10.71/-12.51	-15.13/-17.27	-17.65/-16.06	-13.35/-11.52	-16.18/-15.59	-10.9/-11	-10.39/-7.57	-11.41/-16.51	-13.1/-10.4	-18.03/-17.02	-14.01/-7.84	-6.14/-16.21	-13.86/-9.12	-10.14/-7.08	-7.41/-6.23	-7.21/-7.65
Θ (135°)	-5.74/-7.37	-7.97/-9.62	-9.72/-11.63	-14.14/-17.51	-17.49/-19.29	-19/-17.85	-18.05/-18.53	-14.45/-9.93	-7.9/-7.48	-8.24/-11.93	-15.71/-18.12	-16.7/-10.47	-15.23/-17.95	-10.51/-17.47	-8.11/-10.89	-8.5/-17.38	-11.19/-8.88	-17.25/-18.29	-17.9/-18.44	-14.05/-17.8	-11.92/-16.93	-14.62/-12.35	-9.86/-9.74	-10.41/-10.24
Θ (142.5°)	-11.48/-9.79	-10.19/-11.34	-10.93/-11.05	-12.56/-13.49	-14.24/-13.93	-12.95/-12.88	-14.22/-11.15	-7.07/-5.65	-5.95/-9.12	-15.75/-12.99	-8.27/-10.27	-14.3/-14.11	-10.05/-11.11	-15.28/-14.35	-15.95/-13.67	-13.06/-14.81	-10.83/-18.16	-12.47/-9.79	-15.38/-10.44	-5.77/-1.77	-9.44/-11.34	-19.08/-12.92	-12.95/-12.21	-13.42/-15.41
Θ (150°)	-18.72/-19.05	-18.34/-17.81	-17.41/-17.19	-19.1/-17.46	-16.44/-17.76	-17.49/-17.21	-14.8/-13.78	-10.88/-9.67	-5.69/-5.45	-4.56/-4.14	-4.56/-5.28	-8.09/-13.78	-15.65/-16.71	-17.36/-18.4	-19.09/-17.39	-18.14/-11.95	-9.37/-12.52	-14.23/-12.2	-19.08/-12.5	-7.2/-7.01	-4.66/-3.38	-5.4/-7.77	-10.06/-10.21	-12.41/-17.03
Θ (157.5°)	-17.14/-12.08	-13.09/-14.75	-18.6/-18.49	-17.91/-17.67	-14.04/-11.27	-10.87/-11.59	-13.12/-10.04	-6/-3.73	-3.41/-4.19	-5.51/-8.26	-12.19/-13.16	-14.52/-18.27	-18.51/-15.88	-18.18/-17.63	-18.69/-17.77	-17.97/-19.31	-16.75/-12.93	-11.06/-16.32	-13.8/-5.91	-3.84				



Radiated Composite Gain Data (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix A

Θ (157.5°)	-7.07/-7.11	-5.83/-5.39	-4.56/-4.32	-4.28/-4.47	-5.41/-8.53	-17.11/-17.39	-13.73/-16.83	-19.19/-12.22	-8.04/-6.08	-4.52/-4.53	-5.59/-6.4	-7.74/-9.82	-13.52/-17.74	-17.04/-15.99	-18.44/-17.22	-13.85/-13.91	-12.68/-15.24	-17.45/-17.21	-18.25/-19.05	-18.49/-18.66	-13.38/-8.91	-6.33/-5.9	-5.32/-5.29	-6.08/-6.86
Θ (165°)	-4.62/-4.35	-4.56/-4.62	-4.18/-3.53	-3.37/-4.08	-5.59/-6.93	-6.83/-7.82	-8.62/-12.51	-18.31/-14.21	-9.14/-8.09	-7.26/-8.45	-10.55/-13.18	-14.65/-15.82	-17.44/-15.98	-16.48/-18.26	-18.33/-18.38	-17.54/-18.5	-19.08/-18.02	-19.31/-18.47	-16.59/-18.41	-18.19/-18.48	-18.2/-10.82	-7.81/-6.01	-4.82/-4.19	-4.62/-4.55
Θ (172.5°)	-7.43/-7.25	-7.33/-7.73	-7.23/-6.8	-6.62/-5.65	-5.97/-7.02	-7.66/-9.06	-11.05/-14.18	-14.4/-13.11	-11.19/-10.44	-10.49/-9.96	-10.61/-11.75	-12.75/-13.66	-15.07/-15.97	-16.19/-14.51	-12.08/-11.55	-12.83/-12.59	-11.83/-11.35	-13.44/-18.15	-18.36/-18.49	-18.89/-19.19	-18.66/-13.51	-10.02/-9.58	-8.87/-7.86	-7.33/-7.2
Θ (180°)	-6.67/-6.58	-7.06/-6.87	-7.51/-7.98	-8.28/-9.17	-9.87/-12.44	-14.57/-18.02	-18.84/-17.8	-16.39/-14.98	-14.12/-11.42	-11.12/-10.4	-9.65/-12.12	-15.12/-14.67	-12.81/-10.52	-9.15/-8.73	-7.91/-6.78	-6.92/-7.69	-8.48/-9.41	-11.3/-13.26	-17.14/-18.44	-18.9/-18.79	-17/-12.95	-10.72/-9.19	-7.27/-7.21	-6.88/-6.77
Freq(Hz)	5.6G/Pol.	Theta/Ant. 2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-7.86/-11.35	-16.55/-17.55	-16.51/-12.56	-9.04/-5.44	-3.76/-3.05	-2.92/-2.24	-1.57/-0.3	0.60/95	0.810/63	0.24/-0.45	-1.61/-2.7	-4.51/-6.36	-9.46/-14.52	-18.09/-15.89	-11.51/-7.85	-5.25/-3.42	-2.3/-1.58	-0.530/-2	0.510/97	0.930/53	0.540/13	-0.18/-1	-1.71/-2.74	-3.85/-5.82
Θ (7.5°)	-9.82/-13.95	-18.29/-13.85	-8.74/-6.52	-4.29/-2.1	-0.260/3	0.270/51	1.24/-1.84	2.41/-2.41	2.16/-1.88	1.30/87	0.04/-1.22	-2.68/-4.71	-6.89/-10.83	-18.35/-18.42	-15.42/-10.64	-7.19/-4.73	-2.99/-2.89	-2.51/-1.33	-0.47/-0.28	-0.07/-0.54	-0.78/-1.14	-1.38/-2.18	-2.5/-3.63	-5.47/-7.37
Θ (15°)	-9.34/-14.93	-19.37/-13.17	-7.11/-5.42	-3.56/-1.71	-0.380/-4.8	0.40/-18	1.25/-62	3.61/-3.59	2.83/-2.35	1.410/56	-0.62/-1.36	-2.52/-3.97	-5.38/-7.85	-11.14/-18.26	-17.69/-8.82	-5.56/-3.89	-2.9/-1.72	-0.96/-1.1	-0.91/-0.48	-0.37/-0.38	-0.84/-1.11	-1.56/-1.99	-2.59/-3.63	-4.78/-6.88
Θ (22.5°)	-6.82/-9.35	-14.1/-19.02	-14.77/-9.47	-5.43/-2.66	-1.35/-0.33	0.250/-48	0.35/-125	2.79/-3.66	3.97/-3.18	2.10/88	-0.82/-2.08	-2.26/-3.19	-4.85/-7.46	-10.98/-14.64	-14.63/-9.93	-6.14/-4.8	-3.37/-2.59	-1.84/-2.34	-2.1/-1.66	-1.71/-1.52	-0.8/-0.88	-0.91/-1.63	-2.54/-3.73	-4.85/-6.11
Θ (30°)	-9.26/-10.68	-17.7/-18.8	-11.22/-6.6	-3.35/-1.09	-0.06/-0.88	1.48/-1.82	1.44/-1.78	2.57/-2.88	3.07/-2.47	1.18/-0.21	-1.56/-2.27	-1.87/-3.98	-6.72/-11.08	-17.49/-12.6	-8.89/-7.4	-8.69/-8.45	-7.15/-5.54	-4.43/-3.35	-2.79/-2.63	-1.87/-1.23	-0.86/-0.84	-1.4/-2.1	-2.72/-3.07	-4.85/-7.16
Θ (37.5°)	-13.2/-17.44	-18.31/-11.43	-7.17/-4.26	-2.87/-1.18	0.02/-1.23	1.92/-52	3.01/-23	1.660/95	1.082/03	2.25/-33	0.12/-1.09	-1.33/-3.46	-6.9/-11.36	-17.91/-13.11	-10.53/-12.51	-13.46/-13.52	-10.8/-8.54	-8.39/-7.67	-6.33/-5.59	-2.91/-2.28	-2.96/-3.41	-3.66/-2.59	-3.12/-3.8	-5.95/-9.55
Θ (45°)	-11.06/-16.92	-17.63/-10.3	-6.16/-3.95	-3.56/-3.26	-2.36/-0.78	0.69/-1.4	1.21/-1.55	1.83/-1.89	0.77/-0.12	0.06/-1.18	-2.72/-3.27	-2.96/-6.24	-7.59/-11.07	-13.08/-16.82	-17.95/-14.32	-13.09/-13.73	-18.36/-17.82	-12.19/-9.83	-11.8/-4.86	-5.11/-5.33	-4.33/-2.46	-4.73/-2.47	-3.34/-4.99	-8.82/-10.85
Θ (52.5°)	-9.28/-14.76	-13.59/-6.36	-3.8/-2.93	-2.29/-1.33	-1.48/-0.01	0.870/-8	1.60/-99	1.580/-37	-2.21/-2.05	-1.17/-1.56	-3.1/-4.58	-5.67/-7.85	-9.01/-9.92	-10.58/-18.14	-17.33/-13.01	-13.13/-15.69	-11.8/-9.38	-10.13/-11.57	-10.74/-11.89	-6.44/-6.09	-8.63/-6.22	-3.97/-2.46	-3.27/-6.75	-11.66/-11.91
Θ (60°)	-14.7/-18.8	-12.54/-8.66	-6.25/-4.05	-2.25/-0.8	-0.83/-0.51	0.79/-1.14	-0.06/-0.86	-0.43/-1.2	-2.88/-2.63	-2.91/-3.97	-5.67/-6.01	-7.53/-8.3	-7.39/-8.66	-11.2/-19	-7.78/-7.02	-10.38/-11.84	-19.66/-17.82	-18.05/-15.91	-7.65/-10.25	-11.1/-5.95	-4.64/-2.6	-3.1/-1.76	-15.2/-14.05	
Θ (67.5°)	-16.49/-18.93	-12.87/-8.73	-5.26/-3.29	-1.83/-1.21	-0.760/0.9	0.11/-0.17	-1.31/-1.59	-2.51/-3.61	-3.9/-3.57	-3.83/-4.75	-4.62/-6.75	-8.35/-7.16	-10.32/-11.74	-17.03/-17.47	-8.32/-9.24	-10.83/-18.41	-12.99/-10.16	-12.64/-15.39	-17.37/-10.87	-9.6/-7.96	-16.29/-8.49	-4.93/-3.75	-5.31/-11.35	-19.3/-16.33
Θ (75°)	-18.08/-16.53	-11.55/-8.07	-5.13/-4.14	-2.93/-1.42	-1.92/-1.85	-0.72/-0.35	-1.55/-1.79	-5.45/-10.85	-3.26/-2.22	-5.64/-5.95	-3.32/-4.2	-6.84/-8.59	-11.31/-17.22	-18.32/-18.72	-13.04/-7.3	-11.42/-17.83	-9.15/-15.92	-9.64/-9.31	-16.54/-10.73	-10.22/-13.67	-15.29/-8.54	-7.07/-6.15	-8.71/-18.7	-17.83/-18.55
Θ (82.5°)	-18.47/-17.18	-12.46/-8.95	-5.3/-3.94	-3.06/-3.47	-3.07/-2.59	-3.17/-3.11	-3.77/-3.82	-4.34/-11.67	-6.1/-2.21	-3.99/-4.49	-2.69/-5.03	-7.56/-7.24	-11.65/-12.49	-16.06/-17.65	-13.78/-12.22	-14.16/-12.96	-10.16/-11.89	-6.69/-8.66	-17.65/-17.72	-9.22/-10.13	-19.04/-13.44	-12.5/-8.95	-10.75/-15.24	-19.36/-18.37
Θ (90°)	-18.89/-13.5	-10.25/-8.06	-6.78/-7.32	-7.35/-6.19	-4.02/-3.75	-5.5/-6.26	-7.79/-7.73	-8.84/-7.59	-8.05/-6.65	-6.35/-2.36	-1.61/-4.23	-5.99/-5.94	-9.82/-6.84	-9.03/-18.49	-11.8/-6.85	-7.06/-17.58	-7.71/-10.89	-11.72/-13.04	-17.18/-10.91	-11.36/-12.75	-18.83/-19.17	-13.07/-12.49	-14.77/-14.37	-18.99/-16.61
Θ (97.5°)	-18.16/-16.06	-9.93/-7.47	-7.08/-8.31	-11.12/-9.07	-6.25/-7.11	-8.86/-11.29	-8.9/-8.51	-9.29/-8.84	-9.61/-8.13	-5.43/-4.47	-3.34/-4.25	-6.37/-6.74	-7.46/-5.47	-7.26/-14.07	-9.64/-9.49	-7.84/-18.28	-14.61/-10.52	-18.37/-17.58	-14.73/-9.46	-14.49/-18.39	-18.15/-13.81	-17.23/-12.47	-18.8/-17.52	-18.53/-13.57
Θ (105°)	-15.14/-12.83	-8.27/-8.5	-11.73/-13.13	-12.46/-9.46	-5.64/-5.8	-8.8/-13.68	-15.32/-11.04	-11.14/-10.07	-9.18/-12.99	-10.05/-5.18	-4.49/-5.06	-8.2/-7.38	-6.9/-6.99	-6.07/-13.42	-16.88/-15.52	-11.88/-13.57	-17.81/-17.54	-14.24/-13.71	-13.82/-15.57	-15.25/-16.81	-19.09/-16.2	-12.29/-16.68	-17.52/-12.95	-11.59/-11.33
Θ (112.5°)	-16.64/-11.63	-9.24/-11.64	-17.24/-18.53	-16.95/-9.46	-6.21/-7.39	-11.35/-16.65	-19.29/-19.16	-14.11/-8.78	-8.2/-12.43	-15.83/-10.36	-7.45/-6.37	-11.83/-11.44	-10.29/-13.27	-11.17/-17.95	-9.28/-5.32	-4.82/-5.6	-8.55/-17.84	-17.43/-18.44	-11.2/-11.43	-18.85/-12.66	-17.57/-15.61	-15.88/-14.88	-19.1/-19.34	-15.53/-11
Θ (120°)	-12.59/-14.09	-11.06/-12.08	-19.15/-18.92	-17.18/-11	-8.9/-10.44	-13.36/-15.84	-18.4/-18.23	-16.44/-15.1	-11.39/-14.17	-17.89/-12.76	-17.05/-17.41	-14.41/-18.76	-18.35/-14.17	-9.57/-18.11	-13.58/-6.05	-6.72/-13.27	-18.5/-6.67	-9.01/-15.46	-16.17/-11	-11.8/-17.62	-17.14/-12.61	-6.3/-12.06	-15.11/-12.22	-7.95/-9.72
Θ (127.5°)	-10.51/-12.11	-11.28/-14.59	-17.49/-16.49	-13.49/-10.77	-11.86/-13.17	-12.68/-10.34	-10.1/-18.1	-18.74/-18.51	-13.15/-11.17	-14.49/-17.18	-17.88/-18.46	-18.09/-15.28	-12.02/-18.72	-17.87/-8.77	-5.31/-3.91	-6.14/-8.1	-9.81/-5.86	-9.93/-18.44	-11.26/-6.32	-14.84/-12.54	-9.92/-9.39	-10.39/-10.63	-9.38/-9.63	-7.91/-8.4
Θ (135°)	-7.63/-8.7	-12.42/-17.84	-18.92/-18.63	-16.62/-16.16	-13.27/-12.59	-12.23/-13.11	-12.57/-10.87	-7.99/-8.98	-18.99/-12.18	-10.19/-11.75	-11.81/-11.19	-16.47/-12.43	-9.22/-14.7	-18.07/-9.93	-4.7/-8.11	-8.54/-14.84	-9.86/-9.92	-15.32/-18.93	-19.06/-19.05	-19.41/-13.18	-18.38/-14.88	-15.92/-11.49	-9.38/-12.67	-8.18/-7.91
Θ (142.5°)	-8.03/-9.03	-11.78/-14.16	-14.39/-13.56	-13.83/-14.24	-17.42/-15.1	-12.24/-11.89	-13.39/-10.97	-8.76/-7.99	-7.32/-6.97	-10.49/-14.6	-12.07/-9.96	-11.27/-13.03	-12.89/-16.31	-10.96/-9.79	-7.92/-10.04	-10.92/-7.01	-6.38/-14.71	-16.9/-15.94	-17.77/-9.6	-7.88/-14.44	-14.54/-18.47	-10.5/-10.24	-10.45/-11.73	-12.37/-8
Θ (150°)	-16.37/-15.44	-18.03/-18.62	-18.63/-18.89	-15.65/-12.59	-9.55/-8.21	-7.05/-6.42	-4.96/-3.61	-4.12/-6.52	-9.63/-7	-5.84/-6.85	-3.78/-10.73	-12.11/-13.19	-16.45/-15.46	-19.35/-17.98	-17.16/-16.57	-12.7/-6.54	-5.88/-10.13	-11.66/-11.92	-16.08/-11	-10.75/-6.63	-2.93/-4.21	-7.05/-8.49	-9.8/-11.95	-13.68/-17.32
Θ (157.5°)	-9.61/-12.57	-13.25/-14.08	-16.19/-14.2	-10.52/-7.94	-6.58/-5.5	-5.08/-4.81	-5.78/-6.5	-5.98/-2.87	-1/-0.72	-2.35/-4.66	-6.74/-10.34	-13.37/-13.17	-16.01/-18.63	-18.53/-14	-11.56/-12.9	-11.93/-10.55	-11.92/-11.51	-10.44/-10.36	-9.71/-8.65	-11.25/-8.71	-4.72/-2.94	-3.64/-3.94	-4.4/-5.75	-6.39/-7.65
Θ (165°)	-10.43/-13.36	-14.91/-19.01	-18.91/-15.72	-12.31/-9.62	-8.01/-5.83	-5.53/-4.94	-3.57/-1.78	0.180/-48	-0.27/-2.24	-5.35/-9.22	-16.96/-17.97	-18.17/-17.57	-19.06/-17.96	-19.38/-18.66	-17.56/-15.53	-13.83/-12.67	-13.67/-13.1	-15.59/-18.81	-12.65/-8.54	-7.85/-7.22	-5.29/-5.35	-3.66/-4.73	-5.29/-7.25	-8.99/-10.38
Θ (172.5°)	-10.97/-14.15	-17.24/-18.68	-18.65/-18.59	-18.98/-14.85	-11.08/-8.54	-5.72/-3.85	-3.75/-6.14	-10.04/-16.31	-18.68/-19.45	-14.7/-12.57	-12.42/-12.61	-15.69/-18.78	-18.02/-18.67	-17.98/-17.29	-16.77/-13.9	-12.62/-10.36	-9.07/-8.15	-6.93/-6.04	-5.91/-6.31	-5.82/-6.12	-4.24/-4.55	-5.15/-5.74	-7.15/-9.64	
Θ (180°)	-18.17/-18.69	-18.81/-17.69	-14.32/-11.65	-11.97/-11.42	-11.32/-8.84	-8.03/-9.43	-12.42/-18.12	-18.39/-11.22	-8.41/-7.74	-8.14/-8.87	-10.21/-13.22	-16.83/-17.45	-17.72/-18.3	-17.94/-19.12	-18.22/-13.95	-11.66/-8.69	-7.19/-6.6	-5.85/-5.58	-5.66/-6.34	-6.91/-7.62	-7.71/-7.58	-6.9/-7.41	-8.8/-9.66	-12.87/-16.5
Freq(Hz)	5.785G/Pol.	Phi/Ant. 2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	0.320/69	0.90/53	0.22/-0.23	-1.17/-2.29	-3.33/-3.88	-5.13/-7.77	-11.96/-14.81	-16.26/-13.96	-9.03/-5.97	-4.06/-2.57	-1.44/-0.91	-0.78/-0.26	0.37/-0.02	1.32/-1.41	1.160/6	0.25/-0.54	-1.95/-3.1	-5.24/-7.77	-10.72/-14.19	-15.69/-11.83	-8.02/-5.76	-4.74/-		



Freq(Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	4.06	3.64	4.3	3.51
Ant. 2 Max Gain (dBi)	1.65	1.44	2.31	2.08
Ant. 3 Max Gain (dBi)	2.58	1.31	2.03	2.7
Ant. 4 Max Gain (dBi)	2.51	2.82	3.53	3.79
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/150/247.5	Phi/112.5/330	Phi/127.5/322.5	Theta/157.5/240
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/127.5/142.5	Theta/105/142.5	Theta/105/142.5	Theta/105/15
Ant. 3 Polarization/Θ(°)/Φ(°)	Theta/127.5/37.5	Theta/120/30	Theta/82.5/172.5	Theta/97.5/172.5
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/60/202.5	Phi/52.5/202.5	Phi/37.5/165	Phi/30/165
Max Gain (dBi)	4.06	3.64	4.3	3.79
DG [1SS] (dBi)	4.31	3.97	4.33	3.94
DG [2SS] (dBi)	4.06	3.64	4.3	3.79
DG [4SS] (dBi)	4.06	3.64	4.3	3.79

DG 1SS Result

Freq(Hz)	6.175GPaL	PhiL	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
DG(dB)	0(0°)	0(0°)¶(7.5°)	¶(15°)¶(22.5°)	¶(30°)¶(37.5°)	¶(45°)¶(52.5°)	¶(60°)¶(67.5°)	¶(75°)¶(82.5°)	¶(90°)¶(97.5°)	¶(105°)¶(112.5°)	¶(120°)¶(127.5°)	¶(135°)¶(142.5°)	¶(150°)¶(157.5°)	¶(165°)¶(172.5°)	¶(180°)¶(187.5°)	¶(195°)¶(202.5°)	¶(210°)¶(217.5°)	¶(225°)¶(232.5°)	¶(240°)¶(247.5°)	¶(255°)¶(262.5°)	¶(270°)¶(277.5°)	¶(285°)¶(292.5°)	¶(300°)¶(307.5°)	¶(315°)¶(322.5°)	¶(330°)¶(337.5°)	¶(345°)¶(352.5°)
Θ(0°)	0.911/0.03	1.271/48	2.112/0.24	2.081/69	1.281/05	0.3-0.96	-1.17/-1.61	-0.90/01	0.60/99	1.011/28	1.31/2	0.971/07	1.381/74	2.24/27	2.72/25	2.512/23	1.290/51	-0.03/-0.9	-2.28/-1.67	-0.65/-0.26	0.04/0.7	1.151/43	1.191/3	0.830/72	
Θ(7.5°)	1.411/47	1.82/29	2.57/26	2.52/2	1.610/96	0.16/-0.61	-1.37/-1.86	-1.25/-0.64	-0.16/-0.19	0.571/28	1.361/11	0.840/93	1.091/22	1.591/71	1.871/17	1.531/71	1.110/36	-0.64/-1.47	-1.81/-1.9	-0.92/-0.25	0.411/0.2	1.65/22	2.34/22	1.671/51	
Θ(15°)	1.071/08	1.422/58	2.96/76	2.942/71	2.531/97	0.86/0.24	-0.05/-0.63	-1.1/-0.4	0.360/73	0.871/12	1.381/37	0.890/88	0.650/33	0.190/16	0.350/36	0.371/0.16	-0.53/-1.94	-4.03/-1.56	-4.49/-4.5	-4.53/-2.67	-0.780/32	1.331/95	2.28/247	2.11/43	
Θ(22.5°)	-0.37/-0.96	0.51/27	1.581/7	1.821/76	1.41/08	0.880/42	-0.12/-0.62	-0.46/-0.15	0.20/33	0.340/43	1.08/9	0.980/18	0.650/59	0.240/18	0.61/05	0.910/27	-0.18/-0.38	-0.98/-1.46	-1.69/-1.93	-2.51/-2.64	-1.78/-0.85	0.091/26	2.19/238	1.50/75	
Θ(30°)	-1.23/-1.45	-0.71/-0.36	0.64/-63	2.39/39	1.46/-24	0.57/-0.36	-0.83/-0.46	-0.41/-0.5	-0.51/-0.29	0.060/19	0.27/-0.34	-0.690/7	0.570/42	0.070/19	0.24/-0.19	-0.78/-2.27	-3.69/-3.73	-2.79/-2.79	-4.1/-4.2	-3.38/-2.02	-1.08/-0.39	0.190/51	1.37/-146	0.63/-0.27	
Θ(37.5°)	0.420/18	0.290/54	0.830/73	0.39/-0.48	0.050/9	1.050/85	0.990/92	-0.09/-1	-1.48/-1.81	-0.650/01	-0.36/-1.61	-2.32/-0.52	0.30/43	0.80/83	0.48/-0.49	-0.58/-1.1	-1.12/-1.51	-1.62/-2.3	-3.41/-4.26	-3.79/-3.43	-3.26/-1.56	-0.550/46	0.4/-0.31	-0.130/46	
Θ(45°)	0.360/08	0.4/-0.34	-0.48/-0.28	-0.330/83	2.1/63	0.50/-45	0.60/27	-0.38/-1.02	-0.71/-0.67	-1.18/-1.92	-1.27/-1.11	-1.05/-0.78	-0.680/12	0.710/56	-0.250/64	-0.17/-0.74	-1.67/-1.75	-1.33/-1.27	-3.31/-6.39	-6.27/-4.67	-2.71/-0.3	-0.35/-61	1.530/33	0.320/96	
Θ(52.5°)	0.310/12	-0.320/-44	-0.55/-0.78	-0.99/-0.14	-0.080/32	0.570/04	-0.32/-0.3	-0.91/-0.59	-0.8/-0.36	-1.51/-3.66	-2.65/-2.03	-0.92/-1.2	-0.99/-0.15	-0.01/-1.28	0.56/-1.32	0.62/-0.34	0.05/-1.44	-3.57/-0.55	-0.42/-2.59	-3.83/-2.21	-0.92/-0.86	-0.63/-0.42	-0.81/-0.75	-1.21/-0.67	
Θ(60°)	1.05/-25	0.96/-0.3	0.07/-0.36	0.520/-42	-1.11/-1.41	-1/-1.93	-2.82/-2.18	-1.35/-2.52	-4.09/-4.26	-1.99/-0.63	-1.23/-0.84	-1.02/-0.9	-1.21/-0.53	0.410/56	-0.030/79	1.63/-0.19	-1.73/-1.08	-1.93/-1.52	-1.92/-3.64	-2.98/-3.24	-0.060/35	-0.3/-0.99	0.510/61	0.281/24	
Θ(67.5°)	1.70/59	0.87/-0.6	-1.52/-1.56	-1.22/-0.38	-1.82/-2.62	-3.21/-3.5	-3.73/-3.26	-3.53/-4.59	-3.73/-3.51	-3.42/-1.7	-1.71/-2.56	-2.49/-2.82	-2.15/-1.72	0.300/53	0.090/66	-0.44/-0.49	-1.03/-1.83	0.160/54	-2.21/-2.03	-2.11/-2.94	-0.650/85	-0.130/47	0.810/88	0.61/-47	
Θ(75°)	1.651/-24	-0.41/-0.63	-0.130/-0.2	-1.94/-3.53	-3.22/-2.4	-3/-2.77	-3.24/-3.06	-3.76/-5.76	-5.19/-0.45	-4.54/-3.21	-3.29/-3.52	-3.43/-3.66	-2.02/-1.9	-0.97/-1.35	-0.17/-0.63	-1.38/-2.36	-1.62/-1.16	-0.480/-27	-2.32/-1.33	-0.22/-1.12	-0.050/67	1.13/-0.76	-0.180/89	1.221/63	
Θ(82.5°)	0.921/1	-0.91/-0.1	0.34/-0.01	-1.92/-3.59	-4.16/-1.43	-0.39/-2.75	-2.76/-3.14	-2.78/-0.45	-4.85/-3.2	-3.42/-0.9	-2.96/-1.98	-0.53/-1.5	-1.270/-28	-1.050/-73	-0.36/-1.81	-1.02/-1.6	-3.06/-2.88	0.86/-1.58	-3.32/-3.1	-1.96/-0.38	0.42/-1.56	0.24/-0.26	0.671/23	1.361/81	
Θ(90°)	0.260/91	0.61/-3.13	-1.72/-3.26	-3.84/-5.64	-5.89/-4.61	-4.9/-4.82	-3.88/-3.4	-3.3/-2.54	-3.76/-4.46	-2.65/-0.93	-2.86/-1.67	-0.85/-1.27	-2.31/-2.66	-2.54/-0.06	-0.18/-1.93	0.67/-1.5	0.94/-0.91	-2.02/-3.29	-2.42/-1.13	-1.3/-0.44	0.680/-16	-0.10/83	-0.24/-11	0.24/-11	
Θ(97.5°)	0.751/87	0.52/-2.85	-1.92/-3.16	-4.86/-7.02	-6.27/-4.81	-7.41/-8.79	-6.87/-3.91	-3.78/-4.61	-3.19/-4.09	-2.98/-1.31	-0.95/-2.96	-1.44/-1.12	-0.82/-1.8	-0.820/-58	-0.98/-2.95	-3.02/-1.09	-1.090/-36	-0.5/-4.86	-2.15/-1.49	1.6/-0.57	-0.381/24	1.31/03	1.131/05	0.251/69	
Θ(105°)	0.14/-09	-0.52/-1.86	-4.24/-8.33	-3.48/-4.95	-7.12/-3.77	-3.06/-5.55	-4.21/-3.26	-2.58/-6.21	-4.01/-5.14	-4.38/-2.47	-2.81/-2.78	-1.77/-1.25	-1.48/-0.38	-0.83/-2.03	-1.79/-1.25	-0.7/-2.84	-3.95/-2.36	-2.79/-2.88	-1.84/-1.46	0.51/-1.96	0.21/73	1.731/68	0.740/93	-1.68/-0.22	
Θ(112.5°)	-0.250/-07	0.5/-0.56	-3.68/-1.53	-0.57/-6.61	-5.98/-3.76	-3.72/-1.36	-1.11/-1.72	-2.56/-1.17	-1.31/-1.88	-3.19/-2.52	-3.78/-1.81	-1/-1.25	1.630/-05	-1.93/-2.16	-0.99/-1.27	-1/-0.06	-1.81/-1.48	-0.91/-3.54	-6.210/89	1.551/-86	-1.86/-1.45	-0.071/71	1.910/32	-0.39/-1.46	
Θ(120°)	0.890/28	-0.71/-1.47	-3.17/-1.69	0.29/-0.83	-3.37/-2.78	-1.95/-0.4	0.07/-1.13	-1.19/-0.8	0.45/-0.21	-0.83/-2.19	-4.15/-3.15	-2.61/-2.66	-3.35/-2.89	-3.35/-1.61	-1.140/-2	-1.53/-2.08	0.860/52	-0.78/-5.05	-7.01/-2.12	0.99/-0.94	-0.06/-2.38	-1.94/-1.29	-1.31/-69	1.22/-0.58	
Θ(127.5°)	-2.2/-0.78	-0.93/-2.47	-1.76/-0.72	1.49/1.71	0.2/-1.52	-1.84/-0.38	-2.020/-2	0.770/64	1.181/82	0.77/-0.54	-1.07/-1.92	-0.49/-3.96	-5.15/-4.19	-4.49/-1.1	0.14/-3.43	-3.76/-0.52	-0.28/-3.39	-4.15/-2.43	-4.54/-2.56	-3.99/-3.54	-0.77/-2.35	0.030/73	0.74/-409	-4.04/-2.67	
Θ(135°)	-2.91/-0.39	0.14/-0.23	-0.97/-0.45	0.98/2.7	2.821/71	0.14/-0.23	-0.98/2.7	-3.61/-1.73	-0.11/-29	2.370/34	1.43/-0.44	-2.43/-1.43	2.02/-0.22	-1.42/-1.56	-1.44/-1.4	-2.37/-0.24	-0.91/-1.08	-6.56/-1.93	-4.04/-2.56	0.171/08	-0.31/-1.16	-2.6/-0.76	-1.44/-1.84	-1.45/-1.08	
Θ(142.5°)	-2.74/-2.11	-0.80/-25	0.64/-0.7	-0/-0.06	0.740/85	0.24/-0.58	-1.33/-0.9	-0.750/32	0.790/73	1.20/83	-0.62/-1.69	-1.11/-2.2	-2.03/-0.5	-0.09/-1.51	-0.79/-0.64	-1.91/-1.89	-1.54/-1.97	-2.69/-5.53	-6.01/-4.4	-3.2/-1.25	-1.16/-2.36	-2.74/-3.39	-4.67/-5.48	-3.88/-2.65	
Θ(150°)	-3.67/-4.77	-3.39/-1.18	-1.97/-0.42	0.61/-18	-1.97/-0.42	0.68/-196	1.831/-24	0.560/-1	-0.56/-0.83	-4.74/-1.03	-1.48/-1.78	-3.18/-6.34	-7.85/-3.16	-0.370/-2	-1.06/-2.62	-1.88/-0.19	-0.56/-1.82	-4.36/-1.78	-6.22/-4.54	-4.24/-3.25	-2.15/-0.92	-1.52/-2.44	-3.89/-3.49	-2.2/-1.95	
Θ(157.5°)	-6.87/-4.84	-2.790/-05	1.311/17	1.671/84	1.570/87	0.14/-0.8	-0.98/-0.98	-1.1/-1.4	-0.710/27	0.55/-4.7	-3.78/-6.23	-4.39/-2.53	-0.89/-0.7	-0.2/-0.9	-2.22/-3.32	-3.41/-3.38	-4.78/-6.11	-4.12/-4.72	-5.55/-1.56	-4.16/-2.92	-2.25/-2.42	-2.79/-4.47			
Θ(165°)	-2.68/-2.3	-0.630/-57	0.962/01	2.783/03	3.052/38	1.20/-46	0.1/-0.22	-0.150/-27	0.470/35	0.530/9	0.820/-46	-0.28/-1.22	-2.34/-2.51	-0.660/-72	1.080/76	0.520/77	0.930/19	-1.33/-3.24	-4.05/-4.64	-3.98/-3.6	-3/-2.41	-2.11/-2.13	-2.16/-1.67	-1.4/-2.35	
Θ(172.5°)	-4.25/-3.77	-4.01/-3.31	-1.7/-0.74	-0.010/-86	1.481/-46	0.90/-38	-0.13/-0.13	-0.32/-0.49	-0.92/-0.55	-0.41/-0.4	-2.17/-3.49	-4.93/-6.8	-7.98/-3.5	-6.915/-9.2	-5.29/-4.85	-4.26/-4.46	-4.42/-4.97	-6.37/-1.73	-7.31/-4.72	-7.77/-1.19	-5.88/-4.91	-5.3/-5.58	-5.41/-5.43	-4.7/-3.35	
Θ(180°)	-3.89/-4.17	-3.57/-2.99	-1.93/-1.51	-1.53/-1.56	-2.01/-2.06	-2.06/-1.86	-1.37/-1.04	-1.03/-1.45	-1.96/-3.19	-4.52/-5.38	-6.15/-7.48	-8.67/-9.35	-10.09/-9.26	-7.35/-6	-5.14/-4.7	-3.99/-3.37	-3.02/-2.02	-1.63/-1.54	-1.88/-2.14	-2.43/-2.8	-2.98/-3.09	-3.06/-3.34	-3.19/-3.16	-3.11/-3.6	
Freq(Hz)	6.175GPaL	ThetaL	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
DG(dB)	0(0°)¶(7.5°)	¶(15°)¶(22.5°)	¶(30°)¶(37.5°)	¶(45°)¶(52.5°)	¶(60°)¶(67.5°)	¶(75°)¶(82.5°)	¶(90°)¶(97.5°)	¶(105°)¶(112.5°)	¶(120°)¶(127.5°)	¶(135°)¶(142.5°)	¶(150°)¶(157.5°)	¶(165°)¶(172.5°)	¶(180°)¶(187.5°)	¶(195°)¶(202.5°)	¶(210°)¶(217.5°)	¶(225°)¶(232.5°)	¶(240°)¶(247.5°)	¶(255°)¶(262.5°)	¶(270°)¶(277.5°)	¶(285°)¶(292.5°)	¶(300°)¶(307.5°)	¶(315°)¶(322.5°)	¶(330°)¶(337.5°)	¶(345°)¶(352.5°)	
Θ(0°)	-0.04/-0.64	-1.14/-0.69	-0.48/-0.32	0.280/83	10/8	0.330/82	1.211/35	2.432/-46	2.272/-15	1.981/59	1.280/55	-0.08/-0.85	-1.36/-1.17	-0.45/-0.22	0.451/27	1.430/59	0.430/-29	0.440/-68	0.970/95	1.561/88	1.881/77	0.930/57	0.230/29		
Θ(7.5°)	-0.41/-0.26	-0.67/-0.4	-0.6/-0.61	0.261/5	1.441/13	0.830/89	1.081/09	1.351/4	1.741/17	1.491/1	0.830/34	-0.43/-1.18	-1.76/-1.8	-1.45/-0.82	-0.510/05	0.760/58	0.330/33	0.550/6	0.871/07	1.431/87	1.781/87	1.821/4	0.730/4	0.010/-18	
Θ(15°)	-1.61/-1.18	-1.080/-0.84	-0.770/-25	1.421/81	1.731/53	1.631/76	1.851/19	2.32/-17	2.711/61	0.830/58	0/-0.67	-1.52/-1.94	-2.39/-3.47	-3.84/-3.79	-3.09/-2.27	-1.260/-0.4	-0.17/-0.6	-0.50/-54	1.361/21	0.940/71	0.680/61	0.310/03	-0.58/-0.88	-1.18/-1.43	
Θ(22.5°)	-1.58/-1.92	-0.280/-1.74	-0.820/-51	1.171/-42	1.361/67	1.641/74	2.092/-36	2.892/94	2.982/73	1.591/06	0.750/-17	-0.39/-0.68	-2.39/-3.78	-3.75/-2.65	-1.05/-0.07	0.390/67	0.780/08	-0.76/-0.56	0.210/76	0.720/60	1.261/68	1.740/81	-0.43/-1.34	-1.61/-3.1	
Θ(30°)	0.39/-0.63	-1.65/-1.03	-0.21/-0.1	0.11/-0.02	0.010/-16	0.08/-0.22	-0.260/37	1.312/33	2.732/52	1.551/21	2.042/-39	1.49/-0.2	-2.59/-3.25	-2.94/-3.02	-1.82/-1.23	-0.5/-0.26	-1.34/-1.51	-0.97/-1.42	-0.510/-18	0.641/25	0.91/14	2.042/-19	0.87/-0.31	-1.18/-0.25	
Θ(37.5°)	-0.19/-0.57	0.160/8	0.302/28	0.32/-0.24	-0.05/-0.37	-1.14/-0.92	-0.031/-51	2.542/75	2.822/73	2.561/69	1.491/94	1.2/-0.49	-2.58/-3.01	-2.84/-2.16	-2.26/-2.4	-2.79/-1.83	-1.56/-1.52	-1.13/-0.59	-0.08/-0.72	-0.460/-58	0.790/59	-0.10/-62	0.610/54	-0.75/-0.42	
Θ(45°)	-0.860/-59	1.331/21	1.642/37	1.570/-27	-1.84/-2.5	-2.67/-1.79	-1.01/-0.26	0.831/94	1.822/63	2.722/-11	1.140/81	0.85/-0.12	-1.15/-3.35	-2.43/-2.13	-3.26/-2.75	-2.22/-2.21	-2.65/-3.68	-2.47/-2.59	-1.67/-5.01	-0.870/54	0.951/-46	0.030/75	0.480/-9		
Θ(52.5°)	0.472/03	1.231/05	2.772/51	1.37/-0.27	-1.43/-2.38	-3.58/-2.19	-0.370/-4	1.322/75	4.310/3	3.012/-19	1.721/31	1.35/-0.54	-3.12/-7.18	-3.64/-3.61	-3.2/-2.7	-3.15/-1.33	-2.77/-4.53	-5.49/-4.21	-2.91/-2.92	-1.340/03	2.331/64	1.480/29	-0.630/09	0.82/-0.38	
Θ(60°)	-0.11/-0.12	1.650/-88	1.80/-76	0.860/-48	-0.48/-2.18</																				



