



Antenna Composite Gain Test Report

FCC ID	MSQ-RTBE6J00
Equipment	ROG Rapture GT-BE19000 WiFi 7 Tri-band Gaming Router
Brand Name	ASUS
Model Name	GT-BE19000
Applicant	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou, Taipei City 112, Taiwan
Standard	KDB662911 D03 v01
Sample Received	Dec. 21, 2022
Start Test Date	Dec. 23, 2022
Final Test Date	Jan. 17, 2023

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

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1. Operation Mode and Antenna Information

For EUT 1:

Antenna Position	RF Port			Brand Name	Model Name	Ant. Type	Connector	Modes of Operation
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz					
2G5G Ant1	1	1	-	WHA Yu	C660-510591-A	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant2	4	4	-	WHA Yu	C660-510592-A	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant3	3	3	-	WHA Yu	C660-510593-A	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant4	2	2	-	WHA Yu	C660-510594-A	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
6G Ant1	-	-	1	WHA Yu	C660-510587-A	Dipole	I-PEX	6GHz
6G Ant2	-	-	2	WHA Yu	C660-510588-A	Dipole	I-PEX	6GHz
6G Ant3	-	-	3	WHA Yu	C660-510589-A	Dipole	I-PEX	6GHz
6G Ant4	-	-	4	WHA Yu	C660-510590-A	Dipole	I-PEX	6GHz

For EUT 2:

Antenna Position	RF Port			Brand Name	Model Name	Ant. Type	Connector	Modes of Operation
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz					
2G5G Ant1	1	1	-	WHA Yu	C660-510591-AW1	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant2	4	4	-	WHA Yu	C660-510592-AW1	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant3	3	3	-	WHA Yu	C660-510593-AW1	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
2G5G Ant4	2	2	-	WHA Yu	C660-510594-AW1	Dipole	I-PEX	2.4GHz, 5GHz UNII 1~3
6G Ant1	-	-	1	WHA Yu	C660-510587-AW1	Dipole	I-PEX	6GHz
6G Ant2	-	-	2	WHA Yu	C660-510588-AW1	Dipole	I-PEX	6GHz
6G Ant3	-	-	3	WHA Yu	C660-510589-AW1	Dipole	I-PEX	6GHz
6G Ant4	-	-	4	WHA Yu	C660-510590-AW1	Dipole	I-PEX	6GHz

Note:

2.4GHz and 5GHz Operation Mode (4TX/4RX)

2G5G Ant1~4 can be used as transmitting/receiving antenna.

2G5G Ant1~4 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. Table for Multiple Listing

The difference for each EUT is shown as below:

EUT	Enclosure/Antenna Color	Heatsink Color on the Back of the EUT
1	Black	Red
2	White	Black

Note 1: The difference between EUT 1 and EUT 2 is only color, there is only EUT 1 tested and recorded in this report

Note 2: The above information was declared by manufacturer.

3. 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
5925-6425	6175
6425-6525	6475
6525-6875	6695
6875-7125	6995

4. 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	Dec. 23, 2022 ~ Jan. 17, 2023

Note:

Testing Site Information

Brand Name: TDK

Dimension: 11m*6m*6m

Characteristic: Fully Anechoic Chamber

5. Test Facility and Configuration

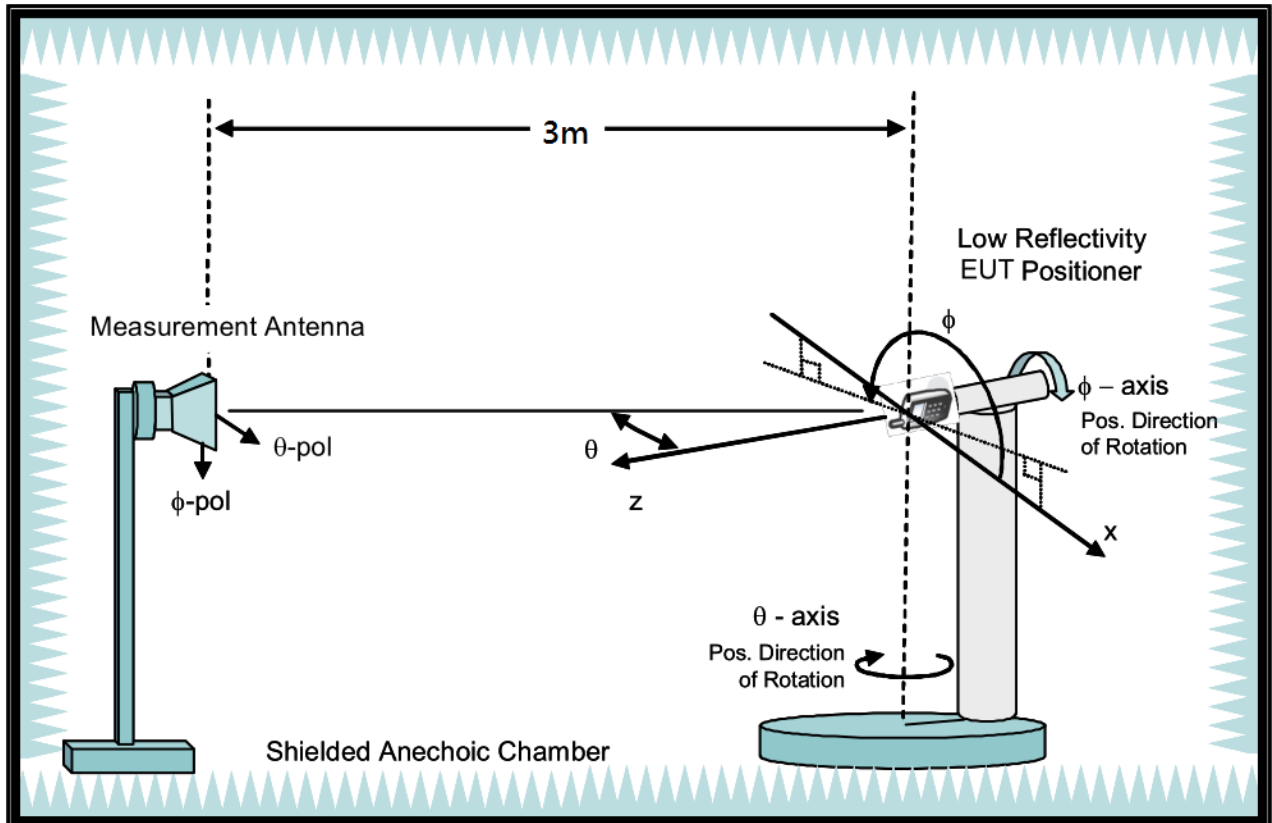
Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Measurement antenna: Dual Polarization Horn antenna

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

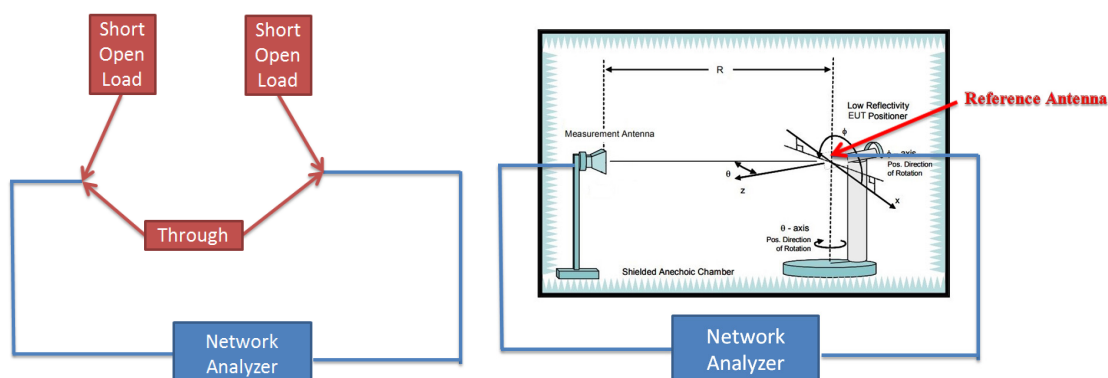
#Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1"



6. 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.

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

7. 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 8 tables.

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

8. Measured Values and Calculation of Maximum Gain Positions

DG_1SS max value position

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 (dBi)	0.15	-2.37	-4.82	-1.93	-0.82
Ant. 2 (dBi)	-0.56	0.43	0.1	-0.31	-2.03
Ant. 3 (dBi)	0.6	-1.08	2.11	1.39	1.62
Ant. 4 (dBi)	-0.34	-2.5	0.96	-0.66	-0.72
DG [1SS] (dBi)	5.99	4.72	5.97	5.72	5.64
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	90	90	82.5	90	60
$\Phi(^{\circ})$	75	127.5	142.5	22.5	195

Note: The DG 1SS max value position is the maximum value of section 12 table DG 1SS Result.

DG_1SS max value position calculation

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 [$10^{(G/20)}$]	$10^{(0.15/20)}$	$10^{(-2.37/20)}$	$10^{(-4.82/20)}$	$10^{(-1.93/20)}$	$10^{(-0.82/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(-0.56/20)}$	$10^{(0.43/20)}$	$10^{(0.1/20)}$	$10^{(-0.31/20)}$	$10^{(-2.03/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(0.6/20)}$	$10^{(-1.08/20)}$	$10^{(2.11/20)}$	$10^{(1.39/20)}$	$10^{(1.62/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-0.34/20)}$	$10^{(-2.5/20)}$	$10^{(0.96/20)}$	$10^{(-0.66/20)}$	$10^{(-0.72/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.017	0.761	0.574	0.801	0.91
Ant. 2 [$10^{(G/20)}$] value	0.938	1.051	1.012	0.965	0.792
Ant. 3 [$10^{(G/20)}$] value	1.072	0.883	1.275	1.174	1.205
Ant. 4 [$10^{(G/20)}$] value	0.962	0.75	1.117	0.927	0.92
Sum All Antenna [Amax]	3.988	3.445	3.978	3.866	3.827
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.99	4.72	5.97	5.72	5.64

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

DG_1SS max value position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	1.75	-1.11	2.13	0.39
Ant. 2 (dBi)	1.95	2.41	-1.18	0.89
Ant. 3 (dBi)	-2.78	-2.79	-2.51	-1.69
Ant. 4 (dBi)	-2.11	-1.66	-1.75	-2.03
DG [1SS] (dBi)	5.99	5.46	5.38	5.5
Polarization	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	60	60	75	82.5
$\Phi(^{\circ})$	82.5	75	90	247.5

Note: The DG 1SS max value position is the maximum value of section 12 table DG 1SS Result.

DG_1SS max value position calculation

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 [$10^{(G/20)}$]	$10^{(1.75/20)}$	$10^{(-1.11/20)}$	$10^{(2.13/20)}$	$10^{(0.39/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(1.95/20)}$	$10^{(2.41/20)}$	$10^{(-1.18/20)}$	$10^{(0.89/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-2.78/20)}$	$10^{(-2.79/20)}$	$10^{(-2.51/20)}$	$10^{(-1.69/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-2.11/20)}$	$10^{(-1.66/20)}$	$10^{(-1.75/20)}$	$10^{(-2.03/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.223	0.88	1.278	1.046
Ant. 2 [$10^{(G/20)}$] value	1.252	1.32	0.873	1.108
Ant. 3 [$10^{(G/20)}$] value	0.726	0.725	0.749	0.823
Ant. 4 [$10^{(G/20)}$] value	0.784	0.826	0.818	0.792
Sum All Antenna [Amax]	3.985	3.751	3.717	3.769
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.99	5.46	5.38	5.5

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

9. Summary of Test Result

Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	2.09	1.52	1.17	1.98	1.08
Ant. 2 Max Gain (dBi)	1.84	2.29	2.9	3.09	2.51
Ant. 3 Max Gain (dBi)	2.91	2.7	3.04	2.48	3.39
Ant. 4 Max Gain (dBi)	2.14	1.21	1.19	3.23	1.87
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/97.5/165	Theta/67.5/270	Theta/67.5/270	Theta/97.5/232.5	Theta/82.5/247.5
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/52.5/262.5	Theta/60/262.5	Theta/90/97.5	Theta/60/247.5	Theta/90/97.5
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/52.5/180	Theta/60/180	Theta/60/180	Theta/90/37.5	Theta/75/195
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/172.5	Theta/82.5/165	Theta/82.5/157.5	Theta/82.5/180	Theta/67.5/165
Max Gain (dBi)	2.91	2.7	3.04	3.23	3.39
DG [1SS] (dBi)	5.99	4.72	5.97	5.72	5.64
DG [2SS] (dBi)	2.99	2.7	3.04	3.23	3.39

Note:

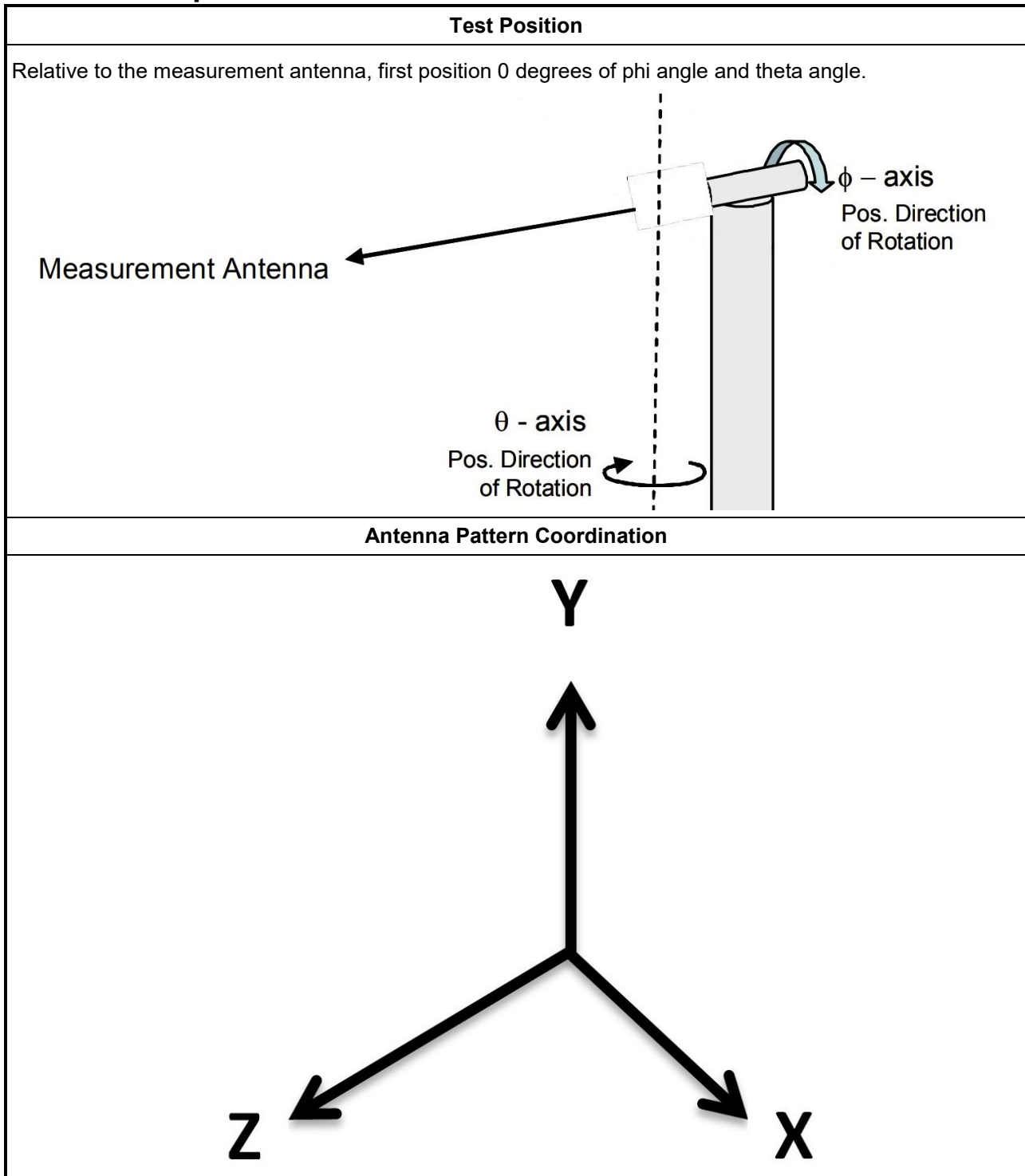
1. Antenna max gain is the max value of each individual antenna through all measurement angles.
2. The max gain is the max value of all antennas.
3. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain. Refer to KDB662911D01 (F) (2) (e) (ii)

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	1.75	1.52	2.13	2.17
Ant. 2 Max Gain (dBi)	1.95	2.41	2.19	1.64
Ant. 3 Max Gain (dBi)	1.61	1.96	1.51	1.93
Ant. 4 Max Gain (dBi)	1.98	1.44	1.47	2.21
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/82.5	Theta/97.5/90	Theta/75/90	Theta/52.5/112.5
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/82.5	Theta/60/75	Theta/52.5/82.5	Theta/82.5/262.5
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/97.5/322.5	Theta/60/352.5	Theta/97.5/187.5	Theta/52.5/0
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/345	Theta/60/345	Theta/52.5/337.5	Theta/52.5/337.5
Max Gain (dBi)	1.98	2.41	2.19	2.21
DG [1SS] (dBi)	5.99	5.46	5.38	5.5
DG [2SS] (dBi)	2.99	2.46	2.38	2.5

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. Refer to KDB662911D01 (F) (2) (e) (ii)

10. Test Setup



Note:

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

**11. 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.



12. Test Results

Please refer to the appendix.

Appendix A – Radiated Composite Gain of 2.4GHz and 5GHz U-NII 1 ~ 3.....	Page 16
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Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	2.09	1.52	1.17	1.98	1.08
Ant. 2 Max Gain (dBi)	1.84	2.29	2.9	3.09	2.51
Ant. 3 Max Gain (dBi)	2.91	2.7	3.04	2.48	3.39
Ant. 4 Max Gain (dBi)	2.14	1.21	1.19	3.23	1.87
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/97.5/165	Theta/67.5/270	Theta/67.5/270	Theta/97.5/232.5	Theta/82.5/247.5
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/52.5/262.5	Theta/60/262.5	Theta/90/97.5	Theta/60/247.5	Theta/90/97.5
Ant. 3 Polarization/Θ(°)/Φ(°)	Theta/52.5/180	Theta/60/180	Theta/60/180	Theta/90/37.5	Theta/75/195
Ant. 4 Polarization/Θ(°)/Φ(°)	Theta/60/172.5	Theta/82.5/165	Theta/82.5/157.5	Theta/82.5/180	Theta/67.5/165
Max Gain (dBi)	2.91	2.7	3.04	3.23	3.39
DG [1SS] (dBi)	5.99	4.72	5.97	5.72	5.64
DG [2SS] (dBi)	2.99	2.7	3.04	3.23	3.39



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

DG 1SS Result

Freq(Hz)	2.45GPol.	PhiH-	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°)
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°)	-8.32/-9.49	-9.87/-9.7	-8.85/-8.45	-8.64/-8.02	-7.34/-6.47	-6.04/-5.89	-5.68/-4.82	-4.12/-4.45	-4.87/-5.33	-5.38/-5.75	-6.15/-6.08	-6.67/-7.71	-8.13/-8.09	-7.85/-7.59	-7.36/-7.59	-7.97/-7.7	-6.88/-6.4	-6.19/-5.8	-5.4/-5.13	-4.88/-4.58	-4.21/-4.58	-4.41/-4.57	-5.36/-6.02	-6.3/-6.76
Θ(7.5°)	-7.56/-7.72	-8.83/-8.97	-8.56/-8.09	-8.05/-8.32	-7.91/-6.86	-6.19/-5.88	-5.93/-5.27	-4.44/-4.38	-4.9/-5.52	-5.71/-5.5	-4.9/-4.89	-5.41/-6.34	-6.98/-7.03	-6.55/-6.58	-6.6/-7.12	-7.62/-8.17	-7.37/-6.55	-5.8/-5.43	-4.39/-4.48	-5.15/-5.26	-5.19/-4.97	-5.43/-6.11	-6.48/-6.63	
Θ(15°)	-7.32/-7.34	-8.1/-7.8	-7.41/-7.53	-7.96/-8.47	-8.16/-6.95	-6.29/-5.87	-6.12/-5.26	-4.01/-3.77	-4.92/-6.15	-6.02/-5.37	-5.58/-5.99	-5.99/-6.41	-7.56/-7.51	-6.95/-5.94	-5.56/-5.63	-6.19/-6.72	-6.78/-6.94	-6.04/-5.46	-4.41/-3.36	-2.78/-2.97	-3.6/-4.4	-5.16/-5.26	-5.42/-5.72	-6.73/-6.59
Θ(22.5°)	-7.63/-7.64	-7.8/-7.47	-7.11/-7.39	-8.19/-8.28	-9.07/-7.03	-5.84/-5.52	-5.64/-5.4	-5.51/-5.2	-5.98/-6.76	-6.5/-5.4	-4.61/-4.42	-4.2/-4.21	-4.94/-5.49	-5.34/-4.89	-4.35/-4.26	-4.9/-6.13	-4.18/-2.8	-6.19/-5.55	-4.18/-2.8	-2.11/-2.18	-2.88/-3.73	-4.45/-4.67	-4.79/-5.57	-6.24/-6.93
Θ(30°)	-8.27/-8.13	-7.06/-6.09	-5.95/-7.01	-8.76/-10.51	-10.41/-8.05	-6.06/-5.51	-5.94/-7.12	-8.08/-8.93	-8.36/-7.94	-7.51/-6.16	-5.18/-5.57	-6.43/-6.98	-6.3/-5.87	-5.13/-5.02	-5.77/-6.82	-7.78/-7.62	-6.49/-5.76	-4.73/-3.82	-3.22/-3.26	-3.74/-4.54	-5.27/-5.46	-5.51/-6.16	-6.62/-7.23	
Θ(37.5°)	-8.28/-8.35	-7.66/-6.2	-5.68/-6.43	-8.73/-11.13	-9.88/-8.8	-7.25/-6.4	-6.86/-7.75	-8.02/-7.26	-7.19/-9.02	-9.49/-7.48	-6.22/-5.72	-5.66/-5.71	-6.03/-6.74	-7.12/-7.27	-7.74/-7.92	-8.11/-8.28	-8.61/-7.89	-6.98/-6.14	-5.39/-4.9	-5.04/-5.87	-6.75/-7.3	-6.86/-6.5	-6.89/-7.76	-7.6/-7.37
Θ(45°)	-8.91/-8.52	-9.18/-7.43	-6.32/-5.84	-7.5/-10.33	-10.18/-9.21	-8.33/-7.56	-7.73/-7.45	-7.09/-6.45	-7.46/-10.14	-12.09/-10.96	-8.52/-6.72	-6.38/-6.35	-6.3/-6.76	-7.42/-9.62	-10.75/-11.81	-12/-9.89	-9.1/-8.78	-8.85/-8.61	-6.7/-5.9	-6.77/-8.41	-9.68/-9.18	-8.03/-7.43	-6.64/-7.37	-8.27/-8.39
Θ(52.5°)	-8.59/-9.19	-9.4/-8.19	-6.85/-6	-7.14/-9.81	-9.83/-9.32	-9.19/-8.81	-7.88/-6.99	-6.95/-7.96	-10.88/-12.05	-9.73/-7.62	-6.89/-6.45	-6.72/-7.02	-6.99/-6.16	-7.11/-9.4	-10.28/-10.76	-11.82/-10.64	-9.34/-9.69	-9.53/-8.99	-8.88/-5.66	-6.73/-8.87	-8.83/-7.5	-7.21/-7.2	-6.47/-6.21	-6.84/-7.54
Θ(60°)	-6.42/-7.49	-8.77/-9.36	-7.94/-7.08	-8.03/-10.42	-9.49/-7.81	-7.53/-7.71	-8.34/-6.6	-8.41/-7.84	-9.55/-10.06	-6.71/-10.9	-5.36/-4.85	-4.8/-5.66	-7.14/-6.93	-7.1/-8.89	-8.95/-8.28	-8.9/-8.66	-9.03/-8.87	-7.79/-8	-5.82/-4.12	-4.46/-6.78	-6.92/-5.75	-6.62/-8.41	-7.84/-6.09	-4.97/-5.09
Θ(67.5°)	-5.3/-6.35	-9.02/-11.73	-11.31/-9.05	-8.28/-8.42	-8.02/-7.38	-8.17/-9.19	-9.61/-7.67	-6.16/-5.52	-7.03/-9.48	-7.61/-6.65	-6.21/-5.03	-5.2/-7.02	-8.31/-7.56	-7.89/-10.43	-9.29/-8.02	-9.6/-7.62	-6.98/-7.46	-6.21/-7.2	-4.8/-4.29	-2.43/-1.47	-4.52/-4.83	-6.38/-8.77	-8.89/-7.4	-6.24/-5.96
Θ(75°)	-5.99/-6.86	-9.05/-12.14	-12.21/-8.11	-6.39/-7.25	-7.28/-9.73	-9.59/-9.1	-8.2/-6.98	-6.36/-5.81	-8.21/-12.37	-8.27/-6.78	-8.05/-6.41	-5.21/-6.11	-7.01/-7.32	-7.8/-11.55	-11.24/-10.86	-11.99/-7.45	-6.89/-7.51	-6.86/-8.44	-6.4/-3.17	-2.03/-2.34	-2.09/-3.55	-5.71/-8.48	-9.29/-7.76	-6.21/-6.99
Θ(82.5°)	-5.73/-6.71	-8.02/-10.16	-10.01/-6.64	-5.88/-7.48	-7.93/-9.73	-10.11/-9.35	-9.36/-8.43	-7.4/-6.19	-8.28/-10.89	-6.43/-6.08	-9.27/-11.71	-10.44/-9.66	-8.48/-7.76	-9.71/-12.48	-10.73/-9.54	-9.65/-8.39	-9.38/-6.83	-5.59/-7.25	-6.91/-4.77	-3.16/-2.59	-1.93/-3.06	-4.5/-5.69	-8.76/-8.58	-5.88/-6.12
Θ(90°)	-6.87/-7.54	-6.81/-7.23	-7.74/-5.6	-5.6/-6.16	-8.04/-8.91	-8.91/-8.81	-9.42/-8.68	-5.78/-5.12	-7.72/-9.56	-6.09/-5.03	-7.13/-10.11	-9.43/-9.31	-7.52/-6.89	-8.76/-12.25	-9.7/-7.85	-8.72/-7.96	-9.43/-6.83	-5.62/-6.16	-6.63/-4.92	-3.51/-3.8	-3.03/-2.77	-3.3/-4.37	-7.21/-8.99	-6.7/-6.77
Θ(97.5°)	-7.73/-7.77	-6.71/-6.97	-7.41/-5.68	-5.29/-6.46	-5.42/-6.27	-7.93/-8.24	-7.58/-5.34	-4.28/-8.48	-8.81/-10.7	-6.02/-5.28	-8.04/-11.05	-10.54/-9.79	-7.38/-6.02	-8.33/-10.13	-6.82/-6.52	-8.63/-8.56	-9.35/-8.1	-7.15/-6.69	-6.22/-4.11	-3.06/-4.4	-3.86/-2.79	-3.34/-4.31	-6.35/-8.74	-7.28/-7.98
Θ(105°)	-8.4/-7.31	-7.2/-8.19	-8.21/-6.38	-8.21/-6.32	-5.55/-6.28	-8.5/-9.05	-7.71/-6.35	-6.29/-6.51	-8.82/-9.44	-7.38/-7.12	-9.43/-10.47	-8.22/-7.39	-5.99/-6.43	-7.53/-7.75	-5.76/-6.54	-9.43/-9.97	-9.44/-8.14	-6.55/-6.81	-5.85/-3.68	-3.34/-4.89	-4.6/-3.78	-4.24/-5.58	-7.03/-7.89	-7.44/-9.49
Θ(112.5°)	-9.34/-8.69	-10.36/-11.2	-8.45/-5.17	-3.98/-5.05	-5.73/-7.63	-11.74/-9.99	-7.65/-6.64	-7.28/-6.79	-7.79/-10.21	-11.77/-10.4	-9.61/-6.07	-5.13/-5.85	-6.66/-7.29	-7.09/-11.4	-8.27/-12.06	-11.47/-8.44	-8.9/-8.05	-7.22/-6.7	-5.32/-2.46	-2.14/-3.77	-3.96/-3.57	-4.4/-5.73	-7.22/-7.33	-7.43/-9.75
Θ(120°)	-9.8/-10.5	-10.38/-9.08	-6.95/-5.67	-4.46/-5.01	-5.23/-6.32	-9.78/-9.9	-5.75/-4.44	-4.84/-4.51	-5.43/-7.16	-8.97/-9.05	-7.58/-6.18	-5.15/-4.3	-4.49/-6.09	-7.39/-7.28	-8.86/-10.31	-8.78/-8.04	-8.37/-6.84	-7.9/-6.98	-5.69/-4.49	-3.24/-3.44	-3.1/-3.92	-4.19/-5.73	-5.8/-5.3	-5.52/-7.9
Θ(127.5°)	-9.83/-10.67	-11.12/-8.45	-7.2/-8.42	-6.82/-5.52	-5.93/-6.04	-7.84/-8.02	-6.3/-5.31	-5.23/-5.26	-6.06/-7.53	-7.87/-7.2	-5.89/-5.41	-5.4/-8.2	-5.54/-7.71	-9/-8.08	-7.75/-6.67	-8.07/-8.07	-8.06/-6.79	-5.62/-5.37	-5.39/-5.74	-6.02/-4.58	-4.01/-4.08	-4.38/-4.89	-4.97/-5.68	
Θ(135°)	-12.14/-11.81	-11.91/-12.06	-12.52/-6.69	-7.78/-6.83	-6.23/-5.97	-6.49/-8.37	-8.67/-6.16	-7.75/-7.48	-6.39/-5.18	-4.16/-3.61	-3.04/-3	-4.07/-6.01	-7.58/-8.48	-8.58/-6.93	-6.1/-5.66	-4.94/-5.1	-6.46/-6.97	-6.99/-5.99	-4.99/-4.76	-6.01/-7.97	-8.02/-6.16	-5.51/-5.34	-5.69/-6.58	-8.47/-11.6
Θ(142.5°)	-10.2/-9.16	-9.6/-8.86	-9.16/-8.1	-6.81/-6.22	-5.57/-5.83	-7.13/-10.31	-10.52/-8.7	-7.31/-5.79	-4.37/-3.36	-3.17/-3.36	-4.08/-5.84	-7.23/-7.6	-7.69/-7.47	-7.45/-7.7	-5.42/-3.85	-3.01/-3.7	-5.22/-7.12	-7.92/-7.45	-6.05/-6.07	-7.69/-8.23	-7.78/-5.69	-4.66/-4.73	-5.61/-7.36	-10.04/-11.87
Θ(150°)	-8.59/-9.39	-7.09/-6.35	-6.6/-6.21	-6.43/-6.34	-5.59/-6.05	-8.2/-11.25	-10.39/-8.06	-6.27/-4.57	-4.14/-4.06	-4.16/-4.57	-4.9/-5.68	-5.97/-6.66	-7.7/-8.3	-8.51/-7.64	-5.73/-3.53	-2.51/-2.7	-3.68/-5.18	-6.57/-6.43	-7.7/-5.95	-7.08/-8.28	-8.68/-7.76	-6.82/-6.88	-7.45/-8.46	-9.53/-9.87
Θ(157.5°)	-10.78/-10.26	-9.79/-9.35	-8.99/-8.59	-8.16/-6.96	-6.44/-7.22	-9.16/-9.98	-7.8/-6.33	-5.73/-5.02	-4.42/-4.1	-4.34/-5.06	-6.23/-7.17	-7.18/-7.11	-6.97/-6.99	-6.75/-6.34	-5.48/-4.03	-3.23/-3.11	-3.52/-4.4	-5.42/-5.41	-4.96/-4.91	-5.36/-6.72	-8.3/-10.1	-11.23/-11.03	-10.18/-9.94	-9.35/-9.83
Θ(165°)	-9.47/-9.87	-10.33/-11.49	-12.11/-12.36	-12.07/-10.21	-9.25/-9.88	-8.89/-8.33	-7.25/-4.84	-6.62/-6.5	-5.96/-5.3	-5.52/-6.12	-7.11/-9.62	-6.38/-6.19	-6.55/-6.5	-7.06/-7.2	-7.27/-6.65	-5.8/-5.11	-4.62/-3.43	-4.13/-4.12	-3.9/-3.83	-4.38/-5.74	-6.61/-7.8	-8.72/-8.95	-8.91/-8.46	-8.23/-8.56
Θ(172.5°)	-9.09/-9.36	-10.02/-10.1	-10.06/-9.88	-9.85/-9.63	-9.82/-10.12	-9.24/-7.89	-6.96/-6.85	-6.89/-6.99	-6.78/-6.44	-6.61/-7.2	-7.53/-6.61	-6.01/-5.58	-6.92/-6.48	-7.41/-7.54	-7.45/-7.15	-6.6/-6.4	-3.75/-3.21	-3.13/-4.9	-4.18/-4.8	-5.46/-6.25	-6.91/-7.31	-7.74/-8.27	-8.28/-8.06	
Θ(180°)	-8.07/-8.82	-8.64/-8.52	-8.17/-7.71	-7.83/-8.17	-8.35/-8.35	-8.09/-6.63	-5.92/-5.9	-6.38/-6.22	-6.01/-6.36	-7.24/-7.98	-8.34/-7.62	-6.74/-6.63	-7.16/-7.91	-8.71/-8.28	-7.62/-7.13	-6.75/-6.64	-6.17/-5.62	-4.92/-4.43	-4.41/-4.78	-4.87/-4.84	-4.98/-5.32	-5.73/-5.97	-6.21/-6.34	-6.64/-7.28
Freq(Hz)	2.45GPol.	ThetaH-	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°)
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°)	-6.74/-6.9	-6.36/-5.88	-5.7/-5.7	-6.02/-6.56	-6.73/-6.59	-6.89/-7.56	-8.59/-8.88	-8.54/-8.44	-9.27/-10	-9.26/-8.12	-7.29/-7.05	-7.15/-7.1	-6.35/-5.76	-5.5/-5.96	-6.14/-6.04	-5.73/-5.69	-6.21/-6.68	-7.4/-8.2	-8.3/-8.85	-9.3/-9.93	-9.24/-8.69	-8.36/-8.74	-8.61/-8.32	-7.41/-6.91
Θ(7.5°)	-5.47/-5.26	-5.88/-6.11	-6.06/-5.9	-6.33/-6.71	-6.84/-6.78	-6.8/-7.35	-8.52/-9.23	-9.59/-10.63	-11.34/-11.22	-10.29/-9.45	-8.39/-7.92	-7.71/-7.34	-6.51/-5.87	-5.58/-5.32	-5.14/-4.81	-4.57/-4.51	-4.65/-5.19	-6.26/-6.75	-6.59/-6.84	-7.13/-7.61	-7.77/-7.09	-6.43/-6.14	-6.75/-7.42	-6.85/-6.18
Θ(15°)	-4.02/-4.03	-4.37/-5.04	-5.4/-5.58	-5.47/-5.32	-4.97/-4.91	-4.75/-4.93	-5.43/-5.99	-6.69/-7.67	-8.25/-8.16	-8.19/-8.76	-7.67/-7.25	-7.77/-6.68	-5.96/-5.24	-4.63/-4.29	-3.93/-3.72	-3.85/-4.51	-5.78/-6.95	-6.63/-6.49	-6.62/-6.84	-6.27/-5.79	-5.49/-5.16	-5.03/-5.05	-5.08/-5.11	
Θ(22.5°)	-1.54/-1.4	-1.68/-2.54	-3.11/-4.16	-5.47/-6.1	-5.11/-3.79	-2.94/-2.8	-3.32/-3.68	-4.35/-3.93	-2.32/-2.13	-2.44/-3.55	-4.66/-4.89	-4.85/-4.01	-3.53/-3.39	-3.28/-3.33	-3.43/-3.32	-4.62/-4.54	-4.88/-3.62	-4.98/-3.62	-3.13/-3.3	-1.81/-3.33	-3.32/-3.28	-3.15/-3.16		
Θ(30°)	-0.94/-0.42	-0.45/-0.98	-1.82/-3.05	-4.66/-5.85	-4.52/-2.29	-1.13/-1.06	-1.8/-2.38	-2.01/-1.12	-0.64/-0.47	-0.49/-0.47	-0.24/-0.21	-0.97/-2.07	-2.75/-3.04	-3.08/-1.97	-1.41/-1.31	-1.3/-1.17	-1.27/-1.37	-1.23/-0.92	-0.53/-0.38	-0.43/-0.53	-0.43/-0.45			



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(15°)	-9.8/-9.14	-8.98/-7.6	-8.29/-9.09	-10.72/-11.9	-10.7/-9.79	-9.11/-9.33	-9.89/-10.52	-11.74/-12.9	-11.56/-12.23	-12.44/-12.51	-12.12/-11.16	-11.54/-11.36	-10.82/-10.26	-10.65/-11.13	-11.45/-10.99	-11.04/-12.48	-12.68/-12.63	-10.55/-8.22	-7.93/-6.51	-9.92/-10.95	-12.1/-11.39	-12.24/-12.26	-12.62/-11.57	-11.28/-10.5
Θ(22.5°)	-11.19/-10.12	-8.73/-9.11	-8.78/-8.66	-8.53/-8.32	-8.43/-9.8	-11.8/-11.08	-11.99/-12.32	-12.52/-10.2	-8.67/-11.64	-12.15/-12.98	-11.95/-11.54	-12.54/-10.05	-11.18/-12.35	-12.13/-11.83	-10.58/-9.6	-10.65/-9.74	-9.68/-11.26	-11.91/-9.22	-7.97/-9.45	-10.97/-12	-11.82/-10.88	-9.79/-10.89	-12.24/-12.71	-12.15/-11.38
Θ(30°)	-11.97/-12.32	-12.75/-11.51	-9.25/-10.6	-12.26/-9.62	-8.97/-11.14	-12.58/-11.04	-11.34/-11.63	-10.95/-10.24	-9.85/-10.78	-11.92/-11.63	-10.49/-11.74	-12.24/-11.62	-12.47/-11.94	-12.19/-10.57	-9.41/-10.67	-10.75/-11.39	-11.62/-12.25	-12.1/-11.35	-10.36/-12.49	-12.54/-11.11	-11.38/-9.07	-11.04/-8.45	-11.23/-10.51	-11.09/-11.1
Θ(37.5°)	-12.46/-12.26	-12.02/-12.14	-11.4/-11.23	-12.78/-10.34	-10.63/-11.22	-11.47/-11.52	-11.97/-12.26	-12.23/-11.7	-10.85/-12.1	-12.59/-11.84	-12/-12.62	-12.71/-11.2	-11.91/-12.31	-12.66/-12.15	-11.53/-12.22	-11.23/-12.62	-10.93/-10.81	-11.93/-11.74	-12.24/-12.4	-11.68/-10.76	-11.96/-12.09	-12.22/-12.01	-12.21/-11.95	-10.54/-11.41
Θ(45°)	-12.17/-11.47	-12.14/-12.39	-12.65/-11.61	-11.96/-8.82	-10.67/-10.5	-11.5/-11.3	-8.89/-10.11	-11.1/-10.3	-9.42/-11.68	-12.25/-12.79	-12.15/-11.38	-10.64/-10.23	-11.46/-10.62	-11.8/-11.87	-10.37/-10.18	-11.58/-11.73	-11.91/-10.57	-10.81/-11.65	-9.65/-8.6	-10.38/-11.01	-10.8/-11.1	-10.2/-10.52	-11.17/-11.41	-9.83/-11.44
Θ(52.5°)	-11.27/-10.53	-9.16/-12.56	-12.42/-12.38	-11.19/-11.25	-10.79/-7.97	-9.63/-11.16	-10.08/-9.06	-9.36/-11.24	-9.14/-7.38	-9.92/-10.31	-9.64/-11.43	-11.42/-11.39	-11.22/-10.95	-9.56/-9.67	-9.89/-8.89	-8.82/-10.89	-10.13/-10.92	-10.49/-10.39	-11.62/-11.84	-11.87/-12.05	-11.38/-9.07	-11.04/-8.45	-11.23/-10.51	-11.09/-11.13
Θ(60°)	-10.93/-9.76	-9.99/-11.94	-12.8/-10.86	-12.09/-11.27	-11.23/-8.23	-10.3/-10.42	-8.26/-9.93	-8.92/-9.9	-10.35/-10.2	-10.84/-8.99	-9.89/-11.22	-11.55/-11.75	-11.48/-10.49	-10.48/-10.47	-9.38/-8.71	-6.96/-9.24	-10.36/-13.17	-12.58/-10.14	-9.77/-9.08	-10.51/-9.41	-9.65/-9.33	-9.99/-9.15	-10.7/-11.09	-12.34/-12.55
Θ(67.5°)	-10.7/-10.76	-8.33/-9.42	-9.79/-8.73	-9.95/-9.21	-11.02/-11.23	-11.16/-11.1	-9.27/-9.31	-9.79/-10.6	-10.85/-10.12	-10.37/-11.73	-12.48/-12.69	-10.79/-13.4	-12.2/-11.01	-10.59/-12.38	-11.23/-10.09	-10.26/-10.86	-10.16/-11.25	-11.52/-9.88	-10.51/-11.61	-12.37/-12.12	-11.54/-10.51	-10.81/-9.03	-9.66/-10.21	-11.44/-12.62
Θ(75°)	-11.96/-10.47	-7.56/-9.2	-9.21/-9	-8.61/-9.36	-9.4/-10.82	-9.66/-9.7	-12.27/-10.91	-8.73/-11.4	-8.09/-9.79	-9.48/-11.96	-12.44/-11.41	-11.99/-11.06	-11.02/-12.11	-11.99/-12.63	-11.12/-9.66	-10.12/-10.04	-11.47/-12.43	-11.79/-10.64	-11.75/-11.38	-10.07/-12.06	-11.7/-11.48	-11.36/-12.26	-11.06/-11.22	-11.26/-11.75
Θ(82.5°)	-11.43/-10.65	-8.47/-11.49	-11.38/-10.97	-10.76/-12	-11.39/-10.59	-10.54/-10	-10.59/-7.37	-7.96/-9.33	-10.13/-8.04	-11.03/-10.78	-8.44/-11.72	-11.35/-10.59	-11.78/-11.81	-9.6/-8.97	-10.58/-9.36	-12.13/-9.52	-10.7/-10.22	-11.76/-8.95	-10.23/-9.9	-8.16/-9.3	-8.71/-10.37	-11.71/-9.69	-10.02/-11.43	-8.26/-11.19
Θ(90°)	-11.2/-10.12	-8.47/-9.87	-12.17/-8.52	-9.04/-8.7	-8.23/-6.97	-12.12/-9.28	-11.37/-9.62	-9.76/-11.32	-11.51/-9.82	-9.83/-10.35	-9.76/-10.42	-9.33/-10.67	-11.4/-12.66	-10.64/-10.7	-9.59/-9.21	-10.22/-11.18	-11.73/-11.02	-8.37/-8.25	-10.05/-8.97	-8.36/-10.01	-8.76/-12.12	-7.17/-8.7	-8.15/-10.62	-8.97/-8.55
Θ(97.5°)	-9.3/-10.64	-10.11/-11.09	-8.11/-7.77	-9.99/-7.76	-10.12/-8.61	-10.77/-11.05	-10.27/-8.91	-8.41/-11.49	-10.95/-9.52	-10.32/-9.36	-8.45/-8.91	-9.24/-11	-10.79/-12.51	-12/-11.52	-9.87/-10.43	-11.14/-9.05	-10.44/-10.5	-12.57/-11.47	-9.87/-10.6	-12.36/-11.08	-9.93/-11.39	-8.95/-7.34	-10.84/-10.63	-10.49/-8.67
Θ(105°)	-11.8/-11.67	-11.78/-12.25	-11.85/-9.93	-10.54/-10.36	-8.88/-10.93	-12/-9.92	-11.03/-9.19	-7.89/-11.5	-11.06/-11	-10.59/-10.48	-8.79/-9.29	-8.64/-9.84	-10.54/-11.8	-10.45/-12.16	-9.67/-8.49	-12.3/-10.28	-11.52/-9.5	-11.94/-10.8	-9.81/-9.16	-10.65/-10.99	-10.89/-10.85	-10.43/-11.36	-8.98/-9.94	-9.44/-8.73
Θ(122.5°)	-11.68/-11.2	-11.96/-10.43	-10.96/-8.15	-10.57/-8.11	-8.53/-8.58	-10.62/-11.1	-11.67/-7.82	-7.54/-10.65	-11.05/-10.21	-9.36/-8.18	-8.8/-8.9	-9.74/-11.79	-11.37/-12.15	-11.54/-9.86	-8.88/-9.55	-11.26/-10.02	-8.64/-10.48	-11.48/-10.07	-11.05/-6.04	-8.06/-7.41	-9.19/-11.95	-12.05/-11.72	-11.46/-10.47	-9.21/-7.42
Θ(130°)	-11.71/-11.33	-11.14/-8.91	-7.37/-8.79	-9.04/-7.92	-9.58/-8.06	-8.03/-11.57	-11.56/-10.35	-9.11/-11.49	-10.08/-10.02	-8.81/-7.81	-9.05/-7.22	-7.33/-9.44	-10.05/-12.34	-11.29/-10.83	-9.63/-10.9	-9.93/-9.79	-12.01/-9.29	-10.47/-11.5	-8.98/-6.92	-6.39/-9.49	-11.26/-12	-12.17/-8.1	-8.16/-9.29	
Θ(127.5°)	-10.49/-10.27	-12.36/-9.73	-9.75/-12.47	-8.35/-9.15	-9.01/-7.08	-7.51/-10.9	-11.27/-9.19	-11.13/-12.79	-9.28/-7.48	-8.46/-10.03	-9.85/-7.36	-7.92/-9.45	-12.71/-11.65	-9.41/-9.69	-11.3/-8.73	-9.99/-11.58	-11.4/-10.55	-11.15/-10.15	-8.77/-9.67	-10.42/-9.79	-6.42/-8.24	-7.37/-11.19	-11.48/-10.84	-8.29/-8.34
Θ(135°)	-11.21/-10.12	-10.81/-12.14	-11.47/-12.26	-10.39/-10.17	-10.75/-9.76	-9.05/-12.47	-12.43/-9.63	-9.14/-9.54	-7.92/-6.89	-6.55/-8.24	-7.98/-7.49	-7.03/-8.66	-10.56/-9.9	-11.49/-10.86	-6.88/-5.83	-9.59/-10.58	-10.16/-8.78	-11.53/-9.29	-5.76/-6.98	-10.64/-10.55	-9.81/-11.2	-11.84/-10.31	-8.8/-10.4	-10.79/-11.57
Θ(142.5°)	-11.17/-10.62	-9.42/-11.86	-11.3/-11.14	-8.55/-9.32	-11.47/-9.44	-10.49/-11.99	-10.28/-8.18	-9.12/-9.91	-9.12/-9.68	-8.95/-8.59	-7.44/-7.27	-8.76/-11.1	-10.2/-10.18	-8.85/-8.11	-7.48/-8.02	-9.65/-11.64	-12.27/-9.61	-10.43/-9.16	-7.34/-7.88	-8.94/-9.48	-9.09/-8.43	-8.75/-10.52	-10.59/-9.63	-10.64/-10.21
Θ(150°)	-9.81/-9.79	-8.8/-9.69	-10.64/-9.28	-8.5/-8.61	-10.14/-10.43	-12.09/-11.91	-11.55/-10.33	-9.79/-9.74	-10.6/-11.45	-8.46/-8.57	-9.36/-10.61	-9.47/-8.7	-9.43/-11.71	-10.69/-9.28	-7.89/-8.08	-9.19/-10.74	-11.19/-11.52	-12.3/-12.14	-8.88/-9.24	-10.55/-9.18	-9.09/-9.02	-8.42/-9	-9.77/-9.92	-10.95/-10.5
Θ(157.5°)	-8.79/-9.44	-9.07/-10.37	-12.54/-11.67	-10.84/-10.3	-10.11/-9.74	-10.75/-10.54	-10.49/-5.84	-9.34/-8.05	-9.12/-11.68	-10.55/-1.59	-5.86/-6.63	-9.27/-11.28	-10.75/-8.37	-7.42/-6.92	-8.74/-10.11	-10.14/-10.69	-11.54/-10.82	-9.86/-11.07	-10.37/-8.58	-8.21/-8.27	-7.52/-6.95	-7.03/-6.52	-7.53/-8.46	-8.2/-8.81
Θ(165°)	-10.71/-9.48	-9.89/-10.04	-9.09/-7.73	-7.42/-8.53	-9.52/-10.06	-10.55/-10.68	-10.38/-10.89	-10.89/-9.97	-9.79/-10.88	-9.92/-7.85	-8.53/-9.42	-9.64/-10.41	-8.72/-9.46	-11.21/-11.73	-11.65/-10.28	-9.59/-10.04	-11.51/-11.23	-10.64/-10.5	-7.81/-7.96	-7.69/-7.8	-7.82/-7.32	-7.11/-7.72	-8.85/-10.02	
Θ(172.5°)	-11.4/-11.93	-11.39/-9.57	-8.3/-8.21	-7.21/-7.29	-7.61/-7.74	-7.84/-7.94	-7.64/-7.04	-7.21/-7.6	-6.98/-6.98	-6.85/-6.05	-5.76/-6.28	-6.42/-7.41	-8.26/-8.66	-9.78/-9.07	-8.1/-7.79	-7.74/-8.48	-8.85/-8.77	-8.13/-6.93	-7.09/-7.02	-7.15/-8.01	-8.79/-9.12	-9.01/-9.14	-9.55/-10.06	-9.37/-10.21
Θ(180°)	-11.25/-11.51	-11.61/-11.32	-10.62/-10.94	-10.55/-11.25	-11.95/-11.43	-10.96/-9.7	-8.22/-7.27	-6.07/-6.41	-6.81/-7.02	-7.22/-7.4	-7.28/-6.66	-6.81/-6.5	-6.73/-7.52	-8.53/-8.76	-9.69/-10.43	-10.08/-10.64	-10.91/-10.59	-10.8/-9.9	-8.45/-8.28	-7.32/-8.03	-7.71/-7.56	-9.42/-9.67	-10.53/-10.04	-10.62/-11.13
Freq[Hz]	5.3GPol.	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°)	-0.04/-9.64	-0.08/-8.99	-9.91/-9.99	-9.81/-10.6	-10.78/-10.57	-10.88/-9.91	-9.85/-9.49	-9.38/-9.71	-9.71/-8.77	-9.55/-10.08	-10.03/-10.91	-10.03/-9.66	-10.08/-9.37	-8.95/-9.71	-9.57/-9.87	-10.42/-9.26	-9.64/-9.77	-10.42/-10.76	-8.4/-9.09	-9.84/-9.15	-10.31/-9.67	-9.37/-9.36	-9.86/-9.95	-9.34/-9.74
Θ(7.5°)	-9.9/-8.9	-8.74/-9.77	-9.96/-9.48	-9.19/-9.73	-10.47/-10.44	-10.02/-10.13	-10.74/-10.36	-9.01/-9.56	-9.5/-8.67	-9.35/-9.36	-8.57/-8.68	-8.7/-8.27	-8.83/-8.8	-8.17/-9.54	-8.97/-7.83	-10.88/-9.99	-8.52/-8.31	-9.01/-9.68	-9.87/-10.34	-9.87/-10.32	-10.07/-11.65	-10.74/-11.33	-10.82/-9.34	
Θ(15°)	-6.8/-6.36	-6.17/-7.18	-9.14/-9.62	-10.18/-11.38	-10.52/-9.45	-9.74/-9.15	-8.21/-7.3	-7.01/-8.46	-10.37/-9.74	-9.8/-8.35	-8.56/-8.5	-8.64/-7.53	-7.79/-7.9	-7.57/-7.31	-6.67/-6.41	-7.16/-8.28	-7.51/-6.26	-5.56/-6.05	-6.44/-7.72	-7.69/-6.59	-6.58/-7.62	-8.03/-7.55	-7.29/-6.28	-6.16/-6.85
Θ(22.5°)	-6.61/-6.51	-6.7/-5.17	-5.39/-6.4	-9.39/-9.65	-5.84/-6.42	-5.91/-6.72	-6.62/-7.13	-8.57/-5.75	-6.32/-6.54	-6.11/-5.97	-7.75/-6.51	-4.96/-7.43	-6.03/-7.36	-6.8/-7.17	-8.46/-7.86	-6.62/-6.04	-4.07/-3.48	-3.97/-4.78	-4.24/-2.43	-5.68/-6.62	-6.21/-5.25	-5.66/-6.7	-7.83/-6.74	
Θ(30°)	-3.06/-3.34	-3.58/-4.19	-5.55/-5.26	-6.61/-6.47	-5.26/-6.14	-7.98/-5.62	-4.35/-5.62	-5.91/-7.44	-8.55/-6.68	-4.71/-4.29	-3.73/-2.36	-3.4/-3.43	-2.56/-3.38	-3.84/-2.96	-2.42/-2.66	-2.37/-3.01	-2.9/-2.59	-2.5/-2.34	-1.51/-1.81	-3/-5.34	-5.14/-7.1	-5.27/-5.62	-6.69/-5.26	-3.24/-3.48
Θ(37.5°)	-1.16/-2.79	-2.39/-2.44	-2.08/-4.41	-5.11/-2.15	-2.76/-4.74	-2.84/-2.8	-3.12/-3.46	-3.33/-3.81	-2.2/-3.57	-3.03/-3.72	-2.92/-2.62	-3.62/-3.4	-3.8/-2.41	-3.35/-2.31	-0.23/-1.53	-0.09/-0.85	-3.42/-3.77	-3.45/-3.26	-3.28/-1.53	-1.83/-0.4	-1.03/-1.13	-1.53/-2.69	-3.32/-2.8	
Θ(45°)	0.110/-13	0.531/-37	0.7/-0.08	-0.47/-0.72	-1.49/-0.95	-0.12/-0.25	-0.69/-2.36	-1.4/-1.91	-1.02/-1.86	-0.43/-1.16	-3.22/-1.93	-1.58/-0.63	-0.3/-0.94	-1.75/-2.61	-1.6/-1.42	-1.36/-0.55	-1.2/-0.78	-0.41/-0.86	-0.670/-0.2	-0.01/-0.95	-1.52/-0.78	-0.850/-55	0.980/-11	-0.92/-0.6
Θ(52.5°)	1.971/-65	1.240/-89	1.990/-62	1.420/-67	0.8/-4	1.251/-82	1.86/-88	0.771/-97	2.030/-53	-1.04/-189	0.432/-95	2.051/-31	2.111/-54	1.963/-26	2.791/-17	1.352/-35	2.682/-9	2.451/-56	0.921/-82	4.071/-97	1.491/-	-0.130/-89	1.41/-28	1.231/-
Θ(60°)	1.190/-37	1.310/-34	0.310/-59	0.221/-16	2.02/-53	1.321/-27	1.441/-18	1.56/-0.09	0.260/-16	1.141/-73	0.872/-66	2.413/-59	3.713/-93	2.483/-04	3.0231/-	4.222/-57	3.152/-73	2.543/-73	3.632/-3	2.671/-4	1.963/-15	2.512/-25	1.03/-0.92	1.02



