



Antenna Composite Gain Test Report

Equipment	XE5-8
Brand Name	Cambium Networks
Model Name	XE5-8
Applicant	Cambium Networks Inc. 3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA
Manufacturer	Cambium Networks, Ltd. Ashburton, TQ13 7UP, UK
Sample Received	Dec. 07, 2021
Start Test Date	Dec. 23, 2021
Final Test Date	Dec. 24, 2021



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History of this test report

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1. Operation Mode and Antenna Information

Antenna Position	2.4GHz port	5GHz port	5GHz port	6E port	Brand Name	Model Name	Ant. Type	Connector	Modes of Operation
Radio 1 Ant1 2G 5G	4	4 (High band)	4 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	2.4GHz, 5GHz UNII 1~3
Radio 1 Ant2 2G 5G	3	3 (High band)	3 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	2.4GHz, 5GHz UNII 1~3
Radio 1 Ant3 2G 5G	2	2 (High band)	2 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	2.4GHz, 5GHz UNII 1~3
Radio 1 Ant4 2G 5G	1	1 (High band)	1 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	2.4GHz, 5GHz UNII 1~3
Radio 1 Ant5 5G	-	4 (Low band)	8 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	5GHz UNII 1~3
Radio 1 Ant6 5G	-	3 (Low band)	7 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	5GHz UNII 1~3
Radio 1 Ant7 5G	-	2 (Low band)	6 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	5GHz UNII 1~3
Radio 1 Ant8 5G	-	1 (Low band)	5 (Full band)	-	ACCTON	EAP9819A-6E-1120-CAM	PCB	I-PEX	5GHz UNII 1~3
Radio 2 Ant1 6G	-	4		4	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 2 Ant2 6G	-	2		2	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 2 Ant3 6G	-	3		3	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 2 Ant4 6G	-	1		1	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 3 Ant1 6G	-	4		4	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 3 Ant2 6G	-	2		2	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 3 Ant3 6G	-	3		3	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8
Radio 3 Ant4 6G	-	1		1	ACCTON	EAP9819A-6E-1120-CAM	Metal	I-PEX	5GHz UNII 1~3 & 6GHz UNII5~8

Note:

DBS Mode: Radio 1 (2.4GHz/5GHz Full Band)+Radio 2 (5GHz/6GHz)+Radio 3 (5GHz/6GHz)

Radio 1:

2.4GHz Operation Mode (4TX/4RX)

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G can be used as transmitting/receiving antenna.

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G could transmit/receive simultaneously.

5GHz Operation Mode (8TX/8RX): UNII 1~3

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G and Radio 1 Ant5 5G~ Radio 1 Ant8 5G can be used as transmitting/receiving antenna.

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G and Radio 1 Ant5 5G~ Radio 1 Ant8 5G could transmit/receive simultaneously.

Radio 2:

6GHz Operation Mode (4TX/4RX)

Radio 2 Ant1 6G~Radio 2 Ant4 6G can be used as transmitting/receiving antenna.

Radio 2 Ant1 6G~Radio 2 Ant4 6G could transmit/receive simultaneously.



Radio 3:

6GHz Operation Mode (4TX/4RX)

Radio 2 Ant1 6G~Radio 2 Ant4 6G can be used as transmitting/receiving antenna.

Radio 2 Ant1 6G~Radio 2 Ant4 6G could transmit/receive simultaneously.

SBS Mode: Radio 1 (2.4GHz/5GHz Low Band/High Band)+Radio 2 (5GHz/6GHz)+ Radio 3 (5GHz/6GHz)

Radio 1:

2.4GHz Operation Mode (4TX/4RX)

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G can be used as transmitting/receiving antenna.

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G could transmit/receive simultaneously.

5GHz Operation Mode (4TX/4RX): UNII 2C, 3

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G can be used as transmitting/receiving antenna.

Radio 1 Ant1 2G 5G~Radio 1 Ant4 2G 5G could transmit/receive simultaneously.

5GHz Operation Mode (4TX/4RX): UNII 1, 2A

Radio 1 Ant5 5G~ Radio 1 Ant8 5G can be used as transmitting/receiving antenna.

Radio 1 Ant5 5G~ Radio 1 Ant8 5G could transmit/receive simultaneously.

Radio 2:

6GHz Operation Mode (4TX/4RX)

Radio 2 Ant1 6G~Radio 2 Ant4 6G can be used as transmitting/receiving antenna.

Radio 2 Ant1 6G~Radio 2 Ant4 6G could transmit/receive simultaneously.

Radio 3:

6GHz Operation Mode (4TX/4RX)

Radio 2 Ant1 6G~Radio 2 Ant4 6G can be used as transmitting/receiving antenna.

Radio 2 Ant1 6G~Radio 2 Ant4 6G could transmit/receive simultaneously.

2. Test Frequency

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

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

3. Testing Location

Testing Location		
☒	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	22-23 / 45-55	Dec. 23, 2021~Dec. 24, 2021

Note:

Testing Site Information

Brand Name: TDK

Dimension: 11m*6m*6m

Characteristic: Fully Anechoic Chamber

4. Test Facility and Configuration

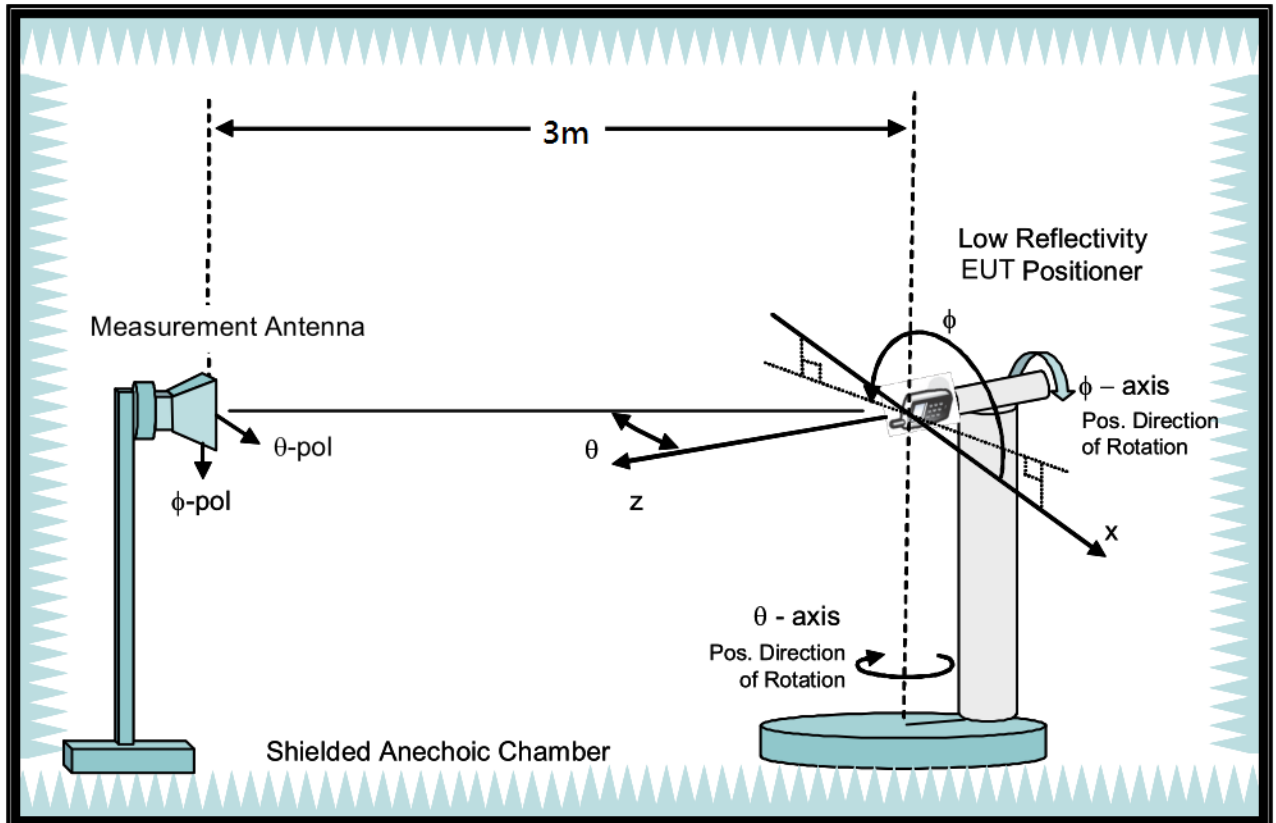
Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Measurement antenna: Single Polarization Horn antenna calibrated according to ANSI C63.5.

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

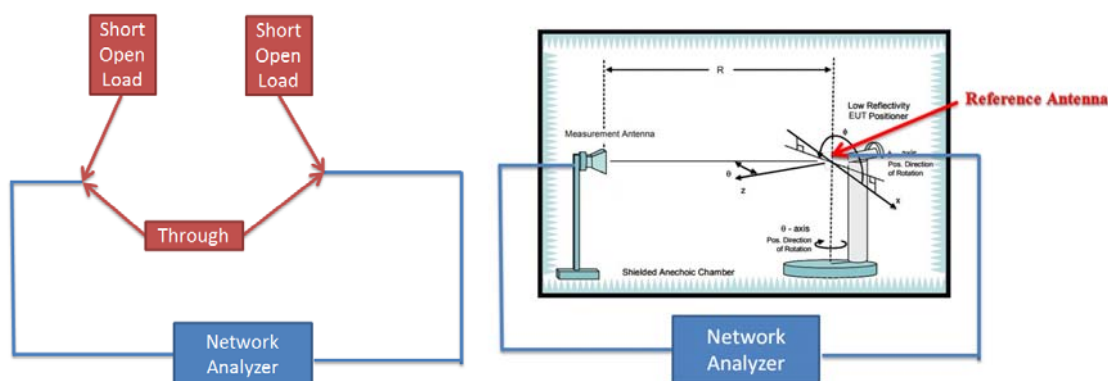
#Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1"



5. Reference Calibration

Connected cables to VNA calibration kit and use network analyzer internal function to do calibration. Do short, open and load to each side. Then connect through to both side and calibrate S21 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 S21 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	7500
S21 values (dBi)	-31.4	-31.4	-31.3	-31.3	-31	-30.7	-30.1	-30.5	-30.5	-30.8	-31.3	-32.8	-34.4	-35.4
Reference gain (dBi)	10.2	10.4	10.6	12.4	12.8	13.4	13.4	13.3	13.3	13.1	13.2	12.3	11.7	11.1
Factor (dB)	41.63	41.81	41.89	43.72	43.78	44.12	43.5	43.78	43.76	43.88	44.45	45.14	46.08	46.51

6. Test Method

EUT set on multi-axis positioner and adjust EUT's physical center to measurement reference center. Measurement antenna set at phi polarization and 1.5 meter height. Port 1 of Network analyzer connect to antenna 1 of EUT. Record S21 value every 15 degree from 0 to 345 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 (ii), for all angles.
3. Composite antenna gain are examined for all angles to determine max gain and Phi/Theta position. Max gain and phi/theta position are listed in section 7 tables.

7. Measured Values and Calculation of Maximum Gain Positions

Mode 1: Radio 1 2.4GHz 4TX and 5GHz full band 8TX

DG_1SS max value position

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 (dBi)	4.51	0.1	2.05	1.72	-1.09
Ant. 2 (dBi)	4.97	1.93	3.87	3.22	2.83
Ant. 3 (dBi)	2.11	1.28	4.41	4.38	2.74
Ant. 4 (dBi)	3.72	4.61	1.28	0.84	3.36
Ant. 5 (dBi)		-1.86	-3.79	-10.88	-5.67
Ant. 6 (dBi)		-5.81	-5.44	-11.75	-15.3
Ant. 7 (dBi)		-5.45	-10.18	-28.18	-17.2
Ant. 8 (dBi)		-6.83	-5.72	-4.42	-6.31
DG [1SS] (dBi)	9.91	8.39	8.65	7.37	7.13
Polarization	Phi	Theta	Theta	Theta	Theta
Θ (°)	45	30	30	30	30
Φ (°)	0	210	15	45	45

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

DG_1SS max value position calculation

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 [10 ^{^(G/20)}]	10 ^{^(4.51/20)}	10 ^{^(0.1/20)}	10 ^{^(2.05/20)}	10 ^{^(1.72/20)}	10 ^{^(-1.09/20)}
Ant. 2 [10 ^{^(G/20)}]	10 ^{^(4.97/20)}	10 ^{^(1.93/20)}	10 ^{^(3.87/20)}	10 ^{^(3.22/20)}	10 ^{^(2.83/20)}
Ant. 3 [10 ^{^(G/20)}]	10 ^{^(2.11/20)}	10 ^{^(1.28/20)}	10 ^{^(4.41/20)}	10 ^{^(4.38/20)}	10 ^{^(2.74/20)}
Ant. 4 [10 ^{^(G/20)}]	10 ^{^(3.72/20)}	10 ^{^(4.61/20)}	10 ^{^(1.28/20)}	10 ^{^(0.84/20)}	10 ^{^(3.36/20)}
Ant. 5 [10 ^{^(G/20)}]		10 ^{^(-1.86/20)}	10 ^{^(-3.79/20)}	10 ^{^(-10.88/20)}	10 ^{^(-5.67/20)}
Ant. 6 [10 ^{^(G/20)}]		10 ^{^(-5.81/20)}	10 ^{^(-5.44/20)}	10 ^{^(-11.75/20)}	10 ^{^(-15.3/20)}
Ant. 7 [10 ^{^(G/20)}]		10 ^{^(-5.45/20)}	10 ^{^(-10.18/20)}	10 ^{^(-28.18/20)}	10 ^{^(-17.2/20)}
Ant. 8 [10 ^{^(G/20)}]		10 ^{^(-6.83/20)}	10 ^{^(-5.72/20)}	10 ^{^(-4.42/20)}	10 ^{^(-6.31/20)}
Ant. 1 [10 ^{^(G/20)}] value	1.681	1.012	1.266	1.219	0.882
Ant. 2 [10 ^{^(G/20)}] value	1.772	1.249	1.561	1.449	1.385
Ant. 3 [10 ^{^(G/20)}] value	1.275	1.159	1.661	1.656	1.371
Ant. 4 [10 ^{^(G/20)}] value	1.535	1.7	1.159	1.102	1.472
Ant. 5 [10 ^{^(G/20)}] value		0.807	0.646	0.286	0.521
Ant. 6 [10 ^{^(G/20)}] value		0.512	0.535	0.259	0.172
Ant. 7 [10 ^{^(G/20)}] value		0.534	0.31	0.039	0.138
Ant. 8 [10 ^{^(G/20)}] value		0.456	0.518	0.601	0.484
Sum All Antenna [Amax]	6.262	7.428	7.656	6.61	6.424
DG [10*log(Amax*2/Nant)]	9.91	8.39	8.65	7.37	7.13

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

DG [4SS(2G)/8SS(5G)] max value position

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 (dBi)	4.51	3.14	-0.92	1.72	-1.09
Ant. 2 (dBi)	4.97	3.18	5.7	3.22	2.83
Ant. 3 (dBi)	2.11	5.17	4.29	4.38	2.74
Ant. 4 (dBi)	3.72	-0.02	0.91	0.84	3.36
Ant. 5 (dBi)		-7.72	-2.71	-10.88	-5.67
Ant. 6 (dBi)		-13.24	-4.69	-11.75	-15.3
Ant. 7 (dBi)		-9.29	-11.43	-28.18	-17.2
Ant. 8 (dBi)		-4.5	-8.85	-4.42	-6.31
DG [4SS(2G)/8SS(5G)] (dBi)	3.96	0.57	0.76	0.03	-0.4
Polarization	Phi	Theta	Theta	Theta	Theta
Θ (°)	45	30	30	30	30
Φ (°)	0	45	0	45	45

Note: The DG 4SS max value position is the maximum DG 4SS value calculated from section 11 table Gain Result.

DG [4SS(2G)/8SS(5G)] max value position calculation

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 $((10^{(G_{ant1}/20)})^2)$	2.8249	2.0606	0.8091	1.4859	0.778
Ant. 2 $((10^{(G_{ant2}/20)})^2)$	3.1405	2.0797	3.7154	2.0989	1.9187
Ant. 3 $((10^{(G_{ant3}/20)})^2)$	1.6255	3.2885	2.6853	2.7416	1.8793
Ant. 4 $((10^{(G_{ant4}/20)})^2)$	2.355	0.9954	1.2331	1.2134	2.1677
Ant. 5 $((10^{(G_{ant5}/20)})^2)$		0.169	0.5358	0.0817	0.271
Ant. 6 $((10^{(G_{ant6}/20)})^2)$		0.0474	0.3396	0.0668	0.0295
Ant. 7 $((10^{(G_{ant7}/20)})^2)$		0.1178	0.0719	0.0015	0.0191
Ant. 8 $((10^{(G_{ant8}/20)})^2)$		0.3548	0.1303	0.3614	0.2339
Sum All Antenna	9.946	9.1133	9.5206	8.0513	7.2972
DG $[10 \cdot \log(\text{sum all}/N_{ant})]$	3.96	0.57	0.76	0.03	-0.4

Note: Directional Gain (4SS) is the max value of all position. Each position value is calculated by KDB662911 D01 (e) (ii).

$$g_{j,k} = 10^{(G/20)}$$

$$\text{Directional Gain (4SS)} = 10 \cdot \log((10^{(G_{ant1}/20)})^2 + (10^{(G_{ant2}/20)})^2 + (10^{(G_{ant3}/20)})^2 + (10^{(G_{ant4}/20)})^2 + \dots) / N_{ant})$$



Mode 2: Radio 1 2.4GHz and 5GHz high band 4TX

DG_1SS max value position

Frequency (Hz)	2.45G	5.6G	5.785G
Ant. 1 (dBi)	4.51	1.72	-1.09
Ant. 2 (dBi)	4.97	3.22	2.83
Ant. 3 (dBi)	2.11	4.38	2.74
Ant. 4 (dBi)	3.72	0.84	3.36
DG [1SS] (dBi)	9.91	8.67	8.15
Polarization	Phi	Theta	Theta
Θ (°)	45	30	30
Φ (°)	0	45	45

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

DG_1SS max value position calculation

Frequency (Hz)	2.45G	5.6G	5.785G
Ant. 1 [$10^{(G/20)}$]	$10^{(4.51/20)}$	$10^{(1.72/20)}$	$10^{(-1.09/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(4.97/20)}$	$10^{(3.22/20)}$	$10^{(2.83/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(2.11/20)}$	$10^{(4.38/20)}$	$10^{(2.74/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(3.72/20)}$	$10^{(0.84/20)}$	$10^{(3.36/20)}$
Ant. 1 [$10^{(G/20)}$] value	1.681	1.219	0.882
Ant. 2 [$10^{(G/20)}$] value	1.772	1.449	1.385
Ant. 3 [$10^{(G/20)}$] value	1.275	1.656	1.371
Ant. 4 [$10^{(G/20)}$] value	1.535	1.102	1.472
Sum All Antenna [Amax]	6.262	5.425	5.11
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	9.91	8.67	8.15

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

DG_4SS max value position

Frequency (Hz)	2.45G	5.6G	5.785G
Ant. 1 (dBi)	4.51	1.72	-1.09
Ant. 2 (dBi)	4.97	3.22	2.83
Ant. 3 (dBi)	2.11	4.38	2.74
Ant. 4 (dBi)	3.72	0.84	3.36
DG [4SS] (dBi)	3.96	2.75	2.27
Polarization	Phi	Theta	Theta
Θ (°)	45	30	30
Φ (°)	0	45	45

Note: The DG 4SS max value position is the maximum DG 4SS value calculated from section 11 table Gain Result.

DG_4SS max value position calculation

Frequency (Hz)	2.45G	5.6G	5.785G
Ant. 1 $((10^{(G_{ant1}/20)})^2)$	2.8249	1.4859	0.778
Ant. 2 $((10^{(G_{ant2}/20)})^2)$	3.1405	2.0989	1.9187
Ant. 3 $((10^{(G_{ant3}/20)})^2)$	1.6255	2.7416	1.8793
Ant. 4 $((10^{(G_{ant4}/20)})^2)$	2.355	1.2134	2.1677
Sum All Antenna	9.946	7.5398	6.7437
DG $[10 \cdot \log(\text{sum all}/N_{ant})]$	3.96	2.75	2.27

Note: Directional Gain (4SS) is the max value of all position. Each position value is calculated by KDB662911 D01 (e) (ii).

$$g_{j,k} = 10^{(G/20)}$$

$$\text{Directional Gain (4SS)} = 10 \cdot \log((10^{(G_{ant1}/20)})^2 + (10^{(G_{ant2}/20)})^2 + (10^{(G_{ant3}/20)})^2 + (10^{(G_{ant4}/20)})^2 + \dots) / N_{ant})$$

Mode 3: Radio 1 5GHz low band 4TX

DG_1SS max value position

Frequency (Hz)	5.2G	5.3G
Ant. 5 (dBi)	1.7	0.3
Ant. 6 (dBi)	1.03	1.7
Ant. 7 (dBi)	2.49	3.13
Ant. 8 (dBi)	-0.11	-0.06
DG [1SS] (dBi)	7.35	7.38
Polarization	Phi	Phi
Θ (°)	45	45
Φ (°)	225	225

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

DG_1SS max value position calculation

Frequency (Hz)	5.2G	5.3G
Ant. 5 [10 ^{^(G/20)}]	10 ^{^(1.7/20)}	10 ^{^(0.3/20)}
Ant. 6 [10 ^{^(G/20)}]	10 ^{^(1.03/20)}	10 ^{^(1.7/20)}
Ant. 7 [10 ^{^(G/20)}]	10 ^{^(2.49/20)}	10 ^{^(3.13/20)}
Ant. 8 [10 ^{^(G/20)}]	10 ^{^(-0.11/20)}	10 ^{^(-0.06/20)}
Ant. 5 [10 ^{^(G/20)}] value	1.216	1.035
Ant. 6 [10 ^{^(G/20)}] value	1.126	1.216
Ant. 7 [10 ^{^(G/20)}] value	1.332	1.434
Ant. 8 [10 ^{^(G/20)}] value	0.987	0.993
Sum All Antenna [Amax]	4.661	4.678
DG [10*log(Amax ² /Nant)]	7.35	7.38

Note:

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

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

DG_4SS max value position

Frequency (Hz)	5.2G	5.3G
Ant. 5 (dBi)	1.7	-0.59
Ant. 6 (dBi)	1.03	1.89
Ant. 7 (dBi)	2.49	3.68
Ant. 8 (dBi)	-0.11	-0.68
DG [4SS] (dBi)	1.38	1.47
Polarization	Phi	Phi
Θ (°)	45	45
Φ (°)	225	135

Note: The DG 4SS max value position is the maximum DG 4SS value calculated from section 11 table Gain Result.

DG_4SS max value position calculation

Frequency (Hz)	5.2G	5.3G
Ant. 5 $((10^{(G/20)})^2)$	1.4791	0.873
Ant. 6 $((10^{(G/20)})^2)$	1.2677	1.5453
Ant. 7 $((10^{(G/20)})^2)$	1.7742	2.3335
Ant. 8 $((10^{(G/20)})^2)$	0.975	0.8551
Sum All Antenna	5.4959	5.6068
DG $[10 \cdot \log(\text{sum all}/N_{\text{ant}})]$	1.38	1.47

Note: Directional Gain (4SS) is the max value of all position. Each position value is calculated by KDB662911 D01 (e) (ii).

$$g_{j,k} = 10^{(G/20)}$$



Radio 2 5GHz and 6GHz 4TX

DG_1SS max value position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	2.63	-3.4	-1.05	-4.5	-0.02	1.47	-3.15	4.44
Ant. 2 (dBi)	1.08	3.18	-2.79	1.53	0.07	1.16	2.45	-5.01
Ant. 3 (dBi)	-1.66	1.68	1.87	0.83	0.21	-2.78	1.85	1.71
Ant. 4 (dBi)	0.68	2.59	-2.43	-0.3	3.54	0.55	-2.43	0.51
DG [1SS] (dBi)	6.84	7.38	5.12	5.7	7.11	6.27	6.05	7.06
Polarization	Theta	Theta	Theta	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	45	75	75	75	30	60	30	45
$\Phi(^{\circ})$	225	180	135	150	120	255	105	240

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

DG_1SS max value position calculation

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 [10^(G/20)]	10^(2.63/20)	10^(-3.4/20)	10^(-1.05/20)	10^(-4.5/20)	10^(-0.02/20)	10^(1.47/20)	10^(-3.15/20)	10^(4.44/20)
Ant. 2 [10^(G/20)]	10^(1.08/20)	10^(3.18/20)	10^(-2.79/20)	10^(1.53/20)	10^(0.07/20)	10^(1.16/20)	10^(2.45/20)	10^(-5.01/20)
Ant. 3 [10^(G/20)]	10^(-1.66/20)	10^(1.68/20)	10^(1.87/20)	10^(0.83/20)	10^(0.21/20)	10^(-2.78/20)	10^(1.85/20)	10^(1.71/20)
Ant. 4 [10^(G/20)]	10^(0.68/20)	10^(2.59/20)	10^(-2.43/20)	10^(-0.3/20)	10^(3.54/20)	10^(0.55/20)	10^(-2.43/20)	10^(0.51/20)
Ant. 1 [10^(G/20)] value	1.354	0.676	0.886	0.596	0.998	1.184	0.696	1.667
Ant. 2 [10^(G/20)] value	1.132	1.442	0.725	1.193	1.008	1.143	1.326	0.562
Ant. 3 [10^(G/20)] value	0.826	1.213	1.24	1.1	1.024	0.726	1.237	1.218
Ant. 4 [10^(G/20)] value	1.081	1.347	0.756	0.966	1.503	1.065	0.756	1.06
Sum All Antenna [Amax]	4.394	4.679	3.608	3.855	4.533	4.119	4.015	4.507
DG [10*log(Amax^2/Nant)]	6.84	7.38	5.12	5.7	7.11	6.27	6.05	7.06

Note:

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

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



DG_4SS max value position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	2.63	-3.4	-0.37	4.7	1.06	1.47	-3.15	4.44
Ant. 2 (dBi)	1.08	3.18	3.45	-0.64	-0.06	1.16	2.45	-5.01
Ant. 3 (dBi)	-1.66	1.68	-8.77	-6.18	-13.96	-2.78	1.85	1.71
Ant. 4 (dBi)	0.68	2.59	-7.81	-18.23	4.85	0.55	-2.43	0.51
DG [4SS] (dBi)	0.94	1.63	-0.67	0.08	1.27	0.39	0.36	1.54
Polarization	Theta	Theta	Theta	Theta	Phi	Theta	Theta	Theta
Θ (°)	45	75	60	45	15	60	30	45
Φ (°)	225	180	270	240	165	255	105	240

Note: The DG 4SS max value position is the maximum DG 4SS value calculated from section 11 table Gain Result.

DG_4SS max value position calculation

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 $((10^{(G_{ant1}/20)})^2)$	1.8323	0.4571	0.9183	2.9512	1.2764	1.4028	0.4842	2.7797
Ant. 2 $((10^{(G_{ant2}/20)})^2)$	1.2823	2.0797	2.2131	0.863	0.9863	1.3062	1.7579	0.3155
Ant. 3 $((10^{(G_{ant3}/20)})^2)$	0.6823	1.4723	0.1327	0.241	0.0402	0.5272	1.5311	1.4825
Ant. 4 $((10^{(G_{ant4}/20)})^2)$	1.1695	1.8155	0.1656	0.015	3.0549	1.135	0.5715	1.1246
Sum All Antenna	4.9665	5.8246	3.4297	4.0702	5.3578	4.3712	4.3447	5.7023
DG $[10 \cdot \log(\text{sum all}/N_{ant})]$	0.94	1.63	-0.67	0.08	1.27	0.39	0.36	1.54

Note: Directional Gain (4SS) is the max value of all position. Each position value is calculated by KDB662911 D01 (e) (ii).

$$g_{j,k} = 10^{(G/20)}$$

$$\text{Directional Gain (4SS)} = 10 \cdot \log((10^{(G_{ant1}/20)})^2 + (10^{(G_{ant2}/20)})^2 + (10^{(G_{ant3}/20)})^2 + (10^{(G_{ant4}/20)})^2 + \dots) / N_{ant})$$

**Radio 3 5GHz and 6GHz 4TX****DG_1SS max value position**

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-1.95	-2.11	-3.23	-6.75	0.87	1.15	-6.99	-0.32
Ant. 2 (dBi)	1.09	1.22	-1.32	3.96	2.22	1.09	1.91	-2.17
Ant. 3 (dBi)	1.03	-3.55	-1.51	-1.37	-1.7	-2.49	-0.33	-0.71
Ant. 4 (dBi)	2.36	3.33	-0.25	-0.71	2.2	0.69	-1.48	1.07
DG [1SS] (dBi)	6.79	6.16	4.51	5.6	7.06	6.25	4.86	5.56
Polarization	Theta	Theta	Theta	Theta	Theta	Theta	Theta	Theta
$\Theta(^{\circ})$	45	45	75	60	60	60	30	15
$\Phi(^{\circ})$	255	240	270	240	165	165	135	15

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

DG_1SS max value position calculation

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 [10 ^{^(G/20)}]	10 ^{^(-1.95/20)}	10 ^{^(-2.11/20)}	10 ^{^(-3.23/20)}	10 ^{^(-6.75/20)}	10 ^{^(0.87/20)}	10 ^{^(1.15/20)}	10 ^{^(-6.99/20)}	10 ^{^(-0.32/20)}
Ant. 2 [10 ^{^(G/20)}]	10 ^{^(1.09/20)}	10 ^{^(1.22/20)}	10 ^{^(-1.32/20)}	10 ^{^(3.96/20)}	10 ^{^(2.22/20)}	10 ^{^(1.09/20)}	10 ^{^(1.91/20)}	10 ^{^(-2.17/20)}
Ant. 3 [10 ^{^(G/20)}]	10 ^{^(1.03/20)}	10 ^{^(-3.55/20)}	10 ^{^(-1.51/20)}	10 ^{^(-1.37/20)}	10 ^{^(-1.7/20)}	10 ^{^(-2.49/20)}	10 ^{^(-0.33/20)}	10 ^{^(-0.71/20)}
Ant. 4 [10 ^{^(G/20)}]	10 ^{^(2.36/20)}	10 ^{^(3.33/20)}	10 ^{^(-0.25/20)}	10 ^{^(-0.71/20)}	10 ^{^(2.2/20)}	10 ^{^(0.69/20)}	10 ^{^(-1.48/20)}	10 ^{^(1.07/20)}
Ant. 1 [10 ^{^(G/20)}] value	0.799	0.784	0.689	0.46	1.105	1.142	0.447	0.964
Ant. 2 [10 ^{^(G/20)}] value	1.134	1.151	0.859	1.578	1.291	1.134	1.246	0.779
Ant. 3 [10 ^{^(G/20)}] value	1.126	0.665	0.84	0.854	0.822	0.751	0.963	0.922
Ant. 4 [10 ^{^(G/20)}] value	1.312	1.467	0.972	0.922	1.288	1.083	0.843	1.131
Sum All Antenna [Amax]	4.371	4.067	3.361	3.813	4.507	4.109	3.499	3.795
DG [10*log(Amax ² /Nant)]	6.79	6.16	4.51	5.6	7.06	6.25	4.86	5.56

Note:

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

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



DG_4SS max value position

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 (dBi)	-1.26	-12.43	-16.6	-6.75	-3.69	1.15	-6.99	-0.32
Ant. 2 (dBi)	1.5	1.56	1.58	3.96	4.72	1.09	1.91	-2.17
Ant. 3 (dBi)	-0.75	0.79	-0.5	-1.37	-3.54	-2.49	-0.33	-0.71
Ant. 4 (dBi)	2.87	3.18	-0.06	-0.71	2.25	0.69	-1.48	1.07
DG [4SS] (dBi)	0.92	0.76	-0.79	0.29	1.39	0.34	-0.72	-0.38
Polarization	Theta	Theta	Theta	Theta	Theta	Theta	Theta	Theta
Θ (°)	30	60	45	60	60	60	30	15
Φ (°)	225	225	225	240	240	165	135	15

Note: The DG 4SS max value position is the maximum DG 4SS value calculated from section 11 table Gain Result.

DG_4SS max value position calculation

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 $((10^{(G_{ant1}/20)})^2)$	0.7482	0.0571	0.0219	0.2113	0.4276	1.3032	0.2	0.929
Ant. 2 $((10^{(G_{ant2}/20)})^2)$	1.4125	1.4322	1.4388	2.4889	2.9648	1.2853	1.5524	0.6067
Ant. 3 $((10^{(G_{ant3}/20)})^2)$	0.8414	1.1995	0.8913	0.7295	0.4426	0.5636	0.9268	0.8492
Ant. 4 $((10^{(G_{ant4}/20)})^2)$	1.9364	2.0797	0.9863	0.8492	1.6788	1.1722	0.7112	1.2794
Sum All Antenna	4.9385	4.7685	3.3382	4.2788	5.5138	4.3243	3.3904	3.6643
DG $[10 \cdot \log(\text{sum all}/N_{ant})]$	0.92	0.76	-0.79	0.29	1.39	0.34	-0.72	-0.38

Note: Directional Gain (4SS) is the max value of all position. Each position value is calculated by KDB662911 D01 (e) (ii).

$$g_{j,k} = 10^{(G/20)}$$

$$\text{Directional Gain (4SS)} = 10 \cdot \log((10^{(G_{ant1}/20)})^2 + (10^{(G_{ant2}/20)})^2 + (10^{(G_{ant3}/20)})^2 + (10^{(G_{ant4}/20)})^2 + \dots) / N_{ant})$$

8. Summary of Test Result

Mode 1: Radio 1 2.4GHz 4TX and 5GHz UNII 1~UNII 3 8TX

Frequency (Hz)	2.45G
Radio 1 Ant1 2G 5G	4.51
Radio 1 Ant2 2G 5G	4.97
Radio 1 Ant3 2G 5G	4.66
Radio 1 Ant4 2G 5G	5.95
Max Gain (dBi)	5.95
DG [1SS] (dBi)	9.91
DG [2SS] (dBi)	6.91
DG [4SS(2G)/8SS(5G)] (dBi)	3.96

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G
Radio 1 Ant1 2G 5G	4.09	3.06	3.82	3.6
Radio 1 Ant2 2G 5G	4.4	5.7	3.79	2.99
Radio 1 Ant3 2G 5G	5.17	5.99	4.38	3.52
Radio 1 Ant4 2G 5G	4.64	4.09	4.19	3.36
Radio 1 Ant5 5G	3.39	3.58	3.34	2.01
Radio 1 Ant6 5G	3.7	3.39	2.52	3.03
Radio 1 Ant7 5G	3.1	3.68	2.83	2.84
Radio 1 Ant8 5G	2.82	3.13	2.19	2.61
Max Gain (dBi)	5.17	5.99	4.38	3.6
DG [1SS] (dBi)	8.39	8.65	7.37	7.13
DG [2SS] (dBi)	5.39	5.99	4.38	4.13
DG [4SS(2G)/8SS(5G)] (dBi)	0.57	0.76	0.03	-0.4

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Mode 2: Radio 1 2.4GHz and 5GHz UNII 2C~UNII 3 4TX

Frequency (Hz)	2.45G
Radio 1 Ant1 2G 5G	4.51
Radio 1 Ant2 2G 5G	4.97
Radio 1 Ant3 2G 5G	4.66
Radio 1 Ant4 2G 5G	5.95
Max Gain (dBi)	5.95
DG [1SS] (dBi)	9.91
DG [2SS] (dBi)	6.91
DG [4SS] (dBi)	3.96

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Frequency (Hz)	5.6G	5.785G
Radio 1 Ant1 2G 5G	3.82	3.6
Radio 1 Ant2 2G 5G	3.79	2.99
Radio 1 Ant3 2G 5G	4.38	3.52
Radio 1 Ant4 2G 5G	4.19	3.36
Max Gain (dBi)	4.38	3.6
DG [1SS] (dBi)	8.67	8.15
DG [2SS] (dBi)	5.67	5.15
DG [4SS] (dBi)	2.75	2.27

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Mode 3: Radio 1 5GHz UNII 1~UNII 2A 4TX

Frequency (Hz)	5.2G	5.3G
Radio 1 Ant5 5G	3.39	3.58
Radio 1 Ant6 5G	3.7	3.39
Radio 1 Ant7 5G	3.1	3.68
Radio 1 Ant8 5G	2.82	3.13
Max Gain (dBi)	3.7	3.68
DG [1SS] (dBi)	7.35	7.38
DG [2SS] (dBi)	4.35	4.38
DG [4SS] (dBi)	1.38	1.47

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Radio 2 5GHz UNII 1~UNII 3 and 6GHz UNII 5~8 4TX

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G
Radio 2 Ant1 6G	3.56	4.37	3.82	4.7
Radio 2 Ant2 6G	1.25	3.18	3.45	1.86
Radio 2 Ant3 6G	4.27	4.24	2.25	3.64
Radio 2 Ant4 6G	1.94	2.59	2.08	3.11
Max Gain (dBi)	4.27	4.37	3.82	4.7
DG [1SS] (dBi)	6.84	7.38	5.12	5.7
DG [2SS] (dBi)	4.27	4.38	3.82	4.7
DG [4SS] (dBi)	0.94	1.63	-0.67	0.08

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Radio 2 Ant1 6G	4.96	3.57	3.72	4.44
Radio 2 Ant2 6G	4.4	3.52	3.12	3.31
Radio 2 Ant3 6G	4.14	2.03	3.08	4.86
Radio 2 Ant4 6G	4.85	2.6	3.43	3.41
Max Gain (dBi)	4.96	3.57	3.72	4.86
DG [1SS] (dBi)	7.11	6.27	6.05	7.06
DG [2SS] (dBi)	4.96	3.57	3.72	4.86
DG [4SS] (dBi)	1.27	0.39	0.36	1.54

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Radio 3 5GHz UNII 1~UNII 3 and 6GHz UNII 5~8 4TX

Frequency (Hz)	5.2G	5.3G	5.6G	5.785G
Radio 3 Ant1 6G	3.25	3.68	3.74	2.9
Radio 3 Ant2 6G	2.35	4.2	2.48	3.96
Radio 3 Ant3 6G	3.07	3.84	2.89	2.61
Radio 3 Ant4 6G	3.41	3.65	1.81	3.31
Max Gain (dBi)	3.41	4.2	3.74	3.96
DG [1SS] (dBi)	6.79	6.16	4.51	5.6
DG [2SS] (dBi)	3.79	4.2	3.74	3.96
DG [4SS] (dBi)	0.92	0.76	-0.79	0.29

Note:

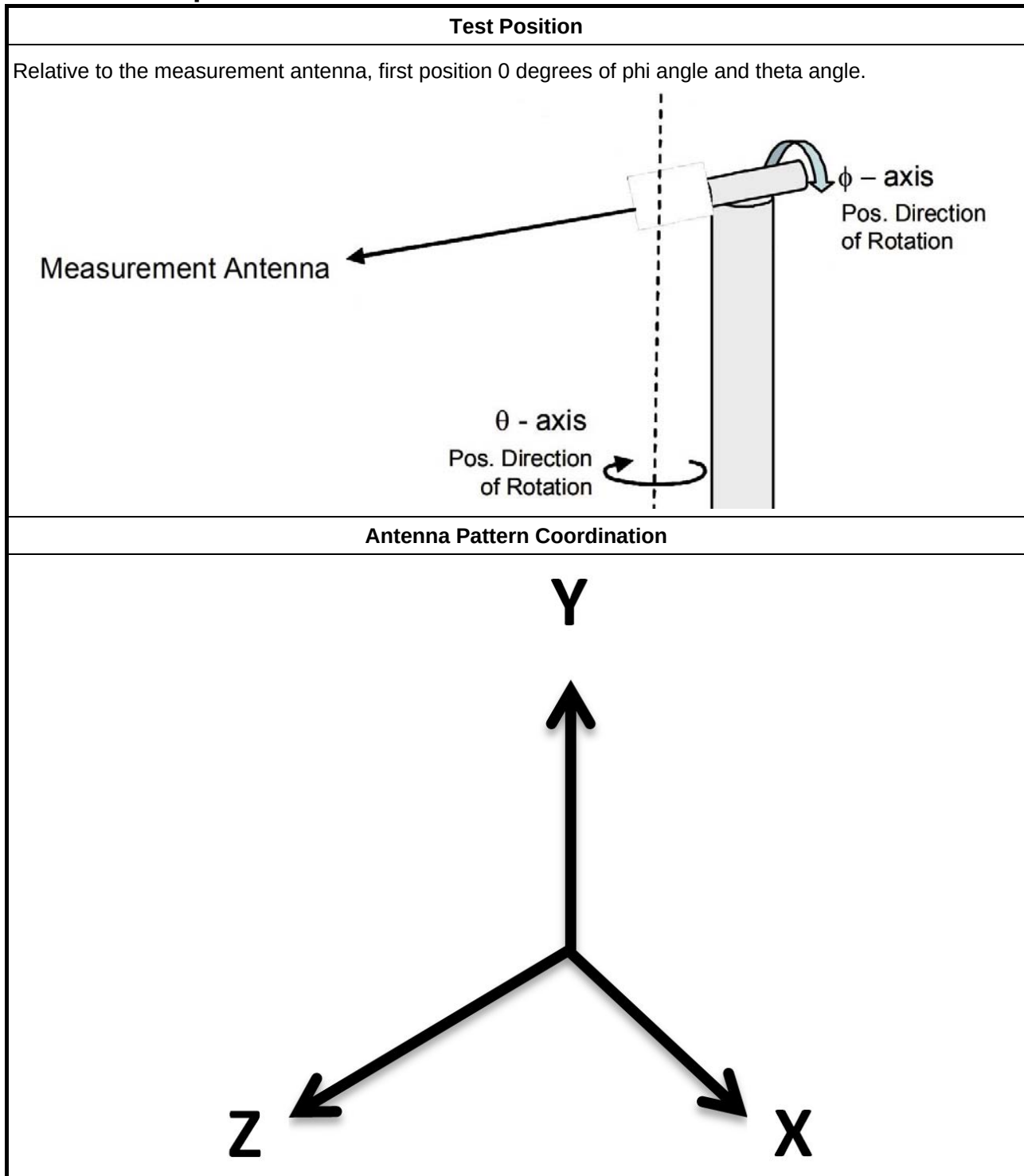
1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Radio 3 Ant1 6G	4.16	2.52	0.71	2.03
Radio 3 Ant2 6G	4.72	2.06	1.91	2.03
Radio 3 Ant3 6G	2.24	1.61	2.74	2.45
Radio 3 Ant4 6G	3.43	3.56	2.35	1.93
Max Gain (dBi)	4.72	3.56	2.74	2.45
DG [1SS] (dBi)	7.06	6.25	4.86	5.56
DG [2SS] (dBi)	4.72	3.56	2.74	2.56
DG [4SS] (dBi)	1.39	0.34	-0.72	-0.38

Note:

1. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain.
2. Each antenna max gain is the max value of measurement S21 of theta and phi through all measurement angles.
3. The max gain is the max value of all antennas.

9. Test Setup



Note:

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

**10. Test Equipment and Calibration Data**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022
Test Software	SPORTON	SENSE-RDG	V1.0.6	-	N.C.R.	N.C.R.

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

N.C.R. means Non-Calibration required.

11. Test Results

Please refer to the appendix.

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Appendix B – Radiated Composite Gain of Radio 1 2.4GHz and 5GHz U-NII 2C~U-NII 3.....	Page 47
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Appendix F – Antenna Pattern of Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3.....	Page 87
Appendix G – Antenna Pattern of Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8.....	Page 101
Appendix H – Antenna Pattern of Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8.....	Page 110
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Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	4.51	4.09	3.06	3.82	3.6
Ant. 2 Max Gain (dBi)	4.97	4.4	5.7	3.79	2.99
Ant. 3 Max Gain (dBi)	4.66	5.17	5.99	4.38	3.52
Ant. 4 Max Gain (dBi)	5.95	4.64	4.09	4.19	3.36
Ant. 5 Max Gain (dBi)		3.39	3.58	3.34	2.01
Ant. 6 Max Gain (dBi)		3.7	3.39	2.52	3.03
Ant. 7 Max Gain (dBi)		3.1	3.68	2.83	2.84
Ant. 8 Max Gain (dBi)		2.82	3.13	2.19	2.61
Ant. 1 Polarization/Θ(°)/Φ(°)	Phi/45/0	Theta/30/300	Theta/30/45	Theta/45/330	Theta/45/330
Ant. 2 Polarization/Θ(°)/Φ(°)	Phi/45/0	Theta/30/0	Theta/30/0	Theta/30/15	Theta/30/120
Ant. 3 Polarization/Θ(°)/Φ(°)	Phi/45/180	Theta/30/45	Theta/30/45	Theta/30/45	Theta/30/75
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/45/180	Theta/30/225	Theta/30/225	Theta/30/270	Theta/30/45
Ant. 5 Polarization/Θ(°)/Φ(°)		Phi/90/300	Phi/90/300	Phi/90/300	Phi/90/300
Ant. 6 Polarization/Θ(°)/Φ(°)		Phi/60/15	Phi/60/15	Phi/75/0	Phi/75/0
Ant. 7 Polarization/Θ(°)/Φ(°)		Phi/60/225	Phi/45/135	Phi/45/225	Phi/45/225
Ant. 8 Polarization/Θ(°)/Φ(°)		Phi/75/90	Phi/75/90	Phi/75/90	Phi/75/90
Max Gain (dBi)	5.95	5.17	5.99	4.38	3.6
DG [1SS] (dBi)	9.91	8.39	8.65	7.37	7.13
DG [2SS] (dBi)	6.91	5.39	5.99	4.38	4.13
DG [4SS] (dBi)		5.17	5.99	4.38	3.6
DG [4SS(2G)/8SS(5G)] (dBi)	3.96	0.57	0.76	0.01	-0.4



DG 1SS Result

Freq(Hz)	2.45G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.49	-5.22	-6.21	-7.13	-6.86	-6.8	-6.28	-5.77	-5.32	-4.74	-4.12	-4.24	-4.64	-4.4	-5.7	-7.66	-8.52	-7.34	-6.22	-4.75	-3.99	-3.04	-2.75	-2.41
Θ(15°)	3.26	3.07	2.82	2.49	2.23	2.14	2.15	2.07	2.13	2.36	3.15	3.93	4.62	4.2	3.03	1.89	1.28	1.55	1.96	1.98	1.79	1.74	1.63	1.46
Θ(30°)	8.02	6.87	5.43	4.54	5.11	6.13	6.58	6.2	5.69	5.43	6.06	7.15	7.89	7.74	6.93	5.72	5.37	6.04	6.68	6.45	5.48	5.22	6.44	7.22
Θ(45°)	9.91	8.86	6.75	5.35	6.88	8.57	8.99	8.14	7.16	6.83	7.95	9.27	9.76	8.97	7.4	6.07	6.13	7.3	8.32	8	6.67	5.92	7.78	9.48
Θ(60°)	8.89	8.01	5.79	4.58	6.37	8.01	8.52	7.84	6.46	6.25	7.3	8.48	9.16	8.23	6.11	4.78	5.02	6.9	8.51	7.79	5.81	5.11	7.11	8.93
Θ(75°)	6.21	5.04	3.07	2.19	3.88	5.64	6.62	6.17	4.15	3.3	4.29	4.56	5.43	4.53	2.33	1.44	2.8	5.22	7.4	5.89	3.9	3.02	4.87	6.67
Θ(90°)	1.57	0.05	-0.78	-1.21	0.18	2	3.73	3.35	1.5	0.17	0.76	0.15	1.16	1.2	-1.03	-1.97	-0.35	2.02	4.52	2.68	1.49	0.24	1.7	3.42
Θ(105°)	-1.79	-3.01	-4.94	-5.13	-2.6	-1.94	-0.17	-0.85	-1.29	-3.3	-4.06	-4.54	-3.38	-3.32	-6.98	-5.91	-4.55	-1.29	0.09	-0.86	-2.58	-3.14	-1.99	-1.33
Θ(120°)	-6.45	-5.88	-7.58	-9.94	-6.11	-4.4	-3.64	-4.36	-4	-6.2	-6.65	-5.57	-6.07	-7.76	-10.36	-9.68	-8.65	-5.59	-5.97	-4.82	-5.86	-6.73	-6.14	-6.65
Θ(135°)	-8.82	-9.82	-10.54	-12.28	-9.87	-7.11	-6.32	-6.61	-7.53	-8.84	-8.99	-8.63	-9.79	-10.67	-11.95	-11.83	-10.64	-9.71	-10.28	-9.85	-8.94	-9.11	-10.22	-10.7
Θ(150°)	-9.19	-10.04	-12.57	-13.31	-9.78	-6.54	-6.94	-8.63	-10.27	-11.15	-8.77	-10.17	-12.16	-12.27	-12.31	-12.19	-11.27	-9.76	-10.53	-12.07	-12.45	-12.95	-12.1	-11.77
Θ(165°)	-12.08	-12.23	-12.4	-11.85	-10.09	-9.28	-10.63	-12.92	-12.84	-12.58	-13.45	-12.41	-12.59	-12.59	-13.48	-12.06	-12.93	-13.71	-14.11	-12.82	-12.8	-13.11	-12.67	-12.47
Θ(180°)	-13.18	-13.82	-13.22	-13.06	-13.28	-12.26	-11.65	-12.03	-12.68	-13.35	-13.13	-12.88	-13.38	-12.81	-12.27	-12.14	-12.67	-13.25	-13.38	-12.66	-12.59	-13.49	-12.92	-13.28
Freq(Hz)	2.45G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.63	-5	-4.99	-4.82	-4.21	-4.15	-3.43	-4.25	-5.74	-6.78	-7.27	-7.42	-6.58	-5.11	-4.06	-3.63	-3.27	-3.23	-3.67	-4.68	-6.59	-9.05	-8.48	-6.53
Θ(15°)	-6.42	-5.85	-6.05	-5.95	-4.37	-3.58	-3.8	-4.78	-6.13	-8.74	-10.47	-8.72	-6.73	-4.95	-3.72	-3.14	2.86	-3.12	-3.79	-5.72	-7.6	-9.66	-9.31	-7.5
Θ(30°)	-6.73	-5.75	-6.53	-7.03	-5.95	-5.19	-4.7	-4.87	-5.49	-8.27	-10.58	-9.13	-8.29	-8.6	-9.93	-8.67	-5.49	-4.64	-5.37	-6.79	-8.42	-8.12	-9.81	-9.54
Θ(45°)	-5.56	-8.17	-9.35	-7.04	-7.2	-7.78	-8.22	-8.67	-9.57	-8.94	-7.94	-8.06	-8.48	-5.97	-5.83	-9.53	-8.07	-5.91	-7.73	-8.1	-9.61	-10.01	-8.97	-7.19
Θ(60°)	-6.14	-9.56	-11.22	-8.83	-10.26	-9.33	-9.9	-9.26	-11.92	-9.09	-10.55	-10.54	-9.08	-5.94	-5.58	-9.45	-10.42	-6.95	-7.89	-7.52	-12.72	-10.65	-9.68	-8.07
Θ(75°)	-7.86	-11.72	-13.53	-11.85	-11.58	-10.55	-11.24	-10.91	-12.57	-11.63	-12.96	-13.4	-13.05	-10.64	-11.25	-12.4	-12	-9.43	-9.73	-8.64	-12.99	-9.88	-9.74	-9.1
Θ(90°)	-11.1	-11.55	-12.88	-13.42	-12.56	-11.69	-11.83	-12.14	-13.72	-13	-13.52	-13.32	-12.68	-11.72	-13.99	-12.93	-13.48	-12.65	-10.38	-12.26	-13.07	-11.85	-11.25	-10.85
Θ(105°)	-12.47	-11.96	-13.65	-13.37	-13.59	-12.54	-13.54	-13.5	-13.07	-13.46	-13.13	-13.01	-12.9	-12.7	-13.22	-13.04	-13.09	-13.46	-12.14	-13.77	-11.51	-12.18	-13.47	-12.72
Θ(120°)	-10.62	-11.87	-13.61	-12.65	-13.43	-13.6	-13.51	-13.04	-13.01	-13.22	-13.14	-12.1	-12.99	-11.49	-12.52	-13.13	-12.86	-13.1	-12.02	-12.73	-11.92	-13.8	-13.07	-12.52
Θ(135°)	-12.11	-10.62	-11.68	-12.27	-11.93	-13.24	-12.81	-12.91	-12.97	-13.72	-12.37	-13.22	-13.23	-13.74	-12.63	-12.85	-13.52	-12.8	-12.67	-13.56	-12.69	-12.81	-13.49	-13.31
Θ(150°)	-12.62	-13.29	-13.28	-13.67	-12.36	-11.75	-13.17	-12.41	-13.07	-13.06	-13.6	-13.06	-12.59	-11.54	-13.22	-13.61	-12.79	-12.36	-13.27	-13.12	-11.62	-12.87	-11.68	-12.86
Θ(165°)	-13.09	-13.37	-12.81	-13.04	-12.99	-13.08	-13.11	-12.86	-12.73	-13.75	-13.06	-12.08	-12.15	-12.25	-12.97	-13.6	-13.32	-13.93	-13.29	-13.41	-13.29	-13.2	-12.59	-13.49
Θ(180°)	-12.27	-11.18	-10.91	-12.34	-13.29	-13.28	-13.55	-13.32	-13.16	-12.44	-12.49	-12.08	-11.86	-12.65	-12.7	-13.7	-13.31	-13.23	-13.75	-14.05	-13.11	-11.99	-12.16	-13.12
Freq(Hz)	5.2G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.33	-0.36	-0.78	-0.68	-0.45	-0.94	-1.09	-1.1	-0.22	0.1	0.52	0.72	0.38	0.34	0.39	0.31	-0.31	-0.72	-1.74	-0.92	-0.56	0.76	1.41	0.84
Θ(15°)	2.66	0.73	-0.5	-0.98	-0.83	-1.41	-0.02	1.48	1.14	0.67	1.54	2.41	2.6	3.4	3.4	3.49	3.29	1.54	0.06	1.83	2.38	3.73	4.43	3.78
Θ(30°)	4.19	2.55	2.78	3.43	2.67	3.45	2.9	3.17	3.7	4.67	5.34	3.8	4.49	5.42	5.01	5.44	4.41	3.46	3.65	2.98	3.68	5.27	5.5	5.18
Θ(45°)	3.82	4.84	4.57	3.99	4.14	4.39	4.92	4.97	5.56	5.54	6.42	5.19	4.65	5.48	6.91	7.01	6.08	5.44	5	3.17	3.23	3.22	4.53	3.74
Θ(60°)	4.11	5.75	4.27	3.6	4.16	4.27	5.1	5.95	3.65	5.18	5.37	5.66	3.98	3.74	5.85	5.02	3.93	3.44	2.9	2.17	4.04	4.59	4.55	3.37
Θ(75°)	3.54	5.24	4.33	4.33	3.69	3.49	6.14	5.44	4.65	5.09	6.78	6.57	4.95	3.18	5.43	4.13	4.57	3.12	2.35	2.73	4.92	3.94	3.58	3.55
Θ(90°)	1.76	2.79	2.76	3.27	2.42	2.43	4.52	3.22	4.72	3.63	3.95	4.83	2.14	1.27	1.84	0.95	2.44	3.03	1.73	3.8	4.75	3.14	1.79	2.22
Θ(105°)	-1.21	-1.28	-2.07	-0.43	-1.37	-0.41	1.28	1.5	1.63	0.4	-0.11	0.84	-1.54	-3.5	-3.05	-3.88	-2.54	-1.86	-3.3	-0.43	-0.07	-0.16	-4.47	-1.16
Θ(120°)	-4.76	-5.13	-5.74	-4.24	-3.42	-2.87	-2.4	-2.09	-1.59	-2.18	-3.12	-2.3	-4.29	-4.66	-6.38	-6.38	-4.83	-4.87	-5.65	-3.98	-2.96	-3.81	-5.23	-4.55
Θ(135°)	-6.8	-6.97	-7	-7.2	-6.28	-5.35	-4.99	-2.97	-5.54	-5.9	-6.28	-6.01	-5	-6.82	-7.73	-6.41	-6.39	-6.99	-5.57	-8.6	-6.05	-4.88	-7.64	-7.17
Θ(150°)	-7.18	-7.06	-9.23	-8.67	-7.72	-6.76	-9.46	-7.48	-10.51	-7.78	-7.97	-7.76	-7.33	-7.12	-8.94	-9.4	-9.54	-8.39	-10.16	-8.34	-9.81	-10.08	-7.36	-8.33
Θ(165°)	-8.55	-7.13	-6.8	-9.32	-8.77	-9.02	-8.25	-8.13	-8.36	-9.42	-8.75	-8.33	-7.98	-8.71	-9.51	-9.92	-9.81	-8.8	-9.14	-9.81	-8.91	-8.95	-9.83	-8.79
Θ(180°)	-7.65	-7.55	-7.9	-7.44	-8.19	-8.41	-8.82	-9.37	-9.16	-9.3	-8.31	-8.86	-8.88	-8.12	-6.91	-7.23	-7.98	-8.5	-9.27	-9.29	-8.32	-8.44	-8.57	-7.87
Freq(Hz)	5.2G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.81	-1.23	-0.47	-0.2	0.82	0.06	0.09	-0.33	-0.44	-0.37	-0.38	-0.67	-0.67	-0.61	0.36	0.34	0.77	0.89	-0.5	-0.8	-1.36	-0.71	-1.37	-1.51
Θ(15°)	4.14	4.49	4.47	4.11	4.02	3.03	2.53	2.05	1.38	1.68	2.2	2.99	3.65	5.17	4.94	4.17	3.89	2.33	-0.17	-0.35	0.85	1.95	2.42	2.93
Θ(30°)	7.87	7.49	7.81	8.18	7.58	7.05	6.82	6.62	6.29	6.43	6.22	5.99	5.98	6.57	8.39	7.94	7.1	7.56	6.7	5.32	6.26	5.53	7.23	7.03
Θ(45°)	5.98	6.59	7.8	5.84	6.38	6.56	5.64	5.02	5.89	6.16	7.02	4.61	5.04	4.02	5.23	4.41	5.87	3.61	4.36	3.9	5.44	3.48	6.43	7.49
Θ(60°)	1.16	0.62	3.53	1.31	0.6	-0.69	0.99	2.52	0.62	-1.03	2.3	0.11	1.43	0.63	-2.94	-3.03	-1.61	-1.8	-0.9	-0.88	1.54	1.76	2.92	2.65
Θ(75°)	-0.89	-1.21	1.04	-1	-1.06	-1.74	0.06	-0.43	-3.5	-3.09	1.07	0.02	0.31	-1.46	-0.69	-0.77	-1.62	-1.71	-3.86	-4.42	-4.86	-3.82	-3.1	-1
Θ(90°)	-2.69	-2.97	-0.72	-4.9	-2.5	-1.																		



