



Antenna Composite Gain Test Report

FCC ID	VW3FAST5295
Equipment	WiFi 6E Router
Brand Name	SAGEMCOM
Model Name	SAX2V1S
Applicant	SAGEMCOM BROADBAND SAS 250 Route de l'Empereur - 92848 RUEIL MALMAISON CEDEX- FRANCE
Manufacturer	SAGEMCOM BROADBAND SAS 250 Route de l'Empereur - 92848 RUEIL MALMAISON CEDEX- FRANCE
Sample Received	Jul. 01, 2022
Start Test Date	Sep. 29, 2022
Final Test Date	Oct. 06, 2022

Approved by: Sam Chen

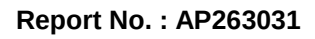
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1. Operation Mode and Antenna Information

Antenna Position	Port			Brand	Model Name	Ant. Type	Connector	Modes of Operation
	2.4 GHz	5GHz	6GHz					
2G ANT1 / 5G ANT1	1	1	-	GALTRONICS	DB1	PIFA	I-PEX	2.4GHz and 5GHz UNII1~UNII4
2G ANT2 / 5G ANT2	2	3	-	GALTRONICS	DB2	PIFA	I-PEX	
2G ANT3 / 5G ANT3	3	2	-	GALTRONICS	DB3	PIFA	I-PEX	
2G ANT4 / 5G ANT4	4	4	-	GALTRONICS	DB4	PIFA	I-PEX	
5G ANT5 / 6G ANT1	-	5	1	GALTRONICS	ANT1	PIFA	I-PEX	5GHz UNII1~UNII4 and 6GHz UNII5~8
5G ANT6 / 6G ANT2	-	6	2	GALTRONICS	ANT2	PIFA	I-PEX	
5G ANT7 / 6G ANT3	-	7	3	GALTRONICS	ANT3	PIFA	I-PEX	
5G ANT8 / 6G ANT4	-	8	4	GALTRONICS	ANT4	PIFA	I-PEX	
6G ANT5	-	-	5	GALTRONICS	6G1	PIFA	I-PEX	6GHz UNII5~8
6G ANT6	-	-	6	GALTRONICS	6G2	PIFA	I-PEX	
6G ANT7	-	-	7	GALTRONICS	6G3	PIFA	I-PEX	
6G ANT8	-	-	8	GALTRONICS	6G4	PIFA	I-PEX	

Note:

2.4GHz Operation Mode (4TX/4RX)

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

2G Ant1~4 could transmit/receive simultaneously.

5GHz Operation Mode (4TX/4RX)

5G Ant1~8 can be used as transmitting/receiving antenna.

There are only four antennas to be used at the same time.

6GHz Operation Mode (4TX/4RX)

6G Ant1~8 can be used as transmitting/receiving antenna.

6G Ant1~8 could transmit/receive simultaneously.

There are only four antennas to be used at the same time.

2. Table of Antenna Configuration

The configuration of antenna option 1~16 are follows:

<For 5GHz>

Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8
Ant.1	Ant.2	Ant.1	Ant.3	Ant.1	Ant.2	Ant.1	Ant.3
Ant.2	Ant.3	Ant.4	Ant.4	Ant.2	Ant.3	Ant.4	Ant.4
Ant.5	Ant.5	Ant.5	Ant.5	Ant.6	Ant.6	Ant.6	Ant.6
Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7
Option 9	Option 10	Option 11	Option 12	Option 13	Option 14	Option 15	Option 16
Ant.1	Ant.2	Ant.1	Ant.3	Ant.1	Ant.2	Ant.1	Ant.3
Ant.2	Ant.3	Ant.4	Ant.4	Ant.2	Ant.3	Ant.4	Ant.4
Ant.5	Ant.5	Ant.5	Ant.5	Ant.6	Ant.6	Ant.6	Ant.6
Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8

<For 6Hz>

Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8
Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2
Ant.3	Ant.3	Ant.4	Ant.4	Ant.3	Ant.3	Ant.4	Ant.4
Ant.5	Ant.5	Ant.5	Ant.5	Ant.6	Ant.6	Ant.6	Ant.6
Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7	Ant.7
Option 9	Option 10	Option 11	Option 12	Option 13	Option 14	Option 15	Option 16
Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2
Ant.3	Ant.3	Ant.4	Ant.4	Ant.3	Ant.3	Ant.4	Ant.4
Ant.5	Ant.5	Ant.5	Ant.5	Ant.6	Ant.6	Ant.6	Ant.6
Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8	Ant.8

Note 1: The above information was declared by the manufacturer.

Note 2:

The directional gain of the maximum was selected to test.

<For 5GHz> Option 5 for 5GHz UNII1 and option 9 for 5GHz UNII3~4 have been tested and recorded in the test report.

<For 6GHz> Option 15 for 6GHz UNII5, Option 3 for 6GHz UNII6~7 and Option 11 for 6GHz UNII8 have been tested and recorded in the test report.

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
5850-5895	5885
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	23.5-24.5 / 45-55	Sep. 29, 2022 ~ Oct. 06, 2022

Note:

Testing Site Information

Brand Name: TDK

Dimension: 11m*6m*6m

Characteristic: Fully Anechoic Chamber

5. Test Facility and Configuration

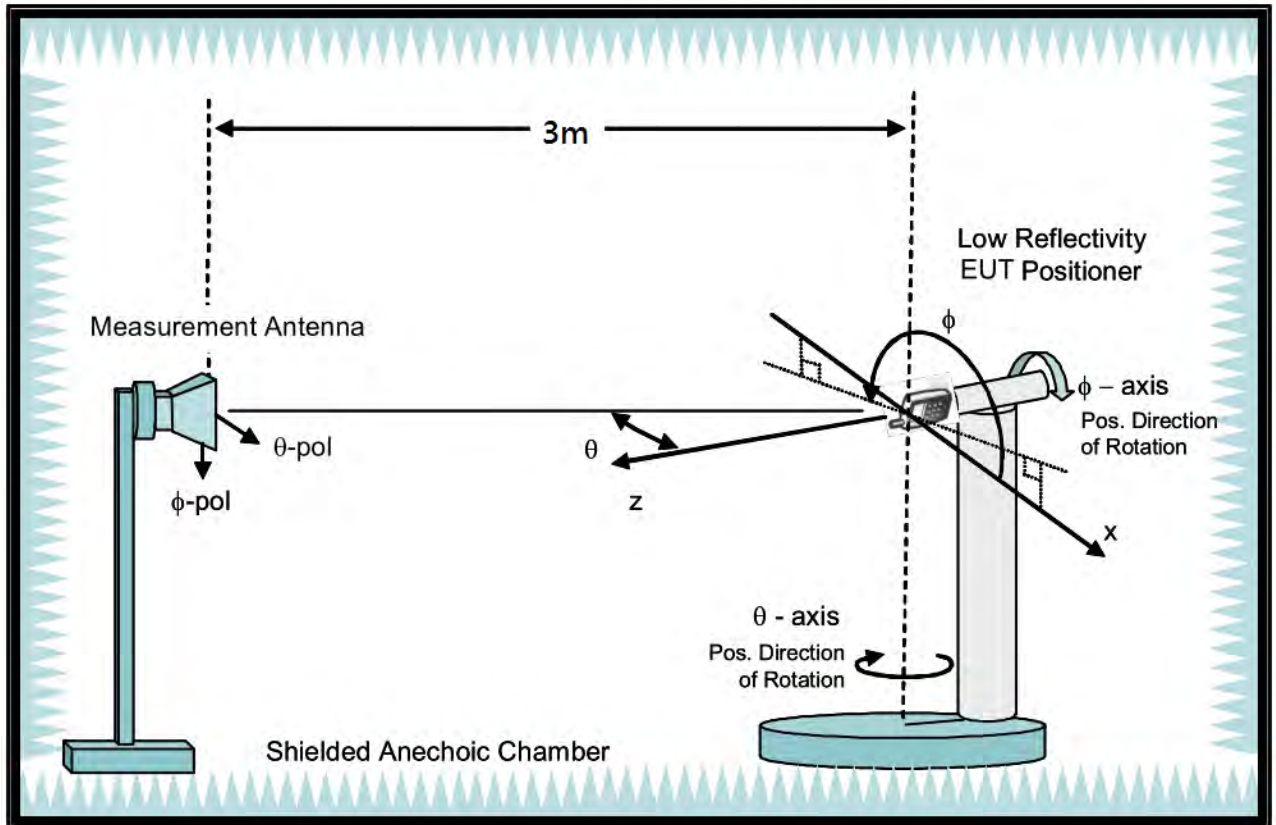
Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Measurement antenna: Dual Polarization Horn antenna

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

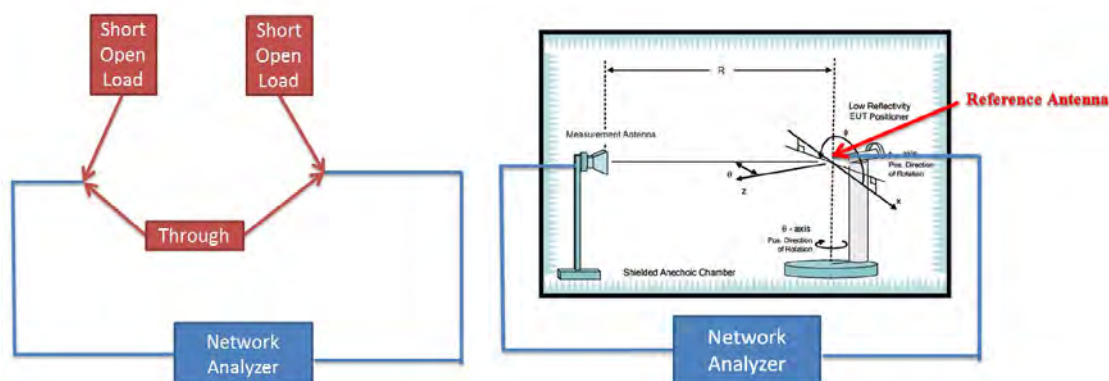
#Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1"



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

2G

DG_1SS Max Value Position

Frequency (Hz)	2.45G
Ant. 1 (dBi)	-5.79
Ant. 2 (dBi)	-3.1
Ant. 3 (dBi)	-1.06
Ant. 4 (dBi)	3.23
DG [1SS] (dBi)	4.98
Polarization	Phi
$\Theta(^{\circ})$	52.5
$\Phi(^{\circ})$	90

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
Ant. 1 $[10^{(G/20)}]$	$10^{(-5.79/20)}$
Ant. 2 $[10^{(G/20)}]$	$10^{(-3.1/20)}$
Ant. 3 $[10^{(G/20)}]$	$10^{(-1.06/20)}$
Ant. 4 $[10^{(G/20)}]$	$10^{(3.23/20)}$
Ant. 1 $[10^{(G/20)}]$ value	0.513
Ant. 2 $[10^{(G/20)}]$ value	0.7
Ant. 3 $[10^{(G/20)}]$ value	0.885
Ant. 4 $[10^{(G/20)}]$ value	1.45
Sum All Antenna [Amax]	3.549
DG $[10*\log(Amax^2/N_{ant})]$	4.98

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



5G option1

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	-0.59	1.11	-2.06	-1.88	-0.83
Ant. 2 (dBi)	0.95	1.48	1.51	1.89	1.73
Ant. 5 (dBi)	-11.09	-15.76	-19.05	-11.05	-4.26
Ant. 7 (dBi)	2.49	1.43	1.9	2.52	0.55
DG [1SS] (dBi)	5.25	5.26	4.44	5.26	5.59
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	67.5	75	60	60	67.5
$\Phi(^{\circ})$	52.5	60	30	30	22.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(-0.59/20)}$	$10^{(1.11/20)}$	$10^{(-2.06/20)}$	$10^{(-1.88/20)}$	$10^{(-0.83/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(0.95/20)}$	$10^{(1.48/20)}$	$10^{(1.51/20)}$	$10^{(1.89/20)}$	$10^{(1.73/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-11.09/20)}$	$10^{(-15.76/20)}$	$10^{(-19.05/20)}$	$10^{(-11.05/20)}$	$10^{(-4.26/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(2.49/20)}$	$10^{(1.43/20)}$	$10^{(1.9/20)}$	$10^{(2.52/20)}$	$10^{(0.55/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.934	1.136	0.789	0.805	0.909
Ant. 2 [$10^{(G/20)}$] value	1.116	1.186	1.19	1.243	1.22
Ant. 5 [$10^{(G/20)}$] value	0.279	0.163	0.112	0.28	0.612
Ant. 7 [$10^{(G/20)}$] value	1.332	1.179	1.245	1.337	1.065
Sum All Antenna [Amax]	3.661	3.664	3.335	3.665	3.807
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	5.25	5.26	4.44	5.26	5.59

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

5G option2

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 (dBi)	-6.78	-11.23	1.28	1.72	1.73
Ant. 3 (dBi)	2.89	-0.86	-5.19	-5.78	-5.46
Ant. 5 (dBi)	2.15	3.74	-11.66	-11.44	-4.26
Ant. 7 (dBi)	-12.26	-8.8	0.88	1.82	0.55
DG [1SS] (dBi)	4.55	3.75	3.74	4.17	4.69
Polarization	Phi	Phi	Theta	Theta	Theta
$\Theta(^{\circ})$	112.5	112.5	52.5	60	67.5
$\Phi(^{\circ})$	285	247.5	30	22.5	22.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 [$10^{(G/20)}$]	$10^{(-6.78/20)}$	$10^{(-11.23/20)}$	$10^{(1.28/20)}$	$10^{(1.72/20)}$	$10^{(1.73/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(2.89/20)}$	$10^{(-0.86/20)}$	$10^{(-5.19/20)}$	$10^{(-5.78/20)}$	$10^{(-5.46/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(2.15/20)}$	$10^{(3.74/20)}$	$10^{(-11.66/20)}$	$10^{(-11.44/20)}$	$10^{(-4.26/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-12.26/20)}$	$10^{(-8.8/20)}$	$10^{(0.88/20)}$	$10^{(1.82/20)}$	$10^{(0.55/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.458	0.274	1.159	1.219	1.22
Ant. 3 [$10^{(G/20)}$] value	1.395	0.906	0.55	0.514	0.533
Ant. 5 [$10^{(G/20)}$] value	1.281	1.538	0.261	0.268	0.612
Ant. 7 [$10^{(G/20)}$] value	0.244	0.363	1.107	1.233	1.065
Sum All Antenna [Amax]	3.378	3.081	3.077	3.234	3.431
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.55	3.75	3.74	4.17	4.69

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



5G option3

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	2.41	-1.64	0.36	1.79	2.07
Ant. 4 (dBi)	-2.99	-1.3	-6.04	-7.89	-5.86
Ant. 5 (dBi)	-5.12	-7.57	-12.28	-12.4	-9.68
Ant. 7 (dBi)	-0.55	1.43	2.48	3.02	3.43
DG [1SS] (dBi)	4.91	4.31	3.85	4.32	5.08
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	75	60	75	82.5	82.5
$\Phi(^{\circ})$	165	142.5	150	97.5	97.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(2.41/20)}$	$10^{(-1.64/20)}$	$10^{(0.36/20)}$	$10^{(1.79/20)}$	$10^{(2.07/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-2.99/20)}$	$10^{(-1.3/20)}$	$10^{(-6.04/20)}$	$10^{(-7.89/20)}$	$10^{(-5.86/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-5.12/20)}$	$10^{(-7.57/20)}$	$10^{(-12.28/20)}$	$10^{(-12.4/20)}$	$10^{(-9.68/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-0.55/20)}$	$10^{(1.43/20)}$	$10^{(2.48/20)}$	$10^{(3.02/20)}$	$10^{(3.43/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.32	0.828	1.042	1.229	1.269
Ant. 4 [$10^{(G/20)}$] value	0.709	0.861	0.499	0.403	0.509
Ant. 5 [$10^{(G/20)}$] value	0.555	0.418	0.243	0.24	0.328
Ant. 7 [$10^{(G/20)}$] value	0.939	1.179	1.33	1.416	1.484
Sum All Antenna [Amax]	3.522	3.286	3.115	3.288	3.591
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.91	4.31	3.85	4.32	5.08

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



5G option4

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 (dBi)	2.18	4.24	-0.21	3.38	-0.87
Ant. 4 (dBi)	0.28	-3.57	-0.37	-4.32	-2.92
Ant. 5 (dBi)	-4.55	-4.83	-2.01	0.37	-0.09
Ant. 7 (dBi)	-9.2	-11.45	-7.55	-19.39	-6.59
DG [1SS] (dBi)	4.24	3.9	3.94	4.18	3.74
Polarization	Theta	Phi	Theta	Phi	Theta
$\Theta(^{\circ})$	15	37.5	15	37.5	15
$\Phi(^{\circ})$	180	262.5	187.5	262.5	315

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 [$10^{(G/20)}$]	$10^{(2.18/20)}$	$10^{(4.24/20)}$	$10^{(-0.21/20)}$	$10^{(3.38/20)}$	$10^{(-0.87/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(0.28/20)}$	$10^{(-3.57/20)}$	$10^{(-0.37/20)}$	$10^{(-4.32/20)}$	$10^{(-2.92/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-4.55/20)}$	$10^{(-4.83/20)}$	$10^{(-2.01/20)}$	$10^{(0.37/20)}$	$10^{(-0.09/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-9.2/20)}$	$10^{(-11.45/20)}$	$10^{(-7.55/20)}$	$10^{(-19.39/20)}$	$10^{(-6.59/20)}$
Ant. 3 [$10^{(G/20)}$] value	1.285	1.629	0.976	1.476	0.905
Ant. 4 [$10^{(G/20)}$] value	1.033	0.663	0.958	0.608	0.714
Ant. 5 [$10^{(G/20)}$] value	0.592	0.573	0.793	1.044	0.99
Ant. 7 [$10^{(G/20)}$] value	0.347	0.268	0.419	0.107	0.468
Sum All Antenna [Amax]	3.257	3.133	3.147	3.235	3.077
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.24	3.9	3.94	4.18	3.74

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

5G option5

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	0.57	-0.42	-2.05	-0.87	-1.54
Ant. 2 (dBi)	1.42	-1.72	-5.69	1.71	-1.15
Ant. 6 (dBi)	-8.08	-3.31	-2.36	-8.16	-6.1
Ant. 7 (dBi)	1.63	1.9	3.98	2.43	2.83
DG [1SS] (dBi)	5.68	5.35	5.23	5.66	5.09
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	75	97.5	105	60	60
$\Phi(^{\circ})$	67.5	37.5	105	37.5	82.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(0.57/20)}$	$10^{(-0.42/20)}$	$10^{(-2.05/20)}$	$10^{(-0.87/20)}$	$10^{(-1.54/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(1.42/20)}$	$10^{(-1.72/20)}$	$10^{(-5.69/20)}$	$10^{(1.71/20)}$	$10^{(-1.15/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-8.08/20)}$	$10^{(-3.31/20)}$	$10^{(-2.36/20)}$	$10^{(-8.16/20)}$	$10^{(-6.1/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(1.63/20)}$	$10^{(1.9/20)}$	$10^{(3.98/20)}$	$10^{(2.43/20)}$	$10^{(2.83/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.068	0.953	0.79	0.905	0.838
Ant. 2 [$10^{(G/20)}$] value	1.178	0.82	0.519	1.218	0.876
Ant. 6 [$10^{(G/20)}$] value	0.394	0.683	0.762	0.391	0.495
Ant. 7 [$10^{(G/20)}$] value	1.206	1.245	1.581	1.323	1.385
Sum All Antenna [Amax]	3.846	3.701	3.652	3.836	3.594
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.68	5.35	5.23	5.66	5.09

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

5G option6

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 (dBi)	0.61	0.63	1.07	1.72	1.92
Ant. 3 (dBi)	-5.06	-4.12	-2.86	-5.78	-6.25
Ant. 6 (dBi)	-7.25	-8.84	-10.38	-8.75	-6.82
Ant. 7 (dBi)	1.78	-0.48	0.72	1.82	1.76
DG [1SS] (dBi)	4.33	3.54	4.19	4.43	4.65
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	45	52.5	52.5	60	60
$\Phi(^{\circ})$	37.5	7.5	22.5	22.5	22.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 [$10^{(G/20)}$]	$10^{(0.61/20)}$	$10^{(0.63/20)}$	$10^{(1.07/20)}$	$10^{(1.72/20)}$	$10^{(1.92/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-5.06/20)}$	$10^{(-4.12/20)}$	$10^{(-2.86/20)}$	$10^{(-5.78/20)}$	$10^{(-6.25/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-7.25/20)}$	$10^{(-8.84/20)}$	$10^{(-10.38/20)}$	$10^{(-8.75/20)}$	$10^{(-6.82/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(1.78/20)}$	$10^{(-0.48/20)}$	$10^{(0.72/20)}$	$10^{(1.82/20)}$	$10^{(1.76/20)}$
Ant. 2 [$10^{(G/20)}$] value	1.073	1.075	1.131	1.219	1.247
Ant. 3 [$10^{(G/20)}$] value	0.558	0.622	0.719	0.514	0.487
Ant. 6 [$10^{(G/20)}$] value	0.434	0.361	0.303	0.365	0.456
Ant. 7 [$10^{(G/20)}$] value	1.227	0.946	1.086	1.233	1.225
Sum All Antenna [Amax]	3.293	3.005	3.24	3.331	3.415
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.33	3.54	4.19	4.43	4.65

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



5G option7

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	0.77	-1.64	0.12	1.03	2.14
Ant. 4 (dBi)	-7.49	-1.3	-7.54	-6.41	-4.22
Ant. 6 (dBi)	-7.01	-3.44	-3.39	-7.53	-8.6
Ant. 7 (dBi)	3.36	1.43	3.62	3.16	2.7
DG [1SS] (dBi)	4.69	4.96	5.17	4.77	5.18
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	82.5	60	112.5	82.5	82.5
$\Phi(^{\circ})$	82.5	142.5	112.5	105	105

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(0.77/20)}$	$10^{(-1.64/20)}$	$10^{(0.12/20)}$	$10^{(1.03/20)}$	$10^{(2.14/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-7.49/20)}$	$10^{(-1.3/20)}$	$10^{(-7.54/20)}$	$10^{(-6.41/20)}$	$10^{(-4.22/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-7.01/20)}$	$10^{(-3.44/20)}$	$10^{(-3.39/20)}$	$10^{(-7.53/20)}$	$10^{(-8.6/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(3.36/20)}$	$10^{(1.43/20)}$	$10^{(3.62/20)}$	$10^{(3.16/20)}$	$10^{(2.7/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.093	0.828	1.014	1.126	1.279
Ant. 4 [$10^{(G/20)}$] value	0.422	0.861	0.42	0.478	0.615
Ant. 6 [$10^{(G/20)}$] value	0.446	0.673	0.677	0.42	0.372
Ant. 7 [$10^{(G/20)}$] value	1.472	1.179	1.517	1.439	1.365
Sum All Antenna [Amax]	3.433	3.541	3.628	3.463	3.631
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.69	4.96	5.17	4.77	5.18

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



5G option8

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 (dBi)	-3.89	-3.76	-4.6	-3.36	-2.98
Ant. 4 (dBi)	3.93	2.41	1.94	3.14	1.86
Ant. 6 (dBi)	0.94	0.56	-0.96	0.34	0.21
Ant. 7 (dBi)	-6.52	-6.48	-7.91	-9.93	-15.75
DG [1SS] (dBi)	5.57	4.88	3.91	4.79	3.91
Polarization	Phi	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	45	45	30	30	30
$\Phi(^{\circ})$	105	105	112.5	105	105

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 [$10^{(G/20)}$]	$10^{(-3.89/20)}$	$10^{(-3.76/20)}$	$10^{(-4.6/20)}$	$10^{(-3.36/20)}$	$10^{(-2.98/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(3.93/20)}$	$10^{(2.41/20)}$	$10^{(1.94/20)}$	$10^{(3.14/20)}$	$10^{(1.86/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(0.94/20)}$	$10^{(0.56/20)}$	$10^{(-0.96/20)}$	$10^{(0.34/20)}$	$10^{(0.21/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-6.52/20)}$	$10^{(-6.48/20)}$	$10^{(-7.91/20)}$	$10^{(-9.93/20)}$	$10^{(-15.75/20)}$
Ant. 3 [$10^{(G/20)}$] value	0.639	0.649	0.589	0.679	0.71
Ant. 4 [$10^{(G/20)}$] value	1.572	1.32	1.25	1.435	1.239
Ant. 6 [$10^{(G/20)}$] value	1.114	1.067	0.895	1.04	1.024
Ant. 7 [$10^{(G/20)}$] value	0.472	0.474	0.402	0.319	0.163
Sum All Antenna [Amax]	3.798	3.509	3.137	3.473	3.136
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.57	4.88	3.91	4.79	3.91

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



5G option9

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	-5.8	-3.51	-1.64	-1.34	-0.21
Ant. 2 (dBi)	1.71	2.95	2.28	3.15	2.55
Ant. 5 (dBi)	-11.54	-11.81	-13.9	-8.2	-7.71
Ant. 8 (dBi)	4.52	3.6	4.07	5.28	5.46
DG [1SS] (dBi)	5.29	5.67	5.86	7.08	7.24
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	67.5	67.5	75	75	75
$\Phi(^{\circ})$	337.5	337.5	337.5	337.5	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(-5.8/20)}$	$10^{(-3.51/20)}$	$10^{(-1.64/20)}$	$10^{(-1.34/20)}$	$10^{(-0.21/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(1.71/20)}$	$10^{(2.95/20)}$	$10^{(2.28/20)}$	$10^{(3.15/20)}$	$10^{(2.55/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-11.54/20)}$	$10^{(-11.81/20)}$	$10^{(-13.9/20)}$	$10^{(-8.2/20)}$	$10^{(-7.71/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(4.52/20)}$	$10^{(3.6/20)}$	$10^{(4.07/20)}$	$10^{(5.28/20)}$	$10^{(5.46/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.513	0.668	0.828	0.857	0.976
Ant. 2 [$10^{(G/20)}$] value	1.218	1.404	1.3	1.437	1.341
Ant. 5 [$10^{(G/20)}$] value	0.265	0.257	0.202	0.389	0.412
Ant. 8 [$10^{(G/20)}$] value	1.683	1.514	1.598	1.837	1.875
Sum All Antenna [Amax]	3.678	3.842	3.928	4.52	4.604
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.29	5.67	5.86	7.08	7.24

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



5G option10

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 (dBi)	-0.45	2.87	2.03	3.15	2.55
Ant. 3 (dBi)	-4.79	-5.25	-7.19	-11.02	-7.52
Ant. 5 (dBi)	-9.9	-15.72	-12.52	-8.2	-7.71
Ant. 8 (dBi)	5.48	3.63	3.78	5.28	5.46
DG [1SS] (dBi)	5.4	5.15	4.82	5.9	6.13
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	75	60	67.5	75	75
$\Phi(^{\circ})$	300	337.5	337.5	337.5	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 [$10^{(G/20)}$]	$10^{(-0.45/20)}$	$10^{(2.87/20)}$	$10^{(2.03/20)}$	$10^{(3.15/20)}$	$10^{(2.55/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-4.79/20)}$	$10^{(-5.25/20)}$	$10^{(-7.19/20)}$	$10^{(-11.02/20)}$	$10^{(-7.52/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-9.9/20)}$	$10^{(-15.72/20)}$	$10^{(-12.52/20)}$	$10^{(-8.2/20)}$	$10^{(-7.71/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(5.48/20)}$	$10^{(3.63/20)}$	$10^{(3.78/20)}$	$10^{(5.28/20)}$	$10^{(5.46/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.95	1.392	1.263	1.437	1.341
Ant. 3 [$10^{(G/20)}$] value	0.576	0.546	0.437	0.281	0.421
Ant. 5 [$10^{(G/20)}$] value	0.32	0.164	0.237	0.389	0.412
Ant. 8 [$10^{(G/20)}$] value	1.879	1.519	1.545	1.837	1.875
Sum All Antenna [Amax]	3.725	3.62	3.482	3.944	4.049
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.4	5.15	4.82	5.9	6.13

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

5G option11

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	2.41	-8.02	-0.25	-0.19	-0.21
Ant. 4 (dBi)	-2.99	-16.51	-11.39	-18.52	-18.73
Ant. 5 (dBi)	-5.12	-0.35	-10.02	-5.47	-7.71
Ant. 8 (dBi)	-10.37	2.15	2.81	4.21	5.46
DG [1SS] (dBi)	3.19	2.89	3.34	4.23	4.55
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	75	112.5	75	75	75
$\Phi(^{\circ})$	165	285	0	0	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(2.41/20)}$	$10^{(-8.02/20)}$	$10^{(-0.25/20)}$	$10^{(-0.19/20)}$	$10^{(-0.21/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-2.99/20)}$	$10^{(-16.51/20)}$	$10^{(-11.39/20)}$	$10^{(-18.52/20)}$	$10^{(-18.73/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-5.12/20)}$	$10^{(-0.35/20)}$	$10^{(-10.02/20)}$	$10^{(-5.47/20)}$	$10^{(-7.71/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-10.37/20)}$	$10^{(2.15/20)}$	$10^{(2.81/20)}$	$10^{(4.21/20)}$	$10^{(5.46/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.32	0.397	0.972	0.978	0.976
Ant. 4 [$10^{(G/20)}$] value	0.709	0.149	0.269	0.119	0.116
Ant. 5 [$10^{(G/20)}$] value	0.555	0.961	0.316	0.533	0.412
Ant. 8 [$10^{(G/20)}$] value	0.303	1.281	1.382	1.624	1.875
Sum All Antenna [Amax]	2.886	2.788	2.939	3.253	3.378
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.19	2.89	3.34	4.23	4.55

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



5G option12

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 (dBi)	0.52	-1.22	3.1	3.38	3.16
Ant. 4 (dBi)	-13.22	-13.03	-5.97	-4.32	-4.49
Ant. 5 (dBi)	2.04	3.64	0.09	0.37	-1.97
Ant. 8 (dBi)	-4.49	-6.14	-7.99	-8.71	-10.34
DG [1SS] (dBi)	3.92	3.82	4.46	4.85	3.91
Polarization	Phi	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	120	112.5	37.5	37.5	37.5
$\Phi(^{\circ})$	285	255	262.5	262.5	262.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 [$10^{(G/20)}$]	$10^{(0.52/20)}$	$10^{(-1.22/20)}$	$10^{(3.1/20)}$	$10^{(3.38/20)}$	$10^{(3.16/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(-13.22/20)}$	$10^{(-13.03/20)}$	$10^{(-5.97/20)}$	$10^{(-4.32/20)}$	$10^{(-4.49/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(2.04/20)}$	$10^{(3.64/20)}$	$10^{(0.09/20)}$	$10^{(0.37/20)}$	$10^{(-1.97/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-4.49/20)}$	$10^{(-6.14/20)}$	$10^{(-7.99/20)}$	$10^{(-8.71/20)}$	$10^{(-10.34/20)}$
Ant. 3 [$10^{(G/20)}$] value	1.062	0.869	1.429	1.476	1.439
Ant. 4 [$10^{(G/20)}$] value	0.218	0.223	0.503	0.608	0.596
Ant. 5 [$10^{(G/20)}$] value	1.265	1.521	1.01	1.044	0.797
Ant. 8 [$10^{(G/20)}$] value	0.596	0.493	0.399	0.367	0.304
Sum All Antenna [Amax]	3.141	3.106	3.341	3.494	3.136
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.92	3.82	4.46	4.85	3.91

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



5G option13

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	-5.8	-3.51	-2.41	-1.34	-0.21
Ant. 2 (dBi)	1.71	2.95	1.83	3.15	2.55
Ant. 6 (dBi)	-14.94	-18.48	-6.82	-19.18	-18.2
Ant. 8 (dBi)	4.52	3.6	3.82	5.28	5.46
DG [1SS] (dBi)	5.09	5.35	6.02	6.53	6.68
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	67.5	67.5	90	75	75
$\Phi(^{\circ})$	337.5	337.5	337.5	337.5	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(-5.8/20)}$	$10^{(-3.51/20)}$	$10^{(-2.41/20)}$	$10^{(-1.34/20)}$	$10^{(-0.21/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(1.71/20)}$	$10^{(2.95/20)}$	$10^{(1.83/20)}$	$10^{(3.15/20)}$	$10^{(2.55/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-14.94/20)}$	$10^{(-18.48/20)}$	$10^{(-6.82/20)}$	$10^{(-19.18/20)}$	$10^{(-18.2/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(4.52/20)}$	$10^{(3.6/20)}$	$10^{(3.82/20)}$	$10^{(5.28/20)}$	$10^{(5.46/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.513	0.668	0.758	0.857	0.976
Ant. 2 [$10^{(G/20)}$] value	1.218	1.404	1.235	1.437	1.341
Ant. 6 [$10^{(G/20)}$] value	0.179	0.119	0.456	0.11	0.123
Ant. 8 [$10^{(G/20)}$] value	1.683	1.514	1.552	1.837	1.875
Sum All Antenna [Amax]	3.592	3.705	4.001	4.241	4.315
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.09	5.35	6.02	6.53	6.68

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

5G option14

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 (dBi)	-0.45	2.87	1.83	0.39	2.55
Ant. 3 (dBi)	-4.79	-5.25	-11.58	-2.66	-7.52
Ant. 6 (dBi)	-10.12	-18.02	-6.82	-9.12	-18.2
Ant. 8 (dBi)	5.48	3.63	3.82	4.31	5.46
DG [1SS] (dBi)	5.38	5.06	4.88	5.52	5.48
Polarization	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	75	60	90	105	75
$\Phi(^{\circ})$	300	337.5	337.5	255	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 2 [$10^{(G/20)}$]	$10^{(-0.45/20)}$	$10^{(2.87/20)}$	$10^{(1.83/20)}$	$10^{(0.39/20)}$	$10^{(2.55/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-4.79/20)}$	$10^{(-5.25/20)}$	$10^{(-11.58/20)}$	$10^{(-2.66/20)}$	$10^{(-7.52/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-10.12/20)}$	$10^{(-18.02/20)}$	$10^{(-6.82/20)}$	$10^{(-9.12/20)}$	$10^{(-18.2/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(5.48/20)}$	$10^{(3.63/20)}$	$10^{(3.82/20)}$	$10^{(4.31/20)}$	$10^{(5.46/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.95	1.392	1.235	1.046	1.341
Ant. 3 [$10^{(G/20)}$] value	0.576	0.546	0.264	0.736	0.421
Ant. 6 [$10^{(G/20)}$] value	0.312	0.126	0.456	0.35	0.123
Ant. 8 [$10^{(G/20)}$] value	1.879	1.519	1.552	1.642	1.875
Sum All Antenna [Amax]	3.717	3.582	3.507	3.775	3.76
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.38	5.06	4.88	5.52	5.48

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

**5G option15****DG_1SS Max Value Position**

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 (dBi)	-6.24	-8.29	-16.87	-7.77	-0.21
Ant. 4 (dBi)	3.01	1.23	2.48	0.29	-18.73
Ant. 6 (dBi)	0.4	1.67	1.37	1.13	-18.2
Ant. 8 (dBi)	-4.42	-12.21	-10.46	-8.07	5.46
DG [1SS] (dBi)	4.98	3.51	3.36	3.45	3.78
Polarization	Phi	Phi	Phi	Phi	Theta
$\Theta(^{\circ})$	135	52.5	60	120	75
$\Phi(^{\circ})$	97.5	120	97.5	112.5	337.5

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 [$10^{(G/20)}$]	$10^{(-6.24/20)}$	$10^{(-8.29/20)}$	$10^{(-16.87/20)}$	$10^{(-7.77/20)}$	$10^{(-0.21/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(3.01/20)}$	$10^{(1.23/20)}$	$10^{(2.48/20)}$	$10^{(0.29/20)}$	$10^{(-18.73/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(0.4/20)}$	$10^{(1.67/20)}$	$10^{(1.37/20)}$	$10^{(1.13/20)}$	$10^{(-18.2/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-4.42/20)}$	$10^{(-12.21/20)}$	$10^{(-10.46/20)}$	$10^{(-8.07/20)}$	$10^{(5.46/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.488	0.385	0.143	0.409	0.976
Ant. 4 [$10^{(G/20)}$] value	1.414	1.152	1.33	1.034	0.116
Ant. 6 [$10^{(G/20)}$] value	1.047	1.212	1.171	1.139	0.123
Ant. 8 [$10^{(G/20)}$] value	0.601	0.245	0.3	0.395	1.875
Sum All Antenna [Amax]	3.55	2.994	2.945	2.977	3.09
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.98	3.51	3.36	3.45	3.78

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

5G option16

DG_1SS Max Value Position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 (dBi)	-3.37	-8.91	-8.24	-3.36	-2.98
Ant. 4 (dBi)	2.04	2.58	2.54	3.14	1.86
Ant. 6 (dBi)	1.76	2.93	1.02	0.34	0.21
Ant. 8 (dBi)	-6.69	-17.98	-13.38	-12.88	-12.93
DG [1SS] (dBi)	5.18	4.17	3.71	4.56	4.08
Polarization	Phi	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	52.5	60	60	30	30
$\Phi(^{\circ})$	75	75	90	105	105

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)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 3 [$10^{(G/20)}$]	$10^{(-3.37/20)}$	$10^{(-8.91/20)}$	$10^{(-8.24/20)}$	$10^{(-3.36/20)}$	$10^{(-2.98/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(2.04/20)}$	$10^{(2.58/20)}$	$10^{(2.54/20)}$	$10^{(3.14/20)}$	$10^{(1.86/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(1.76/20)}$	$10^{(2.93/20)}$	$10^{(1.02/20)}$	$10^{(0.34/20)}$	$10^{(0.21/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-6.69/20)}$	$10^{(-17.98/20)}$	$10^{(-13.38/20)}$	$10^{(-12.88/20)}$	$10^{(-12.93/20)}$
Ant. 3 [$10^{(G/20)}$] value	0.678	0.359	0.387	0.679	0.71
Ant. 4 [$10^{(G/20)}$] value	1.265	1.346	1.34	1.435	1.239
Ant. 6 [$10^{(G/20)}$] value	1.225	1.401	1.125	1.04	1.024
Ant. 8 [$10^{(G/20)}$] value	0.463	0.126	0.214	0.227	0.226
Sum All Antenna [Amax]	3.631	3.232	3.066	3.382	3.199
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.18	4.17	3.71	4.56	4.08

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



6G Option1

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	4.46	3.72	4.5	0.67
Ant. 3 (dBi)	-18.88	-18.21	-17.77	-17.09
Ant. 5 (dBi)	-1.54	-2.15	-2.08	1.1
Ant. 7 (dBi)	-11.02	0.09	1	1.01
DG [1SS] (dBi)	3.24	4.73	5.38	4.81
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	112.5	67.5	60	82.5
$\Phi(^{\circ})$	277.5	240	240	240

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 [$10^{(G/20)}$]	$10^{(4.46/20)}$	$10^{(3.72/20)}$	$10^{(4.5/20)}$	$10^{(0.67/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-18.88/20)}$	$10^{(-18.21/20)}$	$10^{(-17.77/20)}$	$10^{(-17.09/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-1.54/20)}$	$10^{(-2.15/20)}$	$10^{(-2.08/20)}$	$10^{(1.1/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-11.02/20)}$	$10^{(0.09/20)}$	$10^{(1/20)}$	$10^{(1.01/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.671	1.535	1.679	1.08
Ant. 3 [$10^{(G/20)}$] value	0.114	0.123	0.129	0.14
Ant. 5 [$10^{(G/20)}$] value	0.838	0.781	0.787	1.135
Ant. 7 [$10^{(G/20)}$] value	0.281	1.01	1.122	1.123
Sum All Antenna [Amax]	2.904	3.449	3.717	3.478
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.24	4.73	5.38	4.81

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



6G Option2

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	2.14	0.85	1.04	2.96
Ant. 3 (dBi)	-15.3	-17.31	-11.57	-12.64
Ant. 5 (dBi)	0.77	-0.3	-0.52	-3.2
Ant. 7 (dBi)	-9.34	-6.26	-11.83	-6.71
DG [1SS] (dBi)	3.18	2.58	2.24	2.9
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	52.5	52.5	52.5	67.5
$\Phi(^{\circ})$	45	30	60	90

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. 2 [$10^{(G/20)}$]	$10^{(2.14/20)}$	$10^{(0.85/20)}$	$10^{(1.04/20)}$	$10^{(2.96/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-15.3/20)}$	$10^{(-17.31/20)}$	$10^{(-11.57/20)}$	$10^{(-12.64/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(0.77/20)}$	$10^{(-0.3/20)}$	$10^{(-0.52/20)}$	$10^{(-3.2/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-9.34/20)}$	$10^{(-6.26/20)}$	$10^{(-11.83/20)}$	$10^{(-6.71/20)}$
Ant. 2 [$10^{(G/20)}$] value	1.279	1.103	1.127	1.406
Ant. 3 [$10^{(G/20)}$] value	0.172	0.136	0.264	0.233
Ant. 5 [$10^{(G/20)}$] value	1.093	0.966	0.942	0.692
Ant. 7 [$10^{(G/20)}$] value	0.341	0.486	0.256	0.462
Sum All Antenna [Amax]	2.885	2.692	2.589	2.793
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.18	2.58	2.24	2.9

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



6G Option3

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-6.75	3.72	4.5	0.67
Ant. 4 (dBi)	4.37	-13.44	-14.88	-18.26
Ant. 5 (dBi)	-8.2	-2.15	-2.08	1.1
Ant. 7 (dBi)	-0.74	0.09	1	1.01
DG [1SS] (dBi)	4.66	4.96	5.5	4.76
Polarization	Theta	Phi	Phi	Phi
$\Theta(^{\circ})$	105	67.5	60	82.5
$\Phi(^{\circ})$	285	240	240	240

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 [$10^{(G/20)}$]	$10^{(-6.75/20)}$	$10^{(3.72/20)}$	$10^{(4.5/20)}$	$10^{(0.67/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.37/20)}$	$10^{(-13.44/20)}$	$10^{(-14.88/20)}$	$10^{(-18.26/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-8.2/20)}$	$10^{(-2.15/20)}$	$10^{(-2.08/20)}$	$10^{(1.1/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-0.74/20)}$	$10^{(0.09/20)}$	$10^{(1/20)}$	$10^{(1.01/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.46	1.535	1.679	1.08
Ant. 4 [$10^{(G/20)}$] value	1.654	0.213	0.18	0.122
Ant. 5 [$10^{(G/20)}$] value	0.389	0.781	0.787	1.135
Ant. 7 [$10^{(G/20)}$] value	0.918	1.01	1.122	1.123
Sum All Antenna [Amax]	3.421	3.539	3.768	3.461
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.66	4.96	5.5	4.76

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

6G Option4

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-16.15	0.85	-19.46	2.96
Ant. 4 (dBi)	4.37	-16.28	4.16	-15.93
Ant. 5 (dBi)	-8.2	-0.3	-13.13	-3.2
Ant. 7 (dBi)	-0.74	-6.26	-5.04	-6.71
DG [1SS] (dBi)	3.85	2.63	1.94	2.67
Polarization	Theta	Phi	Theta	Phi
$\Theta(^{\circ})$	105	52.5	82.5	67.5
$\Phi(^{\circ})$	285	30	300	90

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. 2 [$10^{(G/20)}$]	$10^{(-16.15/20)}$	$10^{(0.85/20)}$	$10^{(-19.46/20)}$	$10^{(2.96/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.37/20)}$	$10^{(-16.28/20)}$	$10^{(4.16/20)}$	$10^{(-15.93/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-8.2/20)}$	$10^{(-0.3/20)}$	$10^{(-13.13/20)}$	$10^{(-3.2/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-0.74/20)}$	$10^{(-6.26/20)}$	$10^{(-5.04/20)}$	$10^{(-6.71/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.156	1.103	0.106	1.406
Ant. 4 [$10^{(G/20)}$] value	1.654	0.153	1.614	0.16
Ant. 5 [$10^{(G/20)}$] value	0.389	0.966	0.221	0.692
Ant. 7 [$10^{(G/20)}$] value	0.918	0.486	0.56	0.462
Sum All Antenna [Amax]	3.117	2.709	2.501	2.719
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.85	2.63	1.94	2.67

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

6G Option5

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	3.52	3.51	4.5	2.9
Ant. 3 (dBi)	-14.07	-16.71	-17.77	-17.71
Ant. 6 (dBi)	-3.65	-4.08	-2.79	-3.51
Ant. 7 (dBi)	-3.88	-0.4	1	1.95
DG [1SS] (dBi)	3.51	4.15	5.24	4.73
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	52.5	52.5	60	67.5
$\Phi(^{\circ})$	240	240	240	240

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 [$10^{(G/20)}$]	$10^{(3.52/20)}$	$10^{(3.51/20)}$	$10^{(4.5/20)}$	$10^{(2.9/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-14.07/20)}$	$10^{(-16.71/20)}$	$10^{(-17.77/20)}$	$10^{(-17.71/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-3.65/20)}$	$10^{(-4.08/20)}$	$10^{(-2.79/20)}$	$10^{(-3.51/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-3.88/20)}$	$10^{(-0.4/20)}$	$10^{(1/20)}$	$10^{(1.95/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.5	1.498	1.679	1.396
Ant. 3 [$10^{(G/20)}$] value	0.198	0.146	0.129	0.13
Ant. 6 [$10^{(G/20)}$] value	0.657	0.625	0.725	0.668
Ant. 7 [$10^{(G/20)}$] value	0.64	0.955	1.122	1.252
Sum All Antenna [Amax]	2.994	3.224	3.655	3.446
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	3.51	4.15	5.24	4.73

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



6G Option6

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	2.39	1.84	1.81	2.96
Ant. 3 (dBi)	-17.42	-17.61	-18.98	-12.64
Ant. 6 (dBi)	-2.05	-2.23	0.01	-0.73
Ant. 7 (dBi)	-9.86	-8.77	-5.57	-6.71
DG [1SS] (dBi)	2.15	1.96	3.14	3.58
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	60	52.5	82.5	67.5
$\Phi(^{\circ})$	45	67.5	60	90

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. 2 [$10^{(G/20)}$]	$10^{(2.39/20)}$	$10^{(1.84/20)}$	$10^{(1.81/20)}$	$10^{(2.96/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-17.42/20)}$	$10^{(-17.61/20)}$	$10^{(-18.98/20)}$	$10^{(-12.64/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-2.05/20)}$	$10^{(-2.23/20)}$	$10^{(0.01/20)}$	$10^{(-0.73/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-9.86/20)}$	$10^{(-8.77/20)}$	$10^{(-5.57/20)}$	$10^{(-6.71/20)}$
Ant. 2 [$10^{(G/20)}$] value	1.317	1.236	1.232	1.406
Ant. 3 [$10^{(G/20)}$] value	0.135	0.132	0.112	0.233
Ant. 6 [$10^{(G/20)}$] value	0.79	0.774	1.001	0.919
Ant. 7 [$10^{(G/20)}$] value	0.321	0.364	0.527	0.462
Sum All Antenna [Amax]	2.562	2.506	2.872	3.021
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	2.15	1.96	3.14	3.58

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



6G Option7

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-8.87	3.72	4.5	2.9
Ant. 4 (dBi)	4.62	-13.44	-14.88	-17.23
Ant. 6 (dBi)	-5.28	-6.27	-2.79	-3.51
Ant. 7 (dBi)	-4.9	0.09	1	1.95
DG [1SS] (dBi)	4.02	4.2	5.36	4.74
Polarization	Theta	Phi	Phi	Phi
$\Theta(^{\circ})$	120	67.5	60	67.5
$\Phi(^{\circ})$	255	240	240	240

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 [$10^{(G/20)}$]	$10^{(-8.87/20)}$	$10^{(3.72/20)}$	$10^{(4.5/20)}$	$10^{(2.9/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-13.44/20)}$	$10^{(-14.88/20)}$	$10^{(-17.23/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-5.28/20)}$	$10^{(-6.27/20)}$	$10^{(-2.79/20)}$	$10^{(-3.51/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-4.9/20)}$	$10^{(0.09/20)}$	$10^{(1/20)}$	$10^{(1.95/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.36	1.535	1.679	1.396
Ant. 4 [$10^{(G/20)}$] value	1.702	0.213	0.18	0.138
Ant. 6 [$10^{(G/20)}$] value	0.545	0.486	0.725	0.668
Ant. 7 [$10^{(G/20)}$] value	0.569	1.01	1.122	1.252
Sum All Antenna [Amax]	3.176	3.244	3.706	3.453
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.02	4.2	5.36	4.74

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



6G Option8

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-14.41	2.49	1.81	2.96
Ant. 4 (dBi)	4.62	-14.42	-17.57	-15.93
Ant. 6 (dBi)	-5.28	-3.73	0.01	-0.73
Ant. 7 (dBi)	-4.9	-8.43	-5.57	-6.71
DG [1SS] (dBi)	3.54	2.12	3.2	3.37
Polarization	Theta	Phi	Phi	Phi
$\Theta(^{\circ})$	120	52.5	82.5	67.5
$\Phi(^{\circ})$	255	60	60	90

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. 2 [$10^{(G/20)}$]	$10^{(-14.41/20)}$	$10^{(2.49/20)}$	$10^{(1.81/20)}$	$10^{(2.96/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-14.42/20)}$	$10^{(-17.57/20)}$	$10^{(-15.93/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-5.28/20)}$	$10^{(-3.73/20)}$	$10^{(0.01/20)}$	$10^{(-0.73/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-4.9/20)}$	$10^{(-8.43/20)}$	$10^{(-5.57/20)}$	$10^{(-6.71/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.19	1.332	1.232	1.406
Ant. 4 [$10^{(G/20)}$] value	1.702	0.19	0.132	0.16
Ant. 6 [$10^{(G/20)}$] value	0.545	0.651	1.001	0.919
Ant. 7 [$10^{(G/20)}$] value	0.569	0.379	0.527	0.462
Sum All Antenna [Amax]	3.006	2.552	2.892	2.947
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.54	2.12	3.2	3.37

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



6G Option9

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-14.41	2.49	1.81	2.96
Ant. 4 (dBi)	4.62	-14.42	-17.57	-15.93
Ant. 6 (dBi)	-5.28	-3.73	0.01	-0.73
Ant. 7 (dBi)	-4.9	-8.43	-5.57	-6.71
DG [1SS] (dBi)	3.54	2.12	3.2	3.37
Polarization	Theta	Phi	Phi	Phi
$\Theta(^{\circ})$	120	52.5	82.5	67.5
$\Phi(^{\circ})$	255	60	60	90

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. 2 [$10^{(G/20)}$]	$10^{(-14.41/20)}$	$10^{(2.49/20)}$	$10^{(1.81/20)}$	$10^{(2.96/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-14.42/20)}$	$10^{(-17.57/20)}$	$10^{(-15.93/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-5.28/20)}$	$10^{(-3.73/20)}$	$10^{(0.01/20)}$	$10^{(-0.73/20)}$
Ant. 7 [$10^{(G/20)}$]	$10^{(-4.9/20)}$	$10^{(-8.43/20)}$	$10^{(-5.57/20)}$	$10^{(-6.71/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.19	1.332	1.232	1.406
Ant. 4 [$10^{(G/20)}$] value	1.702	0.19	0.132	0.16
Ant. 6 [$10^{(G/20)}$] value	0.545	0.651	1.001	0.919
Ant. 7 [$10^{(G/20)}$] value	0.569	0.379	0.527	0.462
Sum All Antenna [Amax]	3.006	2.552	2.892	2.947
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	3.54	2.12	3.2	3.37

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

6G Option10

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	2.14	1.91	1.04	-7.96
Ant. 3 (dBi)	-15.3	-18.82	-11.57	-16.34
Ant. 5 (dBi)	0.77	-0.78	-0.52	-2.73
Ant. 8 (dBi)	-9.18	-8.94	-6.94	2.72
DG [1SS] (dBi)	3.2	2.38	2.87	2.45
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	52.5	52.5	52.5	52.5
$\Phi(^{\circ})$	45	37.5	60	255

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. 2 [$10^{(G/20)}$]	$10^{(2.14/20)}$	$10^{(1.91/20)}$	$10^{(1.04/20)}$	$10^{(-7.96/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-15.3/20)}$	$10^{(-18.82/20)}$	$10^{(-11.57/20)}$	$10^{(-16.34/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(0.77/20)}$	$10^{(-0.78/20)}$	$10^{(-0.52/20)}$	$10^{(-2.73/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-9.18/20)}$	$10^{(-8.94/20)}$	$10^{(-6.94/20)}$	$10^{(2.72/20)}$
Ant. 2 [$10^{(G/20)}$] value	1.279	1.246	1.127	0.4
Ant. 3 [$10^{(G/20)}$] value	0.172	0.115	0.264	0.152
Ant. 5 [$10^{(G/20)}$] value	1.093	0.914	0.942	0.73
Ant. 8 [$10^{(G/20)}$] value	0.348	0.357	0.45	1.368
Sum All Antenna [Amax]	2.891	2.632	2.783	2.65
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	3.2	2.38	2.87	2.45

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



6G Option11

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-8.87	0.81	0.49	-7.67
Ant. 4 (dBi)	4.62	-12.13	-13.58	3.68
Ant. 5 (dBi)	-13.67	-3.28	-5.61	-17.68
Ant. 8 (dBi)	2.53	2.52	4	3.68
DG [1SS] (dBi)	5.12	4.52	4.55	5.1
Polarization	Theta	Phi	Phi	Theta
$\Theta(^{\circ})$	120	52.5	52.5	97.5
$\Phi(^{\circ})$	255	277.5	277.5	322.5

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 [$10^{(G/20)}$]	$10^{(-8.87/20)}$	$10^{(0.81/20)}$	$10^{(0.49/20)}$	$10^{(-7.67/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-12.13/20)}$	$10^{(-13.58/20)}$	$10^{(3.68/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-13.67/20)}$	$10^{(-3.28/20)}$	$10^{(-5.61/20)}$	$10^{(-17.68/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(2.53/20)}$	$10^{(2.52/20)}$	$10^{(4/20)}$	$10^{(3.68/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.36	1.098	1.058	0.414
Ant. 4 [$10^{(G/20)}$] value	1.702	0.247	0.209	1.528
Ant. 5 [$10^{(G/20)}$] value	0.207	0.685	0.524	0.131
Ant. 8 [$10^{(G/20)}$] value	1.338	1.337	1.585	1.528
Sum All Antenna [Amax]	3.608	3.367	3.377	3.599
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.12	4.52	4.55	5.1

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



6G Option12

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-14.41	1.91	-18.52	-18.68
Ant. 4 (dBi)	4.62	-14.64	2.53	3.68
Ant. 5 (dBi)	-13.67	-0.78	-12.49	-17.68
Ant. 8 (dBi)	2.53	-8.94	2.94	3.68
DG [1SS] (dBi)	4.71	2.62	3.8	4.36
Polarization	Theta	Phi	Theta	Theta
$\Theta(^{\circ})$	120	52.5	120	97.5
$\Phi(^{\circ})$	255	37.5	330	322.5

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. 2 [$10^{(G/20)}$]	$10^{(-14.41/20)}$	$10^{(1.91/20)}$	$10^{(-18.52/20)}$	$10^{(-18.68/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-14.64/20)}$	$10^{(2.53/20)}$	$10^{(3.68/20)}$
Ant. 5 [$10^{(G/20)}$]	$10^{(-13.67/20)}$	$10^{(-0.78/20)}$	$10^{(-12.49/20)}$	$10^{(-17.68/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(2.53/20)}$	$10^{(-8.94/20)}$	$10^{(2.94/20)}$	$10^{(3.68/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.19	1.246	0.119	0.116
Ant. 4 [$10^{(G/20)}$] value	1.702	0.185	1.338	1.528
Ant. 5 [$10^{(G/20)}$] value	0.207	0.914	0.237	0.131
Ant. 8 [$10^{(G/20)}$] value	1.338	0.357	1.403	1.528
Sum All Antenna [Amax]	3.438	2.703	3.097	3.302
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	4.71	2.62	3.8	4.36

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



6G Option13

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	4.46	0.81	0.49	3.26
Ant. 3 (dBi)	-18.88	-19.05	-16.06	-16.51
Ant. 6 (dBi)	-1.49	-4.78	-5.43	-0.65
Ant. 8 (dBi)	-9.12	2.52	4	-3.35
DG [1SS] (dBi)	3.46	3.87	4.44	4.12
Polarization	Phi	Phi	Phi	Phi
$\Theta(^{\circ})$	112.5	52.5	52.5	90
$\Phi(^{\circ})$	277.5	277.5	277.5	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 [$10^{(G/20)}$]	$10^{(4.46/20)}$	$10^{(0.81/20)}$	$10^{(0.49/20)}$	$10^{(3.26/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-18.88/20)}$	$10^{(-19.05/20)}$	$10^{(-16.06/20)}$	$10^{(-16.51/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-1.49/20)}$	$10^{(-4.78/20)}$	$10^{(-5.43/20)}$	$10^{(-0.65/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-9.12/20)}$	$10^{(2.52/20)}$	$10^{(4/20)}$	$10^{(-3.35/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.671	1.098	1.058	1.455
Ant. 3 [$10^{(G/20)}$] value	0.114	0.112	0.157	0.149
Ant. 6 [$10^{(G/20)}$] value	0.842	0.577	0.535	0.928
Ant. 8 [$10^{(G/20)}$] value	0.35	1.337	1.585	0.68
Sum All Antenna [Amax]	2.977	3.123	3.336	3.213
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	3.46	3.87	4.44	4.12

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



6G Option14

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-5.85	2.49	2.25	2.3
Ant. 3 (dBi)	3.28	-17.24	-11.69	-10.48
Ant. 6 (dBi)	-18.41	-3.73	-0.45	-1.45
Ant. 8 (dBi)	-6.3	-9.6	-8.29	-7.01
DG [1SS] (dBi)	2.19	1.77	3.2	3.21
Polarization	Theta	Phi	Phi	Phi
$\Theta(^{\circ})$	67.5	52.5	82.5	82.5
$\Phi(^{\circ})$	75	60	45	45

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. 2 [$10^{(G/20)}$]	$10^{(-5.85/20)}$	$10^{(2.49/20)}$	$10^{(2.25/20)}$	$10^{(2.3/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(3.28/20)}$	$10^{(-17.24/20)}$	$10^{(-11.69/20)}$	$10^{(-10.48/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-18.41/20)}$	$10^{(-3.73/20)}$	$10^{(-0.45/20)}$	$10^{(-1.45/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(-6.3/20)}$	$10^{(-9.6/20)}$	$10^{(-8.29/20)}$	$10^{(-7.01/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.51	1.332	1.296	1.303
Ant. 3 [$10^{(G/20)}$] value	1.459	0.137	0.26	0.299
Ant. 6 [$10^{(G/20)}$] value	0.12	0.651	0.95	0.846
Ant. 8 [$10^{(G/20)}$] value	0.484	0.331	0.385	0.446
Sum All Antenna [Amax]	2.573	2.451	2.891	2.895
DG [$10 \cdot \log(A_{\max}^2/N_{\text{ant}})$]	2.19	1.77	3.2	3.21

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



6G Option15

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-8.87	0.81	0.49	-7.67
Ant. 4 (dBi)	4.62	-12.13	-13.58	3.68
Ant. 6 (dBi)	-5.28	-4.78	-5.43	-19.27
Ant. 8 (dBi)	2.53	2.52	4	3.68
DG [1SS] (dBi)	5.9	4.24	4.58	5.05
Polarization	Theta	Phi	Phi	Theta
$\Theta(^{\circ})$	120	52.5	52.5	97.5
$\Phi(^{\circ})$	255	277.5	277.5	322.5

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 [$10^{(G/20)}$]	$10^{(-8.87/20)}$	$10^{(0.81/20)}$	$10^{(0.49/20)}$	$10^{(-7.67/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(-12.13/20)}$	$10^{(-13.58/20)}$	$10^{(3.68/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-5.28/20)}$	$10^{(-4.78/20)}$	$10^{(-5.43/20)}$	$10^{(-19.27/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(2.53/20)}$	$10^{(2.52/20)}$	$10^{(4/20)}$	$10^{(3.68/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.36	1.098	1.058	0.414
Ant. 4 [$10^{(G/20)}$] value	1.702	0.247	0.209	1.528
Ant. 6 [$10^{(G/20)}$] value	0.545	0.577	0.535	0.109
Ant. 8 [$10^{(G/20)}$] value	1.338	1.337	1.585	1.528
Sum All Antenna [Amax]	3.945	3.259	3.388	3.577
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.9	4.24	4.58	5.05

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

6G Option16

DG_1SS Max Value Position

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 2 (dBi)	-14.41	-18.15	-18.2	-18.68
Ant. 4 (dBi)	4.62	3.56	3.65	3.68
Ant. 6 (dBi)	-5.28	-18.63	-18.12	-19.27
Ant. 8 (dBi)	2.53	-1.1	1.68	3.68
DG [1SS] (dBi)	5.52	2.37	3.47	4.3
Polarization	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	120	120	120	97.5
$\Phi(^{\circ})$	255	255	322.5	322.5

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. 2 [$10^{(G/20)}$]	$10^{(-14.41/20)}$	$10^{(-18.15/20)}$	$10^{(-18.2/20)}$	$10^{(-18.68/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(4.62/20)}$	$10^{(3.56/20)}$	$10^{(3.65/20)}$	$10^{(3.68/20)}$
Ant. 6 [$10^{(G/20)}$]	$10^{(-5.28/20)}$	$10^{(-18.63/20)}$	$10^{(-18.12/20)}$	$10^{(-19.27/20)}$
Ant. 8 [$10^{(G/20)}$]	$10^{(2.53/20)}$	$10^{(-1.1/20)}$	$10^{(1.68/20)}$	$10^{(3.68/20)}$
Ant. 2 [$10^{(G/20)}$] value	0.19	0.124	0.123	0.116
Ant. 4 [$10^{(G/20)}$] value	1.702	1.507	1.522	1.528
Ant. 6 [$10^{(G/20)}$] value	0.545	0.117	0.124	0.109
Ant. 8 [$10^{(G/20)}$] value	1.338	0.881	1.213	1.528
Sum All Antenna [Amax]	3.775	2.628	2.983	3.28
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	5.52	2.37	3.47	4.3

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
Ant. 1 Max Gain (dBi)	1.86
Ant. 2 Max Gain (dBi)	1.63
Ant. 3 Max Gain (dBi)	4.5
Ant. 4 Max Gain (dBi)	4.78
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/0
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/37.5/285
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/120/247.5
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/82.5/105
Max Gain (dBi)	4.78
DG [1SS] (dBi)	4.98
DG [2SS] (dBi)	4.78
DG [4SS] (dBi)	4.78



Freq(Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 Max Gain (dBi)	2.95	1.8	2.24	2.33	2.14
Ant. 2 Max Gain (dBi)	2.31	3.25	3.39	3.62	3.56
Ant. 3 Max Gain (dBi)	4.86	4.24	3.23	3.43	3.43
Ant. 4 Max Gain (dBi)	3.95	3.04	2.54	3.38	2.73
Ant. 5 Max Gain (dBi)	4.89	4.29	3.5	3.99	4.43
Ant. 6 Max Gain (dBi)	2.94	2.93	3.09	4.31	3.75
Ant. 7 Max Gain (dBi)	3.55	3.53	4.34	3.5	4.11
Ant. 8 Max Gain (dBi)	5.48	5.08	5.06	5.28	6.24
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/180	Theta/75/180	Theta/90/165	Theta/97.5/165	Theta/82.5/105
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/90/345	Theta/90/345	Theta/97.5/300	Theta/82.5/345	Theta/67.5/0
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/30/270	Phi/37.5/262.5	Phi/37.5/285	Phi/37.5/270	Phi/37.5/270
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/45/97.5	Phi/52.5/97.5	Phi/60/90	Phi/37.5/105	Phi/37.5/105
Ant. 5 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/112.5/202.5	Phi/105/202.5	Phi/97.5/247.5	Phi/75/202.5	Phi/67.5/232.5
Ant. 6 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/112.5/67.5	Phi/60/75	Phi/127.5/90	Phi/127.5/82.5	Phi/127.5/82.5
Ant. 7 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/45	Theta/60/45	Theta/105/112.5	Theta/105/105	Theta/97.5/75
Ant. 8 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/300	Theta/82.5/285	Theta/97.5/330	Theta/75/337.5	Theta/75/292.5
Max Gain (dBi)	5.48	5.08	5.06	5.28	6.24
DG [1SS] (dBi) option1	5.25	5.26	4.44	5.26	5.59
DG [1SS] (dBi) option2	4.55	3.75	3.74	4.17	4.69
DG [1SS] (dBi) option3	4.91	4.31	3.85	4.32	5.08
DG [1SS] (dBi) option4	4.24	3.9	3.94	4.18	3.74
DG [1SS] (dBi) option5	5.68	5.35	5.23	5.66	5.09
DG [1SS] (dBi) option6	4.33	3.54	4.19	4.43	4.65
DG [1SS] (dBi) option7	4.69	4.96	5.17	4.77	5.18
DG [1SS] (dBi) option8	5.57	4.88	3.91	4.79	3.91
DG [1SS] (dBi) option9	5.29	5.67	5.86	7.08	7.24
DG [1SS] (dBi) option10	5.4	5.15	4.82	5.9	6.13
DG [1SS] (dBi) option11	3.19	2.89	3.34	4.23	4.55
DG [1SS] (dBi) option12	3.92	3.82	4.46	4.85	3.91
DG [1SS] (dBi) option13	5.09	5.35	6.02	6.53	6.68
DG [1SS] (dBi) option14	5.38	5.06	4.88	5.52	5.48
DG [1SS] (dBi) option15	4.98	3.51	3.36	3.45	3.78
DG [1SS] (dBi) option16	5.18	4.17	3.71	4.56	4.08
DG [2SS] (dBi)	5.48	5.08	5.06	5.28	6.24
DG [4SS] (dBi)	5.48	5.08	5.06	5.28	6.24



Antenna Composite Gain Test Report

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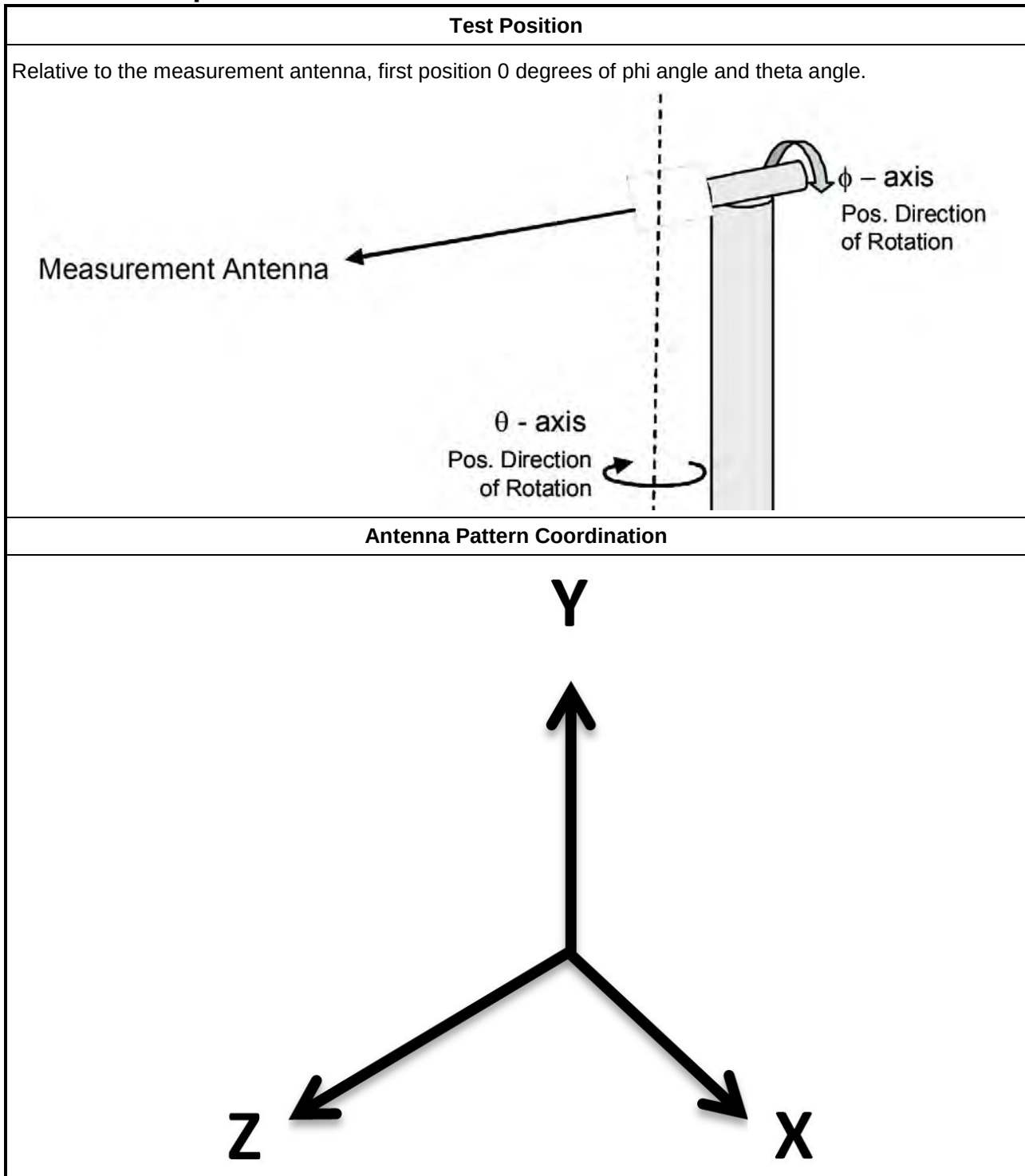
Freq(Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	4.46	4.1	4.5	3.33
Ant. 2 Max Gain (dBi)	2.63	2.79	2.83	2.96
Ant. 3 Max Gain (dBi)	3.71	2.18	3.63	2.99
Ant. 4 Max Gain (dBi)	4.66	4.23	5.31	4.77
Ant. 5 Max Gain (dBi)	1.06	1.02	1.1	1.1
Ant. 6 Max Gain (dBi)	1.45	1.02	1.12	1.65
Ant. 7 Max Gain (dBi)	3.34	1.84	2.05	2
Ant. 8 Max Gain (dBi)	3.37	2.58	4	3.68
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/112.5/277.5	Phi/60/240	Phi/60/240	Phi/120/277.5
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/97.5/112.5	Phi/52.5/52.5	Phi/90/45	Phi/67.5/90
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/82.5	Theta/82.5/127.5	Theta/82.5/120	Theta/82.5/127.5
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/292.5	Theta/75/292.5	Theta/75/292.5	Theta/75/292.5
Ant. 5 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/52.5/37.5	Phi/45/15	Phi/45/97.5	Phi/82.5/240
Ant. 6 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/105/270	Phi/112.5/292.5	Phi/97.5/292.5	Phi/112.5/262.5
Ant. 7 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/97.5/210	Theta/90/195	Theta/90/217.5	Phi/60/277.5
Ant. 8 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/90/330	Phi/52.5/285	Phi/52.5/277.5	Theta/97.5/322.5
Max Gain (dBi)	4.66	4.23	5.31	4.77
DG [1SS] (dBi) option1	3.24	4.73	5.38	4.81
DG [1SS] (dBi) option2	3.18	2.58	2.24	2.9
DG [1SS] (dBi) option3	4.66	4.96	5.5	4.76
DG [1SS] (dBi) option4	3.85	2.63	1.94	2.67
DG [1SS] (dBi) option5	3.51	4.15	5.24	4.73
DG [1SS] (dBi) option6	2.15	1.96	3.14	3.58
DG [1SS] (dBi) option7	4.02	4.2	5.36	4.74
DG [1SS] (dBi) option8	3.54	2.12	3.2	3.37
DG [1SS] (dBi) option9	3.44	4.17	4.41	4.33
DG [1SS] (dBi) option10	3.2	2.38	2.87	2.45
DG [1SS] (dBi) option11	5.12	4.52	4.55	5.1
DG [1SS] (dBi) option12	4.71	2.62	3.8	4.36
DG [1SS] (dBi) option13	3.46	3.87	4.44	4.12
DG [1SS] (dBi) option14	2.19	1.77	3.2	3.21
DG [1SS] (dBi) option15	5.9	4.24	4.58	5.05
DG [1SS] (dBi) option16	5.52	2.37	3.47	4.3
DG [2SS] (dBi)	4.66	4.23	5.31	4.77
DG [4SS] (dBi)	4.66	4.23	5.31	4.77



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)
4. Directional Gain (4SS) = Directional Gain (1SS) – 6dB. 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~U-NII 4.....	Page 50
Appendix B – Radiated Composite Gain of 6GHz U-NII5~U-NII-8.....	Page 122
Appendix C – Antenna Pattern of 2.4GHz and 5GHz U-NII 1~U-NII 4.....	Page 170
Appendix D – Antenna Pattern of 6GHz U-NII5~U-NII-8.....	Page 185
Appendix E – Test Photos.....	Page 197



Freq(Hz)	2.45G
Ant. 1 Max Gain (dBi)	1.86
Ant. 2 Max Gain (dBi)	1.63
Ant. 3 Max Gain (dBi)	4.5
Ant. 4 Max Gain (dBi)	4.78
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/60/0
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/37.5/285
Ant. 3 Polarization/Θ(°)/Φ(°)	Phi/120/247.5
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/82.5/105
Max Gain (dBi)	4.78
DG [1SS] (dBi)	4.98
DG [2SS] (dBi)	4.78
DG [4SS] (dBi)	4.78

Freq(Hz)	5.2G	5.3G	5.6G	5.785G	5.885G
Ant. 1 Max Gain (dBi)	2.95	1.8	2.24	2.33	2.14
Ant. 2 Max Gain (dBi)	2.31	3.25	3.39	3.62	3.56
Ant. 3 Max Gain (dBi)	4.86	4.24	3.23	3.43	3.43
Ant. 4 Max Gain (dBi)	3.95	3.04	2.54	3.38	2.73
Ant. 5 Max Gain (dBi)	4.89	4.29	3.5	3.99	4.43
Ant. 6 Max Gain (dBi)	2.94	2.93	3.09	4.31	3.75
Ant. 7 Max Gain (dBi)	3.55	3.53	4.34	3.5	4.11
Ant. 8 Max Gain (dBi)	5.48	5.08	5.06	5.28	6.24
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/75/180	Theta/75/180	Theta/90/165	Theta/97.5/165	Theta/82.5/105
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/90/345	Theta/90/345	Theta/97.5/300	Theta/82.5/345	Theta/67.5/0
Ant. 3 Polarization/Θ(°)/Φ(°)	Phi/30/270	Phi/37.5/262.5	Phi/37.5/285	Phi/37.5/270	Phi/37.5/270
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/45/97.5	Phi/52.5/97.5	Phi/60/90	Phi/37.5/105	Phi/37.5/105
Ant. 5 Polarization/Θ(°)/Φ(°)	Phi/112.5/202.5	Phi/105/202.5	Phi/97.5/247.5	Phi/75/202.5	Phi/67.5/232.5
Ant. 6 Polarization/Θ(°)/Φ(°)	Phi/112.5/67.5	Phi/60/75	Phi/127.5/90	Phi/127.5/82.5	Phi/127.5/82.5
Ant. 7 Polarization/Θ(°)/Φ(°)	Theta/60/45	Theta/60/45	Theta/105/112.5	Theta/105/105	Theta/97.5/75
Ant. 8 Polarization/Θ(°)/Φ(°)	Theta/75/300	Theta/82.5/285	Theta/97.5/330	Theta/75/337.5	Theta/75/292.5
Max Gain (dBi)	5.48	5.08	5.06	5.28	6.24
DG [1SS] (dBi) option1	5.25	5.26	4.44	5.26	5.59
DG [1SS] (dBi) option2	4.55	3.75	3.74	4.17	4.69
DG [1SS] (dBi) option3	4.91	4.31	3.85	4.32	5.08
DG [1SS] (dBi) option4	4.24	3.9	3.94	4.18	3.74
DG [1SS] (dBi) option5	5.68	5.35	5.23	5.66	5.09
DG [1SS] (dBi) option6	4.33	3.54	4.19	4.43	4.65
DG [1SS] (dBi) option7	4.69	4.96	5.17	4.77	5.18
DG [1SS] (dBi) option8	5.57	4.88	3.91	4.79	3.91
DG [1SS] (dBi) option9	5.29	5.67	5.86	7.08	7.24
DG [1SS] (dBi) option10	5.4	5.15	4.82	5.9	6.13
DG [1SS] (dBi) option11	3.19	2.89	3.34	4.23	4.55
DG [1SS] (dBi) option12	3.92	3.82	4.46	4.85	3.91
DG [1SS] (dBi) option13	5.09	5.35	6.02	6.53	6.68
DG [1SS] (dBi) option14	5.38	5.06	4.88	5.52	5.48
DG [1SS] (dBi) option15	4.98	3.51	3.36	3.45	3.78
DG [1SS] (dBi) option16	5.18	4.17	3.71	4.56	4.08
DG [2SS] (dBi)	5.48	5.08	5.06	5.28	6.24
DG [4SS] (dBi)	5.48	5.08	5.06	5.28	6.24



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Sporton International Inc. Hsinchu Laboratory