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(67.5°)	-12.17/-10.88	-8.5/-11.91	-9.87/-11.76	-8.97/-11.35	-12.74/-12.58	-9.07/-10.31	-9.59/-9.09	-11.79/-11.12	-9.32/-7.2	-7.83/-7.07	-9.26/-9.14	-7.07/-8.69	-9.53/-12.29	-8.48/-9.57	-8.3/-8.45	-10.68/-8.86	-7.77/-11.18	-11.89/-9.81	-9.13/-6.52	-9.6/-8.6	-9.54/-9.88	-9.47/-7.67	-10.96/-10.15	-12.1/-10.25
Θ(75°)	-10.78/-10.81	-11/-10.21	-11.61/-11.8	-7.5/-9.35	-8.93/-7.56	-8.55/-8.2	-7.32/-8.52	-10.14/-10.28	-8.85/-8.76	-8.23/-8	-7.99/-9.04	-9.22/-10.44	-12.07/-11.92	-9.84/-11.49	-8.9/-10.38	-11.69/-11.96	-11.24/-9.49	-10.39/-8.78	-9.94/-7.95	-8.34/-9.26	-9.47/-7.42	-8.61/-10.97	-8.33/-8.28	-10.52/-9.35
Θ(82.5°)	-10.69/-10.78	-12.46/-9.96	-8.8/-9.32	-7.56/-7.17	-8.87/-6.13	-7.45/-9.6	-8.5/-11.52	-8.76/-10.29	-8.96/-6.19	-7.67/-8.68	-6.3/-8.88	-9.82/-12.17	-10.96/-11.84	-7.62/-11.19	-8.55/-8.24	-11.39/-11.21	-9.99/-8.19	-11.71/-8.27	-8.13/-8.58	-8.05/-9.84	-11.32/-10.53	-7.86/-10.84	-8.5/-8.41	-10.24/-9.34
Θ(90°)	-6.95/-9.35	-8.57/-8.6	-8.11/-9.68	-8.33/-8.7	-8.61/-9.89	-7.72/-8.89	-6.24/-8.14	-6.48/-8.91	-8.66/-6.13	-6.26/-6.11	-5.7/-6.37	-10.22/-9.61	-11.95/-9.9	-7.79/-11.31	-9.09/-7.45	-8.28/-11.28	-9.76/-9.27	-11.24/-7.84	-8.64/-8.81	-8.69/-10.64	-9.19/-7.28	-11.63/-10.03	-9.8/-7.81	-7.14/-8.72
Θ(97.5°)	-10.41/-7.6	-10.19/-11.12	-9.09/-9.18	-8.73/-5.8	-6.65/-6.49	-5.18/-9.5	-8.72/-10.42	-6.88/-5.7	-7.11/-6.12	-7.87/-5.09	-4.55/-6.72	-10.62/-11.62	-9.02/-11.75	-9.79/-9.59	-6.89/-9.93	-8.79/-7.69	-10.17/-10.51	-9.92/-8.26	-10.07/-8.72	-11.95/-8.42	-10.78/-10.83	-7.97/-7.71	-6.96/-7.54	-8.64/-8.91
Θ(105°)	-10/-10.9	-11.85/-9.33	-8.93/-9.16	-7.5/-5.24	-7.96/-6.29	-7.01/-12.12	-10.06/-11.29	-5.7/-7.09	-7.99/-5.7	-7.61/-7.77	-3.63/-5.97	-10.17/-9.41	-9.19/-10.73	-10.18/-10.63	-12.6/-8.65	-10.74/-8.75	-10.37/-8.68	-10.83/-10.07	-11.42/-9.9	-9.17/-7.41	-9.2/-9.58	-7.84/-10.42	-9.77/-7.87	-7.26/-12.61
Θ(112.5°)	-8.62/-12.46	-9.21/-8.66	-9.48/-8.7	-6.26/-8.14	-5.81/-6.51	-7/-9.51	-8.11/-9.62	-6.84/-7.52	-7.68/-7.4	-9.83/-7.98	-5.88/-7.17	-8.46/-8.63	-12.01/-10.18	-8.97/-8.42	-7.79/-9.3	-6.78/-6.48	-9.12/-7.87	-9.85/-9.65	-11.45/-10.45	-7.55/-6.19	-7.86/-9.01	-10.58/-11.37	-9.71/-6.41	-6.77/-11.9
Θ(120°)	-10.92/-10.68	-9.19/-6.94	-10.14/-9.9	-7/-6.39	-5.44/-5.59	-7.13/-9.15	-9/-10.98	-8.99/-8.77	-8.66/-6.41	-7.95/-7.47	-8.42/-8.19	-8.28/-8.46	-10.37/-10.07	-12.72/-8.52	-9.96/-9.44	-6.66/-5.16	-7.09/-10.3	-8.58/-9.26	-10.83/-11.75	-6.95/-5.83	-5.83/-7.13	-7.17/-9.18	-8.67/-7.32	-8.54/-9.86
Θ(127.5°)	-9.8/-11.92	-7.69/-8.26	-6.86/-6.41	-8.35/-5.09	-5.32/-6.49	-6.12/-5.85	-8.57/-10.36	-6.59/-5.42	-8.99/-5.8	-4.86/-4.59	-7.35/-8.66	-6.5/-9.45	-11.63/-7.35	-10/-10.18	-6.78/-6.52	-5.28/-6.42	-7.52/-10.28	-9.05/-9.91	-8.66/-9.79	-8.26/-9.08	-8.18/-6.83	-6.29/-10.13	-9.41/-6.75	-8.82/-10.54
Θ(135°)	-10.36/-9.89	-12.38/-11.3	-7.83/-6.06	-8.07/-4.24	-2.05/-4.17	-7.54/-5.31	-7.14/-8.35	-7.77/-4.79	-6.24/-7.3	-3.47/-4.9	-7.96/-7.68	-7.46/-10.48	-8.42/-12.34	-9.5/-4.96	-5.42/-8.22	-6.2/-7.68	-6.22/-6.95	-10.93/-9	-6.65/-7.36	-11.74/-12.29	-9.82/-6.66	-5.75/-5.09	-6.24/-9.59	-10.58/-12.38
Θ(142.5°)	-11.99/-12.44	-11.78/-11.4	-10.02/-9.42	-11.61/-7.12	-3.99/-4.09	-4.23/-5.06	-8.92/-12.42	-10.52/-7.35	-6.04/-9.46	-7.69/-6.09	-5.59/-5.89	-8.63/-9.29	-10.3/-10.62	-7.78/-7.09	-7.3/-5.74	-3.52/-5.11	-8.86/-9.91	-9.85/-11.31	-9.24/-7.18	-7.37/-6.81	-7.41/-7.13	-8.02/-6.69	-6.7/-9.31	-11.63/-11.74
Θ(150°)	-11.79/-12.2	-12.04/-11.42	-10.34/-8.85	-7.99/-7.67	-7.62/-7.25	-7.97/-8	-10.17/-12.27	-12.44/-9.96	-6.93/-7.98	-8.94/-7.68	-7.82/-11.03	-10.78/-7.91	-7.63/-8.5	-9.75/-8.08	-7.15/-7.11	-8.99/-11.67	-11.12/-10.03	-10.56/-11	-9.9/-7.64	-5.75/-4.08	-5.09/-6.24	-7.21/-8.48	-10.05/-10.54	
Θ(157.5°)	-9.03/-10.1	-10.31/-9.63	-8.91/-8.21	-7.22/-6.2	-5.97/-5.69	-6.85/-8.03	-10.66/-11.17	-11.32/-11.75	-9.25/-7.96	-8.51/-9.72	-8.99/-7.78	-8.37/-9.23	-10.33/-8.69	-8.13/-7.13	-6.66/-6.31	-6.12/-7.82	-9.22/-10.99	-9.72/-7.82	-8.04/-8.35	-7.09/-6.19	-4.89/-4.13	-4.24/-6.14	-7.7/-9.61	-9.76/-9.38
Θ(165°)	-6.59/-5.62	-6.22/-6.1	-5.84/-6.28	-7.43/-8.43	-7.2/-6.99	-8.65/-9.27	-10.6/-12.32	-11.9/-12.63	-12.14/-11.02	-9.19/-5.46	-3.61/-4.12	-4.87/-6.23	-6.76/-7.51	-9.32/-9.43	-9.22/-9.45	-8.15/-8.11	-7.36/-7.44	-7.6/-8.58	-10.1/-9.49	-7.6/-6.03	-4.34/-3.38	-4.2/-4.59	-6.11/-6.31	-7.12/-6.54
Θ(172.5°)	-6.74/-6.24	-6.26/-6.61	-6.83/-8.02	-8.62/-7.84	-8.15/-7.84	-7.33/-7.83	-8.84/-10.02	-11.15/-10.37	-10.92/-9.3	-9.1/-7.16	-6.12/-5.37	-5.95/-7.28	-8.06/-9.64	-10.52/-12.27	-11.89/-11.05	-10.81/-9.61	-9.18/-8.89	-8.5/-8.66	-8.95/-7.66	-6.9/-5.98	-4.86/-5.06	-4.25/-4.42	-4.6/-5.69	-6.65/-6.78
Θ(180°)	-5.34/-5.61	-6.18/-6.34	-6.57/-6.01	-5.56/-6.09	-6.36/-5.74	-6.1/-7.41	-6.89/-6.66	-6.23/-5.48	-4.43/-4.57	-4.17/-4.56	-4.74/-4.82	-6.43/-6.35	-8/-9.76	-8.66/-8.54	-7.83/-7.1	-6.64/-6.09	-5.75/-6.58	-6.3/-6.13	-6.79/-6.37	-6.26/-6.02	-5.88/-5.6	-5.31/-4.96	-4.57/-4.57	-4.64/-5.3
Freq(Hz)	5.785GHz	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°)	-10.78/-11.44	-11.31/-11.73	-11.55/-11.64	-11.91/-12.18	-11.81/-12.04	-12.16/-11.91	-12.47/-12.42	-12.21/-12.6	-12.21/-11.79	-11.22/-10.68	-11.03/-11.42	-12.15/-11.88	-11.15/-10.32	-9.86/-10.53	-11.36/-11.2	-11.6/-11.09	-11.74/-11.84	-12.25/-12.18	-12.07/-12.07	-12.04/-12.69	-11.86/-12.92	-11.89/-12.21	-12.11/-10.45	-11.49/-12.04
Θ(7.5°)	-8.67/-8.11	-8.66/-8.75	-8.6/-9.53	-10.12/-10.48	-10.13/-9.15	-8.77/-10.41	-9.57/-9.38	-10.35/-11.01	-12.28/-11.98	-13.11/-12.2	-11.93/-10.29	-10.23/-9.5	-10.6/-10.27	-10.64/-11.11	-11.05/-10.95	-9.85/-10.46	-11.93/-11.16	-11.34/-10.29	-10.52/-10.99	-10.31/-10.05	-9.09/-9.36	-8.9/-9.23	-9.68/-8.99	-9.07/-8.7
Θ(15°)	-8.54/-5.97	-4.9/-5.11	-6/-7.95	-8.86/-7.63	-7.5/-8.1	-7.37/-7.25	-7.34/-7.52	-9.02/-9.3	-9.91/-8.84	-7.39/-6.5	-6.08/-6.32	-6.53/-6.49	-6.85/-7.76	-7.67/-6.24	-5.71/-5.23	-3.99/-4.93	-5.2/-5.5	-7.01/-7.46	-7.39/-8.33	-8.64/-9.88	-9.02/-9.24	-9.35/-8.05	-7.69/-7.52	-7.46/-8.68
Θ(22.5°)	-4.02/-4.95	-2.72/-1.72	-1.73/-2.99	-4.69/-4.98	-3.11/-2.5	-2.2/-2.62	-3.95/-4.32	-2.84/-2.19	-2.93/-3.68	-2.8/-2.22	-2.54/-3.63	-4.63/-5.27	-5.4/-6.01	-3.18/-2.03	-3.05/-4.66	-5.77/-5.29	-5.09/-5.96	-5.71/-4.53	-3.64/-3.61	-3.73/-4.03	-2.85/-2.85	-3.53/-4.26	-3.3/-2.82	-2.9/-2.46
Θ(30°)	-0.15/-1.66	-4.66/-2.77	-0.13/-1.95	-2.3/-1.31	-0.12/0.43	-0.75/-0.97	-0.4/-0.03	-0.59/-0.73	-0.37/-0.37	-0.61/-1.03	-2.07/-0.92	-0.19/0.06	-1.35/-1.83	-0.81/-2.14	-3.04/-2.55	-1.12/0.65	0.48/-1.17	-1.37/-0.54	0.04/-0.04	-0/0.85	0.2/-0.63	-1.44/-2.94	-1.56/-1.93	-0.52/-0.73
Θ(37.5°)	-0.06/0.06	0.84/0.04	-1.13/-0.98	-1.87/0.28	1.49/1.09	1.27/1.9	1/-0.15	-0.78/-0.33	0.03/-0.1	1.28/1.46	0.97/2.27	2.14/3.4	3.39/2.06	0.54/2.69	3.29/1.89	1.27/1.89	2.22/1.1	2.25/1.81	1.12/0.63	0.95/1.93	1.33/1.55	0.74/1.18	1.35/0.26	-0.07/-0.67
Θ(45°)	0.53/-0.11	-1.2/0.43	-0.53/-0.22	-1.78/0.43	-0.93/-0.8	-1.21/-1.91	-1.81/-1.33	0.04/-0.75	0.89/1.41	1.16/1.46	1.21/0.75	0.81/-0.97	0.31/1.45	1.94/0.78	0.81/0.37	1.06/1.24	1.46/0.53	1.8/0.42	0.89/-0.79	0.59/0.77	0.35/0.54	0.55/-0.11	0.78/-0.11	-0.32/0.06
Θ(52.5°)	-0.14/-1.24	0.71/0.82	0.83/1.08	-0.57/0.93	0.63/0.01	-1.04/-2.18	0.12/-0.84	-0.89/0.03	0.62/1.84	2.18/1.76	0.11/0.24	1.21/1.4	-0.66/-0.83	1.27/0.17	1.32/1.85	0.85/1.55	-1.36/-0.21	0.05/0.05	1.78/1.91	1.65/1.12	0.45/0.71	1.12/1.07	0.73/1.73	0.57/1.45
Θ(60°)	3.3/0.98	1.14/1.4	1.94/3.67	0.99/3.67	3.7/2.11	3.33/2.42	3.41/4.62	3.27/2.81	4.07/3.78	3.02/3.72	2.67/0.8	3.67/2	4.62/4.93	5.64/3.63	3.96/3.75	3.57/4.47	3.83/4.33	5.18/4.44	3.93/3.86	4.76/3.84	3.42/3.28	2.86/2.85	2.32/2.26	2.35/3.38
Θ(67.5°)	3.45/4.15	3.18/3.42	3.33/3.89	2.544/7.1	2.834/4.5	3.38/3.58	4.34/0.6	4.52/4.1	4.51/4.37	3.72/3.64	3.845/5.2	4.464/9.7	4.143/3.8	2.992/2.9	2.47/1.95	1.73/2.88	2.32/1.74	3.19/3.7	3.24/2.27	3.37/3.68	4.49/3.85	3.72/2.59	2.1/2.47	3.25/3.76
Θ(75°)	3.21/3.02	4.3/3.43	4.53/4.5	3.31/5.52	2.22/3.39	3.04/3.94	2.21/4.64	3.6/2.61	2.48/1.61	3.93/3.4	4.42/3.39	3.53/1.89	3.68/3.67	5/2.8	2.52/3.29	3.07/1.91	2.16/2.89	3.03/3.42	3.46/1.69	1.61/2.94	2.47/3.06	3.13/2.07	3.48/2.2	1.64/3.21
Θ(82.5°)	4.15/4.93	4.95/3.46	4.76/4.79	4.93/4.63	5.39/3.16	3.92/3.16	3.61/4.22	4.07/2.83	3.78/4.29	3.92/3.17	4.2/4.77	4.99/3.7	5.08/3.57	3.44/2.68	3.49/3.12	2.93/3.8	2.95/4.76	4.33/3.46	3.69/2.98	2.79/3.01	3.58/2.06	2.88/4.08	4.57/4	4.78/3.48
Θ(90°)	2.89/4.6	3.33/3.97	4.64/4.78	4.47/3.84	3.83/3.95	3.36/5.55	4.28/5.58	5.61/3.74	4.66/4.77	4/4.59	3.6/3.68	2.62/1.29	3.3/3.59	3.18/1.67	2.21/3.69	1.45/3.5	1.92/3.52	2.58/1.82	3.97/3.33	2.19/3.23	3.68/2.63	3.51/3.66	2.19/2.7	4.54/4.48
Θ(97.5°)	4.4/1.9	3.13/2.35	3.41/2.28	1.92/2.52	1.38/2.85	1.57/3.77	3.46/4.85	3.81/2.79	2.8/3.16	3.35/2.08	3.98/0.54	3.71/3.6	3.99/1.53	-1.66/0.18	1.61/1.72	1.95/3.08	-1.38/1.89	0.02/2.16	2.58/0.4	0.21/2.04	1.21/0.33	-1.15/1.72	2.12/0.05	0.87/1.09
Θ(105°)	1.06/3.41	2.1/2.14	0.58/2.71	2.66/3.58	2.71/0.89	2.08/1.95	1.69/1.76	3.62/1.95	0.09/1.09	-1.26/1.58	2.09/-1.77	2.52/-0.1	-1.12/-1.35	-1.36/-2.26	-2.93/-2.04	-1.89/-4.44	-4.21/-4.27	-2.59/-0.17	-1.4/-1.53	-1.37/-3.22	-0.61/-0.86	-0.66/0.71	-0.17/1.95	2.4/1.89
Θ(112.5°)	-2.92/0.7	0.24/2.13	0.88/1.14	0.13/0.53	-1.14/-0.68	-0.05/0.78	0.94/-0.96	1.72/-0.92	-4.24/-0.54	-0.1/1.19	0.22/-1.47	-5.07/-4.91	-2.16/-0.82	-2.25/-1.92	-2.92/-6.81	-2.79/-3.77	-6.55/-4.03	-3.93/-3.75	-4.35/-4.17	-5.93/-2	-1.97/-2.2	-0.91/-2.12	-2.32/-1.51	-0.16/0.01
Θ(120°)	-0.63/0.35	-2.09/-2.75	-1.38/-0.83	-2.37/0.38	-0.88/-1.77	-2.18/-2.33	-2.52/-1.57	0.15/-5.03	0.51/2.36	1.34/0.8	-0.97/-3.52	-2.6/-2.69	-1.77/-3.14	-2.94/-3.8	-3.03/-3.69	-1.75/-3.63	-2.68/-2.31	-1.74/-1.54	-1.32/-6.37	-6.96/-4.39	-3.58/-2.07			

Gain Result

Freq(Hz)	2450P/Gal	Phi(Ant.)	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
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°)	-18.03/-19.05	-18.26/-18.5	-17.91/-18.05	-18.14/-18.7	-17.96/-17.96	-19.12/-18.66	-17.85/-18.53	-17.14/-18.45	-18.25/-18.85	-17.89/-18.93	-19.02/-17.44	-17.45/-17.6	-18.24/-18.01	-17.87/-17.84	-18.17/-18.9	-18.93/-18.64	-17.92/-18.18	-18.65/-18.34	-18.48/-18.84	-18.56/-18.45	-17.91/-19.26	-18.76/-17.84	-18.66/-18.27	-18.65/-19.07
Θ(7.5°)	-18.53/-17.26	-16.86/-17.7	-18.98/-19	-17.55/-18.27	-18.94/-18.7	-18.47/-17.4	-17.82/-18	-16.88/-17.7	-18.51/-18.12	-18.56/-19.41	-17.31/-18.39	-18.21/-18.44	-18.93/-19.2	-18.3/-18.94	-18.63/-18.25	-17.47/-18.96	-18.58/-15.86	-17.99/-17.72	-18.38/-17.62	-18.02/-18.97	-18.44/-18.84	-18.17/-17.7	-18.56/-18.62	-19.26/-19.23
Θ(15°)	-17.78/-17.81	-18.91/-18.32	-18.8/-19.05	-18.41/-17.86	-18.47/-17.69	-19.15/-17.24	-19.03/-16.14	-13.18/-13.21	-17.29/-17.7	-15.24/-14.86	-18.58/-18.49	-15.23/-15.07	-18.66/-17.8	-18.11/-18.16	-18.67/-14.24	-18.56/-18.69	-17.43/-19.28	-19/-18.46	-14.44/-13.03	-12.46/-14.07	-15.47/-15.86	-17.66/-18.53	-17.67/-17.41	-18.62/-19.1
Θ(22.5°)	-18.67/-19.28	-18.6/-17.94	-18.47/-19.42	-18.62/-17.6	-17.08/-14.42	-14.38/-15.71	-16.49/-15.15	-13.52/-13.83	-17.24/-17.27	-17.9/-18	-18.22/-18.31	-15.28/-14.58	-15.45/-18.83	-18.33/-17.76	-15.32/-14.7	-15.26/-18.08	-18.43/-17.63	-16.73/-17.84	-16.21/-13.77	-13.31/-14.94	-18.08/-18.88	-18.97/-19.29	-18.28/-18.04	-19.14/-17.67
Θ(30°)	-18.09/-17.27	-16.04/-14.51	-14.02/-15.34	-17.26/-18.79	-16.93/-13.52	-13.45/-15.73	-17.52/-19.01	-18.11/-18.46	-18.81/-17.81	-19.08/-18.54	-18.44/-15.05	-18.26/-17.69	-18.83/-18.29	-17.52/-17.44	-14.6/-14.49	-16.51/-17.99	-17.8/-15.96	-13.43/-13.71	-15.53/-16.93	-16.79/-17.47	-18.25/-19.02	-18.47/-17.26	-17.13/-18	-18.48/-18.28
Θ(37.5°)	-18.99/-19.48	-15.31/-12.89	-11.54/-11.73	-14.69/-18.19	-15.62/-13.12	-14.15/-14.74	-17.32/-16.59	-14.77/-13.91	-15.88/-19.83	-16.66/-14.52	-14.7/-16	-18.34/-17.77	-19/-18.78	-18.13/-19.24	-19.37/-18.79	-18.71/-17.83	-19.13/-17.34	-13.93/-12.31	-12.19/-13.27	-15.47/-17.86	-18.29/-19.01	-18.22/-18.05	-17.08/-17.15	-18.13/-18.27
Θ(45°)	-17.87/-19.06	-18.86/-14.18	-13.46/-11.05	-12.45/-14.03	-12.06/-11.18	-12.92/-13.75	-17.92/-15.13	-13.73/-12.97	-14.19/-16.95	-18.12/-16.4	-14.5/-14.02	-15.32/-18.9	-18.22/-19.05	-15.57/-17.54	-18.94/-18.9	-17.62/-18.82	-17.94/-18.34	-18.89/-19.27	-17.48/-14.24	-17.81/-17.94	-18.13/-18.79	-17.46/-18.38	-18.44/-18.66	-18.91/-18.92
Θ(52.5°)	-18.64/-19.04	-17.88/-16.27	-16.95/-13.22	-11.13/-12.54	-11.55/-19.19	-11.37/-18.42	-18.41/-16.43	-13.98/-15	-18.47/-17.5	-17.65/-18.87	-16.91/-15.04	-14.16/-15.26	-17.86/-12.65	-18.12/-17.99	-18.46/-17.98	-15.69/-17.71	-17.26/-17.4	-16.6/-14.6	-18.19/-16.68	-11.9/-18.06	-12.04/-14.27	-17.75/-19.63	-18.53/-17.45	
Θ(60°)	-18.99/-18.41	-18.12/-15.4	-14.95/-12.78	-11.34/-15.3	-13.24/-11.78	-12.03/-14.53	-17.94/-15.62	-13.24/-14.56	-17.87/-18.95	-18.6/-17.86	-17.09/-14.52	-12.92/-11.3	-11.44/-10.93	-12.37/-13.63	-18.98/-13.93	-12.93/-12.59	-12.82/-18.17	-18.01/-13.3	-12.67/-13.42	-15.48/-15.69	-12.38/-11.15	-11.59/-13.	-15.94/-16.4	-14.02/-15.35
Θ(67.5°)	-17.87/-16.75	-18.39/-17.78	-15.74/-12.48	-11.01/-13.35	-16.44/-12.98	-13.72/-19.04	-18.46/-13.3	-14.12/-16.34	-17.75/-18.47	-18.92/-17.12	-13.73/-11.65	-10.95/-10.52	-10.88/-12.43	-13.61/-18.62	-13.88/-10.66	-14.19/-12.83	-13.04/-18.58	-14.02/-10.51	-11.91/-12.49	-10.62/-10.04	-10.84/-12.44	-13.91/-14.95	-15.09/-16.24	-18.72/-18.06
Θ(75°)	-18.68/-16.25	-16.31/-15.03	-17.55/-13.72	-12.12/-16.67	-18.42/-17.86	-16.12/-18.11	-18.18/-16.52	-17.57/-17.82	-18.75/-18.93	-18.58/-18.51	-13.89/-19.11	-11.69/-12.62	-13.99/-13.69	-14.99/-16.31	-14.54/-13.76	-18.55/-11.9	-12.02/-10.88	-14.93/-12.67	-18.06/-16.7	-9.21/-7.61	-9.09/-12.62	-15.71/-16.71	-13.73/-11.69	-12.17/-16.31
Θ(82.5°)	-15.34/-13.76	-12.91/-15.62	-17.18/-14.32	-14/-19.22	-18.46/-18.22	-19.31/-17.65	-19.15/-11.1	-17.87/-17.97	-16.52/-17.6	-18.12/-16.91	-15.5/-15.88	-17.72/-18.85	-19.11/-18.22	-19.03/-17.41	-16.03/-12.97	-18.88/-15.99	-9.39/-10.07	-17.43/-19.7	-10.69/-9.35	-11.43/-14.38	-16.56/-18.51	-18.24/-16.49	-14.35/-15.39	
Θ(90°)	-14.54/-14.62	-11.81/-13.02	-14.63/-10.6	-10.39/-17.67	-17.47/-18.48	-18.72/-15.87	-13.71/-18.49	-19.31/-18.87	-18.26/-17.85	-17.97/-18.23	-17.57/-17.22	-17.28/-17.19	-18/-18.27	-18.97/-18.03	-19/-18.11	-16.57/-16.02	-18.99/-15.13	-9.29/-9.8	-17.11/-16.93	-10.58/-11.09	-14.99/-14.75	-15.83/-18.6	-17.88/-18.14	-16.58/-15.71
Θ(97.5°)	-14.76/-14.47	-12.01/-12.16	-12.79/-10.36	-10.21/-13.5	-14.23/-18.11	-17.91/-12.27	-11.47/-13.69	-19.02/-18.4	-18.21/-18.21	-18.04/-16.25	-17.43/-18.6	-16.82/-15.48	-14.59/-13.64	-16.35/-17.4	-16.65/-16.62	-18.04/-19.09	-18.44/-16.58	-10.47/-10.46	-17.55/-18.96	-10.39/-11.02	-14.38/-12.88	-12.37/-17.58	-17.47/-18.66	-18.92/-16.05
Θ(105°)	-16.71/-17.71	-14.01/-12.12	-13.54/-10.33	-10.36/-15.3	-14.83/-13.38	-13.15/-13.72	-12.77/-16.19	-17.09/-17.62	-18.54/-18.22	-18.76/-17.94	-18.12/-17.91	-15.94/-13.92	-10.17/-10.15	-16.81/-15.49	-13.49/-17.33	-18.56/-18.92	-18.33/-18.51	-11.62/-9.99	-12.89/-16.54	-17.78/-13.29	-14.62/-12.98	-13.73/-17.5	-17.63/-18.67	-18.23/-19.59
Θ(112.5°)	-15.46/-16.67	-18.68/-15.29	-14.13/-10.05	-9.66/-15.12	-18.56/-18.8	-18.52/-13.19	-12.96/-15.01	-19.31/-18.14	-18.35/-18.89	-18.07/-18.79	-14.7/-11.74	-11.02/-10.16	-10.28/-12.78	-16.88/-12.92	-13.44/-18.94	-18.01/-17.75	-17.34/-18.54	-15.23/-13.86	-17.92/-14.77	-12.25/-12.45	-11.92/-11.53	-12.62/-15.58	-17.55/-17.72	-17.94/-18.43
Θ(120°)	-19.38/-15.74	-16.02/-14.56	-16.47/-16.87	-16.12/-16.61	-18.52/-17.72	-17.98/-18.02	-16.73/-16.54	-17.51/-15.46	-16.36/-14.94	-16.09/-16.31	-13.43/-12.49	-12.87/-12.26	-11.12/-12.74	-15.98/-14.66	-17.16/-17.93	-17.4/-18.23	-15.55/-14.13	-11.23/-10.17	-14.73/-18.86	-13.99/-13.29	-12.77/-11.75	-13.06/-17.85	-16.66/-18.2	-19.07/-18.5
Θ(127.5°)	-18.11/-19.07	-17.76/-13.13	-12.83/-15.48	-18.1/-17.99	-18.18/-14.86	-13.64/-13.91	-14.3/-14.44	-14.57/-15.33	-16.85/-18.2	-13.83/-16.24	-17.12/-17.95	-10.55/-10.76	-11.76/-14.42	-18.14/-18.44	-17.43/-19.27	-16.4/-16.82	-16.02/-12.72	-9.38/-8.22	-10.46/-18.91	-18.14/-17.7	-17.87/-17.75	-17.45/-18.93	-18.65/-18.22	-16.91/-18.35
Θ(135°)	-17.84/-17.26	-17.91/-18.23	-17.94/-17.02	-16.15/-18.41	-18.38/-13.31	-12.71/-10.74	-10.9/-94	-10.58/-10.5	-8.99/-8.61	-8.51/-9.41	-9.86/-10.16	-11/-14.42	-18.52/-18.85	-19.14/-18.87	-18.21/-17.67	-14.9/-13.75	-14.1/-13.52	-11.63/-10.49	-10.99/-13.6	-15.8/-18.23	-17.27/-17.3	-17.84/-18.37	-16.73/-15.06	-14.55/-15.61
Θ(142.5°)	-15.83/-13.28	-16.13/-15.23	-18.66/-18.54	-18.46/-18.02	-17.88/-19.46	-16.42/-12.77	-13.09/-13.03	-12.83/-11.89	-11.14/-9.86	-10.21/-19	-14.1/-15.67	-17.96/-13.1	-19.12/-16.3	-18.44/-18.74	-17.42/-15.14	-12.08/-11.01	-11.71/-13.16	-14.75/-18.99	-15.02/-14.67	-17.26/-17.48	-17.68/-16.47	-15.59/-16.27	-18.84/-17.07	-18.66/-18.19
Θ(150°)	-15.89/-13.18	-12.76/-13.74	-13.46/-13.62	-13.42/-13.35	-14.3/-15.77	-17.62/-16.76	-17.62/-16.76	-17.85/-19.17	-18.18/-17.25	-18.18/-18.33	-19.16/-15.68	-18.18/-18.93	-19.36/-18.43	-19.33/-18.87	-18.68/-14.68	-11.61/-10.66	-11.52/-14.11	-15.15/-18.99	-15.03/-17.78	-18.18/-18.57	-17.71/-16.42	-16.78/-16.38	-18.57/-18.78	-19.18/-18.29
Θ(157.5°)	-15.44/-14.67	-15.01/-15.64	-15.41/-14.82	-14.12/-14.06	-14.29/-15.06	-14.56/-13.25	-11.48/-10.86	-12.06/-13.53	-14.14/-12.8	-12.69/-14.14	-16.09/-16.89	-16.99/-17.7	-18.31/-18.21	-18.12/-18.31	-19.91/-15.79	-13.52/-12.66	-13.07/-14.88	-18.12/-18.17	-18.97/-19.49	-18.19/-17.64	-17.15/-17.25	-18.41/-18.58	-18.1/-18.61	-17.54/-16.29
Θ(165°)	-14.67/-14.58	-15.16/-16.12	-17.24/-17.37	-17.18/-17.37	-17.44/-16.93	-15.39/-13.52	-11.91/-15.6	-13.45/-14.71	-14.01/-11.68	-11.13/-12.57	-14.68/-15.28	-15.55/-17.12	-19.04/-17.22	-17.94/-18.57	-19.11/-18.9	-18.18/-18.75	-17.32/-16.12	-14.46/-13.57	-12.5/-12.3	-12.82/-13.35	-12.67/-11.32	-12.79/-13.21	-13.63/-13.8	-13.87/-14.22
Θ(172.5°)	-15.26/-15.37	-15.78/-16.55	-17.01/-16.72	-16.85/-17.4	-18.91/-18.34	-19.29/-19.09	-18.58/-19.09	-17.49/-17.98	-17.78/-16.15	-17.82/-18.33	-18.46/-17.02	-18.15/-17.72	-18.97/-18.32	-19.17/-18.46	-19.23/-17.86	-18.34/-16.65	-15.58/-14.48	-12.73/-13.55	-10.96/-11.42	-12.71/-12.22	-11.36/-17.47	-11.99/-11.96	-12.05/-12.22	-13.07/-14.26
Θ(180°)	-16.95/-17.26	-17.65/-18.45	-17.16/-15.72	-15.11/-14.96	-15.23/-16.04	-16.49/-16.31	-16.28/-17.06	-19.01/-17.97	-18.3/-18.13	-18.19/-17.31	-18.61/-17.66	-17.98/-18.84	-19.22/-18.89	-18.46/-17.57	-16.96/-16.4	-16.19/-16.67	-15.58/-16.81	-15.86/-15.09	-16.11/-18.62	-19.27/-17.37	-16.96/-18.48	-17.72/-15.25	-14.3/-14.12	-15.06/-16.15
Freq(Hz)	2450P/Gal	Phi(Ant.)	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
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°)	-19.26/-18.99	-17.81/-18.07	-19.19/-18.89	-18.35/-18.12	-19.24/-19.22	-18.78/-18.08	-17.96/-18.41	-18.22/-17.75	-18.54/-19.05	-19.11/-17.8	-18.06/-17.59	-18.13/-17.56	-17.95/-18.35	-17.39/-19.02	-18.49/-18.8	-18.17/-17.65	-19.08/-17.46	-17.55/-19.16	-18.61/-18.58	-18.91/-19.15	-18.2/-18.21	-17.87/-18.79	-17.59/-17.36	-17.36/-18.88
Θ(7.5°)	-19.31/-17.37	-18.94/-19.06	-19.41/-17.8	-18.65/-18.23	-17.48/-18.66	-16.55/-17.76	-18.46/-18.84	-18.18/-18.79	-17.82/-18.05	-18.59/-18.31	-17.13/-18.54	-18.38/-19.18	-17.78/-17.91	-17.61/-18.31	-17.61/-18.11	-18.97/-15.96	-15.98/-16.45	-16.55/-17.58	-17.85/-19.24	-18.65/-18.72	-18.26/-18.06	-18.39/-17.44	-18.53/-17.09	-17.83/-17.81
Θ(15°)	-12.62/-12.8	-13.04/-13.74	-13.99/-13.38	-12.79/-12.05	-11.62/-10.99	-10.64/-10.85	-11.58/-11.62	-14.62/-19.72	-18.89/-17.89	-18.91/-18.54	-17.12/-18.28	-16.89/-16.66	-17.66/-17.66	-18.24/-18.79	-18.49/-18.18	-17.97/-15.98	-17.26/-15.98	-16.55/-16.55	-18.57/-19.48	-18.61/-18.36	-13.71/-12.99	-12.77/-12.99	-12.27/-12.93	-12.66/-12.81
Θ(22.5°)	-7.89/-8.13	-8.24/-9.58	-9.17/-10	-10.55/-10.65	-10.31/-9.72	-9.4/-9.62	-10.2/-11.02	-12.28/-13.6	-14.32/-15.35	-16														



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(22.5°)	-18.25/-14.36	-13.29/-12.35	-11.74/-14.36	-15.89/-13.29	-11.38/-12.81	-18.32/-19.11	-17.57/-18.24	-19.24/-17.65	-17.98/-19.04	-17.92/-18.71	-18.31/-19.05	-19/-18.29	-18.23/-18.48	-18.41/-18.83	-15.91/-13.21	-13.1/-13.47	-13.14/-16.51	-17.94/-18.84	-18.95/-18.97	-17.97/-17.46	-17.86/-19.35	-16.78/-18.47	-19.28/-18.83	-17.54/-19.13
Θ(30°)	-16.9/-14.72	-18.66/-16.73	-13.38/-15.23	-19.09/-12.94	-11.19/-13.84	-18.01/-18.14	-17.46/-17.75	-17.28/-17.71	-17.33/-18.57	-18.88/-18.55	-18.94/-19.05	-17.97/-17.59	-18.13/-16.26	-18.15/-18.28	-14.8/-15.3	-13.74/-15.59	-17.31/-17.42	-16.8/-18.52	-17.28/-18.55	-18.13/-17.46	-18.79/-18.06	-17.37/-17.88	-17.03/-14.82	-14.33/-16.73
Θ(37.5°)	-18.24/-18.32	-17.73/-18.03	-17.57/-18.03	-18.63/-15.65	-14.63/-15.52	-17.94/-17.75	-19.19/-17.9	-17.53/-18.8	-18.71/-18.03	-18.33/-18.23	-18.69/-14.98	-17.14/-17.93	-18.33/-17.48	-18.65/-19.21	-17.47/-16.31	-14.34/-18.95	-18.96/-17.95	-19.31/-17.54	-18.41/-16.62	-18.01/-17.69	-18.37/-18.48	-19.02/-18.84	-17.47/-18.16	
Θ(45°)	-18.13/-17.53	-18.77/-17.4	-18.93/-18.01	-17.65/-19.1	-17.43/-13.32	-17.01/-18.49	-16.15/-15.28	-18.27/-18.67	-18.43/-18.44	-19.03/-19.29	-19.16/-18.28	-17.68/-18.42	-18.36/-17.79	-19.21/-17.2	-17.61/-18.47	-18.28/-18.27	-18/-18.34	-18.98/-17.26	-16.12/-15.56	-14.35/-15	-14.39/-14.68	-13.35/-15.91	-16.27/-18.41	-17.51/-18.76
Θ(52.5°)	-16.29/-17.81	-18.2/-18.62	-18.25/-18.12	-18.7/-13.33	-18.43/-14.33	-15.32/-18.16	-13.77/-14.8	-15.25/-17.65	-19.38/-13.5	-17.87/-18.01	-18.31/-18.39	-19.19/-17.31	-14.76/-14.3	-17.38/-17.62	-15.92/-18.08	-15.14/-15.4	-14.5/-18.42	-16.56/-19.4	-18.21/-19.36	-17.6/-17.82	-17.66/-14.4	-13.15/-11.12	-16.41/-14.15	-14.74/-17.41
Θ(60°)	-17.19/-12.66	-16.22/-19.16	-18.42/-18.92	-17.6/-16.95	-18.05/-14.83	-13.28/-14.1	-12.29/-13.75	-14.25/-18.98	-18.44/-17.66	-18.5/-18.6	-17.73/-18.19	-18.62/-18.6	-16.97/-16.36	-17.74/-17	-18.33/-17.48	-11.47/-14.76	-15.38/-19.13	-18.45/-18.9	-17.94/-18.32	-17.95/-14.83	-18.72/-18.95	-17.3/-12.61	-15.47/-17.23	-18.48/-19.02
Θ(67.5°)	-18.83/-17.94	-17.15/-14.45	-18.4/-18.8	-18.28/-14.56	-17.95/-14.73	-14.39/-18.57	-13.88/-12.45	-14.58/-18.12	-16.63/-17.69	-17.61/-18.01	-18.05/-19.05	-17.61/-17.88	-17.54/-18.73	-18.84/-17.79	-16.64/-17.12	-16.86/-18.7	-18.53/-18.39	-14.43/-15.92	-18.17/-19.3	-18.7/-18.01	-17.26/-17.66	-13.54/-15.12	-17.81/-17.96	-17.42/-19.17
Θ(75°)	-18.36/-17.14	-18.1/-18.89	-18.63/-18.06	-18.95/-18.47	-18.01/-19.15	-19.05/-17.89	-18.91/-17.67	-17.85/-18.45	-16.29/-16.99	-17.05/-17.8	-18.99/-17.58	-18/-17.5	-18.66/-19.05	-17.09/-19.18	-18.81/-15.42	-16.55/-15.91	-17.64/-18.15	-19.27/-18.76	-19.02/-18.51	-13.93/-18.18	-16.94/-18.34	-14.97/-19.15	-19.03/-17.63	-15.81/-17.06
Θ(82.5°)	-16.37/-17.2	-12.89/-15.4	-19.35/-18.06	-18.41/-17.44	-19.04/-18.27	-19.14/-15.18	-17.47/-17.95	-19.45/-18.17	-18.07/-17.93	-17.94/-18.26	-18.48/-19.54	-19.09/-17.44	-18.56/-18.24	-17.63/-16.31	-16.21/-11.43	-16.71/-17.69	-18.05/-15.22	-18.05/-16.11	-18.57/-16.68	-19.08/-12.9	-13.55/-17.48	-17.5/-14.06	-14.84/-18.68	-18.02/-15.07
Θ(90°)	-17.96/-16.88	-14.11/-17.68	-17.53/-17.37	-17.31/-16.56	-18.36/-16.23	-19.09/-11.03	-15.91/-16.46	-16.66/-15.54	-16.28/-16.54	-18.62/-16.65	-19.3/-17.67	-12.57/-17.79	-15.96/-18.8	-17.35/-18.8	-16.57/-14.81	-18.99/-18.98	-17.69/-17.79	-13.91/-16	-18.77/-18.03	-17.69/-19.05	-17.99/-17.79	-18.24/-17.24	-17.77/-18.47	-18.97/-17.86
Θ(97.5°)	-15.24/-17.34	-15.59/-17.58	-17.22/-18.88	-18.55/-17.78	-19.08/-18.2	-18.93/-15.48	-18.54/-18.61	-18.96/-18.4	-18.62/-15.55	-18.69/-17.78	-18.42/-19.07	-18.16/-19.15	-17.97/-18.05	-17.83/-18.48	-19.21/-18.17	-18.82/-19.83	-19.13/-17.77	-17.19/-14.8	-18.58/-17.69	-18.17/-17.59	-18.98/-18.53	-17.94/-16.74	-17.71/-15.75	
Θ(105°)	-16.25/-19.32	-18.26/-18.18	-15.65/-17.45	-13.58/-17.37	-13.23/-13.39	-17.85/-15.87	-18.38/-18.84	-17.75/-14.59	-16.19/-18.11	-18.86/-17.72	-18.47/-16.23	-17.92/-17.16	-18.27/-18.23	-17.11/-17.77	-15.23/-15.87	-18.54/-12.75	-18.26/-15.75	-18.96/-18.34	-18.15/-17.5	-18.82/-19.27	-16.19/-17.97	-18.72/-18.72	-18.47/-17.85	-17.74/-18.19
Θ(112.5°)	-18.58/-18.07	-18.2/-14.46	-17.42/-18.88	-18.01/-13.14	-18.45/-10.54	-15.56/-15.17	-14.18/-16.59	-18.09/-17.91	-18.57/-17.07	-17.65/-18.7	-18/-18.29	-18.66/-17.92	-15.09/-16.28	-17.79/-18.75	-15.47/-16.95	-18.11/-17.68	-18.55/-16.22	-18.88/-19.55	-19.26/-18.55	-14.89/-17.7	-18.83/-17.1	-17.76/-18.19	-18.6/-18.51	-18.21/-17.94
Θ(120°)	-18.16/-18.55	-17.3/-18.96	-18.19/-18.21	-18.52/-16	-16.68/-11.65	-18.41/-18.67	-17.71/-18.2	-14.66/-16.07	-18.5/-17.82	-18.85/-17.48	-18.03/-18.74	-17.82/-18.58	-17.53/-17.86	-19.21/-18.17	-18.82/-19.83	-16.05/-18.81	-17.92/-15.59	-18.98/-18.36	-18.53/-18.56	-17.84/-17.87	-19.02/-17.9	-18.28/-18.43	-15.81/-15.77	
Θ(127.5°)	-17.52/-18.77	-18.45/-17.67	-18.63/-17.49	-14.92/-13.19	-14.95/-8.47	-10.76/-17.69	-15.15/-13.14	-18.08/-18.35	-18.29/-17.52	-14.84/-14.67	-18.64/-15.92	-16.14/-18.68	-18.86/-18.86	-16.27/-19.25	-15/-16.9	-13.2/-17.79	-17.57/-19.36	-17.42/-16.02	-18.81/-17.97	-19.47/-19.14	-18.86/-17.8	-16.49/-19.07	-17.42/-18.71	-15.39/-15.35
Θ(135°)	-18.72/-17.79	-17.7/-17.88	-18.61/-18.78	-19.16/-16.12	-17.49/-13.88	-11.65/-18.54	-18.65/-18.29	-18.22/-17.31	-18.3/-18.98	-17.58/-15.57	-17.2/-14.89	-12.78/-15.86	-18.61/-17.77	-18.96/-15.23	-12.11/-14.41	-10.42/-17.66	-19.31/-19.21	-17.5/-18.5	-18.05/-18.14	-18.82/-17.14	-14.08/-17.41	-18.23/-19.03	-13.19/-13.49	-18.13/-17.26
Θ(142.5°)	-18.02/-17.19	-16.36/-17.35	-17.67/-14.51	-17.03/-14.67	-18.74/-15.62	-15.92/-17.63	-19.14/-16.61	-15.12/-14.99	-13.96/-14.21	-14.83/-18.08	-12.82/-18.52	-19.14/-18.7	-19.14/-13.75	-12.28/-13.3	-12.25/-14.61	-13.89/-17.45	-18.29/-17.68	-18.58/-18.77	-18.25/-15.51	-17.45/-17.88	-18.53/-17.26	-12.48/-10.16	-12.62/-15.44	
Θ(150°)	-18.26/-18.37	-14.29/-14.34	-18.26/-13.54	-10.95/-10.85	-11.92/-13.13	-18.63/-18.01	-19.08/-18.12	-17.31/-17.56	-17.78/-14.19	-18.87/-19.68	-18.9/-16.06	-14.28/-14.35	-13.31/-18.58	-10.82/-11.72	-11.51/-12.6	-17.17/-14.28	-17.59/-17.78	-18.36/-18.83	-18.36/-18.83	-18.25/-16.47	-18.36/-18.82	-17.17/-17.62	-14.08/-15.16	-18.34/-18.57
Θ(157.5°)	-16.4/-17.8	-17.46/-17.4	-18.46/-19.07	-17.48/-18.69	-16.67/-14.63	-15.41/-17.24	-18.79/-19.01	-18.65/-18.86	-18.36/-17.92	-16.74/-18.09	-14.67/-13.99	-16.4/-18.42	-17.1/-12.32	-10.95/-10.44	-12.57/-14.62	-13.26/-14.63	-17.29/-18.64	-17.56/-19.16	-17.82/-18.16	-18.87/-17.75	-17.88/-17.05	-18.09/-15.6	-16.01/-16.84	-14.72/-13.83
Θ(165°)	-17.57/-18.53	-17.61/-18.47	-17.62/-16.65	-14.19/-16.2	-18.29/-18.76	-18.75/-14.75	-19.27/-19.11	-17.25/-18.4	-18.3/-17.53	-17.46/-14.26	-18.74/-14.04	-15.65/-12.34	-10.4/-11.81	-15.25/-18.96	-17.98/-14.48	-14.18/-16.1	-18.76/-18.28	-18.25/-19.36	-17.83/-19.04	-18.48/-18.51	-15.64/-16.27	-17.32/-14.93	-15.36/-13.57	-16.49/-16.58
Θ(172.5°)	-16.91/-17.62	-18.76/-16.5	-13.72/-13.58	-13.91/-15.42	-15.75/-16.38	-16.46/-15.12	-14.75/-13.56	-12.22/-12.45	-11.05/-10.15	-9.01/-9	-8.16/-8.95	-8.79/-9.87	-10.58/-11.68	-13.86/-14.21	-13.25/-12.61	-14.17/-17.48	-17.51/-17.62	-17.33/-14.24	-18.68/-18.07	-17.49/-18.12	-18.17/-17.42	-16.17/-19.01	-17.81/-17.72	
Θ(180°)	-13.74/-14.61	-15.21/-15.03	-13.51/-15.2	-16.88/-18.53	-18.14/-16.22	-14.27/-11.74	-10.26/-10.29	-8.59/-9	-10.13/-9.27	-9.21/-8.33	-8.82/-7.6	-8.32/-9.07	-10.1/-12.4	-16.74/-19.06	-18.29/-17.81	-17.89/-19.05	-17.64/-17.88	-19.26/-18.12	-14.86/-14.31	-18.1/-12.26	-12.01/-12.05	-13.27/-11.82	-12.68/-12.03	-12.73/-13.81
Freq(Hz)	5.3GPol.	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°)	-18.59/-19.39	-18.04/-18.33	-18.44/-18	-17.88/-17.76	-16.4/-15	-15.69/-14.85	-14.48/-15.2	-15.02/-15.54	-15.8/-14.84	-15.82/-15.04	-15.22/-15.4	-13.89/-14.69	-15.11/-14.82	-14.4/-14.58	-17.13/-18.91	-18.05/-14.88	-14.39/-15.56	-17.44/-18.06	-15.81/-14.59	-16.26/-15.13	-17.48/-15.43	-17.24/-15.93	-17.42/-18.1	-16.71/-17.83
Θ(7.5°)	-14.76/-16.72	-16.72/-14.73	-14.71/-16.75	-15.01/-12.42	-15.16/-14.6	-14.72/-14.97	-15.49/-15.83	-14.52/-15.95	-16.66/-15.5	-17.28/-18.81	-16.01/-19.01	-18.88/-18.54	-18.77/-17.49	-18.2/-18.55	-18.83/-17.36	-17.68/-15.51	-14.84/-18.98	-16.87/-16.95	-18.61/-16.7	-17.26/-18.57	-17.72/-18.53	-16.36/-18.14	-14.77/-16.12	-15.21/-12.82
Θ(15°)	-11.74/-12.38	-12.22/-12.62	-13.54/-15.37	-13.74/-18.96	-14.04/-18.87	-16.69/-17.98	-18.18/-19.05	-18.42/-16.49	-13.88/-14.9	-13.08/-12.4	-13.67/-13.32	-19.13/-18.18	-17.68/-18.71	-18.02/-19.15	-18.49/-17.6	-14.88/-14.3	-14.55/-14.47	-12.5/-12.11	-10.58/-11.14	-12.77/-11.55	-12.15/-13.18	-13.55/-13.58	-12.49/-10.24	-10.61/-10.7
Θ(22.5°)	-11.71/-10.28	-11.18/-11.34	-11.14/-10.5	-12.37/-14.9	-11.15/-10.52	-12.73/-14.38	-12.54/-12.2	-14.51/-15.14	-15.02/-17.09	-13.92/-14.92	-16.63/-18.03	-15.97/-12.61	-14.37/-18.6	-13.68/-13.11	-18.31/-14.84	-10.62/-10.19	-10.3/-7.66	-6.38/-6.87	-8.01/-8.52	-8.83/-8.79	-8.86/-10.03	-10.16/-10.02	-11.52/-12.86	-13.12/-11.81
Θ(30°)	-12.1/-12.7	-12/-10.61	-13.57/-9.66	-9.24/-14.04	-10.96/-11	-15.4/-11.82	-10.47/-16.76	-16.23/-13.04	-15.4/-12.97	-11.49/-4.99	-11.54/-11.8	-13.32/-12.78	-17.77/-16.75	-14.12/-13.51	-12.37/-11.15	-8.15/-7.45	-9.63/-9.25	-9.91/-10.36	-9.33/-8.99	-9.16/-9.99	-9.09/-4.84	-8.21/-6.37	-10.71/-13.01	-10.13/-8.92
Θ(37.5°)	-8.31/-9.27	-11.71/-10.38	-8.88/-12.1	-11.24/-9.95	-9.43/-11.24	-10.24/-8.67	-10.52/-14.21	-13.88/-10.78	-11.16/-14.52	-13.44/-10.4	-15.11/-14.92	-11.9/-13.38	-13.84/-10.62	-15.04/-12.22	-7.98/-8.79	-10.62/-9.58	-9.85/-11.02	-12.65/-12.39	-11.69/-11.83	-9.58/-6.3	-5.84/-5.52	-4.77/-8.37	-10.32/-11.8	-8.64/-8.29
Θ(45°)	-9.36/-8.3	-8.19/-8.24	-6.39/-4	-8.45/-6.98	-6.85/-8.2	-4.95/-4.06	-5.82/-7.24	-3.79/-1.79	-7.1/-8.52	-6.96/-6.27	-11.87/-8.8	-7.14/-10.46	-8.89/-8.55	-9.43/-6.47	-5.32/-8.55	-8.49/-9.76	-6.46/-6.83	-5.93/-5.92	-4.84/-4.36	-4.82/-7.3	-9.08/-10.25	-7.95/-6.63	-7.42/-7.32	-10.08/-8.72
Θ(52.5°)	-6.41/-6.52	-7.52/-7.19	-5.19/-5.38	-4.72/-4.8	-5.95/-6.84	-2.5/-3.86	-4.24/-4.02	-5.61/-4.77	-4.63/-6.78	-6.24/-5.5	-7.81/-5.13	-9.66/-4.89	-6.34/-6.49	-6.78/-4.71	-5.05/-6.34	-5.76/-2.05	-1.53/-0.21	-1.95/-2.55	-4.06/-1.87	-0.4/-0.95	-3.85/-4.87	-5.56/-5.89	-5.48/-5.26	-3.55/-5.88
Θ(60°)	-6.36/-6.17	-4.42/-5.1	-7.71																					



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(75°)	-14.87/-15.76	-18.71/-17.27	-17.14/-15.2	-9.75/-10.86	-13.41/-12.25	-12.18/-10.22	-11.44/-13.04	-18.47/-18.16	-11.94/-10.36	-9.75/-10.97	-10.45/-14.63	-16.61/-18.86	-19.06/-18.44	-14.78/-16.04	-17.66/-18.34	-18.68/-16.08	-18.91/-14.06	-16.07/-12.06	-19.27/-17.61	-15.44/-15.44	-12.22/-12.27	-18.21/-18.09	-17.98/-15.2	-15.58/-18.84
Θ(82.5°)	-12.86/-16.21	-17.7/-17.3	-13.3/-13.92	-12.5/-9.7	-18.62/-12.83	-10.41/-11.52	-11.95/-19.03	-17.31/-15.86	-10.91/-10.23	-10.2/-11.21	-10.97/-17.28	-18.91/-16.79	-15.94/-17.1	-9.91/-19.27	-14.07/-13.1	-15.48/-16.97	-15.01/-12.47	-18.63/-17.92	-13.48/-15.56	-18.86/-14.33	-14.53/-19.31	-15.43/-15.99	-18.3/-18.09	-16.42/-13.49
Θ(90°)	-10.92/-17.94	-19.02/-15.15	-18.03/-16.65	-8.37/-11.44	-10.67/-12.84	-10.78/-11.82	-12.26/-13.22	-17.94/-18.98	-13.72/-11.51	-11.66/-11.05	-14.48/-15.15	-15.31/-16.15	-16.83/-11.16	-15.39/-17.12	-18.74/-11.93	-17.64/-15.65	-18.93/-16.61	-17.97/-16.47	-18.86/-14.78	-16.35/-17.87	-12.28/-18.09	-18.85/-16.97	-17.97/-15.42	-15.14/-14.69
Θ(97.5°)	-16.87/-14.11	-17.69/-19.13	-14.99/-9.83	-8.93/-8.5	-8.54/-12.81	-8.19/-9.94	-9.79/-15.29	-18.15/-15.23	9.08/-7.05	-10.08/-8.42	-12.37/-17.7	-13.4/-18.64	-13.53/-18.45	-15/-17.54	-14.56/-18.27	-14.58/-18.29	-18.01/-15.57	-14.57/-18.82	-18.75/-17.87	-17.54/-17.83	-18.02/-18.53	-16.82/-18.1	-14.57/-12.88	-17.33/-10.7
Θ(105°)	-18.66/-18.95	-19.08/-17.52	-17.1/-11.82	-9.35/-8.05	-15.28/-8.58	-9.21/-15.75	-14.27/-16.27	-12.58/-17.7	-11.64/-9.89	-13.51/-10.65	-12.45/-13.03	-17.81/-18.6	-14.64/-13.64	-13.94/-16.42	-17.87/-12.53	-14.41/-17.46	-18.42/-12.81	-17.15/-13.97	-18.65/-14.78	-19.24/-17.26	-10.55/-13.96	-18.11/-18.87	-18.57/-15.08	-11.64/-18.69
Θ(112.5°)	-16.62/-19.01	-18.9/-18.17	-15.43/-8.83	-6.17/-9.34	-8.17/-9.34	-8.82/-11.08	-10.26/-13.05	-16.22/-17.76	-11.34/-10.98	-10.18/-9.98	-11.25/-15.75	-16.83/-14.35	-16.2/-12.03	-12.04/-16.52	-11/-15.19	-11.92/-9.42	-11.05/-12.85	-17.86/-18.97	-17.68/-17.09	-17.47/-17.46	-15.22/-14.2	-17.88/-15.74	-17.43/-17.81	-18.67/-13.67
Θ(120°)	-19.25/-17.67	-19.1/-18.28	-18.84/-13.54	-7.98/-8.4	-8.26/-6.48	-9.3/-9.93	-10/-18.03	-18.01/-17.55	-10.87/-10.36	-12.08/-15.68	-18.09/-19.82	-18.6/-18.14	-17.22/-12.92	-19.37/-12.96	-16.25/-13.88	-9.83/-13.43	-18.03/-17.81	-18.82/-15.42	-18.55/-19.01	-15.37/-17.61	-18.09/-15.46	-14.49/-18.35	-18.96/-17.95	-18.61/-18.71
Θ(127.5°)	-18.83/-17.95	-17.95/-17.57	-16.66/-11.06	-10.61/-8.86	-7.31/-8.56	-7.39/-10.18	-10.88/-12.12	-14.23/-12.62	-18.67/-14.16	-13.77/-11.31	-11.51/-12.3	-11.62/-19.41	-18.66/-18.55	-16.17/-17.88	-13.19/-13.93	-9.73/-10.75	-18.11/-16.4	-14.45/-19.04	-18.23/-12.97	-13.54/-13.92	-17.99/-17.95	-13.86/-16.28	-15.56/-18.49	-17.92/-16.54
Θ(135°)	-18.78/-13.98	-17.29/-19.08	-18.12/-15.41	-14.5/-9.35	-7.27/-7.27	-10.79/-11.11	-14.3/-17.95	-18.94/-17.24	-12.48/-10.11	-8.88/-11.26	-11.65/-12.14	-11.47/-17.07	-17.53/-18.25	-17.72/-13.31	-13.95/-11.5	-11.26/-8.88	-9.03/-15.47	-18.43/-19.21	-15.2/-14.11	-18.19/-17.98	-18.8/-18.47	-18.19/-14.52	-12.71/-18.17	-18.34/-19.1
Θ(142.5°)	-17.19/-17.45	-17.15/-17.81	-18.84/-16.66	-18.28/-9.36	-7.48/-8.2	-14.2/-16.6	-17.79/-18.52	-17.83/-17.77	-14.95/-14.67	-11.18/-11.44	-10.77/-12.67	-16.62/-18.39	-17.78/-17.27	-13.23/-16.84	-9.87/-8.68	-9.87/-9.33	-14.6/-18.35	-16.71/-18.88	-15.32/-16.63	-18.1/-16.63	-18.75/-18.52	-17.85/-15.97	-14.64/-14.3	-17.67/-16.53
Θ(150°)	-18.81/-17.72	-17.37/-18.38	-17.34/-15.32	-14.27/-12.81	-11.83/-11.31	-12.23/-16.07	-18.65/-19	-18.41/-18.57	-17.94/-17.94	-13.23/-13.88	-14.06/-18.09	-18.66/-13.45	-13.71/-18.18	-6.94/-9.39	-12.02/-16.43	-18.24/-17.47	-19.04/-18.68	-18.55/-17.76	-19.22/-15.2	-17.59/-17.91	-11.86/-11.52	-13.02/-15.5	-16.9/-18.76	-15.39/-16.75
Θ(157.5°)	-16.93/-18.52	-17.87/-16.24	-12.35/-13.19	-11.21/-8.47	-10.23/-10.33	-17.13/-13.58	-13.85/-14.14	-15.55/-15.02	-10.47/-11.83	-10.13/-11.05	-10.47/-12	-13.98/-13.38	-15.72/-13.49	-9.84/-8.84	-12.23/-12.02	-12.17/-15.92	-16.59/-16.62	-18.21/-17.2	-16.8/-15.08	-11.68/-11.46	-12.06/-16.94	-15.39/-16.75	-15.39/-16.75	-15.39/-16.75
Θ(165°)	-18.82/-15.73	-14.93/-13.62	-13.27/-12.85	-13.26/-12.47	-12.79/-14	-18.29/-18.36	-18.72/-18.85	-18.87/-19.25	-17.17/-16.9	-14.76/-12.78	-10.77/-12.54	-14.25/-14.23	-9.35/-9.56	-10.54/-13.57	-15.96/-16.13	-16.46/-18.15	-19.28/-18.61	-18.47/-18.15	-18.44/-17.64	-18.34/-18.54	-15.18/-11.49	-12.51/-12.17	-14.99/-13.56	-15.45/-15.29
Θ(172.5°)	-12.3/-11.46	-11.62/-11.57	-12.56/-14.17	-15.2/-14.45	-14.63/-14.65	-18.56/-17.14	-18.49/-19.05	-19.08/-15.97	-13.66/-12.13	-12.91/-11.6	-13.73/-10.58	-9.75/-9.79	-8.42/-10.09	-13.19/-19.11	-18.26/-17.82	-18.6/-18.84	-19.24/-18.63	-18.38/-18.51	-18.19/-16	-15.38/-13.61	-11.41/-12.5	-10.19/-10.94	-9.77/-11.69	-12.26/-11.99
Θ(180°)	-12.19/-12.93	-13.08/-12.39	-12.95/-14.32	-14.9/-16.4	-17.16/-14.25	-13.88/-14.13	-12.73/-12.79	-11.2/-10.72	-10.23/-10.41	-10.1/-10.6	-10.2/-9.98	-11.04/-10.63	-13.16/-17.79	-17.36/-18.52	-18.62/-17.75	-18.79/-18.31	-15.19/-15.27	-12.64/-11.76	-11.67/-10.54	-9.89/-9.37	-9.39/-9.3	-9.94/-8.99	-10.28/-10.8	-11.45/-12.61
Freq(Hz)	5.785GPol.	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°)	-16.87/-17.13	-17.76/-19.55	-18.44/-18.59	-18.44/-17.65	-18.84/-17.43	-18.11/-17.21	-19.23/-18.59	-17.98/-18.44	-15.81/-15.83	-17.27/-16.91	-18.45/-19.03	-17.46/-15.78	-16.56/-17.83	-18.74/-16.23	-18.56/-17.84	-18.74/-16.23	-18.24/-16.15	-18.31/-17.51	-17.86/-17.89	-18.51/-19.04	-17.53/-18.56	-18.23/-18.23	-17.13/-15.96	-16.98/-17.01
Θ(7.5°)	-16.51/-15.01	-14.77/-14.44	-13.74/-13.88	-14.81/-14.65	-13.9/-13.98	-14.68/-16.99	-16.75/-16.82	-17.44/-17.06	-18.09/-17.79	-19.16/-18.9	-18.9/-13.8	-13.09/-13.75	-16.88/-17.66	-18.87/-17.47	-17.87/-16.54	-15.73/-15.19	-16.21/-15.75	-17.57/-15.3	-13.86/-15.12	-15.68/-15.66	-13.92/-15.14	-13.7/-14.8	-15.87/-16.21	-16.18/-15.23
Θ(15°)	-12.34/-10.95	-9.18/-9.66	-10.03/-10.53	-10.02/-8.89	-10.48/-10.67	-10.99/-10.65	-11.23/-12.42	-13.05/-15.92	-16.76/-18	-17.28/-16.73	-16.43/-14.49	-14.49/-13.45	-13.78/-15.41	-17.05/-13.1	-12.08/-11.28	-9.67/-10.26	-9.4/-8.77	-11.14/-12	-12.37/-14.73	-13.48/-13.96	-14.14/-13.97	-12.51/-11.87	-11.13/-10.95	-10.59/-11.84
Θ(22.5°)	-10.2/-8.51	-7.14/-7.01	-7.76/-7.8	-6.29/-6.3	-5.91/-6.25	-6.29/-7.07	-7.99/-10.06	-10.88/-11.08	-11.49/-14.51	-13.55/-15.88	-12.85/-8.42	-9.81/-16.09	-11.74/-10.77	-12.4/-11.92	-12.11/-15.86	-18.35/-18.76	-18.72/-19.24	-17.92/-16.27	-15.55/-16.27	-14.99/-14.02	-12.12/-10.72	-10.65/-10.03	-11.51/-10.14	-11.51/-10.14
Θ(30°)	-7.32/-6.84	-6.35/-5.94	-6.26/-7.28	-5.79/-5.39	-5.14/-4.07	-4.35/-4.71	-4.16/-4.35	-5.8/-6.98	-7.07/-8.67	-9.27/-9.83	-9.27/-10.18	-8.91/-6.47	-8.94/-9.63	-6.77/-12.77	-9.14/-6.77	-7.11/-8.09	-7.21/-6.41	-6.48/-6.72	-5.52/-5.66	-5.36/-4.38	-4.37/-5.05	-4.93/-4.86	-5.9/-8.56	-8.47/-8.54
Θ(37.5°)	-7.93/-8.05	-5.85/-5.76	-7.81/-6.51	-8.48/-5.82	-4.76/-4.22	-4.48/-4.67	-4.28/-4.38	-5.1/-5.57	-6.27/-9.86	-9.29/-8.61	-6.17/-6.36	-6.91/-5.58	-11.18/-4.68	-8.51/-4.1	-3.45/-5	-4.16/-3.53	-1.25/-1.33	-0.77/-1.68	-2.03/-1.37	-1.16/-1.22	-4.3/-4.53	-6.83/-4.57	-8.44/-4.31	-8.39/-7.02
Θ(45°)	-4.51/-6.15	-5.96/-5.55	-6.87/-6.69	-9.32/-4.86	-6.44/-7.52	-7.33/-7.14	-9.58/-7.52	-8.13/-9.44	-9.03/-8.21	-7.17/-5.79	-7.72/-5.47	-5.6/-10.93	-5.65/-8.65	-3.88/-7.31	-8.06/-9.14	-8.99/-6.25	-5.27/-6.33	-8.42/-10.42	-12.98/-10.15	-8.18/-5.63	-4.37/-6.3	-7.22/-10.05	-6.55/-7.19	-7.5/-6.54
Θ(52.5°)	-8.88/-8.14	-3.65/-3.3	-4.36/-4.03	-6.48/-4.85	-3.72/-5.47	-7.73/-9.08	-11.13/-7.58	-7.1/-5.35	-3.79/-4.97	-6.48/-6.08	-6.03/-5.72	-7.02/-3.77	-6.56/-5.46	-3.58/-5.62	-5.75/-3.99	-2.89/-4.41	-6.95/-3.84	-2.35/-2.08	-1.7/-2.15	-1.98/-3.04	-3.58/-4.83	-3.98/-3.38	-3.72/-3.24	-5.68/-5.12
Θ(60°)	-3.84/-3.51	-5.88/-5.29	-3.44/-2.15	-5.29/-2.88	-2.14/-1.24	-1.51/-3.44	-3.82/-1.98	-1.12/-0.99	-0.55/-1.52	-2.13/-4.8	-2.32/-3.48	-1.97/-5.98	-0.76/-3.27	-0.82/-4.12	-2.28/-1.66	-0.92/-0.86	-1.3/-0.82	0.04/-0.25	-1.06/-0.92	-1.83/-3.08	-3.75/-4.31	-6.09/-5.46	-6.49/-4.49	-2.77/-2.45
Θ(67.5°)	-3.78/-3.5	-3.64/-7.79	-5.51/-5.18	-4.68/-2.87	-5.04/-1.03	0.35/-1.96	-0.42/-0.21	-0.40/-0.86	-7.01/-2.57	-3.87/-3.64	-3.45/-3.13	-4.48/-2.84	-6.25/-2.87	-4.46/-2.26	-3.08/-1.41	-0.05/-0.76	0.09/-1.67	-1.32/-1.34	-0.37/-0.51	-0.21/-2.02	-3.73/-5.09	-5.41/-6.97	-6.5/-5.18	-6.5/-5.18
Θ(75°)	-7.32/-4.73	-3.99/-4.9	-3.47/-3.34	-3.66/-3.68	-2.48/-6.15	-2.86/-2.62	-1.33/-1.32	-1.48/-3.38	-3.6/-5.51	-2.66/-3.3	-2.45/-4.13	-1.16/-4.09	-2.68/-1.05	-1.45/-2.35	-1.67/-3.77	-11/-3.1	-3.96/-6.53	-5.57/-1.86	-3.16/-10.2	-9.26/-3.26	-4.3/-3.92	-4.3/-6.09	-5.59/-2.53	-4.87/-6.08
Θ(82.5°)	-6.07/-3.35	-4.78/-7.34	-3.98/-2.47	-0.86/-1.43	-0.48/-2.22	-2.9/-3.63	-5.45/-3.84	-1.15/-0.81	-0.460/-0.9	0.63/-1.33	-4.11/-1.03	-0.03/-3.71	-2.56/-2.1	-2.43/-2.37	0.8/-0.39	-0.53/-0.8	0.33/-1.08	-0.490/-26	-1.16/-1.36	-3.02/-1.22	-1.93/-8.22	-4.65/-3.62	-5.07/-4.77	-1.58/-5.77
Θ(90°)	-9.44/-7.74	-7.71/-5.23	-6.03/-6.19	-5.53/-3.95	-2.79/-2.54	-3.02/-0.37	-0.94/-0.59	-0.570/-0.9	-1.29/-1.75	-4.03/-2.75	-4.99/-3.34	-3.04/-6.25	-6.12/-2.8	-2.08/-4.79	-2.68/-4.53	-8.2/-2.24	-4.85/-1.44	-6.33/-2.46	-0.020/-15	-0.35/-1.93	-1.71/-7.25	-6.41/-7.47	-8.44/-10.18	-4.55/-8.88
Θ(97.5°)	-4.78/-8.11	-6.99/-5.68	-4.94/-5.58	-4.34/-3.49	-3.89/-4.04	-7.66/-1.87	0.05/-0.18	-2.19/-1.89	-2.25/-2.89	-4.35/-0.46	-5.28/-7.4	-0.81/-7.49	-2.67/-1.13	-5.66/-5.72	-2.76/-2.54	-1.740/-29	-2.92/-7.33	-1.76/-3.8	-1.64/-2.86	-5.9/-1.75	-3.03/-9.61	-12.8/-11	-9.5/-12.82	-7.23/-10.64
Θ(105°)	-9/-6.48	-5.22/-12.14	-12.75/-8.83	-2.52/-1.37	-2.71/-4.92	-4.61/-3.3	-3.13/-4.25	-3.63/-4.48	-4.13/-1.1	-4.26/-1.57	-6.93/-12.08	-1.5/-4.44	-8.32/-6.03	-4.82/-10.22	-4.91/-3.9	-8.66/-4.69	-9.07/-7.45	-7.85/-7.76	-8.91/-7.66	-6.01/-9.13	-11.06/-18.1	-17.02/-9.44	-9.46/-12.55	-15.71/-9.35
Θ(112.5°)	-15.98/-17.7	-9.05/-13.49	-14.07/-18.42	-15.87/-9.59	-9.42/-18.13	-6.62/-2.52	-7.39/-4.13	-9.5/-7.74	-19.24/-18.38	-9.48/-9.79	-11.28/-14.1	-7.32/-6.57	-8.97/-14.49	-18.9/-18.19	-10.48/-10.21	-9.25/-14.89	-18.95/-14.8	-7.08/-14.78	-18.82/-13.03	-17.81/-17.24	-14.84/-15.74	-15.92/-18.33	-15.99/-16.89	-15.99/-16.89