Θ(180°)	-6.41	-6.93	-8.58	-9.32	-9.82	-9.29	-9.34	-9.6	-8.12	-7.51	-8.25	-7.07	-7.14	-6.5	-6.84	-7.14	-6.85	-6.61	-6.93	-7.86	-7.19	-7.34	-8.54	-9.48
Freq(Hz)	5.6G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.39	-1.26	-2.09	-2.25	-2.07	-1.52	-0.47	1.15	1.66	1.65	1.19	0.5	0.18	0.24	0.44	0.23	-0.77	-0.64	-1.37	0.07	1.55	2.8	2.66	1.58
Θ(15°)	2.35	1.23	-0.71	-0.14	1.44	1.16	1.31	1.57	1.27	1.16	1.63	2.51	1.14	1.6	3.04	3.06	2.43	2.52	3.46	3.27	3.64	4.39	3.55	3.16
Θ(30°)	4.75	2.98	1.86	2.32	0.99	3.37	3.39	3.77	4.57	5.18	4.82	4.1	4.54	4.16	5.24	4.78	4.49	5	5.77	3.78	2.66	4.99	4.92	5.87
Θ(45°)	2.69	3.36	3.8	2.64	1.98	3.19	3.5	3.63	6.38	5.16	5.39	4.44	4.45	3.99	5.73	6.32	4.92	5.08	5	5.22	4.01	3.71	4.92	5.13
Θ(60°)	4.33	5	2.57	2.16	2.22	3.63	3.24	3.95	4.45	4.49	5.39	3.34	3.32	1.36	3.09	4.05	2.32	3.37	4.43	2.8	3.34	2.59	3.47	4.2
Θ(75°)	4.13	4.08	3.53	1.98	1.81	2.99	3.3	3.75	4.67	4.37	5.76	4.87	3.85	2.82	3.93	3.54	3.66	4.88	4.93	2.29	4.01	3.92	3.4	3.32
Θ(90°)	2.08	1.68	2.19	1.33	1.85	2.97	1.71	2.08	3.92	3.37	3.51	3.66	2.66	0.49	0.46	1.31	3.14	4.51	4.09	3.44	4.28	3.05	1.6	0.46
Θ(105°)	-1.23	-0.65	-1.43	-1.49	-1.82	0.1	-0.19	0.87	1.87	0.61	-0.67	0.03	-0.9	-2.82	-2.37	-3.21	-2.21	-0.96	-2.56	-1.12	0.24	-1.33	-2.59	-1.95
Θ(120°)	-3.55	-2.91	-4.68	-3.56	-4.73	-4.11	-2.56	-2.61	-1.95	-3.38	-4.14	-3.59	-3.45	-4.92	-5.85	-6.15	-4.83	-3.01	-5.92	-4.56	-3.45	-3.83	-5.57	-4.08
Θ(135°)	-4.87	-6.59	-6.14	-6.23	-6.45	-5.88	-6.51	-5.52	-4.94	-6.25	-6.81	-6.57	-6.67	-5.99	-8.85	-7.59	-7.48	-7.3	-7.1	-6.01	-5.55	-4.97	-6.68	-7.51
Θ(150°)	-7.84	-8.22	-9.63	-8.66	-7.79	-9.25	-8.03	-8.26	-10.02	-8.57	-8.92	-8.04	-8.93	-9.52	-9.27	-8.93	-9.63	-9.42	-10.24	-7.72	-10.29	-9.31	-8.7	-8.58
Θ(165°)	-10.39	-9.07	-10.13	-9.27	-9.35	-8.95	-9.95	-10.02	-10.4	-9.96	-10.12	-9.91	-10.3	-9.11	-9.31	-9.75	-9.3	-10.04	-10.51	-9.2	-8.01	-7.94	-8.59	-8.77
Θ(180°)	-9.61	-9.6	-9.64	-9.72	-9.08	-9.68	-10.02	-9.61	-9.54	-9.86	-10.1	-9.73	-10.16	-9.75	-9.32	-8.95	-9.03	-8.46	-8.69	-8.74	-8.81	-8.36	-8.23	-9.48
Freq(Hz)	5.6G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.1	0.51	1.1	0.76	1.21	0.5	0.04	-0.06	0.09	-0.4	-0.58	-0.02	1.23	1.98	1.72	1.47	1.25	1.24	-0.46	-0.58	-0.84	-0.2	-0.39	-1.11
Θ(15°)	4.66	4.38	3.97	2.97	3.12	2.94	2.6	2.2	1.99	2.14	2.22	2.87	3.47	3.63	3.23	4.33	5.12	5.27	4.43	2.58	1.96	1.36	2.36	3.82
Θ(30°)	6.39	7.22	6.84	7.37	6.06	5.95	6.9	6.65	6.27	6.07	6.44	5.62	5.53	5.61	5.6	6.33	5.16	4.67	4.74	5.31	4.86	5.45	5.83	7.02
Θ(45°)	4.83	4.77	6.86	4.89	4.32	5.81	5.64	5.32	4.86	5.38	5.21	4.09	3.88	6.37	5.58	4.31	2.96	2.81	3.92	4.4	4.48	4.62	5.94	6.61
Θ(60°)	-3.4	-2.64	1.89	0.54	-0.28	-1.74	-1.1	-0.07	2.16	-0.06	-0.95	1.06	-1.39	2.07	1.8	-0.88	-1.73	-1.29	-0.21	1.01	1.52	-0.1	1.31	2.33
Θ(75°)	-0.78	-1.79	0.99	-1.77	-4.51	-3.31	-2.62	-2.89	-3.37	-1.65	-0.57	-1.9	-1.85	-0.93	-0.99	-3.8	-5.17	-3.59	-3.57	-4.39	-5.43	-2.26	-1.16	-0.8
Θ(90°)	-1.37	-2.68	-1.85	-3.83	-3.47	-3.25	-2.66	-3.73	-4.45	-3.35	-1.68	-3.71	-3.95	-3.12	-3.24	-3.24	-2.87	-3.37	-1.72	-0.75	-2.27	-1.22	-3.6	-1.68
Θ(105°)	-4.45	-4.06	-3.41	-6.05	-7.43	-5.65	-3.76	-6.02	-5.51	-4.69	-5.08	-5.36	-7.75	-6.32	-4.98	-5.81	-5.19	-6.17	-5.04	-5.21	-7.15	-5.36	-7.39	-5.83
Θ(120°)	-6.34	-5.31	-6.83	-7.12	-7.15	-7.02	-5.65	-8.21	-7.8	-8.23	-6.99	-7.08	-8.08	-4.51	-5.59	-6.14	-7.81	-6.3	-6.68	-5.72	-4.66	-5.65	-7	-6.47
Θ(135°)	-7.07	-7.92	-9.04	-8.22	-9.08	-7.22	-8.45	-7.93	-9.32	-8.47	-7.87	-8.42	-7.56	-7.49	-5.2	-6.43	-6.91	-6.76	-6.77	-7.59	-6.67	-9.24	-9.27	-9.36
Θ(150°)	-8.39	-9.18	-10.12	-9.17	-8.45	-7.96	-9.46	-9.82	-7.92	-9.02	-9.94	-8.6	-8.34	-8.61	-9.05	-7.81	-8.99	-9.74	-9.2	-9.56	-8.91	-9.21	-10.56	-9.1
Θ(165°)	-8.88	-9.57	-10.6	-8.92	-9.6	-9.27	-9.19	-10.6	-10.24	-10.06	-8.88	-9.59	-9.19	-8.35	-7.68	-7.31	-8.72	-10.03	-9.84	-9.51	-10.02	-9.48	-9.54	-9.89
Θ(180°)	-9.42	-9.06	-9.23	-9.59	-9.43	-9.75	-9.36	-10.42	-10.13	-9.82	-9.36	-9.78	-10.17	-10.05	-10.14	-8.89	-8.52	-8.21	-8.35	-8.91	-8.89	-9.07	-9.31	-9.83
Freq(Hz)	5.785G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.31	-0.87	-1.63	-1.54	-1.01	-0.3	0.93	1.62	2.2	1.96	1.25	0.83	-0.14	0.4	0.7	0.81	1.11	1.13	0.41	0.88	1.33	2.78	1.89	0.38
Θ(15°)	2.66	0.75	-0.43	-0.32	0.72	1.22	2.11	2.13	1.43	0.3	-0.37	0.64	3.17	3.24	3.12	2.84	3.19	3.65	4.44	4.63	4.51	4.12	3.66	2.76
Θ(30°)	4.04	3.98	2.67	3.35	2.09	1.78	3.25	2.73	3.25	4.59	4.5	4.11	4.12	4.48	4.91	3.87	5.68	6.58	5.57	3.5	4.01	4.51	6.15	5.16
Θ(45°)	4	3.44	2.68	3.38	4.31	3.53	4.38	4.36	6.1	6.08	5.61	5.23	4.55	4.37	4.46	5.99	5.19	5.79	5.79	5.65	5.6	4.58	5.26	5.53
Θ(60°)	4.16	4.18	2.38	2.31	2.9	3.79	3.2	4.68	4.66	4.6	5.54	3.55	3.59	2.04	3.77	3.73	2.94	4.32	4.89	4.81	3.47	2.62	3.24	4.33
Θ(75°)	4.97	4.76	3.65	1.78	1.79	3.5	3.56	4.62	4.93	4.53	5.41	5.21	2.81	3.09	3.92	4.47	3.76	5.4	5.13	3.82	3.9	4.7	4.3	4.18
Θ(90°)	3.39	3.17	3.29	1.76	1.32	2.4	2.83	2.6	4.78	3.67	3.38	4.42	2.58	1.03	1.18	1.82	3.26	5.02	4.6	4.36	4.3	3.52	2.04	1.53
Θ(105°)	-0.82	-0.61	0.45	-0.88	-1.57	0.64	1.14	1.06	2.61	1.34	-0	1.29	-0.96	-2.93	-2.36	-2.59	-3.14	0.07	-1.03	-0.94	-1.2	-1.56	-2.28	-1.54
Θ(120°)	-3.37	-2.74	-4.36	-3.09	-4.35	-3.11	-2.11	-1.51	-2.63	-1.58	-4.17	-3.97	-3.44	-6.16	-5.34	-4.92	-5.22	-3.89	-5.29	-3.64	-3.37	-4.48	-3.45	-3.61
Θ(135°)	-5.07	-5.34	-5.56	-5.62	-6.25	-6.26	-4.13	-4.26	-5	-5.68	-6.12	-5.92	-5.72	-5.83	-8.2	-7.16	-6.42	-4.85	-6.34	-4.82	-4.71	-4.95	-6.7	-6.75
Θ(150°)	-7.84	-7.89	-10.03	-10.36	-7.27	-8.9	-8.6	-8.02	-7.9	-7.29	-7.57	-7.87	-8.17	-7.37	-9.74	-8.3	-10.1	-7.89	-9.08	-7.12	-10.11	-9.62	-8.24	-8.52
Θ(165°)	-10.1	-9.78	-9.19	-8.57	-9.88	-10.03	-10.18	-9.99	-8.23	-9.02	-9.51	-9.82	-8.25	-9.19	-8.84	-8.73	-9.21	-9.69	-10.19	-9.86	-8.2	-7.71	-8.3	-8.55
Θ(180°)	-9.82	-9.09	-9.05	-9.74	-10.36	-9.11	-9.52	-9.59	-9.17	-9.84	-9.51	-9.32	-9.57	-9.61	-8.93	-9.21	-7.53	-7.89	-8.15	-8.52	-8.41	-8.51	-9.14	-9.7
Freq(Hz)	5.785G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	1.04	1.42	1.87	1.02	0.68	0.07	-0.29	-0.02	0.49	0.21	0.38	0.97	1.94	2.32	2.3	1.95	1.21	0.67	-1.1	-0.97	-0.72	0.76	0.95	0.48
Θ(15°)	3.65	4.18	3.88	3.1	3.82	3.7	2.79	1.55	1.53	2.63	3.34	3.26	2.96	3.97	5.02	5.32	5.55	5.21	3.94	2.61	1.46	1.1	0.73	0.98
Θ(30°)	4.97	4.79	6.41	7.13	5.02	5.57	5.14	4.92	5.87	5.04	5.44	4.6	5.47	5.47	5.59	6.74	5.47	3.78	3.48	3.8	3.78	5.37	6.2	5.92
Θ(45°)	3.6	5.37	5.11	5.69	3.44	4.77	4.11	5.13	3.61	4.27	4.32	3.33	5.43	5.28	5.04	4.26	3.03	3.97	3	3.88	3.55	4.59	5.99	6.12
Θ(60°)	-1.13	-2.28	-0.67	1.3	-1.19	-2.38	-0.9	-0.75	1.82	1.86	-0.01	1.18	-0.06	-0.93	1.49	0.05	-2.44	-0.12	0.94	0.9	0.17	-0.44	-1.98	-0.73
Θ(75°)	-3.25	-1.88	-3.14	-3.26	-3.66	-2.46	-3.99	-2.31	-2.2	-1.71	-0.79	-2.68	-2.04	-2.75	-3.12	-4.9	-4.91	-4.21	-4.21	-3.85	-6.72	-3.24	-3.72	-1.98
Θ(90°)	-1.93	-3.29	-2.77	-4.64	-4.07	-2.75	-4.45	-2.26	-4.74															



Gain Result

Freq(Hz)	2.45G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-8.81	-9.33	-10.63	-12.53	-15.91	-18.41	-19.31	-15.04	-12.22	-10.17	-12.53	-8.44	-8.23	-8.53	-9.2	-11.09	-13.99	-17.81	-18.33	-16.72	-13.74	-11.98	-10.33	-9.72	-9.68
Θ(15°)	-2.16	-2.32	-2.47	-2.69	-2.91	-3.34	-3.67	-4.2	-4.47	-4.96	-5.18	-5.43	-5.14	-5.16	-5.3	-5.41	-4.89	-3.74	-2.76	-2.27	-2.21	-2.17	-2.55	-2.84	
Θ(30°)	2.29	1.1	-0.37	-0.74	-0.25	0.43	1.06	0.97	0.04	-1.5	-2.17	-1.37	-0.13	0.43	-0.46	-2.06	-1.69	-0.03	1.53	2.04	1.9	1.8	2.14	2.16	
Θ(45°)	4.51	3.5	0.22	-1.97	0.33	2.03	2.59	2.67	1.99	0.86	1.85	2.64	2.69	2.18	0.74	-1.85	-1.49	1.52	3.67	3.29	2	1.1	2.28	3.67	
Θ(60°)	4.28	3.47	-0.41	-3.23	-0.58	0.47	0.64	1.59	1.06	0.55	2.11	2.95	1.95	0.59	-0.03	-1.5	-1.19	2.05	4.1	2.82	-0.85	-2.64	-0.08	3.33	
Θ(75°)	2.22	1.47	-2.88	-5.56	-2.99	-1.75	-0.7	0.49	-2.13	-3.05	-1.14	-0.65	-1.36	-3.36	-2.85	-3.57	-2.1	1.23	3.07	0.78	-4.57	-7.33	-2.95	1.17	
Θ(90°)	-1.38	-1.97	-6.74	-9.58	-8.22	-7.44	-4.05	-3.25	-7.56	-7.1	-6.77	-6.6	-5.75	-8.46	-7.14	-5.68	-3.27	-1.15	0.6	-2.27	-8.54	-10.24	-6.28	-1.74	
Θ(105°)	-4.83	-6.58	-12.28	-14.91	-10.68	-11.13	-6.77	-7.71	-13.08	-10.89	-12.86	-11.57	-9.13	-11.41	-12.24	-10.78	-6.91	-5.16	-3.34	-5.75	-11.83	-10.71	-8.29	-5.29	
Θ(120°)	-9.08	-10.59	-14.28	-19.47	-12.46	-12.48	-10.47	-16.77	-16.05	-15.94	-19.46	-13.67	-12.1	-14.67	-15.89	-16.22	-10.4	-10.36	-11.45	-9.15	-11.76	-14.1	-12.66	-9.63	
Θ(135°)	-13.34	-13.97	-17.25	-18.99	-19.4	-14.7	-12.59	-17.97	-19.77	-17.03	-15.03	-15.36	-16.95	-20.43	-19.71	-16.47	-14.45	-15.18	-18.87	-16.48	-15.01	-15.59	-15.91	-14.16	
Θ(150°)	-14.11	-15.25	-19.4	-19.35	-19.89	-16.88	-12.91	-11.94	-14.77	-17.93	-16.85	-17.18	-19.89	-19.09	-19.4	-15.51	-12.41	-12.1	-13.84	-17.01	-18.76	-18.37	-18.94	-18.98	
Θ(165°)	-14.96	-15.28	-16.54	-18.83	-20.21	-19.63	-19.81	-19.4	-18.81	-19.34	-19.89	-19.06	-19.36	-18.88	-19.07	-18.65	-19.01	-20.7	-20.61	-17.99	-18.02	-17.59	-17.27	-16.35	
Θ(180°)	-19.46	-19.91	-18.41	-18.72	-19.65	-18.81	-19.11	-19.94	-19.96	-19.27	-18.78	-19.24	-19.67	-19.47	-18.13	-18.13	-19.19	-19.61	-19.36	-18.43	-19.92	-19.38	-18.85	-19.87	
Freq(Hz)	2.45G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-16.49	-14.11	-12.77	-10.84	-9.34	-8.92	-8.09	-9.46	-10.51	-13.6	-17.48	-19.02	-17.7	-12.91	-10.35	-8.92	-7.79	-7.83	-8.4	-8.65	-10.24	-12.6	-16.08	-17.15	
Θ(15°)	-19.92	-20	-19.9	-18.94	-15.98	-13.39	-11.47	-10.82	-11.28	-14.21	-19.37	-16.45	-10.88	-9.97	-10.06	-10.36	-10.09	-9.96	-9.89	-12.07	-15.16	-19.63	-18.95	-19.85	
Θ(30°)	-13.97	-12.62	-14.39	-18.81	-19.72	-19.46	-12.99	-10.57	-11.74	-15.77	-19.09	-15.92	-12.17	-14.17	-20.11	-20.68	-14.59	-12.05	-11.8	-14.45	-19.06	-18.74	-15.26	-14.25	
Θ(45°)	-9.9	-13.58	-15.71	-18.14	-18.19	-16.08	-14.35	-13.31	-16.78	-19.03	-16.23	-18.59	-18.83	-15.34	-12.92	-14.33	-18	-14.89	-18.38	-18.59	-18.26	-17.49	-11.34	-8.79	
Θ(60°)	-14.94	-18.57	-17.87	-19.26	-19.94	-19.87	-18.99	-16.91	-18.39	-19.86	-18.92	-19	-16.61	-11.35	-11.16	-13.93	-18.53	-20.18	-19.36	-19.01	-19.34	-20.08	-11.33	-11.18	
Θ(75°)	-19.13	-19.83	-19.78	-19.75	-18.78	-19.64	-18.43	-19.33	-18.4	-18.5	-18.55	-19.52	-19.39	-18.39	-16.43	-17.24	-19.04	-19.09	-17.01	-17.96	-20.33	-19.28	-11.2	-13.14	
Θ(90°)	-19.67	-18.53	-18.83	-19.59	-19.91	-20.13	-19.41	-19.87	-19.57	-19.76	-19.36	-18.37	-19.81	-19.52	-19.97	-17.74	-19.23	-19.66	-15.68	-19.06	-19.7	-19.89	-13.91	-18.27	
Θ(105°)	-19.52	-19.51	-19.36	-19.43	-18.34	-19.96	-20.21	-20.04	-18.71	-18.51	-19.46	-18.47	-19.99	-19.36	-19.36	-20.35	-19.1	-18.74	-15.36	-20.66	-18.97	-18.96	-19.92	-19.91	
Θ(120°)	-18.6	-18.72	-18.87	-20.07	-18.67	-20.13	-19.74	-19.08	-19.32	-19.28	-20.12	-19.22	-18.01	-18.97	-18.9	-20.13	-19.09	-19.84	-15.3	-17.2	-19.88	-19.6	-19.74	-19.21	
Θ(135°)	-18.78	-19.29	-18.54	-19.97	-19.86	-18.64	-19.12	-18.89	-18.67	-19.55	-15.19	-17.12	-19.75	-19.68	-19.1	-19.08	-19.48	-18.94	-20.18	-19.18	-17.94	-16.66	-19.83	-18.62	
Θ(150°)	-18.91	-19.31	-18.94	-19.22	-19.47	-18.56	-20.15	-15.68	-16.97	-19.57	-19.48	-18.3	-16.81	-18.28	-19.84	-19.37	-19.28	-20.08	-19.04	-19.39	-19.91	-20.13	-19.83	-19.16	
Θ(165°)	-18.42	-19.53	-18.16	-18.72	-19.64	-19.94	-19.24	-17.85	-18.3	-20.06	-20.02	-18.69	-15.73	-15.87	-17.41	-20.07	-20	-20.12	-20.01	-18.52	-20.1	-18.21	-17.22	-18.65	
Θ(180°)	-19.83	-19.51	-20.31	-20.03	-19.11	-19.84	-19.67	-19.73	-19.61	-18.93	-18.66	-17.37	-18.5	-19.43	-20.09	-19.9	-18.3	-19.19	-19.79	-19.43	-20.58	-19.4	-19.61	-18.04	
Freq(Hz)	5.2G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-14.14	-14.67	-14.79	-9.8	-7.75	-6.29	-5.78	-5.76	-6.69	-8.79	-11.73	-15.89	-19.49	-15.37	-11.49	-7.79	-6.65	-5.99	-5.9	-6.21	-7.27	-8.81	-10.51	-15.1	
Θ(15°)	-13.64	-19.36	-10.73	-7.27	-6.45	-10.74	-7.44	-3.71	-4.33	-11.77	-11.79	-8.05	-11.93	-15.29	-18.1	-13.1	-11.73	-12.81	-9.54	-5.4	-9.01	-13.34	-8.43	-12.67	
Θ(30°)	-11.73	-12.38	-11.12	-7.75	-8.86	-4.94	-6.95	-9.84	-19.73	-5.98	-7.16	-14.08	-19	-14.12	-13.33	-16.38	-16.05	-14.84	-16.82	-18.17	-14.7	-5.74	-10.2	-12.71	
Θ(45°)	-9.85	-18.99	-12.87	-10.87	-11.75	-10.91	-5.95	-6.76	-11.46	-6.72	-11.37	-7.01	-8.24	-7.05	-6.41	-11.77	-9.22	-18.91	-12.26	-12.02	-13.79	-13.9	-19.09	-8.97	
Θ(60°)	-13.97	-14.53	-12.54	-6.74	-9.49	-11.01	-5.25	-4.36	-16.95	-12.65	-15.88	-7.95	-18.33	-16.25	-14.21	-18.26	-10.86	-15.78	-9.14	-13.04	-11.02	-9.15	-19.01	-10.88	
Θ(75°)	-8.33	-11.03	-7.93	-7.93	-10.34	-11.74	-7.47	-7.73	-8.61	-12.49	-7.4	-9.45	-10.33	-8.9	-7.53	-7.3	-4.94	-10.19	-6.25	-12.3	-7.17	-11.59	-10.69	-17.08	
Θ(90°)	-12.47	-9.19	-10.33	-8.52	-11.71	-8.96	-10.94	-10.23	-7.22	-9.5	-10.88	-12.19	-16.39	-11.04	-8.1	-8.56	-7.43	-11.1	-5.94	-10.38	-6.84	-14.34	-13.06	-20.21	
Θ(105°)	-19.66	-9.11	-14.61	-8.65	-14.92	-13.24	-12.49	-17.54	-16.66	-15	-15.54	-17.06	-20.03	-16.39	-13.65	-14.24	-17.67	-11.9	-14.1	-11.98	-11.94	-14.43	-19.16	-18.45	
Θ(120°)	-20.05	-19.93	-17.52	-17.05	-15.61	-13.92	-19.62	-16.97	-18.87	-18.44	-16.28	-11.05	-19.34	-19.71	-19.84	-19.93	-18.97	-18.81	-14.35	-13.65	-12.48	-14.02	-15.78	-19.88	
Θ(135°)	-19.25	-19.66	-12.96	-17.28	-15.13	-17.22	-14.68	-10.61	-18.87	-11.86	-14.57	-20.3	-19.24	-14.72	-18.53	-17.2	-19.91	-18.18	-11.22	-18.04	-19.78	-18.49	-20.13	-19.19	
Θ(150°)	-18.92	-17.37	-19.42	-20.03	-18.29	-17.35	-18.97	-14.43	-19.19	-16.31	-19.15	-18.01	-14.03	-19.24	-11.84	-20.32	-20.45	-18.94	-14.63	-18.82	-20.4	-20.15	-17.95	-18.25	
Θ(165°)	-19.68	-14.4	-13.49	-16.67	-19.96	-19.16	-17.85	-19.9	-18	-17.51	-16.5	-17.75	-15.98	-18.24	-14.93	-19.44	-19.15	-18.45	-19.24	-18.27	-19.71	-19.13	-18.72	-18.28	
Θ(180°)	-13.29	-12.88	-14.23	-14.68	-14.3	-15.26	-17.33	-20.39	-20.1	-18.96	-15.74	-16.26	-17.54	-15.2	-12.46	-11.72	-12.63	-14.57	-19.53	-19.99	-19	-18.91	-19.45	-14.93	
Freq(Hz)	5.2G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-7.17	-7.1	-6.67	-8.2	-9.97	-13.54	-16.72	-14.58	-11.33	-8.58	-6.38	-5.63	-5.27	-5.96	-6.61	-9.24	-12.47	-18.04	-19.18	-15.93	-11.87	-8.6	-8.11	-6.44	
Θ(15°)	-1.19	-0.43	-1.87	-4.04	-5.31	-4.26	-3.33	-4.22	-5.19	-4.63	-4.55	-6.79	-7.96	-4.18	-2.36	-2.63	-3.83	-5.78	-7.58	-4.55	-2.18	-1.73	-2.1	-2.31	
Θ(30°)	-1.07	-0.57	0.49	3.14	1.26	-0.92	1.78	2.16	0.1	1.26	0.25	0.38	-1.7	-3.77	0.1	1.18	0.4	2.78	3.7	1.64	4.09	2.53	2.06	0.77	
Θ(45°)	2.19	-0.42	0.42	1.05	2.78	2.31	2.26	0.79	1.12	2.14	-0.53	-0.38	-1.93	-3.89	-4.05	-0.44	0.45	1.37	0.56	0.09	0.58	0.97	0.56	3.19	
Θ(60°)	-0.71	-4.43	2.15	-3.15	-2.46	-4.33	-9.72																		



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix A

Θ(135°)	-15.77	-18.86	-14.16	-17.4	-19.28	-16.42	-20.02	-19.15	-19.88	-15.18	-16.48	-19.72	-19.15	-15.97	-19.21	-20.45	-19.26	-19.01	-15	-13.55	-14.55	-18.06	-15.46	-18.57
Θ(150°)	-19.39	-19.41	-19.2	-16.63	-19.29	-15.07	-18.95	-17.92	-19.34	-19.56	-18.52	-19.42	-13.69	-16.73	-19.75	-18.22	-19.65	-19.12	-19.6	-18.87	-19.66	-19.2	-19.05	-19.46
Θ(165°)	-19.65	-19.72	-17.11	-18.3	-18.71	-20.02	-19.43	-19.75	-19.5	-19.09	-19.5	-20.31	-19.85	-14.41	-15.91	-19.69	-16.79	-17.55	-18.96	-19.48	-20.09	-19.01	-17.01	-14.68
Θ(180°)	-19.11	-19.37	-19.36	-20.08	-19.68	-19.27	-19.09	-19.68	-19.38	-18.49	-19.4	-19.5	-19.48	-19.77	-20.25	-18.35	-19.5	-19.55	-18.92	-20.15	-19.21	-19.83	-19.52	-19.21
Freq(Hz)	5.6G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.38	-5.73	-7.9	-11.19	-13.09	-15.2	-12.25	-8.84	-5.49	-4.18	-3.33	-2.82	-3.39	-4.65	-7.09	-10.79	-16.61	-16.89	-11.87	-8.56	-7.08	-4.54	-4.97	-5.41
Θ(15°)	-0.18	-2.08	-3.24	-4.51	-4.44	-5.35	-5.84	-4.65	-3.34	-3.1	-3.05	-2.01	-2.22	-2.08	-1.24	-0.7	-0.67	-1.26	-2.01	-3.65	-4.56	-3.02	-0.19	0.84
Θ(30°)	0.26	0.18	0.96	1.72	1.7	1.68	3.22	0.69	1.66	3.23	2.19	0.03	-1.22	-1.37	-2.27	-3.68	-1.53	0.11	-1.48	1.23	-0.2	2.06	0.71	0.27
Θ(45°)	-1.62	-1.77	2.87	0.28	0.87	-0.74	0.95	0.36	-1.39	-1.46	-1.39	-1.33	-2.17	-3.39	0.69	1.05	-3.13	-3.36	-1.91	-1.68	-1.34	1.46	3.82	3.02
Θ(60°)	-15.63	-19.02	-2.47	-3.32	-3.66	-11.67	-11.15	-10.65	-9.45	-14.68	-8.55	-4.1	-8.72	-9.9	-7.8	-7.73	-6.06	-8.98	-10.12	-7.56	-5.02	-0.36	-0.67	-3.55
Θ(75°)	-7.66	-11.4	-3.03	-7.42	-8.25	-6.09	-5.02	-6.67	-11.23	-7.05	-10.21	-14.23	-8.19	-8.52	-10.16	-18.19	-16.53	-9.54	-7.84	-4.17	-10	-1.49	-4.33	-7.71
Θ(90°)	-8.64	-12.06	-7.02	-6.74	-8.73	-4.75	-3.99	-5.56	-8.7	-9.56	-9.3	-16.12	-10.4	-8.54	-8.91	-12.41	-8.66	-4.15	-8.08	-2.72	-7.73	-6.61	-9.69	-12.73
Θ(105°)	-11.05	-10.64	-11.72	-10.68	-14.72	-11.68	-6.71	-9.51	-13.19	-8.97	-14.29	-14.36	-17.33	-14.11	-11.99	-11.52	-10.88	-7.33	-12.5	-9.51	-15.59	-10.13	-13.7	-17.41
Θ(120°)	-18.85	-14.14	-19.89	-14.78	-13.67	-17.69	-8.31	-16.52	-18.66	-13.96	-14.04	-13.97	-13.48	-10.61	-12.89	-12.7	-14.2	-8.73	-18.49	-9.86	-12.12	-19.12	-12.57	-14.72
Θ(135°)	-19.76	-20	-16.98	-15.86	-17.42	-13.44	-13.84	-19.95	-19.13	-19.56	-12.75	-19.21	-14.23	-16.45	-19.49	-13.03	-11.4	-9.45	-17.2	-11.13	-11.39	-20.03	-17.47	-20.02
Θ(150°)	-19.57	-19.42	-19.42	-19.32	-20.22	-14.45	-19.44	-17.63	-18.23	-18.26	-20.2	-20.03	-14.32	-18.49	-18.44	-19.91	-16.84	-15.8	-19.41	-19.42	-20.05	-19.02	-19.35	-20.23
Θ(165°)	-18.95	-19.47	-19.88	-20.07	-18.59	-19.27	-19.49	-19.32	-18.76	-19.49	-20.26	-20.39	-18.04	-14.37	-19.22	-16.05	-16.7	-19.62	-19.7	-18.73	-19.69	-18.38	-18.29	-19.98
Θ(180°)	-18.94	-18.51	-18.61	-20.18	-19.81	-18.91	-18.53	-19.26	-18.49	-19.15	-18.78	-19.35	-19.37	-18.8	-18.64	-19.72	-19.53	-19.03	-18.45	-18.91	-19.01	-19.7	-19.58	-18.74
Freq(Hz)	5.785G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-12.03	-8.58	-6.35	-4.51	-3.77	-3.49	-4.03	-5	-7.21	-11.51	-19.1	-20.33	-13.02	-7.38	-5.19	-4.02	-3.56	-3.38	-6.01	-7.23	-9.46	-11.13	-17.44	-14.26
Θ(15°)	-12.16	-17.05	-15.97	-9.77	-8.59	-19.02	-19.98	-14.64	-12.93	-10.44	-12.28	-19.58	-11.92	-6.41	-4.58	-6.84	-11.31	-9.8	-7.13	-8.41	-10.52	-6.66	-5.93	-11.38
Θ(30°)	-7.81	-11.3	-19.84	-15.41	-14.98	-18.79	-10.39	-10.99	-12.42	-8.41	-6.2	-9.96	-18.27	-4.76	-4.58	-6.34	-7.63	-1.84	-6.99	-11.59	-20.09	-15.69	-14.28	-15.26
Θ(45°)	-10.93	-14.7	-19.4	-19.76	-7.45	-8.93	-19.04	-18.81	-6.37	-11.4	-12.77	-10.43	-20.25	-5.03	-3.86	-3.93	-5.38	-2.83	-4.51	-5	-6.56	-10.9	-16.94	-20.09
Θ(60°)	-12.62	-11.34	-19.51	-7.91	-10.92	-12.42	-16.43	-15.04	-10.02	-19.09	-13.77	-15.51	-9.07	-7.43	-12.39	-14.02	-10.45	-6.61	-4.93	-4.52	-14.94	-12.6	-19.63	
Θ(75°)	-16.88	-5.34	-12.04	-9.48	-7.92	-11.62	-18.55	-18.98	-12.68	-12.88	-13.83	-20.22	-16.04	-10.26	-7.69	-5.66	-6.96	-3.62	-2.87	-4.34	-5.53	-10.8	-8.72	-17.16
Θ(90°)	-18.6	-5.48	-8.7	-12.65	-9.23	-9.71	-14.97	-18.61	-14.3	-11.93	-18.51	-19.39	-13.92	-10.42	-12.13	-6.97	-6.97	-4.65	-2.9	-5.38	-4.54	-12.67	-11.03	-18.98
Θ(105°)	-19.36	-12.86	-7.8	-14.87	-15.42	-11.51	-17.18	-19.4	-19.77	-15.04	-17.32	-20.34	-16	-12.79	-20.38	-11.89	-13.92	-10.47	-8.66	-9.8	-9.96	-12.89	-17.11	-19.66
Θ(120°)	-19.53	-14.66	-16.56	-13.86	-15.53	-13.25	-16.03	-18.72	-15.85	-15.94	-16.64	-19.81	-17.8	-16.04	-15.01	-19.02	-19.43	-14.93	-13.34	-10.45	-12.72	-19.57	-17.04	-17.62
Θ(135°)	-19.88	-15.72	-14.56	-17.41	-15.28	-13.91	-14.25	-18.02	-17.78	-16.96	-16.29	-19.24	-20.15	-19.48	-16.85	-19.74	-16.92	-14.29	-13.3	-14.91	-15.33	-19.73	-15.04	-18.98
Θ(150°)	-19.93	-19.91	-19.43	-20.14	-15.84	-18.31	-18.79	-19.01	-18.86	-16.79	-18.32	-18.88	-11.98	-19.27	-19.81	-19.11	-19.34	-19.02	-19.26	-18.84	-17.19	-17.22	-15.7	-20.13
Θ(165°)	-17.1	-20.34	-16.33	-18.31	-20.05	-19.39	-20.24	-19.54	-19.55	-20.21	-19.26	-19.52	-14.53	-16.29	-19.35	-17.1	-18.21	-19.69	-19.6	-19.74	-18.89	-16.82	-18.24	-18.02
Θ(180°)	-19.78	-18.39	-19.12	-19.95	-19.64	-19.42	-19.71	-19.99	-18.78	-18.84	-20.31	-18.83	-19.47	-19.28	-18.3	-17.02	-15.48	-16.02	-15.9	-14.5	-16.23	-19.14	-19.27	-19.69
Freq(Hz)	5.785G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.69	-7.92	-10.23	-15.51	-19.57	-19.48	-11.23	-7.8	-5.46	-4.36	-4.24	-3.76	-4.15	-5.7	-8.33	-13.14	-19.05	-17.45	-11.98	-8.93	-6.74	-4.51	-5.16	-4.9
Θ(15°)	1.21	-0.83	-2.91	-3.46	-4.03	-5.64	-4.87	-5.61	-5.33	-2.08	0.25	0.36	-1.89	-2.34	-1.03	-1.75	-3.39	-3.15	-3.38	-4.8	-4.66	-2.23	-0.12	0.9
Θ(30°)	-0.09	-1.34	1.26	-1.09	1.52	0.24	1.66	1.93	1.46	1.08	-0.07	0.62	0.68	0.7	-1.23	0.93	0.86	-0.72	0.34	-2.04	-0.09	2.85	1.75	-1.44
Θ(45°)	-2.53	-0.74	-1.65	1.66	-1.16	0.26	0.58	1.99	-1.58	-3.23	-1.52	-1.59	0.7	-1.39	-0.22	-4.3	-7.32	-5.47	-7.65	-1.05	0.01	1.78	3.6	1.23
Θ(60°)	-5.81	-10.96	-11.64	-3.75	-3.57	-15.88	-11.56	-8.53	-10.55	-3.53	-4.36	-2.88	-6.28	-8.98	-6.49	-4.69	-9.54	-12.27	-16.69	-13.95	-6.24	-1.58	-7.84	-5.04
Θ(75°)	-6.2	-7.06	-16.62	-10.09	-9.33	-4.61	-7.02	-2.91	-6.45	-10.42	-7.56	-19.88	-10.73	-9.13	-13.6	-19.62	-10.82	-8.05	-15.32	-2.97	-19.36	-4.21	-13.24	-6.02
Θ(90°)	-6.01	-7.86	-8.71	-16.49	-15.34	-4.78	-7.62	-3.41	-7.73	-10.05	-8.14	-12.83	-9.7	-9.93	-8.16	-9.62	-6	-7.84	-8.77	-0.94	-9.53	-4.61	-7.03	-9.38
Θ(105°)	-11.19	-11.2	-12.55	-14.16	-12.16	-9.78	-10.88	-6.77	-13.1	-10.56	-10.87	-17.76	-11.77	-13.8	-8.82	-10.18	-7.13	-7.23	-19.19	-6.12	-11.71	-7.84	-8.21	-13.95
Θ(120°)	-18.31	-14.1	-19.01	-14.58	-11.52	-12.46	-12.28	-15.24	-19.72	-10.3	-19.07	-20.02	-16.2	-12.27	-14.1	-15.27	-9.45	-10.29	-19.93	-9.61	-10.26	-12.64	-14.14	-18.76
Θ(135°)	-18.43	-18.09	-19.44	-18.73	-19.76	-18.14	-14.03	-18.67	-16.39	-19.6	-16.81	-19.63	-15.65	-15.87	-18.25	-12.7	-10.57	-10.08	-14.09	-12.1	-13.64	-16.97	-14.32	-20.03
Θ(150°)	-19.39	-19.59	-19.49	-19.56	-19.05	-17.89	-14.77	-18.53	-19.11	-18.42	-20.41	-19.59	-14.14	-19.68	-20.22	-20.06	-18.42	-19.21	-20.02	-19.16	-18.3	-17.5	-18.99	-19.3
Θ(165°)	-15.91	-17.8	-19.45	-18.63	-19.98	-17.93	-12.95	-19.04	-19.04	-18.28	-19.11	-17.58	-12.39	-19.22	-14.88	-14.51	-19.98	-19.22	-15.97	-18.6	-15.8	-15.11	-18.47	-19
Θ(180°)	-18.17	-16.33	-14.76	-18.87	-19.91	-19.42	-19.49	-19.82	-18.76	-19.83	-18.82	-18.52	-18.69	-18.58	-20.27	-18.59	-18.25	-19.07	-18	-15.75	-15.98	-15.62	-14.86	-17.93
Freq(Hz)	2.45G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.19	-9.86	-11	-12.43	-14.09	-18.48	-18.78	-19.11	-18.33	-14.09	-11.96	-10.82	-10.28	-9.5										



Θ(90°)	-5.43	-4.31	-7.93	-19.55	-6.51	-6.09	-8.22	-12.04	-12.22	-6.92	-1.99	-7.52	-3.23	-5.61	-6.39	-3.98	-8.48	-6.43	-4.94	-6.85	-8.05	-6.77	-9.48	-14.67
Θ(105°)	-4.34	-13.17	-10.68	-10.54	-9.6	-7.62	-12.18	-13.2	-15.18	-11.82	-5.27	-9.03	-6.6	-8.59	-8.58	-18.08	-14.15	-11.53	-7.19	-8.89	-12.98	-7.59	-12.1	-12.37
Θ(120°)	-9.67	-8	-16.1	-10.08	-11.56	-10.98	-17.08	-11.08	-12.09	-14.24	-12.53	-11.47	-7.34	-11.61	-14.31	-10.74	-13.28	-14.01	-9.36	-10.66	-19.2	-17.4	-10.89	-7.54
Θ(135°)	-9.67	-11	-17.58	-15.25	-15.96	-8.33	-15.11	-17.89	-14.78	-13.17	-19.64	-19.87	-13.28	-16.68	-17.76	-15.89	-13.48	-14.22	-15.06	-16.94	-19.01	-20.21	-15.54	-12.54
Θ(150°)	-12.86	-17.35	-15.36	-18.15	-12.06	-14.47	-18.8	-14.55	-16.99	-16.42	-19.56	-17.71	-19.13	-19.33	-17	-14.56	-19.83	-19.32	-18.58	-15.73	-19.54	-15.78	-13.29	-13.51
Θ(165°)	-18.74	-16.96	-18.51	-20.24	-16.86	-16.35	-14.01	-15.3	-19.18	-19.78	-18.32	-19.43	-16	-16.87	-19.58	-19.38	-16.19	-19.21	-19.57	-19.32	-20.52	-14.11	-18.38	-19.64
Θ(180°)	-20	-19.77	-19.98	-19.53	-17.46	-14	-12.48	-12.68	-15.07	-16.11	-19.05	-15.72	-18.41	-18.97	-20.03	-19.44	-20.47	-17.15	-18.54	-19.13	-19.03	-18.11	-17.2	-19.09
Freq(Hz)	5.3G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-8.75	-9.68	-9.29	-10.58	-11.19	-15.78	-14.36	-13.8	-12.51	-9.76	-9.02	-8.53	-6.07	-7.63	-7.93	-9.94	-11.14	-17.09	-17.81	-18.68	-14.8	-10.85	-9.53	-9.54
Θ(15°)	-18.91	-10.87	-9.8	-15.72	-17.41	-9.56	-6.85	-4.81	-3.88	-5.51	-7.38	-12.16	-20	-12.81	-16.19	-19.25	-14.94	-19.25	-11.86	-9.95	-14.14	-12.84	-18.25	-13.88
Θ(30°)	-10.35	-9.1	-15.2	-19.08	-15.01	-13.18	-16.12	-11.35	-4.28	-9.17	-7.49	-16.61	-18.5	-9.09	-16.28	-11.92	-7.75	-9.46	-6.13	-5.82	-8.77	-11.17	-11.59	-8.33
Θ(45°)	-11.23	-7.51	-16.89	-11.01	-16.34	-19.64	-11.33	-13.63	-10.16	-8.65	-11.02	-15.45	-19.05	-19.79	-17	-4.43	-9.08	-8.31	-8.74	-17.04	-9.26	-8.98	-12.1	-7.24
Θ(60°)	-19.34	-8.37	-8.98	-11.12	-18.69	-18.95	-16.2	-15.7	-14.76	-5.24	-6.84	-10.47	-11.78	-16.61	-13.72	-7.85	-12.19	-6.35	-9.34	-10.56	-7.21	-5.46	-5.78	-8.19
Θ(75°)	-6.21	-6.78	-9.01	-14.51	-16.43	-16.66	-14.86	-12.89	-7.55	-4.46	-4.15	-12.2	-13.18	-19.77	-16.23	-9.75	-9.42	-17.53	-15.88	-9.8	-6.51	-4.5	-5.3	-6.08
Θ(90°)	-5.93	-7.17	-9.48	-12.59	-17.24	-20.12	-13.32	-11.52	-10.44	-5	-6.49	-18.08	-11.64	-19.21	-17.26	-15.75	-12.12	-10.96	-10.25	-9.13	-11.11	-6.61	-6.66	-6.98
Θ(105°)	-11.53	-13	-14.78	-14.74	-19.8	-19.75	-13.76	-11.18	-11.55	-8.69	-13.51	-20.71	-19.64	-15.48	-18.67	-16.8	-18.73	-18	-12.19	-16.62	-19.84	-12.25	-12.43	-10.25
Θ(120°)	-10.52	-18.56	-13.49	-19.79	-19.67	-18.41	-19.46	-19.86	-18.51	-17.66	-18.89	-19.13	-16.09	-20.07	-19	-19.36	-20.12	-18.62	-10.58	-14.59	-20.43	-18.08	-20.14	-14.75
Θ(135°)	-18.92	-19.49	-17.46	-17.68	-19.85	-19.04	-18.74	-17.91	-13.74	-14.98	-19.72	-15.91	-16.73	-15.15	-15.65	-18.73	-18.49	-19.82	-19.01	-19.73	-19.95	-19.59	-20.25	-19.66
Θ(150°)	-19.15	-19.36	-18.17	-17.89	-19.67	-19.33	-19.01	-18.38	-18.98	-19.58	-19.84	-19.51	-19.83	-19.53	-20.39	-18.43	-18.97	-18.83	-19.43	-18.2	-19.65	-20.53	-18.67	-18.75
Θ(165°)	-16.82	-16.01	-16.29	-19.14	-19.71	-14	-14.87	-14.4	-13.54	-16.07	-19.78	-19.86	-19.87	-19.45	-15.14	-19.67	-18.58	-19.75	-17.02	-19.18	-16.83	-18.33	-19.36	-19.51
Θ(180°)	-13.3	-13.11	-10.84	-12.76	-11.39	-14.06	-20.28	-19.06	-19.59	-18.95	-19.46	-17.11	-14.65	-12.62	-12.51	-16.91	-15.17	-18.43	-18.97	-19.6	-19.4	-19.46	-19.58	-19.37
Freq(Hz)	5.3G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.77	-14.29	-15.86	-13.86	-12.14	-8.71	-10.13	-7.73	-8.16	-9.5	-11.83	-14.98	-19.58	-16.34	-14.66	-10.51	-10.51	-9.19	-8.23	-7.95	-8.4	-8.36	-11.55	-12.93
Θ(15°)	-1.35	-0.8	-1.84	-2.55	-4.65	-4.32	-5.35	-3.11	-4.55	-7.46	-2.91	-0.32	-0.86	-1.26	-1.7	-2.3	-3.99	-7.95	-12.52	-11.97	-9.42	-6.39	-2.92	-1.28
Θ(30°)	5.7	3.87	2.38	2.89	3.5	3.71	3.89	3.68	4.18	2.78	2.43	-0.86	0.81	0.73	0.92	2.72	0.7	-1.79	-1.06	-0.72	0.12	-1.15	0.93	1.4
Θ(45°)	4.06	3.13	2.94	1.48	0.43	1.23	0.57	0.27	1.47	-0.34	2.14	-0.99	-0.78	-1.55	-0.3	-2.29	-2.62	-1.63	-1.21	-2.27	-0.65	-2.95	-0.44	1.41
Θ(60°)	-2.42	0	-1.73	-1.43	-4.31	-9.18	0.51	-2.51	-1	-10.6	-5.15	-3.96	-19.03	-9.49	-10.83	-19.63	-7.7	-20.03	-8.88	-7.37	-4.53	-6.73	-5.62	-2.11
Θ(75°)	-5.44	-1.43	-4.08	-4.15	-5.53	-13.08	-2.15	-4.49	-13.06	-4.73	1.32	-18.09	-3.51	-4.45	-4.65	-4.29	-9.44	-11.29	-6	-9.51	-18.92	-9.42	-7.84	-6.86
Θ(90°)	-1.72	-4.32	-8.01	-11.44	-5.95	-8.22	-5.58	-6.89	-9.84	-5.95	-0.86	-13.08	-6.85	-4.28	-4.47	-6.41	-11.03	-8.14	-3.76	-5.09	-10	-8.66	-9.62	-9.46
Θ(105°)	-7.04	-5.43	-8.81	-16.55	-8.2	-10.99	-7.47	-8.2	-9.5	-8.76	-5	-13.58	-8.62	-9.39	-8.45	-13.92	-18.95	-10.97	-9.47	-8.28	-14.82	-8.47	-9.54	-17.46
Θ(120°)	-6.66	-8.28	-14.68	-9.46	-14.78	-11.25	-11.95	-12.83	-18.44	-15.83	-14.49	-14.12	-8.57	-9.44	-16.7	-10.31	-10.22	-14.3	-9.2	-12.34	-20.16	-14.12	-19.44	-12.63
Θ(135°)	-9.67	-13.43	-15.35	-17.53	-10.82	-11.59	-20.22	-12.23	-17.1	-14.93	-19.93	-19	-13.3	-18.46	-17.25	-15.52	-17.51	-16.07	-20.68	-18.34	-18.13	-20.38	-14.06	-14.79
Θ(150°)	-14.18	-13.32	-16.51	-12.91	-16.43	-10.81	-17.65	-19.24	-18.96	-15.55	-19.07	-16.44	-13.98	-17.73	-16	-13.35	-19.66	-19.81	-15.85	-16.05	-19.14	-19.95	-14.04	-13.16
Θ(165°)	-18.15	-15.63	-17.33	-17.61	-19.96	-14.95	-16.34	-20.33	-19.56	-19.55	-18.77	-19.71	-14.11	-13.58	-19.5	-18.95	-19.07	-18.17	-19.6	-19.48	-18.91	-17.77	-19.3	-16.23
Θ(180°)	-18.27	-19.29	-19.2	-19.52	-19.74	-15.08	-14.34	-15.89	-15.05	-16.22	-17.2	-13.21	-16.92	-18.44	-19.15	-18.25	-19.77	-19.29	-18.67	-19.11	-19.88	-18.5	-20.15	-19.94
Freq(Hz)	5.6G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.46	-15.01	-16.79	-19.25	-19.86	-14.99	-11.73	-8.05	-8.23	-7.98	-8.04	-9.48	-8.89	-12.45	-16.05	-18.13	-19.44	-14.05	-14.84	-11.71	-9.38	-9	-8.91	-11.61
Θ(15°)	-20.47	-15.68	-15.61	-18.89	-10.35	-8.34	-6.65	-8.04	-15.09	-16.95	-14.99	-14.59	-13.48	-13.47	-11.47	-16.26	-16.77	-16.14	-10.08	-14.15	-9.01	-7.67	-15.77	-13.54
Θ(30°)	-7.68	-6.74	-10.93	-13.25	-17.89	-9.37	-11.96	-9.79	-7.16	-6.4	-6.68	-18.2	-13.8	-18.95	-12.28	-16.33	-14.81	-9.38	-6.68	-5.7	-6.93	-3.2	-6.78	-8.77
Θ(45°)	-12.25	-5.98	-14.68	-16.88	-20.04	-18.87	-13.97	-11.88	-6.2	-13.87	-12.79	-17.72	-13.52	-16.18	-13.42	-8.73	-6.76	-10.02	-6.37	-2.71	-4.65	-5.42	-6.89	-5.1
Θ(60°)	-7.41	-6.18	-19.29	-16.1	-19.71	-13.47	-15.61	-13.9	-14.18	-7.59	-19.41	-20.05	-13.31	-20.09	-14.72	-6.58	-12.65	-9.4	-8.65	-8.92	-5.96	-5.94	-7.77	-5.5
Θ(75°)	-9.92	-5.95	-13.02	-19.17	-19.18	-8.63	-8.4	-10.98	-10.05	-5.57	-8.65	-14.28	-14.12	-12.93	-14.39	-8.2	-9.23	-19.03	-9.74	-9.64	-6.76	-4.78	-5.77	-5.69
Θ(90°)	-9.23	-7.2	-12.4	-18.8	-13.78	-9.4	-11.26	-16.49	-10.07	-7.9	-9.86	-17.24	-16.32	-18.42	-18.87	-11.69	-7.75	-9.73	-8.32	-9.83	-8.11	-7.56	-6.52	-8.63
Θ(105°)	-8.85	-10.35	-15.94	-19.6	-15.34	-11.88	-13.61	-15.3	-13.4	-10.34	-15.66	-18.75	-18.48	-15.55	-19.85	-16.43	-17.84	-12.53	-18.37	-12.97	-13.21	-14.36	-10.15	-10.04
Θ(120°)	-13.85	-12.88	-17.36	-20.06	-20.05	-18.04	-13.59	-19.28	-18.85	-17.69	-19.49	-19.14	-19.11	-17.69	-19.07	-14.96	-18.85	-20.2	-14.62	-19.24	-20.1	-13.98	-12.99	-12.99
Θ(135°)	-16.63	-19.72	-12.74	-19.39	-19.78	-18.89	-19.03	-20.13	-18.32	-18.11	-19.64	-18.92	-16.73	-19.03	-19.64	-18.64	-19.1	-18.17	-16.4	-17.27	-19.81	-18.73	-19.22	-19.11
Θ(150°)	-20.65	-17.86	-19.79	-19.04	-17.21	-18.07	-18.13	-19.73	-19.11	-18.94	-18.05	-18.57	-18.72	-19.59	-18.38	-18.37	-19.73	-18.25	-20.46	-19.26	-20.26	-19.25	-19.66	-19.05
Θ(165°)	-20.33	-17.87	-19.01	-18	-17.8	-17.26	-18.88	-18.29	-18.49	-17.59	-18.59	-20.04	-19.61	-18.84	-18.25	-19.56	-18.52	-18.82	-19.27	-19.56	-20.22	-18.53	-18.84	-19.63
Θ(180°)	-15.75	-15.91	-15.57	-15.38</																				



Θ(45°)	2.11	1.63	0.96	0.65	2.04	3.37	4.18	4.35	3.08	-0.11	0.74	3.79	4.66	3.09	0.84	-0.51	-1.36	0.07	2.74	2.95	-0.13	-2.45	1.23	2.9
Θ(60°)	-0.39	0.11	0.03	0.29	1.41	1.2	0.8	1.76	1.32	-1.64	-0.21	3.11	4.07	2.3	-1.32	-2.63	-3.68	-0.19	4.4	4.53	1.63	0.16	1.51	1.22
Θ(75°)	-2.69	-2.49	-2.61	-2.74	-3.22	-2.55	-1.57	-1.47	-3.55	-6.36	-2.84	-0.65	0.12	-1.3	-4.2	-4.76	-6.47	-0.91	4.26	3.95	1.12	-0.16	-0.37	-2.05
Θ(90°)	-9.18	-12.15	-9.43	-7.8	-8.52	-4.89	-5.39	-5.26	-6.19	-10.55	-6.73	-3.9	-3.25	-3.26	-6.8	-6.47	-9.91	-3.89	1.77	1.77	-0.26	-1.44	-3.26	-5.67
Θ(105°)	-9.3	-12.13	-15.07	-10.57	-11.61	-11.25	-10.16	-11.19	-8.08	-14.67	-11.25	-9.82	-9.39	-6.86	-11.13	-11.83	-12.48	-5.52	-2.54	-2.36	-4.59	-5.69	-7.37	-9.47
Θ(120°)	-15.94	-13.77	-19.29	-19.26	-16.21	-18.92	-13.25	-12.61	-10.57	-16.6	-15.25	-10.09	-10.19	-11.23	-13.68	-16.59	-14.6	-9.74	-7.25	-6.43	-7.73	-9.1	-11.91	-15.12
Θ(135°)	-20.34	-19.07	-20.43	-18.98	-16.88	-20	-16.31	-14.33	-17.85	-18.82	-19.38	-14.43	-15.04	-16.82	-19.88	-19.08	-17.01	-13.16	-11.4	-11.24	-11.05	-9.97	-12.83	-18.29
Θ(150°)	-19.37	-18.57	-18.88	-19.89	-14.7	-12.11	-15.04	-18.41	-16.16	-19.9	-18.04	-14.46	-14.9	-18.87	-19.11	-20.08	-19.38	-16.95	-18.04	-19.79	-18.4	-18.49	-18.74	-19.43
Θ(165°)	-19.17	-19.77	-18.99	-19.49	-18.79	-19.2	-19.36	-20.16	-18.96	-19.73	-18.89	-18.74	-19.98	-18.96	-19.47	-17.28	-17.59	-19.46	-20.06	-19.16	-18.93	-20.02	-18.92	-18.84
Θ(180°)	-19.48	-19.79	-19.63	-20.16	-19.98	-17.59	-16.22	-16.44	-18.72	-19.54	-20.06	-18.3	-19.42	-18.69	-18.73	-20.2	-19.7	-19.41	-18.5	-18.71	-18.87	-19.38	-19.27	-19.07
Freq(Hz)	2.45G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.06	-4.94	-4.32	-4.28	-4.87	-6.14	-8.2	-11.2	-17.21	-19.83	-14.4	-9.94	-7.1	-5.47	-4.5	-3.91	-3.71	-4.22	-5.6	-8.44	-13.67	-19.33	-14.48	-8.6
Θ(15°)	-9.35	-8.49	-7.42	-5.66	-4.7	-5.12	-6.47	-8.75	-11.4	-14.37	-19.84	-14.5	-9.11	-6.16	-4.65	-4.21	-4.67	-5.95	-7.81	-9.02	-10.45	-14.34	-16.27	-11.2
Θ(30°)	-13.19	-12.84	-11.98	-7.44	-4.86	-4.61	-5.94	-8.95	-11.82	-14.79	-19.05	-19.5	-14.27	-12.64	-11.18	-7.7	-6.3	-7.62	-12.2	-13.42	-9.42	-10.18	-17.16	-20.21
Θ(45°)	-10.7	-12.64	-15.33	-8.06	-6.69	-8.54	-9.93	-11.25	-20.38	-19.03	-14.77	-19.2	-13.56	-10.32	-11.24	-11.04	-10.6	-10.67	-13.9	-14.43	-12.1	-14.54	-19.71	-14.89
Θ(60°)	-13.25	-15.93	-17.52	-10.4	-10.76	-11.13	-12.11	-15.36	-19.42	-14.56	-15.28	-18.83	-15.29	-11.13	-13.82	-16.88	-18.51	-13.8	-15	-12.06	-17.91	-16.77	-19.78	-19.12
Θ(75°)	-16.58	-19.59	-19.52	-15.97	-14.34	-12.05	-12.99	-16.76	-18.57	-15.97	-17.7	-18.24	-18.7	-12.88	-15.89	-18.15	-19.79	-18.54	-18.1	-12.66	-18.98	-13.1	-14.95	-19.54
Θ(90°)	-19.94	-18.49	-18.86	-19.08	-16.01	-13.37	-14.54	-18.92	-19.98	-19.11	-19.8	-19.08	-19.68	-16.76	-20.07	-18.66	-19.48	-19.79	-18.96	-18.53	-19.44	-15.32	-17.56	-19.28
Θ(105°)	-19.88	-19.21	-20.2	-19.15	-19.92	-16.22	-19.16	-19.46	-19.9	-19.87	-18.62	-18.98	-17.63	-19.33	-18.99	-19.99	-19.51	-19.55	-19.69	-18.98	-20.14	-20.04	-18.45	-19.36
Θ(120°)	-19.62	-18.35	-19.95	-19.49	-19.6	-18.86	-18.66	-18.8	-17.94	-18.76	-19.53	-18.7	-18.37	-16.86	-18.44	-19.17	-19.65	-19.17	-19.25	-18.66	-19.61	-20.03	-18.49	-19.63
Θ(135°)	-18.89	-14.59	-14.93	-14.89	-15.46	-19.19	-18.93	-19.35	-18.79	-19.9	-20.04	-20.11	-19.68	-19.21	-19.03	-18.49	-19.33	-18.26	-19.68	-19.93	-18.83	-19.52	-19.84	-19.53
Θ(150°)	-19.68	-19.87	-19.3	-20.18	-15.56	-15.83	-19.22	-18.73	-19.81	-19.31	-19.1	-19.76	-20.22	-18.92	-19.5	-18.86	-18.55	-19.63	-19.29	-19.8	-20.65	-19.93	-19.55	-20.18
Θ(165°)	-19.4	-19.41	-18.82	-19.96	-18.06	-18.64	-18.86	-19.26	-19.13	-19.7	-18.08	-17.8	-19.35	-19.08	-18.97	-19.06	-18.84	-19.93	-19.49	-19.33	-18.95	-19.67	-18.7	-20.02
Θ(180°)	-19.02	-18.64	-20.47	-20.09	-18.92	-19.01	-18.98	-18.94	-19.02	-18.29	-20.34	-16.55	-15.25	-15.99	-17.21	-19.14	-20.42	-18.57	-19.27	-20.12	-19.84	-20.47	-19.69	-19.94
Freq(Hz)	5.2G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.44	-7.73	-8.47	-9.05	-10.11	-12.72	-14.16	-15.02	-12.96	-10.36	-8.92	-7.42	-6.82	-6.85	-7.66	-7.52	-8.73	-10.8	-14.53	-19.83	-18.74	-14.54	-9.48	-6.98
Θ(15°)	-2.22	-5.98	-12.63	-12.97	-7.92	-6.74	-9.41	-10.91	-9.6	-9.2	-8.13	-5.81	-3.72	-1.43	-1.32	-2.63	-6.1	-12.99	-19.68	-11.81	-12.41	-6.67	-3.19	-4.3
Θ(30°)	-18.31	-13.09	-13.68	-16.47	-9.97	-19.1	-19.91	-9.18	-4.67	-10.1	-8.97	-9.12	-0.93	-1.23	-2.7	-3.51	-7.16	-8.91	-5.63	-8.22	-11.7	-6.22	-4.16	-6.18
Θ(45°)	-9.29	-10.74	-18.98	-13.45	-3.77	-14.19	-17.59	-9.51	-12.9	-19.95	-3.83	-4.57	-9.13	-5.27	-3.52	-4.8	-7.6	-7.22	-8.03	-20.31	-12.26	-7.32	-7.99	-10.69
Θ(60°)	-11.56	-7.23	-16.34	-10.75	-7.35	-11.75	-18.41	-9.73	-16.6	-6.22	-4.46	-4.14	-9.26	-7.24	-2.37	-6.56	-9.87	-12.13	-7.23	-18.09	-13.6	-11.63	-12.75	-9.94
Θ(75°)	-13.39	-2.9	-11.52	-16.34	-11.1	-9.14	-6.91	-7.8	-11.74	-5.3	-3.31	-3.64	-6.03	-12.86	-7.72	-12.16	-10.26	-10.69	-12.63	-10.99	-9.46	-8.11	-17.17	-13.99
Θ(90°)	-17.37	-6.19	-7.4	-13.06	-6.84	-12.79	-7.51	-18.97	-9.83	-10.89	-7.39	-8.97	-11.21	-12.42	-13.72	-12.86	-19.65	-18.5	-15.78	-7.23	-6.82	-5.99	-11.74	-16.22
Θ(105°)	-12.33	-10.66	-18.14	-19.01	-9.79	-19.8	-17.8	-11.78	-13.69	-19.45	-19.78	-14.76	-13.46	-17.39	-19.66	-18.08	-14.61	-19.3	-10.93	-11.01	-9.26	-6.39	-16.27	-16.42
Θ(120°)	-20.17	-18.28	-17.86	-19.42	-14.71	-11.57	-12.11	-15.92	-11.65	-9.66	-10.43	-20.09	-19.12	-19.07	-13.86	-20.11	-18.89	-19.92	-17.51	-10.15	-9.18	-5.68	-17.58	-11.58
Θ(135°)	-18.51	-19.35	-19.47	-19.72	-18.26	-13.49	-16.79	-9.89	-13.66	-20.08	-18.9	-14.97	-13.55	-16.31	-18.33	-13.31	-15.05	-18.6	-9.74	-19.48	-15.3	-13.81	-15.11	-13.41
Θ(150°)	-10.08	-9.83	-20.22	-14.84	-17.14	-16.73	-19.35	-10.88	-19.53	-14.15	-11.85	-17.48	-13.63	-12.58	-15.83	-12.89	-19.54	-19.6	-18.47	-12.06	-18.71	-18.77	-11.47	-11.31
Θ(165°)	-18.87	-14.27	-12.92	-20.04	-16.38	-15.21	-14.29	-10.43	-13.17	-16.47	-13.39	-9.67	-9.59	-15	-18.72	-18.46	-18.52	-18.63	-18.55	-19.29	-19.21	-18.89	-19.56	
Θ(180°)	-12.72	-14.47	-18.09	-17.4	-17.05	-17.39	-17.81	-17.62	-18.26	-18.33	-18.28	-16.63	-16.15	-14.29	-12.1	-12.34	-14.29	-17.77	-19.9	-19.13	-15.18	-15.23	-14.79	-12.61
Freq(Hz)	5.2G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.54	-18.37	-12.98	-12.07	-10.53	-9.74	-8.34	-8.5	-8.42	-9.65	-11.57	-13.89	-18.94	-18.27	-15.72	-14.04	-9.83	-8.83	-8.71	-10.08	-11.29	-11.9	-15.02	-18.22
Θ(15°)	-0.81	0.18	0.74	0.61	-0.46	-1.22	-0.47	-0.14	-0.56	-1.45	-2.73	-1.5	-0.68	-1.23	-5.31	-11.37	-6.86	-6.81	-10.84	-19.11	-17.46	-17.72	-15.33	-7.03
Θ(30°)	3.89	2.97	4.4	5.17	2.85	2.19	2.41	2.37	1.58	1.01	1.4	1.72	0.75	1.3	1.28	-0.64	-0.91	-1.23	-1.75	0.7	1.19	1.35	3.01	3.1
Θ(45°)	-0.92	1.61	4.21	2.99	2.06	2.6	2.68	1.96	1.65	0.02	1.24	-0.33	-1.65	-0.12	-0.5	-0.73	-0.13	-5.39	-5.61	-3.29	0	0.58	2.06	1.79
Θ(60°)	-13.93	-8.77	-4.54	-1.83	-8.31	-5.65	-6.03	-0.84	-3.89	-4.49	-1.96	-9.27	-3.18	-2.97	-4.44	-10.85	-11.29	-15.93	-14.63	-10.13	0.4	-0.03	-3.38	-2.66
Θ(75°)	-3.55	-7.48	-4.12	-2.78	-6.77	-10.82	-15.6	-12.33	-9.71	-9.58	-14.04	-8.69	-4.95	-4.71	-9.04	-16.41	-6.48	-4.15	-9.82	-15.34	-10.7	-7	-7.46	-3.49
Θ(90°)	-4.08	-9.03	-5	-9.33	-7.33	-5.36	-5.91	-10.01	-5.35	-7.83	-13.4	-7.11	-8.23	-15.53	-19.26	-11.73	-3.76	-5.39	-6.57	-8.35	-10.06	-12.2	-14.05	-6.39
Θ(105°)	-7.73	-12.75	-6.75	-8.36	-11.22	-6.53	-10.38	-10.63	-6.24	-20.56	-11.53	-8.25	-14.98	-20.06	-13.16	-16.98	-11.51	-14.73	-16.42	-17.18	-8.23	-4.81	-10.8	-3.56
Θ(120°)	-9.25	-19.88	-12.13	-9.47	-9.25	-8.91	-18.48	-9.81	-11.66	-15.85	-10.04	-10.16	-16.92	-16.13	-8.48	-10.16	-7.01	-5.73	-7.13	-13.29	-12.16	-12.97	-11.3	-4.69
Θ(135°)	-9.12	-10.72	-19.87	-19.62	-9.32	-10.49	-19.05	-10.06	-19.8															