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(30°)	-0.38/0.94	1.58/2.02	1.58/2.04	2.94/2.97	2.37/1.86	0.98/0.05	-0.15/-0.18	-1.07/-1.68	-1.14/-0.07	1.11/1.58	2.18/2.81	2.61/2.19	1.62/1.61	2.42/2.89	2.65/2.42	1.88/0.97	0.17/-0.57	-1.07/-1.96	-3.97/-4.48	-2.92/-1.04	-0.56/-0.74	-0.07/0.55	0.93/0.73	0.1/-0.87
Θ(37.5°)	0.24/0.17	0.45/1.49	1.75/2.6	2.59/2.32	1.55/1.06	0.72/0.69	0.38/-0.15	-1.07/-2.12	-1.64/-0.15	0.28/0.13	0.35/-1.29	1.54/1.55	1.12/1.1	1.26/0.88	1.11/1.34	1.43/0.51	-0.52/-1.49	-2.4/-2.8	-3.92/-4.7	-5.07/-3.39	-1.42/-0.76	-1.03/-1.63	-0.34/0.05	0.19/0.57
Θ(45°)	-0.06/-0.68	-0.45/-0.12	1.06/2.4	2.62/1.77	1.10/93	1.09/0.35	0.38/0.69	-0.89/-2.32	-3.45/-2.36	-0.11/0.92	0.16/0.23	0.58/1.06	1.64/2.08	1.81/1.15	2.88/3.02	1.14/-1	-0.5/-0.06	-1.26/-4.22	-6.32/-5.95	-7.24/-7.06	-7.12/-3.88	-2.6/-1.44	-0.98/-0.94	-0.2/-0.12
Θ(52.5°)	-1.13/-1.7	-1.64/0.83	1.99/1.46	-0.51/0.25	1.18/1.48	0.71/0.36	-0.54/0.26	-1.18/-3.29	-2.82/-2.33	-1.49/0.62	0.27/0.46	1.32/0.88	0.53/1.17	0.17/0.77	1.58/1.64	2.42/2.04	0.77/0.69	-1.28/-3.91	-4.1/-3.48	-3.03/-2.1	-2.34/-2.7	-1.89/-0.04	-1/-1.67	-2.33/-2.03
Θ(60°)	-0.42/-1.19	-1.45/-0.71	0.28/-0.73	-1.36/-1.8	-0.63/0.27	-1.11/-0.89	-0.86/-1.58	-2.43/-3.4	-3.32/-3.22	-1.47/-0.67	-0.11/-0.6	0.32/0.71	-0.21/0.81	0.22/0.76	0.18/1.32	1.06/1.07	0.21/-3.2	-3.57/-0.24	-1.94/-2.34	-2.9/-0.29	-2.15/-3.26	-2.28/-1.16	-1.77/-2.45	-2.2/-0.7
Θ(67.5°)	0.37/-0.7	-0.84/0.6	-1.31/-1.14	-1.27/-1.37	-1.16/-1.63	-2.76/-1.05	0.21/-0.2	-3.26/-4	-3.34/-1.78	-0.97/-0.76	1.17/0.66	0.57/1.49	1.64/2.41	1.86/0.92	-0.45/0.57	2.59/2.04	-0.74/-2.21	-1.18/1.03	-0.44/-4.49	-3.79/-1.98	-0.92/-0.14	0.65/-0.31	0.76/-1.15	-0.75/0.26
Θ(75°)	0.56/0.41	0.12/0.35	-2.25/-0.75	-1.51/-3.36	-4.22/-4.56	-4.78/-4.51	-3.32/-3.89	-2.71/-6.36	-6.55/-5.07	-3.48/-2.82	-0.91/0.5	-0.94/0.11	-0.76/0.75	1.7/0.97	-0.11/-0.72	-0.58/-1.41	-1.98/-1.42	-1.54/-0.59	-1.66/-1.95	-2.22/-2.57	-0.07/0.72	0.49/0.68	1.41/-0.2	-0.75/0.73
Θ(82.5°)	0.18/0.67	-2.33/-2.25	-1.93/-2.48	-4.38/-4.3	-6.34/-8.21	-7.71/-3.83	-4.46/-6.23	-3.47/-4	-5.56/-6.59	-4.79/-2.6	-3.35/-1.14	-0.35/-1.07	-0.74/-1.43	-0.63/-1.53	-1.25/-0.78	-1.19/-1.01	0.65/2.21	1.53/-1.99	-4.53/-4.05	-2.54/-1.54	-1.62/-0.76	-1.01/0.26	1.5/0.36	1.63/0.65
Θ(90°)	1/-0.58	-1.45/-1.59	-1.12/-3.29	-3.91/-4.46	-6.88/-9.48	-9.89/-6.67	-3.59/-4	-6.16/-3.23	-5.2/-5.06	-1.07/0.02	-0.9/-2.66	-0.62/-0.2	-0.37/0.15	-2.05/-1.25	-1.39/-2.51	-2.93/-0.27	1.93/1.96	0.58/-1.21	-0.82/-3.44	-3.47/-3.67	-0.71/-1.05	-1.09/-0.28	1.31/0.17	1.99/0.78
Θ(97.5°)	-0.2/0.99	0.78/-1.36	-1.73/-2.66	-4.03/-5.33	-8.81/-11.45	-8.82/-9.08	-6.66/-4.35	-3.8/-3.77	-4.87/-3.17	-0.51/31	0.18/-2.38	-2.92/-1.23	-1.21/-0.92	-2.75/-1.52	-0.55/-2.27	-3.43/-2.3	-0.72/-1.85	-2.67/-0.69	0.46/0.4	-0.08/-0.53	1.15/0.02	-0.89/0.7	-0.18/-0.06	0.87/0.85
Θ(105°)	-1.09/-1.19	-0.4/-1.77	-0.69/-1.03	-3.2/-6.77	-6.42/-5.54	-3.52/-5.1	-5.15/-5.43	-1.77/-3.2	-3.53/-3.11	-0.9/0.08	-0.08/-1.56	-3.05/-3.54	-3.96/-2.84	-3.27/-2.82	-1.19/-1.79	-2.34/-2.96	-3.9/-1.66	-1.49/-2.56	-3.14/-2.22	1.16/-1.01	-0.44/0.64	1.23/0.59	-0.96/-0.66	-1.21/-0.76
Θ(112.5°)	0.86/1.03	-0.13/0.66	-1.01/-0.53	-3.46/-4.75	-3/-2.04	-2.44/-2.47	-2.72/-0.49	-0.56/-4.18	-4.45/-3.61	0.03/-0.72	0.34/-0.53	-0.51/-1.05	-1.09/-3.01	-2.21/-2.62	-1.48/-0.77	-2.22/-3.44	-3.24/-3.49	-1.48/-2.25	-6.91/1.34	0.32/-0.72	-2.65/-0.1	2.64/2.81	0.45/0.26	-1.61/-0.74
Θ(120°)	-0.15/0.09	0.95/1.18	-2.77/-3.13	-2.55/-2.5	-2.65/-0.17	-1/-2.74	-1.61/-1.12	-1.36/-2.09	-0.71/1.14	-0.20/15	-0.51/-2.92	-0.82/-0.87	-1.24/-2.91	-1.93/-3.75	-2.24/-2.3	-2.69/-1.97	-2.25/1.8	-1.29/-2.3	-4.22/-3.51	0.93/-1.21	-3.43/-0.88	-0/0.98	-0.37/-0.28	-1.33/-0.22
Θ(127.5°)	-1.47/-0.83	1.19/0.29	-2.39/-2.33	-1.28/0.09	1.47/-0.59	-0.9/-0.34	-1.18/-2.23	-1.31/0.67	2.26/0.72	0.92/0.89	0.06/-1.12	-1.3/0.12	-3.87/-5.87	-7.07/-2.51	-0.61/-0.96	-3.84/-6.05	-1.68/-0.65	-3.69/-8.54	-5.02/-2.67	-2.57/-5.73	-3.59/-0.9	1.79/1.88	-1.62/-1.6	-0.12/-1.61
Θ(135°)	0.91/1.37	-0.15/-0.51	-1.64/-0.11	1.46/1.92	1.96/0.81	0.83/-0.1	-1.32/0.56	0.86/1.2	2.11/55	-0.14/0.05	-0.63/-1.8	0.62/0.62	0.04/-1.99	-3.45/-1.93	-1.04/-1.32	-2.06/-0.93	0.07/2.64	-9.05/-5.89	-3.02/-3.51	-1.69/-0.37	-1.65/-2.79	1.34/0.37	-0.8/-0.56	0.43/0.49
Θ(142.5°)	0.7/-0.48	-1.83/-2.21	-1.07/-0.47	0.42/0.69	0.72/1.02	0.63/-0.19	-0.01/0.77	1.57/2.59	2.84/0.85	-0.89/0.28	-0.25/0.05	-0.03/-1.27	-1.56/-3.45	-4.99/-1.66	-0.22/0.46	0.52/-0.72	-1.26/-4.58	-3.41/-5.22	-7.97/-3.04	-1.02/-0.29	-1.88/-1.7	-2.43/-2.92	-1.85/-1.62	-0.13/0.56
Θ(150°)	-2.78/-1.96	-0.46/-0.09	-0.78/-1.38	-2.2/-2.07	-2.49/-2.89	-2.4/-2.42	-1.63/-0.17	0.44/0.31	-0.53/-0.59	0.37/0.21	-1.38/-3.07	-2.06/-1.52	-1.86/-2.99	-1.66/-0.08	0.4/-0.14	-0.65/0.68	-0.05/-5.2	-6.71/-3.71	-5.06/-6.08	-4.25/-3.35	-1.96/-2.21	-3.86/-4.69	-5.57/-5.76	-5.08/-3.38
Θ(157.5°)	-6.7/-4.2	-2.38/-1.24	-1.08/-1.92	-2/-2.02	-1.07/-0.78	-0.24/0.06	-0.54/-0.85	-0.78/-1.33	-1.89/-2.15	-1.34/0.13	0.45/-0.58	-2.55/-4.8	-4.64/-3.23	-1.97/-1.53	-0.62/-1.01	-0.67/-1.1	-1.35/-2.72	-2.88/-3.79	-4.49/-4.3	-3.34/-2.87	-1.26/-1.53	-2.8/-5.13	-6.88/-6.78	-8.14/-10.38
Θ(165°)	-3.37/-2.62	-2.3/-0.76	0.45/1.37	1.76/1.29	0.29/0.56	-1.17/-2.04	-2.47/-2.4	-1.44/-1.02	-0.75/-0.94	0.09/0.13	-0.48/-1.51	-2.33/-2.44	-1.1/0.11	0.37/0.12	0.23/-0.06	0.06/-0.95	-2.27/-2.21	-3.05/-3.96	-5.27/-4.9	-2.92/-2.05	-1.94/-1.93	-2.82/-3.13	-2.96/-3.11	-4.46/-3.63
Θ(172.5°)	-3.36/-1.92	-1.13/-0.29	0.18/0.79	0.69/0.57	0.32/0.49	1/1.15	0.75/0.74	0.38/-0.15	-0.95/-1.27	-1.61/-2.92	-4.2/-5.2	-5.96/-6.08	-6.07/-5.37	-5.28/-5	-4.27/-4.58	-4.68/-5.17	-5.05/-6.42	-4.94/-6.12	-7.89/-7.53	-6.6/-5.5	-4.54/-4.45	-5.41/-6.87	-6.52/-5.9	-5.38/-4.03
Θ(180°)	-5.93/-0.52	-5.4/-3.62	-2.78/-1.81	-1.09/-0.73	-0.57/-0.45	-0.89/-1.57	-1.67/-2.28	-2.56/-3.61	-4.14/-5.25	-5.81/-5.89	-6.87/-7.21	-7.71/86	-7.49/-7.29	-7.34/-6.33	-5.31/-4.85	-4.05/-3.4	-2.21/-1.71	-1.61/-2.66	-3.73/-4.17	-5.21/-6.58	-6.79/-7.44	-7.04/-6.19	-5.71/-4.91	-5.34/-5.48
Freq(Hz)	6.895GPol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-0.53/-0.77	0.09/0.83	1.63/2.03	2.56/2.97	2.85/2.71	2.87/3.31	3.06/3.85	3.64/3.68	3.61/3.38	3.06/2.83	2.38/1.78	0.95/0.11	-0.52/0.03	0.77/1.37	1.89/2.38	2.73/2.1	3.04/2.22	2.53/2.62	2.37/2.62	3.15/3.42	3.68/3.58	3.29/3.14	2.52/1.94	1.21/0.25
Θ(7.5°)	-0.22/0.29	1.14/1.18	2.07/2.67	3/2.93	2.77/2.48	2.47/2.45	2.51/2.66	3.11/3.36	3.72/3.74	3.45/2.81	2.25/1.58	0.78/-0.32	-0.96/-0.77	0.18/0.78	1.52/2.27	2.73/2.95	2.42/2.35	2.19/2.3	2.95/3.37	3.61/3.86	3.74/3.4	3.09/2.99	2.7/2.38	1.34/0.26
Θ(15°)	-0.34/-0.17	0.29/0.31	0.99/0.15	1.18/1.13	0.91/0.49	0.69/0.83	1.92/73	3.59/3.96	3.74/3.41	2.93/2.07	0.95/0.41	-0.23/-0.75	-1.17/-1.07	-0.39/0.29	0.66/0.99	1.57/1.99	2.06/2.15	1.82/2.01	2.54/2.75	2.95/3.11	3.13/-0.19	3.01/2.59	2.51/2.34	1.71/0.64
Θ(22.5°)	0.07/-0.66	-0.8/-0.31	0.61/1.29	1.11/0.79	0.21/-0.52	-0.89/-0.55	0.25/0.87	1.45/2.15	2.81/3.28	3.03/2.36	1.09/-0	-0.38/-0.3	-0.89/-1.64	-1.53/-1.18	-1.35/-0.97	-0.26/0.18	0.51/0.2	0.36/1.25	1.82/1.62	1.28/0.9	1.11/1.37	1.45/1.59	2.01/1.97	1.52/0.73
Θ(30°)	0.32/0.33	0.16/0.25	0.54/0.73	-0.23/-0.3	-0.07/-0.52	-1.07/-0.86	-0.55/0.22	0.92/1.76	2.4/2.7	2.87/2.85	2.08/1.1	-0.02/-1.62	-2.82/-3.35	-4.52/-4.2	-2.91/-2.06	-0.64/-0.12	-0.28/-0.48	-0.32/0.54	1.97/2.01	1.41/1.67	2.14/1.89	1.49/0.39	0.2/0.76	-0.27/-0.11
Θ(37.5°)	0.45/0.38	-0.4/0.16	0.64/1.06	0.09/0.01	0/-0.54	-1.52/-1.74	-1.1/-0.84	-0.18/-1.62	2.38/2.64	2.66/2.05	1.18/0.66	-0.89/-2.26	-2.39/-1.24	-2.35/-4.02	-3.61/-3.27	-2.07/-1.19	-0.62/-1.82	-1.25/0.68	0.88/-1.52	1.42/0.73	0.4/0.17	0.18/-0.07	-1.19/-0.23	-0.27/-0.29
Θ(45°)	0.7/-0.38	0.35/0.65	2.17/2.48	1.04/-0.26	-1.29/-2.78	-3.68/-3.26	-3.47/-3.36	-0.99/-1.33	2.37/2.85	2.93/2.31	0.84/0.66	1.4/-0.31	-2.17/-4.4	-5.56/-5.21	-3.37/-3.25	-2.58/-1.96	-1.33/-1.44	-1.79/-1.8	-0.01/-0.57	-1.51/0.03	-0.28/-1.05	0.11/-0.1	-0.33/0.97	-0.09/-0.85
Θ(52.5°)	1.42/-0.14	0.06/1.42	2.01/2.04	1.2/0.54	-0.08/-2.15	-3.01/-3.15	-3.89/-3.35	-1.15/-0.01	1.05/2.04	2.08/2.48	1.77/0.63	0.23/-1.52	-1.64/-3.43	-5.25/-5.66	-5.87/-4.43	-5.16/-4.53	-3.18/-4.45	-3.26/-1.81	-2.61/-2.62	-1.8/-2.28	-1.66/-2.25	-1.25/-0.64	0.23/0.9	-1.27/0.06
Θ(60°)	0.12/-0.15	0.77/1.03	1.19/0.69	0.38/0.63	-0.63/-1.77	-3.96/-5.68	-4.19/-3.22	-2.6/-0.69	2.22/2.65	1.75/1	0.16/0.1	0.76/-0.69	0.11/-2.77	-5.6/-5.24	-6.98/-6	-5.6/-6.46	-3.79/-5.79	-2.34/-2.3	-2.08/-3.14	-0.48/-2.01	-1.14/-0.58	-0.77/-1.11	0.19/0.43	-2.22/0.17
Θ(67.5°)	0.7/-0.18	-0.04/0.97	0.42/0.74	1.45/0.77	-0.79/-3.49	-5.86/-8.22	-7.1/-6.65	-4.56/-0.99	0.4/0.24	1.04/2.21	0.93/0.74	1.18/0.75	1.36/-1.12	-3.37/-4.05	-4.73/-3.88	-4.99/-3.69	-2.13/-6.12	-1.04/-3.35	-0.86/-4.72	0.13/-1.77	-0.66/-2.23	-0.45/-1.79	-2.09/-0.91	-3.09/0.22
Θ(75°)	-0.26/0.04	-0.11/0.75	0.94/1.44	1.05/0.96	-0.81/-3.97	-6.22/-7.75	-6.64/-7.95	-8.94/-5.13	-1.18/0.03	-1.02/1.07	1.03/0.4	1.26/2.33	1.44/1.59	-1.08/-0.12	-1.54/-3.05	-2.61/-3.54	-1.31/-3.82	0.29/-1.67	0.39/-3.41	-0.07/-2.72	-1.26/-4.85	-1.09/-1.64	-4.08/-1.92	-1.50/33
Θ(82.5°)	0.42/-0.51	-0.33/-1.13	1.62/1.1	1.44/0.15	-1.92/-4.08	-5.53/-5.67	-5.84/-9.67	-1.02/-5	-1.74/-0.06	0.38/0.1	1.16/0.82	1.59/3.21	1.65/2.24	0.43/-2.6	-0.98/-4.28	-0.61/-2.65	-1.31/-2.33	-0.43/-1.43	1.7/-1	-0.14/-4.96	-1.54/-2.77	-2.97/-1.32	-3.09/-1.35	-1.35/-0.18
Θ(90°)	0.96/-0.15	0.02/1.8	1.74/1.45	1.45/-0.88	-3.36/-3.77	-6.16/-7.52	-8.52/-7.37	-5.68/-4.06	-2.24/-0.92	0.19/0.11	1.51/1.68	1.99/2.61	2.08/1.18	-0.98/0.33	-2.29/-2.4									



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(22.5°)	0.85/-0.1	-0.31/-0.5	-1.53/-2.77	-4.05/-5.66	-6.62/-8.33	-12.16/-13.75	-16.28/-11.02	-8.19/-6.45	-4.97/-3.23	-1.99/-1.03	-0.26/-0.18	0.49/0.08	-0.34/-0.52	-1.21/-1.88	-3.41/-3.99	-4.98/-5.46	-7.16/-9.35	-12.46/-16.29	-17.21/-13.42	-8.09/-5	-2.93/-1.2	0.09/0.49	1.45/-1.83	1.48/-1.03
Θ(30°)	-0.31/-0.08	-0.93/-2.86	-3.19/-2.99	-2.48/-3.33	-5.53/-9.67	-13.29/-14.56	-13.34/-11.72	-8.38/-7.74	-6.13/-4.12	-2.24/-1.13	-0.68/-0.08	-0.22/-0.25	-0.89/-1.84	-2.46/-2.58	-3.27/-4.53	-6.03/-7.46	-8/-8.85	-10.92/-16.58	-19.15/-17.15	-12.09/-7.54	-5.56/-3.42	-1.83/-0.35	0.36/0.85	0.5/-0.22
Θ(35°)	0.58/0.14	-1/-0.76	-1.47/-2.89	-4.54/-5.97	-8.64/-13.13	-19.51/-18.79	-15.34/-10.61	-8.65/-8.07	-7.46/-6.06	-5.34/-5.4	-4.81/-5.75	-5.27/-3.6	-0.41/-5.23	-6.32/-6.52	-6.98/-6.25	-4.75/-4.34	-6.29/-2.48	-11.42/-16.77	-10.61/-6.85	-7.12/-3.99	-2.05/-1.2	-1.27/-1.09	-0.473/0.03	0.04/0.51
Θ(45°)	0.79/-0.02	-0.76/-3.08	-3.27/-1.85	-1.93/-3.06	-5.85/-10.75	-18.08/-19.34	-13.89/-3.95	-7.64/-6.8	-9.3/-8.03	-5.52/-2.4	-4.65/-5.96	-6.64/-4.28	-2.48/-1.61	-3.1/-5.97	-4.5/-3.65	-6.61/-7.97	-6.53/-6.91	-9.63/-11	-14.74/-18.22	-15.91/-10.24	-7.79/-4.02	-4.49/-1.75	-0.91/0.06	1.07/0.67
Θ(52.5°)	-1.74/-2.49	-2.57/0.01	0.74/-1.25	-3.51/-4.87	-6.2/-10.6	-19.58/-17.87	-15.19/-9.76	-8.95/-13.3	-12.98/-9.61	-8/-6.98	-6.71/-5.41	-5.02/-6.72	-7.47/-7.18	-8.63/-6.91	-4.81/-6.56	-6.7/-6.4	-8.06/-4.95	-8.59/-12.55	-18.92/-14.03	-9.84/-6.82	-4.6/-3.81	-1.09/0.71	1.05/0.02	-1.55/-2.43
Θ(60°)	-0.66/-0.99	-2.24/-2.21	-0.87/-1.73	-3.3/-3.31	-4.02/-6.4	-11.33/-14.38	-11.63/-10.96	-8.38/-8.19	-10.22/-9.89	-15.34/-18.36	-12.76/-8.96	-6.32/-6.3	-10.77/-13.55	-10.62/-9.75	-14.45/-9.93	-9.58/-11.3	-11.01/-13.86	-11.78/-10.53	-14.35/-17.99	-10.12/-5.57	-6.24/-4.9	-2.36/-0.3	-0.46/-2.12	-3.67/-1.78
Θ(67.5°)	-0.51/-0.76	-0.45/-0.97	-2.93/-1.32	-1.8/-2.48	-4.79/-8.02	-15.17/-15.67	-9.39/-7.32	-9.36/-10.01	-9.06/-11.56	-14.9/-9.52	-6.95/-7.15	-5.26/-6.81	-6.84/-7.31	-6.17/-8.62	-17.04/-13.88	-11.73/-10.1	-13.8/-17.86	-17.48/-17.24	-17.36/-18.59	-7.27/-3.81	-1.94/-1.24	-0.13/0.56	0.79/-1.76	-2.65/-0.43
Θ(75°)	0.35/0.46	1.09/0.53	-3.89/-1.25	-2.37/-4.66	-5.74/-9.5	-12.28/-17.98	-18.87/-19.34	-18.17/-16.76	-13.26/-16.77	-17.45/-16.7	-8.23/-9.06	-17.23/-12.7	-15.95/-9.76	-6.83/-7.26	-6.55/-6.47	-12.55/-12.54	-7.56/-8.22	-16.25/-16.23	-18.92/-16.41	-6.82/-3.94	-1.41/-0.68	0.48/2.47	2.58/0.13	-2.31/0.48
Θ(82.5°)	-1.51/-0.52	-1.04/-1.79	-3.97/-3.78	-6.1/-6.27	-7.77/-10.02	-9.5/-12.63	-18.1/-17.96	-9.73/-11.54	-16.67/-17.48	-18.22/-14.78	-17.09/-11.29	-8.85/-7.99	-6.03/-7.86	-8.94/-12.16	-9.61/-5.45	-12.94/-8.84	-7.34/-6.2	-13.96/-10.76	-12.08/-14.88	-6.79/-2.86	-1.05/0.4	1.2/-3.1	1.74/-0.56	-1.5/-0.19
Θ(90°)	-0.38/-1.14	-2.09/-4.1	-3.38/-2.91	-5.41/-5.64	-10.13/-15.89	-18.66/-12.77	-10.82/-10.2	-16.26/-18.25	-15.64/-15.85	-8/-5.86	-11.68/-11.24	-7.83/-5.14	-3.88/-2.92	-6.79/-7.71	-12.28/-8.65	-12.57/-8.97	-11.17/-11.18	-15.01/-11.27	-11.13/-11.74	-5.3/-2.88	-1.12/0.06	-0.56/0.43	0.77/-0.53	1.05/-1.33
Θ(97.5°)	-1.21/0.07	-1.71/-4.58	-3.08/-0.49	-6.64/-7.11	-17.36/-18.42	-15.29/-10.3	-13.17/-6.27	-15.29/-10.3	-12.55/-11.71	-14.12/-3.69	-7.86/-6.67	-17.31/-13.57	-10.66/-17.24	-8.59/-12.21	-18.84/-17.52	-7.68/-6.23	-13.52/-10.16	-17.1/-15.56	-18.78/-5.65	-4.63/-1.91	-0.22/2.4	-2.48/1.54	1.21/0.89	1.93/-1.92
Θ(105°)	-2.53/-1.21	-4.6/-5.35	-5.81/-2.75	-5.64/-11.68	-15.16/-12	-12.9/-43	-11.89/-19.23	-8.25/-12.35	-17.94/-17.52	-8.1/-8.47	-18.94/-10.65	-16.3/-17.81	-17.65/-12.05	-10.52/-12.42	-10.74/-11.8	-8.54/-13.8	-17.07/-18.78	-9.68/-10.62	-9.79/-5.06	-1.3/-2.3	-1.23/0.36	0.84/-1.27	2.01/2.88	1.06/-0.59
Θ(112.5°)	0.78/0.22	-1.98/-3.87	-5.72/-4.81	-7.61/-8.69	-6.04/-8	-11.97/-17.87	-14.3/-6.17	-11.11/-16.59	-14.46/-13	-8.42/-12.05	-10.21/-6.19	-5.7/-9.38	-6.35/-14.45	-8.28/-10.98	-15.19/-8.52	-7.21/-12.5	-13.47/-16.66	-10.6/-9.54	-17.82/-4.28	-1.95/-1.61	-1.85/-2.27	1.24/3.78	3.342.14	0.65/0.04
Θ(120°)	0.91/0.28	-0.48/-2.74	-8.52/-3.68	-7.09/-14.17	-13.17/-6.27	-5.58/-13.3	-9.06/-13.73	-12.55/-11.71	-14.12/-3.69	-3.85/-11.16	-17.31/-13.57	-10.66/-17.24	-8.82/-16.24	-8.59/-12.21	-18.84/-17.52	-7.68/-6.23	-13.52/-10.16	-17.1/-15.56	-18.78/-5.65	-4.63/-1.91	-0.22/2.4	-2.48/1.54	1.21/0.89	1.93/-1.92
Θ(127.5°)	-0.34/-1.04	0.76/-0.06	-3.46/-4.55	-6.81/-2.62	-3.98/-9.28	-7.75/-6.51	-12.34/-16.09	-12.29/-18.04	-5.19/-3.14	-6.25/-17.53	-16.08/-12.81	-8.5/-12.52	-16.86/-17.76	-18.87/-8.39	-12.45/-9.11	-9.43/-15.79	-10.97/-4.1	-10.62/-16.66	-6.61/-7.02	-4.38/-4.21	-6.18/-2.25	1.69/-4.3	1.25/-0.05	0.83/-0.38
Θ(135°)	2.43/2.59	1.09/-1.44	-0.67/-0.13	-0.21/-3.57	-5.73/-7.59	-5.29/-9.41	-19.36/-14	-10.56/-11.3	-9.78/-12.64	-17.75/-18.26	-17.59/-12.8	-5.02/-8.13	-6.04/-7.54	-10.56/-10.65	-19.46/-12.79	-13.59/-17.66	-7.66/-8.02	-16.76/-19.01	-8.1/-3.55	-2.1/-2.78	-6/-7.9	1.13/2.9	2.19/-1.35	3.09/-1.9
Θ(142.5°)	2.21/-1.56	-0.209/-3.77	-3.08/-3.24	-2.3/-2.2	-3.04/-3.85	-6.99/-16.42	-19.17/-17.92	-18.16/-11.97	-9.36/-11.58	-11.76/-10.58	-7.88/-7.36	-8.51/-9.57	-5.66/-8.88	-9.44/-8.22	-6.27/-13.17	-6.59/-14.51	-6.69/-15.24	-10.03/-14.01	-10.86/-3.66	-3.46/-2.24	-7.35/-8.1	-8.01/-2.31	-0.42/0.98	3.07/2.57
Θ(150°)	-2.91/-1.61	0.28/-0.04	-0.96/-3.43	-6.77/-7.76	-9.46/-13.88	-16.64/-16.03	-15.15/-17.65	-19.41/-18.99	-18.55/-16.19	-10.19/-6.77	-7.35/-9.57	-6.87/-6.38	-7.82/-5.66	-2.88/-2.66	-5.8/-8.16	-6.98/-6.05	-6.61/-17.1	-16.25/-17.35	-10.91/-6.65	-7/-5.51	-3.53/-4.32	-4.18/-5.22	-8.86/-7.93	-6.81/-4.11
Θ(157.5°)	-12.07/-9.78	-6.78/-4.43	-2.94/-2.8	-4.06/-5.62	-6.01/-7.24	-8.97/-12.21	-16.99/-18.94	-17.13/-13.19	-19.08/-15.76	-10.84/-6.73	-4.72/-5.53	-7.96/-14.4	-16.34/-7.92	-3.85/-2.22	-2.17/-2.56	-1.89/-1.18	-2.68/-6.55	-10.28/-13.87	-13.67/-9.65	-6.43/-5.61	-3.65/-3.72	-6.63/-11.66	-17.61/-19.14	-17.86/-18.34
Θ(165°)	-2.66/-1.56	-1.73/-1.03	-0.87/-1.19	0.22/-0.78	-2.98/-6.1	-9.95/-16.8	-18.05/-17.55	-17.57/-18.97	-18.78/-17.19	-11.11/-8.17	-6.8/-6.32	-8.32/-9.06	-6.17/-2.96	-0.65/-1.06	2.09/2.3	1.81/0.82	-0.93/-2.33	-6.51/-11.62	-19.23/-13.81	-8.62/-6.57	-5.17/-4.12	-3.37/-3.22	-2.78/-2.99	-3.77/-4.22
Θ(172.5°)	-1.22/-0.66	-0.84/-2.01	-2.95/-3.32	-5.9/-8.97	-11.52/-14.71	-15.78/-15.84	-16.78/-18.4	-17.41/-13.28	-12.46/-11.69	-11.54/-14.67	-15.14/-13.22	-11/-10.3	-9.15/-8.46	-8.32/-7.29	-5.76/-5.52	-5.01/-4.43	-4.92/-6.84	-9.85/-14.34	-18.19/-17.68	-15.52/-12.27	-10.08/-11.08	-9.66/-8.91	-5.81/-4.8	-4.15/-2.13
Θ(180°)	-5.8/-6.09	-8.19/-8.12	-7.01/-7.54	-7.21/-6.69	-7.79/-8.98	-11.22/-12.99	-13.64/-17.61	-17.22/-18.67	-17.22/-18.87	-16.69/-15.63	-14.18/-12.01	-10.35/-10.79	-10.06/-9.77	-10.03/-9.75	-8.48/-8.91	-7.99/-8.57	-7.94/-7.77	-8.04/-8.99	-18.07/-11.91	-13.6/-16.25	-15.86/-15.87	-11.07/-8.48	-6.89/-5.87	-4.55/-6.61
Freq(Hz)	6.995GPol.	ThetaAnt. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-14.76/-10.82	-6.66/-4.93	-2.37/-0.62	0.39/-1.28	1.88/2.47	2.98/3.49	3.53/-2.2	2.41/-1.77	0.9/0.04	-1/-2.25	-4.38/-7	-10.36/-16.14	-15.29/-10.46	-6.89/-4.12	-2.59/-0.84	0.04/0.86	1.48/-1.49	1.78/-1.93	1.86/-1.7	1.22/0.69	0.15/-0.99	-1.87/-3.43	-5.06/-7.3	-10.65/-15.78
Θ(7.5°)	-15.46/-10.37	-6.91/-6.62	-3.54/-1.53	-0.41/-0.21	0.03/0.5	1.09/-1.32	1.63/-1.71	3.81/-5.6	0.96/-0.11	-1.32/-3.13	-4.91/-7.45	-11.77/-14.42	-13.01/-9.38	-6.56/-4.4	-2.5/-1.06	0.08/-0.17	1.41/-8.2	1.88/-2.11	1.98/-1.8	1.41/-2.4	0.74/-0.11	-1.12/-2.77	-4.76/-6.74	-11.8/-18.34
Θ(15°)	-17.46/-12.21	-9.1/-7.71	-5.11/-3.87	-3.27/-3.39	-2.9/-2.07	-7.07/-0.17	0.31/0.85	0.82/0.47	-0.42/-1.23	-2.91/-5.23	-16.86/-18.99	-14.56/-10.61	-7.71/-5.36	-3.59/-2.79	-1.81/-1.19	-0.59/0.03	0.71/-1.19	1.41/-1.18	0.71/0.38	0.11/-0.57	-1.28/-2.56	-4.37/-5.74	-8.32/-13.27	1.06/-0.59
Θ(22.5°)	-15.4/-18.11	-18.57/-12.05	-7.08/-4.67	-3.95/-3.8	-3.08/-2.57	-2.77/-2.06	-1.33/-0.93	-1.3/-2.65	-3/-3.21	-3.82/-5.3	-7.01/-10.25	-18.25/-17.82	-13.88/-10	-7.77/-6.43	-5.5/-5.02	-4.44/-3.33	-2.43/-1.38	-0.71/-0.1	0.68/0.81	0.53/-0.29	-0.62/-1.38	-2.09/-3.16	-5.66/-8.32	-9.51/-10.25
Θ(30°)	-18.53/-18.72	-16.87/-10.05	-6.74/-4.27	-3.65/-3.49	-3.66/-4.53	-3.29/-1.78	-1.81/-2.52	-3/-3.68	-4.14/-3.85	-4.73/-5.75	-8.55/-13.65	-19.13/-19.03	-13.04/-11.15	-11.8/-12.73	-11.96/-10.38	-8.33/-7.22	-5.36/-4.21	-2.57/-1.09	-0.15/0.49	0.71/0.6	0.16/-0.47	-1.53/-2.85	-5.62/-8.43	-11.4/-12.48
Θ(37.5°)	-16.39/-13.93	-9.65/-7.76	-7.43/-5.85	-4.37/-3.46	-3.21/-3.8	-4.73/-4.06	-0.01/-5.41	-7.2/-5.05	-3.92/-4.34	-6.9/-12.59	-17.87/-17.7	-14.25/-16.73	-17.22/-14.4	-16.07/-16.52	-13.59/-12.44	-11.77/-89	-4.34/-3.88	-3.71/-2.78	-1.57/0.34	-0.09/-0.81	-1.45/-2.24	-2.89/-4.38	-7.03/-9.22	-9.45/-13.81
Θ(45°)	-12.22/-11.15	-7.32/-8.85	-7.38/-5.22	-4.39/-4.06	-3.94/-5.68	-4.05/-5.44	-7.73/-8.66	-7.18/-6.03	-7.21/-7.3	-10.33/-10.72	-12.76/-11.04	-11.46/-13.97	-17.81/-15.58	-14.87/-16.41	-18.31/-17.09	-11.02/-8.13	-7.29/-6.86	-6.36/-3.9	-2.65/-1.71	-2.05/-2.43	-1.72/-1.69	-2.95/-3.97	-6.55/-7.27	-9.58/-13.33
Θ(52.5°)	-17.31/-12.83	-11.61/-11.54	-8.98/-6.73	-6.3/-6.03	-4.67/-4.53	-6.02/-6.49	-7.97/-7.18	-7.95/-6.96	-8.12/-9.73	-11.15/-9.49	-10.59/-10.36	-14.8/-17.12	-18.61/-17.53	-18.94/-18.45	-10.85/-14.76	-12.87/-9.87	-9.65/-6.61	-8.17/-6.96	-5.4/-5.71	-4.81/-5.36	-6.63/-6.51	-6.02/-6.58	-9.17/-12.51	-12.04/-17.31
Θ(60°)	-17.68/-13.55	-13.77/-17.59	-11.88/-11.57	-16.73/-9.5	-7.73/-6.45	-8.37/-9.91	-9.66/-10.53	-15.18/-11.41	-5.38/-3.73	-7.22/-14.16	-10.51/-13.75	-11.28/-14.49	-18.9/-18.64	-19.41/-16.72	-15.4/-18.32	-14.13/-8.41	-5.94/-4.3	-3.77/-5.37	-7.31/-7.38	-9.34/-10.42	-8.47/-10.68	-9.41/-12.4	-18.04/-16.77	1.06/-0.59
Θ(67.5°)	-10.68/-12.64	-19.04/-19.05	-15.83/-18.03	-16.53/-11.57	-10.07/-8.38	-11.24/-17.61	-17.23/-18.74	-18.89/-18.39	-15.46/-11.34	-9.09/-9.34	-10.02/-8.44	-6.3/-11.24	-12.04/-14.14	-18.9/-18.02	-18.58/-17.83	-19/-15.53	-13.56/-11.14	-6.61/-5.61	-4.32/-5.89	-9.1/-10.86	-13.97/-14.88	-11.44/-9.38	-11.41/-13.78	-17.99/-11.93
Θ(75°)	-10.45/-14.81	-19.07/-15.93	-																					