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(120°)	-1.74/-1.12	-1.49/-1.29	-1.09/0.25	0.54/-0.11	0.74/1.8	1.45/0.97	0.37/0.25	0.59/1.18	0.78/-0.47	-0.05/-0.56	-0.61/0.19	0.42/1.18	1.22/1.21	1.23/1.31	0.22/-2.87	-3.09/-1.94	-0.34/-0.91	-0.86/-2.71	-3.18/-1.91	-1.31/-3.7	-1.55/-0.32	-0.21/-2.45	-3.02/-0.79	-0.8/-1.9
Θ(127.5°)	-4.07/-2.53	-3.47/-3.8	-3.43/-2.04	-0.28/0.31	-0.11/-0.16	-0.7/-0.86	-0.59/0.08	0.87/1.12	0.67/0.81	0.42/-0.31	-0.4/-0.7	-0.56/-0.57	-0.4/-1.32	-1.19/-0.87	-1.73/-4.09	-4.49/-1.84	-1.4/-2.38	-1.7/-4.15	-4.31/-2.73	-1.17/-3.7	-3.97/-2.71	-1.74/-2.87	-2.63/-0.72	-0.9/-2.52
Θ(135°)	-2.42/-2.26	-2.43/-2.26	-2.42/-3.47	-3.57/-2.16	-1.34/-1.62	-2.63/-2.27	-0.77/0.7	1.67/1.84	1.50/19	-1.47/-2.64	-2.6/-2.01	-2.89/-2.21	-1.94/-3.39	-1.62/-4.09	-2.34/-7.04	-5.77/-2.54	-1.59/-1.26	-1.56/-5.23	-5.2/-3.92	-1.59/-2.75	-3.2/-2.74	-3.82/-5.14	-3.59/-1.8	-0.02/-0.86
Θ(142.5°)	-4.52/-4.96	-6.05/-6.46	-6.1/-5.21	-3.78/-3.52	-4.59/-5.86	-6.57/-6.19	-3.94/-2	-0.79/-0.65	-0.86/-1.52	-2.57/-4.21	-4.39/-3.97	-3.1/-3.7	-5.11/-5.25	-3.75/-3.47	-4.71/-6.81	-4.16/-2.8	-2.65/-2.34	-4.39/-9.78	-6.52/-2.61	-0.17/-0.85	-4.08/-4.47	-5.09/-5.76	-4.03/-1.86	-0.56/-1.76
Θ(150°)	-7.53/-9.63	-8.21/-8.5	-7.9/-5.62	-4.77/-4.52	-3.87/-3.55	-3.78/-3.64	-2.96/-2.32	-2.51/-3.13	-4.07/-4.61	-4.22/-3.29	-3.27/-3.81	-3.55/-4.13	-5.85/-6.44	-4.66/-3.6	-4.13/-6.11	-6.58/-6.78	-4.66/-4.44	-5.83/-7.53	-7.05/-3.4	-1.28/-1.37	-3.36/-4.83	-4.46/-4.69	-4.56/-3.57	-3.39/-4.86
Θ(157.5°)	-5.03/-5.74	-7.25/-9.74	-9.84/8.66	-7.34/-7.31	-8.13/-9.49	-10.34/-8.65	-7.16/-6.6	-6.06/-6.09	-5.81/-5.03	-4.28/-4.13	-3.98/-4.07	-4.87/-7.06	-9.86/-7.43	-4.68/-3.96	-4.6/-6.42	-7.82/-6.87	-4.96/-5.48	-6.78/-7.51	-6.12/-4.96	-3.66/-3.56	-2.79/-2.48	-2.83/-3.85	-4.33/-4.55	-4.81/-4.97
Θ(165°)	-4.93/-5.59	-6.32/-6.62	-6.68/-6.8	-7/-7.35	-7.62/-8.15	-8.87/-9.48	-9.03/8.92	-8.98/-9.67	-9.56/-7.98	-6.72/-6.14	-5.14/-4.82	-5.41/-6.98	-8.44/-9.23	-8.45/-7.63	-6.67/-5.81	-4.13/-2.93	-2.45/-2.27	-2.76/-3.63	-4.26/-4.15	-3.72/-3.31	-3.07/-3.45	-4.67/-6.53	-6.56/-5.55	-4.72/-4.62
Θ(172.5°)	-7.24/-7.52	-7.58/-7.1	-6.85/-7.6	-7.61/-7.81	-8.59/-9.11	-10.06/-11.59	-11.92/-12.1	-11.56/-10.08	-9.18/-7.68	-6.65/-6.17	-6.27/-7.06	-8.59/-8.89	-8.51/-7.58	-6.43/-5.73	-5.45/-5.67	-5.92/-5.54	-5.38/-5.27	-5.42/-6.48	-7.54/-8.38	-8.38/-7.65	-7.01/-6.89	-7.01/-6.32	-6.03/-6.92	-7.91/-8.37
Θ(180°)	-10.09/-10.39	-9.77/-8.47	-7.84/-7.11	-6.72/-6.77	-7.11/-7.48	-7.78/-8.24	-8.88/-9.23	-9.52/-9.65	-9.69/-9.97	-10.06/-10.4	-10.4/-10.38	-10.24/-9.89	-9.61/-9.08	-8.51/-7.75	-7.42/-7.1	-6.97/-7.02	-6.84/-6.98	-7.87/-9.49	-10.86/-11.61	-11.55/-11.3	-11.84/-12.06	-9.68/-8.5	-8.12/-8.94	-10.73/-10.72
Freq(Hz)	5.3G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-6.1/-5.77	-6.59/-7.72	-7.62/-7.02	-6.71/-6.74	-6.9/-6.65	-6.06/-6.16	-6.34/-6.03	-5.22/-4.72	-4.5/-4.6	-4.93/-5.19	-5.23/-5.37	-5.81/-6.03	-6.47/-6.56	-6.7/-7.24	-7.67/-8.29	-8.3/-8.36	-7.55/-6.97	-6.84/-6.48	-6.15/-6.11	-5.83/-5.51	-5.44/-5.6	-5.84/-6.22	-6.3/-6.14	-6.34/-6.19
Θ(7.5°)	-5.47/-5.45	-5.8/-6.55	-6.9/-7.55	-7.31/-7.31	-7.12/-6.56	-6.42/-6.41	-6.26/-6.19	-5.67/-4.9	-4.29/-4.26	-4.6/-5.32	-5.62/-5.47	-5.84/-5.8	-6.44/-6.97	-7.5/-7.53	-7.23/-6.76	-6.55/-6.7	-6.97/-6.7	-6.25/-5.86	-5.4/-5.02	-4.85/-4.84	-4.76/-4.71	-4.55/-4.59	-4.93/-4.97	-4.93/-4.97
Θ(15°)	-4.52/-4.66	-4.38/-5.02	-5.66/-6.15	-6.19/-6.64	-6.53/-6.06	-6.32/-5.14	-4.59/-4.41	-4.1/-3.92	-4.32/-4.92	-5.35/-5.71	-5.35/-4.89	-4.8/-4.46	-4.2/-4.14	-4.2/-4.5	-4.88/-5.09	-5.25/-5.53	-5.83/-6.04	-6.61/-7.26	-7.96/-8.28	-7.73/-6.6	-5.38/-4.52	-3.9/-3.54	-3.34/-3.36	-3.73/-3.96
Θ(22.5°)	-5.54/-5.72	-5.58/-5.19	-5.9/-5.93	-5.3/-5.12	-5.12/-4.93	-5.3/-5.39	-5.28/-5.13	-4.33/-3.92	-3.8/-4.24	-4.87/-4.73	-3.95/-3.27	-2.76/-2.25	-1.96/-1.99	-2.09/-2.37	-2.82/-3.43	-4.28/-5.09	-5.83/-6.39	-7.22/-8.36	-8.89/-9.34	-9.3/-8.77	-7.18/-6.03	-5.33/-5.23	-5.03/-4.86	-5.4/-5.31
Θ(30°)	-5.39/-6.38	-6.18/-8.79	-8.1/-7.7	-6.18/-5.38	-4.79/-4.18	-4.49/-5.94	-6.37/-6.39	-5.1/-3.69	-2.76/-2.62	-2.65/-2.77	-3.04/-3.37	-3.38/-2.88	-2.13/-1.93	-1.9/-1.92	-1.85/-2.08	-2.82/-3.35	-3.8/-4.54	-5.53/-6.16	-7.01/-8.21	-9.07/-9.15	-9.02/-8.74	-8.36/-7.54	-6.87/-6.21	-5.64/-5.41
Θ(37.5°)	-5.56/-7.24	-7.31/-7.33	-7.83/-8.11	-8.45/-8.67	-9.5/-9.23	-8.75/-8.49	-7.75/-6.96	-5.4/-4.37	-3.48/-3.31	-3.33/-2.9	-3.07/-4.02	-4.59/-3.45	-3.42/-2.34	-1.87/-1.81	-2.06/-2.86	-3.6/-3.54	-4.07/-4.72	-5.08/-5.1	-5.78/-6.47	-6.71/-6.03	-5.18/-5.22	-5.39/-5.25	-5.09/-5.91	-6.14/-5.38
Θ(45°)	-6.92/-6.22	-5.71/-5.62	-7.53/-9.35	-10.07/-10.24	-8.7/-7.47	-7.47/-8.97	-9.93/-8.68	-6.04/-4.11	-3.56/-3.69	-3.81/-3.4	-2.5/-2.67	-3.67/-4.76	-3.97/-2.51	-1.2/-0.53	-0.69/-0.88	-1.49/-1.87	-2.63/-4.79	-2.76/-8.42	-5.18/-3.08	-2.28/-3.04	-1.06/-4.31	-4.88/-4.9	-4.88/-4.9	-6.48/-6.6
Θ(52.5°)	-6.14/-5.31	-7.47/-8.94	-10.28/-11.55	-12.22/-8.81	-7.33/-7.35	-7.99/-7.41	-5.94/-4.65	-3.97/-4.45	-5.29/-5.56	-5.74/-6.21	-5.31/-4.39	-4.97/-5.09	-4.78/-3.78	-2.21/-1.56	-1.76/-1.43	-1.24/-1.5	-1.72/-1.27	-2.23/-5.03	-8.09/-6.31	-3.5/-2.12	-2.86/-4.74	-5.73/-5.86	-5.98/-7.92	-8.37/-8.96
Θ(60°)	-5.5/-5.34	-5.53/-5.44	-6.12/-7.35	-9.59/-10.27	-7.76/-5.94	-6.23/-8.36	-9.72/-7.94	-6.01/-4.81	-5.5/-6.3	-6.37/-6.85	-7.48/-7.5	-6.61/-5.66	-4.98/-4.23	-4.39/-4.57	-4.67/-3.11	-2.14/-1.49	-1.6/-1.19	-0.65/-2.42	-5.85/-6.77	-3.92/-3.12	-4.02/-4.22	-4.82/-6.52	-7.12/-7	-7.06/-6.62
Θ(67.5°)	-6.57/-4.46	-4.29/-3.84	-3.45/-4.01	-6.41/-8.64	-10.75/-10.28	-8/-5.16	-4.19/-4.9	-6.7/-7.78	-8.32/-7.75	-6.49/-6.45	-6.03/-6.53	-5.21/-4.19	-4.01/-2.82	-2.38/-2.2	-1.66/-2.4	-3.11/-2.05	-1.99/-3.62	-5.62/-6.44	-5.33/-5.38	-5.34/-4.32	-4.88/-5.96	-6.73/-7.1	-6.23/-4.38	-6.17/-4.7
Θ(75°)	-4.71/-5.31	-5.79/-5.77	-6.8/-6.09	-5.44/-5.88	-6.37/-6.83	-7.84/-9.21	-9.95/-7.83	-5.58/-4.95	-5.7/-6.3	-6.34/-6.14	-6.79/-6.45	-4.85/-5.19	-4.83/-4.29	-3.83/-3.38	-3.32/-3.44	-3.37/-4.01	-4.59/-4.19	-5/-5.48	-6.13/-5.07	-4.44/-5.98	-6.17/-3.99	-3.15/-3.61	-4.54/-5.29	-5.25/-5.06
Θ(82.5°)	-3.77/-4.82	-5.7/-6.35	-7.05/-7.62	-8.46/-9.31	-10.13/-9.46	-9.05/-10.34	-9.09/-7.26	-4.73/-4.21	-4.33/-3.48	-2.96/-3.03	-3.86/-4.61	-3.65/-2.46	-2.44/-2.3	-1.24/-1.61	-1.78/-1.98	-2.11/-3.21	-3.34/-2.71	-3.1/-4.17	-5.62/-4.87	-2.3/-3.69	-5.29/-6.12	-5.4/-4.7	-4.64/-5.73	-5.81/-4.68
Θ(90°)	-7.18/-8.2	-7.78/-7.01	-7.84/-7.38	-7.16/-7.94	-9.38/-11.29	-12.28/-9.22	-7.73/-7.44	-7.16/-6.29	-3.6/-3.11	-4.27/-5.6	-5.13/-4.93	-4.21/-2.87	-2.82/-1.88	-0.91/-1.02	-1.46/-2.8	-1.95/-1.43	-0.89/-2.01	0.43/-1.18	-3.74/-5.27	-2.49/-3.3	-2.67/-4.27	-3.19/-4.96	-5.33/-6.25	-5.64/-5.41
Θ(97.5°)	-5.68/-6.93	-6.42/-6.18	-6.24/-6.65	-7.23/-8.04	-8.53/-8.92	-8.53/-9.54	-9.98/-8.49	-7.28/-7.39	-6.68/-6.56	-5.79/-6.74	-7.36/-6.84	-5.18/-4.88	-4.29/-2.95	-2.07/-0.86	-0.52/-1.77	-1.62/-0.56	-0.16/-0.08	-0.74/-1.34	-3.54/-1.68	-2.22/-4.55	-4.57/-2.17	-4.57/-6.09	-8.14/-7.8	-6.17/-4.7
Θ(105°)	-6.02/-8.65	-8.8/-8.43	-8.37/-6.57	-6.71/-8.83	-9.85/-4.75	-6.52/-7.33	-6.54/-4.67	-3.84/-4.35	-5.96/-7.48	-7.96/-5.07	-2.97/-2.15	-0.57/-0.31	-0.41/-1.16	-0.09/-0.43	-0.24/-1.29	-5.03/-3.01	-1.89/-3.45	-3.25/-2.08	-3.84/-6.31	-6.11/-6.59	-9.28/-6.6			
Θ(112.5°)	-5.91/-5.97	-5.97/-6.46	-8.49/-9.76	-9.02/-8.86	-9.51/-10.21	-10.17/-10.34	-10.22/-8.05	-6.43/-5.36	-4.31/-4.46	-6.44/-6.54	-7.38/-5.71	-4.2/-2.98	-1.44/-1.63	-1.04/-0.21	-0.78/-4.26	-3.47/-0.85	0.19/-1.58	1.47/-1.9	-5.49/-3.3	-1.04/-2.21	-3.55/-2.04	-2.45/-4.92	-4.55/-5.83	-8.23/-7.98
Θ(120°)	-7.25/-6.41	-5.2/-5.33	-4.89/-5.15	-6.58/-7.17	-8.39/-9.18	-9.91/-11.44	-12.24/-9.64	-8.5/-6.46	-6.88/-7.15	-6.15/-5.95	-9.1/-7.52	-6.31/-6.11	-5.89/-5.38	-2.93/-1.99	-3.91/-4.01	-3.33/-2.64	-0.39/-0.61	-1.32/-3.65	-5.4/-1.9	0.32/-1.42	-5.02/-3.83	-3.59/-2.98	-1.68/-3.24	-4.51/-5.19
Θ(127.5°)	-5.92/-4.81	-4.51/-5.39	-4.4/-4.99	-6.34/-7.88	-7.41/-7.34	-6.8/-7.82	-9.64/-8.88	-6.62/-6.19	-6/-5.27	-5.93/-4.68	-6.71/-6.78	-8.32/-8.61	-6.83/-5.57	-5.6/-5.62	-4.87/-4.73	-3.45/-2.52	-1.53/-2.22	-2/-1.42	-9.49/-4.06	-1.39/-0.19	-1.59/-3.62	-4.49/-4.99	-4.25/-4.03	-5.77/-6.58
Θ(135°)	-5.49/-6.02	-4.1/-4.14	-4.17/-4.9	-7.25/-10.05	-9.22/-7.26	-6.12/-5.19	-5.76/-7.48	-4.53/-4.54	-3.15/-2.93	-3.72/-5.52	-7.29/-7.5	-7.08/-5.6	-5.99/-4.28	-2.54/-2.6	-3/-3.14	-3.2/-3.13	-2.69/-2.8	-2.47/-7.36	-10.01/-4.56	-2.67/-2.41	-1.62/-6.21	-3.27/-2.34	-4.73/-6.19	-4.25/-4.95
Θ(142.5°)	-6.75/-8.57	-7.97/-6.66	-4.73/-8.1	-6.86/-5.08	-4.36/-3.9	-4.51/-5.55	-6.97/-6.98	-5.92/-4.87	-5.51/-5.7	-6.15/-6.99	-5.22/-4.55	-2.12/-2.37	-3.24/-2.41	-1.44/-1.78	-3.34/-2.45	-1.77/-2.51	-2.09/-1.22	-2.43/-7.06	-8.76/-6.58	-3.3/-2.74	-3.47/-4.88	-5.84/-6.94	-3.31/-2.96	-4.74/-5.45
Θ(150°)	-5.94/-7.18	-9.04/-8.98	-9.2/-9.29	-7.47/-5.66	-5.29/-6.32	-7.6/-7.16	-6.59/-6.45	-6.04/-5.2	-3.9/-3.14	-3.14/-3.71	-4.55/-4.91	-3.59/-3.81	-5.05/-4.94	-3.99/-3.88	-3.44/-3.22	-3.58/-3.92	-4.13/-4.66	-5.78/-7.64	-7.98/-6.73	-5/-4.95	-6.24/-5.36	-5.16/-6.03	-4.98/-4.55	-5.92/-6.5
Θ(157.5°)	-7.24/-7.09	-7.48/-8.13	-8.28/-8.06	-7.51/-7.61	-8.33/-8.56	-8.21/-7.84	-6.72/-6.34	-6.32/-6.02	-5.27/-4.76	-4.45/-4.1	-3.99/-4.13	-3.96/-3.02	-2.23/-1.91	-2.32/-3.31	-4.08/-3.93	-3.29/-2.01	-1.72/-2.06	-2.89/-3.57	-3.78/-3.7	-4.15/-4.69	-4.8/-5.59	-6.33/-7.45	-8.39/-9.11	-8.78/-7.53
Θ(165°)	-6.15/-6.72	-7.7/-8.9	-9.87/-10.54	-10.7/-10.7	-10.28/-9.03	-8.55/-8.91	-8.36/-7.79	-7.87/-7.98	-7.84/-7.49	-7.41/-7.6	-8.16/-8.54	-8.15/-7.23	-6.53/-6.46	-7.05/-7.07	-6.01/-4.67	-3.68/-3.27	-3.6/-3.81	-3.94/-3.09	-2.6/-2.74	-3.69/-4.38	-5.24/-6.22	-6.03/-6	-6.06/-6.05	-5.93/-5.85
Θ(172.5°)	-9.47/-9.19	-8.99/-7.97	-7.99/-8	-7.61/-7.36	-7.31/-7.78	-8.22/-9.21	-9.63/-9.69	-9.38/-9.26	-9.16/-8.62	-7.96/-7.44	-7.6/-7.88	-7.91/-7.81	-7.82/-7.97	-8.07/-7.76	-7.29/-6.75	-6.25/-5.49	-5.31/-5.1	-4.88/-4.56	-4.54/-5.1	-5.63/-6.57	-8.15/-9.88	-9.94/-10.4	-11.01/-10	-9.25/-9.81
Θ(180°)	-7.01/-7.39	-7.59/-8.04	-8.53/-9.05	-9.67/-10.78	-11.93/-12.38	-12.77/-12.45	-11.98/-10.01	-8.25/-7.25	-6.52/-6.16	-5.89/-5.8	-5													



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(90°)	1.95/3.1	2.88/3.01	3.37/2.64	1.83/0.21	0.95/3.09	3.84/3.34	2.54/1.63	1.89/1.87	0.94/0.37	0.46/2.04	3.43/3.75	4.02/3.5	3.62/2.87	2.47/1.86	1.03/0.57	-2.2/-2.34	-1.87/-1.42	-1.02/0.33	-0.78/-2.46	-3.89/-3.85	-1.91/-0.51	0.66/0.58	0.65/1.69	2.64/2.35
Θ(97.5°)	1.39/2.78	3.11/2.77	2.67/1.33	-0.05/-0.3	1.19/3.04	4.04/3.35	2.04/1.71	2.28/1.99	0.91/-0.01	-0.37/1.4	2.06/2.83	3.5/3.43	3.69/2.68	1.98/0.96	0.53/-1.02	-1.25/-0.99	-1.08/-0.47	-0.42/0.44	0.03/-1.07	-0.17/-0.27	0.34/0.61	1.06/0.13	-0.17/1.4	2.01/1.36
Θ(105°)	-0.25/0.69	1.05/0.57	1.38/1.03	0.82/1.69	2.73/4.06	4.34/3.12	1.68/2.29	3.55/3.92	2.63/1.1	-0.53/0.95	1.68/2.19	2.35/1.32	2.95/1.51	0.57/0.02	-1.33/1.42	-1.48/-1.91	-2.14/-1.37	-1.32/-1.58	-0.48/-0.16	-0.48/-0.48	-0.4/-0.02	-0.06/1.43	-0.35/-0.08	1.27/0.96
Θ(112.5°)	-0.28/-0.15	0.74/0.26	1.03/0.45	-0.49/0.94	2.52/3.56	3.97/2.76	1.09/1.67	2.94/3.48	2.88/2.41	1.33/1.86	0.79/2.03	2.11/2.2	1.95/0.04	0.36/0.37	-0.74/-1.75	-0.82/-1.48	-0.4/-1.07	-1.47/0.15	0.33/0.48	0.09/-2.26	1.27/1.35	-0.9/-0.58	-0.62/-0.27	0.83/-0.2
Θ(120°)	-0.22/0.33	0.02/0.28	0.30/7.1	0.16/0.58	1.48/2.21	2.67/1.99	0.66/0.77	2.32/2.8	2.87/1.94	0.69/1.4	0.86/1.7	0.93/1.32	1.06/-0.51	-1.34/-1.6	-1.58/-4.19	-4.88/-3.99	-2.73/-2.12	-3.79/-3.31	-2.08/-1.96	-0.5/-3.16	-1.14/0.5	-1.18/-4.1	-3.51/-0.78	-1.13/-1.58
Θ(127.5°)	-1.35/-0.77	-0.59/0.13	0.36/0.51	-0.06/-0.13	0.83/1.31	0.81/0	0.73/2.31	2.66/2.17	1.18/0.52	0.33/-0.16	0.42/0.52	-0.27/0.09	-0.38/-1.1	-1.56/-1.01	-1.29/-4.59	-6.15/-2.61	-2.11/-2.87	-3.01/-2.71	-3.16/-3.7	-1.32/-3.98	-1.58/-1.42	-2.17/-3.23	-1.62/0.66	-0.12/-2.06
Θ(135°)	-1.96/-1.64	-1.91/-1.33	-1.03/-1.65	-2.61/-2.35	-1.22/-1.06	-0.91/-0.79	-0.16/0.74	1.15/0.96	0.76/0	-0.85/-0.99	-0.41/-0.87	-0.93/-2.34	-4.74/-6.13	-4.5/-4.11	-5.74/-7.21	-5.99/-5.45	-4.07/-6.24	-3.8/-5.13	-4.36/-2.99	-3.41/-2.76	-3.2/-3.2	-3.14/-7.51	-5.27/-2.02	-0.86/-2.07
Θ(142.5°)	-6.08/-5.01	-5.04/-5.47	-6.27/-5.63	-7.73/-2.39	-2.44/-2.82	-3.03/-3.26	-2.43/-1.07	0.03/0.3	0.04/-0.96	-1.49/-1.03	-1.32/-1.68	-1.97/-2.15	-3.81/-5.63	-4.01/-4.1	-8.82/-8.52	-10.58/-7.36	-6.56/-6.11	-4.34/-4.33	-5.55/-5.53	-3.18/-2.08	-4.1/-7.1	-6.76/-6.36	-3.84/-1.34	-1.37/-3.76
Θ(150°)	-4.66/-5.4	-5.45/-6.04	-7.19/-6.82	-6.94/-6.41	-6.04/-5.57	-6.75/-7.79	-7.34/-5.5	-3.59/-2.55	-2.38/-2.71	-2.89/-2.27	-1.86/-1.46	-0.77/-0.49	-1.99/-2.84	-2.47/-3.01	-3.39/-3.65	-4.76/-5.51	-5.7/-5.17	-4.53/-4.73	-4.64/-4.34	-2.81/-1.37	-2.44/-3.81	-3.98/-3.37	-1.95/-0.74	-0.91/-3.03
Θ(157.5°)	-5.83/-5.75	-6.2/-6.96	-7.67/-8.95	-9.47/-8.24	-6.88/-6.39	-6.66/-6.85	-6.11/-5.22	-4.73/-4.2	-3.98/-3.95	-3.84/-3.92	-4.18/-3.62	-2.24/-1.86	-2.76/-4.12	-4.41/-3.27	-2.43/-2.6	-4.47/-6.96	-7.14/-8.41	-7.34/-4.74	-4.11/-5.4	-5.98/-4.93	-3.49/-3.2	-3.79/-5.03	-4.89/-3.46	-3.56/-4.22
Θ(165°)	-4.8/-5.14	-5.6/-6.35	-7.63/-8.7	-9.16/-10.23	-10.78/-11.4	-11.59/-12.72	-12.2/-11.24	-10.35/-9.27	-7.81/-5.68	-4.06/-2.88	-2.13/-1.7	-1.6/-1.86	-2.64/-4.16	-6.34/-7.16	-7.87/-8.44	-9.1/-8.93	-8.67/-8.81	-8.48/-8.35	-7.38/-5.52	-3.7/-2.65	-2.19/-2.21	-2.99/-4.78	-6.16/-6.26	-5.44/-4.61
Θ(172.5°)	-9.17/-10.7	-11.98/-12.42	-12.36/-11.73	-11.13/-10.77	-10.6/-10.64	-10.65/-11.47	-11.21/-11.32	-10.71/-10.36	-8.99/-8.22	-7.67/-7.21	-7.58/-7.7	-8.27/-9.09	-10.08/-9.81	-9.52/-7.85	-6.66/-6.06	-5.76/-5.78	-6.82/-7.86	-8.22/-9.11	-8.04/-6.95	-5.89/-5.36	-5.15/-5.65	-7.52/-8.87	-7.72/-8.87	-8.95/-8.87
Θ(180°)	-10.73/-11.0	-10.92/-9.99	-10.02/-9.59	-9.81/-9.18	-9.34/-8.98	-9.33/-10.07	-10.1/-10.05	-9.84/-9.65	-9.7/-9.95	-10.21/-10.1	-9.86/-9.72	-9.62/-9.72	-10.32/-10.91	-10.38/-9.74	-9.72/-9.83	-10.15/-10.04	-10.89/-11.29	-10.06/-8.96	-7.86/-6.98	-6.44/-6.2	-6.57/-8.1	-9.42/-9.16	-9.49/-11.25	-12.56/-12.03
Freq(Hz)	5.785G/Pol	Phi-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-2.41/-2.17	-1.73/-1.04	-0.41/-0.02	0.32/0.48	0.41/0.26	-0.21/-0.98	-1.48/-2.19	-2.25/-2.21	-2.03/-2.15	-2.18/-2.51	-2.83/-3.09	-3.26/-3.12	-2.79/-2.4	-1.9/-1.3	-0.76/-0.5	-0.4/-0.6	-1.02/-1.25	-1.59/-1.9	-1.94/-2.44	-2.76/-2.79	-3.05/-3.3	-3.27/-3.25	-3.1/-3.42	-4.08/-3.36
Θ(7.5°)	-2.71/-2.34	-2.17/-1.66	-1.52/-1.04	-0.8/-0.63	-0.45/-0.42	-0.85/-1.47	-2.16/-2.87	-2.97/-2.79	-2.78/-3.05	-3.12/-3.42	-3.72/-4.07	-4.54/-5.05	-5.03/-4.52	-1.48/-0.6	0.07/0.25	0.18/0.06	-0.17/-0.4	-0.93/-1.55	-2.15/-2.48	-2.8/-2.86	-2.67/-2.72	-2.92/-3.39	-3.46/-2.83	
Θ(15°)	-6.34/-6.84	-7.2/-7.5	-6.66/-5.13	-3.97/-3.08	-2.53/-2.05	-1.61/-1.17	-1.31/-1.61	-2/-2.47	-2.91/-3.07	-3.26/-3.76	-4.5/-5.11	-5.53/-5.64	-5.53/-5.57	-5.15/-2.44	-3.37/-3.27	-1.44/-0.88	-0.53/-0.45	-0.56/-0.73	-1.46/-2.22	-3.25/-4.43	-5.24/-5.3	-4.89/-4.36	-4.55/-4.64	-5.23/-6
Θ(22.5°)	-3.4/-3.98	-4.91/-6.03	-7.13/-7.86	-7.24/-6.77	-6.29/-5.47	-4.48/-3.79	-3.29/-3.34	-3.77/-4.19	-3.78/-3.38	-3.32/-3.99	-4.95/-5.82	-6.39/-6.76	-6.44/-5.51	-4.22/-2.82	-2.07/-1.77	-1.69/-1.8	-1.79/-1.65	-1.38/-1.51	-2.51/-4.17	-5.89/-7.03	-7.44/-6.17	-4.41/-3.05	-2.28/-2	-2.64/-3.21
Θ(30°)	-1.71/-2.19	-2.92/-3.28	-3.14/-3.47	-4.25/-5.16	-5.86/-6.43	-5.6/-4.6	-3.99/-3.64	-3.59/-3.76	-4.3/-4.27	-3.86/-3.75	-4.72/-5.79	-6.16/-6.28	-6.32/-5.84	-4.1/-2.35	-1.47/-1.49	-1.76/-2.03	-2.55/-3.4	-4.53/-5.27	-4.67/-4.26	-4.11/-4.66	-5.96/-5.68	-4.13/-2.36	-1.55/-1.08	-0.97/-1
Θ(37.5°)	-3.16/-3.02	-3.89/-4.97	-5.15/-5.42	-5.48/-5.15	-5.75/-6.48	-6.73/-7.06	-5.99/-4.78	-4.21/-3.42	-4.85/-5.26	-5.51/-4.8	-5.24/-6.19	-6.95/-6.56	-4.83/-3.1	-1.8/-0.74	-0.37/-0.41	-0.48/-0.85	-0.83/-1.1	-1.64/-2.44	-2.88/-3.07	-3.52/-4.06	-4.04/-4.46	-4/-2.74	-2.16/-1.72	-2.11/-2.86
Θ(45°)	-5.66/-5.61	-6.06/-6.75	-7.02/-6.87	-5.71/-5.36	-8.31/-8.05	-8/-8.23	-7.46/-5.4	-4.54/-4.02	-3.3/-3.76	-4.84/-6.37	-7.65/-6.28	-5.63/-5.24	-5.04/-3.53	-2.33/-1.49	-1.83/-1.72	-1.7/-1.26	-0.58/-1.28	-2.38/-2.87	-2.64/-1.41	-2.69/-4.03	-5.15/-5.97	-5.42/-4.36	-3.57/-3.93	
Θ(52.5°)	-4.04/-5.06	-6.16/-6.3	-7.5/-8.66	-9.55/-10.24	-8.98/-7.81	-7.69/-7.25	-5.83/-4.66	-4.2/-4.2	-4.59/-6.54	-8.83/-8.61	-7.7/-5.1	-3.2/-3.8	-4.38/-3.61	-3.08/-2.9	-2.20/-0.59	-0.24/0.32	0.43/-0.5	-2.17/-4.07	-4.59/-3.85	-4.1/-3.47	-2.91/-3.28	-4.82/-5.77	-5.6/-4.45	-3.54/-3.14
Θ(60°)	-4.83/-6.78	-7.61/-7.83	-7.41/-8.17	-9.34/-11.69	-10.18/-8.7	-8.47/-8.45	-7.17/-5.52	-5.81/-6.33	-8.06/-9.15	-9.28/-9.53	-4.3/-3.72	-2.25/-2.61	-3.29/-2.86	-3.89/-4.49	-3.18/-1.9	-0.65/-0.41	-1.02/-1.71	-1.54/-2.89	-4.47/-4.98	-3.44/-2.61	-2.18/-2.38	-3.92/-4.17	-4.7/-4.85	-4.66/-4.54
Θ(67.5°)	-8.94/-9.54	-9.1/-7.84	-5.41/-5.1	-6.38/-8.63	-10.12/-10.25	-9.61/-8.34	-8.2/-8.47	-8.58/-9.32	-9.82/-8.7	-6.14/-4.6	-3.32/-2.71	-1.89/-1.02	-1.72/-0.74	-0.52/-1.93	-1.80/-0.64	0.42/0.24	-1.75/-2.86	-3.42/-3.82	-5.62/-4.19	-2.64/-2.82	-4.03/-5.78	-7.36/-6.85	-5.52/-5.81	-7.23/-7.5
Θ(75°)	-7.47/-8.36	-7.29/-6.64	-6.64/-7.81	-8.72/-10.62	-10.93/-10.76	-8.66/-6.55	-6.33/-4.84	-8.06/-9.2	-10.34/-9.53	-6.61/-6.76	-5.99/-4.19	-1.67/-0.6	-0.66/-0.08	0.29/0.4	-0.86/-1.77	-1.79/-0.79	-1.81/-2.89	-3.59/-4.06	-5.1/-3.22	-1.33/-3.78	-4.97/-3.2	-3.51/-3.43	-3.88/-4.96	-5.67/-6.3
Θ(82.5°)	-1.77/-5.15	-4.67/-3.89	-6.28/-8.09	-7.98/-8.07	-6.74/-8.63	-7.8/-9.09	-12.07/-10.39	-7.31/-7.87	-8.31/-7.04	-5.6/-4.87	-3.71/-2.57	-1.65/-1.31	-1.86/-2.62	-1.75/-1.27	-1.61/-2.94	-4.03/-3.75	-2.35/-2.11	-3.68/-3.32	-2.17/-4.36	-3.54/-1.85	-1.16/-1.44	-3.21/-4.89	-1.67/-7.4	
Θ(90°)	-5.06/-5.95	-4.32/-2.53	-2.25/-3.29	-5.25/-8.22	-8.85/-8.65	-10.06/-10.14	-9.41/-8.16	-7.47/-4.17	-3.85/-4.27	-4.27/-4.86	-5.22/-3.25	-2.29/-0.94	-0.33/-0.9	-0.45/-0.6	-2.02/-3.11	-2.69/-2.93	-3.69/-2.77	-0.18/-1.53	-3.53/-2.98	-1.18/-3.36	-3.66/-3.1	-2.75/-4.02	-5/-5.96	-6.39/-4.39
Θ(97.5°)	-7.03/-6.88	-4.65/-4.27	-3.61/-4.82	-6.05/-11.67	-12.07/-10.44	-7.75/-7.29	-7.97/-8.8	-6.12/-3.6	-4.52/-5.1	-4.12/-4.35	-2.4/-1.14	-1.81/-0.96	-1.37/-1.63	-1.94/-2.26	-3.66/-5.01	-3.72/-0.58	-0.65/-0.37	0.11/0.19	-1.7/-1.43	-3.2/-6.91	-2.89/-1.02	-2.52/-5.33	-5.87/-9.1	-5.88/-5.66
Θ(105°)	-6.71/-8.76	-6.82/-8.93	-7.93/-6.9	-7.8/-6.34	-8.4/-4.29	-7/-8.36	-5.48/-4.85	-5.52/-4.93	-3.36/-4.1	-1.7/-1.22	-3.38/-2.07	-1.13/-3.55	-9.17/-3.12	-1.58/0.08	-1.08/-1.12	-2.83/-0.83	-0.37/-6.04	-2.37/-6.04	-1.93/-3.98	-7.82/-12.3	-10.09/-6.47			
Θ(112.5°)	-7.75/-8.62	-7.91/-6.64	-6.61/-6.09	-6.99/-6.78	-5.58/-5.28	-5.31/-5.3	-5.2/-5.78	-5.23/-5.08	-5.17/-3.9	-4.2/-3.56	-2.48/-1.97	-1.72/-1.49	-1.81/-2.12	-3/-1.61	-1.47/-4.91	-9.52/-2.92	-0.95/-0.02	-1.95/-3.35	-4.07/0.39	-0.92/-9.77	-4.63/-1.35	-4.21/-6.33	-6.74/-10.44	-9.11/-7.16
Θ(120°)	-6.56/-8.48	-9.86/-7.92	-7.63/-7.46	-5.7/-4	-3.89/-5.3	-7.13/-9.5	-9.42/-8.38	-7.16/-5.91	-5.34/-5.65	-5.83/-4.73	-6.08/-5.63	-4.16/-4.95	-4.18/-3.67	-5.38/-4.32	-4.87/-7.88	-8.07/-3.98	-1.78/-1.43	-2.94/-3.54	-3.58/-0.33	0.29/-2.48	-3.6/-3.65	-5.93/-6.76	-9.64/-7.78	-6.43/-7.9
Θ(127.5°)	-4.12/-4.93	-5.39/-6.54	-6/-5.47	-4.76/-4.24	-4.81/-5.2	-6.29/-5.93	-5.87/-6.8	-7.64/-7.25	-6.24/-7.04	-7.86/-8.68	-8.95/-9.32	-10.16/-9.88	-7.56/-5.5	-2.98/-3.71	-3.94/-3.63	-3.69/-3.34	-0.22/-1.16	0.78/-3.75	-4.59/-2.14	-2.25/-2.67	-5.14/-5.93	-5.58/-6.1	-7.56/-7.4	-4.64/-2.81
Θ(135°)	-6.76/-6.46	-5.38/-6.81	-6.49/-6.83	-7.35/-6.89	-7.04/-8.2	-10.06/-9.17	-7.67/-8.13	-8.79/-7.05	-6.16/-6.82	-8.45/-8.7	-7.22/-6.04	-6.9/-6.67	-6.62/-4.2	-3.6/-3.18	-2.85/-2.98	-2.69/-3.95	-2.96/-1.11	0.79/-2.93	-3.38/-1.63	-3.1/-1.9	-3.66/-7.03	-8.04/-7	-8.04/-4.24	-2.66/-4.03
Θ(142.5°)	-5.91/-7.89	-5.59/-5.23	-4.81/-4.18	-4.27/-4.76	-6.39/-8.61	-9.08/-8.46	-7.52/-7.25	-7.44/-5.9	-5.08/-4.99	-4.86/-5.57	-6.36/-5.81	-6.11/-5.2	-5.7/-6.23	-5.38/-4.11	-3.56/-1.57	-2.31/-4.29	-5.53/-2.34	-2.68/-5.3	-1.96/-5.16	-1.68/-6.4	-7.3/-5.87	-5.09/-8.47	-8.86/-8.2	
Θ(150°)	-4.91/-5.78	-8.38/-9.64	-10.18/-10.05	-9.84/-11.54	-11.68/-10.12	-8.92/-8.21	-8.2/-7.33	-6.05/-4.88	-4.99/-5.23	-6.61/-8.34	-8.83/-8.08	-6.17/-5.39	-5.77/-5.58	-5.72/-6.53	-7.19/-5.94	-5.67/-7.48	-7.46/-							



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(52.5°)	2.5/3.55	3.5/3.44	4.04/4.31	3.86/3.65	3.67/3.82	4.14/4.36	3.97/2.87	2.19/2.83	3.4/3.22	2.35/1.91	1.48/0.85	1.22/0.96	0.03/-0.3	0.07/0.3	0.57/0.45	0.44/-0.47	-2.32/-2.59	-0.88/-0.21	0.26/0.27	-0.39/-1.21	-2.13/-2.89	-2.71/-0.77	-0.25/-0.22	0.5/1.2
Θ(60°)	2.53/3.38	3.64/0.4	4.25/4.14	4.32/3.66	3.36/4.02	4.92/4.8	3.71/3.5	3.56/3.76	3.96/3.68	2.95/4.28	2.92/2.33	2.62/2.2	1.54/-1.42	0.62/1.13	1.59/1.24	0.59/0.08	-1.64/-0.67	0.1/-0.31	0.31/-0.22	-1.07/-0.22	0.42/1.1	1.18/1.57	2.72/2.08	1.55/1.88
Θ(67.5°)	4.93/5.06	5.19/5.59	5.33/4.9	4.87/3.85	3.13/3.6	4.03/4.4	4.14/3.78	4.31/4.11	3.86/3.58	3.34/2.49	2.72/2.26	2.21/2.53	1.84/1.44	1.22/1.53	1.79/0.8	-0.82/-1.34	-1.91/-0.45	-1.75/-1.29	-1.69/-0.96	-0.35/-0.26	0.42/0.37	-0.06/-0.47	1.45/1.86	2.85/4.16
Θ(75°)	4.8/4.9	5.42/5.57	5.14/4.48	3.75/2.58	1.87/3.4	4.25/4.77	4.84/4.25	4.26/4.21	3.46/3.17	3.04/2.99	3.68/3.77	3.74/3.16	3.2/2.07	1.97/1.36	0.91/0.51	0.11/-2.4	-2.88/-1.8	-1.98/0.9	0.2/0.8	1.32/0.08	-1.74/-2.27	-0.63/1.93	2.81/3.55	3.61/4.17
Θ(82.5°)	3.39/3.82	4.06/4.43	4.31/3.93	3.75/2.93	2.07/2.8	4.05/4.72	4.93/5.01	4.5/3.69	2.85/2.85	3.82/3.65	4.16/3.74	3.22/2.11	2.96/2.57	2.18/1.66	0.58/0.11	-0.61/-2.76	-1.38/0.02	-1.08/-0.43	-1.45/-0.26	0.78/1.23	0.37/-0.62	-0.23/1.05	1.84/2.79	2.72/2.69
Θ(90°)	2.98/3.34	3.97/4.08	3.03/2.48	2.71/3.35	4.09/4.23	4.43/4.3	4.37/4.37	4.43/3.73	2.52/2.02	2.31/2.16	2.99/2.6	3.18/2.46	2.83/1.79	1.01/1.01	1.43/1.46	0.28/-1.95	-1.1/-0.44	0.41/-0.8	-0.82/0.96	1/0.67	0.63/-1.19	-0.98/0.42	0.87/2.38	2.52/2.04
Θ(97.5°)	2.28/2.21	1.92/2.24	2.39/1.34	1.38/1.71	3.36/4.77	4.45/4.2	3.78/3.91	4.17/2.99	1.81/1.4	1.53/2.15	2.34/2.31	2.52/1.75	2.15/0.9	-0.06/-0.36	-0.57/0.28	-2.05/0.56	0.81/1.28	-0.43/-1.15	0.18/0.53	1.15/1.12	0.84/-0.27	0.71/1.44	1.13/2.57	3.74/2.61
Θ(105°)	0.54/1.84	1.76/1.85	2.21/1.03	1.64/2.23	3.13/4.31	4.55/3.67	2.93/2.65	2.93/2.05	0.64/-0.05	0.62/1.83	2.5/2.53	3.32/2.63	3.51/2.08	0.16/-0.98	-1.8/-0.74	-0.54/-1.04	-0.61/0.76	-1.28/-1.41	-1.13/-0.05	0.04/0.13	1.77/1.34	0.99/1.8	0.82/1.61	3.02/1.81
Θ(112.5°)	0.18/0.45	1.03/1	2.13/2.06	2.26/2.35	2.78/4.05	4.24/2.7	2.35/2.3	2.42/1.36	0.2/-0.06	0.22/1.46	2.29/3.18	3.42/1.35	2.09/0.67	-0.27/-1.09	-1.62/-1.67	-1.39/-1.53	0.63/1.07	-1.18/-0.85	-1.51/-0.48	0.65/0.81	0.7/0.76	-1.34/-0.61	-0.6/0.45	1.84/1.44
Θ(120°)	1.38/-0.06	0.81/0.34	1.27/1.99	2.16/2.78	2.64/2.72	2.28/1.41	-0.1/0.65	1.01/1.68	1.54/0.87	0.35/1.01	0.56/1.37	1.44/0.85	2.18/0.2	-1.16/-1.41	-2.91/-2.55	-3.28/-1.95	-1.08/-4.46	-3.85/-3.33	-2.5/-1.54	0.22/-1.3	-1.91/-0.42	-0.49/0.23	0.42/0.59	0.31/0.47
Θ(127.5°)	0.39/-0.87	-1.09/1.06	0.93/1.56	1.45/1.04	0.63/0.75	0.13/0.45	0.72/1.55	2.55/2.18	1.59/1.36	1.23/1.53	1.51/2.26	1.09/1.07	0.35/-1.97	-1.78/-0.81	-1.1/-3.28	-5.29/-3.45	-2.66/-1.85	-3.96/-4.93	-3.05/-3.08	-1.3/-4.76	-1.11/-2.29	-0.77/-3.18	-0.43/-0.62	-1.3/-0.85
Θ(135°)	-0.14/-0.91	-1.57/-0.37	0.15/0.11	0.54/0.05	-0.55/-0.74	-0.87/-0.44	0.02/0.52	1.6/2.25	1.85/1.35	1.5/1.01	1.1/-0.87	-2.34/-2.58	-3.63/-5.41	-3.24/-1.77	-2.98/-6.06	-5.21/-1.56	-4.43/-4.38	-4.94/-3.12	-1.97/-1.83	-3.08/-2.04	-2.17/-1.95	-2.03/-2.39	-1.42/-1.03	-0.41/-0.76
Θ(142.5°)	-6.6/-4.68	-4.69/-3.88	-2.77/-3.55	-4/-2.67	-1.41/-0.96	-1.57/-2.27	-1.58/-0.7	0.47/1.53	1.75/1.23	0.29/0.14	-0.74/-1.84	-2.2/-2.69	-4.34/-7.45	-6.64/-5.73	-5.98/-6.24	-5.63/-4.76	-2.78/-3.69	-3.67/-5.01	-5.14/-4.15	-6.56/-3.91	-4.6/-3.24	0.45/1.32	0.05/-4.6	
Θ(150°)	-6.18/-5.18	-5.33/-6.49	-7.25/-8.02	-8.32/-8.35	-6.8/-5.8	-5.37/-5.83	-5.54/-3.83	-2.05/-0.61	-0.36/-0.55	-1.12/-1.41	-0.99/-1.19	-1.7/-1.88	-3.95/-4.84	-2.76/-2.95	-2.94/-4.12	-7.13/-7.33	-5.91/-2.99	-1.47/-2.77	-2.39/-2.5	-2.6/-1.32	-3.83/-9.16	-8.68/-5.42	-3.24/-1.83	-3.04/-5.53
Θ(157.5°)	-5.55/-4.46	-4.85/-5.02	-5.49/-6.88	-7.67/-6.86	-5.75/-5.93	-7.02/-7.87	-7.87/-7.53	-6.72/-4.97	-3.5/-2.96	-2.95/-2.57	-1.85/-1.52	-1.1/-1.08	-1.82/-2.46	-2.75/-3.18	-3.63/-4.92	-6.41/-7.3	-7.17/-5.65	-3.84/-2.43	-2.55/-4.29	-4.76/-4.22	-4.1/-5.71	-7.06/-5.25	-4.32/-6.03	-7.5/-6.13
Θ(165°)	-7.35/-7.31	-7.77/-7.09	-6.56/-7.13	-7.81/-9.03	-10.29/-11.29	-11.94/-11.03	-10.15/-8.75	-8.56/-8.39	-7.41/-6.96	-6.46/-5.66	-4.47/-2.96	-1.84/-1.27	-1.46/-2.4	-3.29/-4.05	-4.68/-5.85	-8.25/-11.61	-11.81/-8.84	-5.22/-3.09	-2.2/-2.68	-3.16/-2.72	-2.36/-2.41	-3.1/-4.63	-5.44/-5.5	-5.91/-7.05
Θ(172.5°)	-8.44/-9.55	-10.12/-10.66	-9.93/-9.56	-9.27/-9.27	-9.14/-8.5	-9.05/-9.68	-9.79/-9.6	-10.29/-10.52	-9.93/-9.77	-8.82/-8.4	-7.98/-7.04	-5.87/-5.43	-5.23/-5.46	-5.97/-7.41	-8.95/-10.01	-9.38/-7.73	-6.37/-5.88	-5.7/-5.74	-5.86/-6.17	-6.67/-6.5	-5.94/-4.92	-4.26/-4.82	-5.27/-6.06	-7.29/-8.23
Θ(180°)	-11.74/-11.79	-12.77/-12.38	-12.8/-12.1	-12.73/-12.33	-11.62/-10.31	-9.09/-7.93	-6.68/-6.36	-6.63/-7.11	-7.66/-8.21	-8.67/-9.27	-9.49/-9.29	-8.87/-8.79	-8.66/-9.15	-10.59/-11.08	-11.36/-10.23	-10.03/-9.36	-9.08/-9.08	-8.65/-8.78	-8.3/-7.99	-7.56/-7.87	-7.9/-8.59	-9.64/-10.54	-10.48/-10.79	-10.98/-11.41

5G option2

Freq(Hz)	5.2G/Pol.	Phi/-	-/-	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta(0°)	-3.94/-3.59	-3.14/-2.89	-2.31/-1.88	-1.43/-0.73	-0.22/0.3	0.84/1.16	1.47/1.61	1.56/1.3	0.99/0.64	0.23/-0.11	-0.53/-1.19	-1.92/-2.65	-3.08/-3.06	-2.64/-2.25	-1.89/-1.24	-0.46/-0.01	0.12/0.21	0.38/0.68	0.9/1.12	1.11/1	0.75/0.17	-0.53/-1.1	-1.61/-2.24	-3.11/-3.97
Theta(7.5°)	-3.4/-3.41	-3.64/-3.55	-2.94/-2.5	-1.86/-1.19	-0.97/-0.74	-0.44/-0.41	-0.05/0.21	0.25/0.23	-0.16/-0.68	-1.06/-1.53	-2.41/-3.46	-4.69/-5.47	-5.12/-3.97	-2.84/-1.74	-0.99/-0.34	0.04/0.37	0.76/1.12	1.47/1.66	1.68/1.66	1.74/1.63	1.47/1.27	0.84/0.23	-0.29/-0.96	-2.04/-2.93
Theta(15°)	-4.81/-4.74	-4.61/-4.14	-3.48/-2.63	-1.45/-1.01	-0.67/-0.47	-0.71/-0.78	-0.29/-0.32	-0.86/-1.21	-1.41/-1.6	-2.02/-2.7	-3.62/-4.89	-5.81/-5.91	-4.44/-2.92	-1.18/-0	0.76/1.26	1.32/1.26	0.90/0.76	0.88/0.83	0.89/0.91	0.84/0.71	0.64/0.44	0.23/-0.27	-0.87/-1.6	-3.02/-4.37
Theta(22.5°)	-5.5/-6.19	-5.15/-3.87	-3.37/-2.31	-1.56/-0.92	-0.30/0.35	0.59/0.71	0.55/0.3	-0.31/-1.02	-1.77/-2.48	-3.25/-4.04	-5.41/-6.01	-5.32/-4.09	-3.03/-2.19	-1.08/-0.25	0.51/0.7	1.41/1.64	1.69/1.56	1.13/0.69	0.62/0.63	0.62/0.41	-0.06/-0.52	-0.91/-1.49	-2.32/-3.15	-4.18/-5.18
Theta(30°)	-2.38/-2.51	-2.26/-3.07	-4.06/-4.25	-3.37/-2.86	-2.61/-1.93	-1.63/-1.2	-1.54/-1.85	-1.48/-1.26	-1.01/-1.66	-2.98/-4.66	-6.42/-7.74	-7.31/-6.26	-5.28/-4.35	-3.2/-1.77	-0.63/0.17	0.89/1.35	1.63/1.67	1.79/2	1.97/1.56	0.62/-0.39	-1.27/-1.4	-1.77/-2.77	-4.05/-3.58	-2.93/-2.33
Theta(37.5°)	-2.55/-3.17	-3.35/-3.27	-3.6/-5.18	-5.63/-4.77	-4.43/-4.07	-5.06/-5.11	-3.71/-2.59	-1.97/-2.07	-3.16/-4.24	-4.74/-4.75	-5.55/-6.81	-6.99/-6.34	-4.26/-1.91	-0.33/0.7	1.31/1.61	1.48/1.16	0.97/1.21	1.71/1.49	0.96/0.28	0.03/-0.26	-0.8/-1.6	-2.2/-2.46	-2.94/-3.21	-2.99/-2.5
Theta(45°)	-3.51/-1.57	-1.16/-1.29	-2.49/-3.8	-4.96/-6.02	-6.57/-6.52	-6.96/-6.9	-5.12/-3.19	-1.81/-1.32	-2.28/-4.02	-6.48/-7.91	-5.63/-3.95	-3.94/-4.41	-4.09/-3.26	-1.49/0.09	1.15/2.27	2.64/2.59	0.76/-0.64	-2.25/-2.64	-1.67/-0.82	-0.85/-1.68	-2.22/-2.24	-2.46/-3.22	-3.54/-3.6	
Theta(52.5°)	-7.97/-6.42	-6.32/-6.47	-6.33/-6.62	-7.62/-7.69	-5.52/-4.18	-3.49/-3.95	-3.62/-2.97	-3.11/-4.25	-4.47/-5.32	-8.52/-9.55	-6.81/-5.12	-4.07/-2.53	-2.48/-1.8	-1.69/-1.57	-0.71/0.8	1.99/2.51	1.95/0.77	-0.73/-2.53	-1.52/-0.59	-0.43/-0.61	-1.05/-1.79	-2.37/-2.65	-2.65/-3.85	-5.66/-6.1
Theta(60°)	-4.38/-4.05	-3.08/-3.05	-4.18/-5.51	-7.31/-9.19	-7.43/-5.34	-5.26/-6.53	-6.42/-5.34	-3.67/-3.53	-5.12/-5.44	-5.11/-5.69	-5.16/-4.84	-4.3/-4.21	-4.67/-3.16	-1.63/-1.21	-0.45/0.43	1.35/1.94	2.12/2.24	1.46/-0.16	-0.97/0.4	1.4/0.33	-1.33/-1.55	-2.45/-3.09	-3.44/-4.58	-6.09/-4.97
Theta(67.5°)	-4.15/-2.06	-1.56/-1.81	-2.03/-2.7	-3.7/-6	-8.42/-7.87	-7.22/-5.64	-3.38/-1.37	-4.5/-3.69	-2.81/-3.05	-4.04/-5.6	-6.17/-5.33	-5.58/-5.41	-5.18/-3.76	-2.33/-1.48	-0.38/-0.68	-1.15/-1.14	0.13/1.65	1.34/0.21	-0.64/0.01	0.46/0.02	-1.48/-2.18	-2.9/-5.04	-7.5/-7.97	-6.45/-4.46
Theta(75°)	-4.76/-4.9	-4.95/-5.24	-5.63/-5.63	-6.89/-8.55	-8.64/-7.42	-7.96/-7.72	-6.27/-4.69	-4.43/-5	-5.75/-5.29	-5.38/-5.26	-4.99/-5.31	-4.8/-4.27	-3.76/-2.87	-1.56/-0.79	-0.72/-2.39	-3.63/-3.4	-1.9/-0.56	-0.32/-0.04	-0.85/-0.23	-0.39/-1.97	-2.22/-1.09	-1.76/-4.55	-6.62/-6.5	-6.65/-5.43
Theta(82.5°)	-4.86/-5.46	-6.55/-6.11	-6.47/-7.15	-9.35/-12.65	-11.84/-8.59	-6.48/-4.65	-3.28/-3.2	-5.06/-6.21	-4.21/-2.74	-3.25/-4.06	-5.96/-6.27	-5.1/-4.65	-3.61/-1.71	-0.89/-0.98	-0.67/-2.2	-1.96/-1.1	0.35/-0.03	-0.78/-0.72	0.08/1.09	0.93/-0.62	-1.32/-1.28	-1.86/-3.92	-8.16/-10.83	-9.73/-7.17
Theta(90°)	-5.91/-7.6	-8.63/-7.68	-6.85/-6.88	-7.98/-9.3	-8.2/-7.1	-6.34/-5.4	-5.63/-7.56	-9.04/-7.1	-3.5/-3.05	-4.17/-6.21	-6.09/-4.43	-4.63/-3.76	-0.92/-0.38	-0.34/0.62	0.6/-0.57	0.45/1.01	1.8/2.29	2.19/1.37	1.04/2.35	2.65/1.17	-0.16/-0.15	-1.24/-2.58	-5.01/-5.77	-5.28/-5.91
Theta(97.5°)	-3.08/-5.36	-5.55/-5.35	-6.41/-8.43	-8.4/-8	-6.19/-6.88	-9.12/-10.25	-9.72/-9.15	-8.18/-7.83	-6.33/-6.62	-8.3/-7.74	-5.74/-5	-4.21/-3.46	-1.86/-1.08	-1.04/0.06	0.55/-0.21	-0.96/-0.62	-0.17/1.77	2.94/0.77	2.45/-3.16	2.78/0.78	0.05/0.58	-0.45/-3.6	-8.02/-11.69	-7.97/-5.03
Theta(105°)	-5.38/-7.4	-3.32/-6.44	-6.73/-6.04	-6.87/-8.08	-7.96/-6.45	-5.28/-6.48	-9.56/-8.95	-6.52/-4.49	-4.02/-4.91	-4.57/-4.8	-5.95/-5.02	-2.98/-1.53	0.43/1.21	1.15/1.51	1.88/-0.47	-2.87/0.09	1.73/2.27	2.38/1.57	0.54/1.91	2.52/0.79	-0.1/2.1	0.35/-2.85	-4.08/-6.53	-9.55/-6.85
Theta(112.5°)	-6.05/-4.71	-6.09/-6.83	-8.71/-7.97	-5.66/-5.01	-4.41/-5.69	-3.37/-7.08	-8.81/-7.06	-6.01/-4.74	-3.33/-3.28	-4.24/-4.7	-2.97/-2.84	-1.86/-1.94	-0.32/0.31	0.38/1.49	0.84/-1.93	-1.59/0.61	1.86/3.43	2.77/1.04	1.14/3.42	4.55/2.72	1.41/1.63	0.87/-1.22	-3.56/-5.84	-7.16/-7.06
Theta(120°)	-8.82/-7.63	-5.61/-4.52	-4.12/-4.33	-4.55/-4.45	-4.75/-5.55	-7.2/-9.15	-11.08/-12.21	-9.79/-7.71	-7.24/-5.77	-3.89/-3.71	-5.96/-6.6	-5.97/-3.7	-1.41/-0.93	-0.09/-0.22	-1.88/-1.13	-0.58/0.9	2.16/2.78	1.26/-0.08	0.28/2.71	4.28/2.96	0.67/0.46	-0.28/-1.99	-2.94/-4.6	-5.62/-7.02
Theta(127.5°)	-6.29/-7.16	-9.79/-10.36	-8.44/-7.24	-6.62/-5.6	-5.3/-5.85	-6.08/-7.35	-10.33/-10.71	-7.51/-6.69	-6.11/-3.82	-3.52/-5.08	-4.97/-4.31	-4.6/-4.35	-3.1/-1.55	-1.9/-3.45	-3.7/-2.76	-0.71/0.3	1.43/2.17	0.71/-1.39	0/1.09	1.28/1.04	1.38/0.82	0.17/-1.76	-2.78/-3.4	-5.03/-7.28
Theta(135°)	-6.62/-6.14	-4.81/-5.06	-4.96/-3.45	-5.05/-6.08	-5.42/-4.48	-4.96/-6.84	-11.01/-12.17	-8.72/-9.74	-5.19/-4.03	-5.07/-6	-7.01/-6.42	-1.92/-2.42	-3.73/-2.29	-2.18/-1.75	-0.51/1.33	2.45/0.91	-0.4/-2.22	-1.68/0.03	1.86/2.12	1.17/0.56	-0.13/-4.11	-2.27/-5.11	-4.24/-4.58	
Theta(142.5°)	-4.57/-8.36	-7.75/-7.01	-6.92/-7.08	-8.96/-7.03	-5.47/5.15	-5.8/-7.43	-9.47/8.8	-6.44/4.28	-3.83/-4.76	-6.39/-6.75	-4.89/-3.03	-1.94/-0.54	0.23/0.16	0.07/-1.2	-2.29/-0.12	-0.02/0.47	1.18/0.08	-1.74/-4.24	-3.82/-1.61	0.41/0.73	-0.71/-1.46	-2.51/-3.87	-2.6/-4.92	-6.35/-4.61
Theta(150°)	-2.34/-3.3	-6.83/-6.53	-6.33/-7.28	-7.01/6.09	-5.32/5.75	-6.67/-1.6	-9.49/6.81	-5.82/4.14	-2.86/-1.99	-1.82/-2.15	-2.89/3.65	-3.26/-2.23	-1.95/-1.79	-2.12/-2.58	-2.11/-1.92	-2.34/-1.58	-2.24/-4.25	-5.03/4.61	-3.4/-3.15	-3.71/-3.54	-3.5/-3.44	-3.37/-3.61	-3.27/-2.45	-2.23/-2.35
Theta(157.5°)	-4.39/-4.92	-5.22/-6.07	-6.43/-6.01	-6.09/-6.74	-7.38/-7.75	-8.71/-8.6	-8.59/-8.93	-9.28/-7.47	-5.65/-4.2	-3.47/-3.03	-3.05/-3.15	-2.78/-2.03	-1.37/-1.17	-1.18/-1.53	-1.75/-1.59	-0.99/-0.38	-0.57/-1.17	-1.54/-1.61	-1.26/-1.07	-0.78/-0.58	-0.75/-1.45	-2.16/-3.19	-4.29/-4.09	-3.53/-3.83
Theta(165°)	-4.77/-4.76	-5.19/-6.67	-8.53/-9.18	-9.46/-8.94	-8.72/-9.54	-10.29/-10.09	-9.78/-10.11	-8.84/-7.67	-5.7/-5.16	-5.44/-6.4	-7.21/-7.23	-6.36/-5.2	-3.82/-2.62	-1.69/-1.25	-0.97/-0.75	-0.56/-0.52	-0.66/-0.84	-0.55/-0.15	-0.07/-0.42	-0.84/-1.44	-2.16/-3.04	-3.52/-3.82	-4.08/-4.17	-4.31/-4.62
Theta(172.5°)	-9.76/-8.85	-7.51/-5.81	-5.04/-4.26	-3.95/-3.74	-3.95/-4.27	-4.3/-4.39	-4.71/-4.9	-5.07/-5.76	-5.71/-6.28	-7.63/-9.16	-9.84/-8.75	-6.83/-5.72	-4.99/-4.4	-3.75/-3.5	-3.21/-3.07	-2.92/-2.87	-2.51/-2.02	-1.78/-1.75	-2.09/-2.62	-3.3/-4.57	-5.32/-5.17	-5.17/-5.98	-7.53/-8.83	-9.27/-10.11
Theta(180°)	-9.52/-10.2	-10.39/-9.85	-8.78/-8.18	-7.19/-6.69	-6.14/-5.38	-4.74/-4.72	-4.78/-4.95	-4.73/-4.36	-4.06/-4.08	-4.63/-5.51	-6.61/-4.72	-8.22/-8.29	-8.27/-7.97	-7.96/-7.59	-6.9/-6.72	-6.36/-6.36	-5.75/-5.84	-5.43/-4.98	-5.14/-5.06	-5.09/-5.24	-5.31/-5.46	-5.49/-5.74	-6.21/-6.97	-7.7/-8.59
Freq(Hz)	5.2G/Pol.	Theta/-	-/-	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta(0°)	0.09/1.07	-0.13/0.2	0.48/-0.32	-0.86/-1.21	-2.08/-3.23	-4.46/-5.68	-6.06/-5.56	-4.48/-3.64	-2.93/-2.32	-1.69/-0.91	-0.30/2.1	0.44/0.66	0.73/0.68	0.61/0.46	0.16/-0.24	-0.78/-1.28	-1.83/-2.84	-4.04/-4.91	-4.53/-3.68	-3.38/-3.92	-2.63/-2.15	-1.57/-0.95	-0.55/-0.13	0.22/0.24
Theta(7.5°)	0.91/0.17	0.93/0.78	0.47/0.17	-0.17/0.42	-1.05/-1.77	-2.67/-4.09	-4.78/-4.6	-1.47/-3.11	-2.59/-2.12	-1.49/-0.71	0.05/0.6	0.92/0.99	0.67/0.34	0.02/0.44	-1.17/-2.31	-3.74/-4.89	-6.14/-7.17	-6.6/-5.49	-3.43/-2.58	-1.03/-0.66	-0.10/0.54	-6.14/-7.17	0.22/0.24	
Theta(15°)	2.09/2.37	1.95/1.54	0.99/0.36	0.02/0.11	-0.34/-0.52	-1.08/-1.83	-2.76/-3.05	-2.7/-1.91	-1.09/-0.34	0.12/0.39	0.72/1.07	1.31/1.45	1.44/1.11	0.74/0.23	-0.56/-1.18	-1.69/-2.32	-3.49/-4.84	-6.37/-7.63	-6.72/-3.88	-2.37/-1.68	-1.38/-1.37	-1.18/-0.9	-0.37/0.53	1.36/1.86
Theta(22.5°)	1.71/1.99	2.22/32	2/1.94	2.06/2.24	2.13/1.89	1.05/-0.15	-1.29/-1.73	-1.44/-0.97	-0.29/0.3	0.85/1.1	0.96/1.05	0.94/0.69	0.35/0.07	-0.01/-0.15	-0.3/-0.39	-0.71/-1.41	-3.49/-4.27	-5.67/-6.75	-7.22/-5.28	-3.68/-2.66	-2.35/-2.35	-2/-2.52	-0.96/-0.3	0.64/1.43
Theta(30°)	-0.34/0.01	0.25/0.29	0.34/0.59	1.34/1.97	1.88/1.56	0.8/-0.32	-1.06/-1.25	-1.19/-0.68	0.13/0.15	0.35/0.56	0.27/-0.12	-0.37/0.25	-0.18/-0.09	0.13/0.15	-0.15/-0.75	-1.89/-3.32	-4.29/-4.91	-4.82/-5.23	-5.2/-4.28	-2.99/-1.94	-1.32/-1.17	-1.07/-1.06	-0.63/0.4	
Theta(37.5°)	0.37/1.06	1.25/1.38	1.54/1.24	0.87/0.9	0.56/0.06	0.05/0.11	-0.3/-0.69	-1.18/-0.46	0.11/0.07	-0.38/-0.84	-0.12/0.6	0.76/-0.04	-0.92/-0.3	0.58/0.92	0.59/0.25	0.30/3.1	-0.77/-2.08	-3.13/-4.25	-5.45/-4.08	-2.81/-2.47	-2.08/-1.5	-0.8/-0.62	-0.92/-0.66	-0.49/-0.17
Theta(45°)	1.84/2.54	2.91/3.12	3.43/3.55	2.95/2.03	1.2/0.26	-0.14/-0.28	-0.76/0.69	-0.44/0	0.77/0.88	0.46/0.78	1.12/1.69	1.57/0.63	-0.15/-0.35	-0.44/-0.45	-0.26/0.07	0.43/0.21	-0.71/-2.44	-4.23/-6.16	-5.39/-3.27	-1.98/-0.93	-0.84/-0.85	-0.71/-0.88	-0.53/0.35	0.71/1.6
Theta(52.5°)	2.42/2.3	2.08/2.68	3.26/3.48	3.21/2.7																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(0°)	-0.09/0.00	-0.37/-0.72	-2.04/-2.14	-2.61/-3.49	-4.35/-5.27	-6.18/-6.95	-6.93/-6.43	-5.49/-4.33	-3.05/-2.35	-1.65/-1.17	-0.72/-0.34	-0.17/-0.08	-0.13/-0.02	-0.44/-0.61	-1.02/-1.57	-2.37/-3.28	-4.33/-5.48	-6.41/-7.14	-6.81/-5.73	-4.4/-3.42	-2.5/-1.72	-1.33/-1.45	-1.23/-0.9	-0.64/-0.26
Θ(7.5°)	0.04/-0.25	-0.3/-0.16	-0.21/-0.69	-1.02/-2.05	-2.7/-3.22	-3.68/-4.14	-4.51/-4.58	-4.69/-3.95	-3.25/-2.56	-2.13/-1.57	-1.14/-0.66	-0.16/-0.09	-0.08/-0.02	-0.19/-0.42	-0.92/-1.75	-2.57/-3.6	-4.44/-5.51	-7.27/-7.88	-6.77/-5.57	-4.23/-3.2	-2.29/-1.62	-0.88/-0.64	-0.39/-0.2	0.03/0.24
Θ(15°)	1.20/92	1.51/58	1.18/80.1	0.70/11	-0.44/-0.76	-1.66/-2.39	-2.99/-3.28	-3.05/-2.67	-2.56/-2.38	-2.03/-1.51	-0.99/-0.48	-0.15/0.36	0.84/1.12	1.15/0.96	0.45/-0.41	-1.68/-2.99	-4.05/-5.04	-6.51/-8.19	-8.25/-6.16	-4.28/-2.53	-1.53/-0.97	-0.36/0.31	0.79/0.85	1.07/1.25
Θ(22.5°)	1.55/1.73	1.75/1.35	0.88/0.73	1.05/1.28	1.42/1.13	0.42/-0.5	-1.31/-1.16	-1.08/-0.23	0.27/0.49	0.51/0.67	0.79/0.86	0.82/1.05	1.12/0.97	1.07/1.01	0.74/0.22	-0.42/-1.04	-1.72/-3.18	-5.23/-7.74	-9.03/-5.96	-3.25/-1.51	-0.67/-0.51	-0.18/-0.04	0.36/0.8	1.18/1.34
Θ(30°)	0.50/71	0.78/0.95	1.14/1.6	2.42/2.84	2.89/2.52	1.61/0.47	-0.26/-0.74	-0.49/0.64	1.61/1.95	1.79/1.33	10.92	0.76/0.2	-0.3/-0.43	-0.30/15	0.64/0.91	0.88/0.62	-0.08/-1.83	-3.9/-4.97	-5.9/-6.18	-5.03/-3.25	-2.31/-1.31	-0.8/-0.86	-0.81/-0.58	-0.08/0.24
Θ(37.5°)	0.99/1.32	1.1/0.78	0.63/0.59	1.16/1.42	1.26/0.88	0.27/0.15	-0.17/-0.34	-0.38/0.29	1.08/1.42	1.29/0.91	0.61/0.78	0.98/0.72	-0.11/-0.63	-0.32/0.34	0.63/0.47	0.67/0.75	0.17/-1.43	-2.87/-3.76	-4.22/-4.04	-4.33/-3.48	-1.93/-0.14	0.64/0.75	0.45/0.36	0.08/0.26
Θ(45°)	1.85/2.19	2.4/2.38	2.17/2.02	2.04/1.71	0.96/0.64	0.37/0.09	0.02/0.09	-0.07/-0.21	0.07/0.45	0.58/0.67	0.93/1.32	1.22/0.62	0.47/0.53	0.16/0.26	0.75/0.93	1.16/1.06	-0.25/-2.58	-4.74/-6.25	-6.01/-4.08	-2.12/-1.72	-1.59/-0.89	-0.17/0.02	0.62/0.79	0.86/1.25
Θ(52.5°)	2.75/2.78	2.57/2.46	2.54/2.43	2.43/2.49	2.04/1.02	0.04/0.34	0.37/0.81	0.51/0.05	0.33/1	1.58/2.19	2.08/2.39	2.37/1.33	0.78/1.3	1.18/0.34	-0.09/0.05	-0.24/-0.73	-4.9/-8.77	-7.6/-4.71	-2.09/-0.66	-0.6/-0.4	-3.20/2.4	1/1.5	1.94/2.45	
Θ(60°)	2.88/2.61	2.13/1.96	2.11/2.37	2.61/2.52	1.84/0.82	0.5/0.46	0.76/0.66	0.15/-0.77	-0.93/-0.36	0.62/1.63	1.32/1.7	2.11/1.4	1.11/1.69	1.46/0.41	0.23/0.11	-0.57/-1.86	-3.57/-3.95	-4.01/-4.95	-6.43/-6.46	-5.96/-4.13	-3.69/-2.6	-0.87/-0.02	1.36/2.35	2.67/2.67
Θ(67.5°)	1.39/1.73	2.13/2.12	2.42/2.95	3.2/3.03	2.33/1.6	1.81/1.76	0.85/-0.28	-0.88/-0.5	-0.42/-0.24	0.96/1.82	1.76/2.19	2.55/1.69	1.15/1.07	0.99/0.25	-0.18/-0.68	-0.17/-1.39	-2.32/-5.21	-7.23/-6.55	-5.83/-4.12	-3.05/-4.07	-3.56/-2.07	-0.31/0.98	2.12/1.5	1.61/53
Θ(75°)	0.50/85	1.44/1.85	2.64/2.29	2.14/2.21	2.39/2.31	1.75/1.39	1.17/0.82	-0.22/-0.96	-0.94/-0.86	-0.20/77	0.5/1.04	1.63/1.15	0.73/1.01	1.55/1.04	0.07/-0.69	-2.9/-4.17	-3.87/-3.32	-4.01/-7.12	-7.78/-6.87	-4.19/-2.78	-1.69/-0.55	0.45/0.33	1.25/1.76	1.51/0.3
Θ(82.5°)	-0.60/47	1.51/1.87	2.19/1.64	0.52/-0.1	0.43/0.92	1.71/1.95	0.99/-0.12	-0.44/-0.76	-1.05/-1.55	-1.41/0.48	1.17/1.5	1.67/1.38	0.68/0.03	0.12/0.3	0.34/-0.33	-1.49/-2.59	-2.68/-2.36	-1.79/-1.91	-2.01/-3.51	-4.08/-3.45	-2.01/-1.7	-0.88/-1.05	-0.9/-0.32	-0.08/0.41
Θ(90°)	0.310/8	1.78/2.41	2.97/2.17	1.13/0.6	-0.75/0.66	1.93/2.01	0.97/-0.15	-1.11/-1.49	-1.5/-2.47	-2.7/0.32	1.11/1.61	1.73/1.28	1.35/1.15	-0/-1.2	-0.98/-1.78	-2.63/-0.37	-1.08/-2.31	-2.63/-1.83	-2.21/-1.8	-1.63/-1.65	0.17/-1.15	-0.48/0.06	-0.80/-0.89	
Θ(97.5°)	-1/-0.14	0.50/36	1.37/1.56	0.83/-0.24	-1.65/0.36	1.67/1.81	0.59/-0.88	-0.52/-0.08	-0.48/-1.24	-1.21/-0.98	-1.29/-0.34	-0.06/-1.07	-0.61/0.14	-0.37/-0.27	-0.65/-3.47	-3.16/-1.73	-0.87/-1.45	-3.24/-4.77	-4.41/-4.17	-1.19/-1.69	-1.35/-1.28	-1.78/-2.7	-3.42/-1.93	-0.16/0.06
Θ(105°)	-1.31/-1.01	0.03/0.07	1.1/0.91	-0.53/-1.92	-0.75/0.94	1.63/1.03	-0.66/-2.41	-1.78/-0.85	-0.61/-1.05	-1.9/-1.8	-2.22/-1.24	-1.02/-0.69	-0.81/-1.32	-2.37/-2.69	-4.05/-4.69	-2.87/-0.84	0.2/0.1	-1.34/-1.33	-1.45/-0.06	-0.07/-1.1	-1.42/0.09	-1.48/-2.06	-0.63/-1.67	0.55/0.42
Θ(112.5°)	-0.50/-1.97	-1.08/-1.39	-1.43/-1.55	-1.43/-1.52	-0.07/0.91	0.71/0.22	-1.09/-2.64	-2.36/-1.88	-1.5/-2.12	-1.63/-1.29	-1.67/-1.39	-1.88/-1.52	-1.64/-2.61	-4.65/-5.43	-5.25/-7.58	-4.99/-5.26	-4.2/-4.76	-2.9/-2.05	-1.18/1.17	1.49/-1.93	-1.96/-1.35	-1.09/-3.25	-1.86/-0.91	-0.4/-0.13
Θ(120°)	-2.42/-2.74	-1.99/-3.52	-3.21/-1.93	-2.04/-2.56	-1.54/-0.27	-0.68/-1.87	-2.45/-1.77	-1.1/-1.29	-1.73/-2.63	-2.95/-3.17	-4.13/-2.81	-2.12/-2.15	-1.98/-1.87	-2.6/-3.21	-3.41/-7.91	-8.95/-5.87	-4.27/-4.77	-3.4/-4.35	-4.39/-1.48	0.16/-1.36	-1.92/-1.17	-4/-5.06	-4.65/-1.53	-0.71/-0.92
Θ(127.5°)	-2.8/-2.51	-3.12/-3.2	-4.07/-4.21	-2.75/-1.48	-1.08/-1.63	-3.12/-3.81	-2.93/-1.88	-1.79/-2.19	-2.11/-2.53	-4.06/-3.83	-3.05/-2.62	-3.19/-2.7	-2.57/-4.62	-7.92/-6.8	-7.72/8.94	-5.83/-4.71	-4.58/-5.17	-3.34/-3.39	-4.26/-1.43	-0.64/-3.74	-4.01/-4.14	-2.63/-2.92	-3.65/-1.85	-1.86/-2.88
Θ(135°)	-2.25/-1.44	-1.99/-2.15	-1.41/-3.11	-4.36/-3.08	-2.05/-2.96	-5.85/-6.13	-3.86/-2.14	-0.82/-0.45	-1.69/-3.24	-5.69/-6.26	-4.96/-3.36	-3.1/-4.7	-6.45/-6.57	-5.98/-7.31	-6.92/-7.85	-8.66/-5.95	-4.39/-2.77	-1.95/-4	-4.6/-2.33	-0.73/-1.13	-1.93/-2.35	-4.18/-7.35	-4.3/-1.6	1.58/0.86
Θ(142.5°)	-4.72/-7.38	-3.88/-3.7	-5.59/-3.89	-2.23/-2.9	-5.26/-8.88	-9.55/-7.49	-4.94/-3.12	-2.05/-2.22	-3.68/-4.87	-4.41/-4.46	-5.33/-4.34	-4.58/-5.82	-4.76/-4.94	-6.18/-5.73	-6.3/-10.37	-10.42/-8.87	-6.21/-3.65	-5.22/-8.25	-5.83/-1.41	0.24/-0.4	-3.4/-3.92	-3.11/-3.76	-4.43/-1.44	-0.46/-1.35
Θ(150°)	-4.28/-9.72	-2.93/-4.24	-5.24/-4.44	-4.75/-6.24	-6.87/-6.86	-5.96/-4.05	-3.04/-2.54	-2.74/-3.59	-5.34/-6.09	-6.42/-6.26	-5.74/-5.44	-5.61/-4.64	-4.51/-5.94	-7.91/-8.25	-8.28/-7.17	-8.41/-11.29	-9.26/-8.45	-7.52/-5.51	-5.32/-3.48	-2.53/-1.76	-1.86/-2.79	-2.29/-2.08	-2.88/-2.44	-1.95/-2.68
Θ(157.5°)	-0.60/-1.78	-3.73/-6.78	-8.41/-7.74	-6.93/-7.34	-8.14/-9.44	-10.11/-9.39	-8.34/-7.71	-7.22/-7.54	-7.65/-6.96	-5.71/-4.78	-4.11/-3.95	-4.31/-4.92	-5.09/-4.96	-4.71/-5.08	-6.15/-8.44	-10.87/-11.69	-9.51/-8.08	-6.39/-5.06	-5.38/-4.2	-2.14/-0.95	-1.01/-1.61	-1.36/-1.35	-0.85/-0.14	-0.77/1.04
Θ(165°)	-2.7/-3.86	-5.2/-6.12	-6.12/-6.32	-7.13/-7.99	-9.37/-10.23	-11.22/-10.64	-10.15/-10.15	-10.38/-11.81	-10.93/-8.23	-5.48/-3.55	-2.5/-2.39	-2.87/-3.67	-4.57/-6.16	-8.28/-9.72	-9.55/-8.77	-8.84/-8.8	-7.01/-5.41	-5.06/-5.8	-6.99/-5.67	-3.09/-1.66	-1.43/-1.76	-1.27/-0.95	-0.63/-0.68	-1.31/-2.22
Θ(172.5°)	-3.92/-3.84	-4.05/-3.95	-4.78/-6.2	-7.31/-8.16	-7.93/-8.49	-10.27/-10.78	-12.72/-12.69	-11.76/-10.13	-8.3/-6.79	-5.24/-4.56	-4.38/-4.57	-4.87/-5.01	-5.15/-5.16	-5.28/-5.88	-6.34/-7.07	-7.88/-7.81	-7.21/-6.36	-5.99/-5.49	-5.03/-4.3	-3.62/-3.25	-3.64/-4.16	-3.63/-3.46	-4.63/-5.65	-5.41/-4.9
Θ(180°)	-6.01/-6.26	-6.37/-6.75	-7.55/-8.35	-8.57/-8.33	-8.07/-7.99	-8.5/-9.31	-9.95/-9.36	-8.23/-7.08	-6.49/-6.15	-5.61/-5.25	-4.65/-4.05	-3.96/-3.6	-3.4/-3.15	-3.12/-3.38	-4.02/-4.71	-5.46/-5.69	-5.88/-6.64	-7.44/-7.57	-7.42/-7.44	-7.83/-7.96	-8.15/-8.52	-7.02/-5.85	-5.53/-6.07	-6.34/-6.45
Freq(Hz)	5.6G/Pol.	Phi-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.4/-4.54	-3.89/-3.31	-2.98/-2.31	-1.35/-0.62	-0.09/0.51	0.69/0.41	0.23/-0.07	-0.36/-0.73	-0.84/-1.22	-1.77/-2.62	-3.74/-4.98	-6.5/-7.34	-8.11/-7.77	-6.36/-5.07	-3.95/-2.9	-2.26/-1.76	-1.47/-1.18	-1.0/-0.97	-0.9/-0.78	-0.89/-1.37	-1.63/-1.86	-2.8/-3.72	-4.65/-5.33	-5.64/-6.25
Θ(7.5°)	-8.09/-7.2	-6.19/-5.34	-4.72/-4.5	-3.28/-2.42	-1.64/-0.94	-0.73/-0.66	-0.99/-1.24	-1.55/-1.87	-2.27/-2.64	-3.34/-4.1	-5.26/-6.46	-6.29/-6.15	-4.6/-3.26	-2.21/-0.96	-0.18/0.14	1.33/-1.48	1.45/-1.41	1.39/-1.08	0.62/-0.18	-1.04/-1.44	-2.28/-3.28	-4.6/-7.08	-8.69/-8.57	
Θ(15°)	-7.71/-6.51	-5.12/-3.8	-2.47/-1.96	-1.24/-0.79	-0.28/0	0.03/0.26	0.35/-0	-0.42/-0.94	-1.56/-2.21	-3.48/-4.97	-6.86/-8.42	-7.97/-6.95	-5.1/-3.08	-1.33/-0.05	0.79/-1.29	1.5/-1.72	1.81/-1.98	1.95/-1.93	1.75/-1.32	0.61/-0.2	-0.84/-1.21	-1.58/-1.95	-2.83/-4.55	-6.63/-7.75
Θ(22.5°)	-4.86/-3.73	-3.8/-3.5	-2.74/-2.69	-2.29/-1.79	-1.2/-1.29	-1.44/-1.16	-0.69/-0.46	-0.43/-0.57	-0.98/-1.71	-2.86/-4.67	-6.84/-7.82	-8.02/-7.02	-5.41/-3.95	-2.6/-1.42	0.26/0.46	0.76/1.18	1.42/-1.49	1.18/0.81	0.45/-0.1	-0.6/-1	-1.42/-1.56	-2.17/-3.42	-4.74/-5.45	
Θ(30°)	-7.09/-7.69	-6.51/-5.66	-4.52/-2.61	-1.68/-1.74	-2.31/-2.88	-3.33/-2.94	-2.95/-2.55	-2.06/-1.68	-1.73/-2.08	-2.7/-3.43	-4.97/-5.98	-6.27/-5.6	-4.44/-2.99	-1.72/-0.79	0.06/0.82	1.33/-1.61	1.67/-1.52	1.32/-1.1	0.74/0.27	-0.37/-0.85	-0.59/-0.54	-0.57/-0.54	-1.09/-2.21	-3.55/-5.55
Θ(37.5°)	-9.3/-9	-6.5/-6.09	-5.64/-4.66	-4.34/-4.82	-5.53/-5.44	-4.64/-3.98	-3.55/-2.33	-1.54/-1.64	-2.6/-3.5	-3.96/-4.42	-5.1/-5.19	-4.96/-5.43	-5.01/-4.15	-2.45/-0.87	0.37/1.13	1.45/-1.65	2.32/-1.78	3.26/0.34	2.31/-1.91	1.64/-1.1	0.14/-0.21	-0.83/-1.92	-3.25/-3.53	-6.59/-8.24
Θ(45°)	-6.84/-8.47	-5.21/-4.71	-4.5/-4.46	-5.65/-8.1	-9.1/-8.67	-8.04/-7.76	-7.69/-7.35	-6/-4.5	-2.77/-2.41	-2.78/-3.65	-3.94/-41	-4.38/-4.47	-4.06/-3.18	-1.43/-0.37	0.41/1	1.21/-42	1.962/1	1.82/-1.58	1.68/-1.85	1.35/0.66	-0.48/-1.41	-2.79/-3.78	-3.54/-4.17	-5.31/-6
Θ(52.5°)	-4.58/-6.7	-8.11/-6.73	-7.44/-7.93	-8.01/-7.96	-7.31/-5.75	-5.41/-5.62	-5.26/-4.47	-3.4/-3.27	-3.36/-3.68	-3.57/-3.09	-2.88/-2.81	-2.23/-2.04	-2.23/-1.28	-0.63/0.12	1.18/-1.87	1.91/-61	1.47/-1.12	1.65/-1.7	0.96/0.16	0.27/0.17	-0.64/-1.61	-1.96/-2.15	-2.14/-2.63	-3.47/-3.97
Θ(60°)	-9.26/-9.01	-10.88/-7.73	-6.14/-7.09	-8.31/-10.5	-10.75/-7.83	-5.36/-4.65	-5.49/-6.82	-6.34/-4.81	-5.37/-6.82	-8.35/-7.69	-5.33/-3.88	-3.68/-4.18	-3.99/-2.59	-1.1/-0.14	-									