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix A

Θ(0°)	-19.37	-12.71	-8.49	-7.23	-5.17	-4.1	-3.94	-4.61	-6.19	-8.54	-13.79	-19.84	-14.91	-11.84	-9.31	-6.66	-5.53	-4.55	-5.75	-5.92	-6.52	-7.25	-9.24	-11.7
Θ(15°)	1.26	2.01	2.16	1.71	2.22	2.44	2.28	0.76	-0.61	-2.35	-3.69	-3.63	-5.4	-8.2	-8.51	-4.52	-3.46	-3.86	-4.17	-3.14	-2.51	-4.53	-4.29	-0.58
Θ(30°)	1.33	2.29	3.4	4.38	2.18	2.91	3.81	3.61	2.93	1.65	0.46	-0.54	-0.58	-2.47	-3.25	-2.1	-5.97	-5.27	-2.81	-3.34	-2.14	-0.97	1.34	1.33
Θ(45°)	0.12	2.57	2.35	0.04	0.4	2.14	1.36	1.46	-0.37	2.84	1.96	-0.95	-0.32	3.67	0.64	-3.3	-5.36	-5.14	-1.5	-0.57	-2.12	0.06	2.09	0.64
Θ(60°)	-9.67	-7.41	-4.23	-11.17	-4.33	-7.03	-6.52	-2.3	-4.18	-1.09	-5.72	-2.43	-7.25	1.35	-1.98	-4.79	-8.16	-10.44	-8.37	-4.89	-2.24	-5.51	-6.76	-6.84
Θ(75°)	-1.61	-3.2	-5.11	-4.62	-11.94	-8.23	-7.56	-7.4	-18.2	-5.53	-12.26	-6.22	-11.41	-4.78	-5.19	-11.66	-13.6	-5.36	-10.39	-14.62	-14.35	-8.96	-9.25	-7.1
Θ(90°)	-4.96	-5.19	-6.67	-10.97	-8.06	-5.25	-8.87	-9.74	-11.55	-8.13	-8.43	-7.68	-10.7	-8.17	-9.56	-6.98	-5.1	-8.26	-9.59	-8.52	-7.83	-5.23	-9.81	-4.23
Θ(105°)	-7.75	-7.85	-5.58	-10.39	-19.8	-9.15	-8.63	-15.3	-9.28	-11.78	-20.34	-13.86	-13.21	-13.21	-19.78	-9.8	-7.3	-9.93	-9.16	-10.05	-16.58	-10.42	-17.99	-9.44
Θ(120°)	-14.89	-9.99	-10.71	-14.09	-17.35	-11.72	-15.06	-14.6	-19.5	-18.79	-14.88	-14.66	-15.32	-7.63	-8.17	-19.15	-16	-12.18	-17.09	-11.51	-9.05	-7.73	-14.32	-14.14
Θ(135°)	-19.06	-13.99	-16.17	-18.17	-19.6	-19.44	-20.3	-8.9	-13.79	-17.37	-11.57	-11.32	-13.58	-15.46	-6.78	-9.52	-10.22	-12.23	-10.62	-13.78	-16.81	-18.67	-18.86	-19.13
Θ(150°)	-19.98	-18.14	-18.83	-19.95	-16.09	-14.61	-18.73	-19.36	-9.92	-17.91	-20.18	-12.39	-12.59	-12.71	-16.76	-12.29	-13.12	-19.45	-19.08	-15.61	-12.64	-17.76	-20.09	-19.69
Θ(165°)	-14.66	-14.95	-19.67	-18.34	-19.59	-19.82	-18.63	-19.72	-20.4	-15.45	-11.2	-14.56	-19.71	-19.94	-13.24	-9.24	-11.95	-19.2	-16.44	-15.55	-17.07	-19.8	-18.59	-19.65
Θ(180°)	-15.91	-18.19	-17.93	-19.38	-19.83	-19.29	-19.04	-19.68	-17.83	-15.38	-14.81	-16.65	-19.18	-18.2	-19.83	-19.31	-18.89	-19.97	-18.46	-19.49	-15.91	-14.46	-14.66	-16.3
Freq(Hz)	5.785G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.56	-4.01	-7.87	-12.1	-19.32	-18.18	-9.05	-6.07	-3.87	-2.1	-1.77	-1.7	-2.83	-3.46	-5.06	-6.52	-6.74	-6.6	-7.52	-7.32	-7.49	-5.19	-5.16	-7.34
Θ(15°)	-0.16	-3.09	-12.05	-14.86	-8.39	-8	-7.99	-9.32	-8.6	-8.92	-9.8	-12.88	-7.47	-6.44	-6.8	-5.41	-4.84	-5.27	-5	-4.9	-5	-7.06	-5.11	-3.86
Θ(30°)	-7.97	-17.01	-19.33	-19.45	-12.37	-12.43	-7.14	-8.58	-10.22	-17.37	-11.03	-8.76	-16.31	-8.36	-4.35	-5.72	-5.97	-4.39	-6.01	-10.41	-10.65	-9.04	-3.9	-5.03
Θ(45°)	-5.74	-5.53	-12.83	-16.69	-12.06	-14.02	-14.5	-9.39	-5.86	-10.51	-14.41	-10.39	-7.12	-11.63	-8.13	-7.83	-11.6	-8.71	-9.65	-5.44	-3.43	-13.63	-13.56	-7.41
Θ(60°)	-12.72	-14.45	-9.52	-16.25	-18.29	-15.16	-9.27	-7.23	-10.5	-11.87	-5.32	-19.08	-19.94	-14.38	-7.73	-15.29	-10.9	-7.79	-4.28	-6.91	-7.98	-14.22	-14.41	-4.5
Θ(75°)	-5.18	-7.9	-9.56	-14.76	-19.49	-8.7	-8.64	-13.5	-8.06	-6.59	-5.16	-19.41	-18.51	-8.27	-11.4	-12.11	-12.7	-2.88	-2.72	-6.25	-8.84	-8.37	-7.73	-7.22
Θ(90°)	-4.73	-7.14	-12.02	-15.55	-18.83	-20.27	-7.71	-11.91	-9.79	-11.85	-6.47	-15.96	-14.49	-8.06	-14.21	-12.88	-12.34	-6.12	-6.64	-4.32	-7.31	-5.01	-9.3	-10.29
Θ(105°)	-12.33	-13.14	-13.96	-14.56	-16.68	-15.73	-11.33	-11.26	-13.44	-14.26	-17.12	-11.17	-19.81	-19.51	-17.36	-16.79	-17.51	-9.65	-8.73	-7.3	-13.56	-10.3	-18.73	-18.38
Θ(120°)	-19.47	-13.34	-17.12	-19.88	-17.71	-17.35	-14	-13.29	-18.35	-18.86	-19.02	-18.69	-19.2	-19.3	-18.08	-18.95	-18.94	-10.74	-17.13	-8.89	-7.87	-8.52	-10.54	-11.03
Θ(135°)	-13.41	-14.27	-18.61	-15.77	-13.31	-12.36	-11.35	-12.5	-13.66	-19.89	-19.45	-19.9	-17.87	-20.4	-20	-15.12	-19.21	-11.74	-19.55	-7.22	-9.73	-11.76	-11.5	-12.54
Θ(150°)	-14.44	-19.21	-19.18	-20.01	-14.4	-20.23	-17.25	-13.11	-10.64	-11.99	-16.15	-20.05	-18.68	-20.15	-18.79	-18.91	-18.09	-15.54	-15.05	-11.55	-19.64	-16.56	-14.71	-12.53
Θ(165°)	-20.14	-18.41	-19.54	-19.4	-19.33	-19.91	-19.45	-20.24	-11.74	-14.41	-15.08	-15.93	-15.42	-17.68	-20.36	-19	-18.93	-19.33	-19.2	-15.32	-10.78	-9.37	-10.16	-13.47
Θ(180°)	-16.29	-15.56	-16.99	-17.61	-19.76	-17.97	-16.59	-17.38	-17.42	-17.79	-15.99	-15	-16.64	-17.55	-16.65	-18.9	-15.49	-15.6	-15.71	-19.58	-17.83	-13.85	-14.47	-19.2
Freq(Hz)	5.785G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-9.94	-6.09	-3.46	-3.68	-2.4	-2.5	-3.26	-3.9	-6.56	-12.15	-19.02	-16.82	-8.45	-5.9	-4.32	-3.96	-3.66	-3.39	-5.54	-5.93	-6.73	-5.79	-6.93	-7.63
Θ(15°)	1.18	2.01	2.42	0.98	1.65	1.4	-0.59	-2.87	-1.79	-0.5	0.24	-0.46	-4.05	-4.52	-2.72	-1.73	-1.19	-2.31	-4.47	-4.77	-2.98	-4	-8.46	-5.2
Θ(30°)	0.24	1.19	1.59	2.74	1.63	3.52	0.95	2.15	2	0.82	1.07	0.28	-0.75	-2.69	0.1	0.57	0.42	-3.93	-5.29	-4.86	-3.85	-1.38	0.93	1.09
Θ(45°)	-1.03	0.7	0.69	-0.11	-1.42	0.77	-1.61	0.89	-1.8	2.11	0.2	-1.91	-1.62	0.27	0.94	-1.78	-0.73	-0.83	-1.13	-1.03	-2.44	-3.78	-1.98	0.48
Θ(60°)	-18.86	-14.49	-6.61	-5.92	-7.41	-8.53	-5.54	-5.03	-2.55	-2.7	-5.96	-2.74	-7.19	-3.21	-1.62	-5.71	-7.47	-4.79	-3.67	-2.27	-2.98	-7.93	-8.78	-18.24
Θ(75°)	-5.73	-7.93	-9.71	-7.77	-8.8	-7.46	-15.44	-8.87	-8.62	-5.86	-6.18	-5.6	-15.73	-11.27	-7.65	-7	-19.07	-13.3	-9.3	-19.23	-9.45	-19.29	-13.68	-12.72
Θ(90°)	-6.84	-7.34	-8.29	-8.09	-9.91	-6.9	-17.31	-7.23	-18.15	-6.43	-7.65	-5.99	-10.38	-11.11	-11.85	-7.65	-10.29	-4.96	-15.49	-7.09	-10.65	-6.37	-7.36	-8.61
Θ(105°)	-8.94	-11.46	-10.3	-15.55	-15.96	-12.28	-8.59	-13.87	-10.91	-8.92	-18.78	-7.48	-11.99	-15.83	-19.24	-9.5	-8.89	-10.12	-12.28	-7.85	-11.42	-15.03	-8.59	-7.11
Θ(120°)	-19.55	-14.27	-10.78	-14.04	-19.25	-9.24	-14.41	-16.4	-18.58	-19.01	-19.57	-12.3	-14.74	-9	-9.2	-18.73	-10.99	-11.1	-18.26	-12.71	-10.68	-6.87	-10.64	-18.85
Θ(135°)	-18.74	-15.14	-12.64	-19.17	-19.17	-18.1	-19.84	-11.21	-12.88	-16.39	-12.56	-15.61	-19.56	-19.96	-9.15	-14.08	-18.97	-10.19	-13.88	-9.7	-16.1	-17.91	-18.22	-14.2
Θ(150°)	-19.49	-19.07	-19.83	-20.08	-18.29	-19.71	-20.13	-19.46	-13.08	-18.89	-20.01	-13.26	-12.8	-9.7	-13.09	-13.01	-17.25	-18.95	-16.01	-14.94	-13.91	-17.21	-19.02	-19.36
Θ(165°)	-14.44	-18	-19.4	-20.39	-17.36	-19.53	-16.52	-19.58	-19.28	-16.56	-16.48	-13.53	-19.23	-19.86	-15.28	-9.72	-12.2	-19.4	-19.84	-19.87	-19.28	-18.29	-19.49	-19.14
Θ(180°)	-12.11	-14.59	-14.89	-16.06	-18.86	-18.56	-18.48	-18.35	-20.21	-18.43	-14.74	-14.73	-14.21	-13.56	-16.37	-18.44	-19.56	-19.94	-19.05	-18.76	-11.67	-9.46	-10.91	-13.85
Freq(Hz)	2.45G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-15.23	-12.86	-10.97	-10.58	-10.35	-10.79	-11.89	-14.47	-17.35	-20.15	-19.65	-18.95	-17.4	-13.69	-10.84	-9.8	-10.04	-10.97	-13.24	-14.71	-16.4	-15.28	-14.13	-11.63
Θ(15°)	-2.28	-2.7	-3.46	-4.84	-6.4	-7.46	-8.38	-8.4	-7.64	-6.41	-4.46	-2.86	-1.09	-1.52	-2.74	-3.52	-3.3	-2.91	-2.98	-4.06	-5.41	-6.12	-6.2	-6.42
Θ(30°)	2.38	1.58	0.12	-2.02	-2.04	-1.51	-1.72	-2.02	-1.31	0.29	1.43	2.53	3.53	3.24	2.07	0.04	-0.43	0.62	1.12	0.59	-0.38	-0.33	0.92	1.65
Θ(45°)	3.72	3.52	1.96	-0.65	-0.16	1.78	2.02	0.92	0.96	1.82	2.91	4.73	5.95	5.17	2.9	0.61	-0.1	0.78	1.16	0.96	0.74	0.65	1.35	2.48
Θ(60°)	2.6	2.72	1.02	-1.36	0.3	3.55	3.43	1.53	1.49	0.87	0.77	2.37	4.87	4.13	1.33	-0.94	-1.13	-0.5	1.05	0.82	-0.44	-0.47	0.08	1.6
Θ(75°)	-0.57	-1.14	-3.02	-4.52	-0.71	2.24	1.34	-0.04	0.24	-1.06	-2.68	-2.47	0.59	0.04	-3.64	-6.36	-3.66	-3.67	-0.4	-1.93	-2.76	-2.62	-2.55	-0.04
Θ(90°)	-5.99	-7.53	-6.59	-7.49	-2.58	-0.36	-1.18	-1.99	-1.64	-3.24	-4.34	-6.75	-3.5	-2.01	-5.03	-12.92	-9.05	-8.05	-3.58	-6.52	-5.13	-6.18	-6.69	-3.34
Θ(105°)	-11.65	-9.74	-9.4	-1																				



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix A

Θ(180°)	-16.42	-15.91	-19.58	-17.97	-16.61	-18.33	-19.51	-19.79	-19.49	-16.98	-20.03	-19.47	-19.23	-19.63	-15.65	-13.53	-10.59	-9.96	-10.22	-11.14	-12.44	-13.45	-15.09	-18.55
Freq(Hz)	5.3G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.38	-3.74	-4.9	-4.59	-4.8	-7.09	-12.53	-16.44	-12.41	-7.48	-4.44	-2.96	-1.96	-1.79	-2.47	-4.56	-8.48	-14.87	-9.52	-7.13	-4.23	-1.3	-1.04	-1.37
Θ(15°)	-7.79	-10.84	-14.65	-18.25	-18.09	-19.34	-18.4	-15.67	-16.16	-4.93	-0.81	-0.01	-2.85	-5.84	-9.61	-12.36	-7.01	-5.53	-5.69	-3.49	-3.26	-2.53	-1.93	-2.56
Θ(30°)	-6.06	-16.95	-10.81	-11.92	-14.41	-19.34	-11.45	-5.71	-8.13	-11.99	-5.39	-5.96	-9.36	-8.37	-5.88	-18.86	-10.73	-5.96	-5.73	-5.17	-2.19	-0.88	-2.51	-6.06
Θ(45°)	-19.99	-5.43	-9.26	-18.25	-16.3	-18.59	-11.47	-7.33	-2.69	-16.98	-6.55	-13.99	-9.88	-14.4	-6.47	-9.45	-6.63	-9.46	-18.08	-8.91	-8.73	-11.14	-4.1	-3
Θ(60°)	-12.28	-10.05	-9.97	-19.62	-19.8	-9.74	-8.39	-8.97	-5.55	-14.02	-4.99	-5.28	-7.42	-9.57	-6.46	-10.1	-9.72	-15.42	-14.62	-14.24	-10.64	-7.87	-3.52	-7.07
Θ(75°)	-19.62	-11.64	-10.94	-18.61	-16.5	-8.95	-6.5	-6.01	-2.59	-6.65	-4.06	-6.63	-3.93	-9.67	-9.81	-19.93	-19.64	-18.91	-14.52	-17.54	-15.41	-10.18	-5.1	-9.79
Θ(90°)	-18.35	-13.39	-13.21	-19.05	-15.4	-9.81	-6.44	-6.47	-3.39	-7.61	-7.52	-6.73	-7.39	-7.67	-13.63	-14.36	-14.39	-14.36	-18.29	-14.2	-19.96	-9.28	-7.2	-6.67
Θ(105°)	-18.71	-19.13	-15.38	-19.8	-17.72	-13.59	-10.04	-8.62	-5.05	-11.4	-13.46	-10.8	-11.88	-9.11	-15.71	-15.14	-12.55	-19.13	-19.35	-14.02	-14.3	-11.23	-15.15	-12.41
Θ(120°)	-18.78	-20.14	-19.18	-19.21	-19.65	-17.8	-12.96	-10.35	-10.23	-12.66	-15.34	-13.22	-14.68	-14.88	-11.6	-16.06	-9.98	-19.59	-16.64	-13.1	-17.8	-12.87	-12.81	-16.66
Θ(135°)	-18.23	-17.27	-19.56	-19.94	-19.29	-19.08	-19.58	-12.32	-18.3	-17.06	-13.29	-18.32	-17.75	-11.47	-14.19	-11.77	-17.51	-18.86	-19.66	-17.54	-19.19	-14.76	-18.9	-17.22
Θ(150°)	-19.05	-20.38	-19.46	-17.26	-15.33	-15.88	-20.09	-20	-19.75	-17.21	-19.94	-15.95	-19.65	-19.68	-14.43	-14.91	-15.83	-15.6	-18.75	-20.02	-18.89	-19.27	-14.33	-19.29
Θ(165°)	-16.96	-9.99	-11.34	-12.51	-12.11	-16.91	-20.07	-18.27	-19.61	-20.04	-20.05	-20.04	-18.36	-17.12	-18.94	-18.27	-19.5	-14.46	-13.3	-19.71	-14	-14.07	-14.94	-11.36
Θ(180°)	-19.21	-19.47	-19.14	-15.71	-19.42	-18.61	-18.82	-17.42	-17.28	-17.56	-17.17	-15.88	-19.06	-20.26	-19.98	-17.63	-19.43	-20.1	-15.23	-12.74	-10.53	-13.02	-11.12	-11.64
Freq(Hz)	5.3G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-13.06	-14.35	-10.39	-6.71	-3.74	-2.41	-1.51	-1.22	-1.35	-3.13	-4.85	-9.39	-12.21	-10.37	-5.93	-3.09	-1.27	-0.7	-1.11	-1.54	-2.68	-3.48	-6.53	-10.96
Θ(15°)	-4.22	-7.57	-10.18	-12.75	-19.03	-14.93	-8.59	-9.66	-15.37	-10.76	-5.33	-2.02	-0.58	-0.33	2	2.54	2.71	1.6	0.74	-0.68	0.83	1.02	-0.89	-2.6
Θ(30°)	0.91	1.28	1.27	-1.62	0.27	1.53	0.88	0.67	-0.74	-2.12	-0.24	1.42	2.57	3.55	3.72	4.09	2.92	3.19	3.5	2.35	1.93	2.59	1.71	0.46
Θ(45°)	1.56	1.89	-0.98	-1.59	-0.65	1.36	-1.24	-0.32	0.97	0.69	0.48	-0.02	2.56	0.7	3.68	3.57	1.63	0.2	-0.83	-1.33	0.99	-1.81	2.08	3.1
Θ(60°)	-2.64	-6.66	-18.45	-5.11	-9.02	-12.58	-10.79	-5.25	-1.04	-8.34	-0.28	-3.12	-1.43	-0.53	-5.01	-19.87	-8.84	-6.8	-9.92	-5.98	-5.52	-3.59	-1.41	-4.68
Θ(75°)	-3.21	-4.64	-14.45	-4.6	-8.18	-10.65	-6.37	-6.05	-11.4	-14.28	-3.68	-6.3	-10.84	-7.72	-8.43	-4.03	-9.5	-16.49	-16.59	-12.74	-6.9	-11.48	-18.66	-4.35
Θ(90°)	-8.79	-7.39	-15.02	-4.32	-7.87	-6.93	-5.68	-6.43	-9.09	-8.72	-8.84	-8.48	-20.52	-5.7	-6.5	-9.93	-14.68	-15.95	-19.99	-6.49	-2.17	-7.63	-10.01	-6.5
Θ(105°)	-7.52	-19.98	-11.29	-6.47	-6.28	-7.46	-7.13	-9.33	-8.95	-11.62	-10.08	-19.51	-12.58	-9.07	-8.45	-5.05	-14.98	-16.35	-14.31	-13.13	-9.52	-15.51	-11.22	-18.95
Θ(120°)	-18.99	-16.05	-12.42	-13.59	-10.47	-10.51	-7.8	-18.31	-10.83	-9.79	-10.65	-20.06	-13.03	-9.42	-11.21	-6.9	-9.7	-15.19	-15.27	-13.77	-7.87	-12.86	-13.64	-9.78
Θ(135°)	-17.69	-11.45	-17.42	-18.94	-12.12	-8.87	-13.34	-19.39	-20.02	-8.29	-13.55	-13.12	-17.38	-11.93	-11.26	-12.41	-15.07	-17.19	-12.48	-19.28	-13.24	-16.33	-16.17	-18.39
Θ(150°)	-15.28	-19.65	-19.61	-14.78	-9.15	-7.84	-13.5	-18.15	-15.38	-17.27	-19.19	-10.3	-16.24	-18.74	-20.33	-15.51	-16.32	-12.99	-20.26	-17.93	-19.36	-15.37	-20.14	-14.1
Θ(165°)	-18.91	-15.22	-16.88	-13.11	-14.82	-12.78	-17.63	-19.1	-19.47	-13.57	-13.38	-12.74	-16.64	-18.07	-19.98	-20.13	-17.06	-14.03	-19.38	-17.08	-12.22	-14.58	-16.99	-16.99
Θ(180°)	-13.58	-14.16	-17.38	-17.06	-17.17	-19.43	-19.48	-19.92	-19.4	-16.48	-18.51	-17.63	-17.56	-18.8	-18.77	-11.58	-10.05	-9.87	-9.06	-12.94	-12.63	-13.63	-20.09	-19.67
Freq(Hz)	5.6G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.27	-7.33	-10.29	-13.38	-19.14	-17.23	-9.57	-6.58	-4.25	-3.62	-3.33	-3.57	-3.57	-4.38	-4.74	-6.3	-11.9	-10.59	-8.74	-4.25	-2.35	-0.42	0.46	-0.32
Θ(15°)	-10.31	-13.03	-14.16	-9.45	-9.78	-18.7	-10.71	-6.77	-5.47	-4.53	-2.69	-0.16	-2.33	-7.81	-11.87	-12.73	-17.36	-7.19	-3.45	-2.64	-1.84	-1.97	-3.25	-4.13
Θ(30°)	-6.94	-15.6	-13.37	-8.7	-16.41	-5.55	-6.2	-5.88	-6.56	-4.2	-5.92	-7.18	-3.55	-11.06	-5.11	-18.82	-10.88	-10.13	-7.6	-7.13	-7.21	-3.44	-3.2	-7.39
Θ(45°)	-19.78	-17.61	-9.88	-18.96	-19.01	-12.43	-6.24	-8.15	-3.98	-8.54	-6.98	-7.59	-7.9	-7.33	-9.31	-20.6	-11.58	-13.09	-14.3	-19.17	-12.25	-14.43	-4.38	-9.49
Θ(60°)	-18.7	-8.45	-10.13	-19.35	-16.59	-17.18	-4.07	-6.22	-5.93	-7.41	-4.46	-9.66	-4.14	-4.85	-5.77	-20.02	-16.91	-19.34	-19.86	-17.62	-11.17	-15.96	-7.61	-10.84
Θ(75°)	-18.83	-15.03	-18.74	-14.39	-14.8	-11.29	-5.68	-5.76	-4.73	-5.77	-2.17	-5.9	-5.21	-3.96	-10.43	-20.17	-14.97	-9.12	-10.32	-20.52	-13.38	-15.33	-7.73	-19.81
Θ(90°)	-16.89	-13.74	-20.11	-18.16	-13.46	-9.29	-6.29	-7.21	-5.41	-8.05	-5.43	-7.08	-7.76	-6.49	-12.65	-18.39	-17.64	-11.58	-9.68	-19.2	-18.05	-18.57	-7.94	-18.75
Θ(105°)	-19.49	-13.41	-18.97	-18.57	-20.07	-12.27	-8.69	-7.32	-10.45	-9.21	-9.76	-13.28	-9.89	-12.01	-11.47	-13.74	-19.16	-16.66	-19.05	-19.19	-18.51	-19.89	-11.35	-19.6
Θ(120°)	-19.93	-15.63	-19.57	-19.49	-19.95	-19.54	-12.8	-11.1	-11.24	-15.09	-13.37	-20.47	-11.75	-13.66	-11.48	-10.37	-17.79	-20.2	-15.79	-19.95	-17.27	-18.66	-14.07	-19.96
Θ(135°)	-17.03	-13.63	-18.13	-17.96	-17.91	-19.07	-19.13	-15.64	-18.15	-18.85	-13.52	-13.41	-20.06	-10.96	-16.8	-13.14	-19.7	-19.51	-18.08	-17.65	-19.3	-13.48	-19.24	-19.43
Θ(150°)	-19.3	-20.32	-15.93	-19.07	-18.82	-18.73	-19.52	-19.88	-20.15	-18.58	-17.16	-14.23	-19.42	-19.75	-16.3	-14.44	-17.21	-16.36	-20.19	-19.13	-19.69	-19.67	-17.76	-17.97
Θ(165°)	-20.11	-13.96	-19.28	-19.02	-19.49	-19.27	-18.97	-20.07	-20.1	-19.97	-19.86	-18.44	-19.47	-16.73	-17.98	-17.07	-20.05	-18.51	-19.82	-19.31	-15.41	-19.88	-18.67	-15.88
Θ(180°)	-17.4	-18.21	-19.2	-19.35	-19.1	-19.61	-18.96	-20.04	-17.52	-19.86	-20.03	-15.3	-19.24	-19.01	-19.94	-17.06	-19.15	-18.46	-19.64	-15.02	-16.18	-16.76	-15.87	-15.01
Freq(Hz)	5.6G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.87	-7.13	-5.64	-4.72	-3.47	-3.31	-4.02	-4.4	-6.13	-9.1	-11.08	-11.06	-7.5	-5.56	-3.5	-2.64	-2.87	-1.82	-4.39	-4.8	-6.19	-7.34	-10.56	-11.95
Θ(15°)	-2.39	-3.31	-2.82	-5.29	-6.96	-6.98	-9.62	-13.97	-14.69	-11.28	-9.72	-5.21	-0.37	0.13	-0.02	0.99	2.55	2.33	1.28	-0.7	-0.54	-1.92	-3.78	-3.26
Θ(30°)	0.57	1.67	-0.8	0.84	-0.82	-1.11	1.37	1.63	-0.14	-1.71	0.22	1.01	2.4	2.99	3.56	3.92	1.94	1.58	4.19	2.28	0.02	2.4	1.73	0.53
Θ(45°)	-1.98	-2.65	1.02	0.06	-0.59	-0.39	-0.9	-1.3	-0.16	-0.38	-0.89	-1.29	-0.73	3.58	1.59	1.39	1.37	-1.82	-0.73	0.21	1.7</			



Θ(135°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	
Θ(150°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	
Θ(165°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	
Θ(180°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	
Freq(Hz)	2.45G	Pol.	Theta	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(15°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(30°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(45°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(60°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(75°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(90°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(105°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(120°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(135°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(150°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(165°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(180°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Freq(Hz)	5.2G	Pol.	Phi	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.19	-4.65	-6.2	-7.85	-8.18	-10.3	-11.11	-10.85	-8.88	-8.04	-5.5	-4.34	-3.89	-4.16	-4.34	-5.56	-7.63	-9.79	-13.01	-11.54	-8.62	-5.72	-4.64	-4.45
Θ(15°)	-8.15	-11.27	-17.96	-19.17	-18.22	-19.58	-17.36	-9.59	-6.12	-5.11	-4.65	-2.14	-0.24	0.28	0.05	-1.62	-4.4	-7.55	-13.58	-15.39	-15.66	-9.54	-6.54	-5.15
Θ(30°)	-12.49	-11.1	-3.88	-1.73	-4.88	-3.72	-6.64	-4.08	-0.57	-3.98	-1.2	-0.34	-1.34	-0.11	0.09	0.78	-1.33	-4.43	-4.58	-5.39	-5.62	-5.58	-2.31	-7.43
Θ(45°)	-7.77	-1.56	-0.11	-0.25	-1.4	0.43	-0.45	-1.31	-0.51	-2.86	0.5	-0.79	1.35	2.34	1.98	1.7	0.49	-0.06	0.22	-2.15	-0.17	0.92	-1.81	-11.02
Θ(60°)	-3.51	-1.12	0.31	-7.62	0.65	1.17	-1	-0.61	-9.74	-5.88	-1.74	2.43	2.06	2.27	1.78	0.84	-1.6	-3.74	-0.93	2.21	1.9	1.26	1.44	-2.76
Θ(75°)	-6.22	-5.21	1.21	-3.22	-2.2	-0.75	0.68	-6.45	-2.58	-4.09	-1.5	2.6	1.54	-0.43	1.23	-0.86	-2.52	-2.95	-1.05	2.04	3.14	0.64	0.46	-0.5
Θ(90°)	-6.4	-5.01	0.09	-2.89	-3.51	-0.39	0.01	-6.66	-2.18	-6.63	-7.21	1.5	-2.44	-1.76	-1.98	-2.51	-3.07	-1.79	-2.15	2.83	3.39	2.02	-0.79	-2.56
Θ(105°)	-9.7	-10.76	-7.16	-7.3	-7.76	-3.35	-3.59	-7.66	-9.99	-8.63	-13.85	-5.12	-6.45	-5.41	-6.27	-6.33	-5.22	-3.93	-6.46	-0.97	0.48	-1.41	-7.43	-4.66
Θ(120°)	-10.45	-12.35	-19.16	-9.65	-10.95	-7.3	-9.17	-15.7	-9.59	-14.16	-13.56	-8.96	-9.4	-6.93	-11.06	-9.4	-8.99	-10.28	-10.94	-7.91	-7.4	-8.33	-10.33	-9.29
Θ(135°)	-10.37	-12.67	-15.69	-14.11	-14.27	-11.64	-16.19	-10.71	-15.13	-19.67	-19.29	-7.62	-8	-10.07	-17.42	-10.44	-9.87	-11.14	-9.68	-11.91	-6.24	-4.89	-10.58	-19.63
Θ(150°)	-17.51	-18.63	-19.31	-19.27	-12.24	-13.05	-18.55	-19.82	-19.67	-19.18	-15.85	-12.75	-12.47	-13.43	-17.05	-19.46	-16.93	-16.37	-20.42	-20.08	-17.97	-20.18	-16.92	-17.04
Θ(165°)	-19.22	-20.13	-18.54	-19.01	-16.12	-20.04	-18.66	-18.99	-18.75	-19.77	-17.4	-19.76	-19.51	-19.2	-18.58	-20.14	-16.97	-20.05	-18.76	-19.28	-19.8	-19.14	-19.27	-19.18
Θ(180°)	-18.7	-19.89	-18.39	-15.94	-18.39	-18.34	-14.62	-14.66	-14.57	-15.57	-15.78	-17.52	-19.28	-19.79	-17.83	-19.33	-18.14	-16.18	-14.64	-15.56	-16.59	-15.08	-14.19	-17.79
Freq(Hz)	5.2G	Pol.	Theta	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.93	-10.24	-8.77	-7.28	-4.96	-4.52	-4.64	-5.05	-4.7	-6.11	-7.2	-10.66	-10.91	-10.77	-8.97	-6.33	-5.76	-4.55	-3.97	-4.33	-5.71	-7.07	-8.3	-10.56
Θ(15°)	-7.84	-5.82	-4.6	-4.54	-5.86	-8.7	-11.93	-11.61	-14.06	-20.25	-17.23	-16.34	-13.31	-10.48	-6.71	-3.64	-3.13	-6.5	-11.92	-11.49	-11.43	-9.17	-6.87	-7.77
Θ(30°)	-1.52	-2.52	-6.53	-7.72	-2.85	-5.47	-8.27	-9.15	-11.29	-14.88	-14.76	-13.8	-12.44	-6.24	-1.86	-1.34	-0.18	-1.68	-1.68	-16.6	-9.45	-6.48	-4.02	
Θ(45°)	-15.09	-8.34	-4.31	-10.59	-4.31	-3.37	-5.94	-5.97	-8.2	-9.31	-5.69	-7.08	-19.47	-12.7	-15.75	-8.93	-3.01	-11.49	-18.25	-15.21	-8.07	-16.93	-18.82	-7.33
Θ(60°)	-8.65	-11.02	-5.58	-8.64	-6.07	-5.48	-4.83	-6.95	-10.59	-9.7	-6.2	-8.62	-8.3	-13.21	-14.09	-18.91	-13.48	-16.78	-18.58	-13.19	-11.91	-18.39	-17.59	-15.22
Θ(75°)	-16.21	-14.99	-8.54	-11.35	-9.93	-10.83	-5.24	-8.08	-10.58	-19.48	-20.08	-17.21	-12.73	-14.59	-15.5	-17.98	-12.45	-19.1	-18.89	-19.4	-13.75	-18.74	-16.88	-19.16
Θ(90°)	-19.06	-20.26	-13.97	-14.7	-20.16	-12.53	-14.82	-16.45	-13.22	-18.52	-16.22	-19.43	-19.21	-16.5	-14.71	-19.11	-13.59	-18.3	-19.6	-18.33	-11.99	-19.88	-20.27	-18.98
Θ(105°)	-18.97	-16.98	-18	-15.63	-16.67	-19.71	-15.96	-18.64	-16.07	-18.17	-15.93	-19.96	-19.23	-18.65	-19.78	-19.3	-18.28	-19.65	-17.42	-19.31	-14.34	-18.52	-19.02	-14.59
Θ(120°)	-12.68	-13.43	-14.43	-18.63	-14.53	-18.73	-19.85	-19.16	-17.32	-19.88	-19.14	-19.49	-19.52	-19.85	-19.82	-19.07	-19.3	-18.75	-18.58	-18.91	-20.45	-15.55	-19.2	-15.18
Θ(135°)	-13.58	-16.35	-19.26	-16.45	-20	-13.21	-19.13	-19.34	-20.05	-19.54	-20.16	-19.77	-14.92	-20.35	-19.29	-17.67	-19.94	-20.08	-15.28	-19.41	-18.99	-19.43	-19.95	-17.27
Θ(150°)	-12.38	-17.33	-19.49	-13.68	-19.54	-19.58	-18.67	-18.72	-20.01	-17.66	-15.03	-19.27	-14.94	-18.61	-20.29	-19.65	-19.35	-19.88	-19.44	-18.81	-20.11	-18.6	-19.35	-18.84
Θ(165°)	-18.44	-13.09	-12.77	-20.66	-19.57	-20.46	-18.97	-19.03	-19.11	-19.23	-13.75	-15.39	-16.04	-14.16	-16.99	-19.24	-18.59	-17.95	-18.3	-18.29	-18.45	-19.43	-16.39	-13.09
Θ(180°)	-16.32	-17.36	-13.5	-11.75	-14.95	-16.21	-17.06	-16.75	-19.25	-19.61	-18.31	-19.63	-16.87	-12.92	-12.02	-13.35	-13.26	-15.01	-17.99	-19.05	-18.42	-18.87	-19.25	-15.64
Freq(Hz)	5.3G	Pol.	Phi	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.3	-4.6	-5.04	-6.06	-6.77	-10.08	-12.73	-11.89	-9.29	-7.25	-6.44	-5.24	-4.49	-4.25	-4.61	-5.64	-8.36	-9.15	-12.37	-14.42	-12.19	-8.17	-7.02	-5.83
Θ(15°)	-13.49	-19.87	-19.2	-18.58	-14.61	-12.17	-10.48	-8.38	-8.27	-6.63	-4.03	-2.71	-2.76	-3.61	-4.44	-3.83	-3.44	-5.42	-10.75	-11.44	-10.72	-13.27	-10.94	-9.83
Θ(30°)	-9.93	-8.58	-4.95	-2.94	-8.62	-5.37	-9.98	-3.62	-0.34	-4.73	-1.62	-2.35	-1.29	0.12	0.05	-0.34	-2.08	-2.68	-2.7	-4.09	-3.33	-3.28	-2.75	-7.84
Θ(45°)	-4.88	-2.25	0.11	-0.08	-1.88	-0.73	-1.68	-2.23	0.32	-0.59	1.22	-1.65	0.08	1.52	2.49	0.3	-2.25	-2.76	0.72	-1.15	-1.24	-0.16	-1.93	-7.4
Θ(60°)	-4.57	-2.65	0.5	-2.56	1.43	1.77	-1.94	0.55	-13.3	-10.34	-0.11	0.78	1.63	0.67	1.25	0.43	-2.52	-3.07	-0.43	0.85	1.86	2.09	1.4	-0.29
Θ(75°)	-8.27	-5.2	1.34	-4.07	-2.89	-3.45	-0.45	-3.52	-3.92	-4.01	-0.96	1.36	1.71	-1.57	-0.05	-0.41	-1.58	-0.64	-1.28	1.21	2.94	0.56	0.06	0.96
Θ(90°)	-11.65	-7.4	-0.3	-5.49	-2.71	0.16	-2.08	-7.37	-2.86	-6.24	-5.41	0.2	-0.05	-3.16	-3.86	-2.64	-1.32	-0.72	-2.21	3.03	3.58	2.3	-0.94	-1.9
Θ(105°)	-7.72	-7.62	-5.95																					



Θ(45°)	-0.36	1.72	0.78	1.32	-0.24	0.69	0.03	-1.09	-0.85	1.89	2.05	-0.15	-4.79	-4.71	-1.17	1.7	2.09	2.93	1.88	-0.94	-6.15	-8.24	-2.07	-1.22
Θ(60°)	1.35	3.39	-0.45	-0.15	-4.67	-3.68	-1.02	0.65	-0.04	-0.01	1.54	1.38	-3.62	-6.31	-4.46	-1.97	-0.27	0.97	-1.62	-2.76	-4.27	-5.69	-2	-1.94
Θ(75°)	1.46	2.7	-3.06	-1.73	-4.54	-7.04	-1.2	0.6	-3.38	-1.68	0.53	1.37	-4.33	-4.67	-3.07	-3.89	0.06	1.96	-2.33	-3.31	-1.69	-5.6	-3.68	-2.11
Θ(90°)	-0.7	-0.48	-5.53	-3.33	-4.76	-7.36	-3.73	-2.87	-4.17	-3.06	-2.24	-0.78	-5.5	-8.43	-7.15	-8.65	-1.29	0.53	-3.46	-4.18	-3.32	-6.94	-6	-6.52
Θ(105°)	-4.95	-5	-11.28	-7.05	-8.93	-12.02	-6.83	-5.21	-6.45	-7.19	-7.22	-6.3	-10.08	-13.44	-11.33	-15.41	-6.63	-8.37	-11.96	-10.46	-9.14	-17.34	-11.07	-9.4
Θ(120°)	-8.06	-8.59	-12.63	-9.54	-13.62	-18.52	-9.52	-9.13	-13.37	-10.19	-11.91	-8.52	-14.07	-14.32	-16.16	-13.67	-9	-8.49	-10.93	-17.54	-10.38	-19.02	-11.96	-13.03
Θ(135°)	-13.05	-14	-17.99	-17.77	-15.07	-20.05	-11.58	-13.48	-16.21	-14.81	-14.05	-16.81	-16.83	-18.66	-18.32	-16.14	-14.98	-14.93	-18.61	-19.31	-13.02	-18.94	-17.27	-15.75
Θ(150°)	-15.15	-14.41	-19.72	-17.01	-17.44	-18.88	-19.57	-17.93	-19.15	-16.5	-18.44	-19.84	-18.97	-19.58	-18.97	-19.75	-18.63	-16.37	-19.47	-16.08	-18.41	-17.79	-18.89	-18.41
Θ(165°)	-19.94	-20.29	-18.99	-18.85	-19.81	-19.03	-18.94	-18.95	-17.45	-16.18	-20.09	-19.4	-19.88	-18.74	-19.88	-19.26	-18.91	-19.7	-19.99	-19.7	-18.38	-19.69	-18.77	-18.39
Θ(180°)	-19.13	-19.27	-19.3	-19.64	-20.17	-19.17	-18.79	-19.58	-19.25	-17.49	-17.6	-16.87	-18.47	-19.42	-19.59	-18.86	-19.87	-20.16	-18.33	-18.64	-19.89	-19.38	-20.04	-18.96
Freq(Hz)	5.3G	Pol.	Theta	Ant. 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.96	-18.57	-19.41	-17.45	-13.74	-10.11	-8.61	-8.3	-8.3	-8.52	-10.45	-13.17	-16.73	-20.17	-19.26	-13.65	-10.28	-9.59	-9.57	-8.75	-8.97	-9.45	-11.07	-13.67
Θ(15°)	-8.44	-7.87	-9.19	-15.38	-8.49	-5.41	-4.53	-6.03	-9.68	-14.8	-11.15	-12.26	-16.72	-10.64	-14.53	-16.58	-7.87	-5.24	-7.63	-12.07	-19.35	-18.52	-13.66	-10.45
Θ(30°)	-4.69	-5.44	-8.03	-15.5	-14.56	-11.8	-6.7	-7.25	-11.83	-9.51	-8.75	-10.09	-7.11	-6.94	-9.34	-19.65	-9.5	-5.55	-5.7	-9.94	-12.49	-19.52	-10.29	-6.01
Θ(45°)	-14.52	-13.04	-16.5	-18.07	-18.75	-12.63	-14.98	-18.06	-11.5	-8.17	-9.12	-11.5	-7.65	-11.66	-11.62	-14.86	-8.11	-11.76	-7.76	-8.31	-10.43	-19.21	-17.42	-12.69
Θ(60°)	-14.67	-13.71	-13.96	-19.14	-19.96	-19.43	-16.16	-16.25	-14.22	-14.47	-12.67	-11.93	-19.05	-19.32	-20.06	-19.34	-14.95	-13.48	-8.8	-18.64	-17.22	-16.39	-15.4	-19.55
Θ(75°)	-18.92	-14.09	-17.68	-20.29	-19.52	-19.25	-14.97	-18.59	-10.15	-19.14	-15.11	-11.32	-16.99	-19.31	-19.48	-18.68	-18.16	-18.07	-16.43	-19.25	-19.21	-18.51	-19.36	-19.19
Θ(90°)	-19.31	-19.3	-19.04	-19.43	-19.01	-19.38	-18.46	-19.66	-18.07	-19.54	-15.39	-16.82	-18.89	-18.4	-17.89	-20.01	-17.9	-19.3	-19.73	-19.24	-20.08	-17.87	-18.48	-19.55
Θ(105°)	-19.16	-19.01	-18.94	-19.91	-19.75	-19.68	-19	-19.94	-19.12	-18.74	-18.55	-19.79	-20.16	-18.37	-20.4	-19.52	-20.09	-18.57	-19.92	-19.97	-19.83	-19.15	-18.6	-19.6
Θ(120°)	-19.84	-19.88	-18.97	-18.71	-19.46	-19.3	-18.86	-20.19	-19.15	-19.14	-19.75	-18.75	-18.86	-18.94	-18.85	-19.07	-19.65	-18.56	-19.36	-19.72	-19.03	-15.55	-19.59	-20.02
Θ(135°)	-19.05	-19.7	-18.3	-20.1	-19.27	-19.67	-18.18	-20.19	-19.07	-19.71	-18.62	-20.46	-18.62	-19.7	-19.54	-18.58	-20.07	-18.82	-18.53	-19.92	-19.76	-20	-19.17	-19.17
Θ(150°)	-18.71	-18.04	-19.27	-19.72	-18.72	-18.95	-19.1	-18.84	-20	-18.89	-19.74	-19.67	-19.76	-19.48	-20.15	-19.25	-19.87	-19.6	-19.48	-20.11	-19.52	-19.42	-18.62	-19.51
Θ(165°)	-19.98	-18.56	-20.05	-18.68	-19.72	-18.6	-19.34	-19.24	-19.7	-19.82	-18.95	-19.07	-17.89	-19	-18.57	-18.66	-20.4	-19.08	-19.14	-19.99	-20.07	-19.9	-19.66	-20.22
Θ(180°)	-19.58	-19.46	-18.62	-19.74	-18.71	-19.4	-20.11	-20.09	-20.34	-18.44	-19.13	-18.79	-18.62	-18.91	-19.75	-18.89	-16.91	-18.2	-20.08	-19.11	-18.91	-19.73	-19.61	-19.58
Freq(Hz)	5.6G	Pol.	Phi	Ant. 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.07	-7.34	-9.72	-13.32	-14.56	-13.92	-11.52	-8.94	-6.44	-5.32	-4.83	-4.92	-5.72	-6.48	-8.76	-12.51	-15.16	-13.71	-11.81	-9.14	-7.22	-5.38	-4.95	-6.17
Θ(15°)	-0.48	-1.31	-2.32	-3.26	-2.69	-3.35	-4.89	-9.24	-16.3	-18.7	-19.76	-14.55	-10.09	-7.1	-4.11	-4.57	-2.89	-1.9	-0.91	-0.99	-0.73	0.56	0.78	-0.19
Θ(30°)	-0.35	-1.44	-1.84	-1.02	-0.6	-2.09	-2.26	-1.62	-1.14	-2.22	-4.6	-6.69	-7.87	-6.62	-2.16	0	0.36	1.17	2.17	-0.62	-4.35	-1.97	1.42	1.73
Θ(45°)	-2.58	0.97	1.46	0.4	0.17	-1.31	-0.2	0	-1.47	0.98	1.87	-0.44	-5.59	-3.86	-0.92	1.72	1.03	1.65	0.19	-1.01	-4.34	-5.27	-0.32	-0.14
Θ(60°)	1.27	1.53	-0.68	-2.64	-4.02	-1.71	-2.62	-0.67	1.08	1.26	1.68	-0.71	-5.04	-7.74	-7.65	-3.32	-4.83	-1.68	-3.03	-4.91	-5.76	-7.37	-4.36	-2.7
Θ(75°)	2.52	1.47	-3.06	-3.98	-6.07	-5.62	-6.27	-1.69	-2.87	-3.06	0.34	0.12	-3.35	-6.52	-4.46	-4.54	-2.95	1.02	-2.69	-5.15	-3.1	-4.17	-4.81	-4.02
Θ(90°)	0.41	-1.12	-5.61	-4.18	-5.02	-5.75	-6.85	-2.92	-3.85	-4.15	-1.56	-2.22	-4.68	-9.96	-7.92	-6.59	-3.91	-0.24	-3.24	-3.65	-3.43	-6.75	-6.9	-7.38
Θ(105°)	-3.72	-4.83	-9.39	-7.52	-9.47	-11.34	-10.29	-4.8	-6.62	-7.72	-5.78	-7.65	-8.17	-13.43	-10.97	-12.64	-7.83	-8.01	-10.58	-9.45	-8.36	-13.89	-12.23	-11.27
Θ(120°)	-7.39	-8.11	-13.23	-9.04	-12.85	-14.14	-11.06	-8.35	-12.14	-9.09	-10.71	-11.22	-10.67	-16.56	-13.28	-14.83	-9.09	-7.83	-11.3	-14.37	-9.22	-16.04	-15.16	-13.26
Θ(135°)	-10.99	-12.51	-19.99	-16.56	-15.09	-19.23	-14.12	-14.96	-19.73	-13.82	-14.5	-15.39	-14.69	-19.27	-15.24	-18.55	-15.25	-17.13	-17.07	-19.04	-12.76	-17.31	-13.32	-17.38
Θ(150°)	-13.24	-12.3	-19.4	-16.72	-15.03	-19.53	-17.78	-15.47	-19.79	-14.79	-17.09	-20.41	-17.28	-19.38	-18.55	-16.73	-17.11	-16.96	-19.12	-18.22	-20.06	-19.32	-19.41	-19
Θ(165°)	-17.92	-18.29	-19.63	-16.35	-17.57	-14.77	-19.49	-19.66	-19.29	-19.95	-18.92	-19.29	-19.92	-19.79	-18.51	-19.06	-19.21	-19.76	-19.98	-19.36	-19.7	-17.11	-19.6	-19.59
Θ(180°)	-20.05	-18.66	-19.89	-19.3	-19.54	-18.78	-19.66	-19.12	-20.2	-19.59	-19.14	-19.73	-19.34	-20.43	-19.38	-19.3	-18.33	-19.9	-19.39	-19.35	-19.48	-18.38	-19.93	-18.38
Freq(Hz)	5.6G	Pol.	Theta	Ant. 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-11.9	-9.5	-7.46	-6.74	-6.06	-6.03	-6.76	-7.7	-10.35	-14.61	-15.96	-13.51	-9.73	-8.04	-6.21	-5.75	-5.07	-4.56	-6.51	-7.94	-10.5	-12.33	-14.21	-14.71
Θ(15°)	-9.13	-8.13	-9.89	-12.45	-11.4	-7.88	-6.65	-7.76	-12.72	-16.78	-9.63	-6.75	-12.38	-14.25	-16.36	-8.26	-4.42	-3.5	-6.02	-11.95	-18.68	-19.08	-15.49	-11.09
Θ(30°)	-15.88	-13.34	-9.18	-11.75	-19.16	-13.55	-12.81	-9.18	-9.11	-10.28	-6.06	-6.94	-9.1	-9.94	-19.13	-14.82	-10.96	-11.9	-13.93	-7.85	-10.98	-17.38	-12.3	-9.11
Θ(45°)	-11.46	-14.85	-18.08	-19.04	-20.34	-16.29	-19.69	-19.53	-15.15	-7.73	-7.15	-11.12	-8.6	-10.43	-10.34	-16.12	-12.12	-8.67	-4.3	-9.57	-12.83	-19.54	-18.49	-16.36
Θ(60°)	-16.23	-18.27	-16.43	-13.11	-17.62	-19.16	-12.1	-13.33	-15.07	-20.14	-9.13	-14.47	-14	-18.35	-16.17	-18.68	-17.66	-9.63	-8.43	-10.27	-19.39	-18.33	-18.92	-17.2
Θ(75°)	-19.7	-19.89	-16.14	-18.55	-17.98	-18.86	-12.92	-20.13	-12.72	-19	-14.29	-11.46	-15.96	-19.07	-19.41	-18.25	-19.62	-13.47	-20.04	-12.36	-19.72	-18.43	-17.44	-19.21
Θ(90°)	-18.99	-17.8	-18.93	-19.05	-19.94	-19.77	-18.78	-19.87	-16.99	-19.32	-17.96	-18.91	-19.5	-19.12	-19.57	-18.6	-20.03	-19.95	-19.97	-14.22	-19.29	-18.89	-18.32	-17.34
Θ(105°)	-19.2	-18.97	-19.25	-19.57	-19.87	-19.79	-19.95	-19.59	-19.57	-19.75	-18.52	-19.23	-19.06	-18.71	-19	-20.25	-18.35	-19.82	-18.91	-19.58	-18.46	-19.85	-18.53	-18.38
Θ(120°)	-18.6	-19.76	-19.14	-19.43	-19.19	-19.91	-19.02	-20.18	-18.78	-19.56	-18.78	-19.42	-20.25	-18.56	-19.94	-19.89	-18.91	-18.87	-18.93	-20.11	-19.6	-19.36	-20.08	-18.22
Θ(135°)	-19.77	-19.39	-19.53	-19.27	-18.83	-19.29	-																	



Θ(0°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(15°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(30°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(45°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(60°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(75°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(90°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(105°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(120°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(135°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(150°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(165°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(180°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Freq(Hz)	5.2G	Pol.	Phi	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-11.65	-12.24	-14.1	-16.36	-17.69	-17.49	-16.47	-13.52	-11.74	-10.68	-9.51	-10.49	-10.76	-12.59	-15.01	-17.24	-19.4	-19.64	-18.45	-12.17	-10.17	-8.96	-9.88	
Θ(15°)	-4.82	-6.28	-7.57	-8.74	-9.98	-10.78	-9.37	-6.17	-5.43	-5.62	-6.29	-8.16	-9.31	-6.95	-4.15	-3.27	-3.88	-5.92	-10.47	-9.43	-8.46	-4.87	-3.52	-4.06
Θ(30°)	1.65	0.84	-0.29	-1.92	-4.2	-2.3	-0.44	-2.59	-4.63	-2.13	-1.68	-1.07	-0.61	-2.27	-0.83	0.33	-1.41	-5.25	-7.31	-5.41	-2.29	0.13	-0.25	0.75
Θ(45°)	-1.42	-0.21	-0.53	-1.17	-2.03	-2.05	-0.33	1.4	1.64	2.22	-0.07	-0.05	-0.91	-1.31	3.01	2.49	1.26	-0.59	-1.43	-1.15	0.02	1.78	0.95	-5.92
Θ(60°)	-2.62	-2.17	-5.7	-1.73	-1.56	-1.67	-0.71	1.12	0.47	0.59	-3.33	-2.44	-2.09	-3.03	2.02	3.1	-2.71	-4.85	-2.59	-4.01	-1.57	0.16	-1.05	-6.58
Θ(75°)	-2.81	-3.74	-5.87	0.94	-0.62	-3.35	-1.73	0.72	-0.53	-2.28	-1.41	-0.57	-1.25	-2.95	0.5	2.12	-4.3	-3.47	-6.76	-3.09	-1.14	-3.84	-4.07	-4.44
Θ(90°)	-5.19	-6.83	-7.46	-0.78	-2.39	-4.75	-4.61	-1.69	-1.13	-3.31	-3.38	-1.99	-2.92	-4.09	-3.64	-2.67	-8.26	-3.45	-8.08	-2.19	-3.97	-6.53	-8.39	-6
Θ(105°)	-9.79	-10.66	-10.74	-4.78	-6.27	-7.31	-6.41	-2.96	-3.29	-5.57	-6.84	-6.74	-6.29	-9.14	-10.28	-8.25	-14.89	-10.98	-18.68	-8.05	-13.44	-12.79	-15.45	-10.82
Θ(120°)	-13.52	-15.38	-14.26	-7.69	-10.09	-11.59	-10.33	-5.03	-6.37	-9.17	-11.18	-8.73	-11.57	-11.01	-17.33	-11.72	-18.73	-16.67	-19.06	-14.35	-11.72	-16.54	-16.17	-15.86
Θ(135°)	-19.44	-14.79	-14.62	-12.95	-12.74	-17.91	-12.25	-12.15	-8.87	-13.22	-12.59	-12.84	-11.91	-19.49	-19.28	-16.38	-17.81	-12.87	-18.65	-16.34	-19.24	-15.76	-19.63	-16.11
Θ(150°)	-19	-18.26	-20.17	-19.84	-18.95	-19.08	-18.78	-19.73	-19.7	-18.66	-19.85	-15.75	-16.96	-19.85	-19.51	-19.64	-19.24	-15.38	-19.64	-18.89	-17.4	-19.46	-19.17	-19.99
Θ(165°)	-18.82	-19.68	-19.52	-19.12	-19.29	-20.32	-19.49	-19.97	-18.52	-19.5	-20.04	-19.46	-18.92	-18.7	-20.15	-19.56	-18.76	-18.65	-19.83	-18.95	-20.24	-18.7	-20.03	-18.64
Θ(180°)	-18.56	-18.47	-18.43	-18.21	-19.52	-19.98	-19.87	-19.78	-18.93	-20.18	-19.28	-18.19	-18.34	-20.63	-19.16	-20.17	-19.02	-19.61	-19.44	-19.46	-20.04	-19.66	-18.94	-18.79
Freq(Hz)	5.2G	Pol.	Theta	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.24	-12.58	-10.86	-10.34	-8.65	-9.63	-11.56	-10.79	-16.53	-17.87	-19.53	-18.62	-15.88	-13.51	-11.39	-11.07	-10.46	-10.2	-12.02	-12.89	-15.1	-16.54	-18.1	-17.68
Θ(15°)	-19.96	-18.36	-16.47	-16.8	-14.97	-12.6	-11.08	-9.3	-12.88	-11.63	-12.95	-19.35	-11.17	-7.67	-9.82	-16.9	-19.21	-19.22	-18.54	-18.36	-18.69	-17.41	-14.5	-14.5
Θ(30°)	-12.1	-11.2	-10.3	-9.29	-9.62	-17.84	-16.61	-15.44	-9.07	-5.56	-11.48	-8.97	-5.96	-6.27	-5.45	-5.43	-9.74	-11.24	-8.35	-12.32	-13.06	-17.8	-19.49	-18.61
Θ(45°)	-15.04	-14.61	-14.08	-15.63	-15.37	-19.72	-19.76	-18.95	-19.63	-18.34	-10.11	-13.69	-9.5	-12.64	-7.17	-7.59	-11.43	-7.1	-10.32	-11.68	-11.12	-19.89	-8.81	-6.8
Θ(60°)	-20.2	-19.87	-19.74	-20.38	-10.82	-14.3	-16.28	-18.83	-19.33	-19.29	-13.4	-14.08	-15.17	-16.81	-10.61	-14.68	-15.9	-13.25	-13.58	-20.3	-16.39	-14.2	-12.17	
Θ(75°)	-17.82	-20.08	-19.52	-19.94	-19.86	-14.77	-14.38	-16.31	-18.31	-18.69	-14.07	-14.47	-18.18	-19.97	-14.61	-15.14	-15.12	-19.56	-18	-18.59	-19.94	-16.91	-19.64	-19.87
Θ(90°)	-19.66	-19.95	-19.52	-18.63	-19.94	-19.25	-16.02	-18.87	-18.42	-20.17	-16.45	-19.74	-19.22	-19.93	-19.91	-15.71	-16.14	-18.31	-19.72	-19.8	-19.38	-20.02	-19.22	-19.12
Θ(105°)	-19.62	-18.88	-18.1	-20.09	-19.87	-18.72	-15.55	-18.75	-19.93	-19.81	-19.8	-18.65	-19.86	-19.36	-18.27	-17.66	-18.64	-20.34	-19.56	-19.88	-18.86	-19.56	-20.32	-18.02
Θ(120°)	-18.88	-19.82	-19.64	-19.76	-19.51	-19.09	-19.17	-18.12	-19.86	-19.49	-18.64	-19.05	-19.82	-18.91	-19.86	-18.77	-19.36	-19.9	-18.5	-20.15	-19.67	-19.15	-19.02	-20.16
Θ(135°)	-19.57	-20.09	-19.37	-19.21	-19.08	-19.41	-19.35	-20.15	-20.23	-18.93	-18.32	-20.29	-18.92	-20.24	-19.88	-19.8	-20.12	-19.88	-19.66	-19.49	-19.58	-19.73	-19.14	-18.63
Θ(150°)	-18.13	-20.08	-19.04	-19.33	-19.23	-18.38	-20.16	-19.09	-19.21	-19.76	-19.7	-19.38	-19.21	-19.29	-20.27	-19.01	-19.79	-18.55	-18.93	-19.7	-19.54	-19.85	-19.48	-19.87
Θ(165°)	-20.14	-19.75	-19.49	-18.55	-18.99	-19.45	-19.11	-20.16	-19.69	-20.46	-19.91	-18.49	-19.41	-19.56	-18.79	-19.89	-20.11	-19.23	-19.12	-18.28	-17.74	-18.84	-19.8	-19.33
Θ(180°)	-19.83	-20.1	-18.46	-18.73	-20.12	-18.91	-19.22	-19.49	-16.91	-14.44	-17.71	-19.68	-18.77	-18.61	-18.8	-19	-20.12	-18.76	-20.33	-19.51	-19.84	-20.09	-19.11	-19.49
Freq(Hz)	5.3G	Pol.	Phi	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.32	-16.66	-20.18	-17.89	-18.27	-17.48	-17.36	-14.24	-14.76	-13.98	-15.73	-16.6	-16.18	-18.3	-18.99	-19.74	-18.17	-19.53	-16.84	-16.3	-15.02	-12.55	-15.53	-14.48
Θ(15°)	-4.71	-5.89	-5.67	-5.7	-6.27	-8.77	-8.91	-11	-8.53	-7.59	-6.44	-7.62	-8.28	-8.15	-5.52	-3.35	-2.92	-4.92	-6.06	-8.32	-6.23	-4.24	-3.04	-3.27
Θ(30°)	2.11	0.4	-0.98	-3.51	-5.34	-3.29	-1.58	-2.94	-3.67	-0.33	1.45	0.91	1.32	-1.05	-0.72	1.3	0.19	-3.77	-5.83	-6.42	-2.06	0.03	-0.04	1.52
Θ(45°)	-1.71	-1.67	-0.49	-0.73	-1.49	-2.03	-2.22	0.93	2.34	3.68	1.53	0.65	1.45	-1.77	2.37	3.13	3.26	0.14	-2.23	-2.65	0.23	2.3	0.58	-1.71
Θ(60°)	-1.98	-2.21	-4.78	-0.33	-0.44	-2.41	-3.31	-0.02	1.36	0.75	-1.03	-2.72	-0.59	-7.78	1.93	3.42	-0.22	-3.87	-1.3	-5.01	-1.58	-0.97	-0.41	-6.09
Θ(75°)	-1.07	-3.04	-4.19	2.07	-0.35	-3.96	-4.04	-1.01	0.94	-0.72	-2.44	-0.66	-1.23	-2	-0.5	2.17	-1.66	-2.94	-4.45	-4.87	-1.63	-3	-2.88	-2.09
Θ(90°)	-3.9	-5.8	-4.9	0.28	-2.27	-6.28	-4.82	-3.5	0.25	-2.29	-4.57	-2.81	-2.89	-4.5	-5.5	-1.69	-5.22	-2.79	-6.89	-2.59	-3.62	-7.45	-6.61	-3.55
Θ(105°)	-7.74	-10.62	-7.87	-3.89	-6.43	-9.8	-6.35	-4.05	-2.21	-5.2	-6.92	-6.82	-9.02	-8.32	-8.72	-6.98	-14.04	-9.98	-14.26	-9.25	-10.61	-11.63	-11.63	-8.27
Θ(120°)	-12.65	-12.33	-12.25	-7.02	-10.19	-11.19	-8.94	-6.76	-7.04	-7.21	-9.95	-10.59	-13.16	-12.03	-17.94	-11.84	-16.35	-14.73	-19.25	-13.04	-11.49	-18.56	-12.87	-13.04
Θ(135°)	-17.41	-17.72	-13.73	-10.99	-14.89	-17.25	-11.08	-11.84	-9.93	-12.41	-12.32	-12.67	-15.41	-13.6	-18.68	-16.8	-17.88	-12.46	-19.6	-14.49	-16.67	-18.15	-16.91	-16.12
Θ(150°)	-15.96	-14.23	-13.89	-17.94	-18.94	-19.04	-18.62	-19.37	-20.18	-19.03	-20.12	-15.52	-19.47	-19.75	-19.29	-19.46	-19.88	-17.57	-18.96	-20.17	-20.31	-19.44	-19.33	-19.