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(75°)	-7.26/-7.53	-6.77/-9.37	-7.39/-4.99	-5.97/-6.24	-4.51/-4.17	-3.44/-5.03	-6.35/-5.84	-4.4/-4.52	-7.76/-6.66	-6.8/-6.84	-8.93/-15.77	-10.72/-12.09	-18.88/-18.45	-11.23/-12.86	-14.21/-9.89	-9.96/-8.47	-13.26/-11.57	-14.36/-3.42	-4.94/-4.62	-5.12/-12.83	-7.15/-6.71	-8.73/-18.35	-17.35/-19.22	-16.1/-7.84
Θ(82.5°)	-6.94/-5	-9.36/-10.43	-5.14/-4.36	-6.6/-5.74	-4.4/-3.02	-4.62/-7.63	-7.71/-8.06	-4.94/-4.95	-6.15/-6.89	-6.6/-9.11	-9.97/-13.86	-9.32/-12.17	-17.1/-15	-18.76/-15.38	-14.62/-14.3	-17.67/-13.29	-5.9/-9.9	-15.22/-8.93	-5.52/-12.36	-12.31/-15.2	-18.43/-18.96	-17.42/-15.6	-13.47/-8.25	
Θ(90°)	-8.82/-6.07	-6.68/-7.02	-7.64/-9.51	-8.31/-11.33	-11.85/-11.87	-12.14/-8.7	-7.59/-8.07	-11.38/-14.22	-9.83/-6.21	-8.49/-8.89	-6.37/-12.28	-7.53/-4.7	-14.18/-13.88	-18.85/-7.75	-1.14/-4.39	-5.66/-15.9	-12.86/-12.61	-13.26/-18.03	-14.31/-11.06	-17.26/-16.8	-16.47/-11.34			
Θ(97.5°)	-8.51/-6.14	-7.6/-8.24	-7.79/-8.37	-8.62/-9.75	-8.56/-7.89	-10.49/-16.38	-12.6/-9.28	-10.17/-8.12	-7.1/-10.24	-13.99/-10.5	-13.52/-19.35	-11.37/-12.04	-13/-11.42	-17/-11.13	-9.88/-11.19	-17.94/-8.4	-6.66/-2.14	-4.79/-15.14	-8.83/-9.61	-11.93/-15.01	-10.23/-7.31	-9.42/-8.67	-12.89/-15.43	-17.37/-11.98
Θ(105°)	-7.38/-7.51	-8.26/-8.49	-9.75/-8.14	-9.55/-6.68	-11.61/-13.3	-15.07/-15.17	-14.09/-5.38	-4.46/-8.92	-8.61/-10.7	-15.92/-9.63	-16.52/-18.6	-17.09/-10.76	-8.94/-11.02	-16.2/-17.19	-11.26/-8.85	-8.45/-18.12	-14/-8.15	-7.6/-5.73	-4.64/-5.84	-16.71/-13.42	-8.75/-5.66	-3.79/-5.12	-10.91/-16.63	-17.6/-8.85
Θ(112.5°)	-10.38/-6.89	-8.31/-11.33	-11.85/-11.87	-12.14/-8.7	-15.91/-18.72	-14/-12.6	-13.01/-8.18	-8.49/-8.08	-6.79/-7.71	-14.1/-14.11	-13.89/-15.79	-18.57/-14.24	-13.21/-9.06	-12.93/-17.02	-7.91/-7.21	-16.6/-10.61	-5.99/-7.98	-3.69/-5.39	-7.54/-4.64	-1.63/-9.62	-5.34/-6.92	-5.43/-4.86	-7.53/-16.7	-16.39/-18.67
Θ(120°)	-11.8/-10.31	-7.46/-7.99	-10.68/-15.05	-15.48/-12.63	-14.53/-17	-12.76/-9.72	-9.85/-6.2	-6.04/-5.88	-5.04/-5.18	-8.58/-14.04	-13.11/-13.77	-19.22/-11.73	-14.09/-18.15	-10.93/-18.76	-12.44/-6.59	-8.96/-12	-18.05/-8.26	-16.09/-8.46	-14.67/-9.65	-6.95/-6.54	-10.94/-10.27	-7.66/-12.39	-11.1/-14.56	-18.63/-17.98
Θ(127.5°)	-18.7/-13.37	-12.17/-11.71	-13.9/-14.7	-18.53/-17.2	-12.73/-10.52	-8.66/-9.84	-9.98/-9.93	-4.41/-4.56	-7.31/-7.26	-8.63/-8.44	-10.13/-9.15	-9.49/-15.52	-17.76/-18.01	-18.39/-18.46	-13.73/-13.79	-18.59/-8.25	-8.4/-14.07	-6.57/-4.65	-7.99/-18.44	-10.37/-10.63	-8.1/-15.08	-10.97/-8.56	-10.83/-18.96	-18.63/-17.2
Θ(135°)	-18.42/-12.31	-8.55/-10.5	-15.49/-11.27	-9.95/-9.63	-9.92/-10.42	-13.15/-13.68	-10.83/-5.76	-5.33/-2.87	-0.61/-0.39	-4.11/-11.71	-16.26/-6.14	-4.97/-10.73	-18.74/-13.19	-10.56/-7.96	-9.47/-10.3	-17.36/-8.34	-8.45/-12.82	-5.02/-3.2	-6.03/-3.91	-5.51/-7.83	-17.61/-18.16	-18.39/-18.08		
Θ(142.5°)	-16.78/-14.89	-14.02/-14.93	-18.24/-12.48	-10.6/-9.25	-5.98/-3.75	-4.28/-6.18	-6.43/-7.24	-13.3/-8.41	-6.12/-5.26	-1.58/-1.89	-5.78/-10.55	-10.85/-14.64	-13.51/-11.37	-11.02/-16.43	-10.73/-9.86	-17.97/-11.31	-19.39/-13.8	-6.66/-6.59	-11.65/-10.55	-10.27/-4.96	-2.84/-1.18	-3.53/-9.13	-17.88/-13.33	-13.23/-17.84
Θ(150°)	-16.99/-19.07	-16.61/-16.13	-19.27/-18.57	-13.58/-10.54	-9.1/-7.5	-5.06/-9.26	-3.04/-2.29	-1.75/-3.66	-7.91/-6.02	-5.83/-7.68	-8.39/-6.12	-6.06/-8.69	-14.78/-11.99	-12.17/-10.55	-11.05/-14.88	-13.02/-10.24	-12.01/-11.36	-5.24/-5.81	-7.23/-7.71	-10.03/-8.63	-6.96/-3.86	-3.35/-6.17	-13.21/-17.6	-17.53/-13.58
Θ(157.5°)	-18.21/-17.96	-14.9/-10.15	-7.83/-6.6	-5.31/-5.37	-4.93/-4.49	-4.36/-4.95	-5.03/-4.8	-5.56/-7.76	-6.84/-4.38	-4.5/-6.61	-7.91/-7.29	-7.51/-8.72	-13.17/-15.87	-15.83/-18.05	-18.42/-17.73	-18.73/-19.19	-12.34/-10.69	-4.89/-4.2	-4.67/-5.82	-5.62/-6.58	-8.92/-13.94	-10.17/-7.48	-6.7/-8.73	-11.81/-16.33
Θ(165°)	-11.95/-11.89	-8.8/-5.79	-4.65/-4.05	-3.26/-2.56	-2.17/-2.18	-2.58/-2.64	-3.57/-3.78	-2.78/-2.04	-2.72/-4.4	-6.09/-6.25	-6.12/-5.76	-6.56/-8.09	-9.84/-14.78	-17.76/-18.32	-18.29/-15.13	-12.45/-9.07	-6.54/-5.48	-4.97/-4.83	-5.25/-6.82	-6.54/-8.13	-13.51/-18.86	-19.2/-13.78	-11.09/-11.27	-10.98/-12.04
Θ(172.5°)	-15.46/-13.93	-10.24/-7.84	-5.57/-3.47	-3.43/-2.45	-1.35/-1.04	-1.06/-1.28	-1.88/-2.02	-2.31/-2.82	-3.44/-4.39	-5.86/-8.36	-11.08/-13.79	-15.83/-17.75	-17.98/-18.1	-18.34/-18.47	-17.55/-19.85	-14.75/-13.68	-11.77/-11.11	-11.73/-11.18	-9.6/-10.69	-13.3/-15.05	-15.6/-14.4	-13.68/-13.88	-14.21/-17.1	-18.43/-18.39
Θ(180°)	-10.51/-8.73	-8.54/-7.36	-6.17/-5.08	-4.98/-4.4	-4.22/-3.34	-3.35/-2.85	-2.46/-2.14	-2.6/-3.73	-5.09/-7.72	-8.49/-10.57	-10.6/-10.92	-11.76/-14.21	-16.55/-17.27	-16.1/-14.14	-11.66/-9.87	-8.16/-7.09	-5.9/-5.54	-4.32/-4.13	-4.21/-4.58	-5.9/-7.23	-8.63/-8.94	-9.34/-10.17	-10.39/-11.01	-12.28/-11.83
Freq(Hz)	6.175GPdL	Theta/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-2.34/-2.74	-3.87/-4.52	-5.38/-6.54	-7.29/-16	-9.93/-13.01	-17.41/-17.88	-18.69/-15.93	-12.09/-9.78	-7.65/-6.87	-6.89/-6.41	-5.51/-4.98	-3.95/-3.71	-3.57/-3.36	-3.83/-4.48	-5.2/-5.36	-6.59/-9.14	-12.29/-15.71	-18.39/-18.63	-18.18/-15.36	-11.14/-9.06	-7.71/-6.27	-4.67/-4.04	-3.74/-3.19	-2.73/-2.28
Θ(7.5°)	-2.83/-2.29	-3.86/-3.89	-4.92/-6.98	-7.63/-7.51	-10.03/-13.07	-18.95/-19.28	-18.73/-16.32	-12.48/-9.31	-7.17/-5.6	-5.06/-4.97	-4.78/-4.12	-3.4/-3.5	-3.75/-4.4	-4.82/-5.65	-6.49/-6.51	-7.04/-8.41	-11.1/-13.6	-15.49/-17	-18.22/-18.8	-13.77/-12.16	-10.28/-8.08	-6.07/-6.18	-5.82/-4.72	-3.59/-3.15
Θ(15°)	-3.22/-2.4	-2.05/-2.42	-3.6/-4.97	-5.63/-7.68	-11.03/-14.86	-18.2/-17.42	-13.86/-12.61	-9.76/-7.4	-6.54/-6.52	-6.13/-5.53	-5.95/-5.65	-5.35/-5.78	-6.88/-6.65	-8.14/-12.46	-15.22/-15.47	-13.74/-14.57	-15.04/-17.48	-17.65/-17.79	-17.72/-17.66	-18.84/-17.24	-14.03/-11.68	-7.99/-7.2	-6.81/-6.28	-5.19/-3.99
Θ(22.5°)	-1.93/-0.78	-1.16/-2.19	-3.41/-4.73	-6.83/-7.8	-8.43/-9.97	-12.99/-15.19	-13.42/-11.45	-6.83/-4.09	-3.56/-3.64	-5.04/-5.34	-4.44/-5.04	-4.94/-3.95	-4.89/-6.63	-6.43/-6.8	-6.29/-6.76	-8.72/-9.91	-9.2/-9.22	-11.95/-13.84	-19.04/-18.22	-17.44/-14.4	-9.26/-7.61	-4.81/-4.23	-4.9/-5.56	-4.23/-3.4
Θ(30°)	-0.17/-0.64	-1.31/-2.45	-2.72/-2.79	-2.99/-3.48	-6.15/-8.82	-14.17/-18.41	-17.85/-16.19	-8.82/-4.99	-4.01/-0.05	-3.99/-4.85	-3.15/-2.13	-2.98/-3.05	-4.44/-5.62	-6.97/-8.64	-9.18/-10.83	-11.68/-11.25	-13.73/-14.6	-14.23/-17.11	-14.03/-15.21	-15.22/-14.09	-19.05/-14.26	-5.92/-4.24	-4.53/-3.1	-2.4/-0.41
Θ(37.5°)	0.33/-0.32	-0.1/-0.66	-1.36/-2.55	-4.37/-6.17	-7.53/-10.54	-16.25/-14.64	-16.21/-31.1	-6.41/-5.27	-3.3/-2.35	-3.42/-2.15	-1.58/-1.39	-3.1/-4.32	-5.96/-7.59	-6.12/-4.55	-7.39/-7.86	-10.52/-7.03	-6.93/-7.36	-8.56/-15.49	-17.84/-12.41	-11.35/-8.53	-8.3/-9.52	-10.61/-4.57	-5.67/-3.85	-1.46/-0.1
Θ(45°)	-0.84/-0.11	0.28/-0.78	-1.61/-1.52	-2.54/-4.5	-6.22/-8.84	-8.31/-8.51	-11.61/-17.2	-7.56/-4.01	-3.78/-2.04	-0.42/-0.42	-1.53/-2.78	-4.47/-4.43	-3.7/-6.15	-6.42/-6.61	-7.72/-9.32	-8.52/-6.71	-6.67/-10.32	-14.11/-14.13	-12.83/-17.79	-11.24/-9.81	-13.79/-6.42	-4.6/-3.38	-2.43/-2.81	-0.79/-0.1
Θ(52.5°)	-0.051/-26	-0.94/-1.8	-0.57/-1.09	-1.99/-4.48	-5.82/-7.13	-9.78/-13.77	-9.04/-7.32	-5.88/-3.18	-1.14/-1.92	-1.29/-0.97	-0.37/-1.78	-2.54/-3.82	-5.71/-18.57	-10.39/-12.76	-9.63/-9.97	-7.96/-4.34	-5.51/-8.63	-15.57/-16.37	-11.17/-13.94	-10.59/-7.96	-3.54/-4.2	-4.05/-4.13	-3.42/-2.15	-0.83/-1.8
Θ(60°)	-0.49/-0.55	-0.36/-1.79	-1.21/-1.72	-1.21/-2.73	-4.28/-4.93	-6.66/-11.25	-14.63/-11.94	-7.75/-4.48	-1.54/-0.51	-0.25/-0.69	-0.37/-1.46	-6.56/-5.44	-9.66/-10.09	-18.43/-13.99	-12.59/-9.48	-5.37/-11.51	-10.04/-12.26	-7.7/-13.85	-8.08/-8.21	-4.19/-2.51	-4.52/-1.9	-2.22/-2.79	-0.29/-2.09	-0.29/-2.09
Θ(67.5°)	-0.13/-1.29	-0.79/-1.78	-2.48/-1.69	-2.78/-2.52	-2.33/-3.78	-5.15/-9.52	-10.91/-15.11	-11.79/-5.32	-1.90/-5	-0.34/-0.4	-1.72/-2.08	-4.29/-2.55	-5.8/-4.37	-3.76/-6.23	-8.28/-8.32	-9.24/-11.76	-7.09/-10.55	-5.91/-7.14	-6.97/-9.43	-5.54/-2.28	-4.55/-1.73	-3.78/-3.05	-0.37/-0.69	-3.69/-0.65
Θ(75°)	-1.8/-1.64	-0.74/-2.13	-2.01/-1.95	-2.55/-3.08	-2.04/-7.35	-7.57/-12.3	-10.4/-8.41	-6.03/-6.67	-3.69/-2.26	0.57/-0.48	-1.81/-2.54	-2.84/-1.13	-2.94/-4.4	-4.46/-4.28	-4.29/-6.8	-3.75/-5.7	-5.69/-6.56	-0.95/-5.87	-0.21/-4.75	-2.82/-1.7	-4.39/-2.87	-1.73/-1.7	-0.62/-0.69	-3.29/-0.57
Θ(82.5°)	-2.23/-0.82	-1.36/-1.38	-1.7/-2.91	-2.11/-3.09	-2.78/-2.47	-6.97/-11.9	-10.06/-9.74	-8.34/-5.77	-2.93/-2.12	-0.78/-1.84	-1.38/-0.93	-1.78/-1.41	-0.76/-3.24	-1.6/-2.87	-2.83/-5.5	-0.41/-5.71	-5.73/-5.56	-0.19/-4.14	-0.11/-4.54	-1.58/-3.06	-4.92/-3.19	-2.13/-0.95	-0.01/-2.77	-1.6/-1.21
Θ(90°)	-1.11/-1.01	-1.76/-2.65	-4.26/-4.68	-3.42/-1.27	-0.31/-1.55	-5.08/-6.71	-8.87/-8.91	-8.82/-6.3	-2.43/-1.97	-0.13/-0.14	-1.12/-1.32	-2.71/-0.7	-2.04/-3.27	-0.53/-0.85	-6.34/-9.33	-3.15/-4.31	-9.09/-17.58	-5.43/-10.33	-0.44/-3.69	-6.95/-7.9	-4.88/-5.12	-2.06/-1.57	-1.03/-2.06	-1.84/-4.08
Θ(97.5°)	-1.66/-1.05	-2.31/-3.36	-4.05/-5.38	-3.85/-1.57	-0.78/-2.61	-6.56/-6.78	-8.34/-14.12	-16.08/-10.23	-4.27/-3.27	-1.18/-1.58	-0.11/-1.44	-1.94/-1.01	-4.57/-4.97	-3.36/-2.1	-5.58/-10.6	-3.73/-5.99	-5.95/-4.55	-11.19/-12.16	-8.89/-12.01	-11.37/-7.56	-6.08/-3.46	-2.68/-1.8	-2.75/-2.39	-2.02/-3.08
Θ(105°)	-1.2/-2.65	-3.86/-3.53	-3.61/-3.69	-3.82/-2.01	-0.71/-2.53	-4.45/-8.42	-10.21/-10.28	-17.45/-18.56	-4.83/-1.04	-0.40/-7.1	1.37/-0.65	-3.81/-2.88	-4.94/-4.84	-5.75/-5.37	-8.24/-9.81	-11.02/-8.13	-5.04/-7.78	-9.56/-8.2	-8.62/-9.07	-7.35/-1.89	-5.50/-3.8	-5.07/-1.66	-3.62/-2.62	-3.62/-2.62
Θ(112.5°)	-2.24/-1.88	-2.49/-4.17	-5.09/-5.3	-4.51/-3.7	-2.35/-4.17	-5.5/-9	-11.52/-11.27	-17.96/-18.48	-8.54/-1.66	0.67/-0.48	1.240/-86	-0.62/-6.78	-5.51/-3.54	-9.76/-19.39	-16.26/-14.17	-14.44/-9.59	-8.8/-2.43	-11.08/-15.83	-10.91/-11.64	-4.24/-5.76	-5.74/-3.18	-3.56/-4.45	-3.37/-3.4	-5.37/-4.72
Θ(120°)	-5.18/-3.05	-4.15/-5.82	-7.53/-9.84	-6.29/-2.46	-3.46/-6.34	-11.51/-14.13	-16.71/-18.05	-18.82/-10.12	-7.82/-3.81	-0.540/-0.9	1.08/-0.42	-1.84/-2.28	-3.78/-3.56	-8.39/-14.1	-18.71/-13.35	-11.48/-9.93	-4.5/-18.64	-11.85/-17.58	-9.75/-16.58	-11.23/-8.65	-7.58/-6.41	-7.18/-8.62	-4.05/-1.55	-1.78/-6.55
Θ(127.5°)	-4.97/-4.67	-7.29/-7.18	-7.37/-6.52	-4.12/-2.35	-3.06/-5.45	-8.51/-17.18	-15.35/-11.61	-17.17/-10.77	-10															



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ (120°)	-12.06/-4.67	-4.23/-5.11	-9.57/-13.91	-19.18/-14.2	-10.17/-9.48	-10.29/-11.39	-9.07/-6.37	-4.75/-4.23	-4.69/-5.94	-7.74/-9.37	-9.39/-15.89	-15.31/-13.44	-13.82/-13.76	-17.68/-18.97	-12.8/-18.82	-17.71/-11.52	-9.1/-2.1	-10.8/-1.1	-5.15/-16.2	-3.14/-8.48	-18.19/-7.46	-8.95/-9.77	-10.97/-17.79	-11.19/-11.4
Θ (127.5°)	-10.4/-7.51	-7.17/-8.61	-18.99/-14.6	-12.59/-10.18	-5.97/-5	-5.68/-6.31	-6.11/-5.44	-4.21/-1.58	-4.04/-9.84	-8.75/-6.73	-8.63/-10.4	-11.05/-9.25	-15.23/-19.16	-19.22/-15.58	-14.8/-13.89	-14.74/-14.58	-8.79/-11.68	-10.36/-9.69	-9.13/-13.13	-8.16/-15.67	-11.24/-9.68	-8.33/-11.76	-17.77/-13	-9.96/-15.44
Θ (135°)	-6.3/-6.98	-8.5/-12.03	-18.1/-19.02	-10.96/-8.29	-6.13/-4.7	-3.67/-3.11	-3.14/-4.52	-3.89/-5	-6.28/-6.75	-6.25/-6.32	-9.42/-10.4	-7.33/-17.34	-14.21/-16.55	-6.23/-17.58	-7.56/-7.19	-6.62/-9.77	-7.37/-12.65	-8.51/-6.66	-7.05/-15.37	-8.51/-5.63	-4.23/-6.27	-8.73/-18.16	-12.37/-11.98	-15.53/-14.5
Θ (142.5°)	-11.97/-18.12	-17.91/-13.04	-7.73/-6	-5.07/-5.08	-5.1/-5.2	-5.95/-5.36	-3.52/-4.2	-1.44/-1.49	-2.49/-7.01	-18.85/-6.57	-4.97/-4.33	-5.62/-11.15	-12.96/-13.91	-17.85/-9.23	-9.22/-5.56	-5.12/-14.7	-17.75/-10.42	-8.21/-8.42	-13.13/-10.17	-14.59/-7.5	-3.75/-4.43	-8.21/-18.49	-18.62/-17.28	-15.97/-13.61
Θ (150°)	-10.82/-7.52	-7.2/-10.17	-15.53/-11.8	-11.27/-12.76	-17.7/-15.62	-13.89/-12.48	-8.38/-4.17	-1.66/-1.1	-1.77/-3.38	-4.7/-5.17	-7.49/-6.18	-5.9/-4.49	-6.25/-11.21	-13.96/-9.55	-7.42/-5.16	-6.5/-5.68	-7.2/-16.23	-10.54/-5.41	-8.26/-14.22	-13.94/-9.95	-4.77/-2.92	-6.07/-11.33	-18.57/-12.48	-15.08/-17.53
Θ (157.5°)	-13.67/-8.3	-6.42/-5.15	-6.64/-9.15	-10.78/-11.02	-10.01/-10.31	-5.82/-5.63	-5.21/-4.56	-4.45/-8.08	-13.33/-9.72	-7.13/-3.92	-3.67/-4.41	-5.23/-6.59	-6.27/-7.74	-12.16/-18.7	-17.2/-15.82	-19.16/-14.62	-9.81/-7.84	-4.89/-3.64	-5.66/-6.64	-8.95/-12.54	-10.82/-9.24	-8.22/-10.32	-16.81/-19.07	-19.12/-18.94
Θ (165°)	-11.29/-9.78	-7.27/-5.24	-4.71/-4.79	-5.58/-6.46	-7.01/-7.5	-8.35/-9.7	-11.9/-10.03	-7.74/-5.89	-4.01/-3.86	-3.92/-5.98	-8.01/-10.55	-6.85/-5.42	-6.02/-8.12	-12.81/-18.75	-17.94/-17.57	-12.71/-10.11	-9.83/-9.46	-9.18/-8.32	-7.93/-9.11	-10.17/-11.09	-13.81/-15.02	-14.75/-14.62	-16.79/-14.81	-13.75/-12.04
Θ (172.5°)	-12.28/-8.86	-5.71/-4.16	-3.32/-2.21	-1.19/-14.4	-2.38/-1.69	-1.17/-1.53	-1.77/-1.04	-2.08/-3.71	-5.3/-5.51	-6.41/-7.81	-9.15/-9.86	-11.19/-14.29	-18.02/-17.77	-18.92/-19.02	-17.07/-18.61	-18.38/-18.62	-17.69/-14.41	-12.61/-5.17	-13.04/-16.1	-19.12/-18.1	-17.54/-17.5	-17.93/-18.07	-18.53/-16.69	-18.38/-14.76
Θ (180°)	-11.39/-9.59	-7.1/-5.93	-5.03/-3.7	-3.12/-3.65	-3.21/-2.72	-3.03/-4.12	-3.98/-4.66	-6.15/-7.74	-7.66/-9.88	-11.61/-10.97	-10.81/-10.7	-11.61/-10.7	-12.59/-14.17	-13.04/-10.02	-8.02/-7.24	-6.34/-5.77	-4.84/-4.5	-5.62/-6.75	-6.98/-8.53	-9.71/-9.5	-10.22/-12.06	-15.43/-16.92	-17.44/-15.86	-13.91/-12.9
Freq(Hz)	6.695GPol.	Theta/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-3/-3.55	-3.83/-4.24	-6.61/-6	-7.21/-8.24	-11.38/-14.4	-15.26/-15.32	-14.03/-14.46	-14.03/-10.44	-9.3/-9.14	-2.25/-2.19	-2.56/-4.11	-4.96/-5.6	-7.6/-12.13	-13.73/-15.44	-18.17/-18.51	-14.16/-9.23	-7.18/-6.27	-5.27/-3.81	-6.88/-2.8	-	-	-	-	-
Θ (7.5°)	-1.06/-7.15	-0.17/-0.88	-1.34/-2.46	-3.61/-5.16	-7.67/-11.13	-15.62/-17.93	-18.37/-14.72	-10.89/-8.34	-6.44/-5.84	-5.67/-5.32	-5.11/-4.84	-5.3/-5.92	-5.99/-5.99	-6.17/-6.41	-6.6/-7.02	-8.02/-8.99	-11.78/-13.95	-16.26/-15.56	-12.1/-10.39	-9.38/-7.86	-6.97/-6.56	-5.56/-4.51	-3.42/-2.2	-1.33/-1.23
Θ (15°)	-1.22/-1.13	-1.53/-2.3	-3.3/-4.46	-5.93/-13.3	-8.28/-9.94	-13.36/-14.84	-12.48/-9.39	-6.94/-5.08	-4.81/-4.46	-4.85/-5.55	-7.42/-7.03	-7.47/-7.31	-6.65/-5.66	-5.22/-5.42	-7.04/-9.06	-11.3/-13.4	-13.81/-14.78	-19.78/-18.94	-17.15/-17.27	-12.66/-11.33	-9.26/-7.66	-7.55/-6.92	-4.91/-2.35	-0.73/-0.74
Θ (22.5°)	-1.2/-2.55	-2.29/-1.87	-1.65/-1.76	-2.46/-3.76	-5.32/-8.27	-12.02/-17.99	-18.04/-18.5	-14.8/-9.07	-6.75/-4.76	-5.5/-6.89	-8.8/-7.96	-4.47/-3.61	-4.81/-5.92	-7.16/-9.36	-13.67/-15.83	-18.01/-18.45	-14.68/-16.12	-18.72/-17.55	-17.94/-17.45	-13.83/-10.31	-9.54/-7.37	-4.69/-2.35	-1.1/-1.08	-
Θ (30°)	-1.04/-1.16	-1.16/-0.36	-0.63/-1.51	-3.88/-5.93	-7.01/-9.91	-17.5/-18.52	-16.69/-11.46	-11.35/-9.73	-6.35/-5.88	-5.67/-5.32	-4.44/-3.77	-3.04/-4.11	-8.62/-15.21	-18.55/-17.38	-16.26/-15.35	-11.21/-9.46	-10.32/-9.75	-11.54/-18.29	-12.45/-12.76	-18.94/-18.74	-11.52/-6.81	-7.08/-13.16	-7.58/-2.78	-2.26/-1.54
Θ (37.5°)	-0.89/-0.66	-1.62/-1.28	-1.68/-1.52	-3.21/-4.88	-7.22/-8.27	-10.36/-16.76	-18.99/-17.39	-12.81/-7.27	-6.5/-4.58	-2.84/-2.24	-3.31/-4.79	-6.34/-5.73	-7.54/-6.6	-8.01/-7.9	-12.91/-16.78	-17.93/-17.72	-18.37/-19.12	-17.25/-10.57	-18.03/-11.06	-8.38/-9.98	-17.71/-17.87	-6.82/-6.61	-7/-3	-3.92/-1.6
Θ (45°)	-0.95/-2.73	-1.97/-0.66	0.09/-0.03	-1.55/-4.63	-7.15/-8.01	-9.43/-15.42	-17.69/-17.87	-12.12/-8.01	-4.82/-2.91	-1.94/-2.48	-3.28/-2.22	-1.23/-3.81	-7.11/-15.08	-6.65/-6.67	-17.23/-18.1	-9.54/-6.33	-7.38/-7.64	-6.45/-5.96	-7.89/-17.9	-13.53/-14.88	-7.65/-17.88	-8.93/-7.39	-4.26/-1.23	-2.78/-2.54
Θ (52.5°)	0.22/-2.47	-3.53/-1.07	-1.07/-1.47	-2.24/-2.49	-2.94/-6.33	-8.75/-12.43	-18.34/-18.86	-10.94/-6.47	-5/-3.33	-1.62/-0.75	-1.83/-3.18	-3.8/-7.96	-6.08/-10.25	-11.66/-17.92	-18.31/-9.45	-17.62/-12.47	-9.28/-10.95	-10.28/-11.19	-16.17/-12.94	-13.44/-19.32	-7.31/-7.87	-8.06/-7.78	-3.28/-1.4	-3.87/-0.9
Θ (60°)	-2.21/-2.2	-1.78/-1	-0.97/-0.35	-3.35/-2.44	-3.37/-5.41	-10.81/-16.92	-17.62/-17.55	-14.47/-11.99	-4.27/-4.2	-2.38/-0.6	-1.32/-3.3	-3.43/-10.29	-5.9/-8.72	-12.76/-16.34	-18.02/-18.98	-12.46/-12.31	-10.23/-13.17	-8.96/-15.7	-18.87/-8.73	-5.17/-11.8	-7.22/-4.73	-4.31/-3.47	-2.61/-6.8	-2.04/-0.72
Θ (67.5°)	0.18/-2.41	-2.98/-1.19	-2.08/-2.27	-2.19/-1.89	-2.62/-5.01	-9.39/-14.03	-14.07/-17.24	-18.07/-9.31	-5.62/-4.75	-2.66/-0.01	-0.53/-5.53	-5.51/-9.43	-3.5/-8.2	-7.47/-10.09	-9.74/-8.59	-13.23/-9.83	-7.53/-10.57	-4.97/-13.03	-7.26/-10.9	-4.29/-4.45	-2.56/-2.99	-2.36/-2.03	-4.30/-0.74	-
Θ (75°)	-0.73/-1.62	-1.73/-0.96	-0.95/-1.03	-1.17/-2.47	-3.42/-6.84	-8.66/-14.05	-13.03/-9.77	-16.17/-15.84	-6.12/-2.79	-3.43/-0.78	-1.08/-2.07	-4.07/-3.12	-2.65/-0.99	-5.13/-4.63	-6.65/-6.4	-5.27/-4.29	-1.66/-7.06	-3.72/-5.77	-1.42/-9.37	-1.59/-4.93	-5.16/-6.16	-0.76/-1.78	-2.89/-2.77	-1.26/-0.77
Θ (82.5°)	-0.49/-1.23	-1.44/-0.78	-1.45/-1.59	-0.53/-1.36	-4.57/-6.5	-8.06/-6.4	-10.52/-14.88	-18.71/-19.22	-7.5/-3.87	-0.97/-0.44	-0.92/-2.69	-1.09/-0.03	-3.24/-0.52	-2.73/-2.63	-7/-4.08	-2.35/-5.15	-1.97/-6.07	-4.57/-5.07	1.72/-3.34	-3.32/-4.12	-2.69/-4.27	-1.23/-1.41	-0.96/-1.28	-3.28/-0.38
Θ (90°)	-0.43/-0.48	-0.98/-0.11	-1.71/-1.38	0.06/-2.27	-5.69/-8.01	-6.64/-8.24	-13.6/-18.5	-18.17/-17.59	-0.9/-5.96	-1.64/-1.24	1.51/-1.77	-0.310.39	-0.763.32	-5.06/-2.39	-9.25/-4.22	-11.63/-5.68	-6.05/-5.87	-11.63/-5.58	-6.26/-3.47	-4/-0.79	-3.04/-2.1	-3.58/-0.73	-	-
Θ (97.5°)	0.7/-0.26	0.24/-0.09	-0.72/-1.16	0.66/-2.72	-8.04/-7.77	-8.29/-8.8	-8.63/-12.46	-17.29/-17.63	-6.62/-4.32	-1.050.76	1.60.01	-0.220.15	0.94/-6.09	-6.4/-5.47	-9.13/-5.81	-9.14/-9.78	-4.68/-5.37	-7.66/-12.8	-8.85/-15.55	-6.8/-5.79	-3.51/-3.19	-5.51/-2.2	-1.04/-2.6	-5.02/-1.36
Θ (105°)	1.35/-0.71	1.0/-0.61	-0.43/-0.67	-0.1/-3.81	-6.83/-9.96	-12.78/-14.14	-15.03/-13.85	-12.86/-7.26	-0.850.12	2.250.05	1.010.29	-3.03/-8.9	-7.61/-9.47	-9.86/-12.26	-18.32/-7.39	-7.21/-6.91	-15.78/-7.54	-19.7/-7.87	-5.8/-7.35	-6.22/-3.09	-3.39/-6.15	-2/-2.73	-3.79/-0.94	-
Θ (112.5°)	1.05/-1.92	-1.57/-1.49	0.530.37	-0.73/-3.77	-8.96/-8.93	-7.02/-11.08	-12.98/-7.75	-10.96/-11.76	-9.18/-4.14	-0.532.12	0.970.87	0.290.09	-3.05/-9.59	-6.82/-18.92	-18.1/-9.94	-11.88/-4.22	-18.29/-3.83	-12.69/-16.9	-5.11/-5.34	-6.41/-4.56	-6.04/-6.32	-4.17/-3.72	-2.21/-0.57	-
Θ (120°)	-2.15/-2.84	-0.75/-1.26	0.92/-1.2	-0.94/-5.34	-8.57/-8.64	-7.17/-7.74	-10.79/-7.65	-11.5/-18.43	-7.02/-1.53	-1.93/-1.43	1.95/-1.26	-0.8/-1.19	-0.82/-4.71	-12.45/-18.1	-11.03/-13.61	-9.58/-9.7	-5.2/-9.94	-8.9/-14.49	-11.97/-9.01	-11.7/-3.46	-7.63/-12.26	-11.6/-4.83	-2.36/-3.7	-2.26/-0.22
Θ (127.5°)	-3.58/-0.19	0.07/-2.02	-1.5/-1.2	-1.84/-4.69	-8.91/-9.18	-10.41/-13.74	-18/-8.51	-12.48/-10.8	-4.93/-2.72	-3.37/-1.3	2.10.14	-1.280.1	0.45/-2.93	-14.38/-13.8	-13.45/-3.28	-7.29/-17.52	-11.64/-12.1	-15.89/-4.58	-13.2/-18.11	-10.45/-12.62	-10.1/-10.09	-15.16/-8.23	-9.21/-3.1	-0.68/-1.98
Θ (135°)	-4.11/-0.94	-1.79/-5.31	-3.64/-3.17	-3.99/-4.67	-4.93/-4.39	-4.93/-8.39	-13.95/-17.35	-13.88/-14.25	-5.23/-0.53	0.1/-6.9	0.03/-1.97	1.61/-4.31	-7.49/-2.51	-3.63/-5.17	-4.5/-4.03	-5.08/-6.92	-14.88/-14.26	-10.61/-7.29	-18.14/-8.33	-16.76/-8.02	-4.03/-3.84	-7.02/-14.75	-9.75/-3.04	-1.81/-3.85
Θ (142.5°)	-2.16/-0.5	-2.17/-4.45	-1.76/-1.25	-1.29/-2.87	-4/-4.36	-5.68/-6.63	-10.37/-18.24	-13.71/-8.65	-5.58/-3.6	-2.19/-0.85	-1.23/-0.77	1.43/-1.06	-3.65/-8.1	-5.31/-2.36	-1.24/-1.53	-6.66/-2.25	-19.05/-14.1	-11.48/-17.33	-10.17/-10.25	-11.3/-5.76	-4.85/-5.95	-7.61/-14.83	-13.03/-9.42	-10.87/-17.19
Θ (150°)	-7.93/-6.39	-4.02/-4.16	-4.53/-6.06	-5.15/-4.75	-6.2/-5.74	-6.01/-9.36	-12.39/-10.5	-8.39/-6.06	-3.3/-0.55	0.620.67	0.79/-0.92	-1.14/-1.58	-2.07/-2.37	-1.91/-3.08	-2.78/-4.29	-4.29/-6.41	-9.63/-9.54	-4.35/-13.05	-14.25/-10.52	-11.77/-12.71	-10.61/-7.41	-5.15/-5.97	-10.68/-14.35	-11.53/-11.44
Θ (157.5°)	-4.91/-4.46	-5.63/-6.19	-8.04/-9.36	-9.49/-9.27	-11.3/-9.58	-8.11/-8.14	-8.26/-7.14	-5.8/-5.06	-4.48/-1.97	-0.420.11	0.98/-1.35	0.71/-1	-3.26/-7.79	-8.49/-9.84	-13.77/-15.46	-13.79/-14.13	-13.82/-9.8	-9.13/-14.31	-13.11/-13.17	-17.89/-17.29	-13.73/-10.49	-8.9/-6.7	-9.64/-18.41	-18.14/-8.93
Θ (165°)	-7.92/-6.37	-7.25/-10.48	-13.19/-16.31	-15.59/-12.12	-11.31/-10.79	-10.34/-8.85	-8.18/-7.47	-6.14/-5.3	-3.13/-1.89	-0.860.02	0.750.3	-1.92/-4.99	-7.82/-9.41	-8.32/-10.16	-18.33/-12.18	-17.27/-7.38	-8.67/-5.5	-5.19/-5.66	-8.71/-10.81	-11.53/-17.51	-18.9/-14.04	-13.95/-12.1	-14.09/-11.08	-
Θ (172.5°)	-7.8/-4.49	-6/-7.39	-9.36/-15.44	-16.68/-18.8	-19.01/-14.67	-10.77/-9.27	-6.64/-7.7	-3.95/-2.58	-0.79/-0.2	-0.77/-2.01	-3.6/-4.75	-5.33/-4.95	-4.95/-6.14	-9.77/-15.73	-17.94/-15.98									



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ (172.5°)	-18.43/-19.1	-18.85/-16.71	-9.61/-5.64	-3.19/-1.78	-0.83/-0.34	-0.48/-0.9	-1.22/-1.14	-1.66/-2.63	-3.22/-2.95	-3.04/-3.84	-5.28/-7.35	-10.1/-13.37	-19.05/-18.43	-19.16/-17.35	-17.99/-18.34	-17.85/-18.4	-17.19/-14.71	-16.14/-16.08	-14.74/-12.48	-11.09/-10.34	-9.15/-9.77	-12.11/-16.88	-17.19/-14.85	-15.93/-15.61
Θ (180°)	-18.91/-19.66	-14.59/-11.85	-9.32/-7.66	-6.79/-5.63	-5.11/-4.73	-4.04/-3.6	-3.39/-3.19	-3.37/-3.64	-3.94/-4.51	-5.81/-7.22	-9.7/-13.86	-19.85/-18.53	-18.12/-18.7	-15.42/-13.37	-11.15/-10.92	-10.5/-9.7	-8.05/-5.48	-3.7/-3.84	-4.47/-4.45	-4.44/-4.78	-5.77/-6.5	-7.97/-10.77	-11.62/-14.53	-17.44/-17.54
Freq(Hz)	6.175G/Pol.	Theta/Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-2.58/-2.35	-2.63/-3.06	-4.39/-5.71	-7.28/-8.74	-9.9/-12.1	-18.13/-18.66	-17.98/-19.28	-12.37/-11.48	-10.58/-7.47	-5.84/-4.84	-4.65/-3.75	-2.89/-2.43	-2.54/-2.48	-2.61/-2.61	-3.56/-4.52	-6.38/-8.55	-10.84/-13.45	-16.61/-18.47	-17.26/-18.13	-12.94/-9.91	-8.77/-9.91	-7/-5.43	-4.12/-3.22	-2.71/-2.32
Θ (7.5°)	-3.09/-3.27	-3.68/-4.88	-6.18/-7.36	-8.95/-8.12	-8.25/-10.1	-13.41/-15.67	-16.73/-18.48	-14.16/-10.62	-8.17/-6.91	-5.59/-3.92	-3.03/-2.73	-2.76/-3.09	-3.62/-4.04	-5.42/-6.67	-8.2/-10.01	-12.4/-13.3	-13.99/-16.45	-16.97/-11.46	-9.95/-6.61	-7.3/-5.85	-4.24/-3.72	-2.88/-2.52	-	-
Θ (15°)	-4.39/-5.31	-6.11/-7.58	-7.44/-6.26	-5.71/-4.69	-5.56/-7.09	-8.09/-8.03	-10.5/-13.08	-13.13/-17.68	-15.35/-13.45	-12.99/-7.42	-7.85/-6.25	-5.08/-3.89	-3.57/-4.15	-6.04/-6.24	-6.51/-7.04	-7.07/-7.71	-9.08/-12.06	-13.12/-11.72	-11.44/-15.74	-15.76/-17.34	-17.64/-18.35	-19.04/-17.6	-10.38/-6.95	-5.23/-4.16
Θ (22.5°)	-5.09/-8.16	-8.75/-8.17	-7.74/-5.31	-4.3/-5.26	-8.25/-10.31	-12.96/-13.3	-12.1/-10.95	-11.54/-11.1	-9.89/-9.11	-10.43/-7.62	-5.57/-4.2	-3.61/-3.75	-4.88/-6.03	-6.93/-5.87	-4.77/-4.33	-4.33/-5.67	-7.16/-9.22	-14.02/-19.32	-17.38/-13.57	-9.63/-8.29	-7.98/-6.97	-6.33/-7.26	-9.16/-7.18	-5.42/-3.86
Θ (30°)	-3.09/-4.55	-6.96/-6.49	-7.07/-5.29	-5.54/-9.85	-14.88/-18.08	-18.07/-18.32	-18.13/-12.17	-9.01/-7.43	-5.99/-6.01	-6.84/-7.55	-4.1/-2.92	-2.34/-3.89	-6.03/-5.29	-3.46/-1.96	-1.56/-2.5	-2.85/-3.77	-7.69/-11.68	-12.94/-18.16	-19.23/-17.93	-16.86/-8.5	-5.54/-5.34	-5.71/-5.19	-6.44/-6.28	-5.81/-4.45
Θ (37.5°)	-3.23/-3.39	-4.09/-4.21	-5.78/-5.08	-5.77/-7	-8.76/-10.25	-15.09/-14.47	-12.67/-9.92	-6.67/-4.24	-4.17/-4.48	-4.27/-6.08	-5.66/-3.95	-3.53/-3.32	-4.5/-3.48	-3.14/-4.73	-4.77/-4.93	-6.92/-8.94	-12.24/-16.75	-18.49/-13.7	-13.8/-18.43	-12.12/-8.48	-9.43/-10.3	-9.2/-8.46	-6.77/-7.15	-7.34/-6.21
Θ (45°)	-4.97/-10.5	-1.05/-2.34	-2.94/-1.72	-2.71/-4.94	-6.92/-11.08	-14.38/-12.65	-10.23/-7.06	-5.83/-6.37	-5.3/-3.4	-4.34/-4.62	-4.25/-3.96	-2.75/-2.84	-4.29/-5.95	-3.89/-3.7	-5.49/-4.32	-5.86/-6.85	-10.15/-10.85	-10.06/-15.3	-13.44/-8.95	-9.27/-8.82	-10.52/-10.98	-14.3/-7.46	-7.34/-2.88	-4.26/-6.72
Θ (52.5°)	-3.63/-1.29	-1.31/-1.75	-0.3/-0.67	-2.57/-4.64	-6.68/-9.73	-19.07/-10.33	-6.55/-6.62	-4.81/-3.31	-1.94/-3.66	-4.05/-6.31	-5.33/-2.33	-1.49/-2.76	-5.59/-5.38	-3.03/-4.59	-5.87/-4.08	-5.59/-5.39	-7.9/-15.89	-16.27/-18.32	-12.76/-8.79	-6.92/-7.02	-4.46/-7.06	-5.6/-7.56	-9.98/-4.65	-3.62/-6
Θ (60°)	-5.52/-2.14	-2.32/-0.84	0.38/-0.66	-1.92/-2.95	-4.36/-6.05	-10.82/-10.69	-6.25/-4.93	-4.38/-2.59	-1.53/-2.07	-3.05/-3.23	-4.35/-3.04	-1.66/-2.39	-5.1/-6.13	-2.1/-3.29	-6.41/-1.93	-3.86/-4.38	-6.82/-14.25	-12.89/-14.74	-13.49/-10.14	-7.5/-4.31	-2.87/-2.89	-8.33/-9.77	-8.03/-7.34	-3.25/-4.17
Θ (67.5°)	-7.38/-3.82	-4.49/-1.25	-0.51/-0.76	-0.79/-1.55	-2.97/-5.15	-10.12/-10.27	-8.38/-6.79	-3.79/-2.52	-1.51/-1.54	-3.24/-3.97	-4.04/-4.03	-0.67/-1.5	-4.64/-4.13	-1.55/-2.86	-4.84/-1.29	-4.07/-2.13	-5.52/-7.12	-13.72/-18.05	-10.64/-16.18	-11.32/-8.38	-2.54/-4.68	-7.12/-10.17	-14.53/-11.4	-5.31/-9.49
Θ (75°)	-5.47/-6.56	-5.44/-3.33	-2.05/-0.34	0.13/-2.04	-2.69/-5.95	-9.05/-11.55	-8.88/-7.08	-3.79/-1.26	-0.65/-2.55	-3.36/-4.18	-3.43/-2.23	-0.99/-1.35	-4.21/-2.5	-1.15/-1.58	-3.01/-5.03	-6.28/-4.1	-4.32/-6.12	-9.17/-5.3	-4.42/-7.99	-5.97/-14.63	-1.46/-3.43	-12.53/-10.34	-12.43/-15.54	-7.97/-6.41
Θ (82.5°)	-4.17/-5.01	-3.4/-4.89	-2.71/-2.18	-2.36/-2.78	-3.51/-5.79	-11.94/-16.33	-6.97/-4.41	-3.84/-0.65	0.4/-0.74	-3.77/-5.55	-3.33/-0.92	-0.63/-0.35	-3.63/-1.17	-0.15/-3.28	-1.74/-2.99	-6.32/-4.54	-3.29/-2.73	-3.88/-2.96	-2.47/-2.12	-1.46/-7.9	-4.89/-3.66	-6.2/-8.56	-10.75/-9.07	-4.43/-4.53
Θ (90°)	-1.95/-2.12	-3.11/-1.9	-1.91/-2.99	-2.52/-2.66	-5.99/-8.08	-11.55/-11.63	-8.37/-5.4	-5.08/-1.59	-0.42/-0.51	-1.9/-4.1	-2.84/-0.19	-1.25/-1.5	-0.98/-2.24	0.43/-4.14	-3.3/-5.45	-4.31/-5.08	-2.93/-2.76	-4.41/-4.18	-0.93/-6.76	-1.37/-8.42	-6.12/-1.35	-7.59/-4.7	-7.34/-3.77	-3.87/-3.57
Θ (97.5°)	-2.61/-1.05	-2.72/-2.28	-1.88/-3.39	-2.32/-5.28	-9.95/-10.2	-9.58/-12.25	-7.93/-5.69	-5.94/-2.13	-1.87/-0.68	-1.92/-5.44	-1.110.99	-0.77/-1.78	-0.29/-1.74	-0.51/-3.48	-2.95/-5.6	-4.24/-6.28	-7.97/-5.57	-5.77/-2.18	-4.49/-6.66	-13.93/-3.32	-5.74/-2.02	-8.29/-3.78	-6.07/-2.4	-3.51/-3
Θ (105°)	-2.360.05	-3.61/-0.18	-0.32/-2.29	-1.08/-2.45	-8.34/-13.57	-10.41/-12.01	-10.39/-8.66	-6.99/-3	-0.510.04	-1.56/-2.86	-1.690.51	0.31/-3.44	-1.18/-0.64	-1.25/-2.81	-4.61/-3.29	-5.01/-5.17	-9.07/-1.12	-11.31/-4.64	-10.16/-15.83	-5.58/-0.69	-15.66/-7.59	-14.18/-7.45	-4.01/-1.48	-4.21/-2.82
Θ (112.5°)	-2.78/-2.67	-2.05/-1.09	0.74/-0.9	-0.04/-1.4	-6.86/-6.74	-12.5/-11.95	-9.72/-11.1	-7.69/-3.99	-1.02/-0.8	-1.32/-2.13	-1.680.15	0.88/-0.72	-2.12/-1.9	-1.59/-1.75	-1.02/-0.58	-2.4/-8.1	-19.02/-6.11	-12.47/-3	-7.35/-3.78	-4.63/-2.16	-11.19/-9.94	-16.68/-8.49	-4.86/-3.53	-6.71/-74
Θ (120°)	-3.97/-3.31	-7.75/-0.84	0.21/97	1.04/-1.24	-3.32/-5.1	-9.02/-14.88	-10.84/-6	-6.84/-4.27	-1.95/-0.57	-4.93/-0.26	-0.210.2	0.04/-1.48	-4.34/-0.75	0.84/-0.45	-3.53/-3.33	-3.52/-9.91	-12.62/-15.28	-9.22/-11.9	-4.39/-5.42	-16.93/-16.11	-7.68/-13.48	-9.56/-7.95	-11.74/-10.2	-8.56/-5.66
Θ (127.5°)	-5.13/-3.61	-1.03/-0.46	1.72.58	1.7/-0.92	-2.24/-4.32	-10.81/-18.86	-11.62/-10.33	-6.39/-2.59	0.020.01	-0.29/-1.14	0.89/-1.26	-1.440.27	-0.13/-1.56	-1.73/-1.48	-3.56/-7.72	-8.03/-7.3	-8.62/-17.82	-10.24/-11.54	-7.46/-7.09	-8.12/-11.47	-7.46/-9.78	-15.31/-15.03	-10.23/-9.04	-18.93/-7.01
Θ (135°)	-4.37/-2.62	-0.670.11	0.660.75	0.31/-0.3	-1.47/-4.1	-11.62/-17.3	-11.16/-9.29	-7.3/-61	-1.34/-0.14	0.030.7	0.18/-1.18	-1.440.54	1.47/-1.24	-4.49/-3.58	-1.34/-36	-5.58/-16.19	-7.46/-15.87	-9.52/-8.36	-9.17/-3.89	-8.1/-18.08	-14.25/-7.04	-5.02/-6.61	-9.95/-11.06	-8.76/-8.58
Θ (142.5°)	-1.490.08	0.960.61	0.070.01	-1.16/-0.1	-1.46/-4.55	-10.25/-17.64	-12.53/-9.01	-5.91/-2.89	-1.34/-0.57	-0.58/-0.19	0.480.98	1.080.11	-1.25/-2.36	-2.49/-4.89	-3.89/-2.38	-2.5/-5.15	-7.45/-18.21	-15.63/-18.98	-10.28/-7.34	-10.92/-13.6	-9.86/-3.71	-9.36/-14.41	-13.47/-7.51	-6.37/-8.99
Θ (150°)	-1.98/-2.61	-1.93/-0.82	0.010.79	-1/-2.39	-3.12/-4.77	-9.09/-16.1	-17.96/-19.02	-11.96/-6.6	-3.94/-3.14	-2.31/-0.58	0.070.62	1.58/-1.06	-0.29/-4	-3.72/-2.04	-0.63/-1.72	-4.7/-10.51	-19.2/-11.37	-9.28/-17.77	-13.06/-9.89	-10.96/-13.85	-14.72/-17.37	-11.35/-9.89	-7.4/-4.01	-5.79/-5.63
Θ (157.5°)	0.31/-1.35	-2.51/-3.63	-2.58/-0.39	-1.82/-4.24	-5.48/-9.13	-13.09/-18.85	-17.98/-18.19	-10.72/-5.46	-4.73/-4.08	-1.820.15	1.38/-1.94	-12.4/-0.22	-1.89/-3.78	-2.71/-4.06	-7.81/-13.63	-11.28/-12.35	-14.57/-12.7	-12.04/-17.89	-16.66/-15.74	-13.91/-13.75	-10.79/-12.82	-10.27/-11.28	-12.08/-9.32	-6.8/-2.88
Θ (165°)	-4.17/-4.58	-3.93/-3.27	-1.80/-1.78	-1.17/-2.28	-3.98/-5.93	-9.13/-13.75	-18.32/-16.33	-12.53/-8.78	-6.70/-4.11	-2.54/-1.72	-1.08/-0.57	-0.51/-1.1	-1.69/-3.24	-6.27/-11	-12.69/-13.54	-14.91/-12.44	-19.12/-13.25	-19.31/-17.94	-14.93/-13.79	-15.96/-16.63	-12.66/-11.57	-8.94/-9.67	-13.98/-11.5	-6.32/-4.03
Θ (172.5°)	-7.52/-6.8	-7/-6.3	-4.83/-4.18	-4.19/-5.65	-8.5/-10.73	-13.17/-16.8	-19.18/-18.92	-17.86/-11.72	-9.39/-8.27	-5.95/-2.88	-1.18/-0.68	-1.14/-2.26	-4.52/-7.88	-9.43/-9.11	-9.22/-10.22	-13.25/-17.35	-18.86/-17.67	-18.01/-17.41	-19.19/-17.43	-18.27/-13.49	-11.53/-9.93	-8.43/-9.95	-11.71/-10.48	-9.56/-8.91
Θ (180°)	-5.42/-3.57	-6.06/-4.68	-6.31/-8.04	-8.75/-10.59	-11.79/-13.3	-13.92/-16.73	-18.57/-18.05	-14.43/-10.68	-8.81/-8.19	-6.87/-5.85	-6.21/-7.59	-7.96/-7.6	-5.86/-4.17	-3.8/-4.22	-4.79/-6.96	-9.65/-12.66	-16.01/-16.99	-18.99/-17.96	-17.73/-18.08	-13.9/-11.21	-10.18/-9.38	-8.05/-7.35	-6.98/-6.2	-5.79/-8.47
Freq(Hz)	6.475G/Pol.	Phi/Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-18.28/-18.93	-15.62/-13.53	-13.03/-10.35	-8.66/-3.1	-5.92/-8.49	-6.64/-4.64	-5.06/-5.03	-4.6/-4.65	-4.89/-5.86	-7.89/-9.4	-18.91/-18.4	-19.13/-17.86	-15.48/-12.21	-10.4/-10.03	-9.19/-7.66	-6.52/-5.71	-5.6/-6.12	-6.51/-6.88	-6.74/-7.43	-8.14/-9.81	-11.3/-13.17	-15.88/-18.89	-	-
Θ (7.5°)	-18.16/-15	-12.11.88	-11.59/-9.33	-8.25/-7.76	-7.91/-7.28	-6.40/-4.74	-4.94/-5.95	-5.62/-5.88	-7.53/-7.68	-7.94/-9.35	-11.53/-13.44	-15.04/-18.64	-19.03/-19.08	-16.32/-13.31	-10.05/-8.62	-6.94/-5.57	-5.23/-2.35	-3.28/-4.33	-2.52/-2.35	-4.59/-8.29	-10.13/-12.78	-17.6/-18.96	-	-
Θ (15°)	-17.75/-15.21	-13.66/-13.29	-11.67/-9.69	-8.05/-6.17	-5.18/-4.18	-3.65/-3.48	-3.59/-4.36	-6.01/-6.88	-7.17/-7.97	-8.53/-8.77	-10.84/-15.81	-18.71/-17.18	-16.31/-17.95	-18.1/-18.47	-11.97/-7.93	-5.46/-4.48	-3.77/-3.44	-3.56/-5.08	-6.4/-4.98	-4.08/-5.4	-4.73/-3.52	-4.54/-5.58	-5.82/-7.82	-13.71/-17.16
Θ (22.5°)	-17.74/-17.02	-16.06/-12.32	-9.31/-7.73	-6.83/-6.3	-4.65/-4.75	-4.83/-4.79	-4.1/-3.62	-5.34/-7.11	-5.73/-6.56	-11.12/-10.13	-10.1/-15.1	-17.62/-17.98	-14.93/-15.76	-17.74/-15.05	-9.73/-7.26	-6.28/-6.35	-6.21/-6.84	-5.86/-6.42	-5.48/-6.99	-6.98/-5.88	-8.07/-7.			