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Freq(Hz) ⌋	5.785G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-		
DC(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°)	1.84/1.66	1.24/0.81	0.78/0.18	-0.3/-0.66	-1.22/-1.59	-2.35/-3.06	-2.8/-2.17	-1/-0.19	0.6/1.31	1.73/2.09	2.13/2.17	2.11/1.84	1.39/1.02	0.6/0.21	0.05/-0.12	-0.47/-1.05	-1.71/-2.29	-2.79/-2.72	-2.39/-1.62	-0.7/0.02	0.74/1.41	2.03/2.33	2.16/2.23	2.23/2.01
Θ(7.5°)	0.6/0.38	0.29/-0.08	-0.33/-0.71	-1.36/-1.94	-2.28/-2.26	-2.82/-2.74	-2.98/-2.28	-1.67/-1.12	-0.41/0.32	0.8/1.05	1.22/1.51	1.79/2.03	2.13/2.03	1.81/1.63	1.36/0.89	0.3/-0.32	-1.29/-2.37	-2.57/-2.18	-1.18/-0.36	0.31/0.83	1.07/1.48	1.66/1.59	1.41/1.12	0.85/0.51
Θ(15°)	-0.01/-0.23	-0.29/-0.26	-0.09/-0.11	-0.56/-0.84	-1.15/-1.04	-1.31/-1.61	-0.97/-0.26	0.31/0.66	0.95/0.83	0.77/0.4	0.1/-0.25	0.09/0.78	1.46/1.85	2.07/2.15	2.01/1.49	0.77/-0.04	-0.82/-1.18	-1.39/-1.34	-1.16/-0.55	-0.09/0.47	0.59/0.76	0.46/0.14	-0.3/-0.31	-0.19/0.04
Θ(22.5°)	2.33/2.46	2.04/1.79	1.74/2.16	2.09/1.7	1.08/0.74	0.1/0.0	0.15/0.49	0.61/0.74	0.8/0.78	0.59/0.17	-0.4/-0.87	-0.94/-0.7	-0.24/0.24	0.48/0.5	0.21/-0.3	-1.03/-1.47	-1.31/-1.05	-1.46/-2.3	-2.4/-1.76	-0.9/-0.81	-0.64/-0.84	-1.6/-1.89	-1.42/-0.31	1.4/2.1
Θ(30°)	2.94/3.1	2.85/2.81	2.74/2.68	2.79/2.43	1.88/1.24	0.85/0.67	0.2/-0.33	-0.52/-0.48	-0.23/0.2	0.57/0.47	0.24/0.04	0.02/-0.1	-0.27/0.15	0.76/0.68	-0.09/-1.45	-2.47/-2.2	-2.47/-2.26	-1.58/-1.64	-1.71/-2.12	-3.08/-3.34	-3.73/-3.32	-0.92/0.97	2.42/2.75	
Θ(37.5°)	2.74/2.58	2.43/2.34	2.68/2.7	2.69/2.6	2.48/2.45	2.15/1.57	0.5/0.31	-0.29/-0.74	-0.39/0.12	-0.13/-0.99	-1.48/-1.42	-1.43/-1.01	-0.01/0.5	0.45/0.24	0.45/0.28	-0.35/-0.44	-1.32/-2.61	-2.34/-1.92	-2.91/-2.73	-2.22/-2.82	-4.09/-3.88	-2.86/-0.82	0.25/1.17	1.82/2.8
Θ(45°)	2.02/2.8	2.81/2.36	2.56/2.7	2.14/2.01	2.18/2.18	1.99/1.3	0.57/-0.05	-0.3/-0.38	-0.34/-0.42	-0.51/-0.83	-1.61/-1.86	-1.08/-1.26	-1.11/0.95	1.63/1.69	0.64/-0.54	-2.02/-1.26	-2.01/-3.66	-2.98/-2.87	-2.82/-2.81	-2.8/-1.27	0.09/0.81	0.98/1.16	1.47/1.59	
Θ(52.5°)	1.73/2.67	2.92/3.17	3.9/3.87	2.89/2.07	1.85/0.24	2.3/2.15	1.37/-0.21	-0.89/0.49	2.02/2.01	0.42/1.17	0.24/-1.13	-0.38/-0.25	-1.25/-1.8	-0.43/0.61	1.02/1.92	-1.67/-3.58	-2.91/-2.5	-1.9/-1.84	-2.45/-3.04	-2.73/-1.39	-0.9/0.03	1.6/1.64	1.58/1.56	
Θ(60°)	3.05/3.36	3.86/4.17	4.13/3.54	3.44/2.14	1.3/1.77	2.5/2.53	1.39/0.72	0.83/1	2.07/2.23	1.39/1.58	1.64/0.94	1.37/1.38	0.34/0.17	0.41/0.17	-0.27/0.76	1.07/0.28	-1.85/-2.15	-3.9/-2.83	-3.01/-3.18	-1.91/-1.87	-1.78/-0.52	-0.33/-0.1	0.42/0.87	1.72/2.45
Θ(67.5°)	3.36/2.85	3.17/3.92	3.53/3.15	3.08/1.58	0.01/0.57	1.42/1.39	1.3/0.93	1.25/0.95	1.21/1.48	0.81/1.38	2.04/1.02	1.36/1.13	0.58/1.17	1.51/0.88	0.56/-0.45	-0.45/-1.45	-3.45/-3.5	-4.93/-3.71	-3.06/-2.03	-2.61/-2.95	-1.07/0.91	1.01/1.22	1.68/1.75	2.43/3.25
Θ(75°)	1.75/1.67	1.66/2.47	2.47/2.46	1.93/0.72	-0.67/-0.45	0.96/2.04	2.07/1.59	0.8/0.46	-0.03/-0.29	0.1/1.59	2.59/1.75	1.26/0.07	-0.37/-0.4	0.7/0.47	0.33/0.6	1.6/-0.11	-1.33/-3.29	-2.7/-1.71	-0.48/-0.6	-1.23/-1.46	-1.48/0.58	1.81/62	1.77/1.75	1.61/1.62
Θ(82.5°)	0.96/1.36	1.14/0.97	0.69/0.04	Φ(30)/Φ(37.5°)	0.31/0.52	0.27/0.37	1.09/2.02	2.22/1.73	1.0/-0.15	-2.08/-0.24	0.65/-1.98	2.83/2.54	2.15/0.93	1.08/0.65	0.83/-0.03	-0.21/0.38	-0.31/0.22	-0.27/-0.84	-3.47/-2.67	-1.41/-2.21	-1.29/-0.13	-1/-1.7	-0.68/0.39	0.67/1.41
Θ(90°)	1.44/1.23	0.79/0.77	-0.06/0.47	-0.28/-0.01	-0.09/0.69	1.42/1.36	0.96/0.63	0.59/0.03	-1.7/-3.25	-2.64/-0.71	1.62/1.26	1.28/-0.1	0.46/-0.05	-0.64/-1.65	-1.12/0.53	0.91/0.64	1.2/1.36	0.31/-0.05	-0.06/-0.63	-1.3/-1.88	-0.02/-0.56	-0.32/-1.07	-0.62/0.59	11/1.4
Θ(97.5°)	-0.39/-0.01	-0.81/-0.34	-1.16/-2.55	-1.09/-1.07	0.18/2.1	2.36/1.91	0.44/0.08	0.47/-0.48	-3.67/-4.43	-2.64/-0.93	-0.24/-0.59	-0.34/-0.93	-0.85/-2.16	-3.82/-5.95	-3.98/-1.72	-0.11/0.53	0.93/0.66	-0.13/0.19	-0.51/-1.23	-0.32/-0.06	0.72/-0.48	0.1/-0.17	-1.58/0.57	1.27/0.24
Θ(105°)	-1.91/-0.48	-0.37/-0.56	-0.52/-1.75	-1.23/-0.44	-0.07/1.87	2.56/1.43	-0.5/0.07	1.47/0.18	-2.28/-3.53	-3.8/-1.37	-0.59/-0.96	-0.82/-1.22	0.05/0.25	-1.84/-3.8	-4.65/-3.46	-2.11/-1.07	0.64/2.04	0.57/-0.61	-1.7/-3.12	-1.92/-0.4	-0.22/-0.04	-0.3/0.07	-1.12/-1.36	0.92/0.53
Θ(112.5°)	-1.79/0.16	0.84/0.24	0.41/-1.08	-1.7/-0.03	0.99/2.59	2.51/0.78	-0.78/-0.31	0.25/-0.41	-1.79/-2.6	-2.04/-1.35	-1/0.1	0.09/-0.6	-0.33/-2.07	-3.47/-3.27	-3.51/-5.34	-3.55/-6.07	0.63/0.32	-2.1/-0.77	-0.06/-1	-2.16/-1.73	-1.84/-0.82	-0.14/-0.54	-1.51/-1.12	-0.49/-0.86
Θ(120°)	-1.32/-1.88	-0.22/-0.41	-0.44/-0.14	0.01/-0.23	0.61/0.47	0.41/-0.71	-2.36/-1.28	-0.63/-0.59	-1.05/-0.82	-1.41/-1.35	-1.27/-0.85	-1.44/-1.14	0.07/-1.2	-3.97/-5.71	-6.32/-9.47	-6.56/-4.58	-0.87/-3.04	-3.41/-0.46	-1.46/-2.57	-0.53/-2.64	-2.88/-2.59	-3.28/-2.48	-1.42/-0.69	-1.21/-2.82
Θ(127.5°)	-2.61/-3.99	-4.56/-2.41	-1.84/-1.69	-1.96/-2.42	-2.02/-1.93	-3.42/-4.25	-2.96/-0.77	0.03/-0.17	0.06/-0.63	-1.27/-2.31	-1.41/0.7	0.17/-1.21	-1.69/-3.19	-5.49/-3.86	-3.57/-6.83	-8.4/-3.07	-1.69/-3.01	-3/-0.55	-2.19/-2.98	-2.28/-3.36	-1.97/-1.37	-2.51/-5.88	-4.44/-1.93	-2.1/-2.06
Θ(135°)	-1.49/-1.23	-2.17/-3.2	-1.68/-2.28	-2.04/-1.98	-1.35/-1.7	-2.96/-4.33	-3.43/-1.67	-0.79/-0.43	-0.47/-0.74	-0.7/-1.43	-1.27/-3.42	-4.4/-3.61	-5.45/-9.18	-4.48/-4.21	-6.1/-7.83	-7.68/-4.69	-5.12/-3.68	-4.11/-2.34	-1.46/-2.93	-4.16/-2.57	-2.85/-2.42	-3.41/-2.35	-0.81/-0.47	1.24/0.37
Θ(142.5°)	-7.32/-8.12	-3.59/-2.07	-2.78/-2.91	-3/-2.2	-1.99/-3.73	-6.16/-7.82	-6.64/-5.03	-2.9/-2.47	-2.84/-2.73	-3.62/-3.28	-3.39/-4.42	-4.42/-2.98	-4.22/-6.83	-7.26/-6.66	-5.74/-7.01	-7.53/-6.07	-3.43/-2.27	-2.92/-2.33	-1.39/-1.48	-3.55/-4.29	-5.16/-4.13	-0.69/-7.2	-1.03/-0.4	-1.99/-4.1
Θ(150°)	-6.01/-3.11	-3.45/-4.93	-5.59/-4.92	-4.83/-4.76	-6.32/-7.58	-7.91/-9.27	-8.23/-5.46	-3.82/-3.2	-3.14/-3.33	-4.93/-4.9	-3.08/-2.68	-2.74/-1.88	-2.33/-3.79	-5.33/-6.41	-5.46/-4.56	-5.19/-5.14	-3.01/-1.16	-0.62/-1.6	-1.21/-1.22	-1.62/-1.22	-3.36/-7.09	-6.03/-5.26	-4.02/-2.67	-3.36/-5.1
Θ(157.5°)	-0.22/-1.69	-2.93/-4.43	-6.04/-7.06	-6.63/-4.72	-6.03/-5.28	-6.63/-9.17	-6.71/-7.09	-6.35/-6.42	-7.39/-8.11	-8.61/-8.2	-7.4/-5.68	-3.96/-3.71	-2.79/-3.71	-4.42/-4.83	-4.84/-5.67	-6.69/-7.17	-6.63/-6.94	-5.96/-3.78	-3.97/-5.61	-6.57/-5.99	-3.32/-1.28	-0.92/0.59		
Θ(165°)	-1.99/-2.85	-3.85/-4.76	-5.87/-7.31	-7.39/-7.8	-9.04/-10.97	-12.02/-9.98	-8.73/-8.13	-7.39/-7.45	-7.53/-7.34	-6.91/-6.89	-6.64/-5.6	-3.57/-2.26	-1.91/-2.33	-2.96/-3.87	-5.09/-6.86	-8.29/-8.51	-7.76/-6.53	-5.13/-3.64	-3.08/-3.29	-3.72/-2.87	-1.52/-0.64	-0.71/-1.6	-1.85/-1.75	-1.71/-1.57
Θ(172.5°)	-3.79/-4.1	-5.02/-5.94	-7.52/-8.18	-9.2/-10.37	-10.69/-10.78	-8.79/-8.91	-9.39/-10.06	-9.43/-9.25	-9.5/-8.61	-7.73/-7.5	-7.59/-7.32	-6.48/-5.86	-5.75/-5.98	-6.62/-7.64	-8.94/-9.91	-9.55/-9.08	-8.55/-7.87	-7.9/-7.64	-7.02/-5.86	-4.62/-3.67	-3.05/-2.44	-2.44/-3.41	-4.51/-4.87	-4.29/-4.1
Θ(180°)	-6.6/-7.28	-9.29/-9.72	-10.44/-10.4	-11.2/-9.51	-8.54/-7.34	-6.66/-7.56	-8.82/-9.03	-9.05/-8.65	-8.05/-7.66	-7.42/-7.23	-6.65/-6.25	-5.83/-5.84	-6.51/-7.2	-7.46/-7.62	-7.4/-7.09	-6.71/-6.75	-7.27/-8.31	-10.39/-10.19	-8.71/-6.84	-5.98/-5.34	-5.27/-5.48	-6.54/-8.26	-8.67/-8.53	-8.06/-7.52
Freq(Hz) ⌋	5.885G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-2.92/-2.4	-1.87/-0.78	0.42/0.79	1.23/1.62	1.91/1.99	1.92/1.8	1.4/0.91	0.37/0.43	-1.6/-2.27	-2.57/-2.52	-2.83/-3.07	-3.19/-3.1	-2.44/-1.43	-0.4/0.48	0.96/1.23	1.68/2.09	2.24/2.1	1.82/1.43	0.92/0.45	-0.15/-0.63	-0.98/-1.27	-2.1/-2.6	-2.74/-2.76	-3/-3.15
Θ(7.5°)	-2.15/-2.26	-2.08/-1.02	0.01/0.42	0.95/1.51	1.65/1.67	1.62/1.5	1.23/0.96	0.68/0.21	-0.42/-1.18	-2.01/-2.63	-3.4/-4.35	-6.13/-6.3	-6.23/-4.55	-2.48/-0.87	0.15/0.96	1.57/2.01	2.32/2.45	2.26/1.76	1.1/0.44	-0.01/-0.51	-1.09/-1.53	-1.96/-2.02	-2.12/-2.14	-2.22/-2.37
Θ(15°)	-5.28/-6.05	-5.01/-3.93	-2.7/-1.53	-0.84/0.22	0.84/1.17	1.25/0.98	0.71/0.38	0.45/0.43	0.38/0.02	-0.61/-1.3	-2.08/-2.88	-3.71/-4.81	-5.85/-5.85	-4.94/-3.18	-1.69/-0.47	0.35/0.82	1.01/1.19	1.39/1.15	0.9/0.4	-0.25/-1.11	-2.05/-2.99	-2.73/-2.6	-2.71/-2.76	-3.66/-4.81
Θ(22.5°)	-2.96/-3.93	-5.43/-5.88	-4.93/-3.24	-1.99/-0.76	0.01/0.16	-0.16/-1.19	-2.18/-2.18	-1.52/-0.97	-0.8/-0.96	-1.57/-2.6	-3.69/-4.67	-6.23/-0.84	-7.75/-6.14	-4.03/-2.14	-0.94/-0.21	0.29/0.61	0.74/0.84	1.11/1.3	1.14/0.03	-1.29/-2.65	-3.28/-2.69	-1.06/-0.23	-0.24/-0.28	-1.16/-2.7
Θ(30°)	-3.09/-4.08	-3.56/-2.74	-2.36/-1.83	-1.51/-1.75	-2.16/-2.77	-2.16/-2.37	-2.4/-1.73	-1.61/-2.04	-3.25/-4.54	-5.48/-7.23	-9.71/-11.28	-9.51/-6.55	-3.3/-1.14	0.27/0.63	0.68/0.67	0.50/0.27	0.53/0.89	1.23/1.25	0.67/-0.33	-1.38/-1.34	-3.20/1.9	0.23/-0.09	-0.97/-2.13	
Θ(37.5°)	-3.2/-4.1	-6.17/-6.76	-5.82/-5.69	-4.94/-4.65	-5.24/-5.21	-4.2/-3.27	-2.52/-2.33	-2.66/-2.74	-2.73/-3.01	-4.33/-6.41	-7.56/-7.96	-8.44/-8.16	-5.2/-2.51	-0.39/-1.36	2.52/3.07	3.34/3.19	2.55/1.76	1.63/1.92	2.16/2.03	1.39/0.34	-0.14/0.54	0.94/0.9	-0.06/-1.41	-2.66/-3.08
Θ(45°)	-8.06/-8.86	-8.58/-9.18	-9.67/-9.52	-7.99/-6.57	-6.06/-6.4	-5.55/-4.4	-3.61/-3.32	-3.13/-2.74	-3.26/-5.41	-7.31/-8.94	-8.95/-7.78	-6.6/-6.82	-7.39/-5.69	-2.82/-0.29	1.01/1.26	2.28/2.63	2.52/0.9	1.71/1.55	1.22/0.89					



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(150°)	-5.81/-6.45	-6.55/-5.61	-4.8/-5.37	-5.69/-4.58	-3.38/-2.67	-1.8/-1.05	-0.47/-0.22	-0.12/-0.27	0.28/-0.09	-0.53/-0.71	-1.37/-2.84	-3.17/-3.38	-5.02/-6.74	-6.05/-5.38	-5/-5.22	-6.15/-6.81	-6.39/-8.42	-9.56/-8.66	-8.37/-7.72	-6.28/-4.78	-5.67/-6.97	-7.14/-8.07	-6.41/-5.21	-5.05/-5.28
Θ(157.5°)	-6.36/-6.21	-6.07/-6.27	-6.59/-6.28	-6.04/-6.2	-5.82/-4.93	-4.54/-3.61	-2.59/-1.85	-1.56/-1.32	-1.55/-1.93	-2.38/-2.71	-3.46/-3.78	-3.33/-2.57	-2.35/-2.74	-3.71/-4.3	-3.77/-2.73	-2.2/-2.49	-3.25/-3.94	-4.5/-5.46	-5.97/-6.08	-5.2/-4.06	-4.19/-5.67	-7.33/-8.26	-8.06/-7.93	-6.93/-6.12
Θ(165°)	-7.4/-8.02	-7.85/-7.8	-7.6/-7.25	-7.66/-7.57	-6.89/-6.36	-5.82/-5.19	-4.52/-4.35	-3.88/-3.61	-3.54/-3.65	-4.22/-5.01	-5.92/-6.61	-7.08/-7.2	-7.25/-6.69	-5.68/-4.8	-3.94/-3.53	-3.69/-4.45	-5.22/-5.53	-4.98/-4.67	-4.68/-5.16	-5.24/-5.29	-5.78/-7.06	-7.48/-8.44	-8.52/-8.46	-8.24/-7.85
Θ(172.5°)	-8.87/-9.73	-9.64/-9.19	-9.38/-9.78	-10.75/-11.62	-12.51/-12.06	-11.06/-9.84	-8.99/-8.49	-8.07/-7.86	-7.46/-7.18	-7.35/-7.8	-8.25/-8.49	-7.74/-7.54	-7.43/-7.7	-8.17/-7.53	-4.33/-4.63	-5.56/-4.79	-4.03/-4.03	-4.33/-4.93	-5.45/-6.65	-5.27/-7.36	-7.81/-8.48	-8.66/-7.72	-7.21/-8.45	
Θ(180°)	-7.42/-7.88	-7.9/-7.56	-6.89/-6.95	-6.72/-6.96	-7.26/-7.33	-7.48/-8.24	-8.5/-8.88	-8.97/-8.52	-8.03/-7.89	-7.88/-7.94	-8.14/-8.18	-8.17/-8.14	-8.05/-8	-7.97/-7.64	-7.18/-7.01	-6.87/-6.87	-6.32/-6.55	-6.6/-6.93	-7.79/-8.39	-8.82/-9.1	-9.9/-10.29	-10.01/-9	-7.81/-7.09	-6.8/-6.99
Freq(Hz)	5.2G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-1.26/-1.34	-1.11/-0.6	-0.23/-1	-1.43/-1.82	-2.31/-3.27	-4.08/-4.75	-4.88/-4.45	-3.86/-3.38	-3.04/-2.68	-2.49/-2.35	-2.41/-2.33	-2.2/-2.19	-2.2/-2.06	-1.85/-1.84	-1.99/-2.17	-2.6/-2.96	-3.21/-3.8	-4.29/-4.58	-4.39/-3.96	-3.57/-3.06	-2.82/-2.54	-2.33/-2.25	-2.16/-1.81	-1.48/-1.38
Θ(7.5°)	-2.18/-2.02	-2.23/-2.02	-2.1/-2.16	-2.49/-2.81	-3.06/-3.59	-4.01/-4.66	-4.96/-4.6	-3.96/-3.43	-3.02/-2.64	-2.1/-1.59	-1.13/-0.75	-0.49/-0.22	0.05/-0.39	0.41/-0.23	-0.17/-0.78	-1.63/-2.72	-3.79/-4.59	-5.12/-5.15	-4.78/-4.44	-3.85/-3.42	-3.15/-2.9	-2.73/-2.86	-2.84/-2.03	-1.94/-2.27
Θ(15°)	-2.37/-1.82	-1.99/-2.02	-2.68/-3.28	-3.73/-4.43	-4.38/-4.35	-4.26/-3.86	-3.63/-3.07	-2.67/-2	-1.51/-0.86	-0.36/-0.06	0.44/-0.76	1.12/-1.45	1.75/-1.76	1.49/-1.05	0.28/-0.45	-1.15/-2	-3.32/-4.86	-6.22/-6.35	-5.41/-4.6	-4.22/-4.13	-4.57/-4.81	-4.68/-4.65	-4.37/-3.5	-3/-2.71
Θ(22.5°)	-3.07/-2.59	-2.2/-2	-2.07/-1.91	-1.86/-1.69	-1.61/-1.52	-1.64/-1.93	-1.66/-1.47	-1.42/-0.95	-0.21/-0.58	1.34/-1.78	1.85/-1.89	1.86/-1.91	1.96/-1.8	1.63/-2.1	0.73/-0.26	-0.38/-1.34	-3.12/-5.04	-6.73/-6.23	-6/-4.88	-4.26/-4.02	-4.24/-4.79	-4.65/-4.49	-4.24/-4.03	-3.97/-3.4
Θ(30°)	-2.6/-2.27	-2.06/-1.66	-0.86/-0.68	-0.4/-0.22	-0.13/-0.1	-0.33/-0.63	-0.56/-0.72	-0.77/-0.38	0.16/-0.69	1.47/-2.18	2.46/-2.49	2.22/-1.94	1.79/-1.93	1.91/-1.68	1.34/-0.88	0.08/-0.93	-2.36/-3.54	-3.71/-4.29	-4.4/-4.46	-4.4/-4.45	-4.37/-4.26	-3.91/-4.23	-4.01/-3.58	-3.22/-2.84
Θ(37.5°)	-1.31/-0.17	0.59/-0.73	1.11/-1.08	0.59/-0.34	0.09/-0.15	-0.28/-0.55	-0.7/-0.69	-0.30/-45	1.01/-1.1	1.29/-1.74	2.2/-2.43	2.55/-2.1	1.45/-1.5	1.72/-1.36	0.45/-0.52	-0.91/-1	-1.24/-1.98	-2.6/-2.68	-3.03/-3.33	-3.69/-4.23	-4.61/-4.92	-4.47/-4.31	-4.74/-4.41	-4.28/-3.13
Θ(45°)	-0.19/-0.11	1.54/-1.54	2.07/-2.52	2.17/-1.66	1.04/-0.33	0.37/-0.47	0.11/-0.08	0.32/-1.37	2.38/-2.65	2.64/-3.24	3.39/-3.56	3.19/-2.39	2.07/-2.07	1.91/-2.1	0.12/-1.33	-1.71/-1.62	-2.13/-3.69	-4.29/-4.78	-4.86/-4.11	-4.29/-5.28	-6.68/-6.53	-5.58/-5.53	-4.45/-2.74	-1.8/-1.19
Θ(52.5°)	-0.16/-0.18	0.67/-1.25	1.85/-2.41	2.55/-2.49	2.33/-1.62	0.89/-0.41	0.62/-1.24	1.61/-1.8	2.18/-2.82	3.54/-2.7	4.33/-4.28	3.57/-2.36	2.06/-2.25	2.08/-1.34	0.02/-1.62	-2.94/-2.33	-1.89/-2.48	-3.3/-3.14	-3.47/-4.19	-5.45/-5.39	-6.29/-7.3	-7.44/-3.21	-2.42/-1.29	
Θ(60°)	-0.41/-0.27	0.91/-88	2.35/-2.62	2.91/-29	2.28/-155	1.15/-1.71	2.34/-2.18	1.98/-1.93	1.98/-2.67	3.75/-2.47	4.34/-2.7	3.92/-2.98	2.76/-2.76	2.41/-76	1.09/-2.07	-0.99/-1.19	-0.85/-0.46	-1.01/-1.18	-1.32/-2.08	-4.46/-5.22	-5.34/-5.72	-5.48/-5.47	-4.2/-2.97	-1.63/-0.64
Θ(67.5°)	-0.32/-0.14	1.01/-1.89	2.19/-2.43	3.01/-3.18	2.27/-1.61	1.92/-2.52	2.48/-2.21	1.78/-1.88	2.64/-3.18	3.34/-3.67	3.58/-3.59	3.77/-3.01	2.94/-2.78	2.23/-2.21	1.25/-0.86	-2.09/-3.39	-3.23/-4.08	-3.03/-2.5	-3.39/-4.73	-7.09/-7.98	-6.95/-1.69	-6.32/-4.7	-3.73/-3.02	-2.23/-0.85
Θ(75°)	-0.33/-0.3	0.34/-1.1	1.71/-1.42	1.81/-2	1.79/-2.03	2.85/-2.99	2.63/-2.12	1.57/-1.14	2.17/-3.11	3.48/-4.28	4.56/-4.84	4.91/-3.95	3.54/-2.77	2.79/-2.7	1.26/-0.26	-1.33/-2.2	-2.72/-2.81	-3.96/-4.51	-5.6/-7	-6.84/-7.07	-7.03/-5.79	-4.86/-3.77	-2.2/-0.99	
Θ(82.5°)	0.020/-5.1	1.08/-1.43	1.75/-2.63	1.14/-0.46	-0.47/-0.9	3.03/-3.82	3.45/-2.34	1.87/-1.54	1.68/-2.46	2.66/-3.54	4.07/-4.22	4.18/-3.66	3.02/-2.23	2.45/-2.58	1.81/-0.73	-1.69/-2.76	-3.31/-3.8	-3.64/-4.92	-5.09/-5.8	-5.44/-7.52	-8.31/-7.7	-5.83/-4.48	-3.24/-0.49	-3.76/-1.75
Θ(90°)	-2.52/-1.76	0.17/-1.25	2.08/-2.25	1.88/-0.93	-1.3/-0.09	2.33/-3.52	3.39/-2.79	1.29/-0.7	0.71/-0.1	0.63/-1.63	2.66/-2.9	3.5/-0.05	3.17/-2.53	2.22/-2.35	1.01/-0.61	-0.71/-0.5	-0.56/-3.62	-4.53/-5.98	-6.24/-4.8	-4.87/-5.23	-7.95/-4.72	-5.35/-6.97	-5/-5.02	-5.49/-4.7
Θ(97.5°)	-5.1/-3.16	-2.04/-0.18	0.92/-1.97	1.32/-0.51	-0.87/-0.64	2.24/-2.84	2.25/-0.68	0.09/-0.52	1.22/-1.67	0.81/-74	1.49/-2.19	2.58/-2.46	2.59/-1.54	1.64/-1.23	0.41/-0.92	0.10/-82	0.84/-2.11	-6.18/-9.4	-8.05/-5.93	-3.08/-5.74	-6.08/-5.57	-5.87/-7.02	-8.7/-8.37	-7.48/-7.01
Θ(105°)	-2.26/-3.17	-1.87/-0.24	-0.16/-0.96	0.62/-81	-1.89/-0.52	2.19/-2.28	1.43/-0.09	-0.66/-0.21	0.59/-1.29	0.88/-1.95	1.98/-2.56	2.1/-65	1.91/-0.82	0.67/-0.68	-0.37/-0.52	-0.46/-0.25	-1.14/-1.79	-2.99/-4.58	-6.28/-4.89	-3.7/-6.12	-5.83/-2.56	-2.93/-2.86	-3.57/-2.47	-2.77/-2.28
Θ(112.5°)	-2.71/-3.44	-2.7/-0.47	-0.63/-0.47	-1.4/-1.75	-0.28/-1.37	2.38/-2.14	0.74/-0.84	-0.39/-0.3	2.07/-1.05	0.36/-1.2	1.24/-2.25	1.69/-85	1.33/-0.75	0.61/-2.2	-0.47/-2.15	-1.83/-0.07	-1.54/-2.93	-3.86/-6.49	-2.9/-6.87	-6.93/-2.15	-1.56/-5.03	-2.97/-4.63	-5.31/-4.86	
Θ(120°)	-3.12/-2.62	-3.04/-1.12	0.11/-0.41	0.35/-0.63	0.07/-0.63	0.67/-0.82	-0.07/-1.02	-0.69/-0.72	1.36/-0.79	1.03/-62	0.69/-1.1	0.81/-1.52	0.89/-0.32	-0.09/-0.22	-0.92/-3.13	-3.08/-3.09	-1.62/-2.14	-2.57/-5	-4.97/-2.69	-3.08/-7.55	-5.09/-3.47	-2.45/-5.8	-6.04/-3.17	-3.62/-4.88
Θ(127.5°)	-7.98/-6.01	-6.41/-5.11	-3.55/-2.3	-1.49/-0.96	-0.36/-0.14	-0.43/-1.04	-1.72/-1.42	0.48/-1.57	1.48/-1.55	1.27/-0.81	0.65/-0.35	-0.47/-1.11	-1.47/-1.84	-1.18/-0.73	-1.44/-3.98	-5.87/-3.07	-1.36/-3.36	-3.45/-7.63	-5.93/-4.19	-4.09/-8.26	-7.71/-5.76	-3.84/-5.91	-7.26/-5.92	-6.77/-7.74
Θ(135°)	-3.99/-4.94	-5.6/-4.32	-4.02/-3.79	-2.78/-1.94	-2.01/-2.46	-3.23/-3.23	-2.35/-0.82	0.54/-1.33	1.68/-1.31	0.59/-0.26	-0.79/-0.85	-1.92/-2.2	-2.93/-4.61	-1.99/-0.66	-1.83/-5.33	-6.31/-2.56	-2.01/-2.09	-2.58/-7.8	-5.89/-3.97	-2.35/-6.87	-7.57/-7.17	-8.28/-6.95	-6.6/-6	-3.49/-3.17
Θ(142.5°)	-2.79/-3.15	-4.8/-4	-3.92/-4.22	-3.48/-3.36	-3.64/-4.38	-5.58/-6.57	-4.94/-2.82	-1.36/-0.81	-0.61/-0.91	-1.99/-3.51	-3.68/-4.03	-3.65/-2.79	-3.55/-3.21	-2.74/-3.78	-5.85/-6.5	-3.55/-2.87	-2.63/-2.24	-4.76/-11.14	-8.54/-4.19	-1.01/-2.47	-7.41/-7.1	-7.37/-6.81	-3.16/-2.13	-1.65/-2.59
Θ(150°)	-7.42/-7.68	-6.81/-6.37	-5.88/-4.77	-4.68/-0.57	-5.38/-5.83	-6.91/-6.43	-4.76/-3.18	-2.54/-5.25	-3.02/-3.08	-2.48/-1.52	-1.23/-1.55	-1.23/-3.12	-2.64/-3.93	-3.52/-3.4	-4.71/-7.29	-8.21/-8.65	-5.52/-3.43	-5.7/-8.45	-7.72/-3.72	-1.54/-2.07	-5.1/-7.21	-5.81/-5.89	-6.28/-2.62	-6.74/-7.59
Θ(157.5°)	-7.77/-9.1	-9.24/-8.79	-9.24/-8.79	-8.09/-7.59	-7.95/-8.58	-7.17/-8.58	-8.03/-7.55	-6.54/-5.98	-5.29/-4.4	-3.31/-2.53	-2.08/-1.7	-1.82/-3.17	-5.56/-4.76	-2.93/-2.26	-2.74/-4.32	-6.18/-6.58	-5.24/-5.53	-6.71/-8.45	-5.26/-5.03	-3.63/-3.24	-4.13/-6.46	-8.54/-8.94	-8.53/-9.7	
Θ(165°)	-7.57/-7.46	-6.69/-5.9	-5.5/-5.36	-5.34/-5.61	-5.92/-6.65	-8.45/-10.14	-10.77/-10.89	-10.25/-9.77	-8.47/-6.67	-5.37/-4.56	-4/-3.79	-1.25/-5.25	-6.26/-6.79	-6.27/-6.56	-6.63/-6.1	-4.29/-3.15	-2.92/-2.86	-3.36/-4.17	-4.97/-5.27	-5.2/-5.15	-4.63/-5.12	-6.78/-9.5	-10.16/-9.79	-8.61/-7.95
Θ(172.5°)	-7.39/-7.14	-7.43/-7.6	-7.42/-7.72	-7.49/-7.5	-8/-8.61	-9.32/-10.95	-12.2/-12.97	-12.4/-11.04	-10.85/-9.58	-8.13/-7.39	-7.33/-7.7	-8.48/-8.94	-8.23/-6.96	-5.9/-4.89	-4.11/-3.72	-3.56/-3.46	-3.53/-4.11	-5.03/-6.75	-8.58/-9.99	-10.56/-10.5	-10.17/-9.73	-9.96/-8.92	-8.8/-9.72	-9.87/-8.99
Θ(180°)	-7.59/-8.19	-8.41/-8.14	-8.27/-8.3	-8.33/-8.53	-8.94/-9.25	-9/-8.84	-9.08/-8.89	-8.39/-8.06	-7.71/-7.47	-7.39/-7.2	-7.28/-7.25	-7.12/-7.05	-7.17/-7.13	-6.96/-6.74	-6.95/-7.13	-7.58/-8.13	-8.33/-8.45	-8.92/-10.15	-10.89/-11.12	-10.81/-10.05	-9.76/-9.52	-7.43/-6.35	-6.07/-6.65	-7.94/-7.83
Freq(Hz)	5.3G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-4.91/-4.25	-4.23/-4.55	-4.06/-3.28	-2.7/-2.21	-1.95/-1.7	-1.29/-1.07	-0.95/-0.78	-0.69/-0.76	-0.94/-1.19	-1.64/-2.13	-2.6/-3.37	-4.21/-4.98	-5.5/-5.26	-4.67/-4.17	-3.85/-3.57	-3.27/-3.01	-2.37/-2.03	-1.93/-1.76	-1.68/-1.7	-1.55/-1.36	-1.49/-1.87	-2.52/-3.12	-3.58/-4.03	-4.62/-4.87
Θ(7.5°)	-4.99/-4.32	-3.89/-3.66	-3.39/-3.46	-3.21/-2.88	-2.64/-2.54	-2.47/-2.29	-2.02/-1.69	-1.31/-1.08	-1.02/-1.28	-1.67/-2.09	-2.58/-3.11	-4.69/-4.73	-4.63/-4.4	-4.01/-3.41	-2.52/-1.89	-1.68/-1.4	-1.38/-2.13	-1.09/-1.12	-1.15/-1.23	-1.55/-				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(135°)	-5.46/-4.76	-6.04/-7.25	-5.46/-4.76	-5.13/-4.54	-3.88/-2.73	-1.84/-2.05	-2.98/-2.25	-1.38/-1.37	-2.14/-3.76	-5.42/-6.25	-4.98/-4.91	-6.25/-6.31	-6.47/-5.66	-3.17/-1.58	-2.06/-1.35	-2.12/-0.67	-0.76/-0.43	-1.07/-4.67	-7.93/-6.35	-4.5/-4.72	-7.91/-12.53	-9.93/-6.23	-7.31/-6.39	-4.16/-4.87
Θ(142.5°)	-10.82/-12.2	-8.45/-7.33	-5.74/-4.63	-4.26/-3.39	-2.41/-1.69	-1.37/-1.21	-0.75/-1.22	-1.52/-1.04	-1.4/-3.07	-5.14/-6.76	-7.39/-7.25	-6.5/-5.35	-5.64/-4.71	-3.73/-3.62	-2.52/-2.2	-1.84/-2.03	-3.5/-2.85	-4.8/-7.8	-8.37/-7.05	-7.35/-9.01	-7.01/-6.03	-6.58/-8.02	-6.34/-7.75	-9.18/-9.15
Θ(150°)	-8.65/-9.83	-10.3/-10.12	-9.49/-8.66	-7.65/-5.53	-4.24/-3.78	-3.48/-2.93	-2.25/-1.44	-0.76/-1.21	-2.66/-4.67	-6.64/-7.52	-8.39/-8.75	-7.47/-5.33	-4.11/-3.41	-2.87/-2.76	-2.58/-2.82	-2.88/-4.52	-5.86/-5.25	-5.79/-7.08	-6.97/-6.53	-5.2/-5.09	-4.92/-5.18	-6.41/-8.88	-9.6/-9.6	-9.41/-8.67
Θ(157.5°)	-7.6/-6.45	-6.21/-6.75	-6.92/-7.4	-7.15/-6.78	-6.59/-5.88	-5.24/-4.22	-3.54/-3.59	-4.04/-4.11	-4.45/-5.14	-6.34/-7.08	-7.02/-6.51	-5.53/-3.96	-2.41/-1.18	-0.37/-0.1	-0.39/-1.36	-2.77/-3.98	-3.71/-3.66	-3.36/-3.26	-3.62/-3.06	-6.24/-7.64	-6.42/-7.64	-8.64/-8.29	-8.39/-9.95	-9.52/-8.23
Θ(165°)	-7.63/-8.23	-8.03/-7.69	-7.22/-7.22	-7.3/-6.83	-6.05/-5.23	-4.55/-4.13	-4.24/-4.42	-5.13/-5.58	-6.14/-7.09	-8.63/-10.12	-11.41/-10.87	-9.35/-6.29	-4.46/-3.32	-2.98/-3.75	-5.36/-7.07	-6.82/-5.7	-4.98/-4.9	-4.89/-4.59	-4.1/-4.02	-4.58/-5.59	-6.36/-7.62	-7.96/-7.61	-7.21/-7.54	-7.65/-7.74
Θ(172.5°)	-9.08/-9.3	-9.76/-9.85	-9.57/-9.44	-9.37/-8.95	-8.49/-8.32	-8.23/-8.3	-8.95/-9.03	-9.58/-10.03	-10.48/-10.17	-9.91/-9.64	-9.68/-9.7	-9.41/-9.03	-8.94/-9.24	-9.49/-10.74	-12.23/-12.48	-11.23/-8.96	-7.19/-6.09	-5.59/-5.28	-5.35/-6.09	-7.61/-9.3	-10.91/-10.95	-11.96/-12.28	-10.5/-10.08	-9.98/-9.4
Θ(180°)	-8.98/-8.72	-8.33/-8.28	-9.23/-10.43	-11.04/-11.4	-11.87/-12.59	-12.57/-11.84	-11.86/-11.54	-11.64/-11.31	-10.57/-10.41	-10.51/-10.92	-11.12/-10.45	-10.59/-10.35	-10.62/-11.7	-11.96/-11.45	-10.76/-9.94	-9.57/-9.32	-9.17/-9.48	-8.87/-9.16	-10.01/-10.68	-10.99/-11.65	-11.9/-12.29	-11.81/-11.38	-10.39/-10.02	-9.86/-9.12
Freq(Hz)	5.6G/Pol.	Theta	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	0.430/0.15	0.04/-0.29	-0.01/-0.28	-0.54/-1.17	-1.96/-2.68	-3.78/-5.06	-6.03/-6.92	-6.32/-5.32	-4.24/-3.17	-2.3/-1.66	-1.23/-1.01	-0.93/-0.91	-0.78/-0.8	-0.93/-1.26	-1.49/-1.64	-1.88/-2.2	-2.8/-3.69	-5.09/-6.44	-7.55/-6.94	-5.53/-4.13	-2.98/-2.07	-1.18/-0.43	-0.070/28	0.380/39
Θ(7.5°)	-1.47/-1.2	-1.06/-0.9	-1.01/-1.16	-1.35/-1.44	-1.63/-2.03	-2.7/-3.69	-4.23/-4.34	-3.81/-2.99	-1.89/-1.14	-0.32/-0.26	0.70/9.4	1.08/1.37	1.52/1.48	1.33/1.1	0.72/0.35	-0.17/-0.97	-1.88/-2.96	-4.46/-6.19	-8.06/-7.71	-6.04/-4.5	-3.54/-2.93	-2.28/-1.77	-1.45/-1.25	-1.54/-1.65
Θ(15°)	-1.12/-0.8	-0.67/-0.39	-0.3/-0.36	-0.59/-0.88	-1.27/-2.14	-2.81/-3.11	-3.23/-0.37	-2.04/-0.88	-0.06/-0.5	0.91/1.1	1.18/1.4	1.78/2.27	2.62/2.85	2.92/2.71	2.38/1.9	1.22/0.42	-0.58/-1.61	-2.79/-4.38	-6.05/-6.22	-5.43/-4.45	-4.08/-3.85	-3.44/-3	-2.58/-1.82	-2.16/-1.4
Θ(22.5°)	-0.44/-0.16	-0.65/-1.06	-0.9/-0.21	-0.02/-0.44	-1.14/-2.24	-2.86/-3.17	-3.12/-2.96	-2.29/-1.5	-0.54/0.34	0.87/0.88	0.64/0.49	0.54/0.98	1.47/2.08	2.39/2.46	2.36/1.86	1.15/0.32	-0.63/-1.58	-2.52/-3.49	-4.15/-4.25	-4.83/-5.04	-4.38/-4.02	-3.59/-2.76	-2.96/-1.26	
Θ(30°)	-2.84/-1.91	-1.12/-0.74	-0.31/-0.49	-1.12/1.52	1.66/1.25	0.66/-0.35	-1.18/-1.66	-1.66/-1.18	-0.46/0.39	1.15/1.54	1.63/1.54	1.46/1.3	1.38/1.51	1.75/1.83	1.49/0.79	0.08/-0.65	-1.59/-2.75	-3.61/-4.48	-5.58/-6.34	-5.5/-4.43	-4.53/-4.65	-4.71/-4.59	-3.63/-3.54	-3.32/-2.84
Θ(37.5°)	-2.38/-1.32	-0.65/-0.21	-0.01/-0.32	0.47/0.15	0.06/0.29	0.51/0.16	-0.56/-0.65	-0.31/-0.19	0.92/1.62	1.97/0.22	2.12/2.18	2.05/1.89	1.81/1.59	1.45/1.59	1.37/0.55	-0.08/-0.59	-1.63/-3.06	-5.34/-7.62	-7.65/-7.95	-7.4/-6.71	-6.07/-5.11	-4.56/-4.21	-4.21/-4.78	-3.67/-2.94
Θ(45°)	-0.15/1.38	1.94/2.03	2.3/2.36	1.98/1.14	0.37/-0.03	-0.35/-0.31	-0.14/0.1	0.31/0.81	1.4/2.37	2.89/2.43	1.93/1.94	1.6/0.88	1.23/2.31	2.81/2.59	1.88/0.56	-0.19/-0.73	-1.16/-1.67	-2.96/-4.92	-5.01/-5.54	-5.12/-5.09	-5.47/-4.95	-4.55/-4.16	-4.18/-3.68	-2.48/-1.48
Θ(52.5°)	0.12/0.6	1.36/1.99	2.96/3.53	3.3/2.58	1.97/1.3	0.89/0.9	1.03/0.98	0.66/0.73	1.21/1.55	2.12/2.09	1.5/1.93	2.41/1.55	1.09/2.1	2.24/1.33	1.03/0.68	-0.01/-0.78	-2.33/-3.58	-4.11/-3.69	-3.93/-3.43	-2.62/-3.63	-4.41/-5.01	-5.62/-5.54	-3.78/-3.17	-1.97/-0.44
Θ(60°)	-0.13/-0.44	1.11/1.84	2.48/3	3.23/2.72	2.05/1.28	1.11/1.4	1.83/1.64	1.22/1.4	2.22/2.75	2.91/3.5	3.02/2.34	2.84/2.38	1.47/1.87	1.68/0.88	0.58/0.51	0.53/0.15	-1.65/-3.63	-4.84/-4.75	-4.37/-4.17	-3.21/-3.32	-4.47/-5.75	-5.41/-5.11	-4.22/-2.52	-1.37/-0.6
Θ(67.5°)	0.38/0.2	1.02/1.91	2.61/2.89	3.31/2.41	1.38/0.63	0.68/1.59	2.352/3.33	1.54/1.55	2.613/2.27	3.153/2.29	3.572/2.97	2.98/1.98	1.39/1.48	0.97/0.65	-0.18/-0.83	-1.1/-2.48	-4.42/-6.08	-6.68/-5.53	-4.44/-2.44	-6.64/-6.26	-6.41/-5.32	-4.62/-3.61	-4.13/-2.22	-0.44/0.6
Θ(75°)	0.36/0.43	0.99/1.52	1.71/2.08	2.4/1.91	1.38/0.55	0.09/0.81	1.64/1.88	1.55/1.66	2.15/2.7	3.06/3.26	3.85/3.53	2.88/2.2	1.48/0.59	0.6/0.44	-0.58/-2.37	-2.3/-2.64	-4.42/-6.55	-4.54/-4.88	-4.52/-5.14	-4.4/-7.72	-8.86/-6.91	-4.03/-6.26	-3.04/-2.4	-1.7/-0.64
Θ(82.5°)	-1.23/-0.52	-0.21/-0.23	-0.43/-1.25	-1.64/-1.36	-0.28/0.81	1.32/1.79	1.86/2.35	2.36/2.22	2.37/2.59	2.66/2.99	3.44/3.53	2.91/2.29	1.29/0.25	-0.06/0.03	-0.96/-2.87	-4.24/-6.26	-4.68/-8.22	-4.88/-3.32	-3.02/-3.34	-4.05/-5.63	-7.21/-7.09	-7.57/-5.12	-4.98/-3.41	-2.92/-1.29
Θ(90°)	-1.12/0.02	0.59/1.27	1.53/0.92	-0.65/-2.78	-1.57/0.88	2.21/2.26	1.88/1.41	1.67/1.93	1.59/1.25	1.58/2.48	3.37/3.2	2.81/1.72	1.02/0.27	0.54/0.43	-0.76/-1.91	-5.7/-6.15	-5.21/-6.18	-6.45/-6.34	-6.74/-7.32	-8.04/-12.58	-11.05/-7.1	-5.86/-5.72	-4.56/-3.68	-1.89/-0.9
Θ(97.5°)	-1.66/-0.83	0.04/0.22	-0.04/-0.57	-2/-2.93	-1.24/0.83	2.19/2.27	1.98/2.03	2.36/1.57	0.79/0.14	0.45/1.24	2.12/15	1.91/1.06	0.71/-0.22	-0.4/-0.89	-1.27/-2.86	-3.55/-3.82	-4.34/-4.79	-4.84/-5.04	-4.86/-4.88	-5.31/-7.96	-8.8/-7.0	-5.57/-6.05	-5.88/-3.84	-2.98/-2.4
Θ(105°)	-4.15/-3.91	-2.7/-2.08	-1.71/-1.5	-2.4/-0.56	0.31/4.1	1.83/1.44	1.31/2.4	3.23/3.21	2.03/1.07	0.54/0.68	1.48/0.98	1.31/-0.06	0.3/-1.71	-1.62/-1.8	-3.63/-3.35	-4.28/-4.55	-4.97/-5.99	-6.85/-7.33	-7.33/-4.22	-4.34/-6.47	-6.07/-5.32	-5.67/-2.73	-4.95/-4.89	-3.33/-3.83
Θ(112.5°)	-3.31/-3.55	-2.41/-2.72	-1.81/-1.04	-0.57/0.45	1.14/1.88	1.96/1.19	0.72/1.94	3.23/3.73	3.02/2.42	1.5/1.67	1.32/1.22	0.87/0.17	-0.15/-1.31	-0.68/-0.83	-1.96/-3.37	-2.21/-2.62	-2.87/-5.17	-7/-7.14	-4.76/-2.91	-4.25/-10.51	-3.86/-2.39	-6.4/-4.99	-6.17/-7.13	-4.49/-3.99
Θ(120°)	-2.08/-1.93	-2.04/-1.31	-0.91/-0.2	0.14/0.63	0.98/1.21	1.72/1.27	0.43/0.98	2.43/3.19	3.59/3.19	2.3/2.5	1.81/1.67	0.66/0.58	-0.21/-1.21	-1.64/-2.31	-2.51/-4.14	-4.95/-4.7	-4.33/-3.03	-6.36/-8.23	-4.54/-3.36	-2.81/-7.48	-5.65/-2.7	-5.2/-9.16	-8.57/-5.64	-5.55/-4.61
Θ(127.5°)	-3.91/-3.25	-2.11/-0.75	0.13/0.83	0.88/0.44	0.33/0.05	-0.47/-0.79	0.05/1.38	2.05/2.61	3.09/2.81	2.65/1.95	1.31/0.54	-0.74/-1.06	-1.66/-1.72	-1.48/-1.39	-2.14/-6.8	-6.06/-4.55	-3.9/-4.64	-6.29/-7.72	-4.91/-4.74	-3.76/-8.78	-4.84/-5.43	-7.12/-8.6	-6.3/-3.91	-4.97/-5.99
Θ(135°)	-2.86/-2.54	-2.89/-2.16	-1.66/-1.41	-1.38/-1.02	-0.62/-0.79	-0.77/-0.67	-0.17/0.84	1.69/2.17	2.68/2.46	1.65/1.11	0.3/-0.77	-1.82/-4.02	-5.09/-6.19	-5.39/-3.9	-4.58/-6.77	-7.3/-7.09	-4.41/-8.14	-8.06/-10.26	-5.83/-4.64	-5.94/-7.05	-6.48/-6.5	-4.85/-9.09	-9.66/-6.87	-5.04/-4.37
Θ(142.5°)	-7.41/-6.58	-6.67/-6.01	-5.59/-4.26	-2.65/-1.92	-2.14/-2.66	-2.86/-2.98	-2.16/-1.23	-0.27/0.59	1.0/4.2	0.21/0.19	-0.15/-0.6	-1.96/-3.03	-5.39/-6.55	-4.21/-4.74	-7.8/-9.06	-10.14/-6.8	-6.69/-7.73	-8.07/-7.56	-6.24/-6.7	-5.22/-5.78	-7.17/-9.98	-9.99/-6.81	-4.42/-3.15	-3.4/-6.12
Θ(150°)	-3.07/-2.74	-3.38/-3.72	-4.09/-4.55	-5.78/-6.35	-6.41/-5.55	-6.17/-6.42	-6.04/-4.68	-3.09/-1.92	-1.3/-0.9	-0.44/0.35	0.93/1.07	1.31/3.3	0.16/-0.65	-0.66/-1.32	-2.88/-5.07	-6.3/-6.53	-6.53/-6.44	-7.97/-8.6	-7.41/-6.29	-4.17/-3.86	-6.15/-7.08	-5.81/-4.69	-3.05/-1.59	-1.67/-3.3
Θ(157.5°)	-6.26/-5.47	-5.76/-6.98	-7.57/-7.82	-7.99/-7.36	-6.29/-5.56	-5.53/-5.61	-5.32/-4.95	-4.65/-4.09	-3.39/-2.8	-2.24/-1.82	-1.69/-1.15	-0.09/0.26	-0.42/-1.63	-2.18/-1.82	-1.58/-2.01	-3.39/-5.46	-7.19/-9.35	-9.64/-7.05	-5.67/-5.91	-5.77/-4.31	-3.29/-3.95	-5.48/-6.33	-6.03/-5.02	-5.42/-5.64
Θ(165°)	-6.44/-6.04	-5.62/-5.81	-6.34/-6.82	-7.24/-7.76	-7.98/-8.96	-9.81/-11.28	-10.75/-9.35	-8.01/-6.69	-5.15/-3.66	-2.38/-1.4	-0.7/-0.14	0.08/-0.06	-0.66/-1.87	-3.91/-5.52	-7.1/-8.16	-9.02/-8.96	-8.89/-9.02	-10.06/-10.84	-10.3/-7.8	-5.39/-3.62	-2.76/-2.96	-4.5/-7.64	-9.95/-10.07	-8.84/-7.1
Θ(172.5°)	-10.14/-10.72	-11.08/-11.49	-11.72/-11.03	-10.08/-9.61	-9.72/-9.94	-10.97/-11.5	-11.3/-11.22	-10.23/-9.79	-8.68/-8.07	-7.57/-7.38	-7.44/-7.6	-7.93/-8.71	-10.03/-10.19	-10.26/-8.14	-6.43/-5.4	-5.05/-5.34	-6.56/-8.4	-9.46/-10.49	-9.57/-8.31	-7.35/-6.7	-6.35/-6.79	-8.88/-10.64	-10.74/-12.07	-11.72/-10.75
Θ(180°)	-11.29/-11.6	-11.83/-12.09	-12.17/-10.95	-10.58/-9.95	-10.27/-9.99	-10.39/-11.04	-10.98/-11.11	-11.18/-10.83	-10.86/-11.33	-11.41/-11.18	-10.77/-10.34	-9.9/-9.59	-9.97/-10.3	-9.67/-9.32	-9.36/-9.65	-10.3/-10.6	-11.9/-12.42	-11.09/-9.85	-8.75/-7.85	-7.59/-7.66	-7.97/-9.73	-10.96/-10.24	-10.24/-11.77	-12.43/-11.85
Freq(Hz)	5.785G/Pol.	Phi	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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(16												



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(112.5°)	-8.17/-9.71	-7.44/-4.98	-4.31/-4.37	-4.22/-3.14	-1.44/-0.85	-1.04/-1.12	-1.97/-1.93	-0.61/-0.97	-0.87/-0.44	-0.8/-3.22	-4.24/-3.48	-2.18/-2.93	-3.57/-3.34	-5.52/-3.46	-3.31/-7.37	-9.9/-3.18	-0.93/-0.61	-4/-3.67	-3.38/-0.52	-2.9/-11.28	-4.88/-2.44	-4.31/-6.33	-8.53/-10.51	-10.29/-12.79
Θ(120°)	-6.55/-7.37	-6.86/-5.33	-5.5/-4.98	-3.13/-1.9	-1.4/-2.06	-1.84/-2.34	-3.05/-2.64	-1.39/-1.07	-1.31/-1.77	-3.87/-5.14	-6.49/-5.21	-3.18/-2.79	-2.77/-3.98	-6.5/-6.05	-5.89/-8.25	-5.29/-1.39	-0.91/-0.92	-5.6/-4.29	-3.26/-1.1	-2.28/-5.75	-4.31/-2.92	-5.37/-5.83	-7.13/-8.43	-7.85/-7.41
Θ(127.5°)	-3.71/-4.38	-5.51/-6.39	-4.4/-4	-3.18/-3.3	-3.41/-3.54	-4.11/-4.06	-3.34/-2.98	-2.45/-1.71	-1.41/-4.47	-6.36/-8.59	-9.34/-9.03	-8.6/-8.68	-8.81/-9.86	-6.41/-5.36	-4.85/-4.46	-4.09/-3.78	-1.66/-2.89	-2.02/-5.27	-5.43/-2.66	-2.55/-5.15	-7.01/-6.28	-5.61/-5.29	-7.94/-8.21	-4.25/-1.89
Θ(135°)	-6.54/-8.43	-4.5/-5.82	-5.84/-6.38	-5.11/-4.24	-4.07/-2.47	-4.23/-3.4	-2.97/-2.91	-2.58/-2.78	-3.47/-4.65	-6.33/-8.22	-8.79/-8.83	-8.7/-8.6	-9.73/-9.37	-7.33/-4.87	-3.85/-4	-2.85/-4.04	-4.67/-2.72	-1.14/-4.22	-6.61/-4.65	-2.91/-1.93	-4.17/-6.51	-8.15/-8.83	-8.49/-7.03	-8.84/-5.04
Θ(142.5°)	-7.96/-7.65	-5.21/-4.06	-2.87/-2.17	-2.37/-2.45	-3.07/-3.14	-1.85/-0.54	0.04/-0.18	-0.53/-1.11	-1.69/-2.91	-3.92/-4.49	-4.86/-4.89	-5.56/-5.02	-5.41/-5.76	-4.81/-3.42	-1.88/-1.27	-1.64/-2.85	-6.11/-5.01	-4.74/-6.72	-6.94/-4.92	-4.56/-6.37	-8.17/-6.32	-7.22/-6.36	-4.6/-7.22	-8.11/-6.53
Θ(150°)	-5.14/-6.21	-6.42/-6.55	-7.39/-7.98	-6.94/-5.62	-4.66/-3.79	-2.53/-1.68	-1.64/-1.86	-2.05/-2.58	-4.53/-6.1	-7.79/-8.54	-7.96/-7.07	-5.5/-4.18	-4.19/-4.6	-4.78/-4.96	-4.68/-4.79	-4.67/-6.94	-10.95/-7.92	-6.61/-6.26	-6.39/-5.63	-3.89/-3.27	-3.4/-4.77	-6.38/-7.31	-7.31/-8.1	-7.44/-5.41
Θ(157.5°)	-5.55/-5.48	-6.09/-5.89	-5.82/-5.86	-6.21/-7.29	-7.81/-6.94	-5.8/-4.47	-3.64/-2.76	-2.03/-2.1	-2.99/-4.48	-6.07/-7.27	-7.03/-6.85	-6.01/-4.54	-3.1/-1.98	-1.41/-1	-1.05/-1.97	-3.97/-6.94	-7.97/-5.98	-3.39/-2.12	-2.23/-2.3	-1.98/-2.78	-4.86/-6.67	-8.08/-8.74	-10.03/-9.16	-6.52/-5.61
Θ(165°)	-7.95/-7.39	-7.03/-7.92	-8.93/-9.19	-9.07/-8.09	-6.72/-5.71	-4.86/-4.4	-4.71/-5.07	-5.78/-6.23	-6.87/-7.8	-8.7/-9.74	-10.09/-9.48	-7.75/-5.54	-3.94/-2.94	-2.54/-2.78	-3.49/-4.97	-6.67/-7.68	-7.12/-5.87	-4.47/-3.8	-3.91/-4.24	-5.31/-7.32	-8.81/-8.8	-8.21/-7.32	-6.67/-6.84	-7.33/-7.56
Θ(172.5°)	-6.87/-7.22	-7.86/-8.09	-7.82/-7.55	-7.21/-7.19	-7.52/-7.87	-8.02/-8.21	-8.15/-8.79	-9.51/-9.95	-10.53/-11.03	-10.68/-10.2	-10.04/-10.48	-10.87/-9.94	-9.75/-8.94	-8.1/-7.72	-7.45/-7.58	-8.07/-8.02	-7.19/-6.5	-5.89/-5.8	-5.53/-5.61	-6.78/-7.75	-8.71/-9.42	-9.72/-10.05	-9.83/-9.4	-8.66/-7.19
Θ(180°)	-10.76/-9.95	-9.57/-9	-9.07/-8.94	-8.63/-9	-9.15/-9.22	-9.3/-9.93	-10.08/-10.3	-10.07/-11.15	-11.81/-11.9	-12.37/-11.7	-11.29/-10.82	-10.29/-9.92	-9.64/-9.57	-9.93/-9.93	-9.84/-9.3	-9.13/-9.03	-8.79/-8.07	-8.09/-8.32	-8.75/-9.65	-11.26/-12.43	-12.26/-12.19	-12.39/-11.99	-11.42/-10.54	-10.3/-10.84
Freq(Hz)	5.885G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-1.04/-1.7	-2.35/-2.45	-3.04/-2.63	-2.77/-2.69	-2.04/-1.75	-1.67/-1.43	-1.51/-1.37	-1.26/-0.94	-0.56/-0.24	-0.03/-0.14	0.12/-0.11	-0.54/-0.96	-1.52/-1.95	-2.43/-2.97	-3/-3.01	-2.46/-2	-1.95/-1.99	-1.7/-1.48	-1.35/-1.59	-1.58/-1	-0.5/-0.5	0.27/-0.24	0.10/-15	0/-0.54
Θ(7.5°)	-0.95/-1.75	-2.48/-3.09	-3.49/-3.45	-3.28/-2.97	-2.44/-1.97	-1.79/-1.64	-1.59/-1.66	-1.74/-2.05	-2.22/-2.28	-2.03/-1.74	-1.48/-1.39	-1.3/-1.11	-0.98/-0.84	-0.69/-0.78	-1.15/-1.67	-2.73/-2.19	-1.68/-1.66	-1.67/-1.33	-0.53/-0.45	0.91/-13	1.06/-0.84	0.53/-37	0.25/-0.41	
Θ(15°)	-1.77/-2.09	-2.35/-2.66	-2.66/-2.79	-2.73/-2.93	-2.57/-2.33	-1.75/-1.12	-0.66/-0.36	-0.4/-0.32	-0.54/-0.45	-0.25/-0.05	0.04/-0.08	-0/0.28	0.62/-0.92	1.06/-1.03	0.83/-0.53	-0.06/-1.05	-2.18/-2.9	-3.3/-3.46	-3.16/-2.09	-0.77/-0.33	1.01/-1.24	1.16/-0.85	-0/-0.51	-0.71/-1.44
Θ(22.5°)	-3.16/-2.62	-1.91/-1.17	-0.69/-0.78	-1.04/-1.19	-0.6/-0.58	-0.27/-0.43	-1.11/-1.72	-2.12/-1.71	-0.69/-0.46	1.47/-1.94	1.89/-1.73	1.62/-1.5	1.43/-1.26	1.06/6	0.14/-0.24	-0.73/-1.51	-2.51/-3.1	-3.8/-4.21	-4.14/-3.16	-2.09/-1.28	-0.71/-0.28	-0.77/-1.78	-4/-4.66	-4.15/-3.61
Θ(30°)	-1.35/-0.67	-0.6/-0.72	-0.56/-0.15	0.41/-0.43	-0.24/-0.13	-0.73/-0.69	-0.94/-0.7	-0.08/-0.4	0.83/-1.47	2.11/-2.12	1.83/-1.45	1.11/-1.01	0.93/-0.86	0.87/-0.75	0.24/-0.4	-0.66/-1.04	-1.71/-1.88	-2.52/-4.03	-3.71/-2.71	-2.57/-2.25	-1.54/-1.47	-2.52/-4.23	-5.38/-3.45	-2.57/-1.82
Θ(37.5°)	-2.68/-1.9	-1.05/-0.23	0.38/-0.97	1.38/-1.39	0.81/-0.1	0.01/-0.42	-0.45/-0.21	0.65/-0.68	0.55/-0.66	0.74/-0.73	0.79/-0.74	0.37/-0.12	0.71/-1.42	1.40/-92	0.62/-0.19	-1.34/-1.78	-2.23/-3.14	-3.06/-2.71	-2.25/-1.5	-0.3/-0.31	-1.67/-2.36	-3.03/-2.47	-4.92/-4.18	-3.89/-3.21
Θ(45°)	0.61/-85	2.13/-1.65	2.04/-1.23	1.81/-1.26	0.89/-0.69	0.25/-0.05	-0.36/-0.21	0.14/-0.63	1.28/-1.9	2.41/-2.68	2.63/-2.7	2.72/-1.93	0.63/-1	0.94/-0.1	-0.89/-0.92	-0.80/-1	-0.85/-2.35	-2.06/-2.36	-2.51/-1.84	-1.78/-1.94	-2.69/-3.2	-3.41/-3.92	-3.09/-2.05	-0.9/-0.31
Θ(52.5°)	0.16/-1.68	1.76/-1.9	2.81/-3.19	2.5/-2.06	1.94/-1.79	1.81/-2.15	2.32/-1.98	1.77/-2.59	3.29/-3.53	3.48/-3.6	3.43/-2.66	2.56/-2.2	1.49/-1.57	2.02/-1.5	0.57/-0.24	-0.5/-0.65	-1.41/-1.85	-1.38/-1.47	-1.19/-1.43	-1.82/-3.07	-5.32/-7.1	-7.34/-5.21	-4.38/-3.23	-1.96/-1.34
Θ(60°)	-1.03/-0.63	1.21/-1.92	2.65/-0.33	3.36/-2.76	2.31/-2.62	3.11/-3.01	2.67/-2.36	3.51/-3.77	4.02/-3.84	3.59/-3.55	3.93/-3.32	3.28/-2.25	1.61/-1.7	1.48/-1.22	1.09/-0.14	-1.19/-1.24	-1.59/-0.82	-1.06/-2.37	-1.99/-2.93	-3.82/-3.24	-3.58/-3.35	-4.78/-4.62	-2.77/-3.25	-3.3/-2.12
Θ(67.5°)	1.1/-63	2.41/-3.16	3.16/-3.04	3.44/-2.76	2.12/-19	2.22/-2.63	3.21/-3.5	4.17/-4.07	3.81/-3.9	3.98/-3.67	3.32/-2.84	3.23/-2.29	1.43/-1.06	0.94/-0.97	1.28/-0.15	-1.84/-1.6	-1.91/-1.09	-3.47/-3.82	-5.79/-3.59	-1.74/-1.72	-2.58/-3.91	-4.54/-4.64	-2.65/-2.04	
Θ(75°)	1.24/-1.4	2.75/-2.23	3.23/-2.05	1.94/-0.6	-0.38/-1.25	2.29/-3.17	4.07/-0.42	4.19/-4.25	3.68/-3.62	3.39/-3.51	3.52/-3.35	2.83/-2.06	1.90/-94	0.80/-03	-0.54/-1.78	-2.24/-4.62	-4.48/-4.3	-5.37/-3.79	-3.42/-2.28	-1.45/-3.1	-6.69/-10.91	-6.58/-2.24	-1.57/-0.99	-0.62/-0.64
Θ(82.5°)	-1.13/-0.55	0.14/-1.07	1.86/-2.25	1.96/-3.9	-0.70/-38	2.21/-3.59	4.44/-5.08	4.69/-3.91	3.15/-3.38	4.34/-18	3.72/-2.55	1.38/-0.14	0.50/-79	0.59/-0.23	-1.39/-3.45	-3.39/-4.28	-2.95/-3.09	-4.55/-4.29	-6.52/-3.9	-2.06/-3.17	-4.55/-7.36	-6.52/-4.27	-3.89/-2.86	-2.78/-1.9
Θ(90°)	-1.63/-1.34	-0.11/-0.05	-0.07/-0.1	0.34/-0.99	2.17/-2.72	3.16/-3.44	3.95/-4.33	4.64/-4.18	3.35/-2.21	3.33/-2.48	2.1/-73	1.50/-56	-0.1/-1.05	-0.18/-0.77	-0.75/-2.19	-3.18/-5.81	-5.81/-5.8	-4.74/-6.46	-6.59/-2.76	-2.48/-4.42	-4.57/-7.23	-7.15/-4.72	-4.49/-3.14	-2.55/-2.47
Θ(97.5°)	-0.78/-1.12	-0.91/-0.89	-0.22/-0.69	-1.15/-0.16	2.24/-0.4	4.11/-3.95	4.03/-4.59	4.56/-3.66	2.64/-5.28	2.75/-2.5	2.21/-1.5	0.76/-0.47	-0.76/-1.36	-1.89/-2.1	-3.98/-3.6	-6.09/-2.53	-2.35/-3.06	-6.79/-4	-5.96/-3.64	-2.66/-4.22	-6.39/-7.91	-5.85/-3.22	-2.64/-1.66	-0.37/-0.87
Θ(105°)	-2.09/-1.53	-1.27/-1.23	0.12/-0.29	0.21/-21	2.47/-3.04	3.25/-2.95	3.01/-3.34	3.21/-2.04	1.03/-1.12	2.31/-2.96	3.34/-2.62	1.67/-0.54	1.31/-0.81	-2.21/-2.64	-4.21/-3.39	-2.51/-3.83	-4.77/-4.47	-6.72/-6.41	-3.14/-3.54	-3.58/-6.14	-3.11/-3.7	-3.6/-1.9	-2.91/-2.35	-0.72/-1.58
Θ(112.5°)	-2.45/-2.72	-1.71/-1.52	-0.28/-0.9	1.46/-2.22	2.71/-3.09	2.71/-75	2.51/-3.2	3.05/-1.78	0.97/-0.8	1.33/-2.09	3.42/-3.12	2.80/-63	0.09/-1.52	-1.66/-2.17	-3.38/-3.59	-3.89/-3.69	-2.3/-2.92	-5.33/-7.43	-6.31/-3.51	-2.93/-4.42	-4.29/-3.24	-6.59/-4.46	-4.84/-4.64	-2.03/-1.56
Θ(120°)	-1.15/-2.94	-1.73/-1.62	-0.58/-0.88	1.99/-2.72	2.59/-1.83	0.22/-0.25	-0.01/-1.5	2.08/-2.69	2.73/-2.22	1.86/-2.46	2.23/-1.82	1.52/-0.94	1.55/-0.71	-1.46/-1.21	-2.71/-2.92	-4.11/-3.88	-4.14/-5.51	-6.66/-8.46	-4.3/-2.94	-2.21/-5.84	-6.8/-4.05	-4.21/-2.1	-2.82/-3.53	-5.02/-2.96
Θ(127.5°)	-1.3/-2.42	-2.96/-0.52	0.27/-1.39	1.97/-1.89	0.96/-0.02	-1.1/-0.15	1.16/-2.43	3.2/-98	3.35/-3.44	3.05/-2.69	2.16/-2.47	1.23/-0.61	-0.31/-1.81	-1.45/-0.74	-1.91/-3.68	-6.21/-6.46	-6.05/-3.11	-6.44/-10.27	-4.04/-3.91	-4.99/-8.44	-3.68/-5.27	-3.19/-6.51	-5.03/-5.55	-4.01/-2.49
Θ(135°)	-1.94/-2.51	-2.38/-1.28	-1.11/-0.29	0.67/-0.96	0.55/-0.46	-1.3/-0.29	1.07/-1.76	2.48/-3.2	3.26/-3.7	2.97/-2.06	1.06/-1.3	-2.5/-3.76	-3.8/-4.2	-3.36/-2.5	-2.88/-4.85	-6.74/-7.92	-5.73/-5.63	-9.43/-8.02	-2.68/-2	-6.13/-7.7	-6.03/-4.77	-4.44/-1.48	-4.39/-6.2	-5.39/-3.19
Θ(142.5°)	-6.23/-4.44	-4.28/-2.83	-1.42/-2.29	-2.61/-1.85	-1.55/-1.33	-1.03/-0.89	-0.24/-0.28	1.18/-2.18	2.84/-2.74	1.98/-1.22	0.15/-0.54	-1.6/-3.49	-5.87/-1.77	-6.1/-5.77	-7.19/-7.09	-6.79/-4.51	-2.53/-5.66	-8.69/-9.67	-2.64/-2.27	-6.8/-9.14	-1.67/-7.24	-7.04/-3.43	-1.68/-1.25	-2.54/-5.35
Θ(150°)	-4.74/-4.42	-5.25/-5.25	-4.94/-5.89	-7.03/-7.93	-7.28/-6.22	-5.56/-5.24	-4.18/-2.77	-1.58/-0.28	0.34/-0.52	0.30/-21	0.52/-0.46	-0.29/-0.81	-2.05/-2.5	-1.82/-2.23	-3.25/-5.82	-7.74/-7.36	-7.38/-5.65	-4.09/-4.53	-3.34/-3.94	-4.23/-3.97	-7.39/-12.37	-9.66/-5.5	-3.28/-2.41	-4.3/-6.18
Θ(157.5°)	-4.09/-2.93	-3.41/-3.55	-4.14/-5.57	-6.91/-6.29	-5.62/-5.54	-5.99/-5.91	-5.37/-5.53	-5.48/-4.36	-3/-2.04	-1.49/-0.66	0.25/-0.57	0.74/-0.92	0.44/-0.74	-1.86/-3.13	-4.64/-5.84	-5.79/-6.29	-7.05/-6.96	-6/-3.88	-3.11/-4.17	-4.94/-4.75	-4.48/-6.61	-8.78/-6.71	-5.43/-6.72	-7.08/-5.35
Θ(165°)	-8.25/-7.93	-7.79/-7.11	-6.29/-6.09	-6.63/-7.62	-8.88/-9.22	-9.34/-8.49	-7.62/-6.52	-6.39/-6.3	-5.5/-4.59	-3.67/-2.94	-2.05/-0.74	0.22/-0.67	0.53/-0.25	-1.18/-2.49	-4.21/-6.52	-8.84/-11.69	-12.22/-10.4	-7.09/-5.47	-4.89/-5.22	-5.47/-4.78	-3.84/-3.75	-4.88/-6.94	-8.07/-8.26	-7.8/-8.29
Θ(172.5°)	-8.75/-9.56	-9.9/-10.39	-9.59/-8.66	-8.08/-7.87	-7.95/-7.78	-8.59/-9.63	-9.05/-8.17	-8.22/-8.34	-7.97/-8.04	-7.91/-7.72	-7.72/-6.59	-5.55/-5.33	-5.62/-											