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix A

Θ(180°)	-19.65	-19.83	-19.12	-19.89	-20	-20	-19.97	-19.9	-19.69	-19.26	-18.46	-19.07	-19.8	-18.95	-19.64	-19.29	-20.27	-18.73	-19.55	-19.98	-19.82	-20.27	-20.28	-18.88
Freq(Hz)	5.785G	Pol.	Phi	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-19.35	-19.92	-14.41	-11.79	-9.09	-8.97	-7.85	-12.89	-9.94	-12.89	-16.17	-20.16	-20.45	-11.92	-10.66	-6.77	-7.9	-8.73	-10.23	-10.63	-11.12	-11.05	-15.96	-19.88
Θ(15°)	-5.3	-4.96	-3.71	-3.93	-4.64	-5.88	-6.99	-6.51	-7.61	-7.21	-5.3	-4.42	-3.44	-4.35	-5.61	-3.53	-1.65	-1.61	-1.32	-1.63	-2.47	-3.13	-5.37	-6.58
Θ(30°)	2	1.4	-0.38	-0.13	-0.93	-2.23	-3.9	-3.6	0.09	-0.04	-0.43	1.21	2.62	0.94	-0.52	0.79	1.46	1.42	0.57	-1.05	-1.11	-2.33	-0.44	1.79
Θ(45°)	-0.12	-2.06	-0.68	1.38	0.76	-0.98	0.73	-1.16	2.54	1.79	2.17	0.85	2.15	1.4	-1.05	2.84	2.25	-1.12	-0.36	-1.78	1.17	2.09	-0.02	1.92
Θ(60°)	-0.73	-2.07	-0.44	-0.28	-3.31	-2.96	-3.97	-1.05	0.37	0.25	0.46	-0.59	-1.13	-3.09	-0.77	-1.1	-2.03	-3.64	-1.54	-2.65	-4.26	-0.82	-0.66	-2.85
Θ(75°)	-1.84	-3.66	-2.51	-0.5	-3.34	-3.6	-4.25	-0.21	0.8	-1.07	-3.25	-1.63	-4.34	-4.98	-1.66	-0.88	-1.81	-6.37	-4.2	-4.79	-3.67	-0.06	-0.56	-0.86
Θ(90°)	-4.55	-7.48	-2.47	-1.21	-5.11	-5.93	-3.72	-3.17	1.05	-1.22	-5.19	-2.24	-5.46	-6.82	-4.56	-3.74	-3.62	-3.49	-8.1	-3.56	-4.39	-3.73	-4.25	-3.47
Θ(105°)	-8.95	-13.24	-6.63	-4.98	-8.04	-8.44	-6.28	-3.54	-0.98	-2.95	-6.84	-7.18	-7.83	-11.97	-11.67	-9.11	-14.09	-10.45	-19.56	-9.72	-10.84	-7.89	-7.76	-7.67
Θ(120°)	-14.18	-14.86	-9.32	-8.19	-12.13	-12.46	-8.36	-7.65	-5.13	-5.41	-10.3	-9.76	-13.46	-14.19	-12.15	-11.53	-15.17	-12.72	-14.85	-12.99	-13.22	-13.78	-10.45	-11.05
Θ(135°)	-17.97	-14.59	-11.29	-10.89	-17.08	-15.75	-14.04	-10.76	-10.98	-9.77	-11.52	-12.66	-12.05	-19.44	-19.61	-15.82	-18.08	-17.92	-19.94	-15.58	-13.91	-15.11	-13.91	-18.3
Θ(150°)	-16.94	-17.96	-18.6	-20.01	-18.97	-20.31	-19.07	-19.19	-18.53	-19.43	-18.49	-18.12	-20.04	-19.77	-18.79	-15.96	-18.98	-15.47	-19.21	-15.96	-19.91	-20.22	-19.81	-17.78
Θ(165°)	-18.13	-19.07	-19.88	-19.87	-19.35	-19.71	-19.37	-19.63	-18.79	-19.86	-19.15	-19.4	-15.87	-19.09	-16.32	-15.47	-19.4	-19.5	-18.17	-19.7	-19.84	-18.96	-20.2	-18.85
Θ(180°)	-20	-19.38	-19.26	-19.8	-20.04	-19.27	-19.34	-19.82	-19.53	-19.81	-19.05	-19.65	-19.08	-19.48	-19.01	-19.49	-19.62	-19.32	-19.94	-18.89	-18.95	-19.37	-19.65	-19.1
Freq(Hz)	5.785G	Pol.	Theta	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-9.85	-10.16	-9.95	-12.7	-18.75	-19.41	-18.44	-14.21	-8.97	-9.13	-6.19	-6.14	-6.87	-7.69	-8.6	-12.49	-18.7	-19.35	-18.68	-17.41	-14.53	-10.67	-8.63	-9.91
Θ(15°)	-20.11	-19.72	-17.27	-13.11	-13.92	-15.73	-12.54	-20.19	-17.69	-13.55	-10.89	-9.31	-11.59	-7.34	-4.95	-6.56	-8.86	-10.08	-11.56	-11.91	-16.58	-18.98	-13.77	-17.76
Θ(30°)	-19.21	-19.88	-13.45	-17.2	-19.26	-12.84	-12.7	-18.75	-19.9	-9.47	-11.08	-11.1	-9.44	-7.82	-10.85	-10.21	-11.95	-11.91	-18.48	-15.85	-13.28	-15.71	-19.96	-13.53
Θ(45°)	-15.62	-14.5	-12.2	-17.13	-15.28	-15.48	-19.77	-18.87	-13.35	-19.42	-19.47	-16.18	-9.64	-11.8	-10.67	-9.11	-9.09	-5.7	-19.57	-13.33	-19.93	-9.28	-6.22	-11.23
Θ(60°)	-13.89	-19.49	-18.55	-12.7	-17.35	-18.8	-18.21	-18.4	-12.15	-19.77	-17.34	-15.57	-19.88	-14.13	-18.18	-15.01	-13.34	-18.72	-18.92	-15.39	-19.21	-18.86	-14.38	-14.38
Θ(75°)	-19.49	-19.34	-18.84	-19.6	-17.87	-20.63	-20.02	-20.04	-19.48	-18.5	-18.04	-14.6	-19.04	-20.24	-16.78	-17.95	-19.22	-19.54	-19.24	-19.41	-18.51	-18.88	-19.51	-18.96
Θ(90°)	-19.22	-19.42	-19.86	-20.02	-19	-18.34	-19.93	-16.38	-19.23	-17.68	-19.03	-17.08	-19.88	-18.84	-14.7	-19.76	-19.04	-19.92	-19.41	-19.96	-16.66	-18.88	-18.95	-19.17
Θ(105°)	-19.24	-20.11	-18.6	-19.14	-19.35	-18.66	-19.58	-17.52	-18.96	-19.18	-19.13	-19.55	-19.73	-19.48	-18.54	-19.28	-19.09	-18.61	-19.24	-19.96	-18.99	-19.02	-20.21	-18.81
Θ(120°)	-19.86	-20.3	-20.23	-16.71	-19.34	-19.37	-18.99	-19.08	-18.96	-19.69	-19.4	-20.17	-19.45	-20.07	-17.4	-19.04	-20.15	-19.87	-19.24	-18.65	-19.16	-19.84	-20.02	-19.05
Θ(135°)	-20.06	-18.04	-19.64	-19	-20	-18.89	-18.96	-19.92	-19.6	-20.29	-19.37	-19.56	-18.76	-18.25	-20.34	-20.33	-14.45	-19.76	-19.04	-19.94	-18.8	-19.4	-17.49	-20.31
Θ(150°)	-19.91	-19.51	-18.15	-18.99	-19.63	-18.9	-20.25	-19.4	-19.27	-19.71	-20.01	-18.85	-19.81	-19.37	-18.7	-18.61	-19.94	-18.85	-18.48	-19.35	-17.33	-18.3	-18.67	-20.24
Θ(165°)	-19.37	-19.28	-18.67	-19.43	-19.67	-20.44	-20.27	-17.82	-20.27	-18.75	-19.74	-16.73	-17.83	-15.94	-19.62	-16.73	-18.44	-19.46	-19.76	-16	-20.1	-18.73	-19.2	-17.6
Θ(180°)	-19.07	-20.01	-19.38	-18.82	-19.92	-19.67	-19.84	-19.59	-19.42	-19.96	-19.61	-19.58	-19.68	-19.81	-19.81	-18.82	-20.25	-19.19	-19.35	-19.91	-19.26	-19	-19.4	-19.96
Freq(Hz)	2.45G	Pol.	Phi	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(15°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(30°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(45°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(60°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(75°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(90°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(105°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(120°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(135°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(150°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(165°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
Θ(180°)	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf		



Θ(135°)	-11.18	-10.87	-12.05	-15.34	-10.91	-10.48	-6.37	-8.66	-11.84	-13.13	-17.57	-20.33	-13.22	-16.84	-19.32	-18.85	-19.93	-15.82	-19.04	-18.46	-17.49	-20.28	-17.21	-13.43
Θ(150°)	-15.93	-17.51	-20	-18.76	-13.95	-12.45	-15.87	-14.39	-16.57	-19.81	-15.72	-19.88	-19.98	-20.18	-20.45	-20.31	-19.53	-19.44	-20.05	-19.31	-19.49	-17.7	-18.92	-18.02
Θ(165°)	-19.81	-19.71	-19.25	-19.73	-19.66	-18.43	-19.21	-18.56	-19.37	-19.68	-17.98	-19.4	-19.63	-19.62	-19.52	-18.84	-20.03	-19.15	-20.41	-18.25	-19.2	-19.52	-19.27	-18.79
Θ(180°)	-19.53	-19.43	-20.25	-18.22	-19.5	-19.81	-19.93	-20.13	-19.89	-20.35	-19.71	-18.94	-19.72	-19.65	-18.92	-18.6	-17.14	-19.36	-19.88	-19.35	-20.2	-19.68	-19.13	-19.57
Freq(Hz)	5.3G	Pol.	Theta	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.31	-6.86	-6.9	-9.13	-10.22	-11.2	-19.25	-19.8	-14.11	-8.75	-6.73	-5.76	-5	-3.89	-4.76	-5.02	-7.2	-15.9	-18.71	-18.9	-12.62	-9.62	-7.15	-7.03
Θ(15°)	-7.04	-6.95	-5.38	-3.96	-4.61	-8.01	-11.47	-18.5	-8.68	-9.77	-7.89	-5.63	-5.08	-7.38	-11.63	-14.11	-15.16	-18.38	-19.23	-19.61	-14.6	-9.91	-9.65	-6.98
Θ(30°)	-8.85	-5.72	-3.94	-4.34	-5.71	-7.82	-12.04	-12.41	-18.32	-10.46	-10.16	-6.72	-8.28	-10.32	-9.4	-5.41	-10.93	-14.51	-14.49	-12.25	-9.46	-17.15	-8.07	-10.38
Θ(45°)	-9.57	-8.52	-5.38	-7.59	-15.75	-14.98	-19.79	-18.96	-18.9	-13.29	-15.58	-15.15	-7.04	-10.94	-7.42	-16.64	-14.25	-10.24	-13.83	-14.94	-12.32	-13.48	-6.26	-11.68
Θ(60°)	-13.23	-19.09	-13.81	-16.26	-19.67	-13.36	-12.01	-18.93	-18.27	-17.61	-10.41	-15.8	-8.45	-11.23	-9.59	-11.24	-12.91	-15.13	-13.54	-19.57	-15.91	-16.72	-19.72	-11.4
Θ(75°)	-20.26	-15.56	-13.08	-13.29	-18.07	-16.09	-14.2	-15.77	-20.37	-19.23	-10.35	-13.05	-11.63	-10.54	-12.59	-14.81	-19.38	-19.75	-20.02	-18.7	-20.17	-19.48	-12.59	-14.66
Θ(90°)	-19.09	-15.93	-11.95	-13.58	-20.26	-19.78	-16.43	-20	-19.06	-20.02	-13.86	-12.61	-15.1	-14.56	-13.63	-18.92	-20.18	-20.21	-20.25	-19.9	-18.93	-18.84	-15.42	-18.87
Θ(105°)	-19.91	-14.76	-14.21	-15.99	-19.34	-16.42	-20.44	-19.54	-20.26	-19.96	-15.02	-11.23	-12.64	-14.68	-13.64	-19.08	-19.59	-18.37	-20.14	-19.63	-19.91	-19.74	-14.78	-16.2
Θ(120°)	-20.04	-20.13	-19.75	-19.18	-19.31	-15.31	-19.2	-18.17	-19.94	-19.45	-20.06	-16.2	-16	-19.39	-19.51	-17.5	-18.59	-19.96	-19.89	-19.96	-20.15	-16.59	-18.58	-19.93
Θ(135°)	-17.66	-13.82	-17.21	-19.69	-14.92	-15.85	-19.53	-19.19	-19.07	-19.69	-18.91	-19.66	-19.33	-15.21	-14.01	-18.85	-18.28	-18.87	-19.71	-19.84	-19.6	-19.73	-19.21	-18.35
Θ(150°)	-13.92	-17.7	-19.24	-18.32	-20.33	-20.01	-19.77	-19.86	-19.65	-19.86	-19.94	-19.34	-19.16	-19	-18.98	-16.93	-19.91	-19.52	-20.15	-18.85	-17.68	-17.01	-14.22	-19.04
Θ(165°)	-19.93	-19.31	-19.57	-19.52	-18.86	-19.58	-19.82	-19.48	-16.99	-18.81	-19.05	-18.83	-19.6	-19.5	-15.61	-19.09	-19.42	-18.6	-20.36	-18.31	-19.5	-18.31	-17.74	-18.92
Θ(180°)	-18.39	-18.78	-19.65	-19.57	-19.36	-20.14	-19.29	-20.01	-19.54	-20.49	-19.93	-18.11	-20.22	-18.25	-19.21	-17.69	-19.36	-19.29	-19.62	-19.54	-19.92	-19.93	-19.22	-19.77
Freq(Hz)	5.6G	Pol.	Phi	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-18.13	-18.96	-12.71	-8.85	-6.8	-4.79	-4.81	-3.93	-4.71	-6.17	-8.57	-12.52	-20.01	-19.82	-12.19	-8.57	-6.28	-4.64	-5.72	-5.39	-5.96	-5.7	-8.35	-12.85
Θ(15°)	-3.75	-6.12	-11.11	-14.82	-7.88	-5.55	-5.23	-4.49	-4.1	-7.83	-8.21	-6.15	-8.15	-4.9	-2.38	-2.35	-2.82	-2.73	-2.58	-3.83	-5.4	-5.59	-5.06	-3.74
Θ(30°)	-1.15	-2.3	-2	-2.2	-2.69	-1.16	-0.46	-1.26	-0.74	-1.21	-2.07	-2.5	-4	-1.44	-3.1	-2.93	-0.54	-1.56	-1.78	-4.76	-2.15	-3.56	-5.82	0.04
Θ(45°)	-3.2	-5.35	-4.33	-9.05	-10.08	-3.41	-1.42	-2.98	-1.21	-1.86	-3.56	-1.51	0.07	0.28	0.39	-0.35	-7.11	-4.33	-1	-1.16	-6.23	-7.88	-1.43	-0.19
Θ(60°)	-1.09	-2.25	-3.34	-5.07	-2.12	-0.59	1.32	-1.53	-1.13	-1.28	-2.63	-1.48	-1.43	-3.76	-4	-1.55	-3.32	-1.22	-1.72	-5.7	-9.09	-8.32	-4.17	-0.89
Θ(75°)	-0.82	-0.97	-0.61	-1.64	-0.64	-0.09	2.19	0.37	0.67	-0.67	-0.21	1.46	-1.36	-6.63	-0.13	-2.87	-2.77	-4.51	-3.6	-8.2	-9.69	-5.8	-4.86	-1.28
Θ(90°)	-2.92	-3.3	-1.14	-2.52	-1.59	-1.62	-0.02	-2.12	0.34	-0.73	-0.79	0.92	-1.92	-8.45	-4.54	-6.97	-3.28	-3.47	-4.01	-8.83	-11.33	-8.16	-8.46	-5.25
Θ(105°)	-6.48	-5.44	-4.55	-5.5	-4.92	-4.4	-2.79	-3.59	-1.9	-2.99	-3.77	-2.3	-4.08	-15.36	-9.73	-12.72	-8.66	-10.06	-10.27	-11.99	-14.43	-16.28	-14.5	-8.83
Θ(120°)	-19.94	-8.25	-8.28	-8.44	-7.94	-7.8	-5.31	-8.3	-5.23	-7.83	-9.48	-7.98	-7.67	-13.96	-17.54	-17.72	-12.08	-10.14	-19.74	-14.99	-19.1	-19.24	-14.8	-14.03
Θ(135°)	-9.83	-10.06	-13.59	-11.02	-13.42	-11.18	-8.31	-11.53	-9.75	-11.16	-16.65	-20.2	-12.15	-13.08	-20.02	-18.15	-16.21	-18.39	-18.7	-18.9	-18.1	-18.97	-16.87	-14.34
Θ(150°)	-15.88	-15.45	-19.65	-18.91	-15.66	-17.24	-13.85	-15.77	-17.1	-17.73	-19.22	-19.4	-19.27	-15.72	-19.22	-19.56	-20.18	-19.26	-20.01	-20.51	-19.37	-19.81	-19.04	-19.44
Θ(165°)	-18.94	-19.74	-19.4	-19.12	-15.98	-15.75	-20.39	-19.2	-19.94	-19.87	-18.52	-19.08	-19.97	-19.07	-20.33	-18.91	-19.97	-19.33	-19.78	-18.89	-18.68	-18.28	-19.56	-19.8
Θ(180°)	-18.67	-20.18	-18.28	-19.46	-17.17	-18.24	-20.15	-17.41	-18.86	-19.72	-19.29	-18.73	-19	-20.21	-18.84	-19.12	-17.8	-16.56	-18.8	-17.49	-19.1	-19.06	-18.49	-19.76
Freq(Hz)	5.6G	Pol.	Theta	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.32	-4.63	-5.34	-6.83	-9.47	-14.1	-18.48	-19.07	-10.74	-8.06	-5.92	-5.06	-3.92	-3.44	-5.46	-6.14	-8.16	-12.27	-20.17	-19.24	-11.86	-8.72	-5.52	-5.06
Θ(15°)	-11.51	-11.15	-9.1	-8.44	-9	-11.74	-15.8	-16.29	-10.85	-6.23	-6.53	-8.64	-5.03	-5.43	-13	-15.94	-18.29	-18.86	-18.38	-20.41	-15.06	-10.6	-8.87	-8.82
Θ(30°)	-7.85	-4.91	-4.32	-4.42	-9.26	-19.51	-13.3	-10.57	-17.79	-13.73	-15.64	-8.16	-7.68	-9.05	-9.01	-7.49	-14.41	-18.28	-19.73	-10.49	-15.8	-12.2	-13.44	-6.95
Θ(45°)	-16.59	-11.33	-6.8	-13.54	-17.36	-12.49	-18	-19.48	-19.83	-13.57	-7.79	-10.85	-11.28	-11.42	-9.53	-16.99	-18.72	-13.42	-16.21	-19.16	-12.94	-10.54	-11.77	-19.86
Θ(60°)	-19.79	-16.13	-17.55	-19.73	-11.48	-17.47	-11.33	-19.08	-15.93	-16.27	-8.22	-9.92	-9.91	-11.39	-11.27	-12.23	-12.02	-16.6	-9.98	-19.61	-12.91	-14.33	-13.38	-19.41
Θ(75°)	-14.18	-19.06	-19.72	-15.97	-19.28	-15.29	-16.78	-20.53	-15.91	-18.57	-8.27	-10.78	-13.05	-12.22	-14.75	-11.61	-18.74	-19.75	-16.65	-19.69	-17.02	-18.61	-11.98	-17.35
Θ(90°)	-16.6	-16.73	-18.82	-17.07	-19.49	-19.91	-19.94	-19.79	-16.68	-19.26	-12.86	-12.78	-12.89	-19.46	-19.83	-17.21	-18.07	-20.24	-19.71	-19.69	-17.03	-18.92	-17.32	-16.48
Θ(105°)	-17.75	-15.62	-20.36	-18.2	-19.17	-19.72	-19.86	-19.98	-19.25	-20.07	-17.07	-13.39	-13.68	-19.59	-17.75	-19.56	-18.93	-20.18	-19.77	-20.04	-18.99	-19.82	-20.55	-19.63
Θ(120°)	-16.19	-18.96	-18.98	-15.3	-18.79	-19.93	-19.37	-18.52	-18.47	-19.75	-18.49	-15.35	-17.13	-19.12	-19.39	-17.5	-19.07	-19.59	-17.62	-19.81	-18.46	-17.84	-19.93	-19.12
Θ(135°)	-18.09	-14.41	-20.73	-16.75	-18.78	-17.73	-18.53	-20.23	-19.78	-19.49	-17.87	-19.75	-18.91	-19.03	-15.41	-19.4	-19.69	-19.26	-19.73	-19.19	-19.37	-18.98	-20.04	-19.87
Θ(150°)	-16.75	-20.5	-19.21	-16.99	-19.57	-19.53	-19.47	-18.97	-19.56	-20.85	-18.61	-19.83	-16.54	-19.54	-18.76	-17.56	-19.13	-19.39	-16.11	-19.59	-18.82	-17.53	-20.26	-18.24
Θ(165°)	-18.95	-19.5	-20.02	-20.26	-19.67	-19.29	-19.44	-19.34	-19	-20.33	-20.25	-18.62	-20.48	-19.42	-17.61	-19.15	-19.75	-18.67	-19.16	-19.23	-19.7	-19.16	-17.47	-20.04
Θ(180°)	-18.42	-19.91	-20.56	-19.94	-18.89	-19.41	-19.44	-20.02	-19.93	-20.17	-20.23	-18.98	-19.78	-20.15	-19.76	-18.86	-19.14	-18.83	-19.12	-19.56	-20.18	-19.09	-17.74	-19.38
Freq(Hz)	5.785G	Pol.	Phi	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.75	-18.36	-10.51	-6.54	-4.1	-2.88</																		



Freq(Hz)	2.45G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	4.51	3.82	3.6
Ant. 2 Max Gain (dBi)	4.97	3.79	2.99
Ant. 3 Max Gain (dBi)	4.66	4.38	3.52
Ant. 4 Max Gain (dBi)	5.95	4.19	3.36
Ant. 1 Polarization/Θ(°)/Φ(°)	Phi/45/0	Theta/45/330	Theta/45/330
Ant. 2 Polarization/Θ(°)/Φ(°)	Phi/45/0	Theta/30/15	Theta/30/120
Ant. 3 Polarization/Θ(°)/Φ(°)	Phi/45/180	Theta/30/45	Theta/30/75
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/45/180	Theta/30/270	Theta/30/45
Max Gain (dBi)	5.95	4.38	3.6
DG [1SS] (dBi)	9.91	8.67	8.15
DG [2SS] (dBi)	6.91	5.67	5.15
DG [4SS] (dBi)	3.96	2.75	2.27



DG 1SS Result

Freq(Hz)	2.45G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.49	-5.22	-6.21	-7.13	-6.86	-6.8	-6.28	-5.77	-5.32	-4.74	-4.12	-4.24	-4.64	-4.4	-5.7	-7.66	-8.52	-7.34	-6.22	-4.75	-3.99	-3.04	-2.75	-2.41
Θ(15°)	3.26	3.07	2.82	2.49	2.23	2.14	2.15	2.07	2.13	2.36	3.15	3.93	4.62	4.2	3.03	1.89	1.28	1.55	1.96	1.98	1.79	1.74	1.63	1.46
Θ(30°)	8.02	6.87	5.43	4.54	5.11	6.13	6.58	6.2	5.69	5.43	6.06	7.15	7.89	7.74	6.93	5.72	5.37	6.04	6.68	6.45	5.48	5.22	6.44	7.22
Θ(45°)	9.91	8.86	6.75	5.35	6.88	8.57	8.99	8.14	7.16	6.83	7.95	9.27	9.76	8.97	7.4	6.07	6.13	7.3	8.32	8	6.67	5.92	7.78	9.48
Θ(60°)	8.89	8.01	5.79	4.58	6.37	8.01	8.52	7.84	6.46	6.25	7.3	8.48	9.16	8.23	6.11	4.78	5.02	6.9	8.51	7.79	5.81	5.11	7.11	8.93
Θ(75°)	6.21	5.04	3.07	2.19	3.88	5.64	6.62	6.17	4.15	3.3	4.29	4.56	5.43	4.53	2.33	1.44	2.8	5.22	7.4	5.89	3.9	3.02	4.87	6.67
Θ(90°)	1.57	0.05	-0.78	-1.21	0.18	2	3.73	3.35	1.5	0.17	0.76	0.15	1.16	1.2	-1.03	-1.97	-0.35	2.02	4.52	2.68	1.49	0.24	1.7	3.42
Θ(105°)	-1.79	-3.01	-4.94	-5.13	-2.6	-1.94	-0.17	-0.85	-1.29	-3.3	-4.06	-4.54	-3.38	-3.32	-6.98	-5.91	-4.55	-1.29	0.09	-0.86	-2.58	-3.14	-1.99	-1.33
Θ(120°)	-6.45	-5.88	-7.58	-9.94	-6.11	-4.4	-3.64	-4.36	-4	-6.2	-6.65	-5.57	-6.07	-7.76	-10.36	-9.68	-8.65	-5.59	-5.97	-4.82	-5.86	-6.73	-6.14	-6.65
Θ(135°)	-8.82	-9.82	-10.54	-12.28	-9.87	-7.11	-6.32	-6.61	-7.53	-8.84	-8.99	-8.63	-9.79	-10.67	-11.95	-11.83	-10.64	-9.71	-10.28	-9.85	-8.94	-9.11	-10.22	-10.7
Θ(150°)	-9.19	-10.04	-12.57	-13.31	-9.78	-6.54	-6.94	-8.63	-10.27	-11.15	-8.77	-10.17	-12.16	-12.27	-12.31	-12.19	-11.27	-9.76	-10.53	-12.07	-12.45	-12.95	-12.1	-11.77
Θ(165°)	-12.08	-12.23	-12.4	-11.85	-10.09	-9.28	-10.63	-12.92	-12.84	-12.58	-13.45	-12.41	-12.59	-12.59	-13.48	-12.06	-12.93	-13.71	-14.11	-12.82	-12.8	-13.11	-12.67	-12.47
Θ(180°)	-13.18	-13.82	-13.22	-13.06	-13.28	-12.26	-11.65	-12.03	-12.68	-13.35	-13.13	-12.88	-13.38	-12.81	-12.27	-12.14	-12.67	-13.25	-13.38	-12.66	-12.59	-13.49	-12.92	-13.28
Freq(Hz)	2.45G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.63	-5	-4.99	-4.82	-4.21	-4.15	-3.43	-4.25	-5.74	-6.78	-7.27	-7.42	-6.58	-5.11	-4.06	-3.63	-3.27	-3.23	-3.67	-4.68	-6.59	-9.05	-8.48	-6.53
Θ(15°)	-6.42	-5.85	-6.05	-5.95	-4.37	-3.58	-3.8	-4.78	-6.13	-8.74	-10.47	-8.72	-6.73	-4.95	-3.72	-3.14	-2.86	-3.12	-3.79	-5.72	-7.6	-9.66	-9.31	-7.5
Θ(30°)	-6.73	-5.75	-6.53	-7.03	-5.95	-5.19	-4.7	-4.87	-5.49	-8.27	-10.58	-9.13	-8.29	-8.6	-9.93	-8.67	-5.49	-4.64	-5.37	-6.79	-8.42	-8.12	-9.81	-9.54
Θ(45°)	-5.56	-8.17	-9.35	-7.04	-7.2	-7.78	-8.22	-8.67	-9.57	-8.94	-7.94	-8.06	-8.48	-5.97	-5.83	-9.53	-8.07	-5.91	-7.73	-8.1	-9.61	-10.01	-8.97	-7.19
Θ(60°)	-6.14	-9.56	-11.22	-8.83	-10.26	-9.33	-9.9	-9.26	-11.92	-9.09	-10.55	-10.54	-9.08	-5.94	-5.58	-9.45	-10.42	-6.95	-7.89	-7.52	-12.72	-10.65	-9.68	-8.07
Θ(75°)	-7.86	-11.72	-13.53	-11.85	-11.58	-10.55	-11.24	-10.91	-12.57	-11.63	-12.96	-13.4	-13.05	-10.64	-11.25	-12.4	-12	-9.43	-9.73	-8.64	-12.99	-9.88	-9.74	-9.1
Θ(90°)	-11.1	-11.55	-12.88	-13.42	-12.56	-11.69	-11.83	-12.14	-13.72	-13	-13.52	-13.32	-12.68	-11.72	-13.99	-12.93	-13.48	-12.65	-10.38	-12.26	-13.07	-11.85	-11.25	-10.85
Θ(105°)	-12.47	-11.96	-13.65	-13.37	-13.59	-12.54	-13.54	-13.5	-13.07	-13.46	-13.13	-13.01	-12.9	-12.7	-13.22	-13.04	-13.09	-13.46	-12.14	-13.77	-11.51	-12.18	-13.47	-12.72
Θ(120°)	-10.62	-11.87	-13.61	-12.65	-13.43	-13.6	-13.51	-13.04	-13.01	-13.22	-13.14	-12.1	-12.99	-11.49	-12.52	-13.13	-12.86	-13.1	-12.02	-12.73	-11.92	-13.8	-13.07	-12.52
Θ(135°)	-12.11	-10.62	-11.68	-12.27	-11.93	-13.24	-12.81	-12.91	-12.97	-13.72	-12.37	-13.22	-13.23	-13.74	-12.63	-12.85	-13.52	-12.8	-12.67	-13.56	-12.69	-12.81	-13.49	-13.31
Θ(150°)	-12.62	-13.29	-13.28	-13.67	-12.36	-11.75	-13.17	-12.41	-13.07	-13.06	-13.6	-13.06	-12.59	-11.54	-13.22	-13.61	-12.79	-12.36	-13.27	-13.12	-11.62	-12.87	-11.68	-12.86
Θ(165°)	-13.09	-13.37	-12.81	-13.04	-12.99	-13.08	-13.11	-12.86	-12.73	-13.75	-13.06	-12.08	-12.15	-12.25	-12.97	-13.6	-13.32	-13.93	-13.29	-13.41	-13.29	-13.2	-12.59	-13.49
Θ(180°)	-12.27	-11.18	-10.91	-12.34	-13.29	-13.28	-13.55	-13.32	-13.16	-12.44	-12.49	-12.08	-11.86	-12.65	-12.7	-13.7	-13.31	-13.23	-13.75	-14.05	-13.11	-11.99	-12.16	-13.12
Freq(Hz)	5.6G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.92	-2.87	-3.71	-4.45	-5.42	-5.53	-3.97	-1.49	-0.6	-0.43	-0.76	-1.11	-0.67	-0.5	-0.48	-1.02	-3.11	-3.27	-4.47	-2.63	-0.86	0.68	0.74	0.23
Θ(15°)	-2.61	-3.95	-7.53	-5.25	-3.01	-4.64	-3.55	-1.6	-1.07	-1.21	-1.24	-0.36	-2.74	-3.03	-2.67	-3.14	-4.4	-3.4	-1.51	-1.73	-0.55	0.41	-0.97	-1.05
Θ(30°)	-2.33	-5.34	-6.76	-5.17	-11.77	-3.4	-3.63	-2.57	-1.51	-0.89	-0.58	-2.53	-1.59	-4.23	-0.37	-2.61	-2.88	-2.44	-0.81	-1.94	-5.1	0.56	-1.49	-2.2
Θ(45°)	-5.92	-3.81	-6.07	-12.09	-8.87	-7.63	-6.59	-6.88	-0.8	-5.22	-4.01	-5.29	-3.48	-3.9	-2.63	-3.19	-1.4	-2.08	-2.06	-1.15	-2.04	-2.92	-3.14	-2.94
Θ(60°)	-4.6	-2.51	-6.13	-8.15	-9.8	-7.39	-4.35	-4.84	-6.07	-4.28	-4.98	-8.75	-5.36	-6.24	-4.51	-4.24	-6.56	-4.94	-2.19	-3.11	-2.65	-4.1	-3.75	-2.32
Θ(75°)	-5.15	-2.6	-6.31	-9.91	-8.21	-5.49	-3.59	-4.95	-2.22	-2.33	-1.94	-6.26	-3.61	-2.27	-5.39	-4.23	-3.26	-2.16	0.65	-1.95	-2.75	-2.37	-2.8	-6.05
Θ(90°)	-5.62	-3.84	-6.65	-10.84	-8.18	-3.97	-5.61	-5.88	-4.38	-5.23	-4.13	-7.16	-5.02	-4.32	-8.04	-5.52	-3.56	-3.28	-0.25	-1.86	-1.89	-2.36	-3.37	-7.83
Θ(105°)	-9.11	-6.11	-9.22	-12.42	-11.54	-6.55	-7.81	-7	-6.91	-6.31	-9	-8.67	-7.74	-6.97	-9.07	-9.62	-10.25	-8.82	-8.24	-6.41	-4.52	-5.81	-6.51	-8.05
Θ(120°)	-10.56	-7.96	-10.08	-13.25	-11.95	-11.32	-9.44	-10.51	-8.45	-9.65	-10.94	-12.86	-9.7	-9.39	-10	-9.15	-11.6	-11.52	-8.5	-6.68	-7.88	-7.11	-10.02	-9.27
Θ(135°)	-10.76	-11.1	-9.53	-11.82	-11.32	-10.43	-12.45	-11.51	-10.6	-11.85	-10.88	-11.27	-11.78	-9.27	-12.48	-11.15	-13.31	-10.76	-10.99	-9.27	-10.15	-9.58	-10.96	-10.64
Θ(150°)	-11.73	-13	-12.49	-11.54	-11.47	-11.62	-13.15	-11.35	-13.05	-11.57	-12.29	-11.66	-11.48	-12.68	-12.34	-11.42	-12.38	-12.21	-13.11	-9.57	-12.88	-11.47	-11.12	-10.15
Θ(165°)	-13.91	-11.29	-12.79	-12.66	-12.74	-13.14	-12.35	-12.6	-13.54	-12.81	-13.36	-13.25	-13.04	-11.13	-11.87	-12.88	-11.82	-12.53	-13.15	-11.94	-9.25	-9.97	-10.37	-10.45
Θ(180°)	-11.86	-12.03	-12.19	-12.45	-12.58	-13.36	-13.41	-13.73	-12.94	-12.89	-13.01	-12.02	-13.08	-11.7	-11.26	-10.74	-11.48	-10.41	-11.04	-11.81	-11.64	-11	-10.58	-12.28
Freq(Hz)	5.6G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-3.49	-2.41	-1.57	-1.74	-0.72	-0.77	-0.93	-0.97	-1.56	-2.75	-3.67	-3.36	-1.91	-1.18	-1.13	-0.91	-1.13	-0.57	-1.73	-1.49	-2.07	-1.99	-3.59	-4.59
Θ(15°)	4.97	4.55	4.24	2.96	3.15	3.17	2.93	2.6	2.36	1.48	1.07	2.62	3.49	3.3	3.23	4.39	5.28	5.15	4.29	3.04	2.85	1.93	2.59	4.12
Θ(30°)	7.5	8.1	7.92	8.67	7.39	7.58	8.61	8.16	7.84	7.44	7.25	6.17	6.04	6.19	6.52	6.95	5.85	5.4	6.22	6.46	5.55	6.71	7	7.58
Θ(45°)	6	6.14	8.28	6.43	6.23	6.55	6.9	7.1	6.33	5.76	6.08	5.11	4.85	7.52	6.69	5.44	3.7	2.95	4.54	5.3	5.65	5.82	7.23	8.18
Θ(60°)	-4.64	-2.09	2.32	0.73	0.31	-1.8	-2.97	-0.01	1.92	0.41	-2.7	1.14	-2.24	2.9	1.87	-0.79	-1.39	-2.46	-1.06	1.38	2.26	0.99	2.43	2.98
Θ(75°)	0.32	-0.57	1.32	-1.77	-5.22	-2.97	-3.51	-2.95	-5.85	-0.82	-1.39	-3.37	-1.52	-0.33	-0.67	-4.69	-5.14	-3.95	-3.23</					



Θ(180°)	-10.18	-10.16	-8.94	-10.63	-12.3	-11.92	-12.38	-13.18	-13.62	-12.65	-11.94	-11.59	-10.12	-9.65	-10.89	-12.57	-12.33	-11.55	-11.78	-10.88	-9.01	-7.96	-8.14	-10.95
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Gain Result

Freq(Hz)	2.45G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-8.81	-9.33	-10.63	-12.53	-15.91	-18.41	-19.31	-15.04	-12.22	-10.17	-8.44	-8.23	-8.53	-9.2	-11.09	-13.99	-17.81	-18.33	-16.72	-13.74	-11.98	-10.33	-9.72	-9.68
Θ(15°)	-2.16	-2.32	-2.47	-2.69	-2.91	-3.34	-3.67	-4.2	-4.47	-4.96	-5.18	-5.43	-5.14	-5.16	-5.3	-5.41	-4.89	-3.74	-2.76	-2.27	-2.21	-2.17	-2.55	-2.84
Θ(30°)	2.29	1.1	-0.37	-0.74	-0.25	0.43	1.06	0.97	0.04	-1.5	-2.17	-1.37	-0.13	0.43	-0.46	-2.06	-1.69	-0.03	1.53	2.04	1.9	1.8	2.14	2.16
Θ(45°)	4.51	3.5	0.22	-1.97	0.33	2.03	2.59	2.67	1.99	0.86	1.85	2.64	2.69	2.18	0.74	-1.85	-1.49	1.52	3.67	3.29	2	1.1	2.28	3.67
Θ(60°)	4.28	3.47	-0.41	-3.23	-0.58	0.47	0.64	1.59	1.06	0.55	2.11	2.95	1.95	0.59	-0.03	-1.5	-1.19	2.05	4.1	2.82	-0.85	-2.64	-0.08	3.33
Θ(75°)	2.22	1.47	-2.88	-5.56	-2.99	-1.75	-0.7	0.49	-2.13	-3.05	-1.14	-0.65	-1.36	-3.36	-2.85	-3.57	-2.1	1.23	3.07	0.78	-4.57	-7.33	-2.95	1.17
Θ(90°)	-1.38	-1.97	-6.74	-9.58	-8.22	-7.44	-4.05	-3.25	-7.56	-7.1	-6.77	-6.6	-5.75	-8.46	-7.14	-5.68	-3.27	-1.15	0.6	-2.27	-8.54	-10.24	-6.28	-1.74
Θ(105°)	-4.83	-6.58	-12.28	-14.91	-10.68	-11.13	-6.77	-7.71	-13.08	-10.89	-12.86	-11.57	-9.13	-11.41	-12.24	-10.78	-6.91	-5.16	-3.34	-5.75	-11.83	-10.71	-8.29	-5.29
Θ(120°)	-9.08	-10.59	-14.28	-19.47	-12.46	-12.48	-10.47	-16.77	-16.05	-15.94	-19.46	-13.67	-12.1	-14.67	-15.89	-16.22	-10.4	-10.36	-11.45	-9.15	-11.76	-14.1	-12.66	-9.63
Θ(135°)	-13.34	-13.97	-17.25	-18.99	-19.4	-14.7	-12.59	-17.97	-19.77	-17.03	-15.03	-15.36	-16.95	-20.43	-19.71	-16.47	-14.45	-15.18	-18.87	-16.48	-15.01	-15.59	-15.91	-14.16
Θ(150°)	-14.11	-15.25	-19.4	-19.35	-19.89	-16.88	-12.91	-11.94	-14.77	-17.93	-16.85	-17.18	-19.89	-19.09	-19.4	-15.51	-12.41	-12.1	-13.84	-17.01	-18.76	-18.37	-18.94	-18.98
Θ(165°)	-14.96	-15.28	-16.54	-18.83	-20.21	-19.63	-19.81	-19.4	-18.81	-19.34	-19.89	-19.06	-19.36	-18.88	-19.07	-18.65	-19.01	-20.7	-20.61	-17.99	-18.02	-17.59	-17.27	-16.35
Θ(180°)	-19.46	-19.91	-18.41	-18.72	-19.65	-18.81	-19.11	-19.94	-19.96	-19.27	-18.78	-19.24	-19.67	-19.47	-18.13	-18.13	-19.19	-19.61	-19.36	-18.43	-19.92	-19.38	-18.85	-19.87
Freq(Hz)	2.45G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.49	-14.11	-12.77	-10.84	-9.34	-8.92	-8.09	-9.46	-10.51	-13.6	-17.48	-19.02	-17.7	-12.91	-10.35	-8.92	-7.79	-7.83	-8.4	-8.65	-10.24	-12.6	-16.08	-17.15
Θ(15°)	-19.92	-20	-19.9	-18.94	-15.98	-13.39	-11.47	-10.82	-11.28	-14.21	-19.37	-16.45	-10.88	-9.97	-10.06	-10.36	-10.09	-9.96	-9.89	-12.07	-15.16	-19.63	-18.95	-19.85
Θ(30°)	-13.97	-12.62	-14.39	-18.81	-19.72	-19.46	-12.99	-10.57	-11.74	-15.77	-19.09	-15.92	-12.17	-14.17	-20.11	-20.68	-14.59	-12.05	-11.8	-14.45	-19.06	-18.74	-15.26	-14.25
Θ(45°)	-9.9	-13.58	-15.71	-18.14	-18.19	-16.08	-14.35	-13.31	-16.78	-19.03	-16.23	-18.59	-18.83	-15.34	-12.92	-14.33	-18	-14.89	-18.38	-18.59	-18.26	-17.49	-11.34	-8.79
Θ(60°)	-14.94	-18.57	-17.87	-19.26	-19.94	-19.87	-18.99	-16.91	-18.39	-19.86	-18.92	-19	-16.61	-11.35	-11.16	-13.93	-18.53	-20.18	-19.36	-19.01	-19.34	-20.08	-11.33	-11.18
Θ(75°)	-19.13	-19.83	-19.78	-19.75	-18.78	-19.64	-18.43	-19.33	-18.4	-18.5	-18.55	-19.52	-19.39	-18.39	-16.43	-17.24	-19.04	-19.09	-17.01	-17.96	-20.33	-19.28	-11.2	-13.14
Θ(90°)	-19.67	-18.53	-18.83	-19.59	-19.91	-20.13	-19.41	-19.87	-19.57	-19.76	-19.36	-18.37	-19.81	-19.52	-19.97	-17.74	-19.23	-19.66	-15.68	-19.06	-19.7	-19.89	-13.91	-18.27
Θ(105°)	-19.52	-19.51	-19.36	-19.43	-18.34	-19.96	-20.21	-20.04	-18.71	-18.51	-19.46	-18.47	-19.99	-19.36	-19.36	-20.35	-19.1	-18.74	-15.36	-20.66	-18.97	-18.96	-19.92	-19.91
Θ(120°)	-18.6	-18.72	-18.87	-20.07	-18.67	-20.13	-19.74	-19.08	-19.32	-19.28	-20.12	-19.22	-18.01	-18.97	-18.9	-20.13	-19.09	-19.84	-15.3	-17.2	-19.88	-19.6	-19.74	-19.21
Θ(135°)	-18.78	-19.29	-18.54	-19.97	-19.86	-18.64	-19.12	-18.89	-18.67	-19.55	-15.19	-17.12	-19.75	-19.68	-19.1	-19.08	-19.48	-18.94	-20.18	-19.18	-17.94	-16.66	-19.83	-18.62
Θ(150°)	-18.91	-19.31	-18.94	-19.22	-19.47	-18.56	-20.15	-15.68	-16.97	-19.57	-19.48	-18.3	-16.81	-18.28	-19.84	-19.37	-19.28	-20.08	-19.04	-19.39	-19.91	-20.13	-19.83	-19.16
Θ(165°)	-18.42	-19.53	-18.16	-18.72	-19.64	-19.94	-19.24	-17.85	-18.3	-20.06	-20.02	-18.69	-15.73	-15.87	-17.41	-20.07	-20	-20.12	-20.01	-18.52	-20.1	-18.21	-17.22	-18.65
Θ(180°)	-19.83	-19.51	-20.31	-20.03	-19.11	-19.84	-19.67	-19.73	-19.61	-18.93	-18.66	-17.37	-18.5	-19.43	-20.09	-19.9	-18.3	-19.19	-19.79	-19.43	-20.58	-19.4	-19.61	-18.04
Freq(Hz)	5.6G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-12.68	-11.1	-8.39	-5.76	-5.05	-4.95	-5.34	-5.59	-7.08	-10.76	-17.06	-19.61	-14.33	-8.91	-5.92	-4.27	-3.81	-3.88	-5.39	-6.28	-7.67	-9.15	-14.03	-13.77
Θ(15°)	-14.56	-12.61	-17.37	-8.9	-5.43	-6.7	-11.47	-8.08	-5.48	-7.27	-15.55	-12.97	-13.52	-8.58	-6.92	-8.38	-9.75	-10.08	-8.98	-9.61	-11.76	-11.09	-13.62	-19.47
Θ(30°)	-15.53	-19.11	-19.56	-12.34	-17.86	-11.32	-14.96	-12.76	-17.55	-6.96	-7.94	-8.9	-12.37	-7.79	-4.54	-3.95	-5.67	-4.41	-5.61	-8.57	-18.68	-9.98	-19.35	-8.67
Θ(45°)	-14.15	-19.28	-15.45	-17.07	-11.21	-9.67	-20.12	-16.45	-10.93	-12.98	-7.8	-13.71	-10.16	-5.79	-7.92	-4.83	-2.96	-3.28	-6.56	-4.58	-6.26	-5.68	-18.79	-11.05
Θ(60°)	-14.94	-11.22	-13.54	-7.61	-10.85	-8.78	-18.83	-19.82	-14.7	-19.24	-15.17	-14.52	-19.27	-19.01	-11.8	-6.58	-10.65	-6.58	-6.5	-4.95	-5.89	-7.93	-13.67	-18.34
Θ(75°)	-18.69	-19.77	-7.95	-13.74	-8.34	-10.55	-19.56	-16.31	-12.07	-16.1	-19.1	-15.86	-8.78	-6.2	-6.62	-3.85	-5.06	-3.62	-2.62	-4.33	-6.77	-8.4	-9.68	-19.56
Θ(90°)	-18.21	-20.04	-8.6	-13.06	-12.29	-9.93	-17.69	-18.61	-15.38	-19.21	-17	-14.81	-7.87	-6.26	-9.5	-5.12	-6.69	-7.73	-2.8	-5.79	-4.57	-8.48	-12.7	-20.1
Θ(105°)	-19.2	-16.81	-14.94	-17.94	-16.58	-12.34	-17.49	-20.04	-15.4	-19.32	-18.21	-16.91	-12.66	-10.53	-12.77	-14.66	-15.47	-20.17	-10.54	-13	-9.91	-11.52	-13.57	-14.19
Θ(120°)	-17.63	-16.14	-16.67	-18.58	-15.68	-13.94	-17.07	-19.92	-15.93	-11.8	-18.9	-13.18	-16.99	-16.27	-14.86	-16.55	-19.01	-15.65	-13.18	-10.91	-11.28	-14.61	-19.5	-18.23
Θ(135°)	-15.77	-18.86	-14.16	-17.4	-19.28	-16.42	-20.02	-19.15	-19.88	-15.18	-16.48	-19.72	-19.15	-15.97	-19.21	-20.45	-19.26	-19.01	-15	-13.55	-14.55	-18.06	-15.46	-18.57
Θ(150°)	-19.39	-19.41	-19.2	-16.63	-19.29	-15.07	-18.95	-17.92	-19.34	-19.56	-18.52	-19.42	-13.69	-16.73	-19.75	-18.22	-19.65	-19.12	-19.6	-18.87	-19.66	-19.2	-19.05	-19.46
Θ(165°)	-19.65	-19.72	-17.11	-18.3	-18.71	-20.02	-19.43	-19.75	-19.5	-19.09	-19.5	-20.31	-19.85	-14.41	-15.91	-19.69	-16.79	-17.55	-18.96	-19.48	-20.09	-19.01	-17.01	-14.68
Θ(180°)	-19.11	-19.37	-19.36	-20.08	-19.68	-19.27	-19.09	-19.68	-19.38	-18.49	-19.4	-19.5	-19.48	-19.77	-20.25	-18.35	-19.5	-19.55	-18.92	-20.15	-19.21	-19.83	-19.52	-19.21
Freq(Hz)	5.6G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.38	-5.73	-7.9	-11.19	-13.09	-15.2	-12.25	-8.84	-5.49	-4.18	-3.33	-2.82	-3.39	-4.65	-7.09	-10.79	-16.61	-16.89	-11.87	-8.56	-7.08	-4.54	-4.97	-5.41
Θ(15°)	-0.18	-2.08	-3.24	-4.51	-4.44	-5.35	-5.84	-4.65	-3.34	-3.1	-3.05	-2.01	-2.22	-2.08	-1.24	-0.7	-0.67	-1.26	-2.01	-3.65	-4.56	-3.02	-0.19	0.84
Θ(30°)	0.26	0.18	0.96	1.72	1.7	1.68	3.22	0.69	1.66	3.23	2.19	0.03	-1.22	-1.37	-2.27	-3.68	-1.53	0.11	-1.48	1.23	-0.2	2.06	0.71	0.27
Θ(45°)	-1.62	-1.77	2.87	0.28	0.87	-0.74	0.95	0.36	-1.39	-1.46	-1.39	-1.33	-2.17	-3.39	0.69	1.05	-3.13	-3.36	-1.91	-1.68	-1.34	1.46	3.82	3.02
Θ(60°)	-15.63	-19.02	-2.47	-3.32	-3.66	-11.67	-11.15	-10.65	-9.45															



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 2C~U-NII 3

Appendix B

Θ(135°)	-12.2	-14.09	-14.5	-17.05	-17.23	-10.03	-8.47	-10	-11.52	-15.64	-16.74	-16.06	-19.67	-15.93	-17.94	-20.07	-19	-19.93	-20.22	-18.15	-16.85	-20.16	-18.14	-15.88
Θ(150°)	-13.23	-12.6	-16.83	-19.46	-13.84	-10.84	-10.92	-14.19	-19.51	-17.64	-15.38	-20.25	-20.24	-18.76	-18.78	-19.69	-19.76	-19.94	-19.34	-20.61	-19.34	-19.42	-15.85	-14.15
Θ(165°)	-19.66	-19.47	-18.67	-14.31	-10.94	-10.93	-14.86	-19.95	-19.77	-19.17	-19.7	-16.98	-17.52	-19.57	-19.79	-17.88	-19.96	-19.65	-20.22	-19.1	-18.87	-19.9	-19.67	-20.04
Θ(180°)	-19.62	-20.2	-19.03	-19.29	-19.87	-19.7	-17.26	-16.6	-17.17	-19	-18.39	-19.19	-20.01	-18.88	-19.39	-17.07	-16.28	-18.21	-19.79	-18.19	-17.27	-19.31	-18.36	-19.43
Freq(Hz)	2.45G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-11.69	-18.99	-18.69	-16.66	-13.17	-11.92	-9.39	-9.19	-9.68	-11	-13.6	-16.67	-18.11	-20.05	-17.68	-15.19	-13.66	-14.51	-16.88	-18.75	-18.47	-19.92	-18.53	-18.71
Θ(15°)	-15.33	-12.17	-12.37	-12.73	-11.36	-12.29	-15.54	-15.65	-15.71	-19.95	-19.46	-18.74	-19.58	-20.18	-18.31	-13.43	-9.31	-8.8	-9.91	-11.28	-12.4	-14.8	-17.04	-18.75
Θ(30°)	-11.8	-11.76	-15.89	-19.67	-13.71	-16.32	-19.52	-14.22	-13.04	-15.16	-18.04	-19.14	-15.9	-13.98	-15.87	-18.31	-12.04	-10.9	-12.16	-12.59	-16.65	-19.34	-20.21	-16.96
Θ(45°)	-11.01	-15.65	-19.99	-17.03	-15.23	-18.38	-18.46	-18.33	-20.04	-19.49	-19.24	-11.22	-11.09	-9.44	-10.02	-19.95	-14.12	-17.13	-19.43	-16.58	-19.21	-20.2	-13.41	-13.39
Θ(60°)	-9.88	-17.59	-20.29	-20.04	-19.19	-14.69	-15.33	-12.44	-18.51	-19.55	-19.13	-14.11	-12.28	-11.73	-11.05	-19.07	-14.27	-13.04	-11.36	-14.73	-17.93	-17.28	-16.09	-10.68
Θ(75°)	-10.71	-19.09	-19.33	-19.38	-19	-17.1	-19.78	-14.18	-19	-19.97	-19.82	-20.2	-18.82	-19.96	-18.22	-19.08	-14.87	-13.7	-11.79	-14.87	-17.05	-16.31	-20.12	-11.24
Θ(90°)	-12.81	-18.36	-18.54	-19.1	-19.34	-19.88	-18.82	-15.85	-19.88	-17.7	-19.06	-20.38	-17.05	-17.24	-20.25	-19.38	-19.57	-19.74	-13.23	-18.12	-18.24	-17.47	-18.93	-12.62
Θ(105°)	-15.61	-18.22	-19	-20.15	-20.1	-19.23	-19.1	-18.88	-19.12	-19.84	-18.5	-19.55	-19.55	-17.35	-19.06	-18.99	-18.7	-19.39	-19.07	-20.66	-15.87	-15.54	-19.57	-16.89
Θ(120°)	-14.64	-19.54	-19.76	-18.85	-19.68	-20.24	-20.39	-19.38	-20.16	-18.92	-18.6	-15.4	-19.76	-18.79	-17.69	-18.99	-18.71	-18.06	-18.43	-19.88	-17.04	-20.05	-18.93	-17.24
Θ(135°)	-17.01	-19.31	-19.13	-19.3	-18.15	-19.04	-18.29	-18.07	-19.31	-20.09	-19.53	-19.39	-20.05	-19.64	-18.31	-19.82	-18.91	-15.89	-19.82	-19.1	-19.58	-19.72	-20.07	-19.25
Θ(150°)	-17.54	-19.97	-20.01	-19.58	-19.99	-18.38	-19.14	-19.99	-20.18	-20.21	-20.39	-18.67	-19.23	-19.15	-20.13	-20.37	-18.48	-15.23	-19.94	-17.85	-13.41	-17.06	-19.4	-19.25
Θ(165°)	-19.83	-19.19	-19.23	-19	-18.88	-18.39	-19.38	-19.02	-19.17	-20.33	-19.72	-17.54	-18.48	-19.56	-20.18	-19.76	-19.44	-20.08	-19.01	-20.13	-18.96	-19.09	-19.61	-19.96
Θ(180°)	-19.05	-16.87	-15.65	-16.5	-19.56	-19.6	-19.95	-19.16	-19.35	-19.22	-19.19	-18.48	-18.44	-20.33	-20.36	-19.4	-19.4	-19.96	-20.34	-20.54	-16.72	-15	-15.72	-18.33
Freq(Hz)	5.6G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.46	-15.01	-16.79	-19.25	-19.86	-14.99	-11.73	-8.05	-8.23	-7.98	-8.04	-9.48	-8.89	-12.45	-16.05	-18.13	-19.44	-14.05	-14.84	-11.71	-9.38	-9	-8.91	-11.61
Θ(15°)	-20.47	-15.68	-15.61	-18.89	-10.35	-8.34	-6.65	-8.04	-15.09	-16.95	-14.99	-14.59	-13.48	-13.47	-11.47	-16.26	-16.77	-16.14	-10.08	-14.15	-9.01	-7.67	-15.77	-13.54
Θ(30°)	-7.68	-6.74	-10.93	-13.25	-17.89	-9.37	-11.96	-9.79	-7.16	-6.4	-6.68	-18.2	-13.8	-18.95	-12.28	-16.33	-14.81	-9.38	-6.68	-5.7	-6.93	-3.2	-6.78	-8.77
Θ(45°)	-12.25	-5.98	-14.68	-16.88	-20.04	-18.87	-13.97	-11.88	-6.2	-13.87	-12.79	-17.72	-13.52	-16.18	-13.42	-8.73	-6.76	-10.02	-6.37	-2.71	-4.65	-5.42	-6.89	-5.1
Θ(60°)	-7.41	-6.18	-19.29	-16.1	-19.71	-13.47	-15.61	-13.9	-14.18	-7.59	-19.41	-20.05	-13.31	-20.09	-14.72	-6.58	-12.65	-9.4	-8.65	-8.92	-5.96	-5.94	-7.77	-5.5
Θ(75°)	-9.92	-5.95	-13.02	-19.17	-19.18	-8.63	-8.4	-10.98	-10.05	-5.57	-8.65	-14.28	-14.12	-12.93	-14.39	-8.2	-9.23	-19.03	-9.74	-9.64	-6.76	-4.78	-5.77	-5.69
Θ(90°)	-9.23	-7.2	-12.4	-18.8	-13.78	-9.4	-11.26	-16.49	-10.07	-7.9	-9.86	-17.24	-16.32	-18.42	-18.87	-11.69	-7.75	-9.73	-8.32	-9.83	-8.11	-7.56	-6.52	-8.63
Θ(105°)	-8.85	-10.35	-15.94	-19.6	-15.34	-11.88	-13.61	-15.3	-13.4	-10.34	-15.66	-18.75	-18.48	-15.55	-19.85	-16.43	-17.84	-12.53	-18.37	-12.97	-13.21	-14.36	-10.15	-10.04
Θ(120°)	-13.85	-12.88	-17.36	-20.06	-20.05	-18.04	-13.59	-19.28	-18.85	-17.69	-19.49	-19.14	-19.11	-17.69	-19.07	-14.96	-16.85	-20.2	-14.62	-19.91	-19.24	-20.1	-13.98	-12.99
Θ(135°)	-16.63	-19.72	-12.74	-19.39	-19.78	-18.89	-19.03	-20.13	-18.32	-18.11	-19.64	-18.92	-16.73	-19.03	-19.64	-18.64	-19.1	-18.17	-16.4	-17.27	-19.81	-18.73	-19.22	-19.11
Θ(150°)	-20.65	-17.86	-19.79	-19.04	-17.21	-18.07	-18.13	-19.73	-19.11	-18.94	-18.05	-18.57	-18.72	-19.59	-18.38	-18.37	-19.73	-18.25	-20.46	-19.26	-20.26	-19.25	-19.66	-19.05
Θ(165°)	-20.33	-17.87	-19.01	-18	-17.8	-17.26	-18.88	-18.29	-18.49	-17.59	-18.59	-20.04	-19.61	-18.84	-18.25	-19.56	-18.52	-18.82	-19.27	-19.56	-20.22	-18.53	-18.84	-19.63
Θ(180°)	-15.75	-15.91	-15.57	-15.38	-16.16	-20.09	-19.86	-19.35	-19.59	-18.87	-18	-18.28	-17.79	-14.63	-15.31	-15.5	-18.23	-18.16	-18.92	-19.16	-19.59	-19.06	-19.95	-19.97
Freq(Hz)	5.6G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.82	-9.69	-8.7	-9.21	-8.02	-9.13	-10.79	-12.49	-16.19	-18.84	-16.78	-11.89	-9.72	-8.47	-10.36	-10.17	-8.86	-9.7	-11.57	-12.75	-15.36	-17.43	-18.6	-17.74
Θ(15°)	-3.76	-3.77	-4.99	-6.84	-5.46	-4.88	-3.61	-1.7	-1.66	-3.94	-4.77	-3.06	-2.85	-2.71	-3.6	-3.4	-2.69	-1.91	-3.02	-5.01	-6.06	-8.02	-6.78	-6.19
Θ(30°)	3.39	3.79	3.35	3.22	2.09	2.25	1.72	2.37	2.53	1.8	1.87	0.03	-1.07	0.5	2.08	3.19	2.47	-0.29	-0.85	0.64	0.25	-1.42	0.05	3.69
Θ(45°)	2.6	1.29	2.67	1.2	0.08	0.8	1.86	3.19	2.64	-3.2	0.17	-0.14	-1.57	0.34	-0.33	-2.44	-3.69	-2.31	-1.84	-0.96	-0.22	-1.8	-3.44	1.55
Θ(60°)	-6.87	-2.73	-0.51	-2.38	-8.89	-8.81	-10.13	-4.75	0.28	-11.02	-17.52	-5.57	-10.57	-16.36	-7.94	-7.77	-7.78	-5.43	-7.85	-4.17	-4.66	-11.52	-6.23	-1.61
Θ(75°)	-11.43	-4.38	-4.94	-5.88	-13.88	-11.37	-14.03	-10.17	-8.36	-5.48	-2.91	-9.39	-3.43	-3.74	-4.58	-6.82	-10.88	-19.87	-8.28	-13.76	-10.66	-9.5	-4.98	-3.48
Θ(90°)	-7.74	-7.96	-8.08	-11.52	-10.03	-10.94	-11.57	-12.47	-10.21	-6.5	-3.95	-8.58	-7.73	-5.34	-7.45	-6.07	-8.12	-13.02	-4.39	-6.82	-17.67	-6.56	-5.57	-9.48
Θ(105°)	-10.36	-9.84	-9.22	-15.57	-11.13	-12.39	-14.99	-12.6	-13.72	-8.68	-12.83	-11.57	-19.45	-11.04	-7.48	-9.86	-12.83	-19.16	-10.98	-12.94	-17.53	-8.92	-11.73	-12.06
Θ(120°)	-10.32	-11.94	-11.92	-15.5	-12.3	-15.38	-14.2	-13.98	-15.91	-11.73	-13.07	-13.54	-15.61	-8.94	-16.87	-13.56	-16.95	-18.88	-9.08	-11.41	-13.61	-14.56	-9.7	-16.5
Θ(135°)	-12.61	-15.54	-19.98	-12.67	-16.04	-17.15	-14.21	-19.32	-20.31	-18.11	-20.27	-18.83	-17.77	-19.14	-14.46	-13.49	-18.16	-19.32	-10.37	-15.6	-12.33	-16.39	-18.19	-14.98
Θ(150°)	-14.7	-14.66	-19.12	-19.84	-14.48	-16.87	-15.75	-19	-19.97	-19.43	-19.14	-19.54	-19.49	-19.95	-16.2	-15.75	-18.72	-18.52	-19.48	-19.72	-19.91	-16.46	-19.5	-17.82
Θ(165°)	-15.76	-18.61	-18.45	-15.63	-15.89	-20.1	-19.18	-19.66	-18.69	-19.95	-18.28	-19.98	-16.09	-19.42	-18.64	-17.09	-18.74	-20.15	-18.64	-19.04	-18.04	-18.85	-19.47	-16.16
Θ(180°)	-20.02	-19.81	-19.69	-18.31	-19.03	-17.35	-15.36	-19.76	-19.55	-18.83	-18.28	-19.07	-19.26	-19.51	-19.28	-19.09	-18.34	-18.81	-19.05	-17.65	-18.18	-19.81	-20.03	-19.19
Freq(Hz)	5.785G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)