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(22.5°)	-1.87/-1.52	-2.29/-3.08	-3.22/-4.08	-6.32/-9.15	-13.16/-17.86	-18.65/-17.47	-15.75/-12.92	-11.03/-8.08	-5.93/-4.73	-4.07/-3.51	-4.26/-4.5	-3.61/-2.56	-2.21/-2.84	-4.74/-5.45	-5.46/-5.14	-5.87/-8.93	-13.62/-19.14	-19.03/-15.31	-13.86/-15.92	-17.85/-18.47	-16.37/-10.85	-7.03/-5.86	-3.47/-2.25	-2.65/-3.01
Θ(30°)	-2.22/-1.89	-2.2/-3.68	-4.15/-4.5	-6.59/-7.88	-8.49/-8.61	-12.29/-18.45	-16.09/-15	-12.64/-8.05	-7.89/-8.62	-3.86/-1.82	-2.05/-2.63	-3.84/-4.81	-3.25/-2.16	-3.1/-4.35	-3.77/-4.3	-5.47/-7.3	-9.76/-15.66	-18.8/-10.75	-7.81/-9.3	-11.69/-10.38	-8.35/-10.09	-8.22/-8.37	-5.83/-3.56	-4.42/-3.68
Θ(37.5°)	-2.04/-2.51	-4.05/-3.66	-2.16/-2.06	-4.73/-6.71	-7.58/-10.19	-17.62/-16.59	-10.05/-9.94	-9.47/-7.63	-5.92/-5.2	-4.98/-3.58	-2.89/-2.57	-4.3/-3.85	-1.37/-3.04	-1.49/-6.58	-5.12/-5.11	-4.14/-4.87	-7.31/-13.22	-12.65/-7.34	-7.48/-10.99	-6.19/-5.48	-6.99/-5.72	-4.28/-5.16	-1.92/-1.72	-1.42/-1.34
Θ(45°)	-0.91/-2.06	-2.97/-2.41	-1.21/-2.25	-5.73/-6.19	-7.66/-11.3	-18.61/-9.96	-7.73/-9.38	-7.56/-5.09	-3.48/-3.74	-2.01/-2.27	-5.86/-6.57	-3.11/-2.16	-1.44/-2.66	-4.38/-3.87	-3.86/-6.7	-7.88/-9.21	-11.85/-17.53	-17.95/-15.73	-9.65/-12.68	-13.94/-9.71	-17.81/-10.14	-9.5/-8.97	-7.79/-7.12	-5.68/-4.16
Θ(52.5°)	-0.99/-2.13	-1.17/-10.8	-0.49/-1.6	-3.05/-4.47	-7.73/-15.88	-18.42/-12.8	-12.46/-12.46	-8.98/-8.84	-7.1/-4.36	-4.09/-4.03	-3.29/-5.57	-4.55/-2.85	-1.73/-2.04	-4.37/-3.29	-6.21/-6.92	-8.96/-13.66	-9.66/-18.36	-14.91/-10.21	-14.08/-18.43	-12.62/-8.56	-12.37/-17.2	-11.68/-9.75	-6.24/-4.72	-6.24/-2.98
Θ(60°)	-1.36/-1.68	-0.44/-2.04	-1.55/-1.1	-1.41/-5.6	-10.7/-12.83	-17.08/-15.83	-11.44/-9.07	-7.11/-4.94	-4.17/-4.46	-6.21/-6.16	-5.34/-4.87	-3.32/-1.7	-1.16/-3.23	-4.78/-3.06	-5.33/-5.73	-6.79/-6.95	-7.29/-18.6	-10.26/-12.23	-9.78/-17.61	-5.82/-4.71	-6.69/-6.56	-8.9/-8.53	-7.39/-2.99	-7.96/-3.4
Θ(67.5°)	-3.76/-2.39	-0.97/-0.3	-0.55/-0.43	-1.52/-6.27	-8.3/-15.13	-15.08/-10.42	-8.08/-7.68	-6.05/-3.61	-2.66/-4.32	-4.49/-2.99	-6.78/-3.59	-1.48/-1.45	-1.04/-2.26	-3.75/-3.06	-4.37/-4.14	-5.28/-5.72	-3.47/-18.53	-9.58/-16.23	-10.47/-15.06	-5.9/-4.39	-4.11/-8.34	-7.38/-13.18	-12.85/-5.69	-8.17/-5.07
Θ(75°)	-5.57/-3.12	-1.93/-0.03	-0.96/-1.8	-3.11/-4.21	-7.39/-13.04	-14.22/-9.27	-8.2/-12.7	-10.73/-9.7	-6.12/-6.32	-7.82/-4.04	-5/-5.79	-0.41/-0.9	-0.22/-2.2	-3.26/-1.14	-2.05/-4.72	-3.74/-9.67	-5.67/-8.42	-2.98/-3.96	-6.02/-8.01	-5.83/-9.05	-3.98/-18.57	-14.01/-9.2	-14.32/-7.69	-7.99/-4.34
Θ(82.5°)	-4.63/-4.96	-1.81/-0.37	-0.98/-0.06	-1.6/-4.52	-7.77/-12.11	-11.33/-11.46	-8.9/-14.63	-6.3/-5.59	-5.72/-7.12	-2.28/-1.66	-0.52/-2.02	-0.78/-0.53	-0.52/-2.03	-3.43/-3.36	-2.18/-3.91	-2.84/-3.65	-1.22/-18.36	-6.5/-6.64	-1.22/-18.36	-6.5/-6.64	-19.34/-6.68	-16.95/-5.26	-5.78/-3.67	
Θ(90°)	-2.94/-4.5	-1.3/-1.08	-0.39/-0.15	-1.88/-5.59	-7.42/-10.66	-18.99/-19.16	-13.85/-8.54	-6.92/-4.47	-3.96/-3.23	-2.69/-7.21	-3.73/-0.22	0.511/-3.6	1.09/-0.88	-3.24/-1.08	-2.33/-3.83	-3.76/-5.98	-8.6/-4.27	-4.43/-1.84	-1.78/-7.34	-3.97/-19.17	-7.74/-0.22	-6.9/-4.19	-4.45/-3.82	-4.92/-3.12
Θ(97.5°)	-1.02/-2.6	0.49/-0.62	0.12/-0.76	-0.76/-6.61	-6.9/-12.57	-17.92/-13.74	-10.85/-7.69	-5.56/-2.49	-3.38/-1.59	-0.7/-3.51	-4.78/-0.53	1.71/-1.22	0.47/-0.5	-2.1/-3.28	-2.51/-1.06	-3.33/-2.62	-8.46/-5.77	-10.21/-2.91	-4.51/-16.83	-16.06/-7.6	-4.83/-9.06	-8.29/-4.45	-2.3/-4.9	-5.74/-3.5
Θ(105°)	-2.04/-0.86	0.5/-0.22	0.35/-0.34	-2.61/-6.22	-6.8/-12.47	-17.68/-17.46	-10.7/-7.37	-4.54/-3.12	-3.66/-1.72	-0.5/-2.12	-0.70/-0.53	1.18/-1.2	1.25/-0.53	-2.07/-2.87	-2.55/-1.05	-3.01/-3.52	-8.61/-7.65	-9.52/-8.9	-11.04/-13.76	-3.47/-0.21	-8.47/-4.59	-10.08/-5.3	-3.02/-4.75	-5.77/-3.58
Θ(112.5°)	-5.4/-0.78	0.29/-0.39	0.25/-0.66	-3.03/-4.09	-6.59/-9.72	-18.15/-18.44	-14.2/-11.3	-5.55/-4.02	-3.31/-2.22	-1.22/-1.08	-1.34/-0.26	0.37/-0.36	-0.61/-1.94	-2.39/-0.39	-3.31/-1.87	-2.03/-3.14	-5.69/-7.96	-13.57/-9.44	-3.17/-3.01	-5.85/-2.72	-15.09/-13.13	-12.56/-8.02	-14.36/-7.58	-4.58/-5.62
Θ(120°)	-5.2/-2.47	-2.05/-0.5	-0.17/-0.4	-2.19/-2.88	-2.83/-8.45	-17.57/-17.77	-9.11/-9.99	-7.7/-4.31	-3.15/-2.32	-1.23/-1.19	-0.61/-0.78	0.75/-0.1	-2.5/-1.93	-1.44/-0.27	-0.92/-3.89	-3.36/-1.47	-12.34/-18.81	-11.02/-16.4	-8.87/-19.2	-12.56/-13.1	-17.53/-9.41	-11.73/-9.41	-5.47/-8.38	
Θ(127.5°)	-6.9/-2.82	-1.73/-0.39	-0.25/-0.92	-1.42/-2.42	-8.81/-7.89	-9.83/-17.91	-15.19/-9.27	-8.46/-9.94	-4.02/-2.28	-1.29/-1.06	0.24/-0.31	-0.91/-0.06	0.24/-0.41	-1.36/-4.04	-2.52/-3.86	-8.77/-13.44	-18.63/-18.59	-8.71/-15.95	-7.66/-3.46	-10.34/-16.25	-9.25/-18.02	-12.84/-10.13	-14.36/-8.77	-9.18/-14.63
Θ(135°)	-8.97/-5.79	-2.51/-2.65	-0.17/-1.84	1.48/-0.45	-3.04/-6.61	-9.79/-14.97	-19.09/-12.02	-10.53/-9.7	-5.35/-1.73	-1.08/-1.09	-0.53/-0.48	-0.40/-1.8	0.11/-0.22	-0.38/-0.07	-5.1/-2.71	-6.86/-13.34	-14.39/-18.28	-13.47/-19.15	-8.33/-5.31	-18.85/-17.34	-15.46/-7.08	-10.95/-9.55	-7.81/-7.65	-10.11/-11.74
Θ(142.5°)	-7.72/-19.3	-1.04/-1.36	-0.26/-1.09	-0.03/-1.83	-4/-5.26	-6.95/-9.16	-9.75/-5.7	-3.13/-0.81	0.38/-0.14	0.02/-0.41	1.88/-1.7	0.24/-3.48	-3.12/-3.48	-5.67/-6.25	-6.69/-9.6	-9.81/-15.77	-9.91/-17.7	-10.02/-6.54	-0.09/-14.6	-14.16/-9.93	-15.19/-9.87	-7.96/-9.71	-11.21/-2.46	
Θ(150°)	-7.38/-3.2	-1.66/-0.15	-0.50/-0.67	-2.03/-2.33	-4.43/-5.28	-8.03/-10.44	-15.35/-17.67	-12.53/-7.6	-4.23/-2.23	-0.35/-0.55	0.95/-1.3	1.02/-0.12	-0.72/-2.29	-5.41/-8.66	-4.41/-2.87	-8.03/-10.11	-14.71/-19.16	-19.61/-19.19	-18.33/-13.9	-14.71/-18.68	-18.64/-11.5	-13.09/-14.75	-11.74/-9.56	-6.82/-9.41
Θ(157.5°)	-5.51/-5.48	-2.98/-0.93	-0.84/-1.96	-2.75/-3.58	-3.92/-5.27	-8.17/-11.92	-18.59/-13.06	-7.42/-3.9	-1.55/-0.86	-0.65/-0.06	0.97/-1.1	0.50/-2.2	-2.14/-5.41	-7.39/-9.75	-8.97/-12.22	-14.84/-17.12	-17.97/-13.41	-13.96/-18.96	-18.46/-11.59	-11.6/-15.3	-13.62/-10.63	-11.25/-12.71	-12.81/-7.12	-4.08/-4.78
Θ(165°)	-6.76/-6.4	-4.14/-2.96	-2.19/-2.2	-3.71/-5.88	-6.94/-7.08	-7.88/-11.34	-18.59/-13.79	-12.33/-7.37	-4.47/-3.03	-2.48/-1.08	0.28/-1.4	1.66/-1.02	0.3/-1.42	-5.55/-3.46	-16.6/-17.2	-9.87/-13.67	-18.57/-15.33	-14.43/-15.72	-18.19/-18.79	-17.32/-17.1	-14.46/-14.41	-16.4/-18.71	-9.95/-5.4	-5.02/-6.45
Θ(172.5°)	-5/-3.96	-3.13/-3.54	-3.42/-3.54	-3.91/-4.42	-5.03/-7.77	-10.73/-16.44	-17.91/-14.17	-9.02/-6.96	-4.79/-4.01	-2.27/-0.74	0.52/-1.14	0.85/-0.4	-2.83/-6.38	-12.13/-17.19	-18.35/-18.64	-16.93/-14.86	-15.79/-18.61	-18.61/-16.11	-17.55/-18.67	-13.82/-11.03	-10.04/-10.79	-10.61/-11.64	-8.47/-6.58	
Θ(180°)	-4.89/-5.06	-5.85/-5.87	-6.54/-5.48	-6.01/-7.69	-9.66/-12.58	-17.16/-17.91	-18.04/-15.58	-12.90/-10.34	-7.07/-5.02	-4.53/-4.5	-4.11/-5.5	-7.06/-8.7	-8.75/-7.43	-7.01/-6.99	-6.99/-8.18	-10.91/-13.75	-15.19/-17.16	-17.82/-18.78	-17.88/-15.76	-14.97/-12.85	-12.13/-10.61	-9.52/-7.46	-6.76/-5.78	-4.84/-5.1
Freq(Hz)	6.995GPol.	PhiAnt.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-18.66/-15.34	-11.67/-7.93	-8.86/-5.59	-4.26/-3.43	-3.34/-1.79	-2.13/-2.08	-1.45/-1.79	-2.35/-2.68	-3.24/-5.8	-6.59/-8.56	-11.56/-15.57	-19.32/-17.75	-17.51/-12.87	-9.88/-6.82	-5.49/-4.84	-3.96/-3.48	-2.4/-1.72	-0.33/-1.09	-0.89/-0.61	-1.61/-2.44	-2.26/-3.29	-5.19/-5.52	-7.59/-12.3	-13.27/-17.7
Θ(7.5°)	-15.15/-14.65	-11.14/-7.14	-8.31/-8.18	-4.02/-2.95	-2.43/-2.08	-1.68/-1.44	-1.35/-1.38	-2.95/-3.1	-3.14/-3.48	-5.6/-7.03	-8.2/-9.85	-15.8/-17.38	-19.04/-14.48	-9.46/-6.82	-4.83/-3.05	-2.06/-1.39	-0.99/-1.04	-0.89/-0.61	-0.79/-1.76	-2.55/-3.71	-4.67/-7.48	-3.66/-11.95	-13.22/-17.51	-18.97/-17.93
Θ(15°)	-18.36/-14.13	-11.73/-9.6	-6.43/-1.06	-3.11/-2.01	-0.86/-5.55	-1.55/-1.27	-0.91/-1.16	-2.21/-3.13	-1.88/-3.92	-9.72/-14.34	-18.44/-18.98	-13.93/-10.88	-11.54/-8.86	-6.59/-5.51	-4.86/-3.46	-2.83/-2.49	-2.61/-2.39	-1.64/-2.59	-6.76/-11.96	-5.27/-6.7	-7.09/-13.64	-16.11/-16.19	-17.96/-19.19	
Θ(22.5°)	-17.61/-18.06	-18.02/-14.45	-9.75/-5.9	-4.98/-3.57	-2.57/-2.05	-1.96/-2.35	-2.3/-1.84	-3.69/-4.27	-3.84/-4.97	-3.91/-4.47	-7.44/-12.09	-18.87/-17.52	-14.13/-12.2	-13.32/-14.4	-10.91/-8.86	-4.59/-3.4	-2.99/-3.32	-4.29/-5.45	-6.27/-6.71	-6.59/-6.61	-5.95/-5.04	-5.79/-6.8	-8.93/-12.51	-12.97/-18.22
Θ(30°)	-18.38/-19.11	-13.88/-14.36	-12.56/-9.57	-6.77/-3.01	-1.55/-0.72	-0.87/-1.84	-2.21/-2.91	-1.5/-2.28	-3.92/-6.74	-8.34/-9.95	-9.69/-9.66	-10.84/-17.5	-16.71/-13.67	-15.17/-14.73	-10.06/-6.45	-3.08/-3.18	-3.08/-1.44	-5.34/-6.69	-6.92/-6.34	-6.41/-7.48	-7.23/-9.47	-9.01/-7.74	-10.31/-12.5	-12.19/-14.73
Θ(37.5°)	-17.77/-18.17	-11.27/-9.85	-9.47/-9.62	-5.76/-5	-2.92/-3.49	-3.55/-2.57	-2.06/-1.94	-2.82/-4.56	-4.81/-5.22	-6.2/-6.26	-12.4/-13.92	-13.85/-15.54	-17.85/-15.4	-12.32/-8.73	-5/-2.87	-3.07/-4.58	-6.73/-5.62	-4.15/-4.98	-6.6/-5.61	-4.44/-5.22	-6.79/-9.03	-15.46/-16.54	-18.77/-17.14	-16.65/-18.03
Θ(45°)	-17.47/-17.95	-18.71/-15.14	-11.79/-8.01	-7.33/-6.09	-4.49/-2.43	-0.65/-0.63	-1.96/-2.54	-2.28/-3.92	-6.35/-8.2	-9.45/-8.41	-7.44/-9.1	-15.49/-18.42	-18.44/-11.41	-11.78/-9.05	-8.16/-6.63	-6.12/-7.72	-9.51/-6.66	-7.19/-7.21	-11.62/-11.08	-11.83/-14.52	-9.16/-9.01	-12.45/-15.77	-11.01/-19.07	-18.3/-19.07
Θ(52.5°)	-17.86/-19	-17.78/-16.39	-11.45/-8.83	-9.57/-7.88	-3.97/-2.24	-1.81/-0.35	-3.57/-3.03	-3.12/-3.86	-5.87/-5.92	-7.8/-9.69	-9.96/-14.52	-18.01/-18.61	-18.9/-10.37	-8.54/-8.28	-5.82/-6.42	-1.36/-7.27	-6.38/-3.99	-4.11/-5.15	-4.92/-6.67	-8.56/-12.83	-18.51/-13.01	-14.33/-12.29	-11.95/-17.22	-15.93/-18.52
Θ(60°)	-14.74/-14.26	-17.85/-17.58	-11.84/-13.5	-12.28/-8.46	-6.03/-5.92	-3.96/-3.7	-2.53/-2.38	-4.6/-6.32	-7.79/-9.76	-9.93/-10.48	-15.33/-18.51	-11.35/-8.46	-12.37/-10.45	-7.8/-10.55	-5.58/-6.4	-6.15/-3.52	-4.34/-3.99	-5.42/-7.97	-4.84/-7.24	-7.22/-9.22	-11.01/-16.83	-13.85/-18.51	-15.42/-15.16	-17.1/-14.34
Θ(67.5°)	-11.33/-11.24	-14.39/-13.25	-13.82/-18.16	-13.24/-13.03	-9.91/-7.22	-6.61/-7.56	-5.37/-6.16	-7.12/-7.02	-6.42/-12.01	-18.01/-12.86	-11.83/-14.47	-18.31/-8.75	-11.28/-11.64	-6.5/-8.38	-8.24/-8.52	-8.66/-2.33	-5.51/-7.26	-11.43/-4.25	-6.98/-10.68	-13.14/-8.53	-7.58/-7.99	-8.44/-18.72	-8.88/-8.79	-8.91/-11.25
Θ(75°)	-11.35/-10.38	-10.73/-12.41	-17.3/-17.6	-18.66/-19.16	-15.73/-11.03	-6.61/-6.64	-7.08/-4.39	-8/-8.96	-9.02/-7.4	-11.95/-18.53														



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(75°)	-13.98/-18.04	-18.68/-18.9	-13.39/-8.86	-10.02/-15.85	-17.37/-17.32	-18.51/-10.54	-9.16/-17.12	-9.43/-8.35	-7.77/-7.33	-6.74/-7.35	-11.03/-8.13	-9.62/-12.48	-12.56/-18.51	-10.42/-7.69	-10.11/-12.31	-13.91/-12.02	-19.28/-11.97	-8.87/-11.31	-18.1/-13.57	-8.88/-8.62	-8.42/-11.9	-14.6/-8.84	-8.35/-9.6	-11.05/-18.08
Θ(82.5°)	-11.94/-15.45	-15.91/-15.04	-14.77/-15.33	-18.6/-19.63	-16.85/-19.02	-18.98/-14.83	-11.05/-11.92	-9.81/-6.71	-8.15/-8.6	-7.8/-9.38	-12.58/-7.88	-8.83/-10.58	-14.37/-18.31	-12.77/-9.27	-11.2/-15.35	-18.58/-15.83	-16.16/-11.81	-10.17/-12.84	-10.74/-9.74	-7.34/-8.49	-11.13/-18.66	-12.31/-8.64	-8.51/-7.59	-10.18/-16.67
Θ(90°)	-18.91/-16.89	-14.96/-17.34	-18.28/-18.73	-14.38/-16.71	-17.98/-17.02	-12.45/-14.26	-16.29/-9.71	-11.19/-10	-8.8/-9.38	-15.26/-16.3	-12.42/-10.45	-10.33/-10.82	-12.92/-18.95	-12.38/-9.67	-11.04/-11.98	-14.75/-12.33	-16.92/-14.33	-12.38/-9.77	-14.75/-12.33	-18.77/-15.38	-7.8/-8.41	-8.81/-10.82	-18.3/-18.31	
Θ(97.5°)	-19.4/-12.64	-11.27/-11.55	-18.87/-11.47	-10.91/-17.98	-10.94/-14.89	-13.39/-11.47	-18.92/-14.03	-11.89/-12.25	-15.58/-18.84	-19.04/-12.55	-12.72/-11.68	-10.16/-10.21	-16.8/-12.59	-16.87/-16.17	-10.39/-15.51	-18.91/-12.92	-14.01/-15.47	-17.94/-12.5	-19.21/-18.89	-13.26/-17.2	-11.06/-6.64	-4.13/-6.18	-6.49/-9.23	-15.59/-10.98
Θ(105°)	-19.09/-9.52	-13.04/-12.79	-17.65/-11.1	-12.89/-12.43	-4.73/-6.97	-14.74/-10.81	-11.68/-17.78	-18.01/-15.58	-14.91/-12.12	-8.99/-5.08	-6.83/-9.43	-12.4/-8.65	-17.88/-11.25	-7.85/-9.54	-9.06/-11.92	-18.96/-18.87	-17.69/-13.53	-18.78/-10.51	-13.62/-10.56	-11.91/-18.12	-7.31/-7.36	-4.59/-1.72	-9.72/-9.94	-7.93/-9.91
Θ(112.5°)	-17.44/-6.01	-6.37/-9.15	-19/-8.89	-8.49/-17.2	-7.11/-5.86	-9.27/-10.68	-13.57/-11.51	-13.9/-19.33	-15.46/-16.56	-8.73/-7.15	-15.53/-7.21	-11.98/-11.53	-5.06/-6.54	-8.77/-9.05	-15.57/-16.01	-14.61/-13.06	-12.24/-11.97	-10.65/-17.68	-9.4/-11.61	-7.98/-18.6	-12.63/-11.29	-11.19/-7.46		
Θ(120°)	-11.82/-7.23	-8.2/-5.77	-10.34/-14.88	-9.23/-17.65	-10.2/-12.94	-6.45/-6.73	-10.54/-8.01	-8.02/-11.5	-12.73/-18.19	-18.62/-17.8	-15.28/-10.68	-13.82/-10.4	-14.4/-17.47	-6.79/-7.85	-10.83/-7.42	-10.07/-15.79	-9/-12.87	-9.58/-15.6	-18.21/-11.81	-16.8/-15.74	-19.07/-12.03	-9.63/-17.03	-14.81/-8.14	-18.62/-9.55
Θ(127.5°)	-10.97/-12.84	-9.62/-8.14	-10.78/-17.82	-11.04/-12.23	-17.31/-16.37	-7.04/-6.13	-9.57/-9.84	-7.06/-8.29	-9.63/-8.57	-9.46/-13.95	-18.68/-15.88	-18.25/-18.51	-19.01/-18.18	-10.71/-10.16	-8.01/-8.47	-16/-8.82	-11.93/-7.92	-13.5/-5.88	-11.1/-11.63	-6.57/-11.15	-18.14/-9.12	-5.68/-18.94	-18.25/-18.06	-13.07/-13.6
Θ(135°)	-5.54/-8.33	-6.51/-8.05	-15.06/-18.11	-17.66/-19.02	-18.28/-15.26	-8.25/-6.31	-7.89/-8.85	-7.81/-4.8	-2.36/-4.55	-9.24/-12.59	-11.9/-11.29	-9.88/-10.67	-18.72/-17.64	-12.41/-12.77	-9.03/-10.55	-13.88/-16.79	-5.4/-7.89	-4.97/-8.31	-16/-5.37	-3.1/-4.14	-6.58/-16.14	-3.96/-8.91	-12.13/-4.89	-11.06/-9.7
Θ(142.5°)	-2.37/-0.27	-0.53/-4.37	-9.63/-18.93	-14.18/-12.54	-13.83/-18.22	-11.42/-8.14	-9.45/-13.22	-5.77/-3.99	-4.24/-6.23	-8.12/-8.55	-11.51/-13.85	-11.74/-13.23	-18.72/-16.05	-12.74/-15.3	-14.15/-19.16	-16.66/-18.05	-7.87/-11.91	-6.88/-14.09	-11.15/-15.21	-2.42/-5.77	-8.41/-15.46	-7.68/-11.1	-6.51/-6.82	-8.43/-3.03
Θ(150°)	-2.67/-3.71	-1.63/-2.66	-5.72/-13.82	-17.53/-17.48	-18.76/-19.33	-12.62/-13.84	-12.96/-11.6	-13.29/-12.48	-10.29/-6.69	-4.65/-5.88	-9.23/-15.69	-17.96/-13.93	-16.35/-16.21	-16.35/-17.22	-16.53/-13.42	-10.99/-13.29	-11.04/-8	-7.52/-9.95	-7.78/-4.5	-4.23/-6.45	-8.02/-13.86	-19.29/-6.99	-15.6/-8.41	-13.84/-3.61
Θ(157.5°)	-2.62/-3.77	-4.02/-3.92	-7.69/-13.9	-15.59/-15.22	-12.78/-16.31	-17.69/-16.63	-15.01/-11.09	-7.75/-4.87	-3.1/-4.49	-1.87/-1.88	-15.47/-18.04	-7.83/-7.8	-7.49/-9.28	-15.47/-19.04	-11.6/-7.92	-6.84/-9.4	-6.23/-6.02	-7.26/-7.58	-4.83/-3.28	-3.07/-3.21	-4.05/-3.67	-10.59/-12.74	-17.81/-14.76	-8.19/-4.69
Θ(165°)	-8.21/-8.37	-10.37/-11.04	-9.23/-10.68	-12.23/-13.97	-14.97/-13.64	-12.46/-12.59	-13.01/-10.53	-10.07/-10.31	-9.75/-8.17	-8.42/-9.6	-9.51/-9.28	-9.82/-9.96	-10.9/-11.66	-13.74/-17.24	-18.4/-13.11	-8.41/-5.78	-4.58/-3.96	-4.6/-6.76	-8.41/-8.86	-7.83/-5.26	-3.03/-2.23	-3.23/-4.91	-7.85/-12.37	-11.7/-10.23
Θ(172.5°)	-18.05/-16.63	-18.13/-19.42	-17.49/-18.24	-19.05/-18.99	-18.68/-15.64	-15.51/-18.6	-16.95/-12.02	-10.55/-8.9	-7.86/-7.66	-8.29/-13.66	-18.29/-15.4	-10.35/-7.86	-7.55/-7.18	-7.63/-9.08	-11.03/-14.43	-14.19/-11.19	-8.49/-7.83	-7.61/-6.52	-6.28/-6.54	-6.68/-7.35	-7.54/-8.14	-11.13/-13.92	-18.03/-17.74	-18.33/-19.21
Θ(180°)	-14.46/-13.88	-17.81/-15.4	-12.58/-14.63	-17.72/-19	-18/-19.35	-16.82/-15.19	-15.47/-17.15	-18.95/-19.06	-18.1/-17.96	-15.94/-13.28	-12.43/-15.03	-16.59/-16.74	-16.31/-14.22	-15.93/-18.11	-19.14/-17.31	-19.34/-18.42	-18/-16.34	-13.25/-11.31	-10.39/-11.84	-12.72/-12.26	-11.83/-13.28	-16.9/-18.54	-18.8/-16.14	-14.45/-14.72
Freq(Hz)	6.475GPol.	PhiAnt. 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	0.30/7	0.820/9.1	0.920/23	-0.660/-1.98	-3.55/-4.34	-6.31/-8.2	-11.28/-14.61	-17.51/-11.83	-8.62/-6.23	-4.61/-3.31	0.213/-1.39	0.640/-1	0.270/-1	0.1005/-1.8	0.32/-0.4	-1.065/-1.8	-3.35/-5.15	-6.11/-7.79	-10.29/-16.23	-17.84/-12.52	-9.47/-6.19	-3.17/-3.33	-2.05/-1.77	-0.850/-1.9
Θ(7.5°)	-0.42/-0.44	-0.47/-0.28	-0.57/-0.94	-1.78/-2.42	-3.02/-3.92	-5.58/-7.16	-9.84/-13.56	-15.01/-12.62	-9.64/-6.49	-4.17/-2.73	-1.44/-0.39	0.230/7	0.730/6.1	0.330/44	-0.08/-0.79	-2.14/-3.3	-4.6/-5.72	-8.19/-9.51	-12.99/-17.16	-18.38/-13.82	-8.79/-6.51	-4.82/-3.4	-2.9/-2.51	-1.13/-0.48
Θ(15°)	-0.04/-0.91	-0.81/-0.97	-1.18/-0.51	-1.07/-1.93	-2.83/-3.72	-4.99/-7.03	-10.25/-14.39	-18.66/-13.93	-9.69/-6.86	-4.12/-1.97	-0.460/-2.8	0.981/38	1.205/9	0.080/23	0.03/-0.58	-1.26/-2.14	-4.11/-5.62	-7.23/-8.01	-10.65/-15.46	-16.61/-13.47	-9.79/-7.54	-5.17/-3.87	-2.91/-1.64	-0.55/-0.16
Θ(22.5°)	-2.81/-2.13	-1.23/-1.49	-1.67/-1.56	-1.32/-1.73	-2.24/-3.83	-4.16/-9.67	-14.4/-18.55	-14.74/-14.25	-8.17/-5.43	-3.25/-1.34	-0.220/77	1.752/0.4	1.591/23	1.171/76	1.761/08	-0.22/-1.29	-3.06/-5.54	-8.28/-8.45	-9.93/-15.14	-18.97/-13.36	-9.78/-8.77	-6.87/-5.92	-5.51/-4.84	-3.73/-6.32
Θ(30°)	-2.83/-4.8	-4.24/-3.6	-2.06/-1.38	-1.63/-2.45	-2.78/-2.77	-4.13/-6.36	-11.53/-18.58	-17.32/-16.95	-11.43/-7.82	-4.53/-2.62	-1.070/2	1.271/8	1.721/32	1.111/3	1.180/52	-0.66/-2.77	-5.33/-8.5	-11.01/-11.48	-12.37/-15.63	-18.26/-17.52	-18.06/-15.66	-13.31/-12.4	-7.79/-5.44	-3.78/-2.95
Θ(37.5°)	-5.49/-5.68	-4.72/-3.43	-4.08/-4.47	-4.65/-4.59	-4.64/-5.41	-7.45/-7.46	-8.33/-12.03	-18.66/-17.16	-14.18/-8.1	-4.35/-3.06	-1.73/-0.25	1.152/11	2.06/15	1.171/79	1.69/14	0.82/-0.15	-2.75/-5.77	-6.48/-4.92	-13.59/-14.37	-14.49/-17.37	-17.54/-11.12	-9.6/-8.28	-5.56/-3.66	-4.49/-5.38
Θ(45°)	-3.87/-3.85	-4.1/-5.04	-5.01/-5.45	-4.07/-3.86	-4.37/-4.79	-5.78/-6.57	-8.23/-9.63	-12.21/-17.83	-18.69/-9.59	-6.68/-2.57	-2.75/-1.87	0.732/09	2/1	0.53/-1.7	1.441/64	1.19/-0.55	-3.11/-6.84	-8.33/-7.87	-10.44/-18.67	-18.13/-18.61	-16.97/-10.73	-8.61/-8.15	-5.61/-4.2	-4.13/-3.65
Θ(52.5°)	-8.98/-7	-6.71/-8.69	-7.82/-8.44	-8.27/-7.34	-6.37/-6.63	-7.34/-7.03	-9.08/-10.29	-12.53/-19.32	-17.45/-12.28	-4.68/-0.92	-0.67/-1.2	0.541/81	2.692/33	2.272/82	2.822/06	-3.77/-1.62	-3.41/-4.83	-6.57/-7.29	-10.16/-18.08	-19.18/-17.9	-15.64/-8.76	-8.34/-6.24	-4.78/-5.21	-4.35/-5.02
Θ(60°)	-5/-5.76	-10.02/-9.14	-10.83/-11.85	-11.93/-10.84	-8.99/-4.7	-8.12/-10.04	-8.21/-8.76	-13.15/-19.99	-13.97/-9.65	-5.69/-2.13	0.50/35	0.21/15	1.641/37	0.67/1	1.951/58	1.29/-0.88	-3.05/-6.71	-6.56/-8.78	-10.23/-13.06	-17.6/-15.73	-13.65/-15.89	-18.42/-11.94	-9.54/-6.69	-5.22/-7.7
Θ(67.5°)	-4.32/-4.97	-3.46/-5.83	-10.8/-15.35	-13.99/-12.92	-13.13/-9.66	-8.43/-9.13	-7.95/-9.2	-12.12/-11.7	-18.33/-9.41	-4.64/-2.86	-0.451/32	0.660/35	1.20/76	-0.270/-1.5	0.881/86	0.21/-1.13	-2.72/-2.44	-6/-8	-7.02/-11.29	-16.21/-18.16	-15.55/-13.85	-11.79/-11.71	-6.18/-4.49	-5.09/-2.76
Θ(75°)	-8.03/-5.32	-7.64/-14.57	-12.03/-11.26	-15.94/-14.03	-16.54/-18.04	-18.75/-13.59	-14.89/-18.57	-18.56/-11.77	-8.72/-16.14	-13.63/-10.31	-4.81/-47	-0.91/307	1.510/55	0.851/17	0.880/65	0.940/92	0.31/-6.6	-1.91/-0.7	-4.28/-5.96	-18.03/-15.46	-16.06/-15.59	-10.3/-11.52	-7.48/-7.52	-4.8/-5.72
Θ(82.5°)	-5.6/-4.63	-18.94/-10.97	-6.68/-6.19	-17.95/-17.76	-17.03/-10.71	-10.2/-7.85	-8.06/-7.23	-4.83/-11.21	-16.17/-9.31	-4.77/-3.84	-3.12/-0.97	0.59/-0.11	-0.81/-1.53	-0.770/71	1.490/98	0.16/-0.14	-0.220/61	-0.23/-3.55	-8.85/-12.04	-10.72/-18	-19.45/-17.65	-7.84/-6.4	-5.61/-4.48	-2.27/-5.1
Θ(90°)	-4.18/-10.36	-5.98/-8.13	-7.73/-13.88	-18.59/-14.83	-15.78/-13.04	-11.69/-9.56	-9.39/-5.27	-3.93/-3.53	-11.9/-9.26	-2.67/-1.86	-1.36/-1.53	-0.290/51	0.14/-0.56	-1.880/44	0.78/-0.12	0.05/-0.75	0.21/78	0.69/-5.1	-11.3/-8.28	-8.32/-19.04	-15.89/-8.74	-7.41/-3	-3.57/-2.12	-4.92/-2.55
Θ(97.5°)	-5.07/-5.38	-4.42/-14.06	-11.51/-16.52	-15.94/-14.03	-16.54/-18.04	-18.93/-14.75	-12.52/-22	-5.43/-4.32	-9.35/-5.76	-1.65/-0.11	-0.130/12	0.680/62	-0.98/-0.36	-0.271/18	-1.18/-0.56	-1.15/-0.77	-1.84/-2.23	-2.52/-7.73	-15.92/-7.7	-6.67/-4.95	-5.73/-6.75	-18.78/-14.9	-18.59/-10.93	
Θ(105°)	-6.97/-0.47	-7.27/-15.63	-12.82/-10.53	-9.17/-12.98	-11.7/-8.29	-5.24/-6.63	-6.67/-6.96	-6.12/-6.51	-8.78/-7.2	-3.68/-1.65	-0.52/-0.3	1.434/47	-0.04/-1.42	-0.930/09	-0.82/-0.13	-1.82/-4.16	-1.79/-3.31	-7.96/-14.33	-11.73/-10.11	-7.97/-8.93	-18.68/-11.5	-11.93/-10.19	-15.33/-18.81	-11.81/-4.99
Θ(112.5°)	-6.29/-7.9	-8.12/-6.21	-14.76/-6.73	-7.31/-13.65	-9.92/-5.46	-5.49/-1.9	-2.66/-4.46	-5.46/-11.88	-10.71/-5.15	-2.95/-2.17	-1.43/-1.23	1.010/13	-0.19/-1.38	-0.650/27	0.39/-1.36	-5.06/-4.48	-0.54/-0.63	-4.15/-9.5	-5.19/-13.11	-17.89/-12.61	-9.97/-11.1	-18.39/-18.25	-9.69/-6.56	
Θ(120°)	-8.64/-10.69	-7.26/-6.25	-15.47/-9.76	-6.49/-7.91	-7.16/-5.84	-4.26/-5.14	-2.53/-4.69	-5.51/-5.39	-5.1/-4.6	-2.53/-2.47	-0.271/19	-0.17/-1.36	-1.94/-1.95	0.28/-2.58	-0.56/-0.52	0.420/27	-1.76/-10.8	-5.53/-4.95	-6.21/-13.86	-10.43/-14.12	-18.02/-18.3	-18.67/-14.9	-18.59/-10.93	
Θ(127.5°)	-16																							



Radiated Composite Gain Data (6GHz UNII5~UNII8)