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(60°)	-6.72/-6.59	-4.8/-3.53	-3.22/-2.93	-2.67/-1.4	0.31/1.41	1.55/0.9	0.65/0.83	1.16/1.47	0.9/-0.07	-0.97/-1.75	-2.56/-2.38	-2.37/-2.63	-2.64/-1.11	-0.42/-0.89	-0.92/-0.29	0.11/0.07	0.06/1.1	2.23/1.97	0.34/-0.66	0.3/0.37	-0.99/-2	-3.38/-5.47	-5.66/-5.38	-6.49/-7.55
Θ(67.5°)	-6.1/-4.56	-3.86/-2.76	-1.33/-0.42	0.27/0.56	0.26/-0.18	-0.35/-0.22	-0.04/0.22	0.9/-1.48	0.85/-0.03	-1.76/-3.21	-2.63/-2.47	-3.36/-4.2	-3.75/-1.87	-1.01/-0.18	0.56/0.34	-0.11/-0.61	-1.05/0.19	1.03/0.51	-0.67/-0.78	-0.36/-1.19	-2.73/-3.31	-4.88/-7.26	-7.68/-8.26	-8.18/-8.78
Θ(75°)	-4.99/-4.53	-4.28/-4.29	-4.24/-3.36	-1.97/-1	0.05/0.36	-0.1/-1.13	-2.15/-1.6	-0.87/-0.88	-0.71/-0.62	-1.58/-2.64	-3.49/-3.36	-3.31/-4.09	-4.92/-3.48	-1.64/-1.17	-0.81/-1.65	-2.05/-1.68	-0.8/0.14	-0.16/-0.41	-1.16/-0.2	-0.22/-3.09	-5.92/-4.35	-3.31/-4.95	-6.69/-6.93	-7.17/-5.95
Θ(82.5°)	-5.25/-6.06	-5.77/-4.75	-4.27/-3.65	-2.95/-2.62	-2.73/-1.9	-1.42/-1.69	-2.19/-2.59	-1.66/-0.85	-0.68/-0.52	-0.43/-1.39	-2.68/-3.45	-4.1/-4.46	-4.15/-2.63	-1.26/-1.12	-0.47/-1.32	-1.09/-0.19	0.29/0.96	0.89/0.21	0.42/0.94	1.12/-0.94	-2.42/-3.28	-2.82/-3.79	-6.75/-5.98	-8.62/-6.51
Θ(90°)	-7.17/-8.38	-7.77/-6.23	-5.47/-3.96	-2.86/-2.45	-2.77/-3.51	-3.54/-3.38	-4.33/-5.23	-4.07/-2.78	-0.96/0.10	-0.15/-0.91	-1.55/-2.53	-4.24/-4.54	-2.49/-2.22	-2.45/-0.98	-0.37/-1.2	0.11/0.12	1.72/3.35	2.56/1.76	1.48/1.91	1.45/0.38	-0.34/-1.28	-2.56/-3.91	-5.82/-8.52	-9.06/-9.67
Θ(97.5°)	-4.59/-5.97	-5.72/-4.74	-4.74/-3.83	-2.65/-2.3	-2.34/-2.17	-1.98/-2.14	-2.84/-3.15	-2.49/-2.36	-1.96/-2.15	-2.63/-3.57	-4.93/-6.94	-5.96/-5.96	-3.05/-2.45	-1.61/0.28	0.67/-0.61	-1.13/0.26	1.21/2.02	2.29/2.5	1.94/3.12	2.69/1.19	-0.05/-0.6	-2.89/-4.82	-5.68/-7.43	-7.49/-5.61
Θ(105°)	-5.41/-6.46	-6.54/-5.61	-5.76/-4.15	-3.18/-3.15	-3.23/-2	-1.05/-3.12	-1.89/-2.68	-1.47/-0.65	-0.08/-0.42	-1.07/-3.21	-4.87/-4.76	-3.78/-3.22	-1.07/0.05	1.16/1.75	1.48/-0.38	-1.79/0.81	2.09/2.25	2.67/1.64	0.41/1.61	1.67/-0.47	-1.44/-0.8	-1.53/-4.12	-5.43/-6.93	-8.89/-7.44
Θ(112.5°)	-5.93/-3.74	-4.09/-4.55	-5.06/-4.89	-3.49/-2.96	-3.27/-3.81	-3.65/-4.91	-4.58/-2.48	-0.98/0.2	0.55/-0.01	-1.64/-3.02	-3.97/-3.03	-3.18/-3.69	-1.78/-0.75	-0.62/0.33	-0.18/-3.25	2.993/2.27	3.27/1.28	1.38/2.46	2.82/1.4	-0.27/-0.57	-1.47/-2.96	-4.64/-7.26	-7.71/-6.22	
Θ(120°)	-6.26/-6.36	-5.43/-4.89	-4.38/-3.99	-2.96/-3.1	-4.1/-5.01	-5.69/-5.76	-4.97/-3.72	-2.7/-1.54	-1.56/-1.16	-1.37/-2.16	-5.3/-6.66	-6.69/-6.01	-4.38/-4.74	-2.9/-1.97	-2.82/-2.13	-0.22/0.62	1.88/1.66	1.3/-0.77	0.06/1.6	1.48/-0.31	-2.65/-1.61	-1.98/-4.05	-3.3/-3.9	-4.76/-4.65
Θ(127.5°)	-7.03/-6.62	-6.47/-6.23	-4.34/-4.04	-4.17/-4.32	-4.45/-3.91	-3.19/-3.63	-4.51/-3.89	-2.67/-2.23	-1.43/-0.71	-1.23/-2.85	-4.21/-5.02	-6.68/-6.71	-5.05/-3.62	-3.55/-4.3	-3.91/-2.22	-1.47/-0.87	-0.28/-0.35	-1.07/-2.58	-1.77/-0.68	-0.86/-1.48	-1.78/-1.89	-1.35/-2.13	-3.41/-5.87	-7.24/-9.02
Θ(135°)	-7.81/-8.99	-6.08/-5.85	-4.48/-3.47	-3.73/-3.7	-2.49/-0.87	-0.13/-0.43	-1.43/-1.78	-1/-0.51	0.01/-0	-0.76/-2.27	-4.44/-5.6	-6.3/-6.52	-5.8/-4.74	-3.79/-4.21	-2.72/-1.92	-1.09/0.35	0.99/1.43	-2.51/-3.21	-3.32/-2.65	-2.57/-3.15	-2.62/-1.74	-0.88/-2.08	-5.74/-8.88	-5.43/-5.31
Θ(142.5°)	-5.78/-8.77	-8.88/-8.25	-6.53/-4.97	-4.31/-2.86	-1.45/-0.77	-0.86/-1.09	-1.38/-1.07	-0.09/0.25	-0.54/-1.74	-2.71/-3.45	-3.37/-3.37	-2.88/-1.94	-1.15/-1.09	-1.46/-2.58	-3/-1.35	-0.36/-0.12	-0.38/-1.99	-2.24/-2.98	-3.15/-4.28	-3.92/-3.99	-4.53/-7.66	-5.17/-4.86	-4.43/-5.88	-5.58/-4.94
Θ(150°)	-6.3/-3.77	-7.24/-6.25	-5.77/-6.48	-6.16/-4.5	-3.23/-3.01	-2.71/-2.08	-1.52/-1.22	-1.38/-1.78	-2.39/-2.74	-2.83/-1.37	-3.24/-3.08	-3.07/-2.46	-2.31/-2.66	-3.27/-3.17	-1.6/-0.84	-1.06/-1.89	-3.13/-4.46	-4.79/-3.98	-2.28/-2.58	-3.9/-5.09	-5.93/-7.22	-7.86/-7.79	-6.37/-6.09	-6.22/-5.75
Θ(157.5°)	-8.4/-8.05	-8.07/-7.92	-7.39/-6.92	-6.77/-6.73	-6.77/-6.45	-6.86/-3.95	-2.91/-2.82	-3.45/-4.23	-6.47/-3.94	-2.97/-2.22	-1.86/-1.7	-1.61/-1.45	-1.25/-1.07	-0.99/-1.15	-1.12/-1.16	-1.33/-1.81	-2.54/-3.26	-3.66/-3.6	-3.25/-3.21	-3.79/-3.88	-4.04/-4.88	-5.73/-5.47	-6.1/-7.89	
Θ(165°)	-5.13/-5.44	-5.87/-6.84	-7.57/-8.06	-7.91/-7.4	-6.54/-5.46	-4.85/-4.51	-4.26/-4.23	-4.64/-4.81	-5.16/-5.52	-5.74/-6	-6.43/-6.77	-6.76/-6.42	-6.02/-5.55	-5.51/-4.95	-3.82/-2.95	-2.28/-2.05	-2.3/-2.53	-2.56/-1.81	-1.2/-1.21	-1.97/-3.02	-3.99/-4.89	-4.99/-5.14	-5.33/-5.23	-4.93/-5.26
Θ(172.5°)	-9.92/-8.84	-7.46/-6.73	-6.24/-6.06	-5.52/-5.14	-4.76/-4.62	-4.95/-5.49	-5.89/-6.32	-6.65/-6.91	-7.55/-7.9	-8.63/-9.17	-9.87/-10.05	-9.56/-9.03	-8.14/-7.11	-6.24/-5.17	-4.16/-3.26	-2.6/-2.13	-2.09/-2.23	-2.36/-2.36	-2.54/-3.04	-3.68/-4.29	-5.16/-6.04	-6.5/-7.18	-8.11/-9.63	-10.26/-10.16
Θ(180°)	-8.77/-8.57	-8.35/-8.16	-7.66/-6.62	-5.88/-5.42	-5.06/-4.64	-4.43/-4	-3.65/-3.41	-3.31/-3.46	-3.71/-4.08	-4.52/-5.17	-5.87/-6.37	-7.17/-7.9	-7.96/-7.02	-6/5.08	-4.43/-3.94	-3.67/-3.42	-3.49/-3.38	-3.43/-3.68	-3.95/-4.19	-4.42/-5.07	-5.66/-6.21	-7.28/-7.79	-7.99/-8.24	-8.41/-8.59
Freq(Hz)	5.3G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	2.72/7.28	2.42/1	1.15/0.89	0.25/-0.67	-1.56/-2.79	-4.09/-5.16	-5.82/-4.49	-4.21/-2.65	-1.16/-0.1	0.76/1.35	1.84/2.26	2.48/2.59	2.48/2.4	2.29/2.04	1.6/1	0.17/-0.78	-1.96/-3.34	-4.68/-5.86	-6.01/-4.89	-3.16/-1.73	-0.54/0.54	1.17/1.27	1.59/1.98	2.28/2.65
Θ(7.5°)	2.42/0.27	1.84/1.69	1.48/0.89	0.32/-0.64	-1.29/-2.22	-3.18/-3.99	-4.55/-4.46	-3.81/-2.63	-1.56/-0.67	0.06/0.77	1.45/2.04	2.49/2.61	2.73/2.84	2.69/2.47	2.04/1.4	0.53/-0.44	-1.58/-3.17	-5.21/-6.56	-5.98/-4.34	-2.61/-1.08	0.10/0.97	1.61/1.84	2.06/2.22	2.45/2.63
Θ(15°)	2.63/2.22	2.43/2.28	1.63/1.03	0.44/-0.19	-0.96/-1.61	-2.73/-3.83	-4.39/-4.38	-3.43/-2.26	-1.25/-0.43	0.29/0.97	1.54/2.08	2.47/2.92	3.43/3.68	3.82/3.67	3.24/2.44	1.23/-0.14	-1.52/-2.93	-5.04/-7.13	-7.37/-4.98	-2.58/-0.56	0.59/1.13	1.57/2.1	2.45/2.44	2.64/2.78
Θ(22.5°)	1.78/1.8	1.74/1.22	0.54/0.02	-0.18/-0.35	-0.45/-0.86	-1.72/-2.6	-3.1/-2.93	-1.69/-0.24	0.88/1.7	2.25/2.66	3.03/3.23	3.42/3.66	3.81/3.81	3.68/3.4	2.97/2.21	1.26/0.3	-0.72/-2.41	-5.2/-8.39	-9/-4.71	-1.82/-0.18	0.6/0.79	0.99/0.96	1.1/1.35	1.66/1.7
Θ(30°)	0.30/55	0.48/0.46	0.35/0.34	0.63/0.73	0.61/0.05	-1.01/-1.98	-2.72/-0.75	-0.80/-69	1.75/2.36	2.71/2.97	3.16/3.26	3.29/3	2.36/2.4	2.42/-0.9	1.62/1.1	0.19/-2.1	-5.5/-7.88	-7.99/-6.07	-4.1/-2.67	-1.92/-1	-0.62/-0.85	-0.96/-0.81	-0.34/-0.01	
Θ(37.5°)	-0.27/0.17	0.12/0.02	-0.33/-0.89	-0.71/-0.71	-1.03/-1.61	-2.27/-2.39	-2.89/-2.64	-1.85/-0.4	1.06/1.91	2.33/2.52	2.67/2.91	3.04/2.78	2.09/1.61	1.59/1.68	1.48/0.96	0.95/0.67	-0.31/-2.53	-4.78/-5.94	-5.39/-4.29	-4.2/-3.82	-3.11/-1.67	-0.8/-0.74	-0.98/-1.03	-1.51/-1.27
Θ(45°)	-0.07/0.98	1.72/1.77	1.47/0.94	0.53/-0.03	-0.97/-1.53	-1.7/-1.8	-1.9/-1.6	-1.3/-0.38	1.02/1.9	2.72/2.92	3.07/3.18	2.82/1.7	2.18/2.38	1.94/1.22	0.75/0.33	0.28/0.32	-0.79/-3.55	-6.17/-8.19	-8.14/-6.34	-4.64/-4.39	-4.42/-3.66	-2.79/-2.56	-1.92/-1.65	-1.58/-0.97
Θ(52.5°)	-0.51/-0.2	0.34/0.62	0.80/0.73	0.73/0.56	-0.28/-1.47	-2.27/-1.51	-1.31/-0.31	-0.06/0.42	1.52/58	3.38/3.83	3.66/3.6	3.23/2.4	2.13/2.55	2.33/1.63	0.86/0.31	-0.23/-0.54	-1.27/-2.37	-5.42/-11.07	-11.37/-8.83	-5.8/-3.61	-3.73/-4.44	-4.64/-3.91	-3.06/-2.36	-1.58/-0.9
Θ(60°)	-1.3/-0.76	-0.36/0.12	0.63/0.91	1.08/0.61	-0.38/-1.48	-1.56/-1.22	-0.66/-0.1	0.25/0.44	1.07/2.11	3.11/3.54	3.18/3.12	2.92/1.77	1.31/1.78	1.66/0.89	0.42/-0.25	-1.52/-2.46	-3.17/-2.74	-3.45/-5.51	-8.94/-10.22	-8.36/-5.79	-5.73/-6.35	-5.84/-5.42	-4.3/-3.48	-2.6/-2.06
Θ(67.5°)	-3.18/-1.83	-0.10/56	-0.77/1.38	1.77/1.1	-0.34/-1.92	-1.61/-0.8	-0.54/-0.52	-0.02/1.1	1.53/1.83	2.53/2.91	2.62/2.22	1.60/27	-0.17/-0.1	-0.16/-0.23	0.12/-1.09	-1.67/-3.19	-3.32/-5.44	-7.52/-8.54	-9.41/-8.99	-6.93/-7.48	-7.14/-6.07	-4.86/-3.74	-2.62/-3.92	-4.88/-3.83
Θ(75°)	-4.18/-3.85	-2.21/-1.07	0.07/0.07	0.11/-0.79	-1.93/-1.93	-1.68/-0.76	0.16/0.91	0.71/0.43	0.85/1.23	1.69/1.95	1.40/92	0.69/-1.15	-2.03/-1.25	-0.82/-0.87	-1.12/-1.69	-3.71/-4.44	-4.64/-4.43	-4.9/-7.98	-12.42/-11.94	-9.28/-8.43	-7.19/-5.57	-4.5/-4.89	-3.98/-3.91	-4.32/-4
Θ(82.5°)	-4.92/-3.82	-2.36/-1.16	-0.33/-0.32	-1.09/-2.97	-3.62/-3.44	-1.23/0.69	0.9/0.06	-0.4/-0.69	0.4/-0.37	0.15/1.24	1.71/1	0.05/-1.68	-2.58/-3.17	-2.61/-1.56	-1.21/-1.94	-3.23/-4.55	-4.01/-4.25	-3.93/-5.19	-6.23/-9.11	-7.48/-6.99	-5.31/-6.2	-6.32/-7.1	-7.38/-7.47	-7.39/-6.31
Θ(90°)	-4.78/-3.81	-1.35/0.28	1.28/1.02	-0.03/-2.64	-7.2/-3.31	-0.04/-1.12	0.74/-0.3	-1.71/-2.13	-2.23/-2.59	-1.88/0.09	0.93/0.53	-0.21/-1.67	-1.55/-1.47	-2.24/-3.07	-3.25/-4.76	-4.42/-2.43	-3.19/-4.69	-5.58/-8.35	-7.59/-6.35	-7.99/-7.16	-9.55/-8.45	-5.3/-8.24	-6.96/-7.45	-7.07/-5.08
Θ(97.5°)	-5.68/-5.13	-3.63/-2	-1.19/-1.12	-2.09/-5.04	-8.84/-3.78	-0.95/0.32	-0.29/-1.46	-1.38/-1.06	-1.24/-1.14	-1.17/-1.01	-1.79/-2.26	-2.29/-6.55	-4.03/-5.31	-4.45/-3.17	-2.58/-4.51	-4.59/-3.31	-1.72/-2.81	-5.17/-10.15	-10.75/-4.98	-4.29/-6.98	-7.11/-8.59	-9.47/-11.96	-11.55/-10.22	-8.47/-7.29
Θ(105°)	-5.75/-5.55	-4.8/-3.48	-2.17/-1.89	-3.14/-6.61	-5.3/-1.5	-0.26/-0.47	-1.74/-3.13	-2.09/-0.83	-0.94/-1.1	-1.51/-1.6	-1.62/-0.05	-2.88/-3.35	-3.55/-4.66	-6.3/-6.08	-6.93/-7.57	-5.49/-2.88	-3.23/-2.05	-4.21/-6.03	-5.83/-3.99	-4.66/-6.97	-9.05/-5.11	-4.94/-7.98	-4.88/-4.72	-4.89/-4.58
Θ(112.5°)	-6.37/-6.59	-5.04/-3.52	-3.33/-3.29	-2.58/-2.54	-1.84/-0.35	0.26/0.12	-1.5/-2.83	-2.09/-1.19	-0.85/-1.1	-2.16/-1.73	-1.84/-1.86	-2.85/-3.8	-4.5/-5.41	-7.26/-8.06	-6.75/-7.87	-5.46/-6.87	-6.18/-6.32	-5.55/-6.64	-5.07/-1.67	-1.56/-7.61	-7.45/-5.61	-5.49/-9.34	-6.45/-7.05	-7.29/-5.48
Θ(120°)	-4.24/-5.05	-3.67/-3.83	-3.01/-2.3	-2.44/-2.65	-1.99/-1.43	-1.61/-2.18	-2.82/-3	-2.14/-1.57	-0.72/-0.48	-1.01/-1.23	-1.98/-1.91	-2.09/-2.58	-3.08/-3.71	-4.88/-5										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(30°)	-4.42/-4.28	-4.07/-3.36	-1.88/-1.08	-0.66/-0.6	-0.89/-0.63	-0.38/0.6	1.43/1.87	2.09/2.18	1.94/1.48	0.74/-0.1	-1.46/-3.28	-5.21/-6.64	-7.44/-6.98	-5.25/-3.53	-2.32/-1.29	-0.18/0.89	1.78/2.35	2.61/2.93	3.23/3.28	2.8/1.5	-0.33/-1.02	-1.03/-1.18	-1.84/-2.51	-3.81/-3.98
Θ(37.5°)	-4.17/-4.92	-5.63/-5.56	-3.85/-2.51	-1.21/-0.03	0.08/0.08	0.10/4.9	1.29/2.05	2.32/2.03	1.49/0.7	-0.36/-0.94	-2.06/-3.58	-5.41/-6.14	-4.47/-2.81	-1.64/-0.74	-0.09/0.65	1.48/2.19	3.09/3.7	4.11/4.18	4.08/3.32	1.99/1.09	1.07/0.55	-0.47/-1.42	-2.53/-3.1	-3.24/-3.83
Θ(45°)	-7.7/-8.42	-7.37/-6.66	-4.66/-2.58	-1.78/-1.24	-0.91/-1.23	-1.37/-0.71	1.78/-1.24	0.28/1.27	1.36/1.36	1.35/0.84	-0.17/-1.84	-4.18/-4.36	-5.33/-4.62	-2.63/-0.92	-0.71/-0.44	0.42/1.37	2.48/2.73	2.71/2.79	3.01/3.32	3.02/1.85	0.25/-0.7	-1.94/-3.9	-4.63/-4.55	-4.48/-5.53
Θ(52.5°)	-4.57/-5.77	-7.21/-7.22	-5.89/-4.03	-2.3/-1.42	-0.74/-0.3	-0.16/0.05	0.19/-0.03	-0.49/-0.44	-0.03/-0.22	-0.79/-1.12	-1.89/-2.31	-2.77/-3.67	-3.15/-1.97	-0.69/-0.37	-0.27/0.97	2.09/3.17	3.63/2.99	2.13/1.58	1.82/1.93	0.75/-0.18	-0.94/-1.77	-2.65/-3.42	-3.88/-3.16	-3.13/-3.83
Θ(60°)	-5.07/-7.33	-6.69/-7.52	-5.73/-2.88	-2.65/-2.87	-1.46/-0.84	-0.75/-1.21	-1.29/-0.33	-0.38/-0.58	-1.27/-1.6	-1.64/-1.07	-1.74/-2.51	-2.57/-3.36	-4.57/-4.07	-2.7/-2.07	-1.28/-0.03	1.0/99	0.68/-0.04	0.44/0.56	-0.12/-0.45	-0.41/-1.61	-2.65/-2.88	-3.78/-3.16	-2.54/-2.68	-3.31/-4.24
Θ(67.5°)	-7.99/-11.12	-10.65/-7.94	-4.23/-2.84	-2.86/-2.81	-1.8/-1.51	-1.13/-0.91	-1.24/-2.17	-3.69/-3.53	-2.32/-0.98	-1.24/-1.59	-1.31/-1.95	-2.71/-2.81	-3.42/-0.88	0.41/0.1	-0.02/0.73	1.74/1.81	0.52/-0.28	-0.64/0.19	-0.23/0.04	-0.3/-1.62	-1.92/-2.82	-4.14/-5.05	-3.8/-4.7	-5.3/-5.3
Θ(75°)	-6.04/-7.4	-7.09/-5.99	-4.63/-3.68	-3.26/-3.67	-3.41/-2.17	-0.74/-0.35	-1.46/-3.16	-2.79/-2.47	-1.62/-1.75	-1.47/-1.13	-0.83/-0.43	-0.11/0.16	-0.52/-0.19	0.64/1.1	0.34/0.3	0.5/0.87	0.75/-0.76	0.57/0.5	0.11/0.86	1.5/-0.27	-2.44/-3.38	-4.58/-5.07	-4.26/-4.35	-4.66/-4.94
Θ(82.5°)	-8.38/-6.01	-4.99/-3.49	-3.63/-2.97	-1.81/-0.98	-0.6/-1.01	-1.17/-1.47	-2.88/-2.98	-1.65/-2.03	-1.99/-1.71	-1.9/-1.67	-1.95/-2.41	-2.62/-1.18	-0.06/-0.55	-1.81/-1.12	-0.14/0.37	0.26/0.7	0.9/-1.38	0.9/-1.38	1.11/-1.14	-2.4/-2.29	-1.11/-1.61	-2.92/-3.78	-5.65/-7.56	
Θ(90°)	-5.72/-8.65	-6.14/-3.08	-2.35/-2.04	-2.18/-2.45	-2.07/-1.33	-1.38/-1.51	-1.93/-2.3	-2.38/0.09	-0.44/-1.3	-1.58/-2.63	-3.44/-2.12	-2.07/-2.15	-2.89/-2.44	-0.7/-1.04	-1.58/-1.38	-0.87/1	1.01/1.17	1.88/1.57	1.45/2.23	2.11/-0.9	-2.99/-1.99	-1.04/-2.77	-5.03/-5.83	-7.41/-6.24
Θ(97.5°)	-9.58/-9.29	-7.08/-5.7	-4.24/-3.85	-3.75/-4.99	-3.52/-2.69	-1.09/-1.03	-2.55/-4.37	-1.64/-0.13	-0.07/-0.91	-0.96/-1.2	-2.01/-0.87	-2.41/-3.27	-1.84/-1.63	-3.33/-2.44	-2.87/-4.6	-2.33/1.24	1.48/2.3	2.78/3.01	2.5/2.58	1.29/-1.27	0.3/0.91	-1.62/-3.44	-5.77/-10.45	-5.75/-6.7
Θ(105°)	-4.58/-7.75	-5.68/-8.21	-7.09/-6.3	-6.68/-4.88	-1.74/0.02	-0.66/-1.14	-2.1/-2.38	-0.22/0.97	-0.25/-1.52	-1.43/-0.96	-1.06/-0.89	-0.79/-1.29	-1.64/-0.92	-1.55/-0.79	-0.56/-2.07	0.59/1.12	0.73/1.28	0.64/1.5	1.22/-1.61	1.32/2.18	-1.53/-3.28	-7.26/-10.07	-7.34/-3.74	
Θ(112.5°)	-6.28/-7.85	-5.63/-5.13	-5.82/-6.14	-5.94/-3.28	-1.57/-1.75	-2.38/-2.07	-2.27/-2.55	-0.92/0.08	0.12/0.03	-0.54/-0.71	-1.2/-2.46	-2.57/-2.84	-2.55/-0.2	-1.35/-2.28	-2.08/-6.02	-5.71/-0.77	1.38/1.73	0.95/0.18	0.62/2.36	0.22/-3.12	-0.39/0.5	-2.54/-6.31	-7.09/-8.43	-7.94/-6.9
Θ(120°)	-6.29/-7.91	-8.5/-7.68	-7.72/-7.8	-5.72/-3.1	-1.82/-1.87	-2.63/-4.22	-3.72/-3.67	-2.87/-1.87	-1.1/-1.15	-2.4/-4.14	-6.13/-5.19	-4.3/-4.71	-4.03/-3.31	-4.07/-3.07	-3.64/-6.37	-4.84/-1.02	0.26/1.19	1.08/-0.53	0.52/2.32	1.48/0.45	0.68/0.37	-2.42/-7.49	-6.39/-7.9	-5.17/-5.24
Θ(127.5°)	-4.69/-7.46	-8.04/-8.94	-6.48/-5.05	-4.1/-3.75	-3.06/-2.73	-2.84/-1.94	-1.74/-2.88	-3.18/-2.17	-1.88/-2.99	-4.91/-6.78	-7.46/-8.57	-8.91/-8.72	-6.23/-4.05	-2.03/-2.66	-3.78/-1.91	0.03/0.62	1.94/1.51	0.83/-1.19	0.02/1.24	0.52/-0.68	-1.01/-2.15	-3.85/-5.05	-8.76/-9.23	-3.73/-1.92
Θ(135°)	-6.35/-7.86	-7.17/-8.54	-9.33/-8.48	-6.37/-4.55	-3.72/-3.89	-3.72/-3.69	-3.21/-2.92	-3.1/-3.07	-3.52/-4.75	-6.59/-7.71	-6.65/-5.24	-6.04/-7.88	-6.45/-3.83	-3.03/-4.95	-3.06/-1.07	0.01/-0.41	0.61/67	0.85/-0.25	0.61/26	1.04/0.01	-2.33/-2.33	-4.77/-8.11	-7.88/-6.6	-4.39/-4.17
Θ(142.5°)	-8.76/-10.2	-8.89/-7.06	-5.01/-3.54	-3.06/-2.65	-2.61/-3.07	-2.75/-2.36	-2.23/-1.89	-1.67/-2.02	-3.19/-3.01	-3.79/-6.2	-6.21/-4.67	-3.9/-3.93	-3.21/-3.9	-4.51/-4.48	-2.72/-0.95	-1.35/-1.33	-0.85/-1.04	-2/-2.27	-1.28/-0.02	-0.62/-1.86	-4.76/-4.41	-2.81/-2.96	-5.35/-6.38	-6.92/-7.81
Θ(150°)	-4.43/-5.52	-6.55/-7.18	-9.1/-9.24	-8.3/-7.53	-5.62/-3.34	-2.09/-1.34	-1.17/-1.04	-1.42/-2.63	-4.65/-5.81	-7.6/-9.29	-8.3/-6.13	-4.8/-4.07	-3.72/-3.15	-2.98/-3.61	-3.78/-2.87	-2.24/-3.07	-3.81/-4.21	-4.23/-3.33	-2.5/-1.9	-2.8/-3.7	-3.75/-3.47	-3.14/-3.14	-4.11/-5.44	-5.46/-4.12
Θ(157.5°)	-4.73/-6.05	-5.93/-5.64	-5.37/-5.5	-6.42/-7.11	-7.35/-6.87	-5.66/-4.99	-4.69/-4.6	-4.41/-4.14	-4.83/-6.19	-7.45/-7.56	-6.72/-5.22	-4.4/-2.57	-1.11/-0.75	-1.33/-1.52	-1.4/-1.94	-3.87/-6.56	-7.53/-5.44	-3.38/-1.91	-1.85/-2.1	-2.33/-2.37	-2.95/-3.69	-4.04/-3.71	-3.02/-3.1	-3.09/-3.4
Θ(165°)	-5.15/-4.89	-5.34/-6.77	-7.99/-8.75	-9.01/-8.74	-7.33/-4.24	-4.98/-4.67	-5.26/-5.57	-6.29/-6.58	-6.38/-6.39	-7.35/-9.14	-9.83/-9.18	-6.73/-4.04	-2.39/-1.64	-1.72/-2.18	-3.03/-4.28	-5.12/-5.12	-4.68/-4.02	-3.68/-3.62	-3.54/-3.73	-4.16/-5.1	-5.61/-5.81	-5.12/-4.97	-5.23/-5.17	-5.7/-5.74
Θ(172.5°)	-8.8/-8.41	-7.56/-6.97	-6.54/-6.62	-6.92/-7.78	-8.5/-8.86	-8.8/-8.17	-8.22/-8.36	-8.92/-9.4	-10.5/-11.27	-11.59/-11	-10.46/-8.97	-7.18/-5.46	-4.39/-4.1	-4.22/-4.74	-5.53/-5.42	-5.17/-4.32	-3.91/-3.68	-3.44/-3.22	-3.1/-3.82	-5.09/-6.68	-7.7/-8.8	-10.57/-11.66	-11.05/-10.4	-9.91/-8.24
Θ(180°)	-9.76/-9.82	-9.3/-8.66	-7.09/-6.67	-6.62/-6	-5.41/-5.02	-4.77/-4.52	-4.65/-5.3	-5.79/-6.02	-6.38/-6.77	-7.16/-7.72	-8.24/-8.73	-9.39/-9.79	-10.55/-10.41	-10.35/-9.63	-8.92/-8.06	-7.57/-6.74	-6.64/-6.79	-6.3/-5.82	-5.81/-6.18	-6.93/-7.13	-7.05/-7.31	-7.73/-8.14	-8.27/-8.76	-8.91/-8.74
Freq(Hz)	5.785G/Pol.	Theta	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	3.02/2.91	2.57/2.14	2.05/1.5	1.12/0.83	0.22/-0.3	-1.23/-2.26	-2.48/-2.28	-1.17/-0.18	0.74/1.57	2.14/2.61	2.79/2.89	2.89/2.73	2.43/2.12	1.78/1.48	1.34/1.21	0.9/0.32	-0.36/-1	-1.7/-1.82	-1.98/-1.44	-0.71/0.12	1/1.72	2.38/2.79	2.84/3.01	3.19/3.15
Θ(7.5°)	1.63/1.51	1.43/0.99	0.62/0.05	-0.6/-1.84	-1.72/-1.8	-2.27/-2.2	-2.4/-1.79	-1.15/-0.56	0.07/0.76	1.36/1.87	2.26/2.62	2.94/3.21	3.37/3.33	2.82/3.39	1.87/1.26	0.34/-0.8	-1.67/-2.26	-2.01/-1.28	-2.08/0.64	1.16/1.66	1.98/2.06	2.01/1.89	1.86/1.68	
Θ(15°)	0.26/-0.01	-0.2/-0.3	-0.24/-0.42	-0.81/-1.1	-1.51/-1.18	-1.37/-1.77	-1.17/-0.39	0.31/0.83	1.31/1.58	1.68/1.56	1.38/1.49	1.92/2.59	3.79/3.88	3.77/3.37	2.85/2.07	1.06/-0.09	-1.36/-2.43	-2.71/-2.26	-1.28/-0.16	0.30/79	0.78/0.57	0.17/0.09	0.30/39	
Θ(22.5°)	1.97/1.77	1.05/0.6	0.56/1.13	1.22/0.91	0.29/0.12	-0.56/-0.74	-0.7/-0.46	-0.13/0.63	1.42/2.06	2.31/2.25	2.16/1.97	1.83/1.83	2.12/2.61	3.04/3.23	3/2.52	1.8/1.06	0.63/0.27	-0.88/-2.88	-4.36/-3.88	-2.92/-2.17	-1.41/-1.34	-1.9/-2.16	-1.63/-0.59	1.25/1.89
Θ(30°)	1.72/1.62	1.04/0.9	1.25/1.41	1.56/1.11	0.47/-0.23	-0.79/-0.14	-1.77/-2.55	-2.12/-0.96	0.42/1.66	2.53/2.89	3/2.99	2.82/2.55	2.5/2.8	3.05/2.79	2.05/1.01	-0.05/-0.49	-0.34/-0.78	-2.28/-3.44	-3.23/-3.11	-2.61/-2.71	-3.38/-3.39	-3.88/-3.66	-1.33/0.14	1.28/1.46
Θ(37.5°)	1.27/0.93	0.69/0.52	0.79/0.91	1.21/1.3	1/0.59	-0.96/-1.21	-2.92/-2.52	-1.74/-0.78	0.64/1.74	2.03/1.8	1.49/1.09	1.03/1.6	2.42/2.62	2.26/2.01	1.46/1.39	-0.21/-2.87	-2.88/-4.19	-2.02/-2.93	-4.95/-4.51	-3.22/-2.93	-3.98/-3.33	-2.34/-1.14	-0.61/0.02	0.43/0.88
Θ(45°)	0.23/1.39	1.61/0.88	0.97/1.26	0.67/0.32	0.27/-0	-0.41/-1.57	-2.29/-2.51	-2.2/-1.79	-0.78/0.44	1.38/1.65	1.41/1.12	1.26/1.03	1.23/2.9	3.57/3.41	3.01/2.32	1.34/0.67	-0.5/-0.56	-2.71/-6.21	-6.05/-4.67	-3.49/-3.44	-3.9/-2.98	-1.8/-1.32	-0.95/-0.39	-0.14/-0.27
Θ(52.5°)	-1.34/0.52	1.07/1.23	1.96/2.3	1.61/0.93	0.69/0.45	0.24/-0.15	-0.39/-1.3	-1.66/-0.25	1.51/2.25	2.64/2.98	2.16/0.58	0.73/0.95	0.49/0.35	1.63/1.92	1.42/1.74	1.42/0.54	-1.21/-3.31	-3.9/-4.85	-4.45/-4.48	-4.42/-5.1	-5.82/-5.17	-5.38/-4.5	-2.79/-2.48	-1.93/-1.62
Θ(60°)	0.19/0.98	1.63/1.87	1.98/1.73	2.04/1.09	0.42/0.76	0.96/0.43	0.18/0.24	0.60/97	2.28/2.84	2.58/3.09	2.94/1.97	1.83/1.48	0.71/0.71	1.24/1.03	0.18/0.38	0.12/-0.33	-2.09/-3.11	-7.14/-6.88	-6.05/-6.12	-4.19/-4	-5.77/-5.26	-5.33/-5.4	-4.93/-4.62	-2.92/-0.78
Θ(67.5°)	-0.54/-0.99	0.33/1.38	1.21/1.53	1.72/0.48	-0.95/-0.88	-0.44/-0.68	-0.06/0.37	1.05/0.76	1.03/1.92	2.04/2.62	2.79/1.41	0.95/0.64	0.84/0.49	0.2/-1.4	-1.67/-1.75	-2.89/-4.22	-7.76/-6.74	-7.95/-5.38	-4.43/-5.02	-3.99/-2.59	-2.54/-3.01	-3.35/-4.24	-2.63/-0.5	
Θ(75°)	-3.73/-3.64	-2.41/-0.79	-0.74/0.14	-0.17/-1.86	-3.49/-3.28	-1.42/-0.05	0.55/0.73	0.59/0.74	0.27/0.15	0.62/2.02	-0.21/-2	-2.69/-2.43	0.59/-1.2	-0.91/-1.02	-0.32/-2.36	-6.47/-5.83	-4.31/-3.57	-6.84/-5.24	-3.4/-3.17	-3.96/-5.02	-5.41/-3.88			
Θ(82.5°)	-5.96/-5.22	-4.65/-4.25	-4.03/-3.74	-4.24/-4.61	-5.18/-4.64	-2.52/-0.44	0.68/1.11	1.04/0.64	-1.23/-1.39	0.89/1.83	2.19/0.98	-0.3/-2.24	-1.67/-1.37	-1.27/-2.21	-2.26/-2.6	-3.08/-1.83	-1.9/-3.81	-8.25/-7.16	-6.06/-6.05	-3.82/-3.97	-5.43/-8.5	-8.43/-6.34	-6.33/-6.02	-7.66/-8.41
Θ(90°)	-4.09/-4.43	-3.99/-3.63	-4.33/-4.87	-4.87/-4.74	-3.74/-2.01	-0.64/-0	0.17/0.46	0.85/0.68	-0.44/-1.02	-0.64/0.27	0.6/-0.54	-1.58/-3.67	-4.17/-4.31	-3.59/-3.76	-4/-3.76	-2.49/-2.44	-2.11/-3	-4.59/-5.72						



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

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°)	-3.09/-3.93	-4.78/-5.05	-5.37/-6.28	-7.29/-7.54	-6.99/-6.7	-6.19/-5.83	-5.15/-4.56	-4.03/-3.55	-3.09/-2.56	-2.14/-1.72	-1.5/-1.46	-1.53/-1.71	-2.07/-2.48	-2.79/-3.36	-4.53/-5.38	-5.96/-6.32	-6.66/-7.09	-6.88/-6.28	-5.43/-4.62	-3.78/-3.11	-2.87/-2.56	-2.19/-1.78	-1.49/-1.34	-1.72/-2.33
Θ(7.5°)	-1.39/-1.68	-2.41/-3.46	-4.41/-5.62	-6.32/-6.15	-6.31/-6.28	-6.22/-5.96	-5.02/-4.12	-3.55/-3.03	-2.79/-2.62	-2.3/-2.25	-2.46/-2.85	-3.21/-3.38	-3.23/-3.16	-3.45/-4	-4.76/-5.6	-6.52/-7.16	-7.15/-6.75	-6.18/-5.88	-5.17/-4.54	-4.05/-3.64	-3.26/-2.84	-2.46/-2.06	-1.57/-1.36	-1.51/-1.45
Θ(15°)	-1.74/-2.21	-3.57/-4.4	-4.92/-5.01	-4.6/-4.28	-4.35/-4.65	-5.12/-5.81	-5.83/-5.12	-4.41/-3.31	-2.51/-2.14	-1.9/-2.14	-2.51/-3.01	-3.45/-3.71	-3.85/-3.82	-3.47/-3.43	-3.78/-4.4	-5.49/-6.83	-7.73/-7.78	-6.6/-6	-5.27/-4.84	-5.04/-5	-5.06/-4.89	-4.58/-3.84	-3.52/-4.7	-1.75/-1.79
Θ(22.5°)	-4.72/-2.59	-5.83/-5.84	-6.63/-6.63	-6.61/-6.62	-6.59/-5.77	-4.96/-4.5	-3.89/-3.27	-3.03/-2.57	-2.11/-1.79	-1.56/-1.56	-2.16/-2.86	-3.32/-3.69	-4.04/-4.57	-4.35/-4.16	-4.16/-4.31	-4.99/-5.89	-7.15/-8.52	-7.74/-6.84	-5.67/-5.44	-5.86/-6.26	-6.49/-6.59	-5.93/-5.27	-4.61/-4.02	-3.81/-4.37
Θ(30°)	-3.41/-3.28	-3.05/-3.47	-4.79/-5.71	-5.86/-5.5	-4.98/-4.26	-3.65/-3.24	-3.21/-2.72	-1.65/-0.82	-0.51/-0.88	-1.68/-2.52	-3.32/-3.68	-3.92/-4.98	-6.37/-7.24	-7.76/-7.41	-6.71/-5.75	-4.85/-4.58	-5.58/-4.58	-10.99/-9.65	-8.27/-7.41	-6.8/-6.4	-5.96/-5.52	-5.81/-6.08	-5.76/-5.89	-6.05/-4.88
Θ(37.5°)	-2.57/-2.05	-2.01/-2.89	-3.36/-3.86	-3.64/-3.05	-3.29/-2.94	-2.66/-2.36	-1.62/-0.93	-0.6/-0.61	-0.95/-1.19	-1.52/-2.2	-3.42/-4.48	-4.74/-5.79	-6.75/-7.3	-7.5/-6.13	-5.69/-5.31	-5.46/-5.76	-7.04/-9.29	-9.33/-8.98	-5.88/-3.51	-2.69/-3.13	-3.69/-4.59	-5.29/-5.66	-5.71/-4.65	-3.75/-3.09
Θ(45°)	-2.91/-1.76	-1.64/-2.21	-2.01/-1.8	-1.74/-1.72	-1.48/-0.98	-0.8/-1.13	-0.54/-0.44	0.87/0.57	-0.33/-1.32	-2.24/-2.8	-3.56/-4.45	-5.7/-7.05	-7.22/-7.47	-7.49/-6.95	-6.57/-5.42	-5.06/-5.38	-7.08/-8.53	-9.19/-7.83	-7.28/-6.81	-5.7/-4.7	-4.4/-5.19	-5.05/-4.31	-3.87/-3.07	-2.63/-2.2
Θ(52.5°)	-5.52/-4.03	-3.56/-3.99	-3.91/-3.7	-3.36/-2.57	-1.62/-0.93	-0.68/-1.01	-0.35/-0.3	0.51/-0.13	-1.32/-2.89	-4.84/-5.2	-3.35/-3.26	-4.13/-4.73	-5.47/-6.19	-7.53/-7.83	-6.82/-5.94	-4.75/-4.46	-5.92/-7.52	-8.69/-10.76	-11.88/-8.94	-5.85/-4.53	-4.1/-4.15	-4.25/-4.09	-3.37/-4.39	-5.36/-5.43
Θ(60°)	-6.12/-4.16	-3.1/-2.44	-1.94/-2.25	-2.82/-3	-3.03/-2.45	-2.58/-4.5	-3.22/-1.1	-0.93/-0.84	-1.82/-3.57	-6.02/-6.93	-5.32/-4.36	-4.8/-6.18	-7.79/-7.34	-6.92/-6.97	-7.35/-6.87	-5.28/-4.75	-5.5/-6.37	-7.85/-11.29	-11.95/-9.61	-7.35/-6.17	-5.8/-5.04	-5.12/-4.78	-6.47/-8.17	-9.86/-7.26
Θ(67.5°)	-4.32/-2.95	-2.38/-2.27	-2.02/-0.29	-2.77/-3.52	-5.21/-4.63	-3.43/-2.78	-2.12/-1.15	-0.19/-0.18	-1.52/-4.5	-7.43/-5.9	-4.42/-4.08	-4.67/-6.23	-6.09/-5.03	-5.56/-6.16	-6.73/-7.37	-6.23/-4.96	-4.97/-6.15	-9.11/-10.48	-11.04/-10.77	-8.5/-5.82	-5.74/-4.25	-3.92/-4.11	-5.06/-5.25	-4.73/-3.71
Θ(75°)	-5.3/-4.61	-5.35/-4.63	-4.86/-4.23	-3.69/-3.19	-2.85/-2.82	-3.17/-2.83	-1.9/-1.99	-2.26/-1.91	-1.37/-1.83	-2.88/-3.87	-4.14/-4.92	-5.60/-6.23	-5.86/-5.06	-5.67/-6.2	-6.85/-7.38	-7.72/-6.89	-8.39/-10.22	-11.74/-9.87	-10.18/-10.4	-10.21/-6.5	-7.22/-6.38	-6.63/-7.28	-8.23/-8.06	-6.87/-5.6
Θ(82.5°)	-5.78/-7	-7.94/-8.06	-6.69/-5.12	-4.71/-8.48	-3.82/-7.78	-2.31/-2.18	-1.68/-1.89	-2.06/-1.42	-0.03/-0.23	-1.04/-2.62	-4.77/-7.05	-7.65/-6.87	-5.35/-4.04	-4.52/-6.37	-8.14/-7.89	-4.35/-3.71	-4.64/-7.27	-6.12/-5.14	-7.23/-9.06	-10.46/-6.82	-6.77/-6.38	-6.63/-7.17	-7.14/-6.69	-6.27/-5.1
Θ(90°)	-5.89/-3.94	-3.71/-2.45	-2.66/-2.77	-3.21/-3	-2.01/-1.56	-1.49/-1.06	-0.25/-0.07	-0.45/-0.01	1.13/0.36	-1.51/-4.58	-8.24/-10.61	-10.63/-9.92	-5.88/-7.79	-4.5/-2.59	-3.43/-5.77	-6.89/-7.47	-9.96/-10.03	-10.49/-6.73	-5.54/-5.48	-4.42/-4.76	-4.6/-4.07	-3.95/-5.09		
Θ(97.5°)	-5.92/-4.09	-3.13/-1.7	-0.9/-1.12	-1.61/-2.2	-1.81/-2.09	-2.55/-3.23	-3.09/-2.19	-1.25/-1.19	-1.22/-2.26	-5.91/-9.45	-7.81/-6.22	-5.49/-5.43	-7.85/-5.97	-8.8/-8.5	-8.06/-7.89	-5.52/-6.1	-6.37/-3.7	-3.48/-6.83	-6.55/-6.88	-8.24/-8.4	-6.95/-6.23	-7.56/-7.57	-7.28/-7.66	-7.01/-7.04
Θ(105°)	-6.57/-5.95	-5.46/-3.77	-3.65/-3.54	-3.33/-2.27	-0.74/-0.04	-0.29/-1.56	-2.99/-2.13	-1.93/-1.22	-0.73/-1.43	-2.84/-4.4	-6.81/-5.98	-4.94/-4.73	-4.61/-3.15	-4.61/-6.2	-9.28/-9.08	-5.92/-5.12	-5.07/-5.78	-3.57/-5.86	-8.71/-8.09	-7/-6.71	-6.33/-6.67	-7.89/-9.6	-9.94/-10.07	-7.84/-8
Θ(112.5°)	-6.92/-5.6	-5.98/-4.77	-4.38/-2.62	-1.16/-0.22	0.37/0.31	-0.25/-1.4	-3.5/-4.7	-1.76/-2.99	-1.97/-2.29	-3.79/-5.87	-8.77/-9.27	-9/-7.37	-6.28/-6.07	-7.28/-7.39	-7.62/-9.42	-5.1/-4.89	-5.69/-5.31	-4.95/-9.12	-7.52/-5.13	-3.71/-4.56	-6.59/-5.29	-3.67/-6.57	-7.22/-8.62	-8.71/-8.86
Θ(120°)	-9.72/-6.2	-3.18/-2.07	-0.29/0.2	-0.28/-0.42	-0.12/0.02	-0.2/-1.38	-2.7/-3.92	-4.88/-3.62	-2.63/-1.98	-2.23/-4.78	-7.5/-6.81	-5.04/-4.43	-4.57/-4.33	-7/-6.59	-7.18/-7.68	-8.33/-6.13	-7.99/-5.31	-6.77/-8.42	-8.94/-5.06	-3.6/-2.98	-6.73/-8.24	-6.74/-4.02	-3.9/-6.07	-6.32/-8.12
Θ(127.5°)	-5.68/-5.75	-5.08/-4.19	-3.4/-2.8	-1.74/-0.25	0.55/0.44	-0.16/-0.77	-1.7/-2.04	-1.8/-1.67	-1.94/-1.96	-2.01/-3.3	-5.14/-7.52	-10.21/-10.39	-9.92/-7.51	-7.28/-7.66	-11.05/-9.21	-8.38/-8.23	-7.29/-4.4	-4.84/-10.02	-10.18/-7.17	-4.84/-3.47	-3.74/-5.47	-4.28/-3.68	-4.53/-2.96	-4.32/-5.86
Θ(135°)	-4.1/-2.79	-2.35/-2.74	-2.64/-2.42	-2.23/-2.02	-2.05/-2.33	-2.39/-1.92	-1.39/-0.92	-0.5/-0.43	-0.54/-0.93	-2.01/-3.28	-5.09/-6.61	-6.44/-5.26	-4.64/-4.11	-4.29/-6.68	-5.57/-6.38	-9.59/-7.45	-5.45/-4.63	-5.07/-8.4	-7.14/-3.59	-2.2/-1.16	-2.12/-5.31	-7.99/-4.89	-6.34/-5.48	-3.33/-3.43
Θ(142.5°)	-4.3/-4.73	-3.85/-3.58	-4.71/-6.01	-7.35/-6.47	-6.28/-5.28	-4.23/-4.1	-3.51/-2.43	-1.48/-1.34	-2.62/-4.77	-6.35/-5.32	-3.39/-2.39	-1.84/-3.1	-3.5/-2.57	-2.04/-2.91	-6.23/-6.46	-6.28/-5.38	-1.4/-1.51	-4.49/-9.67	-9.8/-6.3	-3.83/-2.49	-2.39/-3.13	-3.93/-7.05	-5.02/-3.82	-4.62/-4.1
Θ(150°)	-1.13/-1.21	-1.81/-2.33	-2.18/-1.99	-1.98/-2.23	-2.53/-3.2	-3.76/-4.03	-3.94/-2.7	-1.64/-0.57	-0.26/-0.72	-2.07/-3.19	-3.83/-5.17	-5.29/-5.04	-6.61/-6.17	-6.15/-8.06	-8.57/-7.1	-5.33/-3.42	-4.19/-5.33	-7.52/-9.02	-8.04/-6.54	-5.55/-3.73	-3.09/-2.27	-1.69/-1.81	-0.81/-0.43	-0.83/-1.12
Θ(157.5°)	-0.37/-0.48	-0.37/-0.6	-0.76/-0.66	-1.1/-1.8	-2.48/-3.4	-4.13/-4.51	-4.7/-4.94	-4.72/-3.79	-3.58/-4.1	-5.14/-6.05	-7.38/-7.87	-6.77/-5.22	-4.48/-4.54	-5.18/-5.82	-5.25/-4.7	-3.94/-3.5	-3.02/-5.04	-5.63/-6.55	-5.45/-6.42	-3.44/-4.46	-4.68/-5.48	-5.48/-4.62	-3.58/-3.28	-2.77/-4.1
Θ(165°)	-1.15/-1.39	-1.51/-1.93	-2.32/-3.01	-4.13/-5.54	-6.71/-7.78	-8.87/-9.2	-9.39/-9.85	-9.65/-8.28	-6.57/-6.08	-6.41/-6.78	-6.57/-6.15	-5.52/-4.49	-3.52/-2.87	-2.56/-2.82	-3.46/-3.93	-4.33/-4.69	-5.16/-5.63	-5.33/-5.24	-5.06/-4.99	-4.99/-5.25	-4.61/-3.93	-3.02/-2.45	-1.69/-1.35	-1.42/-1.14
Θ(172.5°)	-5.28/-5.9	-6.33/-6.12	-6.5/-7.06	-8.02/-8.63	-8.91/-9.52	-9.64/-8.92	-8.7/-8.4	-7.31/-6.45	-5/-4.28	-4.48/-5.37	-6.12/-5.97	-4.85/-3.87	-3.6/-3.81	-4.39/-5.39	-6.82/-8.29	-8.28/-7.75	-6.82/-5.96	-4.98/-4.9	-5.13/-5.64	-5.79/-6.12	-6.33/-6.56	-6.85/-7.09	-6.88/-5.73	-4.85/-5.24
Θ(180°)	-8.14/-8.26	-8.38/-8.4	-8.13/-8.77	-9.35/-10.05	-11.42/-11.88	-11.52/-11.35	-11.06/-10.34	-9.07/-7.39	-6.03/-5.22	-5.05/-5.48	-6.41/-7.39	-8.49/-8.46	-8.79/-9.19	-10.36/-10.87	-10.69/-10.88	-10.24/-10.03	-9.82/-10.39	-10.61/-10.79	-11.1/-11.23	-10.96/-10.38	-10.37/-9.79	-9.39/-8.78	-7.84/-7.96	-7.69/-8.07
Freq(Hz)	5.2G/Pol.	Theta°	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-5.04/-4.56	-3.93/-2.99	-1.99/-2.2	-2.07/-1.87	-1.86/-2.09	-2.45/-2.75	-2.93/-3.3	-3.6/-4.08	-4.39/-4.9	-5.24/-5.36	-5.59/-5.38	-4.95/-4.53	-4.29/-4.1	-3.76/-3.27	-2.88/-2.47	-2.04/-1.62	-1.23/-1.16	-1.19/-1.52	-1.88/-2.43	-3.32/-3.82	-4.56/-5.49	-6.46/-7.02	-6.99/-6.82	-6.35/-5.67
Θ(7.5°)	-3.98/-3.97	-3.48/-2.75	-2.03/-1.59	-1.3/-1.01	-1.02/-1.1	-1.32/-1.95	-2.24/-2.95	-3.32/-3.7	-4.15/-4.89	-5.65/-6.39	-6.39/-6.11	-5.76/-5.55	-5.44/-5.03	-4.76/-4.44	-4.02/-3.79	-3.7/-3.84	-3.96/-4.01	-4.08/-4.22	-4.15/-4.27	-4.49/-4.34	-4.25/-4.2	-4.3/-4.47	-4.51/-4.08	
Θ(15°)	-2.42/-1.94	-1.3/-0.65	-0.51/-0.5	-0.48/-0.27	-0.15/0.28	0.23/0.02	-0.17/-0.68	-1.28/-1.77	-2.24/-2.29	-2.5/-2.94	-3.6/-3.91	-4.59/-5.1	-5.35/-5.69	-5.31/-4.73	-4.34/-3.86	-3.24/-2.83	-2.84/-3.34	-4.02/-4.76	-5.13/-5.28	-5.28/-4.51	-3.88/-3.24	-2.91/-2.67	-2.87/-2.99	-3.01/-2.78
Θ(22.5°)	-2.12/-1.6	-0.24/0.21	0.23/0.18	0.37/0.87	1.27/1.58	1.58/1.49	1.22/0.88	0.44/0.09	0.01/-0.11	-0.33/-0.68	-1.31/-1.91	-2.88/-3.64	-3.97/-3.69	-3.54/-3.63	-3.46/-2.7	-2.02/-1.58	-1.61/-1.86	-2.32/-2.69	-3.28/-4.3	-5.08/-5.12	-3.81/-2.4	-2.63/-2.59	-2.79/-2.7	-3/-2.54
Θ(30°)	-1.31/-1	-0.54/0.13	1.02/0.49	1.79/2	1.73/1.29	0.69/0.6	0.79/1.19	1.68/2.07	2.16/1.96	1.79/1.55	1.09/0.5	-0.31/-0.78	-1.07/-1.61	-2.08/-2.43	-1.93/-1.2	-1.1/-1.02	-0.84/-0.69	-0.92/-1.74	-2.92/-3.85	-4.4/-0.3	-3.62/-3.45	-3.56/-3.65	-3.42/-2.84	-2.3/-1.4
Θ(37.5°)	-0.19/0.5	0.55/-1.25	2.12/2.65	2.55/2.3	1.88/1.55	1.48/1.46	1.72/-0.9	2.44/2.5	2.13/-1.73	1.37/-1.22	1.19/-1.19	1.35/-1.03	0.02/-0.6	0.47/-0.42	0.16/0.51	0.87/0.8	0.18/-0.69	-1.37/-1.66	-2.06/-2.43	-2.24/-1.57	-1.25/-1.73	-2.51/-2.94	-3.17/-2.34	-1.25/-0.43
Θ(45°)	1.32/1.27	2.72/-2.9	3.87/4.52	4.14/-3.7	3.34/2.8	2.52/2.48	2.42/2.06	1.89/1.85	1.91/82	1.79/1.66	1.21/-1.13	1.39/1.12	0.14/-0.65	-0.91/-1.08	-0.91/-0.52	-1.82/-1.31	-2.94/-3.38	-2.73/-2.13	-1.67/-1.72	-1.95/-2.09	-2.36/-2.33	-1.27/0.33	1.08/1.26	
Θ(52.5°)	2.43/2.87	3/3.12	3.71/3.95	3																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(180°)	-9.88/-9.01	-7.7/-6.69	-5.73/-5.74	-5.82/-6.17	-6.79/-7.4	-8.32/-9.48	-10.15/-11.21	-11.97/-11.83	-12.33/-12.51	-12.37/-12.49	-11.78/-10.79	-10.35/-9.59	-8.91/-8.64	-8.91/-8.87	-9.42/-9.82	-10.02/-9.05	-8.1/-8.08	-8.25/-8.49	-8.9/-8.39	-7.85/-7.52	-7.39/-7.79	-8.1/-8.65	-9.4/-10.36	-10.79/-10.36
Freq(Hz)	5.6G/Pol.	Phi-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-6.59/-7.17	-7.38/-7.37	-6.84/-6.02	-5.15/-4.53	-3.94/-3.12	-2.48/-2.49	-2.48/-2.52	-2.62/-2.83	-2.84/-3.19	-3.63/-4.35	-4.99/-5.34	-5.91/-6.79	-8.04/-9.2	-9.1/-8.23	-8.06/-6.28	-4.93/-3.99	-3.4/-3.26	-3.2/-3.15	-2.96/-2.67	-2.23/-1.98	-1.9/-1.86	-2/-2.56	-3.22/-4.05	-4.62/-5.72
Θ(7.5°)	-9.08/-8.82	-8.94/-9.16	-9.02/-8.32	-6.54/-5.48	-4.42/-3.14	-2.48/-1.91	-1.47/-1.09	-1.03/-1.05	-1.18/-1.36	-1.81/-2.4	-3.02/-3.55	-4.1/-4.79	-5.44/-5.68	-6.07/-6.12	-4.42/-4.27	-4.4/-4.26	-3.91/-3.97	-4.4/-4.26	-4.55/-4.56	-4.55/-4.91	-5.47/-6.78	-7.75/-9		
Θ(15°)	-8.11/-8.43	-8.34/-8.53	-7.91/-7.35	-6.6/-5.86	-4.44/-3.19	-3.03/-2.36	-1.8/-1.39	-1.25/-1.25	-1.29/-1.37	-1.43/-1.88	-2.59/-3.26	-3.8/-3.44	-4.49/-4.44	-4.32/-4.19	-3.69/-4.01	-4.49/-4.72	-4.85/-4.71	-4.78/-5.03	-5.58/-5.98	-6.8/-8.17	-9.14/-9.26	-8.36/-7.89	-7.8/-8.01	-8.22/-8.07
Θ(22.5°)	-5.79/-4.72	-5.31/-5.61	-6.13/-5.99	-5.31/-5.06	-3.77/-3.31	-2.58/-1.79	-1.23/-0.78	-0.53/-0.41	-0.58/-0.54	-1.19/-2.31	-3.24/-3.99	-4.9/-5.03	-5.67/-5.72	-6.25/-6.95	-7.18/-6.99	-6.45/-5.8	-5.36/-5.15	-5.21/-5.7	-6.74/-7.58	-8.49/-8.6	-9.01/-8.75	-8.46/-7.93	-7.85/-7.02	-5.22/-4.77
Θ(30°)	-6.15/-6.32	-6.01/-6.09	-4.78/-3.18	-2.15/-1.46	-1.65/-1.7	-1.19/-0.65	-0.45/-0.09	-0.033	0.29/-0.19	-1.18/-2.36	-3.87/-5.27	-7.01/-8.03	-7.61/-7.18	-6.81/-7.01	-7.25/-7.06	-6.61/-6.5	-6.83/-7.5	-7.96/-7.85	-7.79/-8.24	-9.29/-9.1	-7.37/-6.82	-6.97/-6.7	-5.2/-4.99	-5.17/-5.39
Θ(37.5°)	-6.78/-8.12	-9.2/-7.98	-5.72/-3.86	-3.01/-2.01	-1.78/-1.19	-0.47/-0.24	-0.24/-0.06	0.21/0.36	0.18/-0.47	-1.98/-4.14	-5.76/-8.52	-9.57/-10.83	-10.65/-9.02	-8.02/-7.42	-6.79/-5.85	-5.75/-6.65	-7.72/-8.69	-9.62/-9.82	-9.67/-7.45	-6.12/-6.41	-7.35/-7.04	-7.02/-7.72	-7.1/-6.36	-5.64/-5.64
Θ(45°)	-4.36/-4.7	-4.11/-4.22	-3.58/-3.67	-4.18/-3.54	-2.74/-2.36	-2.2/-1.98	-1.71/-1.44	-0.67/-0.17	-0.44/-1.44	-3.42/-6.53	-7.3/-6.71	-6/-5.74	-6.44/-6.44	-6.24/-6.98	-7.1/-6.97	-6.15/-5.32	-5.47/-6.71	-7.71/-8.67	-8.5/-8.82	-9.25/-6.46	-5.66/-5.74	-7.14/-7.71	-7/-5.68	-4.7/-4.66
Θ(52.5°)	-5.14/-4.96	-4.29/-5.13	-5.7/-5	-4.06/-2.28	-2.08/-1.52	-1.19/-1.44	-2.03/-2.14	-1.46/-1.04	-1.1/-1.61	-2.64/-4.71	-6.53/-6.73	-6.49/-6.94	-7.87/-7.03	-6.1/-5.77	-5.98/-7.49	-8.13/-8.53	-9.41/-9.53	-8.95/-9.08	-9.02/-8.47	-7.16/-4.77	-4.09/-4.79	-4.44/-4.37	-3.38/-3.39	-4.63/-4.98
Θ(60°)	-10.69/-9.2	-7.07/-5.55	-4.66/-4.62	-4.39/-4.58	-4.81/-4.52	-3.87/-4.4	-1.2/-0.42	-0.13/-0.34	-1.07/-1.68	-2.36/-3.56	-4.54/-5.64	-6.14/-7.56	-9/-10.49	-10.04/-8.34	-7.66/-8.62	-10.26/-11.62	-9.83/-7.16	-6.7/-9.1	-8.12/-7.51	-6.37/-6.1	-5.58/-5.13	-5.87/-6.01	-7.65/-9.98	-10.92/-11.2
Θ(67.5°)	-8.84/-7.92	-6/-4.69	-4.02/-3.67	-3.53/-3.82	-3.64/-3.49	-4.65/-4.97	-3.61/-1.89	-1.83/-2.29	-2.56/-2.6	-2.74/-3.52	-5.51/-6.18	-5.82/-6.12	-7.43/-8.55	-9.97/-11.68	-12.34/-10.01	-8.21/-7.76	-6.86/-6.18	-6.12/-7.06	-9.59/-9.44	-7.56/-5.92	-5.94/-6	-6.13/-6.61	-8.31/-10.9	-11.69/-10.09
Θ(75°)	-6.6/-6.13	-6.68/-6.78	-6.31/-4.79	-4.14/-4.21	-4.42/-4.57	-5.35/-5.61	-3.88/-2.68	-2.67/-3.38	-3.33/-2.55	-3.13/-5.11	-6.8/-6.79	-4.85/-3.94	-5.02/-5.99	-6.88/-8.16	-9.81/-11.33	-9.22/-7.29	-7.55/-10.97	-7.55/-10.97	-8.45/-7.89	-5.31/-3.34	-7.17/-4.05	-4.93/-7	-8.28/-8.42	
Θ(82.5°)	-5.44/-5.27	-5.5/-5.5	-5.9/-6.44	-6.78/-5.68	-3.4/-2.64	-3.26/-3.98	-3.69/-1.28	-2.54/-4.95	-3.59/-1.18	-0.58/-1.53	-3.85/-6.89	-8.49/-8.41	-8.36/-8.68	-9.85/-9.74	-9.42/-9.9	-8.49/-6.83	-6.22/-6.66	-6.87/-8.56	-9.2/-5.6	-2.83/-3.54	-5.26/-4.91	-3.67/-7.32	-5.3/-6.13	-5.64/-5.13
Θ(90°)	-7.98/-7.8	-5.14/-4.07	-3.51/-4.12	-5.76/-7.69	-9/-7.09	-4/-2.78	-1.76/-1.36	-1.36/-1.44	-1.73/-0.96	-1.31/-3.57	-5.31/-7.26	-9.51/-7.89	-6.42/-5.45	-4.53/-9.99	-5.31/-5.85	-7.3/-7.89	-8.07/-10.37	-8.47/-8.12	-10.6/-10.61	-9.72/-8.35	-5.59/-4.73	-4.62/-5.28	-5.68/-7.1	-8.49/-8.03
Θ(97.5°)	-11.49/-10.5	-6.66/-5.2	-4.91/-4.73	-4.17/-4.95	-4.61/-3.57	-2.19/-1.57	-1.63/-0.96	-0.26/-0.27	0.65/-0.24	-1.85/-3.78	-4.12/-3.94	-4.54/-4.55	-5.64/-5.33	-5.35/-5.93	-6.71/-9.44	-7.31/-5.17	-5.75/-7.77	-9.13/-8.78	-8.52/-8.12	-6.63/-6.48	-6.15/-6.27	-7.39/-7.93	-10.35/-10.73	-11.39/-12.04
Θ(105°)	-7.47/-6.18	-5.06/-3.9	-2.88/-1.88	-1.87/-1.89	-1.91/-1.4	-1.25/-1.89	-2.56/-1.65	-0.26/-0.02	0.081/25	1.59/0.23	-1/-1.83	-2.06/-2.74	-3.93/-4.31	-6.05/-7.87	-7.28/-8.03	-8.89/-9.15	-7.88/-8.16	-10.31/-10.25	-8.6/-5.19	-5.78/-8.43	-7.72/-6	-7.8/-8.36	-10.82/-8.61	-7.55/-7.34
Θ(112.5°)	-9.41/-7.27	-4.99/-3.79	-2.15/-1.11	-0.57/-0.09	0.42/-0.4	-0.94/-1.47	-1.68/-0.95	-0.05/-0.22	0.27/0.42	-0.5/-1.66	-2.88/-3.13	-4.08/-5.11	-6.43/-8.26	-8.5/-8.61	-8.14/-7.97	-9.4/-8.45	-7.81/-6.34	-6.84/-11.32	-9.39/-6.77	-7.19/-10.78	-10.95/-10.1	-9.77/-9.99	-9.31/-10.2	-9.59/-9.81
Θ(120°)	-12.46/-11.8	-10.28/-7.26	-5.19/-3.39	-1.53/-0.31	0.27/1.12	1.25/0.44	-0.13/-0.18	0.17/0.66	0.71/0.11	-1.17/-2.23	-4.19/-6.44	-7.92/-8.3	-7.31/-6.44	-8.4/-8.31	-7.3/-8.41	-9.91/-8.89	-10.01/-8.57	-8.52/-11.92	-10.81/-9.27	-7.1/-6.75	-9.35/-9.84	-10.76/-10.53	-11.13/-11.09	-9.04/-11.19
Θ(127.5°)	-6.7/-5.55	-5.06/-4.54	-4.54/-3.83	-2.3/-1.7	-0.89/0.1	0.5/0.31	-0.42/-1.34	-2.37/-2.59	-2.3/-3.36	-4.69/-6.22	-5.94/-5.99	-7.84/-8.67	-10.77/-8.21	-7.94/-8.18	-9.27/-12.34	-12.48/-9.96	-7.04/-6.93	-5.46/-9.32	-11.23/-8.83	-6/-5.91	-7.36/-8.3	-7.84/-9.66	-12.13/-9.45	-7.99/-6.72
Θ(135°)	-6.62/-6.01	-5.66/-6.18	-5.4/-5.03	-4.56/-2.86	-1.9/-1.21	-0.78/-0.89	-1.62/-2.08	-2.59/-3.61	-4.41/-5.52	-6.65/-7.89	-6.35/-6.12	-6.7/-6.62	-7.51/-5.82	-6.76/-6.26	-7.52/-10.27	-9.17/-7.82	-8.12/-6.12	-4.95/-7.78	-11.08/-7.93	-6.5/-6.21	-7.04/-10.35	-11.56/-6.55	-7.47/-5.96	-4.46/-5.94
Θ(142.5°)	-3.96/-4.73	-2.85/-2.16	-2.31/-1.69	-1.85/-1.95	-2.09/-2.54	-2.98/-2.91	-2.39/-2.71	-3.03/-2.98	-3/-4.28	-5.89/-6.95	-6.99/-5.51	-4.93/-4.71	-5.33/-6.34	-6.94/-6.94	-7.9/-5.77	-5.43/-8.49	-7.41/-5.29	-6.19/-9.62	-12.43/-9.37	-6.47/-5.82	-5.45/-4.54	-7.22/-7.18	-4.74/-5.59	-5.36/-3.76
Θ(150°)	-2.24/-2.33	-3.06/-2.56	-2.34/-2.55	-2.85/-3.14	-3.32/-3.31	-2.86/-2.71	-2.61/-2.25	-1.6/-1.59	-2.1/-2.84	-4.17/-4.97	-5.43/-4.75	-3.41/-2.84	-3.5/-4.15	-4.22/-7.44	-10.4/-11.06	-10.22/-10.45	-9.15/-6.15	-6.23/-9.61	-11.33/-9.95	-7.35/-7.25	-7.99/-6.73	-6.68/-7.92	-6.66/-5.67	-4.67/-2.68
Θ(157.5°)	-0.95/-0.7	-1.4/-2.02	-2.54/-3	-3.41/-3.57	-3.45/-3.81	-4.31/-4.62	-5.23/-5.87	-6.38/-5.5	-4.88/-5.08	-5.85/-6.47	-6.14/-5.25	-4/-2.9	-2.24/-1.59	-1.53/-1.82	-2.58/-4.38	-6.67/-7.36	-6.22/-5.62	-5.25/-6.42	-7.32/-7.84	-7.78/-8.02	-8.45/-8.09	-6.94/-5.62	-4.6/-4.27	-2.99/-1.67
Θ(165°)	-3.14/-2.87	-2.64/-3	-3.61/-4.21	-5.14/-5.74	-6.12/-6.14	-6.39/-6.81	-7.72/-7.79	-10/-9.26	-8.46/-7.3	-6.39/-5.77	-5.08/-4.25	-3.37/-2.12	-1.08/-0.62	-0.91/-2.7	-4.02/-5.18	-5.2/-4.79	-4.5/-4.76	-5.37/-5.38	-5.7/-6.08	-6.23/-5.99	-5.02/-4.23	-3.67/-3.29	-3.22/-3.68	-3.78/-3.47
Θ(172.5°)	-5.11/-5.02	-5.22/-5	-5.14/-5.56	-5.87/-6.32	-7.01/-7.94	-9.44/-10.59	-12.11/-12.26	-12.67/-11.39	-9.84/-8.28	-7.74/-7.77	-7.96/-8.19	-7.96/-7.39	-6.69/-6.23	-6.15/-6.46	-6.5/-5.95	-5.57/-5.02	-5.24/-5.86	-6.68/-6.61	-6.79/-7.63	-8.86/-9.15	-9.05/-8.69	-8.96/-8.92	-7.51/-6.43	-5.69/-5.32
Θ(180°)	-9.14/-8.48	-8.59/-8.35	-9.2/-9.42	-9.95/-10.58	-11.18/-11.57	-11.54/-10.79	-9.66/-8.58	-7.83/-7.09	-7.14/-7.13	-7.47/-7.45	-7.38/-7.08	-7.46/-7.58	-7.86/-8.86	-9.4/-9.61	-9.49/-9.46	-9.26/-9.67	-9.37/-9.83	-9.7/-9.96	-10.45/-10.64	-10.37/-10.81	-10.96/-10.92	-10.53/-10.04	-9.17/-8.6	-8.6/-8.97
Freq(Hz)	5.6G/Pol.	Theta-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-2.01/-1.92	-2.06/-2.49	-2.09/-2.44	-2.66/-2.97	-3.38/-3.98	-4.66/-5.57	-6.37/-7.02	-7.92/-8.03	-8.12/-7.1	-5.94/-5.04	-4.25/-3.68	-3.41/-3.2	-2.91/-2.69	-2.54/-2.58	-2.25/-2.23	-2.4/-2.74	-3.28/-3.84	-4.89/-5.88	-6.8/-7.5	-7.45/-7.2	-7.46/-6.03	-4.95/-4.16	-3.76/-3.14	-2.58/-2.18
Θ(7.5°)	-3.06/-2.46	-2.25/-2.01	-1.81/-1.89	-1.92/-1.86	-1.99/-2.28	-2.78/-3.51	-4.16/-4.89	-5.73/-6.05	-5.71/-4.9	-4.02/-3.3	-2.62/-2.23	-1.88/-1.56	-1.54/-1.77	-2.12/-2.41	-2.79/-3.16	-3.59/-4.27	-5.22/-6.46	-7.68/-7.85	-8.49/-8.21	-8.11/-7.33	-6.54/-5.69	-5.35/-5.05	-4.74/-4.35	-3.94/-3.56
Θ(15°)	-3.87/-3.05	-2.19/-1.61	-1.06/-0.93	-0.65/-0.29	-0.22/-0.3	-1.15/-1.83	-2.71/-3.66	-3.92/-3.95	-3.57/-2.99	-2.77/-2.39	-2.06/-1.76	-1.62/-1.56	-1.65/-1.85	-2.3/-3.06	-3.56/-4.09	-6.49/-5.66	-6.42/-6.5	-6.95/-6.95	-6.79/-5.74	-4.93/-4.15	-3.85/-3.91	-4.23/-4.08	-4.77/-4.78	-4.59/-4.14
Θ(22.5°)	-2.55/-1.4	-0.75/-0.23	0.45/1.01	1.21/1.46	1.12/0.89	0.47/-0.13	-0.75/-1.66	-2.5/-3.14	-3.18/-3.51	-3.03/-2.17	-2.09/-2.38	-2.59/-2.66	-2.68/-2.58	-2.46/-2.76	-3.06/-3.71	-4.72/-5.63	-5.95/-5.74	-5.22/-4.86	-4.86/-4.79	-4.86/-4.75	-4.57/-4.51	-4.87/-5.05	-4.96/-4.77	-4.56/-3.5
Θ(30°)	-0.8/0.05	0.44/0.63	1.13/1.63	2.09/2.08	2.06/2.22	2.25/2.07	1.85/-1.49	0.47/-0.3	-1.39/-1.88	-2.55/-2.5	-2.16/-2.36	-2.78/-2.68	-2.22/-1.92	-1.93/-2.1	-2.87/-3.45	-4.18/-4.68	-5.01/-4.79	-5.1/-5.08	-5.4/-5.61	-5.73/-5.81	-5.57/-5.67	-5.89/-5.8	-4.68/-4	-2.96/-1.79
Θ(37.5°)	0.99/1.39	1.61/1.93	2.26/2.25	2.05/-1.6	1.99/2.37	3.32/3.38	3.09/2.61	2.1/-1.39	0.58/-0.09	-0.76/-1.44	-1.43/-1.18	-1.45/-1.11	-0.65/-0.99	-1.										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Φ(157.5°)	-2.47/-2.81	-3.25/2.98	-2.63/-3.22	-3.85/-3.78	-3.29/-3.34	-3.74/-4.25	-4.03/-4.24	-4.64/-4.93	-5.11/-5.23	-4.8/-4.33	-4.11/-4.38	-4.2/-2.91	-2.63/-2.7	-2.31/-1.55	-1.2/-1.7	-3.6/-6.2	-7.53/-7.7	-6.67/-5.67	-6.72/-10.17	-12.13/-10.95	-9.39/-10.21	-8.45/-4.8	-2.41/-1.55	-1.94/-2.46
Θ(165°)	-4.22/-4.55	-5.05/-5.29	-4.81/-4.55	-4.54/-5.18	-5.47/-5.88	-6.05/-5.51	-4.66/-4.7	-4.78/-5.14	-5.18/-5.36	-5.89/-5.75	-5.2/-4.67	-3.54/-2.7	-2.38/-2.67	-3.42/-4.61	-5.33/-6.46	-7.01/-7.27	-7.12/-7.85	-7.73/-6.79	-5.6/-5.46	-5.65/-5.73	-5.16/-4.99	-6.04/-7.56	-6.92/-5.35	-4.19/-3.94
Θ(172.5°)	-6.79/-6.74	-6.75/-6.22	-6.18/-5.93	-6.33/-7.22	-7.75/-8.09	-8.04/-7.88	-7.25/-7.01	-7.04/-7.33	-7.62/-7.6	-7.61/-6.72	-5.89/-5.27	-5.31/-5.75	-6.67/-7.91	-9.09/-10.26	-9.75/-8.86	-7.89/-7.89	-8.47/-9.43	-10.48/-10.34	-9.5/-9.58	-9.61/-9.8	-9.73/-9.56	-8.65/-8.25	-7.63/-7.86	-6.92/-6.69
Θ(180°)	-11.55/-12.17	-12.12/-10.21	-9.34/-9.06	-9.3/-9.22	-8.82/-8.21	-8.27/-8.14	-7.66/-7.39	-7.67/-7.46	-7.32/-7.62	-8.21/-8.62	-8.75/-8.86	-9.2/-9.6	-10.26/-11.25	-11.39/-11.82	-11.24/-11.54	-10.79/-10.92	-10.33/-8.94	-8.23/-7.29	-6.62/-6.29	-6.13/-6.14	-6.69/-7.72	-9.26/-9.84	-10.05/-11.17	-11.48/-11.37
Freq(Hz)	5.885G/Pol.	Phi-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.92/-5.87	-5.37/-4.45	-3.73/-2.98	-2.54/-2.15	-1.85/-1.73	-1.85/-1.69	-1.92/-2.03	-2.09/-2.45	-3.16/-3.48	-3.84/-4.19	-4.91/-5.47	-5.99/-5.98	-5.48/-5.1	-4.55/-3.56	-3.08/-2.69	-2.08/-1.44	-1.02/-0.86	-0.93/-1.2	-1.7/-2.27	-2.49/-2.54	-2.46/-2.57	-3.05/-3.81	-4.7/-5.18	-5.85/-5.97
Θ(7.5°)	-5.14/-5.34	-5.16/-4.36	-3.97/-3.56	-2.95/-2.42	-2.15/-2.06	-2.03/-1.93	-2.05/-2.12	-2.07/-2.16	-2.3/-2.61	-2.8/-3.19	-3.77/-4.43	-5.2/-5.69	-5.93/-5.61	-4.69/-3.78	-3.14/-2.67	-2.24/-1.91	-1.56/-1.53	-1.78/-2.11	-2.56/-3.01	-3.21/-3.5	-3.72/-4.04	-4.73/-5.04	-5.45/-5.39	-5.16/-5
Θ(15°)	-4.35/-4.49	-4.64/-4.91	-5.18/-4.64	-3.99/-3.27	-2.78/-2.33	-1.98/-1.79	-1.78/-1.74	-1.26/-0.98	-0.75/-0.88	-1.65/-2.14	-2.93/-3.79	-4.88/-5.95	-6.5/-6.46	-6.31/-5.9	-4.94/-4.2	-3.58/-3.3	-3.34/-3.55	-3.61/-3.97	-4.06/-4.55	-4.85/-5.25	-5.51/-5.94	-6.02/-6.13	-5.66/-4.8	-4.08/-4.16
Θ(22.5°)	-4.01/-3.8	-4.01/-4.42	-4.08/-3.79	-4.03/-3.49	-3.13/-2.57	-1.95/-1.75	-1.52/-1.1	-0.39/-0.14	-0.2/-0.51	-1.19/-2.24	-3.57/-5.17	-7.27/-9.51	-9.67/-8.9	-8.25/-6.84	-5.54/-4.54	-3.77/-3.66	-3.82/-4.07	-4.29/-4.9	-5.46/-6.39	-6.87/-7.64	-8.2/-7.06	-5.5/-4.76	-4.4/-4.07	-3.74/-3.89
Θ(30°)	-1.67/-1.49	-1.46/-1.84	-2.14/-2.32	-2.71/-3.01	-2.5/-2.21	-1.88/-1.73	-1.07/-0.16	0.69/1.13	1.15/0.53	-0.81/-2.27	-3.97/-6	-7.9/-9.48	-9.27/-8.16	-6.86/-6.18	-4.86/-4.38	-4.14/-4.02	-4.45/-5.5	-6.6/-7.73	-9.02/-10.67	-10.86/-10.71	-8.93/-6.59	-4.04/-2.62	-1.6/-1.53	-1.64/-1.72
Θ(37.5°)	-1.8/-1.52	-1.6/-1.4	-1.35/-1.39	-1.16/-0.95	-1.37/-1.75	-1.67/-1.84	-1.4/-1	-0.34/-0.18	-0.05/-1.06	-2.81/-4.89	-6.46/-7.69	-8.9/-8.95	-5.39/-4.7	-3.89/-3.2	-2.41/-2.51	-3.7/-6.27	-8.54/-10.68	-11.81/-11.12	-10.32/-9.54	-8.77/-6.9	-4.41/-3.06	-2.07/-1.44	-1.08/-1.84	-1.08/-1.75
Θ(45°)	-2.8/-3.55	-3.45/-2.65	-1.81/-1.25	-0.51/-0.43	-0.91/-1.37	-1.37/-1.76	-2.08/-1.97	-1.3/-0.6	-0.8/-2.06	-3.97/-6.04	-7.49/-8.63	-8.42/-7.33	-8.15/-9.35	-7.85/-6.75	-6.01/-5.72	-4.65/-4.19	-4.04/-5.33	-8.02/-10.67	-9.77/-6.92	-6.16/-7.39	-8.74/-8.88	-5.7/-4.25	-3.64/-3.14	-2.98/-2.75
Θ(52.5°)	-1.5/-2.09	-3.01/-2.34	-1.77/-1.24	-1.5/-2.32	-2.8/-3.23	-3.06/-1.93	-1.07/-1.42	-1.93/-1.68	-1.7/-2.74	-5.54/-7.55	-6.35/-5.35	-4.85/-4.52	-5.51/-7.34	-8.7/-8.73	-7.56/-6.14	-5.42/-4.89	-5.27/-8.07	-11.15/-10.92	-9.83/-8.4	-7.52/-7.9	-8.78/-10.26	-8.67/-6.01	-4.31/-4.06	-3.23/-2.29
Θ(60°)	-3.7/-3.46	-2.95/-3.08	-2.87/-1.78	-1.33/-1.55	-1.9/-1.86	-1.7/-1.62	-1.65/-1.34	-0.92/-0.83	-1.23/-2.21	-3.35/-4.9	-4.98/-4.11	-3.38/-3.88	-5.25/-6.52	-10.65/-11.79	-8.66/-6.35	-5.51/-5.28	-6.35/-7.99	-9.7/-9.41	-9.55/-9.13	-7.7/-6.48	-5.65/-6.63	-7.9/-6.75	-6.52/-5.52	-5.12/-4.53
Θ(67.5°)	-6.84/-5.94	-5.58/-4.41	-2.45/-1.37	-1.09/-1.76	-2.28/-1.88	-1.45/-1.28	-1.43/-1.7	-2.01/-2.04	-2.15/-3.18	-5.72/-6.75	-5.63/-4.04	-3.25/-2.56	-2.97/-4.82	-6.46/-9.41	-9.17/-8.44	-7.6/-8.57	-9.46/-8.56	-9.28/-8.29	-6.86/-6.38	-7.3/-6.92	-7.69/-8.91	-10.56/-10.65	-11.14/-10.79	-9.91/-7.35
Θ(75°)	-5.92/-4.93	-3.47/-3.03	-2.69/-2.74	-3.31/-3.87	-4.36/-3.95	-3.3/-2.19	-2.01/-2.56	-3.1/-3.26	-2.47/-2.17	-3.06/-5.49	-5.96/-4.47	-3.32/-3.09	-3.71/-4.73	-6.14/-9.59	-10.16/-10.77	-9.4/-9.45	-8.97/-9.6	-8.27/-10.27	-9.63/-7.55	-7.55/-10.85	-11.24/-9.45	-7.77/-8.51	-9.57/-11.3	-11.06/-8.28
Θ(82.5°)	-8.48/-6.55	-4.87/-3.84	-4.54/-5.91	-8/-9.55	-8.98/-6.45	-4.31/-2.57	-1.63/-0.64	-0.39/-0.33	-0.67/-1.34	-2.37/-3.65	-4.49/-3.74	-2.89/-3.01	-4.4/-5.81	-7.78/-9.32	-9.64/-11.17	-9.1/-7.84	-7.63/-8.85	-7.04/-8.27	-9.89/-8.68	-8.57/-8.29	-7.09/-5.89	-5.1/-5.62	-7.7/-8.85	-10.02/-9.05
Θ(90°)	-5.39/-3.93	-3.09/-2.66	-2.74/-3.12	-3.72/-4.29	-4.72/-4.71	-4.66/-4.1	-2.69/-1.46	-0.27/-0.68	0.430.24	-1.3/-3.55	-4.46/-4.52	-4.13/-3.6	-3.94/-4.08	-5.36/-6.77	-7.430.65	-7.67/-10.11	-11.36/-8.67	-6.82/-6.95	-9.12/-7.12	-6.66/-8.11	-6.97/-5.08	-5.2/-6.02	-7.95/-4.88	-9.66/-9.65
Θ(97.5°)	-5.01/-3.79	-2.45/-1.99	-1.77/-2.35	-3.19/-3.61	-3.7/-3.28	-1.39/-0.82	-1.14/-1.2	-0.68/-0.02	0.97/0.76	0.09/-1.34	-2.28/-2.62	-3.63/-4.17	-3.75/-3.65	-4.13/-6.42	-8.78/-7.73	-5.26/-3.81	-4.52/-5.39	-6.41/-8.62	-7.71/-9.77	-8.06/-7.62	-4.93/-4.82	-4.66/-6.94	-7.76/-8.25	-8.45/-6.71
Θ(105°)	-9.67/-9.52	-8.06/-5.77	-3.69/-2.65	-2.61/-1.55	-1.59/-1.11	-0.77/-0.93	-1.73/-1.34	-0.27/-0.12	-0.11/0.06	0.27/-1.14	-2.99/-3.61	-3.82/-4.83	-8.9/-8.61	-6.81/-7.53	-7.74/-6.96	-7.16/-5.52	-5.28/-2.84	-8.41/-8.46	-6.65/-8.67	-7.46/-8.14	-10.62/-10.74	-8.49/-9.13	-9.89/-9.76	-9.89/-9.76
Θ(112.5°)	-9.5/-9.79	-9.05/-7.84	-5.72/-3.41	-2.05/-1.14	0.09/1.42	1.76/1.26	0.58/0.14	0.62/0.45	-0.23/-1.15	-1.86/-4.68	-5.92/-3.63	-4.31/-4.3	-4.35/-6.3	-6.48/-6.66	-8.44/-10.03	-9.81/-7.14	-5.51/-6.38	-7.28/-8.11	-7.91/-6.6	-8.83/-9.17	-9.82/-10.94	-10.08/-8.45	-7.25/-8.84	-8.68/-9.85
Θ(120°)	-5.11/-5.99	-5.9/-4.86	-4.2/-2.21	-0.5/0.1	0.36/0.59	1.22/1.49	0.77/0.22	0.63/-0.01	-1.25/-2.45	-4.22/-6.4	-7.31/-7.38	-6.74/-6.36	-6.4/-7.15	-8.84/-9.56	-7.91/-6.51	-10.12/-7.83	-7.53/-5.96	-8.26/-9.38	-8.37/-7.19	-9.57/-8.94	-9.37/-12.39	-11.04/-7.31	-6.67/-4.67	-3.48/-6.2
Θ(127.5°)	-6.6/-4.4	-5.28/-4.37	-2.97/-1.39	-0.38/-0.09	0.22/0.27	0.42/0.35	0.14/-0.17	0.03/-0.68	-1.2/-2.76	-4.67/-5.81	-6.61/-6.98	-7.42/-8.9	-9.51/-9.92	-9.53/-8.88	-7.17/-10.17	-9.8/-11.65	-6.17/-8.3	-6/-12.26	-9.96/-10.28	-6.13/-5.47	-8.92/-10.61	-9.55/-7.58	-8.71/-8.34	-5.33/-4.7
Θ(135°)	-4.82/-3.07	-2.83/-3.58	-2.95/-2.99	-2.04/-1.22	-0.86/-0.62	-0.73/-0.46	-0.35/-0.86	-1.31/-2.49	-4.58/-5.69	-6.85/-6.41	-5.24/-5.29	-6.58/-6.88	-6.9/-5.42	-6.61/-5.28	-6.97/-9.28	-8.7/-7.83	-6.2/-8.89	-5.18/-8.98	-11.46/-10.19	-11.01/-6.82	-6.27/-11.54	-7.64/-6.42	-6.5/-7.35	-5.52/-4.92
Θ(142.5°)	-0.28/-2.64	-0.67/-0.82	-0.39/-0.36	-0.54/-0.99	-1.62/-2.19	-2.13/-1.75	-1.28/-1.21	-2/-2.65	-3.07/-4.61	-5.94/-6.24	-5.65/-6.67	-5.97/-5.84	-5.05/-5.23	-7.37/-9	-9.2/-6.11	-8.1/-6.03	-9.53/-5.14	-5.06/-9.86	-11.37/-9.47	-8.58/-9.46	-6.75/-10.11	-11.63/-7.97	-5.77/-5.82	-5.05/-3.68
Θ(150°)	-1.63/-1.91	-2.87/-2.47	-2.96/-3.73	-4.09/-4.39	-4.42/-4.38	-3.89/-3.36	-3.34/-3.5	-3.13/-2.58	-3.61/-5.2	-6.79/-7.35	-7.2/-7.83	-7.96/-7.64	-6.92/-6.94	-7.71/-9.39	-9.96/-10.39	-9.48/-10.36	-10.22/-5.85	-7.23/-10.59	-11.94/-11.68	-10.49/-9.99	-6.82/-6.69	-9.18/-8.32	-7.73/-6.15	-4.16/-2.5
Θ(157.5°)	-0.85/-1.17	-1.51/-2.05	-2.86/-3.5	-4.11/-4.45	-4.68/-4.5	-3.72/-3.1	-3.12/-3.43	-3.77/-4.15	-4.85/-5.92	-6.85/-7.24	-6.29/-4.87	-3.64/-2.91	-2.95/-3.17	-2.44/-2.64	-4.32/-6.11	-7.69/-8.83	-8.01/-6.3	-5.79/-5.8	-6.08/-6.43	-7.01/-8.66	-9.88/-9.14	-7.15/-5.13	-4.51/-3.97	-1.61/-0.64
Θ(165°)	-4.84/-4.14	-4.17/-4.66	-5.21/-5.42	-5.48/-5.29	-4.9/-4.49	-4.28/-4.43	-5.13/-5.81	-6.71/-7.6	-8.27/-8.69	-8.83/-8.87	-7.72/-6.44	-5.17/-4.07	-3.61/-3.53	-4.25/-4.89	-5.1/-4.48	-4.26/-4.89	-5.81/-6.26	-5.97/-5.75	-5.95/-6.59	-7.74/-9.36	-9.54/-8.41	-7.31/-6.7	-6.44/-6.91	-6.78/-6.11
Θ(172.5°)	-6.6/-7.24	-7.5/-7.29	-6.6/-6.35	-6.18/-6.08	-6.01/-6.06	-6.7/-7.64	-8.45/-9.98	-11.46/-10.64	-10.16/-10.38	-10.61/-9.69	-9.5/-9.49	-8.55/-7.45	-6.62/-5.63	-4.35/-3.52	-3.39/-3.51	-4.51/-5.11	-5.52/-5.9	-6.56/-7.07	-7.03/-7.2	-7.91/-8.32	-9.1/-9.74	-9.12/-8.37	-7.49/-7.16	-7.28/-6.79
Θ(180°)	-8.27/-8.11	-7.72/-6.76	-7.01/-7.36	-7.83/-8.89	-9.82/-10.62	-11.18/-11.43	-10.07/-9.39	-8.85/-8.95	-9.05/-9.13	-8.94/-8.63	-9.02/-9.13	-8.58/-8.4	-8.39/-9.04	-9.59/-10.34	-10.2/-10.2	-10.52/-10.5	-10.28/-9.89	-10.16/-9.81	-10.26/-11.59	-11.58/-11.83	-12.7/-12.32	-11.27/-9.76	-8.88/-7.98	-8.08/-8.26
Freq(Hz)	5.885G/Pol.	Theta-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-1.29/-1.56	-1.68/-1.56	-2.28/-2.26	-2.65/-3.17	-3.75/-4.35	-5.09/-5.77	-5.56/-4.99	-4.25/-3.43	-2.62/-1.84	-1.27/-0.82	-0.6/-0.65	-0.95/-1.21	-1.57/-1.82	-2.24/-2.85	-2.84/-3.09	-3.37/-3.92	-4.62/-5.64	-6.16/-5.81	-5.4/-4.47	-3.47/-2.44	-1.55/-1.08	-0.88/-0.63	-0.62/-0.5	-0.44/-0.85
Θ(7.5°)	-2.48/-2.88	-3.12/-3.27	-3.43/-3.44	-3.41/-3.55	-3.64/-3.7	-3.98/-4.13	-4.25/-4.4	-4.1/-3.33	-2.48/-1.86	-1.19/-0.51	0.01/0.21	0.22/0.09	-0.24/-0.68	-1.05/-1.51	-2.11/-2.69	-3.39/-4.2	-4.76/-5.36	-5.79/-5.13	-4.59/-3.61	-2.86/-2.26	-1.85/-1.76	-1.77/-1.75	-1.89/-1.85	-1.86/-2.1
Θ(15°)	-3.51/-3.24	-3.42/-3.17	-3.17/-2.86	-2.45/-2.41	-2.29/-2.55	-2.58/-2.26	-2.19/-2.3	-2.64/-2.58	-2															