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(120°)	-13.74/-16.67	-18.93/-19.74	-13.41/-18.16	-14.82/-15.09	-17/-17.3	-17.89/-17.23	-17.68/-18.96	-16.6/-11.79	-9.9/-8.12	-11.14/-18.18	-16.65/-14.69	-17.78/-19.18	-18.57/-14.03	-10.7/-16.89	-14.54/-10.38	-13.29/-17.65	-17.88/-14.99	-19.28/-12.52	-18.96/-18.68	-10.38/-7.08	-6.22/-12.97	-18.35/-18.09	-18.3/-12.58	-17.62/-12.59	-12.49/-11.74
Θ(127.5°)	-12.65/-15.69	-17.6/-16.46	-14.01/-18.98	-18.39/-17.91	-15.25/-13.12	-18.23/-18.83	-17.48/-17.12	-19.15/-18.33	-19.29/-17.62	-18.25/-17.2	-18.41/-15.1	-19.04/-18.05	-18.87/-15.31	-13.18/-18.98	-15.81/-11.33	-15.87/-18.89	-17.71/-19.05	-18.88/-17.2	-11.84/-18.17	-18.59/-15.98	-8.25/-12.5	-18.85/-17.72	-17.62/-17.69	-12.49/-11.56	-12.49/-11.56
Θ(135°)	-19.56/-18.12	-18.4/-19.06	-19.06/-18.45	-17.41/-18.12	-18.77/-18.67	-16.99/-14.79	-17.31/-19.33	-18.87/-17.62	-16.48/-14.18	-13.01/-13.2	-13.02/-17.98	-17.94/-17.38	-19.07/-18.97	-17.94/-18.46	-16.31/-18.64	-16.06/-16.84	-18.93/-14.63	-17.55/-12.85	-8.6/-12.14	-18.93/-18.54	-16.55/-19	-18.57/-18.68	-17.45/-18.37	-15.41/-15.46	-15.41/-15.46
Θ(142.5°)	-18.25/-18.28	-18.31/-18.69	-17.52/-18.02	-12.82/-14.43	-18.74/-18.97	-19.37/-16.28	-16.41/-17.77	-18.65/-18.81	-17.92/-17.64	-18.26/-18.91	-17.89/-18.64	-18.84/-17.33	-18.07/-16.99	-18/-17.58	-18.16/-17.76	-18.63/-16.36	-14.07/-17.04	-18.08/-12.76	-9.27/-10.29	-15.3/-15.85	-12.15/-13.04	-14.25/-14.74	-18.22/-18.5	-19.58/-18.76	-19.58/-18.76
Θ(150°)	-13.61/-16.1	-16.84/-18.32	-17.91/-17.67	-16.73/-15.39	-18.27/-19.54	-17.93/-15.26	-16.67/-16.39	-17.88/-12.92	-18.73/-14.97	-18.76/-17.87	-17.4/-15.87	-18.03/-18.28	-18.93/-18.78	-18.4/-18.19	-17.63/-16.85	-17.59/-15.15	-17.23/-18.78	-18.11/-14.74	-12.86/-13.67	-14.72/-14.58	-11.67/-12.25	-14/-15.44	-18.23/-15.3	-13.31/-13.2	-13.31/-13.2
Θ(157.5°)	-18.81/-15.61	-13.74/-18.81	-17.26/-17.89	-18.45/-18.87	-16.68/-19.06	-17.84/-15.55	-16.39/-16.52	-17.46/-18.55	-15.77/-14.58	-12.83/-12.72	-13.92/-14.84	-17.87/-17.95	-16.32/-18.76	-18.47/-18.31	-19.07/-18.75	-18.12/-18.91	-16.05/-17.92	-15.45/-15.31	-13.01/-11.45	-10.97/-11.07	-14.58/-12.48	-14.43/-13.87	-14.43/-13.87	-14.43/-13.87	-14.43/-13.87
Θ(165°)	-17.51/-19.11	-14.91/-13.35	-13.12/-12.79	-13.49/-14.13	-15.04/-18.12	-18.62/-18.73	-17.95/-18.49	-18.93/-17.96	-17.71/-17.86	-15.23/-15.23	-14.57/-14.35	-16.78/-16.64	-17.4/-18.45	-18.19/-18.13	-16.45/-14.19	-16.63/-18.02	-15.47/-18.87	-18.01/-19.22	-16.26/-14.89	-12.82/-11.97	-12.91/-13.54	-12.66/-14.76	-16.54/-15.22	-16.03/-17.93	-16.03/-17.93
Θ(172.5°)	-17.4/-18.97	-17.81/-17.3	-16.94/-14.88	-12.67/-12.82	-12.45/-12.39	-14.9/-14.89	-13.02/-13.03	-12.79/-14.08	-15.15/-14.32	-14.27/-13.35	-14.95/-14.47	-13.55/-13.6	-14.68/-15.92	-18.03/-18.08	-14.99/-12.29	-13.07/-11.88	-10.07/-12.3	-11.95/-13.92	-14.94/-13.9	-14.48/-15.34	-14.92/-17.89	-18.51/-18.74	-19.32/-17.66	-18.62/-18.82	-18.62/-18.82
Θ(180°)	-18.27/-18.48	-17.57/-17.07	-14.62/-14.03	-16.04/-15.23	-13.96/-16.17	-17.94/-18.69	-18.1/-18.06	-17.34/-16.05	-17.09/-16.19	-16.17/-18.33	-17.17/-17.03	-18.83/-18.1	-18.53/-17.19	-16.09/-15.71	-13.8/-12.66	-13.76/-12.77	-12.83/-14.9	-14.66/-14.87	-14.33/-13.59	-14.08/-15.03	-15.96/-17.56	-18.95/-17.6	-18.08/-18.96	-18.08/-18.96	-18.08/-18.96
Freq(Hz)	5.2GPol.	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°)	Φ(345°)Φ(352.5°)
Θ(0°)	-19.08/-17.49	-18.59/-17.56	-18.3/-19.11	-16.28/-16.39	-14.65/-15.14	-14.61/-14.57	-13.65/-14.19	-13.24/-13.71	-14.71/-14.24	-14.72/-14.61	-16.81/-17.02	-16.78/-17.23	-18.05/-17.62	-17.59/-18.26	-18.19/-18.68	-18.12/-16.39	-18.05/-16.36	-17.09/-15.9	-15.37/-17.83	-16.94/-16.09	-17.73/-17.8	-16.94/-16.09	-17.41/-17.15	-17.41/-17.15	-17.41/-17.15
Θ(7.5°)	-18.1/-17.35	-18.94/-18.41	-17.23/-18.82	-17.43/-19.24	-18.5/-16.91	-14.59/-13.77	-13.27/-14.27	-15.16/-15.66	-15.49/-16.5	-18.19/-17.85	-17.75/-17.86	-18.32/-18.15	-18.49/-17.78	-18.36/-18.58	-17.78/-15.41	-11.46/-10.22	-11.77/-11.05	-11.61/-12.41	-11.12/-12.18	-12.24/-11.61	-12.29/-11.96	-12.48/-14.61	-14.41/-14.33	-16.92/-18.24	-16.92/-18.24
Θ(15°)	-18.11/-17.87	-15.5/-14.28	-15.2/-16.72	-17.6/-16.72	-18/-18.53	-16.9/-15.1	-15.23/-12.07	-14.61/-16.14	-19.12/-12.07	-17.19/-17.71	-18.92/-17.85	-17.66/-18.83	-18.94/-17	-14.6/-14.05	-13.76/-14.08	-12.57/-11.15	-11.09/-10.86	-10.27/-10.75	-11.82/-11.39	-11.10/-49	-10.63/-13.22	-15.01/-15.76	-16.91/-17.62	-16.91/-17.62	-16.91/-17.62
Θ(22.5°)	-18.53/-15.09	-14.77/-15.57	-14.87/-13.04	-13.13/-16.12	-16.09/-11.1	-8.78/-7.41	-7.81/-9.71	-12.33/-14.04	-14.87/-16.91	-18.21/-16.91	-12.11/-11.74	-15.6/-14.68	-11.71/-10.87	-12.16/-13.5	-15.95/-13.21	-10.53/-10.23	-9.78/-10.56	-11.71/-10.74	-10.11/-9.97	-9.16/-9.35	-9.75/-9.92	-10.37/-10.28	-15.13/-13.22	-16.92/-17.59	-16.92/-17.59
Θ(30°)	-16.73/-12.69	-11.69/-11.95	-12.96/-10.6	-12.55/-14.89	-13.12/-10.05	-11.06/-14.28	-12.12/-10.36	-11.61/-13.72	-16.38/-10.51	-13.45/-13.79	-9.97/-11.89	-12.72/-8.69	-10.62/-13.95	-11.13/-10.66	-10.9/-8.93	-7.3/-8.02	-10.51/-8.68	-6.63/-7.35	-7.18/-6.32	-6.96/-8.67	-12.78/-11.21	-9.41/-9.37	-12.09/-17.77	-14.26/-13.84	-14.26/-13.84
Θ(37.5°)	-9.99/-9.96	-9.7/-1.7	-11.59/-8.11	-7.87/-9.94	-8.54/-3.89	-7.99/-7.16	-6.31/-5.54	-8.08/-8.88	-11.52/-10.34	-10.79/-7.62	-5.07/-9.97	-8.35/-8.45	-12.18/-8.94	-7.46/-6.13	-7.15/-5.45	-5.18/-8.26	-9.42/-8.88	-8.83/-9.25	-8.54/-5.68	-4.71/-5.64	-5.55/-6.23	-5.92/-4.74	-3.66/-5.56	-7.65/-10.43	-7.65/-10.43
Θ(45°)	-4.95/-4.96	-8.17/-6.4	-5.88/-6.28	-6.68/-6.1	-6.63/-5.34	-4.83/-6.69	-8.08/-6.21	-6.47/-3.98	-4.33/-6.84	-6.48/-7.08	-5.79/-7.39	-8.86/-5.04	-6.32/-6	-6.75/-7.53	-7.71/-7.85	-6.92/-6.73	-6.12/-7.22	-6.09/-5.33	-6.19/-8.31	-7.78/-6.51	-5.97/-9.08	-4.78/-5.31	-3.72/-4.47	-14.26/-13.84	-14.26/-13.84
Θ(52.5°)	-4.83/-3.94	-3.16/-7.51	-4.43/-3.95	-5.31/-5.1	-6.57/-5.71	-5.93/-6.04	-8.13/-12.14	-6.88/-4.47	-4.45/-6.29	-3.51/-5.5	-7.64/-2.71	-7.2/-3.29	-5.37/-7.66	-6.68/-5.01	-4.06/-4.6	-2.01/-2.08	-1.58/-0.82	-0.93/-1.7	-2.32/-1.48	-1.13/-1.89	-4.34/-3.23	-7.57/-6.78	-5.71/-5.85	-3.65/-3.72	-3.65/-3.72
Θ(60°)	-6.27/-4.02	-5.55/-3.2	-4.76/-4.07	-4.47/-4.92	-4.29/-5.4	-6.39/-4.27	-3.35/-4.62	-3.63/-4.86	-5.64/-6.19	-2/-4.46	-5.6/-5.24	-8.07/-5.82	-4.68/-4.64	-5.72/-6.75	-4.81/-2.32	-0.19/-1.94	-0.09/-1.85	-0.24/-2.29	2.15/-1.24	-0.12/-1.86	-1.56/-1.35	-1.96/-1.96	-3.85/-6.02	-6.89/-5.8	-6.89/-5.8
Θ(67.5°)	-5.65/-3.32	-6.76/-4.24	-4.12/-3.24	-5.15/-3.2	-3.31/-3.89	-3.47/-3.16	-2.01/-3.18	-5.54/-4.81	-3.32/-4.22	-2.43/-4.26	-4.11/-5.59	-4.44/-5.32	-5.48/-4.81	-3.36/-4.14	-5.05/-4.24	-5.51/-1.34	-1.92/-4.57	-9.48/-9.39	-6.33/-5.52	-4.23/-4.81	-4.41/-5.59	-2.51/-3.56	-3.34/-1.89	-5.51/-5.83	-5.51/-5.83
Θ(75°)	-2.56/-5.9	-3.58/-4.7	-2.6/-1.91	-2.04/-1.88	-3.15/-1.68	-2.16/-0.81	-0.22/-1.67	-2.22/-3.21	-1.41/-1.48	-1.79/-2.46	-5.76/-4.87	-3.86/-5.44	-3.67/-3.29	-3.26/-4.21	-4.37/-5.99	-4.99/-1.59	-3.27/-1.61	-4.72/-7.02	-5.59/-5.53	-5.74/-7.02	-8.22/-6.76	-3.08/-4.53	-4.9/-6	-3.46/-2.33	-3.46/-2.33
Θ(82.5°)	-1.25/-5.63	-2.41/-5.25	-2.39/-1.21	-0.21/0.3	-2.38/-1.08	-2.60/-47	0.67/-0.43	-1.87/-1.29	-0.38/-0.21	-1.44/-2.35	-5.07/-7.73	-2.9/-4.9	-2.74/-3.61	-4.28/-3.59	-3.62/-0.32	0.11/0.46	-2.25/0.86	-1.02/0.13	0.03/0.77	-1.58/-1.76	-0.62/-0.97	0.65/-3.84	-6.6/-79	-6/-2.28	-6/-2.28
Θ(90°)	-6.73/-4.14	-2.42/-7.91	-2.82/-2.16	-2.52/-1.63	-1.63/-0.85	-1.74/-0.55	0.58/0.51	-0.93/-2.66	-2.61/0.43	-2.32/-2.46	-8.16/-5.35	-6.96/-3.59	-2.65/-8.78	-3.15/-5.32	-5.02/-4.99	0.71/0.46	-6.23/-4.21	-2.81/-2.74	-2.72/-4.82	-4.26/-7.04	-2.73/-5.2	-3.78/-12.87	-9.27/-5.05	-9.27/-5.05	-9.27/-5.05
Θ(97.5°)	-9.33/-5.02	-3.93/-9.31	-3.36/-8.89	-1.49/-3.06	-1.16/-1.32	-1.88/-1.39	-0.41/-0.87	-2.98/-3.54	-5.62/-1.03	-0.83/-2.15	-6.4/-8.99	-4.16/-6.81	-6.31/-10.55	-5.94/-14.84	-7.02/-6.58	-5.85/-6.7	-7.27/-5.58	-4.22/-3.16	-4.09/-1.82	-7.58/-5.53	-5.75/-8.74	-5.97/-6.67	-3.73/-13.03	-6.87/-7.33	-6.87/-7.33
Θ(105°)	-6.31/-7.2	-3.85/-5.23	-4.36/-5.01	-3.06/-2.24	0.44/-0.84	-1.85/-0.41	-4.42/-1.36	-1.63/-2.93	-4.46/-0.84	-0.47/-1.63	-8.16/-5.45	-6.74/-7.36	-6.1/-10.05	-8.18/-6.4	-4.5/-5.95	-5.01/-7.23	-6.89/-5.73	-5.76/-6.65	-1.98/-5.97	-4.93/-3.28	-10.34/-3.86	-3.6/-10.22	-6.07/-14.13	-3.07/-5.6	-3.07/-5.6
Θ(112.5°)	-7.27/-6.18	-5.45/-4.39	-7.85/-8.45	-5.89/-1.98	-2.34/-2.06	-2.21/-3.16	-2.69/-0.67	-0.33/-3.76	-2.97/-1.53	-3.85/-6.55	-4.57/-8.66	-7.25/-10.61	-8.05/-7.56	-6.07/-5.04	-8.1/-5.28	-2.62/-4.29	-9.84/-7.62	-7.21/-10.95	-13.64/-10.8	-9.53/-4.28	-5.91/-6.11	-4.02/-5.96	-13.88/-8.11	-5.82/-9.34	-5.82/-9.34
Θ(120°)	-11.58/-11.96	-17.15/-9.27	-7.41/-5.92	-7.81/-7.9	-6.71/-9.76	-8.56/-4.71	-3.45/-3.52	-4.18/-7.37	-5.22/-4.29	-7.77/-6.33	-6.41/-8.28	-14.75/-9.85	-18.31/-11.6	-7.36/-6.01	-6.4/-8.48	-13.03/-12.08	-4.61/-7.08	-6.6/-6.74	-6.14/-7.96	-17.59/-16.69	-7.93/-9.85	-7.24/-15.23	-8.63/-19.18	-14.08/-13.35	-14.08/-13.35
Θ(127.5°)	-14.84/-16.39	-11.81/-16.64	-17.25/-17.87	-9.06/-11.85	-12.78/-9.37	-9.6/-8.18	-8.83/-9.17	-12.92/-12.62	-7.57/-3.71	-7.41/-13.6	-10.4/-15.94	-18.07/-19.15	-17.89/-21	-6.95/-10	-15.04/-12.63	-6.19/-6.95	-6.43/-12.89	-14.76/-13.06	-8/-6.27	-14.92/-13.29	-17.51/-18.83	-16.57/-18.33	-11.79/-11.61	-18.36/-13.52	-18.36/-13.52
Θ(135°)	-7.81/-10.1	-11.96/-9.09	-9.39/-12.99	-15.87/-12.18	-11.88/-8.97	-9.57/-12.59	-13.05/-13.66	-12.98/-10.19	-7.78/-8.01	-7.34/-8.57	-14.66/-10.3	-9.26/-18.86	-11.71/-6.06	-12.63/-17.55	-7.67/-12.32	-15.82/-6.3	-10.09/-18.46	-10.34/-17.35	-11.07/-11.47	-19.49/-18.52	-10.23/-13.08	-14.81/-18.37	-13.78/-10.01	-12.31/-15	-12.31/-15
Θ(142.5°)	-7.95/-8.68	-7.73/-6.85	-7.21/-10.77	-11.74/-7.38	-7.41/-6.86	-6.45/-6.95	-6.45/-6.95	-6.73/-14	-10.79/-11.24	-8.92/-9.34	-11.39/-14.49	-10.55/-5.3	-6.75/-8.89	-12.61/-9.15	-16.43/-14.65	-10.79/-11.98	-17.49/-16.8	-18.54/-8.69	-8.69/-12.28	-13.37/-12.85	-14.39/-18.86	-17.11/-18.6	-9.47/-6.39	-7.71/-9.06	-7.71/-9.06
Θ(150°)	-17.11/-6.42	-7.99/-7.22	-6.58/-4.74	-4.64/-6.21	-9.13/-12.12	-12.19/-0.93	-7.33/-7.25	-8/-8.83	-11.36/-12.19	-9.32/-8.82	-11.69/-9.21	-10.44/-7.3	-6.02/-7.71	-11.85/-15.88	-17.31/-18.73	-17.29/-12.05	-10.56/-14.77	-18.51/-15.36	-11.31/-10.77	-11.53/-9.94	-10.8/-12.08	-9.84/-7.82	-5.67		



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ (165°)	-8.89/-8.89	-8.47/-9.63	-12.19/-15.99	-17.86/-16.85	-14.18/-11.94	-13.99/-17.66	-15.56/-19.24	-18.83/-16.5	-19.04/-16.01	-15.09/-14.93	-11.87/-9.93	-12.86/-18.37	-18.9/-17.86	-17.76/-17.7	-18.92/-18.61	-15.35/-13.11	-12.56/-13.42	-12.79/-15.62	-17.7/-18.57	-14.6/-14.21	-13.68/-14.67	-15.22/-17.33	-17.77/-18.61	-18/-16
Θ (172.5°)	-11.42/-10.37	-9.53/-10.06	-10.26/-10.96	-12.26/-10.57	-13.97/-12.37	-12.29/-9.85	-12.49/-11.92	-13.74/-16.36	-19/-18.12	-16.17/-15.63	-13.41/-12.07	-14.77/-18.82	-19.32/-19.1	-19.02/-18.16	-17.45/-12.82	-16.41/-14.69	-17.15/-14.77	-15.76/-15.84	-18.36/-18.57	-19.26/-18.62	-18.91/-17.67	-18.62/-18.14	-15.79/-16.25	-18.05/-17.77
Θ (180°)	-13.45/-12.5	-13.91/-14.32	-12.31/-15.92	-15.36/-13.94	-14.06/-14.1	-13.9/-10.68	-13.13/-12.47	-18.83/-18.48	-18.92/-19.17	-18.73/-17.03	-14.64/-15.57	-18.67/-17.9	-18.53/-17.6	-18.32/-17.16	-15.12/-16.61	-18.13/-18.84	-14.92/-19.01	-18.63/-17.99	-19.13/-18.44	-17.35/-18.38	-19/-18.02	-17.67/-17.99	-18.89/-17.72	
Freq(Hz)	5.63GPol.	ThetaAnt.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°)	-18.97/-18.24	-17.27/-18.5	-18.21/-17.31	-16.62/-17.76	-15.06/-13.95	-12.61/-12.35	-16.53/-14.47	-14.71/-14.74	-14.21/-18.69	-19.29/-17.91	-17.8/-18.95	-19.27/-17.74	-18.29/-16.85	-16.61/-17.58	-14.18/-13.29	-11.89/-14.31	-14.33/-13.99	-14.12/-14.43	-16.75/-16.47	-18.42/-18.34	-17.88/-17.89	-18.36/-17.38	-18.35/-18.62	
Θ (15°)	-18.81/-17.65	-15.27/-13.91	-14.4/-13.47	-12.46/-14.18	-14.78/-14.28	-15.1/-15.99	-15.9/-18.95	-18.08/-17.72	-16.4/-15.45	-18.51/-17.7	-17.35/-18.75	-18.78/-17.62	-18.01/-16.29	-15.34/-16.38	-17.5/-16.64	-14.2/-13.85	-12.85/-13.18	-14.44/-13.27	-13.73/-13.31	-12.27/-13.69	-13/-13.01	-13.86/-13.67	-12.2/-14.79	-18.96/-18.29
Θ (17.5°)	-9.84/-12.25	-15.85/-15.56	-10.68/-8	-6.73/-6.73	-8.83/-10.01	-10.44/-10.55	-8.86/-8.5	-7.14/-6.55	-6.68/-6.35	-7.91/-9.45	-9.14/-11.46	-16.32/-17.42	-12.31/-10.08	-9.92/-11.15	-12.84/-15.08	-12.96/-10.76	-10.05/-9.31	-8.53/-7.71	-6.34/-6.24	-6.44/-6.51	-8.44/-8.21	-8.48/-7.97	-9.95/-9.52	-9.34/-9.39
Θ (22.5°)	-5.79/-6.32	-10.05/-16.4	-17.78/-10.96	-9.1/-13.69	-17.24/-11.3	-6.87/-5.85	-5.52/-6.63	-9.05/-10.08	-11.63/-8.57	-11.19/-17.41	-12.53/-12.16	-10.94/-9.19	-8.74/-8.47	-7.4/-8.14	-11.07/-11.83	-9.82/-8.3	-8.12/-8.96	-7.77/-7.16	-6.08/-5.63	-6.39/-6.03	-6.41/-7.74	-8.92/-10.4	-8.76/-7.5	-7.6/-7.49
Θ (30°)	-9.08/-7.86	-8.86/-6.45	-11.75/-7.29	-7.13/-11.69	-9.57/-5.76	-4.54/-6.21	-6.85/-7.19	-6.24/-5.13	-4.85/-3.96	-6.33/-4.86	-6.23/-9.23	-11.52/-7.13	-7.99/-9.34	-11.31/-9.26	-13.64/-8.46	-4.86/-5.22	-6.24/-5.32	-4.86/-6.24	-8.87/-5.62	-6.09/-8.45	-4.78/-4.45	-5.62/-7.4	-8.05/-12.82	-6.31/-6.04
Θ (37.5°)	-7.81/-6	-8.22/-4.06	-5.38/-6.83	-9.34/-9.72	-10.63/-9.38	-8.34/-8.07	-6.89/-6.79	-7.96/-6.8	-6.44/-5.14	-5.94/-5.6	-5.77/-6.32	-6.59/-7.3	-7.57/-7.14	-5.06/-4.2	-5.33/-4.82	-5.61/-5.4	-3.77/-2.98	-3.36/-2.64	-2.63/-2.41	-2.94/-6.37	-7.82/-8.93	-7.87/-9.52	-8.57/-6.35	-8.54/-7.37
Θ (45°)	-7.23/-6.85	-5.03/-6.81	-3.77/-6.94	-6.09/-6.36	-6.06/-6.38	-5.92/-4.98	-3.22/-3.14	-4.52/-4.72	-3.81/-5.11	-6.67/-6.37	-5.33/-5.84	-7.61/-7.2	-7.18/-5.46	-4.81/-6.34	-3.35/-3.23	-3.44/-5.52	-5.41/-5.77	-4.43/-5.14	-6.25/-6.46	-7.78/-6.29	-5.47/-4.76	-3.47/-4.23	-4.32/-4.56	-6.39/-6.08
Θ (52.5°)	-5.06/-4.8	-4.86/-5.55	-4.64/-2.65	-3.17/-2.33	-3.43/-4.69	-3.95/-3.53	-4.85/-4.93	-4.93/-2.66	-3.92/-3.96	-4.17/-5.78	-4.91/-6.55	-5.3/-5.46	-7.23/-4.59	-4.29/-4.52	-4.38/-5.67	-6.06/-4.37	-5.76/-7.56	-5.76/-5.23	-4.72/-2.7	-6.88/-5.88	-7.17/-4.74	-5.43/-1.99	-3.42/-3.98	-3.69/-4.01
Θ (60°)	-7.34/-2.97	-5.67/-2.22	-4.21/-2.72	-0.16/-4.22	-1.56/-3.03	-2.47/-4.8	-6.77/-2.97	-7.03/-8.21	-2.5/-2.88	-3.05/-2.76	-8.53/-4.52	-3.93/-4.81	-4.66/-2.93	-3.24/-4.89	-2.89/-4.01	-0.64/-0.87	1.463/0.9	2.712/71	2.36/1.93	1.330/74	-0.44/-1.4	-2.16/-4.52	-5.72/-2.39	-4.96/-3.55
Θ (67.5°)	-7.39/-3.93	-1.59/-4.81	-3.08/-4.02	-0.31/-2.38	-1.62/-1.69	-1.5/-1.05	-0.67/-1.01	-3.84/-2.57	-2.71/-1.79	-1.86/-4.29	-5.59/-4.55	-6.14/-2.78	-3.22/-4.71	-6.05/-5.94	-3.5/-4.22	-3.18/-5.6	-4.02/-5.58	-3.92/-2.39	-1.92/-4.46	-3.89/-3.54	-0.94/-3.06	-3.7/-3.83	-3.32/-11.97	-4.8/-9.5
Θ (75°)	-4.71/-5.7	-2/-2.48	-2.55/-3.14	-2.73/-0.87	-1.09/-2.05	-2.57/-1.29	-1.11/-1	-3.44/-4.06	-5.64/-1.25	-4.14/-3.86	-3.71/-3.29	-8.06/-3.21	-5.4/-7.9	-2.96/-2.66	-3.32/-1.17	-1.63/-0.61	-1.13/-1.92	-2.2/-3.26	-2.07/-0.23	-2.86/-3.81	-1.91/-4.36	-2.39/-4.63	-4.35/-5.74	-4.98/-4.9
Θ (82.5°)	-4.42/-0.8	-3.06/0.66	-2.54/-0.45	-2.48/-1.07	-0.720/0.61	-0.39/-1.74	-2.24/-1.62	-1.69/-1.2	-2.90/0.1	0.87/-1.18	-4.07/-3.23	-8.15/-4.42	-4.08/-3.43	0.82/-4.32	-6.86/-3.57	-3/-0.01	-3.31/-1.09	-3.22/-1.78	-1.99/-9.64	-3.91/-5.32	-0.52/-4.21	-2.59/-7.13	-3.63/-6.88	-2.17/-2.66
Θ (90°)	-2.44/-4.79	-0.56/-0.31	-1.23/-1.7	-2.17/-2.02	-0.19/1.47	0.52/-1.82	-1.37/0.64	1.15/-1.75	0.77/1.54	1.65/-1.26	-2.62/-3.18	-5.59/-4.55	-1.81/-2.3	-3.45/-1.5	-0.28/-1.45	-6.14/-4.73	-12.32/-3.01	-3.32/-1.91	-9.31/-1.63	-2.68/-2.6	-2.84/-5.36	-2.93/-7.16	-5.11/-5.92	-7.66/-1.88
Θ (97.5°)	-5.3/-3.45	-2.5/-1.35	-3.88/-2.39	-5.6/-2.05	-4.76/-0.99	-0.58/-4.55	-5.33/-1.95	0.78/-3.47	-1.78/-0.82	-1.22/-1.1	-7.28/-2.58	-7.35/-2.82	-2.09/-9.11	-4.58/-6	-11.48/-7.79	-4.04/-2.96	-13.15/-6.84	-4.84/-1.25	-2.93/-4.13	-5/-9	-5.51/-10.66	-9.85/-18.77	-6.71/-8.09	-4.46/-6.76
Θ (105°)	-8.53/-2.64	-3.47/-0.95	-4.07/-3.31	-4.02/-2.14	-4.17/-0.94	-0.98/-1.5	0.06/0.11	1.53/-1.23	-0.06/-2.42	1.05/-3.24	-3.76/-4.8	-6.81/-6.99	-3.61/-12.42	-9.91/-10.8	-4.32/-11.88	-5.56/-18.14	-18.73/-7.15	-5.88/-4.3	-14.52/-2.93	-7.48/-7.75	-12.15/-13.18	-15.97/-8.82	-8.97/-17.27	-0.47/-4.35
Θ (112.5°)	-8.89/-3.66	-6.34/-4.12	-5.58/-2.93	-4.8/-1.92	-0.88/-0.26	-1.91/-3	-1.93/-2.62	-0.45/-1.95	-2.51/-4.7	-0.22/-0.6	-6.21/-4.06	-11.22/-5.81	-13.71/-10.9	-10.2/-6.6	-3.82/-9.69	-2.99/-1.77	-8.34/-6.7	-6.79/-8.78	-14.98/-10.11	-8.11/-5.62	-9.98/-8.83	-9.65/-11.03	-7.67/-9.16	-5.65/-3.29
Θ (120°)	-10.66/-16.16	-8.01/-11.41	-8.3/-13.19	-7.14/-14.45	-5.39/-4.45	-5.64/-8.92	-7.1/-6.29	-4.88/-6.52	-3.85/-5.5	-4.18/-7.63	-6.12/-7.22	-10.77/-16.44	-9.55/-18.09	-9.49/-11	-5.79/-8.14	-8.3/-12.09	-4.89/-8.73	-10.13/-8.81	-6.32/-10.34	-11.75/-19.09	-6.23/-17.17	-18.1/-6.65	-10.69/-18.21	-10/-9.88
Θ (127.5°)	-10.3/-18.26	-17.09/-18.13	-16.98/-13.77	-18.82/-14.16	-17.57/-10.61	-12.55/-12.66	-12.2/-11.76	-11.88/-8.08	-9.55/-14.2	-15.67/-11.68	-18.29/-13.64	-11.94/-7.48	-9.31/-14.33	-12.69/-7.24	-7.17/-4	-18.85/-16.01	-7.14/-8.86	-16.18/-17.99	-14.31/-18.57	-15.43/-9.35	-15.52/-14.42	-11.83/-12.58		
Θ (135°)	-8.85/-14.95	-12.22/-18.31	-14.42/-11.11	-12.59/-13.44	-8.72/-10.09	-11.1/-12.87	-8.59/-7.67	-9.66/-13.74	-18.4/-13.05	-12.81/-11.54	-11.98/-12.28	-17.94/-9.25	-15.25/-11.9	-8.42/-9.37	-13.98/-12.61	-10.58/-18.06	-11.72/-7.98	-14.07/-19.09	-12.39/-13.66	-9.91/-18.5	-10.64/-15.31	-12.64/-11.24	-10.35/-12.97	
Θ (142.5°)	-5.21/-7.66	-10.21/-9.9	-9.16/-7.63	-7.37/-10.44	-9.1/-8.43	-9.28/-10.32	-14.89/-17.47	-13.49/-8.37	-4.95/-4.67	-6.1/-10.49	-13.51/-9.5	-14.3/-15.63	-6.74/-3.55	-5.66/-11.5	-12.35/-18.89	-17.81/-14.16	-16.22/-15.11	-10.22/-6.89	-8.05/-15.92	-12.33/-10.3	-19.79/-17.22	-12.85/-5.3	-5.07/-10.82	-11.48/-6.19
Θ (15°)	-6.33/-7.7	-6.62/-4.65	-5.63/-6.4	-6.91/-6.06	-4.53/-3.76	-4.15/-3.8	-3.32/-3.39	-2.71/-2.64	-2.28/-3.46	-7.38/-9.53	-6.87/-11.05	-9.73/-6.39	-8.52/-8.63	-7.61/-7.57	-8.74/-11.09	-12.58/-17.53	-15.94/-18.62	-17.53/-15.82	-17.03/-14.77	-9.43/-7.29	-7.88/-6.56	-5.32/-2.18	-2.91/-6.78	-10.27/-13.6
Θ (157.5°)	-2.26/-1.96	-5.38/-11.21	-9.53/-2.35	-2.23/-2.53	-4.19/-6.28	-7.12/-7.77	-8.56/-7.28	-5.56/-5.6	-5.4/-4.5	-5.4/-6.24	-6.21/-4.06	-11.22/-5.81	-13.71/-10.9	-10.2/-6.6	-3.82/-9.69	-2.99/-1.77	-8.34/-6.7	-6.79/-8.78	-14.98/-10.11	-8.11/-5.62	-9.98/-8.83	-9.65/-11.03	-7.67/-9.16	-5.65/-3.29
Θ (165°)	-3.65/-2.7	-3.57/-5.66	-7.15/-5.78	-4.87/-5.72	-5.72/-4.57	-4.33/-3.99	-2.98/-3.59	-3.18/-3.93	-4.29/-5.25	-4.67/-4.33	-6.42/-9.43	-7.85/-6.4	-8.45/-9.14	-8.45/-7.68	-8.19/-12	-17.42/-17.68	-13.58/-14.61	-10.98/-7.7	-7.02/-6.69	-8.88/-10.51	-11.51/-9.63	-9.41/-11.56	-12.9/-11.73	-10.49/-6.64
Θ (172.5°)	-18.93/-15.23	-12.18/-11.13	-9.39/-7.48	-6.46/-6.2	-6.61/-7.24	-7.32/-7.13	-6.67/-0.2	-6.07/-5.58	-3.84/-2.96	-4.29/-6.72	-9.35/-8.37	-7.92/-8.83	-11.75/-18.78	-14.6/-12.97	-15.99/-18.17	-12.89/-8.28	-7.19/-8.32	-11.01/-11.71	-13.22/-16.15	-17.56/-18.25	-18.71/-17.29	-17.33/-17.6	-15.82/-15.37	-16.97/-17.09
Θ (180°)	-18.97/-18.77	-19.44/-19.27	-18.97/-18.31	-18.96/-18.82	-17.89/-15.72	-12.88/-12.9	-12.53/-9.83	-8.38/-8.32	-8.9/-12.04	-16.5/-16.26	-11.19/-9.92	-12.45/-16.08	-17.81/-19.59	-14.52/-13.79	-14.47/-16.49	-17.12/-13.76	-12.89/-14.12	-15.81/-16.98	-18.06/-17.64	-18.12/-17.69	-15.47/-15.69	-17.45/-18.36	-17.93/-19.36	-19.38/-17.36
Freq(Hz)	5.785GPol.	PhiAnt.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°)	-17.19/-19.22	-18.85/-17.48	-18.51/-18.92	-18.61/-18.99	-17.95/-17.76	-19.35/-17.67	-19.27/-19.03	-18.66/-18	-18.21/-18.35	-19.21/-19.11	-18.71/-19.37	-18.37/-18.1	-19.14/-17.16	-18.51/-17.59	-17.45/-17.93	-18.71/-19.37	-18.86/-17.82	-18.13/-18.63	-19.25/-17.99	-18.66/-17.99	-18.43/-17.97	-18.26/-18.44	-18.94/-19.07	-19.13/-18.59
Θ (7.5°)	-18.09/-17.82	-19.39/-17.83	-16.59/-17.2	-16.16/-15.83	-18.55/-17.91	-17.86/-17.88	-18.94/-18.44	-15.61/-13.25	-13.42/-14.73	-15/-17.72	-18.42/-17.65	-17.4/-18.11	-17.69/-18.4	-17.13/-15.61	-16.15/-15.14	-17.06/-17.75	-18.24/-17.94	-18.16/-18.64	-18.55/-17.39	-19.3/-18.33	-18.94/-17.86	-15.43/-14.93	-14.26/-15.82	-18.1/-19.19
Θ (15°)	-18.53/-17.75	-19.1/-16.06	-13.16/-12.36	-14.2/-13.86	-15.04/-17.87																			



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(15°)	-6.27/-6.49	-6.75/-7.03	-7.46/-8.21	-8.96/-9.57	-9.85/-10.16	-10.91/-11.55	-13.97/-15.88	-17.31/-17.32	-16.25/-14.51	-12.56/-10.75	-9.09/-8.05	-7.81/-7.91	-7.72/-6.48	-5.41/-5.02	-5.45/-4.65	-7.57/-8.43	-9.31/-10.69	-12.95/-16.64	-17.69/-18.33	-18.71/-18.08	-16.61/-14.43	-12.57/-11.46	-10.72/-9.64	-8.65/-8.17
Θ(22°)	-4.99/-5.16	-5.35/-5.67	-6.4/-7.74	-9.83/-11.91	-12.35/-11.46	-11.06/-11.23	-13.11/-16.72	-17.88/-17.79	-14.04/-10.51	-8.21/-6.6	-5.13/-4	-3.87/-4.45	-5.2/-5.59	-5.25/-4.62	-4.63/-5.25	-6.23/-7.24	-8.55/-10.21	-12.72/-15.98	-16/-14.17	-13.6/-14.16	-14.54/-14.16	-12.84/-11.59	-10.39/-9.06	-7.99/-7.88
Θ(30°)	-5.01/-4.74	-4.77/-4.85	-5.14/-6.38	-9.11/-14.56	-17.56/-13.48	-11.71/-12.46	-15.77/-17.99	-12.75/-7.79	-4.96/-3.65	-3.28/-3.41	-3.39/-3.34	-3.76/-4.48	-5.17/-5.65	-5.44/-4.67	-4.12/-3.77	-7.34/-4.19	-8.55/-10.25	-11.61/-10.25	-9.6/-9.55	-12.68/-12.67	-11.61/-10.14	-8.92/-8.25	-6.43/-6.28	
Θ(37.5°)	-5.87/-5.47	-6/-6.7	-7.33/-8.29	-11.01/-16.22	-14.93/-11.61	-10.81/-11.64	-12.09/-9.1	-5.38/-2.86	-1.77/-1.93	-2.92/-3.62	-2.84/-2.48	-3.08/-3.89	-4.56/-5.25	-5.94/-5.5	-5.05/-3.86	-3/-3.06	-4.34/-6.35	-8.49/-8.76	-8.02/-7.69	-7.27/-6.73	-6.79/-7.94	-9.93/-11.69	-11.92/-11.52	-10.74/-9.45
Θ(45°)	-4.63/-4.41	-5.74/-8.23	-10.8/-11.47	-10.84/-9.86	-8.75/-8.47	-9.1/-9.29	-7.43/-4.65	-2.38/-1.08	-0.95/-2.04	-3.43/-3.12	-2.12/-1.92	-2.3/-4.28	-2.46/-2.63	-3.01/-3.39	-3.75/-3.5	-2.77/-2.45	-3.13/-4.77	-6.43/-5.65	-5.06/-5.85	-5.89/-4.91	-4.5/-4.9	-5.98/-3.73	-8.06/-8.6	-8.43/-7.11
Θ(52.5°)	-4.21/-3.99	-5.53/-8.19	-8.78/-7.3	-6.4/-6.12	-5.89/-6.67	-8.31/-8.02	-4.77/-2.31	-1.17/-0.95	-1.72/-3.75	-4.11/-2.28	-0.30/-5	-1.47/-6.1	2.912/3.7	1.450/84	0.470/09	-0.16/-0.3	-0.64/-1.71	-3.2/-2.64	-2.38/-3.7	-4.01/-3.35	-3.29/-3.55	-4.11/-5.06	-5.56/-5.48	-5.34/-4
Θ(60°)	-3.2/-2.94	-4.13/-5.15	-4.07/-3.09	-3.59/-5.21	-5.83/-5.85	-6.08/-5.19	-2.86/-1.24	-1.88/-3	-3.85/-5.87	-6.7/-3.79	-1.88/-1.08	0.47/2.02	2.15/-1.1	-0.16/-0.26	0.87/-15	1.010/68	0.80/73	-0.29/-0.34	-0.12/-0.95	-1.41/-1.67	-2.54/-3.33	-3.72/-4.57	-4.88/-3.92	-3.09/-2.29
Θ(67.5°)	-2.28/-1.95	-2.45/-2.96	-2.47/-2.14	-2.91/-6.1	-4.95/-3.62	-2.57/-2.4	-1.86/-2.05	-4.6/-5.22	-4.69/-6.81	-7.71/-6.72	-6.85/-6.4	-4.44/-3.51	-4.08/-5.87	-8.47/-8.03	-4.06/-1.88	-1.69/-1.91	-0.69/-0.5	0.25/-0.16	-0.020/-37	0.21/-0.87	-2.4/-4.34	-4.8/-4.76	-5.15/-3.96	-2.48/-1.74
Θ(75°)	-2.85/-2.56	-2.36/-2.86	-3.59/-3.3	-2.14/-1.9	-2.48/-1.8	-0.67/-1.24	-2.44/-3.13	-3.83/-2.66	-3.2/-6.84	-7.69/-6.24	-5.24/-3.75	-3.53/-4.13	-4.49/-4.68	-5.65/-9.18	-18.73/-12.35	-10.44/-10.6	-7.07/-3.11	-1.4/-1.55	-2.35/-0.46	0.26/-1.12	-2.55/-5.93	-6.71/-4.19	-4.79/-4.29	-2.46/-1.9
Θ(82.5°)	-2.89/-3	-2.5/-2.85	-4.21/-3.69	-1.13/-0.23	-1.98/-2.2	-0.19/-0.49	-1.88/-1.64	-0.95/-0.93	-3.22/-3.79	-1.82/-1.83	-2.26/-3.41	-4.05/-2.65	-1.93/-1.64	-1.43/-2.58	-5.67/-7.8	-8.36/-10.13	-11.93/-9.29	-4.68/-3.29	-5.95/-3.81	-2.1/-3.01	-3.26/-6.9	-7.83/-3.96	-4.77/-4.75	-2.43/-1.67
Θ(90°)	-2.68/-3.47	-3.26/-3.25	-4.85/-6.02	-3.09/-1.31	-2.31/-2.32	0.6/-0.11	-2.09/-0.42	0.82/-0.34	-3.72/-1.8	-1.23/-1.81	-2.76/-0.78	0.23/-0.07	0.09/-0.71	-2.06/-2.66	-3.51/-4.99	-6.83/-8.96	-9.51/-5.7	-7.68/-11.15	-8.7/-8.23	-5.44/-6.91	-8.74/-5.2	-5.51/-6.05	-3.66/-2.24	
Θ(97.5°)	-4.23/-6.35	-7/-7.11	-9.38/-13.01	-5.85/-2.58	-4.66/-2.86	-0.14/-3.4	-2.23/-0.33	0.91/-4.7	-5.3/-1.55	-0.68/-2.86	-3.9/-8.48	-1.74/-8.24	-5.17/-3.26	-2.36/-2.76	-2.76/-2.56	-4.32/-7.1	-7.71/-8.56	-9.86/-6.48	-6.77/-10.44	-13.91/-19.12	-10.47/-8.38	-7.9/-5.63	-4.55/-4.15	-2.94/-2.22
Θ(105°)	-2.67/-4.86	-7.77/-11.68	-18.34/-17.11	-7.51/-4.92	-8.02/-5.03	-1.14/-1.73	-2.69/-1.52	-1.84/-4.53	-8.21/-4.58	-3.21/-5.21	-5.99/-5.71	-11.49/-14.64	-7.75/-7.63	-8.1/-10.18	-6.82/-5.46	-7.91/-13	-14.26/-12.46	-12.39/-9.35	-7.89/-8.65	-8.91/-11.15	-16.3/-14.81	-12.51/-9.11	-5.08/-2.49	-1.15/-1.02
Θ(112.5°)	-6.41/-7.7	-9.47/-13.38	-18.73/-14.42	-9.58/-9.25	-1.095/-4.25	-1.67/-3.1	-6.05/-4.79	-8.58/-10	-1.11/-1.73	-5.81/-7.09	-8.74/-6.66	-7.04/-10.91	-15.89/-15.74	-12.44/-12.15	-12.83/-12.39	-15.69/-17.65	-18.98/-19.11	-19.1/-14.19	-10.07/-8.52	-8.21/-9.15	-13.48/-18.43	-14.77/-12.62	-14.17/-8.32	-6.11/-5.89
Θ(120°)	-12.95/-10.86	-11.1/-13.81	-18.71/-12.52	-8.31/-7.64	-8.11/-6.61	-6.64/-10.09	-16.81/-18.21	-19.37/-18.66	-17.42/-11.09	-6.81/-6.22	-9.33/-10.04	-9.53/-12.04	-12.37/-8.12	-5.52/-5.02	-6.95/-9.74	-11.28/-10.09	-10.27/-11.41	-11.69/-16.91	-18.88/-10.34	-7.57/-7.05	-9.06/-14.46	-18.71/-18.56	-13.93/-18.32	-19.03/-14.61
Θ(127.5°)	-6.54/-10.78	-17.31/-19.43	-17.26/-10.68	-6.93/-6.89	-10.44/-16.09	-17.93/-19.17	-18.69/-13.9	-10.42/-9.73	-8.87/-7.84	-7.42/-10.31	-16.88/-8.08	-4.58/-3.13	-1.84/-0.37	0.25/-0.33	-2.07/-4.71	-7.86/-10.7	-10.69/-7.59	-6.56/-9.27	-18.32/-16.43	-11.15/-8.4	-7.33/-7.1	-6.36/-5.67	-5.33/-5	-4.42/-2.27
Θ(135°)	-2.1/-4.85	-8.11/-9.43	-10.69/-11.78	-11.93/-14.58	-17.46/-12.19	-10.18/-10.76	-10.81/-9.12	-7.71/-6.95	-5.44/-2.44	-4.8/-8.48	-14.7/-6.07	-1.470/-69	1.772/-39	2.10/-97	-0.63/-5.27	-4.99/-8.65	-10.41/-7.24	-6.68/-8.9	-10.19/-8.21	-7.57/-6.76	-6.97/-5.99	-4.73/-4.38	-2.47/-1.48	-0.30/-5
Θ(142.5°)	-5.31/-7.4	-8.79/-8.5	-9.71/-11.29	-9.69/-6.9	-5.09/-4.77	-6.09/-8.48	-10.51/-11.09	-10.73/-7.7	-4.38/-2.75	-2.96/-5.59	-8.69/-5.74	-2.54/-1.03	-0.81/-1.26	-2.22/-3.67	-5.04/-5.89	-6.67/-3.38	-7.24/-6.91	-8.29/-11.6	-10.57/-6.57	-4.64/-3.98	-3.57/-3.43	-4.87/-4.62	-4.85/-4.02	-3.03/-2.98
Θ(150°)	-11.2/-8.66	-5.8/-4.28	-3.8/-3.69	-3.38/-3.23	-3.76/-5.58	-9.78/-18.09	-18.05/-12.97	-10.40/-7.29	-5.11/-4.01	-4.01/-5.15	-7.55/-7.52	-4.81/-3.84	-4.74/-6.79	-9.2/-11.55	-11.65/-9.85	-7.64/-6.2	-5.58/-6.17	-8.06/-11.58	-15.39/-11.39	-7.38/-5.19	-3.62/-2.97	-2.83/-3.4	-4.62/-6.14	-7.34/-7.87
Θ(157.5°)	-8.51/-8.17	-6.76/-6.11	-6.38/-6.02	-7.51/-8.32	-10.43/-15.42	-17.86/-15.35	-11.08/-9.52	-8.94/-8.56	-8.68/-9.5	-10.37/-10.74	-11.16/-11.62	-11.79/-12.6	-14.18/-13.57	-11.82/-10.82	-10.08/-9.1	-7.89/-7.06	-7.11/-8.07	-9.86/-11.66	-13.23/-14.44	-14.19/-19.75	-11.29/-5.91	-8.02/-6.96	-6.47/-6.85	-7.91/-6.63
Θ(165°)	-13.53/-15.72	-17.94/-17.8	-18.27/-17.78	-15.84/-15.33	-15.3/-14.44	-13.1/-11.9	-11.41/-11.74	-12.75/-13.93	-15.38/-17.42	-18.66/-19.06	-17.73/-18.45	-19.01/-18.4	-19.25/-17.35	-19.06/-17.8	-18.77/-18.13	-18.41/-16.95	-15.79/-14.76	-13.65/-12.25	-10.87/-9.87	-9.38/-9.72	-10.19/-11.47	-13.12/-14.94	-16.35/-15.63	-13.97/-12.54
Θ(172.5°)	-5.93/-5.92	-6.04/-2.63	-6.6/-7.13	-7.92/-8.91	-10.08/-11.37	-12.71/-13.68	-14.3/-14.67	-14.88/-15.04	-14.57/-14.09	-13.92/-13.8	-13.1/-9.81	-9.31/-9.29	-9.46/-9.69	-9.96/-10.57	-11.32/-12.82	-13.99/-14.66	-15.71/-14.64	-13.44/-12.1	-10.5/-9.05	-7.88/-7.08	-6.49/-6.2	-6.32/-6.64	-7.03/-7.02	-6.66/-6.42
Θ(180°)	-5.52/-4.42	-5.71/-6.3	-7.26/-8.48	-10.11/-12.29	-14.96/-18.76	-18.95/-18.62	-16.77/-14.61	-13.26/-12.17	-11.02/-9.72	-8.27/-12.7	-7.04/-7.44	-7.66/-7.32	-6.77/-6.15	-6.22/-6.56	-7.29/-8.32	-9.91/-11.43	-13.87/-17.44	-19.54/-17.3	-14.52/-12.48	-10.95/-9.89	-9.98/-8.16	-7.48/-6.87	-6.27/-5.8	-5.29/-4.72
Freq(Hz)	5.2GPol.	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°)	-17.88/-18.51	-17.06/-17.3	-16.97/-14.52	-12.78/-15.77	-1.16/-11.73	-13.2/-13.74	-14.17/-14.19	-14.54/-15.72	-15.84/-19.14	-14.81/-17.44	-18.74/-18.85	-15.8/-18.79	-18.05/-17.76	-18.85/-18.65	-18.55/-15.69	-14.81/-14.87	-14.24/-12.51	-11.99/-12.13	-11.31/-11	-11.84/-13.02	-13.75/-18.47	-18.2/-19.49	-17.86/-16.26	-18.67/-15.53
Θ(7.5°)	-18.26/-17.36	-18.37/-17.87	-18.68/-19.06	-15.73/-13.78	-12.36/-12.14	-12.44/-11.19	-10.74/-10.9	-12.01/-10.33	-13.72/-14.64	-13.73/-14.69	-19.41/-18.94	-17.73/-17.76	-18.64/-18.27	-18.82/-18.88	-18.95/-15.97	-14.21/-15.68	-12.84/-13.91	-13.69/-13.81	-18.26/-13.7	-15.81/-17.87	-18.25/-17.87	-19.29/-19.14	-17.95/-17.93	-18.38/-19.3
Θ(15°)	-18.8/-18.2	-19.11/-18.62	-18.97/-18.93	-17.24/-13.17	-12.74/-11.73	-10.66/-10.18	-11.21/-12.52	-13.97/-14.11	-15.55/-15.63	-17.56/-17.56	-18.72/-16.56	-18.84/-18.86	-18.27/-18.1	-19.21/-18.23	-18.41/-19.17	-18.66/-18.38	-16.49/-19.19	-17.42/-17.65	-12.36/-10.91	-11.29/-12.17	-15.81/-17.49	-18.64/-19.41	-19.14/-17.75	-18.99/-18.95
Θ(22.5°)	-17.77/-18.63	-19.11/-17.53	-17.99/-17.36	-18.97/-16.91	-18.8/-18.9	-12.95/-11.75	-14.56/-18.47	-16.35/-12.96	-13.04/-16.23	-18.93/-18.26	-18.36/-18.15	-18.89/-18.82	-17.98/-18.22	-18.87/-17.88	-18.69/-18.92	-18.01/-18.47	-17.49/-18.56	-17.83/-18.45	-15.16/-13.53	-15.44/-13.83	-18.64/-17.24	-16.48/-17.63	-18.75/-18.68	-18.25/-18.8
Θ(30°)	-17.73/-18.21	-17.45/-14.24	-18.52/-18.66	-15.38/-17.43	-18.07/-18.4	-17.42/-16.22	-15.8/-18.68	-18.81/-14.38	-18.83/-17.88	-19.1/-18.25	-18.34/-19.57	-18.92/-17.58	-18.53/-19.32	-18.5/-19.21	-18.26/-17.05	-19.17/-18.29	-17.45/-17.7	-18.73/-18.14	-18.03/-17.86	-19.33/-18.98	-13.88/-12.77	-13.81/-15.06	-18.83/-18.08	-19.1/-17.52
Θ(37.5°)	-18.01/-18.71	-17.88/-18.38	-15.79/-19.28	-18.31/-18.84	-18.4/-19.04	-18.02/-18.84	-18.22/-18.53	-18.52/-19.03	-18.1/-18.3	-18.23/-17.81	-18.24/-15.13	-19.15/-18.3	-17.84/-18.23	-19.23/-18.75	-19.29/-18.41	-18.05/-17.56	-17.87/-17.03	-19.21/-17.79	-18.76/-18	-18.11/-17.36	-16.34/-17.52	-18.62/-18.17	-18.92/-18.61	-18.31/-19.22
Θ(45°)	-19.24/-18.48	-13.3/-17.95	-18.07/-19.1	-18.75/-18.63	-18.91/-18.34	-17.56/-15.67	-14.48/-13.44	-16.43/-14.81	-14.38/-19.23	-19.12/-18.04	-16.19/-14.11	-18.45/-19.02	-19.38/-19.52	-15.99/-13.43	-19.05/-12.44	-12.23/-19.94	-18.45/-18.7	-18.41/-17.56	-19.05/-17.04	-19.24/-17.8	-18.36/-19.24	-17.31/-17.09	-18.66/-17.27	-18.71/-7.52
Θ(52.5°)	-18.75/-17.42	-13.92/-17.5	-18.36/-18.56	-18.08/-15.77	-18.41/-14.56	-13.08/-15.77	-11.09/-11.02	-18.95/-19.04	-10.63/-8.42	-14.48/-13.38	-17.55/-17.7	-17.82/-18.83	-17.21/-18.52	-18.58/-15.36	-18.04/-12.52	-13.1/-18.23	-19.33/-18.4	-18.54/-13.97	-14.59/-19.26	-18.21/-17.78	-17.34/-16.34	-17.16/-17.89	-18.77/-18.09	-18.21/-18.93
Θ(60°)	-18.48/-17.38	-14.06/-19.31	-17.42/-15.52	-18.98/-17.36	-18.89/-11.27	-19.1/-13.77	-13.17/-18.83	-13.2/-13.66	-12.12/-14.09	-13.47/-9.56	-16.36/-18.39	-15.85/-17.05	-12.55/-13.89	-15.6/-17.04	-18.41/-18.94	-16.58/-14.7	-18/-							