Appendix B

Θ(120°)	-18.32/-17.83	-11.16/-9.83	-12.89/-16.86	-9.95/-8.99	-8.94/-18.12	-13.91/-12.78	-10.16/-8.17	-10.41/-13.01	-13.45/-18.32	-12.65/-8.28	-5.71/-8.44	-11.16/-11.48	-17.83/-14.27	-11.29/-13.28	-14.35/-12.39	-10.12/-6.73	-7.02/-8.52	-14.9/-18.9	-14.04/-7.99	-11.93/-19.38	-17.34/-18.67	-16.34/-17.11	-18.8/-13.24	-18.95/-15.92
Θ(127.5°)	-17.1/-14.96	-15.64/-11.42	-12.77/-16.68	-14.29/-8.51	-9.19/-17.6	-10.69/-7.73	-6.53/-5.33	-8.87/-8.66	-8.29/-17.82	-17.5/-8.18	-7.2/-9.37	-13.84/-12.26	-16.87/-16.84	-15.1/-14.97	-9.05/-10.03	-10.94/-9.83	-8.58/-9.69	-9.61/-17.61	-18.31/-5.46	-3.26/-17.04	-12.17/-7.29	-13.98/-15.63	-11.95/-17.97	-8.99/-16.63
Θ(135°)	-12.88/-10.62	-9.52/-12.96	-18.6/-14.89	-13.3/-17.17	-14.07/-12	-12.89/-17.45	-7.8/-4.52	-6.66/-5.18	-4.89/-7.9	-10.69/-9.43	-7.41/-6.81	-9.61/-12.23	-17.41/-18.7	-19.09/-12.63	-9.37/-9.47	-18.9/-10.36	-14.05/-4.37	-10.63/-13.09	-18.71/-2.85	1.26/-12.76	-9.3/-5.84	-2.9/-14.47	-10.98/-6.4	-5.55/-9.4
Θ(142.5°)	-6.51/-5.84	-8.82/-9.57	-18.86/-13.96	-10.08/-11.47	-16.02/-16.96	-18.4/-15.89	-6.26/-6.02	-8.76/-7.5	-6.33/-8.17	-11.2/-13.47	-10.08/-8.13	-9.07/-11.24	-14.8/-17.14	-18.76/-18.47	-11.2/-14.35	-14.81/-13.63	-4.94/-5.6	-6.09/-13.29	-10.1/-3.59	0.85/-3.63	-18.6/-12.14	-6.28/-10.27	-12.69/-6.17	-14.02/-18.45
Θ(150°)	-7.5/-7.28	-10.62/-12.32	-14.68/-19.29	-18.45/-17.9	-16.63/-17.73	-17.69/-11.99	-9.88/-10.11	-11.51/-11.94	-11.62/-10.94	-11.53/-10.98	-12.36/-11.8	-10.1/-9.71	-12.39/-14.01	-18.61/-17.89	-13.83/-18.94	-18.22/-11.95	-9.73/-9.77	-6.71/-8.64	-11.69/-7.48	-3.75/-3.6	-6.99/-9.72	-10.14/-10.8	-9.31/-7.7	-15.45/-8.54
Θ(157.5°)	-11.63/-17.1	-16.08/-13.89	-17.49/-16.73	-14.84/-16.22	-17.52/-19.11	-19.5/-18.96	-14.99/-9.3	-5.95/-5.1	-6.93/-11.49	-11.72/-9.96	-9.67/-10.29	-11.16/-13.63	-16.57/-14.24	-18.3/-13.96	-6.05/-3.42	-3.07/-4.46	-6.59/-8.07	-8.86/-9.14	-7.35/-3.71	-1.55/-1.43	-2.07/-4.3	-8.94/-11.21	-8.99/-8.08	-9.01/-10.84
Θ(165°)	-15.19/-18.29	-17.34/-14.67	-13.78/-13.83	-14.19/-14.8	-17.16/-19.09	-18.08/-16.14	-14.51/-11.81	-11.24/-9.59	-8.28/-7.87	-8.45/-9.84	-10.93/-12.67	-13.69/-14.82	-17.53/-17.97	-19.27/-14.62	-11.49/-11.78	-9.5/-6.96	-7.58/-8.71	-9.9/-9.33	-8.21/-7.25	-7.08/-4.06	-1.89/-1.68	-3.15/-5.58	-7.58/-8.95	-12.54/-17.9
Θ(172.5°)	-18.45/-19.02	-15.75/-17.19	-17.24/-13.22	-11.02/-10.64	-12.29/-13.23	-14.16/-13.79	-14.13/-13.48	-13.71/-14.55	-15.09/-17.39	-18.16/-19.22	-16.34/-13.53	-11.66/-11.71	-12.03/-12.44	-13.13/-14.49	-13.99/-13.54	-12.93/-11.26	-10.56/-8.53	-7.64/-8.66	-8.04/-8.09	-7.3/-6.71	-6.41/-6.7	-7.72/-10.31	-14.48/-18.97	-18.21/-18.13
Θ(180°)	-17.95/-14.99	-16.05/-15.37	-14.08/-16.72	-17.26/-17.58	-18.25/-17.72	-18.13/-18.44	-16.36/-15	-15.86/-15.27	-13.37/-11.38	-10.81/-10.2	-10.04/-10.68	-11.62/-12.86	-14.04/-14.96	-16.64/-18.06	-17.71/-17.78	-18.1/-19.11	-18.13/-18.36	-13.62/-12.69	-12.11/-16.53	-17.89/-19	-17.54/-14.98	-11.55/-11.34	-12.77/-16.88	-18.29/-19.43
Freq(Hz)	6.995GPol.	PhiAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	2.12/2.65	2.81/2.47	1.75/1.31	0.5/-1.2	-3.05/-4.65	-8.06/-11.89	-17.82/-16.93	-11.16/-7.28	-4.67/-2.67	-1.36/-0.44	0.75/1.23	1.73/1.91	1.91/37	1.44/1.46	1.13/0.17	-0.41/-1.67	-3.82/-7.26	-9.61/-12.64	-18.6/-15.07	-8.82/-5.86	-3.69/-1.89	-0.49/0.14	0.22/0.38	1.65/1.83
Θ(7.5°)	0.79/0.94	1.36/0.99	0.8/-0.12	-0.66/-1.75	-3.6/-5.29	-7.58/-12.02	-14.76/-11.39	-8.56/-5.88	-3.52/-1.37	-0.40/7.6	1.53/2.44	2.84/2.9	3.06/3.01	2.59/2.44	1.7/0.94	-0.07/-1.31	-2.73/-5.2	-8.68/-11.29	-15.4/-18.61	-13.1/-8.09	-4.96/-2.77	-1.52/-0.77	-0.29/0.6	0.8/1.4
Θ(15°)	2.21/1.79	0.99/0.5	0.2/-0.51	-1.22/-2.55	-2.8/-4.23	-6.62/-9.37	-13.23/-14.24	-10.72/-7.76	-4.71/-2.43	-0.56/0.74	1.73/2.18	2.69/3.11	3.11/2.58	2.21/67	0.98/0.2	-0.47/-1.85	-3.88/-5.82	-7.13/-13.09	-10.98/-16.3	-14.26/-8.49	-4.69/-2.47	-1.61/-0.73	0.1/1.8	1.06/1.8
Θ(22.5°)	1.72/0.96	0/-1.22	-0.80/0.4	-0.05/-0.09	-0.73/-2.02	-4.1/-5.72	-9.24/-13.32	-12.94/-10.63	-7.61/-4.11	-1.49/0.58	1.89/3.06	3.22/3.38	3.34/2.99	2.93/2.86	2.64/2.19	1.38/0.33	-2.52/-5.06	-7.71/-11.21	-17.03/-18.98	-15.4/-9.57	-6.06/-4.45	-2.98/-1.79	-0.69/0.68	1.07/1.39
Θ(30°)	-0.76/-1.37	-0.51/0.27	-0.01/-0.72	-1.15/-2.2	-3.97/-5.33	-7.28/-9.35	-15.51/-19.41	-19.25/-10.34	-7.22/-4.6	-2.22/0.25	2.35/3.42	3.79/3.44	2.94/3.12	3.41/3.61	2.61/69	0/-2.21	-5.42/-9.18	-16.46/-14.62	-13.67/-18.3	-14.17/-9.16	-7.56/-8.2	-7.03/-5.85	-3.68/-2.07	-1.05/-0.64
Θ(37.5°)	-1.88/-1.02	-0.28/0.01	-0.37/-1.57	-2.92/-4.02	-4.6/-3.76	-4.51/-6.67	-8.06/-9.91	-10.7/-9.06	-5.46/-2.76	-1.32/0.01	1.46/3.01	3.22/91	2.55/2.97	3.62/3.54	2.52/1.21	0.2/-1.44	-2.92/-4.01	-5.07/-7.8	-11.21/-11.16	-10.02/-15.09	-10.46/-11.01	-9.53/-6.71	-4.39/-3.63	-3.47/-3.16
Θ(45°)	-3.06/-2.08	-1.66/-0.95	-1.65/-3.46	-4.88/-5.21	-4.13/-3.88	-4.3/-4.51	-5.03/-7.79	-10.15/-16.86	-10.12/-4.53	-1.78/-1.23	-0.41/4.8	2.87/2.97	2.23/2.33	3.06/3.09	1.81/1.22	1.13/0.26	-1.02/-2.37	-2.87/-4.29	-14.65/-17.53	-18.66/-17.39	-11.07/-8.2	-8.59/-4.79	-2.7/-2.96	
Θ(52.5°)	-5.7/-5.54	-3.44/-3.3	-4.47/-5.02	-5.91/-5.09	-4.09/-2.26	-1.86/-2.21	-3.51/-5.68	-13.71/-18.52	-11.75/-6.21	-3.01/-1.6	-1.97/-1.05	1.65/2.38	1.89/0.59	1.55/2.61	2.07/1.89	0.67/-0.72	-2.37/-3.1	-3.18/-5.29	-7.5/-9.42	-13.56/-13	-13.64/-9.74	-8.18/-10.59	-7.32/-4.21	-6.03/-6.56
Θ(60°)	-8.85/-7.71	-5.73/-7.68	-7.5/-9.17	-9.13/-9.03	-7.48/-4.23	-3.15/-2.82	-3.28/-5.21	-12.37/-17.81	-5.89/-3.39	-2.91/-0.83	-0.18/-1.71	-0.57/1.98	3.31/57	2.02/2.22	1.41/-0.45	-1.21/-2.07	-3.03/-5.06	-5.9/-4.38	-6.5/-8.74	-10.17/-13.61	-16.6/-14.5	-18.85/-10.88	-4.53/-8.83	-6.52/-8.1
Θ(67.5°)	-8.77/-8.63	-7.31/-11.72	-10.61/-13.7	-8.21/-11.34	-6.74/-4.48	-5.98/-7.15	-4.09/-4.54	-11.94/-17.32	-8.45/-4.33	-2.86/-1.04	0.83/0.54	-2.15/1.54	2.39/1.5	1.79/3.09	2.01/-0.82	-1.72/-0.48	-1.88/-5.45	-5.93/-5.35	-7.4/-8.33	-10.82/-16.26	-13.76/-11.38	-12.7/-6.2	-7.6/-8.37	-5.07/-12.89
Θ(75°)	-8.2/-13.87	-17.52/-9.8	-13.5/-17.46	-18.72/-17.6	-11.57/-10.08	-12.14/-12.07	-13.79/-12.78	-10.24/-18.05	-11.33/-5.94	-5.83/-2.74	-0.28/1.01	-1.78/-2.69	0.41/-0.38	-0.26/1.04	1.89/-0.1	-2.61/-1	-1.2/-4.68	-4.13/-1.54	-5.51/-6.03	-8/-19.17	-18.83/-10.1	-12.85/-13.35	-7.02/-4.83	-6.34/-7.18
Θ(82.5°)	-11.2/-10.01	-10.63/-15.68	-18.5/-15.53	-16.79/-16.2	-17.12/-16.6	-15.67/-18.19	-12.33/-15.24	-18.48/-13.41	-12.96/-6.81	-5.14/-4.92	-2.35/0.61	-0.91/-3	0.56/0.64	-0.78/0.31	0.41/-1.75	-2.80/19	0.19/-3.2	-2.32/-2.36	-3.41/-5.76	-13.74/-14.12	-19.42/-11.4	-19.17/-18.9	-5.6/-8.69	-5.23/-6.34
Θ(90°)	-4.79/-6.65	-16.87/-14.24	-11.94/-12.74	-14.88/-10.94	-9.92/-10.01	-12.21/-13.43	-7.59/-4.47	-9.65/-9.96	-11.08/-5.19	-3.13/-1.84	-3.97/-0.66	0.15/-1.59	-1.52/0.64	0.06/0.1	-0.45/-4.59	-1.97/0.97	0.37/0.68	-0.09/-4.8	-5.14/-5.49	-14.17/-15	-17.17/-17.96	-13.47/-11.82	-5.77/-3.61	-0.65/-5.05
Θ(97.5°)	-3.14/-9.11	-4.7/-11.99	-9.56/-17.65	-10.59/-11.75	-16.33/-18	-18.66/-8.96	-9.12/-7.35	-12.5/-10.12	-8.52/-3.89	-1.71/-0.31	-2.14/-2.01	-0.52/-1.61	-3.84/-0.87	-3.77/-0.34	-0.53/-2.4	-2.09/-1.2	-1.54/-0.18	-2.29/-9.46	-12.89/-11.35	-18.82/-16.31	-15.74/-13.08	-10.84/-8.56	-7.69/-3.43	-1.54/-3.32
Θ(105°)	-5.46/-6.43	-3.32/-17.87	-12.3/-10.8	-7.53/-18.35	-15.26/-4.02	-8.06/-6.57	-9.2/-10.46	-15.22/-12.39	-7.61/-5.04	-3.39/-0.85	-2.76/-2.72	-2.2/-1.67	-3.27/-0.6	-4.15/-0.87	-1.88/-3.28	-3.62/-4.56	-4.61/-2.87	-2.13/-12.7	-12.76/-8.6	-10.66/-11.91	-9.95/-10.74	-8.2/-15.67	-15.38/-7.54	-5.14/-3.31
Θ(112.5°)	-16.7/-6.48	-15.46/-8.09	-13.53/-11	-8.64/-19.07	-13.1/-3.27	-3.65/-4.48	-4.5/-8.07	-3.76/-6.37	-4.64/-2.55	-2.64/-2.73	-1.76/-3.26	-4.08/-4.09	-2.26/-2.43	-1.34/-1.62	-3.79/-6.51	-1.86/-1.42	-2.29/-11.08	-12.28/-5.61	-4.82/-9.9	-11.32/-11.31	-7.63/-6.09	-12.32/-11.87	-13.69/-9.32	
Θ(120°)	-9.75/-10.02	-8.7/-4.46	-11.39/-8.55	-10.55/-10.3	-13.08/-8.4	-9.09/-2.63	-3.28/-3.28	-3.81/-1.8	-4.84/-1.27	-0.71/-3.99	-4.06/-4.36	-1.42/-1	-1.65/-2.19	-0.58/-3.01	-2.3/-1.77	-5.71/-6.74	-0.88/0.79	-1.04/-9.64	-8.79/-4.26	-4.99/-11.73	-16.9/-13.92	-12.1/-8.48	-15.09/-9.7	-15.38/-17.71
Θ(127.5°)	-9.45/-10.18	-6.09/-8.01	-14.47/-17.24	-4.83/-2.69	-12.58/-8.23	-11.99/-3.12	-5.49/-1.4	-4.04/-3.25	0.44/0.02	-0.45/0.07	-3.77/-3.87	-3.41/-2.2	-6.74/-7.54	-4.91/-2.22	1.41/-0.63	-7.59/-5.44	-2.21/-3.19	-3.65/-19.16	-12.55/-11.87	-7.21/-15.24	-10.98/-12.94	-4.77/-8.2	-19.23/-15.49	-18.66/-12.25
Θ(135°)	-18.67/-12.86	-10.62/-10.85	-16.59/-11.62	-5.34/-2.94	-5.89/-6.36	-7.12/-9.59	-8.67/-6.75	-6.3/-8.07	1.17/0.42	0.34/-2.14	-1.3/-3.8	-3.15/-0.08	-2.04/-0.74	-2.89/-1.81	0.72/-3.23	-12.77/-7.44	-3.07/-3.89	-4.39/-17.67	-10.92/-10.74	-9.17/-8.62	-9.94/-11.3	-8.59/-13.67	-17.56/-16.58	-8.57/-10.91
Θ(142.5°)	-12.61/-18.15	-8.69/-6.48	-8.48/-12.47	-14.51/-18.34	-18.05/-12.4	-9.72/-13.57	-15.16/-9.49	-7.81/-4.9	-2.43/-2.69	-5.51/-5.57	-4.09/-5.36	-3.37/-2.86	-2.64/-3.3	-8.77/-8.4	-6.48/-10.96	-15.54/-7.66	-8.53/-8.99	-13.21/-10.01	-18.78/-16.3	-8.95/-8.23	-9.08/-4.1	-3.73/-11.68	-14.12/-13.66	-15.02/-10.03
Θ(150°)	-9.91/-13.06	-12.02/-9.61	-10.91/-12.57	-14.87/-15.65	-13.73/-9.14	-7.17/-9.42	-14.78/-18.5	-18.16/-9.09	-7.2/-9.17	-10.57/-8.43	-6.13/-5.52	-8.27/-10.26	-8.12/-7.44	-8.56/-8.1	-6.48/-4.27	-7.44/-11.8	-9.56/-12.6	-15.2/-12.25	-18.42/-11.58	-6.22/-9.69	-13.02/-14.01	-12.59/-10.25	-8.41/-10.52	-13.79/-9.34
Θ(157.5°)	-9.48/-7.55	-6.03/-6.86	-10.18/-11.25	-11.2/-10.17	-9.44/-13.92	-19.36/-17.11	-15.14/-17.77	-17.93/-18.76	-14.47/-11.86	-8.35/-7.51	-5.83/-4.78	-4.64/-6.06	-7.77/-8.24	-6.44/-3.88	-3.17/-4.21	-6.65/-8.53	-10.32/-8.83	-9.63/-10.82	-18.69/-11.78	-6.86/-4.37	-4.48/-9.26	-10.91/-7.75	-6.2/-6.74	-9.38/-10.43
Θ(165°)	-11.66/-11.52	-12.93/-14.55	-14.27/-13.72	-16.27/-17.68	-17.47/-18.33	-18.82/-18.64	-18.04/-19.18	-17.73/-15.98	-14.45/-10.15	-7.54/-5.23	-3.24/-1.52	-1.39/-2.54	-4.67/-4.93	-4.79/-3.43	-3.85/-4.65	-5.77/-8.53	-17.74/-12.79	-9.38/-10.71	-5.08/-4.18	-5.56/-7.12	-6.8/-7.81	-8.73/-13.31	-18.02/-14.64	
Θ(172.5°)	-14.																							

Total Gain Data

Freq(Hz)	2.45G/Pd		TotalAnt.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°) Φ(7.5°)	Φ(15°) Φ(22.5°)	Φ(30°) Φ(37.5°)	Φ(45°) Φ(52.5°)	Φ(60°) Φ(67.5°)	Φ(75°) Φ(82.5°)	Φ(90°) Φ(97.5°)	Φ(105°) Φ(112.5°)	Φ(120°) Φ(127.5°)	Φ(135°) Φ(142.5°)	Φ(150°) Φ(157.5°)	Φ(165°) Φ(172.5°)	Φ(180°) Φ(187.5°)	Φ(195°) Φ(202.5°)	Φ(210°) Φ(217.5°)	Φ(225°) Φ(232.5°)	Φ(240°) Φ(247.5°)	Φ(255°) Φ(262.5°)	Φ(270°) Φ(277.5°)	Φ(285°) Φ(292.5°)	Φ(300°) Φ(307.5°)	Φ(315°) Φ(322.5°)	Φ(330°) Φ(337.5°)	Φ(345°) Φ(352.5°)	
Θ(0°)	-2.20/-2.38	-2.54/-2.77	-2.84/-2.78	-2.49/-2.17	-2.13/-2.32	-2.58/-2.64	-3.06/-2.95	-2.67/-2.57	-2.07/-1.81	-1.87/-1.82	-1.85/-1.68	-1.64/-1.55	-1.46/-1.56	-1.76/-1.98	-1.94/-1.97	-1.85/-1.58	-1.62/-1.62	-1.54/-1.95	-2.33/-2.76	-2.91/-2.85	-2.71/-2.60	-2.53/-2.36	-2.17/-2.30	-2.12/-2.05	
Θ(7.5°)	-1.60/-1.82	-1.87/-1.80	-1.71/-1.67	-1.53/-1.31	-1.07/-0.98	-1.05/-1.18	-1.51/-1.60	-1.53/-1.44	-1.49/-1.53	-1.68/-1.77	-2.36/-2.41	-2.64/-2.60	-2.75/-2.93	-3.49/-3.63	-3.94/-1.00	-3.99/-3.82	-3.48/-3.36	-3.38/-4.33	-3.66/-4.10	-3.99/-3.92	-3.83/-3.51	-3.19/-2.85	-2.56/-2.21	-1.88/-1.64	
Θ(15°)	-0.27/-0.25	-0.26/-0.19	-0.20/-0.56	-0.55/-0.71	-0.62/-0.44	-0.46/-0.44	-0.68/-0.64	-0.85/-0.66	-0.60/-0.70	-0.84/-0.87	-1.21/-1.59	-1.72/-1.99	-2.15/-2.34	-2.47/-3.44	-4.09/-5.06	-5.28/-5.60	-5.55/-5.55	-5.10/-4.95	-4.52/-3.99	-3.55/-2.87	-2.39/-2.06	-1.75/-1.53	-1.11/-0.80	-0.38/-0.46	
Θ(22.5°)	0.61/0.75	0.85/0.99	0.81/37	0.06/-0.25	-0.15/-0.22	-0.11/-0.24	-0.34/-0.38	-0.56/-0.62	-0.69/-0.59	-0.54/-0.44	-0.51/-0.65	-0.75/-0.66	-0.65/-0.72	-1.07/-1.77	-3.08/-4.45	-5.73/-7.00	-5.64/-5.37	-4.48/-3.71	-2.85/-2.10	-1.58/-1.18	-0.92/-0.63	-0.47/-0.45	-0.33/-0.12	0.28/0.46	
Θ(30°)	0.15/0.42	0.82/0.97	0.75/0.47	0.24/0.23	0.32/0.29	0.43/0.55	0.57/0.47	0.40/0.18	0.13/-0.01	0.03/-0.04	-0.10/-0.23	-0.21/0.08	0.61/0.93	0.84/0.21	-0.76/-2.41	-4.09/-5.15	-5.01/-4.88	-3.98/-3.24	-2.54/-2.23	-2.16/-2.18	-1.84/-1.55	-1.44/-1.01	-1.03/-0.71	-0.36/-0.13	
Θ(37.5°)	-0.72/-0.50	-0.11/0.17	0.15/0.15	0.39/0.66	0.76/0.91	1.22/1.36	1.47/1.63	1.76/1.79	1.81/1.81	1.48/1.26	0.82/0.23	-0.10/0.10	0.65/1.20	1.34/1.03	0.15/-1.41	-3.39/-5.14	-5.78/-5.67	-5.23/-4.38	-3.76/-3.32	-3.20/-2.97	-2.65/-2.20	-1.71/-1.30	-1.29/-1.21	-1.01/-0.94	
Θ(45°)	-1.82/-1.50	-1.14/-0.90	-0.89/-0.72	-0.27/0.18	0.49/0.73	1.08/1.49	1.88/2.36	2.68/3.09	3.38/2.39	3.10/2.63	2.02/1.13	0.29/-0.54	-0.59/-0.19	0.69/1.02	0.56/-1.11	-3.91/-1.11	-8.41/-6.97	-5.21/-3.80	-2.81/-1.64	-1.02/-0.83	-1.00/-1.23	-1.26/-1.19	-1.38/-1.75	-2.01/-1.97	
Θ(52.5°)	-5.52/-4.58	-3.50/-2.69	-2.04/-1.37	-0.95/-0.82	-0.60/-0.04	0.72/1.42	1.88/2.36	3.02/2.62	4.00/4.09	3.90/3.60	3.05/2.19	1.16/-0.22	-1.34/-1.65	-0.52/0.42	0.42/-1.11	-4.10/-6.72	-5.80/-4.58	-4.05/-3.64	-3.08/-2.41	-2.51/-2.99	-3.62/-4.45	-4.41/-4.43	-4.55/-4.83	-5.34/-5.92	
Θ(60°)	-1.17/-6.41	-6.83/-4.59	-3.71/-1.92	-1.18/-1.51	-1.78/-1.40	-0.39/0.44	1.16/2.04	2.81/3.52	4.00/4.17	4.31/4.03	3.76/3.20	2.38/1.17	-0.56/-1.88	-1.22/0.17	0.59/-0.86	-3.16/-5.55	-5.86/-5.97	-6.92/-7.85	-7.42/-6.31	-5.80/-5.35	-5.08/-3.88	-2.30/-1.16	-0.49/-0.41	-0.88/-2.05	
Θ(67.5°)	0.30/-1.67	-0.22/-5.99	-5.69/-3.21	-1.66/-1.65	-2.30/-2.05	-1.28/-0.41	0.47/1.69	2.99/3.63	4.25/3.33	4.42/4.19	4.03/3.69	3.28/2.18	-0.63/-0.77	-1.04/-0.31	-0.40/-1.99	-5.31/-9.98	-12.02/-13.27	-13.02/-10.98	-7.28/-4.77	-6.88/-3.40	-5.68/-3.90	-1.65/0.01	0.99/1.64	-2.84/-1.78	
Θ(75°)	-0.18/-1.29	-3.13/-5.88	-6.86/-5.10	-3.22/-2.68	-2.75/-2.08	-1.45/-0.81	0.05/1.41	2.55/2.21	3.74/3.98	3.97/4.00	3.95/4.12	4.01/5.52	-0.76/-1.74	-2.31/-3.27	-6.12/-9.04	-7.68/-6.26	-6.62/-6.82	-7.85/-5.99	-5.01/-4.04	-4.73/-5.20	-5.04/-3.45	-1.62/-0.46	0.16/0.21		
Θ(82.5°)	-0.42/-1.43	-3.29/-6.22	-6.34/-5.37	-4.22/-3.67	-3.33/-2.37	-1.24/-0.29	0.73/1.67	2.35/2.89	3.02/3.10	3.07/3.30	3.74/4.12	4.50/4.26	-0.58/-2.55	-2.44/-2.61	-4.31/5.93	-5.14/-4.46	-5.56/-6.59	-5.20/-3.96	-4.31/-5.85	-4.98/-4.56	-4.32/-3.99	-3.11/-1.71	-0.63/-0.28		
Θ(90°)	-1.31/-1.13	-2.14/-3.91	-4.03/-3.72	-4.63/-3.97	-4.47/-3.77	-1.75/0.10	1.81/2.99	3.74/3.94	3.92/3.63	3.46/3.40	3.76/4.35	4.71/4.76	4.24/3.06	1.18/-0.47	-0.54/-0.96	-3.11/-1.08	-7.37/-7.77	-9.64/-7.44	-3.74/-2.27	-2.80/-5.46	-9.53/-8.96	-5.57/-5.50	-6.27/-5.29	-2.84/-1.78	
Θ(97.5°)	-2.85/-2.78	-3.96/-4.50	-2.97/-1.87	-1.51/-1.96	-2.78/-3.08	-1.86/0.09	2.03/4.44	4.16/4.48	4.31/3.91	3.61/3.63	3.88/4.23	4.70/5.04	5.25/3.91	2.38/0.61	-0.45/-1.54	-3.81/-1.67	-6.32/-7.22	-9.90/-9.29	-5.25/-5.34	-4.43/-7.67	-12.67/-10.43	-5.50/-4.28	-5.59/-6.65	-4.04/-2.94	
Θ(105°)	-1.95/-2.04	-3.66/-4.89	-4.99/-3.51	-1.78/-2.03	-2.54/-1.37	-0.29/0.94	2.27/3.14	3.78/3.86	3.70/3.21	2.89/3.31	3.44/3.93	4.65/5.11	4.86/3.94	2.58/1.11	0.22/-0.89	-2.28/-3.93	-5.35/-6.91	-9.20/-8.80	-6.00/-5.34	-7.19/-10.54	-11.01/-9.59	-8.19/-6.93	-9.53/-9.57	-4.78/-2.63	
Θ(112.5°)	-3.57/-2.38	-2.38/-2.51	-2.18/-1.44	-1.78/-2.43	-2.36/-1.35	-0.09/0.99	1.94/2.72	3.02/3.07	2.91/2.74	2.90/3.31	3.78/4.29	4.93/5.34	5.15/4.70	3.97/2.56	0.57/-1.12	-3.01/-4.45	-5.24/-6.55	-3.39/-8.27	-6.48/-7.00	-9.63/-15.25	-11.76/-9.81	-8.37/-7.83	-9.17/-10.38	-6.29/-4.30	
Θ(120°)	-2.55/-4.24	-4.50/-4.48	-2.89/-1.18	-0.48/-0.57	-0.37/-0.04	0.67/1.39	1.88/2.36	2.90/3.22	3.56/3.93	4.23/4.49	4.71/4.19	4.71/5.04	4.74/4.96	3.54/1.08	-2.24/-4.09	-3.75/-5.32	-3.96/-4.63	-6.20/-6.62	-6.00/-5.53	-6.02/-6.62	-6.42/-5.97	-4.97/-3.69	-3.41/-3.22	-2.23/-1.83	
Θ(127.5°)	0.68/0.29	-1.21/0.19	-2.56/-2.00	-1.23/-0.65	0.17/0.10	2.22/3.09	3.65/3.96	4.23/4.43	4.40/4.43	4.29/4.17	4.28/4.52	4.67/4.33	3.47/2.35	1.20/-0.14	0.27/-0.14	-0.54/-1.72	-6.15/-8.32	-9.46/-9.43	-7.97/-5.74	-3.40/-1.87	-0.70/0.12	0.69/0.16	1.16/1.19		
Θ(135°)	0.44/0.69	0.85/0.57	0.60/0.54	0.42/0.62	0.90/1.78	2.82/3.83	4.66/5.05	5.31/3.30	5.04/4.78	4.46/4.22	4.06/3.97	3.61/3.92	2.24/2.36	2.23/2.11	1.96/1.78	1.20/0.49	0.08/0.32	-1.20/-2.85	-5.10/-9.06	-14.84/-14.11	-9.92/-7.01	-6.84/-2.96	-1.01/-1.09	-0.26/-0.18	
Θ(142.5°)	-3.06/-1.84	-0.61/0.21	0.69/1.24	1.73/2.23	2.66/3.92	3.25/3.62	3.96/4.20	4.24/4.08	3.74/3.34	3.04/2.74	2.51/2.23	2.10/2.29	2.79/3.41	3.80/3.95	2.95/2.25	1.49/0.60	-0.78/-2.40	-4.04/-4.85	-4.96/-4.70	-5.44/-7.04	-8.68/-8.98	-7.89/-7.42	-6.41/-4.74		
Θ(150°)	-9.77/-8.17	-5.98/-3.79	-1.77/0.00	1.68/3.06	4.11/4.87	5.29/5.55	5.63/5.52	5.19/4.80	4.26/3.83	3.61/3.76	3.75/3.98	4.40/4.80	5.26/5.49	5.57/5.41	4.88/3.93	2.71/2.22	-0.53/-2.33	-4.33/-6.27	-5.89/-4.21	-2.43/-1.34	-1.14/-1.61	-2.62/-3.61	-4.66/-6.48	-7.84/-9.69	
Θ(157.5°)	-3.73/-9.07	-11.01/-8.97	-5.97/-2.75	-0.60/-1.39	2.87/4.22	5.08/5.82	6.19/6.50	5.69/5.53	5.45/5.49	5.25/5.02	4.74/5.21	4.50/4.48	5.26/5.02	2.17/0.35	-1.51/-3.26	-4.71/-5.06	-5.30/-4.70	-3.53/-2.35	-1.43/-0.42	-0.13/-0.15	-0.51/-1.26	-1.88/-2.83	-0.37/-2.10		
Θ(165°)	-3.33/-4.86	-6.80/-8.30	-8.84/-7.66	-5.71/-3.81	-1.90/-0.00	1.50/2.55	3.39/4.12	4.62/4.86	5.06/5.39	5.48/5.39	5.15/4.70	3.97/2.91	1.86/0.47	-0.94/-2.63	-3.66/-3.85	-3.16/-2.27	-1.42/-0.85	-0.60/-0.26	-0.13/0.08	0.25/0.67	0.91/0.95	0.61/0.21	-0.24/-0.71	-1.36/-2.30	
Θ(172.5°)	-1.94/-2.90	-3.37/-4.03	-4.76/-4.82	-5.13/-5.19	-4.92/-4.77	-3.71/-2.97	-2.13/-1.22	-0.27/-0.17	0.29/0.40	0.45/0.10	-0.70/-1.88	-3.09/-4.69	-5.27/-5.05	-3.82/-2.43	-1.31/-0.26	0.40/0.67	1.10/1.35	1.18/1.30	1.30/1.28	1.32/1.35	1.18/1.12	0.88/0.56	0.41/-0.10	-1.60/-1.26	
Θ(180°)	-1.53/-1.62	-2.01/-2.09	-1.93/-1.81	-1.52/-1.54	-1.47/-1.51	-1.55/-1.83	-1.98/-2.07	-0.27/-2.72	-3.07/-3.61	-4.13/-4.35	-4.12/-3.61	-2.79/-1.75	-0.96/-0.18	0.38/0.87	1.06/1.23	1.21/1.10	0.89/0.66	0.54/0.26	0.01/0.11	-0.43/-0.89	-1.16/-1.54	-1.49/-1.45	0.30/-1.24	-1.31/-1.54	
Freq(Hz)	5.2G/PdL		TotalAnt.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°) Φ(7.5°)	Φ(15°) Φ(22.5°)	Φ(30°) Φ(37.5°)	Φ(45°) Φ(52.5°)	Φ(60°) Φ(67.5°)	Φ(75°) Φ(82.5°)	Φ(90°) Φ(97.5°)	Φ(105°) Φ(112.5°)	Φ(120°) Φ(127.5°)	Φ(135°) Φ(142.5°)	Φ(150°) Φ(157.5°)	Φ(165°) Φ(172.5°)	Φ(180°) Φ(187.5°)	Φ(195°) Φ(202.5°)	Φ(210°) Φ(217.5°)	Φ(225°) Φ(232.5°)	Φ(240°) Φ(247.5°)	Φ(255°) Φ(262.5°)	Φ(270°) Φ(277.5°)	Φ(285°) Φ(292.5°)	Φ(300°) Φ(307.5°)	Φ(315°) Φ(322.5°)	Φ(330°) Φ(337.5°)	Φ(345°) Φ(352.5°)	
Θ(0°)	-4.21/-3.88	-4.27/-4.98	-5.65/-5.96	-5.71/-4.92	-4.89/-4.72	-4.86/-4.37	-3.67/-3.06	-3.13/-3.93	-4.45/-4.60	-4.34/-4.70	-4.41/-4.37	-4.35/-4.01	-4.37/-4.59	-4.89/-5.28	-5.48/-5.90	-6.17/-6.05	-5.44/-4.54	-3.35/-2.99	-3.26/-4.45	-5.85/-5.88	-4.85/-4.63	-4.76/-5.48	-5.60/-6.18	-6.02/-5.04	
Θ(7.5°)	-4.70/-4.43	-5.02/-5.78	-6.02/-6.41	-6.07/-6.05	-6.02/-5.63	-4.86/-4.85	-4.79/-4.52	-3.90/-3.86	-4.49/-4.75	-4.68/-4.33	-4.60/-4.92	-5.23/-4.96	-4.50/-4.03	-4.55/-5.07	-5.53/-5.90	-5.81/-5.56	-5.23/-4.23	-3.30/-2.61	-2.31/-3.62	-2.99/-3.35	-3.57/-3.59	-3.43/-4.02	-4.60/-3.56	-6.27/-5.83	
Θ(15°)	-6.26/-6.34	-6.68/-6.96	-7.07/-7.06	-7.54/-8.04	-8.17/-7.66	-6.58/-6.37	-6.41/-6.04	-4.69/-3.32	-2.48/-2.32	-2.61/-2.42	-2.62/-1.81	-2.78/-2.26	-2.01/-1.77	-4.89/-6.67	-7.88/-8.23	-9.10/-9.14	-5.62/-4.35	-3.55/-3.63	-5.95/-5.91	-7.28/-6.59	-6.17/-5.37	-4.01/-6.68	-6.64/-7.02		
Θ(22.5°)	-6.26/-6.62	-7.68/-8.10	-7.57/-7.01	-7.78/-7.77	-7.37/-7.24	-5.50/-4.15	-3.42/-2.88	-2.29/-1.99	-2.23/-2.36	-2.34/-2.55	-3.01/-3.95	-3.99/-3.38	-3.19/-3.29	-3.79/-4.68	-6.14/-7.99	-11.18/-12.96	-10.97/-9.14	-9.29/-9.34	-9.91/-10.89	-11.98/-11.51	-10.66/-8.59	-6.46/-5.09	-4.15/-5.44	-6.46/-6.28	
Θ(30°)	-8.44/-8.28	-8.22/-7.78	-6.64/-5.88	-7.60/-6.98	-8.26/-7.32	-5.49/-4.75	-4.25/-3.83	-3.30/-2.82	-2.46/-2.63	-3.10/-2.89	-3.16/-3.86	-5.25/-6.53	-7.95/-7.40	-5.51/-4.67	-4.67/-5.52	-6.38/-6.27	-5.35/-4.97	-6.24/-6.81	-11.12/-9.73	-9.42/-9.63	-9.95/-11.89	-12.60/-11.60	-10.71/-10.16	-11.26/-9.33	
Θ(37.5°)	-6.95/-9.27	-12.45/-14.74	-8.89/-7.19	-7.12/-5.75	-5.11/-4.96	-5.24/-5.34	-4.78/-4.22	-3.70/-3.40	-3.00/-3.74	-3.82/-3.74	-3.30/-3.79	-5.58/-5.87	-6.49/-6.94	-5.40/-4.09	-3.88/-4.28	-4.91/-5.54	-6.26/-6.68	-7.38/-6.56	-6.84/-7.74	-6.53/-6.24	-6.58/-6.59	-8.86/-8.61	-7.71/-7.44		
Θ(45°)	-7.87/-6.49	-7.54/-9.09	-10.02/-12.77	-8.54/-5.34	-5.15/-5.03	-8.60/-9.55	-5.21/-2.51	-1.54/-1.42	-1.50/-1.81	-2.82/-1.39	-1.90/-0.77	-1.12/-2.09	-4.05/-8.32	-4.71/-4.88	-3.82/-5.25	-8.14/-8.11	-10.72/-10.90	-8.52/-10.20	-13.92/-16.46	-12.60/-8.83	-8.62/-9				



Antenna Pattern (2.4GHz and 5GHz UNII 1~UNII 5)