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(105°) ↙	-0.32/0.57 -2.63/-0.82	2.22/67 0.52/0.98	3.45/3.36 1.92/2.3	2.5/1.22 2.06/0.34	0.42/0.87 -0.152/0.1	2.17/2.72 3.24/3.43	2.01/0.42 2.48/1.28	-0.65/-0.44 0.35/-0.92	-0.04/-0.69 -0.121/-1.22	-0.39/-0.64 -1.72/-1.62	-0.68/0.83 -2.36/-1.25	0.57/0.82 -1.8/-1.82	0.42/-0.33 -3.08/-3.9	-1.94/-4.99 -4.76/-4.74	-6.43/4.58 -10.47/-7.46	-3.09/-3.22 -4.95/-5.02	-2.25/-2.16 -3.52/-3.2	-2.04/-0.69 -1.86/-1.16	0.54/0.82 -0.38/-1.97	-0.38/-1.2 -2.99/-2.89	-1.2/-0.38 -3.03/-2.24	-0.09/-0.46 -2.25/-1.33	-0.04/0.78 -0.99/-0.68	
Θ(120°) ↘	-1.7/-1.42 -0.13/-0.63	0.52/-0.35 -0.63/-1.77	-0.79/-0.82 -3.58/-3.31	-1.22/-1.49 -1.75/-0.71	-0.81/-1.32 -0.28/-0.5	1.88/1.86 -1.41/-2.54	1.74/1.48 -0.37/1.08	1.10/42 -0.84/-0.96	-1.37/-2.85 -1.05/-1.34	-3.28/-3.3 -2.3/-2.7	-3.91/-4.2 -3.25/-3.69	-3.21/-2.9 -4.44/-3.65	-2.04/-0.38 -2.29/-4	-1.08/-1.45 -5.8/-5.41	-2.33/-6.44 -7.89/-8.84	-9.39/-4.99 -6.45/-4.98	-1.65/-1.58 -5.16/-6.58	-2.53/-2.22 -5.82/-4.97	-4.3/-8.02 -5.95/-4.97	-5.94/-3.78 -2.62/-2.05	-3.75/-5.07 -2.41/-4.42	-4.72/-3.28 -7.11/-5.23	-3.37/-2.4 -2.72/-2.99	-2.11/-0.78 -0.76/0.17
Θ(135°) ↗	-4.34/-2.66 -2.8/-7.19	-2.62/-2.89 -3.62/-2.82	-2.76/-4.65 -3.18/-2.45	-5.53/-3.27 -1.59/-2.04	-1.83/-2.68 -4.06/-6.52	-5.13/-5.94 -6.57/-6.37	-4.1/-2.16 -5.64/-4.18	-0.13/0.7 -2.06/-1.66	-0.02/-2.18 -3.09/-4.88	-4.53/-5.01 -5.5/-5.52	-4.75/-3.92 -6.3/-6.44	-4.1/-5.91 -5.57/-5.11	-5.73/-3.83 -4.57/-5.23	-5.06/-7.72 -5.59/-4.8	-8.13/-9.31 -7.51/-7.96	-5.88/-4.5 -6.57/-4.44	-5.72/-4.81 -4.41/-4.84	-4.12/-4.36 -3.35/-2.35	-4.18/-3.39 -2.94/-3.53	-3.72/-1.86 -3.04/-1.55	-1.17/-1.84 -0.43/-1.35	-3.32/-5.85 -2.71/-0.78	-4.47/-4.53 -2.71/-0.78	-1.26/-1.57 0.27/0.07
Θ(150°) ↖	-2.74/-2.64 1.42/0.47	-2.34/-3.31 -0.96/-2.47	-3.62/-2.62 -2.7/-2.05	-2.09/-2.35 -1.77/-2.38	-2.8/-4.22 -3.81/-6.12	-5.26/-4.99 -8.55/-8.68	-4.13/-3.2 -7.15/-6.49	-3.29/-4.6 -6.02/-6.03	-6.3/-6.36 -6.2/-5.82	-5.19/-4.64 -5.6/-5.04	-4.9/-4.83 -3.91/-3.26	-5.46/-5.06 -3.08/-3.14	-5.17/-5.66 -3.25/-3.09	-6.03/-5.35 -3.54/-4.38	-5.39/-6.05 -5.6/-6.34	-6.42/-8.21 -6.55/-6.4	-9.12/-9.39 -5.82/-6.3	-9.16/-7.66 -4.23/-4.06	-7.35/-7.05 -3.98/-3.72	-6.73/-4.98 -3.45/-3.79	-3.85/-5.33 -3.72/-2.7	-5.32/-5.19 -1.48/-0.3	-4.79/-4.44 0.95/1.65	-2.31/-1.84
Θ(165°) ↗	-1.35/-1.87 -2.88/-3.05	-2.49/-2.78 -3.1/-3.02	-2.75/-2.79 -3.88/-5.25	-3.34/-4.4 -4.42/-7.17	-5.79/-7.55 -8.15/-8.78	-8.73/-9.52 -11.39/-11.39	-9.01/-9.18 -12.15/-11.72	-10.13/-11.12 -8.17/-8.58	-10.22/-8.53 -6.35/-4.96	-6.63/-5.35 -4.06/-3.22	-4.08/-3.66 -2.64/-2.77	-3.93/-4.4 -3.3/-3.49	-4.59/-4.99 -3.75/-3.99	-5.75/-6.16 -3.97/-4.34	-6.52/-6.68 -5.29/-6.77	-6.1/-6.17 -7.89/-8.12	-5.98/-5.53 -4.67/-6.68	-5.52/-6.01 -5.05/-4.55	-6.21/-5.31 -4.58/-4.71	-4.62/-3.74 -8.66/-4.67	-3.07/-2.59 -4.84/-4.99	-2.56/-2.84 -4.98/-4.6	-2.12/-1.44 -1.19/-1.57	-1/-1.15 -4.19/-6.87
Θ(180°) ↖	-5.76/-5.57 5.3G/Pol.	-5.4/-5.18 Phi/-	-5.58/-5.83 -/-	-6.03/-6.65 -/-	-7.77/-8.43 -/-	-9.29/-9.59 -/-	-9.24/-8.77 -/-	-8.27/-7.83 -/-	-7.24/-6.95 -/-	-6.28/-5.78 -/-	-5.46/-4.78 -/-	-4.27/-3.93 -/-	-3.86/-3.81 -/-	-3.85/-4.04 -/-	-4.5/-4.97 -/-	-5.43/-5.82 -/-	-6.01/-6.4 -/-	-7.04/-7.24 -/-	-7.32/-7.17 -/-	-7.11/-7.03 -/-	-6.85/-6.75 -/-	-7.12/-7.97 -/-	-7.54/-6.77 -/-	-6.42/-6.09 -/-
DC(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°)	-4.01/-3.05	-2.31/-1.95	-1.46/-1.31	-1.23/-1.14	-0.72/-0.25	-0.09/-0.47	-0.81/-0.88	-0.76/-0.57	-0.65/-0.89	-1.47/-2.2	-2.82/-3.54	-4.43/-4.67	-4.31/-3.72	-3.18/-2.85	-2.6/-2.41	-1.99/-1.65	-1.06/-0.58	-0.34/-0.33	-0.34/-0.4	-0.47/-0.85	-1.21/-1.4	-1.88/-2.69	-3.42/-3.86	-4.34/-4.57
Θ(7.5°)	-3.62/-3.39	-2.69/-2.35	-1.95/-1.74	-1.59/-1.59	-1.32/-0.63	-0.19/0.14	0.14/-0.21	-0.45/-0.47	-0.54/-0.78	-1.37/-2.25	-2.82/-3.25	-4.02/-4.32	-4.11/-3.85	-3.69/-3.4	-3.11/-2.54	-2.08/-1.49	-0.98/-0.61	-0.51/-0.48	-0.54/-0.58	-0.73/-0.96	-1.13/-1.42	-1.92/-2.31	-2.74/-3.46	-3.95/-3.92
Θ(15°)	-3.68/-3.76	-3.23/-2.65	-2.36/-1.58	-0.96/-0.91	-0.74/-0.62	-0.88/-0.11	0.37/0.6	0.63/0.44	-0.04/-0.62	-1.18/-1.76	-1.86/-1.88	-2.16/-2.62	-3.01/-3.02	-2.78/-2.56	-2.46/-2.29	-1.88/-1.27	-0.68/-0.1	-0.6/-0.94	-0.07/-0.37	-0.64/-0.94	-1.42/-1.91	-2.32/-2.68	-3.02/-3.32	-3.4/-3.77
Θ(22.5°)	-6.4/-5.42	-5.32/-4.32	-3.97/-3.87	-3.23/-2.5	-1.38/-0.72	-0.49/-0.01	0.35/0.43	0.49/0.41	0.27/-0.16	-0.82/-1.03	-1.11/-1.18	-1.5/-1.89	-2.1/-2.07	-1.8/-1.48	-1.09/-0.86	-0.78/-0.69	-0.36/0.13	0.30/0.42	0.29/0	-0.43/-1.16	-1.97/-2.77	-3.38/-3.74	-4.24/-4.83	-5.41/-6.33
Θ(30°)	-5.05/-4.13	-3.58/-3.23	-2.82/-2.47	-1.53/-0.64	0.31/0.2	1.45/1.28	0.94/0.95	0.96/1.02	0.91/0.61	0.14/-0.64	-1.66/-2.75	-3.67/-4.39	-5.07/-5.48	-5.79/-5	-3.82/-2.61	-0.64/-0.84	-0.31/0.26	1.05/1.62	1.86/1.29	-0.09/-1.5	-2.66/-4.03	-4.68/-5.03	-5.36/-6.16	-6.13/-6.56
Θ(37.5°)	-2.04/-1.95	-2.33/-2.68	-3.08/-2.36	-1.55/-0.68	0.05/0.37	0.39/0.48	0.81/1.22	1.45/1.44	1.03/0.19	-0.76/-1.71	-2.84/-4.48	-5.29/-5.51	-5.71/-5.58	-4.93/-4.07	-3.2/-2.33	-1.29/-0.63	-0.81/-0.31	0.63/1.58	1.94/1.82	0.79/-1.08	-3.01/-4.29	-5.18/-5.57	-5.5/-6.06	-5.1/-3.6
Θ(45°)	-3.59/-2.54	-2.45/-2.23	-1.77/-0.95	-0.44/0.28	0.85/1.23	0.72/-0.21	-0.39/0.5	1.68/-2.02	1.16/-0.71	-2.37/-3.24	-3.93/-5.48	-7.29/-9.08	-7.83/-8.57	-3.85/-2.94	-2.54/-2.29	-1.74/-1.78	-1.98/-1.21	0.02/0.31	0.08/-1.15	-2.79/-4.51	-4.67/-4.69	-3.9/-3.05	-2.29/-3.28	-4.2/-4.51
Θ(52.5°)	-5.01/-4.53	-4.43/-4.06	-3.87/-3.28	-3.3/-2.19	-0.10/0.75	0.72/0.87	0.96/1.05	1.42/1.45	0.59/-1.58	-4.46/-7.84	-6.8/-5.63	-6.54/-7.46	-7.67/-6.57	-4.83/-3.3	-2.55/-1.89	-1.5/-2.16	-3.1/-2.98	-2.75/-2.57	-3.17/-3.84	-3.59/-2.39	-2.31/-2.16	-2.3/-3.14	-3.14/-4.03	-5.15/-6.23
Θ(60°)	-7.67/-6.63	-4.41/-3.63	-3.15/-2.44	-1.93/-1.25	-0.46/0.62	0.76/0.26	-0.7/-1.5	-1.73/-0.89	-0.9/-2.73	-6.03/-8.36	-6.8/5.08	-5.54/-7.74	-10.45/-7.5	-5.81/-5.37	-5.84/-3.47	-1.94/-1.25	-0.67/-1.18	-1.12/-1.87	-2.25/-2.56	-2.63/-2.95	-3.62/-4.2	-4.6/-6.44	-5.26/-7.09	-9.59/-10.18
Θ(67.5°)	-6.42/-4.88	-3.52/-2.12	-1.08/-0.49	-0.18/-0.58	-1.82/-1.54	-0.48/0.26	0.47/0.13	0.19/0.01	-0.93/-3.22	-6.15/-7.02	-4.25/-3.2	-5.07/-6.72	-3.99/-6.4	-5.43/-5.27	-5.08/-4.89	-4.84/-3.16	-1.8/-1.71	-2.19/-3.34	-3.9/-4.38	-3.33/-3.04	-4.62/-5.52	-6.52/-6.7	-6.3/-5.71	-5.87/-5.67
Θ(75°)	-6.89/-5.86	-4.42/-4.45	-3.17/-2.44	-1.95/-1.5	-0.89/-0.82	-1.61/-2.59	-2.53/-1.8	-1.6/-2.86	-3.49/-2.19	-1.29/-2.07	-2.53/-4.51	-5.04/-6.27	-5.79/-4.83	-4.81/-5.45	-5.51/-6.87	-6.51/-4.57	-3.34/-2.18	-1.96/-3.07	-3.26/-2.86	-2.93/-5.76	-6.47/-5.3	-4.91/-5.05	-6.3/-6.51	-7.7/-9.2
Θ(82.5°)	-7.69/-6.97	-5.92/-4.01	-2.64/-1.9	-1.77/-1.2	-3.13/-2.93	-2.19/-2.06	-2.21/-2.44	-2.93/-1.97	-0.83/0.07	0.03/-1.92	-4.48/-6.05	-6.92/-7.03	-5.03/-6.77	-4.59/-6.34	-6.39/-5.66	-2.86/-1.03	-0.71/-2.78	-1.7/-1.12	-1.04/-0.43	-3.69/-3.56	-3.7/-4.69	-6.86/-8.14	-5.86/-7.97	-5.86/-7.97
Θ(90°)	-5.2/-4.75	-4.39/-2.91	-1.43/-1.08	-1.58/-3.27	-3.12/-3.58	-1.87/-2.12	-1.87/-2.39	-2.44/-2.07	-0.77/0.45	-1.44/-3.31	-7.62/-9.35	-12.12/-10.75	-6.05/-5.77	-6.23/-7.25	-6.31/-4.62	-1.27/-3.44	-2.3/-2.17	-1.44/-1.22	-1.98/-1.34	-0.85/-1.24	-2.69/-4.2	-5.11/-5.03	-4.32/-4.31	-4.32/-4.31
Θ(97.5°)	-5.29/-5.19	-5.8/-3.84	-3.07/-2.28	-2.45/-3.29	-4.01/-3.83	-2.97/-3.11	-3.43/-3.84	-3.57/-3.91	-4.43/-4.85	-5.7/-5.95	-5.61/-5.53	-4.67/-4.7	-4.5/-3.71	-5.06/-6.17	-5.96/-5.2	-5.2/-5.6	-3.71/-1.64	-0.96/-0.42	0.24/-0.22	-0.05/0.5	-0.53/-2.1	-3.12/-2.99	-3.91/-4.59	-6.11/-6.93
Θ(105°)	-6.7/-6.11	-5.35/-3.69	-3.9/-3.02	-3.01/-2.62	-2.66/-1.9	-1.71/-1.22	-2.06/-2.92	-4.18/-4.21	-2.75/-1.83	-1.67/-4.43	-6.53/-4.72	-3.33/-4.33	-2.92/-2.21	-2.09/-4.81	-6.12/-5.74	-4.39/-2.86	-2.01/-2.52	-1.59/-2.11	-0.92/-1.26	-0.75/-1.68	-2.01/-2.51	-3.49/-4.02	-4.84/-4.91	-5.6/-7.6
Θ(112.5°)	-4.2/-3.04	-2.54/-1.59	-0.95/-0.43	-0.29/-0.51	-1.06/-2.62	-4.01/-4.33	-4.32/-4.58	-3.18/-2.32	-3.8/-6.03	-6.38/-5.84	-6.74/-6.5	-4.55/-2.61	-4.26/-5.92	-3.83/-0.95	-2.04/-0.7	-1.14/-1.7	1.12/1.25	0.12/-0.79	-0.71/-1.24	-2.3/-4.34	-5.58/-5.88	-4.78/-5.96	-4.78/-5.96	-4.78/-5.96
Θ(120°) ↖	-7.68/-5.76 ↖	-4.2/-2.52 -5.14/-5.48	-0.7/-0.08 -3.91/-3.28	-5.0/-0.95 -2.36/-1.48	-1.41/-1.6 -1.31/-1.66	-2.2/-3.07 -1.98/-1.97	-3.83/-4.62 -2.36/-3.06	-0.37/-3.74 -3.42/-3.63	-3.13/-2.94 -2.66/-2.4	-2.83/-3.15 -2.05/-2.93	-5.31/-7.2	-6.46/-5.75	-4.72/-5.07	-6.91/-7.39	-6.91/-4.91	-4.71/-4.47	-3.79/-2.34	-3.27/-3.03	-2.05/-0.74	-0.49/-1.22	-2.05/-1.77	-2.62/-3.71	-5.4/-5.73	-4.92/-6.3
Θ(135°)	-8.09/-5.48	-4.97/-4.51	-4.08/-4.16	-4.22/-4.57	-4.33/-4.51	-4.5/-4.16	-4.96/-6.17	-5.61/-4.92	-4.66/-4.18	-4.41/-5.51	-7.31/-7.52	-9.18/-9.5	-6.63/-6.09	-6.06/-7.56	-6.82/-6.41	-4.39/-4.01	-2.19/-2.94	-1.97/-2.22	-1.72/-0.6	-0.45/-1.29	-0.81/-0.58	-1.45/-2.35	-4.06/-5.72	-4.71/-6.34
Θ(142.5°)	-0.57/-2.19	-3.44/-3.27	-3.65/-4.3	-5.13/-5.4	-5.81/-5.65	-6.08/-6.84	-7.39/-6.21	-4.85/-4.94	-6.87/-8.37	-9.04/-8.4	-5.39/-3.33	-2.39/-2.41	-3.55/-3.28	-3.29/-5.56	-7.8/-4.59	-3.26/-2.26	-1.42/-1.29	-2.87/-4.41	-3.47/-3.04	-1.93/-1.03	-1.02/-1.76	-2.39/-3.67	-3.41/-4.26	-3.29/-1.45
Θ(150°)	-3.41/-3.5	-4.7/-4.84	-4.79/-5.03	-4.48/-4.48	-4.42/-5.26	-6.6/-7.4	-7.61/-7.76	-7.83/-7.66	-6.77/-5.35	-4.83/-5.97	-7.12/-6.39	-4.87/-3.87	-3.84/-3.63	-4/-5.29	-4.54/-3.24	-2.58/-1.87	-3.38/-4.88	-4.66/-4.68	-3.71/-3.56	-3.76/-3.28	-3.08/-3.11	-3.42/-3.35	-2.68/-2.73	-3.42/-3.67
Θ(157.5°)	-3.42/-3.22	-3.65/-4.28	-4.45/-4.24	-4.33/-4.76	-5.26/-5.74	-6.61/-6.59	-7.19/-7.82	-8.73/-8.74	-7.9/-5.94	-4.76/-4.17	-4.12/-4.21	-4.1/-3.5	-3.04/-2.97	-3.26/-3.95	-4.64/-4.42	-6.41/-4.3	-3.53/-4.5	-4.74/-4.97	-4.55/-3.53	-2.48/-2.23	-2.52/-2.86	-2.67/-2.58	-2.8/-2.87	-3.56/-3.86
Θ(165°)	-1.34/-1.85	-2.85/-4.17	-5.31/-6.12	-6.43/-6.1	-5.77/-4.51	-5.9/-7.06	-7.83/-8.26	-9.26/-9.83	-9.34/-7.8	-6.26/-5.01	-4.5/-4.13	-3.65/-2.76	-1.94/-1.48	-1.63/-2.33	-2.89/-3.04	-2.76/-2.62	-2.79/-3.12	-3.08/-2.56	-1.72/-1.37	-1.44/-1.58	-1.39/-1.15	-0.67/-0.49	-0.39/-0.53	-0.95/-1.38
Θ(172.5°)	-7.51/-7.21	-6.84/-5.74	-5.09/-4.65	-4.23/-3.94	-4/-4.49	-5.46/-6.68	-7.42/-7.79	-7.8/-7.89	-7.82/-8.05	-8.32/-8.71	-8.59/-7.96	-7.15/-6.19	-5.35/-4.76	-4.22/-3.45	-2.68/-2.07	-1.74/-1.7	-2.13/-2.5	-2.73/-2.81	-2.65/-2.96	-3.22/-3.33	-3.4/-3.77	-4.03/-4.46	-5.65/-6.52	-7.56/-7.82
Θ(180°) ↖	-10.57/-10.96 ↖	-11.07/-10.91 5.3G/Pol.	-10.11/-8.96 Theta/-	-7.6																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(75°)	1.12/1.29	1.02/1.44	2.04/2.13	2.13/1.8	1.32/1.18	2.33/3.29	3.02/2	0.44/0.56	-0.21/0.27	-0.25/0.84	1.49/1.62	1.19/0.67	0.79/1	0.35/-1.62	-2.77/-1.24	-0.52/-0.56	-3.15/-5.04	-4.03/-3.27	-3.73/-5.56	-7.2/-6.8	-5.88/-3.23	-1.69/-1.42	-0.47/0.28	0.84/1.19
Θ(82.5°)	1.39/1.34	1.51/1.7	2.1/1.97	2.1/1.97	1.68/2.38	2.95/2.61	1.22/0.49	0.34/0.35	-0.66/-1.08	-1.2/0.18	0.22/0.39	0.31/-0.08	0.35/0.11	0.11/-1.17	-1.56/-1.47	-1.81/-2.74	-2.36/-2.02	-1.54/-1.73	-2.88/-5.36	-4.52/-3.43	-3.39/-2.73	-0.69/-0.55	-0.82/-0.4	0.55/0.55
Θ(90°)	0.29/1.1	0.41/0.68	1.53/0.95	0.38/-1.35	-0.34/1.74	2.8/2.8	1.28/0.4	0.11/0.25	-0.47/-0.63	-1.56/-0.7	0.14/0.49	0.77/-0.48	-0.07/1.16	-1.29/-2.07	-1.49/-1.67	-0.90/31	0.12/0.56	-0.61/-0.16	-1.32/-4.78	-5.21/-3.28	-2.45/-0.3	0.73/0.3	0.19/1.1	0.87/0.48
Θ(95°)	-0.79/0.31	0.26/-0.26	0.39/-1.19	-1.82/-1.36	-0.11/-1.41	2.09/1.85	1.42/1.77	1.21/0.76	-0.24/-2.09	-3.08/-0.95	-0.94/-0.18	0.04/0.14	-0.18/-0.76	-1.72/-3.45	-3.61/-2.51	-2.25/-1.38	-1.33/-1.16	-1.79/-0.4	-1.74/-3.96	-2.91/-1.52	-0.09/-0.76	-0.83/-0.36	-0.45/0.18	1.02/-0.09
Θ(105°)	-2.11/-0.16	0.15/0.65	-0.33/-0.97	-1.22/0.17	1.38/2.73	2.67/1.8	1.13/2.3	3.55/3.24	0.43/-2.27	-4.19/-1.75	-0.27/0.96	-0.74/-1.56	-0.10/-6.2	-1.85/-3.74	-4.58/-3.51	-1.62/-1.42	-1.21/-0.71	-0.83/-1.9	-2.81/-3.27	-3.12/-1.46	-1.95/-1.69	-1.83/-2.2	-2.73/-2.24	-1.27/-0.95
Θ(112.5°)	-2.91/-1.94	-0.8/0.14	1.13/0.29	-1.4/-1.37	-0.5/1.24	2.63/2.2	0.86/1.4	2.65/2.47	0.88/-1.42	-1.97/-1.65	-2.14/-0.3	-0.26/0.28	-0.54/-2.86	-3.58/-4.19	-5.75/-6.21	-4.16/-3.95	-2.92/-1.67	-1.49/-0.21	0.3/-1.72	-1.63/-2.12	-1.37/-2.18	-2.32/-3.79	-2.47/-2.32	-1.61/-2.18
Θ(120°)	-2.46/-1.05	0.06/-0.15	0.04/-0.26	-1.7/-2.04	-0.28/1.15	1.56/0.79	0.35/0.27	1.21/1.91	1.57/0.45	-0.51/-1.68	-1.66/-0.73	-1.29/-0.89	-1.06/-2.09	-3.85/-3.48	-4.12/-8.11	-6.21/-5.11	-2.6/-4.4	-2.84/-1.45	-2.46/-6.07	-4.11/-3.31	-4.17/-3.15	-2.66/-3.69	-3.61/-2.51	-2.94/-2.85
Θ(127.5°)	-3.58/-2.5	-2.54/-1.54	-2.22/-2.94	-2.98/-1.92	0.01/1.34	1.26/0.59	1.26/2.39	2.37/1.68	0.21/0.02	-0.5/-1.06	-0.37/0.07	-1.05/-1.27	-0.91/-2.02	-4.41/-4.07	-3.62/-7.56	-6.75/-2.21	-3.56/-2.65	-1.95/-2.26	-5.17/-4.79	-4.91/-3.63	-2.97/-3.99	-3.55/-4.1	-3.52/-1.12	-1.87/-3.39
Θ(135°)	-5.08/-3.38	-3.09/-2.31	-0.73/-1.46	-1.45/-0.58	0.68/0.76	0.17/-0.24	-0.36/0.2	0.78/0.25	-0.67/-1.29	-1.72/-1.67	-0.63/-1.33	-1.64/-1.64	-3.66/-5.93	-4.11/-4.83	-7.05/-9.23	-5.85/-3.61	-3.12/-6.45	-4.97/-6.02	-6.21/-4.21	-3.9/-7.48	-1.96/-1.95	-6.22/-5.88	-3.53/-2.46	-0.5/-1.4
Θ(142.5°)	-3.93/-5.07	-1.75/-1.59	-2.83/-2.81	-2.67/-3.3	-3.99/-4.22	-4.17/-4.18	-2.99/-2.53	-2.15/-2.28	-3.28/-3.98	-4.66/-3.35	-3.04/-3.32	-3/-3.56	-4.86/-6.08	-6.53/-6.44	-6.82/-8.28	-7.23/-6.25	-5.17/-6.14	-4.14/-4.95	-5.93/-5.35	-4.5/-5.6	-4.45/-4.55	-5.99/-8.92	-2.59/-8.92	-2.55/-1.89
Θ(150°)	-1.38/-1.44	-1.2/-1.94	-2.86/-2.73	-2.95/-3.64	-5.1/-5.91	-5.35/-5.17	-4.92/-4.57	-4.87/-5.45	-6.66/-8.04	-7.61/-5.66	-4.52/-3.37	-2.59/-1.39	-1.44/-2.08	-3.03/-3.73	-3.37/-1.98	-2.31/-4.95	-7.6/-6.5	-3.08/-2.6	-3.34/-3.33	-3.04/-2.9	-3.6/-4.52	-3.52/-1.71	-1.29/-0.36	-0.15/-0.72
Θ(157.5°)	1.55/0.1	-1.82/-3.91	-6.28/-7.73	-7.39/-6.19	-5.47/-5.18	-5.36/-5.51	-5.37/-4.79	-4.62/-5.23	-6.81/-7.95	-7.9/-7.65	-7.66/-6.91	-6.47/-6.19	-6.43/-6.64	-5.96/-4.36	-3.66/-4.07	-6.67/-9.59	-7.86/-7.16	-5.28/-3.93	-4.18/-5.21	-5.51/-6.29	-6.15/-5.29	-4.92/-3.02	-0.69/0.9	1.73/1.98
Θ(165°)	-0.64/-1.54	-2.79/-4.23	-5.05/-4.85	-4.54/-5.27	-6.23/-6.71	-7.14/-6.84	-6.17/-6.08	-6.09/-6.33	-6.3/-5.58	-4.73/-4.02	-3.61/-3.43	-2.88/-2.64	-2.89/-3.27	-4.24/-4.99	-5.27/-5.78	-6.43/-6.13	-5.5/-5.41	-5.62/-5.9	-6.11/-6.37	-6.01/-4.93	-2.94/-1.16	-0.48/-0.37	-0.29/-0.39	-0.49/-0.52
Θ(172.5°)	-3.88/-3.91	-4.96/-6	-6.61/-7.02	-7.59/-8.37	-8.87/-9.4	-8.11/-7.51	-7.29/-7.41	-7.35/-7.38	-6.82/-6.65	-6.59/-5.79	-5.43/-4.78	-4.99/-5.65	-6.58/-7.37	-7.79/-8.52	-9.28/-9.42	-9.4/-8.6	-8.45/-8.11	-8.33/-7.89	-7.33/-6.33	-5.3/-4.64	-4.09/-3.09	-3.09/-3.72	-4.41/-5.06	-4.8/-4.3
Θ(180°)	-6.49/-6.44	-7.82/-7.83	-7.79/-7.76	-8.14/-8.21	-8.16/-7.75	-7.6/-7.61	-7.38/-7.13	-6.13/-5.04	-4.27/-3.86	-3.76/-3.78	-3.72/-3.81	-3.81/-3.92	-4.18/-4.65	-5.02/-5.34	-5.85/-6.51	-6.77/-7.84	-8.98/-10.65	-11.01/-10.53	-9.39/-8.51	-8.09/-7.44	-6.68/-6.52	-7.15/-8.81	-9.59/-9	-8.31/-7.89
Freq(Hz)	5.785G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.63/-4.54	-2.53/-1.08	0.18/1.02	1.58/2.05	2.25/2.3	2.21/1.96	1.66/1.22	1.12/1.02	0.86/0.38	-0.23/-1.19	-2.35/-3.81	-5.66/-6.06	-5.91/-4.47	-2.62/-0.87	0.19/0.91	1.38/1.6	1.79/1.92	1.97/1.91	1.88/1.59	1.27/0.84	0.26/0.42	-0.75/-1.42	-2.56/-4.37	-7.56/-6.41
Θ(7.5°)	-5.43/-4.03	-2.14/-1.24	-0.38/0.54	0.94/1.32	1.74/2.04	2.11/2	1.64/1.36	1.35/1.52	1.47/0.99	0.49/-0.23	-1.03/-2.07	-3.37/-5.13	-6.26/-5.73	-4.66/-3.04	-1.67/-0.53	0.48/1.14	1.52/1.75	1.89/1.83	1.6/1.16	0.58/-0.04	-0.82/-1.5	-2.08/-3.42	-5.43/-7.04	-7.31/-6
Θ(15°)	-5.38/-4.28	-3.63/-3.37	-2.48/-1.36	-0.50/-19	0.85/1.4	1.8/2.06	2.01/2.06	1.72/1.39	0.99/0.73	0.2/-0.43	-1.53/-2.9	-4.2/-5.11	-5.63/-5.37	-4.5/-3.24	-2.03/-1.01	-0.09/0.6	0.99/1.23	1.21/1.03	0.57/0.13	-0.51/-1.41	-2.35/-3.36	-4.43/-5.11	-6.1/-6.13	-6.2/-5.85
Θ(22.5°)	-4.09/-5.33	-5.6/-4.52	-3.34/-1.81	-0.71/-0.12	0.4/1.11	1.63/2.03	2.26/2.28	2.12/1.81	1.37/0.76	0.02/-1.33	-3.18/-5.37	-7.46/-8.7	-8.98/-7.35	-5.14/-3.13	-1.75/-0.89	-0.17/0.53	0.97/1.1	0.84/0.31	-0.6/-1.57	-2.57/-3.16	-2.94/-2.69	-2.47/-2.69	-3.07/-3.96	
Θ(30°)	-2.33/-2.61	-2.13/-1.71	-1.23/-0.92	-0.67/-0.45	-0.07/0.69	0.99/1.51	2.17/2.42	2.48/2.1	1.48/0.87	-0.3/-2.05	-4.8/-6.94	-7.4/-7.52	-7.87/-7.56	-6.28/-5.13	-3.99/-2.98	-1.58/-0.32	0.17/0.24	0.12/0.17	-0.64/-1.5	-2.33/-2.36	-1.81/-1.29	-0.98/-1.09	-1.38/-1.59	
Θ(37.5°)	-3.74/-2.4	-4.75/-3.73	-2.71/-1.3	-0.19/-0.27	0.24/0.02	0.17/0.55	1.08/1.45	1.68/1.57	0.9/-0.18	-1.51/-3.64	-6.85/-8.86	-10.07/-8.41	-6.09/-4.71	-3.6/-2.79	-2.45/-1.72	-0.5/-0.08	-0.04/-0.13	-0.37/-0.77	-0.23/-0.19	-0.57/-0.93	-0.91/-1.38	-1.76/-1.72	-1.89/-2	-2.37/-3.25
Θ(45°)	-5.09/-5.62	-5.75/-4.55	-2.07/-0.69	-0.28/-0.5	-0.62/-0.92	-0.82/-0.87	-0.89/-0.56	0.24/0.81	0.76/-0.35	-2.42/-4.63	-7.04/-7.27	-6.88/-7.24	-6.75/-6.43	-4.89/-3.08	-2.21/-1.28	-0.71/-0.5	-0.16/-0.58	-2.15/-2.36	-1.4/-0.48	-0.07/-0.06	-1.13/-1.92	-2.71/-3.26	-3.61/-3.95	-4.16/-4.35
Θ(52.5°)	-4.76/-1.43	-2.57/-3.16	-3.16/-2.92	-2.57/-2.69	-2.65/-2.52	-1.97/-1.41	-0.99/-1.21	-1.09/-0.82	-0.9/-1.83	-3.54/-4.18	-4.7/-5.97	-4.98/-5.27	-4.14/-2.87	-2.22/-3.18	-1.22/-0.59	-0.86/-1.78	-2.76/-2.71	-2.46/-2.07	-1.89/-2.19	-3.06/-3.68	-3.96/-3.33	-2.32/-1.69	-2.14/-2.24	
Θ(60°)	-5.89/-6.26	-5.81/-4.91	-4.18/-2.82	-2.79/-3.12	-3.28/-3.37	-2.42/-2.01	-1.35/-0.15	-0.21/-0.21	-1.24/-2.37	-3.23/-4.02	-4.64/-4.23	-3.99/-4.6	-5.82/-6.06	-7.48/-6.62	-4.71/-2.92	-1.97/-2.46	-3.34/-4	-3.93/-4.31	-3.96/-3.77	-4.28/-4.2	-2.39/-3.8	-4.58/-3.65	-2.87/-3.58	-4.07/-5.38
Θ(67.5°)	-8.18/-6.53	-5.8/-5.4	-5.09/-4.27	-3.66/-3.3	-2.63/-2.1	-0.99/-0.54	-0.59/-1.37	-2.82/-2.5	-2.11/-2.57	-4.37/-6.17	-5.33/-3.46	-3.28/-3.87	-4.58/-4.47	-3.65/-4.75	-5.28/-4.75	-3.27/-4.18	-3.28/-3.34	-4.84/-4.05	-3.05/-3.16	-4.02/-3.81	-3.79/-3.81	-4.66/-5.79	-5.42/-6.34	-7.98/-7.93
Θ(75°)	-6.41/-6.07	-5.82/-5.39	-4.92/-3.55	-5.26/-5.8	-5.48/-4.01	-1.97/-1.36	-1.75/-2.03	-2.81/-2.77	-2.55/-3.78	-5.29/-4.17	-2.98/-2.03	-1.82/-2.54	-3.25/-3.74	-3.72/-5.71	-6.41/-6.59	-5.56/-4.53	-2.32/-2.59	-3.12/-3.32	-2.95/-2.85	-2.57/-2.92	-4.13/-4.44	-5.51/-7.7	-7.76/-7.71	-8.54/-8.11
Θ(82.5°)	-9.5/-8.61	-6.61/-4.8	-5.07/-6.75	-8.12/-8.99	-6.16/-3.94	-2.91/-0.92	0.1/-1.55	-3.08/-3.96	-4.47/-3.98	-3.78/-4.93	-6.41/-7.3	-6.77/-5.4	-4.94/-7.23	-7.55/-6.27	-4.33/-3.33	-2.13/-2.95	-2.53/-3.15	-3.87/-2.26	-1.07/-2.51	-4.41/-3.83	-3.36/-3.86	-4.95/-6.37	-8.39/-9.58	
Θ(90°)	-6.57/-6.35	-6.41/-5.33	-5.58/-5.29	-5.29/-5.96	-6.18/-5.35	-3.61/-1.19	0.5/0.59	0.89/0.84	-0.31/-0.89	-2.02/-3.89	-5.26/-6.09	-5.36/-4.02	-4.07/-3.36	-3.41/-5.09	-4.6/-3.21	-2.91/-0.88	-0.76/-1.57	-1.82/-1.69	-1.85/-0.99	-0.27/-1.26	-2.7/-3.41	-3.58/-4.52	-6.2/-9.12	-11.92/-9.51
Θ(97.5°)	-8.56/-7.26	-5.93/-3.68	-3.62/-3.41	-4.4/-5.1	-4.02/-3.04	-1.13/-0.56	-0.21/-0.51	0.48/0.04	0.34/0.07	0.25/-0.48	-1.26/-1.78	-5.05/-6.08	-3.5/-2.73	-4.49/-6.12	-9.01/-8.52	-3.10/13	-0.47/-1.14	-0.27/-1.22	-0.54/-1.21	-1.99/-2.42	-2.41/-3.93	-5.85/-8.19	-9.01/-9.78	-7.99/-8.34
Θ(105°)	-7.69/-7.27	-5.68/-5.23	-3.98/-3.32	-3.08/-1.63	-0.33/-0.29	-1.19/-1.58	-1.92/-1.76	-0.97/0.36	-0.15/-0.87	-0.79/0.07	-0.12/-0.98	-2.79/-3.6	-4.2/-3.76	-3.89/-5.56	-6.98/-5.34	-4.29/-2.66	-1.89/-2.23	-2.2/-3.76	-2.29/-2.59	-1.89/-2.04	-5.57/-9.2	-7.97/-7.77	-7.4/-5.72	
Θ(112.5°)	-8.73/-7.95	-6.88/-7.07	-6.56/-4.82	-2.95/-1.14	-0.01/0.3	-0.46/-0.84	-0.89/-1.48	0.08/0.67	-0.16/-1.37	-2.21/-3.87	-5.91/-4.11	-4.89/-5.69	-6.24/-3.89	-3.7/-7.47	-9.77/-10.16	-6.73/-3.41	-2.32/-3.41	-2.32/-2.48	-1.1/-1.68	-5.35/-4	-4.24/-5.22	-6.14/-10.7	-8.16/-7.52	-7.31/-7.47
Θ(120°)	-7.63/-8.15	-9.78/-10.25	-9.11/-6.95	-3.86/-1.94	-0.9/-0.99	-0.03/-0.31	-0.18/-0.83	-0.83/-0.9	-1.08/-1.6	-3.65/-7.09	-8.58/-6.66	-6.25/-7.78	-8.39/-6.78	-7.19/-6.99	-6.36/-6.67	-8/-4.43	-5.1/-3.09	-2.66/-3.66	-2.09/-2.22	-4.48/-2.12	-1.59/-3.4	-5.43/-7.55	-7.55/-6.02	-3.83/-6.11
Θ(127.5°)	-9.61/-9.49	-9.89/-8	-5.26/-3.96	-2.1/0.3	-0.27/0.47	0.67/0.83	0.5/-0.33	-1.17/-2.01	-2.18/-2.98	-4.51/-6.21	-6.24/-5.47	-5.36/-6.43	-6.01/-4.32	-3.83/-6.34	-7.54/-6.23	-4.93/-4.64	-2.65/-2.62	-3.18/-5.15	-2.02/-2.7	-3.15/-1.81	-0.92/-3.42	-5.84/-8.88	-10.15/-11.77	-5.97/-5.66
Θ(135°)	-4.66/-5.97	-5.76/-6.61	-5.86/-4.69	-2.89/-0.87	0.05/-0.12	-0.46/-0.67	-0.83/-1.85	-3.13/-4.16	-4.71/-4.74	-5.01/-5.12	-4.6/-3.67	-4.89/-6.93	-5.4/-2.07	-3.66/-9.21										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(60°)	3.26/3.77	4.18/4.65	4.43/4.08	3.16/2.41	2.09/2.63	3.27/3.41	3.19/2.27	1.33/0.85	1.09/1.28	0.99/0.85	0.68/-0.25	-0.22/0.26	0.29/-0.09	-0.72/0.17	0.6/0.73	0.4/-0.57	-3.09/-4.51	-4.79/-5.76	-4.21/-3.08	-2.73/-1.76	-1.49/-1.36	-0.19/0.98	1.96/2.34	2.41/2.79
Θ(67.5°)	1.66/2.31	3.25/3.66	3.68/3.74	2.75/1.37	0.71/1.29	2.05/2.78	2.43/2.08	2.21/1.29	0.75/0.62	0.87/1.12	2.11/1.08	0.45/-0.03	-0.67/-0.85	-0.67/0.2	0.31/-0.2	-1.53/-3.55	-3.41/-2.77	-3.33/-4.11	-4.83/-4.54	-3.94/-5.19	-4.13/-2.55	-1.89/-0.76	0.81/1.56	1.97/1.64
Θ(75°)	1.27/1.23	1.05/1.61	1.81/1.63	1.17/0.2	-0.94/-0	1.18/2.34	2.69/2.62	2.69/2.17	1.06/-0.48	0.41/1.57	2.49/1.35	0.74/-0.62	-0.61/0.02	0.33/-0.25	-0.88/-0.07	-0.1/-1.33	-1.52/-1.54	-1.84/-3.1	-3/2.89	-1.63/-1.18	-1.72/-0.1	-0.74/-0.93	0.06/0.69	1.26/1.26
Θ(82.5°)	0.56/1.15	1.01/1.76	1.4/1.21	0.55/0.43	-0.49/0.26	1.73/2.21	2.01/2.06	2.25/1.62	0.12/-0.49	0.20/-77	2.54/2.03	0.13/-0.07	0.43/0.09	-0.2/-0.72	-1.29/0.12	-0.28/-1.4	-0.84/-0.42	-1.81/-1.46	-2.58/-4.1	-2.63/-0.5	-0.57/-0.73	-0.38/-1.28	-0.70/1.7	-0.07/0.64
Θ(90°)	1.47/2.07	1.91/2.23	0.57/-0.47	-0.87/0.3	0.78/1.52	2.34/2.04	1.9/1.88	1.92/0.96	-1.19/-2.47	-2.14/-0.74	1.42/0.06	-0.16/-2.09	-1.73/-0.91	-0.95/-1.28	-0.43/0.72	0.26/-0.14	0.29/1.12	0.51/-0.26	-0.54/-2.59	-0.64/-0.09	-0.65/-1.43	-0.52/-1.07	-0.77/0.15	0.64/1.2
Θ(97.5°)	0.68/0.81	0.19/0.73	0.59/-1.16	-1.13/-0.83	1.67/3.26	3.02/2.21	1.15/0.93	1.57/0.27	-1.55/-2.4	-1.85/-0.83	-0.76/-1.33	-1.18/-2.42	-1.28/-1.66	-1.72/-2.81	-1.51/-0.79	-0.96/0.47	1.68/1.45	0.75/1.26	0.61/-0.85	-1.39/-0.21	0.21/-1.54	-1.28/-1.3	-2.03/-0.23	1.34/0.75
Θ(105°)	-1.92/-1.21	-0.46/0.47	1.13/0.48	0.71/1.36	2.12/3.35	3.46/3.13	1.56/1.04	1.35/-0.07	-2.53/-3.02	-2.38/-1.93	-1.76/-1.97	-1.15/-0.93	-0.36/-0.63	-1.73/-3.72	-3.34/-2.92	-2.04/-0.81	0.56/1.76	0.38/-1.22	-2.02/-3.39	-2.29/-2.31	-2.24/-0.94	-0.38/-0.57	-1.58/-0.84	-0.07/-1.22
Θ(112.5°)	-1.64/-0.79	0.10/56	1.64/1.3	0.74/0.51	0.15/2.11	2.72/1.71	0.83/1.03	1.67/0.84	-1.21/-2.26	-1.72/-1.53	-2.29/-0.5	0.49/-0.06	0.83/-0.95	-2.65/-5.02	-4.72/-5.09	-3.34/-2.54	0.56/0.28	-1.03/-0.1	-1/2.2	-2.16/-0.21	-1.6/-2.12	-2.74/-4	-2.82/-1.26	-0.89/-1.53
Θ(120°)	-1.89/-0.66	0.89/1.17	1.2/1.46	1.39/1.52	1.72/1.87	2.36/2.1	1.24/1.12	1.34/1.47	0.85/0.7	-0.22/-0.81	-2.13/-1.47	-1.59/-2.61	-1.5/-2.21	-3.92/-5.81	-5.81/-8	-7.48/-5.37	-1.69/-4.03	-4.05/-2.21	-2.98/-5.06	-2.81/-2.86	-3.67/-3.21	-2.97/-2.76	-1.81/-0.89	-0.06/-1
Θ(127.5°)	-2.99/-2.96	-2.8/-1.79	-1.41/-0.14	0.52/1.02	1.34/1.68	1.09/1.3	1.3/1.45	1.83/1.42	0.82/0.26	-0.26/-0.5	-0.51/-1.34	-2.22/-2.6	-1.83/-3.85	-6.26/-3.29	-2.51/-6.11	-7.1/-2.27	-0.83/-3.25	-3.47/-2.4	-4.48/-6.72	-2.61/-3.23	-3.49/-4.4	-3.49/-6.04	-2.68/-2.35	-1.92/-2.04
Θ(135°)	-4.66/-4	-3.8/-4.02	-1.65/-1.5	-0.54/0.07	0.82/1.33	1.16/0.49	1/1.36	1.43/1.47	0.87/0.08	-0.68/-1.47	-1.19/-2.49	-3.54/-2.54	-1.77/-3.34	-1.6/-0.24	-2.31/-5.95	-6.46/-2.54	-2.65/-4.17	-4.49/-3.83	-4.81/-6.11	-5.1/-2.15	-1.03/-1.88	-4.48/-4.13	-3.33/-1.6	-0.14/-2.5
Θ(142.5°)	-4.93/-6.03	-2.62/-1.62	-1.33/-0.86	-0.43/0.3	0.52/-0.29	-1.8/-3.88	-3.99/-2.57	-1.84/-1.8	-2.18/-2.45	-3.51/-4.33	-3.07/-3.07	-3.01/-1.95	-3.4/-7.84	-8.31/-6.78	-6.02/-8.52	-5.78/-4.81	-2.94/-2.04	-1.65/-4.11	-5.66/-2.77	-2.7/-4.94	-3.8/-3.47	-5.02/-5.34	-0.79/-0.82	-2.36/-2.89
Θ(150°)	-2.72/-1.04	-0.35/-0.65	-0.91/-0.68	-0.9/-1.93	-3.38/-5.03	-5.19/-4.62	-4/-3.83	-3.52/-2.93	-3.15/-4.23	-5.84/-5.16	-3.17/-2.95	-3.14/-7.84	-2.71/-4.73	-4.28/-3.06	-2.2/-1.77	-3.75/-5.94	-4.72/-2.84	-2.43/-3.86	-4.74/-4.56	-4.66/-4.38	-5.95/-6.72	-4.59/-3.47	-2.6/-1.46	-1.36/-2.49
Θ(157.5°)	-1.33/0.65	-0.39/-1.57	-2.74/-3.52	-4.21/-4.83	-3.29/-3.64	-3.9/-4.79	-4.93/-4.68	-5.36/-5.94	-6.11/-6.91	-6.98/-6.28	-5.23/-4.81	-3.66/-2.73	-2.58/-2.82	-3.74/-3.46	-6.34/-4.86	-6.55/-7.22	-7.27/-7.09	-6.12/-5.05	-7.91/-8.07	-9.41/-9.71	-5.93/-2.72	-0.67/0.45	1.36/1.79	
Θ(165°)	-1.88/-2.49	-2.7/-2.68	-2.98/-3.76	-3.96/-4.18	-4.74/-6.15	-6.5/-5.57	-4.72/-3.8	-3.82/-4.54	-5.11/-5.84	-6.54/-6.75	-6.16/-4.9	-3.7/-2.88	-2.49/-2.43	-2.42/-2.49	-2.92/-3.78	-4.92/-6.35	-7.29/-6.94	-5.64/-4.11	-2.86/-2.95	-3.36/-3.15	-2.85/-2.67	-2.73/-2.33	-1.45/-1.02	-1.18/-1.4
Θ(172.5°)	-3.36/-3.16	-3.75/-4.15	-4.84/-5.42	-5.87/-6.61	-7.28/-7.55	-6.72/-6.1	-5.83/-5.66	-6.23/-6.88	-7.23/-7.42	-7.13/-7.08	-6.62/-5.97	-5.46/-5.44	-5.36/-5.52	-6.18/-7.24	-8.44/-9.71	-9.89/-9.56	-8.99/-8.48	-7.4/-6.38	-5.61/-5.48	-5.22/-4.41	-4.13/-4.44	-4.52/-4.69	-4.81/-5.17	-4.93/-4.19
Θ(180°)	-7.37/-8.33	-10.03/-9.9	-10.14/9.39	-9.42/-9.27	-8.78/-7.97	-7.36/-7.32	-7.18/-7.31	-8.08/-8.09	-7.36/-7.03	-6.87/-6.91	-6.74/-6.45	-5.78/-5.43	-5.31/-5.62	-6.19/-6.63	-6.72/-6.88	-7.5/-7.8	-7.86/-8.34	-8.16/-7.51	-6.74/-5.82	-5.18/-5.18	-5.12/-5.72	-6.39/-7.91	-8.99/-7.84	-6.86/-7.05

5G option7

Freq(Hz)	5.2G/Pol.	PhiL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)	
Theta(0°)	-3.56/-3.41	-3.12/-2.6	-2.22/-2.24	-2.28/-2.16	-1.89/-1.67	-1.57/-1.8	-1.6/-1.28	-1.01/-0.78	-0.7/-0.69	-0.91/-1.09	-1.3/-1.58	-2.1/-2.21	-2.21/-1.65	-1.31/-1.23	-1.48/-1.62	-1.89/-2.08	-2.21/-2.43	-2.21/-1.86	-1.41/-1.09	-0.85/-0.84	-1.05/-1.03	-0.93/-0.92	-1.01/-1.3	-2.2/-3.03	
Theta(7.5°)	-2.06/-1.49	-1.3/-1.49	-1.66/-1.98	-2.18/-2.04	-1.96/-1.86	-1.95/-1.97	-1.51/-1.02	-0.65/-0.28	-0.07/-0.04	-0.04/-0.38	-0.87/-1.54	-2.27/-3.04	-3.21/-2.99	-2.52/-2.48	-2.5/-2.65	-2.8/-2.9	-2.64/-2.38	-2.08/-2.07	-1.77/-1.61	-1.63/-1.88	-2.07/-2.17	-2.27/-2.32	-2.28/-2.46	-2.91/-2.39	
Theta(15°)	-2.35/-1.95	-2.05/-2.02	-1.84/-1.69	-1.54/-1.32	-1.41/-1.74	-2.03/-2.24	-2.2/-1.6	-0.82/0.01	0.54/0.88	0.97/0.78	-0.29/-0.42	-1.15/-1.97	-2.77/-3.27	-3.38/-3.2	-3.53/-3.35	-2.78/-2.65	-2.54/-2.75	-3.46/-3.94	-4.42/-4.57	-4.67/-4.45	-4.15/-3.69	-4.23/-2.87	-3.23/-2.87	-3.23/-2.87	
Theta(22.5°)	-4.59/-4.04	-3.89/-3.45	-3.27/-2.86	-2.66/-2.6	-2.53/-2.31	-1.83/-1.28	-0.7/0.01	0.41/0.83	1.07/1.01	0.82/0.54	-0.05/-0.52	-1.14/-1.97	-2.71/-3.68	-4.41/-4.58	-4.29/-3.75	-3.44/-3.57	-4.18/-5.19	-4.84/-4.52	-4.1/-4.32	-4.86/-5.35	-5.85/-6.16	-5.89/-5.54	-5.28/-4.95	-4.75/-4.83	
Theta(30°)	-4/-3.47	-2.71/-2.31	-2.43/-2.25	-1.79/-1	-0.36/0.05	0.47/0.74	1/1.31	1.82/2.07	2.01/1.61	0.96/0.45	-0.02/-0.56	-1.28/-2.48	-4.41/-6.84	-9.07/-9.87	-8.82/-6.82	-4.79/-3.73	-3.87/-5.15	-5.88/-4.8	-4.2/-4.13	-4.34/-4.73	-5.03/-5.05	-5.65/-6.38	-6.71/-7.55	-7.92/-6.26	
Theta(37.5°)	-2.31/-1.42	-0.92/-1.2	-1.24/-0.86	-0.06/0.9	1.19/1.45	1.71/1.96	2.33/2.61	2.73/2.64	2.23/1.66	0.98/0.25	-0.67/-1.65	-2.4/-3.79	-5.91/-8.77	-11.1/-9.89	-9.11/-8.24	-7.53/-6.53	-5.82/-5.71	-4.9/-4.62	-2.88/-1.59	-4.42/-2.24	-3.49/-5.09	-6.22/-6.92	-7.14/-6.02	-4.92/-3.31	
Theta(45°)	-2.89/-1.95	-1.5/-1.36	-0.57/0.23	1.03/1.81	2.48/3.11	3.53/3.59	3.94/4.45	4.61/4.35	3.75/2.88	1.84/1.05	0.3/-0.93	-2.54/-4.01	-4.94/-5.79	-6.81/-8.06	-8.77/-8.29	-7.37/-6.7	-6.99/-6.97	-6.57/-5.45	-5.07/-4.74	-4.21/-3.86	-3.88/-5.06	-5.15/-4.43	-4.01/-3.25	-2.91/-2.43	
Theta(52.5°)	-4.42/-2.43	-1.71/-1.85	-1.66/-1.11	-0.29/0.98	2.25/3.08	3.3/3.3	3.72/4.2	4.36/3.89	2.96/1.81	0.24/-0.7	-0.8/-1.79	-2.98/-3.86	-4.95/-7.5	-6.49/-8.09	-7.47/-7.35	-6.01/-5.84	-6.71/-6.64	-5.93/-6.45	-4.53/-4.56	-4.83/-5.26	-5.1/-6.1	-6.6/-5.49	-6.6/-5.49	-6.6/-5.49	
Theta(60°)	-6.53/-3.87	-2.2/-0.85	-0.10/2.7	0.39/0.87	1.58/2.06	2.18/1.94	2.22/2.99	3.66/3.79	3.22/1.81	-0.23/-1.6	-1.82/-2.09	-2.85/-4	-5.79/-5.73	-5.4/-5.87	-7.69/-9.05	-7.18/-5.98	-5.75/-5.5	-6.61/-8.75	-8.94/-7.59	-5.98/-5.18	-6.59/-6.68	-6.88/-6.55	-8.42/-10.29	-11.75/-8.25	
Theta(67.5°)	-4.32/-3.52	-2.64/-2.05	-1.19/-0.23	0.24/0.79	0.8/1.42	2.07/2.41	2.84/3.36	3.66/3.44	2.45/0.86	-1.34/-1.75	-2.03/-2.54	-3.48/-4.65	-5.73/-4.47	-4.55/-5.18	-6.56/-7.95	-7.3/-5.92	-5.43/-6.09	-8.76/-10.8	-10.81/-9.72	-7.58/-6.98	-7.5/-6.24	-5.55/-5.78	-6.7/-6.34	-5.01/-3.78	
Theta(75°)	-5.37/-4.6	-4.82/-3.79	-3.57/-2.22	-0.53/0.98	1.71/1.74	1.62/1.5	1.54/1.58	1.77/2.17	2.36/1.72	2.07/-1.42	-2.85/-4.25	-5.14/-6.13	-6.38/-5.84	-5.28/-5.33	-5.34/-6.07	-6.91/-6.88	-8.51/-10.14	-11.41/-9.69	-10.36/-9.85	-11.69/-9.99	-7.65/-7.49	-7.66/-7.62	-7.28/-6.77	-5.79/-5.48	
Theta(82.5°)	-5.7/-7.14	-7.26/-6.28	-4.61/-2.52	-1.36/-0.42	0.68/1.5	1.57/1.16	1.31/1.2	1.29/2.21	3.23/2.98	1.46/-0.8	-3.58/-6.52	-7.78/-7.13	-5.57/-4.4	-5.01/-6.62	-8.15/-7.57	-4.23/-4.22	-5.41/-7.35	-5.99/-5.17	-5.87/-4.84	-6.39/-6.96	-6.37/-6.29	-6.64/-6.5	-5.59/-5.25	-5.7/-5.79	
Theta(90°)	-5.99/-0.47	-3.39/-1.77	-1.5/-0.81	-0.26/0.8	1.94/2.3	2.11/2.16	2.32/4.6	2.76/3.15	3.74/3.3	1.75/-0.91	-0.59/-6.52	-10.5/-12.01	-10.83/-9.52	-11.08/-11.96	-11.84/-11.4	-6.25/-4.18	-5.07/-5.38	-5.58/-6.42	-9.22/-11.56	-9.59/-6.53	-6.43/-7.31	-5.12/-4.6	-4.56/-4.71	-4.87/-5.13	
Theta(97.5°)	-6.24/-4.28	-3.22/-1.49	-0.42/0.44	0.94/1.24	1.78/1.84	1.86/1.6	1.85/2.54	3.01/2.88	2.63/1.68	-1.26/-5	-6.09/-6.55	-7.28/-7.65	-9.84/-7.76	-10.49/-9.83	-9.63/-8.99	-6.08/-6.03	-6.84/-3.45	-2.87/-5.92	-5.58/-6.1	-8.43/-7.33	-7.24/-8.11	-9.97/-8.3	-6.53/-6.69	-6.34/-6.93	
Theta(105°)	-6.52/-4.57	-5.12/-3.78	-2.56/-1.73	-0.01/1.39	2.61/2.9	2.58/1.92	1.36/2.09	2.42/2.86	3.21/2.88	1.78/-0.21	-3.08/-4.59	-5.69/-5.82	-5.33/-3	-4.47/-5.95	-9.11/-9.06	-7.47/-3.62	-5.71/-6.7	-2.37/-3.89	-7/-5.88	-6.12/-6.76	-7.02/-8.57	-10.51/-10.83	-10.9/-12.04	-8.36/-8.3	
Theta(112.5°)	-6.27/-4.86	-4.51/-3.25	-2.28/0.15	1.47/2.66	2.79/2.58	2.05/1.26	0.47/0.6	2.45/2.69	3.04/3.22	0.49/-2.13	-8.87/-7.21	-5.27/-4.16	-6.71/-7.16	-6.76/-10.66	-7.08/-4.75	-3.52/-6.25	-3.5/-7.4	-7.05/-6.02	-5.9/-6.27	-10.44/-8.25	-6.09/-4.99	-10.54/-10.83	-8.22/-7.54	-8.22/-7.54	
Theta(120°)	-8.02/-5.33	-3.04/-1.78	-0.09/1.03	1.51/1.75	2.12/2.15	1.85/1.3	0	0.95/0.89	0.79/1.65	2.27/2.22	1.32/-1.43	-4.96/-5.69	-4.91/-4.4	-4.54/-4.36	-7.08/-6.43	-7.25/-8.59	-8.04/-6.04	-7.78/-5.94	-5.71/-8.92	-9.45/-7.14	-7.46/-7.05	-11.01/-9.52	-6.69/-5.43	-5.52/-7.45	-7.01/-6.86
Theta(127.5°)	-6.6/-6.48	-4.97/-3.62	-2.29/1.35	-0.3/1.04	1.72/2.18	2.32/0.6	1.61/1.81	2.28/2.61	2.53/2.34	1.52/0.29	-2.55/-6.07	-10.04/-10.33	-9.58/7.94	-8.29/-7.43	-10.41/-9.47	-9.49/-8.37	-7.8/-5.79	-5.4/-9.86	-11.74/-9.73	-7.94/-6.92	-6/-6.92	-4.69/-3.32	-4.82/-4.4	-5.91/-7	
Theta(135°)	-5.9/-4.52	-3.74/-3.77	-2.56/-1.2	-0.37/0.27	0.69/1.07	1.72/2.54	3.21/3.73	4.06/4.07	3.78/3.12	1.99/0.14	-2.51/-5.21	-6.4/-6.2	-5.71/3.78	-3.5/-5.04	-5.19/-5.98	-8.46/-6.87	-6.04/-5.63	-6.06/8.62	-8.14/6.39	-5.09/-3.45	-3.89/-6.76	-7.41/-5.5	-7.72/-6.55	-4.14/-4.52	
Theta(142.5°)	-5.04/-5.22	-4.07/-4.41	-5/-5.15	-5.12/-4.15	-3.08/-1.72	-0.38/0.7	1.73/2.48	2.84/2.53	1.25/-0.8	-2.57/-2.66	-2.1/-2.25	-2.54/-4.36	-4.33/-3.73	-4.03/-4.58	-6.4/-8.05	-6.83/-5.61	-2.98/-3.4	-6.04/9.94	-11.84/-9.62	-8.22/-7.5	-6.43/-6.66	-6.07/-7.38	-5.29/-4.02	-4.91/-4.53	
Theta(150°)	-2.48/-2.28	-1.73/-1.42	-1.06/-1.06	-1.06/-1.06	-0.72/-0.48	0.01/0.43	0.91/1.37	1.68/1.96	1.6/0.68	-0.74/-1.89	-2.63/-3.88	-3.97/-4.18	-6.24/-6.78	-7.07/-8.39	-8.59/-7.1	-5.41/-5.23	-5.35/-7.06	-7.63/-7.28	-6.93/-6.26	-5.72/-4.47	-4.29/-4.64	-4.22/-4.18	-2.54/-1.91	-1.94/-2.13	
Theta(157.5°)	-2.16/-1.68	-1.35/-1.29	-1.24/1.06	-1.22/1.61	-1.67/-1.68	-1.57/1.27	-0.9/-0.67	1.69/0.92	-1.25/-2.06	-3.09/-4.13	-5.51/-6.01	-3.94/-4.33	-3.99/-4.31	-5.26/-5.56	-4.77/-7.77	-3.77/7.47	-6.27/-7.56	-8.13/-9.41	-9.93/-9.46	-7.68/-6.28	-6.62/-7.52	-7.37/-6.01	-4.18/-3.65	-3.35/-2.53	
Theta(165°)	-2.2/-2.42	-2.18/-2.19	-2.2/-2.65	-3.51/-4.45	-4.95/-5.06	-5.27/5.22	-4.98/-5.03	-4.94/-4.38	-4.07/-3.91	-4.24/-4.56	-4.76/-4.91	-5.15/-5.14	-5.12/-4.88	-4.59/-4.76	-5.17/-5.43	-5.9/-6.62	-7.65/-8.5	-8.36/-8.16	-7.51/-6.92	-6.59/-6.78	-6/-5.29	-4.37/-4.09	-3.42/-3.23	-3.11/-2.53	
Theta(172.5°)	-5.48/6.37	-6.62/-7.04	-7.67/-8.69	-10.04/11.01	-11.37/-11.45	-11.21/-10.05	-9.12/-8.22	-7.17/-6.19	-5.47/-4.89	-5.12/5.98	-7.14/-7.95	-7.19/-6.03	-5.51/5.46	-5.67/-6.62	-7.69/-8.68	-8.2/-7.57	-6.45/-7.38	-5.08/5.27	-5.6/-6.03	-5.99/-6.04	-5.94/-6.05	-6.26/-6.31	-5.82/-4.86	-4.44/-5.01	
Theta(180°)	-8.09/-8.03	-7.97/-7.66	-7.01/-6.93	-7.67/-7.06	-7.85/-8.17	-8.11/-8.28	-8.11/-7.91	-7.65/-7.03	-6.47/-6.14	-6.14/-6.6	-7.59/-8.67	-10.05/-10.1	-10.22/-9.84	-9.6/-8.84	-8.16/-7.52	-6.8/-6.41	-6.14/-6.31	-6.67/-7.27	-8.02/-8.61	-9.06/-9.26	-10.08/-10.39	-10.57/-10.13	-8.76/-8.64	-8.1/-8.15	
Freq(Hz)	5.2G/Pol.	ThetaL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)	
Theta(0°)	-0.72/-0.49	-0.24/0.1	0.38/0.19	-0.38/-0.6	-0.85/-1.41	-1.93/-2.51	-2.73/-2.21	-2.37/-2.21	-2.02/-1.86	-1.75/-1.75	-1.89/-1.77	-1.52/-1.41	-1.38/-1.32	-1.21/-1.13	-1.16/-1.16	-1.21/-1.08	-0.99/-1.21	-1.48/-1.83	-1.89/-1.87	-1.91/-1.78	-1.71/-1.81	-2.01/-2.13	-2.02/-1.76	-1.46/-1.13	
Theta(7.5°)	-1.63/-1.83	-1.63/-1.22	-0.92/-0.86	-0.96/-1.05	-1.2/-1.58	-2.02/-2.52	-2.75/-2.85	-2.65/-2.38	-2.07/-1.91	-1.77/-1.82	-1.73/-1.52	-1.24/-0.95	-0.62/0.25	-0.12/-0.07	-0.20/-0.55	-1.02/-1.63	-2.23/-2.78	-3.32/-3.7	-3.55/-3.33	-2.92/-2.46	-1.48/-1.54	-1.72/-1.47	-1.52/-1.54	-1.52/-1.54	
Theta(15°)	-1.95/-1.66	-1.23/-0.71	-0.84/-1.13	-1.47/-1.51	-1.71/-1.59	-1.47/-1.74	-1.66/-1.54	-1.41/-1.15	-0.97/-0.5	0.06/0.07	-0.08/-0.18	-0.10/-0.09	-0.10/-0.09	-0.10/-0.09	-0.10/-0.13	-0.30/-0.77	-1.45/-2.6	-3.88/-4.83	-4.87/-4.71	-4.53/-4.82	-3.12/-2.57	-1.77/-1.55	-2.06/-2.2	-2.06/-2.2	
Theta(22.5°)	-1.77/-1.1	-0.43/-0.34	-0.59/-0.99	-1.24/-1.08	-0.76/-0.55	-0.48/0.04	-0.14/0.19	0.33/0.55	0.99/1.36	1.55/1.64	1.59/1.39	1.07/0.5	0.68/0.64	0.51/0.13	0.04/-0.13	-0.18/0.07	-1.2/-2.02	-3.42/-4.06	-4.79/-5.07	-5.26/-4.86	-3.43/-2.26	-2.27/-2.15	-2.08/-1.84	-2.18/-1.94	
Theta(30°)	-1.11/-0.88	-0.73/-0.31	0.37/0.52	0.48/0.33	-0.04/-0.54	-1.03/-0.91	-0.06/0.88	1.64/2.23	2.61/2.84	3.13/3.2	3.3/3.01	2.62/35	2.06/1.6	1.0/42	0.28/0.39	0.12/-0.36	-0.85/-1.39	-2.37/-4.07	-5.2/-4.96	-4.3/-4.03	-3.72/-3.68	-3.72/-3.79	-3.26/-2.35	-1.83/-1.14	
Theta(37.5°)	-0.83/0.44	0.72/1.15	1.56/1.79	1.38/0.83	0.26/-0.15	-0.33/-0.34	0.40/1.1	1.68/2.26	2.48/2.7	2.99/3.3	3.4/3.38	3.39/3.08	2.36/1.63	1.18/0.57	0.59/0.5	-0.39/-0.06	-0.92/-0.24	-3.32/-3.58	-3.47/-3.53	-3.47/-3.01	-3/-3.62	-4.29/-4.42	-4.33/-3.29	-2.3/-1.47	
Theta(45°)	0.27/1.35	1.96/2.05	2.86/3.39	2.99/2.66	2.19/1.41	1.15/1.32	1.41/1.25	1.56/2.35	3.07/3.59	3.94/3.97	3.69/3.51	3.38/3.01	2.49/2.06	1.74/1.06	0.2/-0.9	0.33/-0.68	-4.22/-4.92	-4.68/-6.47	-5.67/-5.06	-5.55/-5.83	-5.89/-5.53	-3.74/-3.16	0.02/-0.24	0.02/-0.2	