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ(60°)	-3.33/2.99	-2.56/5.9	-4.71/4.25	-4.49/4.12	-0.79/5.91	-3.2/5.3	-5.74/5.6	-1.91/-6.49	-4.43/3.73	-2.06/2.13	-2.91/1.35	1.43/1.93	3.04/2.5	0.11/0.45	0.43/-1.24	-0.71/-5.24	-6.15/-5.64	-6.19/-2.42	-3.56/-6.17	-4.72/5.97	-7.61/-2.83	-4.75/-3.76	-4.63/-5.27	-4.98/-3.79
Θ(67.5°)	-3.6/-2.6	-4.87/-8.25	-7.41/-3.84	-2.94/-1.17	-2.99/-4.89	-4.53/-6.32	-4.36/-6.76	-4.3/-3.87	-2.66/-2.02	-0.32/-3.09	-1.66/-8.2	-1.3/-3.7	-6.07/-5.26	-4.07/-5.47	-3.9/-5.32	-6.33/-6.59	-6.16/-15.69	-7.61/-8.69	-3.51/-6.07	-3.12/-4.81	-5.75/-4.71	-5.17/-2.07	-2.15/-3.26	-4.8/-4.31
Θ(75°)	-1.75/0.03	-2.29/-3.7	-1.09/-0.84	0.95/-2.21	-0.83/-3.34	-5.01/-3.45	-4.35/-6.12	-1.97/-4.39	-6.08/-2.1	-5.12/-2.45	-4.27/-6.51	-1.27/-1.88	-0.56/-3.13	-0.95/-3.29	-3.24/-3.52	-6.41/-5.68	-7.47/-6.21	-6.92/-5.36	-4.98/-5.31	-5.03/-4.33	-4.93/-2.73	-2.29/-2.15	-1.99/-1.69	-1.68/-3.78
Θ(82.5°)	0.43/0.87	-1.22/-1.27	1.37/0.19	1.54/-5.74	3.4/-3.12	-1.45/-4.84	-3/0.76	-8.15/-3.24	2.64/-0.84	-1.52/1.1	-1.98/-1.88	-2.29/0.17	-0.48/0.11	-1.43/-1.54	-8.9/-2.04	-4.1/-3.63	-1.9/-5.62	-2.52/-4.25	-3.75/-2.4	-6.46/-6	-3.44/-1.11	-1.90/5.6	0.1/-2.02	-0.96/-0.42
Θ(90°)	0.74/-1.5	-1.34/-1.37	0.15/-6.08	-1.96/-5.81	-4.19/-3.67	-1.43/-4.85	-2.87/-2.6	-6.74/-2.89	-3.11/-2.22	-1.41/0.09	-1.09/0.22	0.29/-1.94	-4.23/-2.59	-2.04/-2.58	-7.2/-3.02	-3.33/-2.07	-3.01/-5.67	-2.05/-4.5	-3.49/-3.04	-9.99/-2.69	-4.26/-1.71	-2.69/0.04	-0.45/-3.42	-4.77/-0.03
Θ(97.5°)	1.39/-1.31	0.88/-1.69	0.43/-5.43	-1.73/-3.57	-5.67/-5.57	-3.55/-4.89	-6.57/-5.73	-2.1/8.68	-4/-9.63	-12.49/-4.08	-8.52/-12.07	-5.96/-7.2	-6.75/-5.88	-2.51/-6.12	-12.3/-8.23	-6.75/-5.98	-6.97/-9	-6.21/-5.16	-5.66/-5.87	-14.18/-3.99	-6.24/0.18	-0.48/0.79	-0.69/-4.5	-4.39/-0.89
Θ(105°)	1.66/-1.04	-1.22/-1.3	2.08/-0.93	-0.82/-8.13	-2.95/-5.25	-3.55/-4.37	-4.31/-4.95	-3.6/-5.46	-6.91/-16.83	-5.84/-1.62	-4.11/-4.82	-4.53/-9.09	-4.1/-4.86	-7.07/-7.07	-11.8/-8.15	-3.04/-8.95	-17.86/-11.09	-6.98/-6.55	-6.46/-6.35	-7.63/-6.3	-5.85/-3.28	0.07/1.1	-1.21/-5.57	-0.61/1.24
Θ(112.5°)	-2.43/-5.75	-2.28/-4.12	-0.55/-1.25	-2.79/-7	-6.9/-5.34	-4.74/-3.7	-6.7/-5.63	-4.58/-8.57	-6.18/-4.58	-5.31/-2.22	-4.6/-4.6	-5.15/-6.55	-3.63/-6.35	-6.67/-6	-9.29/-12.7	-4.92/-12.92	-11.15/-8.47	-7.02/-5.41	-9.67/-6.36	-9.79/-8.37	-5.03/-5.93	-3.55/-3.88	-3.66/-4.08	-0.99/-1.35
Θ(120°)	-6.36/-6.78	-10.82/-8.35	-3.5/-1.2	-8.1/-11.7	-13.84/-6.38	-10.61/-10.7	-8.58/-9.28	-8.36/-8.28	-7.09/-6.75	-8.27/-7.58	-8.75/-7.38	-8.24/-14.48	-16.81/-12.93	-12.96/-11.6	-9.67/-8.88	-4.23/-13.25	-14.55/-6.97	-10.38/-11.75	-13.54/-13.64	-14.38/-7.63	-4.95/-8.7	-9.68/-7	-7.32/-10.11	-8.33/-4.93
Θ(127.5°)	-7.03/-8.74	-10.36/-12.01	-16.1/-10.88	-8.97/-7.62	-12.3/-14.31	-14.76/-11.23	-16.5/-13.77	-12.46/-18.09	-14.83/-11.96	-17.72/-12.04	-9.56/-5.2	-4.85/-5.83	-5.11/-6.53	-6.6/-9.57	-17.3/-8.72	-18.84/-10.25	-17.94/-12.82	-10.56/-12.41	-18.61/-14	-18.2/-8.27	-5.18/-10.48	-14.87/-7.97	-10.49/-6.81	-8.14/-9.78
Θ(135°)	-11.92/-13.35	-13.09/-10.39	-7.68/-8.81	-5.36/-6.03	-10.31/-11.74	-12.94/-13.95	-12.77/-11.94	-8.24/-11.21	-17.91/-9.41	-11.08/-14.36	-12.84/-13.83	-11.35/-12.05	-13.93/-12.94	-17.75/-14.31	-12.13/-11.8	-11.97/-18.17	-15.23/-19.29	-13.17/-17.13	-11.77/-18.18	-11.39/-14.07	-10.94/-12.69	-4.83/-6.47	-7.26/-13.39	-13.28/-14.91
Θ(142.5°)	-2.63/-3.21	-4.55/-5.4	-7.2/-10.3	-13.1/-12.16	-10.58/-9.26	-17.53/-12.72	-10.5/-3.65	-4.44/-10.89	-13.95/-11.37	-8.56/-14.9	-11.93/-10	-15.16/-18.9	-14.77/-19.12	-6.93/-11.3	-19.29/-16.44	-12.33/-12.99	-13.06/-9.02	-17.61/-10.42	-18.54/-14.57	-11.31/-10.53	-11.42/-12.6	-12.75/-9.43	-6.6/-7.72	-6.71/-5.75
Θ(150°)	-7.11/-8.06	-6.47/-5.82	-5.27/-6.2	-9.18/-7.51	-7.42/-9.49	-7.44/-6.35	-7.99/-9.47	-9.95/-7.27	-7.16/-13.81	-15.14/-17.23	-18.53/-18.02	-18.98/-18.72	-16.1/-5.89	-17.15/-18.15	-13.88/-18.57	-19.06/-18.77	-11.57/-6.43	-5.69/-6.6	-9.62/-13.83	-12.29/-14.96	-18.18/-12.02	-9.72/-7.73	-4.32/-4.37	-5.57/-5.59
Θ(157.5°)	-9.46/-7.73	-9.35/-9.75	-9.27/-15.2	-5.16/-6.57	-12.25/-10.3	-8.4/-14.19	-11.94/-6.39	-4.66/-5.03	-6.8/-13.9	-18.96/-19.27	-7.22/-8.27	-9.64/-8.49	-8.53/-9.25	-12.78/-15.03	-13.69/-12.79	-12.92/-15.15	-12.27/-8.99	-7.09/-7.23	-8.71/-11.8	-12.61/-14.18	-18.55/-16.39	-10.56/-9.05	-10.96/-9.84	-9.07/-11.72
Θ(165°)	-7.1/8.21	-8.26/-9.16	-10.2/-10.8	-11.54/-9.21	-6.9/-8.02	-9.09/-7.97	-6.29/-7.04	-9.36/-13.28	-18.41/-19	-14.31/-9.67	-8.28/-9.03	-9.97/-11.09	-11.76/-10.73	-9.34/-8.06	-8.16/-10.89	-15.37/-14.78	-12.33/-12.99	-12.41/-13.96	-14.85/-14.57	-11.31/-10.53	-11.42/-12.6	-12.75/-9.43	-6.6/-7.72	-6.71/-5.75
Θ(172.5°)	-9.62/-9.01	-8.09/-7.48	-7.51/-7.99	-8.39/-10.37	-15.24/-18.18	-12.18/-9.23	-8.69/-9.61	-12.46/-16.12	-19.37/-18.28	-14.14/-11.3	-11.18/-12.76	-12.75/-14.07	-11.78/-9.02	-8.61/-8.33	-8.27/-10.31	-12.3/-13.99	-15.98/-17.44	-19.2/-18.41	-16.78/-13.56	-10.44/-9	-9.04/-8.96	-9.12/-10.6	-10.93/-10.51	-10.73/-11.47
Θ(180°)	-17.45/-19.05	-17.97/-18.23	-18.13/-18.94	-19.35/-15.53	-12.53/-10.94	-10.91/-11.45	-13.05/-15.23	-15.03/-12.78	-12.73/-14.99	-18.49/-18.42	-17.16/-18.96	-19.06/-18.86	-18.08/-17.79	-17.66/-18.95	-18.6/-17.06	-16.69/-18.83	-19.04/-18.12	-17.92/-15.67	-14.46/-13.9	-12.6/-11.36	-11.77/-12.95	-12.97/-13.83	-15.04/-16.54	-16.22/-15.23
Freq(Hz)	5.6GPol.	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°)	-17.83/-18.42	-17.43/-18.54	-19.19/-19	-18.58/-18.35	-17.93/-17.49	-18.92/-16.57	-15.21/-13.9	-14.12/-14.74	-17.72/-17.89	-17.48/-17.29	-18.39/-19.72	-17.82/-18.3	-18.58/-18.44	-18.66/-18.71	-18.98/-17.84	-17.88/-17.44	-16.64/-16.34	-18.57/-18.1	-18.06/-18.52	-19.4/-18.36	-18.58/-18.07	-18.51/-18.06	-19.3/-19.08	-18.96/-18.97
Θ(7.5°)	-18.96/-18.76	-19.17/-17.8	-19.47/-17.69	-18.83/-17.15	-16.87/-15.15	-14.44/-16.37	-16.73/-19.03	-16.76/-15.65	-17.99/-18.19	-18.89/-18.09	-19.35/-18	-17.73/-18.42	-17.74/-19.13	-17.64/-16.52	-18.26/-18.83	-16.72/-17.99	-18.81/-18.23	-16.48/-15.18	-14.29/-12.93	-14.28/-13.62	-14.63/-14.73	-14.71/-13.91	-14.89/-17.17	-18.67/-18.01
Θ(15°)	-18.9/-18.3	-18.28/-18.74	-19.36/-18.15	-15.18/-12.06	-14.06/-15.43	-14.94/-18.54	-18.25/-14.68	-11.94/-12.99	-15.93/-17.8	-16.01/-13.33	-15.34/-18.49	-17.36/-17.62	-18.19/-18.21	-18.22/-18.15	-17.59/-18.06	-18.3/-18.72	-13.58/-12.96	-11.78/-10.92	-12.45/-15.21	-19.37/-18.63	-17.75/-16.9	-17.4/-18.17	-17.94/-17.49	-18.16/-17.96
Θ(22.5°)	-18.74/-18.14	-16.53/-17.77	-17.28/-15.91	-15.34/-13.71	-11.22/-11.31	-13.34/-17.47	-15.84/-11.14	-11.04/-19.29	-18.16/-17.98	-16.88/-17.46	-17.74/-17.71	-18.04/-18.74	-18.22/-18.43	-19.92/-18.59	-17.43/-19.33	-17.03/-19.33	-19.36/-19.18	-12.88/-9.36	-11.75/-19.09	-17.73/-15.97	-13.87/-14.21	-16.89/-18.42	-18.81/-17.62	-18.81/-17.62
Θ(30°)	-17.19/-18.31	-18.4/-18.54	-17.95/-16.71	-15.58/-18.3	-17.21/-12.5	-14.22/-18.57	-13.2/-11.73	-10.27/-18.12	-14.18/-14.97	-17.83/-16.17	-17.41/-11.63	-15.57/-19.27	-18.38/-18.09	-19.19/-19.51	-14.63/-16.08	-16.21/-15.99	-16.51/-15.26	-18.9/-13.66	-12.47/-16.55	-12.57/-10.64	-11.89/-17.97	-18.83/-17.53	-17.56/-17.78	-18.68/-18.01
Θ(37.5°)	-18.83/-16.35	-14.37/-14.08	-19.17/-18.35	-17.69/-17.84	-18.59/-12.87	-17.87/-15.01	-12.3/-17.61	-18.92/-18.4	-17.24/-16.93	-18.17/-17.29	-16.73/-19.2	-17.53/-18.89	-18.4/-18.16	-17.52/-18.7	-12.71/-14.88	-17.17/-17.95	-18.73/-19	-17.6/-18.35	-17.99/-17.65	-11.33/-12.23	-18.08/-17.91	-13.23/-12.57	-18.87/-17.66	-18.77/-17.52
Θ(45°)	-19.37/-18.83	-18.12/-13.32	-12.43/-18.68	-14.87/-16.76	-19.40/-13.81	-16.88/-19.08	-17.17/-19.04	-17.85/-19.01	-17.46/-19.21	-19.44/-17.14	-17.51/-15.18	-18.89/-18	-17.95/-18.87	-18.2/-18.25	-13.85/-12.72	-16.17/-17.48	-18.73/-17.06	-18.99/-17.78	-18.62/-18.29	-17.17/-19.11	-17.17/-15.25	-17.29/-18.5	-17.98/-17.68	-18.18/-18.61
Θ(52.5°)	-18.4/-18.47	-18.77/-18.99	-14.37/-18.51	-18.93/-10.33	-12.78/-19.34	-10.66/-16.14	-14.33/-18.94	-17.26/-17.12	-17.23/-18.37	-18.19/-18.09	-19.09/-13.27	-17.98/-18.2	-17.71/-18.49	-12.71/-14.16	-18.66/-18.3	-18.84/-18.64	-17.52/-17.61	-18.46/-18.69	-18.87/-19.08	-18.22/-18.42	-17.79/-18.88	-18.83/-19.44	-17.66/-18.77	-17.66/-18.77
Θ(60°)	-13.74/-15.29	-18.27/-17.53	-15.82/-17.22	-18.96/-16.98	-12.7/-17.99	-9.19/-18.23	-18.86/-11.17	-13.53/-18.32	-16.61/-8.69	-11.8/-10.35	-11.03/-10.34	-12.31/-19.01	-16.75/-14.7	-16.29/-15.66	-17.94/-15.53	-18.16/-18.09	-17.82/-18.84	-14.5/-16.79	-12.47/-11.3	-18.02/-13.81	-18.08/-18.82	-17.72/-12.92	-14.92/-19.04	-17.75/-17.15
Θ(67.5°)	-18.9/-19.07	-19.06/-18.96	-18.71/-17.5	-18.91/-18.36	-19.38/-12.09	-12.73/-14.6	-10.87/-12.34	-10.3/-8.95	-10.91/-9.44	-16.35/-13.38	-11.59/-11.97	-11.91/-14.67	-16.51/-15.66	-18.19/-16.68	-13.51/-17.59	-11.58/-18.28	-18.34/-18.19	-18.63/-18.2	-13.67/-10.68	-17.86/-15.72	-18.93/-16.63	-15.1/-12.03	-13.05/-16.28	-17.71/-19.4
Θ(75°)	-18.1/-16.82	-14.95/-18.29	-15.18/-17.77	-14.47/-13.92	-18.64/-18.82	-15.27/-18.61	-15.15/-15.13	-14.11/-16.88	-18.58/-18.16	-18.83/-17.38	-16.71/-15.8	-16.78/-16.27	-13.24/-18.79	-16.39/-17.9	-15.18/-16.36	-18.92/-19.36	-17.49/-17.55	-14.4/-12.73	-18.15/-15.61	-16.15/-15.56	-15.59/-16.01	-19.12/-15.67	-17.09/-16.81	-17.09/-16.81
Θ(82.5°)	-18.31/-15.31	-17.47/-18.67	-13.52/-19.23	-18.46/-17.52	-17.95/-19.28	-12.6/-16.62	-15.25/-17.85	-11.17/-12.02	-12.16/-18.91	-14.66/-13.15	-13.27/-12.08	-9.95/-17.75	-18.71/-17.35	-17.13/-15.97	-17.91/-17.73	-17.69/-18.21	-18.31/-17.52	-16.29/-18.22	-16.15/-14.33	-12.82/-14.39	-16.83/-19.04	-17.67/-19.17	-17.97/-19.7	-18.47/-18.45
Θ(90°)	-16.58/-15.12	-16.01/-18.04	-16.06/-17.59	-18.75/-17.94	-18.35/-19.32	-18.37/-15.72	-11.9/-16.85	-9.52/-12.63	-18.85/-18.52	-13.71/-12.78	-10.91/-10.94	-17.88/-18.65	-19.4/-17.98	-12.94/-14.98	-14.41/-11.46	-11.99/-18.49	-19.43/-15.2	-17.45/-12.27	-12.58/-11.17	-19.24/-17.55	-18.34/-14.7	-13.55/-18.43	-18.17/-17.84	-18.23/-18.18
Θ(97.5°)	-19.05/-16.01	-16.11/-18.87	-14.75/-19.04	-12.38/-17.46	-18.96/-16.46	-16.17/-14.92	-15.28/-11.64	-6.64/-9.15	-16.31/-18.29	-16.45/-18.9	-7.89/-8.96	-12.2/-10.49	-15.09/-18.91	-16.72/-17.7	-14.6/-16.89	-11.55/-17.17	-16.45/-13.55	-19.06/-10.6	-14.27/-12.97	-18.77/-19.15	-18.78/-18.1	-11.8/-17.5	-13.54/-16.46	-



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ (112.5°)	-2.82/2.8	-2.92/1.65	-1.13/-3.1	-5.38/6.39	-2.29/-1.84	-7.47/-5.21	-3.39/-9.12	-0.59/-15.64	-10.65/6.59	-3.6/-2.56	-2.11/-6.49	-9.33/-10.48	-7.18/-4.22	-4.02/-5.47	-7.57/-12.74	-9.86/-10.2	-19.31/-11.2	-9.53/-7.45	-8.45/-17.36	-9.79/-5.14	-3.93/-4.28	-1/2.25	-3.04/-3.41	-1.92/-0.55
Θ (120°)	-7.05/-6.11	-3.99/-4.68	-5.07/-5.31	-12.23/-4.59	-8.72/-3.99	-8.83/-3.74	-7.58/-6.06	-3.03/-18.96	-6.02/-4.39	-5.35/-7.17	-5.55/-18.41	-8.69/-17.68	-16.29/-17.65	-8.66/-17.67	-11.54/-12.47	-5.89/-15.99	-16.02/-8.87	-17.93/-10.01	-10.55/-17.35	-18.32/-5.68	-13.16/-6.91	-3.43/-6.19	-8.73/-11.96	-5.67/-4.5
Θ (127.5°)	-18.56/-16.68	-18.11/-9.41	-10.42/-13.53	-10.01/-15.85	-12.88/-8.24	-10.98/-13.31	-11.62/-16.66	-6.67/-18.5	-15.1/-16.33	-8.35/-10.62	-19.15/-10.36	-2.92/-3.77	-2.08/-3.95	-8.63/-11	-18.92/-9.73	-19.05/-10.83	-9.75/-16.3	-10.67/-16.3	-12.66/-14.02	-16.16/-15.03	-13.09/-13.99	-16.95/-17.56	-16.96/-13.17	-18.81/-16.05
Θ (135°)	-7.88/-8.77	-11.48/-18.83	-9.57/-9.63	-13.27/-15.27	-17.67/-15.44	-9.98/-14.38	-18.35/-18.86	-17.7/-9.55	-7.16/-15.17	-9.96/-6.62	-8.68/-16.21	-14.3/-10.59	-11.48/-15.82	-18.34/-17.05	-15.64/-9.81	-12/-15.25	-16.1/-17.12	-16.44/-15.68	-18.79/-18.45	-18.52/-19.25	-6.11/-14.6	-6.41/-10.92	-12.85/-9.12	-10.88/-9.73
Θ (142.5°)	-8.36/-7.55	-6.79/-6.54	-7.48/-6.25	-11.11/-7.7	-8.84/-12.68	-7.37/-8.1	-9.61/-17.03	-12.04/-9.7	-4.25/-5.26	-14.48/-12.11	-12.7/-10.5	-8.38/-10.2	-18.26/-15.2	-10.69/-8.46	-7.66/-10.7	-18.35/-15.88	-10.48/-9.54	-9.18/-18.09	-17.82/-17.45	-12.36/-12.7	-14.46/-5.56	-2.63/-4.58	-7.58/-12.34	-14.6/-12.19
Θ (150°)	-3.37/-2.46	-2.62/-2.56	-4.05/-5.06	-5.4/-5.56	-5.88/-3.16	-2.56/-7.8	-14.03/-8.69	-5.52/-5.71	-5.42/-5.05	-10.94/-13.25	-12.2/-11.74	-12.12/-15.9	-13.32/-12.15	-14.95/-14.68	-11.78/-10.17	-18.12/-13.11	-9.58/-8.73	-8.06/-10.01	-14.16/-15.34	-18.22/-10.83	-4.46/-6.5	-6.54/-5.37	-6.95/-6.39	-6.65/-6.76
Θ (157.5°)	-5.47/-6.93	-5.51/-3.59	-2.56/-2.23	-3.43/-4.19	-4.98/-8.44	-11.28/-7.47	-4.61/-5.61	-10.02/-11.01	-6.98/-6.17	-6.5/-8.24	-9.3/-10.67	-11.68/-16.8	-19.02/-14.76	-11.58/-6.79	-6.93/-9.12	-10.08/-8.21	-6.85/-5.98	-5.83/-9.86	-11.74/-10.73	-13.49/-11.99	-6.72/-5.11	-3.53/-1.61	-1.29/-1.64	-2.09/-3.09
Θ (165°)	-7.92/-7.91	-6.64/-6.35	-7.53/-10.33	-12.56/-5.65	-3.82/-3.28	-5.72/-11.35	-16.29/-11.66	-8.47/-6.75	-5.37/-4.76	-6.1/-9.32	-12.74/-12.03	-13.62/-16.57	-16.31/-16.68	-11.75/-8.86	-8.82/-9.68	-10.92/-8.36	-6.74/-6.51	-8.13/-12.52	-12/-11.3	-12.55/-10.57	-6.79/-4.41	-4.34/-9.49	-5.03/-5.95	-6.76/-3.73
Θ (172.5°)	-3.14/-3.88	-4.91/-4.89	-4.53/-3.85	-3.3/-4.39	-6.31/-9.75	-13.91/-12.01	-11/-11.65	-12.79/-12.25	-13.1/-15.05	-18.21/-19.14	-18.23/-14.06	-15.22/-18.11	-18.66/-19	-18.07/-18.39	-19.23/-18.91	-14.7/-13.06	-12.87/-11.67	-12.24/-14.39	-14.31/-14.31	-14.79/-13.43	-11.46/-8.76	-6.8/-5.42	-4.65/-3.53	-2.93/-2.82
Θ (180°)	-7.12/-5.94	-5.05/-4.7	-5.37/-5.74	-7.39/-11.84	-17.69/-16.45	-12.66/-13.65	-19.22/-18.09	-19.01/-18.93	-16.47/-17.05	-18.89/-18.86	-17.96/-11.67	-9.13/-8.14	-8.36/-9.83	-9.99/-10.48	-10.41/-10.16	-10.68/-11.62	-13.36/-13.82	-15.37/-17.87	-19.23/-18.74	-18.74/-18.48	-18.74/-18.72	-15/-13.16	-11.34/-10.73	-11.12/-11.27
Freq(Hz)	2.45GPol.	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°)	-13.57/-15.18	-16.77/-14.97	-12.37/-11.16	-10.98/-11.23	-11.71/-12.03	-12.26/-12.56	-12.68/-13.01	-14.45/-17.82	-18.32/-17.64	-17.47/-17.89	-17.78/-16.18	-15.66/-14.86	-13.59/-12.8	-12.25/-11.96	-12.1/-12.61	-13.24/-13.96	-14.2/-13.98	-13.77/-14.28	-15.53/-16.84	-18.57/-18.76	-17.09/-18.66	-15.44/-14.74	-16.37/-17.54	-15.01/-13.46
Θ (7.5°)	-10.86/-11.26	-12.3/-11.51	-9.82/-9.2	-9.67/-10.4	-11.81/-12.73	-13.79/-14.84	-15.44/-15.47	-16.06/-18.1	-18.54/-17.87	-18.26/-18.24	-15.87/-15.02	-15.72/-16.45	-16.4/-16.16	-15.61/-15.1	-15.3/-16.13	-16.98/-16.74	-15.42/-13.98	-12.83/-12.54	-13.67/-15.35	-18.98/-18.66	-18.01/-15.94	-16.96/-17.7	-14.53/-11.87	
Θ (15°)	-11.23/-11.18	-11.87/-10.72	-8.99/-8.67	-9.64/-11.38	-13.1/-14.39	-15.61/-17.07	-17.48/-16.55	-15.88/-16.25	-17.28/-19.2	-18.11/-18.83	-18.98/-18.97	-18.85/-17.96	-16.15/-14.78	-14.5/-15.06	-15.59/-15.23	-14.04/-12.62	-11.46/-10.77	-10.45/-10.28	-10.16/-10.5	-16.27/-17.1	-19.29/-18.06	-14.82/-12.99		
Θ (22.5°)	-14.99/-13.94	-14.35/-12.49	-10.29/-9.8	-10.89/-13.07	-15.15/-16.46	-17.97/-19.25	-18.02/-18.73	-18.03/-16.49	-16.83/-18.93	-18.36/-18.36	-19.14/-18.74	-19.05/-18.13	-17.92/-16.45	-15.34/-14.62	-14.83/-15.52	-15.86/-15.21	-13.91/-12.41	-10.99/-9.9	-8.96/-8.22	-7.69/-7.61	-8.18/-9.36	-11.01/-12.41	-14.65/-19.59	-18.38/-18.73
Θ (30°)	-18.49/-18.76	-17.16/-14.39	-12.73/-12.43	-13.36/-15.17	-16.92/-19.18	-18.37/-18.59	-18.16/-18.23	-17.64/-18.93	-18.13/-18.7	-17.93/-18.75	-17.71/-18.69	-17.72/-17.68	-17.17/-17.08	-17.24/-17.72	-18.13/-18.78	-19.05/-18.83	-17.55/-18.45	-12.71/-11.06	-9.71/-8.78	-8.17/-9.75	-8.13/-8.76	-9.93/-13.8	-13.71/-17.48	-18.28/-18.88
Θ (37.5°)	-13.22/-16.68	-19.21/-14.3	-12.92/-13.92	-16.79/-19.04	-17.6/-18.17	-15.94/-16.01	-14.07/-14.62	-16.73/-18.34	-18.43/-18.4	-18.74/-18.21	-17.93/-18.79	-18.05/-17.74	-15.03/-14.97	-17.07/-18.24	-18.04/-18.35	-18.39/-16.14	-13.36/-11.89	-11.23/-10.89	-10.75/-10.89	-11.29/-11.63	-11.92/-12.51	-14.72/-17.66	-18.19/-18.02	
Θ (45°)	-19.39/-18.63	-18.68/-13.12	-10.78/-11.14	-13.85/-19.05	-18.03/-18.22	-17.26/-16.61	-14.24/-12.65	-12.1/-13.75	-18.61/-18.25	-18.13/-16.63	-18.51/-17.84	-18.96/-15.03	-11.12/-10.47	-13.07/-18.78	-18.25/-16.88	-18.21/-17.66	-18.43/-16.37	-12.88/-11.25	-10.89/-11.04	-11.59/-12.83	-14.52/-15.87	-17.31/-18.77	-18.1/-18.37	-19.04/-18.91
Θ (52.5°)	-14.76/-14.49	-13.56/-11.56	-10.32/-11.62	-12.51/-18.85	-11.94/-17.86	-19.04/-19.23	-12.43/-10.08	-15.83/-15.07	-18.36/-18.11	-15.51/-14.18	-15.88/-17.48	-11.86/-9.84	-11.94/-16.65	-13.72/-13.14	-16.76/-17.74	-17.51/-14.02	-11.17/-10.61	-10.27/-9.84	-10.78/-13.5	-17.73/-18.74	-17.62/-18.61	-18/-16.5	-15.07/-18.38	
Θ (60°)	-11.28/-11.07	-12.16/-13.46	-13.12/-12.67	-15.34/-17.7	-15.11/-11.53	-12.91/-13.68	-10.95/-10.68	-15.5/-9.9	-14.56/-10.95	-9.59/-8.42	-7.27/-7.51	-10/-17.51	-18.65/-13.91	-13.22/-18.56	-11.66/-10.46	-13/-13.87	-17.59/-13.97	-9.01/-9.28	-9.09/-8.09	-9.32/-12.73	-18.55/-19.07	-15.98/-18.56	-17.92/-14.97	-13.29/-11.85
Θ (67.5°)	-11.51/-11.47	-14.56/-17.94	-18.51/-15.91	-18.1/-19.16	-11.14/-10.12	-13.41/-14.16	-11.05/-11.21	-14.65/-12.54	-10.51/-10.39	-10.86/-10.85	-8.68/-7.65	-9.41/-15.88	-18.76/-13.49	-14.68/-18.6	-13.75/-12.28	-12.43/-10.77	-16.71/-15.26	-9.62/-10.02	-8.05/-6.37	-7.44/-10.09	-14.49/-19.09	-18.99/-17.97	-19.04/-18.61	-16.56/-13.59
Θ (75°)	-11.56/-11.16	-15.05/-18.24	-17.19/-13.31	-13.46/-16.82	-12.89/-13.05	-15.76/-12.12	-9.91/-10.21	-12.57/-11.64	-13.31/-17.62	-14.12/-15.24	-18.91/-14.41	-13.84/-16.93	-15.65/-11.5	-12.26/-18.91	-18.52/-17.89	-17.11/-11.05	-14.72/-16.31	-11.44/-14.71	-10.13/-10.72	-7.08/-7.92	-9.97/-16.61	-18.07/-19.04	-18.45/-18.51	-18.18/-15.93
Θ (82.5°)	-9.97/-9.33	-12.54/-18.02	-18.36/-12.04	-12.46/-18.29	-14.11/-14.47	-17.08/-14.01	-13.21/-12.3	-10.51/-9.62	-13.82/-15.35	-12.01/-12.2	-18.18/-18.55	-18.37/-17.27	-14.47/-12.41	-16.86/-18.98	-13.02/-15.52	-18.23/-13.49	-18.62/-13.43	-11.54/-17.15	-11.68/-8.97	-8.86/-8.98	-10.63/-17.47	-13.13/-14.43	-15.32/-16.11	-15.36/-13.88
Θ (90°)	-15.89/-11.88	-12.14/-14.09	-17.36/-12.7	-12.6/-18.1	-13.74/-14.58	-19.2/-18	-16.42/-13.07	-10.98/-11.62	-17.69/-16.34	-9.33/-9.03	-12.8/-18.49	-18.28/-18.59	-14.93/-12.25	-13.51/-18	-12.22/-13.23	-18.99/-12.11	-19.08/-14.81	-13.19/-14.31	-9.28/-8.54	-10.09/-11.71	-13.37/-16.59	-18.4/-18.85	-18.38/-17.24	-18.54/-17.09
Θ (97.5°)	-18.16/-13.86	-11.42/-12.13	-14.63/-11.6	-12.03/-19.24	-12.62/-12.67	-17.56/-17.7	-18.23/-17.14	-14.03/-13.39	-19.29/-15.06	-10.27/-11.13	-15.14/-18.62	-19.19/-18.54	-17.03/-13.03	-13.17/-14.5	-9.66/-11.3	-14.44/-12.81	-17.83/-13.77	-14.83/-13.76	-7.75/-7.48	-8.88/-13.07	-16.02/-16.38	-18.71/-18.18	-18.48/-18.2	-17.16/-17.82
Θ (105°)	-17.76/-11.61	-10.62/-12.89	-15.91/-12.14	-12.22/-10.63	-10.52/-10.23	-16.52/-18	-18.95/-17.11	-11.54/-14.86	-18.46/-18.1	-17.98/-18.34	-17.77/-18.82	-17.55/-16.5	-14.23/-17.56	-10.54/-9.74	-17.02/-15.89	-18.73/-16.97	-9.6/-11.19	-7.83/-7.67	-11.04/-15.49	-18.1/-17.33	-16.31/-13.5	-16.58/-17.97	-17.88/-18.84	
Θ (112.5°)	-18.87/-15.64	-17.73/-18.2	-12.96/-8.88	-9.29/-13.89	-12.29/-12.14	-18.45/-16.44	-12.22/-13.6	-18.27/-18.97	-18.49/-19.22	-18.76/-18.42	-19.16/-19.4	-18.09/-17.35	-18.23/-14.66	-12.57/-18.05	-18.04/-18.57	-15.23/-11.27	-18.52/-15.42	-10.83/-8.34	-5.08/-4.83	-7.19/-10.96	-17.29/-18.76	-13.05/-12.51	-16.15/-19.11	-19.09/-17.36
Θ (120°)	-10.58/-10.38	-15.33/-14.29	-10.74/-6.66	-9.87/-11.1	-16.32/-13.19	-18.37/-18.79	-11.64/-12.6	-18.09/-17.64	-18.48/-10.93	-18.38/-18.94	-17.77/-13.7	-16.72/-17.5	-19.06/-17.39	-14.13/-14.55	-15.88/-17.37	-15.24/-11.44	-14.55/-16.4	-17.76/-16.35	-8.48/-6.48	-7/-8.16	-9.9/-14.6	-19.17/-18.39	-16.56/-12.97	-10.53/-6.62
Θ (127.5°)	-11.13/-13.75	-14.74/-15.71	-15.28/-13.58	-15.1/-19.18	-12.08/-9.87	-12.69/-18.27	-19.11/-19	-17.71/-13.74	-12.51/-10.86	-10.68/-12.15	-14.04/-16.63	-18.35/-18.88	-18.73/-18.97	-18.76/-18.6	-18/-17.74	-13.66/-9.49	-9.22/-12.66	-14.13/-13.77	-15.45/-15.6	-14.36/-15.09	-14.33/-12.49	-11.61/-11.03	-10.01/-9.66	
Θ (135°)	-18.28/-18.05	-18.08/-17.62	-19.35/-13.58	-12.5/-13.2	-11.36/-9.99	-11.61/-17.37	-18.84/-18.57	-17.88/-16.51	-14.64/-14.26	-13.35/-11.99	-11.54/-12.34	-13.97/-15.22	-14.77/-13.03	-10.99/-10.16	-11.01/-13.6	-16.73/-18.81	-18.17/-10.78	-8.52/-8.63	-9.3/-10.38	-12.94/-17.68	-19.02/-18.36	-18.21/-15.61	-14.57/-15.24	-16.33/-17.92
Θ (142.5°)	-18.74/-18.11	-17.82/-15.56	-12.46/-11.08	-12.33/-15.43	-13.93/-12.06	-13.32/-18.45	-17.69/-17.43	-19.03/-18.55	-18.57/-18.19	-16.64/-13.17	-10.78/-9.95	-10.22/-11.08	-11.88/-10.76	-8.92/-8.22	-8.64/-9.61	-11.72/-16.53	-18.05/-15.12	-11.75/-10.94	-11.3/-12.28	-13.89/-15.94	-16.34/-15.41	-14.24/-12.82	-12.26/-13.59	-16.25/-18.66
Θ (150°)	-16.15/-16.69	-16.11/-14.32	-13.27/-14.56	-17.91/-19.47	-13.78/-12.26	-14.12/-18.51	-18.81/-17.2	-14.39/-13.45	-10.85/-9.96	-9.48/-9.35	-9.71/-10.84	-13.29/-14.63	-12.99/-10.72	-10.04/-10.0										



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

Θ (150°)	-11.63/-8.82	-7.74/-5.64	-5.24/-6.68	-7.29/-10.35	-18.49/-12.28	-11.98/-15.2	-18.4/-16.84	-9.76/-13.16	-18.75/-16.78	-11.31/-7.95	-9.87/-10.87	-16.86/-16.31	-14.55/-9.88	-8.72/-7.49	-7.49/-9.62	-16.69/-13.9	-9.27/-9.01	-12.4/-12.61	-13.24/-12.1	-12.61/-15.27	-12.78/-8.74	-7.41/-6	-6.22/-6.76	-8.84/-11.24
Θ (157.5°)	-6.29/-7.03	-8.43/-11	-12.37/-8.03	-6.68/-9.74	-17.5/-16.04	-9.17/-6.3	-7.55/-13.12	-19.06/-14.05	-7.79/-6.9	-9.26/-10.09	-15.99/-14.81	-18.89/-16.58	-16.47/-13.48	-8.48/-7.71	-8.69/-12.74	-15.15/-14.53	-12.58/-9.52	-8.97/-10.1	-17.23/-15.03	-12.47/-9.59	-8.47/-6.69	-6.53/-8.58	-8.92/-8.25	-6.34/-6.69
Θ (165°)	-7.71/-7.53	-7.1/-5.66	-6.41/-8.03	-12.32/-19.2	-17.79/-12.52	-9.03/-8.13	-10.15/-14.56	-18.61/-17.92	-12.39/-13.89	-17.81/-16.57	-17.99/-17.66	-18.17/-18.57	-18.06/-16.48	-16.11/-9.2	-9.28/-9.46	-11.38/-17.34	-10.39/-12.95	-10.39/-9.28	-8.99/-9.41	-8.67/-7.23	-6.76/-7.23	-6.16/-6.25	-5.78/-6.31	
Θ (172.5°)	-8.23/-7.7	-8.54/-11.22	-16.55/-19.36	-17.46/-18.95	-18.52/-17.22	-13.08/-13.08	-15.9/-18.19	-17.62/-18.34	-18.32/-18.5	-18.15/-18.32	-17.73/-17.9	-19.56/-18.59	-18.59/-17.94	-17.35/-16.2	-15.38/-16.14	-16.17/-17.53	-17.79/-18.3	-18.12/-17.36	-19.22/-18.27	-17.91/-16.86	-15.09/-13.74	-12.5/-9.81	-9.35/-10.42	-9.92/-4.88
Θ (180°)	-17.49/-18.32	-18.87/-18.47	-16.3/-14.13	-14.57/-18.08	-17.51/-18.66	-17.64/-18.35	-18.66/-14.08	-13/-15.37	-17.87/-18.13	-18.51/-18.56	-16.78/-17.99	-19.04/-18.81	-18.49/-17.26	-18.75/-18.57	-18.42/-17.67	-16/-14.92	-15.68/-15.69	-14.73/-15.05	-15.36/-16.12	-18.14/-18.94	-18.14/-18.06	-18.86/-19.13	-17.66/-18.06	-18.77/-17.93
Freq(Hz)	5.3GPol.	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°)	-17.98/-17.83	-17.98/-19.14	-18.66/-17.77	-18.08/-17.96	-15.81/-16.22	-17.4/-18.62	-18.57/-17.62	-14.48/-15.1	-17.51/-14.55	-17.37/-16.98	-17.48/-19.67	-19.21/-18.26	-18.93/-17.6	-17.8/-18.41	-18.59/-19.42	-18.1/-17.57	-17.99/-17.46	-17.4/-16.66	-18.81/-17.14	-16.33/-16.04	-19.7/-19.36	-16.22/-17.93	-18.27/-19.02	-18.18/-17.65
Θ (7.5°)	-15.49/-16.65	-18.73/-18.94	-17.51/-19.01	-18.53/-18.45	-18.52/-18.49	-19.24/-19.6	-17.79/-17.57	-15.77/-15.71	-17.99/-18.62	-18.02/-18.79	-18.15/-18.44	-18.06/-16.48	-18.59/-18.12	-18.77/-17.68	-18.31/-18.68	-18.87/-17.72	-16.96/-15.98	-15.63/-16.02	-18.76/-17.77	-18.74/-17.57	-18.22/-19.08	-18.85/-17.28	-18.73/-17.03	-18.42/-18.25
Θ (15°)	-18.23/-17.47	-18.95/-18.48	-18.32/-18.07	-19.25/-19.09	-18.37/-18.28	-16.73/-17.43	-17.36/-16.01	-18.6/-18.79	-18.07/-18.03	-18.76/-18.58	-17.94/-17.49	-17.45/-18.75	-18.7/-17.95	-18.28/-17.96	-18.53/-18.25	-18/-18.98	-18.71/-18.17	-14.63/-13.22	-12.3/-14.29	-16.52/-17.39	-17.5/-16.81	-17.86/-18.19	-18.93/-19.28	-18.45/-18.14
Θ (22.5°)	-19.12/-18.9	-17.85/-18.29	-17.72/-16.31	-14.13/-15.72	-16.64/-18.78	-16.91/-15.09	-18.98/-18.07	-18.05/-16.3	-13.02/-19.26	-18.09/-19.15	-18.46/-18.12	-18.6/-17.86	-17.4/-18.51	-17.99/-19.17	-19.32/-17.83	-18.32/-17.42	-18.13/-18.94	-17.68/-14.14	-13.15/-16.94	-17.97/-18.13	-19.51/-17.87	-17.96/-17.59	-17.75/-19.4	-18.82/-18.49
Θ (30°)	-17.97/-19.02	-18.87/-18.32	-18.84/-18.43	-18.84/-16.53	-17.76/-18.72	-18.77/-15.07	-19.01/-16.13	-14.16/-13.23	-13.27/-12.8	-14.73/-18.41	-17.01/-18.24	-19.5/-19.3	-19.04/-19.11	-18.98/-19.06	-19.46/-19.09	-16.68/-17.47	-17.24/-17.81	-18.72/-14.97	-14.32/-18.24	-18.98/-15.93	-13.46/-17.55	-18.15/-18.28	-18.54/-16.57	-18.21/-18.87
Θ (37.5°)	-18.68/-17.92	-17.74/-18.6	-18.27/-18.34	-18.79/-15.54	-19.16/-17.23	-16.09/-17.91	-18.36/-18.88	-18.19/-16.07	-13.96/-17.9	-19.16/-17.78	-17.91/-19.05	-19.09/-18.61	-18.65/-17.71	-18.84/-18.42	-18.86/-18.92	-19.22/-17.65	-17.51/-18.67	-18.74/-17.22	-18.91/-19.74	-15.72/-14.66	-18.61/-19.36	-18.39/-17.55	-17.61/-16.68	-13.33/-16.11
Θ (45°)	-17.9/-17.43	-18.38/-19.26	-17.85/-17.34	-16.82/-13.02	-18.73/-18.67	-18.57/-17.9	-16.85/-18.96	-19.2/-17.96	-13.76/-16.57	-18.68/-18.65	-17.91/-15.01	-17.79/-18.31	-18.71/-14.24	-18.85/-19.42	-15.56/-17.3	-18.09/-18.89	-17.96/-18.2	-19.18/-19.37	-15.62/-19.27	-17.86/-18.98	-19.12/-18.1	-17.93/-17.76	-17.09/-15.33	-15.51/-18
Θ (52.5°)	-18.54/-18.58	-17.59/-17.31	-17.85/-17.48	-13.7/-16.94	-18.32/-18.39	-19.93/-18.29	-18.49/-18.05	-15.1/-16.37	-11.88/-11.36	-14.94/-15.06	-15.17/-18.06	-18.81/-17.23	-17.77/-16.39	-14.25/-11.34	-14.88/-18.96	-18.27/-15.16	-16.15/-17.79	-14.88/-15.01	-15.79/-18.54	-17.94/-18.41	-18.45/-18.81	-18.85/-18.87	-18.35/-17.96	-17.34/-18.91
Θ (60°)	-16.8/-16.49	-18.63/-18.86	-18.24/-15.12	-19.21/-16.92	-18.16/-17.23	-18.41/-19.21	-16.29/-16.08	-19.05/-15.63	-15.42/-15.57	-14.07/-18.83	-17/-16.4	-18.73/-17.21	-18.04/-15.07	-18.58/-18.79	-18.03/-14.45	-14.08/-16.86	-18.54/-18.85	-19.07/-12.84	-13.41/-14.99	-17.43/-18.88	-14.15/-14.86	-16.48/-16.83	-18.28/-18.31	-17.88/-18.61
Θ (67.5°)	-19.37/-18.83	-14.81/-13.57	-16.48/-13.12	-14.94/-14.05	-12.98/-19.31	-18.63/-18.34	-17.59/-18.02	-17.31/-13.55	-15.84/-16.68	-17.99/-18.78	-18.66/-17.9	-16.92/-16.42	-12.5/-18.72	-18.73/-17.64	-16.31/-16.76	-18.32/-17.97	-18.43/-17.39	-19.08/-19.18	-18.72/-14.97	-18.95/-18.81	-18.65/-14.01	-16.56/-15.63	-15.33/-16.33	
Θ (75°)	-16.02/-14.65	-11.74/-14.23	-14.41/-14.6	-12.22/-13.02	-14.88/-18.42	-17.68/-17.71	-18.62/-16.89	-11.93/-18.81	-17.08/-16.52	-18.15/-18.49	-18.96/-17.61	-17.9/-15.25	-15.09/-16.83	-16.36/-18.56	-14.17/-15.44	-17.72/-14.13	-15.47/-18.21	-16.19/-13.02	-18.43/-18.93	-15.96/-17.06	-16.87/-19.05	-16.42/-17.75	-17.95/-17.92	-17.74/-17.16
Θ (82.5°)	-18.48/-19.05	-18.11/-18.72	-19.07/-15.93	-13.88/-17.69	-17.79/-17.75	-14.1/-18.64	-19.22/-14.74	-18.57/-13.47	-16.91/-18.12	-19.2/-15.51	-12.81/-17.82	-18.48/-13.29	-17.93/-16.18	-17.72/-15.62	-15.37/-15.67	-18.03/-12.24	-15.44/-17.99	-19.29/-14.12	-16.63/-18.12	-15.37/-15.35	-14.8/-17.05	-17.04/-18.04	-13.88/-18.52	-14.58/-18.14
Θ (90°)	-13.76/-16.94	-18.38/-12.97	-18.32/-13.58	-13.12/-12.82	-11.26/-18.97	-19.23/-18.94	-18.79/-13.63	-17.86/-17.35	-18.03/-15.58	-13.58/-13.12	-15.77/-18.33	-17.79/-13.53	-18.55/-18.88	-17.89/-15.73	-15.17/-16.63	-18.77/-15.36	-18.74/-18.84	-19.34/-18.73	-17.99/-18.23	-18.62/-16.21	-19.01/-18.4	-13.11/-13.02	-9.75/-16.42	-17.22/-13.25
Θ (97.5°)	-17.27/-17.67	-13.75/-14.67	-11.89/-15.01	-11.89/-18.15	-13.35/-15.99	-17.68/-17.59	-17.13/-18.21	-17.87/-18.41	-18.14/-18.89	-17.93/-19.64	-17.37/-17.26	-17.14/-18.9	-17.81/-14.97	-11.6/-14.15	-18.77/-10.92	-14.23/-15.56	-19.22/-18.31	-18.82/-17.36	-18.97/-19.26	-17.99/-15.43	-17.99/-18.81	-14.07/-17.69	-17.32/-15.1	
Θ (105°)	-18.78/-15.48	-17.11/-17.87	-18.99/-18.41	-17.7/-18.68	-12.25/-18.46	-17.84/-18.85	-17.65/-12.8	-9.93/-18.84	-17.44/-18.58	-18.54/-18.02	-15.07/-14.38	-18.02/-19.16	-13.97/-18.32	-15.04/-18.22	-18.62/-18.5	-18.99/-16.01	-16.69/-15.15	-18.16/-16.97	-15.62/-18.57	-15.2/-17.93	-15.34/-14.4	-12.41/-15.3	-9.84/-19.44	-17.98/-14.65
Θ (112.5°)	-15.54/-16.28	-18.74/-17.63	-18.67/-12.59	-18.71/-16.63	-15.24/-17.35	-17.38/-18.36	-19.17/-13.93	-10.57/-18.68	-18.44/-17.94	-18.59/-14.41	-15.35/-17.42	-19.09/-18.77	-17.7/-18.44	-18.05/-16.65	-18.4/-15.25	-14.78/-16.08	-11.52/-15.27	-18.32/-18.05	-18.43/-16.88	-17.43/-18.07	-17.32/-18.56	-18.09/-18.98	-14.75/-17.7	-16.16/-19.16
Θ (120°)	-17.4/-18.61	-18.34/-16.08	-18.27/-13.9	-18.84/-13.81	-18.72/-18.31	-18.34/-18.24	-16.76/-16.55	-13.12/-10.98	-18.78/-17.17	-19.22/-12.53	-14.73/-16.48	-19.08/-18.79	-16.53/-19.1	-17.61/-16.99	-18.83/-18.33	-17.72/-18.24	-13.03/-17.17	-18.14/-16.21	-18.93/-18.05	-18.06/-18.24	-19.29/-15.39	-16.88/-18.46	-17.76/-13.85	-15.34/-14.66
Θ (127.5°)	-15.15/-17.63	-18.93/-15.28	-15.26/-19.27	-15.55/-18.72	-19.02/-17.62	-19.23/-17.31	-19.14/-17.28	-17.1/-18.91	-11.58/-10.81	-14.23/-17.78	-12.7/-15.48	-14.07/-11.71	-18.84/-16.12	-13.98/-12.32	-17.98/-13.6	-16.88/-19.63	-14.92/-11.83	-18.13/-13.69	-15.78/-17.73	-13.87/-19.3	-12.06/-14.65	-9.17/-14.21	-18.68/-17.56	-14.13/-10.97
Θ (135°)	-15.3/-15.65	-15.4/-18.12	-15.75/-18.31	-15.12/-13.69	-18.8/-15.08	-14.16/-19.36	-19.14/-17.12	-13.7/-14.8	-10.61/-12.81	-14.01/-12.97	-13.59/-18.78	-12.03/-11.78	-12.23/-11.4	-14.77/-17.7	-12.33/-13.13	-18.1/-18.13	-14.55/-16.11	-16.6/-19.3	-13.27/-15.65	-19.16/-17.49	-14.01/-14.8	-17.95/-11.88	-12.16/-16.61	-15.49/-18.59
Θ (142.5°)	-16.91/-16.75	-13.36/-18.14	-18.53/-18.44	-11.56/-12.88	-19.04/-12.91	-14.41/-17.7	-18.67/-16.84	-12.29/-10.2	-11.42/-16.28	-19.05/-15.11	-13.1/-10.18	-18.17/-14.24	-13.83/-18.86	-15.89/-15.14	-13.27/-11.32	-18.33/-18.41	-12.32/-12.9	-12.39/-14.86	-16.88/-18.53	-18.51/-15.66	-15.21/-16.08	-19.2/-19.05	-17.65/-18.4	
Θ (150°)	-17.49/-15.94	-13.33/-13.37	-13.9/-14.89	-12.65/-14.56	-17.55/-17.54	-16.67/-17.47	-19/-15.33	-13.84/-15.95	-17.05/-14.63	-13.07/-14.09	-13.62/-16.44	-17.91/-13.69	-14.81/-16.59	-16.98/-17.03	-12.15/-10.79	-17.47/-18.9	-18.49/-17.94	-18.65/-19.47	-13.25/-12.76	-18.9/-18.1	-16.52/-16.39	-16.72/-18.89	-18.75/-15.07	-17.94/-18.26
Θ (157.5°)	-12.31/-10.71	-10.01/-12.26	-18.66/-18.43	-15.54/-12.65	-12.72/-14.21	-17.98/-18.9	-19.21/-17.65	-19.16/-13.86	-13.66/-18.03	-16.5/-8.6	-6.93/-8.11	-10.86/-14.2	-13.82/-12.07	-12.95/-14.16	-13.6/-13.76	-16.43/-17.49	-18.45/-18.95	-18.52/-18.35	-13.25/-11.02	-12.45/-14.66	-12.82/-11.16	-10.96/-10.22	-11.11/-13.03	-13.1/-12.74
Θ (165°)	-18.98/-17.77	-17.58/-16.56	-11.79/-16.05	-9.93/-10.03	-11.37/-14.06	-17.42/-17.59	-14.9/-14.4	-14.73/-11.35	-11.78/-18.56	-18.68/-17.51	-15.06/-14.97	-14.95/-19.03	-17.57/-17.7	-18.62/-16.99	-17.52/-17.64	-17.39/-18.03	-17.47/-18.22	-16.1/-14.46	-11.23/-10.02	-10.25/-10.29	-12.26/-14.02	-15.46/-17.37	-15.43/-18.23	-17.28/-18.73
Θ (172.5°)	-16.92/-18.55	-18.54/-15.85	-14.76/-14.15	-15.04/-16.76	-16.59/-16.03	-16.74/-17.15	-16.25/-15.42	-17.29/-17.73	-15.16/-16.15	-17.63/-15.83	-18.27/-19.03	-17.95/-17.29	-16.94/-16.78	-13.82/-12.97	-13.02/-14.52	-14.62/-14.59	-14.02/-13.09	-11.68/-10.55	-9.09/-8.48	-8.72/-9.26	-10.26/-11.35	-11.43/-12.6	-13.45/-13.21	-12.86/-15.84
Θ (180°)	-19.61/-18.3	-18.78/-17.92	-17.7/-18.55	-18.34/-18.48	-18.78/-18.92	-18.33/-15.92	-13.24/-14.08	-9.16/-9.67	-9.55/-10.46	-11.19/-12.43	-11.97/-11.69	-12.1/-11.29	-11.75/-14.74	-11.73/-12.78	-13.74/-15.4	-17.08/-17.09	-19.22/-19.28	-18.77/-19.1	-18.34/-18.41	-17.84/-18.76				