Appendix C

Θ(30°)	-4.00/-4.96	-6.67/-5.41	-5.00/-5.08	-3.98/-3.11	-2.33/-2.28	-2.77/-2.71	-2.41/-1.22	-0.24/0.54	0.84/-1.16	1.41/-1.29	0.53/-0.03	-0.72/-0.56	0.03/0.14	-0.18/-0.96	-0.88/-1.60	-2.55/-2.52	-1.73/-2.41	-4.36/-3.30	-3.11/-4.28	-6.98/-8.04	-7.68/-6.96	-6.17/-5.20	-4.86/-5.12	-6.05/-4.68
Θ(37.5°)	-9.02/-6.14	-5.57/-4.36	-4.83/-6.61	-6.07/-5.20	-5.34/-5.25	-4.69/-2.96	-0.99/-0.14	0.40/0.28	0.20/0.84	1.29/-1.11	1.57/2.04	1.45/-1.07	0.01/-1.13	-0.49/-0.17	0.49/-0.89	-1.98/-1.98	-2.64/-3.71	-2.76/-2.76	-4.94/-6.58	-6.03/-7.70	-9.44/-13.72	-13.62/-11.08	-13.51/-14.67	-10.85/-12.12
Θ(45°)	-5.78/-9.28	-10.58/-5.77	-6.97/-8.14	-5.99/-4.86	-6.12/-6.17	-4.96/-3.16	-2.43/-1.66	-1.00/-0.72	-0.53/-0.04	0.67/-1.19	1.44/-1.51	1.47/0.41	-0.41/-0.46	-0.04/-0.07	-0.83/-3.16	-4.04/-6.08	-7.40/-5.57	-6.47/-9.31	-7.35/-6.13	-7.59/-6.96	-11.09/-12.05	-11.69/-14.83	-9.71/-8.78	-4.84/-5.63
Θ(52.5°)	-8.26/-7.20	-6.99/-8.29	-8.35/-7.21	-6.88/-8.26	-9.07/-5.17	-4.08/-4.39	-2.32/-0.47	0.44/0.75	0.65/-1.37	1.75/-1.54	1.42/0.97	1.04/-1.63	1.24/0.27	-0.58/-1.00	-2.66/-7.40	-8.14/-5.73	-4.81/-5.47	-5.83/-6.94	-10.00/-9.07	-11.57/-14.31	-9.59/-5.44	-6.71/-9.41	-7.12/-8.27	-7.54/-6.12
Θ(60°)	-5.58/-5.09	-8.88/-8.48	-7.88/-7.68	-6.14/-6.53	-11.89/-6.56	-3.75/-3.69	-3.48/-2.43	-1.05/-0.03	0.59/-1.53	1.61/-1.90	1.53/0.86	0.39/0.44	0.01/-1.29	-2.01/-2.45	-4.02/-7.55	-11.78/-9.80	-7.89/-8.14	-10.75/-14.58	-12.28/-10.05	-13.66/-12.47	-7.62/-5.92	-7.01/-4.30	-5.58/-8.50	
Θ(67.5°)	-6.90/-5.99	-12.17/-11.24	-8.42/-9.81	-13.58/-10.69	-7.33/-6.80	-6.12/-4.26	-2.90/-1.66	-0.51/-0.08	0.02/0.86	1.36/-1.51	1.20/-0.1	1.63/2.01	-1.56/-1.03	-2.09/-0.93	-3.98/-8.75	-15.48/-13.42	-12.80/-8.97	-9.26/-15.31	-12.48/-9.86	-11.09/-12.15	-7.11/-7.21	-11.69/-14.83	-9.71/-8.78	-6.36/-11.39
Θ(75°)	-7.52/-7.59	-10.38/-9.40	-8.94/-13.95	-11.61/-7.52	-6.64/-7.03	-6.30/-4.42	-4.26/-2.05	-1.19/-1.57	-0.58/0.72	0.38/0.35	0.82/0.93	0.56/0.53	1.60/0.22	-2.86/-1.07	0.06/-1.55	-8.57/-13.18	-12.88/-9.65	-9.43/-12.49	-15.11/-11.26	-8.93/-9.55	-7.83/-3.52	-3.92/-9.51	-8.80/-6.96	-5.78/-7.26
Θ(82.5°)	-10.09/-6.44	-9.41/-10.16	-7.44/-9.31	-7.98/-8.47	-11.43/-10.76	-6.35/-5.30	-4.00/-1.83	-1.22/-0.61	0.67/0.55	0.16/0.23	1.09/-0.17	0.53/-0.20	0.23/-0.07	-2.51/-3.35	-3.25/-7.29	-7.81/-11.85	-11.48/-9.10	-14.07/-10.87	-8.14/-15.18	-9.25/-13.13	-4.91/-6.78	-6.19/-11.96	-7.91/-5.38	-4.57/-7.25
Θ(90°)	-5.08/-3.59	-7.62/-11.03	-8.62/-7.31	-8.10/-9.47	-10.39/-7.86	-6.54/-5.94	-3.52/-1.24	-0.85/-0.54	-0.23/0.25	1.23/0.53	-0.37/0.26	0.88/0.99	0.72/-0.57	-2.66/-2.98	-1.82/-1.93	-6.68/-6.03	-9.82/-10.32	-12.14/-9.66	-11.45/-12.00	-9.71/-11.46	-8.25/-8.55	-7.64/-5.93	-3.89/-6.63	
Θ(97.5°)	-4.82/-4.49	-8.48/-5.95	-4.65/-8.84	-6.74/-4.26	-6.14/-8.50	-8.51/-4.44	-2.48/-1.53	-0.50/0.24	1.63/-1.37	0.76/0.76	1.04/-0.55	-2.81/-2.06	0.85/0.58	-2.10/-4.34	-3.55/-1.93	-4.27/-6.54	-12.96/-9.48	-7.14/-7.55	-8.66/-14.70	-7.85/-6.45	-9.18/-7.65	-7.72/-6.76	-14.84/-8.09	-5.88/-5.38
Θ(105°)	-5.82/-3.37	-4.01/-6.67	-5.34/-4.63	-3.56/-2.74	-3.32/-5.31	-5.85/-4.49	-3.02/-0.97	-0.10/0.82	1.13/-1.54	2.57/-4.24	1.49/0.22	-1.13/-0.78	0.32/0.13	-0.85/-0.99	-2.66/-4.48	-4.21/-1.36	-3.87/-7.57	-5.81/-2.87	-5.96/-7.21	-7.86/-10.46	-10.69/-15.97	-9.26/-9.91	-3.85/-2.76	
Θ(112.5°)	-3.57/-1.58	-4.23/-4.40	-1.64/-2.19	-3.91/-4.10	-2.88/-2.64	-3.98/-2.10	-0.94/-0.19	0.81/0.21	2.60/-2.96	2.30/-2.29	2.30/0.23	0.65/-1.00	-1.27/-1.31	-0.10/-2.36	-0.64/-2.20	-4.07/-2.83	-6.53/-11.23	-8.75/-6.66	-11.34/-8.02	-3.58/-6.11	-12.07/-1.97	-11.22/-4.82	-4.86/-13.12	-8.49/-4.43
Θ(120°)	-5.71/-4.80	-3.10/-2.25	-2.11/-2.36	-1.95/0.21	-0.60/-2.34	-1.19/-1.10	-0.31/0.99	2.27/2.71	2.73/2.52	2.51/3.12	2.80/-1.18	0.04/0.95	0.76/0.24	-0.28/-0.94	1.40/-0.16	1.56/-5.71	-7.82/-0.54	-2.78/-4.19	-7.74/-5.65	-2.31/-4.23	-9.23/-6.26	-10.16/-8.82	-7.57/-7.02	-5.10/-6.56
Θ(127.5°)	-6.32/-1.15	1.30/-0.19	-4.90/-2.05	0.19/-0.61	-1.94/-1.44	0.97/2.01	1.69/-1.39	1.68/2.83	3.35/3.67	2.72/-1.90	1.08/-1.47	1.88/-0.20	2.03/2.76	0.79/-0.99	-0.88/-2.13	-13.36/-3.20	-0.56/-1.69	-7.64/-2.27	-1.64/-6.83	-11.62/-14.06	-15.16/-5.21	-4.37/-2.76	-2.98/-5.08	
Θ(135°)	-4.07/-4.26	-1.74/0.05	0.70/0.59	0.65/-0.11	-0.40/0.94	1.67/-1.91	2.08/2.39	3.18/2.62	3.83/3.36	2.66/2.48	2.99/2.28	2.20/2.29	1.72/-0.25	-0.82/0.30	0.26/-1.783	-5.53/-4.37	-5.04/-7.52	-11.61/-12.46	-15.26/-4.99	-1.03/-4.95	-15.39/-12.52	-15.13/-7.97	-1.68/-3.09	-1.40/-2.33
Θ(142.5°)	-4.21/-1.70	-0.06/0.45	-1.41/-3.00	0.19/2.41	2.21/0.97	0.16/0.36	1.80/3.10	4.13/-4.49	4.44/-4.17	4.51/-4.62	4.31/-4.35	3.63/3.09	2.56/1.52	0.04/-2.57	-2.69/-0.69	-4.26/-4.94	-1.82/-0.20	-0.73/-5.86	-15.16/-10.24	-4.36/-2.46	-4.16/-6.65	-7.21/-3.44	-2.69/-4.68	-7.65/-5.81
Θ(150°)	-7.09/-5.97	-0.37/2.61	3.48/2.85	0.77/0.02	0.33/-1.74	3.28/-1.49	4.43/-4.39	4.16/-0.06	4.07/-0.34	4.44/-4.35	4.46/-5.1	2.33/-0.16	-1.24/-1.37	-2.05/-2.05	-2.42/-2.16	2.39/-0.5	4.11/2.08	0.64/-2.21	-5.62/-5.45	-1.67/0.71	-0.10/-4.82	-8.49/-5.36	-2.30/-1.28	-2.19/-5.10
Θ(157.5°)	-8.27/-5.41	-1.73/0.70	2.58/3.04	3.01/3.33	3.01/-1.89	1.34/-1.34	2.09/-2.39	2.91/-2.29	3.35/3.44	3.31/-0.38	2.05/0.30	-1.13/-1.04	-0.28/-0.23	1.00/-1.31	2.30/-4.15	4.67/-3.99	-0.93/-4.88	-5.04/-9.85	-14.66/-9.40	-13.16/-10.83	-7.69/-5.59	-6.95/-4.91	-2.68/-1.30	-1.16/-3.30
Θ(165°)	-5.22/-4.42	-2.49/-0.81	0.63/-1.13	1.50/2.06	2.56/2.63	2.58/2.90	3.43/3.98	4.38/-4.70	4.72/-4.61	3.85/2.81	1.55/0.64	0.58/0.96	1.61/2.32	2.52/2.54	1.96/0.50	-3.01/-8.21	-8.41/-4.07	-3.15/-5.14	-8.94/-9.94	-8.35/-5.72	-3.35/-2.52	-3.51/-3.50	-3.26/-3.31	-4.00/-5.10
Θ(172.5°)	-3.80/-3.20	-1.97/-1.01	-0.05/0.62	1.13/-1.74	2.02/-1.73	1.49/-2.17	0.90/0.37	0.30/-0.00	-0.17/-0.10	-0.11/0.34	0.62/0.76	0.81/0.92	0.92/0.11	-1.22/-3.76	-6.57/-8.12	-6.38/-4.40	-2.64/-1.90	-2.86/-5.27	-9.12/-13.84	-12.14/-10.93	-11.03/-12.36	-11.31/-8.96	-7.85/-6.83	-5.63/-5.00
Θ(180°)	-2.40/-2.36	-2.29/-2.35	-2.29/-2.14	-1.58/-1.79	-2.21/-2.95	-3.58/-3.80	-3.71/-3.81	-3.38/-2.85	-2.57/-2.31	-1.95/-1.55	-1.69/-1.85	-2.24/-3.22	-4.47/-6.43	-9.47/-9.94	-7.02/-5.17	-4.31/-4.04	-4.90/-6.67	-10.09/-13.64	-9.17/-6.22	-4.52/-4.43	-4.62/-4.12	-3.98/-3.71	-3.12/-2.72	-2.82/-2.70
Freq(Hz)	2.45GHzPol.	TotalAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	0.17/0.37	0.66/0.84	0.96/0.92	0.82/0.80	0.81/0.54	0.24/-0.24	-0.77/-1.22	-1.58/-1.76	-1.54/-1.18	-0.85/-0.69	-0.54/-0.39	-0.24/-0.04	0.16/0.44	0.67/0.99	1.26/-1.25	1.36/-1.15	1.01/0.72	0.48/0.39	0.42/0.47	0.28/0.11	0.08/-0.05	-0.30/-0.29	-0.44/-0.51	-0.25/0.00
Θ(7.5°)	1.17/1.22	1.46/1.66	1.89/-1.93	1.99/-1.98	1.87/1.63	1.35/0.85	0.11/-0.35	-1.04/-1.25	-1.26/-1.09	-1.06/-1.02	-0.93/-0.76	-0.83/-0.73	-0.72/-0.49	-0.56/-0.43	-0.26/-0.18	-0.15/-0.21	-0.29/-0.58	-0.90/-1.01	-0.79/-0.76	-0.67/-0.58	-0.42/-0.38	-0.23/-0.13	0.06/0.28	0.71/0.95
Θ(15°)	1.58/1.78	2.02/2.40	2.70/2.79	2.92/2.84	2.67/2.31	2.01/-1.54	0.89/0.17	-0.88/-0.75	-0.96/-0.82	-0.85/-0.89	-0.85/-0.64	-0.70/-0.60	-0.54/-0.60	-0.79/-1.11	-1.27/-1.43	-1.58/-1.78	-1.79/-2.09	-2.38/-2.58	-2.43/-2.04	-1.72/-1.41	-1.20/-0.87	-0.67/-0.22	0.23/0.60	1.10/-1.42
Θ(22.5°)	1.55/1.88	2.32/2.80	3.15/3.33	3.35/3.22	3.05/2.94	2.60/-1.95	1.43/0.69	0.07/-0.43	-0.61/-0.83	-0.86/-0.76	-0.43/-0.04	0.29/0.50	0.61/0.21	-0.33/-0.75	-1.31/-1.75	-2.18/-2.50	-2.66/-2.89	-3.52/-4.08	-4.03/-3.78	-3.10/-2.67	-2.07/-1.80	-1.53/-0.95	-0.28/0.38	0.90/-1.42
Θ(30°)	1.17/1.60	2.23/2.75	3.12/3.50	3.58/-3.49	3.25/2.95	2.48/-1.94	1.38/0.64	0.27/-0.04	-0.15/0.10	0.32/0.29	1.20/-1.24	1.06/0.70	0.61/-0.02	0.31/-0.17	-0.82/-1.54	-2.41/-3.05	-3.52/-4.03	-5.06/-6.26	-7.24/-7.08	-6.23/-4.81	-3.85/-3.42	-3.08/-2.34	-1.38/-0.45	0.32/0.80
Θ(37.5°)	0.32/1.10	1.91/2.59	3.12/3.39	3.46/3.26	3.00/2.67	2.21/-1.74	1.11/0.64	0.34/0.38	0.32/0.31	0.34/0.50	0.79/-1.05	0.97/0.71	-0.61/-0.02	-0.38/-0.75	-1.50/-2.24	-3.15/-3.95	-4.61/-5.39	-6.47/-8.17	-9.64/-10.52	-9.72/-7.64	-5.96/-5.36	-4.91/-3.96	-2.54/-1.34	-0.65/-0.13
Θ(45°)	-0.17/0.80	1.84/2.51	3.05/3.15	3.16/2.97	2.60/2.36	1.98/-1.55	1.04/0.50	0.21/0.17	0.32/0.42	0.15/-0.04	-0.07/-0.06	-0.20/-0.49	-0.53/-0.50	-0.80/-1.35	-2.09/-2.76	-3.35/-3.69	-4.35/-2.99	-6.20/-7.61	-9.07/-10.92	-12.25/-10.65	-8.27/-6.57	-5.32/-4.21	-2.85/-1.90	-1.35/-0.93
Θ(52.5°)	-0.30/0.94	1.96/2.57	3.01/3.02	2.89/2.69	2.57/2.43	2.36/2.20	1.85/-1.25	0.49/-0.16	-0.66/-1.07	-1.27/-1.36	-1.42/-1.57	-1.68/-1.61	-1.50/-1.50	-1.52/-1.99	-2.43/-2.93	-3.38/-4.05	-4.80/-5.68	-6.22/-7.88	-10.26/-12.68	-13.23/-10.45	-8.99/-6.96	-5.70/-4.52	-3.17/-2.48	-1.88/-1.36
Θ(60°)	-3.04/-8.02	1.72/2.33	2.46/2.66	2.62/2.66	2.36/2.31	2.19/2.29	2.46/2.57	2.32/-1.62	0.44/-1.19	-3.00/-3.75	-2.36/-2.79	-2.37/-2.39	-2.74/-3.00	-2.56/-2.56	-2.67/-2.96	-3.83/-4.63	-4.61/-4.03	-3.94/-4.99	-7.87/-11.77	-12.49/-10.52	-10.02/-8.47	-6.23/-4.05	-3.02/-2.57	-1.93/-1.48
Θ(67.5°)	0.43/1.02	1.60/-1.95	2.00/-1.92	1.65/-1.66	1.80/-1.93	1.91/-1.74	1.41/0.70	-0.90/-3.00	-5.22/-4.86	-2.95/-1.74	-1.74/-2.51	-3.35/-4.28	-4.17/-2.82	-2.51/-2.46	-2.52/-3.32	-4.58/-4.68	-3.62/-2.32	-2.01/-3.58	-6.07/-10.24	-11.79/-11.28	-10.01/-7.64	-4.20/-2.12	-1.17/-0.98	-0.63/-0.25
Θ(75°)	2.25/2.60	2.79/2.73	2.41/2.00	1.68/-1.54	1.41/-1.22	1.03/0.72	0.18/-0.56	-1.80/-3.50	-4.63/-4.32	-1.98/-1.50	-2.34/-3.98	-5.66/-5.75	-3.86/-3.23	-1.96/-2.00	-2.02/-2.76	-4.34/-5.01	-3.64/-2.39	-2.24/-3.58	-6.81/-10.96	-10.39/-7.78	-6.69/-6.57	-4.30/-2.20	-1.08/-0.63	0.45/-1.53
Θ(82.5°)	1.22/2.67	2.83/2.63	2.26/-1.71	1.13/0.86	0.42/0.05	-0.21/-0.47	-0.76/-1.44	-2.66/-4.34	-4.98/-3.85	-5.49/-6.53	-5.79/-3.62	-1.80/-0.56	-0.79/-1.48	-2.10/-3.10	-4.77/-5.77	-4.91/-3.26	-1.90/-2.32	-4.85/-10.09	-10.73/-7.23	-6.73/-8.23	-6.04/-5.01			

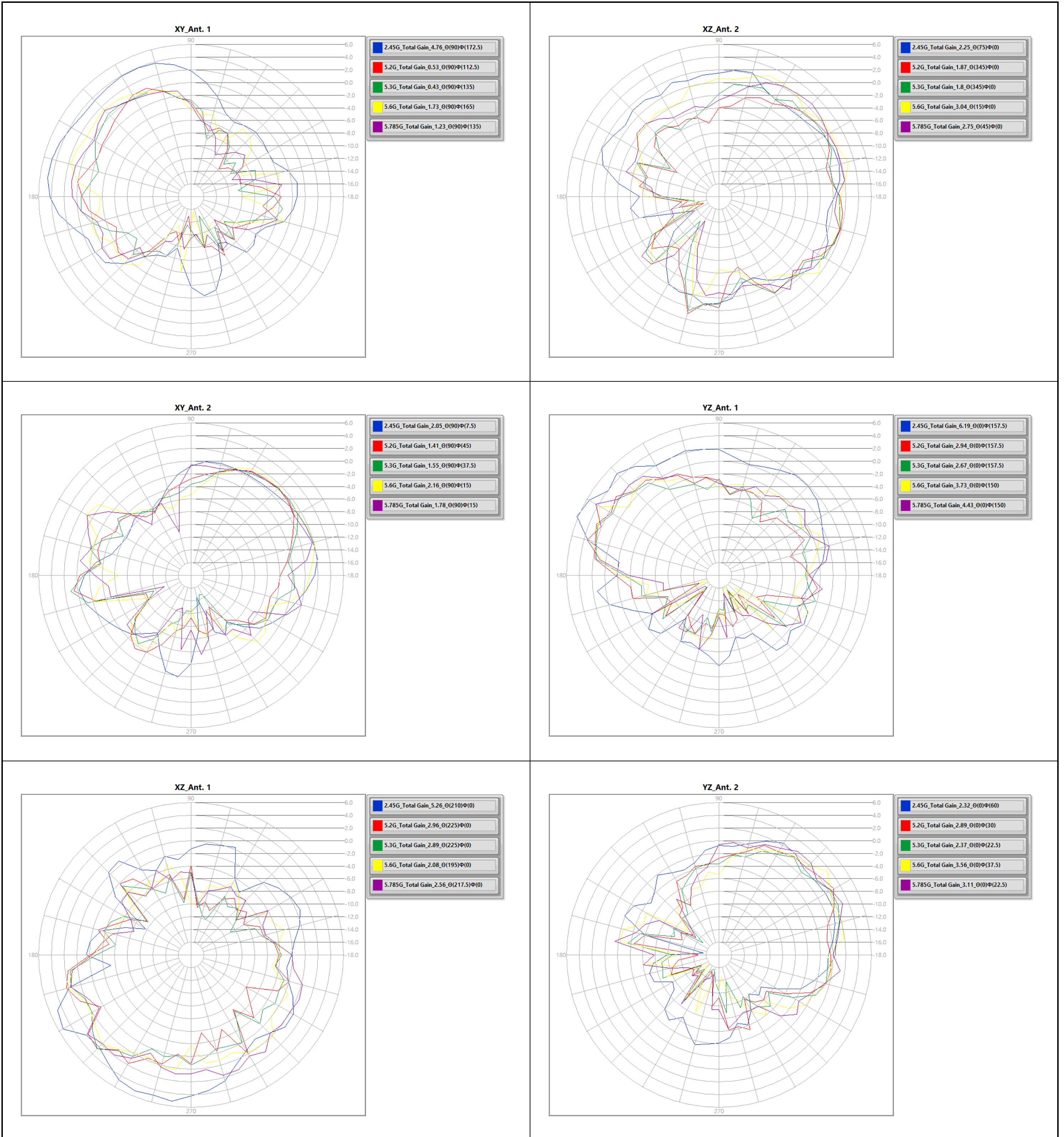


Antenna Pattern (2.4GHz and 5GHz UNII 1~UNII 3)

Appendix C

Θ(75°)	1.50/-1.13	2.53/-0.42	3.17/2.67	2.49/2.27	2.00/1.56	1.64/1.09	-0.51/-0.89	-5.05/-10.28	-2.96/-2.01	-5.43/-4.51	-1.96/-2.03	-2.04/-3.33	-5.68/-8.48	-5.48/-3.58	-2.67/-3.37	-5.49/-5.96	-4.09/-5.64	-7.52/-8.61	-11.02/-10.05	-8.59/-12.53	-11.05/-6.18	-2.82/-1.29	-2.04/-3.51	-1.17/-1.28
Θ(82.5°)	0.69/0.45	2.00/2.91	2.67/2.26	2.32/2.32	2.06/1.54	0.51/-0.82	-2.41/-2.82	-3.82/-10.53	-5.08/-1.69	-3.12/-2.85	-1.14/-1.25	-1.17/-2.56	-6.12/-6.95	-8.36/-11.62	-7.30/-7.90	-6.13/-4.33	-6.90/-6.09	-5.27/-8.19	-14.38/-15.31	-8.02/-9.51	-14.70/-6.95	-3.84/-2.98	-4.10/-3.57	-0.31/-1.59
Θ(90°)	0.62/1.39	2.16/1.79	1.44/1.34	1.53/1.50	1.27/0.36	-1.53/-3.44	-5.33/-5.64	-7.05/-6.34	-6.19/-4.99	-4.40/0.26	1.12/-1.92	-1.84/-1.77	-6.58/-3.40	-2.06/-8.13	-10.90/-6.19	-4.51/-4.35	-4.74/-10.09	-8.69/-10.61	-12.82/-9.43	-7.96/-11.86	-9.23/-5.52	-3.30/-3.22	-4.78/-5.21	-1.78/0.24
Θ(97.5°)	0.01/-0.38	1.02/2.06	1.91/1.19	0.68/0.83	0.98/-0.12	-2.51/-5.01	-4.83/-5.36	-6.93/-7.79	-5.90/-4.33	-2.35/-0.96	-0.45/-2.54	-2.52/-2.15	-2.98/-2.18	-1.62/-6.05	-8.81/-8.05	-6.59/-3.44	-4.33/-8.89	-14.24/-14.64	-13.55/-9.01	-10.32/-14.12	-11.02/-6.99	-4.33/-4.05	-7.33/-4.69	-1.29/0.53
Θ(105°)	-0.08/-0.55	0.15/0.16	0.22/0.75	0.67/0.13	0.17/-0.71	-3.03/-5.34	-6.90/-7.33	-8.14/-8.16	-5.78/-5.22	-3.45/-1.33	-0.52/-2.72	-5.44/-3.81	-1.84/-0.64	0.05/-3.55	-6.78/-12.35	-8.86/-8.58	-8.23/-9.22	-11.46/-10.64	-12.65/-13.57	-9.09/-11.12	-10.47/-7.58	-5.19/-7.74	-4.80/-4.88	-2.71/-0.28
Θ(112.5°)	-1.97/-1.61	-0.64/-0.42	-1.14/-1.42	-0.71/0.25	0.29/-1.20	-3.96/-5.93	-6.73/-8.59	-9.12/-7.17	-5.60/-5.60	-5.70/-4.25	-3.40/-2.45	-3.72/-5.77	-7.34/-7.17	-6.62/-9.73	-8.76/-5.12	-3.71/-5.19	-7.30/-13.16	-15.15/-13.16	-8.25/-10.47	-13.19/-11.65	-11.00/-8.59	-7.57/-5.55	-7.21/-6.54	-3.63/-2.17
Θ(120°)	-1.75/-2.47	-2.51/-1.71	-2.12/-2.57	-2.64/-2.28	-2.38/-3.73	-4.48/-5.33	-8.86/-11.24	-9.40/-8.08	-6.15/-6.93	-4.87/-4.05	-8.94/-10.80	-4.86/-6.24	-11.26/-9.12	-8.48/-15.51	-11.57/-5.46	-2.85/-8.19	-14.09/-6.06	-7.85/-12.10	-13.00/-9.41	-9.42/-14.68	-14.29/-10.65	-3.64/-4.40	-4.36/-6.17	-3.42/-1.78
Θ(127.5°)	-1.55/-2.58	-3.12/-3.88	-4.34/-3.88	-3.67/-3.07	-4.16/-5.54	-6.12/-6.22	-7.46/-10.36	-13.05/-10.79	-7.25/-6.55	-6.73/-8.18	-6.19/-4.98	-4.80/-8.39	-9.99/-14.88	-11.39/-6.58	-2.41/-2.69	-5.74/-9.20	-8.31/-4.72	-9.01/-14.12	-9.39/-6.03	-11.58/-10.22	-8.44/-6.61	-8.68/-6.35	-5.50/-4.52	-1.92/-1.23
Θ(135°)	-1.95/-2.34	-2.73/-3.94	-4.86/-6.13	-6.51/-6.94	-6.39/-6.48	-6.85/-7.33	-8.88/-9.47	-7.32/-7.72	-10.03/-7.83	-5.65/-4.66	-4.04/-5.86	-12.13/-6.26	-2.77/-4.04	-4.30/-3.08	-2.27/-6.06	-7.39/-13.49	-6.87/-7.05	-13.32/-15.92	-15.91/-12.26	-13.47/-12.31	-14.32/-11.46	-14.21/-10.30	-7.33/-5.49	-2.44/-2.42
Θ(142.5°)	-1.93/-0.75	-0.43/-1.08	-1.38/-2.34	-3.70/-4.68	-5.50/-5.79	-4.98/-7.11	-11.80/-10.35	-8.28/-6.44	-4.69/-4.20	-6.87/-8.99	-4.50/-3.01	-3.57/-4.09	-4.69/-4.93	-4.27/-4.09	-4.95/-5.71	-7.18/-6.76	-6.11/-12.74	-14.13/-13.85	-14.73/-8.88	-7.47/-13.06	-11.17/-10.19	-7.43/-7.29	-9.75/-9.37	-6.93/-3.26
Θ(150°)	-3.42/-2.28	-1.29/-1.17	-1.78/-2.65	-3.31/-3.57	-3.64/-4.09	-4.93/-5.47	-4.75/-3.46	-3.91/-6.08	-7.24/-4.70	-2.97/-1.42	-0.85/-1.54	-2.88/-5.72	-6.61/-6.80	-9.54/-12.19	-10.55/-8.91	-7.18/-3.97	-4.66/-8.91	-10.56/-11.04	-13.65/-10.30	-8.92/-5.71	-2.55/-3.05	-5.07/-6.02	-8.15/-8.73	-5.96/-4.74
Θ(157.5°)	-5.15/-6.02	-5.11/-4.84	-4.27/-3.90	-3.35/-2.86	-2.95/-3.75	-4.82/-4.58	-5.13/-6.12	-5.78/-2.39	-0.22/0.39	-0.29/-1.58	-3.12/-4.93	-6.69/-8.17	-11.58/-15.15	-14.71/-11.87	-10.75/-11.53	-9.77/-8.90	-9.27/-9.98	-9.65/-9.54	-9.14/-8.27	-10.50/-8.29	-4.17/-1.96	-1.77/-1.80	-1.83/-2.50	-3.22/-4.23
Θ(165°)	-3.61/-3.84	-4.18/-4.46	-4.04/-3.28	-2.85/-3.01	-3.62/-3.33	-3.12/-3.14	-2.39/-1.43	0.24/0.63	0.26/-1.24	-3.19/-5.81	-9.66/-11.94	-13.05/-13.60	-15.16/-13.85	-14.68/-15.45	-14.92/-13.71	-12.29/-11.66	-12.57/-11.89	-14.05/-15.55	-11.18/-8.11	-7.47/-6.91	-5.07/-2.80	-2.25/-2.31	-2.04/-2.45	-3.27/-3.54
Θ(172.5°)	-5.84/-6.44	-6.91/-7.39	-6.93/-6.52	-6.37/-5.16	-4.80/-4.70	-3.57/-2.71	-2.26/-2.38	-3.39/-5.34	-7.57/-9.44	-9.88/-9.50	-9.17/-9.13	-9.57/-10.09	-12.36/-14.14	-14.00/-13.10	-11.09/-10.52	-11.36/-10.19	-9.20/-7.82	-7.72/-7.74	-6.63/-5.80	-5.70/-6.09	-5.60/-4.53	-3.22/-3.36	-3.61/-3.66	-4.23/-5.24
Θ(180°)	-6.37/-6.32	-6.78/-6.52	-6.67/-6.43	-6.73/-7.14	-7.52/-7.27	-7.16/-8.87	-11.53/-14.95	-14.27/-9.69	-7.38/-6.19	-6.37/-6.56	-6.91/-9.62	-12.88/-12.83	-11.59/-9.85	-8.61/-8.35	-7.52/-6.02	-5.66/-5.15	-4.78/-4.77	-4.76/-4.90	-5.27/-6.08	-6.64/-7.30	-7.22/-6.47	-5.39/-5.20	-4.96/-5.25	-5.74/-6.33
Freq[Hz]	5.785GPol.	TotalAnt. 2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	0.59/0.77	0.95/0.63	0.60/0.45	-0.03/-0.08	0.15/0.58	0.35/-0.37	-0.00/-1.25	1.76/1.95	1.90/1.95	1.99/1.89	1.82/1.41	1.42/1.58	1.58/1.80	1.53/1.28	1.56/1.80	1.58/1.60	1.51/1.28	1.62/1.50	1.44/1.36	1.54/1.63	1.49/1.12	1.33/1.07	0.53/0.46	
Θ(7.5°)	1.94/1.77	1.79/1.76	1.58/1.64	1.23/0.91	0.71/1.35	1.28/0.81	0.80/0.88	1.03/1.18	1.25/1.39	1.14/1.36	1.60/1.45	1.36/0.60	0.36/0.53	0.51/0.65	0.44/0.39	0.50/0.65	0.33/0.41	0.37/0.74	1.23/1.15	1.25/1.43	1.83/1.77	1.73/1.80	2.08/1.93	1.84/2.02
Θ(15°)	1.85/1.50	1.81/2.00	1.78/1.51	1.54/1.59	1.68/1.76	2.05/1.95	1.68/1.31	1.34/1.58	1.72/1.63	1.91/1.71	1.89/2.05	2.07/1.91	1.73/1.65	1.29/0.93	0.97/0.90	0.61/0.37	-0.12/-0.78	-0.36/-0.55	-0.71/0.09	0.56/1.02	1.15/1.40	1.71/1.81	1.91/1.87	2.02/1.98
Θ(22.5°)	2.04/2.32	2.79/2.84	2.56/2.47	2.62/2.50	2.68/3.17	3.65/3.46	3.11/3.17	3.25/3.26	3.06/2.75	2.28/1.96	2.27/2.35	1.97/1.80	1.64/1.32	1.45/1.22	1.23/0.83	0.63/0.24	-0.38/-1.05	-1.89/-2.65	-2.22/-1.14	-0.13/0.54	0.82/0.96	0.88/1.23	1.33/1.51	1.75/1.86
Θ(30°)	1.83/2.24	2.82/3.38	3.73/3.93	3.50/2.82	2.73/3.10	2.85/2.48	2.39/3.02	3.62/3.69	3.09/2.29	1.83/1.53	1.63/1.40	0.54/0.10	-0.88/-1.52	-1.02/-1.22	-1.89/-3.14	-4.28/-3.98	-2.85/-1.97	-2.75/-3.80	-3.48/-1.87	-0.10/0.27	-0.10/-0.58	-1.07/0.18	1.47/1.86	1.96/2.08
Θ(37.5°)	2.33/2.63	3.28/3.85	3.96/3.61	3.17/2.62	2.47/1.67	0.96/0.35	1.35/2.05	2.27/2.31	2.28/2.01	2.12/0.81	0.65/0.50	0.57/0.47	0.29/1.35	2.03/-3.12	-2.99/-4.02	-4.25/-4.16	-6.24/-6.71	-8.71/-9.08	-7.28/-6.18	-5.55/-1.45	-1.16/-1.75	-1.08/0.24	0.05/1.73	
Θ(45°)	2.75/3.75	3.89/3.86	3.42/3.19	2.64/2.20	1.84/1.34	1.53/2.18	2.44/1.77	1.34/0.84	0.53/0.25	0.14/0.19	0.85/1.58	1.01/0.52	-1.53/-0.62	-0.73/-0.28	-0.74/-1.48	-1.36/-1.96	-3.64/-4.00	-4.88/-5.63	-4.43/-4.53	-3.24/-2.40	-3.70/-1.44	0.57/1.02	1.48/1.58	1.41/1.72
Θ(52.5°)	2.40/2.50	2.70/2.72	2.90/2.85	2.52/2.39	1.98/1.20	1.48/2.26	2.52/2.07	1.83/1.39	0.24/-1.03	-1.28/-1.08	-0.72/0.22	-0.42/-0.87	0.45/0.93	0.15/-0.63	-1.70/-2.08	-2.62/-2.36	-2.08/-5.29	-6.77/-5.21	-7.77/-5.32	-4.64/-8.60	-5.05/-2.19	-0.70/0.17	0.84/1.39	1.04/1.59
Θ(59.25°)	2.19/2.12	2.78/3.21	3.58/3.60	3.79/3.89	3.20/2.39	1.88/1.36	1.41/1.52	1.05/-1.00	-2.67/-1.90	-1.28/-2.36	-4.38/-4.59	-4.78/-3.62	-2.02/-1.65	2.03/-3.12	-2.99/-4.02	-4.25/-4.16	-6.24/-6.71	-8.71/-9.08	-7.28/-6.18	-5.55/-1.45	-1.16/-1.75	-1.08/0.24	0.05/1.73	
Θ(67.5°)	1.39/0.66	2.23/3.35	3.55/2.95	2.65/2.38	2.24/2.16	0.88/0.51	0.84/-0.38	-2.16/-3.89	-4.83/-3.47	-3.88/-5.41	-4.55/-5.84	-5.43/-3.63	-2.97/-2.90	-2.47/-0.62	-0.05/-0.77	-4.14/-6.26	-4.24/-6.07	-15.02/-8.42	-8.15/-8.42	-8.86/-14.38	-8.22/-3.58	-3.87/-3.95	-1.94/-0.86	1.34/2.46
Θ(75°)	-0.08/0.15	2.78/3.76	3.31/2.81	2.47/2.17	2.07/1.73	0.47/-0.21	-0.52/-1.71	-3.31/-6.81	-9.01/-2.66	-3.31/-8.82	-6.08/-4.22	-1.86/-1.08	-3.45/-7.15	-5.04/-3.22	-1.95/-4.04	-4.91/-4.19	-4.82/-4.71	-10.07/-8.97	-7.30/-5.00	-4.99/-12.36	-10.12/-4.22	-3.61/-4.73	-3.26/-2.56	0.26/1.18
Θ(82.5°)	-1.78/0.82	3.36/3.67	2.33/1.45	0.93/1.46	1.20/0.44	0.88/1.30	-0.19/-3.72	-6.58/-7.97	-12.22/-5.55	-5.12/-5.12	-1.25/-1.33	-0.69/-0.37	-2.42/-5.53	-6.69/-7.66	-6.70/-6.99	-3.62/-4.83	-9.84/-3.89	-5.82/-11.74	-6.34/-6.32	-6.75/-10.85	-7.20/-5.88	-6.58/-6.77	-4.80/-2.63	0.70/0.52
Θ(90°)	-2.79/0.33	1.78/1.14	0.75/1.36	1.43/1.00	0.86/0.04	-0.60/-0.61	-0.64/-3.80	-10.91/-5.71	-6.02/-7.87	-4.32/-1.53	0.91/-0.45	-1.74/-0.38	-2.84/-4.86	-4.90/-13.40	-10.06/-5.25	-5.04/-5.66	-7.21/-12.09	-12.73/-6.22	-9.36/-5.44	-7.52/-11.88	-7.10/-7.31	-4.61/-6.70	-6.59/-1.77	-0.03/-1.19
Θ(97.5°)	-3.85/-0.06	1.46/1.25	-0.11/-0.24	0.56/0.61	0.01/-0.68	-1.93/-4.44	-4.04/-4.53	-7.43/-7.75	-7.13/-6.48	-2.27/-1.06	0.24/0.52	-0.75/-1.44	-2.28/-2.03	-1.78/-9.18	-10.61/-7.28	-5.88/-3.70	-3.86/-9.13	-15.76/-10.67	-9.29/-10.82	-10.12/-8.79	-10.06/-6.06	-4.81/-7.62	-5.11/-1.61	-1.14/-2.81
Θ(105°)	-3.34/-1.99	-0.83/-1.82	-0.93/0.10	0.62/0.42	0.11/-0.16	-1.87/-4.50	-4.94/-5.88	-7.66/-7.05	-6.27/-5.96	-2.94/-0.41	-0.40/-0.53	-1.54/-4.64	-4.44/-1.66	0.16/-3.86	-6.06/-7.88	-5.18/-6.44	-6.59/-6.75	-14.30/-11.92	-14.88/-14.20	-9.28/-11.50	-11.73/-6.99	-5.46/-6.71	-5.40/-2.70	-3.26/-3.41
Θ(112.5°)	-3.54/-1.69	-1.75/-2.32	-3.05/-2.22	-0.78/-0.90	-1.60/-2.11	-3.40/-4.54	-6.51/-8.69	-8.62/-5.90	-7.65/-8.29	-4.31/-1.34	-3.65/-3.25	-0.38/-3.11	-9.15/-8.22	-8.21/-7.99	-7.80/-6.28	-5.30/-4.33	-4.79/-10.66	-12.81/-11.40	-14.05/-14.66	-8.94/-8.31	-11.10/-4.95	-4.14/-8.48	-7.34/-4.52	-5.58/-3.38
Θ(120°)	-3.65/-3.51	-2.36/-2.13	-2.26/-2.54	-3.31/-3.62	-2.71/-2.91	-4.41/-7.20	-9.01/-10.89	-9.45/-8.19	-6.02/-6.35	-4.68/-1.98	-3.36/-12.77	-6.14/-6.35	-13.54/-6.86	-5.35/-14.85	-8.37/-4.51	-3.06/-3.96	-6.99/-9.01	-4.96/-7.42	-13.54/-10.62	-9.18/-11.81	-11.62/-7.55	-5.31/-7.95	-6.84/-5.11	-3.43/-3.13
Θ(127.5°)	-2.53/-3.12	-3.62/-4.64	-4.73/-4.51	-4.92/-5.22	-4.91/-5.32	-6.18/-6.10	-6.99/-8.68	-12.18/-11.01	-6.74/-5.32	-7.15/-8.81	-5.55/-3.92	-4.91/-5.97	-6.43/-15.19	-8.49/-8.11	-2.56/-2									

E1(XY plane) – $\Theta(90)\Phi(0-360)$
E2(XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
E3(YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$





Antenna Pattern (6GHz UNII5~UNII8)