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(7.5°)	-1.89/-1.76	-1.56/-1.43	-1.35/-1.28	-1.2/-1.37	-1.62/-2.06	-2.59/-3.38	-3.99/-4.27	-4.34/-4.16	-4.14/-3.95	-3.68/-3.5	-3.21/-2.96	-2.86/-2.72	-2.44/-1.82	-1.63/-1.35	-1.19/-1.07	-1.15/-1.41	-2/-2.7	-3.68/-4.47	-4.93/-4.85	-4.34/-3.76	-3.36/-3.19	-3.19/-3.34	-3.31/-2.87	-2.62/-2.26
Θ(15°)	-1.41/-1.35	-1.02/-0.91	-1.11/-1.14	-1.1/-1.04	-1.07/-1.1	-1.54/-2.23	-2.84/-3.29	-3.45/-3.38	-3.07/-2.57	-2.15/-1.95	-1.63/-1.53	-1.57/-1.68	-1.2/-0.73	-0.37/-0.03	0.17/0.15	-0.18/-0.96	-2.01/-3.13	-4.41/-5.75	-6.64/-6.98	-6.38/-5.51	-5.03/-4.25	-3.77/-3.35	-3.02/-2.62	-2.18/-1.74
Θ(22.5°)	-1.55/-1.47	-1.19/-1.28	-1.63/-1.89	-1.87/-1.92	-1.79/-1.87	-2.16/-2.29	-2.52/-2.55	-2.44/-2.05	-1.49/-0.95	-0.63/-0.35	-0.10/-11	0.32/0.71	1.05/1.02	0.78/0.43	0.16/-0.07	-0.3/-0.54	-1.01/-2.18	-4.16/-6.12	-7.12/-6.59	-5.87/-4.93	-3.82/-3.25	-2.93/-2.79	-2.33/-2.06	-1.87/-1.51
Θ(30°)	-1.86/-1.64	-1.04/-0.79	-0.7/-0.76	-0.9/-1.19	-1.47/-1.85	-1.88/-1.47	-1.19/-1.12	-0.4/-0.81	-0.53/-0.14	0.55/-1.09	1.57/1.88	2.04/2.24	1.99/1.39	0.56/-0.17	0.21/-0.46	-0.64/-0.76	-1.28/-2.31	-3.47/-4.35	-4.16/-3.7	-3.72/-3.91	-3.72/-3.33	-3.08/-2.94	-2.8/-2.83	-2.27/-1.88
Θ(37.5°)	-0.91/-0.01	0.39/0.87	1.36/1.22	0.65/0.29	-0.06/-0.55	-0.87/-0.98	-0.97/-0.62	-0.04/-0.51	1.06/1.42	1.58/1.65	1.78/1.82	2.22.53	2.31/1.56	0.77/0.1	0.05/0.18	0.29/-0.34	-2.82/-2.12	-2.72/-3.55	-4.17/-1.35	-2.34/-3.39	-4.05/-4.5	-4.64/-4.18	-2.94/-1.83	
Θ(45°)	0.09/1.41	2.03/2.41	3.19/3.11	2.5/2.03	1.4/0.74	0.79/1.05	0.92/0.85	0.88/1.71	2.59/2.97	3.13/3.26	3/2.67	2.77/2.74	2.23/1.49	1/0.7	0.44/0.1	-0.07/-0.29	-1.27/-3.09	-3.98/-3.91	-3.05/-3.2	-3.66/-3.98	-4.13/-5.04	-5.84/-5.71	-3.43/-1.89	-1.25/-0.86
Θ(52.5°)	-0.27/1.17	1.86/2.43	2.98/2.67	2.53/2.55	2.11/1.43	1.33/1.89	2.05/1.62	1.02/1.64	2.87/3.76	4.01/4.13	3.69/3.17	2.48/2.14	2.02/1.82	1.54/1.24	0.67/-0.04	-0.94/-2.35	-3.33/-2.79	-2.62/-2.15	-2.4/-3.4	-4.44/-5.54	-7.12/-7.95	-6.99/-5.55	-3.9/-2.45	-1.41/-0.81
Θ(60°)	-0.81/0.61	1.56/1.89	2.47/2.62	2.98/3.19	2.49/2.09	2.22/2.4	2.48/2.06	1.03/0.96	2.25/3.98	4.75/4.96	4.46/3.61	2.51/1.41	0.77/0.32	0.06/-0.47	-0.89/-1.72	-3.51/-3.8	0.1/0.2	-0.62/-2.25	-3.1/-3.76	-5.17/-6.97	-6.54/-5.4	-3.94/-3.22	-2.37/-1.58	
Θ(67.5°)	-0.87/0.06	1.26/2.08	3/3.41	3.63/3.66	3.35/2.56	2.04/2.47	3.04/2.85	2.37/2.92	3.61/4.39	4.44/4.19	3.75/3.19	2.92/1.98	1.19/0.41	-1.34/-1.63	-1.69/-2.73	-2.44/-2.95	-3.68/-4.45	-4.12/-3.68	-3.44/-3.34	-4.08/-5.12	-6.47/-8.96	-7.5/-5.26	-3.78/-3.03	-2.33/-1.41
Θ(75°)	-1.17/-0.36	0.33/0.63	1.58/2.32	3.02/3.07	2.48/2.1	2.55/3.24	3.46/3.3	2.96/3.1	3.29/3.94	3.49/3.37	3.49/2.73	2.73/1.87	1.95/1.67	0.2/-0.52	-2.08/-2.91	-3.55/-4.57	-5.83/-4.95	-4.54/-3.57	-4.93/-5.95	-6.28/-7.46	-9.09/-7.32	-6.09/-5.34	-5.16/-4.89	-3.91/-2.26
Θ(82.5°)	-0.57/0.16	1.39/1.68	1.92/1.8	1.71/1.48	1.07/1.41	2.57/3.42	3.77/3.42	2.86/2.2	1.65/2.28	2.78/3.17	3.67/3.03	2.98/2.17	2.32/1.16	0.21/-0.6	-0.45/-1.07	-1.73/-4.48	-5.24/-4.6	-3.55/-4.57	-5.96/-6.78	-5.07/-6.95	-8.57/-7.91	-7.33/-5.54	-4.17/-4.06	-3.32/-1.64
Θ(90°)	0.85/1.53	2.59/2.75	3.11/2.6	2.02/0.37	-1.49/0.8	2.9/3.59	3.42/2.83	2.16/1.76	1.42/1.18	1.16/2.22	3.2/3.3	2.42/0.73	0.46/-0.33	-0.19/0.08	-1.2/-3.14	-4.08/-1.07	-3.02/-4.75	-7.34/-3.73	-10.13/-10.38	-6.8/-6.22	-7.65/-6.2	-5.76/-5.57	-4.26/-2.84	-2.56/-0.56
Θ(97.5°)	-1.2/-0.55	0.82/2.39	3.39/3.71	2.77/0.8	-1.87/-0.03	1.74/2.57	2.29/3.73	1.88/2.44	2.69/3.08	2.63/2.22	3.22/2.9	2.05/0.88	0.2/-1.72	-1.83/-1.66	-3.07/-5.25	-4.11/-2.95	-5.25/-5.21	-7.82/-10.73	-8.61/-6.82	-4.23/-4.69	-5.4/-5.1	-4.23/-5.3	-6.58/-5.94	-3.95/-3.26
Θ(105°)	-2.18/-1.14	-0.53/0.97	1.56/2.59	2.19/1.59	1.45/2.48	2.43/2.52	2.04/1.27	1.6/2.18	2.28/3.52	3.29/3.41	2.83/3	2.46/2.38	2.08/0.47	0.43/-1.13	-2.18/-2.09	-2.44/-1.95	-1.99/-3.16	-4.22/-8.43	-7.79/-6.35	-6.29/-5.45	-5.32/-4.15	-5.2/-6.04	-5.61/-5.4	-4.05/-3.21
Θ(112.5°)	-4.34/-1.31	-0.62/1.04	1.07/1.4	0.48/0.56	1.29/2.92	4.08/3.69	2.4/1.73	2.2/2.31	2.65/2.8	2.53/2.88	2.26/2.18	0.77/1.13	0.2/-0.2	-0.12/-0.72	-1.87/-2.65	-2.79/-1.28	-2.63/-4.38	-6.49/-8.96	-6.93/-6.46	-7.38/-9.07	-8.51/-5.31	-5.77/-5.9	-6.1/-6.98	-6.35/-6.36
Θ(120°)	-3.36/-4.17	-0.72/0.54	0.51/0.24	-0.56/-5.5	1.49/2.28	2.33/1.14	1.61/1.73	2.38/3.14	3.48/2.5	2.86/3.93	2.83/2.39	0.74/0.79	-0.47/0.34	0.18/-0.28	-1.11/-2.7	-3.09/-1.42	-0.31/-1.47	-6.96/-9.83	-6.88/-9.42	-9.88/-10.16	-7.44/-7.61	-4.57/-5.62	-5.1/-4.28	-4.26/-4.62
Θ(122.5°)	-4.4/-4.11	-4.25/-3.93	-3.64/-2.88	-0.98/0.4	1.32/1.41	0.66/1.65	-1.65/0.41	1.42/2.56	2.57/2.55	2.66/2.16	2.06/0.59	-0.63/-1.31	-1.91/-2.29	-1.99/-1.11	-1.88/4.28	-5.46/-5.58	-3.78/-3.91	-4.7/-6.87	-7.33/-7.53	-7.21/-7.53	-7.05/-7.73	-7.24/-7.3	-5.56/-3.65	-5.32/-4.11
Θ(135°)	-5/-4.82	-4.51/-3.42	-2.96/-2.5	-1.92/-1.59	-1.41/-1.74	-2.99/-3.93	-2.47/-0.22	1.03/1.81	2.43/2.47	2.13/1.8	1.09/0.46	-0.65/-0.85	-1.63/-3.46	-1.55/-0.73	-2.57/-4.74	-4.55/-2.92	-2.36/-5.2	-7.4/-9.73	-6.26/-7.69	-6.17/-6.48	-7.65/-6.77	-9.53/-8.63	-8.31/-5.59	-4.06/-4.64
Θ(142.5°)	-4.72/-4.18	-3.68/-2.5	-1.94/-2.04	-2.55/-3.57	-4.95/-5.84	-6.31/-5.65	-4.13/-2.43	-1.37/-0.61	-0.46/-0.5	-0.85/-1.64	-2.7/-3.96	-5.64/-4.2	-4.8/-4.7	-3.48/-4.06	-5.67/-7.16	-6.69/-4.54	-4.11/-4.52	-5.81/-10.69	-10.06/-10.41	-7.07/-7.17	-8.88/-5.38	-5.23/-3.88	-2.25/-2.26	-2.58/-4.27
Θ(150°)	-4.37/-2.86	-2.13/-1.63	-1.52/-1.54	-1.84/-2.23	-2.81/-3.7	-4.41/-4.48	-3.49/-2.2	-1.67/-1.79	-2.02/-2.22	-2.39/-2.25	-1.89/-2.02	-1.63/-1.11	-1.42/-1.91	-2.4/-3.11	-4.12/-6.23	-6.58/-6.85	-7.55/-7.01	-7.9/-10.69	-9.86/-8.36	-6.07/-6.52	-9.62/-11.03	-9.23/-8.4	-6.57/-4.19	-3.61/-4.22
Θ(157.5°)	-4.88/-4.08	-3.84/-3.6	-3.23/-2.63	-2.75/-3.26	-3.81/-5.19	-5.79/-6.34	-5.74/-4.85	-4.5/-4.92	-5.23/-4.91	-4.68/-4.75	-4.74/-3.51	-2.26/-1.84	-1.88/-2.72	-1.26/-0.43	-0.22/-0.72	-2.13/-4.18	-5.7/-6.45	-7.03/-7.3	-6.81/-7.03	-7.46/-7.62	-7.13/-7.63	-9.32/-9.72	-8.55/-6.36	-5.35/-4.89
Θ(165°)	-4.51/-3.4	-2.33/-1.85	-1.56/-1.8	-2.49/-3.9	-5.25/-7.45	-10.55/-11.52	-12.09/-10.57	-8.97/-7.09	-5.77/-4.93	-4.4/-4.5	-5.02/-5.56	-5.53/-5.2	-4.96/-4.88	-5.06/-5.27	-5.81/-6.87	-7.13/-7.08	-6.55/-6.39	-6.6/-6.09	-7.12/-7.34	-7.11/-7.16	-7.75/-9.37	-10.81/-11.16	-11.07/-9.1	-7.61/-5.74
Θ(172.5°)	-8.96/-8.98	-8.97/-8.55	-8.4/-8.92	-9.41/-9.86	-10.16/-10.79	-11.55/-11.23	-11.93/-11.48	-10.89/-9.64	-8.89/-8.37	-8.43/-8.76	-9.39/-9.9	-9.78/-9.72	-9.1/-8.34	-8.03/-7.74	-6.86/-6.23	-5.32/-4.58	-4.27/-4.66	-5.39/-6.19	-7.28/-8.29	-10.88/-10.02	-11.11/-10.37	-10.88/-10.35	-10.45/-10.08	-9.39/-9.04
Θ(180°)	-8.7/-8.19	-7.75/-7.15	-6.28/-6.26	-6.6/-7.04	-7.61/-8.17	-7.77/-9.59	-10.13/-10.37	-10.18/-9.72	-9.33/-8.95	-8.3/-8.08	-7.89/-7.4	-7.24/-6.93	-7.67/-6.92	-7.53/-7.94	-8.67/-9.37	-9.85/-9.47	-9.11/-9.44	-9.49/-9.25	-8.88/-8.01	-7.37/-7.07	-6.71/-6.75	-6.66/-7.08	-7.91/-8.45	-8.78/-8.55
Freq(Hz)	5.6G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-6.39/-6.9	-6.51/-5.55	-4.13/-3.14	-2.24/-1.52	-0.92/-0.38	-0.05/0.06	0.14/0.18	0.01/-0.33	-0.71/-1.16	-1.62/-2.17	-2.9/-3.89	-5.34/-7.17	-8.4/-9.06	-8.05/-6	-4.94/-3.16	-1.83/-0.9	-0.32/-0.1	-0.06/-0.08	-0.05/0.1	0.27/0.33	0.3/0.09	-0.25/-0.89	-1.62/-2.75	-3.74/-4.94
Θ(7.5°)	-9.24/-8.78	-7.75/-6.84	-5.62/-4.18	-2.69/-1.69	-0.86/0.1	0.53/0.86	1.26/1.55	1.61/1.53	1.37/1.14	0.67/0.12	-0.45/-1.18	-2.12/-3.28	-4.71/-5.6	-5.66/-5.34	-4.81/-3.84	-2.88/-2.03	-1.49/-1.25	-1.42/-1.57	-1.56/-1.65	-1.62/-1.87	-2.22/-2.56	-3.11/-3.85	-4.64/-5.98	-7.34/-8.91
Θ(15°)	-8.15/-7.64	-6.78/-5.7	-4.55/-3.57	-2.9/-2.16	-1.03/-0.04	0.39/0.95	1.46/1.9	2.04/2.02	1.91/1.69	1.54/1.12	0.54/-0.26	-1.21/-2.25	-3.23/-4.23	-5.05/-4.98	-3.92/-3.53	-2.34/-1.84	-1.69/-1.91	-2.43/-2.99	-5.68/-6.01	-6.03/-6.46	-7.04/-7.58	-8.01/-8.04		
Θ(22.5°)	-5.41/-3.69	-3.68/-3.29	-3.38/-2.83	-2.24/-1.86	-0.7/-0.33	0.41/1.28	1.87/2.36	2.65/2.76	2.59/2.44	1.78/0.87	-0.01/-1.23	-2.57/-3.81	-5.5/-6.37	-7.22/-7.56	-7.03/-5.97	-4.7/-3.54	-2.79/-2.33	-2.11/-2.3	-2.71/-3.03	-3.56/-3.97	-4.99/-5.79	-6.78/-7.35	-8.02/-7.41	-5.48/-4.73
Θ(30°)	-5.84/-5.16	-4.38/-4.25	-3.22/-1.76	-0.57/0.46	0.82/1	1.72/1.3	2.36/2.68	2.96/3.26	3.2/2.66	1.78/0.81	-0.28/-1.71	-3.59/-5.65	-6.98/-8.44	-9.65/-10.11	-9.8/-8.32	-6.49/-5.01	-3.88/-3.19	-3.01/-2.82	-3.02/-3.54	-4.31/-4.55	-4.31/-5.12	-6.56/-7.47	-6.07/-5.84	-5.59/-5.42
Θ(37.5°)	-7.41/-8.24	-8.46/-6.12	-4.07/-1.97	-0.63/0.8	1.43/1.96	2.57/2.63	2.62/2.7	2.83/3.01	2.98/2.52	1.3/-0.52	-1.89/-3.88	-5.47/-7.56	-9.6/-10.53	-11.06/-10.93	-9.77/-7.45	-5.84/-5.36	-5.51/-6.29	-7.26/-6.59	-5.31/-3.93	-3.52/-3.53	-6.2/-6.95	-7.6/-9.21	-8.51/-7.68	-6.97/-6.87
Θ(45°)	-4.46/-4.66	-4.04/-3.94	-2.76/-1.64	-0.84/0.35	1.49/1.99	2.34/2.25	2.2/2.22	2.59/2.83	2.58/1.91	0.71/-1.42	-3.18/-4.13	-4.22/-4.79	-7.62/-9.19	-10/-9.77	-7.69/-5.45	-4.54/-4.81	-4.68/-4.83	-5.02/-5.65	-6.08/-5.01	-5.78/-7.71	-9.97/-10.34	-9.48/-7.59	-5.91/-4.56	
Θ(52.5°)	-5.40/-5.18	-5.26/-5.11	-3.86/-2.4	-0.58/1.27	1.89/4.23	2.64/2.47	2.06/1.82	2.05/2.22	2.16/1.81	0.87/-0.97	-3.43/-4.93	-5.94/-7.11	-6.36/-7.94	-8.9/-11.29	-10.11/-8.93	-8.82/-8.87	-8.41/-7.25	-6.07/-5.49	-5.19/-4.61	-5.93/-7.12	-9.13/-7.74	-5.94/-4.41	-4.62/-4.55	
Θ(60°)	-10.77/-9.5	-7.81/-5.88	-3.73/-2.32	-1.01/-0.37	0.22/0.95	1.49/2.2	2.79/3.26	3.45/3.33	2.83/2.22	1.22/-0.49	-2.5/-5.3	-7.3/-9.13	-10.23/-10.44	-9.63/-9.51	-9.34/-10.14	-11.13/-11.76	-10.3/-8.03	-5.73/-6.27	-5.57/-5.59	-6.25/-7.23	-7.34/-7.7	-8.84/-8.35	-9.5/-10.52	-10.87/-11.02
Θ(67.5°)	-8.93/-8.49	-6.66/-5.2	-3.54/-2.27	-0.92/-0.15	0.53/1.02	0.65/0.55	1.25/2.12	2.2/2.1	2.2/2.07	1.31/-0.31	-3.32/-5.63	-6.45/-6.73</												



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Freq(Hz))	5.785G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
DC(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°)	1.21/0.98	0.77/0.2	0.34/-0.11	-0.32/-0.79	-1.48/-2.29	-3.48/-4.38	-4.83/-4.96	-4.55/-3.32	-2.08/-1.03	-0.15/0.4	0.68/0.73	0.75/0.78	0.64/0.35	0.14/-0.15	-0.3/-0.48	-0.78/-1.31	-1.99/-2.83	-3.49/-3.86	-3.76/-3.26	-2.64/-1.84	-1/-0.45	-0.07/0.31	0.69/0.87	1.01/1.2
Θ(7.5°)	-0.42/-0.71	-0.89/-1.14	-1.37/-1.5	-1.6/-2.01	-2.58/-3.15	-3.49/-3.55	-3.82/-4.06	-3.78/-3.03	-1.94/-0.49	-0.14/0.49	0.93/1.13	1.35/1.59	1.66/1.57	1.41/1.08	0.66/0.19	-0.46/-1.2	-2.17/-3.3	-4.38/-4.96	-5.24/-4.42	-3.12/-2	-1.04/-0.46	-0.2/0.05	0.13/0.05	0/-0.06
Θ(15°)	-1.92/-2.34	-2.44/-2.74	-2.67/-2.5	-2.57/-3.05	-3.36/-3.35	-3.12/-2.9	-3.08/-3.69	-3.84/-3.05	-2.01/-1.08	-0.38/0.2	0.79/1.29	1.71/1.93	1.81/1.62	1.23/0.85	0.42/-0.17	-0.94/-1.96	-3.38/-4.75	-5.67/-6.87	-6.14/-5.63	-4.58/-3.74	-3.13/-2.75	-2.37/-2	-1.85/-1.79	-1.64/-1.73
Θ(22.5°)	-2.8/-2.6	-2.08/-1.49	-1.05/-0.96	-1.13/-1.67	-2.14/-2.38	-2.23/-1.81	-2.03/-2.64	-2.8/-1.97	-0.56/0.42	0.98/1.32	1.59/1.88	1.82/1.46	1.01/0.68	0.67/0.77	0.61/0.19	-0.42/-1.24	-2.58/-4.32	-5.48/-6.6	-6.33/-5.74	-5.74/-5.2	-4.95/-5.28	-5.3/-4.85	-4.17/-3.84	-3.13/-2.95
Θ(30°)	-2.92/-2.53	-1.98/-0.83	0.16/0.46	0.31/-0.22	-0.93/-1.52	-1.43/-1.08	-1.11/-1.38	-1.54/-1.37	-0.47/0.49	1/1.09	1.28/1.34	1.07/0.7	0.70/0.95	1.08/0.92	0.60/0.03	-0.75/-1.87	-3.21/-3.86	-4.13/-4.73	-4.59/-3.94	-3.29/-3.72	-3.91/-3.9	-4.27/-4.17	-3.74/-4.15	-4.13/-3.44
Θ(37.5°)	-2.75/-1.45	-0.75/0.03	0.66/0.8	0.99/1.08	0.76/0.11	-0.04/-0.09	-0.06/-0.11	0.06/0.13	0.27/0.94	1.72/1.8	1.67/1.36	0.77/0.19	0.01/-0.48	-1.36/-1.87	-1.78/-1.43	-1.24/-1.15	-1.74/-3.05	-4.87/-5.45	-5.34/-5.44	-5.29/-4.42	-5.02/-5.38	-5.36/-4.88	-4.94/-5.27	-5.59/-4.11
Θ(45°)	0.19/1.06	1.68/1.99	2.1/2.03	1.79/1.43	1.31/1.47	1.98/2	1.71/1.3	0.74/0.18	0.33/1.21	2.03/2.24	1.75/1.38	0.92/0.51	0.3/0.05	0.15/0.11	-0.03/-0.32	-1/-1.38	-2.68/-3.73	-5.09/-6.41	-5.05/-3.98	-4.48/-5.63	-6.06/-6.04	-6.92/-7.45	-6.87/-4.71	-2.52/-0.73
Θ(52.5°)	0.87/1.98	2.4/2.9	3.35/3.45	3.21/2.88	2.63/2.47	2.41/2.41	2.72/2.46	2/1.92	2.08/2.44	2.56/2.6	2.19/1.56	1.15/0.55	0.08/-0.53	-0.7/-0.74	-1.52/-2.76	-3.81/-4.47	-4.28/-4.6	-3.89/-4.03	-4.97/-4.92	-5.11/-5.22	-5.28/-4.24	-3.14/-2.15	-0.53/0.32	
Θ(60°)	-0.03/0.94	1.83/2.85	3.61/4.27	4.3/3.84	3.25/2.98	2.84/2.46	2.63/2.42	2.7/3.38	3.65/3.17	2.57/2.33	2.25/1.99	1.55/0.68	0.18/-0.1	-0.29/-0.2	0.26/-0.22	-1.15/-1.9	-3.19/-3.99	-5.14/-5.28	-5.38/-5.76	-6/-5.93	-5.99/-6.59	-5.82/-5.91	-5.06/-3.63	-2.06/-0.92
Θ(67.5°)	-1.11/-0.28	0.94/2.12	2.74/3.19	3.05/2.38	1.68/1.8	2.25/1.97	2.24/2.73	3.58/3.99	3.9/3.63	3.22/2.84	2.59/2.03	1.13/0.23	-0.46/-0.5	-0.7/-0.94	-1.01/-2.28	-2.85/-2.4	-2.66/-3.48	-5.21/-5.27	-4.27/-3.87	-3.4/-4.68	-7.35/-11.67	-8.95/-5.71	-3.59/-3.25	-2.59/-1.8
Θ(75°)	-1.22/-0.99	-0.05/0.62	1.7/2.44	2.26/1.1	-0.11/0.14	1.87/3.05	3.71/4.22	4.51/4.39	3.91/2.9	2.69/3.05	3.13/2.35	1.09/0.01	0.19/0.49	0.13/-0.75	-1.17/-1.63	-1.7/-3.47	-6.09/-7.91	-6.01/-5.43	-4.71/-4.49	-4.19/-5.31	-7.16/-7.03	-5.89/-3.8	-3.91/-2.98	-2.79/-1.85
Θ(82.5°)	-2.18/-2.41	-1.48/-1.3	-0.16/0.71	0.67/-0.02	-0.56/-0.08	1.84/2.92	3.82/4.53	4.77/4.16	2.71/2.06	2.65/2.24	2.29/1.76	1.46/0.09	0.08/-0.86	-1.39/-1.83	-2.23/-3.22	-3.57/-4.68	-5.04/-6.21	-6.24/-5.44	-4.95/-5.55	-3.7/-5.59	-8.15/-8.83	-5.69/-4.13	-3.93/-3.79	-3.62/-2.84
Θ(90°)	-0.8/-0.61	-0.92/-1.45	-1.81/-1.83	-1.67/-1.01	0.14/1.41	2.77/3.7	3.83/3.77	3.66/2.97	1.91/1.48	2.03/2.41	3.35/3.32	2.68/1.08	0.21/-0.88	-2.08/-2.09	-2.71/-3.04	-3.39/-5.33	-7.06/-7.63	-8.39/-6.41	-4.97/-6.07	-5.14/-5.89	-7.95/-5.22	-3.98/-3.13	-3.03/-2.56	-2.23/-1.75
Θ(97.5°)	0.34/0.73	0.58/-0	-0.91/-2.01	-2.17/-0.9	0.93/2.91	3.4/2.91	3.37/4.13	3.53/2.06	0.6/0.46	1.35/2.1	2.96/2.44	2.03/0.46	-0.2/-1.44	-2.26/-2.15	-3.51/-3.01	-4.04/-3.95	-5.46/-7.57	-5.25/-2.77	-3.67/-3.12	-3.8/-5.5	-5.33/-6.83	-7.08/-4.7	-3.74/-2.85	-1.37/-0.6
Θ(105°)	-3.18/-3.06	-1.42/-0.31	0.97/1.41	1.66/1.86	2.09/2.61	2.83/2.63	2.39/3.02	3.19/1.77	-0.31/-0.36	1.41/2.08	2.55/1.89	1.83/0.82	0.55/-0.96	-1.2/-2.51	-4.82/-4.03	-4.91/-4.63	-4.72/-5.01	-6.17/-9.7	-6.5/-5.56	-5.4/-7.22	-7.04/-6.35	-4.69/-3.95	-4.72/-3.38	-2.89/-4.75
Θ(112.5°)	-2.92/-2.81	-2.02/-0.86	0.45/1.62	0.23/0.56	2.36/2.57	2.46/1.95	1.92/2.99	3.24/2.57	0.79/0.44	1.31/2.05	2.68/2.8	3.11/2.16	1.45/-1.07	-1.5/-2.26	-2.47/-2.8	-2.25/-2.42	-3.19/-1.73	-1.14/-9.94	-7.18/-7.88	-6.29/-6.79	-7.46/-5.42	-6.85/-7.1	-8.08/-5.31	-4.2/-4.46
Θ(120°)	-2.83/-1.64	-0.84/0.56	0.54/1.29	1.62/2.6	3.22/3.36	2.53/1.29	1.15/2.21	3.39/4.08	4.35/4.31	3.69/3.78	3/2.77	1.56/0.13	-0.06/-2.59	-1.27/-1.88	-2.52/-3.81	-4.4/-3.63	-4.23/-6.34	-5.96/-6.85	-5.27/-6.28	-5.7/-10.52	-10.54/-7.25	-5.08/-5.28	-4.58/-4.89	-4.23/-4.45
Θ(127.5°)	-2.82/-2.01	-2.01/-1.26	-0.93/0.37	1.47/2.59	2.94/2.62	1.92/1.9	3.22/4.06	4.38/4.24	4.13/3.94	3.81/3.48	2.77/1.9	-0.21/-0.6	-2.27/-2.94	-2.7/-1.83	-2.25/-4.18	-6.61/-3.94	-3.59/-3.27	-7.04/-10.53	-8.18/-9.79	-6.17/-9.43	-7.5/-7.97	-5.45/-6.83	-5.15/-5.24	-4.95/-3.66
Θ(135°)	-3.89/-4.6	-3.87/-3.18	-2.37/-1.01	0.22/1.29	1.96/2.18	2.08/1.96	2.62/3.29	3.68/3.77	3.67/3.55	3.22/2.56	1.69/-0.14	-1.05/-2.71	-2.95/-2.5	-2.87/-2.17	-2.34/-4.96	-8.1/-7.28	-4.09/-6.9	-8.64/-10.94	-8.84/-9.1	-9.34/-11.37	-6.87/-6.66	-5.85/-5.58	-5.6/-4.84	-4.79/-4.33
Θ(142.5°)	-5.43/-5.92	-5.72/-3.98	-2.44/-1.44	-0.7/-0.4	-0.59/-0.69	-0.81/-0.55	0.58/1.26	1.35/1.6	2.05/1.98	1.57/1.15	0.33/-0.68	-2.09/-4.37	-6.2/-9.33	-8.69/-7.68	-8.56/-7.66	-8.43/-4.98	-3.64/-7.64	-6.55/-11.08	-8.65/-7.04	-6.1/-9.33	-10.33/-8.24	-8.22/-5.19	-3.03/-2.57	-2.58/-4.44
Θ(150°)	-2.42/-2.65	-3.24/-2.72	-1.62/-1.57	-2.29/-3.2	-3.94/-4.27	-3.92/-2.98	-1.9/-1.49	-1.3/-0.81	-0.6/-0.51	-0.54/-0.36	0.34/0.41	-0.05/-0.08	-0.55/-1.01	-0.47/-0.56	-1.6/-3.61	-4.88/-5.8	-7.16/-7.63	-6.17/-8.55	-9.87/-10.95	-7.14/-5.84	-8.55/-11.02	-6.66/-4.4	-2.53/-3.14	-1.43/-2.36
Θ(157.5°)	-2.27/-2.03	-2.98/-2.87	-2.39/-2.67	-3.47/-3.89	-3.91/-3.67	-3.48/-3.27	-2.97/-3.64	-4.6/-5.17	-5.09/-4.63	-3.54/-2.19	-1.48/-1.47	-1.02/-0.06	-0.09/-0.91	-1.58/-1.82	-2.12/-2.25	-3.2/-5.26	-7.8/-6.68	-8.94/-7.66	-7.18/-10.61	-11.38/-10.73	-9.52/-10.59	-9.84/-5.11	-2.69/-2.14	-2.58/-2.86
Θ(165°)	-5.29/-2.03	-4.92/-4.78	-4.15/-3.75	-4.06/-4.67	-4.94/-5.19	-5.14/-4.7	-4.08/-3.92	-3.82/-4.05	-3.98/-3.92	-4.05/-3.62	-2.97/-2.41	-1.29/-0.52	-0.2/-0.57	-1.58/-3.18	-5.02/-6.3	-7.09/-7.18	-7.24/-8.91	-10.1/-9.94	-8.66/-8.08	-8.23/-8.13	-6.93/-6.51	-8.26/-10.55	-9.79/-8.11	-6.7/-5.68
Θ(172.5°)	-7.29/-6.85	-6.71/-6.45	-6.47/-6.03	-6.04/-6.3	-6.86/-7.79	-7.99/-7.76	-7.01/-6.49	-6.26/-6.29	-6.5/-6.9	-7.43/-6.67	-5.5/-4.67	-4.53/-5.18	-6.69/-8.68	-9.86/-11	-10.44/-8.88	-7.48/-7.53	-8.21/-9.76	-10.91/-11.52	-11.43/-12.26	-11.97/-12	-11.83/-11.12	-10.37/-11.06	-10.12/-9.75	-8.58/-7.84
Θ(180°)	-10.73/-11.6	-11.33/-10.48	-10.09/-9.54	-9.65/-9.54	-9.74/-9.24	-9.32/-9.09	-8.79/-8.53	-8.82/-8.93	-8.63/-8.86	-9.71/-10.14	-10/-10.21	-10.36/-10.23	-10.54/-11.29	-11.56/-11.89	-11.48/-11.7	-11.56/-12.25	-11.93/-10.46	-9.35/-8.38	-7.93/-7.86	-7.93/-8.03	-8.92/-9.97	-11.27/-11.27	-11.13/-11.44	-11.39/-10.65

Freq(Hz)	5.885G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	-4.73/-5.12	-4.95/-4.42	-3.91/-3.02	-2.33/-1.71	-1.21/-0.9	-0.72/-0.57	-0.66/-0.78	-0.71/-0.96	-1.23/-1.46	-1.8/-2.28	-2.81/-3.22	-3.73/-4.2	-4.32/-4.3	-3.86/-3.07	-2.63/-2.21	-1.54/-0.78	-0.3/-0.1	-0.07/-0.11	-0.37/-0.69	-0.84/-0.97	-0.99/-1.11	-1.3/-1.63	-2.16/-2.93	-3.91/-4.33
Θ(7.5°)	-4.34/-4.33	-3.92/-3.22	-3.1/-2.75	-2.24/-1.82	-1.42/-1.15	-0.96/-0.88	-0.96/-0.97	-0.89/-0.86	-0.71/-0.74	-0.79/-1.16	-1.69/-2.29	-3.07/-3.64	-4.16/-4.52	-4.55/-4.12	-3.47/-2.78	-2.04/-1.35	-0.78/-0.47	-0.33/-0.3	-0.45/-0.71	-1/-1.28	-1.59/-1.96	-2.52/-3.02	-3.61/-4.06	-4.32/-4.28
Θ(15°)	-2.07/-2.78	-2.61/-2.6	-2.81/-2.59	-2.37/-2.05	-1.68/-1.32	-0.98/-0.67	-0.5/-0.13	0.14/0.33	0.56/0.59	0.1/-0.3	-1.02/-2.07	-3.17/-4.13	-4.83/-5.35	-5.7/-5.79	-5.26/-4.47	-3.51/-2.76	-2.27/-1.98	-1.6/-1.49	-4.28/-4.67	-2.2/-2.62	-3.26/-4.07	-4.77/-5.41	-5.73/-5.28	-4.26/-3.54
Θ(22.5°)	-3.27/-2.74	-2.29/-2.17	-1.82/-1.62	-1.87/-1.69	-1.38/-0.78	-0.03/0.43	0.7/0.93	1.37/1.62	1.61/1.42	0.75/-0.45	-2.05/-3.87	-5.53/-7.38	-8.69/-9.49	-9.79/-8.34	-6.63/-5.02	-3.68/-2.88	-2.39/-2.17	-2.17/-2.45	-2.77/-3.2	-3.79/-4.97	-6.41/-6.7	-6.38/-6.46	-5.64/-4.78	-3.9/-3.41
Θ(30°)	-1.84/-0.9	-0.29/-0.01	0.12/0.1	-0.26/-0.73	-0.23/-0.2	0.71/1.14	1.92/2.66	3.14/3.19	2.98/2.43	1.34/-0.2	-2.33/-4.44	-6/-7.44	-8.83/-9.46	-9.43/-9.27	-7.32/-5.93	-4.47/-3.28	-2.81/-2.96	-3.41/-3.96	-4.94/-6.4	-7.65/-9.12	-8.96/-8.04	-6.01/-4.51	-3.18/-2.81	-2.55/-2.43
Θ(37.5°)	-1.76/-0.72	-0.08/0.52	1.05/1.31	1.47/1.54	1.29/0.98	1.03/0.96	1.47/2.16	2.83/3.08	2.68/1.67	0.22/-1.4	-3.18/-4.94	-6.11/-6.56	-6.87/-7.23	-7.54/-7.27	-6.87/-5.69	-3.84/-2.66	-2.15/-2.92	-3.99/-5.51	-6.64/-7	-7.25/-8.03	-6.97/-5.67	-6.89/-4.56	-2.81/-2.08	-2.03/-2.37
Θ(45°)	-3.28/-2.83	-1.87/-0.52	0.77/1.6	2.21/2.21	1.84/1.58	1.74/1.71	1.78/2	2.43/2.74	2.41/3.1	-0.33/-2.31	-4.26/-6.15	-6.87/-6.45	-6.28/-6.86											



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Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(112.5°)	-8.84/-5.91	-3.51/-3.05	-1.05/0.01	0.63/1.98	2.85/2.94	2.13/1.23	0.78/1.21	1.96/2.38	2.8/2.29	0.25/-0.86	-2.49/-4.42	-4.9/-5.24	-5.59/-4.53	-4.89/-7.54	-7.88/-7.12	-7.41/-4.11	-2.82/-0.98	-0.58/-2.65	-0.92/-1.43	-2.19/-1.99	-2.27/-3.95	-5.27/-7.62	-10.16/-9.2	-8.03/-7.97
Θ(120°)	-8.09/-9.54	-8.43/-6.98	-4.98/-4.02	-2.09/-0.45	0.68/1.77	2.19/1.95	2.22/2.21	1.72/1.24	0.87/0.27	-0.97/-2.89	-5.2/-7.47	-7.95/-8.39	-7.63/-5.7	-5.12/-5.07	-6.49/-6.91	-5.76/-4.06	-4.29/-2.37	-3.01/-4.38	-1.96/-2.54	-3.32/-2.38	-3.06/-4.45	-5.55/-6.81	-9.62/-11.9	-12.38/-10.29
Θ(127.5°)	-6.41/-5.84	-5.23/-4.47	-5.04/-4.76	-3.44/-1.72	-0.04/1.46	2.19/2.61	2.31/1.6	0.85/0.59	0.32/-0.96	-3.47/-6.22	-6.41/-7.6	-8.13/-8.94	-9.23/-6.18	-6.13/-9.02	-8.66/-6.73	-4.84/-4.45	-3.24/-3.01	-3.78/-3.43	-2/-1.61	-2.09/-3.18	-3.52/-5.27	-6.82/-6.81	-9.3/-11.29	-6.81/-6.31
Θ(135°)	-7.47/-8.75	-7.08/-7.04	-6.04/-4.83	-3.08/-0.72	0.78/1.71	2.01/1.87	1.58/1.27	0.45/-0.61	-1.35/-1.83	-3.73/-5.4	-5.66/-5.33	-6.37/-8.91	-7.12/-4.75	-5.64/-10.04	-9.27/-5.53	-4.85/-3.9	-2.61/-2.53	-4.86/-3.91	-2.59/-3.19	-4.88/-4.55	-5.2/-3.49	-5.43/-7.98	-9.05/-8.62	-8/-7.15
Θ(142.5°)	-3.97/-4.75	-4.2/-3.13	-1.91/-0.85	-0.71/-0.28	0.34/0.65	1.07/1.42	1.59/1.37	1.08/0.47	-0.91/-2.17	-3.87/-5.83	-6.77/-6.42	-5.51/-5.44	-4.2/-4.58	-6.47/-8.42	-7.65/-5.24	-4.28/-3.74	-3.46/-3.69	-3.84/-3.3	-3.91/-3.43	-5.88/-4.53	-4.79/-4.77	-6.66/-7.46	-5.83/-4.45	
Θ(150°)	-1.47/-1.64	-1.8/-1.65	-1.1/-1.14	-1.15/-1.17	-0.92/-0.14	0.67/1.15	1.29/1.24	0.78/-0.36	-2/-3.41	-4.74/-6.29	-6/-5.02	-4.6/-3.88	-3.24/-2.32	-2.72/-4.77	-6.52/-6.22	-5.39/-5.93	-7.01/-7.42	-6.66/-5.57	-4.66/-4.41	-4.97/-5.26	-5.74/-6.8	-7.36/-5.69	-3.83/-3.24	-2.36/-1.4
Θ(157.5°)	-2.51/-1.55	-0.78/-0.63	-0.68/-1.01	-1.58/-2.37	-2.11/-1.86	-1.5/-1.24	-1.49/-2.24	-3.19/-3.85	-4.93/-5.66	-6.84/-7.94	-7.81/-5.63	-3.5/-1.6	-0.39/0.15	0.32/0.14	-0.69/-2.48	-4.9/-7.21	-7.53/-7.29	-6.13/-5.34	-4.96/-5.62	-6.6/-6.9	-7.16/-6.25	-5.17/-4.24	-3.3/-2.68	-2.37/-2.54
Θ(165°)	-3.13/-2.51	-2.37/-2.39	-2.76/-3.28	-3.72/-3.85	-3.43/-2.5	-1.95/-2.09	-2.9/-4.12	-5.59/-6.35	-6.73/-6.74	-6.74/-7.05	-7.06/-5.94	-4.75/-2.43	-0.77/0.05	0.1/-0.67	-2.2/-3.81	-4.17/-3.78	-3.72/-4.38	-5.32/-5.3	-5.37/-5.14	-5.2/-4.89	-4.09/-3.53	-3.25/-3.29	-3.15/-3.22	-3.46/-3.77
Θ(172.5°)	-5.21/-4.79	-4.17/-3.73	-3.92/-4.26	-4.26/-4.42	-4.78/-5.08	-5.47/-5.93	-6.71/-6.63	-6.91/-6.57	-6.35/-6.63	-7.13/-7.96	-8.41/-8.4	-7.58/-6.41	-5.16/-4	-3.37/-3.23	-3.18/-3.14	-2.52/-2.2	-2.42/-2.98	-3.73/-3.83	-4.05/-4.58	-5.7/-6.26	-6.26/-6.12	-6.41/-6.26	-5.71/-5.81	-5.73/-5.72
Θ(180°)	-9.41/-8.55	-8.12/-8.55	-8.01/-7.46	-6.62/-6.23	-6.24/-6.06	-5.66/-4.94	-4.59/-4.32	-4.28/-4.15	-4.07/-4.26	-4.72/-5.33	-6.16/-6.8	-7.92/-8.92	-9.45/-9.24	-8.7/-8.14	-7.68/-7.11	-6.68/-6.61	-6.37/-6.45	-5.9/-5.7	-5.86/-5.93	-6.2/-6.58	-6.92/-7.36	-7.42/-7.92	-7.84/-8.18	-8.45/-8.38
Freq(Hz)	5.6G/Pol.	Theta-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	2.76/2.64	2.34/1.68	1.47/0.94	0.5/-0.36	-1.17/-2.17	-3.46/-4.75	-5.86/-6.08	-5.49/-4	-2.74/-1.69	-0.71/0.08	0.68/1.04	1.31/1.47	1.56/1.56	1.42/1.07	0.88/0.5	0.02/-0.59	-1.58/-3.01	-4.57/-5.92	-6.86/-6.15	-4.69/-3	-1.79/-0.48	0.32/0.91	1.57/1.98	2.34/2.66
Θ(7.5°)	1.91/1.98	1.88/1.7	1.25/0.59	0.28/-0.32	-0.76/-1.43	-2.36/-3.25	-4.15/-4.66	-4.17/-2.84	-1.72/-0.69	0.21/1.03	1.64/1.98	2.34/2.61	2.62/3.7	2.03/1.61	1.09/0.52	-0.1/-1.01	-2.38/-4.18	-5.99/-7.27	-7.93/-6.39	-4.71/-2.97	-1.53/-0.46	0.03/0.48	1.09/1.52	1.79/1.88
Θ(15°)	1.58/1.82	2.1/1.91	1.40/5.9	0.07/-0.47	-0.79/-1.63	-2.73/-3.46	-4.03/-4.05	-3.28/-2.05	-0.96/0.2	0.9/1.61	2.17/2.46	2.59/2.69	2.68/2.62	2.27/1.63	0.86/0.06	-0.78/-1.97	-3.26/-4.53	-6.21/-7.01	-7.28/-5.59	-3.49/-1.58	-0.42/0.25	0.67/0.89	1.16/1.39	1.66/1.57
Θ(22.5°)	1.81/2.08	1.97/1.99	2.02/1.65	0.90/4.7	-0.1/-0.84	-1.73/-2.53	-3.23/-3.49	-2.87/-1.99	-0.77/-0.14	0.91/1.91	2.22/2.04	1.99/2.06	2.15/2.16	1.8/1.2	0.54/-0.32	-1.14/-2.02	-3.05/-4.6	-5.26/-5.2	-5.64/-4.77	-3.42/-2.14	-0.98/0.27	0.98/1.11	1.04/1.4	1.36/1.47
Θ(30°)	1.94/2.01	1.35/0.9	1.03/1.4	1.13/0.52	0.11/-0.42	-1.03/-1.56	-1.96/-2.17	-2.75/-1.48	-0.42/0.68	1.29/1.79	2/2	2.46/2.25	1.82/1.39	0.59/-0.01	-0.51/-1.26	-2.18/-3.34	-4.5/-5.95	-7.69/-8.73	-5.98/-3.23	-1.35/-0.49	0.12/0.53	0.84/1.14	1.38/1.61	
Θ(37.5°)	0.74/1.03	0.77/0.62	0.88/1.3	1.03/0.04	-0.13/-0.36	-0.01/-1.01	-1.48/-1.55	-1.54/-1.14	-0.39/0.55	1.62/0.05	2/1.91	1.95/2.16	2.31/1.87	0.94/0.25	-0.13/0.01	-0.27/-1.43	-2.73/-4.3	-7.08/-8.8	-8.02/-6.93	-5.67/-4	-0.22/-1.45	-0.88/-1.02	-0.96/-0.56	-0.42/-0.13
Θ(45°)	1.07/1.94	2.05/1.43	1.23/1.37	0.9/-0.34	-1.26/-1.15	-1.07/-1.07	-1.18/-1.45	-1.31/-0.74	0.09/1.05	2/2.12	1.40/95	0.90/79	0.72/0.62	0.68/0.47	-0.08/-0.12	-0.5/-1.87	-2.5/-4.22	-6.11/-7.27	-8.85/-11.4	-9.29/-6.63	-5.08/-4.14	-3.61/-3.66	-3/-1.63	-0.47/0.33
Θ(52.5°)	1.16/1.85	2.67/2.74	2.51/2.51	2.35/0.71	0.02/-0.28	-0.17/0.17	0.58/0.37	-0.74/-1.35	-0.50/-63	1.29/1.53	0.99/0.8	0.12/-0.55	-1.1/-0.55	0.40/48	0.3/-0.46	-2.3/-3.91	-5.84/-6.16	-5.8/-6.16	-7.74/-7.6	-8.44/-8.46	-6.42/-5.17	-6.41/-7.41	-3.1/-1.26	0.10/0.91
Θ(60°)	-1.83/-1.38	-0.67/0.1	0.97/1.76	1.97/0.91	-0.04/-0.53	-0.51/0.06	0.45/-0.28	-1.37/-1.08	0.42/1.46	2.18/2.35	1.7/0.9	0.8/-0.05	-0.72/-1.02	-1.37/-1.57	-1.29/-1.34	-1.6/-2.99	-4.34/-5.76	-7/-7.66	-9.57/-9.93	-7.89/-6.75	-6.09/-6.94	-5.96/-5.27	-3.96/-2.89	-2.1/-1.67
Θ(67.5°)	-2.34/-2.18	-1.88/-0.81	0.09/1.01	1.19/0.51	-0.96/-2.46	-2.61/-0.96	0.14/0.58	-0.13/0.02	1.39/2.44	2.47/2.31	1.47/0.52	-0.45/-1.41	-2.03/-2.13	-2.04/-2.16	-2.97/-2.22	-2.58/-3.94	-4.74/-6.96	-9.14/-10.6	-11.44/-10.33	-6.68/-5.62	-5.79/-7.26	-7.6/-7.67	-6.52/-4.72	-3.49/-2.99
Θ(75°)	-3.15/-2.79	-2.26/-1.41	-0.60/1.6	0.57/0.01	-0.75/-1.42	-0.60/89	1.61/1.41	0.58/0.23	1.13/1.73	1.46/1.72	1.63/1.18	0.02/-0.89	-1.38/-1.18	-1.69/-3.19	-3.62/-2.93	-2.71/-2.04	-4.83/-9.04	-8.5/-9.53	-10.26/-11.38	-9.64/-10.87	-11.17/-10.3	-9.67/-8.96	-7.85/-7.02	-5.67/-3.45
Θ(82.5°)	-3.87/-3.26	-2.14/-1.92	-1.54/-1.29	-1.46/-2.16	-1.66/-0.4	0.61/0.55	-0.47/-0.45	0.32/0.97	0.74/0.41	0.36/0.58	-0.06/-0.93	-1.83/-3.56	-3.82/-3.67	-3.42/-3.47	-3.51/-4.68	-4.56/-4.88	-5.84/-5.75	-5.84/-5.75	-8.77/-11.52	-8.94/-8.89	-11.09/-10.12	-7.39/-6.72	-8.41/-8.93	-6.68/-5.5
Θ(90°)	-3.58/-3	-2.77/-1.67	-0.81/-1.18	-2.64/-0.7	-3.34/-0.91	0.94/1.57	0.5/-0.67	-0.17/0.32	0.30/35	-0.17/-0.11	0.05/-0.32	-1.06/-4.38	-4.44/-5.75	-4.48/-4.44	-3.98/-5.04	-3.82/-2.32	-4.42/-4.73	-5.7/-6.07	-7.85/-11.92	-10.29/-11.11	-12.72/-6.66	-5.72/-6.3	-5.42/-4.82	-5.12/-3.77
Θ(97.5°)	-4.94/-4.91	-3.46/-4.15	-3.32/-3.83	-2.27/-4.41	-2.99/-1.33	-0.29/0.55	1.36/2.09	1.30/2.7	-0.38/-1.89	-1.98/-1.17	-0.88/-1.17	-4.26/-3.57	-5.42/-5.51	-5.68/-6.8	-6.74/-4.74	-7.27/-6.67	-8.24/-9.88	-11.13/-11.39	-10.17/-10.8	-12.87/-7.08	-6.43/-6.23	-4.83/-4.75		
Θ(105°)	-7.26/-5.41	-4.13/-3.78	-4.27/-4.31	-4.16/-2.58	-1.52/-0.45	-0.48/-0.19	0.74/2.41	3.23/2.47	-0.35/-2.31	-2.6/-2.12	-2.38/-2.75	-2.26/-3.53	-4.16/-5	-4.88/-6.75	-8.16/-6.04	-4.46/-3.9	-3.71/-4.9	-5.94/-7.96	-9.14/-9.9	-8.9/-8.55	-9.34/-8.68	-9.44/-9.71	-9.5/-9.09	-8.22/-7.47
Θ(112.5°)	-7.34/-6.34	-4.71/-2.88	-1.67/-1.22	-1.49/-2.01	-2.52/-1.03	0.23/0.52	0.48/1.67	2.94/2.74	1.06/-1.42	-1.73/-1.93	-1.4/-1.38	-1.92/-2.35	-3.48/-4.82	-5.27/-6.33	-8.06/-9.13	-6.29/-5.5	-6.42/-6.17	-7.04/-8.01	-4.81/-6.41	-7.31/-10.17	-9.42/-8.68	-9.3/-11.24	-10.08/-12.53	-9.74/-7.29
Θ(120°)	-4.96/-3.76	-1.99/-1.83	-1.2/-1.27	-1.72/-1.97	-0.9/0.01	0.47/-0.04	0.11/0.5	1.33/2.35	2.4/1.91	1.31/-0.15	-0.42/-0.76	-1.65/-1.85	-2.72/-2.94	-4.25/-3.47	-5.4/-8.03	-6.3/-5.92	-4.17/-5.6	-5.1/-5.18	-5.04/-8.45	-7.89/-7.73	-11.58/-8.65	-7.69/-8.45	-8.76/-9.83	-8.8/-6.48
Θ(127.5°)	-7.07/-5.63	-4.48/-2.62	-2.52/-2.48	-1.7/-1.23	-0.55/0.08	0.05/-0.15	0.61/1.47	1.73/2.15	2.32/2.43	2.02/1.25	-0.61/-0.05	-1.57/-2.63	-2.29/-2.73	-4.3/-4.62	-4.69/-7.68	-6.66/-4.06	-5.73/-4.38	-4.78/-6.93	-7.43/-5.97	-8.93/-8.18	-9.73/-10.31	-9.88/-7.18	-8.32/-8.2	
Θ(135°)	-6.4/-4.5	-4.22/-3.25	-1.33/-1.22	-0.36/0.52	1.17/0.97	0.3/-0.13	-0.38/0.31	1.34/1.55	1.55/1.5	1/0.57	0.1/-1.23	-2.61/-3.19	-3.97/-5.99	-4.96/-4.6	-5.71/-8.68	-7.14/-4.92	-3.43/-6.21	-10.07/-11.95	-8.07/-6.15	-6.59/-10.65	-4.73/-4.73	-8.79/-7.17	-6.94/-7.66	-4.46/-3.51
Θ(142.5°)	-4.95/-6.65	-2.84/-1.93	-2.37/-1.8	-1.7/-2.79	-3.63/-4.04	-3.98/-3.87	-2.71/-2.72	-2.54/-1.89	-1.91/-2.08	-2.31/-1.8	-1.63/-2.03	-2.99/-4.61	-6.66/-7.04	-6.79/-7.3	-7.81/-8.8	-6.92/-5.76	-5.82/-7.76	-7.76/-8.48	-6.66/-6.49	-6.93/-11.96	-8.3/-6.61	-8.34/-9.53	-8.34/-6.55	-4.92/-3.74
Θ(150°)	-0.26/0.34	0.12/-0.42	-0.85/-1.25	-2.2/-3.6	-5.43/-5.9	-4.85/-4.13	-3.92/-3.83	-4.29/-4.58	-4.96/-4.96	-3.74/-2.02	-0.92/-0.32	-0.10/61	0.59/-0.21	-1.11/-1.91	-2.86/-3.14	-3.45/-5.91	-8.65/-8.01	-5.89/-5.46	-5.67/-5.04	-4.44/-5.97	-8/-8.14	-5.24/-2.78	-2.31/-1.17	-0.84/-0.93
Θ(157.5°)	1.37/0.24	-1.55/-3.92	-6.19/-6.74	-6.2/-5.49	-4.97/-4.45	-4.38/-4.44	-4.65/-4.54	-4.54/-5.11	-6/-6.18	-5.47/-4.6	-4.17/-3.51	-3.21/-2.93	-3.06/-3.45	-3.35/-2.73	-2.69/-3.37	-5.29/-7.61	-7.93/-7.97	-7.04/-6.01	-5.76/-5.7	-5.31/-5.56	-5.88/-6.25	-6.87/-4.04	-1.38/-0	0.77/1.32
Θ(165°)	-1.61/-2.13	-2.81/-3.81	-4.07/-3.6	-3.36/-3.79	-4.46/-5.21	-6.03/-6.08	-5.41/-4.99	-4.58/-4.42	-4.01/-3.58	-2.92/-3.25	-1.94/-1.56	-0.96/-6.9	-0.86/-1.18	-2.28/-3.69	-4.69/-5.58	-6.37/-6.15	-5.65/-5.55	-6.72/-7.71	-8.57/-8.93	-8.29/-6.22	-3.56/-1.82	-1.59/-1.97	-2.01/-2.12	-2.24/-1.98
Θ(172.5°)	-4.39/-3.91	-4.54/-5.55	-6.28/-6.61	-6.88/-7.47	-8.14/-8.79	-8.14/-7.53	-7.35/-7.35	-7.02/-6.97	-6.58/-6.62	-6.49/-5.93	-5.33/-4.72	-6.47/-5.4	-6.55/-7.65	-8.39/-8.83	-8.97/-8.46	-8.33/-7.99	-8.58/-6.56							



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(97.5°)	-7.39/-6.44	-4.14/-3.32	-3.08/-1.8	-2.15/-1.58	0.16/1.24	2.25/2.68	1.41/0.06	1.46/2.38	3.26/2.62	1.98/0.35	-2.04/-2.82	-4.65/-6.39	-6.6/-5.93	-6.83/-8.22	-10.52/-8.29	-3.28/-0.7	-0.44/-1.14	-2.21/-3.07	-1.37/-1.35	-1.99/-3.75	-3.97/-4.16	-5.29/-5.89	-9.35/-9.67	-7.27/-7.6
Θ(105°)	-7.96/-7.77	-6.07/-4.51	-3.45/-2.41	-1.24/0.28	2.12/4.8	2.11/4.8	0.91/1.18	2.36/3.4	2.63/1.33	0.63/0.32	-1.12/-2.55	-4.9/-7.19	-7.78/-8.53	-7.26/-9.24	-10.04/-9.29	-6.85/-5.09	-3.6/-3.09	-3.55/-4.57	-3.81/-2.85	-3.6/-4.43	-3.38/-3.1	-5.5/-7.39	-7.44/-9.38	-8.07/-7.37
Θ(112.5°)	-8.45/-9.65	-8.31/-8.18	-5.61/-3.26	-0.93/0.52	2/2.58	2.49/2.32	2.04/2.06	3.31/3.41	2.34/0.94	0.12/-2.39	-5.35/-5.4	-5.99/-6.92	-6.57/-4.61	-4.71/-8.61	-9.7/-12.17	-7.13/-4.34	-2/-3.47	-3.74/-4.57	-2.44/-3	-7.43/-4.6	-4.69/-5.79	-7.28/-8.47	-6.72/-6.87	-6.79/-7.82
Θ(120°)	-4.59/-5.06	-5.31/-5.56	-5.36/-3.05	-0.68/0.87	1.68/2.27	2.63/2.64	2.49/2.17	2.1/1.7	1.17/0.79	-1.6/-4.35	-5.74/-5.44	-5.65/-6.4	-6.6/-8.18	-8.51/-8.53	-6.97/-5.05	-4.84/-2.16	-2.66/-1.72	-3.37/-4.97	-2.23/-2.02	-6.83/-4.64	-2.61/-3.71	-6.1/-6.84	-6.4/-6.95	-3.61/-3.52
Θ(127.5°)	-6.34/-7.49	-7.9/-5.92	-3.45/-1.6	-0.14/0.37	1.08/1.37	1.38/1.79	1.66/1.41	1.27/0.87	0.51/-0.66	-2.34/-4.16	-5.02/-3.58	-4.04/-5.93	-5.88/-5.06	-5.59/-7.91	-8.98/-8.66	-5.73/-3.77	-2.83/-1.52	-4.09/-6.62	-2.73/-2.7	-3.93/-4.62	-2.49/-4.11	-5.15/-6.24	-9.59/-8.98	-4.88/-3.82
Θ(135°)	-4.32/-4.97	-3.99/-4.08	-4.12/-3.43	-1.34/0.55	1.3/1.76	2.04/0.29	1.61/0.86	0.15/-0.85	-1.6/-2.14	-3.79/-5.88	-6.45/-6.18	-5.83/-6.25	-5.57/-4.1	-6.37/-9.81	-7.68/-7.15	-4.93/-3	-1.74/-1.71	-4.95/-5.04	-3.85/-4.34	-4.53/-4.41	-5.23/-4.35	-4.31/-5.97	-5.59/-8.53	-6.19/-3.79
Θ(142.5°)	-2.81/-2.52	-1.75/-1.75	-1.09/-0.4	-0.26/-0.04	0.05/0.14	0.44/0.71	1/1.14	0.73/-0.4	-1.71/-2.54	-3.99/-5.64	-6.2/-5.01	-3.36/-3.35	-2.23/-3.57	-7.14/-10.39	-9.08/-7.15	-7.15/-5.62	-4.64/-4.14	-5.67/-5.87	-5.44/-4.79	-5.31/-4.74	-6.78/-7.04	-5.99/-5.63	-6.53/-4.59	-3.65/-2.76
Θ(150°)	-0.11/-1.52	-1.33/-1.67	-2.54/-3.26	-3.13/-2.45	-1.51/-0.69	-0.02/0.38	0.53/0.58	0.17/-0.67	-2.71/-4.78	-6.95/-7.55	-6.05/-5.07	-5.13/-4.99	-4.78/-4.52	-4.6/-5.63	-5.84/-6.03	-5.59/-5.63	-5.86/-5.93	-6.48/-6.06	-5.1/-4.72	-6.38/-8.71	-7.22/-7.57	-7.63/-6.97	-6.1/-5.05	-3.49/-1.69
Θ(157.5°)	-0.41/-0.86	-1.56/-2.19	-2.36/-2.64	-3.03/-3.02	-2.58/-1.9	-1.31/-0.84	-0.78/-1.03	-1.53/-2.5	-4.16/-6.38	-8.35/-7.81	-5.14/-3.48	-1.84/-0.54	0.2/0.37	-0.04/-0.64	-1.55/-3.16	-5.45/-7.94	-6.76/-5.43	-4.65/-4.63	-5.39/-5.92	-6.32/-6.38	-5.04/-3.59	-2.59/-1.55	-0.48/-0.03	
Θ(165°)	-3.38/-2.34	-2.41/-3.07	-3.44/-3.17	-3.1/-2.96	-2.55/-2.3	-2.23/-2.28	-3.12/-3.88	-5.16/-6.36	-6.9/-7.19	-7.87/-9.48	-9.37/-7.9	-5.49/-3.38	-2.12/-1.54	-1.56/-1.89	-2.44/-3.5	-4.94/-5.62	-5.88/-6.26	-6.28/-6.33	-6.51/-6.36	-6.57/-7.01	-6.5/-5.48	-5.27/-6.04	-7.29/-7.71	-6.96/-5.53
Θ(172.5°)	-6.28/-6.91	-6.43/-5.54	-5.04/-4.89	-4.63/-4.85	-5.06/-5.25	-5.06/-5.16	-5.48/-6.48	-7.71/-8.42	-9.48/-11.13	-10.64/-10.44	-10.28/-9.19	-7.71/-5.8	-4.57/-3.37	-2.47/-2.29	-2.44/-2.91	-3.37/-4.09	-4.47/-4.86	-5.13/-4.55	-5.09/-5.04	-5.75/-6.26	-7.14/-7.44	-7.83/-8.65	-8.53/-7.47	-6.53/-5.86
Θ(180°)	-7.47/-7.55	-6.63/-5.64	-5.16/-5.03	-5.05/-5.4	-5.5/-5.43	-5.39/-5.3	-5.29/-5.57	-5.44/-5.58	-5.46/-5.31	-5.51/-5.77	-6.02/-6.43	-7.21/-7.75	-8.95/-9.87	-10.91/-10.57	-10.04/-9.08	-8.36/-7.69	-6.91/-6.44	-6.66/-6.74	-6.55/-6.88	-7.3/-7.84	-8.26/-8.56	-8.69/-8.64	-7.82/-7.01	-6.91/-7.21
Freq(Hz)	5.885G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	3.28/3.26	3.28/3.17	2.61/2.44	1.97/1.08	0.11/-0.89	-1.98/-2.9	-3.5/-3.76	-3.09/-1.92	-0.65/0.46	1.42/2.12	2.65/2.92	2.94/2.88	2.81/2.72	2.43/1.96	1.83/1.53	1.07/0.4	-0.46/-1.66	-2.72/-3.31	-3.65/-3.07	-2.26/-0.9	0.35/1.28	1.81/2.31	2.75/3.21	3.43/4.7
Θ(7.5°)	2.24/1.9	1.58/1.44	1.09/0.95	0.95/0.47	0.01/-0.59	-1.48/-2.15	-2.95/-3.46	-3.27/-2.45	-1.45/-0.49	0.56/1.57	2.39/2.96	3.27/3.44	3.43/2.3	3.09/2.92	2.49/2.04	1.36/0.46	-0.73/-2.17	-3.69/-4.27	-4.08/-2.96	-1.51/-0.12	0.96/1.67	2.06/2.31	2.48/2.49	2.64/2.45
Θ(15°)	0.97/0.38	-0.19/-0.24	-0.41/-0.54	-0.72/-1.08	-1.12/-1.62	-2.29/-2.13	-2.36/-2.77	-3.02/-4.1	-1.57/-0.25	0.88/1.75	2.32/2.63	2.87/2.96	2.91/2.93	2.9/2.78	2.41/-7.9	1.05/-0.03	-1.45/-3.3	-5.05/-5.81	-5.16/-3.45	-1.67/-0.33	0.73/1.49	1.91/1.93	1.71/1.43	1.62/1.36
Θ(22.5°)	0.38/0.25	0.27/0.68	1.04/1.14	0.88/0.5	0.06/-0.87	-1.52/-1.78	-1.93/-2.48	-2.91/-2.26	-0.46/0.88	1.85/2.45	2.67/2.85	2.82/2.79	2.82/7.1	2.46/2.12	1.73/1.24	0.58/-0.22	-1.48/-3.5	-5.06/-5.79	-4.7/-2.64	-1.49/-0.63	0.06/0.36	0.25/0.15	-0.02/0.38	0.80/62
Θ(30°)	1.18/1.4	1.65/2.01	2.42/4.5	2.06/1.69	0.95/-0.02	-0.77/-1.1	-1.28/-1.78	-1.74/-1.41	-0.31/1.32	2.51/2.67	2.31/55	0.85/0.76	1.03/1.29	1.38/1.17	0.86/0.54	0.33/-0.3	-1.59/-2.9	-4.18/-5.26	-4.94/-3.92	-3.02/-1.89	-1.33/-1.2	-0.94/-0.61	-0.44/0.14	0.49/0.94
Θ(37.5°)	1.49/2.24	2.42/2.58	2.54/2.15	1.58/1.26	0.85/0.45	0.15/-0.13	-0.74/-0.86	-0.84/-0.65	-0.61/0.47	1.71/1.88	1.29/0.71	0.49/0.62	1.1/1.7	1.70/98	0.1/-0.78	-1.42/-1.5	-1.5/-2.14	-3.27/-3.88	-4.03/-3.49	-3.19/-3.01	-3.24/-2.49	-2/-1.69	-2.1/-2.05	-1.24/0.41
Θ(45°)	2.53/07	2.87/2.63	2.74/2.31	1.56/0.95	0.88/1.14	1.32/1.09	0.36/-0.72	-1.28/-1.06	-0.29/0.61	1.89/2.8	1.26/1.39	1.24/1.41	1.53/1.59	1.47/1.04	0.24/-0.23	0.21/-0.12	-1.41/-2.25	-3.77/-6.05	-5.67/-4.5	-5.07/-4.37	-3.21/-2.95	-2.31/-1.48	-0.2/0.88	1.49/1.87
Θ(52.5°)	1.78/2.07	1.92/2.05	2.35/2.59	1.98/1.06	0.61/0.76	1/1.21	1.26/0.78	0.03/0.21	1.34/2.43	2.97/2.86	1.98/0.83	0.71/1.14	1.85/2.3	2.31/1.94	0.79/0.3	-0.8/-1.68	-2.56/-4.33	-7.04/-7.66	-7.9/-8.67	-4.6/-2.98	-2.61/-2.87	-3.15/-2.3	-1.32/0.41	1.19/1.26
Θ(60°)	0.05/1.17	1.97/2.69	2.86/2.96	2.05/1.36	0.87/0.97	1.02/1.26	2.09/2	1.27/0.86	1.17/1.5	1.78/2.12	1.96/1.06	0.69/0.32	0.36/0.25	0.27/0.26	0.04/-0.43	-1.41/-1.99	-3.04/-4.74	-6.94/-10.14	-8.53/-7.13	-6.2/-5.51	-6.85/-7.96	-6.28/-4.73	-4.27/-2.78	-1.84/-0.71
Θ(67.5°)	-4.93/-2.84	-0.39/0.5	0.99/1.57	0.88/-0.11	-0.83/-0.6	-0.28/0.6	1.29/1.73	2.03/1.23	0.68/1.06	1.71/2.49	2.77/1.74	0.6/-0.36	-1.23/-1.35	-1.01/-0.46	-3.0/-3.92	-2.64/-3.88	-3.41/-3.61	-5.42/-7.85	-11.58/-8.89	-6.21/-7.95	-10.01/-9.38	-8.2/-6.97	-5.87/-5.29	-4.39/-4.94
Θ(75°)	-4.84/-4.89	-3.96/-2.44	-1/-0.44	-1.37/-2.51	-4.23/-3.4	-1.76/0.16	1.72/35	2.62/2.1	1.35/0.2	0.87/2.19	2.31/0.79	-0.58/-2.37	-2.73/-1.44	-1.11/-1.89	-2.69/-2.55	-2.51/-3.27	-2.87/-3.95	-5.17/-7.03	-8.89/-8.18	-6.85/-4.99	-6.65/-5.97	-6.8/-7.48	-6.73/-6.56	-4.85/-4.19
Θ(82.5°)	-6.61/-5.56	-5.29/-5.21	-2.26/-1.18	-2.17/-3.14	-4.46/-3.16	-0.75/0.67	1.32/2.17	2.51/1.9	0.53/0.28	0.92/1.5	2/0.55	-1.05/-3.08	-3.06/-2.37	-2.37/-3.3	-2.95/-2.69	-2.31/-3.75	-5.65/-5.95	-8.64/-10.71	-7.26/-6.28	-6.29/-7.6	-6.84/-9.21	-9.75/-8.88	-9.06/-5.72	
Θ(90°)	-4.39/-3.65	-3.7/-3.26	-3.85/-4.04	-4.76/-4.19	-2.2/-0.61	0.7/0.91	1.34/1.83	2.21/57	0.05/-0.55	-0.5/-0.3	0.21/-1.12	-2.75/-5.6	-7.47/-5.07	-3.79/-3.69	-3.21/-3.35	-3.21/-3.13	-2.51/-2.72	-4.56/-5.46	-6.06/-9.03	-8.7/-5.83	-6.68/-7.72	-6.24/-7.63	-7.82/-8.01	-6.27/-3.92
Θ(97.5°)	-3.14/-3.25	-3.41/-3.14	-2.76/-4	-4.71/-2.99	0.25/2.38	2.62/1.9	1.49/1.88	2.08/0.77	-0.34/-0.32	-0.1/-0.33	-0.94/-2.59	-4.03/-5.69	-6.05/-4.85	-3.99/-5.19	-5.42/-5.33	-4.42/-2.66	-1.12/-2.77	-4.5/-3.81	-5.11/-6	-7.02/-6.88	-7.92/-11.36	-10.84/-8.6	-8.17/-6.84	-4.62/-3.82
Θ(105°)	-5.62/-6.51	-4.62/-3.27	-1.27/-0.93	-0.91/0.22	1.37/1.92	1.97/2.36	1.66/1.87	1.69/-0.08	-1.98/-1.41	-0.09/-0.24	-0.43/-1.83	-3.2/-6.3	-4.09/-4.88	-4.79/-6.09	-6.31/-6.49	-4.44/-3.51	-2.94/-2.72	-3.84/-6.08	-7.8/-9.18	-7.42/-12.24	-12.19/-8.33	-6.06/-5.85	-6.95/-6.6	-6.09/-6.54
Θ(112.5°)	-5.03/-4.58	-3.01/-2.11	-0.94/-0.31	-0.22/0.35	0.07/0.89	0.84/0.64	1.02/2.07	2.35/1.3	-0.31/-1.17	-0.35/-0.64	-0.45/-0.59	-0.38/-0.91	-1.53/-3.67	-4.53/-6.78	-7.36/-8.11	-6.61/-5.02	-2.4/-4.21	-5.08/-5.9	-5.45/-7.24	-7.62/-6.4	-8.91/-8.41	-9.36/-10.52	-8.83/-7.99	-6.78/-6.14
Θ(120°)	-5.87/-3.79	-1.62/-0.58	-0.65/0.29	1.2/1.44	1.67/0.87	0.33/0.58	1.32/1.93	2.38/2.5	2.13/2.08	1.39/0.95	0.08/-0.85	-1.47/-2.49	-2.48/-3.44	-4.33/-5.48	-5.54/-8.71	-8.87/-8.41	-5.01/-5.03	-6.94/-6.53	-4.9/-7.25	-6.49/-8.68	-10.17/-8.74	-8.38/-6.27	-6.29/-6.04	-5.72/-5.24
Θ(127.5°)	-5.62/-4.98	-5.14/-4.07	-2.28/-0.34	1.1/1.87	1.64/0.99	-0.01/0.76	1.72/2.34	2.31/2.29	2.72/2.59	1.87/0.94	0.3/-1.03	-2.01/-3.31	-2.68/-3.65	-5.71/-3.2	-3.47/-6.68	-8.23/-4.84	-3.47/-4.74	-5.79/-6.06	-5.65/-8.01	-7.08/-6.19	-7.06/-8.41	-7/-11.12	-9.31/-8.88	-4.87/-3.95
Θ(135°)	-7.94/-6.38	-4.86/-5.46	-3.23/-1.98	-0.40/0.98	1.76/1.55	0.82/0.63	1.95/2.49	2.32/2.5	2.43/2.03	1.17/-0.1	-1.24/-3	-3.78/-3.71	-1.9/-2.68	-1.71/-0.85	-2.22/-4.76	-8.25/-4.49	-3.7/-5.38	-8.7/-9.32	-5.8/-6.39	-9.17/-7.9	-4.17/-7.35	-7.8/-6.38	-7.22/-7.26	-4.91/-5.58
Θ(142.5°)	-4.62/-5.74	-2.29/-0.8	-0.62/0.08	0.64/0.89	0.4/-0.64	-1.25/-2.25	-2.28/-1.37	-0.92/-0.86	-5.02/-0.23	-1.02/-0.15	-1.93/-1.59	-2.35/-2.68	-4.77/-8.18	-7.66/-6.41	-7.23/-9.64	-6.97/-4.55	-6.29/-3.8	-5.36/-8.19	-6.38/-3.41	-3.92/-10.59	-7.19/-6.6	-7.6/-5.58	-3.28/-4.27	-5.53/-3.97
Θ(150°)	-1.73/-0.56	-0.3/0	0.28/0.31	-0.32/-1.73	-3.7/-5.41	-5.38/-4.11	-2.85/-2.77	-2.96/-2.51	-2.2/-2.65	-3.53/-2.77	-1.27/-0.97	-1.5/-0.77	-1.04/-2.41	-3.17/-2.33	-2.49/-3.03	-4.16/-5.97	-5.99/-5.45	-5.4/-5.9	-6/-6.43	-6.78/-8.44	-10.82/-9.03	-5.19/-3.54	-2.64/-2.01	-2.39/-2.95
Θ(157.5°)	2.02/1.53	0.5/-0.55	-1.74/-2.61	-3.69/-4.37	-4.19/-3.33	-3.16/-3.37	-3.07/-3.19	-4.29/-5.25	-5.45/-5.5	-4.76/-3.51	-2.29/-1.91	-1.28/-0.37	-0.1											