Radiated Composite Gain Data_2.4GHz, 5GHz U-NII 1~3

Appendix A

																					(300°)Φ(307.5°)			
Θ(0°)	-17.61/-18.78	-17.41/-18.42	-18.61/-17.07	-17.84/-18.48	-18.35/-17.9	-19.08/-19.27	-18.81/-18.9	-18.31/-17.39	-18.35/-19.21	-17.47/-18.43	-19.52/-18.18	-18.45/-18.61	-19.08/-18.85	-18.63/-18.8	-18.02/-18.77	-17.43/-17.2	-19.2/-18.78	-18.96/-19.22	-19.33/-18.58	-17.48/-17.97	-18.88/-18.53	-19.47/-18.16	-18.15/-19.32	-17.13/-17.13
Θ(7.5°)	-19.08/-18.32	-18.47/-18.8	-18.76/-18.86	-18.39/-19.26	-18.03/-16.94	-17.81/-18.57	-17.5/-18.31	-19.26/-17.89	-19.07/-18.27	-18.54/-19.27	-18.07/-18.99	-17.8/-18	-18.81/-19.04	-18.21/-18.46	-18.02/-17.43	-18.86/-17.78	-18.22/-17.84	-18.86/-19.36	-18.68/-18.06	-18.42/-19.09	-18.52/-17.65	-18.18/-18.79	-18.29/-18.86	-19.32/-17.63
Θ(15°)	-19.26/-17.78	-18.09/-18.42	-18.77/-18.49	-18.64/-18.59	-18.55/-18.91	-19.07/-17.77	-17.55/-18.79	-18.9/-17.66	-15.83/-14.3	-14.91/-13.99	-15.65/-18.61	-18.54/-18.65	-18.36/-18.66	-17.57/-17.93	-19.07/-18.99	-19.05/-17.9	-17.57/-18.08	-18.12/-18.48	-18.38/-18.15	-16.02/-18.85	-19.1/-17.63	-18.32/-18.98	-18.63/-17.93	-18.47/-18.36
Θ(22.5°)	-18.41/-17.76	-19.14/-18.7	-18.74/-17.77	-15.79/-17.87	-18.26/-18.83	-17.82/-16.62	-16.89/-17.08	-15.1/-14.61	-15.59/-17.88	-18.62/-17.81	-18.9/-15.86	-18.93/-17.2	-18.19/-17.72	-18.81/-15.7	-18.19/-19.02	-17.64/-18	-18.25/-18.85	-18.83/-17.84	-18.27/-18.46	-17.36/-18.96	-18.72/-18.13	-19.3/-17.09	-18.44/-18.9	-18.22/-17.32
Θ(30°)	-17.63/-18.78	-18.36/-17.84	-18.74/-17.53	-18.34/-18.74	-18.16/-18.99	-17.48/-15.5	-16.49/-16.58	-14.51/-18.8	-17.53/-15.55	-14.85/-14.83	-17.82/-19.02	-18.73/-17.04	-17.83/-18.43	-18/-13.06	-16.2/-15.79	-18.36/-18.49	-18.72/-17.59	-18.8/-19.1	-18.83/-17.93	-18.57/-18.68	-19.01/-18.44	-17.56/-17.99	-18.31/-18.48	
Θ(37.5°)	-18.33/-18.76	-19.06/-18.13	-19.17/-19.96	-17.85/-17.67	-18.29/-18.93	-18.79/-18.07	-19.39/-17.75	-18.72/-18.14	-13.9/-10.78	-12.51/-10.68	-11.19/-16.78	-18.5/-17.67	-17.71/-19.16	-17.8/-19.1	-18.48/-19.33	-18.7/-17.56	-15.35/-16.58	-18.87/-19.63	-18.32/-18.36	-19.24/-17.8	-18.06/-17.29	-18.47/-17.84	-18.46/-19.44	-18.89/-18.41
Θ(45°)	-19.1/-18.09	-19.07/-13.84	-13.97/-17.48	-18.56/-17.97	-19.08/-18.59	-18.83/-18.27	-15.92/-16.82	-17.12/-15.72	-11.71/-16.7	-16.07/-13.62	-16.87/-15.79	-19.21/-19.06	-19.15/-18.25	-18.68/-17.54	-17.66/-18.8	-15.81/-10.44	-13.01/-13.87	-18.33/-17.61	-16.36/-17.51	-17.53/-18.66	-13/-12.51	-12.82/-18.8	-17.42/-17.71	-18.46/-17.68
Θ(52.5°)	-17.23/-15.38	-15.17/-18.12	-18.63/-18.46	-18.61/-18.6	-14.3/-16.85	-18.07/-18.29	-18.5/-19.25	-18.22/-16.07	-13.16/-13.75	-16.36/-18.99	-17.34/-19.01	-18.71/-17.88	-18.93/-13.76	-18.31/-17.76	-18.42/-12.48	-15.44/-16.93	-18.72/-17.86	-18.99/-17.87	-18.62/-18.53	-16.81/-19.06	-14.85/-14.41	-12.39/-14.19	-15.51/-16.94	-16/-18.17
Θ(60°)	-18.47/-18.15	-18.07/-17.27	-15.91/-14.98	-12.4/-16.26	-17.5/-18.39	-17.32/-17.54	-18.14/-17.54	-13.9/-17.7	-19.33/-17.19	-12.86/-12.15	-13.23/-11.17	-15.33/-19.26	-17.78/-17.26	-19/-18.89	-16.04/-13.18	-18.44/-18.26	-15.57/-18.54	-18.88/-18.77	-18.22/-18.43	-17.72/-17	-19.38/-18.1	-17.8/-17.28	-15.42/-15.76	-18.9/-18.93
Θ(67.5°)	-17.67/-15.61	-14.12/-17.48	-15.55/-17	-18.85/-18	-18.92/-19.19	-17.32/-18.68	-19.03/-19.05	-19.05/-19.37	-16.83/-13.77	-10.79/-8.57	-14.38/-16.63	-13.43/-12.14	-17.92/-18.39	-17.67/-14.6	-18.81/-14.06	-17.54/-14.6	-18.88/-19.02	-19.29/-18.23	-18.86/-18.66	-17.28/-16.39	-18.03/-17.99	-18.51/-16.07	-18.44/-18.06	-19.1/-17.59
Θ(75°)	-18.34/-17.8	-18.22/-17.96	-19.03/-18.84	-17.91/-15.85	-16.26/-19.5	-13.65/-17.71	-13.2/-17.4	-17.44/-17.24	-17.61/-14.45	-17.08/-17.71	-17.68/-18.13	-18.21/-15.39	-19.01/-17.52	-17.34/-16.49	-18.16/-14.12	-18.36/-18.22	-17.78/-17.91	-15.3/-16.25	-17.58/-18.11	-19.23/-18.57	-18.53/-14.43	-13.16/-14.71	-12.3/-16.43	-17.89/-15.05
Θ(82.5°)	-19.01/-16.36	-19.43/-18	-18.57/-15.12	-13.04/-9.82	-14.33/-12.72	-13.35/-18.39	-13.92/-19.23	-11.12/-18.04	-18.07/-15	-17.8/-17.57	-13.63/-17.95	-17.97/-19.11	-15.27/-18.09	-18.12/-14.25	-12.09/-9.82	-18.25/-15.18	-16.86/-19.04	-17.3/-10.94	-15.91/-15.57	-19.19/-15.74	-18.06/-18.37	-13.87/-18.58	-14.02/-18.92	-13.11/-12.05
Θ(90°)	-16.39/-17.92	-16.88/-16.34	-14.42/-19.27	-16.49/-12.47	-18.6/-18.5	-12.76/-17.82	-11.25/-14.99	-10.61/-18	-18.98/-16.81	-16.41/-11.07	-9.92/-12.68	-18.7/-11.52	-17.79/-17.83	-16.85/-17.13	-13.68/-16.86	-16.27/-18.12	-17.51/-17.85	-16.92/-12.03	-16.66/-18.45	-18.24/-18.5	-18.56/-17.02	-18.19/-12.66	-12.86/-18.73	-18.13/-17.52
Θ(97.5°)	-17.72/-18.89	-17.1/-17.68	-19.01/-18.82	-17.03/-12.04	-16.55/-11.56	-8.81/-18.34	-14.8/-18.25	-17.09/-15.61	-18.56/-17.26	-18.5/-18.59	-17.14/-18.88	-16.68/-18.19	-17.95/-15.86	-18.34/-15.67	-10.56/-11.62	-18.94/-10.56	-14.71/-18.84	-17.53/-16.19	-17.26/-17.04	-17.68/-17.99	-17.78/-18.26	-18.04/-18.58	-13.63/-15.22	-18.01/-15.18
Θ(105°)	-19.2/-16.57	-17.15/-19.2	-17.14/-16.2	-17.83/-10.79	-17.99/-13.05	-18.27/-19.06	-18.64/-17.22	-10.87/-15.72	-18/-17.87	-15.02/-16.21	-15.03/-15.41	-17.58/-18.67	-14.18/-17.91	-18.29/-18.43	-19.11/-18.88	-17.35/-14.36	-17.5/-16.91	-18.44/-13.92	-18.96/-14.52	-14.63/-16.74	-18.96/-17.87	-18.03/-18.51	-18.73/-15.05	-15.28/-18.69
Θ(112.5°)	-17.47/-18.22	-14.32/-12.36	-18.44/-16.58	-11.89/-16.49	-16.13/-13.86	-12.22/-17.41	-17.28/-18.47	-15.88/-19.22	-19.09/-17.48	-18.92/-19.58	-13.88/-16.14	-14.06/-18.79	-18.03/-17.75	-14.91/-15.32	-17.23/-15.09	-10.47/-12.46	-16.89/-14.51	-17.56/-18.95	-19.18/-16.9	-18.12/-18.48	-13.49/-14.03	-17.61/-17.95	-16.03/-11.97	-16.87/-19.33
Θ(120°)	-14.78/-18.37	-17.56/-12.59	-17.28/-15.81	-14.65/-19.29	-16.85/-17.45	-18.02/-17.61	-17.41/-18.94	-17.58/-14.26	-17.79/-14.26	-18.67/-14.25	-12.31/-15.58	-14.21/-13	-18.22/-11.84	-13.66/-17.49	-15.23/-9.95	-10.35/-14.98	-10.86/-13	-13.64/-18.55	-18.5/-17.92	-18.82/-14.91	-10.64/-10.1	-15.39/-14.58	-11.11/-9.46	-13.87/-15.57
Θ(127.5°)	-15.78/-16.81	-17.97/-15.21	-11.87/-17.4	-17.49/-12.63	-14.85/-18.48	-15.98/-15.8	-18.26/-18.3	-16.36/-14.4	-15.01/-9.42	-8.6/-12.72	-18.91/-14.61	-11.54/-18.75	-18.23/-18.71	-18.22/-13.74	-14.35/-13.37	-13.56/-10.64	-14.04/-18.61	-18.93/-17.96	-15.38/-18.17	-15.57/-18.48	-17.6/-15.01	-18.12/-17.56	-18.6/-18.2	-17.51/-13.74
Θ(135°)	-18.42/-18.55	-19.07/-17.32	-18.51/-11.86	-14.5/-18.87	-10.19/-11.9	-13.18/-9.98	-12.18/-14.39	-18.12/-10.61	-10.3/-14.71	-10.03/-10.07	-18.77/-17.47	-16.05/-18.23	-17.08/-18.41	-18.89/-13.76	-10.97/-10.78	-14.07/-19.01	-18.2/-14.09	-17.94/-18.27	-16.5/-15.24	-17.78/-17.51	-17.5/-9.68	-7.33/-8.41	-14.28/-18.85	-18.16/-18.76
Θ(142.5°)	-18.37/-18.97	-17.92/-18.51	-19.26/-18.58	-16.19/-11.78	-10.29/-13.62	-13.11/-13.62	-18.14/-18.16	-17.81/-11.7	-9.76/-13.93	-18.54/-16.66	-14.21/-13	-18.22/-11.84	-13.86/-17.49	-15.23/-9.95	-10.35/-14.98	-10.86/-13	-13.64/-18.55	-18.5/-17.92	-18.82/-14.91	-10.64/-10.1	-15.39/-14.58	-11.11/-9.46	-13.87/-15.57	-15.82/-15.3
Θ(150°)	-18.24/-18.81	-18.11/-18.45	-19.26/-16.69	-17.12/-18.36	-18.9/-17.34	-17.23/-18.28	-18.21/-16.6	-18.02/-18	-14.89/-17.84	-18.8/-16.38	-15.06/-17.79	-18.72/-18.46	-18.74/-17.43	-18.29/-16.38	-14.45/-13.04	-18.18/-17.06	-17.22/-14.3	-12.74/-14.58	-17.87/-19.1	-15.44/-12.73	-8.41/-6.5	-9.41/-10.98	-11.75/-12.47	-16.27/-18.71
Θ(157.5°)	-13.9/-18.32	-18.29/-18.56	-18.83/-12.52	-11.56/-14.15	-13.8/-12.45	-14.42/-17.26	-19.23/-18.65	-18.27/-18.82	-12.29/-10.87	-18.51/-17.83	-17.4/-18.33	-18.31/-18.68	-18.6/-17.86	-19.25/-13.9	-9.22/-9.16	-10.84/-13.08	-13.66/-15.14	-12.3/-9.28	-11.94/-16.13	-12.98/-16.16	-10.16/-9.5	-11.18/-16.08	-16.79/-18.96	-19.25/-17.95
Θ(165°)	-8.89/-9.75	-10.77/-11.55	-9.17/-9.81	-12.5/-16.59	-18.42/-17.39	-18.08/-18.28	-17.82/-18.6	-18.78/-19	-19.71/-19.2	-12.28/-10.59	-9.81/-9.52	-11.51/-12.1	-16.35/-16.21	-17.47/-14.87	-14.36/-18.22	-18.31/-15.55	-13.6/-11.68	-11.28/-11.1	-14.01/-16.31	-14.08/-11.18	-8.87/-9.3	-7.21/-6.21	-6.7/-6	-8.98/-8.31
Θ(172.5°)	-16.64/-18.21	-17.6/-18.16	-16.33/-14.9	-15.85/-17.31	-19.5/-18.97	-17.09/-18.5	-19.16/-18.33	-18.35/-18.62	-19.02/-13.88	-13.18/-13.08	-12.27/-13.2	-13.62/-15.68	-17.84/-18.14	-18.64/-17.93	-18.16/-17.56	-16.85/-12.83	-11.61/-10.75	-10.26/-11.25	-12.81/-12.76	-12.97/-11.04	-10.36/-10.9	-10.1/-10.28	-13.75/-17.19	-16.88/-17.01
Θ(180°)	-13.08/-12.92	-17.29/-18.15	-18.73/-18.82	-18.1/-19.27	-18.02/-17.57	-16.76/-15.01	-11.41/-10.24	-10.15/-8.67	-8.63/-11.79	-11.11/-13.13	-14.23/-14.77	-16.85/-16.19	-19.19/-19.24	-17.32/-16.18	-14.03/-12.56	-10.77/-9.19	-8.63/-8.07	-8.05/-7.59	-8.28/-7.96	-8.05/-8.59	-9.16/-9.57	-9.21/-10.8	-8.98/-10.23	-11.73/-13.51
Freq(Hz)	5.785GPol.	Theta/Ant.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°)	-18.12/-19.17	-17.82/-17.74	-18.22/-18.49	-18.87/-19.06	-18.57/-19.09	-18.43/-18.53	-19/-18.5	-18.17/-17.85	-18.09/-17.37	-17.14/-18.68	-17.61/-18.77	-18.52/-18.03	-18.45/-18.58	-17.38/-17.59	-19.15/-17.91	-18.55/-19.34	-18.16/-18.32	-18.87/-18.65	-18.73/-17.97	-17.69/-18.1	-17.16/-18.95	-18.27/-19.09	-18.97/-17.24	-19.22/-18.76
Θ(7.5°)	-17.81/-18.03	-18.66/-18.39	-17.99/-18.54	-18.41/-18.84	-18.51/-18.8	-17.88/-19.16	-18.25/-18.21	-17.94/-18.9	-17.81/-18.4	-19.37/-17.85	-17.56/-16.39	-16.76/-15.85	-15.94/-17.01	-16.79/-18.68	-18.63/-18.65	-18.25/-18.82	-16.92/-17.09	-18.63/-14.91	-16.71/-18.36	-18.26/-18.7	-18.95/-19.03	-18.95/-17.85	-18.14/-17.06	-17.01/-17.74
Θ(15°)	-18.52/-16.36	-18.35/-18.62	-18.62/-18.56	-17.88/-18.63	-18.9/-18.47	-17.81/-19.01	-18.63/-17.21	-19.08/-18.19	-18.08/-16.45	-14.08/-11.87	-11.25/-10.91	-12.78/-13.33	-13.54/-12.76	-12.26/-11.08	-10.08/-10.74	-11.35/-14.07	-16.99/-17.79	-17.51/-17.29	-16.06/-15.84	-16.85/-18.39	-18.44/-18.76	-18.83/-18.64	-18.47/-17.77	-16.33/-18.69
Θ(22.5°)	-11.52/-11.42	-12.28/-13.28	-12.68/-12.97	-14.81/-17.13	-16.56/-18.1	-17.68/-18.53	-17.91/-19.05	-13.72/-13.25	-14.83/-14.78	-14.13/-13.89	-13.45/-14.55	-13.98/-14.97	-13.44/-12.69	-11.58/-11.87	-10.53/-9.23	-9.83/-11.1	-12.96/-14.66	-13.02/-11.08	-12.53/-15.67	-16.18/-16.43	-14.24/-12.37	-11.61/-11.82	-11.57/-11.78	-10/-10.96
Θ(30°)	-9.9/-15.29	-18.72/-18.75	-10.56/-12.27	-10.4/-9.16	-8.48/-5.99	-7.35/-7.43	-8.23/-10.45	-11.02/-9.64	-6.1/-5.53	-7.13/-7.6	-8.31/-8.56	-8.82/-6.9												



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Freq(Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	1.75	1.52	2.13	2.17
Ant. 2 Max Gain (dBi)	1.95	2.41	2.19	1.64
Ant. 3 Max Gain (dBi)	1.61	1.96	1.51	1.93
Ant. 4 Max Gain (dBi)	1.98	1.44	1.47	2.21
Ant. 1 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/60/82.5	Theta/97.5/90	Theta/75/90	Theta/52.5/112.5
Ant. 2 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/60/82.5	Theta/60/75	Theta/52.5/82.5	Theta/82.5/262.5
Ant. 3 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/97.5/322.5	Theta/60/352.5	Theta/97.5/187.5	Theta/52.5/0
Ant. 4 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/60/345	Theta/60/345	Theta/52.5/337.5	Theta/52.5/337.5
Max Gain (dBi)	1.98	2.41	2.19	2.21
DG [1SS] (dBi)	5.99	5.46	5.38	5.5
DG [2SS] (dBi)	2.99	2.46	2.38	2.5



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

DG 1SS Result

Freq(Hz)	6.175G/Pol.	PhiH	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°)
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(22.5°)	-12.68/-11.38	-11.66/-11.01	-11.21/-10.6	-10.74/-9.24	-9.75/-10.25	-8.87/-9.19	-8.43/-9.29	-9.23/-9.76	-10.47/-10.91	-11.55/-11.94	-12.08/-12	-12.13/-11.74	-11.41/-10.94	-10.43/-10.99	-10.79/-12.32	-10.33/-10.66	-10.79/-12.32	-9.84/-9.51	-10.33/-10.04	-11.41/-11.21	-10.31/-10.74	-12.43/-12.58	-12.19/-12.03	-11.66/-12.77
Θ(7.5°)	-10.21/-10.78	-9.91/-11.17	-10.54/-12.11	-12.11/-12.25	-12.88/-12.39	-11.71/-11.32	-9.97/-9.03	-10.23/-9.07	-10.72/-9.74	-11.76/-10.54	-11.63/-11.65	-12.27/-12.59	-12.35/-12.38	-12.07/-11.87	-10.83/-11.41	-11.04/-10.76	-10.89/-10.46	-9.93/-10.61	-10.67/-11.16	-10.49/-10.67	-10.62/-10.66	-12.48/-12.36	-12.17/-11.53	-11.48/-11.25
Θ(15°)	-9.58/-9.34	-10.16/-9.85	-11.02/-11.2	-12.17/-10.5	-10.01/-11.27	-11.81/-12.6	-12.69/-12.35	-11.75/-12.09	-11.42/-11.72	-11.21/-12.27	-9.61/-9.17	-9.83/-11.28	-12.32/-11.25	-12.12/-12.39	-9.99/-9.62	-10.68/-10.05	-10.22/-11.22	-10.48/-11.21	-12.07/-11.75	-10.74/-12.28	-11.84/-11.64	-11.56/-12.39	-12.36/-11.65	-11.07/-9.93
Θ(22.5°)	-7.69/-8.79	-9.23/-9.44	-8.27/-7.15	-5.64/-6.69	-7.76/-8.93	-9.46/-10.26	-11.57/-12.6	-12.03/-11.88	-10.79/-8.95	-7.77/-9.97	-12.22/-10.83	-8.62/-8.83	-11.79/-12.32	-12.36/-12.36	-11.65/-12.04	-11.64/-10.29	-10.47/-10.76	-11.11/-12.5	-11.41/-8.39	-8.01/-10.85	-9.92/-11.21	-11.85/-12.31	-11.97/-11.28	
Θ(30°)	-9.79/-11.76	-10.55/-9.68	-10.56/-8.95	-6.42/-8.64	-10.49/-10.35	-11.31/-11.54	-12.06/-11.93	-11.05/-11.01	-10.42/-12.22	-10.8/-10.53	-11.28/-11.61	-10.68/-9.03	-11.32/-11.4	-10.56/-10.74	-10.23/-9.7	-11.63/-11.57	-12.24/-11.64	-10.26/-10.82	-7.8/-7.11	-9.71/-9.09	-11.06/-8.97	-10.78/-10.29	-8.03/-8.92	-12.1/-11.18
Θ(37.5°)	-9.37/-12.13	-10.27/-11.12	-11.28/-11.54	-10.08/-11.08	-11.45/-11.56	-10.86/-11.67	-11.72/-12.81	-9.74/-9.35	-11.03/-10.52	-9.81/-11.41	-10.69/-11.57	-12.53/-11.83	-11.26/-12.47	-12.09/-12.58	-12.25/-11.52	-11.96/-11.53	-10.98/-12.16	-11.18/-12.46	-12.21/-11.3	-10.36/-9.69	-10.8/-11.48	-10.47/-8.51	-8.67/-12.41	-9.12/-10.43
Θ(45°)	-11.91/-10.12	-9.93/-9.72	-8.25/-8.36	-6.25/-7.99	-8.03/-8.32	-8.28/-11.1	-12.15/-12.69	-12.17/-12.18	-10.2/-10.18	-9.59/-11.69	-9.48/-12.84	-11/-12.22	-10.46/-11.92	-12.73/-12.32	-10.34/-10.88	-10.86/-10.81	-9.75/-10.36	-11.87/-12.34	-11.41/-11.94	-9.55/-11.09	-11.65/-11.51	-11.94/-10.47	-12.45/-12.28	-12.74/-12.62
Θ(52.5°)	-10.14/-9.88	-11.34/-9.96	-11.77/-11.53	-8.9/-9.77	-9.6/-10.54	-11.74/-12.44	-11.69/-10.16	-11.75/-11.04	-12.48/-11.09	-11.64/-10.27	-11.91/-11.08	-10.34/-10.04	-12.73/-11.02	-12/-10.7	-11.72/-11.06	-11.61/-10.63	-10.38/-11.2	-10.49/-11.21	-9.77/-9.74	-11.51/-9.64	-11.62/-11.23	-11.77/-8.19	-9.99/-10.61	-10.74/-9.29
Θ(60°)	-11.42/-12.19	-12.93/-12.27	-11.12/-8.48	-9.74/-8.86	-9.4/-10.59	-12.17/-10.84	-11.72/-13.01	-11.49/-10.86	-11.65/-10.51	-11.08/-10.24	-12.56/-10.67	-11.38/-12.45	-12.38/-11.87	-12.55/-11.8	-10.47/-10.79	-12.47/-12.65	-11.94/-10.95	-9.67/-12.27	-10.22/-12.18	-11.42/-11.89	-9.59/-9.93	-10.32/-9.51	-10.08/-11.13	-11.6/-12.3
Θ(67.5°)	-10.98/-10.07	-10.13/-10.62	-8.65/-7.98	-9.47/-10.32	-9.81/-11.33	-11.67/-12.47	-11.51/-11.42	-12.11/-10.35	-11.35/-12.36	-10.09/-9.75	-12.51/-12.25	-11.42/-11.98	-11.22/-11.75	-12.24/-11.18	-11.78/-9.46	-11.52/-12.53	-12.19/-10.18	-10.77/-11.28	-11.94/-12.29	-11.09/-11.62	-12.32/-11.08	-11.58/-11.35	-12.88/-11.4	
Θ(75°)	-12.28/-11.54	-10.17/-12.81	-10.28/-10.4	-11.19/-10.66	-12.2/-11.6	-12.03/-12.41	-11.43/-11.12	-12.4/-11.3	-12.23/-12.3	-9.29/-11.79	-12/-12.02	-12.88/-11.24	-12.62/-10.9	-11.48/-12.1	-11.5/-10.56	-12.06/-10.55	-11.18/-12.53	-12.35/-10.41	-11.33/-10.03	-10.29/-10.41	-9.98/-10.91	-11.3/-12.65	-12.51/-12.01	-12.29/-11.98
Θ(82.5°)	-12.1/-12.29	-12.22/-12.33	-11.92/-10.88	-9.56/-10.48	-12.12/-11.66	-11.54/-12.05	-11.77/-12.6	-12.28/-12.43	-12.21/-12.02	-11.95/-12.68	-12.47/-10.94	-12.19/-12.73	-12.21/-12.34	-12.76/-12.33	-12.14/-12.04	-11.71/-11.61	-11.16/-11.22	-12.43/-12.12	-11.75/-12.41	-10.74/-11.19	-11.09/-11.75	-11.64/-11.15	-12/-12.76	-11.09/-12.35
Θ(90°)	-12.64/-11.89	-10.64/-10.87	-10.99/-11.99	-11.24/-12.05	-10.53/-10.72	-11.61/-10.47	-11.85/-11.97	-12.63/-11.67	-11.72/-12.28	-11.63/-11.67	-11.81/-11.07	-10.66/-10.81	-11.91/-11.89	-12.48/-12.04	-11.5/-11.91	-12.1/-10.28	-10.86/-11.27	-11.71/-11.87	-11.82/-11.48	-11.36/-11.02	-12.61/-12.93	-12.58/-10.14	-12.4/-12.46	
Θ(97.5°)	-12.44/-10.67	-11/-12.77	-8.83/-10.27	-10.42/-11.36	-11.05/-12.52	-12.19/-12.05	-12.23/-12.57	-12.33/-12.69	-11.38/-12.14	-12.19/-12.45	-12.68/-12.31	-12.74/-12.51	-12.54/-10.9	-12.66/-12.27	-12.35/-11.37	-12.5/-12.58	-11.65/-12.08	-12.41/-12.01	-10.78/-9.42	-11.05/-12.07	-12.52/-11.12	-12.18/-11.52	-12.52/-11.69	-10.28/-11.64
Θ(105°)	-10.01/-9.69	-10.78/-10.42	-8.84/-6.42	-11.99/-10.13	-10.69/-12.33	-11.33/-12.62	-11.7/-12.59	-11.36/-12.07	-11.22/-11.37	-11.61/-11.51	-10.29/-9.98	-11.18/-12.23	-12.4/-11.6	-11.73/-12.39	-12.57/-12.29	-8.92/-10.72	-12.14/-11.56	-10.87/-12.22	-12.37/-12.02	-11.71/-11.57	-11.67/-10.02	-11.42/-11.43	-12.19/-11.43	-11.66/-12.08
Θ(112.5°)	-10.48/-11.99	-8.02/-11.4	-12.18/-10.8	-9.76/-9.29	-12.42/-12.42	-11.68/-11.62	-11.78/-12.7	-12.64/-12.49	-11.43/-11.58	-11.44/-10.16	-12.91/-12.53	-10.84/-11.53	-11.48/-11.41	-12.36/-12.68	-11.14/-11.91	-10.94/-12.02	-10.66/-12.12	-11.84/-12.12	-10.13/-12.87	-11.08/-11.48	-10.68/-12.3	-9.02/-8.67	-11.42/-10.3	-10.12/-9.62
Θ(120°)	-11.13/-8.99	-8.64/-12.51	-10.58/-7.11	-8.04/-9.89	-9.01/-10.82	-11.92/-12.33	-12.67/-11.65	-10.74/-11.06	-10.48/-11.83	-11.14/-12.33	-12.73/-10.69	-9.58/-11.02	-12.24/-10.23	-10.42/-11.96	-11.94/-10.08	-11.23/-6.3	-10.45/-12.34	-11.9/-12.94	-11.03/-10.6	-9.18/-11.37	-10.82/-11.8	-11.14/-11.87	-9.14/-8.34	-8.72/-11.43
Θ(127.5°)	-10.15/-5.74	-9.57/-10.1	-11.66/-8.18	-7.93/-8.21	-8.34/-9.21	-11.57/-9.81	-10.96/-12.03	-10.21/-10.6	-10.4/-9.41	-12.09/-10.7	-10.31/-10.88	-11.18/-8.55	-9.03/-7.29	-8.36/-10.38	-9.63/-5.73	-11.05/-8.39	-9.26/-12.51	-11.92/-12.68	-12.11/-11.45	-9.94/-7.63	-10.02/-10.51	-12.92/-10.82	-8.78/-7.47	-9.01/-8.6
Θ(135°)	-9.84/-6.88	-7.96/-6.73	-6.72/-5.4	-9.32/-9.15	-9.68/-8.59	-11.76/-9.06	-10.42/-11.58	-10.17/-11.99	-10.53/-9.18	-9.38/-9.75	-9.56/-10.39	-12.54/-9.9	-10.31/-12.67	-11.39/-9.63	-11.86/-10.54	-8.45/-8.03	-5.67/-6.75	-11.51/-11.45	-8.68/-9.36	-12.17/-9.29	-9.13/-8.35	-6.36/-6.65	-12.45/-7.74	-9.21/-11.69
Θ(142.5°)	-10.99/-10.31	-7.64/-9.7	-8.08/-11.54	-10.61/-10.64	-11.79/-8.58	-11.44/-8.78	-9.19/-11.19	-9.71/-9.8	-9.84/-11.18	-10.95/-8.86	-7.64/-11.23	-11.41/-7.41	-8.58/-8.92	-9.83/-9.4	-8.14/-11.51	-11.35/-6.06	-7.75/-9.38	-10.78/-11.68	-8.82/-11.74	-11.28/-11.44	-9.99/-8.11	-7.96/-11.24	-12.58/-11.23	-8.44/-7.54
Θ(150°)	-10.5/-10.63	-9.68/-11.69	-8.21/-8.15	-9.11/-10.95	-10.52/-9.14	-11.67/-9.05	-8.14/-9.14	-8.65/-8.36	-9.34/-11.49	-11.83/-11.92	-8.64/-6.63	-7.02/-10.37	-11.41/-10.47	-9.18/-12.15	-9.99/-7.57	-8.7/-10.4	-8.28/-7.6	-12.4/-11.21	-12.62/-12.29	-10.75/-10.02	-9.7/-10.47	-9.61/-7.97	-7.48/-6.73	-9.44/-10.78
Θ(157.5°)	-9.64/-9.47	-8.85/-10.47	-9.29/-10.9	-9.97/-9.39	-10.09/-10.4	-10.44/-10.98	-11.08/-8.59	-8.21/-10.69	-8.06/-5.3	-5.08/-6.15	-7.51/-8.22	-7.24/-7.64	-9.93/-8.3	-6.11/-7.61	-6.56/-6.61	-7.02/-6.9	-7.51/-11.17	-12.55/-9.04	-9.88/-11.85	-11.88/-10.84	-8.77/-7.85	-6.69/-5.6	-8.28/-12.51	-9.06/-9.26
Θ(165°)	-7.99/-7.92	-10.58/-9.45	-7.66/-7.42	-7.41/-7.57	-8.33/-9.86	-11.92/-12.59	-10.27/-8.34	-6.93/-7.47	-8.4/-7.08	-6.46/-6.97	-7.34/-6.13	-5.97/-6	-6.74/-8.43	-9.55/-8.98	-8.79/-9.54	-8.85/-8.63	-9.02/-8.74	-9.14/-8.63	-8.63/-9.95	-11.47/-11.2	-10.15/-11	-12.42/-11.35	-11.31/-10.02	-9.1/-8.57
Θ(172.5°)	-12.14/-11.87	-8.99/-7.38	-8.04/-8.41	-7.17/-6.77	-6.09/-6.38	-6.16/-5.43	-5.39/-6.63	-7.5/-8.95	-9.17/-8.52	-7.66/-6.13	-5.34/-4.98	-4.65/-4.68	-4.13/-4.18	-4.51/-4.82	-5.83/-6.47	-6.43/-7.86	-7.95/-6.82	-6.39/-6.35	-6.72/-7.34	-7.17/-7.11	-8.09/-9.07	-10.23/-11.09	-9.27/-8.25	-8.26/-10.57
Θ(180°)	-11.95/-12.28	-11.17/-10.65	-8.64/-5.84	-5.09/-5.58	-6.47/-5.88	-5.21/-4.78	-5.33/-5.64	-5.59/-5.67	-5.61/-6.78	-7.06/-7.57	-8.49/-8.53	-7.56/-7.57	-7.17/-7.03	-7.12/-7.16	-6.32/-5.95	-5.3/-5.7	-5.27/-5.5	-5.44/-5.52	-5.29/-5.71	-5.6/-6.26	-7.1/-6.53	-6.82/-7.34	-7.8/-7.78	-9.11/-10.13
Freq(Hz)	6.175G/Pol.	ThetaL	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°)	-9.71/-10.73	-10.35/-11.05	-10.98/-11.82	-11.24/-12.18	-11.91/-12.5	-12.74/-12.29	-11.88/-11.92	-10.57/-10.01	-9.67/-9.18	-9.25/-10.25	-9.62/-10.55	-9.87/-10.29	-10.39/-10.49	-11.22/-11.39	-11.87/-11.92	-11.31/-12.18	-12.42/-12.18	-12.55/-12.37	-11.89/-11.72	-11.89/-11.72	-11.21/-10.21	-10.52/-11.47	-10.47/-10.44	-11.41/-9.94
Θ(7.5°)	-10.49/-11.27	-12.15/-11.76	-12.73/-11.65	-12.27/-11.35	-11.95/-11.11	-10.97/-11.72	-11.4/-11.61	-12.06/-11.89	-11.96/-12.01	-11.33/-11.35	-11.12/-11.55	-10.73/-9.73	-9.87/-9.87	-11.03/-11.75	-12.09/-12.38	-12.47/-12.38	-12.4/-12.38	-11.66/-13.1	-10.93/-11.73	-10.75/-11.24	-11.06/-11.29	-9.8/-10.21	-11.44/-10.76	
Θ(15°)	-7.42/-7.65	-7.53/-11.32	-11.99/-11.96	-10.42/-10.79	-11.15/-10.87	-9.18/-63	-8.01/-8.08	-7.78/-7.66	-6.99/-6.25	-5.32/-5.66	-6.32/-6.5	-5.96/-5.28	-4.58/-4.81	-5.12/-10.7	-7.68/-6.81	-7.5/-8.7	-8.25/-7.32	-6.51/-6.4	-5.85/-6.86	-6.77/-6.9	-7.57/-8.48	-10.5/-10.24	-10.11/-11.38	-10.29/-9.03
Θ(22.5°)	-2/-2.21	-3.61/-3.49	-2.84/-2.5	-2.98/-2.2	-2.06/-2.85	-2.67/-2.17	-1.93/-1.84	-1.92/-1.24	-2.33/-2.67	-4.26/-3.15	-2.52/-2.57	-3.74/-9.7	-5.99/-4.35	-3.58/-3.04	-3.56/-3.24	-3.66/-4.25	-3.3/-3.34							



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(22.5°)	-9.89/-10.05	-9.34/-10.87	-11.78/-11.87	-10.57/-11.21	-9.36/-9.25	-9.5/-10.82	-10.25/-9.92	-10.22/-11.61	-11.58/-12.27	-12.48/-12.45	-11.71/-11.01	-10.44/-10.18	-8.82/-9.17	-10.65/-12.36	-10.66/-12.56	-11.36/-11.99	-12.38/-12.07	-9.32/-8.7	-10.62/-9.72	-9.08/-9.91	-9.31/-11.65	-12.1/-9.9	-10.15/-10	-9.58/-10.58
Θ(30°)	-11.22/-11.07	-11.06/-9.74	-11.4/-12.36	-10.88/-10.58	-10.8/-10.96	-11.14/-12.2	-11.99/-12.62	-11.05/-9.79	-10.66/-9.83	-9.83/-12.2	-12.07/-12.39	-12.61/-11.59	-10.57/-12.14	-11.96/-12.1	-11.1/-12.02	-12.64/-12.5	-11.45/-12.35	-11.28/-12.47	-12.55/-10.38	-10.96/-12.17	-12.27/-11.26	-12.01/-10.88	-9.66/-10.1	-12.35/-10.77
Θ(37.5°)	-9.35/-10.31	-9.21/-8.9	-7.18/-7.71	-7.86/-8.19	-8.68/-10.37	-10.93/-10.8	-12.01/-12.4	-11.56/-11.2	-11.87/-10.77	-8.4/-8.19	-12.58/-10.42	-11.06/-11.77	-11.19/-12.03	-11.25/-10.22	-11.28/-11.75	-12.31/-10.91	-9.73/-11.56	-12.89/-12.83	-12.22/-12.36	-10.23/-11.65	-11.79/-11.99	-10.56/-12.08	-12.13/-12.55	-12.07/-11.83
Θ(45°)	-10.99/-9.17	-8.27/-12.75	-11.75/-12.19	-10.93/-10.74	-11.48/-12.58	-12.14/-12.46	-11.92/-10.84	-11.49/-12.29	-12.46/-12.32	-12.31/-11.86	-11.19/-11.89	-10.44/-10.61	-10.2/-11.73	-10.12/-10.64	-9.94/-11.75	-11.83/-12.93	-9.44/-10.87	-12.09/-12.28	-11.19/-11.21	-12.2/-12.71	-11.1/-10.84	-12.34/-12.17	-11.39/-9.89	-10.79/-8.86
Θ(52.5°)	-9.94/-11.96	-9.93/-10.42	-10.07/-9.4	-7.56/-9.47	-9.96/-10.49	-10.18/-10.06	-12.38/-12.77	-12.42/-10.11	-11.6/-9.31	-11.07/-10.87	-10.67/-9	-11.19/-10.31	-12.29/-12.22	-11.71/-10.78	-11.79/-11.87	-12.33/-12.33	-12.18/-12.44	-9.51/-11.81	-11.63/-12.47	-11.79/-11.56	-11.64/-10.73	-12.61/-7.95	-10.93/-11.04	-10.32/-12.3
Θ(60°)	-9.12/-10.53	-9.72/-10.09	-9.62/-8.96	-9.62/-8.96	-9.34/-10.51	-11.66/-11.53	-10.39/-12.67	-12.5/-12.41	-11.79/-11.08	-12.02/-11.53	-12.23/-11.45	-11.28/-11.25	-10.79/-12.1	-9.88/-12.25	-10.45/-12.12	-11.55/-11.56	-10.45/-12.12	-10.42/-12.39	-12.34/-10.94	-11.15/-10.5	-9.86/-10.65	-9.06/-12.32	-10.15/-11.91	-11.93/-10.79
Θ(67.5°)	-11.38/-10.03	-13.26/-11.85	-11.01/-11.64	-8.85/-10.66	-9.84/-12.16	-9.9/-11.48	-12.11/-12.39	-11.35/-9.9	-11.56/-10.82	-9.14/-11.45	-12.04/-12.37	-12.17/-12.15	-11.32/-11.96	-12.12/-11.98	-10.4/-12.04	-10.4/-11.53	-11.57/-11.99	-10.82/-11.95	-10.5/-11.77	-12.01/-10.42	-11.41/-12.15	-9.24/-10.77	-9.52/-11.71	-8.63/-10.94
Θ(75°)	-10.81/-11.64	-11.03/-10.93	-12.21/-9.82	-9.78/-11.86	-11.21/-11.27	-10.99/-12.85	-12.7/-12.68	-11.48/-11.11	-11.64/-9.01	-11.42/-12.52	-12.27/-12.11	-11.33/-10.93	-12.48/-11.99	-11.27/-12.98	-12.42/-11.56	-11.81/-11.24	-12.06/-9.94	-12.39/-12.37	-10.77/-11.59	-11.78/-12.1	-12.22/-11.8	-12.47/-11.19	-10.65/-12.41	-11.07/-12.46
Θ(82.5°)	-10.31/-11.08	-10.41/-11.57	-12.5/-11.27	-10.92/-11	-11.7/-10.71	-10.53/-11.43	-12.71/-11.79	-11.03/-11.61	-11.56/-11.64	-10.54/-12.82	-10.96/-11.13	-11.95/-11.65	-12.69/-12.56	-12.11/-12.03	-11.46/-12.05	-10.8/-10.83	-12.03/-10.46	-10.54/-9.82	-12.22/-12.05	-10.16/-12.06	-10.97/-11.81	-11.1/-12.37	-11.7/-12.48	-11.16/-12.38
Θ(90°)	-12.18/-10.84	-10.72/-11.63	-12.13/-12.17	-9.54/-12.42	-12.06/-12.49	-12.38/-12.4	-12.56/-12.1	-12.04/-12.81	-11.19/-11.21	-11.27/-12.75	-12.43/-11.8	-11.62/-12.41	-12.41/-12.78	-12.11/-12.57	-12.22/-12.31	-11.37/-12.26	-12.19/-11.13	-13.07/-12.57	-11.88/-11.83	-11.19/-12.29	-12.44/-11.64	-11.03/-10.98	-11.45/-11.99	-12.32/-11.34
Θ(97.5°)	-12.04/-12.05	-10.18/-8.72	-11.81/-11.96	-12.59/-12.28	-11.44/-11.03	-12.48/-12.86	-12.16/-12.14	-12.84/-11.46	-12.15/-11.87	-12.59/-12.04	-12.03/-11.89	-12.19/-12.36	-12.45/-12.24	-11.92/-12.58	-12.14/-12.08	-9.27/-12.15	-11.61/-11.68	-11.94/-11.04	-12.03/-11.48	-11.22/-10.63	-12.08/-12.3	-12.37/-11.49	-11.26/-10.68	-12.22/-11.73
Θ(105°)	-11.11/-11.65	-11.94/-10.7	-12.14/-10.99	-10.54/-12.05	-11.19/-11.22	-12.17/-12.82	-12.12/-12.53	-12.61/-12.79	-11.68/-12.35	-12.53/-11.73	-12.03/-11.86	-11.83/-12.76	-11.86/-12.14	-12.52/-10.58	-10.78/-12.77	-12.18/-11.51	-11.26/-12.69	-11.23/-11.37	-13.01/-10.07	-11.61/-9.93	-12.67/-11.99	-12.33/-9.09	-10.24/-10.01	
Θ(112.5°)	-11.03/-12.4	-11.66/-9.49	-7.9/-9.79	-10.52/-11.27	-11.41/-11.66	-12.18/-12.81	-12.51/-11.93	-11.41/-12.71	-10.85/-12.21	-10.65/-11.87	-10.63/-11.4	-9.34/-9.88	-11.84/-12.03	-10.75/-11.61	-11.68/-12.56	-9.28/-12.43	-12.05/-11.93	-9.47/-11.09	-12.39/-12.6	-12.45/-9.63	-8.66/-9.94	-11.35/-8.1	-11.79/-10.97	-10.64/-11.41
Θ(120°)	-11.75/-10.67	-12.12/-11.26	-9.06/-9.14	-10.85/-12.51	-10.26/-12.44	-12.25/-12.33	-12.59/-12.62	-11.1/-10.53	-11.41/-10.91	-12.34/-12.06	-11.96/-12.35	-10.96/-11.27	-10.05/-11.14	-12.83/-12.33	-10.37/-12.11	-11.04/-11.21	-10.81/-11.54	-10.5/-12.53	-11.65/-12.19	-10.55/-12.46	-9.32/-11.24	-12.38/-10.87	-11.02/-11.88	-11.62/-9.32
Θ(127.5°)	-8.69/-11.47	-6.25/-8.2	-8.51/-8.87	-7.03/-10.48	-9.56/-11.27	-11.01/-12.44	-11.61/-11.22	-11.02/-12.13	-10.77/-7.29	-10.54/-12.03	-9.96/-11.66	-11.1/-9.25	-10.96/-10.16	-10.77/-10.21	-10.55/-9.18	-8.91/-11.3	-17.16/-9.89	-10.41/-11.55	-12.08/-11.91	-11.59/-9.8	-11.12/-11.27	-11.8/-10.44	-8.06/-12.26	-9.03/-12.74
Θ(135°)	-8.67/-10.47	-8.83/-10.95	-5.56/-7.73	-7.74/-12.22	-12.34/-12.18	-9.61/-12.04	-11.07/-11.26	-10.94/-11.38	-9.91/-8.93	-10.52/-10.33	-10.32/-11.95	-8.62/-11.69	-10.36/-10.92	-10.82/-9.99	-10.53/-8.86	-9.75/-7.8	-7.88/-9.88	-11.76/-10.72	-9.66/-12.24	-8.97/-11.23	-10.27/-9.49	-9.58/-7.56	-8.42/-10.12	-5.87/-7.31
Θ(142.5°)	-6.56/-12.67	-6.91/-5.33	-6.98/-9.79	-10.14/-8.52	-12.36/-9.19	-11.39/-10.26	-10.46/-10.12	-8.54/-12.33	-8.16/-8.05	-9.2/-7.57	-6.09/-8.76	-9.72/-10.93	-10.31/-10.95	-10.47/-11.99	-10.59/-7.23	-4.17/-9.84	-9.51/-11.28	-12.64/-12.34	-10.28/-11.79	-9.65/-7.1	-10.61/-11.43	-9.65/-7.1	-10.57/-5.55	
Θ(150°)	-9.32/-5.96	-7.51/-9.42	-10.58/-6.19	-8.07/-10.4	-11.73/-12.35	-12.03/-11.02	-12.25/-11.34	-10.2/-10.72	9.42/-10	-11.32/-12.04	-8.51/-5.79	-7.08/-5.84	-8.68/-10.14	-8.65/-8.9	-12.01/-10.96	-9.05/-10.77	-8.41/-11.69	-10.89/-11.08	-9.36/-7.38	-9.78/-8.79	-9.31/-11.49	-9.65/-7.1	-8.71/-7.27	-8.61/-12.99
Θ(157.5°)	-10.29/-6.83	-5.28/-8.62	-8.36/-8.29	-7.53/-10.13	-10.81/-9.16	-11.38/-12.41	-12.83/-9.81	-10.4/-12.16	-8.72/-6.77	-6.33/-10.17	-8.8/-8.12	-5.56/-7.11	-7.79/-6.24	-6.81/-8.06	-8.78/-9.12	-6.28/-5.5	-6.94/-7.05	-9.08/-9.86	-10.5/-11.96	-11.46/-10.88	-10.54/-8.68	-7.42/-7.96	-7.03/-9.51	-11.09/-11.96
Θ(165°)	-6.24/-5.46	-7.29/-8.86	-6.38/-7.86	-8.88/-10.42	-8.92/-7.85	-7.26/-8.56	-9.54/-10.93	-10.43/-8.94	-6.84/-4.33	-3.45/-2.97	-3.35/-4.13	-5.2/-6.26	-8.26/-11.46	-9.61/-5.13	-6.44/-6.66	-6.39/-5.76	-6.69/-8.27	-7.96/-7.22	-8.15/-8.9	-10.69/-8.78	-8.58/-9.97	-11.68/-11.01	-11.48/-12.49	-11.35/-9.16
Θ(172.5°)	-6.58/-9.13	-9.33/-6.11	-6.53/-6.36	-5.06/-4.9	-5.4/-5.36	-5.63/-6.66	-7.25/-8.71	-10.81/-9.93	-7.04/-5.7	-3.65/-3.09	-2.4/-2.56	-2.67/-2.95	-3.48/-4.17	-4.89/-5.45	-6.12/-6.45	-7.04/-6.44	-6.41/-6.12	-5.67/-6.21	-6.8/-8.13	-9.65/-9.33	-8.28/-6.93	-6.59/-6.34	-5.97/-6.37	-6.39/-6.18
Θ(180°)	-8.92/-8.81	-8.28/-7.35	-6.14/-9.1	-2.95/-2.15	-2.45/-2.95	-3.36/-4.11	-5.04/-5.84	-6.24/-5.87	-6.38/-4.75	-5.48/-3.34	-3.29/-2.49	-2.48/-2.19	-1.77/-2.01	-1.89/-1.56	-2.16/-1.94	-2.16/-3.42	-3.54/-4.13	-5.03/-6.31	-6.36/-6.87	-6.8/-6.77	-6.96/-6.72	-5.4/-5.1	-5.85/-5.34	-6.39/-10.25
Freq(Hz)	6.995GPol.	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°)	-12.61/-11.97	-12.34/-12.33	-11.61/-11.33	-11.77/-11.1	-10.54/-10.15	-10.59/-10.67	-10.29/-10.21	-9.92/-10.44	-10.05/-10.33	-10.83/-10.83	-11.27/-11.34	-11.09/-11.77	-12.01/-11.72	-12.15/-12.38	-12.17/-11.57	-11.86/-11.43	-10.48/-10.81	-10.12/-9.59	-8.74/-9.1	-9.03/-9.13	-9.24/-9.91	-9.51/-10.39	-10.26/-10.82	-11.42/-12.15
Θ(7.5°)	-11.1/-12.06	-12.57/-12.51	-11.68/-12.14	-10.74/-10.73	-10.16/-11.08	-9.01/-8.85	-8.86/-9.26	-8.89/-9.54	-9.36/-9.9	-10.36/-11.29	-11.04/-10.98	-10.09/-10.12	-9.62/-9.89	-9.91/-10.48	-10.75/-9.5	-10.62/-10.08	-10.06/-10.83	-10.68/-11.06	-10.66/-11.07	-12.25/-11.85	-12.58/-12.14	-11.74/-11.59	-10.87/-11.08	-11.64/-11.84
Θ(15°)	-5.9/-6.27	-6.81/-6.01	-6.26/-7.36	-8.04/-8.56	-8.2/-7.66	-6.71/-6.82	-5.62/-6.38	-6.12/-7.62	-8.26/-8.31	-7.73/-7.41	-8.58/-9.31	-9.75/-10.03	-11.12/-11.9	-10.75/-10.88	-11.41/-10.92	-9.57/-11.78	-11.41/-9.8	-10.12/-9.26	-9.29/-9.5	-8.82/-7.43	-6.65/-5.77	-6.43/-6.95	-6.78/-6.1	-6.13/-7.1
Θ(22.5°)	-3.57/-3.72	-3.44/-2.73	-2.49/-3.13	-2.47/-2.47	-2.06/-3.61	-4.66/-3.18	-3.93/-4.03	-4.57/-4.44	-5.14/-5.27	-5.44/-4.02	-5.54/-6.76	-8/-6.33	-5.28/-5.53	-5.79/-5.77	-7.11/-5.95	-5.45/-4.35	-4.63/-5.16	-4.37/-2.95	-3.04/-4.42	-3.92/-3.73	-3.9/-2.71	-3.55/-2.96		
Θ(30°)	-5.67/-4.94	-6.53/-7.84	-8.25/-8.13	-8.01/-8.5	-7.68/-6.67	-5.81/-4.94	-4.35/-4.59	-5.87/-4.3	-4.92/-4.78	-5.13/-4.53	-3.73/-3.28	-4.65/-4.6	-4.03/-4.41	-4.29/-3.61	-2.49/-4.05	-2.89/-2.49	-1.97/-3.36	-2.35/-2.01	-2.36/-2.14	-3.17/-5.52	-4.86/-6.5	-7.17/-6.58	-6.91/-6.47	-6.73/-6.78
Θ(37.5°)	-0.96/-8.07	-0.68/-1.09	-0.45/-0.51	-0.86/-1.22	-1.12/-0.2	-0.24/-1.16	-1.250/-77	-0.620/-86	0.21/-0.45	-1.09/-2.4	-2.07/-2.28	-3.45/-3.26	-1.34/-2.19	-1.08/-0.6	-0.26/-0.8	-0.64/-0.12	-0.58/-0.9	-1.82/-1.24	-2.84/-2.43	-2/-2.87	-2.1/-1.62	-1.02/-0.79	-0.170/-87	0.64/-0.75
Θ(45°)	-2.69/-1.87	-0.79/-2.62	-3.16/-4.41	-3.88/-1.68	-2.54/-5.02	-3.23/-3.96	-2.99/-1.86	-2.33/-2.55	-0.97/-0.54	-0.17/-1.02	-0.48/-0.42	-0.16/-0.45	-1.11/-0.31	-0.47/-0.12	0.110/-23	-0.13/-0.35	0.45/-0.74	-0.11/-1.51	-1.31/-0.11	-1.54/-0.48	-0.22/-0.82	-3.44/-4.18	-2.92/-2.86	
Θ(52.5°)	1.972/-8	1.812/-21	2.172/-76	1.381/-68	3.293/-2	3.684/-2	3.893/-55	2.612/-27	1.771/-61	-0.010/-76	1.20/-26	0.620/-49	1.511/-19	0.540/-93	0.361/-04	2.11/-0.21	2.11/-76	0.45/-1	0.3/-0.04	0.210/-65	0.821/-52	1.391/-5	2.84/-99	3.763/-32
Θ(60°)	1.951/-15	1.710/-13	-1.17/-0.7	0.531/-07	0.860/-38	0.750/-92	2.691/-4	1.591/-21	2.282/-2	2.781/-93	1.91/-53	2.121/-08	1.662/-31	2.342/-49	1.993/-5	3.993/-31	2.481/-42	2.582/-11	1.770/-41	2.051/-1	0.511/-23	1.651/-33	1.181/-98	1.540/-71
Θ(67.5°)	1.012/-51	1.731/-32	1.382/-29	1.091/-47	1.321/-32	1.382/-29	0.810/-5	1.903/-33	0.653/-34	1.422/-06	3.012/-83	3.274/-2	3.0											