Appendix D

Total Gain Data

Freq(Hz)	6.175GPol.	TotalAnt.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	-0.26/-0.31	-0.60/-0.68	0.06/-0.12	0.65/-1.5	1.26/-1.04	0.96/-1.3	1.83/-2.19	2.67/-2.51	1.99/-1.66	1.84/-2.33	2.19/-1.93	2.04/-1.92	1.82/-1.73	1.72/-1.80	1.76/-1.54	1.11/-1.23	0.97/-0.92	0.81/-0.77	0.49/-0.55	0.71/-0.50	0.60/-0.50	0.56/-0.93	0.58/-0.26	-0.02/-0.28
Θ(7.5°)	1.57/-1.05	0.77/-1.01	0.85/-0.63	1.18/-1.19	0.77/-0.68	0.27/-0.14	-0.03/-0.06	0.12/-0.13	-0.21/-0.79	-0.91/-0.26	-0.09/-0.41	-0.41/-0.14	0.10/-0.32	0.52/-0.85	0.94/-0.94	1.21/-1.07	1.24/-1.36	1.38/-1.43	1.48/-1.85	1.95/-2.10	2.31/-2.66	3.03/-2.91	2.52/-2.20	
Θ(15°)	1.13/-0.88	0.02/-1.08	0.72/-0.81	1.25/-0.54	-0.26/-0.24	-0.31/-0.00	0.10/-0.37	0.82/-0.75	0.72/-0.12	-0.72/-1.20	-1.39/-1.52	-2.24/-2.43	-2.74/-2.19	-1.84/-1.59	-1.24/-1.09	-0.81/-0.55	-0.37/-0.16	-0.17/-0.04	0.20/-0.19	0.48/-0.87	1.48/-1.80	1.82/-2.05	2.31/-2.17	1.95/-1.37
Θ(22.5°)	-0.62/-1.52	-1.66/-0.79	-0.52/-0.32	0.76/-0.29	-0.04/-0.42	0.98/-1.36	1.50/-1.22	0.98/-0.25	-0.31/-0.30	-0.49/-0.64	-1.27/-2.60	-2.95/-2.70	-2.84/-2.86	-2.56/-2.27	-1.61/-1.31	-1.32/-0.94	-1.31/-2.29	-2.63/-2.32	-1.90/-0.96	-0.70/-0.60	0.01/-0.83	1.27/-1.13	1.64/-1.44	0.70/-0.22
Θ(30°)	-0.85/-1.70	-0.91/-0.35	0.70/-0.03	-0.99/-1.27	-1.10/-0.23	0.35/-0.40	-0.10/-0.63	-0.86/-0.97	-1.41/-2.60	-3.37/-3.31	-3.73/-5.13	-5.94/-4.08	-3.13/-3.25	-5.42/-5.13	-4.19/-4.70	-5.49/-5.13	-4.76/-4.67	-4.20/-3.74	-2.89/-1.61	-0.37/-0.22	0.43/-1.36	2.00/-0.06	1.99/-1.42	0.67/-0.37
Θ(37.5°)	-0.26/-0.18	0.31/-0.09	-1.61/-3.05	-2.60/-2.29	-1.18/-0.95	-1.60/-1.60	-0.41/-0.86	0.74/-0.74	-2.39/-3.50	-3.02/-2.92	-4.39/-7.52	-8.27/-6.42	-3.90/-4.11	-3.69/-4.26	-5.97/-7.16	-6.50/-7.41	-7.85/-6.89	-4.17/-2.60	-1.86/-2.99	-2.29/-1.42	-0.84/-0.24	0.31/-0.12	-1.05/-1.61	-0.50/-0.21
Θ(45°)	0.44/-0.72	0.44/-1.52	-1.72/-1.62	-2.42/-2.44	-2.85/-3.89	-0.05/-4.79	-3.37/-2.88	-3.17/-2.95	-3.53/-4.36	-4.98/-5.16	-4.58/-6.67	-4.86/-4.28	-6.17/-5.81	-4.00/-7.88	-10.41/-5.17	-3.70/-5.79	-10.76/-12.45	-7.69/-5.10	-4.98/-4.38	-4.74/-3.09	-0.40/-1.13	1.85/-1.94	1.14/-0.09	-0.28/-0.37
Θ(52.5°)	0.16/-0.37	-0.32/-0.81	-0.64/-2.08	-3.68/-7.31	-6.02/-4.74	-4.59/-4.24	-4.27/-4.61	-3.20/-1.97	-0.32/-1.03	-3.21/-5.79	-7.10/-6.64	-3.08/-5.62	-6.74/-6.95	-7.97/-4.92	-5.23/-4.50	-7.00/-7.78	-8.89/-8.85	-9.76/-7.42	-7.83/-8.35	-4.81/-2.25	-0.76/-0.69	1.14/-0.22	-0.36/-1.35	-0.47/-0.13
Θ(60°)	1.94/-1.73	0.97/-1.13	-0.72/-2.04	-1.50/-3.01	-6.28/-9.49	-8.29/-7.76	-7.18/-8.22	-7.10/-5.13	-4.67/-4.32	-3.80/-5.59	-7.39/-7.58	-6.38/-4.97	-8.28/-10.81	-6.64/-7.16	-13.14/-11.08	-6.93/-10.36	-13.34/-11.96	-13.38/-12.75	-11.68/-8.64	-6.27/-3.71	-1.54/-1.61	-0.36/-0.37	1.73/-1.90	2.21/-0.10
Θ(67.5°)	2.59/-1.19	1.71/-0.29	-2.39/-3.65	-4.00/-2.37	-3.05/-6.15	-10.81/-11.74	-11.30/-11.05	-9.59/-12.32	-12.23/-11.94	-6.47/-3.84	-4.37/-1.05	-10.04/-7.36	-8.78/-9.75	-7.98/-7.42	-9.74/-8.92	-10.55/-9.02	-11.50/-12.01	-14.68/-14.65	-14.06/-9.41	-5.43/-3.56	-2.27/-0.16	1.85/-1.34	2.17/-1.25	1.83/-2.31
Θ(75°)	2.32/-0.43	-0.32/-0.53	-1.90/-0.20	-1.69/-4.64	-5.14/-8.35	-11.08/-9.58	-11.95/-13.27	-10.00/-7.67	-6.24/-8.72	-13.38/-8.81	-7.35/-6.16	-15.38/-14.23	-7.85/-9.74	-9.10/-10.09	-8.16/-9.75	-9.31/-11.48	-10.46/-11.05	-14.21/-15.71	-16.10/-15.19	-5.90/-3.76	-1.73/-0.05	1.61/-1.25	0.26/-0.22	1.24/-2.19
Θ(82.5°)	1.94/-1.96	0.78/-0.42	-1.28/-0.17	-1.53/-5.64	-10.09/-8.77	-5.63/-9.35	-14.03/-14.05	-10.39/-9.45	-9.78/-7.95	-13.86/-15.53	-11.86/-4.72	-5.89/-9.97	-4.76/-9.31	-6.97/-4.43	-8.56/-11.70	-10.10/-14.19	-10.79/-10.10	-14.45/-8.77	-8.39/-8.11	-4.94/-1.41	-1.63/-0.65	-0.06/-1.35	2.00/-2.38	2.65/-2.95
Θ(90°)	-0.06/-0.84	0.09/-2.70	-1.51/-1.09	-4.27/-10.39	-11.79/-9.59	-8.08/-15.24	-15.24/-10.50	-10.34/-11.93	-15.75/-14.62	-11.74/-8.35	-10.74/-6.59	-5.17/-9.20	-11.03/-8.70	-10.90/-6.11	-6.92/-9.31	-9.60/-14.59	-12.97/-11.28	-9.89/-11.64	-6.82/-5.92	-1.91/-0.65	0.40/-0.69	1.32/-1.01	1.93/-2.17	0.50/-0.30
Θ(97.5°)	0.77/-1.50	0.92/-1.80	-2.03/-2.28	-6.95/-11.36	-9.59/-6.66	-9.99/-13.28	-10.39/-7.86	-7.43/-6.25	-6.55/-14.33	-10.93/-7.06	-8.03/-14.55	-11.81/-10.89	-13.49/-12.00	-5.62/-7.10	-8.90/-9.56	-7.23/-10.19	-13.37/-12.57	-8.78/-9.10	-7.43/-4.77	-2.00/-0.05	-1.05/-0.18	1.42/-2.48	3.19/-2.79	0.69/-1.34
Θ(105°)	-0.36/-0.67	0.23/-1.97	-4.35/-8.46	-8.83/-9.80	-8.84/-5.33	-6.52/-7.85	-7.20/-5.92	-6.07/-6.20	-5.61/-11.54	-15.20/-14.57	-13.73/-12.84	-9.76/-9.81	-6.38/-6.98	-8.86/-12.74	-10.18/-10.67	-6.88/-9.94	-14.33/-13.81	-12.35/-11.78	-12.61/-5.13	-1.85/-0.42	0.53/-0.14	1.502/-2.39	2.79/-2.04	0.53/-0.10
Θ(112.5°)	0.62/-0.11	-0.88/-1.74	-3.96/-7.64	-4.45/-4.27	-6.12/-7.96	-7.04/-5.15	-4.40/-8.03	-5.05/-3.92	-5.81/-10.33	-7.95/-9.34	-10.22/-7.23	-6.06/-8.93	-4.53/-5.42	-6.58/-15.26	-14.12/-8.52	-5.13/-8.50	-10.74/-9.73	-10.03/-8.30	-15.63/-6.74	-3.67/-0.83	-1.07/-1.34	0.80/-0.44	3.83/-2.35	1.95/-1.26
Θ(120°)	2.00/-1.21	-2.09/-5.03	-3.93/-4.34	-6.31/-5.70	-3.63/-3.86	-4.79/-2.39	-4.06/-7.79	-8.16/-8.08	-6.76/-7.78	-9.14/-8.01	-11.66/-10.13	-10.01/-14.48	-14.54/-9.70	-9.56/-9.44	-11.80/-8.43	-4.86/-7.62	-7.34/-7.41	-15.04/-11.43	-5.53/-5.49	-0.25/-0.95	-0.07/-0.15	-1.02/-0.56	-0.43/-1.00	1.32/-1.62
Θ(127.5°)	0.72/-1.72	-0.45/-2.45	-1.98/-0.50	-0.67/-1.46	-3.98/-4.95	-3.54/-3.61	-4.22/-5.27	-6.22/-4.65	-4.22/-5.36	-14.44/-10.98	-5.29/-14.81	-12.23/-4.58	-10.20/-4.72	-5.86/-4.22	-9.00/-7.27	-4.79/-2.70	-9.60/-13.58	-6.21/-5.21	-0.25/-3.48	-2.09/-5.36	0.12/-2.38	3.88/-0.02	0.29/-0.55	
Θ(135°)	0.88/-1.99	1.50/-0.00	0.03/-0.71	0.09/-1.11	-1.26/-1.82	-2.46/-1.30	-1.11/-2.17	-3.50/-4.34	-3.81/-4.96	-13.17/-10.77	-7.66/-6.22	-1.78/-3.96	-5.47/-7.28	-7.64/-10.07	-7.57/-0.64	0.15/-7.87	-1.50/-3.32	-1.25/-11.13	-8.62/-2.28	-0.98/-1.70	-3.32/-6.06	-3.54/-2.33	2.52/-1.65	2.27/-2.62
Θ(142.5°)	-1.05/-1.12	-1.30/-1.18	0.09/-0.47	-2.33/-2.40	-2.42/-4.31	-6.37/-5.71	-6.47/-6.67	-9.02/-12.72	-10.98/-13.19	-15.37/-13.07	-12.18/-6.62	-2.86/-3.80	-3.73/-0.36	-0.25/-6.35	-2.85/-1.87	-5.71/-10.33	-0.60/-3.75	-1.46/-6.81	-4.92/-3.02	-0.37/-1.25	-0.69/-5.39	-4.15/-3.21	-1.14/-2.42	-1.83/-0.49
Θ(150°)	-5.99/-6.79	-6.64/-5.45	-6.44/-4.22	-4.42/-12.40	-1.82/-10.72	-6.62/-6.85	-5.14/-4.74	-6.77/-9.99	-9.78/-9.00	-8.66/-7.68	-5.34/-4.79	-9.55/-13.22	-11.15/-3.76	-2.53/-5.09	-11.15/-13.76	-1.130/-2.30	2.98/-4.76	2.97/-1.89	-4.44/-2.31	-1.06/-0.30	1.79/-1.17	1.00/-1.61	-1.46/-3.80	-0.96/-4.07
Θ(157.5°)	-4.66/-5.28	-5.18/-2.55	-1.11/-2.07	-0.68/-0.48	0.01/-1.55	-3.21/-5.93	-8.34/-7.80	-9.00/-10.55	-13.45/-11.92	-8.53/-6.47	-6.13/-6.40	-7.27/-8.70	-12.23/-12.60	-8.97/-4.22	0.05/-2.79	3.58/-2.9	2.17/-0.39	-4.29/-6.74	-7.42/-3.25	-1.41/-0.67	0.67/-1.57	1.01/-0.15	-2.05/-3.32	-4.05/-4.37
Θ(165°)	-0.24/-0.57	1.90/-1.83	1.11/-1.34	0.69/-1.17	-3.23/-6.39	-8.64/-11.63	-15.70/-15.70	-14.40/-10.94	-7.41/-6.01	-3.56/-3.03	-3.17/-4.26	-6.27/-7.48	-8.46/-7.16	-3.37/-0.52	3.03/-4.32	4.53/-3.59	2.07/-0.27	-1.53/-1.93	-1.55/-0.78	-0.36/-0.52	-0.60/-0.41	-0.25/-0.53	-0.02/-0.04	-0.43/-0.59
Θ(172.5°)	-1.53/-1.28	-2.48/-3.39	-4.44/-4.97	-4.38/-4.53	-4.64/-6.97	-9.06/-9.43	-12.87/-12.98	-13.40/-13.84	-13.43/-13.41	-12.37/-13.58	-15.61/-15.58	-14.65/-15.43	-11.83/-11.31	-8.60/-6.40	-5.28/-4.43	-1.48/-4.82	-5.26/-5.52	-5.71/-5.96	-6.70/-7.18	-6.86/-6.19	-5.57/-4.45	-3.96/-2.35	-1.66/-2.16	-1.24/-1.27
Θ(180°)	-4.64/-6.15	-6.47/-5.76	-4.60/-3.23	-2.77/-4.59	-6.93/-8.77	-11.97/-15.49	-14.88/-14.98	-15.64/-14.64	-15.70/-15.96	-15.12/-14.82	-14.68/-15.41	-13.49/-13.37	-13.80/-13.44	-11.56/-10.69	-11.44/-11.79	-11.13/-10.49	-10.68/-10.06	-9.25/-8.49	-7.01/-5.99	-4.40/-4.47	-3.63/-4.30	-4.60/-5.19	-5.55/-4.64	-3.94/-4.16
Freq(Hz)	6.475GPol.	TotalAnt.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	2.98/-0.38	3.54/-0.82	2.88/-2.46	1.97/-1.84	1.86/-1.83	1.95/-1.77	1.83/-1.57	1.90/-1.98	1.89/-1.98	1.99/-2.27	2.50/-2.57	2.70/-2.78	2.72/-2.64	2.62/-2.74	2.84/-2.73	2.25/-2.06	1.78/-1.78	1.82/-1.65	1.74/-1.88	1.87/-1.85	2.17/-2.38	2.53/-2.30	1.66/-1.58	2.17/-2.73
Θ(7.5°)	1.15/-1.54	2.77/-3.68	2.54/-1.77	1.24/-1.27	1.52/-1.91	1.99/-1.73	1.77/-1.52	1.68/-1.85	1.62/-1.80	1.75/-1.77	2.06/-1.95	1.99/-2.06	2.16/-2.22	2.16/-2.38	2.46/-2.07	1.89/-1.56	1.39/-1.38	1.20/-1.30	1.39/-1.59	1.63/-1.77	1.76/-1.65	1.65/-1.81	1.64/-1.12	0.96/-0.92
Θ(15°)	-0.86/-0.22	1.01/-0.59	-0.22/-0.25	-0.63/-0.40	-1.04/-0.02	0.11/-0.07	0.27/-0.34	-0.55/-0.53	-0.48/-0.03	0.56/-1.63	0.76/-1.32	1.53/-1.70	1.20/-1.15	0.61/-0.25	0.05/-0.04	-0.11/-0.43	-0.58/-0.92	-0.92/-0.29	0.38/-1.04	1.37/-1.51	1.49/-1.49	1.42/-1.39	1.02/-0.09	-0.99/-0.57
Θ(22.5°)	0.89/-0.47	0.68/-0.72	-1.52/-1.82	-1.97/-1.72	-1.50/-1.61	-1.07/-0.86	-1.73/-1.96	-1.28/-0.58	-0.24/-0.20	-0.17/-0.39	0.65/-0.80	0.97/-1.18	0.77/-0.38	-0.15/-0.40	-0.89/-1.33	-2.13/-2.69	-2.62/-2.55	-2.58/-2.19	-1.66/-0.70	0.22/-0.77	0.87/-1.33	1.53/-1.44	1.22/-0.71	0.95/-1.34
Θ(30°)	0.35/-0.10	0.60/-0.24	-1.57/-2.59	-1.99/-1.28	-3.32/-3.37	-3.79/-3.87	-3.84/-4.08	-3.76/-2.84	-1.76/-1.15	-1.19/-2.06	-2.82/-3.24	-3.37/-3.93	-4.77/-4.75	-4.56/-5.21	-4.37/-3.06	-2.66/-3.11	-2.73/-2.82	-2.95/-3.29	-2.95/-2.81	-2.19/-1.41	-1.06/-0.73	-0.15/-0.23	0.07/-0.63	1.11/-0.84
Θ(37.5°)	-0.77/-1.10	-0.90/-1.39	-1.70/-0.86	-0.81/-2.21	-4.44/-5.98	-7.18/-6.80	-6.83/-5.83	-3.60/-2.37	-2.01/-2.12	-2.40/-3.13	-3.34/-3.24	-3.44/-4.51	-4.08/-4.61	-4.80/-6.17	-6.21/-5.48	-5.20/-4.								



Antenna Pattern (6GHz UNII5~UNII8)

Appendix D

Θ(15°)	-3.07/-2.31	-1.95/-1.91	-2.03/-2.29	-1.86/-1.62	-1.04/-0.97	-0.88/-0.43	-0.07/-1.39	-2.00/-1.71	-2.45/-3.50	-3.78/-3.88	-4.73/-5.07	-5.13/-5.55	-5.64/-6.30	-7.34/-10.65	-12.69/-13.70	-13.29/-13.10	-10.80/-11.37	-13.38/-13.09	-11.20/-12.66	-13.28/-9.89	-7.71/-6.58	-4.66/-4.70	-4.81/-4.65	-4.68/-3.82
Θ(22.5°)	-1.81/-1.71	-0.87/-1.42	-1.96/-2.41	-2.91/-1.83	-1.21/-1.25	-1.03/-0.63	-0.24/-0.35	-0.38/-0.08	0.01/-0.80	-3.03/-4.08	-3.57/-4.60	-4.77/-3.80	-4.56/-4.88	-5.71/-6.34	-5.72/-5.78	-6.78/-8.41	-6.97/-4.17	-3.02/-3.32	-3.59/-4.87	-5.79/-4.27	-3.34/-3.89	-2.99/-2.71	-3.23/-3.80	-3.45/-3.07
Θ(30°)	-0.10/-0.56	-1.16/-2.11	-1.93/-1.20	-1.93/-1.20	-1.05/-0.52	-0.29/-0.41	-0.97/-1.21	-1.26/-1.14	-1.21/-1.26	-1.82/-2.94	-2.74/-2.84	-4.09/-5.20	-6.98/-3.11	-8.78/-10.08	-9.50/-4.97	-12.74/-13.31	-11.66/-11.43	-9.71/-8.90	-9.01/-7.57	-7.34/-5.85	-3.64/-2.59	-2.86/-1.96	-1.97/-0.30	-1.56/-0.30
Θ(37.5°)	0.45/-0.19	0.19/-0.23	-0.05/-0.47	-0.44/-0.86	-0.19/-0.04	0.03/-0.11	0.53/-0.20	-1.07/-1.85	-1.29/-1.00	-1.02/-0.77	-0.84/-1.01	-3.00/-3.91	-5.74/-7.14	-5.65/-4.17	-6.21/-6.46	-8.22/-5.84	-5.41/-6.18	-7.94/-13.81	-13.40/-7.52	-5.33/-4.33	-5.37/-6.38	-7.31/-3.00	-3.33/-2.69	-1.23/-0.04
Θ(45°)	-0.69/-0.19	0.50/-0.21	-0.63/-0.19	-0.17/-0.60	-0.32/-0.90	-0.80/-0.33	-0.71/-1.80	-1.78/-1.32	-1.18/-0.05	0.55/-0.03	-0.93/-0.29	-4.05/-2.47	-3.55/-5.46	-6.35/-5.78	-7.37/-8.70	-4.84/-2.39	-6.42/-9.68	-10.25/-8.84	-9.35/-11.35	-6.79/-5.96	-6.36/-4.41	-3.85/-1.27	-1.70/-2.64	-0.72/-0.69
Θ(52.5°)	0.28/-0.60	-0.76/-1.29	0.26/-0.37	0.02/-0.39	-0.59/-0.73	-0.72/-1.51	-1.75/-2.15	-2.52/-1.31	0.09/-0.50	-0.44/-0.61	0.24/-0.99	-2.24/-3.66	-5.46/-10.86	-6.27/-9.85	-9.11/-7.87	-4.89/-2.91	-3.23/-6.64	-13.35/-5.87	-5.60/-3.39	-1.23/-3.07	-2.83/-2.67	-3.06/-2.04	-0.73/-0.16	
Θ(60°)	0.08/-0.19	-0.03/-1.24	-0.25/-0.05	1.00/-0.23	-0.51/-0.51	-1.30/-3.19	-4.28/-4.22	-2.70/-2.22	-0.48/-0.12	0.61/-0.13	-0.04/-0.85	-5.16/-4.89	-5.22/-7.20	-6.24/-7.51	-14.55/-5.50	-1.98/-1.76	-3.59/-4.57	-6.30/-5.89	-3.90/-6.04	-1.68/-2.17	-0.08/-0.20	-2.36/-1.38	-1.97/-0.72	-0.18/-1.84
Θ(67.5°)	0.82/-0.43	-0.02/-1.05	-1.28/-0.10	-0.81/-0.96	-0.42/-0.32	-1.11/-2.25	-5.45/-5.13	-6.31/-3.41	-0.38/-1.62	0.69/-0.70	-1.20/-1.73	-3.45/-2.38	-5.31/-3.05	-2.21/-5.64	-7.25/-4.91	-3.33/-3.39	-2.56/-8.51	-2.73/-3.25	-1.94/-2.61	-1.33/-1.68	-2.84/-0.03	-3.12/-0.14	-0.22/-0.52	-3.56/-0.15
Θ(75°)	-0.71/-0.64	-0.23/-1.38	-0.90/-0.20	-0.92/-1.37	-0.09/-0.94	-2.02/-4.28	-4.91/-3.93	-2.13/-4.07	-2.25/-0.91	1.30/-0.42	-1.04/-2.34	-2.18/-0.80	-2.83/-4.23	-0.11/-3.72	-3.87/-5.07	-8.22/-3.90	-4.99/-5.36	-0.76/-1.46	1.05/-1.67	-0.81/-1.38	-2.54/-1.37	-0.94/-1.61	-0.53/-0.63	-3.07/-0.18
Θ(82.5°)	-0.97/-0.58	-0.72/-0.87	-0.08/-0.56	-2.19/-1.21	-0.50/-0.27	-2.63/-6.25	-5.72/-5.81	-3.31/-2.33	-1.24/-0.87	0.22/-1.09	-0.82/-0.71	-1.08/-1.06	-0.66/-2.96	-1.52/-2.38	-2.55/-4.96	0.48/-5.01	-4.39/-0.87	0.84/-3.12	0.24/-3.19	-0.11/-2.58	-4.19/-2.92	-2.03/-0.88	0.07/-2.55	-1.33/-0.43
Θ(90°)	-0.27/-0.17	-0.55/-1.30	-2.62/-3.45	-2.40/-0.39	0.43/-0.68	-4.17/-6.00	-6.31/-4.34	-5.94/-2.53	-0.96/-1.58	0.60/-1.61	-0.91/-1.09	-2.43/-0.72	-1.70/-3.07	-0.45/-0.70	-5.53/-8.78	-3.03/-2.69	-1.56/-0.58	0.23/-3.40	0.70/-3.44	-0.56/-6.34	-4.29/-4.90	-1.80/-1.11	-0.93/-1.96	-1.69/-3.33
Θ(97.5°)	-0.84/-0.12	-1.18/-2.14	-2.52/-3.61	-2.60/-0.96	-0.11/-1.48	-5.08/-6.33	-6.96/-8.05	-9.18/-6.04	-2.45/-2.47	-0.93/-1.84	0.08/-1.37	-1.47/-0.68	-3.99/-4.08	-3.18/-2.03	-4.21/-7.87	-3.57/-0.02	-3.28/-0.17	-3.89/-10.39	-5.85/-7.64	-6.63/-6.84	-4.67/-1.96	-1.85/-1.06	-2.35/-2.18	-1.90/-2.55
Θ(105°)	-0.10/-1.42	-2.51/-2.33	-3.22/-4.17	-2.79/-1.16	-0.37/-2.17	-4.09/-7.59	-8.71/-4.16	-4.25/-9.28	-3.31/-0.59	-0.32/-1.09	1.44/-0.58	-3.61/-2.22	-3.48/-3.90	-4.45/-5.09	-6.48/-6.29	-6.54/-7.72	-4.52/-4.95	-5.46/-3.78	-3.24/-5.60	-7.99/-7.71	-4.98/-0.37	-1.36/-1.40	-4.06/-1.52	-3.45/-1.87
Θ(112.5°)	-1.62/-0.69	-1.48/-3.41	-4.26/-4.44	-3.80/-3.38	-2.16/-4.02	-4.93/-7.43	-9.19/-7.06	-8.03/-7.70	-4.57/-0.70	0.81/-0.30	1.37/-0.95	-0.55/-6.06	-4.83/-2.47	-8.05/-15.03	-7.32/-6.41	-13.03/-7.06	-4.16/-1.36	-2.96/-5.01	-5.90/-8.35	0.27/-4.27	-4.45/-1.65	-1.38/-1.64	-1.96/-3.20	-5.12/-4.55
Θ(120°)	-4.32/-2.30	-2.49/-3.76	-5.82/-8.70	-5.80/-2.06	-3.13/-5.98	-9.08/-8.38	-9.03/-5.93	-5.82/-4.49	-3.20/-1.43	0.09/-0.25	1.24/-0.22	-1.76/-1.81	-3.39/-3.33	-6.47/-13.20	-11.52/-5.76	-7.03/-7.83	-4.31/-7.88	-10.46/-7.96	-5.84/-8.85	-5.57/-4.46	-5.93/-4.91	-4.40/-5.76	-3.27/-1.34	-1.69/-5.40
Θ(127.5°)	-4.79/-5.85	-6.07/-5.87	-6.50/-6.18	-3.97/-2.21	-2.62/-4.27	-5.57/-9.10	-8.87/-6.38	-4.16/-3.63	-5.50/-2.54	1.22/-0.6	0.49/-0.24	1.04/-0.62	-2.66/-7.90	-8.72/-9.10	-4.36/-3.56	-11.20/-6.63	-7.99/-8.61	-6.31/-4.51	-4.69/-11.69	-9.83/-5.05	-4.81/-6.91	-7.60/-7.10	-4.26/-3.50	-5.76/-3.32
Θ(135°)	-5.22/-5.03	-7.15/-7.06	-6.79/-3.34	-3.11/-3.13	-5.37/-8.77	-11.81/-12.38	-10.19/-5.56	-4.85/-1.44	0.81/-0.30	0.07/-0.90	0.01/-0.49	-0.15/-0.27	-0.15/-4.50	-5.09/-3.71	-2.28/-1.15	-0.63/-5.72	-10.38/-9.33	-9.60/-7.67	-7.91/-11.88	-4.73/-1.66	-2.93/-1.66	-1.91/-8.53	-13.31/-7.63	-5.16/-3.29
Θ(142.5°)	-9.11/-8.76	-9.82/-6.07	-7.55/-6.10	-5.07/-3.96	-3.53/-3.34	-4.11/-5.37	-5.59/-6.21	-2.63/-4.36	-2.63/-1.78	0.67/-0.68	-0.03/-1.30	1.09/-1.67	-4.11/-3.50	-0.63/-0.24	-0.70/-1.54	-6.40/-6.27	-15.54/-10.24	-4.49/-6.29	-9.69/-9.56	-9.38/-3.76	0.07/-1.31	-0.19/-4.29	-9.16/-8.97	-8.04/-7.36
Θ(150°)	-6.17/-5.63	-7.92/-11.76	-14.15/-11.32	-9.76/-8.73	-4.84/-6.95	-4.83/-2.84	-2.75/-1.54	-0.10/-0.59	-2.88/-2.28	-1.92/-1.77	-0.87/-0.07	0.79/-0.42	-1.38/-2.88	-4.31/-4.23	-4.88/-4.38	-5.89/-9.65	-11.24/-7.79	-3.96/-5.55	-6.78/-7.01	-9.07/-6.92	-5.05/-2.62	-1.17/-0.93	-2.32/-6.69	-11.52/-7.70
Θ(157.5°)	-8.61/-7.55	-6.15/-5.45	-5.38/-5.23	-4.50/-4.67	-4.18/-3.95	-4.20/-4.75	-4.87/-5.48	-4.93/-5.75	-3.74/-1.42	-0.86/-1.33	-1.77/-0.47	0.21/-1.03	-2.20/-4.77	-11.04/-13.80	-10.94/-10.32	-11.77/-14.07	-9.96/-6.43	-4.34/-4.02	-4.46/-5.05	-4.92/-5.73	-7.05/-11.01	-8.43/-4.14	-2.58/-3.77	-6.97/-11.12
Θ(165°)	-4.15/-6.31	-2.51/-1.04	-1.22/-1.65	-1.87/-1.78	-1.90/-2.07	-2.41/-2.22	-2.68/-2.33	-1.26/-0.36	-0.41/-0.98	-1.14/-1.07	-1.12/-0.98	-1.63/-2.34	-2.87/-4.61	-7.43/-13.58	-15.54/-9.56	-6.94/-5.29	-3.58/-2.81	-2.53/-3.20	-3.82/-5.34	-5.41/-6.47	-9.71/-11.38	-12.19/-11.17	-9.45/-7.85	-6.16/-4.87
Θ(172.5°)	-6.58/-6.23	-4.76/-3.95	-2.86/-2.23	-1.90/-1.85	-1.24/-0.97	-0.98/-0.98	-1.07/-1.09	-0.72/-0.17	0.25/-0.27	-0.53/-2.33	-4.83/-6.98	-6.96/-5.96	-5.50/-6.55	-8.34/-11.98	-15.16/-12.39	-10.31/-10.17	-8.92/-7.30	-6.54/-7.04	-6.58/-6.64	-8.36/-8.37	-8.69/-9.94	-10.77/-10.02	-8.50/-8.13	-7.96/-7.48
Θ(180°)	-4.39/-5.40	-5.50/-5.05	-4.52/-0.48	-4.25/-3.81	-3.50/-2.67	-2.76/-2.09	-1.49/-1.08	-1.07/-1.66	-2.63/-4.65	-6.26/-7.10	-6.21/-5.80	-5.01/-4.62	-4.98/-6.35	-7.62/-7.96	-8.41/-7.52	-6.51/-5.52	-4.42/-3.76	-3.82/-3.61	-3.49/-3.85	-4.83/-5.68	-6.87/-6.58	-6.29/-6.11	-4.94/-4.59	-5.13/-4.74
Freq(Hz)	6.475GPol.	Total/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.25/-5.28	-4.70/-3.86	-4.26/-3.65	-3.03/-2.66	-2.70/-2.44	-2.36/-2.30	-1.77/-2.20	-2.70/-2.87	-2.93/-2.88	-2.65/-2.80	-3.21/-3.63	-3.70/-4.04	-4.49/-4.82	-4.79/-4.70	-4.23/-3.54	-3.81/-3.67	-3.01/-2.79	-3.11/-3.31	-3.34/-3.29	-3.17/-3.01	-3.04/-3.48	-4.23/-4.50	-4.00/-4.19	-4.54/-4.94
Θ(7.5°)	-4.59/-4.39	-4.67/-3.49	-3.54/-3.29	-3.01/-3.04	-2.67/-2.21	-2.37/-2.34	-2.24/-2.30	-2.59/-2.85	-3.01/-3.18	-3.83/-4.05	-4.30/-4.41	-4.20/-4.18	-4.14/-3.70	-3.12/-3.09	-2.69/-2.21	-2.92/-3.27	-2.81/-2.42	-2.33/-2.61	-1.91/-2.31	-2.45/-2.32	-2.76/-3.18	-3.10/-3.71	-4.01/-3.93	-4.70/-4.97
Θ(15°)	-1.90/-2.17	-2.26/-1.93	-1.32/-1.15	-1.24/-1.78	-1.95/-3.26	-1.85/-1.60	-1.57/-0.96	-1.70/-1.35	-2.27/-2.78	-3.45/-3.85	-4.17/-4.88	-4.72/-5.08	-5.23/-5.35	-6.09/-6.89	-7.37/-8.70	-8.37/-10.04	-12.61/-10.16	-9.28/-12.32	-9.32/-7.17	-6.76/-5.19	-4.14/-4.42	-4.90/-5.46	-5.52/-4.67	-3.82/-2.68
Θ(22.5°)	-2.02/-2.22	-2.77/-2.59	-1.48/-1.23	-1.84/-0.94	-0.34/-1.27	-2.36/-1.78	-2.27/-2.88	-1.08/-2.22	-2.89/-3.05	-2.80/-2.47	-5.59/-5.79	-5.96/-8.55	-5.72/-6.14	-13.13/-11.80	-11.98/-14.41	-12.77/-10.58	-9.94/-10.81	-9.14/-6.49	-7.22/-8.28	-9.61/-10.88	-9.01/-6.36	-6.14/-6.97	-5.67/-5.65	-4.26/-2.16
Θ(30°)	-3.82/-4.17	-2.95/-1.64	-0.80/-0.18	0.46/-0.36	-0.55/-0.79	-1.21/-2.19	-2.02/-1.52	-3.09/-3.46	-2.80/-3.53	-4.22/-5.47	-5.62/-6.68	-6.37/-7.16	-7.71/-8.45	-7.87/-9.14	-10.43/-9.92	-10.46/-11.54	-12.76/-13.16	-13.46/-10.65	-8.94/-9.95	-10.23/-11.89	-9.00/-4.47	-3.24/-4.05	-5.03/-5.43	-2.46/-2.17
Θ(37.5°)	-3.30/-3.42	-2.64/-2.35	-0.78/-1.19	-1.15/-1.25	-1.60/-1.77	-1.72/-2.71	-4.18/-3.50	-3.58/-3.86	-3.95/-2.39	-3.49/-4.14	-3.98/-3.14	-4.24/-3.57	-9.10/-10.4	-12.90/-10.76	-10.76/-9.49	-10.17/-13.90	-10.00/-9.97	-10.36/-11.52	-11.55/-14.90	-10.03/-9.34	-9.51/-9.29	-5.83/-4.97	-6.22/-4.55	-2.24/-2.98
Θ(45°)	-2.10/-2.40	-4.14/-2.66	-4.74/-4.07	0.22/-0.32	-0.74/-1.44	-2.93/-3.55	-4.23/-3.78	-3.44/-3.33	-3.17/-4.66	-3.40/-2.56	-1.42/-1.80	-5.25/-6.67	-1.70/-6.90	-8.21/-7.48	-10.77/-8.04	-15.20/-10.05	-8.64/-9.19	-14.31/-14.37	-11.42/-14.49	-8.23/-7.41	-7.12/-7.75	-7.04/-5.90	-6.17/-4.21	-3.04/-3.45
Θ(52.5°)	-1.06/-2.48	-1.91/-2.55	-2.27/-0.52	-0.79/-2.12	-2.72/-3.57	-3.34/-3.54	-4.13/-4.53	-4.57/-4.81	-4.18/-1.59	-0.92/-1.42	-2.35/-2.25	-5.16/-6.30	-5.63/-11.12	-11.21/-9.26	-9.02/-12.56	-6.21/-4.23	-6.12/-9.19	-7.41/-11.41	-8.49/-5.33	-4.55/-4.80	-6.55/-3.51	-5.23/-4.55	-4.88/-2.64	-4.35/-1.71
Θ(60°)	0.30/-2.29	-3.26/-3.61	-1.36/-0.89	-1.75/-1.57	-1.09/-1.54	-1.91/-2.72	-3.78/-4.79	-6.36/-5.05	-2.91/-1.58	-1.47/-1.21	-1.73/-2.42	-4.44/-3.68	-4.60/-7.36	-8.09/-5.72	-12.61/-8.49	-5.36/-2.94	-5.00/-8.81	-9.00/-10.45	-14.04/-4.17	-2.45/-6.22	-2.04/-1.43	-3.91/-3.49	-4.76/-2.47	-4.67/-0.64
Θ(67.5°)	-1.75/-0.63	-2.93/-3.28	-0.39/-1.27	-2.01/-1.77	-1.53/-2.14	-5.52/-8.39	-7.90/-7.81	-4.55/-5.14	-2.77/-3.64	-4.39/-3.97	-4.37/-7.05	-3.74/-4.45	-8.31/-12.32	-3.83/-4.99	-3.79/-7.08	-2.50/-1.91	-1.71/-3.62	-4.30/-4.48	-2.41/-2.42					



Antenna Pattern (6GHz UNII5~UNII8)

Appendix D

Θ(52.5°)	-3.44/-1.01	-0.84/-1.14	0.02/-0.30	-2.22/-2.89	-3.93/-5.90	-7.73/-4.81	-2.71/-1.74	-1.25/-1.01	-1.03/-2.44	-3.02/-5.74	-5.10/-2.23	-1.39/-2.67	-4.50/-5.36	-2.93/-3.20	-4.37/-2.46	-3.47/-3.48	-3.12/-4.82	-5.68/-2.34	-3.15/-4.82	-3.81/-4.01	-2.40/-5.18	-5.39/-7.25	-8.47/-4.09	-3.49/-5.78
Θ(60°)	-4.44/-1.47	-1.68/-0.50	0.72/-0.19	-1.33/-1.63	-3.02/-4.69	-6.68/-6.45	-4.11/-2.58	-1.54/-0.76	-0.83/-1.82	-2.86/-2.59	-3.49/-2.66	-1.52/-2.28	-4.79/-4.87	-2.00/-2.97	-4.19/-1.15	-1.68/-2.74	-3.35/-5.32	-4.95/-4.08	-4.76/-5.13	-5.80/-4.15	-1.86/-1.82	-6.16/-9.23	-7.24/-5.59	-3.99/-6.83
Θ(67.5°)	-5.97/-3.48	-4.02/-0.80	0.15/-0.22	-0.12/-0.34	-2.35/-4.27	-6.39/-6.53	-3.60/-3.02	-2.02/-1.34	-0.91/-1.17	-3.04/-3.83	-3.89/-3.91	-0.59/-1.42	-4.43/-3.51	-2.24/-2.44	-3.79/-1.69	-3.80/-1.94	-4.29/-5.26	-4.31/-3.96	-4.59/-7.20	-1.75/-4.02	-0.85/-2.68	-5.70/-15.00	-9.81/-5.17	-4.89/-6.84
Θ(75°)	-4.67/-6.00	-5.20/-2.65	-1.60/-0.04	0.68/-1.32	-2.08/-4.33	-5.05/-6.37	-4.18/-4.32	-3.12/-1.00	-0.43/-2.23	-3.07/-4.00	-3.12/-2.08	-0.92/-1.24	-4.04/-2.36	-1.06/-1.50	-2.62/-4.74	-5.75/-3.93	-2.73/-5.63	-3.21/-2.40	-2.49/-2.02	-2.01/-2.00	0.82/-0.79	-5.82/-8.54	-7.64/-6.35	-6.82/-5.21
Θ(82.5°)	-3.95/-4.82	-2.91/-3.91	-2.31/-2.01	-1.66/-1.86	-2.40/-3.16	-6.85/-9.98	-5.03/-0.43	-3.69/-0.57	0.47/-0.66	-3.63/-5.36	-3.09/-0.86	-0.57/-0.28	-3.46/-0.98	-0.09/-3.12	-1.63/-2.87	-5.87/-4.74	-2.47/-1.76	-1.73/-1.15	-1.16/-1.81	-1.04/-3.79	-0.55/-2.65	-3.07/-7.84	-6.70/-6.71	-3.92/-3.63
Θ(90°)	-1.87/-1.83	-2.67/-4.95	-1.82/-2.87	-1.96/-1.99	-4.83/-6.86	-6.78/-8.75	-7.21/-5.23	-4.70/-1.18	-0.34/-0.36	-1.80/-3.92	-2.70/-2.65	-1.09/-1.20	-0.86/-2.13	-0.49/-3.96	-3.16/-5.26	-3.75/-5.50	-2.78/-2.04	-2.44/-2.32	0.32/-3.81	-0.66/-4.67	-5.69/-1.26	-6.41/-4.11	-6.33/-3.33	-3.72/-3.12
Θ(97.5°)	-2.51/-0.98	-2.49/-2.13	-1.75/-3.27	-2.11/-4.65	-8.66/-10.39	-8.73/-11.00	-7.59/-5.45	-5.71/-1.97	-1.73/-0.50	-1.80/-4.91	-0.86/-1.04	-0.70/-1.60	-0.03/-1.53	-0.44/-3.05	-2.42/-5.39	-3.97/-3.73	-6.59/-4.15	-3.49/-0.99	-1.56/-2.28	0.30/-0.98	-4.56/-1.69	-7.81/-3.65	-5.83/-2.31	-3.33/-2.87
Θ(105°)	-2.23/-0.12	-3.35/-0.07	-0.22/-2.20	-0.45/-1.61	-7.42/-12.41	-9.62/-11.16	-9.78/-8.15	-6.66/-2.38	-0.28/-0.10	-1.39/-2.04	-1.35/-0.55	0.37/-3.33	-0.89/-4.00	-1.08/-2.51	-4.00/-3.17	-3.78/-4.36	-8.71/-5.95	-8.35/-2.64	-3.77/-9.70	-0.27/-0.19	-5.61/-6.13	-9.61/-6.46	-3.81/-1.23	-4.02/-2.70
Θ(112.5°)	-2.53/-2.35	-1.69/-1.29	-0.57/-0.30	0.91/-0.46	-6.35/-5.96	-11.31/-10.89	-9.24/-8.22	-5.07/-2.97	-0.55/-0.37	-0.97/-1.61	-1.51/-0.09	0.95/-0.65	-1.78/-1.67	-1.45/-1.65	-0.67/-0.36	-0.84/-5.47	-11.12/-4.93	-6.16/-5.21	-7.02/-2.12	-3.03/-1.56	-8.47/-7.13	-10.24/-7.25	-4.13/-5.15	-6.39/-4.45
Θ(120°)	-3.77/-2.98	-0.56/-0.51	0.52/-2.36	1.96/-0.39	-1.44/-2.61	-5.21/-9.01	-8.33/-6.32	-5.02/-2.64	-1.30/-0.01	0.00/-0.52	-0.13/-0.27	0.34/-1.34	-3.08/-0.36	0.93/-0.19	-2.24/-2.71	-3.39/-5.65	-4.65/-5.10	-2.62/-10.91	-3.97/-4.09	-3.52/-9.32	-4.45/-9.82	-10.63/-5.02	-8.55/-9.53	-7.44/-5.35
Θ(127.5°)	-4.90/-3.45	-0.95/-0.16	2.20/-3.17	2.57/-0.34	-0.06/-0.89	-3.35/-6.44	-4.88/-2.77	-1.36/-0.51	1.08/-0.70	0.52/-1.85	1.38/-1.01	-1.03/-0.45	-0.05/-1.17	-1.52/-3.17	-2.78/-6.61	-6.94/-6.08	-4.46/-15.32	-8.80/-7.59	-7.07/-5.83	-7.66/-9.36	-6.92/-6.38	-6.68/-9.19	-9.41/-8.63	-15.37/-6.63
Θ(135°)	-4.22/-2.52	-0.59/-0.41	1.61/-1.42	1.57/-1.72	1.21/-1.19	0.02/-1.83	-2.86/-2.07	-0.70/-5.16	0.46/-1.27	1.40/-1.35	0.39/-0.49	-0.37/-0.87	-1.05/-1.06	-4.29/-3.41	-1.04/-3.28	-3.92/-3.21	-1.27/-2.71	-9.02/-4.32	-6.60/-2.74	-2.84/-5.43	-7.97/-6.31	-4.61/-6.29	-9.22/-10.32	-8.39/-6.16
Θ(142.5°)	-1.42/-0.14	1.11/-1.17	0.96/-1.02	0.20/-1.45	2.43/-1.31	-0.80/-2.39	-1.38/-0.82	1.85/-1.89	2.07/-2.10	1.13/-0.69	0.95/-1.15	1.23/-0.25	-1.14/-2.26	-2.38/-4.60	-2.43/-0.20	1.95/-1.32	-0.47/-2.54	-6.01/-10.74	-8.67/-6.99	-8.77/-9.85	-8.63/-7.01	-8.53/-11.99	-11.53/-7.10	-6.09/-7.48
Θ(150°)	-1.87/-2.52	-1.72/-0.24	0.67/-1.81	0.60/-0.68	1.19/-2.22	2.28/-2.02	1.42/-0.80	0.58/-1.04	0.91/-0.48	0.62/-1.16	0.73/-0.76	1.70/-1.11	-0.22/-3.70	-3.00/-1.39	0.12/-0.05	-0.27/-1.58	-4.67/-5.32	-8.19/-15.32	-11.29/-7.65	-8.46/-9.83	-11.23/-14.03	-10.20/-9.29	-7.10/-3.84	-5.59/-6.43
Θ(157.5°)	0.36/-1.11	-2.06/-2.96	-1.71/-0.96	0.84/-0.31	0.27/-0.61	-0.79/-1.50	-1.31/-0.62	0.53/-1.70	1.46/-1.09	1.51/-1.86	2.12/-3.36	1.59/-0.15	-1.78/-3.66	-2.10/-2.66	-5.52/-10.56	-6.84/-8.15	-11.31/-11.53	-11.24/-15.32	-15.59/-13.69	-10.08/-11.64	-9.70/-9.59	-9.31/-8.00	-6.36/-1.14	
Θ(165°)	-4.03/-4.44	-3.79/-2.95	-0.92/-0.85	1.70/-2.23	2.77/-2.75	1.99/-1.27	1.04/-0.75	0.28/-0.11	0.15/-0.16	0.37/-0.39	0.37/-0.28	0.07/-0.82	-1.53/-3.01	-5.10/-8.07	-10.55/-12.22	-12.18/-7.63	-5.52/-5.03	-6.26/-6.77	-5.67/-5.82	-7.11/-6.78	-5.72/-6.05	-6.15/-7.14	-12.46/-9.99	-5.40/-3.86
Θ(172.5°)	-7.18/-6.55	-6.73/-5.92	-3.58/-4.14	-0.65/-0.29	-0.14/-0.04	-0.25/-0.79	-1.15/-1.07	-1.56/-2.13	-2.28/-1.83	-1.25/-0.32	0.25/-0.17	-0.62/-1.94	-4.37/-7.51	-8.99/-8.50	-8.68/-9.60	-11.96/-14.83	-14.93/-12.93	-13.96/-13.68	-13.41/-11.27	-10.33/-6.63	-7.17/-6.84	-6.88/-9.15	-10.63/-9.13	-8.66/-8.07
Θ(180°)	-5.23/-5.21	-5.49/-5.37	-4.55/-4.84	-4.85/-4.43	-4.27/-4.16	-3.62/-3.39	-3.26/-3.05	-3.04/-2.86	-2.72/-2.96	-3.30/-3.47	-4.80/-6.67	-7.69/-7.26	-5.61/-4.02	-3.51/-3.72	-3.89/-5.49	-7.04/-7.92	-7.41/-5.18	-3.57/-3.67	-4.27/-4.27	-3.97/-3.89	-4.43/-4.70	-5.00/-5.72	-5.70/-5.60	-5.50/-4.64
Freq(Hz)	6.475GPol.	TotalAnt.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-5.91/-5.88	-6.33/-6.44	1.61/-1.45	-1.61/-5.81	-4.93/-4.43	-4.41/-4.47	-4.87/-4.80	-4.37/-3.68	-3.36/-3.62	-4.57/-6.30	-6.70/-7.04	-7.13/-2.02	-5.75/-7.88	-6.13/-6.02	-5.47/-5.01	-5.39/-5.59	-5.45/-5.89	-5.78/-5.93	-6.02/-7.13	-6.47/-6.14				
Θ(7.5°)	-5.09/-4.98	-4.93/-5.24	-5.73/-5.62	-5.74/-6.01	-6.71/-6.44	-5.64/-4.52	-4.77/-5.53	-5.29/-5.14	-5.90/-5.43	-5.34/-5.50	-6.32/-6.61	-7.25/-8.33	-7.95/-7.39	-6.33/-5.61	-5.40/-5.19	-4.81/-4.39	-4.09/-3.78	-3.29/-3.19	-2.36/-1.93	-2.39/-3.01	-2.02/-1.97	-2.32/-2.96	-3.47/-3.78	-5.25/-5.27
Θ(15°)	-4.45/-4.21	-4.58/-4.58	-4.83/-4.72	-4.68/-4.31	-3.48/-3.74	-3.28/-3.91	-4.89/-4.89	-5.27/-4.92	-3.58/-4.45	-4.95/-5.58	-6.31/-5.99	-6.65/-6.78	-5.52/-4.93	-4.21/-3.90	-3.39/-2.88	-2.83/-4.42	-5.74/-4.41	-3.51/-5.00	-4.01/-2.59	-2.70/-3.27	-1.87/-1.99	-2.63/-3.38		
Θ(22.5°)	-5.73/-5.80	-4.96/-3.76	-3.41/-3.22	-3.76/-4.19	-4.26/-4.57	-4.62/-4.61	-3.84/-3.34	-4.62/-4.88	-3.88/-4.88	-6.60/-5.64	-3.30/-3.31	-4.19/-4.84	-5.13/-4.39	-3.52/-4.25	-4.85/-6.43	-4.35/-4.77	-4.58/-4.05	-5.16/-7.00	-6.74/-5.62	-7.42/-6.99	-4.73/-5.52	-5.45/-3.89	-4.06/-5.07	
Θ(30°)	-4.78/-5.62	-5.43/-3.86	-3.78/-5.04	-5.07/-5.95	-6.58/-5.44	-5.15/-4.36	-4.00/-3.98	-3.36/-2.78	-2.46/-2.02	-1.27/-3.45	-7.87/-6.35	-5.66/-2.51	-2.03/-4.08	-6.65/-7.33	-4.64/-2.86	-2.70/-3.60	-5.10/-4.46	-7.17/-6.14	-4.78/-4.00	-4.14/-4.78	-4.95/-5.98	-8.44/-9.27	-7.32/-5.28	-6.06/-5.64
Θ(37.5°)	-5.24/-5.27	-5.78/-5.07	-4.23/-5.01	-5.54/-5.01	-3.23/-3.95	-4.64/-4.54	-4.32/-4.03	-4.21/-4.22	-3.69/-3.24	-3.61/-3.27	-4.26/-5.97	-5.41/-6.21	-2.85/-4.62	-7.43/-2.68	-1.71/-1.75	-4.51/-6.38	-7.58/-6.03	-5.75/-4.68	-4.58/-5.94	-6.24/-8.33	-9.32/-6.67	-6.22/-5.57	-6.36/-7.00	-6.96/-6.29
Θ(45°)	-2.75/-2.64	-4.08/-3.00	-2.88/-4.38	-4.28/-3.95	-4.97/-6.50	-6.08/-4.72	-3.60/-3.40	-2.95/-2.47	-3.08/-1.00	-3.64/-5.87	-5.82/-3.04	-3.24/-3.27	-3.31/-3.60	-4.26/-4.40	-6.09/-8.49	-9.44/-8.68	-5.37/-5.08	-7.82/-11.38	-6.29/-7.67	-10.52/-11.44	-12.74/-13.97	-6.45/-6.51	-4.92/-5.56	-9.41/-5.80
Θ(52.5°)	-2.08/-1.18	-2.66/-2.20	-2.14/-3.25	-3.32/-4.19	-5.95/-6.51	-5.54/-4.13	-3.16/-2.65	-2.61/-2.61	-2.14/-1.91	-2.84/-3.48	-5.62/-6.29	-2.86/-2.28	-3.27/-3.68	-5.96/-5.83	-4.72/-5.89	-4.40/-3.30	-3.23/-3.15	-5.40/-5.82	-6.47/-3.92	-4.60/-6.19	-8.96/-1.37	-11.20/-8.32	-6.27/-4.45	-6.66/-6.73
Θ(60°)	-3.35/-1.94	-1.70/-0.19	-0.88/-4.84	-2.33/-3.55	-6.13/-7.51	-4.03/-3.58	-3.49/-4.25	-5.47/-5.16	-3.00/-2.82	-3.40/-4.64	-5.63/-5.16	-3.25/-2.69	-3.21/-4.39	-4.33/-4.45	-5.06/-6.70	-5.47/-3.43	-3.15/-6.28	-7.03/-5.15	-5.51/-7.00	-4.62/-3.30	-5.73/-6.49	-8.65/-10.59	-10.78/-4.04	-5.60/-7.22
Θ(67.5°)	-5.50/-3.70	-2.06/-0.81	-0.85/-1.28	-0.89/-3.99	-5.12/-4.75	-5.53/-5.33	-3.89/-5.15	-5.44/-3.64	-3.64/-4.10	-5.04/-6.29	-6.36/-4.90	-2.70/-1.69	-3.03/-4.86	-4.04/-4.13	-3.85/-3.34	-6.45/-5.34	-6.23/-7.26	-6.53/-4.87	-5.59/-9.39	-6.93/-6.25	-3.42/-4.01	-7.13/-14.53	-8.97/-5.57	-5.64/-9.44
Θ(75°)	-6.29/-6.24	-4.29/-0.85	-1.44/-1.48	-1.68/-4.31	-4.72/-6.50	-9.94/-5.45	-8.32/-2.57	-4.02/-3.92	-2.75/-2.37	-6.71/-2.89	-2.03/-2.60	-2.24/-3.19	-2.80/-3.31	-3.84/-4.43	-6.42/-5.75	-8.41/-4.41	-2.16/-3.44	-2.78/-5.03	-4.76/-3.67	-0.12/-2.18	-6.14/-8.53	-10.40/-6.20	-6.61/-7.07	
Θ(82.5°)	-4.60/-4.40	-4.26/-2.50	-2.20/-1.86	-3.22/-2.37	-5.81/-14.06	-9.88/-5.49	-5.97/-5.55	-4.66/-6.17	-4.21/-3.50	-2.75/-4.39	-4.34/-3.06	-2.02/-1.03	-1.07/-4.34	-1.82/-2.79	-3.16/-6.87	-8.91/-6.10	-5.11/-2.04	-0.26/-3.52	-3.25/-2.69	-2.14/-7.75	-5.39/-3.61	-8.99/-6.53	-5.67/-5.51	-5.99/-4.75
Θ(90°)	-3.86/-3.86	-4.31/-2.14	-3.94/-2.17	-2.96/-3.50	-7.58/-11.60	-7.71/-5.13	-5.22/-7.01	-6.44/-4.76	-4.71/-4.80	-5.82/-3.94	-2.88/-1.78	-0.25/-0.61	-0.23/-2.25	-2.75/-2.09	-3.90/-5.29	-6.05/-4.99	-3.75/-4.90	-5.13/-3.63	-2.31/-3.82	-2.21/-9.75	-8.52/-2.17	-5.98/-4.78	-4.73/-4.09	-8.05/-4.05
Θ(97.5°)	-2.28/-2.56	-2.37/-1.85	-2.66/-1.66	-2.62/-3.40	-7.43/-7.04	-1.05/-4.46	-5.80/-9.01	-9.53/-7.18	-3.05/-4.31	-6.35/-4.24	-1.81/-1.01	-0.88/-1.58	-1.73/-1.42	-2.01/-1.98	-3.29/-2.50	-7.17/-3.11	-5.14/-4.80	-7.22/-1.66	-1.35/-4.78	-4.34/-1.56	-7.67/-4.43	-4.67/-6.98	-7.21/-2.69	
Θ(105°)	-2.77/-3.63	-2.15/-1.42	-0.94/-0.39	-1.29/-4.87	-8.03/-6.24	-11.65/-7.16	-8.89/-8.60	-6.44/-6.66	-2.67/-1.74	-2.38/-3.67	-1.76/-0.66	-0.12/-0.09	-2.53/-1.82	-2.98/-3.47	-4.36/-4.24	-4.13/-1.69	-7.55/-7.76	-14.72/-8.24	-6.43/-11.61	-0.51/-0.49	-10.54/-7.36	-9.59/-5.71	-5.74/-5.23	-5.38/-2.94
Θ(112.5°)	-4.69/-3.14	-0.47/-0.54	1.26/-0.96	-1.18/-4.90																				