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(45°)	-8.72/-5.53	-6.3/-6.36	-7.72/-9.28	-9.82/-11.43	-9.67/-8.03	-8.42/-9.64	-11.47/-12.04	-9.77/-7.3	-5.04/-4.18	-3.66/-3.08	-2.36/-3.02	-3.76/-4.56	-4.29/-3.16	-1.75/-0.91	-0.71/-0.91	-1.22/-1.22	-1.94/-2.81	-4.06/-6.33	-9.06/-8.47	-4.83/-2.86	-2.04/-2.54	-3.15/-3.79	-5.11/-5.61	-6.92/-7.35
Θ(52.5°)	-6.82/-5.4	-7.69/-8.3	-8.48/-9.88	-10.76/-9.71	-9.24/-10.15	-10.97/-9.29	-7.81/-7.21	-7.27/-7.62	-7.26/-6.31	-5.42/-5.13	-4.06/-4.5	-5.43/-5.18	-4.62/-3.98	-2.35/-1.95	-2.08/-1.64	-1.65/-1.7	-2.01/-1.33	-2.56/-5.19	-8.12/-6.33	-3.16/-1.61	-2.46/-4.28	-5.62/-6.47	-7.22/-9.82	-9.42/-10.19
Θ(60°)	-5.93/-5.85	-6.4/-6.06	-6.46/-7.86	-8.77/-9.95	-8.8/-7.26	-7.43/-9.18	-11.65/-10.57	-8/-6.84	-7.71/-8.42	-5.93/-5.4	-5.54/-7.42	-6.59/-5.74	-5.23/-4.42	-4.09/-3.97	-3.95/-3.04	-2.04/-1.23	-1.35/-0.87	-0.69/-2.49	-5.1/-5.55	-3.79/-2.63	-2.71/-3.26	-4.43/-6.92	-7.22/-6.58	-6.54/-7.15
Θ(67.5°)	-6.29/-6.19	-6.34/-5.27	-4.91/-5.84	-6.23/-6.4	-8.06/-9.46	-9.76/-9.91	-9.83/-7.57	-6.7/-8.15	-11.85/-10.68	-6.81/-5.69	-5.32/-6.27	-5.96/-5.52	-4.8/-4.15	-3.98/-2.7	-1.81/-1.97	-1.24/-1.12	-2.03/-0.94	-0.33/-1.44	-3.16/-3.84	-3.64/-3.75	-3.05/-2.34	-3.14/-4.59	-5.99/-7.09	-7.44/-6.83
Θ(75°)	-5.04/-5.56	-6.03/-6.36	-8.62/-7.28	-5.92/-6.64	-6.21/-5.63	-5.93/-6.67	-7.96/-9.9	-8.99/-8.38	-8.66/-9.44	-8.54/-7.1	-6.75/-5.95	-4.1/-3.98	-2.99/-4.04	-2.68/-2.32	-2.28/-2.89	-2.69/-2.77	-3.53/-3.55	-2.8/-2.46	-2.94/-2.26	-2.36/-3.62	-4.08/-2.61	-2.29/-3.63	-5.07/-6.37	-6.82/-6.23
Θ(82.5°)	-2.79/-4.6	-6.35/-6.9	-7.86/-7.91	-8.33/-8.13	-7.47/-7.59	-8.4/-9.42	-8.84/-8.4	-5.74/-4.93	-5.47/-5.37	-5.12/-4.65	-4.75/-4.79	-3.3/-1.61	-1.88/-1.23	-0.58/-1.04	-1.32/-1.91	-1.48/-2.09	-2.25/-1.65	-2.1/-3.81	-5.31/-3.79	-0.73/-1.86	-4.35/-5.97	-5.29/-4.74	-4.95/-6.14	-5.96/-4
Θ(90°)	-5.68/-6.14	-6.94/-7.74	-10.26/-10.23	-8.76/-7.68	-7.74/-9.72	-10.56/-9.42	-7.87/-7.4	-7.28/-6.58	-4/-4.2	-5.92/-7.52	-5.98/-4.35	-3.16/-1.65	-1.27/-1.17	-0.47/-1.23	-1.48/-2.78	-2.01/-1	-0.18/-0.13	0.45/-0.95	-3.33/-3.17	-3.21/-4.94	-4/-2.5	-1.64/-1.33	-1.52/-3.16	-3.4/-4.28
Θ(97.5°)	-4.48/-6.83	-7.32/-7.39	-8.91/-9.31	-9.99/-9.26	-9.57/-10.86	-11.36/-10.07	-9.64/-8.83	-7.21/-7.22	-7.13/-6.53	-5.09/-4.81	-4.78/-3.97	-2.67/-2.46	-3.73/-2.09	-3.11/-1.06	-1.04/-2.43	-1.24/-0.44	-0.12/-0.02	-0.76/-1.6	-1.35/-4.08	-4.43/-1.74	-3.77/-4.09	-5.29/-4.39	-4.02/-4.04	
Θ(105°)	-3.37/-5.75	-6.64/-6.04	-7.45/-5.66	-6.41/-8.29	-9.12/-7.8	-6.14/-7.19	-6.65/-7.34	-5.63/-4.9	-4.03/-4.27	-5.54/-5.67	-6.28/-3.99	-1.95/-2.08	-1.24/-1.31	-0.65/-0.19	-0.27/-2.11	-1.81/-0.11	-0.070.98	0.53/-1.01	-4.54/-2.69	-2.11/-2.61	-2.78/-2.08	-3.87/-5.29	-4.66/-4.49	-5.9/-3.99
Θ(112.5°)	-1.8/-1.9	-3.87/-4.56	-6.56/-7.16	-6.46/-7.75	-9/-10.6	-11.17/-10.12	-10.83/-8.8	-7.27/-6.93	-7.18/-7.85	-9.23/-6.9	-6.65/-3.78	-4.37/-3.6	-2.31/-2.92	-1.78/-0.09	-1.29/-3.4	-2.650.02	0.59/1.52	2.15/-0.48	-4.93/-2.39	-1.15/-2.48	-3.27/-1.78	-1.62/-4.46	-3.69/-3.65	-3.76/-3.62
Θ(120°)	-5.75/-3.64	-2.94/-3.58	-4.5/-6	-6.93/-8.75	-11/-11.14	-9.78/-8.5	-7.73/-5.59	-3.87/-3.85	-6.66/-9.24	-8.97/-9.06	-11.25/-8.26	-6.46/-5.33	-5.94/-4.38	-2.75/-1.77	-3.37/-3.65	-3.14/-1.06	-0.3/-0.72	-0.03/-1.87	-4.48/-0.79	1.52/-0.23	-3.04/-2.8	-2.43/-1.38	-1.29/-3.2	-3.66/-3.4
Θ(127.5°)	-3.69/-3.16	-4.75/-6.1	-7.4/-5.5	-7.46/-7.94	-8.28/-9	-6.58/-6.09	-7.22/-6.22	-7.45/-5.58	-7.25/-8.22	-9.58/-9.93	-10.06/-8.91	-4.04/-7.39	-6.15/-0.2	-4.88/-4.51	-3.62/-3.38	-2.02/-1.23	0.37/-2.16	-0.72/-5.58	-8.61/-3.59	-4.04/-1.25	-0.29/-2.03	-3.48/-3.41	-2.91/-2.59	-3.3/-3.7
Θ(135°)	-4.85/-4.13	-2.43/-3.36	-3.22/-4.75	-9.21/-11.92	-9.87/-6.23	-5.62/-4.72	-4.35/-4.43	-4.01/-3.94	-3.84/-4.39	-5.82/-8.38	-9.79/-8.09	-7.23/-5.58	-4.73/-3.86	-2.54/-1.45	-1.29/-0.56	-2.1/-0.73	-1.79/-2.26	-1.77/-8.44	-10.12/-3.74	-2.41/-2.22	-1.21/-1.82	-2.64/-2.73	-6.09/-7.55	-4.47/-4.7
Θ(142.5°)	-8.35/-9.76	-8.82/-7.22	-7.15/-6.91	-6.71/-5.22	-4.09/-2.64	-2.28/-2.91	-4.42/-5.04	-5.11/-4.78	-5.57/-6.66	-7.38/-7.58	-7.7/-5.62	-3.32/-3	-3.51/-3.13	-1.64/-0.55	-1.18/-0.92	-0.65/-1.12	-2.38/-1.56	-2.82/-7.13	-8.68/-5.27	-2.56/-2.81	-3.83/-4.55	-4.68/-6.18	-3.97/-3.13	-4.8/-6.42
Θ(150°)	-5.88/-6.59	-7.59/-7.73	-8.21/-9.28	-7.43/-4.88	-4.17/-4.65	-5.12/-4.89	-5/-5.37	-4.86/-4.18	-3.21/-2.49	-2.33/-3.41	-5.66/-7.07	-5.41/-6.33	-8.26/-7.07	-4.61/-4.57	-4.65/-3.93	-3.56/-4.05	-4.47/-4.76	-5.85/-7.8	-8.14/-5.42	-3.73/-4.7	-7.13/-5.78	-5.16/-5.36	-4.2/-4.03	-5.48/-5.98
Θ(157.5°)	-6.66/-6.6	-6.81/-7.19	-7.04/-6.58	-6.31/-6.87	-8.24/-8.69	-8.32/-7.81	-6.78/-6.39	-5.88/-5.12	-4.25/-3.53	-3.02/-3.15	-3.67/-4.26	-4.04/-3.15	-2.65/-2.77	-3.61/-4.87	-5.47/-4.97	-1.6/-2.15	-3.07/-3.57	-3.84/-2.93	-3.01/-3.72	-4.29/-5.08	-6.13/-7.56	-8.35/-8.98	-8.5/-6.95	
Θ(165°)	-5.76/-5.61	-5.72/-6.56	-7.36/-7.89	-8.17/-8.83	-8.86/-8.28	-8.11/-8.22	-7.37/-6.87	-6.85/-6.47	-6.15/-5.49	-5.29/-5.69	-6.91/-8.36	-8.34/-6.74	-5.18/-4.47	-4.66/-5.11	-5.27/-5.12	-4.35/-4.07	-4.1/-3.96	-3.83/-3.08	-2.61/-2.74	-3.71/-4.29	-5.21/-5.88	-5.83/-6.23	-6.62/-6.37	-5.83/-5.42
Θ(172.5°)	-8.28/-7.62	-7.05/-6.39	-6.66/-6.8	-6.66/-6.62	-6.38/-6.9	-7.3/-8.04	-8.39/-8.41	-8.11/-7.85	-7.74/-7.23	-6.46/-5.92	-5.86/-5.89	-5.64/-5.47	-5.4/-5.49	-5.76/-6.05	-6.33/-6.46	-6.36/-5.62	-5.19/-4.87	-4.48/-4.37	-4.21/-4.64	-5/-5.67	-7.11/-8.25	-8.71/-9.04	-9.5/-8.33	-8.47/-8.7
Θ(180°)	-6.6/-7.27	-7.48/-7.57	-7.64/-7.82	-8.42/-9.21	-10.15/-10.77	-11.07/-11.57	-12.09/-10.43	-9.36/-8.24	-7.65/-7.4	-7.09/-6.67	-6.52/-6.38	-6.17/-6.24	-6.42/-6.67	-6.97/-6.9	-6.99/-6.94	-6.8/-6.65	-7.26/-7.8	-7.97/-7.98	-7.98/-7.63	-7.74/-7.37	-7.38/-7.53	-7.54/-7.01	-6.48/-5.75	-5.89/-6.53
Freq(Hz)	5.3G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	-6.09/-5.46	-5.82/-6.46	-7.04/-7.42	-7.2/-6.89	-7.15/-7.13	-7.48/-8.16	-8.85/-8.82	-9.13/-9.87	-8.27/-8.2	-7.82/-7.86	-7.53/-7.36	-7.37/-7.22	-6.91/-6.72	-6.5/-6.51	-6.31/-6.35	-6.88/-7.4	-8.09/-8.85	-9.14/-9.54	-9.41/-9.59	-9.29/-9.85	-9.57/-8.75	-8.54/-8.82	-8.41/-8.15	-7.58/-6.57
Θ(7.5°)	-5.32/-4.99	-4.86/-5.16	-5.7/-6.55	-6.67/-7.16	-7.14/-7.13	-6.97/-7.29	-7.32/-8.12	-9.27/-9.29	-9.04/-8.36	-8.16/-8.4	-8.77/-9.3	-7.4/-7.61	-6.29/-5.75	-5.52/-5.45	-5.65/-5.92	-6.55/-7.24	-8.32/-8.5	-8.43/-7.85	-7.54/-7.84	-7.87/-6.71	-6.92/-6.78	-6.41/-6.39	-6.4/-5.59	
Θ(15°)	-2.47/-2.11	-1.61/-1.99	-2.57/-2.65	-3.06/-3.24	-3.87/-4.17	-4.84/-5.61	-5.98/-6.67	-6.87/-6.97	-7.26/-7.17	-6.91/-6.51	-6.26/-6.03	-5.63/-4.89	-4.14/-3.28	-2.83/-2.76	-3.18/-3.98	-5.13/-6.51	-7.31/-7.53	-7.85/-9.32	-10.38/-9.49	-9.05/-8.2	-8.34/-8.14	-7.92/-6.61	-5.5/-4.79	-3.85/-2.75
Θ(22.5°)	-1.19/-0.98	-0.69/-0.62	-0.60/-0.57	-0.46/-0.39	-0.74/-1.36	-2.08/-2.92	-4.14/-4.94	-5.13/-4.66	-4.34/-4.48	-4.57/-4.14	-3.82/-3.94	-2.71/-2.18	-1.39/-0.97	-0.85/-1.13	-1.91/-3.17	-3.9/-5.39	-7.47/-9.4	-10.62/-9.37	-7.55/-6	-15.19/-4.8	-3.77/-3	-1.86/-1.28		
Θ(30°)	-1.94/-2.3	-1.75/-1.03	-0.28/-1.03	-0.73/-0.97	0.84/-0.52	-4.9/-1.65	-3.25/-4.7	-6.73/-5.47	-4.55/-3.96	-3.64/-3.28	-2.58/-2.25	-2.69/-3.51	-3.37/-4.2	-1.34/-0.59	0.024	-1.02/-1.11	-2.02/-3.24	-4.19/-2.82	-2.52/-4.13	-5.42/-5.21	-5.44/-4.53	-3.18/-2.76	-2.29/-2.06	-1.65/-1.9
Θ(37.5°)	0.450/0.21	-0.35/-0.28	0.420/0.77	0.940/0.93	0.56/-0.3	-1.66/-2.1	-2.37/-2.6	-2.38/-1.85	-2.46/-3.57	-3.91/-3.38	-2.37/-1.67	-1.45/-1.47	-1.99/-2.06	-1.29/-0.64	-0.66/-1.11	-1.06/-0.8	-0.19/-0.52	-0.730.02	-0.34/-1.68	-3/-2.25	-1.74/-1.02	-0.220.1	0.240/1.1	-0.060
Θ(45°)	1.71/-1.48	0.26/-0.51	0.210.92	0.790/2.1	-0.29/-0.55	-1.47/-2.96	-2.71/-2.51	-2.19/-2.37	-3.87/-5.1	-4.85/-3.13	-1.78/-0.74	-0.01/-0.16	-0.51/-0.56	-0.89/-0.95	-0.54/-0.47	-0.130.11	-0.2/-1	-1.87/-2.16	-0.940.54	0.61/-0.02	-0.780.28	1.31/1.79	2.08/2.19	2.03/1.48
Θ(52.5°)	3.092/0.39	0.55/-0.75	-0.010.78	0.931/8.1	1.430/7.8	-1.1/-2.04	-1.01/-1.3	-1.04/-1.63	-2.45/-3.31	-3.13/-1.06	-0.400.86	0.47/-1.05	-0.12/-1.76	-1.82/-1.63	-1.37/-1.35	-2.01/-1.67	-0.180.66	1.99/2.07	0.71/39	2.44/2.8	3.313/6.7	3.24/3.07		
Θ(60°)	4.063/1.9	1.690/8.9	0.55/-0.15	-0.04/-1.35	1.510/8.4	-0.44/-1.54	-1.84/-1.94	-1.71/-1.98	-2.39/-0.38	-3.56/-1.77	-1.040.18	1.25/-1.18	1.922/5.4	1.680/0.4	-0.72/-1.15	-0.93/-1.8	-1.850.4	1.591/1.3	0.74/-1.12	1.04/-1.7	1.294/5.7	2.83/2.5	4.615/5.4	5.064/2.8
Θ(67.5°)	5.04/0.74	3.73/3.16	2.33/-1.4	1.32/2.02	1.611/5.4	1.5/0.83	-0.55/-2.02	-3.15/-3.66	-3.51/-3.21	-2.23/-1.03	-0.040.7	1.68/2.1	3.023/0.2	2.360/9.1	-0.63/-1.3	-0.17/-0.78	-0.56/-0.39	0.771/38	1.77/2.65	3/2.59	2.62/0.4	3.093/9.9	5.025/6.7	5.425/0.1
Θ(75°)	3.63/3.27	2.042/5.4	2.71/8.6	1.282/6.6	3.08/3.11	2.42/1.3	0.24/-0.5	-1.1/-2.34	-2.65/-2.05	-1.06/-0.91	0.410.83	2.12/2.39	3.383/1.7	3.07/1.91	0.310/2.8	-0.59/-0.78	-0.83/-0.52	0.68/1.48	2.692/9.3	3.423/53	3.93/3.7	3.313/0.7	3.94/9.8	5.083/9.2
Θ(82.5°)	2.412/6.8	2.082/6.7	1.970/4.7	0.681/1.4	1.512/0.4	1.630/4.1	-1/-1.51	-1.13/-1.62	-1.84/-1.9	-1.45/-1.05	1.371/8.8	2.452/7.1	3.083/1.1	2.882/3.7	2.161/8.6	0.840.82	-0.27/-1.36	3.643/3.7	3.843/8.8	3.393/23	3.593/1.2	2.923/0.9	3.58/4	4.122/5
Θ(90°)	4.133/8.5	2.942/8.8	2.040/8.4	1.222/1.9	2.491/9.9	0.42/-0.73	-1.62/-1.91	-2.12/-2.72	-1.98/-2.69	-4.45/-2.93	-0.950.38	0.92/21	2.243/6.2	2.771/7.8	1.840/-0.3	-1.11/7.6	1.581/0.5	2.08/1.21	0.722/3.2	3.454/3.1	4.724/1.2	4/3.54	4.764/9.3	5.4/1.7
Θ(97.5°)	2.382/7	1.491/2.3	0.660/8.4	1.172/1.8	2.382/1.6	0.75/-0.11	-0.84/-1.63	-1.55/-2.01	-2.47/-2.64	-2.4/-1.6	-2.14/-0.36	0.2/-0.18	1.852/1.2	1.851/4.3	1.2/-1.36	-0.360.06	0.731/27	1.17/-0.85	0.161/0.2	2.663/5.4	3.973/7.2	3.353/0.9	3.653/7.2	3.672/7
Θ(105°)	0.77/-0.17	-0.98/-0.36	-0.66/-0.31	-0.790.83	1.360/8.9	-0.19/-1.02	-2.42/-3	-2.33/-6.1	-2.79/-2.34	-2.06/-0.66	-1.84/-0.29	-0.91/-1.4	1.290/7.5	-0.0/-0.24	-0.027	2.412/8.2	2.743/7.6	3.82/-1.5						



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(15°)	-7.25/-7.86	-8.28/-8.31	-7.89/-6.81	-5.73/-4.86	-3.91/-3.28	-2.7/-2.02	-1.72/-1.76	-2.03/-2.44	-3.12/-3.88	-4.55/-5.43	-6.68/-7.66	-8.19/-8.32	-7.9/-7.86	-7.29/-6.23	-5/-3.51	-2.2/-1.34	-0.69/-0.45	-0.4/-0.28	-0.7/-1.34	-2.37/-3.45	-4.1/-3.93	-3.51/-3.16	-3.73/-4.32	-5.74/-6.64
Θ(22.5°)	-4.43/-7.1	-5.48/-6.61	-7.71/-8.68	-8.59/-7.99	-7.17/-6.51	-5.51/-4.73	-3.89/-3.89	-3.97/-4.38	-4.06/-3.96	-4.11/-5.07	-6.12/-6.56	-6.55/-6.4	-5.76/-4.93	-4.23/-3.45	-2.95/-2.59	-2.5/-2.29	-1.79/-1.15	-0.52/-0.24	-0.72/-2.03	-3.5/-4.68	-5.55/-4.96	-4.13/-3.49	-3.07/-2.79	-3.35/-3.91
Θ(30°)	-2.98/-3.5	-4.49/-5.05	-4.64/-5.08	-6.12/-6.61	-6.09/-6.38	-5.35/-4.48	-3.99/-4	-4.21/-4.77	-5.48/-5.47	-4.51/-4.01	-4.71/-5.97	-6.49/-6.21	-5.58/-4.71	-3.14/-1.73	-1/-0.95	-1.55/-1.99	-2.02/-1.85	-2.01/-2.76	-2.97/-3.1	-3.15/-3.5	-4.47/-4.27	-3.32/-1.97	-1.49/-1.39	-1.44/-1.96
Θ(37.5°)	-2.88/-3.24	-3.97/-4.97	-6.11/-4.75	-7.74/-6.92	-6.59/-6.38	-6.62/-6.91	-6.92/-5.54	-6.19/-6.4	-7.06/-7	-6.71/-5.42	-5.33/-6.23	-7.01/-6.52	-5.52/-4.12	-2.34/-0.95	-0.19/-0.26	0.09/-0.4	-0.51/-0.8	-1.05/-1.06	-1.6/-2.1	-2.91/-3.4	-3.45/-4.06	-3.65/-2.62	-2.22/-1.49	-1.28/-2.05
Θ(45°)	-3.25/-3.08	-3.45/-5.85	-8.71/-8.15	-8.62/-9.5	-8.47/-7.31	-7.68/-8.29	-7.97/-6.16	-5.68/-5.79	-5.09/-4.9	-5.4/-6.32	-7.59/-6.22	-4.81/-4.76	-4.77/-3.02	-1.93/-1.39	-1.66/-1.41	-1.15/-0.67	-0.51/-1.14	-1.42/-1.53	-1.35/-0.5	-2.11/-2.87	-3.17/-3.16	-2.82/-2.25	-1.99/-1.84	
Θ(52.5°)	-3.11/-3.37	-3.62/-4.15	-5.18/-6.41	-7.48/-6.96	-5.73/-5.51	-6.46/-6.2	-5.6/-5.24	-5.31/-5.31	-5.68/-7.16	-8.72/-8.65	-7.54/-5.17	-3.46/-4.39	-3.95/-2.97	-2.45/-2.01	-1.72/-0.69	-0.160/27	0.640/16	-1.42/-3.88	-4.52/-3.75	-2.85/-2.04	-1.37/-1.7	-2.44/-2.83	-3.22/-3.04	-2.88/-2.6
Θ(60°)	-4.96/-5.82	-6.72/-7.03	-5.34/-5.89	-5.68/-6.52	-5.8/-5.53	-6.26/-6.47	-6.06/-5.38	-5.96/-6.12	-8.02/-9	-9.34/-5.49	-3.27/-3.12	-2.17/-2.65	-2.97/-2.43	-3.41/-4.41	-3.19/-2.03	-0.020/-33	-0.82/-1.2	-0.62/-1.95	-4.24/-4.16	-2.18/-1.16	-1.29/-1.14	-2.55/-3.27	-3.63/-3.76	-3.79/-3.84
Θ(67.5°)	-8.43/-7.56	-7.03/-4.95	-2.75/-2.76	-3.89/-6.53	-8.5/-8.12	-7.14/-5.02	-7.23/-9.5	-9.05/-8.69	-5.72/-3.9	-2.73/-3.24	-2.59/-1.71	-2.28/-1.04	-1.16/-2.26	-1.81/-0.22	0.91/09	-1.17/-2.29	-1.53/-2.12	-3.31/-2.13	-0.66/-1.1	-2.52/-4.92	-6.42/-6.24	-5.3/-4.73	-6.26/-6.8	
Θ(75°)	-6.4/-5.96	-5.28/-4.5	-4.13/-4.14	-4.96/-6.65	-8.94/-8.04	-6.94/-3.31	-3.5/-6.33	-6.65/-7.91	-9.01/-9.74	-5.92/-4.96	-4.21/-3.4	-4.08/-0.28	-0.76/-0.26	0.660/82	-0.68/-1.78	-1.130/56	-0.67/-1.91	-1.08/-1.44	-3.29/-1.22	0.31/-0.7	-2.36/-2.15	-2.94/-7.26	-3.61/-4.68	-5.05/-5.19
Θ(82.5°)	-6.46/-4.58	-4.11/-3.13	-4.99/-6.11	-5.53/-5.47	-5.38/-5.71	-6.31/-7.06	-9.31/-8.68	-7.43/-10.02	-10.56/-7	-5.39/-5.1	-4.55/-3.74	-2.69/-2.1	-2.57/-2.64	-1.28/-1.12	-1.71/-2.17	-1.57/-1.84	-3.43/-3.54	-0.9/-0.23	-1.09/-0.95	0.37/-1.74	-0.93/-0.39	-0.43/-0.69	-1.98/-3.75	-5.02/-7.2
Θ(90°)	-4.2/-5.72	-3.67/-2.56	-2.89/-4.57	-5.62/-7.41	-7.89/-7.64	-10.04/-9.24	-10.31/-8.93	-8.94/-5.91	-5.31/-4.57	-4.11/-4.58	-6.7/-4.62	-2.85/-1.5	-0.87/-0.74	-0.07/-0.71	-2.4/-3.43	-1.62/-1.1	-1.95/-2.47	-0.16/-1.85	-1.78/-0.89	0.68/-1.76	-1.9/-1.83	-2.49/-3.82	-5.07/-6.23	-6.53/-4.3
Θ(97.5°)	-6.18/-6.43	-4.91/-4.84	-3.85/-5.26	-7/-11.89	-12.34/-11.51	-8.76/-7.77	-7.9/-8.86	-6.98/-4.7	-4.8/-4.64	-4.52/-5.61	-3.8/-1.61	-2.24/-0.75	-2.16/-2.85	-3.16/-4.4	-3.22/-0.17	-0.50/61	1.110/-49	-1.8/-0.07	-0.83/-3.62	-1.63/-0.8	-2.61/-3.56	-5.74/-8.18	-5.32/-4.69	
Θ(105°)	-5.36/-7.03	-6.02/-9.3	-9.85/-6.8	-6.74/-8.77	-7.99/-9.25	-7.22/-4.77	-7.22/-8.83	-6.56/-6.85	-6.65/-6.58	-5.05/-8.42	-4.66/-3.68	-1.06/-1.42	-3.28/-2.18	-4.26/-3.32	-1.73/-9.3	-6.6/-2.9	-1.64/11	0.520/56	-0.790/69	0.563/-38	-0.760/62	-2.41/-3.33	-6.56/-7.97	-4.66/-4.4
Θ(112.5°)	-7.13/-8.18	-8.94/-6.45	-6.06/-5.96	-7.68/-9.85	-7.71/-6.95	-5.91/-5.42	-4.99/-5.2	-6.17/-7.71	-8.82/-6.79	-7.81/-5.68	-4.28/-4.81	-3.65/-2.89	-3.27/-3.62	-3.66/-2.31	-0.81/-4.22	-9.05/-2.22	-0.450/72	-1.26/-2.89	-2.24/1.85	-0.18/-7.24	-3.87/-1.19	-3.25/-5.05	-5.2/-6.96	-7.21/-6.14
Θ(120°)	-6.49/-7.21	-8.02/-6.2	-6.78/-7.01	-5.33/-5.11	-5.03/-7.43	-10.17/-8.43	-8.15/-7.66	-6.24/-4.78	-6.51/-8.26	-8.52/-5.01	-5.69/-4.49	-3.76/-6.47	-5.44/-4.73	-5.24/-5.44	-5.27/-11.69	-9.08/-3.7	-2.08/0.88	-3/-3.97	-3.70/65	1.2/-2.8	-2.9/-4.02	-6.3/-6.27	-7.03/-4.97	-6.11/-5.96
Θ(127.5°)	-3.75/-4.27	-4.38/-5.62	-4.12/-5.15	-4.2/-4.36	-6.51/-6.62	-6.77/-5.52	-5.24/-6.64	-7.88/-7.78	-7.42/-9.31	-8.38/-8.67	-8.43/-9.63	-10.69/-9.82	-7.85/-5.34	-3.33/-3.6	-4.08/-2.31	-3.72/-1.74	-0.35/-0.78	-0.1/-3.55	-4.55/-2.3	-1.8/-2.47	-5.19/-6.18	-5.17/-4.93	-5.47/-5.6	-3.91/-1.8
Θ(135°)	-5.23/-3.96	-3.89/-5.63	-5.06/-5.27	-6.74/-8.2	-6.49/-9.49	-10.21/-8.4	-7.63/-8.19	-8.76/-6.99	-6.11/-6.61	-8.52/-10.07	-8.62/-6.72	-6.72/-6.14	-6.43/-3.44	-3/-2.69	-2.53/-4.14	-2.96/-1.76	0.59/-2.35	-2.88/-0.78	-1.47/-2.73	-3.87/-7.12	-8.28/-7.55	-8.91/-5.33	-3.36/-3.95	
Θ(142.5°)	-1.63/-1.85	-2.91/-2.24	-2.91/-3.23	-3.29/-3.64	-3.97/-4.37	-4.77/-5.14	-5.81/-6.19	-5.13/-5.79	-5.02/-4.53	-3.75/-3.3	-2.71/-1.88	-1.34/-0.96	-0.91/-1.05	-1.34/-1.7	-2.35/-3.17	-4.03/-4.6	-5.28/-6.01	-5.49/-4.42	-1.66/-1.57	-4.55/-1.22	-1.32/-1.28	-1.34/-1.2	-1.43/-1.71	
Θ(150°)	-5.62/-6.2	-9.03/-9.61	-9.71/-9.55	-9.34/-10.31	-10.23/-9.75	-8.87/-8.4	-8.32/-7.44	-6.11/-5	-4.82/-4.72	-5.6/-6.81	-8.31/-9.28	-8/-7.87	-8.36/-7.31	-6.66/-7.65	-8.42/-5.61	-5.03/-7.66	-6.66/-4.15	-4.59/-6.19	-6.71/-4.76	-4.25/-5.15	-5.47/-4.14	-4.63/-5.7	-5.73/-6.9	-8/-7.36
Θ(157.5°)	-4.81/-4.48	-4.64/-4.85	-6.34/-9.2	-10.41/-10.78	-10.66/-10.88	-10.94/-10.48	-9.27/-8.31	-6.76/-6.15	-5.75/-5.64	-5.43/-5.44	-5.77/-5.74	-6.06/-6.21	-5.66/-5.47	-5.37/-5.57	-6.46/-7.05	-7.89/-7.98	-6.56/-4.41	-3.21/-3.45	-3.88/-3.41	-3.64/-5.31	-7.35/-8.09	-6.98/-5.55	-5.49/-6.26	-5.13/-4.12
Θ(165°)	-7.9/-8.11	-8.3/-9.95	-11.96/-11.52	-10.65/-9.95	-9.02/-8.17	-7.74/-7.9	-8.52/-8.71	-9.32/-8.8	-8.5/-8.03	-7.65/-7.09	-6.71/-6.4	-5.79/-4.98	-4.54/-4.47	-5.1/-6.19	-6.38/-5.77	-5.03/-4.49	-4.15/-3.71	-3.72/-3.7	-3.76/-4.29	-5.39/-6.85	-7.76/-8.06	-6.56/-5.68	-5.88/-6.61	-7.46/-7.99
Θ(172.5°)	-7.33/-7.61	-7.5/-7.59	-7.18/-7.51	-7.49/-8.38	-8.66/-9.93	-11.32/-10.95	-10.84/-10.29	-10.01/-10.5	-10.87/-10.44	-9.6/-9.37	-9.51/-9.51	-8.8/-8.36	-7.97/-8.38	-8.83/-8.92	-8.28/-7.93	-7.35/-6.49	-5.85/-5.37	-5.25/-5.36	-5.92/-6.94	-8.08/-9.14	-9.83/-9.9	-10.81/-10.12	-9.33/-9.09	-8.82/-8.02
Θ(180°)	-10.16/-9.5	-8.31/-8	-6.96/-7	-7.17/-7.39	-7.66/-8.38	-8.69/-8.7	-9.15/-9.45	-10.24/-11.1	-11.72/-11.57	-12.03/-12.07	-12.38/-11.78	-10.95/-10.48	-9.91/-9.42	-9.01/-8.68	-8.95/-8.88	-8.42/-8.34	-8.14/-8.27	-8.44/-8.32	-8.93/-10.07	-11.28/-11.38	-11.63/-11.41	-10.25/-9.44	-9.32/-9.56	-9.58/-9.79
Freq(Hz)	5.785G/Pol.	Theta-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-0.59/-0.99	-1.41/-2.23	-2.89/-3.38	-3.74/-3.9	-4.33/-4.46	-4.83/-5.23	-5.12/-6.65	-4.04/-3.61	-3.08/-2.53	-2.03/-1.75	-1.51/-1.21	-1.05/-0.98	-1.11/-1.25	-1.62/-2.09	-2.35/-2.54	-3/-3.63	-4.19/-4.62	-4.92/-5.01	-4.98/-4.89	-4.22/-4.11	-3.33/-2.67	-2.07/-1.77	-1.54/-0.92	-0.62/-0.59
Θ(7.5°)	-1.63/-1.85	-2.91/-2.24	-2.91/-3.23	-3.29/-3.64	-3.97/-4.37	-4.77/-5.14	-5.81/-6.19	-5.13/-5.79	-5.02/-4.53	-3.75/-3.3	-2.71/-1.88	-1.34/-0.96	-0.91/-1.05	-1.34/-1.7	-2.35/-3.17	-4.03/-4.6	-5.28/-6.01	-5.49/-4.42	-1.66/-1.57	-4.55/-1.22	-1.32/-1.28	-1.34/-1.2	-1.43/-1.71	
Θ(15°)	-2.77/-2.95	-2.57/-2.32	-2.21/-2.06	-2.3/-2.93	-3.17/-3.34	-3.49/-3.61	-3.4/-3.52	-3.51/-3.59	-3.5/-3.94	-4.01/-4.43	-4.63/-4.33	-3.67/-2.92	-2.32/-1.97	-1.84/-1.83	-2.23/-2.99	-3.93/-5.08	-6.01/-5.64	-5.33/-4.64	-3.73/-2.91	-2.33/-1.91	-1.83/-1.94	-2.29/-2.53	-2.98/-2.47	-2.39/-2.6
Θ(22.5°)	-0.99/-1.42	-2.27/-2.31	-1.76/-0.81	-0.53/-0.86	-1.24/-1.46	-1.42/-1.43	-1.48/-1.73	-2.18/-2.52	-2.99/-3.34	-3.99/-4.41	-4.09/-3.66	-3.2/-3.1	-2.84/-2.75	-2.74/-2.92	-2.92/-3.3	-3.85/-4.55	-4.81/-4.8	-4.95/-4.86	-4.05/-3.2	-2.58/-2.87	-2.51/-2.33	-2.96/-4.01	-3.91/-2.67	-1.48/-1.06
Θ(30°)	-1.07/-0.51	-0.85/-0.57	0.010/58	0.820/-27	-0.71/-1.6	-1.75/-1.41	-1.58/-2.12	-2.65/-3.25	-3.73/-3.97	-3.81/-3.69	-3.4/-3.06	-2.47/-2.46	-2.54/-2.34	-1.71/-1.42	-1.72/-2.41	-3.81/-5.41	-5.03/-4.27	-3.33/-1.86	-0.380/-1	0.06/-0.9	-2.1/-2	-2.45/-3.59	-2.89/-2.11	-1.29/-1.3
Θ(37.5°)	-0.82/-0.77	-0.070/51	1.55/1.69	1.010/51	0.30/24	-0.09/-0.74	-1.74/-1.75	-2.27/-3.49	-3.69/-3.61	-4.33/-3.57	-4.81/-3.68	-3.8/-3.56	-2.38/-1.93	-1.66/-1.06	-0.27/-0.79	-2.19/-2.71	-3.05/-3.69	-2.64/-0.84	-0.27/-0.58	-0.83/-1.68	-3.02/-3.15	-3.04/-2.12	-0.7/-0.56	-1.21/-1.51
Θ(45°)	1.24/-1.8	1.75/-1.37	1.62/06	1.410/88	0.54/-0.26	-1.11/-1.27	-1.57/-1.77	-2.09/-2.22	-2.59/-3.49	-4.49/-5.53	-5.53/-3.84	-2.43/-3.2	-3.95/-2.41	-1.56/-0.41	0.340/21	-0.96/-1.4	-2.01/-1.35	-0.22/-0.19	0.080/12	-0.53/-2.05	-2.66/-1.05	-0.31/-0.02	0.280/32	0.130/72
Θ(52.5°)	3.012/-94	2.542/-99	3.087/-107	1.41/-42	1.320/-62	0.280/-27	-0.12/-1.08	-1.48/-0.64	-0.45/-1.33	-2.44/-2.32	-1.24/-1.44	-3.42/-4.57	-2.46/-3.1	-0.360/99	10/46	-1.19/-0.82	0.30/71	0.910/-61	-0.2/-1.08	-1.030/74	1.111/-57	2.92/-94	2.752/-64	
Θ(60°)	4.343/-7	3.173/-75	3.422/-71	2.912/-39	1.450/-85	0.25/-0.24	-0.69/-0.33	-0.39/-0.45	-0.21/-0.8	-2.18/-2.34	-1.7/-1.54	-0.51/-0.16	-0.96/-1.23	-1.03/-0.46	0.02/1.11	1.871/59	0.37/1	1.371/-27	0.510/06	1.712/-87	2.783/-11	2.452/-49	3.514/-1	3.693/-37
Θ(67.5°)	6.565/-39	4.524/-29	3.624/-58	2.61/-3	0.570/81	0.11/-0.67	-0.7/-0.35	0.13/-0.1	0.0/-74	-2.91/-4.09	-2.63/-2.16	-0.95/-0.67	0.30/-0.34	0.160/-07	0.010/08	0.530/-32	-0.21/-26	1.442/06	2.73/85	4.224/-38	3.925/-89	3.484/-32	5.215/-88	5.615/-63
Θ(75°)	6.845/-55	5.14/-42	2.913/-02	1.580/-29	0.250/-35	0.220/-56	0.690/-08	-0.73/-1.03	-1.15/-1.94	-2.89/-2.95	-1.74/-1.78	-1.26/-0.93	0.49/-0.16	0.180/68	1.191/-35	1.680/-28	-0.30/-2	1.922/-47	3.214/-5	4.714/-28	4.035/-	5.		



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

5G option10

Freq(Hz)	5.2G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phi(0°)	Phi(7.5°)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(187.5°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Theta(0°)	-5.57/-4.6	-3.63/-3.36	-2.49/-1.77	-1.2/-0.57	-0.2/0.24	0.8/1.11	1.23/1.18	0.97/0.51	0.05/-0.49	-1.04/-1.43	-2.12/-3.18	-4.38/-5.35	-5.7/-5.4	-4.42/-3.49	-2.59/-1.79	-0.91/-0.24	0.06/0.24	0.36/0.52	0.52/0.58	0.44/0.2	-0.16/-0.78	-1.5/-2.04	-2.64/-3.69	-4.82/-6.13	Theta(7.5°)	-5.84/-5.86	-5.72/-4.9	-3.39/-2.25	-1.21/-0.55	-0.51/-0.3	0.02/-0.13	-0.04/-0.02	-0.26/-0.55	-1.09/-1.42	-1.52/-1.99	-2.96/-4.25	-5.6/-6.59	-6.44/-5.12	-3.71/-2.34	-1.29/-0.42	0.1/0.56	0.88/1.28	1.51/-1.69	1.61/-42	1.31/1.08	0.77/0.34	-0.28/-1	-1.44/-2.25	-3.38/-4.97	Theta(15°)	-6.34/-6.44	-6.17/-4.97	-3.7/-2.27	-0.95/-0.49	-0.34/-0.17	-0.47/-0.62	-0.37/-0.76	-1.4/-1.96	-2.33/-2.84	-3.48/-4.07	-4.49/-5.31	-5.93/-6.17	-4.82/-3.49	-1.76/-0.46	0.47/1.09	1.36/1.49	1.31/3	1.21/06	0.96/0.91	0.85/0.7	0.64/0.45	0.28/0.44	-1.43/-2.16	-3.37/-5.34	Theta(22.5°)	-6.38/-7.41	-6.07/-4.07	-2.91/-1.74	-1.16/-0.78	-0.19/0.56	0.75/0.97	0.52/-0.07	-1.02/-1.93	-3.03/-3.93	-4.3/-4.64	-5.8/-6.53	-6.31/-5.74	-4.81/-3.33	-1.53/-0.36	0.47/1.07	1.54/1.97	2.19/2.06	1.42/0.9	0.68/0.8	0.93/0.82	0.59/0.14	-0.39/-1.21	-2.36/-3.23	-4.35/-5.82	Theta(30°)	-3.05/-3.07	-2.77/-3.34	-4.17/-4.62	-3.63/-2.9	-2.1/-1.02	-0.67/-0.27	-1.15/-2.43	-2.82/-2.76	-2.26/-2.59	-3.48/-4.73	-6.5/-8.03	-7.88/-7.41	-6.41/-4.89	-3.16/-1.55	-0.55/-0.17	0.96/1.55	1.84/1.83	2.05/2.36	2.32/1.89	1.17/0.33	-0.37/-0.83	-1.37/-2.56	-4.34/-4.06	-3.65/-3.03	Theta(37.5°)	-3.83/-4.61	-4.62/-3.84	-3.9/-5.53	-5.66/-4.9	-3.36/-2.83	-3.57/-4.18	-3.92/-3.58	-3.65/-3.97	-4.74/-5.21	-4.74/-4.27	-5.39/-6.94	-6.91/-6.05	-4.4/-2.08	-0.57/0.36	1.02/1.41	1.27/0.98	0.86/1.12	1.39/1.15	0.83/0.39	0.28/0.15	-0.3/-0.96	-1.51/-1.94	-2.96/-4.27	-3.42/-3.81	Theta(45°)	-5.48/-3.51	-2.25/-1.53	-3.23/-4.57	-5.42/-5.57	-5.44/-5.55	-5.7/-5.41	-5.02/-4.74	-3.78/-2.8	-3/-3.7	-4.99/-5.66	-4.24/-3.88	-3.81/-4.11	-4.19/-3.6	-1.46/0.03	1.12/1.84	1.97/2.02	1.78/1.37	0.44/-0.84	-2.54/-2.56	-1.35/-0.57	-0.57/-1.22	-2.01/-2.35	-2.65/-3.81	-4.11/-4.79	Theta(52.5°)	-9.16/-6.76	-7.22/-6.15	-6.21/-6.8	-7.02/-6.26	-4.36/-3.24	-2.59/-3.37	-4.3/-4.27	-4.3/-4.59	-5.44/-5.97	-8.73/-8.39	-5.77/-5.75	-4.99/-3.41	-2.54/-1.77	-1.56/-1.53	-0.75/0.85	1.81/2.17	2.02/1.27	-0.28/-2.18	-1.22/-0.94	-1.21/-0.77	-0.76/-1.34	-2.37/-3.51	-4.43/-5.93	-7.81/-8.51	Theta(60°)	-5.88/-5.2	-4.47/-3.78	-5.71/-7.17	-7.65/-8.52	-6.32/-4.46	-4.71/-6.97	-8.13/-6.84	-4.59/-4.51	-6.81/-7.33	-5.77/-5.74	-4.92/-5.08	-5.24/-5.56	-6.41/-4.44	-2.6/-1.48	0.05/0.97	1.99/2.65	2.57/2.32	1.6/0.43	-0.14/0.65	1.44/0.48	-0.39/-0.7	-1.76/-2.65	-3.19/-4.47	-6.17/-6.57	Theta(67.5°)	-7.8/-5.02	-4.82/-4.92	-5.58/-5.98	-5.48/-6.21	-8.08/-9.7	-5.89/-4.8	-3.63/-4.86	-8.26/-7.66	-5.66/-4.61	-3.92/-4.81	-5.47/-6.01	-6.51/-6.91	-6.35/-4.61	-3.13/-1.66	-0.58/-0.91	-1.07/-0.93	0.18/1.41	1.54/0.73	0.01/0.58	0.76/0.89	-0.45/-1.72	-2.88/-4.9	-7.03/-8.91	-8.6/-7.47	Theta(75°)	-6.14/-5.94	-6.3/-7.15	-6.9/-5.68	-5.18/-5.46	-4.88/-3.51	-4.54/-5.92	-6.84/-6.53	-8.13/-9.52	-10.58/-8.54	-7.52/-6.42	-5.91/-5.41	-4.47/-3.98	-3.49/-3.09	-1.9/-1.47	-1.48/-3.14	-3.77/-3.41	-2.21/-1.06	-0.36/-0.02	-0.85/-0.14	0.07/-1.2	-1.6/-1.15	-1.64/-4.1	-6.44/-7.2	-8.48/-7.22	Theta(82.5°)	-4.58/-5.42	-6.38/-5.36	-6.15/-6.41	-7.35/-8.57	-7.25/-4.92	-3.95/-3.5	-4.24/-5.28	-8.1/-10.72	-7.91/-5.67	-6.43/-6.01	-6.73/-6.39	-4.34/-3.18	-2.2/-0.57	-0.4/-0.93	-0.62/-2.23	-1.3/-0.32	0.9/0.45	-0.76/-0.74	0.11/0.05	0.65/-0.89	-1.02/-0.69	-1.14/-3.44	-7.52/-10.26	-8.68/-6.64	Theta(90°)	-4.6/-6.87	-9.65/-9.15	-7.04/-6.56	-6.59/-7.17	-6.88/-5.89	-4.93/-4.82	-6.27/-8.96	-12.05/-9.53	-6.05/-5.55	-6.64/-8.71	-6.98/-4.24	-4.15/-2.79	-0.38/0.3	0.07/0.56	0.63/-0.54	0.52/1.09	1.92/2.27	2.49/-1.46	0.88/2.29	3.09/1.51	-0.14/0.76	0.39/-0.27	-2.06/-3.19	-3.29/-4.59	Theta(97.5°)	-2.19/-3.4	-6.72/-6.27	-8.38/-9.06	-8.3/-7.12	-7.57/-10.18	-11.03/-10.55	-9.98/-10.04	-8.99/-9.23	-8.82/-8.84	-8.44/-5.84	-3.46/-2.86	-2.33/-1.8	-1.32/-0.45	-1.07/0.45	0.5/-0.13	-0.89/-0.62	-0.19/1.93	3.01/2.98	2.35/3.38	3.64/1.81	0.97/1.38	0.62/-1.38	-4.53/-7.05	-5.93/-3.94	Theta(105°)	-4.04/-6.09	-8.29/-6.75	-7.88/-6.34	-7.53/-8.64	-9.32/-8.12	-7.02/-6.46	-6.83/-8.61	-6.93/-5.31	-4.59/-5.16	-4.49/-3.37	-3.59/-2.66	-1.57/-1.76	-0.4/0	0.35/0.87	1.52/-0.54	-1.95/0.47	1.55/2.45	2.07/1.24	0.58/1.9	3.04/2.18	1.32/2.01	0.36/-2.29	-2.88/-4.63	-7.28/-5.22	Theta(112.5°)	-3.37/-2.97	-6.32/-7.33	-9.89/-8.36	-6.89/-7.46	-7.27/-7.8	-6.48/-7.04	-7.2/-5.65	-5.46/-5.19	-5.3/-6.63	-7.68/-5.73	-3.75/-0.93	-1.64/-2.71	-0.89/0.07	0.48/1.75	0.44/-1.36	-1.21/5.7	2.59/3.63	3.03/1.87	1.49/3.7	4.4/2.64	1.41/1.52	1.19/-0.7	-3.33/-4.05	-3.71/-4.23	Theta(120°)	-8.02/-5.5	-5.28/-4.46	-4.96/-6.91	-7.17/-8.38	-8.14/-8.06	-6.73/-5.38	-5.78/-6.41	-4.7/-5.44	-8.56/-9.85	-8.44/-7.58	-7.57/-5.95	-5.95/-3.12	-1.3/-0.12	0.1/0.58	-1.58/-0.79	-0.25/1.6	1.82/2.9	2.44/0.96	0.55/3.25	5.14/3.93	1.8/1.02	0.56/-0.55	-2.58/-4.89	-3.89/-5.07	Theta(127.5°)	-9.02/-3.9	-9.92/-11.94	-9.38/-7.07	-7.92/-6.46	-6.47/-7.46	-5.79/-4.93	-5.72/-6.02	-3.93/-7.92	-10.62/-8.37	-8.34/-9.77	-6.22/-5.08	-5.17/-3.03	-1.64/-0.89	-0.9/-2.85	-2.22/-1.79	0.7/0.14	2.03/1.99	1.8/-0.07	0.33/1.63	2.7/2.9	2.72/2.05	0.78/-1.14	-2.11/-1.93	-3.23/-4.03	Theta(135°)	-5.28/-3.6	-2.75/-4.71	-5.04/-6.21	-8.22/-9.26	-6.07/-3.57	-7.76/-4.49	-5.6/-6.27	-6.87/-8.99	-8.24/-7.06	-8.75/-11.63	-11.6/-7.77	-5.31/-2.32	-0.47/-1.74	-2.91/-1.22	-0.16/0.98	0.63/2.45	2.71/1.31	0.9/-1.74	-1.73/0.03	1.8/2.53	1.96/1.3	0.3/-0.78	-3.07/-4.92	-3.64/-3.84	Theta(142.5°)	-5.46/-8.38	-8.03/-7.96	-7.6/-6.83	-8/-5.9	-4.11/-2.85	-2.25/-3.04	-4.77/-5.25	-4.99/-5.03	-5.62/-6.83	-9.19/-8.65	-4.81/-3.46	-2.92/-0.83	0.19/-0	0.41/0.58	0.26/1.61	1/0.84	0.75/-0.62	-1.88/-4.58	-3.97/-1.98	-0.08/0.42	-0.31/-0.52	-1.39/-2.99	-3.21/-4.24	-5.88/-5.21	Theta(150°)	-2.55/-3.3	-5.81/-6.78	-6.76/-8.11	-6.71/-4.9	-3.54/-3.23	-3.53/-4.13	-5.18/-5.31	-5.46/-4.97	-4.46/-3.71	-3.35/-4.06	-5.67/-6.53	-5.22/-3.83	-3.6/-2.63	-2.04/-2.76	-3.39/-2.57	-2.09/-1.47	-2.68/-4.22	-4.97/-5.07	-3.84/-3.38	-4.01/-4.14	-4.32/-3.9	-3.37/-3.02	-2.26/-1.75	-1.85/-2.4	Theta(157.5°)	-5.38/-6.19	-6.65/-7.76	-8.27/-7.56	-7.57/-7.78	-8.09/-7.64	-7.82/-7.21	-7.36/-7.8	-8.22/-7.14	-5.56/-3.92	-3.18/-2.91	-3.14/-3.14	-2.63/-1.93	-1.6/-1.84	-2.39/-2.93	-3.01/-2.58	-1.8/-0.85	-0.71/-1.15	-1.55/-1.67	-1.31/-0.88	-0.51/-0.35	-0.5/-1.05	-1.86/-3	-4.26/-3.49	-4.06/-4.54	Theta(165°)	-3.52/-4.32	-3.81/-5.41	-7.72/-8.51	-8.79/-8.21	-7.8/-4.89	-8.95/-8.63	-8.59/-8.88	-8.35/-7.32	-5.53/-4.93	-5.33/-6.49	-7.59/-7.72	-6.64/-5.6	-3.7/-2.17	-1.22/-0.98	-1.21/-1.63	-0.88/-0.63	-0.32/-0.09	-0.05/-0.46	-1/-1.23	-1.58/-2.11	-2.55/-2.96	-2.97/-2.57	-2.64/-3.46	Theta(172.5°)	-8.16/-6.76	-5.53/-4.39	-4.02/-3.37	-2.95/-2.79	-2.89/-3.28	-3.99/-3.38	-3.98/-4.43	-0.55/-0.57	-5.7/-6.31	-7.15/-8.51	-8.97/-7.65	-5.97/-4.88	-4.01/-3.35	-2.86/-2.77	-2.62/-2.64	-2.47/-2.39	-2.08/-1.76	-1.76/-1.8	-3.28/-4.52	-5.45/-5.4	-5.69/-6.56	-8.04/-9.56	-8.87/-9.15	Theta(180°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(187.5°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(195°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(202.5°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(210°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(217.5°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(225°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(232.5°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(240°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15	-5.49/-5.31	-5.03/-4.89	-4.51/-4.8	-4.57/-4.38	-4.57/-4.75	-4.68/-4.7	-4.92/-5.21	-5.43/-5.7	-6.23/-6.84	-7.52/-8.41	Theta(247.5°)	-9.62/-10.42	-10.47/-9.69	-8.06/-6.96	-6.36/-5.95	-5.51/-4.86	-4.44/-4.64	-4.82/-4.88	-4.66/-4.29	-4.13/-4.2	-4.5/-5.1	-6.09/-6.99	-7.55/-7.46	-7.32/-6.86	-6.57/-6.15



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(150°) Φ(157.5°)	-6.18/-5.53 0.09/-1.7	-3.96/-5.48 -3.78/-6.73	-6.56/-5.02 -7.97/-6.69	-4.54/-4.78 -5.33/-5.04	-4.59/-4.25 -5.13/-5.44	-3.62/-2.61 -6.23/-5.8	-2.94/-3.27 -5.05/-5.14	-3.89/-5.32 -5.67/-7.31	-6.58/-6.21 -8.78/-8.64	-5.48/-4.45 -7.21/-6.07	-3.96/-4.78 -5.18/-5.14	-5.44/-4.08 -5.02/-5.88	-4.76/-6.96 -6.48/-5.17	-7.11/-7.23 -3.5/-3.11	-9.19/-8.45 -3.75/-5.73	-8.94/-10.8 -8.7/-11.43	-6.48/-5.3 -9.03/-7.32	-5.49/-4.64 -6.22/-4.22	-4.61/-3.17 -3.95/-3.7	-1.33/-0.57 -2.13/-0.75	-1.56/-2.71 -0.74/-1.54	-1.36/-1.53 -1.47/-1.62	-2.2/-2.09 -1.42/-0.68	-2.62/-4.27 0.54/1.08
Θ(165°) Φ(172.5°)	-1.49/-2.8 -1.93/-1.56	-4.18/-4.69 -1.54/-1.52	-4.08/-3.29 -1.96/-2.85	-3.24/-3.67 -3.7/-4.64	-4.51/-5 -5.04/-5.72	-5.81/-6.02 -11.67/-12.03	-7.5/-8.46 -11.27/-9.48	-9.66/-11.03 -10.77/-9.48	-9.82/-6.91 -5.98/-6.02	-4.33/-2.48 -4.6/-4.1	-1.43/-1.2 -3.9/-4.15	-1.57/-2.36 -5.78/-5.3	-3.43/-4.96 -5.39/-5.05	-6.35/-6.54 -4.7/-4.85	-6.18/-5.96 -6.25/-6.45	-6.59/-6.94 -6.02/-5.53	-5.29/-4.09 -6.02/-5.53	-4.38/-5.6 -5.76/-5.8	-6.93/-5.62 -5.41/-4.62	-2.78/-0.88 -3.54/-2.61	-0.11/-0.9 -2.57/-2.7	0.5/0.73 -2.1/-1.88	0.79/0.56 -2.65/-3.47	-0.18/-1.15 -3.51/-2.88
Θ(180°) Freq(Hz) 5.6G/Pol.	-4.81/-4.71 5.6G/Pol.	-4.57/-5.01 Phi-	-6.43/-7.78 -	-8.18/-8.27 -	-8.43/-8.41 -	-8.74/-9.89 -	-9.66/-8.45 -	-10.73/-5.72 -	-5.19/-4.94 -	-4.61/-4.4 -	-3.75/-3.24 -	-3.14/-3 -	-3.02/-2.86 -	-2.89/-3.17 -	-3.66/-4.28 -	-4.82/-5.06 -	-5.51/-6.39 -	-7.51/-7.44 -	-7.34/-7.45 -	-7.91/-7.98 -	-8.33/-8.37 -	-6.91/-5.55 -	-4.84/-5.22 -	-5.46/-5.49 -
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°)	-8.76/-8.15	-6.82/-5.83	-5.44/-4.14	-2.56/-1.61	-0.73/0.36	0.77/0.82	0.87/0.77	0.42/-0.05	-0.48/-1.05	-1.8/-3.08	-4.71/-6.58	-8.61/-9.6	-10.74/-10.37	-8.54/-7.27	-6.05/-5.09	-4.3/-3.42	-2.63/-1.69	-1.02/-0.72	-0.56/-0.58	-0.59/-1.08	-1.36/-1.89	-3.39/-5.28	-6.41/-6.9	-7.12/-9.13
Θ(7.5°)	-9.76/-9.16	-7.58/-6.6	-6.03/-5.92	-4.72/-4	-2.99/-1.82	-1.28/-1.06	-1.06/-1.18	-1.35/-1.72	-2.47/-3.2	-4.17/-5.42	-7.26/-9.4	-9.87/-10.4	-8.13/-6.33	-5.1/-3.24	-2.05/-1.27	-0.54/0.2	0.81/-1.35	1.71/1.97	2.06/1.81	1.45/0.79	0.11/-0.55	-1.44/-2.67	-4.03/-6.5	-8.08/-9.25
Θ(15°)	-10.76/-9.45	-8.61/-7.48	-6.92/-6.48	-5.41/-4.4	-4.07/-3.1	-2.81/-2.1	-2.11/-1.7	-1.61/-1.5	-1.11/-1.1	-0.61/-0.6	-0.11/-0.1	0.39/-0.3	0.89/-0.8	1.39/-1.3	1.89/-1.8	2.39/-2.3	2.89/-2.8	3.39/-3.3	3.89/-3.8	4.39/-4.3	4.89/-4.8	5.39/-5.3	5.89/-5.8	6.39/-6.3
Θ(22.5°)	-6.49/-4.98	-5.18/-4.74	-3.63/-3.9	-3.15/-2.3	-1.5/-4.6	-1.8/-1.7	-1.39/-1.35	-1.47/-1.77	-2.44/-3.43	-4.37/-5.91	-7.85/-8.64	-9.04/-8.31	-6.85/-5.4	-3.95/-2.42	-1.29/-0.59	-0.15/0.28	0.82/-1.49	1.94/-2.19	2.1/69	1.41/0.87	0.3/-0.27	-1.09/-1.52	-2.46/-4.2	-6.36/-7.5
Θ(30°)	-5.97/-6.71	-5.59/-5.13	-4.65/-3.36	-2.26/-2.02	-2.49/-2.68	-3.29/-3.17	-3.54/-3.47	-3.42/-3.33	-3.58/-4.05	-4.25/-5.12	-6.93/-8.21	-8.27/-6.97	-5.59/-3.87	-2.22/-1.27	-0.56/0.4	1.09/-1.68	1.91/-2.08	2.15/-1.89	1.39/0.65	0.13/0.09	0.2/0.04	-0.42/-0.28	-0.77/-1.58	-3.08/-4.26
Θ(37.5°)	-7.35/-6.67	-5.07/-5.06	-4.96/-4.71	-4.84/-5.33	-5.69/-5.08	-4.29/-3.85	-4.03/-3.21	-2.73/-2.99	-4.3/-5.4	-5.88/-6.15	-6.62/-6.4	-5.78/-5.72	-5.17/-3.58	-1.98/-0.78	0.27/1.19	1.93/-2.44	2.91/-3.32	3.66/3.66	3.21/2.75	2.02/1.44	0.98/0.47	-0.62/-1.46	-2.29/-4.03	-4.91/-5.83
Θ(45°)	-6.14/-6.99	-3.82/-3.65	-4.46/-4.79	-6.27/-9.18	-10.65/-9.77	-8.24/-6.74	-6.76/-7.17	-7/-5.7	-3.4/-3.14	-3.93/-4.3	-3.98/-4.01	-4.32/-4.2	-3.46/-2.75	-1.42/-0.25	0.53/1.11	1.44/-1.72	2.32/-2.68	2.47/-2.1	2.16/-2.59	2.48/-1.77	1.03/0.58	-0.47/-1.4	-1.73/-2.91	-4.05/-9.19
Θ(52.5°)	-3.03/-4.55	-5.38/-4.4	-5.41/-6.65	-7.39/-8.14	-8.07/-6.41	-5.79/-5.76	-5.14/-3.7	-3.97/-4.21	-4.37/-4.65	-4.61/-3.28	-2.1/-2.1	-1.76/-1.8	-2.17/-1.55	-0.99/-0.13	1.35/1.98	1.86/1.56	1.48/-1.27	1.89/1.92	1.0/1.4	0.55/0.41	-0.23/-0.53	-0.76/-0.78	-0.65/-1.12	-1.81/-2.62
Θ(60°)	-5.64/-5.44	-6.14/-5.41	-4.52/-6.1	-6.37/-6.73	-7.51/-6.37	-4.69/-4.51	-5.11/-6.51	-6.88/-5.77	-6.29/-6.87	-7.97/-6.93	-4.84/-3.9	-3.6/-4.16	-3.96/-2.79	-1.43/-0.31	-0.22/-0.08	0.32/0.09	0.11/-1.13	1.75/0.69	0.55/1	1.03/0.35	-0.25/-0.19	-0.05/0.11	-0.44/-2.09	-3.97/-3.92
Θ(67.5°)	-5.84/-7.69	-8.28/-6.45	-4.8/-3.9	-4.34/-6.13	-6.93/-7.15	-7.26/-5.99	-4.48/-4.87	-6.9/-9.26	-8.9/-8.3	-7.04/-5.42	-4.08/-3.87	-2.93/-3.82	-5.28/-2.43	-1.19/-0.61	-0.35/-1.26	2.5/-2.44	1.58/-2.45	2.92/-2.29	1.15/-1.25	2.32/-2.25	1.33/-2.05	-1.23/-2.05	-1.53/-2.94	-5.23/-5.23
Θ(75°)	-4.77/-5.23	-5.68/-5.87	-6.23/-7.56	-7.37/-8.7	-9.63/-8.17	-4.97/-2.65	-3.35/-6.87	-8.23/-7.7	-7.98/-7.38	-5.96/-6.01	-3.41/-2.3	-2.44/-1.58	-2.49/-2.46	-1.06/-0.58	0.01/0.29	0.71/-2.2	1.07/-1.18	2.47/-2.24	1.69/-2.95	4.072/9.1	1.41/0.64	-0.88/-2.95	-4.23/-6.1	-6.84/-4.9
Θ(82.5°)	-6.03/-7.18	-7.69/-7.85	-8.71/-6.97	-8.17/-7.72	-7.05/-6.11	-5.45/-6.16	-7.33/-7.45	-5.52/-6.36	-8.51/-7.7	-6.37/-5.91	-5.69/-4.16	-5.36/-4.24	-3.79/-1.5	-0.96/-1.85	-1.52/-1.74	-0.31/-0.97	0.63/0.71	1.23/-1.22	1.89/-3.2	3.56/0.32	0.93/-0.16	-0.29/-1.82	-3.97/-4.84	-6/-6.34
Θ(90°)	-5.19/-8.93	-6.2/-5.23	-6.89/-8.45	-9.62/-8.45	-8.41/-9.5	-8.16/-7.82	-7.56/-6.92	-8.24/-7.42	-7.55/-7.27	-5.2/-5.15	-7.83/-6.85	-7.35/-3.78	-2.9/-3.65	-3.39/-3.31	-2.45/-5.32	2.18/-1.87	0.92/0.71	1.5/-2.41	1.78/0.12	0.57/0.77	-0.52/-3.38	-6.94/-8.09	-7.29/-5.07	
Θ(97.5°)	-6.35/-8.41	-5.58/-5.7	-7.56/-9.22	-12.54/-12.34	-10.9/-10.96	-9.52/-7.3	-7.17/-8.64	-8.58/-5.88	-6.45/-7.78	-4.88/-5.68	-5.22/-3.12	-4.46/-3.96	-4.9/-1.5	-2.85/-2.35	-1.26/-2.3	0.16/2.21	2.63/-2.76	2.98/2.06	1.35/-2.61	2.79/-1.29	1.23/-1.1	-1.34/-2.81	-4.67/-9.72	-8.73/-5.26
Θ(105°)	-3.68/-6.71	-7.58/-8.88	-8.93/-6.96	-6.93/-8.84	-8.04/-6.42	-7.97/-10.07	-8.53/-6.64	-8.6/-8.85	-9.06/-8.54	-7.4/-7.56	-5.65/-4.08	-4.02/-4.11	-3.76/-1.93	-2.48/-0.81	-0.08/-2.77	-0.27/0.4	1.02/-2.36	2.89/-2.68	2.05/-3.65	2.96/-1.92	1.96/-1.73	-1.87/-4.25	-5.32/-6.5	-6/-6.87
Θ(112.5°)	-7.42/-6.07	-9.78/-9.6	-6.76/-6.4	-7.11/-7.03	-5.76/-5.86	-7.68/-9.49	-10.02/-10.46	-11.04/-10.11	-9.29/-8.33	-11.49/-8.7	-6.52/-7.39	-6.82/-6.72	-4.22/-2.66	-3.08/-3.2	-2.58/-4.1	-4.61/-0.7	2.12/-2.52	2.73/-1.07	1.68/-3.83	2.14/-0.51	-0.01/-0.19	-2.98/-6.65	-7.14/-6.97	-6.6/-6.6
Θ(120°)	-6.5/-7	-8.51/-9.18	-10.91/-10.42	-8.83/-9.84	-9.28/-8.14	-8.16/-9.2	-8.76/-8.02	-7.1/-7.09	-9.09/-10.18	-10.48/-9.49	-8.83/-7.33	-6.87/-10.45	-8.02/-4.44	-3.99/-3.26	-2.74/-6.71	-3.7/-1.14	2.12/-3.1	2.35/0.72	1.48/-3.6	3.29/0.19	-0.74/-3.2	-4.24/-4.7	-5.42/-6.51	-7.71/-5.51
Θ(127.5°)	-7.77/-7.36	-8.47/-6.32	-5.36/-6.87	-6.36/-8.48	-10.36/-7.47	-7.04/-7.97	-9.97/-10.69	-8.85/-8.07	-8.5/-10.67	-10.79/-8.22	-8.15/-11.07	-11.54/-10.2	-5.17/-3.46	-3.4/-2.69	-2.93/-1.83	-0.2/-2.26	2.31/-2.21	1.47/0.35	0.79/-1.66	1.25/-1.16	-1.54/-2.93	-4.34/-3.71	-6.69/-7.84	-5.54/-5.74
Θ(135°)	-6.66/-6.63	-7.01/-8.43	-6.59/-7.01	-8.1/-8.16	-10.2/-10	-8.74/-8.43	-10.23/-11.27	-10.71/-9.41	-8.8/-9.43	-10.54/-10.34	-7.55/-5.77	-5.97/-6.75	-6.05/-2.67	-1.9/-2.19	-0.42/0.18	0.9/-1.11	1.52/0.88	0.14/-0.76	-0.48/0.74	0.93/-0.62	-2.82/-2.78	-3.31/-4.9	-7.32/-6.82	-6.85/-7.4
Θ(142.5°)	-7.86/-10.2	-8.96/-9.41	-9.23/-7.12	-7.93/-7.38	-6.36/-6.48	-7.24/-8.31	-9.11/-10.24	-9.45/-7.81	-8.63/-9.36	-9.32/-8.74	-7.82/-7.56	-7.79/-6.18	-3.47/-3.07	-1.92/-1.4	-1.73/-0.82	-0.12/-0.5	-0.22/-1.1	-1.73/-1.94	-0.38/0.54	-0.54/-2.82	-3.69/-3.04	-2.9/-3.67	-6.16/-9.94	-9.61/-7.85
Θ(150°)	-4.07/-5.39	-7.71/-7.81	-7.52/-9.28	-11.12/-8.84	-7.22/-7.14	-6.87/-7.12	-8.84/-8.49	-6.79/-5.71	-5.59/-5.17	-5.44/-7.72	-9.65/-9.29	-8.07/-7.03	-7.68/-6.66	-4.42/-3.48	-3.59/-2.3	-1.56/-1.89	-3.01/-2.99	-3.09/-3.08	-1.75/-1.3	-2.03/-2.86	-2.14/-1.57	-2.73/-4.95	-5.08/-5.1	-6.04/-7.52
Θ(157.5°)	-7.42/-6.97	-6.71/-7.19	-7.05/-7.59	-7.9/-9.2	-9.41/-9.51	-9.68/-10.15	-10.65/-11.45	-12.03/-10.85	-9.99/-8.23	-8.02/-8.28	-8.09/-6.03	-4.88/-4.46	-4.62/-4.13	-3.74/-3.62	-3.43/-3.41	-3.36/-2.79	-3/-3.9	-4.56/-4.11	-2.49/-2.02	-5.97/-4.74	-4.54/-4.7	-4.33/-4.15	-5.71/-7.2	
Θ(165°)	-5.73/-5.46	-5.56/-6.86	-6.84/-7.26	-7.83/-8.17	-7.15/-6.63	-6.99/-7.47	-7.85/-9.22	-9.89/-8.67	-7.68/-7.11	-6.98/-7.21	-7.96/-8.34	-7.52/-6.1	-5.07/-4.52	-4.4/-5.06	-5.07/-4.03	-2.86/-1.85	-1.28/-1.42	-1.91/-1.95	-1.52/-1.54	-2.09/-3.01	-3.68/-4.55	-5.51/-6.56	-7.44/-7.43	-7.6/-6.93
Θ(172.5°)	-11.3/-10.69	-9.18/-7.02	-5.94/-5.71	-5.41/-5.67	-5.77/-7.09	-8.55/-8.94	-8.89/-8.91	-8.26/-8.38	-8.12/-7.64	-7.24/-7.33	-7.3/-6.5	-5.62/-5.21	-5.09/-5.18	-5.02/-4.76	-4.68/-4.07	-3.75/-3.21	-2.69/-2.32	-2.16/-2.05	-2.2/-2.77	-4.03/-5.31	-6/-6.79	-8.49/-8.78	-8.92/-9.19	-9.8/-11.16
Θ(180°) Freq(Hz) 5.6G/Pol.	-9.16/-8.97 5.6G/Pol.	-9.12/-9.33 Theta-	-9.01/-7.91 -	-7.48/-6.93 -	-6.66/-6.56 -	-6.11/-5.71 -	-4.78/-4.69 -	-5.05/-5.35 -	-5.9/-6.67 -	-7.41/-7.91 -	-8.38/-8.88 -	-9.78/-10.44 -	-10.45/-8.93 -	-7.36/-6.23 -	-5.56/-4.95 -	-4.39/-4.12 -	-3.89/-4.07 -	-4.3/-4.48 -	-4.76/-5 -	-5.03/-5.15 -	-5.38/-5.98 -	-6.2/-5.7 -	-5.65/-6.75 -	-8.21/-8.2
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°)	0.51/0.32	0.03/-0.79	-1.33/-1.61	-1.84/-3.04	-4.31/-3.75	-7.59/-9.49	-10.89/-9.64	-7.94/-6.59	-5.4/-3.84	-2.77/-1.75	-0.92/-0.27	0.16/-0.26	0.24/0.28	0.20/06	-0.27/-0.82	-1.74/-2.78	-4.24/-6.1	-7.95/-9.11	-9.22/-8.96	-7.8/-5.95	-4.76/-3.64	-3.04/-2.1	-1.21/-0.63	-0.18/-0.33
Θ(7.5°)	0.7/0.76	0.73/0.5	-0.27/-1.14	-1.6/-2.46	-3.4/-4.24	-5.06/-6.38	-6.74/-6.18	-5.6/-5.31	-4.99/-4.19	-3.2/-2.37	-1.56/-0.97	-0.42/0.08	0.34/0.34	0.26/-0.31	-0.27/-1.1	-2.16/-3.64	-5.39/-7.48	-9.23/-10.36	-1.2/-8.07	-6.2/-4.37	-3.06/-2.2	-1.42/-0.83	-0.35/0.15	0.24/0.46
Θ(15°)	1.74/-1.83	1.87/-1.57	0.91/0.03	-0.5/-1.26	-1.87/-2.55	-2.94/-3.68	-3.6/-3.04	-2.41/-1.83	-1.52/-1.48	-1.36/-1.4	-1.44/-1.36	-0.88/-0.2	0.32/0.57	0.3										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(135°)	-0.95/-1.26	-2.5/-4.47	-3.36/-4.59	-4.9/-5.2	-4.59/-4.69	-5.07/-6.1	-7.37/-7.12	-6.38/-5.9	-5.03/-5.64	-6.52/-7.61	-6.46/-7.5	-6.77/-5.08	-6.72/-10.85	-4.19/-3.49	-7.1/-6.09	-4.99/-4.56	-4.7/-1.84	-0.39/-0.42	-1.48/-2.64	-3.31/-1.76	-1.7/-1.9	-1.99/-0.38	0.91/0.89	1.79/0.61
Θ(142.5°)	-5.72/-6.59	-3.2/-2.44	-3.59/-4.19	-5.5/-4.92	-3.93/-4.69	-6.45/-8.18	-9.34/-10.07	-7.95/-6.79	-6.9/-7.59	-9.12/-7.83	-6.78/-6.9	-6.64/-4.14	-4.58/-5.01	-4.68/-5.53	-5.97/-7.02	-7.04/-5.37	-2.16/-0.3	-1.01/-1.07	-1.11/-1.25	-1.58/-1.54	-2.13/-2.62	-5.21/-5.58	-0.44/0.02	-1.13/-2.99
Θ(150°)	-5.67/-7.2	-2.23/-4.07	-6.03/-5.9	-6.06/-6.35	-7.97/-8.56	-7.94/-9.2	-9.99/-8.61	-7.31/-6.29	-6.24/-7.31	-9.87/-9.17	-6.77/-6.76	-5.61/-3.98	-4.41/-5.07	-6.18/-4.87	-8.19/-5.91	-6.14/-4.77	-2/-2.06	-0.4/-1.9	-1.28/-0.88	-0.9/-0.49	-2.14/-5.29	-5.05/-4.47	-3.49/-2.64	-3.18/-5.61
Θ(157.5°)	-0.47/-1.81	-3.66/-5.48	-7.51/-9.06	-10.33/-8.77	-6.99/-5.71	-6.16/-7.42	-9.55/-7.15	-6.96/-7.08	-6.58/-9.66	-11.45/-11.93	-11.3/-9.76	-7.27/-4.93	-4.4/-4.68	-5.37/-6.46	-5.82/-4.94	-4.22/-3.25	-2.77/-3.92	-4.48/-3.84	-3.02/-3.28	-2.87/-2.46	-2.96/-3.83	-3.9/-3.35	-1.81/-1.03	0.28/0.42
Θ(165°)	-1.56/-2.37	-3.65/-4.76	-6.17/-7.87	-8.25/-8.73	-10.12/-11.59	-11.72/-10.35	-8.91/-8.04	-8.23/-8.82	-9.5/-9.52	-8.93/-9.35	-9.59/-8.39	-5.69/-4	-3.55/-3.92	-4.88/-6.32	-7.12/-6.87	-6.48/-6.15	-6.16/-5.74	-4.55/-3.1	-2.42/-2.55	-2.63/-1.73	-0.58/0.11	-0.11/-0.89	-0.91/-0.69	-0.63/-0.99
Θ(172.5°)	-3.8/-4.08	-5.12/-6.05	-7.43/-8.44	-10.12/-11.37	-11.13/-10.53	-8.36/-8.31	-9.02/-9.27	-8.79/-9.01	-9.28/-8.32	-7.46/-7.45	-7.67/-7.48	-6.65/-6	-5.77/-5.76	-6.36/-7.51	-9.27/-11.21	-11.34/-10.44	-9.77/-8.12	-7.39/-6.41	-5.57/-4.68	-3.88/-2.91	-2.39/-1.88	-1.88/-2.9	-4.15/-4.6	-4.19/-4.13
Θ(180°)	-5.88/-6.55	-8.68/-10.02	-10.47/-10.71	-11.58/-9.78	-8.81/-7.69	-7.08/-8.21	-9.37/-10.08	-10.33/-9.98	-9.31/-8.65	-8.16/-7.72	-7.14/-6.65	-6.28/-6.15	-6.66/-7.55	-7.64/-8.12	-8/-7.74	-7.15/-6.83	-7.16/-8.33	-9.93/-10.35	-8.81/-6.86	-5.82/-5.28	-5.29/-5.52	-6.34/-7.57	-7.83/-7.46	-7.24/-6.52
Freq(Hz)	5.885G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.21/-4.37	-3.7/-2.51	-1.56/-0.92	-0.10/93	1.61/1.92	1.93/2.07	1.63/1.31	0.62/0.05	-0.95/-1.8	-2.6/-3.19	-4.29/-5.13	-5.94/-6.75	-6.41/-5.07	-3.4/-1.81	-0.63/0.1	0.81/1.32	1.76/1.8	1.71/1.52	1.29/1.22	0.69/-0.07	-0.89/-1.7	-2.87/-3.72	-4.56/-5.69	-6.41/-6.18
Θ(7.5°)	-0.02/-4.98	-4.14/-2.61	-1.78/-1.46	-0.67/0.25	0.84/1.23	1.42/1.62	1.67/1.37	0.94/0.31	-0.63/-1.39	-2.77/-3.92	-5.28/-6.81	-8.75/-10.63	-11.54/-9.02	-5.92/-3.34	-1.55/-0.23	0.81/1.51	2.08/2.4	2.35/1.98	0.7/0.03	-0.81/-1.74	-2.78/-3.1	-3.37/-3.85	-4.6/-5.23	
Θ(15°)	-7.14/-8.92	-7.55/-5.63	-4.21/-2.82	-2.29/-0.98	-0.13/0.34	0.68/0.59	0.69/0.54	0.68/0.7	0.46/-0.06	-1.04/-2.12	-3.37/-4.28	-5.37/-6.54	-7.26/-7.07	-6.06/-4.21	-2.6/-1.09	1.21/1.63	1.94/1.8	1.57/1.03	0.39/-0.4	-1.29/-2.23	-2.22/-2.51	-2.94/-3.27	-4.56/-6.26	
Θ(22.5°)	-4.78/-6.31	-7.84/-8.35	-6.88/-4.63	-2.95/-1.5	-0.64/-0.53	-0.88/-1.32	-1.89/-1.37	-0.83/-0.46	-0.46/-0.74	-1.44/-2.61	-4.12/-5.1	-7.23/-8.29	-7.63/-5.93	-3.89/-2.22	-1.06/-0.27	0.31/0.8	1.15/1.41	1.91/2.31	2.25/1.27	-0.18/-1.77	-2.72/-2.97	-1.72/-1.04	-1.11/-1.38	-2.88/-3.94
Θ(30°)	-4.24/-5.36	-4.98/-4.45	-3.83/-3.02	-2.25/-2.07	-2.28/-2.8	-3.24/-2.44	-1.72/-1.82	-2.05/-1.39	-1.38/-1.93	-3.09/-4.25	-5.03/-6.74	-10.05/-11.57	-9.6/-6.43	-3.18/-1.14	0.12/0.51	0.66/0.8	1.16/1.38	1.73/1.92	2/1.87	1.29/0.13	-1.11/-1.46	-0.48/0.07	0.06/-0.63	-2.03/-3.22
Θ(37.5°)	-3.78/-4.91	-7.32/-9.8	-8.91/-8.09	-6.54/-5.8	-5.5/-5.18	-3.94/-2.68	-2.03/-2.18	-2.92/-2.92	-2.79/-3.15	-4.39/-6.59	-8.39/-9.12	-9.34/-9.59	-6.58/-3.26	-0.92/0.92	2.07/2.76	3.17/3.08	2.57/2.17	2.21/2.48	2.64/2.14	1.31/0.55	0.24/0.8	1.27/1.25	-0.03/-1.85	-3.46/-3.71
Θ(45°)	-6.94/-7.26	-6.6/-8.51	-11.04/-10.45	-9.06/-7.6	-6.48/-6.02	-5.11/-4.21	-3.78/-3.79	-4.18/-4.13	-4.13/-5.18	-7.45/-9.18	-8.97/-8.21	-6.02/-6.77	-8.14/-5.67	-2.89/-0.75	0.66/1.32	2.55/2.59	2.23/1.82	1.79/2.41	2.52/2.36	1.51/0.97	1.35/0.86	0.1/-0.48	-1.03/-2.74	-3.86/-5.38
Θ(52.5°)	-6.19/-7.09	-7.67/-8.04	-9.07/-8.51	-7.22/-5.87	-4.47/-5.69	-6.57/-6.11	-6.27/-5.2	-8.39/-8.23	-6.73/-5.71	-5.4/-4.98	-5.13/-4.43	-2.67/-3.24	-2.4/-0.62	0.47/1.04	1.29/2.41	3.82/4.23	3.87/2.57	1.42/0.49	-0.58/-0.23	0.18/1.03	0.99/0.39	-0.77/-1.48	-1.37/-3.39	-4.39/-4.97
Θ(60°)	-4.55/-4.33	-6.02/-6.77	-7.3/-7.03	-5.81/-6.24	-6.71/-8.43	-9.79/-9.69	-6.84/-5.6	-4.32/-3.69	-5.77/-7.86	-6.06/-3.13	-1.52/-1.73	-1.08/-1.8	-2.26/-1.85	-1.29/-0.9	-0.03/0.82	2.53/3.04	2.61/1.85	0.62/-0.4	-0.7/-1.38	-1.21/-0.07	-0.04/-1.21	-3.61/-3.59	-3.02/-3.68	-4.48/-5.48
Θ(67.5°)	-4.85/-5.4	-6.09/-5.78	-3.79/-3.15	-3.38/-5.22	-7.17/-8.86	-9.05/-6.93	-6.54/-7.38	-8.05/-7.49	-7.07/-7.41	-9.74/-5.86	-2.7/-3.04	-3.1/-2.22	-2.81/-1.48	-1.05/-1.38	-1.07/1.2	3.2/3.68	2.32/1.24	-0.07/-1.78	-2.61/-0.54	-1.15/-1.9	-4.46/-4.89	-3.74/-3.85	-4.16/-3.24	
Θ(75°)	-4.03/-4.58	-3.98/-2.8	-4/-5.22	-5.59/-6.46	-7.03/-6.65	-6.72/-3.56	-3.27/-1.13	-8.38/-8.47	-9.21/-10.6	-8.05/-6.8	-3.44/-1.89	-1.55/-0.12	-0.88/-0.36	-0.41/-0.42	-1.87/-1.22	1.6/3.09	3.16/2.26	1.42/0.55	-0.43/1.7	2.26/1.39	0.27/-1.34	-3.73/-5.21	-3.79/-4.2	-5.49/-7.7
Θ(82.5°)	-6.08/-6.84	-4.73/-4.4	-6.13/-5.95	-6.36/-6.36	-6.14/-5.66	-6.35/-6.22	-5.45/-6.17	-8.1/-9.73	-9.13/-9.38	-6.41/-6.27	-4.94/-8.1	-5.43/-3.93	-3.51/-3.2	-2.5/-1.92	-2.35/-1.39	-0.38/0.81	0.57/0.38	0.85/0.26	0.27/2.22	3.59/2.29	-0.18/-0.9	-1.9/-1.3	-1.78/-3.57	-5.66/-6.19
Θ(90°)	-5.65/-6.28	-4.7/-3.49	-4.13/-6.41	-9.85/-8.72	-6.09/-4.81	-6/-5.93	-7.65/-7.35	-5.78/-5.95	-7.83/-5.2	-4.49/-5.62	-7.13/-5.77	-4.48/-3.91	-3.49/-2.79	-1.58/-1.93	-2.64/-1.84	0.49/2.49	2.26/0.45	0.29/-1.31	0.96/3.04	4.01/1.2	-0.77/-1.32	-0.74/-1.74	-4.01/-6.26	-5.91/-7.48
Θ(97.5°)	-7.31/-9.27	-6.4/-5.93	-5.62/-6.03	-8.42/-10.18	-10.02/-9.37	-7.43/-6.03	-6.74/-9.9	-7.2/-5.73	-5.3/-5.24	-4.93/-5.44	-4.27/-2.38	-3.36/-0.37	-3.84/-2.42	-3.97/-4.21	-5.04/-4.21	0.09/0.03	2.53/2.37	2.31/2.02	1.52/2.36	2.79/-0.36	-0.61/-0.47	-3.53/-4.41	-8.79/-8.93	-7.6/-6.49
Θ(105°)	-4.75/-5.1	-6.09/-8.86	-12.08/-10.7	-10.94/-7.47	-5.77/-7.47	-7.92/-5.94	-7.84/-10.58	-7.37/-6.54	-8.48/-9.89	-9.48/-7.05	-5.88/-5.62	-4.49/-4.96	-4.41/-3.7	-4.97/-2.7	-2.75/-8.2	-4.21/-1.28	0.06/1.3	1.92/6.71	1.95/2.21	1.92/-1.41	-1.09/-4.5	-1.52/-3.03	-7.16/-6.35	-5.26/-3.6
Θ(112.5°)	-6.84/-8.79	-8.35/-7.73	-7.79/-8	-11.32/-12.59	-7.48/-7.42	-8.21/-8.22	-9.25/-8.86	-7.42/-9.59	-9.06/-8.19	-6.83/-6.93	-6.15/-6.62	-5.4/-4.95	-3.55/-1.51	-1.54/-2.27	-2.16/-6.69	-4.48/1.62	2.39/1.4	-0.82/-0.47	1.25/1.63	-1.38/-2.96	-0.93/0.48	-2/-5.93	-6.94/-5.99	-6.68/-6.93
Θ(120°)	-6.82/-9.34	-9.48/-9.57	-10.29/-9.54	-8/-10.28	-8.92/-8.27	-8.75/-7.23	-7.57/-10.06	-9.74/-8.32	-9.36/-7.38	-8.86/-7.44	-7.99/-5.04	-4.01/-6	-4.71/-4.53	-6.06/-7.49	-5.66/-9.93	-4.72/0.3	1.25/0.93	-0.78/-1.21	1.03/2.4	-0.28/-2.06	0.63/0.76	-1.45/-4.21	-5.89/-5.97	-5.04/-4.9
Θ(127.5°)	-3.95/-5.96	-6.73/-8.49	-7.14/-8.8	-6.47/-6.64	-7.9/-7.65	-8.5/-7.45	-7.07/-8.64	-9.41/-9.46	-8.51/-10.28	-11.81/-11.16	-10.03/-8.36	-9.41/-10.76	-8.5/-6.83	-4.3/-5.21	-5.1/-2.98	-0.85/1.33	1.75/0.81	0.29/-1.88	-0.54/0.5	-1.71/-1.66	-1.26/-1.88	-2/-2.13	-7.5/-6.41	-4.01/-1.34
Θ(135°)	-5.18/-6.34	-6.36/-8.46	-9.54/-9.78	-9.53/-6.9	-7.27/-9.09	-10.44/-9.53	-10.05/-10.1	-10.06/-10.52	-10.94/-9.68	-9.58/-9.04	-7.41/-7.23	-8.13/-7.92	-7.37/-3.58	-5.23/-3.4	-1.46/-2.73	-0.78/-1.18	-0.73/-1.07	0.3/-1.11	-1.04/0.59	-0.11/-2.64	-1.98/-1.82	-4.92/-8.29	-8.42/-9.34	-6.27/-4.52
Θ(142.5°)	-7.9/-9.25	-8.62/-10.36	-11/-9.89	-8.62/-10.36	-9.71/-10.39	-9.02/-8.28	-7.78/-7.89	-7.96/-5.31	-5.19/-6	-7.32/-7.24	-6.23/-6.78	-4.45/-3.43	-3.39/-2	-1.79/-0.26	-1.99/-2.46	-1.74/-2.9	-2.99/-2.82	-2.25/-0.06	0.19/-2.74	-4.72/-2.81	-2.61/-3.15	-5.62/-7.69	-7.9/-6.24	
Θ(150°)	-6.39/-6.18	-7.1/-6.17	-8.23/-10.96	-10.61/-8.8	-7.71/-7.56	-7.61/-7.29	-7.65/-7.59	-7.18/-7.39	-8.26/-8.02	-8.61/-9.74	-7.85/-6.7	-6.02/-5.49	-5.17/-4.79	-4.61/-5.11	-5.23/-3.86	-3.83/-3.79	-3.35/-2.64	-3.31/-3.18	-2.1/-1.42	-1.32/-2.75	-2.91/-3.73	-3.84/-3.43	-3.86/-6.19	-7.37/-7.1
Θ(157.5°)	-5.68/-6.39	-5.94/-5.88	-6.88/-7.91	-7.98/-8.12	-9.02/-10.54	-10.57/-10.38	-10.94/-9.7	-8.8/-9.08	-9.84/-11.15	-10.99/-8.19	-6.87/-5.39	-4.25/-3.41	-3.24/-4.02	-4.24/-5.11	-6.1/-6.13	-6.29/-7.15	-6.71/-4.96	-2.92/-2.11	-2.11/-2.04	-2.06/-3.07	-4.44/-5.44	-5.87/-5.29	-4.56/-4.22	-4.05/-4.93
Θ(165°)	-5.56/-4.33	-4.69/-6.42	-8.84/-9.97	-10.2/-10.13	-9.92/-10.03	-10.53/-10.21	-10.98/-11.53	-11.84/-12.55	-10.38/-8.56	-8.16/-6.66	-9.44/-8.4	-6.46/-4.63	-3.78/-3.49	-3.84/-4.24	-3.94/-3.21	-3.18/-3.48	-3.49/-2.81	-2.26/-1.89	-2.05/-2.27	-2.96/-4.31	-5.62/-6.1	-6.95/-7.72	-8.11/-8.68	-8.36/-7.2
Θ(172.5°)	-6.68/-8.42	-8.4/-8.18	-6.72/-6.05	-6.04/-6.61	-7.3/-8.24	-8.98/-8.6	-8.46/-8.92	-9.37/-9.38	-9.51/-11.09	-11.65/-10.89	-10.21/-8.94	-8.26/-7.36	-6.5/-5.93	-5.35/-4.62	-3.7/-3.04	-2.45/-1.9	-1.6/-1.59	-1.82/-2.03	-1.92/-1.89	-2.33/-3.22	-4.31/-5.59	-7.7/-10.91	-11.64/-9.62	-7.02/-5.79
Θ(180°)	-9.56/-9.06	-8.55/-6.33	-4.78/-3.9	-3.34/-3.3	-3.2/-2.94	-3.29/-3.52	-3.76/-4.23	-4.64/-5.31	-6.36/-7.34	-7.67/-7.86	-8.09/-8.23	-8.1/-8.04	-8.49/-8.68	-8.37/-7.61	-6.62/-5.81	-5.43/-4.86	-4.43/-4.16	-4.24/-4.01	-4.58/-5.96	-6.99/-8.07	-8.31/-8.32	-9.31/-8.63	-7.44/-6.93	-7.25/-8.64
Freq(Hz)	5.885G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ							