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(22.5°)	-11.37/-11.57	-10.43/-13.3	-18.66/-18.4	-16.05/-19.13	-17.47/-18.97	-14.15/-15.89	-16.5/-18.55	-19.14/-19.06	-18.23/-18.25	-18.82/-18.26	-18.27/-15.34	-13.09/-13.04	-11.79/-11.8	-13.96/-17.2	-16.79/-18.52	-17.71/-19.42	-18.76/-19.28	-18.29/-18.23	-17.72/-18.96	-17.77/-18.87	-18.28/-17.48	-16.65/-18.07	-16.69/-19.27	-18.17/-17.57
Θ(30°)	-15.78/-18.85	-17.17/-12.27	-18.93/-18.2	-19.04/-19.2	-18.99/-18.9	-18.69/-17.4	-17.09/-17.7	-18.25/-15.8	-17.35/-11.2	-11.8/-17.23	-18.39/-19.62	-18.37/-16.97	-16.8/-17.4	-18.29/-18.16	-13.56/-18.56	-18.51/-18.33	-18.45/-18.5	-18.24/-18.88	-18.67/-17.99	-16.69/-18.57	-18.36/-17.9	-17.6/-18.1	-17.54/-19.1	-17.17/-14.42
Θ(37.5°)	-15.67/-18.75	-19.15/-11.2	-9.59/-14.54	-11.66/-11.53	-14/-12.96	-18.31/-18.33	-17.44/-19.05	-16.78/-15.86	-18.44/-18.66	-13.51/-12.9	-18.5/-16.61	-18.53/-16.03	-14.98/-17.7	-18.39/-18.39	-17.54/-15.91	-17.84/-18.57	-17.91/-18.2	-18.39/-18.18	-18.62/-18.22	-18.58/-19.22	-17.5/-17.95	-18.95/-18.24	-18.37/-18.17	-18.78/-19.14
Θ(45°)	-18.96/-9.4	-7.45/-19.24	-16/-19.14	-14.61/-15.48	-17.23/-17.68	-18.96/-18.37	-17.92/-16.98	-18.67/-18.49	-18.45/-18.89	-18.55/-18.59	-14.31/-16.55	-18.62/-18.03	-17.63/-18.46	-14.52/-15	-17.37/-19.41	-16.48/-18.51	-17.5/-14.85	-17.03/-18.19	-17.8/-18.94	-18.77/-18.94	-18.16/-18.19	-17.39/-17.19	-18.03/-15.12	-17.84/-11.33
Θ(52.5°)	-11.73/-17.1	-13.84/-15.25	-15.02/-19.02	-15.96/-15.75	-14.79/-18.24	-11.48/-11.18	-18.87/-18.86	-18.39/-17.4	-16.5/-12.37	-17.45/-18.98	-17.56/-16.0	-16.16/-11.95	-18.93/-18.74	-17.12/-17.43	-18.53/-17.7	-18.53/-18.63	-18.41/-17.83	-16.95/-17.4	-17.97/-16.8	-18.65/-18.58	-15.33/-14.17	-18.41/-13.68	-18.35/-14.26	-14.53/-17.27
Θ(60°)	-14.43/-18.36	-14.44/-12.75	-10.89/-18.03	-14.08/-18.27	-18.65/-14.28	-17.76/-18.38	-17.62/-18.61	-17.88/-17.64	-17.51/-15.18	-16.78/-15.02	-16.41/-17.29	-18.62/-19.4	-17.38/-18.39	-18.51/-19.19	-17.75/-18.2	-17.89/-18.34	-17.28/-19.14	-19.01/-17.65	-18.69/-16.48	-18.64/-15.51	-14.55/-18.55	-14.09/-17.97	-18.22/-18.3	
Θ(67.5°)	-15.24/-10.95	-19.33/-17.83	-17.77/-18.83	-14.57/-14.62	-14.44/-17.66	-17.8/-14.93	-18.53/-18.78	-18.39/-16.58	-17.78/-19.4	-18.42/-15.82	-18.65/-18.5	-19.15/-18.69	-14.37/-18.74	-18.87/-16.87	-18/-18.79	-17.82/-18.49	-18.64/-17.54	-18.55/-18.72	-18.03/-18.88	-18.68/-17.59	-18.13/-17.93	-14.6/-16.12	-12.99/-17.74	-10.71/-18.97
Θ(75°)	-14.25/-18.71	-13.75/-19.04	-17.6/-11.72	-14.98/-18.08	-19.29/-17	-18.15/-19.56	-18.88/-17.84	-17.89/-18.8	-19.21/-17.4	-14.75/-18.57	-17.97/-17.28	-15.84/-19.42	-14.22/-18.32	-14.94/-18.3	-18.54/-17.7	-18.28/-17.84	-17.86/-19.36	-18.42/-18.04	-17.68/-15.78	-18.27/-17.72	-17.96/-16.04	-17.8/-17.3	-15.52/-18.19	-16.89/-18.3
Θ(82.5°)	-14.23/-15.76	-14.34/-15.64	-19.05/-16.18	-13.81/-13.94	-16.64/-17.56	-19.38/-18.82	-19.17/-18.23	-18.57/-17.63	-19.18/-17.62	-18.5/-19.15	-17.68/-18.66	-18.11/-19.14	-18.66/-18.42	-18.52/-17.8	-18.46/-17.72	-18.41/-18.66	-16.88/-19.03	-14.79/-16.68	-19.2/-19	-18.37/-18.55	-18.2/-15.97	-17.81/-18.8	-17.36/-17.59	-15.24/-18.13
Θ(90°)	-18.93/-18.34	-13.55/-16.19	-18.24/-18.46	-12.9/-18.01	-18.08/-18.61	-18.01/-18.32	-19/-17.6	-17.25/-19.16	-17.24/-18.34	-17.89/-19.27	-18.72/-15.67	-16.1/-18.72	-18.65/-19.2	-17.86/-18.52	-17.98/-18.67	-18.51/-17.89	-18.98/-18.27	-18.73/-18.54	-18.39/-15.43	-17.82/-18.71	-18.38/-17.74	-18.22/-18.06	-18.68/-17.98	-18.99/-17.8
Θ(97.5°)	-15.65/-18.79	-12.17/-11.36	-18.86/-16.33	-18.92/-18.39	-18.6/-18.63	-19.06/-19.04	-17.95/-19.46	-18.12/-18.02	-19.41/-17.5	-19.03/-18.12	-17.28/-18.52	-19.29/-18.29	-18.36/-19.74	-17.76/-18.74	-18.89/-19.3	-18.85/-19.04	-15.57/-19.1	-18.95/-18.68	-18.35/-18.14	-18.11/-18.17	-18.68/-18.41	-13.92/-13.89	-17.51/-14.96	
Θ(105°)	-18.94/-15.14	-18.48/-17.58	-18.12/-13.88	-12.42/-18.43	-15.59/-13.79	-19.04/-19.1	-17.81/-18.23	-17.71/-19.81	-19.02/-17.8	-18.38/-17.03	-17.75/-18.66	-17.23/-19.09	-17.26/-17.85	-19.16/-18.18	-17.56/-18.91	-17.69/-16.34	-17.59/-17.98	-18.37/-19.01	-14.14/-18.16	-19.14/-18.42	-19.36/-17.96	-19.07/-18.68	-17.43/-18.85	-13.37/-12.52
Θ(112.5°)	-17.25/-17.58	-18/-11.99	-10.45/-16.16	-17.91/-18.65	-17.24/-16.46	-17.73/-18.58	-17.89/-16.71	-17.71/-18.67	-17.72/-17.94	-18.54/-17.21	-17.34/-18.89	-10.12/-13.13	-17.69/-18.84	-16.97/-18.28	-15.21/-19.05	-17.03/-18.41	-17.74/-18.33	-15.37/-16.14	-18.32/-18.86	-17.45/-13.19	-17.71/-17.52	-18.87/-14.5	-18.58/-14.52	-13.32/-18.23
Θ(120°)	-18.09/-18.65	-17.25/-16.71	-10.71/-14.37	-18.9/-18.19	-19.02/-19.06	-18.49/-17.61	-18.88/-18.95	-18.29/-18.54	-18.34/-15.41	-18.63/-17.13	-18/-17.38	-17.58/-16.02	-12.83/-18.96	-18.71/-18.57	-13.62/-17.84	-17.74/-18.41	-15.98/-18.51	-12.31/-17.56	-18.38/-18.97	-17.85/-18.4	-17.18/-18.03	-14.78/-18.37	-15.52/-18.19	-13.88/-17.37
Θ(127.5°)	-13.26/-19.58	-9.67/-18.18	-10.99/-16.43	-9.05/-13.52	-16.97/-17.22	-13.71/-17.71	-17.06/-19.98	-17.98/-15.55	-18.59/-10.32	-18.27/-18.43	-13.88/-18.2	-15.47/-11.73	-10.46/-14.38	-17.83/-13.52	-14.55/-13.72	-13.81/-14.89	-9.51/-12.15	-17.33/-18.02	-18.06/-18.3	-16.81/-18.97	-16.04/-18.86	-16.14/-18.64	-14.01/-18.71	-15.46/-18.68
Θ(135°)	-16.39/-16.39	-9.09/-18.29	-4.28/-8.17	-10.61/-17.81	-19.04/-18.48	-18.01/-16.15	-17.89/-13.94	-14.62/-18.9	-14.64/-18.53	-18.67/-18.65	-17.73/-16.13	-11.87/-17.92	-13.48/-14.82	-13.75/-17.25	-15.17/-19.44	-16.34/-10.99	-18.3/-19.15	-18.06/-18.65	-12.04/-17.94	-16.13/-17.15	-17.33/-16.04	-14.57/-8.24	-9.35/-12.55	-4.66/-8.89
Θ(142.5°)	-7.37/-18.54	-5.47/-6.32	-10.7/-14.92	-19.11/-17.37	-17.93/-10.65	-18.05/-17.1	-12.68/-11.82	-11.44/-13.97	-17.87/-18.84	-14.06/-16.35	-11.52/-17.5	-17.77/-13.98	-12.69/-16.19	-19.22/-18.51	-18.06/-19.55	-12.76/-8.67	-6.72/-14.85	-19.13/-18.77	-12.67/-17.2	-18.73/-17.79	-18.05/-19.36	-17.22/-17.08	-14.52/-17.55	-15.81/-8.09
Θ(150°)	-12.34/-8.53	-10.33/-10.55	-16.04/-6.7	-9.93/-17.57	-17.01/-17.71	-18.03/-18.72	-18.68/-16.11	-14.52/-15.69	-16.53/-18.75	-19.33/-19.92	-10.45/-4.73	-8.86/-12.23	-18.61/-12.48	-13.58/-16.61	-19.09/-15.52	-4.97/-14.3	-13.75/-16.42	-18.98/-14.89	-17.83/-17.97	-17.89/-13.79	-11.94/-17.44	-11.42/-10.15	-12.78/-12.18	-8.59/-19.11
Θ(157.5°)	-11.52/-5.47	-3.12/-8.65	-10.27/-15.23	-17.73/-16.2	-18.86/-13.33	-15.55/-19.25	-18.76/-14.42	-14.52/-18.29	-12.47/-8.72	-7.71/-13.33	-10.24/-6.11	-3.09/-5.8	-8.05/-6.86	-9.34/-9.92	-12.08/-18.87	-9.59/-7.78	-7.24/-11.78	-17.18/-11.27	-18.39/-17.44	-19.76/-19.04	-12.87/-10.37	-10.08/-13.85	-10.3/-17.55	-15.84/-17.15
Θ(165°)	-5.81/-6.57	-10.44/-15.59	-9.21/-8.66	-11.12/-14.02	-11.72/-14.14	-8.14/-10.1	-13.57/-18.2	-18.76/-12.45	-9.45/-5.88	-4.43/-3.39	-3.23/-3.11	-4.29/-5.66	-8.84/-16.64	-18.24/-14.38	-13.12/-9.58	-7.53/-8.06	-9.04/-8.36	-8.49/-7.39	-8.16/-11.3	-12.28/-10.88	-12.91/-14.43	-17.47/-15.98	-14.48/-15.63	-14/-1.7
Θ(172.5°)	-6.37/-15	-17.84/-9.4	-8.95/-8.84	-5.54/-4.35	-6.18/-6.12	-7.47/-7.86	-9.01/-11.07	-15.8/-12.45	-10.11/-7.03	-4.44/-3.11	-2.11/-1.74	-1.82/-2.14	-2.51/-3.1	-3.68/-4	-4.36/-4.74	-5.12/-4.86	-4.86/-4.87	-4.56/-5.3	-5.89/-7.67	-10.48/-11.95	-10.33/-9.54	-8.95/-9.15	-6.73/-4.64	-4.46/-4.66
Θ(180°)	-12.04/-15.42	-19.87/-19.7	-15.07/-6.72	-2.79/-2.16	-3.02/-2.63	-4.02/-5.05	-7.06/-7.99	-10.6/-9.27	-8.49/-6.7	-6.2/-4.53	-3.58/-2.29	-1.98/-1.3	-0.47/-0.11	-0.99/-0.07	-0.41/-0.97	-0.93/-1.71	-2.48/-3.12	-4.12/-5.6	-10.87/-8.71	-8.35/-9.39	-8.76/-8.92	-6.4/-4.76	-3.67/-3.47	-5.13/-11.24
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°)	-18.62/-17.38	-18.32/-19.08	-15.97/-15.73	-15.34/-14.65	-12.71/-11.72	-12.27/-12.95	-11.81/-11.22	-11.01/-11.72	-11.69/-12.6	-12.86/-13.48	-15.09/-15.45	-15.29/-16.36	-15.74/-17.44	-18.54/-18.18	-16.64/-15.97	-16.15/-15.33	-12.96/-12.41	-11.19/-11	-11.01/-10.37	-9.94/-10.38	-11.29/-11.23	-11.83/-13.19	-13.41/-14.82	-16.2/-18.72
Θ(7.5°)	-15.37/-16.77	-17.89/-19.12	-17.52/-17.81	-14.71/-16.01	-15.65/-15.02	-12.98/-11.82	-12.16/-11.98	-12.41/-12.7	-12.64/-14.1	-11.47/-11.89	-17.95/-19.02	-16.36/-16.6	-16.13/-16.63	-16.23/-16.31	-15.38/-16.49	-14.99/-17.46	-17.13/-18.14	-17.95/-18.1	-18.17/-18.2	-18.18/-17.02	-18.15/-18.04	-17.13/-17.07	-16.26/-14.63	-16.04/-16.16
Θ(15°)	-19.02/-18.79	-19.34/-15.56	-15.82/-17.08	-11.71/-13.89	-12.72/-11	-9.99/-8.42	-7.57/-7.71	-9.39/-9.36	-10.03/-10.11	-17.74/-14.78	-16.63/-13.51	-15.02/-16.82	-16.14/-13.57	-13.16/-16.38	-19.21/-18.45	-14.71/-13.76	-13.18/-15.92	-17.89/-17.32	-15.76/-16.13	-14.68/-16.69	-15.39/-13.19	-12.78/-16.27	-15.46/-18.26	
Θ(22.5°)	-13.07/-14.31	-12.53/-10.31	-9.01/-12.12	-11.24/-11.04	-11.28/-13.25	-17.8/-13.14	-12.12/-9.84	-8.9/-7.67	-8.06/-9.18	-15/-13.43	-11.51/-10.85	-12.46/-10.91	-10.45/-10.62	-10.26/-10.65	-11.6/-11.57	-12.91/-16.65	-13.08/-10.58	-12.45/-13.51	-12.61/-15.11	-15.61/-17.8	-15.67/-12.65	-13.18/-13.06	-17.03/-11.88	-17.68/-14.71
Θ(30°)	-12.41/-10.38	-11.06/-11.72	-15.3/-15.77	-18.7/-18.29	-19.08/-17.47	-18.24/-16.69	-13.3/-12.05	-14.29/-10.7	-10.22/-13.1	-15.94/-15.46	-11.98/-11.69	-16.37/-13.58	-12.84/-10.26	-10.22/-10.86	-11.4/-8.9	-7.93/-9.21	-7.91/-12.71	-12.85/-12.09	-11.73/-9.27	-8.92/-10.62	-11.32/-11.44	-14.87/-11.08	-11.29/-11.68	-13.97/-9.77
Θ(37.5°)	-10.88/-12.35	-14.01/-14.32	-13.17/-10.64	-10.51/-10.24	-8.65/-5.41	-4.25/-5.49	-4.66/-4.11	-4.08/-5.36	-6.72/-4.4	-5.19/-8.28	-7.49/-6.3	-9.38/-9.58	-8.98/-10.58	-6.96/-7	-5.93/-6.51	-4.65/-6	-9.25/-7.78	-7.06/-5.59	-7.16/-7.17	-7.08/-7.17	-7.15/-7.66	-9.33/-8.66	-6.59/-7.95	-7.84/-11
Θ(45°)	-8.24/-7.98	-6.3/-8.83	-7.49/-8.85	-7.83/-6.43	-10.25/-13.94	-9.08/-12.71	-8.49/-8.33	-7.94/-9.63	-8.8/-7.58	-6.97/-9.89	-10.22/-10.05	-7.79/-7.52	-7.45/-5.35	-8.24/-7.3	-7.18/-6.63	-6.14/-6.15	-5.18/-6.53	-4.77/-6.21	-7.09/-7.06	-5.2/-5.89	-7.39/-6.24	-5.29/-6.06	-6.93/-9.24	-8.31/-8.09
Θ(52.5°)	-3.98/-7.51	-9.77/-8	-8.45/-5.47	-6.72/-4.67	-2.69/-3.08	-2.79/-0.86	-1.22/-0.59	-1.75/-1.34	-0.91/-4.27	-2.77/-3.83	-3.38/-4.98	-7.06/-7.63	-6.22/-5.19	-7.14/-9.65	-7.25/-6.61	-4.46/-6.52	-5.29/-3.84	-7.57/-5.71	-7.96/-9.61	-6.22/-9.93	-8.03/-7.31	-8.64/-7.68	-8.24/-7.56	-6.47/-6.53
Θ(60°)	-7.2/-7.44	-6.11/-7.24	-5.03/-6.4	-5.81/-7.03	-9.32/-6.98	-5.23/-3.7	-1.34/-4.13	-3.97/-5.2	-1.88/-1.85	-3.75/-5.83	-5.07/-8													



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(75°)	-18.27/-18.66	-18.56/-19.12	-18.76/-18.44	-16.22/-18.28	-19.07/-17.87	-18.43/-18.78	-18.22/-17.9	-18.17/-17.89	-18.92/-17.76	-10.31/-19.18	-15.93/-17.33	-19.11/-17.08	-18.93/-15.67	-16.73/-17.58	-17.47/-18.66	-18.06/-17.92	-17.82/-18.95	-18.24/-17.27	-18.52/-17.21	-12.29/-12.15	-13.34/-18.5	-14.54/-18.97	-19.46/-18.26	-17.8/-18.83
Θ(82.5°)	-17.94/-18.27	-18.58/-18.51	-18.78/-17.4	-18.08/-18.38	-16.79/-16.89	-16.58/-17.95	-18.76/-18.24	-17.7/-18.65	-19.06/-18.05	-18.27/-19.16	-18/-14.41	-17.91/-18.62	-17.78/-18.63	-18.55/-18.33	-17.82/-18.2	-18.13/-16.37	-17.68/-17.52	-18.52/-19.11	-17.15/-17	-15.74/-18.02	-15.32/-17.05	-18.59/-17.89	-17.91/-18.26	-14.84/-17.1
Θ(90°)	-18.85/-18.27	-18.76/-13.95	-17.48/-18.84	-18.66/-18.4	-18.96/-18.4	-18.31/-18.3	-17.31/-17.74	-18.93/-18.57	-16.43/-18.03	-18.63/-14.26	-15.34/-17.8	-17.5/-17.83	-18.63/-18.7	-19.15/-18.38	-17.66/-16.08	-19.26/-18.16	-17.24/-16.41	-18.49/-18.95	-17.57/-19.22	-16.68/-18	-18.48/-17.16	-19.06/-19.11	-18.96/-14.86	-18.21/-18.39
Θ(97.5°)	-19.26/-12.87	-16.44/-18.92	-18.12/-18.56	-18.57/-18.3	-19.12/-18.01	-18.22/-17.8	-18.08/-18.1	-19.31/-18.3	-16.26/-17.53	-18.87/-18.86	-18.34/-18.6	-18.88/-17.53	-18.78/-13.71	-18.9/-18.08	-18.32/-18.32	-18.29/-18.88	-18.03/-19.07	-17.93/-17.35	-15.45/-12.77	-15.63/-18.98	-18.83/-18.59	-18.11/-14.85	-19.13/-16.96	-11.83/-19.26
Θ(105°)	-12.11/-12.2	-18.73/-19.23	-16.72/-16.18	-19.02/-18.8	-18.48/-17.66	-19.05/-18.74	-13.7/-16	-17.67/-16.96	-18.05/-17.82	-11.66/-18.01	-14.32/-18.73	-18.54/-18.16	-18.4/-18.32	-18.61/-17.56	-13.57/-13.23	-12.63/-18.16	-18.77/-18.1	-16.04/-17.85	-18.12/-18.99	-18.28/-18.4	-18.81/-19.15	-18.64/-15.32	-18.7/-18.48	
Θ(112.5°)	-18.77/-17.1	-14.17/-17.11	-18.12/-18.58	-18.77/-18.62	-18.34/-17.84	-18.93/-15.65	-17.83/-19.23	-19.27/-19.02	-14.79/-18.51	-18.84/-11.92	-18.86/-18.77	-15.34/-17.8	-17.5/-17.83	-18.63/-18.7	-19.15/-18.38	-17.66/-16.08	-18.24/-16.41	-18.49/-18.95	-17.57/-19.22	-16.68/-18	-18.48/-17.16	-19.06/-19.11	-18.96/-14.86	-18.21/-18.39
Θ(120°)	-13.88/-10.85	-18.17/-18.41	-18.5/-14.38	-18/-14.76	-13.61/-18.76	-18.82/-17.84	-19/-18.43	-15.59/-18.97	-17.54/-19.03	-16.82/-17.87	-17.97/-18.42	-12.79/-18.02	-18.72/-12.68	-18.88/-18.16	-18.83/-13.03	-14.29/-11.02	-13.89/-17.32	-18.31/-18.73	-18.78/-14.17	-13.48/-17.49	-15.33/-18.53	-18.96/-16.5	-12.57/-9.34	-10.06/-15.63
Θ(127.5°)	-17.76/-19.22	-17.09/-13.5	-18.3/-18.7	-17.38/-17.96	-17.69/-17.9	-19.13/-14.61	-18.41/-19.2	-18.13/-15.3	-18.25/-13.19	-18.5/-13.8	-17.14/-15.4	-18.4/-10.05	-11.94/-11.64	-18.19/-18.14	-16.9/-15.11	-16.7/-11.92	-11.5/-18.58	-18.78/-19.15	-17.13/-18.16	-16.83/-10.79	-17.02/-13.88	-18.58/-17.38	-18.28/-14.48	-13.75/-18.93
Θ(135°)	-17.92/-18.09	-12.83/-18.58	-10.97/-12.74	-18.37/-10.54	-11.6/-16.35	-18.45/-17.79	-13.09/-15.71	-17.75/-16.32	-17.4/-11.26	-13.72/-11.48	-10.17/-14.47	-18.42/-18.11	-17.64/-19.13	-19.16/-17.83	-18.86/-17.19	-18.33/-17.03	-14.8/-13.77	-17.21/-18.77	-14.53/-14.18	-17.75/-17.21	-15.35/-13.31	-11.15/-10.89	-18.21/-19.14	-17.06/-18.26
Θ(142.5°)	-14.09/-18.26	-18.29/-14.85	-11.23/-17.05	-14.19/-14.17	-17.83/-12.67	-17.32/-17.62	-13.72/-17.1	-12.67/-15.73	-18.02/-18.25	-12.68/-16.09	-16.47/-16.1	-18.05/-18.56	-17.82/-18.55	-19.4/-18.92	-17.3/-14.59	-15.12/-19.14	-19.11/-18.23	-18.09/-18.56	-15.13/-18.67	-18.14/-17.91	-16.43/-10.34	-8.65/-15.9	-18.75/-14.9	-14.84/-11.83
Θ(150°)	-18.53/-17.79	-18.53/-18.39	-17.99/-15.62	-17.66/-18.36	-16.31/-16.47	-17.71/-14.61	-16.06/-12.96	-10.66/-18.45	-17.45/-17.51	-19.57/-17.74	-14.45/-13.4	-10.43/-13.7	-15.99/-15.86	-15.96/-16.08	-13.62/-8.48	-11.09/-15.73	-14.23/-12.36	-17.61/-18.33	-17.79/-18.99	-16.07/-18.73	-18.33/-19.88	-16.49/-14.04	-7.64/-11.87	-14.76/-17.74
Θ(157.5°)	-18.74/-18.85	-17.74/-15.15	-14.26/-15.45	-15.85/-13.88	-16.46/-15.82	-17.9/-16.99	-17.56/-13.64	-10.74/-17.06	-19.07/-12.87	-14.03/-17.96	-18.71/-18.39	-18.73/-17.64	-15.51/-10.29	-7.3/-6.66	-8.37/-11	-12.32/-13.5	-14.43/-18.99	-19.2/-18.64	-18.59/-18.52	-16.23/-14.41	-15.53/-17.76	-16.49/-10.27	-13.12/-18.52	-15.56/-18.44
Θ(165°)	-13.55/-12.15	-14.1/-18.62	-18.65/-18.59	-17.22/-15.06	-15.81/-15.27	-18.2/-17.83	-18.79/-15.79	-11.25/-9.67	-8.88/-7.91	-8.55/-10.42	-12.26/-12.35	-12.65/-11.91	-12.22/-15.4	-17.41/-17.82	-14.48/-13.25	-14.42/-16.62	-17.68/-18.51	-18.34/-16.69	-14.08/-13.94	-14.19/-15.51	-12.04/-16.39	-19.11/-16.82	-17.22/-17.58	-18.09/-19.54
Θ(172.5°)	-17.58/-16.51	-12.59/-11.03	-10.93/-10.47	-10.42/-10.57	-10.03/-11.07	-12.24/-13.07	-13.01/-16.19	-16.41/-16.51	-14.47/-14.06	-12.68/-11	-10.43/-9.4	-9.06/-9.22	-9.32/-9.67	-11.25/-10.85	-12.16/-13.34	-14.79/-17.89	-19.09/-15.1	-15.07/-12.83	-13/-10.57	-9.48/-9.76	-10.95/-13.18	-14.63/-16.02	-18.33/-16.94	-15.73/-17.38
Θ(180°)	-16.92/-18.62	-16.88/-12.96	-8.35/-7.2	-7.65/-9.3	-9.78/-9.18	-8.12/-9.03	-10.61/-10.22	-11.66/-12.56	-14.14/-18.1	-18.9/-18.32	-18.53/-18.83	-17.55/-17.89	-17.12/-16.48	-15.45/-15.36	-12.66/-12.32	-10.97/-12.5	-11.13/-12.09	-11.28/-11.43	-10.73/-11.81	-11.02/-13.78	-17.42/-14.32	-13.23/-14.03	-14.26/-10.91	-10.59/-11.36
Freq(Hz)	6.175GPol.	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°)	-17.12/-18.47	-18.35/-19.04	-18.54/-14.44	-17.21/-18.13	-18.36/-18.88	-18.61/-18.85	-18.38/-17.4	-18.41/-18.22	-19.21/-18.3	-18.69/-16.57	-18.63/-18.95	-15.34/-18.41	-17.9/-18.45	-18.34/-18.64	-17.38/-18.1	-18.34/-18.12	-18.97/-19.08	-17.31/-17.86	-16.11/-15.55	-16.06/-19.08	-18.1/-17.1	-16.55/-16.31	-	-
Θ(7.5°)	-18.9/-17.88	-19.34/-16.95	-19.29/-16.87	-19/-19	-16.89/-18.4	-19.03/-19.05	-17.81/-17.33	-18.4/-18.62	-17.7/-18.59	-16.52/-16.88	-17.71/-17.66	-15.77/-15.78	-15.29/-15.95	-18.89/-18.17	-17.72/-17.53	-18.14/-19.02	-19.04/-18.87	-16.88/-18.12	-15.65/-19.45	-17.07/-18.88	-15.64/-18.3	-17.75/-18.48	-18.99/-18.27	-19.06/-16.73
Θ(15°)	-11.43/-12.35	-15.18/-17.69	-19.82/-18.09	-17.94/-17.92	-18.83/-13.92	-18.87/-19.04	-18.62/-16	-15.99/-16.15	-15.88/-14.73	-13.71/-14.83	-18.54/-19	-14.76/-12.38	-11.34/-11.65	-15.15/-15.04	-15.79/-12.47	-11.97/-10.85	-9.91/-9.98	-9.46/-12.71	-10.61/-11.27	-11.44/-12.76	-14.86/-16.51	-18.5/-14.89	-18.06/-19.06	-16.55/-15.25
Θ(22.5°)	-11.02/-11.22	-16.65/-15.7	-10.39/-9.85	-8.18/-7.03	-6.52/-6.62	-6.12/-5.84	-5.16/-6.08	-6.72/-8.22	-9.64/-11	-10.64/-10.24	-8.68/-9.52	-10.59/-9.84	-5.85/-6.66	-7.39/-9.02	-8.51/-8.74	-8.97/-7.47	-6.34/-7.22	-8.89/-8.79	-8.37/-8.1	-6.81/-7.65	-8.81/-9.84	-9.24/-8.97	-11.10/-10.17	-
Θ(30°)	-7.34/-7.5	-8.19/-7.15	-6.08/-6.55	-4.37/-2.18	-2.91/-4.05	-5.63/-5.09	-5.66/-4.75	-3.75/-4.08	-5.56/-5.65	-5.33/-6.01	-6.73/-7.01	-5.26/-6.47	-7.12/-5.68	-6.92/-5.5	-5.77/-6.21	-5.05/-5.3	-5.82/-4.42	-4.63/-3.7	-3.25/-2.23	-2.99/-6.1	-7.55/-5.91	-6.88/-7.57	-11.79/-7.25	-6.05/-8.94
Θ(37.5°)	-6.66/-13.66	-13.39/-6.34	-6.83/-11.48	-17.54/-18.47	-17.58/-16.21	-15.99/-10.43	-8.54/-8.3	-7.65/-11.14	-3.99/-8.7	-5.35/-6.5	-6.51/-8.17	-4.66/-6.58	-6.59/-6.22	-7.1/-7.5	-4.61/-3.77	-6.25/-8.33	-3.59/-3.27	-2.07/-2.77	-3.68/-3.49	-3.69/-3.48	-4.02/-7.21	-3.67/-8.27	-3.92/-6.94	-6.47/-6.08
Θ(45°)	-8.97/-6.48	-6.23/-3.52	-3.05/-2.73	-3.52/-2.85	-1.63/-1.11	-1.92/-1.59	-0.89/-1.74	-2.73/-5.02	-3.3/-3.37	-4.59/-4.95	-6.53/-5.91	-8.94/-4.49	-6.89/-3.23	-3.57/-1.3	-1.88/-3.28	-3.98/-5.59	-3.23/-4.24	-3.25/-4.4	-3.52/-3.66	-3.52/-4.4	-6.52/-3.65	-3.72/-6.74	-6.79/-7.37	-
Θ(52.5°)	-5.81/-4.64	-5.19/-6.13	-7.76/-9.23	-5.09/-5.38	-8.63/-7.01	-6.74/-9.7	-10.14/-7.71	-6.52/-5.67	-5.94/-6.27	-3.15/-3.23	-3.32/-4.12	-4.3/-4.12	-6.59/-2.81	-4.82/-3.74	-0.6/-3.1	-4.93/-3.56	-3.03/-4.13	-2.42/-2.15	-1.78/-1.49	-3.07/-4.01	-5.55/-3.32	-4.94/-4.81	-3.41/-5.84	-4.88/-4.18
Θ(60°)	-4.74/-3.01	-4.94/-6.49	-0.72/-1.63	-0.76/-0.51	-0.540/-77	0.54/-95	0.39/-0.05	-1.15/-1.03	-2.07/-1.07	-4.27/-5.76	-1.92/-4.35	-2.34/-5.6	-1.32/-4.01	-3.82/-2.53	-0.71/-1.08	-3.86/-1.18	-2.31/-1.47	-1.9/-2.64	-2.92/-1.98	-2.85/-2.44	-1.78/-2.29	-2.31/-5	-4.72/-3.65	-2.66/-3.7
Θ(67.5°)	-1.23/-3.92	-1.66/-4.51	-5.1/-5.32	-5.93/-5.67	-3.53/-3.76	-4.64/-8.12	-5.06/-2.89	-3.73/-3.78	-4.45/-4.68	-1.65/-1.81	-2.53/-4.06	-3.62/-4.25	-2.43/-3.97	-2.47/-3.22	-1.46/-2.03	-2.65/-2.55	-0.51/-1.25	-2.17/-1.56	-0.48/-1.14	-1.54/-2.2	-0.61/-1.78	-2.27/-2.73	-5.21/-3.69	-
Θ(75°)	-5.18/-2.61	-2.8/-3.9	-3.27/-3.19	-0.750/-2.3	0.46/-2.76	-0.160/-28	-0.24/-0.68	-1.27/-2.74	-1.82/-2.8	-4.05/-4.18	-0.54/-3.63	-2.15/-3.2	-6.09/-4.8	-4.18/-3.7	-2.21/-2	-5.36/-4.31	-1.21/-0.34	-0.310/-42	0.26/-0.55	0.27/-0.79	-1.23/-1.32	-2.37/-2.11	-3.14/-5.07	-4.96/-4.66
Θ(82.5°)	-4.24/-10.84	-3/-2.8	-7.65/-3.93	-2.89/-2.54	-5.13/-3.54	-1.88/-8.67	-1.7/-2.65	-2.73/-5.66	-1.34/-2.84	-2.21/-3.12	-2.4/-5.95	-5.05/-3.19	-8.42/-3.89	-5.83/-5.41	-4.57/-1.74	-4.52/-1.8	-2.04/-3.33	-0.190/-0.3	-2.24/-6.09	-1.89/-1.84	-3.27/-1.19	-3.93/-3.2	-2.69/-3.78	-6.31/-6.15
Θ(90°)	-12.72/-4.87	-3.17/-5.72	-1.48/-2.75	-2.140/-14	-1.71/-1.14	-1.29/-2.84	-1.54/-2.96	-3.82/-5.24	-2.27/-1.33	-5.17/-6.51	-1.98/-6.94	-4.69/-6.04	-3.78/-6.56	-3.93/-2.38	-4.06/-3.74	-1.6/-2.18	-0.13/-1.2	-1.41/-1.63	-2.15/-0.8	-2.74/-1.55	-4.43/-3.05	-4.41/-4.47	-8.77/-5.18	-10.41/-3.07
Θ(97.5°)	-6.68/-9.39	-5.69/-4.33	-4.15/-3.44	-2.580/-59	-3.94/-1.72	-1.24/-2.56	-1.88/-2.87	-3.75/-4.02	0.52/-1.71	-2.68/-2.98	-6.74/-10.57	-5.14/-5.24	-5.25/-3.42	-6.48/-4.11	-2.06/-2.94	-6.2/-3.79	-4.03/-1.77	-1.03/-4.23	-4.88/-2.95	-2.29/-2.84	-3.69/-4.16	-2.44/-6	-4.19/-11.24	-9.16/-3.3
Θ(105°)	-9.33/-6.81	-1.75/-8.74	-4.74/-6.6	-5.01/-2.84	-15.92/-6.04	-4.62/-4.56	-5.34/-5	-5.13/-6.91	-5.01/-6.67	-6.98/-4.46	-6.2/-9.8	-4.41/-4.76	-5.58/-10.07	-9.39/-6.25	-5.63/-5.56	-6.07/-6.41	-1.98/-3.81	-3.110/-73	-1.63/-1.4	-2.9/-3.89	-4.71/-33	-3.93/-5	-11.19/-13.42	-8.15/-2.83
Θ(112.5°)	-12.92/-7.98	-11.97/-11.92	-6.93/-8.06	-6.82/-4.63	-10.05/-6.21	-10.42/-4.14	-9.8/-4.66	-6.24/-6.12	-5.25/-2.84	-10.42/-7.77	-11.18/-12.54	-9.6/-4.26	-9.7/-2.4	-3.95/-2.71	-5.73/-0.65	-10.05/-3.11	-2.86/-4.78	-5.39/-4.09	-3.44/-3.95	-2.45/-4.59	-2.17/-4.53	-5.48/-9.23	-5.07/-4.33	-
Θ(120°)	-3.93/-8.05	-14.92/-5.53	-4.89/-7.04	-9.78/-5.49	-11.09/-5.98	-16.14/-8.93	-10.03/-10.22	-8.2/-6.61																



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ (127.5°)	-15.52/-18.11	-15.67/-19.12	-14.41/-15	-18.6/-17.85	-14.92/-18.81	-18.04/-18.04	-18.91/-18.63	-18.59/-17.17	-18.09/-18.12	-14.91/-18.64	-17.96/-15.88	-17.02/-14.06	-11.36/-13.92	-13.78/-16.01	-14.8/-13.76	-13.05/-18.84	-10.23/-18.12	-18.79/-15.31	-16/-19.02	-17.82/-17.18	-16.56/-17.69	-18.52/-17.69	-13.56/-18	-19.23/-19.38
Θ (135°)	-12.48/-13.98	-19.24/-19.15	-18.83/-14	-11.2/-18.1	-17.55/-18.83	-15.41/-18.64	-18.52/-19.31	-17.7/-16.49	-17.79/-11.31	-14.2/-13.87	-11.73/-19.07	-12.34/-16.15	-18.18/-18.47	-18.27/-18.12	-18.21/-16.51	-12.62/-11.07	-14.59/-13.57	-18.88/-14.51	-15.46/-18.57	-13.49/-17.18	-12.71/-14.91	-17.11/-15.97	-17.53/-18.81	-14.36/-11.29
Θ (142.5°)	-15.92/-19.39	-18.95/-12.96	-12.59/-12.56	-12.6/-13.59	-18.8/-18.45	-18.36/-18	-18.17/-19.29	-13.34/-18.91	-18.48/-15.47	-15.98/-9.02	-7.89/-10.42	-11.94/-16.49	-16.26/-18.77	-17.96/-19	-17.89/-18.3	-17.5/-16.41	-12.55/-13.28	-13.11/-17.56	-10.99/-10.55	-18.66/-18.96	-17.58/-14.92	-11.59/-11.17	-18.55/-16.48	-14.11/-14.68
Θ (150°)	-16.3/-10.94	-13.51/-17.54	-15.86/-16.87	-18.41/-18.98	-18.3/-19.48	-18.47/-14.01	-18.33/-18.31	-17.02/-18.81	-18.2/-17.41	-18.48/-17.63	-18.51/-15.47	-12.85/-13.12	-11.84/-17.35	-12.04/-10.74	-15.26/-15.63	-18.26/-18.79	-14.2/-18.81	-13.75/-17.99	-13.72/-10.49	-12.09/-11.75	-16.5/-15.87	-18.96/-11.9	-7.03/-8.67	-17.97/-17.21
Θ (157.5°)	-18.45/-18.93	-18.57/-18.39	-13.67/-10.28	-9.92/-15.85	-17.98/-18.43	-18.26/-18.07	-18.98/-14.63	-15.64/-17.85	-12.21/-10.65	-10.66/-18.14	-14.65/-12.81	-18.88/-17.52	-16/-11.96	-12.92/-16.19	-12.83/-8.94	-8.18/-10.27	-13.38/-11.38	-14.88/-18	-12.68/-17.93	-15.79/-14.67	-18.38/-14.37	-11.58/-8.82	-9.42/-13.26	-16.47/-17.57
Θ (165°)	-13.09/-9.45	-10.18/-12.48	-12.1/-10.58	-15.38/-17.63	-19.33/-19.11	-19.6/-18.14	-17.49/-17.56	-15.08/-15.36	-11.58/-17.74	-6.15/-6.44	-7.92/-10.62	-11.96/-13.21	-14.81/-17.33	-12.59/-10.9	-9.93/-11.4	-10.45/-10.77	-11.69/-17.28	-18.07/-16.56	-16.81/-18.95	-19.17/-14.14	-11.28/-14.83	-17.46/-16.59	-18.13/-16.68	
Θ (172.5°)	-12.85/-11.05	-9.91/-8.31	-9.25/-9.1	-10.11/-14.72	-13.95/-15.38	-14.17/-18.95	-17.9/-18.54	-17.33/-15.6	-12.83/-10.63	-8.36/-8	-7.26/-7.68	-7.58/-8.04	-9.45/-10.48	-12.13/-13.91	-17.16/-17.74	-19.18/-18.34	-17.05/-18.25	-16.67/-16.56	-18.32/-18.25	-18.78/-17.47	-13.22/-13.54	-10.13/-9.08	-11.82/-17.97	-18.93/-17.84
Θ (180°)	-13.56/-10.22	-7.85/-6.34	-7.3/-9.51	-10.4/-10.51	-10.3/-13.47	-14.4/-15.45	-13.54/-14.47	-12.16/-12.76	-11.13/-9.9	-9.18/-7.63	-7/-6.58	-6.99/-6.93	-8.27/-9.17	-8.98/-9.35	-10.64/-9.68	-11.13/-12.45	-10.87/-14.1	-12.61/-14.18	-12.79/-13.83	-13.96/-13.42	-13.12/-9.61	-9.37/-11.77	-17.57/-15.5	-16.46/-19.06
Freq(Hz)	6.995GPol.	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°)	-18.52/-17.84	-18.15/-18.24	-17.83/-18.43	-18.89/-17.8	-19.43/-18.34	-18.94/-18.32	-18.1/-18.95	-18.86/-19.35	-19.03/-17.73	-17.85/-19.38	-18.22/-17.84	-17.37/-18.25	-18.28/-18.43	-18.23/-17.72	-18.97/-17.83	-18.59/-18.06	-17.58/-19.26	-18.9/-17.81	-18.43/-18.02	-18.58/-17.77	-18.06/-18.67	-18.26/-18.84	-18.2/-17.51	-19.01/-18.01
Θ (7.5°)	-18.01/-18.37	-18.71/-18.69	-17.27/-18.31	-16.25/-14.88	-13.33/-14.28	-13.15/-13.73	-13.91/-15.49	-14.77/-17.13	-16.63/-17.59	-19.75/-18.77	-19.14/-18.66	-18.1/-18.17	-16.87/-15.68	-14.76/-15.12	-14.42/-13.34	-15.14/-13.26	-14.1/-13.71	-13.55/-13.95	-14.1/-14.63	-17.97/-18.05	-17.54/-16.7	-17.48/-16.36	-18.97/-17.85	
Θ (15°)	-14.11/-14.24	-13.74/-11.56	-10.63/-12.41	-15.08/-15.5	-15.34/-13.22	-12.34/-12.6	-11.57/-13.32	-13.54/-16.98	-16.41/-17.69	-15.28/-15.75	-13.21/-15.21	-17.61/-17.51	-15.15/-16.14	-18.55/-17.82	-14.44/-17.23	-16.26/-14.8	-15.12/-13.66	-13.78/-18.03	-17.23/-15.58	-16.9/-13.11	-17.45/-16.54	-15.48/-16.71	-18.1/-19	
Θ (22.5°)	-13.2/-12.68	-10.91/-12.61	-13.31/-9.23	-9.77/-7.63	-7.16/-6	-6.47/-5.85	-7.59/-8.79	-10.15/-10.62	-11.24/-12.53	-10.2/-9.58	-9.61/-10.86	-15.42/-14.9	-10.98/-8.11	-9.44/-14.26	-12.66/-9.5	-8.94/-11.59	-10.58/-11.49	-10.36/-8.15	-8.84/-8.31	-10.38/-9.29	-10.19/-12.18	-13.24/-14.36	-13.96/-11.17	-10.82/-12.34
Θ (30°)	-9.43/-7.05	-10.06/-14.81	-14.4/-16.84	-16.71/-18.59	-17.86/-16.68	-15.6/-18.13	-17.88/-14.22	-17.58/-17.37	-11.96/-8.87	-7.74/-6.24	-7.7/-9.07	-6.98/-9.63	-11.29/-9.01	-8.47/-11.01	-10.0/-8.4	-8.76/-7.03	-7.34/-6.89	-6.64/-6.65	-8.71/-12.21	-9.12/-9.86	-8.75/-9.7	-10.94/-9.58	-9.93/-11.33	
Θ (37.5°)	-9.11/-7.34	-7.3/-9.86	-9.34/-7.37	-5.55/-4.78	-4.98/-5.49	-5.64/-8.05	-7.88/-6.22	-7.12/-5.05	-4.88/-8.72	-8.92/-9.28	-5.88/-6.16	-11.49/-10.99	-5.97/-4.3	-4.04/-8.43	-6.62/-5.75	-5.65/-5.11	-7.35/-8.88	-6.47/-6.02	-7.07/-12.01	-7.45/-6.99	-7.58/-9.04	-9.94/-6.32	-9.91/-11.87	
Θ (45°)	-7.51/-7.53	-9.36/-10.53	-11.4/-12.95	-18.95/-10.75	-11.26/-15.65	-17.72/-17.31	-17.98/-12.37	-11.39/-10.01	-10.01/-6.48	-8.21/-6.53	-5.96/-5.74	-5.89/-8.86	-5.55/-6.26	-6.72/-3.48	-5.49/-5.28	-4.53/-3.82	-4.09/-5.16	-5.87/-5.55	-5.82/-6.29	-6.13/-6.7	-7.3/-5.76	-5.92/-5.12	-9.18/-6.94	-7.55/-7.64
Θ (52.5°)	-7.61/-4.1	-7.55/-6.06	-3.42/-3.24	-2.52/-2.78	-1.50/-2	1.032/-1.9	1.37/-0.22	-1.08/-2.21	-5.68/-4.94	-8.16/-7.28	-5.41/-8.2	-4.72/-5.11	-4.54/-5.83	-4.11/-3.82	-4.22/-5.24	-2.02/-5.03	-3.79/-3.39	-4.41/-3.25	-3.01/-5.12	-5.22/-4.47	-4.77/-5.74	-3.57/-6.19	-5.79/-6.82	-5.92/-6.39
Θ (60°)	-6.79/-7.27	-6.71/-5.26	-10.68/-8.58	-5.08/-4.57	-3.71/-4.14	-3.77/-4.94	-3.47/-3.36	-5.91/-8.65	-5.71/-8.34	-4.78/-6.2	-5.76/-3.96	-6.62/-5.24	-4.5/-3	-5.46/-2.46	-3.78/-4.44	-4.28/-4.83	-2.71/-2.25	-2.17/-2.55	-2.16/-2.33	-4.03/-4.11	-4.86/-4.05	-6.5/-3.58	-4.13/-5.36	
Θ (67.5°)	-5.05/-3.14	-4.61/-7	-3.9/-5	-4.02/-3.52	-6.72/-3.9	-4.49/-1.67	-4.75/-4.31	-3.98/-3.61	-5.52/-1.88	-5.65/-6.84	-2.73/-4	-4.9/-4.71	-5.97/-4.7	-3.67/-2.25	-2.88/-2.56	-2.69/-1.75	-2.01/-3.25	-1.5/-5.04	-0.78/-1.52	-1.99/-3.08	-2.84/-2.79	-2.28/-5.28	-3.74/-6.6	-2.6/-7.06
Θ (75°)	-5.46/-6.27	-4.83/-5.08	-5.73/-5.14	-3.62/-0.92	-1.14/-1.39	-0.64/-2.61	-1.18/-0.8	-1.98/-3.56	-3.88/-4.82	-7.67/-5.43	-5.51/-6.19	-3.79/-4.68	-5.61/-3.43	-6.88/-2.33	-3.64/-3.89	-2.26/-2.99	-0.71/-1.51	-1.91/-1.86	0.11/-1.43	-4.81/-2.36	-3.49/-3.37	-3.61/-4.7	-4.95/-3.93	-9.92/-3.61
Θ (82.5°)	-10.54/-7.01	4.46/-5.64	-3.76/-6.76	-6.94/-4.74	-2.5/-2.7	-3.92/-3.83	-4.16/-3.18	-6.77/-5.85	-6.95/-3.57	-2.71/-6.38	4.49/-6.71	-5.93/-4.56	-7.2/-5.8	-3.04/-4.27	-2.41/-0.5	-2.17/-0.88	-1.11/-1.28	-2.05/-2.58	-1.82/-2.66	-1.88/-1.88	-0.97/-2.19	-4.04/-2.95	-5.15/-6.14	-6.17/-8.01
Θ (90°)	-6.68/-9.81	-6.27/-6.67	-5.7/-8.21	-6.49/-2.18	-3.28/-6.05	-1.49/-6.61	-2.16/-3.1	-2.29/-6.25	-3.17/-4.3	-6.15/-5.61	-5.51/-6.96	-5.36/-5.62	-9.72/-8.82	-6.2/-2.32	-4.22/-5.09	-4.83/-5.08	-1.44/-2.56	-3.67/-1.92	-2.19/-2.73	-2.33/-4.83	-6.01/-6.47	-7.09/-8.91	-16.81/-6.92	
Θ (97.5°)	-18.89/-7.33	-6.55/-7.46	-4.46/-1.82	-4.14/-3.07	-2.19/-5.87	-1.38/-6.7	-2.35/-6.39	-4.25/-8.04	-2.78/-2.01	-4/-6.37	-8.06/-10.55	-5.53/-3.85	-8.93/-6	-5.22/-2.73	-3.08/-5.19	-2.85/-4.69	-3.02/-2.83	-1.13/-1.35	-3.25/-2.12	-1.5/-4.52	-3.23/-3.1	-5.8/-5.02	-10.72/-9.06	-8.3/-5.7
Θ (105°)	-12.93/-17.82	-7.04/-5.6	-7.09/-6.25	-8.46/-6.15	-5.22/-9.17	-3.65/-8.33	-7.12/-8.62	-6.76/-12.06	-5.88/-3.74	-5.61/-4.57	-11.44/-11.16	-6.45/-9.44	-13.13/-5.66	-8.39/-4.65	-4.85/-3.81	-5.29/-2.89	-3.8/-3.35	-2.56/-5.24	-2.13/-5.04	-3.21/-4.55	-5.02/-3.84	-4.26/-4.71	-10.05/-15.04	-10.81/-10.15
Θ (112.5°)	-17.48/-9.14	-18.68/-9.5	-6.69/-10.91	-7.28/-8.32	-11.38/-5.74	-6.24/-8.14	-7.32/-4.41	-5.25/-7.33	-8.88/-8.51	-11.38/-4.25	-10.04/-10.72	-11.26/-9.45	-13.68/-8.15	-5.58/-6.95	-4.7/-8.67	-4.4/-6.94	-3.99/-2.02	-6.54/-5.18	-3.01/-4.04	-6.74/-5.55	-5.79/-2.44	-11.27/-18.29	-7.88/-7.22	
Θ (120°)	-5.16/-9.79	-6.6/-5.67	-7.82/-6.37	-5.5/-8.38	-12.52/-6.97	-10.68/-9.04	-11.05/-11.57	-9.33/-8.28	-6.47/-8.62	-10.99/-12.29	-16.67/-18.23	-16.23/-10.34	-5.17/-6.7	-5.68/-3.74	-5.6/-5.6	-5.87/-3.98	-5.67/-8.03	-3.63/-3.08	-3.56/-6.2	-5.09/-3.16	-3.24/-2.11	-6.75/-14.33	-7.5/-5.46	
Θ (127.5°)	-8.23/-7.85	-12.85/-8.1	-6.79/-9.28	-14.15/-7.85	-18.42/-10.58	-15.19/-12.64	-10.64/-10.01	-7.52/-14.72	-4.89/-8.71	-15.19/-13.14	-14.14/-16.73	-11.49/-10.12	-9.89/-6.82	-7.1/-9.77	-6.68/-8.1	-7.67/-9.6	-9/-5.68	-3.94/-5.67	-8.52/-8.28	-3.97/-7.97	-8.38/-10.35	-10.74/-8.72	-7.19/-16.14	-9.98/-11.94
Θ (135°)	-12.13/-17.57	-9.33/-11.67	-17.67/-16.12	-8.2/-8.6	-13.94/-13.57	-17.03/-16.22	-19.42/-9.95	-6.89/-8.12	-6.7/-9.79	-7.89/-12.73	-13.85/-19.44	-13.98/-10.04	-11.01/-11.32	-6.13/-15.37	-16.61/-8.33	-8.0/-12.11	-14.11/-9.42	-6.29/-5.09	-6.03/-5.58	-5.6/-13.7	-6.95/-7.91	-14.29/-5.9	-4.17/-12.8	-10.57/-17.84
Θ (142.5°)	-6.53/-5.83	-7.1/-6.67	-18.27/-13.43	-18.55/-13.3	-18.13/-15.85	-19.08/-19.07	-18.12/-17.19	-14.57/-13.25	-9.97/-14.88	-14.65/-16.37	-18.76/-16.82	-15.73/-8.69	-6.33/-6.11	-7.3/-5.83	-7.1/-9.4	-9.33/-9.7	-12.67/-12.22	-10.07/-10.47	-9.02/-5.79	-8.91/-6.83	-7.61/-16.18	-9.13/-3.22	-6.92/-6.41	-7.46/-11.13
Θ (150°)	-7.18/-12.22	-17.86/-10.41	-12.99/-10.41	-17.14/-18.54	-18.41/-15.45	-11.98/-12.67	-18.92/-14.06	-12.64/-14.95	-18.62/-19.1	-15.55/-11.48	-15.36/-11.42	-11.77/-16.74	-16.2/-10.75	-9.57/-12.91	-12.31/-9.13	-12.76/-16.1	-17.88/-13.59	-18.75/-13.59	-9.91/-15.95	-13.92/-7.72	-7.05/-11.71	-11.18/-7.42	-6.01/-5.97	-7.4/-7.25
Θ (157.5°)	-2.84/-7.92	-9.49/-11.47	-18.49/-18.73	-16.33/-12.59	-14.24/-11.41	-11.32/-15.87	-19.06/-19.23	-17.17/-18.26	-18.08/-18.88	-19.71/-14.67	-15.82/-11.52	-12.38/-11.54	-18.71/-9.54	-11.71/-15.66	-12.89/-9.97	-10.91/-14.08	-18.41/-14.53	-7.33/-7.09	-11.99/-18.33	-10.08/-6.21	-17.71/-9.24	-12.86/-17.92	-17.62/-11.91	-8.57/-10.2
Θ (165°)	-10.13/-14.24	-15.97/-11.58	9.32/-10.72	-12.38/-13.52	-15.72/-18.93	-18.63/-17.16	-12.8/-11.18	-8.32/-7.1	-8.12/-13.33	-17.3/-18.86	-17.36/-16.81	-12.43/-10.3	-9.5/-11.17	-12.88/-14.64	-15.71/-18.52	-19.24/-17.94	-14.79/-10.68	-10.55/-14.46	-18.04/-17.88	-18.57/-17.01	-11.26/-10.79	-8.82/-9.34	-9.22/-6.99	-8.79/-10.55
Θ (172.5°)	-9.44/-8.82	-6.54/-7.61	-9.08/-9.59	-5.92/-5.62	-6.82/-9.69	-6.89/-6.49	-6.65/-6.25	-5.25/-4.72	-4.97/-5	-6.73/-9.48	-13.18/-17.77	-17.54/-14.55	-13.65/-13.21	-14.07/-14.72	-17.98/-19.18	-18								



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ (172.5°)	-18.81/-17.28	-18.27/-17.99	-17.57/-17.31	-18.16/-18.4	-18.54/-17.67	-14.64/-13.76	-14.7/-17.38	-18.33/-18.51	-18.21/-18.67	-17.72/-17.96	-15.94/-18.5	-18.53/-18.43	-17.66/-19.22	-16.51/-15.92	-15.29/-15.33	-14.92/-15.46	-17.35/-17.46	-16.49/-17.95	-18.56/-18.14	-18.8/-18.83	-18.1/-18.84	-17.58/-18.15	-17.58/-18.28	-18.79/-18.6
Θ (180°)	-18.45/-18.48	-18.23/-18.87	-17.89/-18.04	-18.73/-17	-17.47/-17.48	-16.42/-13.69	-13.21/-11.99	-10.43/-10.38	-10.3/-10.57	-12.17/-13.12	-17.49/-17.92	-18.36/-17.82	-17.23/-18.23	-18.6/-18.39	-17.37/-19.09	-16.5/-18.35	-18.08/-18.31	-18.52/-17.81	-17.71/-18.86	-17.67/-18.78	-17.97/-17.57	-18.4/-17.63	-19.07/-18.91	-19.41/-17.58
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°)	-11.07/-12.86	-11.91/-14.11	-14.22/-16.32	-19.01/-18.36	-18.7/-17.48	-18.33/-17.69	-18.08/-19.39	-17.53/-15.34	-14.73/-13.56	-11.75/-11.07	-11.02/-11.74	-10.85/-12.16	-11.38/-12.46	-12.55/-12.96	-14.01/-14.33	-16.4/-16.05	-15.42/-17.56	-19.18/-19.19	-18.8/-18.3	-18.48/-18.81	-17.78/-14.41	-13.69/-14.26	-12.42/-13.5	-12.85/-12.27
Θ (7.5°)	-18.07/-18.36	-17.99/-19.17	-18.03/-17.31	-17.3/-15.96	-17.22/-14.82	-14.21/-16.09	-16.21/-15.49	-16.62/-16.12	-17.32/-13.63	-16.56/-16.46	-16.32/-16.77	-15.94/-15.29	-18.82/-18.31	-18.23/-19.25	-18.5/-18.41	-17.24/-15.96	-18.04/-18.39	-18.53/-19.22	-18.15/-18.61	-17.42/-15.95	-17.52/-16.41	-14.93/-16.17	-16.6/-17.69	
Θ (15°)	-13.99/-14.97	-12.4/-17.79	-17.72/-17.16	-13.53/-13.88	-13.41/-14.56	-14.53/-13.21	-10.78/-10.41	-11.08/-11.56	-10.61/-9.23	-8.59/-9.86	-9.66/-9.67	-8.82/-10.37	-9.64/-10.59	-9.17/-9.88	-10.96/-11.73	-13.47/-16.49	-16.25/-16.87	-17.93/-17.92	-16.3/-17.83	-18.03/-18.02	-18/-18.16	-18.56/-17.16	-14.88/-14.78	-15.79/-14.94
Θ (22.5°)	-4.48/-5.84	-6.17/-5.96	-6.39/-8.06	-8.43/-7.6	-7.73/-9.36	-11.34/-9.29	-9.78/-9.32	-10/-9.94	-8.89/-9.98	-11.16/-8.88	-7.53/-13.77	-9.74/-9.43	-8.84/-11.18	-11.19/-6.66	-8.66/-6.93	-9.65/-12.04	-9.8/-10.01	-12.95/-13.76	-11.9/-11.93	-10.97/-9.9	-9.91/-9.92	-9.53/-8.01	-8.53/-7.91	-6.78/-6.93
Θ (30°)	-4.75/-3.14	-2.78/-1.98	-2.77/-3.17	-4.43/-5.29	-5.11/-4.11	-6.21/-4.06	-5.27/-6.69	-5.15/-7.1	-8.01/-9.07	-6.03/-5.23	-6.79/-5.52	-3.58/-3.1	-3.29/-5.36	-5.7/-5.98	-6.69/-5.34	-7.82/-8.44	-8.51/-8.98	-6.61/-9.41	-7.3/-5.94	-8.4/-6.25	-4.88/-5.4	-6.32/-4.92	-2.53/-3.1	-4.08/-5.25
Θ (37.5°)	-18.24/-17.58	-13.22/-14.35	9.25/-13.66	-13.58/-8.22	-7.31/-6.8	-6.51/-6.31	-4.62/-3.65	-5.18/-6.48	-3.08/-3.77	-3.04/-5.32	-7.58/-6.67	-5.89/-4.34	-4.39/-5.32	-5.73/-3.94	-4.63/-5.13	-3.77/-7.39	-6.13/-10.26	-5.59/-9.86	-6.73/-5.91	-8.88/-5.28	-6.74/-8.06	-8.52/-9.86	-13.68/-10.08	-7.82/-10.48
Θ (45°)	0.61/-0.13	0.06/-1.37	-1.96/-2.23	-1.48/-1.59	-2.2/-4.41	-2.29/-5.06	-4.52/-7.27	-5.82/-3.24	-2.3/-3.66	-4.12/-4.32	-4.27/-2.86	-2.88/-3.78	-3.63/-2.91	-4/-4.83	-3.33/-3.36	-3.41/-2.98	-7.02/-8.1	-2.98/-8.14	-4.21/-7.48	-7.39/-6.73	-6.65/-4	-2.57/-2.16	-2.61/-3.59	-3.67/-0.54
Θ (52.5°)	-1.59/-2.53	-6.25/-8.33	-6.15/-4.29	-5.61/-3.08	-5.44/-5.08	-3.23/-3.31	-2.92/-3.03	-5.43/-4.59	-1.59/-2.1	-2.31/-1.55	-1.59/-1.77	-3.68/-1.21	-3.59/-1.88	-2.95/-2.31	-2.39/-2.48	-2.98/-7.71	-3.4/-4.29	-2.76/-3.48	-2.57/-5.29	-3.88/-3.09	-4.18/-4.1	-3.91/-4.3	-3.84/-3.92	
Θ (60°)	-0.19/-1.18	1.06/-0.38	-0.61/-0.75	-0.45/-4.43	-3.32/-3.51	-4.04/-2.78	-5.02/-3.25	-3.79/-3.3	-3.09/-3.79	-0.54/-0.66	-0.34/-0.28	-0.3/-1.09	-2.11/-2.53	-3.03/-2.8	-1.15/-2.93	-1.71/-2.69	-2.24/-2.64	-1.86/-3.17	-2.43/-4.27	-1.91/-4.92	-4.9/-2.48	-1.190/-9	-0.13/-0.03	0.170/-0.9
Θ (67.5°)	-0.77/-3.87	-2.14/-4.74	-2.15/-5.32	-1.89/-2.99	-3.79/-5.08	-0.77/-2.88	-1.86/-3.19	-4.52/-4.63	-2.1/-2.13	-1.560/-87	-0.81/-0.01	0.22/-0.76	-0.75/-0.76	-1.01/-0.51	-0.59/-1.42	-2.24/-1.87	-1.77/-2.26	-3.1/-1.65	-2.15/-2.52	-1.89/-1.41	-1.79/-0.85	-1.08/-2.41	-1.16/-3.19	-2.28/-1.95
Θ (75°)	-0.19/-0.05	-0.64/-1.34	0.3/-0.99	-1.82/-4.18	-5.5/-3.09	-2.03/-4.28	-1.03/-3.97	-2.83/-3.86	-4.51/-2.87	-1.77/-0.17	-1.54/-1.28	-0.19/-0.17	-0.550/-36	0.380/-41	-0.41/-2.31	-2.8/-1.72	-2.57/-3.35	-1.79/-0.92	-1.154/-2.63	-1.18/-2.86	-2.42/-6.41	-3.65/-1.15	-0.330/-29	0.141/-4.8
Θ (82.5°)	-1.51/-2.8	-1.68/-2.04	-3.66/-2.13	-3.61/-6.42	-7.08/-5.68	-5.27/-2.04	-1.18/-5.8	-4.42/-2.87	-3.91/-2.86	-2.25/-1.39	0.06/-1.69	-1.24/-0.12	-1.69/-1.49	-1.39/-1.04	0.56/-2.44	0.11/-4.57	-3.21/-1.65	-1.34/-4.4	-1.76/-2.19	-3.23/-3.32	-5.45/-1.27	-3.4/-0.96	-1.65/-3.5	-2.34/-0.89
Θ (90°)	0.06/-3.18	0.09/-0.1	-3.470/-51	-3.66/-3.88	-5.87/-3.92	-4.72/-2.74	-3.15/-3.1	-4.73/-4	-1.41/-2.39	-2.12/-0.85	-1.990/-32	-1.230/-1	-0.390/-22	1.3/-61	-0.1/-3.42	-2.82/-6.33	-2.66/-2.47	-1.27/-2.68	-3.05/-2.06	-4.59/-3.17	-8.53/-2.12	-3.35/-4.16	-1.620/-37	-1.620/-37
Θ (97.5°)	-1.67/-5.55	-0.39/-1.74	-5.42/-1.16	-5.66/-3.4	-5.11/-6.66	-2.44/-4.95	-5.51/-2.8	-3.59/-5.89	-5.04/-4.73	-1.46/-2.04	-2.91/-2.35	-1.23/-1.73	-0.75/-0.45	-0.83/-2.91	-3.51/-4.48	-5.29/-3.01	-1.4/-6.59	-0.95/-10.89	-6.28/-4.09	-3.84/-6.06	-2.63/-3.01	-2.271/-61	-3.31/-4.06	-5.89/-3.07
Θ (105°)	-4.61/-5.85	-4.97/-5.08	-13.55/-1.71	-10.73/-7.51	-10.3/-8	-3.95/-5.11	-5.69/-3.54	-5.7/-7.27	-9.47/-3.17	-2.78/-0.07	-2.29/-0.86	-0.23/-3.15	-0.49/-3.01	-1.41/-2.73	-2.11/-0.87	-3.11/-4.33	-4.99/-2.98	-1.48/-4.4	-3.64/-4.48	-5.56/-2.12	-1.65/-3.13	-0.93/-0.35	-6.8/-7.52	-12.53/-4.7
Θ (112.5°)	-4.91/-3.58	-5.22/-6.18	-8.88/-1.85	-10.31/-6.89	-13.25/-18.18	-8.62/-9.07	-2.95/-2.51	-8.11/-12.78	-11.05/-2.83	-1.71/-3.04	-6.14/-5.3	-3.1/-0.57	-2.15/-4.31	-1.84/-1.69	-3.84/-9.12	-3.1/-4.67	-2.43/-8.25	-2.34/-4.64	-9.17/-0.26	-9.63/-3.9	1.21/-3.84	-0.550/-06	-2.23/-3.95	-6.25/-4.11
Θ (120°)	-3207/-6.45	-16.69/-6.44	-8.88/-10.46	-9.11/-1.76	-7.37/-10.88	-11.81/-14.99	-13.27/-10.34	-10.1/-14.48	-13.53/-8.87	-6.11/-1.77	-6.27/-6.89	-3.74/-6.15	-8.54/-7.53	-3.86/-6.1	-4.6/-7.87	-11.29/-7.9	-8.04/-6.89	-4.13/-11.4	-10.11/-3.86	-5.51/-4.76	-3.05/-8.04	-8.65/-18.81	-10.87/-7.37	
Θ (127.5°)	-6.81/-10.57	-3.57/-6.08	-11.94/-13.32	-7.37/-11.54	-9.05/-7.22	-7.96/-7.46	-12.47/-13.13	-14.66/-8.4	-7.27/-9.02	-5.72/-10.08	-8.28/-7.99	-6.79/-4.85	-3.55/-8.02	-7.63/-4.24	-5.8/-5.46	-11.07/-5.87	-11.36/-5.86	-6.83/-6.57	-15.99/-8.07	-9.15/-4.53	-4.78/-4.89	-3.96/-6.5	-4.46/-6.83	-6.57/-5.84
Θ (135°)	-8.57/-9.64	-13.8/-11.64	-18.21/-12.42	-7.71/-11.7	-13.69/-11.36	-10.86/-11.15	-8.85/-6.61	-10.82/-13.36	-11.58/-10.25	-6.39/-6.31	-6.57/-8.01	-5.42/-8.85	-7.4/-4.04	-6.39/-10.44	-5.41/-9.06	-4.75/-10.38	-8.59/-13.96	-6.34/-9.5	-9.79/-10.24	-12.7/-4.48	-4.08/-6.28	-8.43/-9.55	-10.68/-11.78	-13.04/-12.22
Θ (142.5°)	-17.74/-11.14	-13.72/-10.21	-13.56/-18.89	-15.22/-11.77	-12/-12.22	-16.94/-14.19	-14.9/-13.34	-11.86/-17.82	-18.95/-19.16	-15.97/-18.45	-15.96/-13.89	-16.15/-14.15	-18.71/-17.73	-18.99/-13.36	-10.09/-18.03	-10.91/-5.23	-6.63/-14.33	-17.64/-15.25	-12.01/-10.51	-8.85/-10.44	-18.3/-18.88	-13.32/-16.81	-18.31/-15.66	
Θ (150°)	-18/-15.91	-14.12/-14.91	-18.67/-17.93	-18.2/-17.96	-17.47/-9.83	-11.04/-18.46	-12.71/-12.36	-11.93/-13.67	-16.96/-14.28	-10.97/-12.87	-12.22/-8.74	-7.66/-9.58	-12.24/-12.16	-11.34/-11.74	-12.16/-9.87	-10.53/-11.29	-9.19/-8.97	-11.08/-18.97	-18/-18.24	-16.56/-18.32	-18.95/-18.23	-10.40/-10.9	-13.83/-14.08	-17.22/-15.15
Θ (157.5°)	-13.19/-14.64	-19.21/-17.9	-17.95/-18.38	-17.85/-14.7	-16.64/-15.32	-12.61/-13	-11.12/-14.36	-18.79/-10.97	-8.59/-10.43	-9.01/-6.84	-6.24/-6.82	-6.91/-6.27	-6.75/-7.84	-8.22/-9.77	-7.7/-7.53	-6.89/-7.15	-6.36/-5.72	-9.53/-10.84	-11.89/-18.15	-19.23/-17.82	-19.03/-18.83	-14.02/-19.12	-14.55/-13.57	-10.52/-10.06
Θ (165°)	-12.68/-10.57	-10.5/-9.17	-11.64/-13.01	-13.3/-13.81	-13.49/-9.61	-9.75/-12.08	-10.9/-11.99	-14.36/-19.1	-18.65/-11.68	-8.95/-6.97	-6.14/-5.66	-7.68/-8.36	-9.46/-11.53	-10.85/-9.39	-7.21/-6.31	-6.74/-8.36	-15.32/-11.78	-9.45/-9.24	-12.67/-15.21	-12.18/-12.07	-15.75/-17.87	-18.09/-18.85	-17.45/-18.97	-17.87/-14.96
Θ (172.5°)	-1.725/-18.2	-10.57/-17.22	-19.27/-18.69	-16.82/-17.97	-14.6/-14.7	-1.94/-16.82	-15.47/-14.48	-17.23/-17.24	-17.98/-18.3	-18.28/-18.99	-16.86/-14.94	-15.38/-12.62	-12.41/-13.37	-13.55/-14.69	-15.35/-13.79	-13.75/-12.93	-11.86/-15.43	-18.98/-18.39	-14.96/-14.35	-18.32/-18.56	-19.21/-14.84	-18.68/-18.2	-1.751/-18.5	-18.16/-95
Θ (180°)	-14.08/-13.83	-14.6/-13.16	-11.73/-12.43	-12.66/-14.85	-16.76/-17.59	-17.46/-18.73	-19.27/-19.32	-18.18/-17.95	-17.24/-18.3	-17.62/-19.21	-15.99/-16.35	-16.57/-15.48	-14.02/-13.72	-12.61/-13.46	-12.64/-13.58	-13.83/-15.75	-17.55/-18.92	-18.66/-18.4	-18.12/-18.91	-17.6/-17.18	-18.44/-17.98	-18.8/-19.04	-17.53/-19.16	-19.25/-15.8
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°)	-17.45/-14.14	-17.18/-16.29	-18.02/-17.69	-18.8/-18.06	-17.97/-18.76	-18.18/-18.16	-18.94/-19.01	-18.39/-18.57	-18.88/-18.75	-18.86/-18.56	-18.37/-16.24	-18.69/-16.75	-18.46/-19.06	-18.7/-17.78	-14.53/-19.05	-19.04/-15.7	-17.95/-17.99	-17.52/-19.06	-18.7/-18.84	-17.88/-17.79	-17.98/-17.82	-17.19/-16.13	-18.64/-15.89	
Θ (7.5°)	-18.07/-17.44	-19.1/-17.37	-17.24/-17.97	-14.17/-15.94	-15.13/-15.3	-15.22/-15.1	-15.47/-15.74	-19.64/-17.94	-18.27/-18.92	-18.02/-18.44	-18.82/-18.69	-17.35/-17.6	-19.78/-18.35	-18.11/-17.41	-17.71/-17.5	-19.18/-17.72	-17.71/-18.48	-19.13/-19.32	-18.91/-18.59	-18.86/-17.37	-17.32/-18	-18.69/-18.73	-17.73/-17.43	-18.7/-16.92
Θ (15°)	-17.7/-18.41	-18.44/-17.88	-18.73/-17.97	-17.62/-18.96	-18.24/-17.71	-17.87/-17.41	-15.93/-14.69	-15.06/-16.09	-15.52/-18.72	-18.73/-18.47	-17.89/-18.58	-17.98/-18.79	-19.32/-17.94	-18.03/-17.78	-19.23/-18.73	-17.62/-15.46	-14.85/-18.51	-16.41/-19.05	-18.41/-18.35	-18.8/-18.45	-18.61/-18.45	-19.38/-19.74	-17.67/-18.39	-17.86/-18