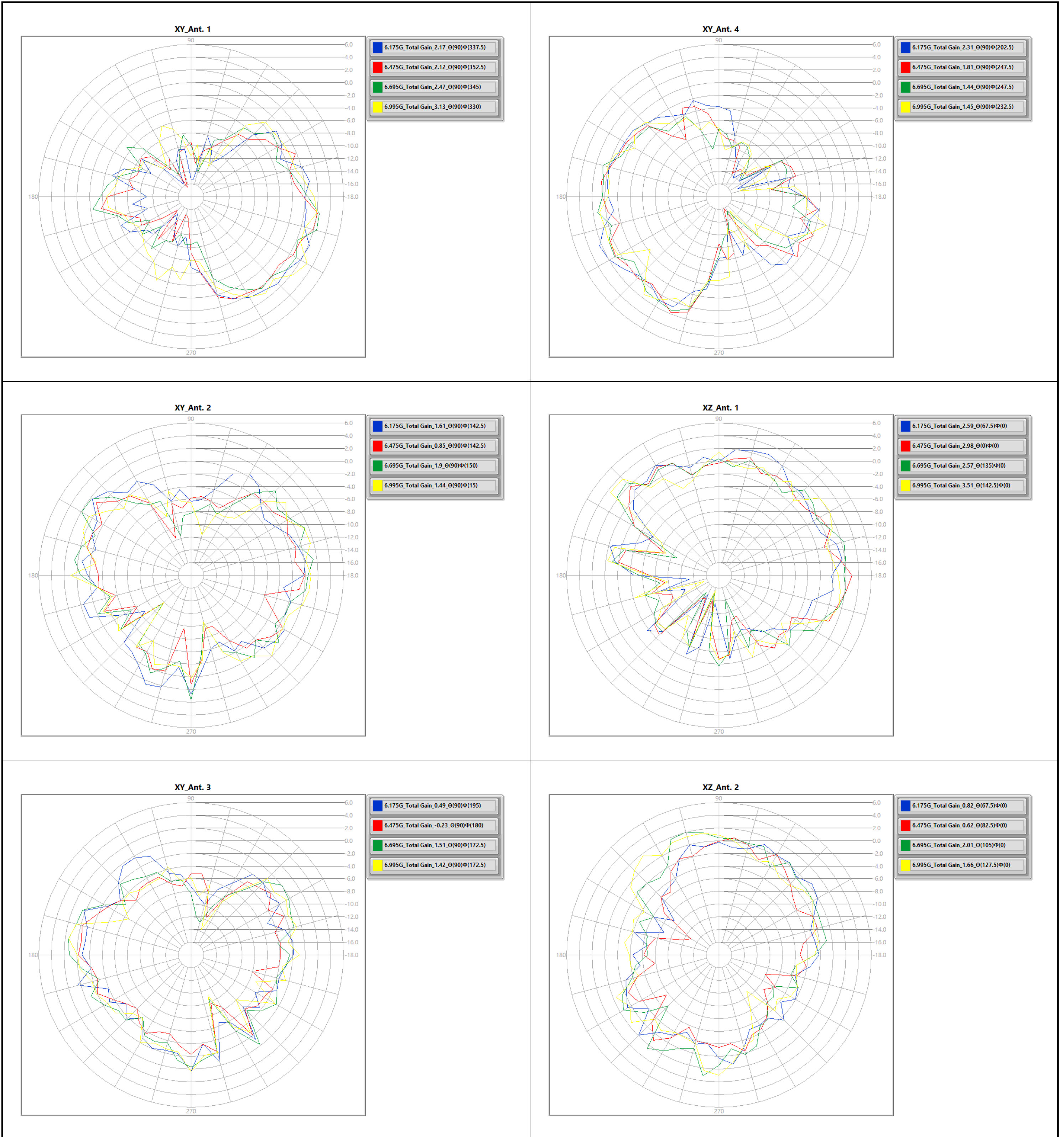


Antenna Pattern (6GHz UNII5~UNII8)

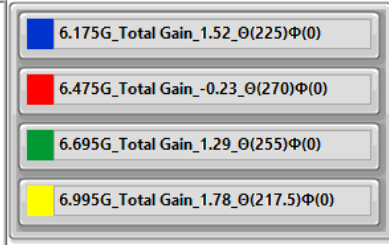
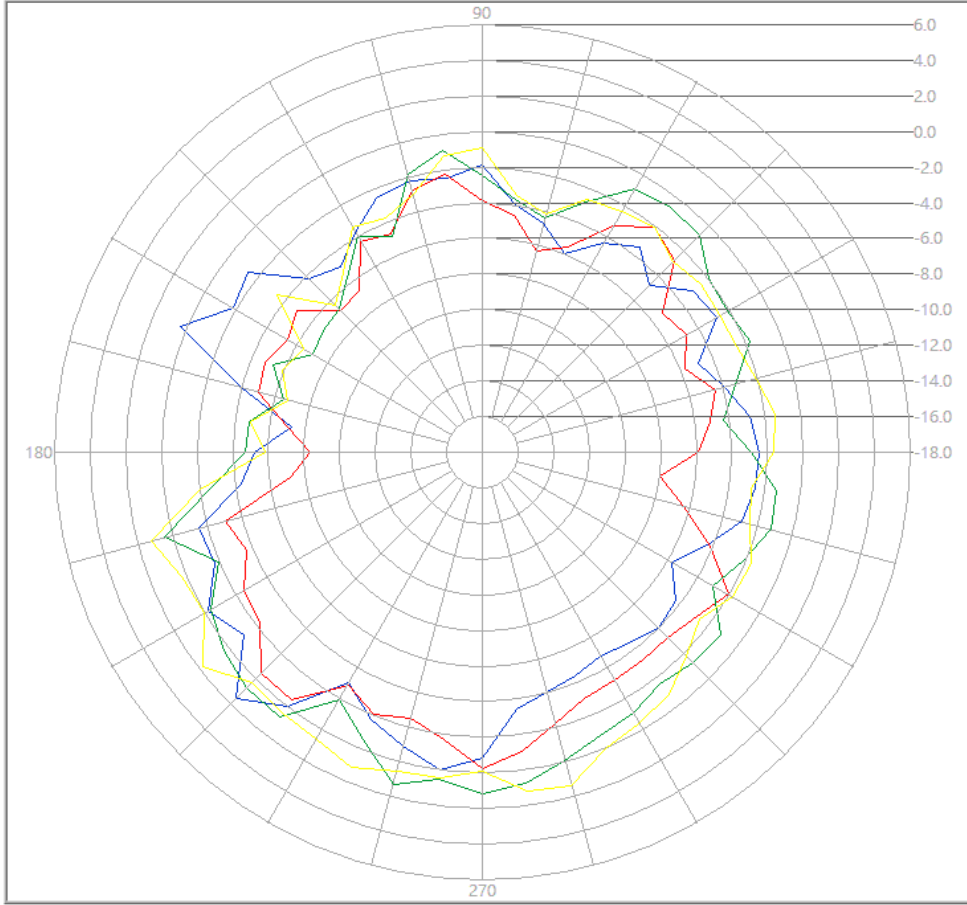
Appendix D

Θ(97.5°)	-4.17/-2.69	-5.84/-10.78	-9.78/-10.27	-9.52/-15.65	-10.15/-12.71	-12.05/-8.81	-10.37/-6.09	-3.78/-6.50	-4.22/-3.70	-1.64/-0.72	0.62/0.72	0.94/1.03	1.96/0.12	1.65/2.28	0.38/-1.19	-2.76/-1.64	-0.33/-1.13	-5.02/-8.70	-10.98/-13.00	-6.90/-12.92	-5.35/-1.88	-0.68/-3.53	-3.13/-2.75	-2.38/-0.49
Θ(105°)	-5.64/-4.25	-8.03/-8.42	-13.01/-5.94	-8.10/-11.48	-4.23/-3.19	-2.85/-2.73	-3.96/-7.00	-8.33/-13.17	-8.35/-4.46	-1.56/-0.82	-0.00/-0.75	0.99/0.82	2.45/-1.37	1.91/-0.14	0.26/-1.33	-2.85/-1.46	-1.61/-2.03	-4.81/-8.26	-9.44/-5.89	-4.96/-15.11	-6.25/-2.23	-3.07/-4.71	-5.50/-8.25	-5.67/-4.50
Θ(112.5°)	-4.34/-3.77	-2.13/-3.70	-11.18/-1.89	-3.58/-14.01	-5.12/-1.32	-3.20/-0.98	-0.78/-2.61	-7.17/-1.432	-4.30/-3.86	-3.52/-1.26	-0.52/-0.10	0.67/1.33	1.24/-1.25	1.35/0.88	1.73/-1.18	-3.47/-0.11	0.64/-0.84	-4.86/-9.14	-7.52/-2.53	-3.71/-13.00	-7.57/-10.68	-7.47/-15.71	-7.61/-6.45	-5.50/-5.72
Θ(120°)	-4.15/-4.07	-4.25/-2.92	-8.82/-5.48	-1.67/-6.57	-9.54/-6.42	-1.83/-1.49	-0.04/-1.31	-2.30/-2.86	-1.71/-3.29	-2.70/-2.66	-2.93/-1.59	-1.14/-0.38	-1.42/-1.13	-1.90/-0.80	0.38/-0.02	-0.71/0.43	2.27/0.45	-0.39/-7.85	-9.25/-3.76	-5.92/-13.33	-7.49/-11.30	-9.15/-11.82	-10.52/-6.83	-9.71/-4.77
Θ(127.5°)	-7.94/-8.53	-4.56/-6.66	-8.78/-8.64	-2.14/0.29	-4.31/-11.17	-5.89/-4.60	-4.31/-1.06	-1.18/-2.68	-1.66/0.55	0.13/-0.58	-0.54/-1.95	-1.31/-2.17	-2.94/-5.39	-3.36/0.87	1.52/-1.88	-2.96/-0.58	-0.45/-0.67	-5.81/-4.57	-6.93/-2.75	-6.24/-8.31	-3.52/-4.15	-3.28/-13.61	-9.03/-13.90	-11.65/-10.26
Θ(135°)	-5.34/-6.12	-4.21/-5.16	-9.98/-9.48	-6.30/-2.21	-1.28/-4.44	-4.26/-5.54	-7.25/-7.28	-3.62/-1.82	0.14/0.15	0.27/0.81	-0.69/-1.29	-1.32/-1.34	0.48/0.59	0.55/0.07	-1.46/-4.69	-6.08/-2.53	-2.13/-2.60	-1.86/-5.36	-10.41/-3.05	-2.74/-3.54	-3.18/-5.05	-3.49/-7.75	-8.84/-3.86	-7.89/-7.68
Θ(142.5°)	-1.48/0.50	0.94/-0.87	-3.52/-6.45	-6.13/-7.37	-9.88/-10.16	-7.17/-4.99	-8.00/-10.31	-4.05/-1.91	-1.99/-2.39	-1.98/-1.64	-1.29/-1.61	-3.60/-4.60	-4.17/-3.34	-1.52/-1.82	-6.18/-10.66	-11.54/-12.99	-4.12/-6.74	-4.81/-10.95	-6.92/-6.14	-1.13/-3.73	-5.03/-9.96	-5.95/-6.74	-5.47/-6.34	-6.55/-1.97
Θ(150°)	-0.71/-1.74	0.09/0.28	-0.47/-1.51	-3.50/-6.27	-13.05/-15.56	-11.79/-8.79	-6.78/-7.55	-11.45/-10.39	-7.11/-5.47	-3.60/-3.43	-3.65/-5.02	-6.80/-7.64	-8.26/-6.62	-3.26/-0.93	-1.39/-3.70	-5.29/-7.46	-8.15/-6.89	-7.20/-9.38	-6.19/-3.03	-2.93/-5.10	-7.06/-10.20	-15.77/-6.72	-4.26/-4.09	-2.60/-4.02
Θ(157.5°)	-2.52/-3.00	-1.99/-0.50	-1.86/-5.11	-7.62/-9.48	-10.22/-10.67	-13.37/-13.06	-10.42/-9.86	-7.38/-4.66	-2.63/-2.87	-4.43/-6.09	-6.56/-5.70	-4.69/-4.83	-4.57/-4.99	-6.37/-6.58	-4.60/-2.40	-2.70/-4.07	-4.32/-4.63	-5.39/-5.28	-3.92/-2.95	-2.49/-2.94	-3.91/-6.09	-9.84/-10.43	-9.65/-6.86	-4.02/-3.38
Θ(165°)	-8.44/-8.01	-9.51/-9.56	-8.48/-9.73	-10.02/-8.81	-7.90/-8.14	-9.75/-11.58	-11.88/-9.93	-9.46/-8.98	-7.63/-5.83	-4.93/-4.65	-4.13/-3.34	-2.89/-2.22	-2.04/-2.03	-1.48/-1.67	-2.16/-3.36	-3.30/-1.98	-1.23/-1.59	-2.88/-5.87	-8.02/-8.48	-7.36/-4.99	-2.52/-1.31	-1.79/-3.39	-6.31/-8.63	-8.25/-8.04
Θ(172.5°)	-15.37/-14.13	-16.18/-14.16	-12.36/-12.53	-13.18/-12.02	-11.65/-12.46	-13.77/-14.98	-14.70/-11.29	-9.55/-7.79	-6.23/-4.90	-4.40/-4.22	-4.26/-4.22	-4.34/-4.64	-4.76/-4.92	-5.59/-6.71	-7.70/-8.30	-7.77/-6.53	-5.52/-5.90	-6.52/-5.93	-5.94/-6.30	-6.40/-6.78	-6.23/-6.43	-9.18/-12.15	-15.41/-15.38	-15.25/-15.88
Θ(180°)	-9.13/-9.02	-9.48/-10.84	-9.37/-12.15	-15.19/-16.11	-15.36/-15.88	-14.38/-13.64	-13.12/-12.88	-11.67/-11.13	-9.89/-10.48	-11.23/-10.51	-9.42/-10.45	-11.77/-12.49	-9.54/-9.07	-9.04/-8.94	-8.46/-7.94	-8.29/-9.82	-11.50/-11.34	-11.00/-11.91	-12.39/-10.10	-9.11/-8.12				
Freq(Hz)	6.475GPol.	TotalAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	0.51/0.80	0.93/1.13	1.41/1.09	0.70/0.31	-0.13/-0.01	-0.06/0.03	-0.20/-0.44	-0.24/-0.27	0.16/0.00	0.12/-0.04	0.16/0.21	0.24/0.55	0.44/0.21	0.42/0.67	0.82/0.53	0.42/0.26	-0.10/-0.21	0.01/-0.09	0.09/-0.18	0.01/0.21	0.14/-0.40	0.14/-0.45	-0.07/0.63	
Θ(7.5°)	-0.13/-0.27	-0.36/-0.08	-0.15/-0.19	-0.42/-0.66	-0.63/-0.68	-0.75/-0.53	-0.71/-0.84	-0.69/-0.30	-0.22/0.17	0.46/0.45	0.82/0.92	0.91/0.98	0.78/0.66	0.50/0.86	0.68/0.34	-0.11/-0.03	-0.33/-0.57	-0.53/-0.58	-0.24/-0.30	-0.29/-0.02	0.27/0.34	-0.03/0.04	-0.38/-0.74	-0.28/0.01
Θ(15°)	0.20/-0.79	-0.74/-0.88	-1.02/-0.23	-0.57/-0.92	-0.88/-0.72	-0.85/-1.20	-1.53/-1.45	-1.26/-1.15	-0.91/-0.11	0.74/-1.43	1.77/-1.68	1.78/-1.69	1.24/0.66	0.25/0.60	0.75/0.49	0.25/-0.21	-0.80/-1.11	-1.10/-1.18	-1.58/-1.50	-1.31/-0.66	-0.58/-0.24	0.08/0.35	0.04/0.22	0.31/0.36
Θ(22.5°)	-2.00/-1.54	-0.98/-1.39	-1.57/-1.40	-1.05/-1.42	-0.65/-0.52	-0.98/-1.62	-1.08/-0.53	-0.47/-0.32	-0.08/0.36	0.77/1.35	1.68/-1.13	2.52/-2.35	1.67/1.28	1.29/1.89	1.97/1.63	1.10/0.62	-0.59/-1.09	-0.92/-1.31	-2.30/-3.70	-3.02/-1.73	-1.20/-1.45	-1.29/-1.68	-2.38/-2.79	-2.66/-2.63
Θ(30°)	-2.42/-4.23	-3.65/-3.40	-1.96/-1.25	-1.21/-1.48	-1.22/-0.75	-0.78/-1.16	-1.63/-1.71	-1.23/-0.72	-0.53/-0.44	0.07/0.49	0.87/1.42	1.92/2.06	1.87/1.47	1.29/1.42	1.48/1.22	0.64/-0.47	-1.50/-2.22	-2.59/-2.75	-2.44/-2.94	-3.35/-4.14	-5.39/-6.61	-7.05/-7.31	-5.47/-3.66	-2.72/-2.21
Θ(37.5°)	-5.03/-5.49	-4.55/-3.93	-3.64/-3.93	-4.38/-1.48	-3.73/-3.88	-4.56/-3.88	-3.86/-3.89	-3.36/-1.91	-1.29/-0.46	0.01/0.03	0.18/0.80	1.72/-2.37	2.28/-1.62	1.23/-1.85	2.00/-1.96	1.70/0.99	-0.67/-1.64	-2.11/-3.12	-3.84/-3.79	-3.77/-5.85	-7.70/-6.45	-4.69/-4.09	-3.11/-2.31	-3.22/-5.48
Θ(45°)	-3.47/-3.59	-3.91/-4.63	-4.26/-4.44	-3.47/-3.46	-4.07/-4.23	-3.80/-3.59	-4.02/-4.42	-4.57/-4.03	-2.55/-1.82	-0.68/0.05	-0.82/-0.51	1.40/-2.46	2.34/-1.21	0.69/1.32	1.68/1.93	1.51/0.19	-1.31/-2.98	-3.32/-2.15	-3.09/-4.48	-5.52/-4.65	-3.89/-3.74	-3.72/-3.85	-2.86/-2.48	-3.06/-3.29
Θ(52.5°)	-7.09/-6.67	-6.45/-8.34	-6.47/-6.07	-5.90/-5.57	-4.85/-4.83	-4.84/-4.10	-4.21/-3.58	-4.16/-4.09	-3.24/-2.31	-0.75/0.89	0.55/-0.09	1.03/2.16	2.95/2.48	2.40/2.88	2.90/2.18	0.15/-0.92	-2.04/-2.46	-2.49/-3.52	-4.47/-5.70	-6.39/-5.82	-5.62/-3.60	-3.45/-3.36	-2.82/-2.89	-3.38/-4.31
Θ(60°)	-4.62/-4.47	-9.15/-7.48	-7.32/-7.24	-7.22/-5.76	-5.36/-4.96	-5.84/-7.74	-5.95/-5.36	-5.18/-4.01	-3.49/-2.68	-1.78/0.09	1.35/0.75	0.51/-1.42	1.84/-1.50	0.79/-1.12	1.89/-1.62	1.36/-0.31	-1.88/-4.12	-4.06/-4.11	-4.67/-6.16	-7.56/-7.88	-6.14/-7.58	-5.67/-6.00	-7.30/-5.10	-4.43/-6.43
Θ(67.5°)	-4.04/-4.81	-3.17/-5.44	-9.25/-9.81	-7.40/-6.51	-9.01/-9.02	-7.98/-8.65	-9.08/-7.27	-6.19/-4.46	-3.00/-1.14	0.57/-1.76	0.94/0.44	1.35/0.89	0.02/0.46	1.02/-1.90	0.27/-0.72	-1.59/-2.03	-4.51/-4.65	-5.11/-9.06	-10.75/-9.33	-7.62/-8.56	-8.37/-10.25	-5.94/-4.10	-4.88/-2.66	
Θ(75°)	-7.40/-4.85	-7.34/-13.24	-9.49/-8.13	-8.74/-10.84	-15.94/-12.36	-13.17/-15.77	-13.70/-10.72	-7.95/-11.00	-8.01/-5.91	-3.81/-3.51	-1.89/0.77	1.73/0.73	0.97/1.38	1.00/0.95	1.06/0.97	0.36/-1.43	-1.41/-0.41	-3.19/-4.43	-6.40/-13.41	-12.17/-9.05	-9.93/-12.01	-7.37/-10.68	-6.50/-6.73	-4.52/-5.14
Θ(82.5°)	-5.38/-6.06	-12.77/-7.55	-4.21/-6.16	-15.34/-14.91	-13.73/-9.49	-8.67/-7.04	-6.12/-6.27	-3.60/-8.14	-6.92/-5.11	-3.51/-3.07	-1.88/-0.44	0.78/0.27	-0.43/-1.16	-0.48/0.83	1.53/-1.04	0.22/-0.06	-0.07/0.76	0.15/-2.76	-7.61/-11.13	-8.53/-10.74	-10.69/-11.20	-7.22/-5.86	-5.14/-4.32	-2.06/-4.57
Θ(90°)	-4.07/-6.67	-5.43/-5.71	-6.90/-12.48	-12.42/-12.54	-13.81/-9.37	-8.88/-8.79	-7.77/-4.82	-3.31/-2.90	-7.59/-6.05	-2.09/-1.59	-1.11/-0.91	-0.21/0.63	0.32/-0.31	-1.79/0.51	0.83/-0.06	0.13/-0.65	0.26/-1.81	0.83/-4.24	-10.57/-7.93	-8.87/-10.16	-13.70/-8.30	-7.05/-2.49	-3.41/-1.93	-4.69/-2.42
Θ(97.5°)	-4.85/-5.15	-3.89/-10.32	-10.74/-11.80	-9.16/-12.59	-13.95/-11.15	-9.91/-10.55	-10.62/-5.00	-4.56/-3.74	-8.70/-5.53	-1.56/-0.06	0.04/0.17	0.73/0.76	1.05/-0.25	-0.22/-1.23	-0.12/-0.49	-1.08/-0.61	-1.72/-1.93	-2.20/-6.97	-14.89/-7.78	-9.95/-9.61	-13.08/-5.43	-4.02/-3.86	-4.34/-4.67	-7.77/-2.29
Θ(105°)	-6.69/-3.88	-6.94/-12.40	-10.97/-9.77	-6.67/-11.80	-7.58/-5.65	-3.92/-6.66	-6.12/-6.64	-5.89/-6.06	-8.22/-6.73	-3.04/-1.13	0.09/-0.08	1.59/0.05	0.07/-1.34	-0.85/-0.17	-0.72/-0.07	-1.70/-3.90	-1.71/-3.20	-6.54/-12.92	-10.86/-8.82	-5.35/-9.19	-11.00/-5.70	-6.36/-6.05	-9.11/-9.41	-9.26/-4.32
Θ(112.5°)	-5.89/-5.65	-5.72/-5.04	-12.23/-5.42	-5.32/-10.55	-5.92/-3.05	-3.53/-1.69	-2.44/-0.00	-5.26/-10.73	-10.08/-4.95	-2.46/-0.71	-0.15/-0.58	1.39/0.81	-0.02/-1.31	-0.45/0.44	0.48/-1.28	-4.56/-4.22	-0.42/-0.50	-3.97/-8.90	-10.02/-3.16	-4.31/-11.78	-9.71/-9.75	-8.30/-9.65	-14.91/-11.64	-7.47/-5.99
Θ(120°)	-7.28/-8.23	-4.72/-3.42	-9.83/-8.88	-4.17/-6.27	-11.27/-5.63	-3.37/-3.96	-2.32/-3.26	-4.65/-4.71	-2.00/-3.69	-4.84/-1.19	-1.45/-1.57	0.07/1.53	-0.07/-1.26	-1.63/-1.72	0.38/-2.20	-5.75/0.03	0.65/0.47	-1.21/-9.72	-8.09/-3.07	-5.62/-12.49	-9.82/-12.56	-12.61/-14.89	-15.82/-10.58	-15.75/-10.22
Θ(127.5°)	-1.63/-9.11	-5.85/-8.40	-13.61/-15.60	-5.52/-1.72	-6.83/-10.43	-7.36/-8.07	-6.80/-3.23	-2.55/-1.97	-0.71/-0.35	-0.15/-0.77	0.17/-1.68	-2.27/-0.56	-2.06/-2.73	-7.62/-1.45	1.51/-2.19	-5.96/-4.23	-0.93/-3.34	-5.56/-10.98	-11.84/-3.57	-6.20/-10.98	-4.73/-5.42	-4.87/-10.74	-13.74/-15.36	-11.40/-15.01
Θ(135°)	-7.99/-8.67	-7.94/-8.71	-14.32/-14.65	-6.80/-3.70	-3.40/-6.81	-7.16/-9.49	-9.12/-3.80	-2.04/-2.79	-0.92/0.67	-0.38/-0.56	-0.57/-1.99	-0.89/-0.95	0.11/-0.53	-3.05/-1.46	0.15/-1.57	-7.50/-2.63	-2.16/-5.05	-7.63/-6.96	-8.93/-2.91	-1.96/-4.72	-7.58/-4.88	-2.66/-14.16	-14.70/-6.43	-7.29/-9.60
Θ(142.5°)	-2.94/-3.00	-4.00/-2.76	-4.84/-10.28	-9.39/-9.66	-13.10/-13.53	-8.49/-8.49	-12.88/-8.51	-5.15/-3.42	-2.48/-2.64	-2.14/-2.38	-3.44/-3.18	-3.61/-3.42	-2.84/-3.84	-3.33/-2.82	-4.85/-8.22	-8.33/-6.27	-2.74/-3.95	-4.55/-8.95	-1.73/-4.65	0.17/-2.18	-6.27/-6.39	-5.39/-9.01	-8.59/-6.77	-8.89/-5.92
Θ(150°)	-4.02/-3.92	-3.41/-2.55	-2.94/-4.70	-8.53/-13.92	-14.77/-10.02	-12.39/-13.57	-12.17/-10.93	-11.97/-11.99	-10.53/-6.20	-4.58/-5.36	-5.80/-5.97	-6.44/-5.83	-6.20/-6.95	-4.93/-3.01	-3.12/-5.23	-5.83/-5.29	-6.76/-							

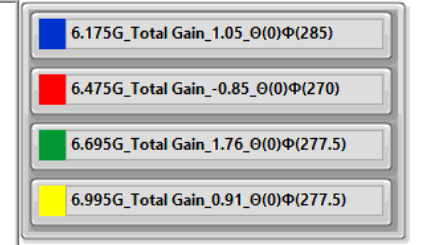
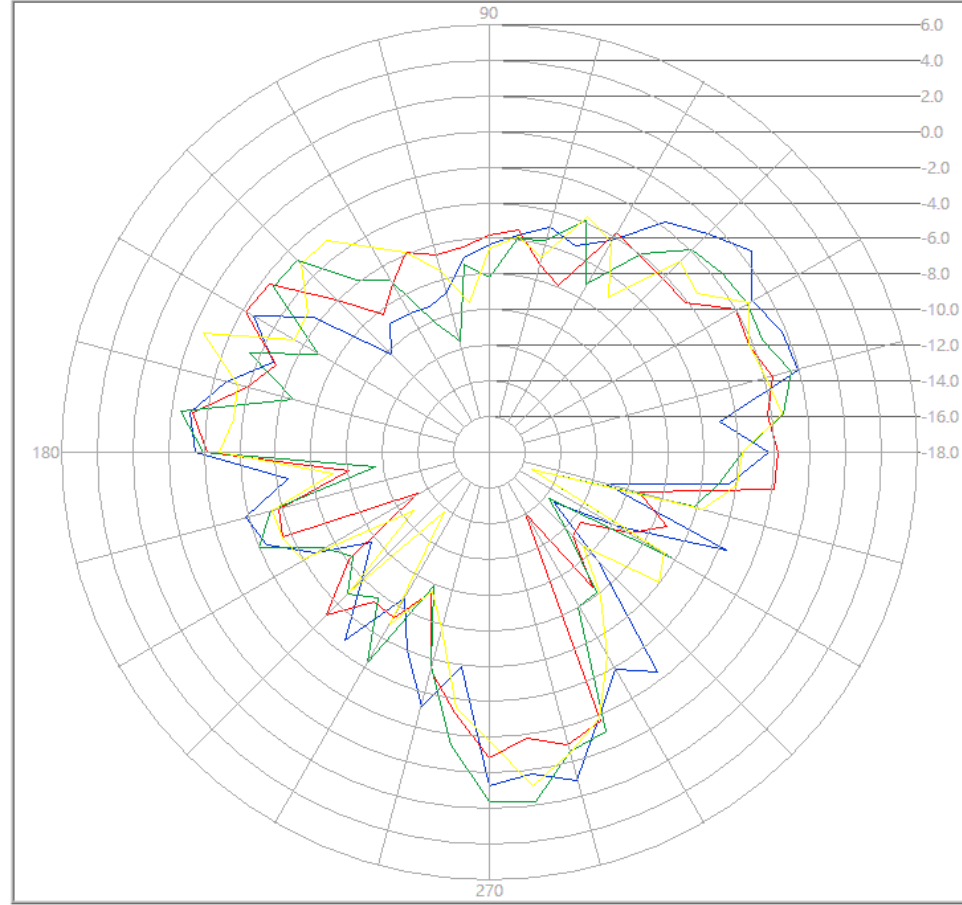
E1(XY plane) – $\Theta(90)\Phi(0-360)$
E2(XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
E3(YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$



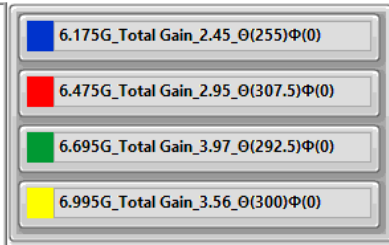
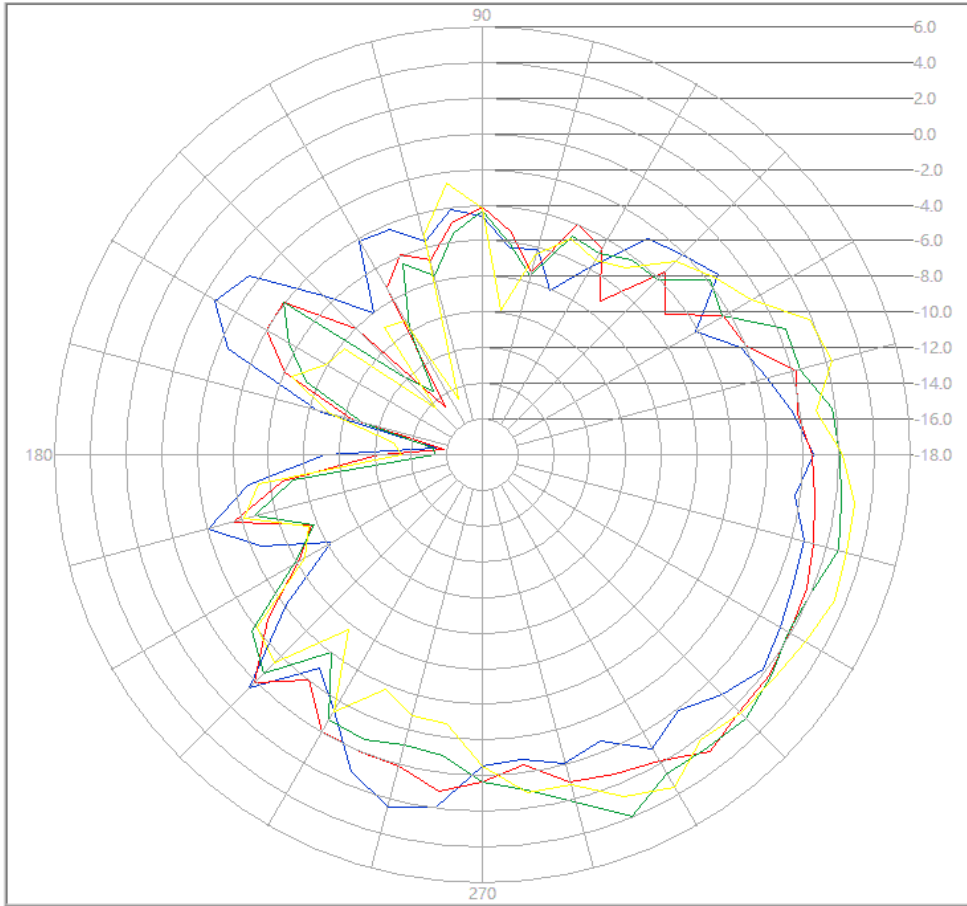
XZ_Ant. 3



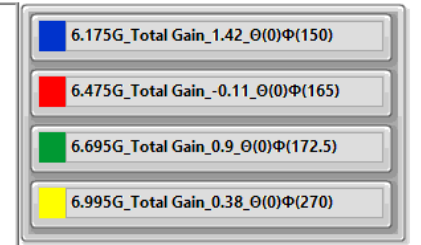
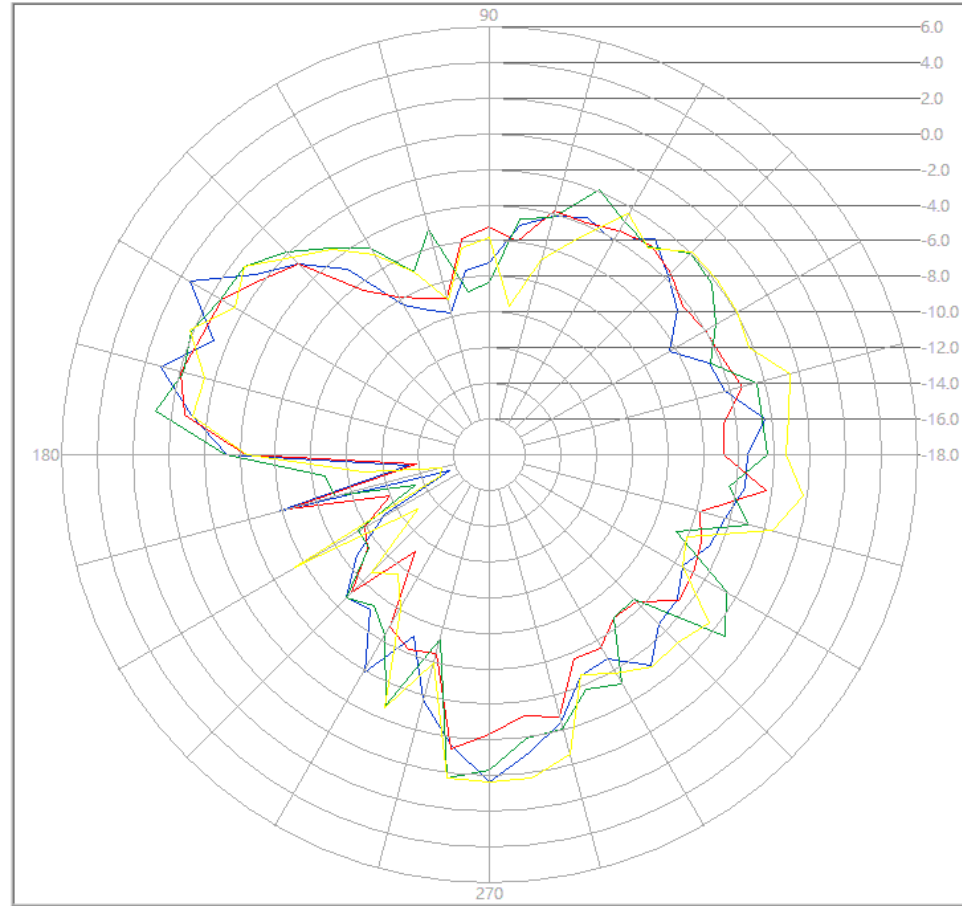
YZ_Ant. 2



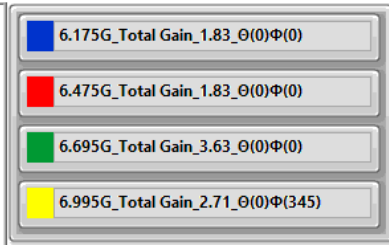
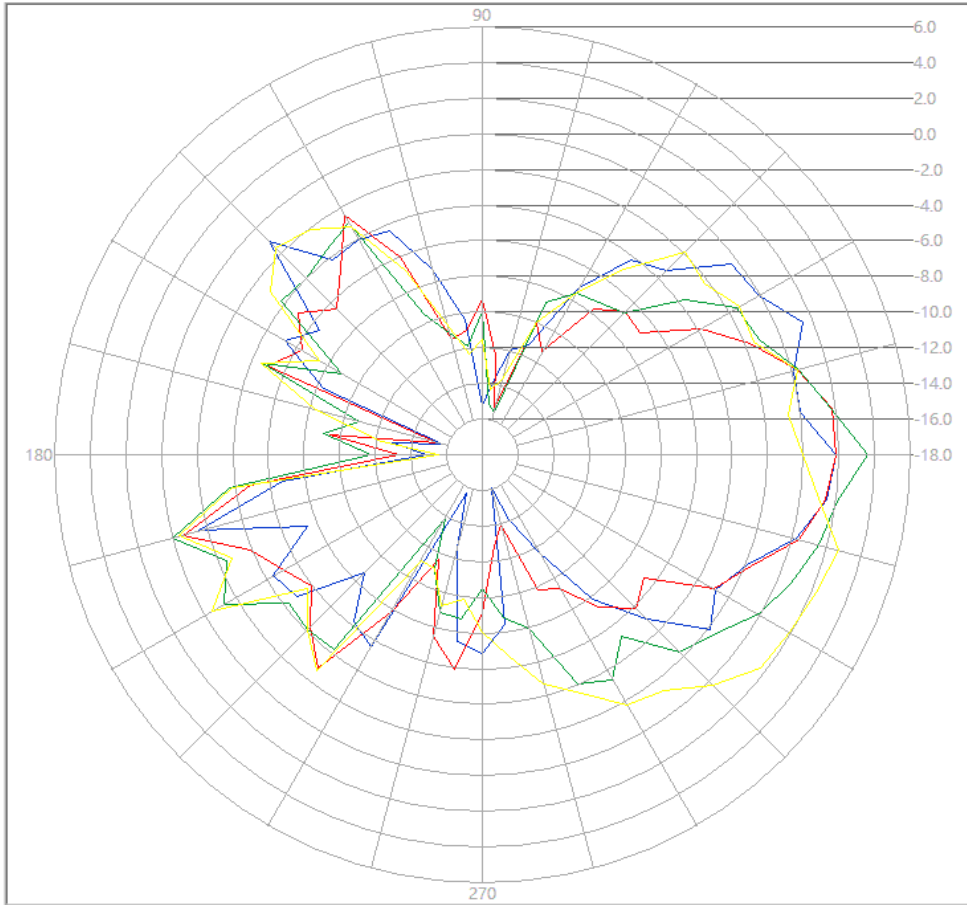
XZ_Ant. 4



YZ_Ant. 3



YZ_Ant. 1



YZ_Ant. 4