Radiated Composite Gain_Radio 1 2.4GHz and 5GHz U-NII 2C~U-NII 3

Appendix B

Θ(90°)	-19.94	-18.49	-18.86	-19.08	-16.01	-13.37	-14.54	-18.92	-19.98	-19.11	-19.8	-19.08	-19.68	-16.76	-20.07	-18.66	-19.48	-19.79	-18.96	-18.53	-19.44	-15.32	-17.56	-19.28
Θ(105°)	-19.88	-19.21	-20.2	-19.15	-19.92	-16.22	-19.16	-19.46	-19.9	-19.87	-18.62	-18.98	-17.63	-19.33	-18.99	-19.99	-19.51	-19.55	-19.69	-18.98	-20.14	-20.04	-18.45	-19.36
Θ(120°)	-19.62	-18.35	-19.95	-19.49	-19.6	-18.86	-18.66	-18.8	-17.94	-18.76	-19.53	-18.7	-18.37	-16.86	-18.44	-19.17	-19.65	-19.17	-19.25	-18.66	-19.61	-20.03	-18.49	-19.63
Θ(135°)	-18.89	-14.59	-14.93	-14.89	-15.46	-19.19	-18.93	-19.35	-18.79	-19.9	-20.04	-20.11	-19.68	-19.21	-19.03	-18.49	-19.33	-18.26	-19.68	-19.93	-18.83	-19.52	-19.84	-19.53
Θ(150°)	-19.68	-19.87	-19.3	-20.18	-15.56	-15.83	-19.22	-18.73	-19.81	-19.31	-19.1	-19.76	-20.22	-18.92	-19.5	-18.86	-18.55	-19.63	-19.29	-19.8	-20.65	-19.93	-19.55	-20.18
Θ(165°)	-19.4	-19.41	-18.82	-19.96	-18.06	-18.64	-18.86	-19.26	-19.13	-19.7	-18.08	-17.8	-19.35	-19.08	-18.97	-19.06	-18.84	-19.93	-19.49	-19.33	-18.95	-19.67	-18.7	-20.02
Θ(180°)	-19.02	-18.64	-20.47	-20.09	-18.92	-19.01	-18.98	-18.94	-19.02	-18.29	-20.34	-16.55	-15.25	-15.99	-17.21	-19.14	-20.42	-18.57	-19.27	-20.12	-19.84	-20.47	-19.69	-19.94
Freq(Hz)	5.6G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.66	-5.17	-6.48	-8.87	-10.44	-15.07	-17.47	-10.62	-7.48	-5.12	-4.23	-3.64	-3.91	-3.25	-3.75	-5.06	-8.13	-12.45	-19.05	-18.43	-10.62	-5.89	-4.93	-4.11
Θ(15°)	-0.97	-3.77	-9.29	-10.94	-12.01	-13.54	-10.3	-7.65	-5.56	-4.87	-3.67	-5.58	-11.31	-7.53	-6.06	-4.05	-4.46	-7.03	-9.39	-8.52	-6.84	-4.32	-2.73	-1.58
Θ(30°)	-6.03	-9.25	-10.04	-11.17	-19.22	-13.43	-8.06	-7.43	-3.89	-11.63	-6.01	-4.8	-5.09	-7.36	-5.59	-4.74	-6.97	-11.8	-7.61	-11.46	-19.22	-6.92	-7.4	-8.12
Θ(45°)	-6.58	-5.24	-9.9	-19.89	-12.64	-16.52	-16.45	-19.2	-7.57	-10.6	-15.07	-9.52	-7.62	-15	-5.67	-9.07	-11.46	-9.06	-7.24	-9.89	-11.52	-14.71	-13.06	-11.87
Θ(60°)	-6.82	-9.02	-8.95	-19.87	-19.25	-17.07	-10.3	-9.06	-19.23	-11.4	-12.15	-18.87	-17.48	-14.35	-12.6	-14.39	-11.37	-13.25	-4.3	-9.28	-14.55	-14.8	-11.51	-4.56
Θ(75°)	-5.1	-3.12	-12.83	-17.56	-19.8	-18.19	-9.96	-14.86	-7.83	-9.6	-9.36	-19.01	-13.54	-14.38	-18.62	-19.97	-10.71	-7.16	-2.1	-4.94	-9.77	-8.07	-14.15	-11.39
Θ(90°)	-7.22	-5.29	-11.7	-18.9	-18.39	-11.51	-15.94	-10.09	-14.52	-14.53	-12.21	-18.75	-16.11	-17.3	-19.12	-18.17	-9.79	-8.64	-5.91	-3.49	-6.03	-4.29	-11.97	-12.85
Θ(105°)	-18.11	-9.69	-12.37	-17.78	-19.06	-13.92	-19.7	-14.36	-13.18	-13.59	-20.27	-11.64	-16.6	-14.84	-19.53	-18.48	-13.65	-12.27	-12.2	-8.01	-5.48	-6.62	-16.26	-15.03
Θ(120°)	-16.03	-12	-12.43	-19.03	-17.03	-19.05	-20.37	-19.32	-13.63	-20.44	-17.49	-19.29	-17.59	-15.95	-19.5	-19.67	-18.55	-18.71	-18.5	-6.88	-8.52	-5.02	-19.11	-11.96
Θ(135°)	-17.83	-17.6	-18.63	-16.83	-13.77	-12.93	-16.21	-16.04	-12.26	-20.11	-19.48	-18.69	-15.93	-17.44	-18.64	-18.28	-19.26	-12.46	-19.14	-13.58	-13.01	-13.5	-14.94	-11.96
Θ(150°)	-13.56	-18.68	-19.74	-15.95	-15.25	-19.33	-20.2	-13.56	-17.85	-14.33	-19.7	-19.72	-19.65	-19.08	-19.46	-19.68	-17.34	-19.56	-16.79	-9.59	-16.52	-13.49	-13.51	-11.15
Θ(165°)	-19.67	-18.87	-20.12	-19.46	-19.12	-20.44	-16.5	-16.77	-20.28	-18.83	-19.64	-18.47	-17.52	-19.58	-19.89	-19.59	-16.46	-19.45	-18.67	-14.59	-9.81	-10.38	-12.61	-16.43
Θ(180°)	-19.84	-19.16	-19.34	-19.99	-20.03	-18.61	-19.85	-19.94	-19.51	-18.51	-18.81	-19.86	-20.06	-18.43	-15.02	-16.37	-14.23	-11.87	-12.76	-17.87	-16.26	-13.76	-12.99	-20.1
Freq(Hz)	5.6G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-19.37	-12.71	-8.49	-7.23	-5.17	-4.1	-3.94	-4.61	-6.19	-8.54	-13.79	-19.84	-14.91	-11.84	-9.31	-6.66	-5.53	-4.55	-5.75	-5.92	-6.52	-7.25	-9.24	-11.7
Θ(15°)	1.26	2.01	2.16	1.71	2.22	2.44	2.28	0.76	-0.61	-2.35	-3.69	-3.63	-5.4	-8.2	-8.51	-4.52	-3.46	-3.86	-4.17	-3.14	-2.51	-4.53	-4.29	-0.58
Θ(30°)	1.33	2.29	3.4	4.38	2.18	2.91	3.81	3.61	2.93	1.65	0.46	-0.54	-0.58	-2.47	-3.25	-2.1	-5.97	-5.27	-2.81	-3.34	-2.14	-0.97	1.34	1.33
Θ(45°)	0.12	2.57	2.35	0.04	0.4	2.14	1.36	1.46	-0.37	2.84	1.96	-0.95	-0.32	3.67	0.64	-3.3	-5.36	-5.14	-1.5	-0.57	-2.12	0.06	2.09	0.64
Θ(60°)	-9.67	-7.41	-4.23	-11.17	-4.33	-7.03	-6.52	-2.3	-4.18	-1.09	-5.72	-2.43	-7.25	1.35	-1.98	-4.79	-8.16	-10.44	-8.37	-4.89	-2.24	-5.51	-6.76	-6.84
Θ(75°)	-1.61	-3.2	-5.11	-4.62	-11.94	-8.23	-7.56	-7.4	-18.2	-5.53	-12.26	-6.22	-11.41	-4.78	-5.19	-11.66	-13.6	-5.36	-10.39	-14.62	-14.35	-8.96	-9.25	-7.1
Θ(90°)	-4.96	-5.19	-6.67	-10.97	-8.06	-5.25	-8.87	-9.74	-11.55	-8.13	-8.43	-7.68	-10.7	-8.17	-9.56	-6.98	-5.1	-8.26	-9.59	-8.52	-7.83	-5.23	-9.81	-4.23
Θ(105°)	-7.75	-7.85	-5.58	-10.39	-19.8	-9.15	-8.63	-15.3	-9.28	-11.78	-20.34	-13.86	-13.21	-13.21	-19.78	-9.8	-7.3	-9.93	-9.16	-10.05	-16.58	-10.42	-17.99	-9.44
Θ(120°)	-14.89	-9.99	-10.71	-14.09	-17.35	-11.72	-15.06	-14.6	-19.5	-18.79	-14.88	-14.66	-15.32	-7.63	-8.17	-19.15	-16	-12.18	-17.09	-11.51	-9.05	-7.73	-14.32	-14.14
Θ(135°)	-19.06	-13.99	-16.17	-18.17	-19.6	-19.44	-20.3	-8.9	-13.79	-17.37	-11.57	-11.32	-13.58	-15.46	-6.78	-9.52	-10.22	-12.23	-10.62	-13.78	-16.81	-18.67	-18.86	-19.13
Θ(150°)	-19.98	-18.14	-18.83	-19.95	-16.09	-14.61	-18.73	-19.36	-9.92	-17.91	-20.18	-12.39	-12.59	-12.71	-16.76	-12.29	-13.12	-19.45	-19.08	-15.61	-12.64	-17.76	-20.09	-19.69
Θ(165°)	-14.66	-14.95	-19.67	-18.34	-19.59	-19.82	-18.63	-19.72	-20.4	-15.45	-11.2	-14.56	-19.71	-19.94	-13.24	-9.24	-11.95	-19.2	-16.44	-15.55	-17.07	-19.8	-18.59	-19.65
Θ(180°)	-15.91	-18.19	-17.93	-19.38	-19.83	-19.29	-19.04	-19.68	-17.83	-15.38	-14.81	-16.65	-19.18	-18.2	-19.83	-19.31	-18.89	-19.97	-18.46	-19.49	-15.91	-14.46	-14.66	-16.3
Freq(Hz)	5.785G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.56	-4.01	-7.87	-12.1	-19.32	-18.18	-9.05	-6.07	-3.87	-2.1	-1.77	-1.7	-2.83	-3.46	-5.06	-6.52	-6.74	-6.6	-7.52	-7.32	-7.49	-5.19	-5.16	-7.34
Θ(15°)	-0.16	-3.09	-12.05	-14.86	-8.39	-8	-7.99	-9.32	-8.6	-8.92	-9.8	-12.88	-7.47	-6.44	-6.8	-5.41	-4.84	-5.27	-5	-4.9	-5	-7.06	-5.11	-3.86
Θ(30°)	-7.97	-17.01	-19.33	-19.45	-12.37	-12.43	-7.14	-8.58	-10.22	-17.37	-11.03	-8.76	-16.31	-8.36	-4.35	-5.72	-5.97	-4.39	-6.01	-10.41	-10.65	-9.04	-3.9	-5.03
Θ(45°)	-5.74	-5.53	-12.83	-16.69	-12.06	-14.02	-14.5	-9.39	-5.86	-10.51	-14.41	-10.39	-7.12	-11.63	-8.13	-7.83	-11.6	-8.71	-9.65	-5.44	-3.43	-13.63	-13.56	-7.41
Θ(60°)	-12.72	-14.45	-9.52	-16.25	-18.29	-15.16	-9.27	-7.23	-10.5	-11.87	-5.32	-19.08	-19.94	-14.38	-7.73	-15.29	-10.9	-7.79	-4.28	-6.91	-7.98	-14.22	-14.41	-4.5
Θ(75°)	-5.18	-7.9	-9.56	-14.76	-19.49	-8.7	-8.64	-13.5	-8.06	-6.59	-5.16	-19.41	-18.51	-8.27	-11.4	-12.11	-12.7	-2.88	-2.72	-6.25	-8.84	-8.37	-7.73	-7.22
Θ(90°)	-4.73	-7.14	-12.02	-15.55	-18.83	-20.27	-7.71	-11.91	-9.79	-11.85	-6.47	-15.96	-14.49	-8.06	-14.21	-12.88	-12.34	-6.12	-6.64	-4.32	-7.31	-5.01	-9.3	-10.29
Θ(105°)	-12.33	-13.14	-13.96	-14.56	-16.68	-15.73	-11.33	-11.26	-13.44	-14.26	-17.12	-11.17	-19.81	-19.51	-17.36	-16.79	-17.51	-9.65	-8.73	-7.3	-13.56	-10.3	-18.73	-18.38
Θ(120°)	-19.47	-13.34	-17.12	-19.88	-17.71	-17.35	-14	-13.29	-18.35	-18.86	-19.02	-18.69	-19.2	-19.3	-18.08	-18.95	-18.94	-10.74	-17.13	-8.89	-7.87	-8.52	-10.54	-11.03
Θ(135°)	-13.41	-14.27	-18.61	-15.77	-13.31	-12.36	-11.35	-12.5	-13.66	-19.89	-19.45	-18.9	-17.87	-20.4	-20	-15.12	-19.21	-11.74	-19.55	-7.22	-9.73	-11.76	-11.5	-12.54
Θ(150°)	-14.44	-19.21	-19.18	-20.01	-14.4	-20.23	-17.25	-13.11	-10.64	-11.99	-16.15	-20.05	-18.68	-20.15	-18.79	-18.91	-18.09	-15.54	-15.05	-11.55	-19.64	-16.56	-14.71	-12.53
Θ(165°)	-20.14	-18.41	-19.54	-19.4	-19.33	-19.91	-19.45	-20.24	-11.74	-14.41	-15.08	-15.93	-15.42	-17.68	-20.36	-19	-18.93	-19.33	-19.2	-15.32	-10.78	-9.37	-10.16	-13.47
Θ(180°)	-16.29	-15.56	-16.99	-17.61	-19.76	-																		



Θ(45°)	-19.78	-17.61	-9.88	-18.96	-19.01	-12.43	-6.24	-8.15	-3.98	-8.54	-6.98	-7.59	-7.9	-7.33	-9.31	-20.6	-11.58	-13.09	-14.3	-19.17	-12.25	-14.43	-4.38	-9.49
Θ(60°)	-18.7	-8.45	-10.13	-19.35	-16.59	-17.18	-4.07	-6.22	-5.93	-7.41	-4.46	-9.66	-4.14	-4.85	-5.77	-20.02	-16.91	-19.34	-19.86	-17.62	-11.17	-15.96	-7.61	-10.84
Θ(75°)	-18.83	-15.03	-18.74	-14.39	-14.8	-11.29	-5.68	-5.76	-4.73	-5.77	-2.17	-5.9	-5.21	-3.96	-10.43	-20.17	-14.97	-9.12	-10.32	-20.52	-13.38	-15.33	-7.73	-19.81
Θ(90°)	-16.89	-13.74	-20.11	-18.16	-13.46	-9.29	-6.29	-7.21	-5.41	-8.05	-5.43	-7.08	-7.76	-6.49	-12.65	-18.39	-17.64	-11.58	-9.68	-19.2	-18.05	-18.57	-7.94	-18.75
Θ(105°)	-19.49	-13.41	-18.97	-18.57	-20.07	-12.27	-8.69	-7.32	-10.45	-9.21	-9.76	-13.28	-9.89	-12.01	-11.47	-13.74	-19.16	-16.66	-19.05	-19.19	-18.51	-19.89	-11.35	-19.6
Θ(120°)	-19.93	-15.63	-19.57	-19.49	-19.95	-19.54	-12.8	-11.1	-11.24	-15.09	-13.37	-20.47	-11.75	-13.66	-11.48	-10.37	-17.79	-20.2	-15.79	-19.95	-17.27	-18.66	-14.07	-19.96
Θ(135°)	-17.03	-13.63	-18.13	-17.96	-17.91	-19.07	-19.13	-15.64	-18.15	-18.85	-13.52	-13.41	-20.06	-10.96	-16.8	-13.14	-19.7	-19.51	-18.08	-17.65	-19.3	-13.48	-19.24	-19.43
Θ(150°)	-19.3	-20.32	-15.93	-19.07	-18.82	-18.73	-19.52	-19.88	-20.15	-18.58	-17.16	-14.23	-19.42	-19.75	-16.3	-14.44	-17.21	-16.36	-20.19	-19.13	-19.69	-19.67	-17.76	-17.97
Θ(165°)	-20.11	-13.96	-19.28	-19.02	-19.49	-19.27	-18.97	-20.07	-20.1	-19.97	-19.86	-18.44	-19.47	-16.73	-17.98	-17.07	-20.05	-18.51	-19.82	-19.31	-15.41	-19.88	-18.67	-15.88
Θ(180°)	-17.4	-18.21	-19.2	-19.35	-19.1	-19.61	-18.96	-20.04	-17.52	-19.86	-20.03	-15.3	-19.24	-19.01	-19.94	-17.06	-19.15	-18.46	-19.64	-15.02	-16.18	-16.76	-15.87	-15.01
Freq(Hz)	5.6G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.87	-7.13	-5.64	-4.72	-3.47	-3.31	-4.02	-4.4	-6.13	-9.1	-11.08	-11.06	-7.5	-5.56	-3.5	-2.64	-2.87	-1.82	-4.39	-4.8	-6.19	-7.34	-10.56	-11.95
Θ(15°)	-2.39	-3.31	-2.82	-5.29	-6.96	-6.98	-9.62	-13.97	-14.69	-11.28	-9.72	-5.21	-0.37	0.13	-0.02	0.99	2.55	2.33	1.28	-0.7	-0.54	-1.92	-3.78	-3.26
Θ(30°)	0.57	1.67	-0.8	0.84	-0.82	-1.11	1.37	1.63	-0.14	-1.71	0.22	1.01	2.4	2.99	3.56	3.92	1.94	1.58	4.19	2.28	0.02	2.4	1.73	0.53
Θ(45°)	-1.98	-2.65	1.02	0.06	-0.59	-0.39	-0.9	-1.3	-0.16	-0.38	-0.89	-1.29	-0.73	3.58	1.59	1.39	1.37	-1.82	-0.73	0.21	1.7	-0.88	0.83	3.18
Θ(60°)	-12.95	-10.35	-10.41	-6.82	-6.94	-5.07	-8.85	-8.93	-5.89	-2.5	-7.11	-8.56	-6.95	1.24	-1.16	-7.32	-7.82	-10.04	-3.45	-2.66	-3.39	-6.27	-2.23	-1.24
Θ(75°)	-5	-10.23	-5.98	-19.21	-11.89	-11.46	-16.11	-13.04	-12.38	-10.05	-7.2	-9.52	-9.21	-9.8	-7.93	-9.75	-6.68	-10.63	-10.89	-19.92	-12.16	-16.83	-9.1	-5.6
Θ(90°)	-4.81	-8.33	-10.03	-13	-8.78	-19.42	-10.13	-10.31	-15.84	-12.78	-8.91	-9.09	-12.36	-12.83	-9.16	-11.28	-11.16	-11.38	-4.83	-6.12	-3.24	-8.6	-14.96	-4.3
Θ(105°)	-12.46	-12.52	-9.1	-14.74	-13.31	-16.1	-7.94	-12.04	-10.46	-14.46	-9.17	-9.31	-15.02	-12.45	-9.06	-17.93	-16.27	-19.86	-10.67	-11.65	-8.94	-19.93	-15.13	-11.22
Θ(120°)	-13.4	-11.35	-15.24	-13.61	-13.06	-11.1	-11.02	-17.37	-10.95	-19.69	-12.59	-16	-19.65	-16.07	-10.48	-9.24	-13.07	-13.94	-12.96	-14.44	-8.08	-12.72	-19.83	-11.55
Θ(135°)	-14.84	-17.56	-19.07	-19.67	-16.74	-10.61	-17.64	-16.9	-17.43	-10.57	-18.84	-18.93	-14.98	-13.9	-10.15	-18.08	-20.23	-15.29	-17.08	-20.13	-13.15	-15.29	-18.78	-17.72
Θ(150°)	-17.47	-19.03	-19.12	-18.63	-13.77	-14.58	-18.18	-19.69	-19.42	-16.15	-19.11	-18.69	-19.85	-17.34	-18.68	-14.05	-19.61	-19.56	-20.09	-17.06	-18.84	-18.42	-19.6	-14.43
Θ(165°)	-18.64	-18.52	-19.72	-15	-18.54	-12.64	-14.17	-20.21	-19.15	-19.24	-20.14	-18.95	-17.68	-15.87	-19.5	-17.93	-19.39	-18.46	-19	-19.84	-19.66	-16.31	-17.05	-18.72
Θ(180°)	-16.88	-14.76	-14.62	-13.89	-13.78	-16.67	-16.23	-18.29	-19.69	-19.99	-19.99	-19.64	-18.13	-18.75	-19.08	-15.42	-14.18	-11.51	-12.12	-12.54	-14.32	-15.37	-17.06	-19.27
Freq(Hz)	5.785G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.03	-9.97	-11.07	-11.09	-11.31	-12.1	-13.26	-15.22	-13.1	-14.13	-11.38	-9.53	-8.52	-8.7	-6.58	-6.42	-8.15	-11.01	-10.75	-7.61	-5.13	-2.59	-2.26	-2.43
Θ(15°)	-18.94	-19.36	-19.64	-16.65	-19.33	-12.53	-5.97	-4.28	-4.59	-3.8	-4.8	-5.7	2.09	-5.52	-13.2	-19.6	-14.11	-6.8	-4.55	-4.12	-4.21	-6.31	-7.96	-11.02
Θ(30°)	-10.99	-16.47	-13.49	-10.95	-19.91	-8.66	-10.32	-5.75	-8.2	-4.09	-9.65	-5.31	-4.72	-8.4	-14.81	-19.6	-5.89	-5.02	-10.93	-15.11	-9.65	-6.46	-7.95	-11.93
Θ(45°)	-16.89	-10.68	-8.43	-15.95	-17.97	-17.91	-7.14	-3.07	-6.8	-4.27	-9.17	-7.14	-6.56	-9.16	-14.08	-18.71	-12.36	-10.22	-10.55	-12.88	-12.78	-10.45	-12.38	-9.04
Θ(60°)	-20.58	-11.77	-10.59	-18.34	-19.35	-17.54	-8.21	-4.96	-10.79	-5.7	-8.25	-11.78	-3.97	-8.36	-6.17	-18.57	-19.66	-18.73	-14.27	-7.97	-18.18	-11.21	-7.23	-10.56
Θ(75°)	-20.03	-12.75	-8.99	-19.84	-19.3	-10.06	-11.36	-4.23	-8.35	-4.65	-5.93	-4.83	-12.16	-5.42	-8.6	-13.77	-8.37	-5.71	-9.65	-16.78	-10.61	-18.63	-11.03	-16.72
Θ(90°)	-19.68	-11.33	-8.7	-14.02	-13.87	-9.34	-10.23	-6.04	-5.82	-6.86	-11.33	-4.59	-12.21	-5.94	-9.01	-15.49	-18.01	-5.7	-6.57	-11.08	-9.19	-14.06	-9.19	-18.57
Θ(105°)	-19.83	-12.55	-13.34	-16.8	-14.61	-13.45	-7.68	-9.83	-6.48	-6.28	-9.91	-9.98	-14.24	-9.57	-11.27	-14.64	-19.35	-11.27	-12.59	-18.73	-19.93	-19.21	-12.59	-19.69
Θ(120°)	-20.1	-13.76	-12.53	-19.04	-19.21	-15.38	-11.56	-9.3	-14.59	-10.1	-9.54	-20.25	-11.22	-14.11	-18.56	-9.04	-15.74	-19.49	-13.42	-19.57	-13.97	-19.3	-14.07	-19.82
Θ(135°)	-20.3	-19.89	-19.21	-17.96	-18.73	-19.72	-15.99	-17.11	-13.73	-15.74	-18.72	-17.94	-19.29	-15.63	-12.91	-16.12	-18.37	-13.22	-13.95	-18.3	-20.2	-12.1	-20.07	-20.02
Θ(150°)	-19.14	-19.19	-19.06	-18.9	-17.1	-15.33	-18.44	-20.3	-19.96	-18.77	-16.43	-14.82	-18.61	-15.17	-19.6	-14.39	-19.59	-16.49	-16.44	-16.53	-19.37	-19.29	-16.83	-20.16
Θ(165°)	-19.83	-15.63	-14.74	-13.14	-16.31	-19.01	-19.95	-20.15	-19.76	-14.69	-17.69	-18.87	-19.2	-19.43	-15.87	-18.57	-16.59	-19.45	-20.57	-20.04	-19.15	-19.74	-19	-14.84
Θ(180°)	-20.32	-19.45	-20.11	-19.1	-19.38	-18.79	-17.8	-18.77	-17.5	-17.78	-17.07	-18.03	-19.27	-19.88	-18.82	-16.65	-18.31	-19.32	-18.97	-19.75	-19.9	-19.6	-18.54	-15.98
Freq(Hz)	5.785G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.34	-15.95	-11.64	-10.25	-8.24	-6.65	-6.32	-6.33	-6.19	-7.23	-8.59	-11.4	-13.54	-14.66	-11.66	-8.95	-6.79	-5.14	-5.79	-4.95	-5.77	-6	-8.85	-12.99
Θ(15°)	-7.88	-6.96	-6.57	-6.42	-2.36	-1.08	-3.25	-7.56	-9.41	-16.87	-13.97	-7.69	-2.01	0.64	0.52	1.07	1.12	0.32	-0.33	-1.51	-2.44	-3.53	-5.65	-7.19
Θ(30°)	-2.67	-2.79	-0.52	3.36	-0.82	-0.77	-0.69	-3.62	-2.5	-1.56	-2.08	-3.44	-0.57	0.63	0.77	0.08	0.33	0.28	1	0.79	-0.35	1.64	0.72	-0.95
Θ(45°)	-2.2	1.37	-2.12	0.24	0.76	0.17	-1.44	-2.7	-3.05	-1.47	-2.44	-6.52	-1.37	-0.15	-0.73	1.12	-1.76	-1.06	0.36	-0.62	-0.87	-0.22	0.01	1.99
Θ(60°)	-5.82	-6.19	-7.62	-7.27	-11.65	-4.78	-5.52	-8.66	-3.51	-5.11	-7.68	-9.22	-1.88	-9.32	-4.45	-3.65	-18.22	-10.34	-2.05	-1.75	-4.38	-8.08	-5.98	-1.89
Θ(75°)	-8.83	-5.84	-20.38	-19.76	-11.24	-7.69	-6.92	-8.97	-14.35	-14.23	-10.97	-11.06	-8.97	-6.52	-13.08	-11.29	-6.41	-9.82	-15.25	-18.7	-19.67	-10.56	-5.86	-5.24
Θ(90°)	-5.48	-12.62	-11.6	-8.76	-5.89	-7.74	-6.6	-9.17	-13.37	-14.66	-7.21	-9.25	-5.8	-7.99	-6.02	-12.76	-13.13	-12.47	-5.95	-8.76	-7.57	-9.74	-13.3	-7.02
Θ(105°)	-15.27	-10.58	-18.41	-17.73	-9.46	-7.15	-6.02	-12.79	-12.92	-5.76	-19.41	-8.89	-14.23	-11.58	-19.44	-10.84	-18.85	-19.49	-9.46	-13.55	-11.12	-11.34	-16.42	-9.58
Θ(120°)	-12.42	-9.72	-16.51	-11.27	-11.73	-7.1	-8.56	-12.84	-14.77	-8.71	-14.7	-14.76	-20.38	-8.76	-20.24	-11.43	-18.67	-12.7	-18.8	-17.08	-12.55	-15.83	-18.55	-16.54
Θ(135°)	-13.01	-16.51	-19.71	-18.26	-16.04	-12.09	-13.37	-20.15	-12															



Freq(Hz)	5.2G	5.3G
Ant. 5 Max Gain (dBi)	3.39	3.58
Ant. 6 Max Gain (dBi)	3.7	3.39
Ant. 7 Max Gain (dBi)	3.1	3.68
Ant. 8 Max Gain (dBi)	2.82	3.13
Ant. 5 Polarization/Θ(°)/Φ(°)	Phi/90/300	Phi/90/300
Ant. 6 Polarization/Θ(°)/Φ(°)	Phi/60/15	Phi/60/15
Ant. 7 Polarization/Θ(°)/Φ(°)	Phi/60/225	Phi/45/135
Ant. 8 Polarization/Θ(°)/Φ(°)	Phi/75/90	Phi/75/90
Max Gain (dBi)	3.7	3.68
DG [1SS] (dBi)	7.35	7.38
DG [2SS] (dBi)	4.35	4.38
DG [4SS] (dBi)	1.38	1.47



DG 1SS Result

Freq(Hz)	5.2G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.24	-5.24	-6.12	-6.27	-5.04	-5.06	-4.66	-3.88	-3.21	-3.25	-2.68	-2.8	-3.43	-4.42	-4.61	-4.33	-4.59	-4.72	-5.53	-4.4	-3.76	-2.56	-2.39	-3.22
Θ(15°)	1.58	0.43	-0.84	-2.08	-3.24	-3.89	-3.15	-1.8	-1.57	-1.33	-1.6	-1.99	-0.71	1.39	2.85	3.32	2.63	0.96	-1.25	-0.21	0.88	2.21	2.44	2.37
Θ(30°)	4.53	3.07	3.25	3.87	2.74	3.78	3.74	3.33	3.77	4.63	4.7	3.85	3.44	4.21	5.02	6.17	4.78	3.49	3.03	2.39	2.53	3.49	4.79	4.93
Θ(45°)	3.98	5.56	5.17	4.86	4.15	5.42	5.78	5.43	6.47	6.28	6.51	5.6	5.59	5.95	7.11	7.35	6.24	5.86	5.62	3.93	3.32	2.89	4.75	2.21
Θ(60°)	4.57	6.15	5.1	3.47	4.11	5.47	5.84	6.48	4.81	4.86	5.12	5.75	5	4.49	5.91	6.12	4.15	3.62	3.3	3.13	4.4	4.19	5.04	3.41
Θ(75°)	3.89	4.7	4.97	4.94	4.09	4.24	6.51	5.2	4.33	4.05	6.09	7.03	4.87	3.31	5.81	4.86	4.35	3.96	1.81	3.2	5.33	3.47	3.16	4.04
Θ(90°)	2.07	2.33	3.19	3.77	2.56	2.83	4.65	3.21	4.03	2.57	3.63	5.41	2.71	0.74	1.75	1	2.63	3.96	1.12	3.76	4.23	2.58	0.74	1.75
Θ(105°)	-1.41	-2.04	-1.51	-0.24	-1.39	-0.26	1.79	1.59	1.36	0.07	-0.11	1.2	-0.68	-3.53	-3.02	-4.23	-2.65	-1.47	-5.65	-1.11	-0.91	-2.42	-5.79	-1.64
Θ(120°)	-5.59	-4.95	-6.18	-3.91	-4.67	-3.61	-2.15	-2.78	-2.03	-3.55	-5.33	-2.62	-4.21	-5.08	-8.26	-6.78	-5.13	-5.7	-9.16	-6.18	-4.37	-7.91	-7.82	-6.17
Θ(135°)	-7.35	-8.01	-9.56	-8.36	-7.3	-6.49	-5.49	-5.42	-7.41	-8.35	-8.29	-7.26	-5.87	-9.42	-11.98	-8.5	-8.2	-7.75	-9.57	-10.2	-6.72	-6.51	-9.34	-12.36
Θ(150°)	-10.68	-11.19	-12.31	-13.07	-9.53	-9.74	-11.71	-12.88	-13.72	-10.62	-12.07	-10.17	-10.56	-11.39	-11.64	-13.4	-12.36	-11.46	-13.78	-12.06	-12.55	-12.81	-12.47	-12.45
Θ(165°)	-12.84	-13.73	-13.26	-13.02	-12.5	-13.76	-12.95	-13.18	-13.1	-12.7	-12.8	-13.58	-13.41	-13.16	-13.47	-13.28	-12.6	-13.2	-13.4	-13	-13.18	-13.11	-13.83	-13.03
Θ(180°)	-12.8	-13.28	-12.85	-12.33	-12.35	-12.62	-11.81	-11.88	-11.31	-12.14	-12.16	-12.68	-13.33	-13.68	-13.06	-13.51	-13.13	-12.11	-11.46	-12.35	-12.36	-12.11	-11.82	-13.01
Freq(Hz)	5.2G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.34	-4.29	-4.09	-3.44	-2.58	-3.59	-4.14	-4.86	-4.97	-4.63	-4.03	-4.24	-3.83	-3.97	-3.05	-3	-3.17	-2.35	-4.56	-5.04	-6.15	-5.46	-5.2	-5.36
Θ(15°)	-4.99	-3.86	-3.11	-2.77	-1.52	-2.16	-4.29	-4.51	-5.2	-6.99	-8.12	-6.03	-2.97	-1.56	-2.72	-4.13	-2.69	-3.25	-5.59	-7.23	-8.62	-5.96	-4.62	-4.32
Θ(30°)	-0.5	-0.78	-1.49	-2.12	-0.98	-3.59	-4.2	-4.36	-5.9	-4.44	-4.6	-3.56	-2.03	0.1	1.25	0.54	-0.69	0.29	-0.56	-5.96	-6.74	-9.45	-4.42	-2.67
Θ(45°)	-7.28	-4.31	-1.36	-5.37	-3.97	-3.33	-6.29	-6.54	-6.83	-5.97	-2.83	-4.41	-4.13	-6.36	-3.19	-5.68	-1.9	-4.57	-5.85	-6.42	-3.68	-12.34	-5.62	-3.3
Θ(60°)	-6.58	-9.18	-5.31	-9.47	-6.07	-6.4	-6.09	-8.12	-9.59	-8.19	-4.43	-6.19	-5.64	-8.96	-7.6	-8.72	-7.52	-8.57	-6.54	-8.56	-9.94	-10.6	-9.17	-7.17
Θ(75°)	-12.23	-11	-6.77	-9.32	-9.92	-9.1	-4.74	-7.15	-8.3	-13.14	-9.08	-7.98	-8.71	-8.9	-9.02	-9.7	-9.9	-13.12	-10.89	-12.86	-11.79	-11.41	-10.97	-11.24
Θ(90°)	-13.27	-12.5	-8.87	-10.26	-13.7	-10.8	-9.74	-11.98	-11.06	-13.19	-10.1	-11.24	-11.12	-12.61	-10.15	-11.96	-10.84	-12.61	-13.57	-13.13	-10.67	-12.63	-12.56	-13.29
Θ(105°)	-13.08	-11.15	-11.38	-12.36	-12.73	-12.76	-11.45	-12.98	-12.77	-12.86	-10.5	-11.46	-11.3	-12.82	-12.87	-12.95	-13.15	-13.42	-12.85	-13.27	-11.74	-13.53	-12.98	-10.63
Θ(120°)	-11.03	-11.22	-12.07	-13.24	-11.56	-12.18	-13.64	-13.12	-12.69	-13.49	-12.51	-12.35	-12.81	-13.17	-13.52	-12.92	-13.59	-13.41	-13.26	-13.35	-13.76	-11.48	-12.82	-12.35
Θ(135°)	-10.61	-11.59	-13.29	-12.87	-12.7	-11.39	-13.21	-13.79	-14.01	-13.43	-13.22	-13.19	-11.34	-13.99	-12.76	-13.16	-13.72	-13.53	-12.51	-13.66	-13.28	-13.49	-13.44	-12.05
Θ(150°)	-9.69	-12.73	-13.14	-11.51	-13.29	-13.34	-13.7	-13.27	-13.26	-12.82	-11.88	-12.92	-11.72	-13.21	-13.94	-13.11	-12.9	-13.53	-13.49	-13.51	-13.57	-12.96	-12.33	-12.98
Θ(165°)	-13.42	-11.34	-11.25	-13.28	-12.69	-13.66	-12.96	-13.51	-12.86	-13.85	-11.43	-12.14	-11.19	-11.02	-11.28	-12.49	-13.37	-13.02	-12.93	-12.68	-12.72	-13.11	-12.47	-11.51
Θ(180°)	-12.41	-12.28	-10.69	-10.32	-12.32	-12.14	-13.02	-12.67	-12.54	-11.82	-12.28	-13.5	-12.81	-11.01	-9.91	-11.08	-11.14	-12.09	-13.57	-13.69	-13.25	-13.3	-13.56	-11.98
Freq(Hz)	5.3G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.13	-4.64	-4.7	-4.49	-4.02	-4.96	-5.46	-5.34	-4.58	-3.54	-3.55	-3.41	-3.77	-3.93	-3.92	-3.47	-3.96	-4.45	-6.02	-6.23	-5.5	-4.36	-4.16	-4.32
Θ(15°)	0.83	-0.24	-0.64	-1.52	-1.25	-1.86	-1.9	-2.21	-3.11	-2.34	-0.54	-0.55	-0.77	0.36	2.05	2.89	3.36	1.66	0.6	0.9	1.78	1.94	1.67	1.74
Θ(30°)	4.92	3.41	3.14	3.14	2.36	3.63	3.54	3.17	3.83	4.41	5.49	3.62	3.67	4.32	4.83	5.43	5.24	4.28	4.16	2.25	3.04	4.53	5.03	5.62
Θ(45°)	3.67	5.09	5.56	4.91	3.59	4.85	4.9	4.62	6.59	7.29	6.82	5.76	5.61	5.18	7.18	7.38	6.66	5.72	5.83	4.23	3.16	3.81	4.86	3.82
Θ(60°)	4.49	5.84	4.86	4.27	4.6	5.75	5	6.03	4.46	4.65	5.67	5.87	5.17	2.48	5.96	6.21	4.98	4.44	4.78	2.86	3.96	3.85	5.17	3.97
Θ(75°)	4.46	5.14	4.73	5.35	4.27	3.4	5.76	5.53	4.56	4.68	5.88	6.68	5.3	2.81	5.47	5.19	5.38	4.76	2.86	2.74	5.03	3.07	3.37	5.01
Θ(90°)	1.95	2.37	3.44	3.83	3.14	3.39	4.14	2.99	4.41	3.45	3.74	5.36	3.4	0.59	1.15	1.45	3.35	4.57	1.54	3.76	3.87	2.38	1.01	2.06
Θ(105°)	-0.54	-0.78	-0.83	0.26	-0.95	-0.19	1.98	1.29	2.04	0.12	0.18	0.85	-1.2	-3.82	-2.57	-3.39	-2.08	-1.3	-4.53	-1.06	-1	-3.05	-3.81	-0.67
Θ(120°)	-4.52	-3.29	-6.15	-2.89	-5.02	-3.72	-1.28	-2.9	-2.42	-3.16	-4.36	-2.63	-5.03	-5.12	-7.7	-6.36	-4.93	-4.5	-9.07	-5.61	-3.9	-9.22	-6.94	-5.61
Θ(135°)	-6.85	-7.38	-8.18	-8.84	-6.97	-8.4	-4.76	-5.32	-7.32	-8.49	-9.53	-6.93	-6.67	-7.8	-12.76	-8.47	-8.38	-7.34	-8.74	-9.25	-6.61	-7.29	-9.5	-9.08
Θ(150°)	-10.56	-10.21	-11.72	-12.16	-9.99	-9.66	-11.7	-11.52	-12.84	-11.88	-10.54	-10.72	-13.34	-11.79	-13.24	-13.84	-13.2	-11.05	-12.67	-12.46	-13.22	-12.52	-11.57	-11.49
Θ(165°)	-14.04	-12.47	-12.97	-12.64	-12.62	-12.83	-13.37	-13.01	-12.76	-12.69	-13.28	-12.12	-12.44	-12.58	-12.82	-13.35	-13.17	-12.21	-13.65	-12.12	-13.11	-13.68	-12.93	-12.88
Θ(180°)	-12.72	-12.94	-13.36	-12.7	-13.71	-12.39	-13.42	-13.82	-12.78	-12.38	-13.05	-12.55	-13.44	-13.24	-13.6	-12.81	-12.84	-13.46	-12.88	-12.32	-12.78	-13.11	-12.85	-13.37
Freq(Hz)	5.3G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.53	-4.87	-4.1	-4.74	-4.6	-4.02	-4.87	-4.73	-3.81	-3.11	-3.41	-3.85	-4.56	-4.95	-4.67	-3.71	-3.5	-4.78	-5.17	-5.09	-4.47	-4.01	-4.08	-5.38
Θ(15°)	-2.38	-2.15	-2.18	-3.52	-2.63	-2.59	-3.2	-5.35	-4.72	-6.55	-5.81	-5.47	-4.87	-2.67	-3.06	-4.07	-2.83	-1.5	-3.77	-7.44	-9.86	-8.08	-5.38	-3.32
Θ(30°)	-0.25	0.04	-3.24	-2.83	-2.26	-5.6	-6.36	-6.08	-6.29	-4.04	-3.51	-4.31	-3.03	-2.11	-0.59	-0.61	-0.47	-2.03	-4.41	-7.55	-6.69	-9.4	-4.04	-2.47
Θ(45°)	-4.29	-5.29	-3.12	-7.79	-6.67	-4.5	-7.4	-9.43	-8.57	-2.88	-4.62	-3.38	-7.31	-4.85	-5.27	-2.5	-5.73	-5.76	-5.44	-4.86	-8.58	-4.8	-2.77	
Θ(60°)	-7.03	-10.61	-4.85	-8.04	-7.93	-7.74	-4.37	-11.47	-7.95	-9.19	-4.45	-7.08	-7.56	-7.35	-9.16	-10.61	-10.35	-8.84	-7.14	-8.64	-10.52	-10.94	-9.98	-8.61
Θ(75°)	-12.48	-10.2	-6.61	-8.94	-8.97	-10.02	-4.81	-9.75	-6.18	-13.08	-8.2	-9	-8.86	-9.66	-8.84	-11.34	-10.96	-13.16	-12.52	-13.12	-13.73	-13.27	-10.97	-11.59



Gain Result

Freq(Hz)	5.2G	Pol.	Phi	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.19	-4.65	-6.2	-7.85	-8.18	-10.3	-11.11	-10.85	-8.88	-8.04	-5.5	-4.34	-3.89	-4.16	-4.34	-5.56	-7.63	-9.79	-13.01	-11.54	-8.62	-5.72	-4.64	-4.45
Θ(15°)	-8.15	-11.27	-17.96	-19.17	-18.22	-19.58	-17.36	-9.59	-6.12	-5.11	-4.65	-2.14	-0.24	0.28	0.05	-1.62	-4.4	-7.55	-13.58	-15.39	-15.66	-9.54	-6.54	-5.15
Θ(30°)	-12.49	-11.1	-3.88	-1.73	-4.88	-3.72	-6.64	-4.08	-0.57	-3.98	-1.2	-0.34	-1.34	-0.11	0.09	0.78	-1.33	-4.43	-4.58	-5.39	-5.62	-5.58	-2.31	-7.43
Θ(45°)	-7.77	-1.56	-0.11	-0.25	-1.4	0.43	-0.45	-1.31	-0.51	-2.86	0.5	-0.79	1.35	2.34	1.98	1.7	0.49	-0.06	0.22	-2.15	-0.17	0.92	-1.81	-11.02
Θ(60°)	-3.51	-1.12	0.31	-7.62	0.65	1.17	-1	-0.61	-9.74	-5.88	-1.74	2.43	2.06	2.27	1.78	0.84	-1.6	-3.74	-0.93	2.21	1.9	1.26	1.44	-2.76
Θ(75°)	-6.22	-5.21	1.21	-3.22	-2.2	-0.75	0.88	-6.45	-2.58	-4.09	-1.5	2.6	1.54	-0.43	1.23	-0.86	-2.52	-2.95	-1.05	2.04	3.14	0.64	0.46	-0.5
Θ(90°)	-6.4	-5.01	0.09	-2.89	-3.51	-0.39	0.01	-6.66	-2.18	-6.63	-7.21	1.5	-2.44	-1.76	-1.98	-2.51	-3.07	-1.79	-2.15	2.83	3.39	2.02	-0.79	-2.56
Θ(105°)	-9.7	-10.76	-7.16	-7.3	-7.76	-3.35	-3.59	-7.66	-6.99	-8.63	-13.85	-5.12	-6.45	-5.41	-6.27	-6.33	-5.22	-3.93	-6.46	-0.97	0.48	-1.41	-7.43	-4.66
Θ(120°)	-10.45	-12.35	-19.16	-8.65	-10.95	-7.3	-9.17	-15.7	-9.59	-14.16	-13.56	-8.96	-9.4	-6.93	-11.06	-9.4	-8.99	-10.28	-10.94	-7.91	-7.4	-8.33	-10.33	-9.29
Θ(135°)	-10.37	-12.67	-15.69	-14.11	-14.27	-11.64	-16.19	-10.71	-15.13	-19.67	-19.29	-7.62	-8	-10.07	-17.42	-10.44	-9.87	-11.14	-9.68	-11.91	-6.24	-4.89	-10.58	-19.63
Θ(150°)	-17.51	-18.63	-19.31	-19.27	-12.24	-13.05	-18.55	-19.82	-19.67	-19.18	-15.85	-12.75	-12.47	-13.43	-17.05	-19.46	-16.93	-16.37	-20.42	-20.08	-17.97	-20.18	-16.92	-17.04
Θ(165°)	-19.22	-20.13	-18.54	-19.01	-16.12	-20.04	-18.66	-18.99	-18.75	-19.77	-17.4	-19.76	-19.51	-19.2	-18.58	-20.14	-16.97	-20.05	-18.76	-19.28	-19.8	-19.14	-19.27	-19.18
Θ(180°)	-18.7	-19.89	-18.39	-15.94	-18.39	-18.34	-14.62	-14.66	-14.57	-15.57	-15.78	-17.52	-19.28	-19.79	-17.83	-19.33	-18.14	-16.18	-14.64	-15.56	-16.59	-15.08	-14.19	-17.79
Freq(Hz)	5.2G	Pol.	Theta	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.93	-10.24	-8.77	-7.28	-4.96	-4.52	-4.64	-5.05	-4.7	-6.11	-7.2	-10.66	-10.91	-10.77	-8.97	-6.33	-5.76	-4.55	-3.97	-4.33	-5.71	-7.07	-8.3	-10.56
Θ(15°)	-7.84	-5.82	-4.6	-4.54	-5.86	-8.7	-11.93	-11.61	-14.06	-20.25	-17.23	-16.34	-13.31	-10.48	-6.71	-3.64	-3.13	-6.5	-11.92	-11.49	-11.43	-9.17	-6.87	-7.77
Θ(30°)	-1.52	-2.52	-6.53	-7.72	-2.85	-5.47	-8.27	-9.15	-11.29	-14.88	-14.76	-13.8	-12.44	-6.24	-1.86	-1.34	-0.18	-1.68	-7.46	-16.8	-16.6	-9.45	-6.48	-4.02
Θ(45°)	-15.09	-8.34	-4.31	-10.59	-4.31	-3.37	-5.94	-5.97	-8.2	-9.31	-5.69	-7.08	-19.47	-12.7	-15.75	-8.93	-3.01	-11.49	-18.25	-15.21	-8.07	-16.93	-18.82	-7.33
Θ(60°)	-8.65	-11.02	-5.58	-8.64	-6.07	-5.48	-4.83	-6.95	-10.59	-9.7	-6.2	-8.62	-8.3	-13.21	-14.09	-18.91	-13.48	-16.78	-18.58	-13.19	-11.91	-18.39	-17.59	-15.22
Θ(75°)	-16.21	-14.99	-8.54	-11.35	-9.93	-10.83	-5.24	-8.08	-10.58	-19.48	-20.08	-17.21	-12.73	-14.59	-15.5	-17.98	-12.45	-19.1	-18.89	-19.4	-13.75	-18.74	-16.88	-19.16
Θ(90°)	-19.06	-20.26	-13.97	-14.7	-20.16	-12.53	-14.82	-16.45	-13.22	-18.52	-16.22	-19.43	-19.21	-16.5	-14.71	-19.11	-13.59	-18.3	-19.6	-18.33	-11.99	-19.88	-20.27	-18.98
Θ(105°)	-18.97	-16.98	-18	-15.63	-16.67	-19.71	-15.96	-18.64	-19.67	-18.17	-15.93	-19.96	-19.23	-18.65	-19.78	-19.3	-18.28	-19.65	-17.42	-19.31	-14.34	-18.52	-19.02	-14.59
Θ(120°)	-12.68	-13.43	-14.43	-18.63	-14.53	-18.73	-19.85	-19.16	-17.32	-19.88	-19.14	-19.49	-19.52	-19.85	-19.82	-19.07	-19.3	-18.75	-18.58	-18.91	-20.45	-15.55	-19.2	-15.18
Θ(135°)	-13.58	-16.35	-19.26	-16.45	-20	-13.21	-19.13	-19.34	-20.05	-19.54	-20.16	-19.77	-14.92	-20.35	-19.29	-17.67	-19.94	-20.08	-15.28	-19.41	-18.99	-19.43	-19.95	-17.27
Θ(150°)	-12.38	-17.33	-19.49	-13.68	-19.54	-19.58	-18.67	-18.72	-20.01	-17.66	-15.03	-19.27	-14.94	-18.61	-20.29	-19.65	-19.35	-19.88	-19.44	-18.81	-20.11	-18.6	-19.35	-18.84
Θ(165°)	-18.44	-13.09	-12.77	-20.66	-19.57	-20.46	-18.97	-19.03	-19.11	-19.23	-13.75	-15.39	-16.04	-14.16	-16.99	-19.24	-18.59	-17.95	-18.3	-18.29	-18.45	-19.43	-16.39	-13.09
Θ(180°)	-16.32	-17.36	-13.5	-11.75	-14.95	-16.21	-17.06	-16.75	-19.25	-19.61	-18.31	-19.63	-16.87	-12.92	-12.02	-13.35	-13.26	-15.01	-17.99	-19.05	-18.42	-18.87	-19.25	-15.64
Freq(Hz)	5.3G	Pol.	Phi	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.3	-4.6	-5.04	-6.06	-6.77	-10.08	-12.73	-11.89	-9.29	-7.25	-6.44	-5.24	-4.49	-4.25	-4.61	-5.64	-8.36	-9.15	-12.37	-14.42	-12.19	-8.17	-7.02	-5.83
Θ(15°)	-13.49	-19.87	-19.2	-18.58	-14.61	-12.17	-10.48	-8.38	-8.27	-6.63	-4.03	-2.71	-2.76	-3.61	-4.44	-3.83	-3.44	-5.42	-10.75	-11.44	-10.72	-13.27	-10.94	-9.83
Θ(30°)	-9.93	-8.58	-4.95	-2.94	-8.62	-5.37	-9.98	-3.62	-0.34	-4.73	-1.62	-2.35	-1.29	0.12	0.05	-0.34	-2.08	-2.68	-2.7	-4.09	-3.33	-3.28	-2.75	-7.84
Θ(45°)	-4.88	-2.25	0.11	-0.08	-1.88	-0.73	-1.68	-2.23	0.32	-0.59	1.22	-1.65	0.08	1.52	2.49	0.3	-2.25	-2.76	0.72	-1.15	-1.24	-0.16	-1.93	-7.4
Θ(60°)	-4.57	-2.65	0.5	-2.56	1.43	1.77	-1.94	0.55	-13.3	-10.34	-0.11	0.78	1.63	0.67	1.25	0.43	-2.52	-3.07	-0.43	0.85	1.86	2.09	1.4	-0.29
Θ(75°)	-8.27	-5.2	1.34	-4.07	-2.89	-3.45	-0.45	-3.52	-3.92	-4.01	-0.96	1.36	1.71	-1.57	-0.05	-0.41	-1.58	-0.64	-1.28	1.21	2.94	0.56	0.06	0.96
Θ(90°)	-11.65	-7.4	-0.3	-5.49	-2.71	0.16	-2.08	-7.37	-2.86	-6.24	-5.41	0.2	-0.05	-3.16	-3.86	-2.64	-1.32	-0.72	-2.21	3.03	3.58	2.3	-0.94	-1.9
Θ(105°)	-7.72	-7.62	-5.95	-7.74	-8.61	-3.54	-3.89	-9.59	-7.1	-9.78	-9.71	-6.56	-7.67	-6.84	-7.02	-6.54	-3.81	-4.17	-5.7	-1.49	-0.59	-1.95	-6.89	-3.57
Θ(120°)	-11.88	-8.44	-19.26	-10.5	-11.61	-8.19	-8.53	-13.69	-9.69	-13.07	-11.79	-10.36	-9	-7.6	-9.24	-10.01	-8.82	-8.36	-14.05	-7.59	-5.92	-9.07	-10.72	-7.87
Θ(135°)	-11.2	-12.4	-14.06	-17.06	-11.88	-12.97	-17.49	-12.15	-17.59	-19.14	-20.47	-7.38	-8.05	-9.24	-18.82	-9.39	-8.99	-11.07	-8.01	-11.28	-7.31	-5.51	-11.95	-15.35
Θ(150°)	-20.06	-20.02	-18.91	-19.19	-14.63	-14.24	-17.27	-13.61	-19.53	-20.03	-16.74	-13.45	-13.51	-14.24	-19.05	-13.61	-18.88	-15.41	-16.66	-18.94	-18.87	-19.39	-14.29	-15.08
Θ(165°)	-20.33	-16.03	-19.01	-16.5	-16.23	-18.52	-20.05	-19.1	-19.54	-19.53	-19.47	-18.96	-19.5	-19.41	-19.5	-19.44	-17.83	-15.56	-19.31	-15.96	-19.27	-19.35	-18.66	-19.57
Θ(180°)	-17.35	-18.16	-18.71	-18.54	-19.31	-16.55	-19.23	-19.75	-16.58	-17.58	-18.94	-19.16	-20.26	-18.35	-20.03	-19.21	-19.37	-20.02	-18.41	-16.03	-15.98	-18.04	-16.98	-19.92
Freq(Hz)	5.3G	Pol.	Theta	Ant. 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-11.02	-8.56	-7.06	-7.49	-6.93	-6.6	-6.26	-5.26	-4.98	-5.07	-6.32	-7.5	-9.6	-12.64	-10.72	-9.08	-7.47	-6.04	-5.33	-5.67	-6.19	-6.48	-8.02	-10.11
Θ(15°)	-5.99	-5.31	-6.3	-8.44	-9.93	-12.28	-13.66	-15.07	-19.79	-14.09	-19.52	-19.55	-15.31	-9.63	-5.25	-4.28	-3.28	-1.8	-4.56	-10.11	-18.87	-17.67	-12.44	-10.31
Θ(30°)	-2.71	-3.79	-17.58	-5.64	-3.42	-10.89	-16.53	-13.41	-11.3	-17.4	-10.15	-19.53	-13.07	-5.74	-2.92	-1.8	-0.12	-2.58	-11.38	-19.36	-12.12	-9.51	-6.89	-4.52
Θ(45°)	-7.94	-9.24	-6.06	-19.89	-6.51	-3.78	-6.8	-9.48	-13.89	-3.48	-5.1	-4.09	-14.86	-19.79	-20.16	-7.86	-3.09	-16.76	-16.2	-17.51	-6.76	-10.6	-15.29	-6.31
Θ(60°)	-9.4	-15.5	-4.37	-8.25	-8.85	-8.16	-4.53	-12.08	-15.71	-11.51	-6.23	-9.21	-14.6	-12.08	-19.99	-20.11	-18.97	-14.22	-14.61	-13.96	-15.51	-17.46	-16.19	-16.19
Θ(75°)	-16.08																							