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(97.5°)	-1.93/-2.09	-4.7/-3.16	-3.05/-1.36	-0.7/-1.02	-0.96/-0.62	-1.98/-2.33	-2.78/-3.86	-3.69/-3.05	-2.03/-1.15	-2.35/-0.47	-1.56/-0.6	-1.05/-0.48	1.09/0.66	0.70/0.78	1.18/-0.27	1.14/1.79	1.39/1.22	0.49/-3.14	-2.44/-0.13	1.63/0.86	0.67/0.1	-0.68/-0.76	-0.18/-0.29	-1.54/-3.41
Θ(105°)	-2.01/-1.7	-5.01/-4.14	-3.29/-1.52	-0.69/-2.57	-2.7/-1.97	-1.98/-2.32	-3.55/-4.1	-3.41/-4.24	-3.79/-2.47	-2.1/-0.1	-0.86/0.19	-1.74/-1.9	-0.24/-0.17	-0.76/-0.55	-0.03/0.3	1.45/2.09	0.73/2.32	2.69/-0.27	-2.37/-1.16	1.99/1.64	0.48/1.59	0.33/1.12	1.49/0.21	-1.03/-1.77
Θ(112.5°)	-2.61/-4.22	-3.73/-2.12	-2.42/-4.24	-2.72/-2.15	-2/-1.62	-1.9/-2.32	-2.98/-3.52	-2.31/-1.54	-1.31/-2.83	-3.43/-2.15	-1.51/0.86	-0.23/-0.18	0.39/-1.23	-0.51/-1.81	-1.69/-1.87	1.08/1.22	-1.47/-0.06	0.95/-2.59	-2.52/1.03	1.28/0.82	-0.38/1.61	0.68/-0.57	1.52/0.47	-1.08/-9.9
Θ(120°)	-0.15/-1.35	-2.74/-1.81	-1.61/-1.32	-1.75/-2.98	-1.81/-2.69	-3.74/-3.72	-4.04/-3.75	-2.97/-2.03	-0.83/-1.07	-0.99/-1.97	-1.88/-0.75	-0.94/-0.23	0.71/-1.66	-1.35/-0.79	-2.78/-1.13	1.16/-2.68	-0.55/-0.24	1.24/-3.05	-3.5/0.88	1.26/-0.21	-0.41/-0.14	-0.77/-1.32	0.65/1.54	-0.57/-2.74
Θ(127.5°)	-3.97/-4.11	-4.56/-3.06	-3.54/-3.46	-3.6/-4.37	-3.21/-2.26	-1.98/-2.61	-3.66/-3.34	-1.69/-0.83	-0.34/-0.05	-0.21/-1.06	-1.37/-2.21	-2.19/-2.19	-2.1/-3.1	-1.26/-0.84	-2.47/-1.13	-1.82/-3.48	0.19/1.54	1.03/-5.05	-4.05/-0.03	0.43/-0.37	-1.13/-2.32	-1.62/-2.65	-1.11/-0.22	-2.73/-5.03
Θ(135°)	-3.09/-5.58	-7.23/-5.72	-4.85/-4.12	-3/-2.67	-2.72/-2.67	-3.89/-4.64	-4.06/-3.89	-2.75/-1.44	-0.73/-0.59	-0.2/-1.63	-1.19/-0.83	-1.93/-4.23	-2.58/-3.56	-1.61/-1.38	-2.31/-5.13	-3.48/-1.85	0.49/2.41	1.54/-4.89	-5.17/-1.85	0.26/-3.42	-2.93/-3.4	-5.58/-3.03	-1.72/-2.04	-1.94/-2.07
Θ(142.5°)	-2.78/-2.93	-4.58/-3.81	-4.01/-5.11	-5.4/-5.14	-4.62/-4.48	-4.36/-3.98	-3.47/-3.04	-2.62/-2.74	-2.78/-2.69	-3.21/-4.42	-4.25/-4.56	-3.87/-2.96	-4.13/-4.23	-3.13/-4.33	-6.44/6.73	-3.8/-2.91	-1.33/-0.05	-1.5/-3.73	-7.26/-2.74	0.75/-0.65	-6.53/-5.03	-5.77/-5.15	-1.71/-1.76	-2.2/-3.09
Θ(150°)	-9.32/-9.95	-8.66/-7.67	-5.42/-3.99	-3.87/-3.92	-3.54/-3.67	-4.47/-4.6	-3.81/-3	-2.68/-3.42	-3.65/-3.43	-2.68/-1.36	-0.81/-1.3	-1.11/-0.93	-2.19/-4.02	-3.71/-3.75	-5.33/-7.11	-7.59/-8.68	-4.01/-2.2	-3.58/-7.04	-6.78/-3.22	-0.22/-0.32	-3.93/-6.83	-5.21/-5.47	-6.25/-6.06	-6.71/-9.22
Θ(157.5°)	-8.64/-8.35	-8.36/-8.59	-7.49/-5.95	-4.68/-4.29	-4.61/-4.83	-4.91/-4.66	-4.42/-4.33	-4.5/-5.34	-6.03/-6.01	-4.83/-3.96	-3.45/-2.66	-2.12/-3.17	-5.24/-3.81	-1.27/-0.25	-0.32/-1.6	-8.31/-5.69	-5.32/-5.52	-7.43/-7.75	-5.62/-4.96	-4.97/-4.37	-2.77/-2.18	-3.07/-5.94	-10.32/-11.65	-10.8/-9.77
Θ(165°)	-5.27/-4.96	-4.08/-3.42	-2.6/-1.86	-1.4/-1.5	-1.83/-2.46	-3.88/-5.78	-7.82/-9.26	-10.67/-10.09	-8.56/-6.58	-5.37/-4.75	-4.11/-3.71	-3.75/-4.39	-5.27/-5.92	-5.34/-5.2	-4.83/-4.26	-3.18/-2.45	-2/-2.18	-2.9/-3.72	-4.27/-4.43	-3.99/-3.29	-2.33/-2.18	-2.71/-3.97	-4.94/-5.3	-5.37/-5.38
Θ(172.5°)	-5.53/-4.61	-4.27/-4.44	-4.23/-4.66	-4.61/-5.24	-6.38/-7.34	-8.77/-11.09	-11.9/-12.49	-11.9/-10.65	-10.77/-10.11	-9.1/-8.63	-8.71/-9.12	-10.15/-11.01	-10.3/-8.55	-6.75/-5.1	-3.84/-3.21	-2.96/-2.91	-3.28/-4.17	-5.1/-6.74	-8.64/-10.05	-10.97/-10.54	-9.46/-8.47	-8/-7.01	-6.82/-7.93	-7.97/-7.13
Θ(180°)	-6.91/-7.41	-7.63/-7.98	-8.18/-8.28	-8.14/-8.75	-8.57/-8.62	-8.06/-7.16	-6.89/-6.38	-6.04/-5.67	-5.39/-5.12	-5.31/-5.5	-5.77/-6.11	-6.21/-6.43	-6.53/-6.64	-6.84/-6.74	-6.84/-7.13	-7.62/-7.89	-8.38/-8.6	-8.74/-9.9	-10.48/-10.25	-9.61/-9.16	-9.35/-9.43	-7.36/-6.48	-6.1/-6.43	-6.78/-6.91
Freq(Hz)	5.3G/Pol	Phi/-	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	-7.26/-6.28	-6.1/-5.85	-5.18/-3.97	-2.91/-2.13	-1.78/-1.59	-1.08/-0.86	-0.91/-0.91	-0.85/-1.09	-1.54/-2.06	-2.78/-3.4	-4.24/-5.29	-6.25/-6.9	-7.3/-6.73	-5.86/-4.95	-4.32/-3.91	-3.38/-2.98	-2.48/-1.98	-1.81/-1.73	-1.8/-1.92	-2/-1.88	-2.19/-2.84	-3.85/-4.65	-5.34/-5.9	-6.15/-6.68
Θ(7.5°)	-7.44/-6.22	-5.34/-5.1	-4.78/-4.58	-3.8/-3.26	-2.76/-2.55	-2.37/-2.55	-2.48/-2.47	-2.38/-2.38	-2.55/-2.7	-3.09/-3.58	-4.24/-4.81	-5.46/-5.89	-6.05/-5.75	-5.07/-4.39	-3.71/-3.14	-2.35/-1.85	-1.45/-1.37	-1.29/-1.14	-1.03/-1.11	-1.3/-1.63	-2.14/-2.91	-3.6/-4.18	-5.15/-6.25	-7.38/-7.79
Θ(15°)	-7.61/-6.27	-4.5/-3.33	-2.57/-2.15	-2.25/-2.15	-1.86/-1.6	-1.52/-1.18	-1.18/-1.26	-1.12/-1.31	-1.61/-2.03	-2.22/-2.37	-2.69/-3.24	-3.93/-4.59	-5.13/-4.59	-5.13/-4.21	-3.25/-2.55	-2.01/-1.72	-1.46/-1.15	-1.13/-1.32	-1.67/-2.13	-2.34/-2.36	-2.35/-2.44	-2.85/-3.5	-4.59/-6.23	-7.58/-8.04
Θ(22.5°)	-6.09/-5.72	-4.22/-3.1	-2.51/-1.9	-1.78/-1.66	-1.71/-1.74	-1.36/-1.33	-1.63/-1.26	-0.88/-0.74	-0.86/-1.25	-1.7/-1.98	-2.3/-2.87	-3.64/-4.56	-3.93/-3.25	-2.68/-2.47	-2.04/-1.54	-1.21/-1.36	-1.85/-2.78	-3.7/-4.35	-4.69/-4.74	-3.94/-3.33	-3.32/-3.84	-4.15/-4.58	-5.51/-5.84	
Θ(30°)	-4.83/-5.27	-5.72/-4.96	-3.74/-3.31	-2.66/-2.02	-1.85/-1.88	-1.55/-1.87	-2.09/-2.07	-1.62/-1.07	-0.7/-1.06	-1.61/-2.06	-2.42/-2.78	-2.85/-3.16	-3.18/-3.65	-4.01/-4.14	-3.62/-2.55	-1.47/-0.77	-0.72/-1.53	-2.65/-3.62	-4.37/-4.62	-4.32/-4.45	-5.13/-5.62	-6.48/-6.97	-7.48/-6.91	-5.72/-5.23
Θ(37.5°)	-5.36/-6.27	-4.72/-3.8	-3.63/-3.65	-3.13/-3.33	-3.45/-2.82	-2.05/-1.76	-1.18/-1.14	-1.38/-1.5	-1.21/-1.14	-0.82/-0.56	-0.97/-1.82	-2.66/-3.75	-4.7/-4.64	-4.57/-4.58	-3.84/-3.1	-2.85/-2.39	-2.1/-2.05	-2.01/-1.94	-2.68/-4.01	-4.12/-3.46	-3.19/-3.57	-4/-4.3	-5.35/-5.9	-5.56/-5.13
Θ(45°)	-8.05/-7.4	-5.58/-4.62	-4.72/-4.85	-3.92/-3.8	-2.41/-1.31	-0.88/-0.76	-1.06/-1.23	-1.26/-0.87	0.04/0.49	0.59/0.47	0.72/0.26	-0.76/-2.16	-3.17/-3.34	-3.2/-3.04	-3.24/-3.42	-3.26/-2.2	-1.91/-2.12	-3.01/-4.29	-5.61/-4.96	-2.7/-1.64	-1.54/-2.73	-3.58/-4.54	-6.02/-5.88	-6.79/-6.76
Θ(52.5°)	-6.73/-4.81	-5.64/-5.69	-4.85/-5.1	-4.59/-2.83	-1.77/-1.3	-1.07/-0.76	-0.57/-0.36	-0.36/-0.44	-0.42/-0.46	-0.46/-0.49	-0.27/-1.43	-2.54/-2.81	-2.79/-2.71	-1.96/-2.48	-3.08/-2.63	-2.61/-2.07	-1.27/-0.19	-0.71/-2.59	-4.82/-3.41	-2.58/-1.82	-3.12/-5.16	-6.54/-6.79	-7.2/-9.64	-9.56/-10.59
Θ(60°)	-5.92/-5.45	-4.96/-3.98	-3.39/-3.49	-2.93/-2.36	-1.08/-0.18	0.11/-0.51	-1.16/-0.87	0.11/0.36	-0.34/-0.94	0.0/0.1	-0.73/-2.45	-2.7/-2.66	-2.74/-2.55	-2.16/-2.56	-2.85/-3.1	-2.65/-1.85	-2/-2.1	-0.24/-1.47	-4.02/-5.04	-3.46/-2.55	-2.76/-3.63	-5.08/-8.22	-8.44/-7.15	-6.62/-7.26
Θ(67.5°)	-6.21/-5.48	-5/-3.73	-2.71/-2.5	-1.97/-1.19	-1.26/-1.31	-1.04/-0.57	-0.64/-0.79	-0.49/-1.08	-2.88/-2.67	-1.53/-1.38	-1.88/-3.29	-3.46/-3.35	-3.07/-2.8	-2.49/-1.57	-1.31/-1.77	-2.51/-1.37	-2.56/-1.4	-0.51/-1.43	-2.75/-2.66	-2.39/-4.05	-3.63/-2.76	-3.58/-5.48	-7.06/-8.34	-7.18/-6.96
Θ(75°)	-4.89/-4.54	-5.14/-4.73	-6.05/-4.49	-3.2/-1.47	-0.49/-0.04	-0.2/-0.66	-2.08/-3.71	-3.34/-2.43	-1.78/-2.46	-3.33/-3.3	-3.86/-4.05	-3.62/-4.07	-4.68/-4.36	-2.35/-1.95	-1.95/-2.86	-2.7/-2.77	-3.34/-3.51	-2.94/-2.45	-2.95/-2.15	-3.39/-3.78	-4.94/-5.28	-6.58/-6.83	-7.75/-4.56	-9.01/-9.16
Θ(82.5°)	-2.73/-4.75	-5.56/-5.23	-5.43/-4.64	-3.76/-2.61	-1.43/-1.03	-1.76/-2.78	-3.21/-3.29	-1.45/-0.48	-0.43/-0.9	-1.7/-2.35	-3.16/-4	-3.24/-1.98	-3.26/-1.48	-0.95/-1.22	-1.45/-2.11	-2.54/-1.79	-2.09/-3.7	-4.42/-3.56	-1.29/-2.82	-4.86/-6.61	-5.71/-5.56	-5.48/-6.52	-6.05/-6.36	
Θ(90°)	-5.66/-6.1	-6.59/-6.25	-7.87/-6.65	-4.44/-2.4	-1.63/-2.55	-3.23/-4.03	-4.66/-4.51	-3.38/-1.89	-0.13/0.02	-1.14/-2.52	-2.52/-2.45	-2.4/-1.91	-2.28/-2.18	-1.67/-2.02	-2/-3.28	-2.85/-1.36	-0.18/0.43	0.75/-0.78	-3.25/-3.16	-3.06/-5.3	-4.84/-3.42	-2.35/-1.95	-1.96/-3.63	-4.23/-4.65
Θ(97.5°)	-4.61/-6.75	-7.22/-6.57	-6.92/-5.82	-4.72/-3.32	-2.87/-2.92	-3.04/-2.72	-2.92/-2.63	-1.62/-1.35	-1.12/-1.03	-1.01/-2.01	-3.56/-4.05	-3.44/-3.01	-3.81/-2.63	-2.97/-1.14	-1.08/-2.45	-1.57/-0.57	-0.08/0.36	-0.18/-1.18	-3.17/-1.41	-1.81/-4.87	-5.75/-3.18	-5.29/-5.28	-5.65/-5.34	-5.09/-4.17
Θ(105°)	-3.43/-5.3	-5.57/-4.78	-4.8/-3.28	-2.63/-2.91	-2.75/-2.33	-1.8/-2.5	-1.95/-1.82	-0.36/0.32	0.73/0.61	-0.6/-1.6	-3.82/-3.99	-3.09/-2.82	-1.67/-1.63	-0.76/0.16	-0.29/-2.28	-1.72/-0.02	-0.13/0.75	0.94/-0.69	-4.39/-2.45	-2.56/-4.43	-4.94/-6.48	-6.58/-6.83	-7.75/-4.56	-9.01/-9.16
Θ(112.5°)	-1.67/-1.14	-2.71/-3.18	-4/-3.69	-2.69/-3.33	-4.17/-5.16	-5.4/-4.98	-4.51/-2.36	-0.82/-0.02	-0.38/-1.6	-2.97/-2.81	-3.75/-2.4	-3.74/-3.84	-2.76/-3.56	-2.69/-0.57	-1.61/-4.25	-2.18/0.34	0.94/0.9	2.3/-0.5	-4.72/-2.56	-1.39/-3.31	-5.46/-3.98	-3.44/-6.1	-5.08/-5.13	-4.75/-3.36
Θ(120°)	-4.68/-2.78	-1.79/-2.28	-3.15/-4.17	-3.63/-4.66	-6.44/-7.18	-6.39/-4.81	-3.44/-1.22	0.46/0.6	-0.69/-1.85	-2.69/-3.98	-6.87/-6.35	-6.13/-5.44	-5.96/-4.39	-2.78/-1.85	-3.44/-4.34	-2.79/-0.65	-0.34/-0.67	0.29/-2.84	-4.76/-1.78	-0.09/-1.8	-4.95/-4.15	-4.08/-3.73	-2.98/-4.6	-4.73/-3.18
Θ(127.5°)	-4.1/-3.36	-4.26/-4.83	-3.11/-3.25	-4.56/-4.58	-4.94/-4.98	-3.08/-2.53	-2.7/-1.48	-0.11/-0.15	-1.06/-1.87	-3.4/-5.04	-6.35/-6.73	-8.42/-7.33	-7.27/-6.01	-5.14/-4.23	-3.64/-3.33	-2.71/-1.26	-0.02/-2.06	-1.07/-5.73	-8.76/-4.56	-1.81/-0.43	-2.04/-3.44	-4.43/-3.78	-4.62/-4.92	-5.09/-4.5
Θ(135°)	-5.93/-5.72	-3.12/-3.79	-2.74/-2.62	-4.72/-4.99	-3.47/-0.94	-0.18/0.31	0.71/1.18	1.58/1.61	1.54/0.78	-0.6/-2.97	-5.38/-6.14	-6.58/-5.32	-4.82/-3.88	-2.61/-1.99	-1.71/-0.51	-2.47/-0.2	-1.89/-2.99	-3.38/-9.74	-11.82/-6.31	-5.9/-5.34	-3.94/-4.65	-4.21/-4.94	-9.3/-11.45	-5.88/-5.21
Θ(142.5°)	-9.9/-10.77	-8.12/-8.84	-2.89/-4.6	-4.15/-2.71	1.13/0.4	1.16/1.34	1.0/89	0.94/0.79	0.02/-1.26	-2.66/-3.84	-4.64/-4.95	-4.12/-4.02	-3.88/-3.75	-2.9/-1.37	-1.13/-1.49	-7.18/-1.25	-3.45/-3.28	-4.65/-7.72	-8.85/-8.25	-6.69/-7.98	-8.24/-8.96	-6.9/-7.27	-5.15/-3.86	-5.67/-5.16
Θ(150°)	-7.46/-7.62	-6.76/-6.05	-5.94/-6.8	-5.79/-3.27	-2.08/-1.54	-0.81/-0.14	0.16/0.11	0.03/-0.2	-0.5/-0.89	-1.15/-1.67	-3.06/-4.74	-7.71/-5.65	-7.27/-6.97	-5.47/-5.07	-4.6/-3.98	-3.6/-5.47	-5.95/-6.26	-7.7/-7.74	-7.78/-5.77	-4.85/-6.3	-8.96/-8.92	-8.59/-8.53	-6.8/-6.66	-7.49/-6.99
Θ(157.5°)	-8.06/-7.58	-7.11/-6.78	-6.41/-6.07	-5.68/-5.51	-5.73/-5.08	-4.05/-3.05	-2.01/-1.61	-1.41/-1.59	-1.82/-1.95	-1.77/-1.99	-2.61/-													



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(67.5°)	2.36/1.53	0.66/1.33	0.75/0.32	0.86/-0.75	-1.31/-1.82	-3.18/-3.49	-2.76/-2.05	-1.96/-2.13	-1.43/-0.65	-0.83/-0.8	0.02/0.41	1.12/1.01	0.03/0.02	0.08/0.22	0.24/-0.51	-1.39/-2.24	-2.48/-2.17	-2.29/-2.19	-0.8/1.68	3.13/2.52	1.15/1.38	1/1.48	1.75/2.57	2.37/1.78
Θ(75°)	3.34/2.59	1.53/1.6	0.06/0.75	0.45/-1.87	-1.95/-2.3	-3.24/-3.36	-2.88/-1.79	-1.93/-1.69	-1.64/-1.18	-0.47/-1.01	-0.26/-0.18	-0.65/-0.27	-0.34/-0.91	-0.53/0.24	-0.03/-0.8	-0.91/-0.93	-1.56/-1.92	-0.26/-0.75	0.32/1.3	2.45/1.34	1.27/0.97	1.65/1.57	2.05/2.78	2.46/-1.22
Θ(82.5°)	1.96/0.81	-0.49/-1.06	3.12/-2.19	-4.14/-4.8	-3.99/-2.94	-2.85/-1.29	-0.67/-0.73	-1.99/-2.24	-1.72/-1.37	-0.14/-1.02	0.18/0.09	0.25/0.04	-0/-0.81	-1.2/-1.54	-1.36/-0.54	-0.94/-1.04	-1.7/-2.88	0.89/1.88	2.34/2.74	2.46/1.48	1.76/1.09	-0.02/0.34	1.25/1.92	1.33/-0.11
Θ(90°)	1.18/0.64	0.96/0.78	-1.05/-0.87	-2.27/-1.87	-4.85/-3.98	-2.06/-0.63	-0.54/-1.56	-3.1/-3.97	-3.89/-3.19	-1.74/-1.02	-0.28/-0.38	-0.3/-0.64	-1.25/-0.72	-0.01/-0.65	-1.29/-0.68	-2.77/-1.65	-1.81/-1.2	1.07/-0.14	-1.01/0.05	1.24/-0.07	-0.15/0.36	-0.43/0.17	2.29/2.1	1.77/0.02
Θ(97.5°)	4.44/-0.38	0.2/-0.57	-2.55/-1.74	-2.21/-3.56	-4.18/-3.41	-1.75/-0.67	-0.83/-1.64	-2.77/-4.69	-5.01/-3.75	-3.03/-1.45	-1.49/-1.24	-1.61/-2.27	-1.02/-0.59	-0.45/-1.33	-0.5/-1.22	-1.46/0.04	-2.16/-0.86	1.58/-0.56	-1.11/-0.43	1.88/1.15	0.69/0.22	-0.45/0.89	2.17/1.98	0.78/-0.31
Θ(105°)	-1.26/-2.44	-2.68/-2.52	-3.25/-3.12	-1.76/-1.5	-1.82/-2.28	-1.65/-1.16	-1.94/-2.53	-2.82/-3.34	-3.75/-3.09	-1.88/-1.57	-1.55/-1.77	-1.57/-3.31	-0.32/-2.11	-1.11/-1.82	-1.96/-1.14	-0.52/-0.54	-3.3/-1.36	0.92/-2.55	-3.19/0.65	2.09/1.68	1.19/-0.34	-0.56/1.61	1.62/0.7	0.7/-0.31
Θ(112.5°)	-3.73/-3.89	-4.16/-5.09	-5.2/-3.87	-1.43/-0.6	-0.92/-1.26	-2.03/-1.97	-1.85/-2.25	-2.23/-1.45	-1.91/-0.84	-1.43/-1.44	-1.85/-1.72	-0.52/-2.86	-1.28/-2.7	-0.39/-1.53	-0.78/-1.94	-0.24/-0.57	-1.91/-0.25	0.82/-2.09	-1/2.73	1.58/-0.35	-0.33/0.14	-2.77/-0.04	1.08/-1.45	-1.13/-1.74
Θ(120°)	-3.05/-3.29	-3.34/-4.68	-3.78/-3.4	-3.06/-1.31	-1.37/-1.82	-1.38/-2.11	-3.19/-3.37	-2.26/-0.9	-0.43/-0.1	-1.11/-0.53	-1.62/-1.49	-0.92/-3.22	-0.76/-2.57	-4.42/-4.56	-3.05/-4.68	-2.2/-1.62	-4.69/-0.11	0.48/-3.11	-2.88/0.95	0.54/-0.15	-0.96/0.78	-3.8/-2.77	-1.56/-1.35	-4.61/-2.96
Θ(127.5°)	-2.71/-3.97	-2.03/-2.26	-2.33/-1.16	-1.76/-2.13	-1.98/-2.42	-2.62/-3.45	-3.68/-2.76	-2.59/-1.77	-0.43/-0.05	-0.73/-1.5	-3.05/-3.36	-4.5/-3.66	-3.42/-6	-4.44/-2.03	-3.64/-3.15	-1.44/-3.09	-2.26/-0.67	0.17/-4.29	-4.63/-1.33	0.33/-2.47	-0.74/-1.98	-4.55/-2.77	-0.32/0.07	-3.25/-3.74
Θ(135°)	-1.99/-2.24	-3.22/-3.22	-3.4/-3.34	-3.58/-3.74	-3.27/-3.43	-3.22/-3.11	-3.04/-2.55	-2.1/-1.02	0.1/-0.27	-1.16/-2.3	-3.03/-2.71	-3.44/-5.35	-5.6/-6.81	-3.85/-1.69	-4.22/-3.83	-3.71/-6.9	-3.33/-4.67	-3.39/-6.05	-5.87/-3.6	-2.27/-2.85	-3.5/-5.25	-4.18/-5.09	-4.69/-2.66	-2.25/-2.87
Θ(142.5°)	-7.65/-5.96	-5.42/-5.14	-5.24/-4.23	-3.44/-3.54	-4.16/-5.08	-4.94/-4.94	-4.72/-4.58	-3.13/-0.92	0.03/-0.33	-0.73/-1.82	-2.18/-2.23	-4.22/-4.57	-6.08/-4.93	-1.72/-2.4	-5.46/-7.02	-8.94/-6.31	-4.64/-3.07	-3.5/-4.59	-4.65/-5.08	-2.98/-2.4	-3.16/-5.19	-7.19/-3.99	-2.63/-2.25	-3.18/-6.68
Θ(150°)	-4.35/-3.66	-4.27/-4.94	-5.8/-6.16	-7.05/-7.52	-7.33/-5.9	-5.83/-5.53	-6.11/-6.07	-4.7/-3.13	-2.28/-2.02	-1.8/-0.76	-0.27/-1.12	-1.28/-0.78	-2.73/-2.97	-1.21/-1.28	-3.57/-7.02	-8.68/-6.88	-4.34/-3.47	-5.46/-7.38	-6.42/-5.09	-2.61/-2.2	-3.57/-3.7	-3.28/-2.34	-1.24/-0.64	-1.82/-4.34
Θ(157.5°)	-6.72/-5.64	-4.81/-5.14	-5.44/-6.27	-6.86/-6.42	-5.71/-5.33	-5.47/-5.99	-6.42/-6.33	-5.91/-5.58	-4.73/-4.01	-3.33/-2.82	-2.67/-2.54	-1.39/-0.69	-1.47/-2.86	-3/-3.11	-2.9/-2.75	-2.72/-2.55	-3.04/-4.21	-5.08/-4.72	-4.41/-5.03	-4.95/-3.29	-2.06/-2.5	-3.48/-3.64	-3.65/-3.78	-4.92/-5.44
Θ(165°)	-5.15/-4.95	-4.53/-4.8	-5.47/-6.22	-7.08/-8.28	-8.58/-9.08	-9.13/-10.35	-10.05/-8.73	-7.95/-7.27	-5.94/-4.65	-3.49/-2.72	-2.36/-2.18	-2.17/-2.11	-2.49/-3.47	-5.47/-7.32	-9.3/-9.31	-8/-6.99	-6.84/-7.28	-8.08/-8.54	-7.56/-5.6	-3.67/-1.87	-1.04/-1.31	-2.57/-5.11	-6.96/-9.67	-6.13/-4.95
Θ(172.5°)	-8.39/-8.54	-9.01/-9.37	-9.84/-9.86	-9.95/-9.92	-9.56/-9.4	-10.1/-10.76	-10.39/-10	-9.76/-9.57	-8.87/-8.57	-8.53/-8.72	-8.83/-9.04	-9.06/-9.5	-10.18/-9.7	-9.88/-8.33	-7.01/-6.19	-5.94/-6.29	-7.37/-9.06	-9.99/-11.07	-9.92/-8.21	-7.45/-6.63	-6.36/-6.51	-7.67/-9.42	-10.23/-11.76	-10.79/-9.52
Θ(180°)	-9.39/-9.66	-10.31/-11.32	-12.01/-12.11	-11.73/-10.35	-10.72/-10.79	-11.59/-12.59	-11.82/-12.29	-12.28/-11.79	-11.51/-11.93	-11.42/-10.76	-10.26/-10.07	-10/-9.83	-10.27/-11.07	-10.9/-10.9	-11.03/-11.16	-11.71/-11.35	-11.76/-11.71	-10.35/-9.45	-8.29/-7.35	-7.04/-7.2	-7.43/-8.94	-9.72/-8.47	-8.24/-9.49	-10.21/-9.46
Freq(Hz)	5.785G/Pol.	Phi-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	-4.17/-5.11	-4.77/-4.07	-2.54/-1.47	-0.88/-0.51	-0.21/0.12	0.2/0.13	0.22/0.13	0.06/-0.1	-0.5/-0.96	-1.48/-2.22	-3/-3.87	-4.73/-5.33	-5.61/-5.33	-4.8/-4.27	-3.54/-2.82	-2.11/-1.7	-1.25/-0.84	-0.53/-0.43	-0.32/-0.67	-0.78/-0.81	-0.95/-1.37	-1.97/-2.99	-3.35/-3.63	-3.93/-3.71
Θ(7.5°)	-4.09/-3.7	-3.84/-3.07	-2.94/-2.23	-1.99/-1.65	-1.15/-0.81	-0.73/-0.7	-0.5/-0.43	-0.33/-0.44	-0.89/-1.67	-2.37/-2.99	-3.71/-4.81	-6.09/-7.43	-7.88/-7.31	-6.23/-4.63	-3.22/-1.94	-0.93/-0.19	0.29/0.67	0.85/0.88	0.79/0.41	0.04/-0.38	-0.72/-1.05	-1.29/-1.75	-2.36/-3.64	-4.27/-4.29
Θ(15°)	-5.92/-5.67	-5.51/-5.18	-4.81/-4.09	-3.17/-2.57	-1.73/-1.09	-0.56/0.09	0.55/0.65	0.66/0.48	-0/-0.66	-1.35/-2.2	-3.07/-3.81	-4.51/-5.27	-5.94/-6.82	-7.3/-6.36	-4.91/-3.24	0.12/0.62	0.94/1.18	0.91/0.31	-0.59/-1.47	-2.18/-2.54	-2.27/-2.44	-3.39/-4.26	-5.8/-6.03	
Θ(22.5°)	-3.75/-3.64	-3.75/-4.15	-4.73/-3.51	-4.89/-4.45	-3.74/-2.93	-2.09/-1.36	-0.5/-0.13	0.23/0.21	0.29/-0.11	-0.85/-1.92	-2.82/-3.49	-4.1/-4.62	-4.8/-4.96	-5.06/-4.64	-3.49/-2.58	-1.95/-1.45	-0.7/0.12	0.88/1.26	0.93/-0.17	-1.57/-2.88	-4.11/-4.22	-3.85/-3.57	-3.48/-3.13	-3.51/-3.53
Θ(30°)	-3.41/-2.92	-3.1/-2.87	-2.14/-2.17	-2.64/-2.89	-2.6/-2.74	-2.1/-2.14	-0.52/-0.09	0.19/0.23	-0.03/-0.48	-0.75/-0.95	-1.64/-3.18	-5.05/-6.24	-6.61/-6.13	-4.87/-3.61	-2.72/-2.1	-1.88/-1.42	-0.59/0.04	0.01/-0.55	-0.7/-0.91	-1.27/-2.29	-4.17/-4.92	-4.69/-3.5	-3.03/-2.67	-2.81/-3.02
Θ(37.5°)	-2.91/-2.96	-2.74/-2.76	-2.78/-3.33	-2.94/-2.23	-2.08/-1.77	-1.72/-1.44	-1.04/-0.35	0.06/-0.07	-0.61/-1.17	-1.97/-2.12	-6.43/-7.3	-5.38/-6.16	-5.95/-5.1	-3.93/-2.9	-2.09/-1.14	-0.57/-0.08	0.67/0.94	1.02/1.01	0.4/-0.42	-1.79/-2.64	-2.99/-4.16	-4.61/-4.14	-3.68/-2.74	-1.99/-2.02
Θ(45°)	-3.6/-3.92	-2.29/-3.45	-4.88/-3.98	-3.67/-3.35	-2.63/-2.06	-2.15/-1.77	-1.07/-0.16	-0.19/-0.42	-0.3/-0.44	-1.13/-2.4	-4.28/-4.4	-4.05/-4.23	-4.43/-3.48	-3.04/-2.87	-3.92/-3.99	-2.86/-2.17	-0.41/-0.48	0.03/0.53	0.36/-1.49	-3.51/-4.47	-4.65/-4.83	-4.32/-3.22	-2.52/-2.39	
Θ(52.5°)	-3.17/-3.53	-3.13/-2.85	-2.55/-2.25	-1.74/-2.02	0.13/0.47	0.06/-0.14	-0.39/-0.63	-0.09/-0.54	-0.8/-1.14	-2.11/-3.1	-3.55/-2.92	-4.39/-3.92	-3.42/-3.22	-2.14/-2.73	-3.27/-2.5	-1.4/-0.22	0.48/0.22	-0.77/-2.19	-1.83/-1.46	-2.13/-2.49	-3.21/-4.47	-3.06/-3.46	-4.04/-3.57	-2.96/-2.71
Θ(60°)	-4.85/-5.37	-5.81/-4.7	-2.16/-1.6	-0.84/-0.68	0.4/0.85	0.46/0.09	-0.52/-1.02	-1.74/-1.44	-1.79/-1.85	-2.42/-1.76	-1.63/-3.07	-3.53/-4.47	-4.97/-3.68	-4.02/-4.62	-3.91/-3.07	-0.96/-0.56	-1.47/-1.89	-0.75/-0.86	-2.5/-2.61	-1.54/-1.36	-2.25/-1.95	-3.27/-4.15	-4.11/-3.64	-3.8/-3.87
Θ(67.5°)	-8.54/-8.78	-7.76/-4.42	-1.18/-0.18	-0.22/-0.99	-1.21/-0.86	-0.71/0.01	0.06/-0.66	-2.07/-3.14	-2.33/-1.5	-0.48/-0.41	-0.97/-3.16	-3.6/-3.07	-3.67/-1.97	-1.85/-2.36	-1.78/-0.73	0.02/0.49	-1.8/-2.71	-1.57/-1.24	-1.96/-0.94	-0.12/-1.53	-3.12/-5.93	-7.12/-6.77	-5.51/-5.03	-6.12/-6.73
Θ(75°)	-6.13/-6.17	-5.37/-3.91	-2.44/-1.06	-0.96/-1.39	-1.98/-2.17	-0.94/0.33	-0.25/-2.25	-2.11/-2.23	-1.68/-1.59	-0.19/-0.74	-1.57/-1.85	-0.89/0.05	-0.61/0.27	0.51/0.69	-1.75/-1.76	-1.25/0.03	-1.44/-2.12	-2.75/-0.67	0.3/-1.27	-3.3/-3.6	-4.19/-3.45	-3.85/-4.64	-4.95/-5.22	
Θ(82.5°)	-6.31/-4.2	-3.54/-2.16	-2.32/-1.72	-0.71/-0.21	-0.47/-1.06	-1.27/-1.61	-3.52/-4.18	-3.16/-3.46	-2.61/-0.78	-1.09/-1.79	-2.8/-3.22	-3.33/-2.81	-3.31/-2.56	-1.26/-1.24	-2.34/-2.87	-2.08/-1.7	-3.28/-4.37	-1.32/-0.51	-1.15/-1.12	-0.49/-3.06	-1.83/-1.72	-1.46/-1.57	-2.65/-3.7	-4.62/-6.2
Θ(90°)	-4.72/-6.21	-3.42/-1.69	-1.13/-1.56	-1.57/-2.04	-1.56/-0.77	-2.08/-2.82	-4.79/-4.69	-4.3/-1.39	-0.73/-0.78	-1.41/-2.58	-4.67/-3.06	-2.14/-1.85	-1.94/-1.75	-0.68/-1.3	-3.13/-4.89	-3.32/-1.93	-2.33/-1.98	0.18/-1.55	-1.91/-0.65	-0.04/-3.7	-3.31/-2.32	-2.7/-4.23	-5.98/-6.37	-6.64/-5.05
Θ(97.5°)	-6.42/-6.64	-4.78/-4.22	-2.42/-2.2	-3.65/-4.85	-3.56/-2.76	-1.45/-1.28	-2.91/-4.67	-2.96/-0.59	-0.09/-0.46	-1.6/-3.9	-3.19/-1.33	-2.09/-1.07	-3.44/-2.21	-3.4/-3.87	-3.25/-5.08	-4.75/-1.6	-1.4/0.75	1.13/-0.12	-2.25/0.09	-0.32/-4.01	-2.13/-0.7	-2.51/-3.55	-5.79/-8.76	-5.58/-5.24
Θ(105°)	-5.15/-7.04	-6.12/-7.98	-7.11/-3.35	-3.75/-3.1	-2.98/-1.29	-1.31/-0.53	-1.92/-5.58	-0.75/-0.59	-0.66/-1.37	-1.44/-4.98	-5.94/-3.66	-1.01/-1.41	-3.34/-2.83	-4.83/-3.52	-1.7/-3.96	-7.52/-3.41	-2.5/0.81	0.58/0.59	-0.70/-56	-0.06/-5.23	-1.66/-0.28	-2.98/-3.35	-6.89/-7.83	-6.12/-4.36
Θ(112.5°)	-7.06/-8.5	-7.84/-4.97	-4.15/-3.96	-4.61/-4.7	-2.88/-2.32	-1.53/-1.11	-0.99/-0.76	-0.89/-1.32	-1.72/-1.17	-2.61/-2.33	-2.34/-4.11	-3.33/-3.86	-4.46/-3.16	-1.19/-4.7	-8.9/-2.97	-0.63/0.8	-1.22/-3.04	-2.41/-4.9	-0.21/-7.31	-3.64/-1.44	-3.32/-4.65	-4.99/-6.4	-7.54/-7.73	
Θ(120°)	-6/-5.98	-6.03/-4.47	-4.91/-5.13	-3.02/-2.2	-1.49/-3.07	-4.1/-3.14	-2.72/-2.06	-1.09/-0.13	-1.12/-2.64	-4.19/-3.1	-4.13/-3.61	-3.52/-5.48	-4.85/-5.08	-5.24/-5.12	-4.97/-10.35	-7.58/-3.37	-2.06/-1.01	-2.99/-4.42	-4.12/0.09	0.7/-3.47	-3.66/-3.93	-6.42/-6.39	-7.01/-5.44	-6.96/-5.34
Θ(127.5°)	-3.11/-3.97	-3.76/-5.19	-3.16/-3.48	-2.54/-2.63	-3.59/-3.45	-3.08/-1.89	-1.51/-2.3	-2.5/-1.92	-1.94/-3.72	-4.31/-5.89	-7/-9.2	-10.												



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(37.5°)	-1.78/-1.22	-1.44/-1.87	-1.65/-0.68	-0.35/-0.9	-2.34/-2.5	-4.92/-5.74	-5.99/-4.63	-3.46/-2.9	-2.73/-2.27	-2.06/-1.71	-1.03/-0.79	-1.14/-1.22	-0.46/0.35	0.46/0.36	0.46/0.14	-0.84/-1.46	-2.35/-3.05	-2.12/-0.96	-0.49/-0.54	0.18/0.47	0.07/0.15	-0.32/-0.78	-1.26/-1.69	-2.98/-2.72
Θ(45°)	1.06/1.85	1.30/0.64	0.82/0.52	-0.19/-1	-1.99/-3.53	-5.47/-6.46	-6.09/-4.96	-3.8/-3.25	-2.74/-1.99	-1.14/-0.61	-0.44/0.31	0.42/-0.15	-1.64/-0.66	0.74/0.76	-0.12/-0.83	-1.08/0.29	0.09/-1.25	-1.24/-1.25	-1.38/-0.65	-0.33/-0.54	-0.57/0.2	0.04/-0.39	0.18/0.29	0.54/0.31
Θ(52.5°)	0.99/2.09	1.58/0.97	1.41/49	0.67/0.08	-0.39/-2.19	-3.3/-2.84	-2.07/-1.96	-2.26/-1.39	-0.67/-0.16	0.17/0.92	1.07/0.35	0.43/0.15	-0.42/0.54	1.67/1.54	0.78/-0.07	-0.44/-0.2	-0.23/0.38	0.97/0.49	0.6/0.33	0.26/-0.77	-1.66/-1.6	-1.75/-0.72	-0.29/-1	-1.44/-0.46
Θ(60°)	0.14/0.44	0.39/0.55	0.53/1.25	1.61/0.69	-0.06/-0.84	-1.05/-1.67	-1.79/-0.14	-0.21/-0.52	-0.37/-0.32	-0.34/-0.04	0.93/0.36	0.95/-0.08	-0.08/0.33	0.31/0.5	0.45/-0.65	-0.79/-0.09	0.11/37	1.87/0.76	1.11/0.56	0.85/1.4	0.46/1.5	0.58/0.82	1.74/0.58	-1.88/-1.42
Θ(67.5°)	3.28/2.25	2.63/2.79	1.24/0.91	1.39/1.01	0.19/-0.97	-2.83/-3.81	-2.09/0.51	0.52/0.15	-0.38/0.16	-0.17/-0.64	-0.77/-0.6	-0.13/0.38	0.54/0.1	-0.56/-0.71	-0.50/-0.43	-0.37/-0.01	-0.3/1.21	0.99/1.2	0.24/2.13	3.64/32	3.36/2.49	1/1.04	1.83/1.77	0.86/1.61
Θ(75°)	4.17/3.02	4.14/4.03	2.79/1.93	0.03/-0.68	-1.18/-0.91	-1.79/2.24	-0.77/-0.42	0.51/0.88	0.12/-0.09	-1.28/-1.79	-1.36/-0.6	-0.16/-0.28	0.89/-0.22	-0.62/-1.06	-1.02/-0.93	-0.72/-1.83	-1.19/-0.99	-0.36/1.38	1.96/3.74	4.39/4.02	2.69/1.13	1.58/2.87	3.76/4.55	3.57/2.99
Θ(82.5°)	3.4/1.51	2.78/3.05	2.56/2.17	-0.11/-1.14	-2.13/-1.63	-0.48/-0.55	-0.08/0.95	1.18/1.15	0.25/-0.36	0.03/-0.16	-1.55/-1.78	-2.93/-3.14	-0.95/-0.44	-0.16/-0.89	-1.18/-0.97	-1/-0.95	0.78/0.55	0.51/0.62	0.81/2.83	3.69/2.54	2.67/1.79	0.93/1.47	2.19/3.63	2.84/1.47
Θ(90°)	2.48/-0.31	1.67/1.81	1.08/0.7	-1.13/-0.54	-0.45/-0.63	-1.3/-1.06	-0.54/-0.11	0.47/0.73	0.18/-0.05	-0.66/-1.64	-2.46/-1.84	-1.49/-0.87	-0.28/-1.09	-0.58/-0.93	-1.56/-0.85	-0.89/-0.63	-0.83/-1.7	1.79/0.58	-0.95/2.21	3.59/2.45	2.41/0.66	0.05/2.18	2.6/3.43	2.82/0.73
Θ(97.5°)	1.77/-0.22	0.62/0.78	0.4/-0.42	-2.37/-2.94	-1.99/-0.32	0.08/0.06	-0.27/-0.01	0.15/0.34	-0.25/-0.45	-1.21/-1.43	-2.04/-1.38	-0.76/-1.34	-0.85/-1.25	-1.53/-2.04	-4.09/-1.6	-2.79/0.78	-1.41/-0.72	1.33/1.56	-0.91/0.97	3.42/2.77	1.49/0.33	0.89/3.65	4.16/3.6	3.39/1.85
Θ(105°)	-0.19/0.41	-0.92/-0.82	0.03/-0.92	-1.66/-2.94	-2.61/-2.45	-0.96/-0.37	-0.47/-1.24	-2.45/-3.34	-3.62/-2.3	-0.99/-0.4	0.53/0.52	1.21/-1.09	1.23/-0.33	0.5/-1.01	-1.91/-1.44	0.04/0.73	-2.81/-0.3	1.98/-1.64	-2.9/0.67	3.07/2.18	3.56/2.22	1.08/3.39	3.23/2.52	1.93/1.41
Θ(112.5°)	-2.39/-2.62	-3.17/-2.47	-2.02/-1.73	-1.29/-1.54	-1.86/-1.74	-0.88/-0.7	-0.28/-0.7	-1.76/-4.86	-3.75/-2.73	-1.81/-1.53	0.99/0.96	1.67/-2.02	-2.36/-1.32	-0.18/-1.53	-1.03/-2.09	0.19/0.53	-1.56/0.98	1.97/-4.66	-2.98/1.5	3.76/1.07	0.99/0.05	-2.68/0.05	0.63/-0.92	0.31/-0.44
Θ(120°)	-1.9/-2.85	-4.03/-4.5	-1.94/-1.49	-0.61/-1.4	-1.98/-1.38	-3.2/-3.74	-2.66/-2.45	-2.51/-1.83	-1.18/-1.37	-1.8/-0.45	-0.7/-0.74	0.63/-1.18	0.11/-1.58	-2.11/-1.35	-1.32/-4.39	-0/0.08	-5.01/-1.84	1.33/-2.92	-1.47/1.39	1.53/0.34	-2.28/-1.47	-2.62/0.08	1.11/-1.59	-3.84/-1.8
Θ(127.5°)	-1.65/-2.73	-3.15/-1.94	-0.8/-0.57	-0.84/-1.12	-2.23/-2.35	-2.42/-2.66	-3.38/-2.25	-1.76/-1.82	-1/0.18	-0.77/-0.92	-1.89/-0.06	-1.29/-2.06	-2.4/-3.31	-3.99/-0.8	-1.87/-2.71	-0.92/-4.12	-5.45/-0.69	0.88/-4.16	-2.1/-1.13	-2.37/-1.43	-0.93/-2.55	-4.11/-3.28	-1.25/-1.97	-2.99/-1.12
Θ(135°)	-2.65/-4.08	-3.72/-2.98	-3.78/-2.95	-1.57/-1.04	-1.49/-2.35	-2.63/-1.93	-2.23/-2.91	-2.18/-0.99	-0.07/0.36	-0.3/-1.87	-3.08/-5.46	-5.8/-6.7	-5.67/-6.16	-4.39/-2.49	-4.1/-4.13	-4.1/-6.96	-5.65/-1.97	-2.42/-4.93	-1.94/-1.49	-5.46/-4.64	-3.23/-5.26	-3.03/-2	-1.8/-3.38	-4.99/-3.84
Θ(142.5°)	-6.26/-4.78	-5.13/-3.97	-3.18/-4.29	-4.88/-4.43	-3.62/-2.94	-1.55/-1.72	-2.02/-2.88	-2.5/-1.08	0/0.11	-0.79/-1.49	-1.81/-2.25	-3.87/-5.62	-7.01/-7.1	-4.87/-4.99	-6.65/-5.87	-6.41/-4.53	-2.2/-2.57	-4.52/-7.12	-2.26/-1.06	-3.34/-4.66	-6.92/-5.17	-6.28/-2.56	-1.01/-0.51	-1.45/-5.77
Θ(150°)	-4.96/-4.1	-4.96/-5.5	-5.67/-6.39	-7.73/-9.2	-8.5/-6.94	-5.64/-5.8	-5.84/-5.04	-4.04/-2.12	-1.29/-1.39	-1.78/-1.99	-1.72/-1.79	-2.26/-2.51	-3.35/-2.88	-2.28/-3.5	-4.18/-6.62	-9.21/-7.2	-6.06/-4.09	-3.5/-5.23	-3.81/-3.58	-3.22/-2.99	-6.18/-9.88	-7.46/-3.83	-2.34/-2.03	-4.69/-6.84
Θ(157.5°)	-4.44/-2.88	-3.21/-3.91	-5.13/-6.48	-8.39/-7.93	-7.1/-6.7	-6.14/-5.07	-5.04/-6.23	-6.58/-5.74	-4.47/-3.66	-3.64/-3.08	-1.87/-1.63	-1.37/-0.8	-0.96/-1.58	-2.66/-4.03	-4.61/-4.8	-3.96/-3.49	-3.76/-4.68	-4.95/-3.53	-2.81/-2.99	-3.72/-3.23	-2.88/-4.37	-5.51/-3.63	-3.5/-5.66	-7.83/-6.28
Θ(165°)	-7.51/-6.92	-6.47/-6.51	-6.54/-7.08	-7.77/-8.97	-10.07/-9.73	-9.56/-8.68	-7.42/-7.28	-7.58/-8.1	-7.54/-6.29	-5.31/-4.8	-4.14/-2.84	-1.61/-0.77	-0.65/-1.33	-2.7/-4.71	-5.72/-6.37	-6.64/-7.55	-8.05/-8.27	-6.55/-5.37	-4.79/-4.8	-4.74/-3.95	-2.99/-2.98	-3.64/-5.14	-6.44/-6.88	-7.23/-8.11
Θ(172.5°)	-7.74/-8.76	-9.36/-9.95	-9.68/-9.23	-8.68/-8.44	-8.72/-8.3	-8.57/-9.34	-8.65/-7.91	-8.31/-8.75	-8.6/-8.66	-8.42/-8.23	-8.15/-6.99	-6.02/-5.81	-6.05/-6.91	-7.86/-9.47	-10.79/-12.03	-10.94/-8.85	-7.22/-5.99	-5.74/-5.82	-5.97/-5.97	-6.19/-6.07	-5.45/-4.9	-4.36/-4.75	-4.93/-5.19	-6.35/-7.44
Θ(180°)	-12.23/-12.14	-12.17/-11.97	-12.53/-12.48	-12.35/-12.53	-11.66/-11.04	-10.25/-9.64	-8.96/-8.58	-9.41/-9.98	-10.92/-11.22	-11.64/-11.73	-11.82/-10.72	-10.33/-9.76	-9.53/-10.3	-11.57/-11.79	-12.37/-11.1	-10.48/-9.69	-9.72/-9.44	-9.15/-9.52	-9.33/-9.24	-9/-9.57	-9.77/-10.39	-11.63/-11.56	-10.87/-11.88	-12.11/-12.18

5G option12

Freq(Hz)	5.2G/Pol.	Phi/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta(0°)	-6.2/-4.05	-2.16/-1.3	-0.12/0.85	1.65/2.25	2.5/2.87	3.17/3.16	3.11/3.03	2.79/2.34	1.78/1.02	0.05/0.82	-1.9/-3.33	-5.19/-6.12	-5.92/-4.26	-2.66/-1.33	-0.07/0.87	1.6/2.12	2.4/2.56	2.7/2.82	2.78/2.7	2.35/1.81	1.21/0.48	-0.33/-1.16	-2.09/-3.65	-5.52/-7.24
Theta(7.5°)	-6.99/-5.56	-4.14/-2.62	-0.91/0.38	1.33/1.85	1.99/2.19	2.37/2.14	2.11/2.04	1.83/1.59	1.2/0.86	0.57/-0.17	-1.28/-2.73	-4.39/-6.1	-6.41/-4.92	-2.76/-1.07	0.29/1.33	2.04/2.57	2.96/3.29	3.44/3.49	3.33/3.02	2.69/2.15	1.54/0.81	-0.13/-1.23	-2.13/-3.47	-5.16/-6.42
Theta(15°)	-7.42/-6.02	-4.18/-2.44	-0.97/0.27	1.17/1.53	1.63/1.69	1.47/1.52	1.75/1.53	1.29/0.96	0.67/0.29	-0.14/-0.55	-1.1/-2.06	-2.99/-3.93	-3.62/-2.96	-1.69/-0.29	0.91/1.86	2.5/2.93	3.04/3.12	2.96/2.71	2.4/2.05	1.69/1.27	0.98/0.63	0.22/-0.84	-2.2/-3.34	-5.2/-7.02
Theta(22.5°)	-6.22/-5.84	-4.08/-2.07	-0.68/0.6	1.17/1.51	1.99/2.4	2.51/2.83	2.58/2.31	1.82/1.27	0.45/-0.48	-1.18/-1.78	-2.77/-3.17	-3.37/-3.62	-3.35/-2.55	-1.58/-0.63	0.39/1.38	2.31/2.98	3.32/3.18	2.54/1.93	1.47/1.36	1.41/1.24	0.88/0.34	-0.37/-1.38	-2.87/-4.07	-5.35/-6.35
Theta(30°)	-3.61/-3.25	-2.44/-2.2	-1.96/-1.5	-0.34/0.64	1.45/2.17	2.44/2.73	2.32/1.5	1.03/0.72	0.74/0.35	-0.33/-1.06	-2.07/-3.35	-4.01/-4.24	-4.5/-4.58	-3.9/-2.71	-1.53/-0.35	0.99/1.98	2.6/2.99	3.48/3.85	3.73/3.16	2.23/1.14	0.13/-0.55	-1.27/-2.76	-5.13/-5.38	-5.03/-4.13
Theta(37.5°)	-3.53/-3.77	-3.18/-1.97	-1.67/-2	-1.35/0.02	1.15/1.52	1.17/0.9	0.94/0.94	0.77/0.47	-0.21/-1.04	-1.32/-1.26	-2.06/-3.36	-4.01/-3.99	-3.75/-2.86	-2.01/-1.22	-0.39/0.18	0.38/0.64	1.38/2.36	2.93/2.76	2.34/1.66	1.21/0.76	-0.16/-1.28	-2.1/-2.75	-3.98/-5.58	-5.15/-4.05
Theta(45°)	-5.44/-3.73	-2.1/-0.75	-1.59/-1.89	-1.47/-0.55	0.19/0.55	0.88/1.37	1.55/1.55	1.89/2.33	2.17/1.49	0.23/-0.67	-0.13/-0.55	-1.18/-1.84	-2.53/-2.48	-1.11/-0.45	0.29/0.71	1.01/1.48	1.82/1.9	1.40/3.1	-1.2/-1.24	-0.42/-0.04	-0.23/-1.14	-2.08/-2.44	-2.78/-4.01	-4.43/-5.1
Theta(52.5°)	-7.54/-4.64	-4.55/-3.49	-3.38/-3.29	-2.69/-1.3	0.59/1.69	2.13/1.94	1.47/1.57	1.59/0.92	0.69/0.15	-1.71/-2.46	-2.54/-3.84	-3.72/-2.66	-2.13/-1.48	-1.02/-1.66	-1.07/0.24	1.24/1.55	1.71/1.6	0.87/-0.32	0.62/0.68	-0.13/-0.58	-1.05/-1.63	-2.83/-4.6	-6.42/-8.02	-9.5/-8.61
Theta(60°)	-6.28/-4.88	-3.43/-1.95	-3.01/-3.13	-2.64/-1.97	-0.21/0.92	1.01/0.23	-0.06/0.68	1.71/82	0.78/-0	-0.11/-0.94	-1.55/-2.64	-3.2/-3.51	-4.68/-3.26	-1.64/-0.88	-0.05/0.15	1.22/2.14	2.47/2.65	2.04/1.16	0.74/1.32	1.97/0.96	-0.8/-1.66	-2.92/-4.01	-4.48/-5.79	-7.35/-7.48
Theta(67.5°)	-7.8/-5.75	-5.16/-4.63	-4.36/-3.22	-1.58/-0.74	-0.52/0.34	0.85/1.36	2.02/1.34	-0.6/-0.73	0.07/0.66	0.57/-1.06	-2.82/-4.12	-5.07/-6.11	-5.99/-4.08	-2.35/-1.06	-0.5/-1.19	-1.65/-1.52	-0.07/1.43	1.64/0.68	0.08/0.88	1.09/0.37	-1.36/-3.16	-4.31/-6.75	-9.14/-10.63	-9.04/-7.58
Theta(75°)	-6.23/-5.94	-5.72/-6.04	-5.3/-3.65	-1.54/-0.34	0.56/1.34	0.86/-0.24	-1.46/-1.15	-1.44/-1.78	-2.47/-2.13	-2.68/-3.27	-4.35/-4.7	-4.54/-3.91	-3.88/-3.71	-1.65/-0.95	-0.63/-2.31	-3.25/-3.4	-2.27/1.03	-0.27/0.04	-0.91/0.03	-0.35/-1.81	-1.83/-1.74	-2.18/-4.34	-5.66/-6.03	-7.2/-7.08
Theta(82.5°)	-4.52/-5.54	-5.81/-4.02	-4.18/-3.46	-3.07/-2.43	-1.2/0.25	0.55/0.29	-0.42/-1.03	-2.32/-2.71	-1.35/-0.88	-2.23/-3.44	-5.26/-5.9	-4.43/-3.35	-2.35/-0.8	-0.7/-1.07	-0.62/-2.06	0.50/42	-0.69/-0.76	0.72/1.24	0.68/-0.96	-0.81/-0.64	-1.15/-2.99	-5.91/-8.17	-7.94/-6.72	
Theta(90°)	-4.69/-7.05	-9.04/-7.75	-5.2/-3.7	-2.53/-1.65	-0.82/-0.22	-0/-0.25	-1.76/-3.19	-3.42/-2.24	-0.93/-0.47	-1.43/-3.38	-4.16/-3.17	-4.09/-3.64	-1.19/-0.34	-1.18/-0.3	-0.07/-1.01	-0.42/0.08	1.07/2.43	2.96/1.85	1.1/1.94	3.29/1.58	-0.6/-0.09	-0/-0.18	-2.04/-3.76	-4.14/-4.63
Theta(97.5°)	-2.4/-5.55	-6.86/-5.91	-7.26/-5.59	-3.51/-1.75	-1.57/-2.39	-2.22/-1.84	-1.38/-1.14	-0.89/1.24	-1.44/-1.9	-2.65/-2.66	-2.38/-3.09	-3.54/-3.2	-2.2/-1.36	-1.73/0	-0.05/-0.56	-1.22/-0.58	-0.42/2.06	3.3/3.28	2.71/3.63	3.59/2.15	0.85/0.65	-0.25/-1.73	-3.98/-6.14	-5.33/-3.86
Theta(105°)	-4/-5.6	-7.83/-6.77	-6.18/-3.93	-2.65/-2.23	-2.23/-2.01	-1.69/1.03	-0.75/-1.3	-0.26/0.53	0.96/0.8	0.85/0.43	-0.86/-1.69	-2.07/-2.52	-0.83/0.11	0.43/0.99	1.57/0.53	-1.19/1.29	2.72/2.16	2.72/2.16	1.16/2.39	3.33/2.16	1.04/1.35	-0.2/-2.8	-3.29/-5.63	-7.77/-5.44
Theta(112.5°)	-2.94/-2.42	-4.78/-5.35	-6.27/0.48	-2.35/-2.21	-2.29/-2.89	-1.29/-2.5	-1.68/0.09	-1.61/1.62	1.33/0.04	-1.68/-2.04	-1.6/-0.01	-1.58/-2.61	-0.90/0.66	0.61/1.83	0.78/-1.83	0.99/1.63	2.74/3.3	3.64/2.39	1.66/3.39	3.6/1.93	0.08/0.29	-0.11/-2.06	-5.3/-5.29	-3.44/-3.43
Theta(120°)	-6.6/-4.7	-5.1/-4.06	-4.6/-5.14	-3.61/-3.71	-3.33/-3.44	-2.85/-1.45	-0.94/-0.45	0.88/0.71	-0.59/-1.75	-2.28/-3.24	-5.02/-4.93	-5.81/-3.1	-1.28/-0.14	0.07/0.65	-1.62/-1.19	-0.14/1.64	1.89/2.66	2.82/0.79	0.38/2.51	3.92/2.33	0.44/0.6	0.58/-1.47	-3.95/-6.09	-4.41/-4.16
Theta(127.5°)	-3.69/-4.49	-9.72/-10.61	-7.3/-4.81	-5.2/-4	-4.04/-3.66	-1.56/-0.73	-0.92/-0.53	0.25/-0.66	-1.59/-0.99	-2.16/-4.32	-4.72/-4.84	-5.07/-3	-1.51/-1.09	-1.37/-2.72	-1.99/-1.9	0.33/0.09	1.86/1.35	1.55/-0.02	-0.11/0.79	1.54/1.41	1.72/1.47	0.55/-0.86	-2.33/-3.2	-3.57/-5.05
Theta(135°)	-7.38/-5.51	-4.22/-6.02	-4.93/-4.39	-4.84/-4.67	-2.04/0.25	0.89/1.09	0.99/1	0.87/0.02	-0.07/-0.2	-1.63/-4.54	-6.83/-6.18	-5.27/-2.98	-1.11/-1.49	-2.23/-0.31	0.04/1.15	0.99/2.64	2.48/0.82	0.42/-1.84	-2.25/-1.7	0.09/1.1	0.90/66	0.53/-1.16	-3.99/-5.92	-4.48/-4.98
Theta(142.5°)	-6.32/-9.14	-8.38/-9.37	-8.02/-5.89	-5.62/-3.71	-1.53/0.03	0.94/1.33	1.07/0.99	0.88/0.35	-0.55/-2.04	-4.3/-4.98	-3.31/-3.3	-3.72/-1.78	-0.34/-0.86	-1.05/-0.5	0.18/1.02	0.76/0.73	-0.45/-2.3	-3.01/-4.73	-4.95/-3.84	-2.67/-2.86	-3.31/-2.98	-2.93/-3.19	-3.43/-4.55	-6.22/-5.69
Theta(150°)	-4.16/-4.69	-5.88/-5.31	-4.94/-6.31	-5.3/-3.35	-1.53/-0.5	0.16/0.37	0.22/-0.17	-0.73/-1.1	-1.62/-1.79	-1.83/-2.64	-4.21/-5.04	-3.91/-3.08	-3.33/-3.04	-2.6/-2.94	-3.4/-2.57	-2.14/-2.88	-4.17/-5.72	-5.05/-3.93	-3.14/-3.19	-4.15/-4.92	-5.71/-6.85	-6.65/-5.81	-4.34/-3.5	-3.1/-3.58
Theta(157.5°)	-8/-8.67	-8.8/-9.42	-9.46/-8.47	-8.03/-7.4	-6.61/-5	-4.16/-3.04	-2.51/-2.31	-2.73/-2.93	-2.72/-1.92	-1.51/-1.53	-4.95/-2.01	-1.72/-1.31	-1.25/-1.67	-2.44/-2.74	-2.58/-2.01	-1.66/-1.75	-2.18/-2.66	-3.02/-3.18	-2.86/-2.35	-1.77/-1.44	-1.64/-2.22	-3.06/-4.14	-4.91/-4.8	-4.73/-6.18
Theta(165°)	-4.92/-4.74	-4.69/-5.81	-7.5/-7.84	-7.76/-6.76	-5.82/-5.58	-5.33/-4.86	-4.49/-4.46	-4.16/-3.75	-3.27/-3	-3.39/-4.33	-5.58/-6.25	-6.22/-6.35	-5.33/-4	-2.93/-2.51	-2.5/-2.75	-2.85/-2.63	-2.32/-2.13	-1.89/1.58	-1.35/-1.55	-1.98/-2.17	-2.54/-3.2	-3.79/-4.71	-5.01/-4.76	-4.62/-5.33
Theta(172.5°)	-8.43/-7.29	-5.79/-5.14	-4.88/-4.39	-4.03/-3.93	-4.04/-4.17	-4.12/-3.96	-4.22/-4.32	-4.93/-5.46	-6.2/-6.76	-8.04/-9.4	-10.34/10.12	-8.68/-7.36	-6.03/-4.91	-3.92/-3.66	-3.15/-2.84	-2.43/-2.29	-1.86/-1.65	-1.83/-2.06	-2.43/-2.81	-3.43/-4.45	-5.09/-4.94	-5.17/-5.83	-6.84/-8.25	-8.22/-8.81
Theta(180°)	-9.55/10.13	-9.96/-8.84	-6.95/-5.44	-4.46/-3.97	-3.52/-3.01	-2.77/-3.09	-3.26/-3.5	-3.77/-4.04	-4.48/-5.01	-5.52/-6.17	-7.22/-8.21	-8.94/-8.91	-8.5/-7.36	-6.07/-4.92	-4.01/-3.38	-2.98/-2.7	-2.33/-2.42	-2.39/2.52	-2.98/-3.41	-3.71/-4.1	-4.77/-5.66	-6.17/-6.63	-6.99/-7.43	-7.92/-8.5
Freq(Hz)	5.2G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(dB)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta(0°)	2.48/2.21	1.92/1.81	1.35/0.64	-0.13/0.97	-2.27/3.96	-5.53/7.36	-7.76/6.26	-4.47/2.68	-1.54/-0.39	0.45/1.22	1.86/2.25	2.44/2.46	2.23/2.03	1.82/1.35	0.74/0.1	-0.97/-1.87	-2.9/-4.41	-6.36/7.53	-6.35/-4.3	-2.93/-1.86	-0.73/0.28	1.09/1.75	2.21/2.57	2.78/2.65
Theta(7.5°)	2.3/2.62	1.73/1.3	0.95/-0.07	-0.02/-1.16	-2.28/-3.42	-4.74/-6.49	-7/-5.81	-4.21/-2.67	-1.47/-0.21	0.72/1.5	2.26/2.68	2.97/3.08	3.24/2.31	3.01/2.64	2.09/1.27	0.12/-1.41	-3.39/-5.07	-7.11/-8.36	-7.49/-4.66	-2.79/-1.54	-0.62/0.3	0.93/-1.32	1.79/2.3	2.41/2.21
Theta(15°)	2.62/2.8	2.26/2.1	0.9/-0.08	-1.06/-2.17	-2.97/-4.4	-6.15/-7.97	-9.29/-7.99	-5.45/-3.22	-1.53/-0.2	0.68/1.42	2.01/2.51	2.98/3.37	3.82/3.91	3.71/3.26	2.48/1.5	0.41/-0.96	-2.99/-5.7	-8.01/-9.58	-8.24/-4.8	-3.03/-2.29	-1.63/-1.4	-0.49/-0.25	0.44/1.32	2.02/2.2
Theta(22.5°)	2.46/2.56	2.46/2.07	1.37/0.65	-1.55/-2.71	-4.57/-7.32	-8.58/-7.54	-5.21/-3.26	-1.46/-0.14	0.75/1.38	1.76/2.11	2.49/2.64	2.86/2.85	2.78/2.55	2.25/1.77	1.09/-0.22	-2.62/-5.33	-8.18/-10.53	-11.23/-7.05	-4.19/-2.23	-1.43/-1.29	-0.87/-0.43	0.05/0.61	1.41/2.15	
Theta(30°)	0.30/32	0.02/-0.57	-1.07/-1.67	-0.54/-1.72	-2.51/-3.43	-4.46/6.79	-7.37/6.52	-5.05/-3.67	-2.21/-1.24	-0.63/-0.2	0.47/1.23	1.49/1.44	1.41/1.72	2.05/2.17	2.07/1.73	1.01/-0.1	-1.9/-0.41	-6.58/-7.72	-5.88/-4.99	-4.85/-3.75	-2.05/-0.87	0.02/0.38	0.65/0.10	0.89/0.59
Theta(37.5°)	-0.27/0.77	1.05/0.46	-0.51/-1.62	-2.85/-3.81	-5.18/-6.27	-7.05/-7.98	-8.29/-7.88	-6.88/-3.92	-2.31/-1.99	-1.7/-1.54	-0.33/0.71	0.94/0.44	0.34/1.06	1.43/1.24	0.52/-0.47	-0.99/-1.14	-1.86/-3.38	-5.05/-6.33	-6.07/-3.91	-3.24/-4.12	-3.55/-1.83	-0.22/0.56	0.52/0.38	-0.06/-0.45
Theta(45°)	0.53/1.35	1.31/0.47	-0.51/-1.03	-1.79/-2.72	-3.63/-4.87	-6.43/-8.46	-10.2/-8.89	-6.33/-3.65	-2.09/-0.87	-0.71/-0.04	0.92/1.81	1.67/0.92	0.82/1.37	1.64/0.88	-0.09/-1.08	-0.98/-1.14	-2.1/-3.79	-5.59/-8.08	-7.69/-5.04	-2.48/-1.31	-1.6/-0.83	0.27/0.67	0.96/1.34	1.16/0.42
Theta(52.5°)	-0.44/-1.62	-2.18/-1.98	-1.69/-1.52	-1.92/-2																				