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(22.5°)	-6.84/-6.5	-6.56/-5.54	-5.97/-7.38	-7.73/-7.8	-5.93/-8.8	-8.55/-9.55	-9.76/-8.99	-9.02/-10.68	-14.93/-11.07	-8.09/-8.2	-10.05/-13.37	-10.98/-9.24	-10.97/-12.02	-11.34/-9.86	-9.54/-10.98	-13.16/-14.07	-12.25/-13.31	-13.06/-11.67	-12.18/-12.88	-8.75/-17.4	-7.76/-9.3	-7.89/-6.64	-8.73/-8.67	-8.87/-6.78
Θ(30°)	-10.76/-14.8	-14.67/-17.35	-15.3/-12.81	-13.07/-14.13	-10.6/-13.1	-9.54/-6.2	-5.82/-7.3	-7.52/-6.37	-9.46/-7.05	-7.34/-8.79	-7.95/-8.78	-9.27/-8.24	-9.38/-10	-8.38/-7.43	-6.17/-7.47	-7.66/-6.68	-9.61/-10.38	-8.05/-10.2	-8.96/-8.42	-8.25/-11.86	-10.88/-12.69	-14/-13.25	-13.43/-14.28	-18.96/-18.9
Θ(37.5°)	-6.05/-4.06	-3.38/-3.2	-3.19/-3.22	-3.29/-4.87	-6.51/-6.44	-8.01/-7.28	-6.51/-6.44	-9.4/-9.7	-5.59/-6.05	-7.08/-6.31	-6.41/-6.26	-6.19/-6.33	-6.35/-8.02	-7.02/-8.34	-9.07/-7.24	-6.95/-5.91	-6.08/-7.22	-10.21/-5.88	-12.87/-9.12	-8.49/-10.06	-10.64/-9.29	-8.06/-5.34	-4.72/-4.64	-2.91/-6.1
Θ(45°)	-9.68/-11.2	-10.22/-8.26	-9.05/-9.68	-9.87/-9.09	-6.17/-7.51	-6.73/-7.24	-4.61/-5.56	-7.93/-7.76	-4.89/-6.76	-4.03/-6.11	-6.27/-6.66	-6.2/-4.49	-6.27/-6.07	-5.56/-7.11	-3.41/-6.03	-6.62/-7.49	-5.91/-7.67	-6.69/-8.22	-7.28/-4.67	-6.19/-6.09	-6.8/-6.56	-8.4/-9.44	-8.7/-10.38	-8.2/-9.6
Θ(52.5°)	-0.43/-0.87	-0.12/-1.29	-3.27/-2.28	-4.19/-4.03	-4.27/-5.06	-4.09/-6.98	-5.01/-4.44	-5.72/-6.69	-4.08/-6.36	-5.85/-2.92	-4.82/-5.75	-6.42/-3	-2.24/-3.65	-3.72/-3.51	-4.8/-3.32	-5.05/-5.67	-3.81/-4.05	-5.39/-4.97	-5.88/-4.15	-7.56/-5.21	-6.28/-5.05	-3.67/-2.44	-1.32/-2.35	-0.110.46
Θ(60°)	-2.02/-4.07	-2.75/-4.66	-5.27/-6.05	-4.83/-6.45	-4.32/-7.06	-8.81/-57	-6.39/-4.54	-5.45/-5.01	-4.5/-3.48	-2.48/-1.94	-2.44/-2.83	-1.91/-1.66	-2.89/-1.69	-1/-2.35	-1.55/-3.59	-1.71/-3.01	-3.64/-3.69	-4.39/-5.57	-6.15/-9.28	-3.35/-3.33	-3.73/-4.91	-4.96/-9.25	-6.12/-4.99	-3.43/-3.03
Θ(67.5°)	-4.64/-3.38	-6.03/-4.84	-4.95/-2.97	-4.33/-5.33	-5.07/-4.38	-5.28/-5.76	-4.55/-6.81	-4.19/-5.16	-3.94/-3.96	-2.75/-1.94	-2.87/-2.08	-2.04/-0.36	-0.81/-1.07	-1.4/-2	-3.14/-2.39	-2.71/-2.98	-2.69/-3.95	-5.83/-4.21	-5.58/-4.65	-3.61/-5.2	-6.8/-3.93	-3.15/-2.81	-3.45/-1.89	-4.38/-4.96
Θ(75°)	-1.86/-1.69	-0.66/-1.93	-3.72/-3.33	-3.11/-5.15	-8.02/-8.05	-6.57/-4.95	-2.51/-3.23	-4.28/-4.66	-3.19/-4.03	-1.26/-0.43	-3.24/-2.07	-2.59/-3.1	-0.46/-1.16	-0.98/-0.29	-2.43/-0.71	-3.75/-1.76	-2.37/-2.66	-4.41/-3.3	-3.42/-4.29	-6.02/-4.47	-3.58/-1.94	-1.08/-2.8	-2/-1.57	-0.52/-0.24
Θ(82.5°)	-4.28/-5.78	-3.44/-10.53	-3.27/-5.32	-4.8/-10.64	-5.04/-6.67	-5.12/-6.61	-6.17/-3.23	-6.88/-4.54	-4.77/-3.04	-2.1/-0.16	-1.19/-0.79	-0.42/-0.15	-0.35/-0.25	-0.07/-0.71	-2.03/-2.04	-3.19/-3.37	-1.87/-4.9	-5.76/-3.95	-4.79/-4.36	-5.45/-5.48	-5.66/-6.46	-5.3/-5.67	-3.81/-6.41	
Θ(90°)	-2.69/-3.11	-1.12/-6.94	-1.63/-3.9	-3.72/-7.15	-7.51/-12.91	-4.09/-6.8	-3.76/-4.2	-2.95/-4.79	-3.67/-2.95	-2.12/-0.83	-3.01/-1.27	-2.57/-0.76	-1.66/-2.26	-0.91/-1.96	-2.73/-2.12	-3.84/-3.1	-4.7/-4.89	-6.36/-6.91	-6.64/-5.21	-4.57/-6.23	-4.88/-4.67	-6.78/-6.03	-5.15/-5.66	-0.81/-1.34
Θ(97.5°)	-2.64/-5.07	-0.97/-6.6	-1.6/-3.8	-5.37/-7.86	-8.08/-8.45	-2.12/-6.12	-4.68/-3.45	-4.04/-3.1	-8.43/-2.4	-1/-1.87	-3.62/-0.28	-8.0/-0.13	0.51/-1.51	0.9/-0.43	-0.39/-0.58	-2.64/-3.45	-3.4/-2.9	-4.04/-2.64	-6.97/-5.5	-3.45/-6.77	-3.51/-6.15	-3.34/-0.03	-4.99/-7.85	-1.85/-1.34
Θ(105°)	-8.75/-12.15	-8.54/-8.53	-7.32/-8.71	-7.41/-12.11	-12.59/-10.91	-9.46/-10.87	-4.24/-4.67	-3.75/-7.14	-5.26/-2.09	-2.86/-2.26	-3.31/-4.22	-2.14/-1.62	-2.3/-1.66	-2.04/-3.61	-1.58/-1.81	-5.07/-5.59	-9.13/-6.3	-4.79/-2.34	-9.13/-6.3	-3.12/-5.3	-5.42/-2.93	-1.92/-1.44	-5.91/-7.9	-6.79/-5.11
Θ(112.5°)	-7.21/-6.48	-13.19/-6.69	-6.63/-8.75	-8.43/-11.32	-12.4/-9.19	-5.04/-7.36	-8/-6.31	-10.06/-7.66	-8.7/-2.26	-2.22/-4.45	-4.67/-1.07	-1.24/-3.7	-2.25/-1.75	-2.25/-3.67	-1.87/-2.92	-1.7/-2.96	-6.5/-7.11	-7.57/-4.32	-10.29/-7.1	-3.36/-9.56	-2.86/-2.01	-2.48/-2.9	-6.29/-10.3	-8.96/-4.13
Θ(120°)	-10.65/-8.58	-10.48/-10.92	-16.07/-10.9	-16.05/-11.28	-13.12/-15.87	-10.8/-13.73	-11.94/-11.1	-14.07/-11.06	-7.81/-6.67	-3.23/-3.91	-6.79/-5.06	-2.8/-2.79	-5.14/-1.99	-3.63/-3.12	-6.16/-3.14	-6.46/-5.71	-7.36/-9.83	-9.83/-11.79	-9.92/-10.24	-8.91/-8.7	-4.26/-2.74	-4.52/-7.91	-11.98/-15.55	-13.37/-14.81
Θ(127.5°)	-11.73/-15.24	-11.66/-12.86	-18.65/-9.93	-15.38/-10.51	-10.5/-9.57	-11.25/-11.71	-19.12/-10.32	-8.71/-15.15	-9.45/-9	-6.41/-7.59	-7.34/-4.89	-3.32/-5.82	-6.38/-5.12	-6.14/-6.32	-7.59/-7.42	-6.28/-4.63	-5.23/-8.52	-4.81/-13.49	-17.4/-16.17	-15.74/-9.96	-4.79/-7.3	-12.23/-6.52	-5.39/-5.78	-9.42/-12.42
Θ(135°)	-10.15/-16.91	-10.24/-14.55	-16.03/-13.67	-9.74/-13.99	-16.64/-13.4	-10.04/-7.6	-9.62/-17.89	-11.38/-10.56	-7.92/-6.94	-8.53/-7.64	-8.95/-6.33	-5.2/-5.53	-5.64/-9.22	-6.26/-5.05	-5.61/-4.02	-8.53/-8.32	-9.4/-8.22	-4.82/-9.71	-13.45/-8.61	-13.31/-9.32	-5.91/-4.82	-12.7/-12.15	-11.14/-18.36	-18.42/-7.76
Θ(142.5°)	-17.72/-15.81	-13.81/-18	-15.98/-17.8	-15.29/-11.72	-15.57/-10.37	-18.82/-19.3	-14.98/-19.26	-18.09/-17.27	-17.64/-12.51	-8.75/-7.21	-7.98/-7.38	-6.28/-6.47	-3.71/-8.71	-10.58/-11.47	-9.75/-15.44	-9.6/-9.76	-18.98/-8.18	-7.13/-9.61	-17.93/-9.78	-11.18/-10.27	-18.01/-16.74	-12.52/-14.76	-12.62/-14.28	
Θ(150°)	-17.72/-16.54	-18.79/-17.91	-18.18/-18.55	-16.07/-14.95	-10.2/-11.95	-16.99/-17.89	-12.34/-10.9	-13.23/-17.1	-13.31/-13.38	-11.93/-10.62	-9.58/-12	-13.06/-11.29	-10.6/-12.47	-12.14/-9.65	-12.37/-11.73	-10.21/-7.57	-9.29/-15.46	-17.64/-13.97	-13.08/-17.65	-18.87/-18.24	-18.84/-11.78	-13.75/-18.23	-19.35/-19.23	
Θ(157.5°)	-18.95/-18.9	-18.72/-18.76	-18.72/-18.9	-17.94/-12.02	-13.34/-14.44	-10.39/-15.32	-16.83/-11.52	-8.64/-9.19	-10.04/-8.96	-8.45/-7.37	-6.16/-6.28	-6.3/-6.75	-6.66/-6.44	-7.36/-9.13	-8.15/-5.9	-5.31/-6.51	-8.51/-10.46	-8.86/-7.64	-7.95/-10.48	-14.25/-13.22	-14.43/-18.79	-18.63/-17.98	-18.05/-19.38	-16.33/-13.85
Θ(165°)	-18.99/-16.18	-16.41/-15.38	-18.85/-17.41	-18.45/-19	-16.92/-15.82	-14.68/-13.2	-17.91/-7.16	-10.91/-8.33	-6.43/-6	-7.42/-7.32	-6.25/-6.49	-4.49/-4.47	-4.72/-5.15	-5.67/-6.11	-6.59/-7.21	-7.49/-5.11	-4.91/-8.21	-13.52/-18.36	-16.62/-14.99	-17.03/-16.66	-18.29/-17.95	-18.39/-16.18	-16.23/-18.13	-17.18/-17.11
Θ(172.5°)	-12.82/-11.08	-13.84/-12.91	-14/-14.9	-18.85/-18.25	-18.96/-17.6	-18.43/-17.32	-16.2/-17.26	-15.94/-16.12	-12.27/-11.27	-8.92/-7.84	-7.46/-7.27	-6.72/-7.39	-9.3/-9.82	-11.48/-13.37	-14.57/-14.31	-13.01/-12.97	-10.03/-11.18	-13.52/-12.02	-11.9/-13.86	-16.42/-18.08	-19.06/-19.02	-18.3/-18.98	-19.16/-14.02	-12.6/-12.79
Θ(180°)	-16/-17.32	-14.52/-13.49	-14.89/-15.9	-16.9/-17.7	-19.47/-16.6	-16.46/-16.79	-18.16/-19.03	-18.19/-17.92	-18.19/-17.7	-15.1/-13.62	-12.13/-11.42	-10.9/-10.71	-14.24/-12.08	-11.88/-12.65	-12.92/-13.42	-16.11/-19.39	-18.16/-17.66	-14.95/-17.47	-17.72/-18.9	-19.77/-17.86	-18.42/-19.34	-18.06/-18.4	-17.36/-19.02	-17.88/-18.76
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°)	-17.85/-18.17	-16.84/-17.25	-19.19/-19.01	-18.69/-18.4	-18.16/-19.26	-18.27/-17.83	-18.26/-18.82	-18.27/-17.94	-18.12/-17.91	-18.12/-18.98	-17.44/-18.95	-18.94/-17.21	-18.01/-18.14	-18.18/-19.23	-17.74/-19.22	-18.69/-17.81	-17.46/-18.5	-18.93/-18.66	-18.64/-19.01	-17.92/-18.89	-18.49/-18.54	-19.12/-17.79	-17.93/-18.68	-18.81/-17.65
Θ(7.5°)	-17.91/-18.07	-16.62/-17.14	-18.67/-19.13	-18.17/-17.72	-17.57/-18.72	-17.82/-18.08	-18.64/-18.82	-17.43/-17.53	-18.69/-18.49	-19/-18.69	-18.85/-17.9	-18.09/-18.16	-18.32/-18.36	-17.38/-18.35	-18.58/-15.68	-18.23/-15.45	-16.65/-18.17	-14.61/-18.28	-18.14/-18.74	-18.42/-18.22	-18.58/-18.35	-19.03/-17.23	-17.81/-18.06	-18.59/-19.43
Θ(15°)	-16.78/-12.09	-13.43/-15.45	-19.85/-18.01	-14.2/-12.47	-11.64/-13.5	-19.34/-18.49	-19.01/-18.66	-18.79/-17.64	-18.06/-18.37	-18.96/-18.17	-18.5/-17.63	-18.59/-18.92	-18.33/-17.63	-17.6/-18.61	-18.92/-18.32	-18.33/-16.22	-18.86/-17.64	-17.94/-17.62	-17.84/-17.78	-19.02/-18.07	-17.39/-18.98	-18.84/-18.72	-18.41/-18.93	
Θ(22.5°)	-17.53/-19	-16.2/-12.16	-13.71/-18.29	-14.79/-10.18	-10.57/-15.59	-16.3/-12.24	-13.02/-17.16	-18.41/-17.13	-17.46/-19.13	-18.99/-18.21	-17.87/-17.4	-17.57/-17.46	-18.06/-19.05	-18.51/-19.03	-17.3/-19.02	-19.1/-18.9	-17.37/-18.4	-18.37/-15.62	-13.07/-15.69	-15.65/-15.5	-15.16/-17.54	-18.39/-18.47	-18.45/-17.91	-18.18/-18.41
Θ(30°)	-17.66/-16.99	-17.86/-18.09	-19.07/-18.78	-18.64/-17.74	-17.18/-18.56	-15.71/-18.81	-19.03/-18.23	-18.14/-18	-19.73/-18.54	-18.46/-18.13	-18.97/-18.67	-18.07/-18.88	-17.86/-15.29	-15.39/-18.37	-18.32/-18.94	-19.1/-18.15	-16.29/-18.61	-17.61/-11.64	-11.46/-10.55	-12.87/-14.77	-14.99/-14.4	-17.27/-14.21	-19.04/-18.42	-16.45/-17.87
Θ(37.5°)	-16.12/-16.16	-19.08/-15.99	-14.9/-15.47	-17.87/-13.31	-15.62/-15.76	-18.16/-18.1	-18.89/-17.33	-18.47/-18.64	-16.57/-11.93	-12.92/-18.11	-18.2/-19.01	-19.12/-17.74	-17.88/-18.39	-16.24/-16.51	-17.88/-19	-15.69/-18.96	-15.29/-18.75	-10.57/-17.02	-18.86/-17.55	-17.77/-17.82	-19.22/-18.83	-18.04/-17.88	-16.68/-19.02	-18.65/-17.55
Θ(45°)	-18.16/-18.79	-19.33/-16.79	-17.27/-18.96	-18.24/-18.38	-14.86/-18.64	-17.38/-13.51	-17.36/-18.34	-17.93/-17.72	-18.04/-17.37	-17.15/-18.55	-17.64/-18.42	-17.76/-18.02	-17.82/-19.27	-17.93/-17.68	-18.69/-18.83	-18.16/-18.42	-16.1/-19.13	-16.81/-13.86	-18.15/-11.06	-11.98/-17.37	-18.05/-14.3	-13.18/-18.32	-16.63/-18.5	-18.06/-16.95
Θ(52.5°)	-15.09/-17.28	-15.22/-18.78	-18.06/-18.01	-13.71/-19.37	-18.87/-18.12	-19.03/-18.33	-18.73/-17.47	-18.23/-18.6	-19.13/-16.79	-17.82/-17.49	-18.78/-17.29	-18.59/-18.92	-18.69/-18.34	-17.97/-18.69	-17.68/-13.82	-17.16/-15.61	-15.42/-17.77	-18.06/-11.94	-15.54/-15.3	-16/-18.11	-17.88/-18.39	-18.16/-19.22	-18.51/-17.62	-18.52/-16.45
Θ(60°)	-8.91/-18.05	-17.32/-12.58	-17.26/-16.83	-18.26/-18.12	-16.2/-17.16	-16.79/-16.96	-17.73/-15.14	-17.98/-18.34	-18.53/-17.79	-18.03/-17.55	-18.86/-18.33	-18.32/-17.39	-18.87/-17.5	-17.61/-19.12	-18.46/-16.25	-19.31/-18.64	-17.86/-16.96	-16.8/-17.96	-18.63/-12.77	-17.19/-18.13	-17.41/-18.27	-18.44/-16.96	-16.4/-18.56	-18.33/-14.18
Θ(67.5°)	-17.94/-17.06	-18.42/-17.81	-16.85/-17.85	-17.06/-18.75	-17.85/-19.19	-15.13/-15.83	-17.84/-18.37	-17.35/-18.7	-18.48/-18.58	-18.58/-18.05	-18.01/-17.82	-18.51/-18.83	-18.											



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(75°)	0.09/-1.28	0.28/0.28	-0.23/-0.88	-3.24/-3.33	-2.3/-5.15	-3.44/-3	-1.46/-4.04	-1.55/-1.27	-2.48/-1.05	-0.09/0.45	-1.0/-5.1	0.97/0.99	0.18/1.46	0.07/-1.07	-2.43/-1.37	-1.16/-2.27	-2.77/-1.47	-5.94/-4.02	-1.82/-1.01	-1.05/-3.96	0.57/0.25	0.39/-1.25	-1.03/-2.35	-0.77/-1.57
Θ(82.5°)	-0.6/-3.41	-1.25/-2.73	-0.07/-1.08	-5.69/-1.53	-3.02/-3.77	-3.91/-4.27	-1.71/-4.75	-3.63/-1.44	-0.78/-1.53	1.09/-0.92	-1.25/-0.89	-0.76/-0.48	-0.22/0.47	-0.09/-1.29	-1.4/-0.43	-0.98/-2.75	-1.8/-3.78	-1.61/-6.3	-1.8/-4.16	-1.73/-6.16	-3.44/-4.38	-4.5/-2.76	-0.63/-0.57	-2.23/-1.06
Θ(90°)	0.32/-0.11	-0.6/-1.27	-3.45/-3.58	-0.50/-3.63	-2.66/-3.89	-6.64/-3.12	-3.36/-3.94	-5.34/-5.22	-2.48/-3.6	0.74/-1.25	-1.72/-0.51	0.02/0.45	-0.16/0.36	0.91/-1.73	-4.43/0.14	-3.31/-1.66	-2.57/-4.12	-0.98/-4.15	-4.35/-4.13	-3.48/-4.07	-7.51/-2.96	-2.67/-1.21	-0.81/-2	1.25/0.13
Θ(97.5°)	-0.13/-3.19	-0.01/-0.67	-2.52/-3.17	-3.86/-3.28	-2.59/-3.87	-13.79/-3.71	-5.4/-5.89	-3.96/-3.72	-4.03/-4.12	-0.41/0.91	-2.01/-1.04	0.06/0.56	-3.25/-0.29	-0.43/-0.65	-2.89/-2.22	-1.15/-3.53	-3.91/-2.74	-5.98/-7.57	-2.95/-5.09	-1.23/-1.06	-3.81/-6	-0.19/-1.43	-4.95/-6.55	-0.52/-3.34
Θ(105°)	-2.91/-7.16	-4.01/-4.67	-3.01/-3.89	-6.41/-3.13	-2.46/-5.11	-11.14/-3.5	-7.59/-3.94	-7.05/-2.51	-2.85/-2.02	-1.2/-2.06	-4.07/-0.31	-0.65/0.38	-2.06/0.32	-0.17/-1.86	-3.75/-1.3	-0.78/-1.1	-3.93/-4.48	-5.78/-6.96	0.07/-3.61	-1.22/-3.5	-4.77/-2.68	-5.45/-4.62	-10.75/-10.82	-2.61/-4.41
Θ(112.5°)	-6.66/-6.34	-3.62/-3.24	-2.92/-4.3	-3.26/-2.79	-4.45/-9.44	-7.77/-4.04	-5.63/-2.98	-7.96/-4.39	-3.38/-3.22	-2.37/-6.63	-3.14/-3.58	-2.91/-3.11	-0.58/-3.77	-2.53/-1.46	-2.05/-1.93	-7.13/-6.35	-6.87/-10.11	-2.21/-5.83	-5.95/-6.03	-3.84/-5.8	-4.02/-6.15	-2.54/-4.78	-2.84/-1.77	
Θ(120°)	-7.98/-9.21	-17.88/-5.23	-5.7/-6.75	-8.2/-6.33	-7.19/-6.97	-5.44/-6.35	-7.23/-6.98	-10.34/-5.14	-8.04/-7.41	-5.32/-10.25	-4.73/-0.83	-4.66/-3.71	-2.51/-3.39	-3.36/-6.38	-8.15/-8.37	-5.53/-8.38	-10.08/-14.77	-13.56/-12.75	-10.08/-7.2	-7.46/-5.95	-9.24/-17.5	-8.98/-15.16	-10.53/-9.12	-6.97/-6.68
Θ(127.5°)	-6.98/-10.6	-4.91/-5.89	-5.53/-2.86	-7.4/-9.38	-8/-5.16	-10.32/-5.31	-4.46/-8.46	-7.96/-8.3	-10.58/-9.22	-6.77/-4.64	-8.7/-6.44	-6.58/-4.1	-5.39/-9.73	-9.05/-3.57	-4.8/-4.69	-8.66/-8.43	-5.32/-15.57	-8.99/-6.34	-7.02/-10.49	-6.72/-15.73	-6.27/-7.42	-14.91/-6.05	-6.8/-6.33	
Θ(135°)	-13.95/-11.87	-12.75/-5.86	-5.68/-5.12	-5.02/-6.95	-7.92/-9.03	-14.43/-8.53	-7.83/-8.2	-7.9/-9.29	-6.81/-8.03	-7.88/-6.48	-4.51/-4.48	-4.78/-6.21	-5.91/-4.24	-5.25/-4.99	-5.29/-4.49	-8.99/-5.74	-18.39/-4.1	-5.64/-12.02	-3.39/-9.45	-8.44/-10.77	-3.39/-17.35	-16.73/-10.57	-11.23/-12.51	
Θ(142.5°)	-10.61/-19.06	-16.07/-13.93	-17.51/-10.55	-9.64/-8.69	-8.44/-13.66	-14.06/-14.17	-11.69/-7.86	-10.32/-14.05	-14.52/-11.47	-14.59/-14.93	-16.14/-13.36	-11.63/-12.7	-15.55/-14.58	-9.93/-11.94	-11.92/-17.34	-10.13/-17.8	-12.84/-6.94	-9.22/-10.98	-13.58/-18.44	-11.52/-16.42	-19.02/-14.26	-10.52/-11.94	-15.82/-17.64	-19.29/-12.26
Θ(150°)	-13.11/-13.67	-11.54/-12.45	-10.39/-18.51	-18.35/-12.67	-10.53/-8.7	-13.34/-17.31	-12.69/-10.74	-14.24/-11.5	-7.8/-7.89	-10.34/-10.38	-10.61/-10.52	-10.71/-12.98	-15.03/-10.25	-6.86/-7.29	-11.88/-10.3	-11.83/-8.72	-8.95/-13.51	-10.45/-13.29	-13.02/-11.44	-18.06/-15.37	-18/-17.9	-13.7/-19.16	-15.23/-18.76	-18.71/-7.72
Θ(157.5°)	-13.15/-13.25	-12.44/-11.56	-10.51/-11.68	-9.81/-11.29	-15.4/-12.94	-13.25/-10.09	-9.4/-11.54	-10.41/-11.22	-8.99/-6.9	-6.98/-6.54	-7.39/-7.38	-6.35/-6.66	-6.04/-6.07	-6.09/-4.97	-5.87/-8.31	-7.32/-8.77	-11.92/-15.01	-18.91/-17.27	-16.83/-14.65	-12.19/-13.55	-18.28/-19.14	-17.83/-19.76	-13.62/-14.03	
Θ(165°)	-15.94/-12.86	-14.91/-16.21	-18.45/-15.04	-12.92/-15.24	-18.08/-17.9	-18.25/-12.63	-8.56/-7.26	-8.62/-7.58	-7.26/-6.08	-6.91/-6.81	-7.17/-7.62	-6.32/-5.77	-5.29/-6.24	-6.94/-7.8	-9.75/-9.31	-8.7/-7.79	-12.66/-18.94	-18.82/-17.61	-15.76/-13.37	-14.52/-16.21	-18.75/-17.79	-18.75/-17.94	-17.65/-18.21	-17.78/-18.25
Θ(172.5°)	-18.87/-19.37	-16.04/-15.33	-15.82/-18.27	-17.03/-17.58	-15.79/-14.5	-16/-18.64	-16.38/-14.39	-13.7/-14.58	-16.53/-16.41	-17.22/-16.53	-15.45/-15.12	-12.98/-12.02	-11.13/-10.75	-11.51/-13.16	-12.38/-13.57	-18.11/-18.38	-18.26/-16.54	-17.39/-17.49	-19.48/-18.1	-17.83/-18.84	-17.42/-19.05	-16.4/-18.39	-18.69/-18.48	-18.35/-18.59
Θ(180°)	-17.95/-18.66	-16.1/-17.44	-19/-18.21	-18.88/-18.72	-18.8/-17.64	-18.89/-19.11	-19.13/-18.58	-18.98/-18.34	-19.28/-19.02	-18.12/-16.12	-16.72/-16.16	-16.86/-18.57	-19.06/-18.85	-18.14/-18.13	-18.19/-18.43	-17.03/-15.17	-16.31/-18.76	-17.49/-18.73	-18.99/-18.99	-18.68/-18.1	-17.36/-18.61	-18.92/-16.04	-18.93/-17.91	-16.48/-15.71
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°)	-17.73/-16.57	-12.75/-18.52	-15.2/-13.78	-15.55/-15.88	-16.61/-16.49	-18.37/-19.89	-18.89/-16.39	-13.96/-16.37	-18.77/-17.6	-17.81/-17.38	-18.01/-18.37	-18.89/-18.65	-18.24/-14.9	-19.32/-17.07	-16.81/-16.21	-17.76/-18.14	-16.86/-15.25	-16.49/-17.98	-15.53/-19.21	-15.73/-18.47	-19.15/-15.37	-18.24/-16.2		
Θ(7.5°)	-17.62/-18.93	-18.36/-17.51	-18.14/-19.14	-19.22/-17.79	-18.38/-18.56	-17.69/-18.85	-17.7/-17.65	-18.04/-18.38	-17.82/-18.69	-17.96/-18.75	-18.16/-18.86	-18.29/-18.34	-18.19/-18.95	-17.72/-15.77	-17.8/-13.49	-15.52/-16.73	-11.57/-10.77	-10.83/-12.27	-15.54/-14.16	-15.09/-14.16	-16.19/-18.72	-18.87/-19.17	-18.19/-18.89	-17.83/-17.6
Θ(15°)	-18.22/-18.97	-18.9/-19.02	-18.95/-18.51	-18.17/-19.17	-19.08/-17.02	-15.66/-14.84	-14.81/-15.96	-17.55/-18.24	-18.86/-18.2	-18.31/-18.85	-18.72/-19.07	-18.12/-18.71	-17.03/-18.58	-18.18/-14.74	-18.59/-13.3	-18.95/-16.74	-14.05/-12.33	-12.4/-12.4	-16.04/-16.79	-16.71/-17.47	-15.06/-18.13	-18.05/-18.66	-19.09/-19.04	
Θ(22.5°)	-18.25/-18.31	-18.38/-19.11	-18.68/-18.51	-18.3/-17.66	-15.39/-16.63	-18.11/-17.01	-18.11/-17.01	-18.91/-15.59	-15.63/-18.02	-17.95/-18.28	-19.25/-18.78	-18.02/-17.65	-17.81/-18.39	-17.24/-18.35	-14.43/-16.28	-15.98/-17.87	-11.31/-11.83	-18.06/-18.71	-13.9/-13.15	-18.14/-19.25	-18.28/-18.36	-18.18/-18.09		
Θ(30°)	-14.72/-16.56	-15.24/-18.95	-18.39/-13.25	-15.61/-18.9	-15.87/-18.2	-17.74/-18.19	-17.97/-17.68	-18.14/-18.36	-18.87/-18.84	-18.96/-17.83	-18.34/-19.08	-18.63/-18.85	-19.06/-17.65	-17.38/-17.5	-14.24/-14.3	-15.85/-17.99	-14.68/-17.66	-18.13/-17.15	-18.05/-12.81	-11.13/-16.93	-18.53/-12.6	-16.59/-16.68	-14.84/-12.83	-18.73/-15.93
Θ(37.5°)	-18.84/-19.46	-18.18/-16	-16.91/-16.22	-13.57/-14.62	-14.82/-14.35	-16.01/-17.81	-17.19/-13.38	-18.56/-12.22	-16.54/-10.83	-17.49/-18.03	-18.36/-18.55	-19.03/-18.93	-17.96/-17.95	-14.62/-13.02	-14.56/-19.32	-18.61/-18.82	-19.13/-12.01	-12.74/-18.1	-16.09/-15.34	-12.62/-11.68	-9.56/-16.5	-18.49/-16.65		
Θ(45°)	-17.4/-15.91	-16.55/-15.45	-17.26/-18.29	-18.25/-17.72	-14.79/-19.6	-18.78/-17.33	-18.14/-17.93	-18.56/-18.38	-16.56/-16.19	-17.98/-19.02	-18.23/-19.33	-17.83/-14.94	-17.47/-17.69	-18.92/-17.15	-11.78/-13.84	-18.89/-19.21	-18.53/-18.1	-19.39/-17.96	-16.7/-18.8	-17.77/-18.06	-19.51/-13.4	-14.32/-19.17	-17.75/-18.97	
Θ(52.5°)	-17.21/-16.64	-17.38/-17.73	-18.63/-13.28	-15.07/-12.85	-17.9/-19.2	-19.02/-18.34	-18.98/-19.1	-18.83/-19.34	-17.18/-15.48	-15.34/-17.89	-17.84/-18.94	-18.2/-17.78	-18.86/-18.52	-16.43/-17.32	-11.95/-11.74	-13.12/-18.7	-18.49/-13.75	-14.65/-18.62	-19.19/-18.25	-17.63/-17.64	-16.81/-18.63	-16.93/-16.99	-16.79/-13.94	-17.63/-18.26
Θ(60°)	-18.3/-18.12	-18.9/-17.73	-13.07/-13.38	-19.25/-17.43	-18.12/-18.29	-19.31/-18.81	-18.17/-18.06	-18.77/-18.64	-18.06/-18.08	-18.76/-18	-18.64/-18.55	-19.03/-18.83	-18.94/-19.14	-18.54/-18.53	-14.94/-13.88	-17.45/-19.13	-18.69/-17.81	-16.43/-16.51	-17.99/-16.36	-18.05/-13.27	-16.64/-18.06	-18.44/-18.69	-16.89/-18.83	-19.41/-15.8
Θ(67.5°)	-18.11/-18.16	-17.77/-17.58	-15.24/-15.1	-13.69/-18.2	-17.38/-19.3	-18.33/-17.15	-17.76/-18.64	-18.18/-18.04	-18.98/-18.84	-18.15/-19.55	-17.77/-18.61	-17.94/-18.81	-18.22/-17.52	-17.95/-18.38	-18.08/-17.73	-15.34/-16.5	-18.69/-17.82	-16.71/-15.92	-17.81/-17.92	-18.35/-19.16	-17.18/-18.66	-17.98/-17.72	-18.25/-17.6	
Θ(75°)	-18.14/-18.03	-18.42/-17.73	-14.54/-14.77	-13.63/-17.96	-16.53/-17.8	-17.84/-18.21	-17.17/-18.64	-17.77/-19.63	-17.87/-17.84	-19.19/-18.31	-18.31/-14.53	-18.26/-18.97	-17.94/-18.53	-18.45/-18.47	-17.79/-15.67	-16.05/-18.5	-18.2/-19.27	-18.17/-18.08	-17.66/-18.54	-17.85/-17.26	-17.29/-18.71	-17.89/-17.76	-19.08/-17.48	-17.73/-18.08
Θ(82.5°)	-18.7/-17.83	-18.58/-18.46	-16.03/-12.95	-12.23/-17.85	-16.49/-18.64	-18.37/-18.55	-16.83/-17.1	-18.56/-17.89	-18.16/-19.17	-17.61/-17.97	-18.89/-18.6	-19.38/-19.24	-17.95/-17.49	-17.33/-17.65	-18.72/-18.13	-16.2/-18.89	-17.91/-17.81	-18.02/-17.76	-18.37/-18.02	-18.06/-18.48	-14.54/-16.58	-17.65/-13.34	-13.92/-18.79	-18.52/-17.68
Θ(90°)	-17.72/-19	-17.34/-17.52	-17.74/-19.97	-18.83/-18.83	-16.28/-18.56	-17.94/-19.13	-17.31/-15.12	-17.55/-16.99	-14.72/-19.17	-19.07/-19.1	-19.16/-15.83	-17.35/-18.17	-19.45/-19.21	-17.99/-17.74	-18.37/-18.99	-15.33/-19.21	-18.67/-18.39	-18.09/-18.11	-18.42/-18.48	-17.96/-18.48	-16.16/-15.32	-17.8/-18.88	-18.97/-17.45	-18.42/-17.92
Θ(97.5°)	-17.63/-19	-17.76/-17.78	-13.89/-13.76	-16.95/-18	-14.11/-17.49	-17.93/-17.98	-18.2/-17.4	-18.34/-18.22	-17.48/-18.25	-18.47/-18.17	-18.6/-18.61	-17.98/-18.12	-18.07/-18.81	-18.53/-17.91	-18.51/-18.25	-17.37/-17.65	-17.29/-18.49	-17.71/-18.6	-17.57/-17.7	-17.88/-16.71	-17.82/-19.55	-19/-19.24	-18.9/-18.4	-18.14/-18.74
Θ(105°)	-19.3/-19.29	-12.4/-18.03	-19.22/-19	-18.84/-18.6	-15.02/-18.99	-18.43/-18.21	-18.93/-17.72	-15.17/-14.49	-13.47/-17.99	-15.42/-18.22	-18.61/-19.1	-16.62/-17.78	-17.49/-18.18	-17.36/-19.35	-18.84/-18.86	-18.88/-14.21	-18.3/-17.02	-18.71/-16.19	-16.28/-16.87	-14.42/-16.12	-19.14/-18.9	-18.61/-13.87	-18.1/-18.91	-18.12/-18.2
Θ(112.5°)	-18.89/-17.63	-14.94/-14.34	-18.21/-18.24	-19.16/-18.69	-13.53/-19.05	-18.64/-18.53	-18.47/-17.09	-18.98/-15.03	-16.52/-18.72	-16.53/-19.14	-18.74/-15.48	-18.95/-17.81	-18.77/-18.46	-18.45/-19.05	-19.2/-18.72	-16.38/-18.89	-15.32/-19.14	-18.11/-19.16	-15.89/-14.66	-13.36/-14.56	-16.83/-16.37	-18.35/-19.17	-18.89/-18.36	
Θ(120°)																								



Radiated Composite Gain Data_6GHz U-NII 5~8

Appendix B

Θ(127.5°)	-14.7/-8.83	-10.51/-10.08	-5.14/-7.86	-8.65/-7.61	-5.86/-7.36	-11.86/-8.9	-10.78/-13.45	-13.77/-11.49	-8.91/-7.53	-6.24/-7.59	-4.7/-5.97	-3.85/-3.07	-5.87/-3.57	-4.55/-5.76	-8.93/-8.99	-6.2/-14.7	-6.64/-10.29	-6.47/-9.22	-13.3/-16.47	-9.18/-7.48	-18.39/-18.12	-9.34/-5.96	-18.04/-14.5	-10.39/-16.48
Θ(135°)	-17.59/-18.25	-10.86/-10.22	-8.99/-8.92	-10.51/-9.8	-6.72/-11.47	-9.71/-5.84	-6.35/-4.24	-6.83/-6.25	-6.02/-8.63	-7.98/-5.79	-6.06/-6.19	-5.76/-8.13	-7.21/-5.06	-5.29/-8.27	-5.38/-5.62	-2.31/-4.7	-5.29/-9.62	-4/-9.97	-15.71/-15.36	-13.84/-12.59	-9.26/-12.45	-18.33/-12.34	-14.91/-8.69	-15.59/-8.56
Θ(142.5°)	-18.39/-18.01	-13.76/-19.29	-16.45/-14.77	-19.07/-13.07	-15.68/-17.31	-14.69/-8.6	-12.07/-9.82	-9.18/-8.71	-7.74/-8.33	-7.92/-7.47	-6.38/-7.54	-5.87/-6.22	-6.46/-7.01	-6.02/-7.48	-4.99/-7.84	-5.78/-12.95	-18.43/-16.62	-13.23/-16.05	-13.82/-12.26	-17.63/-19.35	-17.84/-16.48	-13.11/-18.05	-15.24/-12.88	-11.23/-10.66
Θ(150°)	-11.62/-11.85	-13/-14.76	-14.99/-15.69	-14.33/-12.4	-10.86/-14.67	-18.57/-18.42	-13.44/-14.03	-12.37/-17.13	-19.07/-17.7	-16.07/-13.53	-12.59/-12.22	-10.74/-10.73	-12.35/-12.18	-15.07/-13.79	-11.41/-11.06	-15.76/-13.32	-9.06/-6.08	-6.9/-8.17	-7.94/-18.66	-17.71/-15.77	-16.99/-18.84	-19.14/-18.52	-18.5/-18.52	-18.58/-16.12
Θ(157.5°)	-18.16/-15.48	-18.89/-11.32	-11.82/-11.5	-12.02/-12.48	-13.57/-11.52	-11.76/-9.68	-8.09/-7.39	-6.15/-5.48	-6.42/-7.37	-6.94/-6.77	-8.07/-6.79	-6.84/-6.46	-6.53/-6.1	-5.74/-4.84	-5.6/-6.53	-4.83/-5.81	-7.48/-5.24	-6.59/-9.07	-10.45/-17.46	-13.86/-18	-19.04/-16.22	-18.84/-17.84	-17.79/-18.8	-17.39/-19.38
Θ(165°)	-17.57/-19.2	-14.65/-18.9	-15.38/-12.18	-13.44/-16.22	-12.68/-11.45	-12.34/-13.64	-10.13/-8.58	-8.12/-6.52	-5.46/-4.87	-4.11/-4.2	-4.47/-4.13	-4.17/-3.88	-3.79/-4.44	-5.08/-3.94	-3.41/-5.55	-6.62/-7.07	-6.24/-7.95	-9.98/-15.13	-18.66/-18.29	-18.5/-18.06	-17.69/-17.68	-18.54/-17.06	-19.66/-16.13	-15.88/-16.56
Θ(172.5°)	-18.03/-17.18	-15.42/-15.38	-16.64/-16.94	-18.61/-19.14	-18.97/-16.18	-15.91/-16.04	-17.04/-15.23	-11.24/-10.14	-8.32/-8.4	-7.21/-6.88	-6.53/-5.96	-5.84/-5.92	-6.33/-6.28	-6.57/-8.35	-7.68/-6.55	-6.98/-9.45	-10.64/-11.84	-15.13/-17.63	-18.28/-18.99	-17.9/-17.74	-18.79/-17.56	-18.68/-18.66	-19.44/-19.2	-18.07/-17.27
Θ(180°)	-11.11/-11.06	-12.53/-13.6	-13.83/-15.51	-17.26/-17.58	-17.92/-18.82	-19.02/-19.21	-17.66/-17.73	-18.21/-16.16	-14.09/-13.64	-12.35/-11.27	-10.89/-9.83	-9.09/-9.62	-9.49/-10.03	-9.21/-9.29	-11.79/-16.68	-18.26/-14.5	-14.78/-16.93	-19.28/-17.63	-15.96/-13.33	-19.01/-17.48	-15.84/-13.05	-13.16/-13.13	-11.81/-11.8	-11.4/-12.13
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°)	-17.98/-18.06	-19.65/-18.93	-18.58/-15.58	-15.17/-14.48	-13.5/-13.25	-13.47/-12.91	-12.44/-11.77	-11.65/-13.02	-12.95/-13.3	-14.29/-14.1	-15.55/-17.16	-17.06/-18.86	-19.43/-16.05	-18.45/-16.48	-18.55/-14.4	-13.83/-14.55	-12.79/-12	-11.31/-10.43	-10.33/-11.54	-11.8/-12.68	-11.45/-12.29	-12.83/-11.84	-13.97/-14.37	-13.44/-17.31
Θ(7.5°)	-19.08/-17.54	-17.91/-17.36	-17.2/-19.33	-16.08/-16	-15.7/-16.11	-15.81/-18.3	-17.65/-16.95	-13.25/-13.08	-18.34/-16.44	-17.24/-17.43	-17.65/-17.6	-16.82/-19.12	-17.94/-18.14	-18.8/-18.2	-16.92/-18.28	-12.87/-14.81	-12.59/-10.49	-10.42/-10.39	-11.35/-12.82	-12.27/-12.91	-16.23/-15.53	-18.12/-18.3	-17.85/-18.97	-17.85/-17.67
Θ(15°)	-18.81/-17.84	-17.31/-18.51	-18.75/-18.27	-16.99/-17.03	-16.73/-17.64	-19.26/-18.97	-15.67/-16.87	-17.9/-18.88	-18.84/-18.36	-17.83/-18.7	-17.58/-17.91	-18.02/-18.44	-19.25/-17.95	-18.24/-18.77	-18.93/-19.27	-17.86/-19.33	-17.64/-13.85	-13.45/-13.6	-14.83/-18.09	-17.99/-17.88	-17.94/-19.03	-17.6/-18.92	-18.73/-19.1	-18.55/-18.99
Θ(22.5°)	-18.36/-17.47	-18.35/-18.29	-18.77/-18.69	-18.8/-16.02	-15.49/-17.42	-18.1/-18.99	-18.01/-18.25	-17.89/-18.42	-18.48/-13.66	-15.86/-15.5	-18.46/-17.79	-18.75/-18.72	-18.09/-19.18	-17.73/-16.5	-19.28/-18.31	-19.26/-15.57	-18.54/-15.3	-14.11/-17.33	-18.66/-17.5	-18.86/-19.06	-18.37/-18.32	-18.42/-17.64	-18.41/-17.56	-18.36/-19.07
Θ(30°)	-17.73/-18.9	-19/-18.95	-19.08/-18.45	-18.11/-18.99	-17.07/-17.15	-16.64/-19.25	-17.92/-18.29	-17.74/-16.11	-15.05/-14.11	-15.76/-18.79	-18.3/-18.7	-18.24/-17.26	-17.68/-19.11	-18.96/-17.83	-17.76/-17.84	-18.15/-12.91	-18.77/-17.81	-18.18/-17.61	-19.03/-18.5	-17.98/-13.13	-17.9/-17.11	-18.58/-18.68	-19.27/-18.27	
Θ(37.5°)	-17.36/-13.69	-17.6/-17.73	-15.05/-18.05	-18.26/-17.97	-18.13/-19.07	-18.08/-18.36	-18.44/-17.89	-17.06/-16.76	-13.48/-13.72	-18.9/-18.87	-18.59/-18.09	-19.44/-16.23	-17.81/-17.79	-18.05/-18.58	-19/-18.42	-9.94/-13.88	-14.05/-18.21	-18.87/-17.35	-18.34/-17.19	-17.69/-15.22	-18.24/-17.95	-18.38/-17.65	-18.67/-18.75	-18.07/-17.36
Θ(45°)	-18.54/-19.14	-19.02/-18.12	-17.63/-18.02	-17.74/-19.34	-16.08/-18.42	-18.12/-18.28	-18.51/-17.78	-17.73/-17.98	-17.77/-18.18	-18.65/-17.34	-19.22/-18.64	-18.19/-18.92	-17.84/-18.38	-18.98/-17.64	-18.05/-18.21	-16.13/-18.2	-13.31/-17.87	-17.8/-17.81	-15.15/-18.26	-13.49/-12.95	-16.56/-18.61	-19.03/-14.38	-13.81/-19.01	-19.01/-19.03
Θ(52.5°)	-17.61/-15.97	-14.9/-18.72	-15.43/-19.28	-19.01/-18.61	-18.93/-19.99	-17.52/-19.38	-19/-18.08	-17.41/-17.56	-17.25/-18.59	-17.8/-18.7	-18.02/-17.78	-18.89/-18.32	-17.85/-18.74	-18.12/-19.14	-16.78/-18.94	-17.72/-17.65	-17.52/-16.64	-17.52/-18.05	-19.1/-18.64	-17.5/-18.44	-18.51/-14.66	-18.05/-18.75	-18.59/-18.15	-18.96/-19.23
Θ(60°)	-17.53/-19.41	-18.63/-17.63	-16.07/-19.35	-12.66/-16.5	-17.18/-17.54	-13.12/-18.84	-18.47/-17.64	-18.78/-13.06	-12.46/-14.87	-17.54/-18.56	-18.74/-12.86	-17.61/-18.67	-18.57/-17.51	-18.65/-18.26	-18.46/-19.06	-17.55/-17.43	-18.81/-18.17	-18.18/-17.86	-18.35/-17.67	-17.54/-19.14	-18.52/-17.24	-17.52/-17.95	-18.39/-18.99	-17.58/-19.17
Θ(67.5°)	-18.73/-18.43	-18.07/-17.7	-13.82/-15.1	-17.51/-17.98	-17.59/-18.9	-14.51/-14.64	-18.67/-18.71	-18.86/-19.25	-18.48/-15.63	-16.86/-13.63	-14.86/-16.99	-14.88/-18.52	-18.63/-19.17	-17.92/-13.2	-15.98/-15.91	-18.02/-19.16	-18.61/-17.78	-17.88/-19.18	-17.64/-18.91	-16.81/-18.06	-18.63/-15.04	-17.71/-18.91	-16.9/-18.4	
Θ(75°)	-18.68/-17.8	-18.26/-18.36	-18.64/-18.05	-19.05/-19.26	-18.15/-18.13	-16.78/-18.35	-18.89/-19.28	-12.98/-12.84	-17.03/-18.43	-17.19/-13.86	-12.56/-11.03	-13.56/-18.53	-17.59/-19.08	-17.27/-12.95	-11.56/-17.29	-17.61/-14.94	-19.19/-19.01	-12.58/-18.11	-18.42/-18.2	-18.42/-17.08	-19.15/-18.66	-18.23/-18.11	-18.94/-18.93	-17.18/-17.69
Θ(82.5°)	-18.6/-18.03	-17.45/-19.11	-15.96/-15.89	-15.18/-18.59	-17.75/-17.91	-16.62/-12.07	-18.67/-19.25	-17.22/-17.4	-18.47/-18.27	-19.05/-13.9	-18.74/-15.55	-18.71/-18.84	-17.98/-17.75	-17.85/-18.01	-11.52/-12.46	-19.55/-13.95	-15.38/-18.07	-18.62/-17.63	-19.05/-19.15	-17.32/-18.22	-18.3/-17.94	-18/-17.74	-18.41/-18.75	-18.11/-18.19
Θ(90°)	-18.44/-18.78	-16.98/-17.82	-18.4/-17.79	-15.42/-18.87	-18.09/-18.89	-18.75/-18.07	-15.19/-17.7	-14.12/-18.18	-17.93/-19.07	-16.89/-10.96	-12.01/-14.97	-15.87/-18.97	-18.12/-18.82	-18.51/-16.25	-10.14/-13.57	-18.31/-18.43	-18.08/-18.62	-13.68/-18.16	-18.03/-18.07	-18.14/-19.26	-18.46/-18.39	-19.19/-16.2	-17.93/-17.92	-18.31/-19.23
Θ(97.5°)	-18.34/-18.41	-19.18/-18.84	-19.12/-16.27	-12.78/-15.4	-13.9/-18.78	-14.15/-19.06	-17.8/-18.62	-18.91/-17.57	-16.6/-17.84	-15.78/-13.94	-17.92/-19.11	-18.41/-18.28	-18.46/-18.29	-17.23/-19.18	-13.64/-12.77	-18.77/-19.38	-18.65/-15.86	-16.22/-18.54	-19.13/-18.67	-19.12/-18.38	-16.75/-18.76	-18.94/-18.66	-19.07/-18.59	-16.27/-19.19
Θ(105°)	-16.42/-19.09	-17.56/-17.21	-16.58/-18.32	-15.07/-16.6	-18.04/-18.56	-18.67/-18.29	-18.56/-17.39	-16.03/-15.98	-19.24/-18.78	-18.18/-12.49	-18.04/-15.86	-15.39/-17.4	-18.17/-19.28	-18.61/-17.57	-12.91/-11.35	-18.26/-18.04	-19.08/-18.06	-17.74/-18.81	-17.76/-18.66	-17.74/-17.95	-17.74/-11.2	-18.4/-16.18	-17.93/-13.5	-17.59/-18.31
Θ(112.5°)	-16.71/-18.82	-17.78/-18.35	-17.03/-16.92	-15.18/-14.47	-18.24/-17.86	-16.46/-18.01	-17.99/-18.74	-19.05/-15.25	-18.5/-17.31	-17.38/-15.92	-17.19/-16.63	-17.69/-18.15	-18.41/-18.38	-19.04/-19.09	-17.92/-13.27	-18.92/-17.78	-17.75/-18.8	-17.69/-18.35	-18.4/-18.65	-18.51/-15.24	-15.12/-17.46	-18.3/-14.88	-18.67/-18.8	-19.15/-19.62
Θ(120°)	-14.17/-16.95	-18.28/-19.03	-18.05/-18.16	-18.45/-19.23	-18.2/-18	-15.57/-17.88	-17.9/-17.69	-19.49/-18.39	-17.25/-18.53	-18.34/-18.97	-16.34/-14.97	-16.28/-17.47	-18.74/-18.61	-19.01/-14.09	-17.48/-18.02	-17.84/-17.89	-15.42/-12.26	-18.9/-13.76	-18.32/-18.02	-18.64/-19.26	-18.55/-17.9	-17.79/-17.87	-18.24/-19.16	
Θ(127.5°)	-17.31/-19.06	-18.42/-19.14	-18.51/-17.86	-18.33/-13.87	-18.41/-18.42	-18.89/-16.2	-17.96/-10.66	-14.83/-17.54	-18/-18.19	-18.1/-17.97	-19.26/-18.76	-19.13/-18.99	-18.3/-18.4	-18.88/-19.01	-19.01/-17.74	-18.12/-9.86	-11.21/-19.1	-17.97/-17.85	-18.27/-18.34	-19.04/-16.09	-18.16/-14.77	-16.4/-18.74	-16.07/-18.21	-14.97/-16.51
Θ(135°)	-16.28/-17.55	-17.78/-14.01	-16.07/-17.1	-19.01/-15.35	-14.93/-11.98	-17.44/-13.2	-15.98/-14.74	-17.42/-17.9	-18.54/-18.4	-15.59/-18.75	-17.75/-18.87	-17.8/-18.59	-18.11/-17.96	-16.96/-18.07	-17.71/-18.26	-18.01/-18.23	-11.26/-10.32	-16.53/-18.8	-14.86/-18.78	-18.49/-18.52	-14.46/-14.2	-16.72/-18.65	-16.3/-17.74	-15.96/-17.87
Θ(142.5°)	-18.41/-15.19	-19.39/-15.71	-19.01/-18.56	-17.83/-18.45	-17.52/-17.5	-16/-16.07	-11.75/-18.63	-15.98/-13.3	-19.09/-18.66	-19.15/-16.04	-15.04/-17.24	-18.52/-18.81	-17.53/-17.51	-18.16/-13.11	-18.11/-17.93	-18.91/-8.94	-13.32/-12.9	-16.07/-15.5	-18.08/-17.88	-18.04/-17.99	-9.87/-15.02	-18.28/-18.8	-17.28/-18.77	-19.08/-17.78
Θ(150°)	-17.83/-14.83	-17.96/-18.9	-17.19/-16.17	-18.18/-14.69	-18.32/-18.24	-18.39/-17.02	-17.62/-13.37	-17.62/-14.79	-14.12/-19.41	-18.32/-17.58	-15.26/-14.22	-18.42/-18.08	-18.62/-18.7	-18.98/-17.86	-19.23/-17.9	-19.07/-18.26	-15.87/-14.2	-17.31/-17.59	-18.09/-11.26	-19.06/-18.41	-16.65/-13.49	-18.12/-18.75	-18.18/-17.85	-18.61/-18.65
Θ(157.5°)	-18.45/-18.18	-18.93/-18.07	-12.88/-15.9	-17.83/-12.33	-13.34/-18.34	-18.74/-18.87	-18.33/-18.31	-16.39/-17.66	-19.14/-18.79	-16.56/-18.17	-18.13/-18.33	-18.86/-17.23	-17.43/-18.24	-16.48/-17.18	-14.46/-13.15	-17.53/-18.22	-19.36/-13.84	-13.64/-17.76	-17.63/-18.63	-17.49/-17.71	-15.87/-19.12	-18.48/-18.53		