Θ(135°)	-13.05	-14	-17.99	-17.77	-15.07	-20.05	-11.58	-13.48	-16.21	-14.81	-14.05	-16.81	-16.83	-18.66	-18.32	-16.14	-14.98	-14.93	-18.61	-19.31	-13.02	-18.94	-17.27	-15.75
Θ(150°)	-15.15	-14.41	-19.72	-17.01	-17.44	-18.88	-19.57	-17.93	-19.15	-16.5	-18.44	-19.84	-18.97	-19.58	-18.97	-19.75	-18.63	-16.37	-19.47	-16.08	-18.41	-17.79	-18.89	-18.41
Θ(165°)	-19.94	-20.29	-18.99	-18.85	-19.81	-19.03	-18.94	-18.95	-17.45	-16.18	-20.09	-19.4	-19.88	-18.74	-19.88	-19.26	-18.91	-19.7	-19.99	-19.7	-18.38	-19.69	-18.77	-18.39
Θ(180°)	-19.13	-19.27	-19.3	-19.64	-20.17	-19.17	-18.79	-19.58	-19.25	-17.49	-17.6	-16.87	-18.47	-19.42	-19.59	-18.86	-19.87	-20.16	-18.33	-18.64	-19.89	-19.38	-20.04	-18.96
Freq(Hz)	5.3G	Pol.	Theta	Ant. 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.96	-18.57	-19.41	-17.45	-13.74	-10.11	-8.61	-8.3	-8.52	-10.45	-13.17	-16.73	-20.17	-19.26	-13.65	-10.28	-9.59	-9.57	-8.75	-8.97	-9.45	-11.07	-13.67	-13.67
Θ(15°)	-8.44	-7.87	-9.19	-15.38	-8.49	-5.41	-4.53	-6.03	-9.68	-14.8	-11.15	-12.26	-16.72	-10.64	-14.53	-16.58	-7.87	-5.24	-7.63	-12.07	-19.35	-18.52	-13.66	-10.45
Θ(30°)	-4.69	-5.44	-8.03	-15.5	-14.56	-11.8	-6.7	-7.25	-11.83	-9.51	-8.75	-10.09	-7.11	-6.94	-9.34	-19.65	-9.5	-5.55	-5.7	-9.94	-12.49	-19.52	-10.29	-6.01
Θ(45°)	-14.52	-13.04	-16.5	-18.07	-18.75	-12.63	-14.98	-18.06	-11.5	-8.17	-9.12	-11.5	-7.65	-11.86	-11.62	-14.86	-8.11	-11.76	-7.76	-8.31	-10.43	-19.21	-17.42	-12.69
Θ(60°)	-14.67	-13.71	-13.96	-19.14	-19.96	-19.43	-16.16	-16.25	-14.22	-14.47	-12.67	-11.93	-19.05	-19.32	-20.06	-19.34	-14.95	-13.48	-8.8	-18.64	-17.22	-16.39	-15.4	-19.55
Θ(75°)	-18.92	-14.09	-17.68	-20.29	-19.52	-19.25	-14.97	-18.59	-19.15	-19.14	-15.11	-11.32	-16.99	-19.31	-19.48	-18.68	-18.16	-18.07	-16.43	-19.25	-19.21	-18.51	-19.36	-19.19
Θ(90°)	-19.31	-19.3	-19.04	-19.43	-19.01	-19.38	-18.46	-19.66	-18.07	-19.54	-15.39	-16.82	-18.89	-18.4	-17.89	-20.01	-17.9	-19.3	-19.73	-19.24	-20.08	-17.87	-18.48	-19.55
Θ(105°)	-19.16	-19.01	-18.94	-19.91	-19.75	-19.68	-19	-19.94	-19.12	-18.74	-18.55	-19.79	-20.16	-18.37	-20.4	-19.52	-20.09	-18.57	-19.92	-19.97	-19.83	-19.15	-18.6	-19.6
Θ(120°)	-19.84	-19.88	-18.97	-18.71	-19.46	-19.3	-18.86	-20.19	-19.15	-19.14	-19.75	-18.75	-18.86	-18.94	-18.85	-19.07	-19.65	-18.56	-19.36	-19.72	-19.03	-15.55	-19.59	-20.02
Θ(135°)	-19.05	-19.7	-18.3	-20.1	-19.27	-19.67	-18.18	-20.19	-19.07	-19.71	-18.62	-20.46	-18.62	-19.7	-19.54	-18.58	-20.07	-18.82	-18.53	-19.92	-19.76	-20	-19.17	-19.17
Θ(150°)	-18.71	-18.04	-19.27	-19.72	-18.72	-18.95	-19.1	-18.84	-20	-18.89	-19.74	-19.67	-19.76	-19.48	-20.15	-19.25	-19.87	-19.6	-19.48	-20.11	-19.52	-19.42	-18.62	-19.51
Θ(165°)	-19.98	-18.56	-20.05	-18.68	-19.72	-18.6	-19.34	-19.24	-19.7	-19.82	-18.95	-19.07	-17.89	-19	-18.57	-18.66	-20.4	-19.08	-19.14	-19.99	-20.07	-19.9	-19.66	-20.22
Θ(180°)	-19.56	-19.46	-18.62	-19.74	-18.71	-19.4	-20.11	-20.09	-20.34	-18.44	-19.13	-18.79	-18.62	-18.91	-19.75	-18.89	-16.91	-18.2	-20.08	-19.11	-18.91	-19.73	-19.61	-19.58
Freq(Hz)	5.2G	Pol.	Phi	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-11.65	-12.24	-14.1	-16.36	-17.69	-17.49	-16.47	-13.52	-11.74	-10.68	-9.51	-10.49	-10.76	-12.59	-15.01	-17.24	-19.4	-19.64	-18.45	-13.95	-12.17	-10.17	-8.96	-9.88
Θ(15°)	-4.82	-6.28	-7.57	-8.74	-9.98	-10.78	-9.37	-6.17	-5.43	-5.62	-6.29	-8.16	-9.31	-6.95	-4.15	-3.27	-3.88	-5.92	-10.47	-9.43	-8.46	-4.87	-3.52	-4.06
Θ(30°)	1.65	0.84	-0.29	-1.92	-4.2	-2.3	-0.44	-2.59	-4.63	-2.13	-1.68	-1.07	-0.61	-2.27	-0.83	0.33	-1.41	-5.25	-7.31	-5.41	-2.29	0.13	-0.25	0.75
Θ(45°)	-1.42	-0.21	-0.53	-1.17	-2.03	-2.05	-0.33	1.4	1.64	2.22	-0.07	-0.05	-0.91	-1.31	3.01	2.49	1.26	-0.59	-1.43	-1.15	0.02	1.78	0.95	-5.92
Θ(60°)	-2.62	-2.17	-5.7	-1.73	-1.56	-1.67	-0.71	1.12	0.47	0.59	-3.33	-2.44	-2.09	-3.03	2.02	3.1	-2.71	-4.85	-2.59	-4.01	-1.57	0.16	-1.05	-6.58
Θ(75°)	-2.81	-3.74	-5.87	0.94	-0.62	-3.35	-1.73	0.72	-0.53	-2.28	-1.41	-0.57	-1.25	-2.95	0.5	2.12	-4.3	-3.47	-6.76	-3.09	-1.14	-3.84	-4.07	-4.44
Θ(90°)	-5.19	-6.83	-7.46	-0.78	-2.39	-4.75	-4.61	-1.69	-1.13	-3.31	-3.38	-1.99	-2.92	-4.09	-3.64	-2.67	-8.26	-3.45	-8.08	-2.19	-3.97	-6.53	-8.39	-6
Θ(105°)	-9.79	-10.66	-10.74	-4.78	-6.27	-7.31	-6.41	-2.96	-3.29	-5.57	-6.84	-6.74	-6.29	-9.14	-10.28	-8.25	-14.89	-10.98	-18.68	-8.05	-13.44	-12.79	-15.45	-10.82
Θ(120°)	-13.52	-15.38	-14.26	-7.69	-10.09	-11.59	-10.33	-5.03	-6.37	-9.17	-11.18	-8.73	-11.57	-11.01	-17.33	-11.72	-18.73	-16.67	-19.06	-14.35	-11.72	-16.54	-16.17	-15.86
Θ(135°)	-19.44	-14.79	-14.62	-12.95	-12.74	-17.91	-12.25	-12.15	-8.87	-13.22	-12.59	-12.84	-11.91	-19.49	-19.28	-16.38	-17.81	-12.87	-18.65	-16.34	-19.24	-15.76	-19.63	-16.11
Θ(150°)	-19	-18.26	-20.17	-19.84	-18.95	-19.08	-18.78	-19.73	-19.7	-18.66	-19.85	-15.75	-16.96	-19.85	-19.51	-19.64	-19.24	-15.38	-19.64	-18.89	-17.4	-19.46	-19.17	-19.99
Θ(165°)	-18.82	-19.68	-19.52	-19.12	-19.29	-20.32	-19.49	-19.97	-18.52	-19.5	-20.04	-19.46	-18.92	-18.7	-20.15	-19.56	-18.76	-18.65	-19.83	-18.95	-20.24	-18.7	-20.03	-18.64
Θ(180°)	-18.56	-18.47	-18.43	-18.21	-19.52	-19.98	-19.87	-19.78	-18.93	-20.18	-19.28	-18.19	-18.34	-20.63	-19.16	-20.17	-19.02	-19.61	-19.44	-19.46	-20.04	-19.66	-18.94	-18.79
Freq(Hz)	5.2G	Pol.	Theta	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-16.24	-12.58	-10.86	-10.34	-8.65	-9.63	-11.56	-10.79	-16.53	-17.87	-19.53	-18.62	-15.88	-13.51	-11.39	-11.07	-10.46	-10.2	-12.02	-12.89	-15.1	-16.54	-18.1	-17.68
Θ(15°)	-19.96	-18.36	-16.47	-16.8	-14.97	-12.6	-11.08	-9.3	-12.88	-11.63	-12.95	-19.35	-11.17	-7.67	-9.82	-19.21	-19.22	-18.54	-18.36	-18.69	-17.41	-14.5	-14.5	-14.5
Θ(30°)	-12.1	-11.2	-10.3	-9.29	-9.62	-17.84	-16.61	-15.44	-9.07	-5.56	-11.48	-8.97	-5.96	-6.27	-5.45	-5.43	-9.74	-11.24	-8.35	-12.32	-13.06	-17.8	-19.49	-18.61
Θ(45°)	-15.04	-14.61	-14.08	-15.63	-15.37	-19.72	-19.76	-18.95	-19.63	-18.34	-10.11	-13.69	-9.5	-12.64	-7.17	-7.59	-11.43	-7.1	-10.32	-11.68	-11.12	-19.89	-8.81	-6.8
Θ(60°)	-20.2	-19.87	-19.74	-20.38	-10.82	-14.3	-16.28	-18.83	-19.33	-19.29	-13.4	-14.08	-15.17	-16.81	-10.61	-14.68	-15.9	-11.57	-13.25	-13.58	-20.3	-16.39	-14.2	-12.17
Θ(75°)	-17.82	-20.08	-19.52	-19.94	-19.86	-14.77	-14.38	-16.31	-18.31	-18.69	-14.07	-14.47	-18.18	-19.97	-14.61	-15.14	-15.12	-19.56	-18	-18.59	-19.94	-16.91	-19.64	-19.87
Θ(90°)	-19.66	-19.95	-19.52	-18.63	-19.94	-19.25	-16.02	-18.87	-18.42	-20.17	-16.45	-19.74	-19.22	-19.93	-19.91	-15.71	-16.14	-18.31	-19.72	-19.8	-19.38	-20.02	-19.22	-19.12
Θ(105°)	-19.62	-18.88	-18.1	-20.09	-19.87	-18.72	-15.55	-18.75	-19.93	-19.81	-19.8	-18.65	-19.86	-19.36	-18.27	-17.66	-18.64	-20.34	-19.56	-19.88	-18.86	-19.56	-20.32	-18.02
Θ(120°)	-18.88	-19.82	-19.64	-19.76	-19.51	-19.09	-19.17	-18.12	-19.86	-19.49	-18.64	-19.05	-19.82	-18.91	-19.86	-18.77	-19.36	-19.9	-18.5	-20.15	-19.67	-19.15	-19.02	-20.16
Θ(135°)	-19.57	-20.09	-19.37	-19.21	-19.08	-19.41	-19.35	-20.15	-20.23	-18.93	-18.32	-20.29	-18.92	-20.24	-19.88	-19.8	-20.12	-19.88	-19.66	-19.49	-19.58	-19.73	-19.14	-18.63
Θ(150°)	-18.13	-20.08	-19.04	-19.33	-19.23	-18.38	-20.16	-19.09	-19.21	-19.76	-19.7	-19.38	-19.21	-19.29	-20.27	-19.01	-19.79	-18.55	-18.93	-19.7	-19.54	-19.85	-19.48	-19.87
Θ(165°)	-20.14	-19.75	-19.49	-18.55	-18.99	-19.45	-19.11	-20.16	-19.69	-20.46	-19.91	-18.49	-19.41	-19.56	-18.79	-19.89	-20.11	-19.23	-19.12	-18.28	-17.74	-18.84	-19.8	-19.33
Θ(180°)	-19.83	-20.1	-18.46	-18.73	-20.12	-18.91	-19.22	-19.49	-16.91	-14.44	-17.71	-19.68	-18.77	-18.61	-18.8	-19	-20.12	-18.76	-20.33	-19.51	-19.84	-20.09	-19.11	-19.49
Freq(Hz)	5.3G	Pol.	Phi	Ant. 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)



Θ(90°)	-19.25	-15.79	-10.94	-13.81	-18.87	-18.38	-14	-17.15	-18.92	-18.15	-17.34	-13.92	-12.5	-18.63	-12.5	-19.21	-19.84	-20.27	-19.63	-19.52	-19.45	-19.17	-16.34	-19.04
Θ(105°)	-19.18	-14.01	-14.38	-19.08	-19.23	-17.89	-19.45	-19.41	-20.33	-18.66	-14.43	-13.28	-13.32	-17.38	-18.33	-19.6	-20.1	-19.04	-18.76	-18.29	-19.1	-20.19	-17.26	-15.39
Θ(120°)	-19.88	-17.95	-19.61	-19.95	-17.69	-16.48	-19.93	-19.55	-19.6	-19.85	-16.55	-16.1	-16.98	-18.63	-19.37	-18.19	-20.3	-18.99	-20.23	-19.46	-19.31	-16.6	-17.3	-20.31
Θ(135°)	-15.31	-15.45	-19.86	-20.25	-16.49	-18.75	-18.47	-19.92	-19.78	-20.32	-19.97	-17.93	-17.46	-20.19	-16.31	-19.99	-18.65	-18.5	-19.45	-20.04	-20.02	-20.36	-19.17	-16.9
Θ(150°)	-15.09	-18.83	-18.09	-18.93	-18.82	-20.36	-20.14	-19.13	-19.37	-19.57	-18.72	-18	-19.06	-19.85	-19.78	-18.26	-18.44	-20.23	-19.62	-19.43	-19.13	-18.4	-16	-17.54
Θ(165°)	-19.74	-18.6	-19.27	-18.67	-18.26	-20.16	-19.45	-19.31	-17.17	-19.92	-19.4	-19.96	-15.31	-16.01	-14.67	-19.35	-19.3	-20.34	-18.83	-19.83	-19.82	-18.89	-18.69	-19.17
Θ(180°)	-20.03	-17.77	-18.17	-18.38	-19.4	-18.92	-20.17	-19.53	-19.25	-18.48	-18.39	-18.7	-19.94	-18.28	-16.12	-17.84	-18.84	-20.02	-19.93	-19.99	-19.68	-19.15	-20.06	-18.73
Freq(Hz)	5.3G	Pol.	Phi	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-19.57	-20.03	-15.39	-11.23	-8.16	-6.99	-5.06	-5.45	-5.3	-5.49	-7.67	-10.31	-16.96	-19.26	-16.24	-9.12	-7.07	-5.35	-5.63	-5.63	-5.59	-7.26	-8.34	-12.67
Θ(15°)	-5.22	-4.88	-5.88	-9.61	-9.57	-7.44	-5.18	-4.1	-7.38	-7.77	-6.04	-8.15	-9.33	-5.45	-2.66	-2.41	-2.93	-4.54	-3.9	-1.83	-1.61	-2.8	-6.35	-5.78
Θ(30°)	-0.49	-2.46	-5.18	-5.28	-2.02	-1.14	-1.22	-2.06	-1.47	0.11	-0.82	-5.24	-4.02	-0.98	-1.84	-5.17	-2.75	-2.98	-2.65	-5.87	-4.69	-1.75	-3.41	-1.33
Θ(45°)	-3.07	-2.18	-2.58	-6.99	-7.88	-3.06	-0.8	-3.96	0.13	-0.68	-2.18	-0.07	0.4	0.36	0.45	-0.06	-1.89	-2.86	-1.83	-2.55	-6.15	-7.37	-1.49	-0.11
Θ(60°)	-1.94	-0.64	-0.79	-4.75	-3.33	1.85	1.46	-1.28	-0.34	0.2	-2.26	-0.58	-1.64	-3.23	-0.26	-2.4	-1.35	-1.16	-1.68	-8.26	-6.51	-7.36	-3.06	-0.94
Θ(75°)	-1.01	-0.05	-0.35	-0.09	-0.01	1.64	3.13	1.22	-0.44	0.45	1.73	0.42	-0.1	-5.19	0.95	-2.39	0.41	-4.99	-5.16	-9.45	-5.8	-5.23	-4.89	-1.16
Θ(90°)	-3.32	-2.59	-0.83	-1.3	-2.03	0.19	1.66	0.05	-0.39	0.15	1.41	0.38	-2.91	-6.53	-3.46	-7.27	-3.47	-3.38	-7.26	-10.31	-11.34	-6.88	-8.39	-4.52
Θ(105°)	-6.16	-5.12	-3.93	-4.91	-4.62	-2.89	-0.57	-1.8	-1.55	-2.89	-1.64	-2	-3.6	-12.53	-7.85	-11.54	-11.58	-7.84	-13.06	-10.93	-13.82	-13.52	-10.58	-6.67
Θ(120°)	-10.29	-8.46	-8	-8.97	-9.34	-5.69	-3.6	-7.61	-5.58	-7.48	-8.36	-5.95	-9.17	-12.07	-14.12	-14.77	-11.56	-12.06	-18.99	-11.2	-13.88	-19.15	-17.83	-14.07
Θ(135°)	-11.18	-10.87	-12.05	-15.34	-10.91	-10.48	-6.37	-8.66	-11.84	-13.13	-17.57	-20.33	-13.22	-16.84	-19.32	-18.85	-19.93	-15.82	-19.04	-18.46	-17.49	-20.28	-17.21	-13.43
Θ(150°)	-15.93	-17.51	-20	-18.76	-13.95	-12.45	-15.87	-14.39	-16.57	-19.81	-15.72	-19.88	-19.98	-20.18	-20.45	-20.31	-19.53	-19.44	-20.05	-19.31	-19.49	-17.7	-18.92	-18.02
Θ(165°)	-19.81	-19.71	-19.25	-19.73	-19.66	-18.43	-19.21	-18.56	-19.37	-19.68	-17.98	-19.4	-19.63	-19.62	-19.52	-18.84	-20.03	-19.15	-20.41	-18.25	-19.2	-19.52	-19.27	-18.79
Θ(180°)	-19.53	-19.43	-20.25	-18.22	-19.5	-19.81	-19.93	-20.13	-19.89	-20.35	-19.71	-18.94	-19.72	-19.65	-18.92	-18.6	-17.14	-19.36	-19.88	-19.35	-20.2	-19.68	-19.13	-19.57
Freq(Hz)	5.3G	Pol.	Theta	Ant. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-6.31	-6.86	-6.9	-9.13	-10.22	-11.2	-19.25	-19.8	-14.11	-8.75	-6.73	-5.76	-5	3.89	-4.76	-5.02	-7.2	-15.9	-18.71	-18.9	-12.62	-9.62	-7.15	-7.03
Θ(15°)	-7.04	-6.95	-5.38	-3.96	-4.61	-8.01	-11.47	-18.5	-8.68	-9.77	-7.89	-5.63	-5.08	-7.38	-11.63	-14.11	-15.16	-18.38	-19.23	-19.61	-14.6	-9.91	-9.65	-6.98
Θ(30°)	-8.85	-5.72	-3.94	-4.34	-5.71	-7.82	-12.04	-12.41	-18.32	-10.46	-10.16	-6.72	-8.28	-10.32	-9.4	-5.41	-10.93	-14.51	-14.49	-12.25	-9.46	-17.15	-8.07	-10.38
Θ(45°)	-9.57	-8.52	-5.38	-7.59	-15.75	-14.98	-19.79	-18.96	-18.9	-13.29	-15.58	-15.15	-7.04	-10.94	-7.42	-16.64	-14.25	-10.24	-13.83	-14.94	-12.32	-13.48	-6.26	-11.68
Θ(60°)	-13.23	-19.09	-13.81	-16.26	-19.67	-13.36	-12.01	-18.93	-18.27	-17.61	-10.41	-15.8	-8.45	-11.23	-9.59	-11.24	-12.91	-15.13	-13.54	-19.57	-15.91	-16.72	-19.72	-11.4
Θ(75°)	-20.26	-15.56	-13.08	-13.29	-18.07	-16.09	-14.2	-15.77	-20.37	-19.23	-10.35	-13.05	-11.63	-10.54	-12.59	-14.81	-19.38	-19.75	-20.02	-18.7	-20.17	-19.48	-12.59	-14.66
Θ(90°)	-19.09	-15.93	-11.95	-13.58	-20.26	-19.78	-16.43	-20	-19.06	-20.02	-13.86	-12.61	-15.1	-14.56	-13.63	-18.92	-20.18	-20.21	-20.25	-19.9	-18.93	-18.84	-15.42	-18.87
Θ(105°)	-19.91	-14.76	-14.21	-15.99	-19.34	-16.42	-20.44	-19.54	-20.26	-19.96	-15.02	-11.23	-12.64	-14.68	-13.64	-19.08	-19.59	-18.37	-20.14	-19.63	-19.91	-19.74	-14.78	-16.2
Θ(120°)	-20.04	-20.13	-19.75	-19.18	-19.31	-15.31	-19.2	-18.17	-19.94	-19.45	-20.06	-16.2	-16	-19.39	-19.51	-17.5	-18.59	-19.96	-19.89	-19.96	-20.15	-16.59	-18.58	-19.93
Θ(135°)	-17.66	-13.82	-17.21	-19.69	-14.92	-15.85	-19.53	-19.19	-19.07	-19.69	-18.91	-19.66	-19.33	-15.21	-14.01	-18.85	-18.28	-18.87	-19.71	-19.84	-19.6	-19.73	-19.21	-18.35
Θ(150°)	-13.92	-17.7	-19.24	-18.32	-20.33	-20.01	-19.77	-19.86	-19.65	-19.86	-19.94	-19.34	-19.16	-19	-18.98	-16.93	-19.91	-19.52	-20.15	-18.85	-17.68	-17.01	-14.22	-19.04
Θ(165°)	-19.93	-19.31	-19.57	-19.52	-18.86	-19.58	-19.82	-19.48	-16.99	-18.81	-19.05	-18.83	-19.6	-19.5	-15.61	-19.09	-19.42	-18.6	-20.36	-18.31	-19.5	-18.31	-17.74	-18.92
Θ(180°)	-18.39	-18.78	-19.65	-19.57	-19.36	-20.14	-19.29	-20.01	-19.54	-20.49	-19.93	-18.11	-20.22	-18.25	-19.21	-17.69	-19.36	-19.29	-19.62	-19.54	-19.92	-19.93	-19.22	-19.77



Freq(Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	3.56	4.37	3.82	4.7	4.96	3.57	3.72	4.44
Ant. 2 Max Gain (dBi)	1.25	3.18	3.45	1.86	4.4	3.52	3.12	3.31
Ant. 3 Max Gain (dBi)	4.27	4.24	2.25	3.64	4.14	2.03	3.08	4.86
Ant. 4 Max Gain (dBi)	1.94	2.59	2.08	3.11	4.85	2.6	3.43	3.41
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/270	Theta/30/270	Theta/30/240	Theta/45/240	Theta/30/255	Theta/30/240	Theta/45/225	Theta/45/240
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/240	Theta/75/180	Theta/60/270	Theta/30/135	Theta/30/345	Theta/45/120	Phi/15/30	Theta/30/330
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/75	Theta/75/75	Theta/45/120	Theta/45/105	Theta/60/135	Phi/45/45	Theta/60/105	Phi/60/45
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/45/75	Theta/75/180	Theta/60/345	Phi/30/150	Phi/15/165	Theta/60/75	Theta/45/330	Phi/30/60
Max Gain (dBi)	4.27	4.37	3.82	4.7	4.96	3.57	3.72	4.86
DG [1SS] (dBi)	6.84	7.38	5.12	5.7	7.11	6.27	6.05	7.06
DG [2SS] (dBi)	4.27	4.38	3.82	4.7	4.96	3.57	3.72	4.86
DG [4SS] (dBi)	0.94	1.63	-0.67	0.08	1.27	0.39	0.36	1.54



DG 1SS Result

Freq(Hz)	5.2G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	3.13	2.8	2.39	0.15	0.1	-0.25	-0.04	-0.17	1.12	2.57	3.49	3.98	4.34	3.78	2.74	1.14	0.25	-0.12	-1.3	-0.77	-0.12	2.01	2.97	3.31
Θ(15°)	2.14	1.88	3.19	3.99	4.16	1.43	0.24	-1.02	-1.76	0.98	1.31	1.75	2.73	2.32	1.36	0.33	0.74	0.95	-2.53	-3.18	-1.81	-0.14	1.38	2.37
Θ(30°)	-0.16	0.89	2.82	4.5	1.98	1.27	1.5	1.12	1.24	-1.54	1.82	-1.26	2.57	2.28	0.98	-4.59	-2.65	-2.49	-3	-3.11	-2.12	-4.06	-1.3	-1.54
Θ(45°)	-2.73	0.31	-0.44	-0.58	-2.49	-4.23	-1.56	-3.89	-3.39	-0.99	0.52	-1.03	-1.69	-3.09	-2.91	-4.32	-5.97	-3.09	-6.54	-7.27	-4.77	-2.5	0.48	-3.12
Θ(60°)	-3.86	0.21	-3.17	-2.88	-7.51	-4.95	-2.05	-2.43	-1.33	-3.96	-1.64	-2.85	-0.54	-5.81	-6.44	-6.78	-4.56	-4.49	-2.61	-3.56	-2.79	-3.09	-0.68	-2.76
Θ(75°)	-6.95	-1.93	-2.6	-3.4	-9.45	-3.82	-3.1	-0.66	-0.83	-1.69	-3.57	-3	-0.37	-5.17	-5.57	-3.22	-5.27	-3.17	0.76	-3.11	-1.46	-6.59	-6.35	-2.11
Θ(90°)	-7.01	-3.89	-3.44	-4.55	-6.85	-0.56	-4.19	-3.02	-1.15	-1.7	-0.64	-8.85	-3.33	-8.22	-5.43	-4.24	-6.37	-4.38	-0.39	-3.47	-2.28	-7.24	-8.29	-5.22
Θ(105°)	-7.56	-6.49	-4.4	-5.4	-4.71	0.27	-4.35	-3.25	-3.62	-4.94	0.62	-7.02	-8.9	-8.02	-4.66	-9.22	-5.35	-3.22	-1.64	-4.24	-4.78	-8.58	-10.97	-6.89
Θ(120°)	-9.55	-9.23	-7.18	-5.45	-3.76	-1.96	-2.09	-3.73	-7.68	-7.66	-7.29	-6.32	-6.17	-11.39	-8.55	-7.54	-7.67	-4.69	-3.75	-6.84	-4.61	-11.27	-8.88	-9.31
Θ(135°)	-7.9	-9.66	-11.96	-7.99	-6.4	-3.8	-5.5	-5.33	-6.13	-5.62	-11.32	-7.41	-8.53	-9.48	-8.25	-6.59	-8.44	-8.02	-4.76	-8.32	-11.28	-8.7	-6.99	-12.04
Θ(150°)	-11.02	-9.76	-10.07	-6.41	-6.49	-7.88	-5.59	-9.18	-11.85	-7.96	-10.43	-12.3	-9.09	-11.38	-10.28	-9.91	-10.77	-6.24	-6.9	-9.72	-10.11	-7.89	-7.33	-12.36
Θ(165°)	-10.47	-9.43	-11.87	-10.15	-8.34	-7.38	-8.29	-8.94	-9.33	-11.02	-11.51	-11.38	-11	-12.1	-11.13	-9.58	-9.44	-6.57	-6.11	-6.99	-6.62	-7.03	-10.9	-12.45
Θ(180°)	-11.76	-10.12	-10.12	-10.37	-10.67	-9.94	-11.34	-12.28	-11.1	-10.96	-12.32	-12.54	-13.05	-10.82	-9.48	-8.77	-8.99	-9.95	-10.49	-11.35	-11.9	-13.21	-14.01	-12.05
Freq(Hz)	5.2G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.66	-0.52	0.65	1.22	2.64	3.18	3.47	3.18	2.34	1.29	-0.24	0.53	-0.81	0.17	1.47	2.52	3.48	4.05	3.35	3.06	1.96	1.09	-0.14	-1.38
Θ(15°)	-0.8	-0.68	-2.45	-2.26	0.63	2.34	2.72	3.36	3.22	1.38	-0.19	-1.01	1.18	1.44	0.38	1.2	1.58	1.54	0.25	-0.4	-0.47	0.46	-0.82	0.8
Θ(30°)	1.6	0.62	0.8	-1.93	-0.15	2.37	2.41	2.91	3.25	5.04	2.49	0.13	-0.65	-1.09	-0.72	2.52	2.72	3	1.69	-0.96	-1.45	-0.42	-0.52	0.55
Θ(45°)	-0.89	-1.02	1.37	0.97	2.02	4.96	3.76	2.9	0.77	4.89	-0.62	2.46	4.3	0.42	2.13	6.84	4.6	4.08	4.71	2.94	0.03	-1.07	1.83	-1.4
Θ(60°)	-2.01	-0.73	3.51	3.26	3.94	4.5	3.94	1.58	0.76	2.68	3.03	0.94	3.89	0.41	1.46	4.78	4.11	4.91	5.17	4.1	3.55	0.03	1.72	-0.67
Θ(75°)	0.42	2.43	2.86	3.84	3.67	4.41	3.02	4.37	-0.21	3.15	3.08	2.56	5.88	1.76	1.26	4.24	5.08	3.44	4.35	0.83	2.86	-0	0.87	1.92
Θ(90°)	-1.34	1.84	3.33	3.85	2.85	3.53	3.22	2.45	-0.23	-0.77	0.37	-1.96	0.82	-1.32	1.73	2.85	3.43	1.58	-0.27	-0.72	1.67	-0	0	1.62
Θ(105°)	-2.89	0.45	2.85	2.61	0.92	-1.6	-0.51	0.51	-1.51	-6.23	-0.88	-3.79	-3.51	-5.34	-7	-4.77	-4.69	-4.5	-4	-4.66	-2.67	-1.27	-0.17	-0.34
Θ(120°)	-4.53	-1.7	-0.47	0.36	-3.16	-6.54	-8.99	-6.52	-9.23	-9.03	-7.8	-6.7	-7.23	-7.24	-5.26	-7.5	-5.9	-5.38	-5.47	-7.33	-9.17	-5.45	-3.54	-2.93
Θ(135°)	-5.42	-4.12	-1.29	-4.07	-4.65	-9.58	-8.43	-5.28	-6.62	-6.75	-6.73	-6.68	-9.32	-11.65	-10.98	-5.89	-10.13	-8.02	-5.41	-7.93	-10.18	-4.05	-6.33	-3.01
Θ(150°)	-6.01	-4.61	-6.21	-3.69	-6.98	-10.55	-12.56	-8.43	-9.51	-13.42	-8.66	-12.16	-10.19	-9.29	-10.98	-13.34	-13.13	-12.63	-10.57	-9.68	-9.4	-8.97	-5.94	-4.64
Θ(165°)	-8.82	-8.41	-8.12	-7.27	-6.51	-7.15	-11.24	-12.33	-12.65	-7.97	-7.37	-9.14	-9.31	-10.8	-9.22	-11.57	-13.09	-12.09	-11.97	-11.6	-9.22	-9.89	-9.77	-9.94
Θ(180°)	-10.83	-12.93	-13.19	-12.94	-13.58	-13.58	-13.73	-12.67	-10.33	-12.27	-11.55	-10.73	-10.09	-10.92	-12.45	-12.17	-13.02	-12.63	-10.36	-9.98	-9.61	-9.08	-10.72	-10.82
Freq(Hz)	5.3G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	3.92	4.12	3.3	1.78	-0.71	-4.25	-5.23	-2.43	0.13	1.93	3.99	5.05	5.41	5.13	4.16	2.57	-0.06	-3.97	-5.93	-3.6	-1.14	1.78	3.6	3.85
Θ(15°)	2.81	3.07	2.17	1.74	3.45	2.7	0.15	-1.65	-0.75	1.04	1.82	2.18	3.43	2.95	2.22	0.79	-0.1	-1.19	-3.73	-3.28	-1.16	0.8	2.14	2.7
Θ(30°)	0.57	2.26	1.47	2.01	0.2	0.24	0.64	0.78	1.83	-0.38	1.39	-1.54	3.57	2.8	1.79	-2.04	-0.99	-2.96	-4.55	-1.86	-0.74	-3.65	-0.26	-0.21
Θ(45°)	-0.66	1.73	-1.07	-2.18	-6.19	-3.93	-0.22	-2.28	-3.82	-1.48	0.61	-3.31	-2.88	-2.9	-0.98	-2.84	-2.68	-0.65	-5.43	-4.83	-5.54	-2.32	0.62	-2.07
Θ(60°)	-2.59	-0.31	-2.85	-4.25	-5.65	-3.74	-1.87	-2.16	-2.75	-1.98	-2.35	-2.91	-0.2	-5.13	-3.41	-4.62	-2.52	-2.73	-2.56	-2.51	-1.84	-3.23	-1.62	-2.08
Θ(75°)	-4.8	-2.19	-2.79	-6.13	-6.75	-2.55	-4.02	-0.93	-2.55	-2.76	-2.81	-3.55	-0.34	-3.66	-5.31	-3.26	-4.78	-3.45	-0.24	-1.99	-0.67	-4.8	-5.81	-3.58
Θ(90°)	-5.71	-3.91	-2.6	-9.19	-5.63	-1.23	-3.41	-3.34	-1.91	-3.23	-1.2	-7.4	-1.84	-7.04	-5.96	-2.72	-6.37	-4.68	-1.38	-1.23	-2.19	-4.87	-5.96	-5.53
Θ(105°)	-7.77	-5.62	-4.15	-7.9	-5.55	-2.66	-5.39	-3.08	-4.77	-5.97	-1.46	-5.92	-8.9	-9.31	-6.06	-7.78	-6.92	-4.23	-4.07	-4.64	-5.45	-7	-9.15	-8.67
Θ(120°)	-7.61	-9.55	-6.02	-4.62	-5.05	-4.25	-3.48	-6.28	-8.86	-7.75	-10.68	-6.44	-8.53	-11.76	-8.24	-6.9	-8.54	-5.6	-3.32	-7.85	-5.51	-8.92	-9.84	-10.76
Θ(135°)	-10.67	-9.65	-9.45	-8.83	-5.17	-3.43	-5.24	-7.29	-6.4	-8.89	-10.98	-10.65	-10.19	-10.6	-9.97	-7.64	-11.32	-9.54	-6.94	-9.94	-11.62	-10.57	-10.1	-9.2
Θ(150°)	-10.34	-7.46	-9.67	-6.31	-6.19	-8.97	-3.52	-8.65	-11.46	-8.1	-10.8	-13.16	-11.82	-12.12	-12.16	-9.54	-12.05	-8.25	-7.11	-11.29	-10.98	-10.21	-9.94	-11.12
Θ(165°)	-11.85	-10.76	-10.23	-10	-9.91	-8.49	-9.36	-10.53	-9.18	-10.02	-11.05	-12.94	-13.06	-11.24	-10.68	-11.37	-8.39	-6.74	-7.96	-8.04	-8.22	-8.68	-11.48	-13.22
Θ(180°)	-9.28	-9.26	-8.98	-8.94	-8.28	-9.26	-11.15	-11.07	-10.58	-12.84	-12.05	-11.01	-11.16	-9.13	-8.88	-8.6	-8.23	-7.8	-8.04	-9.78	-12.58	-12.44	-11.38	-10.99
Freq(Hz)	5.3G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.11	-3.31	-1.6	0.84	3.51	4.43	4.9	4.92	3.86	2.14	-0.99	-4.61	-4.54	-2.69	-0.32	2.34	4.19	4.75	4.24	3.95	3.01	2.12	-0.82	-4.31
Θ(15°)	-1.52	-2.47	-2.55	-2.93	0.93	2.93	3.67	3.34	3.22	1.16	-1.32	-2.31	-0.79	1.01	0.28	0.51	1.32	2.55	1.1	1.13	0.29	-0.8	-2.36	-1.72
Θ(30°)	1.18	0.38	1.13	-0.24	-1.2	1.57	2.02	1.29	1.4	3.17	2.57	2.61	1.44	-1.74	2.2	2.57	3.75	3.14	3.26	1.38	-0.43	2.47	1.09	1.26
Θ(45°)	-2.83	-1.94	1.06	1.41	2.75	5.63	4.53	4.54	1.68	3.99	1.64	1.01	5	-1.34	2.15	5.23	5.39	5.67	6.11	4.12	1.95	-1.61	2.15	-4.62
Θ(60°)	-0.86	2.16	3.05	4.41	5.08	5.17	4.49	3.28	2.77	3.56	3.67	2.27	6.08	1.03	0.75	4.86	5.77	5.34	4.82	3.9	5.2	0.75	1.72	0.42
Θ(75°)	-1.05	2.48	4.59	5.19	3.06	4.14	3.08	4.97	2.52	3.6	4.37	1.81	7.38	-0.94	-0.61	4.24	4.72	2.51	4.31	-0.05	3.38	-1.61	1.11	2.73
Θ(90°)	0.23	1.57	3.74	4.1	1.35	4.32	2.21	2.51	-0.22	0.67	2.19	-1.6	3.14	-4.17	-1.14	2.85	3.59	0.17	0.01					



Θ(180°)	-9.96	-9.81	-9.61	-10.19	-8.79	-9.57	-10.58	-12.21	-11.59	-10.26	-10.13	-9.8	-8.11	-11.4	-10.64	-10.15	-9.15	-9.9	-9.4	-9.29	-9.03	-9.06	-9.62	-10.77
Freq(Hz)	5.785G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	1.88	2.5	2.66	2.51	1.97	1.31	1.49	0.61	0.07	-0.15	0.23	0.45	2.03	2.71	2.69	2.63	2.46	2.13	0.2	-0.74	-0.75	0.72	1.19	0.48
Θ(15°)	0.58	1.61	2.83	3.72	2.94	1.36	3.02	2.81	3.14	3.47	3.05	3.72	2.88	3.94	4.57	2.72	0.6	-1.39	-3.46	-2.57	-0.91	-1.78	-4.47	-2.34
Θ(30°)	2.78	0.35	2.07	1.51	-0.95	1.83	0.69	0.6	0.77	1.7	3.31	2.37	2	1.93	1.47	1.5	-1.23	-2.62	-3.59	-4.67	-3.32	-3.74	-2.69	0.62
Θ(45°)	2.41	1.92	-1.39	0.04	-1.22	-0.62	1.21	-0.35	-3.76	-2.17	1.58	1.33	1.76	-0.14	-1.43	-5.36	-4.51	-8.56	-5.36	-2.31	-2.16	-1.47	-1.33	-0.23
Θ(60°)	1.18	0.73	-2.71	-1.96	-3.15	-0.47	0.12	-2.06	-1.83	-4.59	-4.94	-0.63	-2.34	-1.42	-4.06	-6.34	-4.64	-4.99	-1.86	0.3	-5.31	-5.73	-3.58	-1
Θ(75°)	-1.31	-1.8	-3.54	-5.53	-3.61	-2.12	-3.36	-4.73	-1.47	-1.85	-2.57	-4.73	-5.31	-3.9	-8.32	-6.65	-6.41	-4.11	0.41	-1.98	-5.15	-7.81	-1.91	-0.17
Θ(90°)	-2.7	-4.9	-2	-6.85	-3.63	-2.9	-2.53	-2.85	-1.59	-4.58	-4.34	-5.16	-3.33	-5.88	-9.69	-5.94	-6.27	-3.76	-1.61	-1.78	-2.95	-6.62	-4.61	-3.35
Θ(105°)	-5.32	-6.3	-3.5	-8.76	-4.83	-2.42	-3.72	-2.45	-7.27	-9.07	-4.64	-8.01	-8.61	-11.01	-8.6	-9.86	-8.89	-2.73	-2.75	-4.31	-4.49	-6.75	-8.13	-7.27
Θ(120°)	-8.01	-6.09	-8.23	-8.1	-6.26	-6.11	-6.22	-4.05	-7.03	-5.91	-7.28	-11.43	-9.03	-9.52	-8.61	-6.02	-8.82	-5.82	-6.74	-9.6	-4.44	-6.72	-10.23	-9.17
Θ(135°)	-5.34	-7.29	-12.99	-7.85	-8.95	-7.78	-7.53	-9.72	-8.28	-11.18	-5.83	-9.52	-7.33	-8.7	-13.68	-11.78	-9.74	-9.55	-9.87	-11.45	-8.61	-8.58	-8.93	-10.3
Θ(150°)	-5.81	-7.73	-9.44	-9.35	-6.73	-7.45	-5.55	-7.85	-6.21	-7.75	-10.1	-11.76	-12.5	-8.66	-12.46	-12.43	-8.71	-8.6	-7.64	-8.38	-10.75	-9.7	-10.11	-11.66
Θ(165°)	-6.18	-9.2	-11.81	-10.48	-9.31	-7.93	-8.61	-9.22	-10.08	-9.64	-9.68	-11	-10.99	-7.51	-6.64	-9.56	-10.23	-9.17	-10.03	-10.93	-11.16	-12.66	-12.67	-12.31
Θ(180°)	-5.95	-6.11	-6.39	-8.12	-11.29	-10.78	-11.87	-11.07	-8.71	-10.01	-9.09	-9.2	-9.23	-7.65	-8.07	-9	-10.31	-11.55	-10.82	-9.51	-9.07	-7.22	-6.25	-8.46
Freq(Hz)	5.785G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	0.56	0.27	0.03	0.68	1.34	1.67	2.13	2.9	2.8	2.36	1.39	1.1	0.72	0.36	1.06	1.67	2.28	0.84	1.2	1.51	2.97	2.7	0.48	
Θ(15°)	1.01	1.35	1.96	0.97	0.56	1.92	3.24	3.76	0.66	-3.76	0.24	1.21	2.53	1.35	-1.2	-1.21	-0.03	0.44	0.7	1.68	2.57	2.17	1.15	0.65
Θ(30°)	-0.41	0.62	0.93	0.04	-0.12	-0.05	2.86	2.48	3.43	4.1	3.14	2.04	3.19	1.56	1.46	3.31	3.15	1.07	0.05	-2.73	1	-2.27	1.18	-0.89
Θ(45°)	-1.19	1.19	-0.67	0.87	-0.11	1.26	3.58	4.53	3.84	2.84	0.6	0.75	0.8	1.66	4.89	3.86	4.24	3.43	2.53	1.5	0.15	3.57	2.26	1.67
Θ(60°)	1.19	4.11	2.38	0.74	-1.26	2.61	3.61	1.33	3.75	4.1	4.49	0.63	0.73	1.47	3.57	2.5	2.55	2.92	3.1	4.11	2.32	1.95	1.82	1.47
Θ(75°)	1.89	5.04	2.3	0.57	0.69	2.56	3.85	3.44	2.93	4.51	5.7	1.54	2.74	4.2	2.46	-1.62	2.23	2.67	4.36	3.77	-0.26	2.49	1.93	1.92
Θ(90°)	-0.79	3.03	3.15	-0.02	0.83	2.56	3.59	0.08	-0.46	2.26	0.35	-4.73	-0.7	0.29	-0.23	-0.14	0.65	-0.23	2.36	0.51	-1.13	1.41	-0.26	0.65
Θ(105°)	-3.48	-0.1	2.93	-0.82	-1.32	1.22	-0.11	-4.43	-2.85	-0.73	-3.42	-8.38	-2.95	-8.25	-6.31	-7.16	-5.77	-6.54	-3.6	-4.86	-5.22	-1.92	-0.54	-1.92
Θ(120°)	-4.32	-0.66	0.76	-0.61	-5.29	-4.65	-4.38	-10.43	-8.13	-7.73	-7.53	-9.3	-5.52	-6.43	-8.04	-3.84	-6.55	-5.86	-4.71	-5.81	-7.44	-5.37	-2.69	-3.97
Θ(135°)	-6.23	-2.83	-2.46	-3.93	-7.57	-4.9	-9.23	-6.22	-6.97	-5.23	-8.24	-9.01	-13.27	-9.41	-10.63	-8.48	-8	-7.07	-7.26	-9.92	-10.24	-4.28	-6.89	-8.4
Θ(150°)	-7.2	-4.52	-3.75	-3.25	-6.56	-11.9	-9.93	-8.23	-6.73	-10.24	-8.51	-8.91	-10.7	-9.24	-10.77	-11.31	-11.1	-11.45	-9.96	-12.59	-9.33	-8.14	-5.01	-9.42
Θ(165°)	-6.97	-5.97	-6.84	-6.59	-7.5	-7.6	-10.62	-13.46	-9.7	-10.21	-10.43	-11.79	-12.42	-10.98	-11.08	-11.09	-11.85	-10.43	-9.88	-9.18	-8.72	-7.52	-9.36	-7.1
Θ(180°)	-9.88	-9.06	-8.35	-8.25	-8.56	-8.37	-10.28	-11.99	-10.06	-10.25	-10.59	-11.7	-11.11	-10.79	-7.31	-6.42	-5.54	-6.64	-6.64	-6.73	-7.72	-9.28	-9.98	-11.83
Freq(Hz)	6.175G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	5.79	5.71	6.31	5.33	4.56	3.35	1.8	1.8	2.29	2.45	3.2	4.31	5.78	6.01	6.21	5.8	5.24	4.2	1.54	0.34	0.51	2.54	3.6	2.95
Θ(15°)	5.9	4.68	3.89	3.96	3.38	0.93	-3.8	-2.29	-2.54	3.25	6.1	6.17	6.2	3.4	2.92	1.92	-0.52	-2.54	-4	-2.53	-2.98	-7.7	-4.49	0.85
Θ(30°)	1.96	0.54	2.39	3.07	2.31	3.58	0.99	-0.46	1.99	3.67	5.62	3.87	5.41	-0.59	2.18	-0.12	-0.06	1.03	0.96	0.94	0.7	0.32	0.36	3
Θ(45°)	-1.02	-0.08	0.05	2.49	1.75	3.3	-1	1.02	-0.39	-0.72	-0.85	3.61	5.7	0.67	0.21	-1.94	0.68	-0.82	-2.17	0.43	-0.45	0.73	2.16	3.92
Θ(60°)	1.86	1.98	-3.48	-2.38	-1.81	-0.08	-1.32	-1.18	-2.69	-2.96	0.45	0.2	-0.18	-1.16	-5.02	-5.39	-3.16	-2.12	-3.33	-2.53	-4.47	-1.42	-0.53	3.15
Θ(75°)	2.24	-0.18	-6.02	-4.93	-6.96	-1.82	0.42	-2	-5.1	-7.03	-5.02	-3.55	-2.96	-4.07	-5.69	-6.9	-7.06	-5.8	-0.57	-3	-9.18	-3.88	1.59	-0.72
Θ(90°)	0.88	-2.8	-5.5	-5.83	-4.72	-2.13	-0.07	-5.64	-6.47	-4.58	-9.37	-2.21	-3.01	-6.35	-10.19	-4.66	-10.14	-3.93	-0.75	-3.92	-6.05	-5.42	-1.88	-2.96
Θ(105°)	-2.44	-4.15	-5.58	-6.04	-4.17	-0.41	-1.36	-6.57	-7.9	-8.86	-5.48	-5.14	-6.76	-10.79	-10.29	-6.9	-11.32	-5.87	-2.54	-5.26	-7.4	-7.88	-5.15	-5.56
Θ(120°)	-5.02	-6.82	-6.37	-4.95	-6.27	-4.69	-4	-5.67	-7.71	-8.35	-9.89	-7.9	-9.24	-9.93	-8.79	-7.2	-5.31	-7.79	-5.14	-10.13	-8.13	-6.59	-6.45	-8.42
Θ(135°)	-11.08	-7.48	-8.5	-4.21	-7.83	-10	-6.76	-9.58	-10.62	-9.7	-13.25	-8.73	-7.91	-8.42	-12.72	-9.25	-9.39	-9.63	-5.51	-10.46	-5.93	-7.86	-10.69	-11.06
Θ(150°)	-5.35	-9.22	-9.05	-4.55	-10.1	-7.49	-10.68	-9.32	-9.19	-6.54	-9.8	-10.4	-13.08	-7.08	-9.09	-10.56	-9.94	-6.7	-5.52	-6.85	-9.91	-9.13	-6.55	-8.3
Θ(165°)	-9.76	-11.66	-13.36	-9.66	-11.45	-9.5	-7.4	-10.32	-11.44	-12.54	-12.05	-8.41	-10.47	-10.34	-9.41	-9.84	-8.28	-7.05	-5.39	-8.02	-9.81	-12.81	-11.73	-13.44
Θ(180°)	-7.97	-9.08	-9.91	-13.18	-13.32	-10.24	-11.63	-7.96	-7.69	-8.08	-8.59	-6.47	-8.22	-7.42	-9.03	-9.49	-8.9	-7.82	-6.4	-6.54	-6.13	-5.25	-5.71	-8.46
Freq(Hz)	6.175G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	2.44	1.65	2.31	2.5	2.8	3.79	4.06	5.34	5.9	5.53	4.96	3.57	3.14	1.64	2.13	2.14	3.67	5.11	4.6	4.52	4.64	6.16	5.47	2.07
Θ(15°)	4.21	2.51	0.45	0.68	1.33	1.43	3.89	5.66	5.64	3.68	1.47	2.47	1.21	2.05	-1.29	2.04	3.86	3.88	4.24	3.74	3.25	4.3	3.78	2.98
Θ(30°)	0.66	1.13	2.52	4.04	0.24	3.03	4.92	4.85	7.11	4.33	4.14	-2.46	2.57	3.02	1.65	1.13	3.18	5.66	3.98	2.27	-1.3	1.81	2.27	4.54
Θ(45°)	2.47	2.12	3.17	2.79	1.94	2.85	4.69	5.64	6.4	1.67	2.65	0.22	2.1	3.36	2.14	3.69	2.98	5.98	2.76	4.33	3.75	0.38	3.71	4.76
Θ(60°)	3.6	3.11	2.3	0.54	1.81	4.86	4.76	5.97	4.63	3.92	2.52	0.6	0.9	2.99	1.2	4.94	4.81	6.48	5.3	6.44	3.05	5	0.6	6.41
Θ(75°)	3.43	2.55	3.36	-0.02	1.39	5.22	4.55	4.52	4.16	4.08	5.44	6.07	4.18	4.36	3.66	1.49	4.52	5.6	5.44	5.06	3.4	3.55	3.69	5.84
Θ(90°)	1.59	2.95	2.6	-1.8																				



Freq(Hz)	6.695G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.84	-0.68	1.33	1.93	1.21	0.76	-0.72	-1.85	-5.83	-8.79	-7.47	-7.13	-2.99	-0.52	1.13	2.24	2.36	2.03	0.59	-1.32	-3.15	-6.54	-7.5	-5.3
Θ(15°)	-0.65	2.56	4.18	2.38	-0.02	1.05	-0.41	-4.7	-2.17	-1.05	0.36	1.07	0.54	0.48	0.37	1.88	3.35	3.21	4	2.68	0.34	1.05	-0.48	0.3
Θ(30°)	2.63	2.38	2.81	5.38	5.85	4.1	1.09	-0.32	0.64	-2.24	1.97	4.36	0.71	-0.65	1.2	2.71	1.77	0.43	1.12	-2.59	-0.34	-0.42	-0.14	1.67
Θ(45°)	3.9	2.59	2.09	5.5	4.64	0.8	-0.62	-2.89	-3.36	-1.96	0.45	1.16	0.84	0.03	-2.84	-3.51	-2.71	-2.06	-1.62	-2.09	-4.23	-3.08	-1.84	1.79
Θ(60°)	0.24	-0.77	0.54	1.98	1.26	0.58	-2.78	-1.88	-2.84	-4.89	-4.27	-1.57	-5.18	-3.2	-4.95	-5.43	-5.91	-3.13	-3.47	-6.42	-2.99	0.62	1.48	2.87
Θ(75°)	-2.65	-4.66	-1.47	-0.02	-0.82	-1.95	-2.59	-5.95	-4.56	-5.84	-4.23	-3.9	-5.06	-6.19	-4.76	-8.02	-4.88	-3.67	-1.25	-1.65	-7.58	0.56	2.66	2.43
Θ(90°)	-3.1	-6.3	-5.48	-3.21	-4.76	-3.41	-2.21	-2.8	-9.48	-4.05	-7.31	-4.26	-6.11	-8.04	-6.24	-4.46	-5.72	-2.26	-1.47	-5.27	-7.03	-2.52	-0.01	-0.82
Θ(105°)	-5.62	-7.86	-9.03	-6.78	-7.58	-2.48	-6.04	-2.32	-3.67	-4.61	-6.39	-5.95	-6.66	-10.49	-7.08	-6.11	-8.68	-5.21	-5.55	-7.24	-8.84	-5.24	-4.01	-4.11
Θ(120°)	-7.87	-8.25	-8.11	-10.41	-9.48	-6.89	-9.7	-13.41	-9.08	-7.81	-10.83	-8.58	-6.7	-12.28	-10.06	-7.68	-9.34	-8.48	-7.26	-9.51	-10.71	-7.8	-7.56	-7.43
Θ(135°)	-7.98	-7.17	-7.3	-13.3	-9.65	-9.85	-8.21	-9.77	-8.9	-11.08	-13.64	-9.92	-10.48	-8.31	-9.67	-12.4	-9.62	-13.38	-12.47	-13.33	-12.42	-6.49	-9.01	-8.97
Θ(150°)	-8.24	-7.79	-9.75	-5.93	-9.56	-11.33	-8.06	-9.25	-11.78	-9.04	-11.09	-10.42	-12.99	-11.58	-13.36	-11.5	-11.39	-8.34	-6.22	-7.94	-8.38	-6.32	-7.27	-5.53
Θ(165°)	-9.57	-11.59	-13.04	-10.56	-9.49	-10.12	-10.25	-9.29	-13.17	-10.81	-13.22	-12.2	-11.77	-13.33	-12.72	-13.26	-9.61	-9.73	-9.1	-10.81	-9.63	-11.4	-11.61	-10.88
Θ(180°)	-10.18	-10.93	-12.16	-13.44	-12.54	-13.25	-13.4	-12.73	-13.23	-12.28	-12.59	-11.91	-10.67	-10.83	-10.24	-8.02	-7.59	-7.34	-6.86	-8.01	-9.06	-8.39	-9.38	-9.65
Freq(Hz)	6.695G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	1.38	0.08	-3.11	-7.48	-10.25	-7.03	-4.13	-0.76	0.34	1.07	1.16	0.79	0.71	-1	-3.38	-6.91	-7.48	-5.33	-3.34	-0.45	1.08	1.95	2.37	1.93
Θ(15°)	3.03	4.12	4.69	5.1	2.61	3.56	3.52	3.5	2.53	1.77	0.23	-2.47	-1.31	-0.23	0.64	1.11	-0.5	0.2	1.61	2.66	2.89	3.19	3.26	2.26
Θ(30°)	0.9	1.22	1.83	4.91	5.6	4.7	5.9	6.05	2.79	2.07	-0.36	-3.58	-4.29	-0.3	1	2.41	0.86	0.61	3.14	2.57	2.83	2.98	2.21	0.05
Θ(45°)	0.15	2.5	0.83	3.85	4.58	3.62	2.42	4.09	4.44	1.6	1.67	-3.11	-4.7	1.87	1.11	3.39	5.35	4.47	3.36	2.25	1.86	2.46	3.85	3.14
Θ(60°)	-0.22	2.99	2.84	2.64	5.18	4.47	3.63	4.38	3.62	2.33	0.36	0.56	-4.93	1.88	0.84	0.69	3.76	4.59	4.97	3.39	0.15	2.34	2.87	3.63
Θ(75°)	0.81	-0.11	1.2	-0.06	4.17	2.02	3.1	0.53	1.82	1.81	2.83	3.43	0.86	1.78	0.96	1.36	2.78	3.33	3.94	2.08	2.07	0.84	4.66	2.96
Θ(90°)	0.86	-1.03	-2.76	0.32	0.18	-0.84	2.53	2.9	-0.42	-0.02	-1.5	0.97	-4.19	-2.75	-4.79	-1.46	3.29	2.25	0.21	-0.83	1.02	2.35	2.95	1.81
Θ(105°)	-0.11	-2.09	-5.01	-3.54	-3.27	-2.92	-0.44	0.25	-4.33	-4	-5.49	-3.61	-4.8	-6.81	-4.33	-7.47	-6.42	-5.62	-6.62	-4.18	-0.63	-0.95	1.92	0.34
Θ(120°)	-2.74	-3.1	-7.33	-7.46	-2.98	-5.34	-5.47	-2.8	-5.54	-3.39	-8.95	-7.55	-9.44	-9.95	-11.82	-8.98	-7.75	-7.86	-10.47	-8.35	-7.82	-4.52	-0.23	-1.7
Θ(135°)	-4.44	-5.29	-9.11	-5.88	-8.33	-7.07	-7.29	-4.95	-6.35	-8.51	-9.21	-7.76	-9.57	-13.55	-8.16	-7.56	-7.67	-11.17	-11.36	-11.37	-9.02	-4.4	-5.27	-3.79
Θ(150°)	-7.42	-6.68	-9.47	-9.87	-7.8	-7.56	-9.28	-6.55	-8.78	-10.64	-10.68	-9.5	-8.69	-12.21	-10.44	-11.42	-12.33	-10.98	-12.64	-13.55	-11.43	-7.97	-5.52	-5.25
Θ(165°)	-9.21	-8.89	-6.48	-7.97	-8.85	-11.26	-11.09	-10.15	-11.63	-10.28	-10.02	-8.88	-7.37	-11.34	-9.63	-11.49	-9.11	-11.67	-12.89	-11.23	-10.5	-9.98	-9.84	-9.36
Θ(180°)	-10.39	-10.39	-10.98	-11.32	-13.52	-11.4	-11.78	-11.82	-10.34	-9.3	-10.11	-9.67	-8.5	-9.35	-9.31	-8.28	-9.11	-9.87	-10.9	-10.99	-11.47	-10.33	-10.51	-10.25
Freq(Hz)	6.995G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	0.71	-0.14	0.16	0.77	1.71	2.02	2.37	0.61	-0.14	-1.17	-1.14	-0.99	0.72	0.95	0.76	2.09	2.75	2.55	2.46	2.11	1.8	1.16	1.07	0.74
Θ(15°)	4.48	2.79	3.69	4.98	4.3	3.02	1.77	-1.41	-3.78	-2.71	-0.55	0.13	1.35	3	2.52	2.1	4.08	2.69	3.14	4.29	4.35	2.26	-2.22	1.05
Θ(30°)	4.73	2.54	4.14	5.02	6.58	3.35	-0.26	-5.21	0.58	-0.04	-1.63	2.96	1.47	0.25	1.28	2.35	1.53	2.41	0.63	1.87	1.43	-0.06	0.26	0.85
Θ(45°)	2.93	4.04	3.39	5.48	4.77	2.87	2.52	-0.05	-4.88	-2.21	-2.36	3.58	-0.47	-1.54	1.09	-2.78	-2.1	0.22	-0.27	-1.72	-3.74	-0.52	-0.41	-1.3
Θ(60°)	-0.65	-0.43	1.78	3.88	2.38	1.31	-1.94	-4.26	-1.33	-1.96	-2.02	-0.84	-3.66	-5.29	-4.12	-3.09	-1.89	-1.59	-1.43	-6.39	-1.93	3	2.35	0.89
Θ(75°)	-0.88	-1.08	0.19	-0.57	-0.96	-1.26	-3.77	-5.25	-2.22	-5.43	-4.35	-4.18	-5.57	-8.49	-6	-6.73	-2.32	-0.24	-0.14	-2.07	-3.7	1.36	3.42	0.38
Θ(90°)	-1.48	-4.05	-3.4	-4.55	-2.77	-4.35	-2.84	-2.53	-3.83	-4.6	-5.05	-5.87	-7.13	-7.69	-7.11	-3.99	-5.37	-2.86	-1.24	-3.99	-6.61	-2.46	1.55	-0.61
Θ(105°)	-4.81	-7.19	-4.72	-6.41	-4.48	-4.58	-1.81	-6	-6.75	-5.69	-4.04	-4.59	-6.32	-10.53	-7.18	-5.16	-8.31	-4.33	-3.37	-5.39	-6.64	-3.14	-2.85	-3.71
Θ(120°)	-5.23	-7.73	-8.44	-10.02	-8.02	-6.05	-6.52	-6.09	-7.06	-9.5	-7.45	-9.13	-8.13	-10.01	-8.61	-7.22	-7.58	-6.98	-8.63	-7.93	-8.96	-5.32	-6.98	-4.77
Θ(135°)	-8.25	-12.08	-8.7	-10.27	-10.27	-6.08	-6.11	-8.23	-8.9	-11.12	-11.88	-11.3	-10.94	-10.45	-10.6	-10.17	-9.34	-11.83	-10.89	-13.3	-9.13	-9.54	-7.22	-7.84
Θ(150°)	-8.14	-10.45	-8.05	-7.12	-7.39	-8.73	-8.39	-8.17	-10.9	-10.47	-12.89	-12.17	-12.98	-11.64	-9.81	-12.89	-9.92	-8.99	-8.13	-12.39	-9.55	-7.28	-10.28	-9.76
Θ(165°)	-10.61	-9.26	-11.48	-10.02	-7.78	-9.68	-7.8	-10.21	-11.9	-11.49	-12.71	-13.24	-13.26	-12.36	-13.37	-11.91	-11.65	-10.75	-12.49	-10.9	-11.35	-13.03	-12.7	-11.68
Θ(180°)	-10.91	-11.63	-11.86	-13.03	-10.05	-10.07	-10.92	-9.75	-8.84	-8.77	-10.34	-12.59	-11.74	-11.27	-10.34	-6.9	-7	-5.43	-5.96	-5.37	-7.59	-6.97	-8.25	-9.8
Freq(Hz)	6.995G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	2.89	2.31	1.71	0.85	0.1	-0.47	-0.93	-1.03	-0.81	0.72	1.5	1.89	2.79	1.97	1.46	0.2	0.34	0.57	0.99	1.07	1.02	1.58	2.08	2.56
Θ(15°)	2.71	1.68	2.87	4.7	4.16	4.17	5.85	5.14	3.71	3.78	3.04	1.94	1.44	2.08	1.6	-0.97	1.51	0.9	2.04	3.1	1.82	0.74	1.61	1.93
Θ(30°)	1.84	2.32	2.4	4.12	5.86	6.68	6.21	6.79	3.89	0.76	-2.88	-2.05	-4.89	-3.75	1.62	3.43	2.02	4.36	1.34	2	2.87	1.66	4.02	3.05
Θ(45°)	2.63	2.11	2.84	5.26	6.23	4.7	5.74	6.52	4.29	2.27	0.02	-0.37	-4	-1.7	0.54	0.3	7.06	6.16	2.36	3.11	3.69	3.65	2.69	3.68
Θ(60°)	2	1.35	0.87	5.28	6.25	5.24	3.2	4.09	4.44	4.37	1.32	1.53	-3.93	0.25	-1.26	2.36	4.9	5.43	4.51	4.73	3.05	2.11	4.52	2.26
Θ(75°)	3.36	3.19	-0.46	2.41	2.1	5.45	4.15	3.54	4.65	5.04	1.2	3.73	-4.1	1.79	1.46	3.95	3.09	3.35	3.81	4.06	1.06	3.11	3.35	3.14
Θ(90°)	3.33	3.19	0.78	1.39	-0.51	2.76	3.59	1.48	0.84	0.2	-1.87	-0.14	-5.47	-0.42	-2.99	2.97	1.13	1.9	3.31	0.29	-0			



Gain Result

Freq(Hz)	5.2G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.43	-0.91	-0.63	-2.08	-1.72	-3.07	-3.68	-3.96	-2.04	-1.01	0.21	0.77	1.16	0.97	0.05	-0.62	-2.01	-3.07	-4.11	-3.43	-3.26	-1.42	-1.22	-0.56
Θ(15°)	-2.3	-2.07	0.66	1.71	0.16	-3.04	-5.21	-6.62	-4.19	-2.47	-1.48	-0.58	0.87	-0.63	-3.22	-1.93	-2.85	-6.31	-14.94	-16.13	-11.15	-7.17	-8.14	-3.74
Θ(30°)	-2.06	-0.63	-0.73	-2.03	-2.13	-3.31	-2.64	-10.46	-4.95	-6.64	-1.54	-1.12	0.53	-0.29	-0.87	-5.05	-7.32	-7.95	-7.96	-7.64	-10.47	-8.8	-7.91	-7.81
Θ(45°)	-5.75	-5.67	-7.31	-6.83	-9.53	-6.83	-10.33	-12.47	-16.7	-9.84	-4.27	-1.34	-0.83	-3.97	-7.38	-16.46	-19.44	-9.39	-16.95	-18.55	-10.86	-10.39	-13.05	-7.38
Θ(60°)	-6.25	-9.83	-19.37	-8.36	-12.09	-9	-12.35	-9.57	-19.23	-17.99	-7.93	-4.34	-2.98	-7.58	-20.19	-13.09	-14.86	-13.05	-9.78	-8.75	-11.41	-8.23	-9.48	-15.8
Θ(75°)	-12.45	-16.4	-11.9	-10.53	-13.29	-19.8	-19.85	-10.14	-18.66	-10.6	-4.69	-10	-2.06	-6.42	-15.18	-19.08	-14.42	-18.23	-9.07	-6.47	-8.88	-13.65	-14.37	-17.7
Θ(90°)	-14.39	-12.76	-16.97	-9.94	-19.47	-13.71	-12.55	-14.1	-17.21	-15.87	-12.49	-12.56	-5.72	-12.16	-19.49	-17.16	-19.3	-19.75	-9.02	-6.63	-14.26	-13.27	-19.34	-19.45
Θ(105°)	-17.02	-11.37	-14.73	-13.17	-18.78	-10.7	-18.94	-12.75	-15.5	-20.36	-9.19	-13.08	-13.44	-12.8	-12	-19.2	-16.34	-17.44	-8.32	-8.71	-19.25	-15.29	-18.66	-15.45
Θ(120°)	-13.76	-13.37	-19.52	-12.06	-19.53	-14.86	-10.72	-11.04	-15.33	-15.38	-18.59	-11.64	-13.84	-20.46	-15.14	-13.51	-19.44	-10.9	-9.82	-13.45	-19.98	-18.84	-13.06	-15.03
Θ(135°)	-11.24	-16.99	-15.34	-19.93	-20.08	-12.68	-16.32	-12.4	-14.97	-12.22	-20.32	-15.83	-18.29	-13.18	-11.64	-7.66	-14.24	-14.12	-10.56	-20.02	-19.57	-19.98	-15.55	-16.93
Θ(150°)	-19.51	-15.42	-20.05	-19.45	-16.37	-16.6	-12	-18.42	-19.52	-20.14	-19.23	-19.68	-15.85	-12.92	-15.73	-14.3	-13.63	-14.65	-11.79	-16.12	-20.43	-12.78	-14.15	-17.67
Θ(165°)	-19.53	-13.24	-18.8	-19.71	-19.2	-18.68	-18.87	-19.44	-19.18	-18.14	-16.43	-14.13	-16.8	-18	-14.12	-12.66	-11.63	-10.6	-12.14	-12.58	-11.21	-14.13	-14.96	-18.24
Θ(180°)	-20.05	-18.86	-19.48	-19.04	-19.03	-19.04	-19.23	-17.49	-16.48	-17.6	-18.52	-16.91	-18.22	-18.61	-17.81	-16.74	-14.27	-13.26	-14.27	-13.01	-15.14	-18.48	-20.42	-19.63
Freq(Hz)	5.2G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-3.22	-4.58	-3.22	-2.75	-1.27	-0.46	0	0.02	-0.24	-0.63	-2.14	-3.47	-4.01	-3.4	-2.6	-1.33	-0.02	0.47	0.04	-0.68	-0.47	-0.81	-1.51	-3.27
Θ(15°)	-5.32	-6.25	-12.1	-19.09	-8.75	-5.56	-2.77	-1.87	-2.95	-3.86	-3.84	-4.46	-3.81	-4.32	-4.31	-2.79	-1.57	-0.53	0.11	-0.01	-2.3	-4.36	-5.14	-2.61
Θ(30°)	-3.91	-5.81	-8.48	-7.06	-10.73	-9.63	-2.68	-2.84	0.18	2.82	-2.61	-11.24	-5.72	-4.44	-2.64	2.71	1.45	1.79	0.88	0.1	-2.3	-4.02	-5.84	-4.31
Θ(45°)	-2.5	-5.74	-2.72	-1.79	-2.25	-3.13	-6.33	-8.39	-4.61	0.25	-4.43	-9.11	-4.39	-3.57	0.36	2.63	1.75	0.6	-0.53	-1.59	-5.09	-2.56	0.86	-5.18
Θ(60°)	-4.31	-5.74	-1.81	-3.33	-4.02	-1.64	-4.79	-9.47	-3.55	-6.34	-2.54	-6.7	-9.2	-3.66	-4.48	-0.23	0.89	3	3.56	2.19	-1.9	-0.84	-2.82	-2.95
Θ(75°)	-5.62	-2.91	-1.14	-7.5	-6.29	-12.43	-11.32	-1.9	-1.49	-1.49	-4.75	-7.87	-9.83	-3	-3.23	-0.72	1.82	2.23	1.53	-2.84	-5.17	-3.32	-1.62	-1.85
Θ(90°)	-4.62	-4.62	-3.61	-6.84	-7.48	-4.36	-7.44	-4.47	-2.65	-3.87	-7.7	-8.06	-13.08	-3.04	-2.58	-3.34	-0.35	-1.45	-2.32	-3.67	-6.52	-7.83	-3.1	-3.31
Θ(105°)	-7.41	-10.96	-5.44	-5.68	-8.94	-7.8	-12.76	-5.49	-6.37	-18.31	-13.99	-12.94	-10.26	-17.89	-15.56	-9.53	-8.02	-12.5	-7.26	-5.82	-14.46	-7.76	-5.51	-7.83
Θ(120°)	-8.88	-12.08	-8.51	-6.74	-14.68	-15.55	-19.54	-13.14	-8.46	-13.32	-14.06	-15.51	-16.22	-10.45	-12.08	-13.02	-12.42	-7.78	-8.45	-8.81	-12.12	-8.58	-12.49	-8.2
Θ(135°)	-12.19	-11.84	-11.26	-13.75	-8.02	-19.4	-20.86	-16.62	-20.4	-14.19	-17.56	-12.97	-14.74	-18.91	-19.95	-11.47	-13.12	-11.28	-7.51	-8.65	-16.61	-5.39	-17	-6.25
Θ(150°)	-10.63	-12.93	-17.96	-14.58	-18.06	-16.98	-19.56	-15.59	-17.09	-19.99	-17.92	-19.9	-18.32	-18.05	-19.89	-19.47	-19.31	-18.51	-12.78	-14.25	-13.28	-13.38	-15.84	-9.05
Θ(165°)	-12.89	-19.25	-18.84	-19.4	-19.61	-19.68	-19.81	-18.18	-19.71	-14.81	-17.59	-14.48	-15.19	-16.14	-15.9	-19.29	-19.52	-17.21	-14.78	-13.14	-11.68	-12.25	-14.97	-17.82
Θ(180°)	-14.14	-18.13	-19.06	-17.9	-20.35	-20.34	-20.23	-19.79	-19.62	-19.38	-19.72	-16.16	-15.5	-15.2	-19.15	-15.92	-16.63	-18.15	-18.07	-18.87	-18.23	-19.8	-17.38	-14.64
Freq(Hz)	5.3G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	1.09	1.02	-0.12	-2	-4.29	-7.25	-9.59	-6.33	-2.23	-0.16	1.86	2.4	2.76	2.55	1.27	-0.3	-3.17	-7.16	-10.33	-7.1	-3.66	-0.13	1.14	0.99
Θ(15°)	0.02	-1.07	-2.52	-1.17	-0.44	-2.2	-3.99	-8.81	-5.57	-1.91	-1.27	-0.5	0.43	-0.65	-0.76	-0.78	-2.8	-6.65	-14.5	-19.15	-16.43	-10.65	-5.28	-2.46
Θ(30°)	-3.02	-1.9	-1.5	-3.2	-3.79	-1.45	-2.35	-6.25	-3.7	-4.22	-2.67	-0.4	2.68	0.79	0.58	-3.24	-4.16	-7.85	-8.81	-6.92	-8.85	-19.03	-4.28	-3.44
Θ(45°)	-8.32	-6.39	-7.51	-8.11	-12.06	-8.3	-13.16	-19.67	-13.37	-7.69	-3.61	-3.81	-0.81	-2.21	-4.96	-9.95	-11.44	-9.11	-12.09	-14.49	-15.24	-7.18	-7.88	-7.22
Θ(60°)	-8.67	-12.58	-8.83	-8.78	-11.64	-14.84	-17.06	-10.28	-19.45	-12.02	-10.17	-5.68	-2.69	-6.76	-9.41	-9.97	-17.71	-17.02	-10.06	-5.03	-7.56	-10.05	-9.86	-12.22
Θ(75°)	-15.14	-11.86	-11.63	-12.62	-18.58	-16.57	-19.84	-13.31	-18.53	-15.21	-4.29	-8.55	-1.16	-3.61	-19.83	-20.3	-18.54	-19.93	-8.94	-5.51	-7.06	-10.48	-17.96	-19.66
Θ(90°)	-15.72	-10.9	-12.89	-17.82	-18.91	-11.45	-12.03	-18	-15.76	-16.85	-12.6	-11.88	-5.01	-9.87	-18.35	-19.03	-14.78	-19.68	-9.77	-5.78	-9.05	-12.73	-18.48	-19.4
Θ(105°)	-16.87	-13.92	-14.15	-18.65	-14.07	-13.23	-19.82	-11.46	-19.77	-18.58	-16.27	-13.12	-14.84	-18.99	-10.48	-18.98	-15	-18.58	-13.69	-8.98	-10.79	-19.67	-17.49	-19.4
Θ(120°)	-17.71	-19.44	-13.07	-11.47	-20.24	-18.99	-11.12	-18.29	-15.23	-20.04	-18.6	-15.63	-15.11	-19.74	-12.76	-14.29	-16.67	-12.15	-8.43	-11.66	-17.62	-20.25	-14.5	-13.69
Θ(135°)	-14.94	-19.53	-14.94	-18.61	-18.69	-10.86	-20.22	-11.55	-14.75	-19.04	-19.83	-20.2	-19.52	-15.7	-15.07	-9.13	-19.56	-10.78	-10.74	-18.21	-20.16	-19.17	-13.63	-14.11
Θ(150°)	-18.92	-14.45	-20	-19.9	-19.74	-18.55	-14.3	-14.37	-19.57	-19.07	-17.12	-19.77	-20.03	-14.58	-17.42	-12.57	-13.77	-14.63	-12.28	-20.17	-18.92	-13.29	-15.95	-15.44
Θ(165°)	-18.99	-14.75	-19.88	-19.18	-19.64	-20.12	-16.61	-18.33	-19.72	-20.08	-17.83	-18.07	-17.39	-13.68	-13.35	-12.45	-11.39	-13.01	-14.49	-14.63	-16.35	-18.52	-15.03	-19.7
Θ(180°)	-19.12	-19.6	-19.4	-19.82	-15.17	-16.93	-20.73	-18.83	-20.38	-19.64	-20	-19.24	-19.69	-18.89	-17.98	-14.21	-11.94	-12.22	-11.56	-13.34	-19.28	-19.98	-19.66	-19.03
Freq(Hz)	5.3G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.32	-6.96	-4.28	-1.33	0.71	1.54	1.88	1.61	0.97	-0.5	-3.92	-7.7	-10.74	-6.67	-2.72	-0.02	1.35	2.12	1.31	0.91	-0.32	-1.53	-4.66	-8.61
Θ(15°)	-9.95	-17.68	-11.63	-13.99	-5.87	-3.33	-1.2	-0.81	-2.05	-6.27	-9.35	-7.78	-5.53	-5.44	-3.67	-1.27	-0.25	1.68	1.69	0.87	-0.49	-1.74	-3.41	-4.96
Θ(30°)	-7.64	-9.7	-5.87	-5.48	-6.36	-7.39	-3.57	-1.06	-3.18	-0.33	-4.23	-7.49	-3.47	-4.61	1.37	2.78	3.35	3.18	4.37	2.11	-1.17	0.29	-1.79	-3.4
Θ(45°)	-6.72	-8.26	-3.82	-0.98	-0.47	-2.29	-6.8	-4.48	-7.83	0.28	-5.26	-9.53	-1.75	-4.21	-1.08	2.28	4	2.66	3	-0.18	-2.46	-3.16	2.16	-6.8
Θ(60°)	-5.64	-4.56	-2.33	-2.32	-2.9	-1.82	-4.69	-7.17	-3.82	-5.76	-2.28	-9.45	-3.92	-2.91	-4.85	0.66	2.18	3.45	3	-0.11	-0.56	0.54	-4.41	-0.25
Θ(75°)	-4.08	-2.76																						



Radiated Composite Gain_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix D

Θ(135°)	-12.45	-9.93	-17.8	-18.78	-16.34	-15.27	-16.33	-17.12	-11.75	-17.37	-15.89	-19.96	-14.46	-18.79	-19.33	-14.26	-12.6	-15.8	-10.92	-12.99	-19.73	-17.51	-15.63	-16.82
Θ(150°)	-8.31	-14.68	-19.15	-9.64	-17.39	-20.25	-9.62	-13.65	-11.38	-15.8	-15.32	-18.77	-19.07	-10.33	-15.44	-17.02	-15.86	-12.66	-12.73	-13.88	-16.57	-19.09	-17.67	-13.34
Θ(165°)	-8.6	-16.73	-17.01	-18.82	-16.72	-19.64	-18.94	-16.88	-14.85	-13.56	-15.04	-15.19	-11.9	-10.87	-8.42	-9.92	-10.81	-9.45	-11.01	-14.59	-19.76	-19.78	-20.27	-17.75
Θ(180°)	-11.69	-8.41	-10.19	-12.26	-20.18	-19.55	-20.21	-15.79	-15.46	-10.85	-11.58	-11.69	-16.27	-18.49	-13.22	-15.45	-17.61	-19.42	-18.59	-15.66	-18.57	-14.73	-15.57	-17.27
Freq(Hz)	5.785G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.28	-8.23	-8.45	-5.81	-3.99	-2.66	-2.34	-2.15	-2.67	-3.77	-5.69	-7.36	-7.87	-5.98	-4.39	-3.07	-2.23	-1.59	-3.55	-3.51	-3.87	-2.9	-4.11	-7.41
Θ(15°)	-3.29	-8.22	-10.65	-7.89	-6.71	-4.87	-4.52	-4.88	-6.64	-10.18	-6.57	-3.78	-3.72	-3.44	-1.34	-1.04	-1.3	-0.73	-0.7	-0.98	-1.77	-1.58	-1.28	-3.13
Θ(30°)	-7.02	-13.66	-11.72	-10.1	-16.2	-19.97	-7.32	-2.44	-2.98	1.46	-0.66	-0.21	-1.49	-2.92	0.06	3.93	3.23	1.09	1.08	-2.03	-2.16	-4.73	-5.45	-8.37
Θ(45°)	-7.61	-6.32	-2.95	-2.76	-2.2	-8.12	-4.32	-3.4	-3.97	-2.83	-0.49	-1.42	-5.67	-6.05	3.28	1.81	4.7	2.03	-2.11	-2.28	-3.59	-3.38	-6.16	-2.98
Θ(60°)	-2.29	-0.03	-1.11	-0.7	-3.05	-0.09	-5.35	-14.31	-10.55	-2.65	-1.24	-2.91	-8.03	-7.72	-2.16	0.74	3.1	3.21	0.33	-0.62	-3.17	-1.64	-0.54	-11.9
Θ(75°)	-1.3	0.46	-4.9	-3.16	-1.96	-6.28	-3.85	-4.36	-4.38	1.31	-4.5	-3.55	-7.12	-7	-4.51	-3.74	2.88	1.76	2.02	-0.07	-8.13	-0.19	-2.65	-2.9
Θ(90°)	-0.49	-0.97	-7.99	-5.77	-6.47	-5.84	-4.26	-5.8	-8.39	-0.21	-9.72	-12.2	-10.26	-6.99	-4.85	-2.38	0.14	-4.11	0.65	-0.58	-6.47	-1.37	-6.49	-3.24
Θ(105°)	-4.69	-4.52	-9.37	-7.26	-7.85	-6.16	-7.02	-10.83	-19.61	-6.82	-18.84	-12.77	-7.97	-18.35	-9.88	-9.51	-5.01	-8.43	-3.36	-6.72	-9.27	-3.77	-5.96	-5.77
Θ(120°)	-7.56	-4.5	-9.16	-11.11	-16.95	-12.66	-10.16	-19.2	-14.88	-13.66	-13.73	-13.06	-14.84	-18.53	-13.41	-10.05	-10.84	-11.78	-4.97	-9.27	-15.53	-4.84	-5.92	-9.89
Θ(135°)	-9.5	-8.91	-12.7	-13.37	-9.63	-13.01	-19.69	-17.74	-15.7	-11.77	-11.15	-16.37	-19.37	-13	-19.32	-10.18	-10.21	-11.53	-7.44	-13.16	-19.44	-7.34	-10.04	-12.7
Θ(150°)	-9.35	-9.37	-15.21	-12.43	-15.14	-18.63	-18.91	-16.19	-13.04	-15.41	-18.97	-19.14	-20.44	-17.53	-13.63	-14.89	-14.06	-19.16	-10.05	-16.27	-12.21	-9.58	-8.73	-9.7
Θ(165°)	-13.57	-13.43	-12.75	-11.53	-14.94	-14.49	-19.3	-19.3	-14.11	-19.15	-19.51	-18.72	-18.4	-18.79	-18.81	-14.92	-13.28	-11.32	-9.67	-12.11	-12.08	-12.78	-12.68	-11.75
Θ(180°)	-14.97	-18.32	-18.94	-18.41	-18.15	-18.39	-18.67	-18.81	-14.71	-15.63	-18.62	-17.06	-15.66	-15.07	-12.93	-14.01	-12.63	-13.59	-13.04	-13.44	-13.2	-15.61	-15.56	-16.12
Freq(Hz)	6.175G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	2.71	2.65	2.78	1.14	-0.7	-3.25	-6.96	-10.58	-6.79	-1.84	0.29	2.46	3.43	4.25	3.85	2.88	0.98	-1.66	-7.97	-12.92	-9.17	-1.89	0.16	-0.06
Θ(15°)	-0.86	-2.22	-5.05	-1.54	-4.15	-8.65	-15.14	-13.24	-6.93	-1.74	-1.8	1.06	3.96	0.03	-8	-5.79	-6.49	-8.12	-9.06	-10.73	-8.8	-8.96	-17.24	-9.77
Θ(30°)	-8.09	-17.24	-8.05	-3.18	-3.28	-9.3	-12.41	-2.79	-0.55	-1.36	2.14	-1.34	2.73	-4.37	-0.7	-6.45	-12.52	-15.43	-8.56	-1.56	-3.63	-6.55	-7.1	-10.55
Θ(45°)	-14.58	-16.71	-10.94	-10.07	-8.48	-3.45	-14.71	-5.38	-5.64	-1.86	-13.24	2.8	2.46	-2.37	-4.48	-2.75	-7.04	-11.5	-12.73	-2.49	-4.57	-3.22	-8.61	-10.14
Θ(60°)	-11.02	-6.73	-16.76	-20.09	-15.66	-9.04	-16.49	-17.84	-6.39	-8	-5.26	-0.01	-2.54	-10.3	-8.1	-14.86	-7.14	-4.81	-6.5	-3.92	-4.44	-5.47	-11.74	-9.2
Θ(75°)	-11.22	-15.76	-20.46	-13.27	-17.96	-12.94	-8.28	-18.23	-11.14	-12.27	-16.71	-6.49	-5.36	-9.77	-10.8	-12.45	-14.29	-10.14	-4.62	-4.28	-18.51	-9.17	-7.52	-12.69
Θ(90°)	-13.47	-14.44	-19.58	-12.07	-16.94	-12.97	-15.56	-15.25	-12.1	-6.31	-12.83	-9.23	-8.22	-18.68	-18.43	-11.67	-19.23	-12.61	-6.6	-5.96	-19.22	-8.37	-8.69	-12.66
Θ(105°)	-17.15	-13.67	-15.25	-14.72	-14.36	-7.03	-16.96	-20.05	-18.16	-11.85	-18.4	-9.43	-18.5	-20.07	-20.13	-17.6	-19.14	-18.61	-6.09	-8.54	-18.13	-10.77	-9.45	-19.5
Θ(120°)	-15.17	-14.29	-13.8	-15.35	-13.07	-12.68	-14.49	-18.3	-12.65	-15.49	-13.66	-19.57	-19.65	-12.69	-10.72	-18.54	-11.97	-12.08	-7.74	-12.3	-15.91	-11.7	-11.34	-17.52
Θ(135°)	-18.91	-10.93	-14.47	-11.95	-16.98	-17.99	-15.18	-19.65	-13.15	-19.55	-19.24	-19.22	-13.57	-19.95	-19.82	-13.3	-10.09	-18.41	-6.9	-12.73	-15.17	-16.32	-18.25	-19.12
Θ(150°)	-12.28	-13.08	-10.5	-7.04	-19.72	-14.43	-18.46	-19.42	-20.47	-19.36	-19.76	-20.25	-19.46	-10.12	-9.54	-19.11	-16.96	-10.49	-9.86	-10.22	-17.96	-20.27	-15.18	-14.06
Θ(165°)	-18.62	-19.62	-19.51	-11.7	-14.43	-18.61	-19.29	-18.33	-19.39	-19.07	-18.93	-13.47	-14.46	-13.69	-14.55	-10.65	-7.96	-7.83	-8.2	-10.5	-17.08	-19.47	-20.32	-20.14
Θ(180°)	-16.3	-13.82	-12.9	-17.89	-19.33	-18.19	-19.62	-18.37	-17.89	-18.54	-19.79	-16.6	-20.16	-13.07	-11.65	-10.21	-10.51	-11.03	-14.34	-15.65	-19.23	-19.6	-18.88	-19.65
Freq(Hz)	6.175G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.55	-11.5	-6.7	-1.92	-0.72	1.12	1.49	1.92	2.73	1.77	0.03	-3.19	-6.88	-14.39	-6.49	-1.7	1.13	2.83	2.24	1.79	1.42	2.11	0	-5.15
Θ(15°)	-4.39	-3.41	-6.51	-18.25	-3.47	-2.01	-3.59	-0.64	0.87	-0.57	-3.33	-5.1	-3	-1.97	-6.81	0.95	1.91	-0.68	-2.67	-4.65	-5.84	-4.66	-2.48	-4.72
Θ(30°)	-12.24	-11.73	-9.65	-15.61	-7.89	-6.08	-5.78	-4.99	-0.02	-6.5	-4.05	-5.35	-0.71	-2.2	-0.35	-0.77	2.84	4.96	3.23	0.89	-8.3	-11.9	-19.23	-3.3
Θ(45°)	-2.41	-7.76	-2.18	-5.35	-5.33	-5.94	-3.12	-2.55	-5.9	-6.59	-0.2	0.89	-2.44	-0.84	1.53	2.4	1.77	3.3	0.89	2.73	0.78	-6.24	-3.55	-4.41
Θ(60°)	1.8	-0.38	-2.1	-4.04	-5.38	-1.9	-3.36	-3.9	-5.22	-3.43	0.36	-2.2	-8.1	-2.37	-5.75	-0.59	0.86	1.79	4.61	3.43	-2.74	-5.13	-11.08	3.15
Θ(75°)	-2.43	0.6	-2.77	-5.48	-7.54	-3.29	-0.72	-0.28	-1.44	0.89	-0.03	0.54	-7.69	-4.46	-5	-5.71	1.52	3.01	1.23	2.1	-3.01	-0.54	-2.23	2.14
Θ(90°)	-2.63	1.36	-1.39	-8.19	-8.13	-5.75	-0.28	1.11	-6.02	-1.36	-8.66	-5.83	-18.9	-14.08	-10.18	-6.8	0	-1.21	-4.27	-1.27	-5.41	-0.93	-1.71	-1.57
Θ(105°)	-3.57	-1.65	-3.76	-7.5	-12.31	-9.72	-4.08	-5.62	-11.35	-6.34	-19.94	-19.46	-19.4	-7.6	-19.95	-9.13	-6	-7.12	-5.78	-5.01	-8.47	-2.66	-1.81	-3.94
Θ(120°)	-10.3	-6.68	-3.96	-7.21	-12.34	-19.36	-12.94	-9.03	-9.49	-9.08	-11.49	-10.77	-13.46	-19.77	-18.43	-19.59	-9.39	-13.8	-6.44	-9.92	-10.47	-4.62	-3.01	-6.48
Θ(135°)	-9.2	-5.81	-11.4	-10.19	-18.57	-12.64	-14.49	-19.56	-17.23	-8.76	-14.11	-14.36	-19.84	-19.29	-19.29	-9.17	-11.62	-15.11	-8.34	-8.65	-14.05	-3.01	-10.01	-13.08
Θ(150°)	-9.56	-8.6	-12.72	-14.96	-18.4	-15.71	-15.4	-15.78	-18.79	-12	-19.32	-18.46	-14.91	-19.15	-19.74	-18.97	-12.24	-19.54	-15.55	-13.31	-12.47	-11.13	-7.69	-9.16
Θ(165°)	-10.99	-15.87	-18.29	-15.1	-19.92	-19.65	-14.45	-12.18	-19.95	-19.63	-13.2	-16.14	-20.17	-19.21	-19.95	-12.38	-17.01	-14	-12.81	-9.09	-7.55	-8.06	-13.21	-17.64
Θ(180°)	-10.6	-14.83	-15.82	-19.45	-19.11	-19.45	-19.39	-19.05	-14.12	-13.33	-9.21	-13.47	-16.97	-16.06	-19.08	-20.06	-19.39	-19.33	-13.2	-13.55	-13.58	-11.69	-10.62	-13.81
Freq(Hz)	6.475G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.23	0.18	1.12	1.07	0.04	-0.55	-2.44	-5.5	-9.59	-19.46	-12.96	-6.39	-2.31	-0.44	0.51	0.97	0.91	0.07	-1.91	-4.43	-9.26	-15.37	-9.31	-5.47
Θ(15°)	-5.38	-2.69	-2.82	-0.7	-1.03	-3.53	-8																	



Θ(90°)	-2.25	-4.72	-2.92	-2.28	-5.41	-12.6	-8.44	-3.29	-2.15	-6	-6.03	-8.86	-15.74	-20.17	-10.39	-7.09	-3.73	-6.77	-4.41	-10.28	-5.43	-1.78	0.89	0.53
Θ(105°)	-1.82	-3.77	-5.38	-6.03	-6.3	-9.12	-4.67	-5.39	-7.19	-7.33	-19.66	-13.22	-14.71	-12.55	-18.5	-10.57	-8.55	-11.93	-8.03	-11.44	-4.98	-4.38	-1.87	-1.3
Θ(120°)	-4.25	-5.2	-10.38	-9.69	-8.67	-19.42	-15.4	-10.56	-9.71	-6.93	-12.76	-16.8	-18.63	-18.54	-19.8	-16.75	-10.24	-19.7	-13.59	-8.71	-9.59	-8.27	-4.67	-3.03
Θ(135°)	-6.2	-6.84	-12.41	-12.32	-13.1	-15.05	-14.33	-13.3	-12.66	-13.78	-13.68	-15.64	-19.84	-20.53	-14.62	-9.15	-14.34	-18.58	-14.39	-18.62	-19.5	-6.89	-9.46	-7.67
Θ(150°)	-8.18	-7.7	-10.64	-13.38	-18.4	-10.36	-15.45	-17.96	-16.45	-19.78	-17.01	-15.03	-16.82	-16.4	-16.33	-18.35	-19.85	-19.37	-19.4	-18.88	-14.66	-9.63	-6.16	-4.98
Θ(165°)	-13	-13.52	-10.65	-16.62	-14.83	-18.38	-18.84	-18.53	-19.61	-19.49	-19.68	-17.81	-13.94	-19.32	-18.6	-19.23	-19.2	-17.5	-20.13	-12.29	-11.2	-13.8	-11.97	-12.93
Θ(180°)	-14.37	-18.8	-20.2	-20.12	-19.74	-16.65	-14.72	-13.75	-10.84	-11.16	-12.7	-15.42	-15.71	-19.06	-19.06	-20.3	-16.32	-16.64	-14.81	-13.98	-15.21	-13.96	-14	-13.96
Freq(Hz)	6.995G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.56	-12.15	-11.04	-6.22	-2.64	-0.49	0.89	0.27	0.83	0.34	-0.25	-2.01	-3.38	-6.19	-10.19	-5.36	-1.98	-0.29	0.98	1.37	1.84	0.56	-0.6	-2.23
Θ(15°)	-3.45	-15.21	-3.32	-4.04	-1.83	-1.82	-3.74	-4.26	-6.34	-7.39	-6.18	-11.2	-4.47	-0.67	-6.45	-9.3	-0.48	-1.43	-0.96	2.49	3.44	2.47	-2.01	-3
Θ(30°)	-5.16	-10.48	-9.75	-7.15	-5.91	-7.95	-5.91	-17.27	-2.31	-6.13	-4.17	0.19	-3.67	-1.95	-3.21	-7.38	-13.77	-1.7	-1.55	-0.91	1.22	1.81	-1.24	-2.56
Θ(45°)	-15.38	-8.76	-19.12	-9.53	-5.41	-16.87	-4.25	-3.63	-9.28	-5.63	-4.95	-3.16	-4.23	-4.21	-7.58	-8.56	-7.01	-4.55	-4.5	-2.21	-1.25	0.38	-1.41	-14.28
Θ(60°)	-12.96	-12.71	-18.62	-8.39	-5.74	-19.05	-17.91	-10.05	-4.37	-18.62	-6.33	0.38	-3.5	-8.84	-10.26	-17.37	-6.75	-3.84	-2.87	-5.64	-6.04	-2.93	-4.84	-9.53
Θ(75°)	-12.12	-18.91	-16	-10.22	-11.77	-17.68	-19.86	-11.71	-5.18	-14.72	-16.07	-10.9	-5.78	-12.67	-14.12	-12.4	-6.78	-2.72	-3.2	-3.72	-5.05	-4.04	-7.35	-5.95
Θ(90°)	-12.94	-20.31	-14.15	-18.63	-11.2	-15.16	-10.16	-18.72	-8.69	-9.97	-10.32	-8.93	-14.48	-19.98	-12.39	-11.71	-9.22	-6.89	-6.04	-3.48	-9.94	-4.55	-5.47	-7.77
Θ(105°)	-18.11	-18.98	-9.57	-14.99	-11.84	-17.36	-9.81	-12.51	-6.67	-7.02	-19.55	-12.34	-14.27	-17.84	-14.08	-16.57	-11.71	-18.91	-8.94	-9.2	-9.49	-6.72	-6.77	-12.45
Θ(120°)	-13.21	-17.15	-9.72	-12.99	-16.56	-14.78	-15.77	-11.1	-12.88	-11.28	-18.67	-14.46	-12.79	-18.91	-14.52	-18.88	-12.95	-13.81	-9.43	-13.78	-15.34	-7.36	-9.3	-10.68
Θ(135°)	-10.25	-14.69	-14.23	-15.89	-19.51	-19.49	-10.38	-13.46	-15.4	-19.14	-18.91	-14.72	-16.83	-13.7	-13.88	-19.69	-9.76	-18.87	-14.05	-19.2	-11.78	-12.59	-11.81	-13.39
Θ(150°)	-9.7	-11.75	-12.39	-8.24	-10	-12.48	-11.07	-10.02	-18.95	-13.18	-19.68	-14.95	-19.43	-15.86	-14.64	-19.34	-15.36	-19.72	-15.72	-19.96	-18.64	-15.01	-19.21	-10.14
Θ(165°)	-12.74	-16.67	-13.72	-16.45	-10.6	-19.14	-19.56	-14.32	-18.12	-17.06	-19.12	-20.29	-18.52	-19.29	-19.86	-20.14	-14.37	-11.67	-15.82	-12.44	-16.27	-18.08	-19.67	-14.56
Θ(180°)	-13.12	-14.9	-14.46	-19.85	-15.14	-15.71	-19.74	-11.04	-15.42	-16.02	-20.24	-19.25	-16.41	-14.2	-13.32	-9.56	-11.85	-10.25	-12.04	-11.4	-15.27	-15.02	-13.9	-15.67
Freq(Hz)	6.995G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	1.14	1.63	1.37	0.8	-0.7	-3.11	-6.07	-9.22	-9.23	-6	-3.21	-1.27	1.16	1.88	2.2	1.26	0.4	-1.89	-5.02	-9.17	-9.84	-5.95	-2.65	-0.09
Θ(15°)	-4.28	-8.56	-4.51	-1.91	-5.4	-4.28	-1	-0.68	-0.38	-0.83	-0.83	-1.6	-2.56	-1.51	-1.52	-0.56	2.44	-0.23	-0.66	-0.18	-4.51	-13.55	-11.86	-4.65
Θ(30°)	-6.24	-6.69	-10.18	-19.4	-3.48	0.68	0.01	0.97	-5.28	-6.25	-6.55	-6.16	-6.5	-4.59	2.7	3.23	2.95	3.5	-5.76	-1.84	-3.64	-17.83	-11.13	-8.49
Θ(45°)	-3.82	-4.81	-6	-7.75	-1.63	-2.53	-4.98	-0.94	-4.41	-4.59	-2.83	-5.68	-4.02	-4.94	-0.6	0.9	4.44	2.05	-6.8	-3.11	-3.79	-1.06	-6.59	-1.85
Θ(60°)	-0.07	-8.02	-2.62	0	2.33	-1.25	-10.87	-3.99	-5.91	-6.92	-0.53	-5.79	-8.02	-7.67	-3.08	-6.1	-0.52	0.98	0.56	-0.61	-3.49	-4.87	0.63	-0.14
Θ(75°)	-0.41	-2.01	-0.49	-6.56	-4.41	-2.49	-8.9	-4.61	-3.3	0.23	1.41	-4.3	-18.88	-7.71	-5.19	-0.87	-2.54	-3.05	1.11	-2.01	-14.29	0.4	0.23	1.54
Θ(90°)	-1.6	-1.31	-0.16	-2.6	-7.03	-12.44	-4.1	-3.26	-1.72	-3.07	-0.88	-4.95	-13.99	-10.03	-10.09	-0.78	-8.11	-10.86	-0.46	-5.57	-8.01	0.03	-0.59	0.46
Θ(105°)	-2.31	-1.53	-0.78	-2.87	-5.19	-20.15	-5.48	-4.28	-4.23	-3.19	-10.81	-15.51	-19.72	-19.03	-18.13	-14.02	-8.7	-8.3	-2.43	-5.03	-9.87	-1.09	-2.65	0.3
Θ(120°)	-2.63	-3.03	-5.53	-10.77	-10.15	-17.22	-19.08	-11.89	-12.67	-7.57	-9.08	-18.31	-18.95	-16.21	-16	-13.74	-6.61	-15.78	-6	-8.63	-13.12	-5.62	-4.55	-2.06
Θ(135°)	-4.31	-6.98	-8.31	-15.2	-10.24	-10.49	-11.04	-12.85	-12.65	-15.53	-10.24	-18.07	-19.65	-18.84	-15.45	-12.34	-5.27	-18.1	-8.82	-17.28	-9.9	-7.87	-9.24	-5.72
Θ(150°)	-4.82	-6.01	-6.62	-6.96	-12.08	-13.1	-18.05	-18.76	-13.86	-18.7	-20.25	-15.07	-15.61	-19.65	-19.19	-19.25	-19.56	-20.18	-16.85	-15.85	-16.8	-9.22	-8.29	-6.09
Θ(165°)	-11.65	-13.46	-10.81	-14.99	-20.43	-17.42	-15.75	-20.23	-16.23	-13.06	-12.42	-19.57	-18.84	-19.18	-17.08	-18.26	-19.73	-16.94	-17.58	-12.98	-14.26	-13.05	-15.53	-16.53
Θ(180°)	-9.66	-10.67	-12.92	-17.6	-18.3	-19.24	-18.76	-16.51	-14.05	-10.56	-11.79	-11.13	-11.24	-12.69	-12.1	-16.21	-18.6	-18.87	-19.92	-14.53	-14.06	-12.05	-11.8	-8.91
Freq(Hz)	5.2G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.18	-4.08	-2.78	-4.54	-4.19	-6.24	-8.23	-11.48	-14.28	-11	-7.99	-5.61	-3.5	-3.22	-2.41	-2.65	-3.43	-4.49	-8.37	-10.76	-14.2	-11.89	-8.02	-6.61
Θ(15°)	-4.2	-4.2	-2.78	-1.51	0.58	-0.45	-3.62	-7.9	-20.13	-10.8	-11.11	-15.68	-17.85	-9.8	-4.85	-4.59	-5.16	-4.04	-9.63	-12.02	-15.94	-14.78	-6.01	-5.13
Θ(30°)	-9.5	-3.68	-1.21	-1.25	-7.16	-11.43	-5.46	-3.86	-7.84	-11.24	-6.72	-13.47	-4.43	-4.07	-8.27	-19.35	-9.28	-13.22	-9.87	-9	-12.49	-17.23	-6.91	-10.22
Θ(45°)	-8.76	-0.58	-4.41	-15	-12.2	-13.5	-9.01	-13.95	-9	-16.71	-8.4	-17.52	-12.38	-10.3	-5.93	-2.85	-4.91	-5.35	-7.17	-9.93	-17.45	-10.78	-3.65	-8.4
Θ(60°)	-7.05	-4.02	-9.03	-8.93	-19.31	-18.66	-9.98	-17.93	-12.76	-10.66	-10.19	-10.47	-5.57	-12.4	-7.17	-7.4	-4.71	-2.59	-1.04	-4.04	-4.94	-8.96	-4.6	-4.31
Θ(75°)	-10.4	-9.01	-11.25	-10.37	-19.86	-12.76	-12.41	-4.26	-16.03	-6.19	-18.7	-8.66	-5.05	-13.16	-3.48	-3.5	-5.36	-2.73	-0.93	-8.77	-5.71	-11.1	-11.94	-5.05
Θ(90°)	-10.58	-11.11	-11.25	-8.37	-11.33	-3.6	-13.26	-7.28	-8.44	-7.42	-4.31	-19.16	-7.05	-15.16	-7.48	-5.07	-6.78	-6.69	-3.83	-12.81	-6.75	-13.45	-14.32	-8.96
Θ(105°)	-11.03	-16.49	-8.4	-10.67	-8.15	-2.95	-8.94	-8.39	-9.08	-14.49	-3.57	-9.45	-15.42	-10.71	-9.96	-8.91	-10.04	-10.23	-6.24	-12.82	-7.96	-14.27	-19.86	-11.34
Θ(120°)	-16.29	-16.71	-9.34	-11.85	-8.22	-7.24	-6.46	-16.31	-17.11	-11.81	-19.44	-12.82	-15.52	-16.51	-11.04	-8.93	-10.07	-9.98	-8.29	-14.27	-9.16	-14.98	-19.77	-15.93
Θ(135°)	-11.4	-19.88	-19.46	-9.98	-11.07	-19.74	-10.1	-14.46	-7.98	-11.48	-14.65	-12.04	-10.32	-13.6	-12.41	-9.86	-11.48	-14.28	-14.72	-19.95	-15.83	-20.05	-14.55	-19.13
Θ(150°)	-16.57	-18.89	-17.01	-9.72	-7.31	-11.09	-10.51	-10.25	-16.85	-11.65	-18.87	-19.54	-13.94	-19.67	-17.36	-19.46	-19.21	-14.07	-15.22	-18.83	-20.2	-20.32	-12.53	-18.46
Θ(165°)	-14.13	-14.25	-14.69	-12.55	-8.92	-7.68	-12.1	-12.98	-14.22	-19.64	-19.82	-17.5	-16.83	-19.17	-17.41	-16.79	-19.24	-10.3	-9.78	-14.31	-14.21	-13.37	-20.08	-18.82
Θ(180°)	-19.91	-16.16	-13.77	-16.19	-17.5	-19.32	-16.74	-17.21	-15.81	-20.3	-19.42	-19.22	-18.86	-18.97	-15.17	-15.03	-15.85	-16.8	-15.06	-19.18	-19.69	-19.49		



Radiated Composite Gain_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix D

Θ(45°)	-7.09	-1.78	-1.43	-6.77	-8.62	-11.96	-7.31	-12.53	-12.95	-12.53	-8.73	-17.82	-7.61	-15.84	-13.71	-6.45	-6.44	-7.13	-9.74	-11.54	-17.59	-6.34	-10.43	-4
Θ(60°)	-4.35	-1.82	-6.44	-18.93	-10.09	-11.06	-9.86	-12.69	-6.78	-8.39	-16.86	-7.15	-14.09	-10.86	-10.13	-7.07	-3.26	-2.38	-5.35	-5.03	-7.89	-11.09	-8.72	-10.86
Θ(75°)	-4.68	-2.99	-9.44	-12.14	-9.49	-10.68	-16.89	-9.1	-18.25	-10.67	-18.54	-19.07	-10.85	-14.36	-6.54	-4.01	-3.35	-4.18	-2.4	-5.69	-6.85	-11.27	-18.09	-8.05
Θ(90°)	-10.13	-8.5	-14.15	-10.88	-9.29	-7.36	-12.1	-8.51	-5.29	-19.23	-9.26	-10.27	-9.52	-11.86	-9.89	-3.01	-4.97	-6.47	-4.94	-7.34	-7.3	-7.64	-19.2	-11.56
Θ(105°)	-13.73	-12.94	-19.47	-17.7	-9.62	-7.82	-8.35	-10.8	-9.34	-18.05	-7.41	-9	-11.13	-16.65	-13.69	-9.45	-16.18	-7.84	-7.83	-10.05	-9.4	-10.31	-16.02	-13.86
Θ(120°)	-13.36	-16.11	-19	-19.11	-15.38	-14.89	-9.15	-13.35	-15.79	-8.29	-19.74	-12.89	-16.7	-14.54	-12.87	-10.54	-19.95	-8.54	-10.87	-16.83	-9.25	-12.76	-13.96	-19.89
Θ(135°)	-18.63	-11.92	-18.95	-15.51	-19.9	-13.94	-15.34	-14.27	-10.12	-16.31	-10.75	-20.26	-13.06	-19.22	-19.92	-16.85	-18.92	-14.34	-16.3	-17.99	-11	-12.89	-17.86	-18.47
Θ(150°)	-16.56	-9.39	-14.21	-13.28	-11.15	-14.88	-9.88	-13.85	-18.38	-20.1	-14.92	-18.99	-14.26	-19.12	-18.32	-18.69	-20.43	-15.2	-18.52	-19.48	-17.83	-17.31	-19.17	-20.09
Θ(165°)	-18.79	-18.82	-16.92	-14.14	-14.73	-14.23	-16.46	-16.96	-19.06	-19.28	-18.75	-18.77	-20.18	-18.91	-18.85	-19.01	-19.47	-18.61	-19.19	-19.24	-19.17	-19.82	-19.58	-19.12
Θ(180°)	-11.9	-11.85	-14.25	-13.84	-15.58	-19.5	-19.33	-19.95	-19.63	-19.39	-17.67	-11.9	-12.93	-12.6	-12.7	-14.82	-13.54	-14.97	-19.42	-19.44	-16.84	-16.54	-15.44	-16.24
Freq(Hz)	5.6G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.49	-10.99	-14.99	-15.66	-11.12	-7.79	-5.9	-4.21	-3.1	-3.49	-4.02	-6.56	-7.83	-13.37	-20.07	-13.58	-7.64	-5.4	-5.37	-4.27	-3.73	-3.07	-2.72	-6.39
Θ(15°)	-5.29	-2.84	-4.4	-11.04	-4.49	-4.64	-5.78	-1.83	-1.79	-5.16	-9.34	-9.45	-7.02	-9.53	-11.91	-15.49	-11.2	-13.92	-10.69	-6.46	-6.26	-6.23	-10	-9.28
Θ(30°)	-1.64	-0.73	-9.58	-1.53	-3.87	-2.59	-2.6	-4.11	-5.37	-3.71	0.51	-2.26	-2.69	-6.9	-3.38	-9.48	-18.74	-12.33	-16.23	-12.91	-13.76	-12.19	-13.1	-9.71
Θ(45°)	-2.91	-1.23	-5.16	-1.76	-4.78	-1.82	1.12	0.62	-1.63	-12.41	-1.61	-4.84	-5.59	-4.5	-14.03	-2.52	-0.51	0.81	0.15	-6.37	-10.45	-7.31	-6.85	
Θ(60°)	-1.25	-6.67	-13.9	-7.88	-4.25	-3.25	-6.27	-2.44	-3.36	-5.58	-1.79	-3.3	0.53	-10.05	-18.67	-14.26	-1.86	-1.25	3.45	0.79	-1.28	-7.17	-13.23	-4.43
Θ(75°)	-2.3	-6.13	-6.25	-8.97	-6.9	-1.95	-0.49	-0.86	-0.55	-2.79	-0.66	-2.46	0.55	-7.26	-9.62	-7.34	-2.18	-0.74	0.87	-3.11	-3.26	-9.84	-13.93	-9.04
Θ(90°)	-5.9	-8.44	-2.84	-4.55	-4.87	-2.69	-3.41	-7.29	-3.71	-2.09	-6.34	-9.21	-4.13	-18.89	-12.86	-4.4	-2.45	-3.01	-3.83	-8.78	-6.11	-9.45	-16.09	-12.71
Θ(105°)	-9.46	-14.46	-4.31	-5.95	-7.08	-7.95	-9.28	-15.16	-3.82	-5.46	-6.37	-19.67	-13.46	-16.08	-14.91	-8.46	-8.89	-9.18	-17.76	-14.47	-9.86	-12.17	-13.26	-14.29
Θ(120°)	-11.03	-19.29	-8.78	-10.65	-9.18	-16.31	-14.69	-19.99	-20.07	-10.28	-11.38	-14.26	-17.09	-20.27	-10.55	-10.95	-8.32	-15.94	-13.05	-6.76	-12.68	-17.95	-11.37	
Θ(135°)	-10.05	-13.66	-10.17	-14.82	-12.86	-12.4	-14.55	-12.71	-19.26	-14.4	-12.44	-15.72	-19.46	-19.78	-18.22	-12.12	-12.03	-16.79	-18.71	-13.51	-15.43	-16.05	-18.78	-18.36
Θ(150°)	-15.27	-15.87	-9.92	-10.13	-11.89	-18.55	-13.58	-15.86	-16.2	-18.95	-15.19	-12.51	-15.84	-14.62	-19.79	-16.28	-17.2	-15.38	-18.44	-19.86	-20.39	-18.94	-18.02	-13.09
Θ(165°)	-18.1	-14.75	-20.1	-15.41	-20.1	-16.8	-12.68	-17.06	-19.07	-19.02	-19.52	-19.97	-19.09	-20.04	-19.64	-15.93	-20.03	-20.16	-16.66	-18.11	-18.62	-16.58	-18.77	-19.17
Θ(180°)	-18.74	-19.72	-19.65	-19.07	-15.48	-13.31	-15.5	-18.38	-18.89	-15.83	-14.22	-12.88	-13.56	-19.25	-19.67	-18.5	-17.31	-15.71	-13.85	-12.59	-12.38	-13.27	-15.43	-16.35
Freq(Hz)	5.785G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.56	-4.8	-3.94	-4.67	-6.99	-7.54	-10.36	-14.8	-19.99	-12.72	-7.88	-6.22	-3.81	-3.36	-3.05	-3.6	-4.18	-6.37	-12.32	-17.09	-19.57	-13.18	-8.19	-7.92
Θ(15°)	-5.42	-5.69	-4.87	-2.52	-6.29	-6.6	-1.54	-2.75	-2.47	-2.56	-3.49	-1.28	-2.41	-2.05	-3.7	-3.7	-3.14	-3.7	-5.99	-8.82	-9.62	-13.19	-19.97	-7.39
Θ(30°)	-1.3	-3.99	-1.38	-2.68	-2.34	-2.02	-4.39	-4.45	-7.95	-8.94	-2.99	-10.87	-9.92	-5.27	-0.69	-5.11	-3.5	-6.27	-15.05	-17.09	-7.91	-6.2	-15.76	-1.59
Θ(45°)	-1.14	-0.45	-2.86	-6.29	-5.84	-7.71	-8.24	-9.88	-19.13	-12.44	-2.13	-9.62	-3.24	-11.27	-9.74	-9.17	-6.58	-11.49	-19.6	-13.08	-16.83	-5.83	-5.21	-4.22
Θ(60°)	0.66	0.57	-6.24	-14.13	-13.15	-8.89	-5.15	-10.44	-8.49	-13.05	-11.93	-5.94	-15.3	-9.77	-18.16	-9.23	-4.58	-6.28	-7.25	-6.66	-11.96	-19.56	-10.66	-1.75
Θ(75°)	-4.37	-2.25	-9.59	-19.99	-7.05	-7.9	-13.35	-9.49	-11.62	-4.78	-16.71	-14.39	-20.8	-9.14	-16.4	-7.77	-8.57	-5.11	-3.93	-5.92	-9.34	-18.2	-10.01	-2.43
Θ(90°)	-9.38	-6.55	-9.58	-20.4	-6.96	-6.5	-8.05	-7.47	-4.41	-13.28	-8.24	-12.23	-19.37	-8.34	-14.31	-4.66	-5.98	-6.19	-5.53	-7.39	-8.76	-10.99	-13.96	-5.23
Θ(105°)	-15.16	-15.04	-11.9	-16.54	-10.79	-7.72	-6.56	-10.54	-10.29	-16.92	-5.3	-9.28	-19.81	-17.7	-11.69	-11.16	-10.08	-7.43	-6.13	-9.51	-8.34	-10.44	-19.33	-10.26
Θ(120°)	-19.17	-20.04	-18.67	-11.08	-16.57	-14.55	-10.51	-18.53	-15.06	-7.02	-19.06	-14.08	-17.13	-9.46	-10.56	-10.41	-15.54	-7.51	-7.48	-14.8	-4.97	-10.86	-18.81	-13.73
Θ(135°)	-13.44	-14.59	-19.65	-16.06	-19.02	-17.28	-18.65	-20.12	-14	-19.87	-9.06	-15.62	-12.87	-13.41	-19.84	-19.04	-16.89	-14.81	-20	-19.36	-9.81	-11.57	-18.72	-19.27
Θ(150°)	-12.72	-15.01	-13.35	-19.48	-11.22	-13.07	-10.99	-10.12	-11.19	-18.99	-16.85	-18.57	-15.85	-14.87	-20.13	-19.66	-15.05	-18.84	-19.65	-17.89	-17.64	-19.59	-17.07	-19.9
Θ(165°)	-20.09	-20.18	-17.87	-14.76	-19.08	-13.79	-16.63	-19.72	-15.69	-19.2	-16.48	-18.47	-19.87	-18.44	-18.41	-18.36	-19.79	-17	-20.21	-20.76	-20.28	-19.38	-18.93	-18.76
Θ(180°)	-11.23	-14.38	-14.82	-13.93	-18.27	-18.46	-19.38	-19.91	-15.44	-17.64	-13.45	-12.9	-12.94	-12.21	-15.65	-13.69	-13.21	-15.38	-14.96	-15.24	-13.91	-12.7	-11.2	-13.65
Freq(Hz)	5.785G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-14.54	-18.58	-19.79	-11.72	-7.69	-5.97	-3.67	-2.52	-2.78	-3.73	-4.96	-7.78	-10.27	-12.56	-17.31	-10.79	-7.35	-4.88	-5.97	-5.27	-5.16	-4.37	-5.05	-9.8
Θ(15°)	-14.49	-5.92	-1.73	-3.83	-4.24	-1.72	-2.5	-3	-5.16	-8.92	-13.72	-20.26	-19.64	-18.39	-10.84	-7.52	-6.57	-6.22	-4.23	-2.89	-1.02	-3.53	-6.59	
Θ(30°)	-8.08	-1.42	-1.41	-5.3	-3.73	-1.61	-0.22	-0.66	-0.73	1.86	-2.46	-8.34	-5.63	-7.61	-13.65	-13.36	-12.27	-11.79	-7.29	-13.22	-4.43	-5.28	-4.78	-5.05
Θ(45°)	-7.18	-1.52	-19.61	-6.37	-6.99	-1.66	-0.57	0.45	1.3	-0.62	-4.81	-9.25	-7.8	-5.72	-6	-3.12	-0.64	-0.81	1.12	-2.61	-12.63	-4.58	-1.93	-1.67
Θ(60°)	-1.25	-0.91	-9.58	-7.16	-11.53	-10.09	-3.45	-3.82	-1.58	-2.52	-2	-9.61	-3.44	-9.15	-11.72	-4.29	-3.01	-0.46	1.25	-1.37	-10.12	-13.29	-7.27	-6.26
Θ(75°)	-1.87	-2.56	-8.87	-7.62	-9.4	-8.47	-3.73	-4.48	0.68	-3.9	1.53	-5.13	1.76	-5.85	-6.21	-12.83	-5.71	0.98	1.37	-1.53	-8.67	-8.04	-6.52	-11.02
Θ(90°)	-4.19	-7.17	-5.7	-6.75	-5.04	-4.23	-2.04	-11.76	-2.98	-5.31	-6.82	-12.94	-1.77	-9.23	-6.57	-7.08	-5.41	-0.53	-2.45	-6.78	-5.28	-7.64	-8.25	-10.13
Θ(105°)	-7.32	-9.28	-2.71	-3.83	-6.03	-4.82	-6.89	-17.57	-2.88	-5.87	-5.38	-19.09	-6.77	-13.85	-14.07	-11.11	-18.43	-9.13	-15	-13.33	-9.55	-13.18	-8.15	-11.23
Θ(120°)	-10.45	-11.12	-4.62	-5.88	-11.63	-17.11	-12.49	-20.7	-20.16	-19.28	-12.88	-14.96	-14.12	-15.75	-18.92	-10.16	-8.94	-6.98	-11.56	-14.21	-9.1	-17.88	-10.86	-12.44
Θ(135°)	-12.81	-13.51	-9.53	-13.14	-16.77	-11.45	-17.03	-8.65	-14.82	-12.23	-11.46	-18.76	-19.93	-19.79	-12.77	-19.6	-12.54	-11.33	-18.97	-19.0				



Radiated Composite Gain_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix D

Θ(0°)	-12.24	-13.3	-13.68	-10.78	-10.07	-8.91	-7.72	-5.87	-5.86	-6.18	-6.96	-8.92	-10.81	-16.6	-15.68	-10.64	-7.5	-4.89	-4.45	-4.77	-4.68	-5.49	-7.87	-11.75
Θ(15°)	1.29	1.02	0.29	-1.51	-2.45	-3.45	-5.44	-1.64	-5.04	-6.05	-3.39	-8.29	-18.88	-19.94	-14.62	-19.28	-9.03	-5.18	-3.05	-0.23	-0.26	-3.3	-4.76	-1.85
Θ(30°)	0.01	-1.01	-1.83	1.57	1.17	0.71	-1.34	-2.61	0.98	-3.85	-1.74	-14.72	-20.69	-6.51	-4.43	-0.17	-9.25	-7.53	-8.53	-9.2	-4.31	-0.91	0.42	-1.91
Θ(45°)	0.66	-5.62	-4.16	-2.69	-5.73	-7.59	-2.24	-0.62	3.52	-11.55	0.84	-15.25	-10.49	-2.55	-9.32	-5.96	-4.22	-1.71	-2.69	-0.29	-6.66	-2.43	-3.85	-1.16
Θ(60°)	-2.01	-7.21	-0.23	-3.99	-9.65	-2.94	-6.96	-2.31	-2.73	-3.71	-6.26	-2.39	-8.89	-1.88	-8.21	-12.54	-1.42	1.16	0.7	0.48	-2.12	-14.47	-2.52	-1.31
Θ(75°)	-5.6	-4.3	-4.5	-2.69	-1.46	-8.91	-6.61	-5.81	-6.49	-3.21	0.53	-1.62	-4.02	-2.01	-14.68	-9.26	-6.29	-1.85	-0.37	-2.06	-2.06	-1.86	-10.09	-3.55
Θ(90°)	-4.36	-7.02	-6.91	-7.08	-4.9	-6.41	-1.88	-1.84	-10.02	-11.13	-8.86	-3.31	-5.3	-4.78	-14.28	-5.63	-3.5	-2.53	-4.4	-7.38	-6.46	-2.91	-6.29	-6.75
Θ(105°)	-5.01	-4.99	-7.16	-9.04	-8.07	-7.2	-6.82	-4.97	-19	-13.36	-9.96	-4.95	-7.74	-10.36	-12.75	-9.64	-10.7	-9.52	-9.93	-10.29	-7.84	-6.61	-6.69	-6.7
Θ(120°)	-7.23	-6.14	-6.64	-7.06	-8.74	-13.91	-12.96	-9.91	-12.16	-12.63	-19.43	-14.88	-13.68	-9.35	-13.02	-15.68	-12.69	-11.25	-19.32	-18.4	-14.02	-7.82	-8.49	-8.71
Θ(135°)	-9.11	-8.91	-15.57	-12.5	-16.55	-9.82	-11.51	-15.93	-14.43	-17.62	-14.67	-12.56	-10.33	-19.23	-16.54	-15.6	-10.51	-14.39	-19.4	-15.03	-18.62	-19.67	-10.45	-10.49
Θ(150°)	-12.57	-8.35	-9.34	-13.71	-16.83	-16.26	-15.62	-18.7	-12.85	-19.32	-10.96	-20.08	-12.38	-19.78	-14.68	-16.43	-19.11	-19.96	-19.16	-19.72	-18.87	-17.16	-20.1	-10.87
Θ(165°)	-15	-10.66	-10.13	-14.11	-19.56	-19.03	-18.67	-17.8	-19.37	-13.07	-18.62	-19.29	-11.96	-14.58	-20.51	-14.68	-13.36	-11.72	-18.78	-17.02	-13.55	-14.36	-14.5	-11.99
Θ(180°)	-6.35	-6.17	-8.97	-12.89	-12.97	-12.31	-12.19	-17.63	-17.5	-16.26	-14.11	-10.22	-9.32	-9.29	-9.74	-9.88	-11.36	-12.82	-17.49	-16.74	-12.42	-8.35	-7.07	-7.39
Freq(Hz)	6.695G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.91	-4.1	-3.04	-2.86	-5.43	-5.96	-9.03	-10.96	-18.38	-19.53	-12.92	-10.9	-7.3	-4.84	-4.19	-3.79	-3.73	-4.25	-6.95	-10.42	-14.97	-19.88	-13.27	-9.16
Θ(15°)	-4.5	-1.72	3.12	1.56	-2.73	-2.66	-4.27	-7.6	-15.94	-10.33	-6.57	-4.1	-3.37	-5.74	-3.84	-2.31	-0.35	-1.41	-1.64	-4.59	-13.7	-10.08	-9.88	-3.92
Θ(30°)	2.27	1.43	2.97	1.97	-0.06	-1.19	-9.81	-5.88	-6.76	-6.75	-9.15	-4	-7.74	-14.51	-4.45	-0.93	-5.83	-10.88	-7.22	-6.11	-7.93	-19.04	-8.27	-3.12
Θ(45°)	2.17	0.48	0.21	-0.63	-4.5	-1.93	-3.91	-7.51	-15.21	-8.75	-8.45	-5.22	-13.62	-3.76	-7.19	-11.63	-16.48	-10.29	-6.79	-7.75	-19.49	-16.58	-13.82	-6.53
Θ(60°)	-4.15	-1.7	-0.96	-6.63	-17.76	-8.78	-8.22	-10.93	-11.98	-11.03	-19.63	-9.48	-19.72	-5.17	-14.1	-7.48	-5.88	-8.64	-6.56	-14.6	-7.55	-8.83	-7.42	-2.67
Θ(75°)	-7.73	-3.72	-4.35	-8.2	-13.29	-19.93	-18.49	-17.78	-18.42	-11.26	-12.66	-7.53	-14.01	-13.88	-6.66	-8.54	-7.87	-6.05	-6.84	-16.19	-15.84	-6.39	-3.86	-0.25
Θ(90°)	-4.4	-8.04	-9.42	-10.37	-10.03	-20.09	-9.97	-9.28	-19.87	-10.29	-15.18	-11.63	-10.32	-16.15	-9.14	-6.68	-16.72	-6.81	-8.14	-13.42	-17.58	-11.08	-8.26	-3.73
Θ(105°)	-7.94	-12.58	-16.91	-15.41	-10.25	-7.89	-13.02	-9.24	-10.8	-12.75	-10.01	-9.95	-8.84	-19.57	-13.92	-8.17	-14.61	-10.11	-13.56	-11.4	-13.58	-11.35	-11.38	-6.14
Θ(120°)	-11.45	-13.4	-19.66	-18.89	-12.13	-9.76	-19.78	-20.29	-14.42	-12.07	-15.43	-19.02	-11.41	-19.39	-17.27	-11.32	-20.27	-11.5	-15.77	-14.97	-19.48	-12.64	-16.83	-10.57
Θ(135°)	-19.59	-10.03	-13.85	-19.59	-10.62	-11.73	-11.35	-14.68	-19.48	-16.78	-20.11	-12.58	-14.4	-12.68	-19.01	-19.9	-19.48	-19.3	-20.18	-19.81	-18.67	-12.86	-19.17	-16.62
Θ(150°)	-16.53	-11.91	-19.83	-12.26	-13.45	-15.7	-18.08	-12.97	-19.04	-19.98	-15.04	-19.76	-18.41	-17.41	-19.27	-13.41	-15.86	-19.39	-18.18	-18.9	-15.15	-11.65	-13.36	-14.08
Θ(165°)	-19.95	-19.27	-19.45	-19.44	-13.87	-12.85	-17.88	-18.59	-19.08	-17.36	-19.03	-18.13	-19.9	-19.56	-18.57	-18.99	-13.71	-15.45	-15.34	-14.53	-15.44	-16.55	-19.07	-19.25
Θ(180°)	-19.83	-19.7	-20.37	-19.34	-15.73	-19.22	-19.91	-19.4	-19.55	-15.94	-17.86	-17.85	-18.82	-18.61	-18.46	-12.92	-10.6	-7.73	-7.55	-7.86	-11.31	-10.48	-11.58	-15.2
Freq(Hz)	6.695G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.55	-8.17	-12.11	-19.86	-15.35	-10.1	-8.15	-5.24	-4.49	-4.25	-4.44	-5.67	-6.67	-10.63	-17.23	-18.17	-11.97	-7.2	-5.24	-3.54	-2.67	-2.94	-2.44	-4.22
Θ(15°)	-1.37	0.08	-0.41	2.01	-0.6	-0.4	-1.6	-2.39	-2.01	-4.66	-7.16	-7.17	-6.22	-8.16	-7.91	-4.05	-4.82	-3.57	-2.19	-2.38	-0.13	0.48	-0.13	-2.25
Θ(30°)	-1.68	-1.99	-2.05	0.98	-0.95	-1.11	1.33	2.45	-0.09	-7.46	-7.13	-8.13	-10.41	-9.74	-3.75	-6.05	-9.5	-20.14	-19.01	-3.84	-2.37	0.49	-0.87	-2.45
Θ(45°)	-2.53	-3.77	-0.5	-0.39	-1.57	-1.46	-3.88	0.09	-1.89	-3.02	-2.28	-10.65	-19.87	-4.62	-11.61	-11.79	-1.13	0.98	-3.03	-9.85	-19.32	-1.55	0.45	-1.29
Θ(60°)	-4.75	-0.41	-0.91	-2.07	-3.01	-2.27	-2.89	-2.14	-1.7	-0.99	-8.14	-3.47	-18.93	-1.63	-8.37	-5.32	-0.49	0.75	2.32	0.29	-3.51	-11.44	-4.34	-3.26
Θ(75°)	-4.15	-3.8	-4.74	-7.78	0.06	-10.36	-1.55	-13.98	-6.55	-1.58	-3.96	-1.2	-7.6	-4.79	-6.55	-4.81	-1.72	-1.22	-3.16	-2.31	-3.57	-14.19	-2.43	-1.87
Θ(90°)	-3.87	-5.66	-10.31	-4.93	-6.35	-8.01	-1.41	-4.82	-11.08	-4.72	-12.35	-3.87	-12.35	-7.29	-19.08	-5.82	-1.75	-1.57	-8.16	-6.56	-4.37	-6.62	-5	-4.45
Θ(105°)	-4.57	-7.88	-12.75	-11.69	-9.99	-16.06	-5.13	-7.92	-16.21	-15.3	-12.78	-5.75	-10.87	-11.81	-15.47	-18.07	-14.79	-11.35	-14.38	-7.3	-4.6	-5.85	-4.56	-5.56
Θ(120°)	-7.38	-7.34	-12.21	-12.31	-8.65	-9.72	-16.43	-7.87	-9.73	-11.82	-19.55	-16.9	-18.69	-11.93	-18.81	-17.46	-16.76	-16.17	-19.42	-18.88	-13.55	-9.68	-7.35	-8.86
Θ(135°)	-8.17	-8.74	-14.62	-12.51	-11.85	-14.08	-20.28	-11.44	-14.79	-12.67	-17.65	-10.49	-12.11	-18.8	-11.59	-12.78	-8.15	-16.71	-20.19	-18.71	-14.44	-13.58	-10.73	-9.16
Θ(150°)	-12.02	-10.98	-17.39	-18.82	-15.73	-19.1	-15.5	-13.42	-17	-19.74	-13.97	-14.21	-10.1	-18.94	-12.45	-17.44	-19.66	-18.38	-19.59	-19.94	-19.46	-18.56	-16.44	-10.29
Θ(165°)	-12.8	-13.42	-10.38	-11.07	-14.28	-19.13	-16.79	-12.82	-18.97	-13.76	-10.83	-10.39	-8.05	-13.09	-15.2	-14.5	-12.33	-19.32	-20	-19.87	-19	-17.29	-17.47	-13.64
Θ(180°)	-14.69	-12.5	-14.61	-16.64	-20	-18.88	-19.08	-19.23	-19.37	-16.87	-15.54	-11.5	-10.24	-10.4	-10.98	-9.5	-12.37	-14.51	-19.85	-18.84	-20.11	-16.38	-15.64	-13.9
Freq(Hz)	6.995G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.41	-2.42	-1.43	-1.51	-1.06	-1.33	-1.56	-4.1	-6.92	-12.01	-12.4	-8.18	-4.18	-1.3	-0.58	0.16	-0.11	-0.85	-2.11	-3.67	-5.93	-7.85	-7.59	-7.28
Θ(15°)	1.81	1.81	-0.72	1.77	-0.8	-0.92	0.24	-4.37	-9.61	-15.32	-18.81	-12.06	-7.02	-4.73	-1.32	-0.26	0.32	-2.72	-3.25	-3.95	-4.74	-7.89	-18.66	-4.18
Θ(30°)	1.47	1.18	0.98	2.65	-0.23	-0.81	-4.21	-4.44	-8.91	-9.2	-18.35	-6.54	-2.66	-11.88	-4.54	-1.6	-2.9	-5.2	-9.64	-11.91	-17.31	-9.2	-11.49	-5.23
Θ(45°)	-3.57	0.91	1.56	1.52	-3.41	1	-0.77	-4.36	-14.16	-19.02	-19.65	-1.38	-19.6	-1.57	-0.26	-7.5	-19.93	-5.86	-4.66	-19.14	-18.03	-12.5	-16.3	-3.18
Θ(60°)	-6.97	-0.84	-0.75	-3.33	-11.66	-11.09	-12.68	-15.9	-10.2	-6	-17.49	-10.08	-20.13	-6.7	-14.25	-5.93	-5.05	-5.66	-5.3	-19.48	-9.79	-4.77	-6.44	-2
Θ(75°)	-2.94	-5.11	-2.73	-8.7	-15.82	-15.95	-19.46	-13.55	-10.33	-10.44	-10.25	-4.37	-19.35	-14.92	-9.19	-7.41	-3.8	-3.55	-6.26	-12.59	-9.7	-5.98	-5.93	-3.06
Θ(90°)	-4.81	-10.06	-5.09	-8.86	-18.54	-18.04	-16.69	-6.11	-8.75	-15.63	-10.38	-10.22	-10.02	-10.53	-11.6	-5.44	-11.91	-6.58	-12.8	-11.98	-9.75	-6.83	-7.14	-4.88
Θ(105°)	-8.																							