Total Gain Data

[illegible]



Antenna Pattern_2.4GHz, 5GHz U-NII 1~3

Appendix C

Θ(15°)	-11.39/-10.21	-8.63/-9.12	-9.41/-9.98	-9.53/-8.44	-9.71/-9.70	-9.49/-8.95	-8.88/-8.62	-8.85/-10.63	-9.99/-11.46	-11.87/-11.14	-13.07/-13.18	-13.15/-12.31	-12.60/-15.98	-14.65/-11.90	-10.11/-9.46	-8.56/-9.58	-8.98/-8.38	-10.48/-10.83	-11.41/-11.72	-11.73/-12.83	-12.89/-12.66	-11.55/-10.15	-10.36/-10.04	-9.91/-11.07
Θ(22°)	-9.62/-8.05	-6.83/-6.74	-7.35/-7.98	-6.06/-5.97	-7.27/-7.53	-5.67/-4.36	-5.53/-5.53	-5.58/-7.32	-7.79/-8.23	-9.27/-11.66	-11.80/-10.37	-10.57/-8.02	-8.31/-14.09	-10.89/-10.13	-11.62/-11.06	-11.68/-14.87	-15.60/-15.81	-15.77/-15.53	-13.63/-12.65	-11.19/-12.66	-10.15/-11.76	-10.64/-10.79	-10.04/-9.38	-10.55/-9.46
Θ(30°)	-6.91/-6.50	-5.09/-5.68	-5.99/-6.93	-5.59/-6.19	-4.94/-3.89	-4.22/-4.30	-3.51/-3.48	-4.29/-5.40	-5.26/-6.38	-7.79/-8.49	-7.66/-9.05	-7.83/-5.85	-6.27/-11.84	-8.72/-6.53	-6.59/-7.95	-6.97/-8.60	-6.66/-4.19	-6.24/-5.44	-5.24/-5.17	-5.02/-3.82	-3.59/-3.78	-3.85/-4.25	-5.33/-8.15	-7.82/-8.07
Θ(37.5°)	-7.29/-7.52	-5.48/-5.56	-7.41/-6.29	-8.03/-5.60	-4.60/-4.06	-4.28/-4.44	-3.88/-3.80	-3.78/-4.17	-5.00/-6.21	-8.25/-8.09	-8.10/-5.90	-5.83/-4.68	-8.57/-5.56	-8.02/-3.66	-2.82/-4.32	-3.34/-2.44	-0.85/-1.07	-0.68/-1.56	-1.94/-1.30	-1.08/-0.79	-3.18/-3.53	-5.04/-3.59	-4.08/-3.72	-7.60/-6.73
Θ(45°)	-4.31/-5.57	-5.65/-5.34	-6.48/-7.40	-8.69/-4.15	-6.21/-6.91	-3.90/-6.68	-7.96/-6.33	-7.23/-7.10	-7.92/-7.45	-6.56/-5.59	-7.35/-5.24	-5.06/-8.98	-4.91/-8.05	-3.14/-5.60	-6.25/-7.97	-7.15/-5.03	-4.71/-5.86	-7.88/-9.79	-10.85/-9.63	-7.80/-4.97	-3.98/-5.89	-6.84/-9.41	-6.05/-6.77	-8.89/-5.43
Θ(52.5°)	-8.40/-7.79	-3.46/-3.16	-4.17/-3.87	-5.99/-4.37	-3.57/-5.22	-7.36/-6.45	-9.60/-7.01	-6.87/-5.18	-3.64/-4.74	-3.26/-5.76	-5.84/-5.51	-6.76/-3.63	-6.31/-5.29	-3.45/-5.31	-5.54/-3.69	-4.29/-4.24	-6.36/-3.69	-2.26/-1.96	-1.63/-2.05	-1.69/-1.87	-3.08/-4.41	-3.63/-2.95	-3.39/-3.09	-5.45/-4.90
Θ(60°)	-3.70/-3.36	-8.06/-5.07	-3.28/-2.03	-5.11/-2.64	-2.02/-1.15	-1.42/-3.29	-3.61/-1.87	-1.02/-0.91	-0.34/-1.13	-1.92/-4.59	-2.23/-3.33	-1.89/-5.76	-0.48/-3.14	-0.37/-3.53	-1.70/-0.98	-0.62/-0.59	-1.21/-0.74	0.38/-0.18	-0.84/-0.84	-1.68/-2.81	-3.42/-3.76	-4.53/-3.94	-6.23/-4.03	-2.54/-2.32
Θ(67.5°)	-3.64/-3.29	-3.30/-7.48	-5.29/-4.98	-4.23/-2.66	-4.85/-9.05	0.52/-1.64	-0.32/-0.13	0.04/-0.79	-0.50/-2.19	-3.70/-3.29	-3.25/-2.96	-4.33/-2.71	-4.98/-2.74	-3.26/-2.68	-2.43/-1.0	-2.86/-1.33	0.01/-0.68	0.15/-1.57	-1.23/-1.19	-0.19/-0.56	-0.07/-1.89	-3.46/-4.54	-5.18/-6.64	-6.17/-4.94
Θ(75°)	-6.62/-4.40	-3.85/-4.66	-3.29/-3.07	-2.70/-2.92	-2.14/-5.20	-2.38/-1.92	-0.93/-1.04	-1.39/-3.24	-3.01/-4.28	-1.88/-2.61	-1.81/-3.76	-1.04/-3.95	-2.58/-0.97	-1.33/-2.17	-1.56/-3.62	-1.02/-2.89	-3.82/-5.82	-5.20/-1.46	-3.05/-4.88	-8.31/-3.00	-3.65/-3.33	-4.13/-5.82	-5.35/-2.30	-4.52/-5.86
Θ(82.5°)	-5.24/-3.13	-4.56/-6.92	-3.50/-2.17	-0.57/-0.83	-0.41/-1.86	-2.19/-2.98	-4.57/-3.71	-1.05/-0.68	-0.09/-0.48	0.97/-0.91	-3.30/-0.93	0.03/-3.50	-2.37/-1.96	-1.72/-2.28	0.94/-0.19	0.39/-0.70	0.46/-1.27	-0.42/-0.33	-0.91/-1.20	-2.91/-1.01	-1.70/-7.89	-4.30/-3.38	-4.87/-4.57	-1.44/-5.09
Θ(90°)	-7.83/-7.34	-7.40/-4.81	-5.24/-4.86	-3.71/-3.24	-2.13/-2.15	-2.26/-0.10	-0.63/-0.36	-0.49/-0.14	-1.05/-1.31	-3.34/-2.15	-4.53/-3.06	-2.79/-5.83	-5.77/-2.21	-1.88/-4.54	-2.51/-3.80	-7.73/-2.05	-4.09/-1.19	-6.11/-2.30	0.03/-0.29	-0.24/-1.82	-1.34/-6.91	-6.17/-7.00	-7.98/-9.04	-4.19/-7.87
Θ(97.5°)	-4.50/-7.14	-6.49/-9.12	-5.43/-3.45	-3.48/-2.30	-2.61/-3.50	-4.91/-1.24	0.48/-0.05	-2.08/-1.69	-1.43/-1.48	-3.20/-3.18	-4.50/-7.01	-0.58/-4.61	-2.33/-1.05	-5.18/-5.44	-2.48/-2.43	-1.520/-35	-2.79/-6.72	-12.83/-3.67	-1.56/-2.73	-5.61/-1.64	-2.89/-9.09	-11.35/-10.23	-8.32/-9.84	-6.83/-7.66
Θ(105°)	-8.55/-6.24	-5.05/-11.03	-11.39/-4.85	-1.70/-0.53	-2.48/-3.37	-3.32/-3.06	-2.81/-3.99	-3.11/-1.38	-3.42/-0.56	-3.77/-1.06	-5.86/-9.53	-1.40/-4.28	-7.41/-5.34	-4.32/-9.29	-4.70/-3.59	-7.64/-6.16	-8.59/-6.20	-7.37/-7.36	-8.47/-6.89	-5.81/-5.15	-7.79/-12.54	-14.52/-8.97	-8.96/-10.62	-10.20/-8.87
Θ(112.5°)	-13.28/-15.32	-8.62/-12.22	-11.69/-8.38	-5.73/-6.45	-4.89/-7.44	-4.57/-1.95	-2.26/-5.18	-6.86/-3.95	-7.31/-6.05	-9.67/-9.39	-7.27/-8.80	-10.21/-11.47	-6.79/-4.77	-7.23/-12.38	-10.35/-13.43	-8.13/-6.79	-7.05/-10.74	-15.36/-13.42	-6.74/-7.77	-15.08/-11.69	-13.31/-12.45	-13.09/-12.56	-13.60/-15.05	-14.12/-14.56
Θ(120°)	-10.26/-11.52	-15.78/-13.91	-9.55/-9.92	-2.86/-4.03	-4.15/-4.39	-4.93/-8.03	-6.74/-6.06	-7.24/-8.65	-3.15/-4.11	-3.73/-3.07	-5.41/-11.38	-8.11/-6.44	-4.92/-5.32	-8.21/-7.90	-6.61/-6.16	-4.17/-5.29	-6.80/-6.66	-2.80/-1.84	-6.82/-12.75	-12.92/-14.92	-12.97/-7.61	-10.56/-10.27	-16.07/-14.26	-10.64/-13.23
Θ(127.5°)	-7.00/-5.82	-9.95/-8.45	-14.64/-6.87	-3.52/-2.91	-2.92/-3.05	-3.23/-2.92	-3.00/-5.80	-5.66/-5.69	-5.45/-3.90	-4.10/-5.56	-7.96/-7.46	-6.67/-5.44	-10.85/-9.83	-11.29/-11.53	-6.97/-7.50	-5.43/-7.07	-6.33/-5.30	-6.32/-13.01	-12.80/-9.26	-9.05/-9.72	-13.00/-14.59	-12.53/-14.34	-12.36/-15.76	-14.11/-9.70
Θ(135°)	-12.38/-1.74	-5.72/-8.40	-10.91/-11.50	-13.02/-8.85	-6.95/-6.44	-8.00/-8.46	-7.88/-8.76	-10.71/-11.47	-10.59/-9.86	-8.34/-9.44	-10.63/-9.68	-10.44/-14.25	-14.54/-15.44	-11.11/-12.18	-12.48/-10.00	-6.69/-8.39	-8.55/-11.45	-14.42/-13.84	-7.81/-11.45	-11.15/-10.93	-15.53/-15.70	-12.88/-12.69	-11.78/-14.52	-10.57/-12.32
Θ(142.5°)	-11.88/-10.94	-13.84/-12.89	-13.81/-10.11	-8.24/-5.17	-5.16/-4.46	-9.18/-13.47	-13.55/-12.03	-9.91/-10.40	-10.67/-9.80	-7.92/-9.81	-10.58/-13.16	-9.61/-15.71	-14.76/-10.20	-11.11/-12.34	-7.77/-6.74	-6.18/-8.06	-9.76/-13.68	-10.98/-9.59	-7.46/-11.64	-15.43/-14.17	-15.64/-15.39	-11.22/-10.12	-12.13/-12.66	-14.66/-9.99
Θ(150°)	-4.30/-4.54	-7.60/-10.00	-14.60/-7.84	-7.07/-8.14	-4.58/-3.36	-3.83/-5.44	-7.53/-6.94	-5.25/-5.10	-4.64/-4.85	-4.09/-4.66	-7.41/-7.62	-8.62/-8.40	-9.09/-10.53	-5.44/-2.97	-4.95/-5.72	-8.81/-8.66	-8.87/-8.55	-6.90/-8.10	-6.90/-7.63	-11.96/-13.24	-12.43/-10.30	-7.52/-7.77	-9.32/-9.63	-6.39/-5.84
Θ(157.5°)	-3.08/-2.65	-3.88/-6.07	-7.71/-6.98	-5.64/-3.16	-2.92/-4.26	-5.79/-4.91	-4.44/-4.33	-5.41/-4.77	-4.52/-4.25	-3.80/-4.59	-5.33/-7.83	-6.01/-5.56	-6.20/-3.40	-2.67/-5.93	-9.67/-5.36	-4.97/-5.83	-7.13/-7.73	-7.99/-9.94	-14.11/-14.43	-12.84/-8.35	-7.52/-5.25	-6.98/-8.59	-7.47/-5.60	-5.07/-4.78
Θ(165°)	-4.67/-3.69	-3.66/-3.35	-3.83/-5.00	-5.22/-5.79	-4.72/-4.38	-4.21/-5.08	-4.87/-5.23	-4.63/-4.71	-4.85/-5.18	-6.12/-5.77	-5.16/-5.69	-7.21/-6.31	-4.51/-6.09	-9.41/-8.09	-6.51/-7.28	-8.38/-8.00	-8.10/-10.05	-13.80/-14.12	-9.37/-6.98	-5.67/-6.21	-7.56/-8.01	-8.77/-7.17	-5.92/-5.50	-5.17/-4.60
Θ(172.5°)	-5.18/-4.54	-4.84/-4.66	-4.46/-4.26	-4.28/-4.64	-4.91/-4.16	-3.90/-3.21	-3.16/-3.52	-4.04/-4.13	-4.48/-4.72	-5.33/-5.84	-7.50/-5.68	-5.80/-6.72	-7.87/-9.11	-9.07/-10.76	-13.63/-14.52	-12.02/-10.62	-10.52/-14.43	-12.22/-12.30	-9.04/-7.75	-9.63/-10.66	-9.31/-9.84	-7.48/-7.46	-6.24/-6.16	-6.10/-5.23
Θ(180°)	-7.20/-7.34	-7.71/-7.14	-6.97/-6.55	-7.05/-7.54	-7.15/-7.64	-8.22/-8.98	-9.02/-9.26	-7.99/-7.87	-8.25/-8.63	-8.26/-8.55	-7.30/-6.18	-6.92/-7.96	-12.11/-15.10	-14.49/-12.22	-11.92/-8.93	-7.80/-7.69	-8.76/-13.59	-9.15/-7.23	-7.91/-9.06	-9.02/-8.21	-8.13/-8.43	-9.03/-8.26	-8.61/-8.48	-8.05/-7.79
Freq(Hz)	2.45GHz	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°)	-9.43/-9.29	-8.89/-8.42	-8.25/-8.50	-9.06/-8.76	-8.33/-8.10	-8.60/-9.72	-10.87/-8.40	-7.57/-7.45	-9.06/-10.06	-8.55/-7.11	-6.80/-7.10	-7.64/-8.31	-8.54/-8.76	-9.10/-9.42	-9.10/-6.68	-7.91/-7.30	-7.67/-7.69	-7.87/-7.50	-7.20/-7.47	-7.48/-7.29	-6.88/-6.36	-6.06/-5.92	-5.86/-6.23	-6.71/-7.36
Θ(7.5°)	-9.25/-9.30	-9.73/-9.86	-9.49/-9.17	-9.19/-9.24	-8.92/-8.32	-7.70/-7.66	-8.52/-8.54	-7.47/-7.27	-8.89/-10.89	-9.66/-7.49	-6.59/-6.34	-5.14/-5.26	-5.25/-5.14	-5.17/-5.19	-5.45/-5.04	-5.29/-5.41	-5.79/-5.69	-5.32/-5.11	-5.46/-6.08	-6.39/-6.05	-5.93/-5.08	-5.31/-6.13	-6.86/-7.19	
Θ(15°)	-7.39/-7.48	-8.10/-8.57	-8.22/-7.65	-7.35/-7.15	-6.79/-6.29	-5.81/-5.64	-5.94/-5.78	-5.18/-5.08	-5.94/-7.46	-8.05/-6.90	-5.69/-5.39	-5.84/-6.40	-6.64/-6.43	-5.79/-4.38	-3.76/-3.44	-3.53/-3.77	-4.03/-4.45	-4.99/-5.48	-5.32/-4.69	-4.44/-4.72	-5.25/-5.39	-4.89/-4.30	-4.20/-4.74	-5.53/-6.04
Θ(22.5°)	-5.68/-6.41	-6.61/-7.01	-7.32/-7.69	-8.16/-8.08	-7.11/-5.91	-5.03/-4.82	-5.26/-5.13	-4.63/-4.43	-4.90/-5.41	-5.23/-4.33	-3.35/-2.80	-2.94/-3.36	-3.69/-3.59	-3.33/-2.78	-2.36/-3.20	-2.66/-3.14	-3.75/-4.40	-5.18/-6.14	-6.19/-5.45	-4.73/-5.44	-4.97/-5.48	-5.53/-4.99	-4.44/-4.49	-5.08/-5.79
Θ(30°)	-6.81/-6.53	-6.22/-6.58	-7.61/-9.62	-11.92/-11.96	-8.78/-6.02	-4.29/-3.84	-4.51/-5.41	-6.06/-6.41	-7.48/-8.66	-8.24/-5.76	-5.14/-3.63	-4.08/-5.07	-5.89/-5.85	-4.75/-3.04	-2.31/-2.12	-2.43/-2.91	-3.48/-3.77	-3.95/-4.10	-7.76/-3.34	-3.03/-2.92	-3.17/-3.57	-4.08/-4.29	-3.89/-3.63	-4.08/-5.28
Θ(37.5°)	-5.26/-6.05	-6.72/-7.50	-8.32/-10.05	-11.84/-11.27	-7.50/-5.45	-4.40/-4.18	-4.49/-4.96	-5.61/-5.92	-7.57/-11.09	-14.12/-8.82	-5.67/-4.86	-5.26/-5.20	-4.83/-4.94	-4.42/-3.10	-2.43/-2.88	-4.29/-6.18	-7.51/-7.26	-6.28/-5.41	-4.56/-3.98	-3.61/-3.04	-2.32/-1.63	-1.59/-2.19	-2.74/-2.94	-3.13/-3.70
Θ(45°)	-4.36/-5.52	-7.55/-8.40	-7.51/-8.44	-12.60/-12.77	-7.71/-5.81	-5.24/-4.66	-3.74/-3.40	-3.38/-4.61	-6.94/-10.12	-12.51/-10.94	-7.56/-6.85	-7.27/-4.97	-3.29/-4.13	-5.74/-4.29	-2.89/-3.14	-4.34/-4.82	-4.20/-3.00	-2.10/-1.71	-1.46/-1.52	-2.23/-2.78	-1.91/-2.52	0.17/-0.07	-0.74/-1.45	-2.29/-3.02
Θ(52.5°)	-4.41/-5.65	-7.83/-7.24	-5.31/-6.07	-10.22/-10.49	-7.19/-6.45	-5.48/-3.79	-2.30/-1.57	-2.28/-4.94	-10.13/-9.24	-6.96/-3.37	-5.07/-3.63	-3.41/-2.55	-1.41/-2.36	-4.85/-3.16	-0.92/-0.21	-0.140/-0.08	0.761/-4.7	1.851/-8.8	1.921/-1.2	0.691/-2.7	-2.76/-2.42	-1.33/-0.50	-0.05/-0.27	-1.62/-2.79
Θ(60°)	-2.93/-3.76	-5.47/-5.39	-4.15/-5.07	-6.85/-5.59	-4.63/-5.13	-4.18/-1.90	-0.78/-0.84	-2.17/-5.18	-11.03/-8.04	-4.28/-3.87	-3.65/-2.04	-1.89/-2.56	-1.99/-1.93	-2.90/-2.45	-1.05/-0.50	-0.30/-0.32	-0.180/-3.4	0.710/-75	0.57/-0.84	-2.32/-3.78	-4.87/-3.69	-1.78/-0.79	-1.16/-1.99	
Θ(67.5°)	-1.40/-1.24	-2.13/-3.53	-3.95/-5.40	-3.61/-2.41	-2.81/-3.53	-2.16/-0.50	-1.02/-0.61	-1.70/-4.06	-9.00/-7.54	-3.30/-2.92	-2.72/-0.54	-0.14/-1.68	-1.4											



Antenna Pattern_2.4GHz, 5GHz U-NII 1~3

Appendix C

Θ(52.5°)	-4.53/-4.46	-3.98/-5.23	-4.43/-2.54	-3.05/-6.00	-3.28/-4.54	-3.68/-3.40	-4.66/-4.74	-4.33/-2.46	-3.64/-3.79	-4.02/-5.55	-4.70/-6.26	-4.83/-5.26	-6.89/-4.44	-4.11/-5.23	-4.18/-5.40	-5.86/-4.17	-5.56/-6.97	-5.40/-5.01	-4.55/-2.59	-6.62/-5.48	-6.73/-4.55	-5.13/-1.76	-3.20/-3.82	-3.56/-3.78
Θ(60°)	-6.37/-2.74	-4.68/-2.01	-3.90/-2.60	-0.10/-4.08	-1.40/-2.92	-2.37/-4.62	-5.44/-2.85	-6.84/-2.56	-2.11/-2.67	-2.92/-2.63	-8.16/-3.46	-3.70/-4.65	-4.46/-2.77	-3.12/-4.71	-2.68/-3.49	-0.17/-1.05	1.60/-3.12	2.75/-2.75	2.42/-2.09	1.54/-1.00	0.10/-1.04	-1.94/-4.58	-5.12/-1.28	-4.75/-3.39
Θ(67.5°)	-6.76/-3.72	-1.48/-4.62	-2.94/-3.85	-0.24/-2.28	-1.53/-1.58	-1.27/-0.93	-0.90/-0.66	-3.88/-2.42	-2.61/-1.71	-1.77/-4.11	-5.11/-4.47	-5.84/-2.69	-3.10/-4.53	-5.80/-3.33	-3.30/-3.59	-2.80/-4.75	-3.07/-5.24	-3.37/-2.03	-1.63/-3.27	-3.67/-3.05	-0.84/-2.55	-3.36/-3.64	-3.07/-8.91	-4.82/-5.84
Θ(75°)	-4.40/-5.19	-1.85/-2.36	-2.43/-2.85	-2.61/-0.73	-1.00/-1.95	-2.37/-1.21	-1.04/-0.90	-3.31/-3.88	-5.31/-0.88	-3.73/-3.68	-3.41/-3.16	-7.67/-3.09	-5.13/-7.59	-2.85/-2.54	-3.18/-1.09	-1.52/-0.55	-1.06/-1.75	-2.09/-3.13	-1.10/-0.10	-2.12/-3.44	-1.81/-3.88	-2.25/-4.43	-4.16/-5.12	-4.76/-4.72
Θ(82.5°)	-4.25/-0.74	-2.88/-0.72	-2.43/-0.39	-2.39/-0.89	-0.50/-0.66	-0.28/-1.38	-2.04/-1.52	-1.56/-1.08	-2.78/-0.28	0.93/-1.06	-3.78/-2.12	-7.82/-2.46	-3.92/-3.14	0.71/-1.44	-6.56/-3.39	-2.90/-0.66	-3.20/-0.98	-3.10/-1.43	-1.87/-9.11	-2.84/-5.14	-0.44/-4.04	-1.82/-6.03	-3.23/-3.00	-1.65/-2.53
Θ(90°)	-2.01/-4.31	-0.47/-0.05	-1.12/-3.05	-1.81/-1.92	0.30/-1.51	0.57/-1.69	-1.30/-0.72	1.24/-1.36	0.82/-1.67	1.69/-1.16	-2.48/-2.63	-5.11/-4.38	-1.72/-2.17	-3.30/-4.69	-0.19/-1.37	-4.88/-7.16	-10.76/-2.79	-2.72/-1.69	-7.83/-1.54	-2.55/-4.43	-2.00/-6.59	-4.82/-5.01	-5.28/-1.66	
Θ(97.5°)	-4.93/-3.33	-2.12/-1.08	-3.72/-2.08	-4.56/-1.95	-4.41/-0.89	-0.46/-4.38	-5.07/-1.84	0.85/-3.01	-1.64/-0.64	-0.98/-0.91	-6.25/-2.33	-6.86/-2.71	-1.77/-8.24	-4.37/-5.54	-10.02/-7.47	-3.88/-2.85	-12.02/-5.55	-3.96/-1.16	-2.26/-3.98	-4.79/-7.82	-4.77/-9.88	-8.15/-11.76	-6.08/-5.94	-2.75/-6.07
Θ(105°)	-8.82/-2.54	-3.05/-0.88	-3.90/-3.14	-3.82/-1.88	-3.86/-0.87	-0.91/-1.40	0.11/0.03	1.56/-1.07	-4.84/-2.25	1.10/-2.11	-3.39/-4.38	-6.45/-6.35	-3.49/-11.39	-9.36/-9.22	-4.14/-16.69	-5.35/-13.06	-15.32/-4.97	-5.00/-3.82	-10.17/-2.58	-6.92/-5.23	-9.39/-9.06	-11.28/-7.40	-7.58/-7.89	-0.12/-3.99
Θ(112.5°)	-7.58/-3.44	-5.96/-3.04	-5.27/-2.56	-4.51/-1.78	-0.75/-0.21	-1.81/-2.89	-1.84/-2.50	-0.38/-1.86	-2.39/-1.40	-0.14/-1.37	-5.31/-3.90	-10.23/-5.57	-12.48/-10.31	-9.66/-5.39	-3.50/-8.65	-2.86/-3.05	-7.04/-4.44	-6.50/-7.30	-12.72/-9.22	-6.02/-3.04	-6.09/-8.32	-9.08/-10.11	-7.30/-7.65	-4.00/-2.97
Θ(120°)	-9.44/-14.09	7.32/-8.51	7.97/-10.22	-6.51/-11.08	-4.42/-4.11	-5.38/-8.51	-6.50/-6.00	4.47/-6.22	-3.69/-4.98	-3.80/-6.10	-5.88/-6.92	-9.89/-14.55	-9.10/-14.98	-7.48/-7.37	-5.57/-6.61	0.06/-8.11	-3.86/-8.30	-9.41/-6.84	-5.21/-9.72	-8.74/-6.19	-3.66/-9.58	-13.38/-6.37	-9.50/-8.88	-6.96/-8.09
Θ(127.5°)	-8.85/-15.47	-14.82/-10.86	-14.85/-11.23	-14.50/-10.89	-9.63/-9.51	-10.12/-11.39	-10.67/-10.70	-9.76/-7.53	-8.53/-12.10	-13.49/-10.36	-12.34/-10.58	-11.57/-15.05	-11.71/-11.18	-11.01/-14.38	-10.27/-6.26	-6.86/-3.81	-16.04/-9.90	-4.57/-6.55	-12.33/-7.69	-7.52/-9.42	-9.28/-8.74	-13.51/-7.23	-6.15/-9.82	
Θ(135°)	-8.19/-13.50	-10.16/-10.59	-12.97/-9.87	-11.58/-12.18	-7.33/-4.83	-9.74/-11.80	-8.20/-7.32	-9.01/-14.40	-11.31/-11.16	-10.93/-10.84	-11.10/-11.20	-14.77/-8.27	-13.38/-11.00	-7.76/-6.69	-11.77/-11.75	-8.89/-14.25	-10.99/-8.62	-11.72/-12.88	-11.42/-7.97	-9.25/-13.66	-11.49/-13.47	-10.49/-9.41	-8.67/-11.41	
Θ(142.5°)	-5.00/-7.37	-9.66/-9.16	-8.56/-6.52	-6.67/-9.80	-7.71/-6.30	-7.58/-9.05	-13.06/-15.24	-11.90/-7.14	-4.42/-4.38	-5.84/-9.93	-12.49/-8.87	-12.98/-14.00	-6.43/-3.45	-4.95/-9.42	-11.39/-14.60	-11.53/-11.02	-13.84/-13.56	-9.48/-6.42	-4.94/-5.91	-7.30/-6.75	-7.76/-7.59	-8.20/-5.08	-4.51/-9.12	-10.65/-5.94
Θ(150°)	-5.48/-5.55	-6.35/-4.48	-5.37/-8.01	-6.21/-6.51	-4.34/-3.45	-3.69/-6.35	-3.17/-3.25	-2.61/-2.51	-2.19/-4.21	-6.64/-8.07	-6.50/-10.35	-8.39/-6.16	-8.14/-7.66	-6.79/-7.19	-8.18/-10.26	-11.61/-13.12	-10.07/-10.47	-13.41/-15.59	-13.26/-11.00	-8.31/-6.22	-5.67/-5.75	-3.73/-1.87	-2.79/-7.33	-8.66/-6.81
Θ(157.5°)	-1.83/-1.67	-4.95/-10.17	-5.70/-2.23	-1.96/-2.09	-3.79/-5.95	-6.79/-8.34	-7.86/-6.79	-5.69/-5.34	-5.14/-4.35	-5.20/-6.02	-5.06/-4.54	-4.79/-6.87	-8.85/-8.20	-6.83/-9.12	-7.57/-8.16	-7.88/-8.16	-9.07/-8.54	-7.95/-8.29	-8.29/-8.13	-6.42/-5.80	-5.31/-5.56	-11.40/-13.77	-6.74/-3.84	
Θ(165°)	-2.72/-1.76	-2.35/-4.20	-5.97/-5.38	-4.66/-5.40	-5.14/-3.84	-3.88/-3.81	-2.75/-3.47	-3.06/-3.70	-4.15/-4.90	-4.29/-3.97	-5.33/-6.66	-6.66/-6.13	-6.21/-8.59	-7.97/-7.27	-7.84/-11.14	-13.25/-11.81	-10.03/-10.96	-8.78/-7.05	-6.66/-6.42	-7.85/-8.97	-9.45/-8.45	-8.40/-10.54	-11.68/-10.92	-9.78/-6.16
Θ(172.5°)	-10.71/-9.14	-7.65/-7.55	-6.97/-8.87	-5.45/-5.67	-5.88/-6.08	-6.12/-5.27	-5.60/-5.80	-5.38/-5.23	-3.71/-2.83	-4.02/-6.19	-7.91/-6.82	-7.10/-8.42	-11.05/-15.93	-13.26/-11.82	-13.65/-14.37	-11.24/-7.39	-6.71/-7.43	-9.76/-10.29	-12.06/-14.23	-15.33/-15.52	-15.79/-14.47	-14.92/-14.85	-12.79/-12.78	-14.47/-14.41
Θ(180°)	-12.38/-11.58	-12.84/-13.11	-13.09/-13.94	-13.79/-12.72	-12.56/-11.77	-10.15/-6.64	-9.81/-7.94	-8.01/-7.92	-8.49/-11.27	-14.46/-13.62	-9.57/-8.87	-11.52/-13.89	-15.14/-15.47	-13.01/-12.15	-11.77/-13.54	-14.59/-12.59	-11.58/-12.90	-13.98/-14.45	-15.55/-15.01	-14.71/-15.01	-13.88/-13.69	-14.55/-15.16	-15.34/-15.92	-16.12/-14.27
Freq(Hz)	5.785GPol.	TotalAnt.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-14.45/-16.06	-15.26/-15.15	-15.20/-15.76	-15.01/-15.78	-14.80/-14.91	-15.37/-14.72	-15.29/-16.11	-15.16/-15.18	-15.12/-15.39	-15.30/-15.32	-15.35/-15.15	-15.59/-14.96	-15.77/-15.18	-15.76/-15.35	-15.72/-15.19	-16.01/-15.18	-15.30/-15.61	-15.63/-15.31	-15.73/-15.34	-15.02/-15.42	-15.38/-15.60	-16.07/-15.75		
Θ(7.5°)	-11.92/-11.88	-12.86/-12.66	-12.74/-13.85	-12.99/-12.97	-13.79/-12.60	-11.57/-11.69	-10.82/-10.43	-10.95/-10.85	-12.24/-12.83	-13.57/-14.85	-15.51/-14.64	-14.08/-13.37	-13.82/-14.18	-14.75/-13.94	-13.92/-12.97	-12.53/-14.29	-14.85/-14.51	-14.76/-14.84	-15.65/-15.28	-15.32/-15.48	-15.53/-15.26	-13.33/-13.35	-12.90/-13.78	-15.53/-14.38
Θ(15°)	-14.10/-9.23	-7.76/-7.52	-8.46/-10.68	-12.58/-11.66	-10.89/-12.72	-12.38/-12.79	-11.97/-11.49	-12.39/-12.98	-14.04/-12.92	-10.85/-10.25	-6.35/-10.95	-12.97/-12.40	-13.75/-12.91	-12.74/-11.63	-10.61/-9.37	-8.39/-9.34	-8.23/-8.29	-9.82/-10.85	-11.69/-13.00	-13.07/-15.08	-15.12/-15.23	-8.55/-12.33	-12.71/-10.38	-13.31/-15.41
Θ(22.5°)	-9.14/-13.21	-9.96/-6.56	-7.25/-9.64	-12.24/-8.77	-6.24/-4.98	-4.38/-6.31	-8.12/-9.37	-7.06/-5.65	-6.28/-7.00	-4.88/-3.17	-4.63/-6.33	-8.02/-11.44	-12.44/-10.87	-8.07/-5.43	-7.11/-10.88	-13.89/-11.41	-9.01/-8.17	-6.98/-5.95	-5.34/-3.90	-3.68/-4.20	-4.16/-6.08	-8.42/-9.26	-7.27/-6.66	-7.32/-6.85
Θ(30°)	-2.80/-4.41	-11.37/-8.94	-4.83/-6.86	-10.01/-6.73	-6.07/-7.08	-8.24/-9.30	-7.13/-6.57	-9.34/-7.15	-5.92/-5.02	-4.50/-5.26	-8.36/-4.74	-3.37/-5.77	-7.45/-9.25	-7.49/-6.85	-6.85/-8.40	-7.31/-6.88	-3.45/-5.48	-5.69/-4.54	-5.26/-5.45	-5.94/-5.18	-6.06/-6.38	-7.06/-8.74	-7.09/-5.84	-5.22/-5.53
Θ(37.5°)	-1.75/-4.76	-2.24/-6.42	-8.39/-7.32	-7.15/-6.49	-4.49/-4.98	-5.18/-2.79	-1.84/-4.04	-6.36/-3.64	-6.61/-4.09	-2.84/-3.97	-7.75/-3.88	-7.93/-4.52	-3.35/-8.29	-7.95/-3.84	-1.78/-4.34	-3.10/-1.54	-1.95/-2.25	-2.07/-2.72	-3.50/-4.16	-3.96/-4.45	-3.87/-2.73	-3.55/-4.45	-4.55/-7.77	-5.62/-6.64
Θ(45°)	-7.06/-5.24	-6.80/-4.38	-8.48/-5.83	-8.80/-7.54	-7.86/-7.56	-7.00/-7.44	-7.03/-7.91	-6.39/-6.85	-4.78/-3.02	-2.51/-4.52	-4.57/-5.75	-3.83/-5.89	-6.51/-7.75	-3.48/-5.23	-5.15/-5.43	-3.66/-3.84	-3.47/-3.48	-1.89/-1.61	-3.84/-4.75	-4.50/-3.85	-4.19/-4.97	-4.75/-5.50	-5.14/-5.29	-5.53/-7.20
Θ(52.5°)	-4.47/-5.96	-4.22/-4.40	-6.43/-4.83	-8.12/-1.56	-7.17/-6.33	-8.35/-4.57	-4.28/-5.38	-8.14/-6.32	-3.34/-2.40	-4.26/-2.62	-5.96/-7.14	-4.22/-6.40	-5.17/-7.54	-3.88/-5.14	-3.36/-3.51	-6.62/-5.62	-9.49/-7.97	-10.50/-11.33	-5.26/-4.43	-4.68/-6.60	-5.99/-5.23	-3.48/-4.87	-6.25/-3.12	-3.63/-3.77
Θ(60°)	-2.01/-6.00	-1.68/-4.49	-5.73/-1.01	-8.90/-4.05	-2.47/-2.26	-4.21/-1.28	0.92/0.89	-1.05/-2.73	-1.94/-2.00	-1.13/-1.61	-4.62/-0.89	-1.29/-5.04	-3.27/-2.65	-1.86/-3.10	-4.52/-4.23	-2.57/-0.69	1.04/2.09	2.42/-1.46	0.32/-1.25	1.79/-0.09	-1.16/-1.81	-1.33/-1.71	-2.01/-2.45	-5.33/-4.00
Θ(67.5°)	-5.41/-0.79	4.56/-1.04	-4.85/-2.65	-5.58/-1.34	-0.19/-1.42	-2.80/-2.00	0.10/-1.42	-0.89/-2.09	0.50/-2.68	-1.53/-2.63	-6.49/-1.04	-3.00/-3.33	-2.47/-2.00	-3.07/-6.66	-3.90/-3.22	-5.00/-2.29	-1.43/-3.10	-3.48/-2.87	-1.60/-1.90	-1.44/-2.93	-2.08/-1.66	-2.24/-0.43	-0.98/-2.22	-2.53/-3.30
Θ(75°)	-4.45/-3.60	-1.22/-3.51	-2.25/-2.96	-0.96/-1.49	-1.46/-0.40	-1.32/-1.53	-1.11/-1.02	-0.86/-0.52	-2.78/-2.33	0.13/-4.48	-4.25/-2.48	-3.27/-5.31	-1.05/-7.00	-4.82/-4.21	-4.15/-0.63	-1.05/-0.01	0.28/0.51	-0.31/-1.22	-0.76/-0.28	-2.45/-1.52	-3.68/-1.34	-1.02/-8.15	-3.52/-6.74	-5.35/-1.86
Θ(82.5°)	-3.28/-2.42	-1.26/-2.13	-0.82/-0.53	-0.76/-1.23	0.84/0.68	-1.71/0.08	0.31/2.16	-0.68/-2.04	-1.72/-1.21	-2.65/-2.23	-2.60/-1.89	-3.70/-3.53	-3.94/-3.38	-1.84/-2.61	-5.86/-3.58	-3.88/-3.02	-4.59/-1.33	-2.90/-5.67	-4.97/-3.35	-3.01/-6.80	-3.66/-6.20	-4.00/-5.16	-1.17/-2.91	-3.66/-3.68
Θ(90°)	-3.86/-0.22	-4.30/-1.36	-1.38/0.78	-2.51/-0.17	-0.58/0.72	0.12/-1.61	0.69/-2.55	1.72/-0.93	-2.35/-2.40	-0.09/-0.85	-3.39/-2.66	-6.50/-3.76	-3.51/-0.84	-3.42/-6.86	-4.14/-4.04	-1.47/-3.13	-5.92/-1.85	-1.95/-3.80	-4.96/-1.86	-2.53/-3.05	-1.74/-2.51	-2.91/-2.77	-6.00/-5.74	-2.29/-1.03
Θ(97.5°)	-1.52/-5.87	-1.11/-4.14	-1.82/-5.66	-3.84/-6.37	-0.94/-0.59	-0.74/-0.51	-1.09/-0.60	-1.00/-0.47	-3.10/-0.72	-1.73/-3.20	-0.57/-8.20	-3.56/-4.63	-1.39/-8.81	-7.58/-4.45	-8.00/-11.06	-8.15/-3.40	-1.05/-2.94	-6.38/-2.30	-3.08/-5.51	-4.83/-3.90	-7.39/-10.03	-9.96/-6.78	-3.44/-6.45	-8.12/-12.59
Θ(105°)	-7.22/-3.88	-5.62/-1.37	-3.41/-2.42	-3.85/-2.52	-1.36/-1.04	-0.43/-2.85	-3.22																	



Antenna Pattern_2.4GHz, 5GHz U-NII 1~3

Appendix C

Θ (105°)	1.71/-0.96	-1.13/-1.23	2.12/-0.58	-0.73/-6.84	-2.79/-5.04	-3.43/-4.01	-4.12/-4.24	-3.10/-5.27	-6.46/-12.04	-5.59/-1.35	-3.15/-4.25	-3.74/-7.34	-3.84/-4.61	-6.79/-6.77	-9.87/-7.06	-2.91/-8.57	-14.79/-10.29	-6.68/-6.32	-6.01/-6.01	-6.89/-6.05	-5.62/-3.11	0.12/1.14	-1.12/-5.31	-0.55/-1.28
Θ (112.5°)	-2.32/-5.52	-2.11/-3.83	-0.49/-1.08	-2.68/-6.34	-6.04/-5.15	-4.43/-3.55	-6.47/-3.97	-3.58/-7.31	-7.50/-4.41	-5.11/-1.84	-3.50/-3.35	-4.21/-6.09	-3.49/-6.14	-6.28/-5.27	-7.84/-11.36	-4.72/-9.23	-9.81/-8.20	-6.68/-5.19	-8.77/-6.09	-8.89/-7.78	-4.80/-5.64	-3.40/-3.63	-3.53/-3.94	-0.93/-1.26
Θ (120°)	-6.05/-6.48	-9.33/-6.00	-3.08/-4.04	-6.75/-9.61	-11.25/-5.92	-6.99/-9.34	-7.99/-7.78	-7.91/-7.80	-6.70/-6.49	-7.89/-7.28	-6.94/-4.55	-6.79/-8.68	-11.63/-11.97	-11.85/-10.08	-9.22/-8.30	-4.04/-10.50	-12.56/-6.20	-9.84/-10.55	-11.28/-12.56	-12.41/-6.90	-4.74/-7.78	-9.07/-6.65	-6.96/-9.55	-7.62/-4.75
Θ (127.5°)	-6.73/-7.92	-8.65/-9.53	-14.01/-10.27	-7.38/-7.19	-11.30/-13.13	-9.96/-10.50	-14.49/-10.70	-10.48/-15.50	-11.92/-8.81	-13.67/-11.17	-8.59/-9.91	-3.72/-5.56	-4.94/-6.26	-6.32/-9.02	-15.08/-8.14	-15.10/-8.96	-15.39/-11.82	-9.31/-11.37	-15.52/-12.06	-14.06/-7.83	-4.50/-4.85	-11.68/-7.56	-9.78/-6.56	-7.73/-9.18
Θ (135°)	-11.06/-12.31	-11.77/-9.64	-7.36/-3.87	-5.17/-7.69	-9.45/-11.68	-11.82/-12.35	-11.57/-9.03	-6.71/-13.02	-11.72/-6.00	-8.19/-12.35	-10.10/-13.02	-8.65/-13.02	-12.67/-11.96	-15.03/-12.86	-9.01/-8.27	-11.00/-12.11	-13.23/-16.27	-11.87/-6.74	-8.80/-10.74	-8.66/-11.99	-10.10/-11.71	-4.54/-4.46	-6.93/-12.47	-12.05/-12.58
Θ (142.5°)	-2.47/-2.99	-4.12/-5.10	-6.80/-9.72	-11.93/-11.17	-7.27/-8.64	-7.20/-12.36	-8.27/-2.47	-7.31/-10.29	-12.61/-9.50	-5.94/-8.58	-12.82/-14.15	-8.39/-9.46	-12.48/-14.76	-13.05/-8.67	-5.94/-9.30	-12.21/-11.40	-15.76/-12.44	-12.01/-8.52	-7.15/-9.54	-13.31/-11.50	-7.14/-7.00	-7.49/-5.12	-4.76/-5.57	-3.79/-3.28
Θ (150°)	-6.15/-7.36	-5.96/-5.51	-4.97/-5.77	-8.66/-7.21	-7.11/-8.98	-7.15/-6.04	-7.83/-8.72	-9.18/-6.33	-6.37/-12.55	-9.29/-8.88	-11.33/-13.45	-12.09/-13.41	-13.99/-13.95	-14.12/-13.90	-11.74/-14.24	-13.42/-15.68	-10.76/-6.22	-5.47/-6.30	-9.11/-12.62	-10.57/-11.16	-12.93/-10.20	-8.46/-6.99	-4.03/-4.04	-5.04/-4.79
Θ (157.5°)	-8.87/-7.43	-8.73/-9.24	-8.73/-7.21	-4.92/-6.24	-11.24/-9.54	-7.95/-11.58	-9.20/-4.97	-3.46/-3.60	-5.52/-12.15	-16.12/-5.55	-6.88/-7.80	-9.13/-8.02	-8.07/-8.53	-10.40/-10.69	-11.60/-11.76	-11.70/-13.44	-10.67/-7.41	-5.73/-6.30	-8.07/-9.86	-6.68/-10.45	-12.29/-11.41	-8.24/-7.54	-4.88/-8.91	-8.55/-10.92
Θ (165°)	-6.11/-6.74	-7.50/-8.34	-9.37/-9.53	-10.27/-8.69	-6.36/-7.07	-7.67/-6.95	-5.70/-6.59	-8.73/-12.04	-14.10/-12.94	-9.95/-7.27	-6.85/-8.06	-9.20/-10.42	-10.24/-9.43	-8.57/-7.59	-7.73/-10.29	-13.72/-13.28	-11.55/-10.96	-10.54/-11.25	-10.88/-10.53	-9.43/-9.20	-9.60/-9.77	-8.77/-6.53	-5.01/-5.20	-5.22/-4.71
Θ (172.5°)	-8.89/-8.49	-7.70/-7.16	-7.10/-7.65	-7.58/-8.72	-10.83/-11.21	-8.86/-7.24	-7.07/-7.54	-8.30/-8.68	-9.59/-9.67	-8.62/-7.40	-7.47/-8.57	-8.54/-9.59	-9.32/-7.85	-8.06/-7.95	-7.92/-9.70	-11.34/-12.70	-13.65/-14.71	-13.81/-11.80	-10.25/-9.47	-8.47/-7.86	-8.13/-8.11	-8.23/-8.67	-9.11/-9.25	-9.08/-9.74
Θ (180°)	-15.11/-15.87	-15.44/-15.32	-15.03/-13.81	-12.77/-12.86	-11.39/-9.87	-10.09/-10.70	-11.96/-13.20	-12.57/-11.25	-11.74/-13.44	-15.14/-15.31	-14.43/-14.96	-13.91/-13.64	-12.58/-12.89	-12.80/-12.09	-13.08/-12.87	-12.33/-13.51	-13.95/-12.76	-11.64/-9.61	-9.03/-8.94	-8.60/-8.47	-9.17/-10.61	-11.44/-12.64	-13.62/-14.06	-14.18/-13.30
Freq(Hz)	5.60Pol.	Total/Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-15.53/-15.37	-15.13/-15.82	-15.96/-15.73	-15.60/-15.18	-15.32/-14.53	-15.59/-14.14	-13.53/-12.72	-12.97/-13.16	-15.22/-15.28	-14.56/-14.92	-13.90/-13.65	-13.42/-13.34	-14.31/-13.28	-13.49/-15.75	-15.61/-15.39	-15.57/-15.05	-14.29/-14.10	-15.82/-15.84	-15.00/-15.79	-15.59/-15.47	-15.81/-15.56	-15.78/-15.31	-16.26/-15.90	-15.66/-15.94
Θ (7.5°)	-9.96/-10.01	-11.08/-11.09	-11.88/-12.09	-11.40/-11.43	-13.44/-12.48	-12.77/-13.69	-15.01/-16.11	-14.19/-13.81	-15.19/-15.06	-15.44/-15.04	-16.06/-14.97	-13.72/-13.63	-12.34/-13.13	-14.61/-12.86	-14.22/-15.89	-14.31/-15.42	-15.67/-15.13	-14.25/-13.63	-12.96/-11.63	-11.26/-11.86	-11.06/-11.00	-9.74/-10.36	-9.63/-10.02	-
Θ (15°)	-10.80/-10.34	-10.65/-9.95	-8.12/-8.12	-7.28/-6.32	-8.26/-11.11	-9.93/-9.39	-9.67/-10.34	-9.83/-9.08	-7.90/-7.16	-6.88/-7.92	-10.31/-11.80	-10.67/-10.91	-10.26/-9.78	-10.50/-9.70	-9.35/-11.05	-10.77/-10.74	-9.60/-9.49	-9.43/-9.26	-10.32/-10.56	-12.31/-12.03	-11.12/-10.26	-8.40/-8.35	-9.84/-10.74	-10.77/-11.20
Θ (22.5°)	-6.29/-5.03	-4.54/-6.86	-8.65/-8.48	-5.83/-4.71	-5.27/-7.21	-8.69/-10.81	-9.78/-5.33	-4.06/-5.40	-8.29/-8.54	-8.12/-7.29	-7.76/-9.74	-11.38/-9.80	-8.98/-8.43	-7.87/-7.50	-9.56/-10.81	-6.01/-6.32	-6.55/-7.14	-8.69/-9.33	-8.74/-8.38	-8.16/-7.56	-8.78/-10.10	-8.81/-9.16	-8.62/-7.00	-
Θ (30°)	-7.46/-7.13	-5.07/-5.02	-5.52/-7.20	-4.59/-6.38	-6.36/-5.74	-6.00/-8.71	-7.86/-4.37	-6.26/-7.95	-6.33/-5.41	-5.96/-7.42	-6.03/-5.61	-10.09/-8.05	-6.90/-6.98	-5.75/-8.22	-7.82/-6.96	-7.76/-8.92	-8.06/-8.25	-7.13/-7.94	-5.70/-4.07	-4.49/-4.43	-5.97/-5.94	-9.20/-7.94	-	-
Θ (37.5°)	-10.44/-8.65	-6.85/-6.43	-7.13/-4.69	-1.61/-4.79	-9.90/-3.36	-5.99/-6.22	-6.49/-6.42	-6.98/-6.79	-11.11/-6.56	-5.22/-3.72	-4.41/-2.44	-1.42/-0.67	-0.96/-2.52	-2.80/-3.54	-3.61/-3.03	-4.72/-7.08	-7.79/-6.65	-6.46/-10.40	-5.95/-8.54	-6.18/-7.57	-8.01/-8.06	-5.38/-4.50	-5.51/-5.51	-5.98/-7.12
Θ (45°)	-6.43/-5.26	-4.62/-4.93	-5.58/-5.05	-4.32/-5.65	-3.65/-6.33	-6.65/-6.33	-5.97/-3.38	-8.21/-3.45	-3.18/-5.03	-4.29/-3.68	-3.80/-3.04	-6.12/-7.98	-4.23/-2.57	-3.96/-6.02	-4.81/-6.51	-4.01/-4.38	-4.68/-5.60	-5.25/-4.79	-10.56/-5.16	-8.85/-6.10	-3.26/-6.60	-3.87/-5.76	-3.52/-2.26	-3.89/-6.47
Θ (52.5°)	-3.57/-2.52	-3.61/-4.05	-4.04/-4.86	-5.39/-3.59	-2.59/-5.43	-2.31/-3.15	-5.82/-3.11	-1.91/-4.60	-4.76/-2.96	-4.55/-8.24	-6.57/-4.91	-7.18/-6.74	-7.98/-9.38	-4.43/-4.01	-4.70/-4.27	-6.75/-5.33	-7.57/-6.76	-5.06/-4.86	-4.43/-4.94	-3.60/-3.68	-2.69/-2.27	-5.63/-5.02	-	-
Θ (60°)	-2.63/-1.31	-1.80/-3.68	-1.12/-3.46	-1.82/-3.00	-4.49/-0.28	-3.10/-2.40	-3.34/-3.11	-5.89/-2.40	-2.40/-0.65	-0.55/-0.82	-1.58/-0.32	0.94/1.36	1.87/2.45	1.83/0.56	0.21/0.73	-1.65/-6.25	-3.06/-6.56	-4.43/-4.67	-6.01/-4.32	-6.11/-5.52	-5.33/-5.23	-1.82/-1.65	-2.10/-1.02	-2.64/-1.37
Θ (67.5°)	-0.67/-1.67	-0.53/-2.06	-0.33/-3.69	-0.49/-5.99	-1.65/0.03	-4.58/-1.58	-6.11/-2.79	-1.70/-1.71	0.16/-2.49	0.04/-1.32	-2.15/-1.81	-3.14/-6.38	-4.80/-3.33	-2.96/-7.77	-7.65/-5.45	-9.25/-8.01	-5.62/-3.49	-3.25/-2.91	-6.31/-4.44	-7.92/-9.42	-1.77/-0.66	-1.62/-2.20	-5.47/-1.19	-
Θ (75°)	-1.14/-1.80	-1.87/-2.47	-2.37/-2.80	-0.20/-6.57	-1.20/-4.71	-2.45/-2.80	-4.36/-1.71	-6.17/-5.09	-3.24/-2.97	-1.36/-0.41	-0.02/-4.21	-1.07/-2.08	1.03/-1.08	-1.35/-0.91	2.42/-0.35	-4.57/-4.37	-4.70/-4.27	-6.75/-5.33	-7.97/-6.76	-5.22/-4.05	-3.56/-2.89	-6.34/-2.24	-2.76/-0.67	-3.62/-0.82
Θ (82.5°)	-0.37/-1.04	-1.89/-1.29	-1.62/0.78	-0.70/-0.30	-2.33/-1.28	-2.90/-1.88	-3.89/-2.94	-2.30/-5.95	-1.12/-3.21	-2.23/-0.86	-4.08/-6.31	-3.30/-4.10	-0.96/-2.90	-0.56/-8.89	-2.75/-0.64	-5.53/-1.47	-6.85/-1.59	-4.10/-2.70	-3.06/-4.41	-2.79/-2.47	-5.00/-1.34	0.02/1.21	-0.35/0.80	-1.00/0.15
Θ (90°)	0.67/-0.28	-2.00/-1.44	-9.97/-2.52	-1.99/-0.18	-2.01/-6.46	-4.54/0.04	-8.39/-0.58	-2.10/-5.35	0.02/-1.45	-0.00/-0.05	-1.04/0.23	0.93/-1.43	-3.81/-3.14	-1.82/-1.74	-6.97/-9.21	-1.06/-1.31	-4.97/-0.34	-3.17/-0.22	-2.23/-5.78	-3.57/-4.66	-4.76/-2.32	-0.90/-1.79	-0.31/-1.18	0.66/0.11
Θ (97.5°)	-1.75/-1.52	-1.63/0.10	-4.11/-0.65	-5.11/-3.25	-1.27/-0.82	-4.03/-4.74	-5.63/-4.25	-1.35/-3.66	-4.40/-1.90	-4.90/-0.51	-1.80/-4.01	-1.56/-5.06	-5.08/-3.07	-4.54/-8.02	-13.28/-7.62	-6.34/-6.17	-12.22/-3.46	-7.81/-3.32	-4.02/-9.87	-5.99/-4.65	-2.53/-2.85	-1.73/-2.46	-2.22/-3.21	-1.50/-0.47
Θ (105°)	-2.59/-2.44	-3.56/0.80	-2.31/-1.41	-2.40/-1.87	-6.06/0.08	-7.24/-3.78	-8.36/-4.56	0.03/-7.89	-7.21/-6.79	-13.23/-6.14	-4.32/-6.01	-3.11/-8.18	-11.02/-4.99	-6.35/-8.08	-6.69/-7.74	-5.45/-11.02	-12.58/-10.49	-13.20/-7.98	-3.05/-10.34	-9.81/-4.35	-3.09/-2.40	1.13/0.02	-0.51/-2.29	-1.02/-3.36
Θ (112.5°)	0.02/-3.47	0.14/-0.49	-1.25/-5.57	-3.03/-1.28	-4.35/-1.47	-5.22/-1.35	-9.11/-2.84	-2.07/-3.58	-6.85/-9.09	-3.70/-4.13	-5.03/-5.35	-4.52/-6.94	-6.94/-6.57	-3.29/-4.80	-5.26/-12.49	-7.48/-15.13	-10.72/-6.42	-10.34/-3.62	-6.12/-11.69	-7.52/-5.14	-3.99/-4.84	-0.46/-1.77	-1.61/-5.41	-0.35/-1.46
Θ (120°)	-5.75/-10.55	-6.51/-4.82	-5.00/-5.70	-8.22/-7.61	-7.28/-8.41	-4.35/-7.15	-9.14/-6.68	-9.99/-5.62	-5.05/-8.14	-4.56/-8.11	-6.97/-7.32	-4.72/-7.47	-11.55/-13.01	-11.22/-10.46	-11.09/-9.77	-6.95/-9.83	-11.15/-8.42	-12.49/-7.75	-10.57/-12.11	-11.22/-8.28	-6.86/-10.04	-6.31/-8.36	-7.39/-8.25	-5.10/-4.73
Θ (127.5°)	-8.83/-8.23	-10.59/-13.29	-8.65/-8.34	-15.40/-11.00	-11.11/-12.24	-10.87/-14.84	-13.05/-9.87	-6.91/-10.26	-15.08/-12.71	-10.69/-11.98	-9.02/-4.60	-2.01/-3.19	-3.32/-5.43	-6.88/-8.43	-15.56/-7.71	-15.30/-13.32	-8.54/-9.46	-12.52/-13.90	-15.11/-13.06	-10.41/-8.81	-12.96/-12.12	-11.78/-8.78	-8.70/-9.37	-12.98/-9.86
Θ (135°)	-8.76/-9.53	-7.87/-8.28	-10.00/-9.33	-10.57/-8.12	-10.43/-8.02	-10.57/-11.78	-9.77/-9.31	-6.88/-6.57	-13.88/-11.58	-5.70/-10.90	-12.17/-10.06	-6.76/-6.35	-11.40/-13.79	-12.81/-10.39	-9.15/-8.58	-10.17/-10.93	-13.29/-14.25	-13.04/-9.20	-13.46/-13.78	-14.98/-12.50	-11.60/-5.21	-7.22/-0.70	-14.30/-9.70	-11.95/-11.16
Θ (142.5°)	-10.95/-10.43	-8.95/-7.39	-7.20/-6.66	-7.09/-6.50	-9.03/-8.17	-7.75/-9.72	-11.12/-8.20	-3.97/-5.41	-7.08/-13.15	-7.87/-7.25	-8.52/-9.11	-6.72/-8.51	-13.01/-14.99	-9.52/-4.31	-3.88/-8.48	-14.15/-13.05	-12.44/-12.01	-9.76/-7.16	-8.00/-15.81	-15.28/-12.12	-8.80/-7.54	-4.61/-2.93	-3.85/-5.00	-6.54/-7.17
Θ (150°)	-5.16/-5.48	-5.54/-5.70	-6.30/-4.29	-5.32/-6.91	-5.25/-5.78	-8.37/-10.99	-6.80/-5.73	-5.21/-4.52	-4.39/-6.38	-15.80/-10.11	-11.14/-14.14	-14.26/-15.06	-12.61/-11.18	-14.83/-15.01	-15.49/-14.49	-11.90/-12.14	-11.22/-8.70	-6.68/-6.98	-7.36/-8.32	-8.83/-11.18	-8.83/-6.62	-4.16/-3.89	-4.01/-4.88	-5.74/-5.98