Radiated Composite Gain_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix D

Θ(180°)	-17.22	-19.84	-19.18	-20.12	-18.4	-18.7	-19.26	-16.7	-13.53	-17.25	-18.92	-14.92	-12.71	-14.72	-19.75	-19.39	-20.19	-18.19	-14.7	-13.72	-13.76	-13.18	-12.98	-15.76
Freq(Hz)	5.3G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.18	-7.73	-8.38	-9.28	-16.11	-19.86	-18.91	-11.7	-8.64	-6.86	-4.4	-3.7	-3.91	-5.38	-6.85	-9.04	-12.82	-18.76	-19.55	-12.22	-8.19	-6.42	-6.07	-6.18
Θ(15°)	-6.76	-7.95	-10.61	-12.15	-8.53	-9.39	-12.96	-13.11	-10.05	-6.43	-7.77	-5.52	-6.41	-7.65	-7.1	-7.87	-6.16	-8.48	-13.05	-11.64	-6.03	-5.77	-5.83	-6.24
Θ(30°)	-9.05	-7.22	-5.81	-2.71	-14.03	-10.89	-12.06	-8.07	-5.1	-18.19	-6.57	-13.53	-8.14	-4.03	-7.02	-4.93	-12.08	-11.4	-10.49	-8.77	-5.22	-9.31	-5.86	-8.79
Θ(45°)	-8.37	-3.2	-3.73	-8.76	-8.59	-14.04	-8.03	-13.08	-19.49	-8.67	-4.72	-10.42	-14.5	-9.74	-6.89	-20.49	-13.02	-8.53	-9.73	-11.64	-8.28	-9.69	-5.79	-15.07
Θ(60°)	-8.56	-3.44	-3.62	-10.91	-17.21	-18.94	-15.59	-12.13	-8.07	-13.29	-4.79	-7.85	-9.01	-16.26	-8.98	-12.43	-9.82	-12.72	-19.28	-12.67	-17.73	-20.15	-9.87	-14.24
Θ(75°)	-8.12	-6.68	-2.32	-13.45	-18.34	-10.22	-13	-9.46	-5.03	-9.83	-9.01	-9.43	-6.84	-8.85	-12.83	-10.59	-16.33	-10.26	-7.18	-9.17	-7.72	-19.65	-16.19	-10.07
Θ(90°)	-10.6	-5.79	-3.57	-10.84	-17.51	-6.59	-8.86	-7.69	-7.07	-5.84	-4.53	-16.55	-5.58	-15.23	-12.81	-8.24	-16.84	-8.72	-5.84	-6.99	-7.43	-13.05	-15.65	-8.24
Θ(105°)	-14.18	-6.76	-7.02	-8.12	-10.27	-7.67	-8.99	-6.61	-7.96	-6.93	-3.33	-18.06	-15.42	-15.88	-11.77	-18.67	-10.74	-6.39	-4.04	-10.42	-10.91	-9.51	-16.51	-9.96
Θ(120°)	-10.83	-12.26	-8.28	-7.35	-5.12	-4.34	-5.93	-5.55	-10.09	-9.8	-12.76	-6.68	-11.65	-17	-18.15	-13.82	-13.11	-11.37	-4.91	-12.5	-8.88	-13.91	-15.29	-19.53
Θ(135°)	-18.71	-10.39	-13.94	-14.41	-5.33	-4.58	-5.07	-13.64	-11.18	-10.76	-18.66	-11.99	-19.5	-20.19	-16.72	-20.19	-18.95	-15.74	-7.98	-11.02	-13.87	-11.23	-19.89	-14.9
Θ(150°)	-18.95	-20	-13.64	-10.35	-11.27	-13.81	-8.76	-13.29	-12.73	-12.06	-13.41	-17.29	-16.27	-20	-17.65	-14.73	-20.05	-9.77	-9.85	-13.93	-15.87	-15.07	-19.85	-17.96
Θ(165°)	-19.6	-20.51	-11.46	-10.51	-13.16	-13.38	-12.15	-12.48	-11.77	-12.28	-13.27	-18.86	-20.02	-18.55	-19.42	-19.72	-15.21	-10.52	-14.4	-19.13	-16.08	-13.03	-16.96	-18.65
Θ(180°)	-17.66	-16.78	-14.36	-13.07	-11.36	-10.55	-12.05	-15.55	-15.63	-18.85	-14.88	-16.47	-19	-16.2	-14.06	-13.79	-11.12	-11.48	-12.98	-13.56	-16.74	-18.75	-18.8	-19.4
Freq(Hz)	5.3G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-14.74	-11.74	-9.42	-7.51	-5.56	-5.13	-4.81	-4.57	-6.43	-8.29	-11.7	-18.31	-17.95	-12.53	-8.99	-6.02	-4.87	-5.14	-5.78	-7.34	-8.78	-11.19	-16.57	-19.15
Θ(15°)	-13.11	-14.04	-10.49	-9.84	-4.97	-2.79	-6.24	-5.96	-10.1	-11.98	-16.07	-10.02	-8.56	-11.27	-19.69	-15.05	-8.22	-13.76	-8.04	-5.16	-6.69	-12.24	-16.19	-16.19
Θ(30°)	-19.11	-15.5	-7.88	-12.6	-5.87	0.22	-2.37	-3.31	-4.88	-6.29	-6.42	-10.93	-6.61	-9.26	-15.4	-8.49	-2.66	-3.98	-6.91	-7.83	-9.97	-9.46	-11.07	-13.94
Θ(45°)	-11.79	-18.31	-6.89	-7.04	-3.91	1.3	-0.53	-2.33	-2.47	-0.89	-5.53	-7.76	-1.88	-8.62	-2.91	-2.68	-4.02	0.61	-0.61	-5.88	-9.59	-20.69	-17.92	-17.42
Θ(60°)	-5.17	-5.85	-4.16	-3.06	1.95	1.49	1.12	-4.36	-1.6	0.1	-2.91	-1.56	1.07	-9.34	-8.42	0.97	-2.69	-4.36	-9.7	-5.47	-3.29	-10.6	-6.44	-15.64
Θ(75°)	-15.89	-6.98	-4	0.14	2.41	4.24	0.27	1.03	-7.01	-4.54	-4.26	0.94	1.68	-7.52	-5.36	-0.91	-2.31	-4.42	0.52	-6.44	-0.67	-7.5	-4.17	-5.14
Θ(90°)	-8.46	-4.17	-4.91	-0.94	2.11	2.88	-0.05	-1.11	-5.68	-9.56	-6.02	-3.23	-4.11	-18.69	-3.7	-0.24	-2.59	-6.03	-1.58	-9.18	-2.42	-4.43	-3.34	-5.93
Θ(105°)	-10.52	-2.24	-4.59	-2.49	-1.42	-1.99	-3.11	-6.06	-5.57	-12.66	-4.84	-6.42	-7.12	-9.29	-13.34	-11.37	-17.98	-19.91	-6.61	-14.01	-7.89	-8.42	-5.46	-7.59
Θ(120°)	-11.58	-3.62	-5.26	-3.15	-6.24	-7.83	-9.42	-15.46	-18.75	-17.37	-16.12	-9.53	-6.51	-12	-12.18	-10.13	-16.45	-8.91	-8.37	-19.55	-16.6	-11.85	-7.44	-13.4
Θ(135°)	-9.46	-7.98	-4.94	-9.81	-9.99	-12.77	-13.31	-10.63	-4.93	-15.53	-13.07	-8.54	-18.79	-14.86	-15.03	-14.94	-14.91	-18.94	-15.31	-17.88	-17.11	-16.27	-13.36	-14.14
Θ(150°)	-12.2	-3.96	-5.52	-9.58	-11.18	-16.12	-16.46	-19.15	-18.28	-18.39	-14.25	-19.93	-12.5	-15.78	-14.23	-19.24	-19.42	-12.93	-18.18	-20.39	-20.22	-19.73	-18.71	-19.89
Θ(165°)	-14.78	-13.1	-8.96	-8.96	-9.03	-12.58	-17.25	-19.58	-17.68	-11.88	-9.61	-10.94	-12.58	-17.25	-19.29	-19.64	-18.73	-19.96	-19.36	-19.08	-19.11	-19.18	-17.24	-19.07
Θ(180°)	-11.56	-12.68	-14.38	-16.23	-15.25	-17.31	-19.38	-20	-14.33	-17.45	-18.78	-14.32	-11.04	-16.38	-18.9	-18.46	-18.66	-18.51	-15.53	-14.72	-13.8	-13.19	-12.49	-12.01
Freq(Hz)	5.6G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.94	-3.38	-3	-1.8	-1.35	-1.09	-0.88	-1.7	-2.76	-3.46	-3	-4.92	-4.63	-2.79	-1.8	-0.93	-0.72	-0.63	-0.87	-1.68	-2.13	-2.84	-3.33	-4.33
Θ(15°)	-7.6	-3.38	-0.84	-1.12	-2.12	-2.53	-3.57	-15.8	-12.71	-9.78	-8.82	-4.07	-2.15	-3.02	-2.68	-2.03	-4.17	-6.08	-8.79	-19.17	-11.02	-4.62	-4.74	-8.1
Θ(30°)	-19.13	-6.63	-5.3	-16.45	-9.45	-8.53	-7.79	-11.25	-5.94	-11.31	-4.43	-18.55	-10.72	-5.3	-4.88	-13.53	-7.47	-3.67	-11.89	-9.43	-9.8	-6.68	-9.94	-13.14
Θ(45°)	-6.37	-6.97	-9.24	-6.82	-10.24	-3.7	-4.58	-8.93	-8.18	-4.88	-18.53	-8.88	-11.8	-5.97	-6.99	-4.77	-14.73	-8.04	-6.09	-7.37	-9.98	-18.86	-13.77	-6.73
Θ(60°)	-2.73	-7.6	-4.36	-3.45	-7.53	-9.04	-3.56	-4.79	-8.36	-13.25	-5.35	-9.99	-5.52	-12.16	-7.93	-9.47	-9.58	-15.57	-18.01	-5.92	-10.24	-16.56	-9.14	-5.02
Θ(75°)	-8.28	-3.74	-3.38	-3.09	-11.54	-13.49	-7.75	-6.55	-7.27	-10.39	-4.07	-13.75	-9.9	-11.07	-7.99	-4.77	-13.83	-11.01	-4.18	-7.61	-7.77	-19.64	-9.68	-10.39
Θ(90°)	-9.32	-4.94	-3.84	-5.24	-9.02	-9.29	-14.36	-17.44	-7.6	-7.11	-8.38	-13.19	-10.82	-8.66	-11.83	-9.06	-12.83	-5.26	-6.31	-12.21	-8.45	-13.9	-17.57	-6.77
Θ(105°)	-11.93	-6.72	-6.34	-8.18	-7.95	-5.6	-5.88	-18.11	-10.34	-7.11	-19.73	-14.98	-15.01	-9.62	-20.56	-19.56	-12.12	-5.74	-11.32	-10.62	-13.96	-16.3	-18.66	-7.56
Θ(120°)	-12.15	-10.15	-13.71	-9.29	-8.98	-8.95	-7.39	-12.24	-6.5	-19.22	-6.2	-17.4	-19.28	-18.85	-19.15	-8.19	-15.09	-18.28	-18.56	-17.9	-14.88	-19.69	-19.03	-11.08
Θ(135°)	-16.6	-19.27	-11.56	-14.92	-10.77	-6.89	-8.81	-12.92	-8.25	-19.18	-16.66	-8.52	-16.35	-19.24	-18.28	-20.13	-19.95	-19.06	-19.54	-19.12	-17.64	-16.04	-18.61	-14.25
Θ(150°)	-18.03	-16.39	-16.37	-16.98	-13.75	-15.4	-9.35	-14.54	-9.83	-9.71	-14.59	-18.03	-19.9	-19.12	-16.19	-14.82	-14.01	-15.71	-12.22	-12.4	-15.88	-19.96	-15.25	-14.76
Θ(165°)	-19.96	-19.12	-19.18	-10.88	-8.82	-12.7	-9.96	-12.93	-20.67	-19.44	-17	-18.71	-19.46	-19.03	-19.72	-18.8	-14.28	-15.27	-19.42	-19.67	-17.93	-18.61	-18.87	-17.85
Θ(180°)	-19.33	-19.47	-17.49	-19	-14.37	-10.72	-9.95	-14.68	-13.04	-16.58	-20.16	-14.16	-19.96	-18.95	-15.13	-14.69	-14.05	-12.24	-11.69	-13.42	-12.33	-14.71	-19.32	-18.83
Freq(Hz)	5.6G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.57	-2.35	-3.26	-4.22	-5.32	-5.6	-5.49	-3.42	-2.63	-1.75	-1.56	-0.88	-1.72	-2.43	-2.85	-3.72	-3.88	-4.04	-4.71	-4.1	-3.28	-1.22	-1.03	-1.97
Θ(15°)	-9.36	-6.37	-4.62	-5.55	-5.92	-4.97	-5.11	-8.65	-5.25	-0.46	0.48	-0.54	-2.49	-2.25	-4.86	-16.88	-8.48	-4.18	-3.65	-6.89	-6.68	-4.56	-9.56	-10.21
Θ(30°)	-8.82	-10.7	-9.41	-12.11	-15.72	-5.87	-11.43	-7.4	-15.53	-7.15	-8.9	-4.36	-12.1	-2.9	-2.91	-6.3	-7.98	-3.28	-7.13	-5.25	-16.17	-15.11	-12.15	-9.52
Θ(45°)	-7.53	-5.97	-9.34	-5.01	-3.12	-0.26	-0.71	1.19	2.25	-4.21	-8.59	-13.59	-4.61	-5.61	-4.95	-7.05	-4.72	0.08	-11.35	-19.95	-7.49	-3.12	-9.06	-5.13
Θ(60°)	-15.3	-7.13	-6.73	-10.47																				



Radiated Composite Gain_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix D

Θ(135°)	-13.52	-10.13	-18.67	-8.59	-12.04	-12.13	-7.69	-10.16	-16.93	-11.67	-19.45	-17.89	-13.36	-15.81	-19.54	-19.55	-16.64	-12.86	-11.57	-18.38	-9.17	-10.69	-16.91	-13.94
Θ(150°)	-11.35	-16.71	-19.25	-7.05	-10.36	-8.17	-12.37	-10.08	-7.9	-8.84	-11.55	-12.77	-20.27	-19.49	-16	-19.28	-11.33	-10.27	-11.12	-14.59	-18.14	-18.7	-15.71	-16.18
Θ(165°)	-19.16	-14.99	-19.99	-20.2	-15.83	-7.68	-11.55	-13.07	-17.44	-18.85	-19.89	-19.6	-19.37	-14.37	-17.27	-13.53	-12.23	-18.87	-18.39	-18.85	-19.36	-19.31		
Θ(180°)	-15.35	-19.7	-18.1	-19.3	-19.22	-19.54	-18.53	-14.61	-16.29	-14.66	-19.6	-15.32	-13.61	-14.1	-15.64	-16.43	-15.22	-18.56	-14.72	-15.09	-17.01	-12.06	-11.85	-15.22
Freq(Hz)	6.175G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.61	-2.51	-2.61	-4.59	-8.28	-11.82	-16.26	-14.92	-9.62	-7.41	-5.2	-5.16	-3.86	-4.31	-4.61	-6.52	-8.05	-10.58	-16.13	-14.93	-11.72	-5.97	-3.98	-4.2
Θ(15°)	-3.89	-7.12	-15.01	-14.36	-19.44	-9.08	-3.66	0.09	0.79	-1.81	-5.6	-0.59	-2.64	-4.32	-9.39	-8.99	-6.4	-7.21	-4.88	-3.56	-9.52	-7.94	-8.98	-7.68
Θ(30°)	-4.22	-2.51	-5.34	-7.7	-19.29	-5	-1.67	-0.47	0.21	-3.27	-1.93	-9.46	-2.91	-3.76	-13.12	-5.37	-6.84	-6.73	-5.05	-5.44	-6.82	-0.81	-2.12	-2.27
Θ(45°)	-3.6	-4.98	-8.9	-3.45	-0.22	2.69	3.08	3.28	3.65	-4.5	-6.91	-11.2	-3.83	-7.67	-4.62	-6.45	-4.68	-1.96	-4.95	-2.71	-2.92	-3.3	-4.82	-3.29
Θ(60°)	-5.19	-16.08	-4.11	-2.2	0.23	0.99	1.49	2	3.04	4.14	-4.94	-10.57	0.19	-4.33	-2.45	0.03	-2.18	0.6	-6.09	-1.49	-4.46	2.39	-8.4	-1.79
Θ(75°)	-2.99	-11.16	-1.95	-2.22	-2.21	-0.74	-0.8	-4.72	-0.45	2.93	-1.07	-0.58	2.25	-2.69	0.53	-1	-3.87	-4.4	-2.79	-4.13	-3.97	-0.5	-1.34	-3.79
Θ(90°)	-6.12	-8.01	-1.02	-2.87	-2.25	-1.34	1.19	-13.43	-2.67	-0.93	-3.44	-3.33	-2.75	-2.86	-19.07	-3.98	-0.33	-4.91	0.05	-5.06	-4.07	-7.17	-5.15	-6.57
Θ(105°)	-8.99	-12.5	-3.8	-6.37	-3.79	-0.74	-4.32	-12.09	-8.22	-4.31	-7.42	-10.63	-4.87	-19.03	-7.52	-10.86	-18.86	-9.49	-7.79	-10.37	-9.91	-6.22	-4.88	-5.56
Θ(120°)	-12.67	-15.53	-4.16	-8.34	-7.76	-6.94	-9.57	-19.99	-18.27	-18.93	-16.01	-7.58	-12.52	-11.34	-18.8	-7.83	-10.88	-7.8	-6.24	-11.62	-8.91	-3.84	-7.72	-9.87
Θ(135°)	-14.41	-16.86	-5.8	-6.97	-12.08	-16.26	-18.76	-20.68	-16.31	-9.89	-19.25	-18.24	-13.62	-11.56	-19.71	-20.31	-10.45	-12.45	-19.2	-14.3	-6.6	-7.11	-10.44	-13.76
Θ(150°)	-10.97	-17.79	-14.8	-6.8	-13.14	-17.1	-18.5	-14.17	-18.74	-10.82	-12.72	-12.15	-11.73	-11.06	-19.36	-17.83	-16.48	-20.45	-15.46	-16.52	-18.71	-18.27	-19.54	-18.76
Θ(165°)	-11.14	-12.78	-12.99	-16.71	-19.95	-13.42	-19.61	-16.3	-13.38	-19.12	-16.6	-17.45	-13.54	-19.4	-13.71	-19.51	-20.26	-19.68	-17.04	-19.62	-16.89	-18.73	-13.1	-18.94
Θ(180°)	-16.5	-20.12	-18.01	-14.05	-15.52	-15.1	-15.47	-19.63	-19.21	-19.51	-19.94	-15.25	-18.92	-18.96	-20.31	-14.38	-14.48	-13.63	-11.19	-13.07	-15.78	-13.19	-19.27	-20.07
Freq(Hz)	6.475G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-8.31	-9.23	-8.14	-8.36	-8.18	-11.41	-13.36	-13.28	-14.68	-20.06	-18.88	-17.39	-10.87	-8.39	-6.48	-6.11	-5.68	-6.55	-9.79	-13.3	-20.04	-18.84	-15.27	-9.84
Θ(15°)	-5.62	-14.02	-13.62	-12.92	-12.7	-8.15	-9.99	-6.25	-18.16	-10.43	-9.49	-9.57	-9.96	-19.84	-10.85	-6.43	-7.4	-3.24	-1.6	-2.92	-4.25	-20.1	-9.37	-4.56
Θ(30°)	-8.63	-12.51	-9.24	-1.22	-2.28	-4.02	-4.43	-12.25	-5.89	-18.51	-2.12	-10.2	-14.84	-12.68	-7.3	-7.73	-1.61	-2.74	-3.17	-17.74	-7.37	-5.96	-3.2	-0.41
Θ(45°)	-6.46	-13.61	-7.2	2.03	-0.76	-2.74	-4.81	-9.09	-12.75	-11.55	-7.83	-6.72	-8.17	-15.04	-10.12	-6.11	-5.63	-8.95	-13.85	-8.45	-10.14	-13.75	-8.74	-0.03
Θ(60°)	-1.74	-8	-5.64	-0.63	-0.85	-0.88	-4.21	-4.31	-13.85	-9.16	-9.11	-16.41	-14.51	-5.69	-10.17	-10.12	-13.75	-12.68	-17.54	-19.47	-12.7	-9.15	-5.06	-1.08
Θ(75°)	-4.1	-10.5	-5.73	-2.09	-2.24	-3.09	-7.42	-6.56	-17.78	-15.04	-5.03	-9.06	-16.02	-19.25	-14.94	-19.06	-12.63	-14.61	-19.42	-11.88	-16.11	-7.26	-4.25	-2.75
Θ(90°)	-3.71	-12.99	-7.81	-5.29	-9.16	-6.93	-14.14	-12.28	-18.89	-18.32	-20.3	-7.06	-15.21	-12.62	-18.65	-6.77	-17.76	-7.63	-10.89	-14.76	-14.53	-10.87	-6.15	-6.17
Θ(105°)	-8.06	-12.19	-7.73	-8.79	-12.81	-6.03	-8.73	-10.52	-18.61	-19.34	-11.69	-9.12	-18.83	-9.97	-15.63	-10.07	-15.9	-8.73	-13.88	-18.44	-20.4	-15.37	-9.95	-8.64
Θ(120°)	-12.22	-10.58	-9.57	-11.15	-10.58	-10.89	-13.07	-10.03	-11.76	-16.8	-15.76	-6.94	-12.55	-19.38	-19.62	-19.51	-13.85	-19.52	-19.57	-18.86	-16.45	-12.3	-12.41	-10.71
Θ(135°)	-18.32	-11.6	-14.2	-13.45	-12.54	-13.58	-9.47	-18.68	-15.77	-18	-18.51	-17.84	-12.41	-16.25	-20.24	-19.26	-17.21	-19.17	-17.51	-15.33	-14.89	-19.78	-17.64	-10.87
Θ(150°)	-17.07	-11.02	-13.03	-12.52	-14.08	-12.85	-19.71	-15.8	-16.53	-13.1	-18.92	-19.75	-19.35	-19.48	-19.77	-20.11	-19.2	-14.98	-14.03	-18.05	-18.98	-15.37	-14.06	-13.1
Θ(165°)	-19.16	-18.74	-18.13	-11.11	-12.77	-16.45	-10.29	-15.5	-19.44	-18.51	-20.41	-19.55	-19.5	-16.41	-19.39	-18.96	-18.37	-17.23	-20.03	-20.75	-16.19	-11.61	-11.72	-16.85
Θ(180°)	-18.71	-18.4	-19.54	-18.97	-19.34	-19.58	-19.39	-19.05	-19.53	-19.5	-18.25	-18.6	-18.6	-19.46	-19.64	-19	-16.44	-19.8	-18.99	-18.04	-18.83	-18.15	-18.54	-17.17
Freq(Hz)	6.475G	Pol.	Theta	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.12	-18.37	-19.63	-16.1	-13.6	-10.61	-9.72	-8.52	-8.36	-8.75	-8.91	-7.8	-8.35	-10.34	-14.08	-18.84	-18.15	-13.85	-9.82	-7.38	-7.05	-5.91	-7.48	-10.59
Θ(15°)	-3.16	-4.75	-5.25	-7.01	-6.65	-10.26	-14.78	-6.79	-3.5	-5.56	-9.2	-15.34	-12.39	-14.75	-14.34	-7.13	-1.07	-2.43	-2.2	-1.13	-0.42	-2.37	-1.25	-0.97
Θ(30°)	-3.67	-3.84	-3.89	-5.12	-0.36	-1.78	0.34	2.03	-0.41	-0.4	-6.88	-7.01	-8.45	-10.51	-6.51	-2.69	-4.13	-6.5	-5	-3.78	-1.65	-3.01	-5.07	0.68
Θ(45°)	-1.86	-4.76	-2.4	-0.4	0.15	-0.24	1.73	0.58	0.13	-1.44	-14.13	-14.79	-9.58	-11.07	-5.63	-1.93	-3.78	-12.88	-7.15	-6.58	-11.09	-14.82	-5.06	-3.18
Θ(60°)	-3.22	-1.83	-6.65	-7.2	-8.27	-1.38	0.59	0.73	1.15	0.51	-2.04	-9.42	-5.63	-3.53	-6.83	-2.52	-1.67	-2.78	-4.14	-5.74	-19.15	-7.73	-15.44	-10.05
Θ(75°)	-8.04	-1.45	-5.7	-5.9	-4.87	-0.93	0.4	-1.42	-3.08	-0.79	-1.94	-2.36	1	-5.25	1.02	-0.35	-2.98	-5.66	-3.57	-10.08	-15.28	-7.87	-6.9	-14.24
Θ(90°)	-6.83	-5.07	-6.04	-10.56	-7.26	-12.24	-4.97	-1.98	-8.1	-5.17	-3.25	-6.16	-6.41	-8.91	-8.53	-6.26	0.39	-2.6	-2.49	-16.04	-9.25	-4.76	-8.21	-8.5
Θ(105°)	-7.49	-7.9	-12.63	-7.96	-5.74	-14.32	-6.01	-6.9	-11.01	-9.31	-5.92	-15.06	-8.29	-18.38	-7.17	-13.95	-18.93	-12.93	-17.7	-11.8	-13.69	-6.67	-8.99	-7.66
Θ(120°)	-15.05	-6.96	-9.3	-19.63	-7.18	-20.01	-13.06	-15.17	-12.7	-19.64	-18.97	-9.52	-11.06	-13.9	-18.58	-9.21	-14.17	-8.32	-8.97	-20.11	-9.25	-8.36	-8.37	-8.69
Θ(135°)	-13.98	-14.48	-8.85	-19	-19.19	-20.06	-12.25	-11.91	-13.49	-14.33	-13.75	-12.91	-17.37	-13.02	-14.77	-19.57	-20.17	-13.47	-14.94	-12.68	-12.24	-16.45	-14.9	-15.09
Θ(150°)	-14.38	-17.33	-16.19	-8.92	-20.2	-17.44	-18.97	-17.55	-20.36	-17.91	-15.78	-16.87	-19.85	-17.93	-19.73	-16.9	-19.77	-14.36	-18.78	-19	-16.62	-13.28	-18.49	-14.28
Θ(165°)	-19.62	-18.71	-18.9	-16.33	-17.8	-20.08	-20.01	-19.78	-14.68	-17.24	-18.48	-19.65	-19.88	-19.43	-20.09	-16.01	-19.86	-17.85	-12	-17.05	-18.9	-19.24	-14.01	-13.48
Θ(180°)	-20.23	-19.57	-19.09	-19.2	-18.32	-19.06	-14.27	-18.71	-19.51	-18.38	-19.45	-18.99	-19.49	-20.28	-17.51	-19.99	-18.78	-17.44	-16	-15.71	-18.65	-19.03	-18.51	-18.88
Freq(Hz)	6.695G	Pol.	Phi	Ant. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-5.37	-7.45	-12.06	-19.94	-14.65	-9.43	-7.33	-4.68	-3.66	-3.32	-3.53	-3.71	-4.17	-6.53	-10.05	-14.63	-12.79	-7.79	-5.65	-4.27	-3.28	-3.04	-3.73	-4.3
Θ(15°)	-3.66	-4																						



Θ(90°)	-2.89	-6.14	-11.1	-19.91	-12.18	-3.76	-1.22	-4.18	-10.49	-18.89	-11.36	-3.24	-14.57	-5.97	-5.48	-4.84	-2.3	-4.83	-6.33	-7.71	-6.88	-8.74	-9.63	-5.52
Θ(105°)	-4.46	-8.19	-15.09	-12.22	-13.1	-13.35	-9.47	-12.8	-14.09	-14.42	-11.51	-15.52	-14.5	-14.54	-8.86	-11.12	-10.28	-14.7	-17.34	-11.35	-8.57	-7.45	-10.44	-7.96
Θ(120°)	-7.93	-12.27	-12.75	-19.14	-13.35	-16.91	-16.04	-11.79	-20.01	-8.71	-14.33	-15.97	-18.49	-15.24	-14.66	-20.21	-13.64	-12.62	-19.83	-16.12	-12.84	-11.15	-11.29	-10.67
Θ(135°)	-12.98	-10.63	-13.21	-16.5	-19.72	-11.54	-9.65	-10.84	-14.43	-16.07	-19.56	-15.7	-14.5	-19.14	-17.84	-18.8	-14.31	-20.53	-16.04	-20.03	-14.76	-12.06	-14.64	-10.46
Θ(150°)	-9.5	-10.77	-11.39	-13.07	-10.1	-19.64	-8.64	-19.34	-19.37	-13.33	-18.08	-19.09	-17.46	-19.05	-19.52	-19.17	-13.89	-14.49	-19.75	-19.55	-17.56	-15.51	-17.78	-14.26
Θ(165°)	-13.36	-14.25	-16.02	-15.46	-19.35	-17.99	-12.12	-20.14	-19.52	-17.77	-19.9	-13.55	-17.53	-18.46	-16.55	-19.97	-18.86	-19.87	-20.22	-18.73	-19.87	-19.07	-18.89	-18.92
Θ(180°)	-13.27	-11.84	-12.32	-12.56	-15.33	-13.99	-18.13	-18.56	-20.08	-15.9	-19.88	-15	-15.35	-15.1	-13.8	-11.91	-11.98	-14.29	-14.03	-20.63	-17.96	-18.86	-17.24	-14.61
Freq(Hz)	5.2G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.41	-3.81	-6.59	-12.87	-12.56	-7.09	-3.2	-1.12	-0.31	0.85	0.88	0.04	-1.3	-3.53	-8.06	-16.29	-14.29	-7.38	-4.9	-2.76	-1.3	0.09	0.31	-0.45
Θ(15°)	-2.67	-2.81	-3.24	-3.29	-2.87	-4.74	-4.03	-2.9	-2.7	-0.73	-2.16	-0.28	0.51	-1.49	-7.49	-19.24	-9.14	-4.49	-3.14	-3.03	-1.65	-1.47	-0.03	-0.46
Θ(30°)	-6.64	-8.31	-6.62	-2.31	-2.22	-0.14	-2.61	0.26	-2.82	-1.78	-4.32	-7.43	-3.36	-6.18	-7.56	-15.92	-6.32	-3.68	-4.83	-7.6	-4.52	-6.92	-7.93	-4.47
Θ(45°)	-10.91	-19.17	-19.9	-4.07	-6.81	-7.08	-2.38	-3.58	-2.7	0.18	-1.88	-4.58	-11.2	-10.5	-11.01	-18.7	-12.82	-12.06	-19.68	-11.13	-5.88	-7.3	-4.27	-12.66
Θ(60°)	-19.52	-12.74	-19.41	-5.72	-13.13	-5.67	-0.78	-1.89	-0.67	-3.61	-8.33	-14.07	-14.16	-11.84	-11.43	-19.57	-11.13	-19.6	-19.82	-12.7	-6.05	-5.21	-5.75	-7.46
Θ(75°)	-20.08	-8.21	-14.36	-6.99	-12.93	-4.16	-1.02	-2.48	-2.91	-4.18	-10.02	-9.33	-17.61	-19.47	-19.96	-12.81	-11.75	-11.58	-7.95	-10.66	-7.9	-10.39	-9	-6.83
Θ(90°)	-16.42	-11.93	-12.21	-9.73	-11.87	-6.03	-6.95	-6.12	-5.2	-6.11	-6.95	-12.32	-18.87	-19.8	-10.51	-16.61	-18.75	-10.67	-7.91	-9.56	-8.15	-16.29	-8.72	-11.92
Θ(105°)	-19.26	-16.07	-15.08	-12.43	-13.1	-7.97	-13.56	-11.2	-10.83	-8.14	-7.92	-13.18	-13.79	-18.19	-12.91	-20.27	-10.66	-8.9	-13.01	-11.28	-12.08	-19.71	-12.85	-11.2
Θ(120°)	-14.93	-17.62	-18.94	-15.91	-11.43	-11.1	-12.87	-19.95	-16.48	-19.03	-12.1	-17.48	-10.84	-16.37	-17.14	-19.22	-14.45	-10.99	-15.45	-15.54	-10.9	-20.35	-14.35	-12.6
Θ(135°)	-20.17	-16.49	-18.7	-15.8	-11	-10.8	-18.7	-10.99	-13.46	-19.99	-18.54	-14.29	-19.47	-17.85	-19.39	-19.88	-18.6	-14.55	-15.32	-14.1	-20.07	-18.75	-11.81	-16.35
Θ(150°)	-14.21	-11.86	-18	-12.42	-11.38	-13.11	-14.34	-15.54	-16.09	-15.72	-20.18	-19.72	-18.98	-20.25	-18.57	-15.91	-20.12	-11.93	-16.9	-18.14	-10.45	-10.84	-11.28	-18.71
Θ(165°)	-14.73	-16.26	-18.87	-20.14	-18.51	-18.68	-18.08	-16.18	-18.25	-18.72	-19.33	-19.83	-19.27	-19.75	-19.35	-19.36	-18.95	-19.25	-17.34	-11.51	-11.27	-10.47	-15.63	-18.01
Θ(180°)	-19.42	-16.33	-15.76	-13.77	-16.08	-15.89	-20.35	-19.83	-18.36	-19.08	-19.2	-19.64	-19.37	-15.64	-12.77	-13.39	-16.71	-19.39	-18.62	-20.38	-18.7	-19.54	-19.43	-16.73
Freq(Hz)	5.2G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.98	-2.73	-1.04	-0.65	0.05	-0.91	-2.15	-3.93	-7.47	-13.65	-11.83	-5.61	-3.35	-0.35	0.42	0.7	0.16	-0.43	-2.4	-3.77	-8.26	-13.99	-18.87	-8.98
Θ(15°)	-6.83	-4.28	-2.65	-1.39	-0.86	0.08	-1.05	-2.58	-1.05	-2.33	-4.59	-10.34	-4.45	-1.01	-0.21	0.77	-0.02	-1.61	-7.48	-12.17	-16.07	-18.7	-12.91	-6.97
Θ(30°)	-0.87	-0.13	-1.43	-8.72	-7.15	-1.37	-3.97	-0.99	-6.37	-5.83	-0.8	-2.72	-11.89	-8.21	-3.82	-4.4	-6	-7.62	-6.83	-9.72	-4.99	-6.81	-6.7	-3.71
Θ(45°)	-11.52	-5.26	-4.29	-9.3	-3.6	1.94	1.38	1.79	-6.23	-3.66	-9.76	-1.84	-2.15	-4.92	-1.67	0.68	-2.4	-8.3	-3.18	-3.06	-4.57	-4.7	-3.72	-6.39
Θ(60°)	-12.82	-5.86	-4.44	-2.46	-1.75	-0.55	-0.14	-3.08	-1.5	-0.79	-3.13	-9.26	-3.9	-2.71	-4.15	-0.38	-5.54	-4.97	-5.82	-6.28	-5.77	-7.21	-0.45	-6.49
Θ(75°)	-5.64	-1.9	-4.74	-0.98	-2.64	-8.53	-8.41	-7.74	-12.34	1.28	-2.14	-5.65	0.87	-2.25	-6.65	-2.25	-3.78	-4.12	-6.96	-8.19	-7.36	-6.58	-12.44	0.1
Θ(90°)	-6.12	-4.24	-0.76	0.14	-3.69	-19.77	-6.69	-7.3	-18.17	-3.54	-5.65	-9.85	-4.27	-7.19	-11.06	-7.3	-4.98	-10.91	-19.89	-9.21	-6.99	-6.07	-9.7	-1.1
Θ(105°)	-7.33	-7.3	-1.95	-4.43	-4.15	-17.26	-7.71	-4.44	-19.6	-8.34	-8	-19.21	-10.4	-10.11	-18.87	-18.98	-8.22	-12.24	-11.62	-11.26	-11.74	-7.8	-5.77	-2.43
Θ(120°)	-9.44	-11.12	-6.96	-3.85	-7.84	-14.41	-18.38	-10.31	-19.78	-16.3	-16.29	-18.89	-12.98	-17.66	-11.63	-15.31	-17.87	-18.98	-10.39	-14.54	-19.56	-19.09	-6.09	-6.01
Θ(135°)	-12.5	-15.8	-8.84	-6.66	-12.12	-20.17	-18.99	-11.16	-13.78	-18.69	-18.95	-17.22	-14.62	-19.74	-19.9	-13.44	-18.74	-14.32	-13.74	-20.23	-11.82	-6.92	-8.22	-8.22
Θ(150°)	-14.1	-16.89	-15.06	-8.18	-10.38	-15.48	-18	-13.44	-14.79	-18.79	-11.54	-18.42	-20.34	-18.65	-19.4	-20.2	-20.27	-19.53	-17.05	-19.59	-13.57	-12.56	-10.91	-11.84
Θ(165°)	-17.6	-13.89	-14.26	-14.43	-14.09	-12.42	-16.65	-18.23	-16.35	-14.76	-14.48	-20.03	-19	-20.03	-18.51	-19.62	-19.71	-20.34	-19.04	-19.23	-19.54	-17.13	-12.61	-14.66
Θ(180°)	-18.24	-19.94	-18.75	-18.82	-19.5	-19.2	-19.48	-18.94	-16.31	-16.53	-17.79	-20.45	-20.08	-19.18	-18.63	-18.96	-20.01	-18.87	-14.72	-15.41	-14.96	-16.65	-20.01	-19.34
Freq(Hz)	5.3G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.68	-0.99	-2.27	-5.42	-8.85	-19.2	-11.89	-4.92	-2.12	-1.54	-0.37	0.16	0.31	-0.59	-2.18	-5.03	-10.01	-19.11	-15.04	-8.7	-4.29	-1.52	-0.08	-0.09
Θ(15°)	-2.04	-2.41	-3.28	-4.86	-5.01	-7.06	-8.3	-3.36	-2.86	-1.31	-1.07	-1.51	0.65	-0.29	-3.91	-11.37	-19.49	-5.46	-3.36	-2.51	0.02	0.83	0.33	-0.71
Θ(30°)	-4.27	-6.29	-12.04	-7.38	-1.81	-1.82	-1.77	-1.04	-0.44	-1.39	-4.07	-9.06	-5.08	-6.46	-7.87	-13.06	-8.44	-6.33	-7.43	-6.7	-5.22	-5.88	-6.82	-2.48
Θ(45°)	-6.89	-15.84	-13.93	-3.28	-13.51	-4.63	-0.87	-0.58	-1.91	-2.77	-5.05	-10.17	-14.13	-16.02	-9.58	-14.71	-11.9	-7.12	-16.86	-9.69	-8.36	-6.9	-4.41	-5
Θ(60°)	-11.05	-9.95	-18.29	-6.51	-8.76	-2.53	-0.03	-0.92	-1.91	-2.98	-7.62	-15.39	-10.71	-15.04	-11.8	-18.91	-11.33	-14.31	-12.13	-15.17	-6.94	-3.39	-4.37	-6.14
Θ(75°)	-19.34	-9.65	-18.98	-12.23	-8.37	-1.14	-1.53	-1.61	-2.93	-5.33	-8.54	-9.05	-20.2	-16.51	-19.96	-13.41	-13.16	-13.68	-9.63	-7.99	-5.68	-7.24	-6.11	-7.28
Θ(90°)	-18.38	-12.02	-13.06	-18.62	-7.2	-5.09	-6.72	-4.98	-5.11	-7.3	-7.17	-11.08	-19.09	-11.46	-14.03	-15.33	-19.75	-11.48	-7.8	-6.5	-7.44	-11.17	-7.5	-11.41
Θ(105°)	-18.98	-14.22	-13.32	-19.29	-10	-9.69	-10.13	-9.1	-10.59	-9.4	-9.29	-10.16	-17.03	-14.1	-15.91	-19.01	-17.4	-8.13	-16.37	-10.57	-13.24	-20.17	-13.6	-18.33
Θ(120°)	-19.73	-17.22	-18.99	-14.21	-9.64	-11.2	-13.52	-19.68	-18.3	-18.23	-17.51	-19.56	-16.21	-16.55	-17.84	-18.23	-20.16	-11.25	-16.77	-18.6	-13.59	-16.62	-14.7	-16.59
Θ(135°)	-19.44	-19.09	-19.74	-16.98	-12.26	-8.73	-13.92	-13.59	-16.09	-20.33	-17.31	-18.75	-16.45	-17.25	-19.5	-19.72	-19.21	-19.82	-19.99	-17.98	-19.38	-20.06	-15.54	-19.14
Θ(150°)	-13.87	-8.79	-12.68	-13.75	-11.96	-16.91	-9.1	-16.01	-20.08	-11.77	-18.9	-19.84	-19.44	-20.06	-18.09	-17.25	-20.45	-16.05	-16.19	-17.16	-14.3	-19.82	-11.52	-16.07
Θ(165°)	-18.96	-19.84	-19.73	-19.16	-19.55	-19.11	-18.36	-18.04	-13.4	-14.37	-18.64	-19.79	-19.7	-19.85	-16.56	-20.07	-18.83	-17.67	-15.19	-10.74	-10.01	-10.96	-19.02	-18.92
Θ(180°)	-12.06	-11.93	-13.34	-14.75	-15.91	-17.36	-20.29	-18.43	-12.8	-17.61	-19.08	-19.68												



Θ(45°)	-4.14	-3.59	-11.46	-11.2	-10.73	-5.5	-2.3	-3.54	-7.67	-4.83	-3.88	-2.04	-6.08	-11.15	-8.7	-11.38	-10.91	-17.37	-17.8	-8.46	-4.48	-3.14	-5.33	-5.57
Θ(60°)	-5.04	-7.95	-11.93	-11.68	-4.52	-1.64	-3.38	-8.35	-3.58	-5.8	-11.05	-11.64	-10.58	-8.21	-9.23	-17.55	-15.83	-19.43	-10.33	-8.79	-6.93	-6.96	-5.57	-7.3
Θ(75°)	-6.34	-13.18	-11.77	-13.16	-15.22	-3.46	-3.93	-5.51	-2.64	-7.36	-9.72	-14.58	-15.34	-11.12	-12.47	-18.05	-14.56	-19.78	-9.47	-7.69	-9.75	-10.97	-5.36	-5.32
Θ(90°)	-8.43	-18.99	-7.95	-16.16	-18.41	-8.84	-4.85	-4.11	-4.85	-13.31	-8.92	-10.7	-8.29	-15.38	-19.01	-18.35	-17.91	-18.75	-10.06	-5.61	-7.19	-13.03	-6.78	-7.92
Θ(105°)	-10.74	-15.13	-7.91	-19.92	-13.8	-14.88	-10.86	-4.4	-11.37	-12.12	-13.21	-13.26	-14.8	-19.76	-19.81	-19.62	-19.59	-10.56	-8.82	-9.91	-9.45	-13.95	-9.48	-12.21
Θ(120°)	-11.65	-11.72	-18.15	-17.32	-10.42	-17.9	-20.19	-8.63	-18.55	-10.36	-11.09	-17.85	-13.13	-19.53	-20.17	-15.4	-15.9	-13.02	-16.75	-16.22	-13.22	-11.42	-12.06	-16.88
Θ(135°)	-7.89	-15.05	-18.93	-19.36	-19.31	-18.06	-19.29	-17.65	-13.78	-18.66	-10.18	-13.62	-10.2	-10.39	-20.16	-19.26	-19.38	-19.94	-18.36	-19.44	-17.14	-19.01	-9.94	-15.16
Θ(150°)	-10.59	-12.84	-17.93	-18.63	-19.29	-16.28	-18.89	-18.05	-18.03	-12.03	-19.99	-17.92	-19.88	-16.44	-19.58	-19.42	-14.93	-16.68	-12.42	-12.34	-17.39	-14.34	-14.13	-20.14
Θ(165°)	-8.4	-10.57	-19.34	-19.98	-19.76	-18.71	-16.1	-17.81	-15.35	-12.87	-15.78	-15.91	-19.45	-11.37	-10.65	-18.29	-18.3	-18.53	-16.61	-14.36	-12.55	-19.92	-17.27	-17.14
Θ(180°)	-8.6	-9.82	-9.64	-12.64	-17.31	-18.08	-18.29	-18.13	-12.83	-19.43	-18.92	-20.07	-13.91	-8.82	-10.38	-12.61	-16.95	-18.01	-18.73	-14.16	-11.58	-9.4	-8.61	-10.4
Freq(Hz)	5.785G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-3.18	-1.97	-0.91	-1.54	-0.6	-0.98	-1.65	-1.92	-2.38	-2.28	-2.71	-3.08	-2.08	-2.31	-2.11	-1.73	-0.95	-0.59	-2.17	-2.75	-3.25	-2.39	-2.89	-4.22
Θ(15°)	-0.97	-2.09	-3.2	-3.25	-2.22	-0.49	0.48	0.51	-4.2	-17.78	-6.58	-8.24	-2.67	-4.85	-14.09	-10.83	-8.83	-7.72	-6.51	-5.78	-2.73	-2.84	-4.54	-2.74
Θ(30°)	-3.83	-2.72	-2.79	-2.66	-1.91	-1.04	-1.39	-5	-6.38	-4.88	-5.09	-3.11	-0.65	-6.14	-9.09	-4.48	-6.55	-16.38	-11.76	-10.95	-4.8	-12.66	-2.38	-9.03
Θ(45°)	-10.03	-2.6	-5.25	-8.21	-11.03	-4.67	-6.28	-18.51	-19.03	-7.42	-18.76	-4.07	-0.84	-0.61	0.84	-0.73	-18.23	-18.97	-11.25	-3.53	-2.82	-0.51	-5.41	-10.61
Θ(60°)	-19.77	-1.91	-0.17	-13.45	-10.84	-18.58	-6.18	-4.97	-7.36	-6.81	-0.46	-5.48	-7.86	1.86	0.02	-4.68	-19.62	-12.88	-8.96	-4.47	-0.26	-4.26	-5.65	0.6
Θ(75°)	-10.32	1.17	0.2	-8.06	-13.96	-7.09	-1.43	1.63	-7.87	-6.29	-0.3	-5	-3.46	1.63	-0.65	-9.6	-16.11	-14.62	-8.66	-4.47	-2.74	-6.23	-3.67	-0.73
Θ(90°)	-16.26	-0.32	0.89	-7.53	-9.1	-6.46	-1.35	-2.47	-7.56	-4.57	-5.84	-5.08	-4.38	-3.84	-4.36	-15.48	-13.11	-17.93	-19.06	-9.19	-9.21	-7.2	-7.46	-3.05
Θ(105°)	-17.85	-4.3	-0.57	-9.22	-13.86	-8.17	-4.09	-6.8	-10.85	-6.6	-11.11	-9.96	-8.27	-9.89	-11.72	-20.36	-12.39	-18.37	-13.99	-12.73	-16.32	-9.56	-7.67	-4.59
Θ(120°)	-17.28	-6.38	-4.66	-7.06	-13.19	-9.41	-6.99	-10.8	-8.13	-11.02	-10.3	-15.5	-11.94	-10.63	-11.47	-13.16	-15.72	-17.63	-18.52	-13	-13.89	-19.52	-8.53	-5.57
Θ(135°)	-17.64	-8.01	-8.1	-10.8	-17.95	-10.39	-9.64	-11.41	-9.49	-11.3	-18.7	-16.07	-18.01	-17.51	-18.71	-15.53	-19.39	-15.66	-14.16	-14.88	-19.51	-8.69	-12.76	-13.75
Θ(150°)	-16.4	-13.45	-9.54	-9.94	-12.2	-19.86	-15.65	-11.17	-10.9	-19.6	-17.83	-13.66	-15.38	-15.21	-15.8	-18.39	-17.69	-18.78	-19.07	-19.61	-12.11	-12.82	-8.64	-19.65
Θ(165°)	-20.06	-13.15	-12.4	-14.91	-16.12	-11.88	-11.69	-18.69	-12.08	-11.93	-12.16	-15.78	-19.75	-18.74	-19.32	-16.62	-20.21	-18.69	-19.46	-18.04	-14.9	-17.34	-19.47	-16.03
Θ(180°)	-18.33	-15.06	-11.52	-11.38	-10.87	-9.97	-11.34	-15.64	-12.94	-13.24	-13.9	-18.63	-18.06	-16.34	-13.86	-9.33	-8.7	-8.01	-8.73	-8.67	-9.75	-11.83	-13.53	-20.6
Freq(Hz)	6.175G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	3.12	2.76	2.05	-0.22	-2.79	-5.58	-5.25	-2.18	-0.02	0.99	2.06	1.72	2.87	1.29	0.55	-0.91	-2.34	-3.92	-4.58	-3.53	-2.23	1.28	2.14	0.69
Θ(15°)	0.15	-3.05	-3.98	-3.47	-6.42	-12.01	-12.8	-4.36	-8.27	-1.77	3.17	4.85	1.15	-6.73	-1.83	-3.15	-6.81	-13.35	-9.21	-4.56	-8.05	-13.97	-4.68	-1.44
Θ(30°)	-5.92	-4.71	-5.28	-6.48	-3.99	-1.08	-9.8	-10.59	-1.2	2.08	0.74	2.39	4.68	-6.53	-7.64	-2.98	-11.68	-10.07	-9.57	-7.97	-8.84	-1.66	0	-1.3
Θ(45°)	-9.98	-4.25	-9.26	-4.49	-4.84	-2	-5.07	-3.44	-1.17	-4.47	-2.49	-2.18	2.93	-6.39	-6.58	-17.97	-12.19	-12.65	-19.85	-8.52	-8.22	-6.82	-1.79	-5.28
Θ(60°)	-7.17	-1.28	-13.26	-10.76	-6.99	-6.48	-3.08	-3.08	-7.13	-7.5	-11.54	-7.55	-6.28	-11.69	-7.34	-15.51	-10.76	-12.6	-10.24	-13.29	-8.77	-5.57	-6.04	-6.38
Θ(75°)	-7.24	-3.57	-13.45	-18.4	-18.84	-5.34	-0.46	-2.59	-5.36	-17.02	-18.94	-13.51	-10.47	-7.5	-14.84	-19.58	-10.01	-14.06	-4.06	-9.43	-11.54	-8.81	-2.5	-10.98
Θ(90°)	-6.93	-7.11	-12.27	-19.75	-13.22	-8.64	-4.39	-5.76	-6.84	-16.79	-14.88	-15.4	-12.4	-9.44	-14.42	-19.48	-18.56	-19.4	-4.94	-12.55	-10.01	-9.67	-7.07	-15.81
Θ(105°)	-7.87	-9.46	-12.48	-18.39	-13.6	-8.58	-7.16	-13.08	-8.81	-16.65	-14.48	-16.04	-14.89	-13.97	-15.08	-19.18	-19.67	-12.84	-11.28	-13.58	-15.87	-10.24	-11.3	-12.52
Θ(120°)	-9.5	-11.46	-17.9	-19.26	-19.04	-14.03	-11.1	-12.04	-19.87	-18.92	-19.65	-13.43	-10.93	-18.88	-16.19	-13.07	-18.51	-16.27	-19.95	-16.69	-19.94	-13.64	-12.73	-12.89
Θ(135°)	-19.28	-19.22	-17.94	-10.85	-15.59	-19.83	-14.95	-16.44	-19.59	-19.34	-20.39	-16.99	-14.88	-14.97	-18.87	-18.61	-20.01	-18.86	-16.88	-19.04	-15.96	-16.74	-16.37	-17.71
Θ(150°)	-13.5	-17.47	-16.91	-20.76	-19.95	-15.58	-18.8	-19.54	-20.45	-12.11	-16.29	-15.56	-18.56	-19.88	-19.62	-19.43	-19.77	-13.49	-8.97	-12.58	-14.69	-11.66	-10.86	-19.14
Θ(165°)	-12.2	-17.36	-18.5	-17.53	-16.58	-16.5	-14.7	-18.27	-19.92	-18.66	-19.89	-14.45	-18.82	-19.2	-14.15	-19.95	-18.49	-17.12	-11.98	-12.53	-10.74	-17.96	-14.2	-19.35
Θ(180°)	-15.05	-17.13	-19.52	-19.7	-19.17	-15.06	-14.6	-10.52	-11.6	-19.16	-18.97	-15.64	-18.11	-14.71	-16.36	-19.7	-18.2	-18.85	-16.65	-16.25	-14.4	-12.57	-14.93	-14.94
Freq(Hz)	6.175G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-3.98	-2.76	-0.34	0.68	1.37	1.56	1.53	2.14	0.65	-1.28	-3.18	-4.43	-2.58	-1.63	0.12	1.19	2.33	2.88	1.76	0.95	0.06	0.12	-1.28	-5.23
Θ(15°)	-1.18	-1.29	-0.32	0.44	-1.28	-6.14	-2.01	0.56	-1.37	-6.91	-6.8	-4.95	-7.93	-4.14	-8.67	-3.79	0.56	1.01	0.36	0.45	0.08	-1.8	-3.59	-4.25
Θ(30°)	-6.16	-6.95	-2.79	2.25	-7.41	-4.35	0.69	0.56	3.54	1.66	2.45	-13.01	-5.07	-2.43	-7.25	-12.35	-8.68	-0.35	-3.62	-5.3	-10.07	-4.13	-5.64	-11.77
Θ(45°)	-10.91	-4.78	-1.79	-3.47	-4.64	-8.78	-3.03	-3.45	-2.08	-6.68	-3.7	-8	-4.16	1.78	-3.46	-6.67	-15.38	-2.06	-4.92	-6.56	-0.95	-6.39	-0.14	-4.02
Θ(60°)	-11.14	-3.22	-6.41	-11.32	-7.48	-0.15	1.19	3.15	-1.33	-14.98	-11.66	-1.09	-17.72	0.94	-2.58	-5.81	-4.86	0.21	-3.72	1.97	-0.76	0.74	1.5	-1.11
Θ(75°)	-9.55	-3.58	-4.01	-15.83	-2.49	2.93	1.21	3.39	-0.68	-7.06	-4.56	0.86	-5.18	2.83	4.16	-18.29	-6.38	0.48	1.54	1.71	0.11	-2.55	-2.66	2.6
Θ(90°)	-11.15	-2.83	-11.45	-16.92	-3.18	-4.16	-8	0.42	-5.22	-6.3	-5.16	-1.7	-5.13	-2.24	-12.36	-17.29	-5.15	-7.35	-1.24	-0.62	-3.61	-8.5	-6.14	-2.67
Θ(105°)	-10.54	-4.53	-13.98	-12.49	-4.69	-8.5	-19.06	-6.07	-9.74	-9.8	-7.37	-12.8	-7.03	-7.02	-11.92	-13.28	-18.04	-11.05	-9.09	-9.15	-7.46	-17.54	-5.6	-6.92
Θ(120°)	-13.15	-7.94	-9.78	-10.25	-10.98	-11.13	-12.1	-13.1	-13.15	-9.04	-12.49	-14.36	-17.3	-10.09	-15.36	-17.58	-18.16	-15.81	-10.36	-13.03	-18.86	-18.13	-7.69	-12.25
Θ(135°)	-12.19	-7.57	-11.63	-19.12	-14.87	-15.05	-14.82	-17.76	-9.69	-10.93	-13.59	-19.65	-15.23	-19.59	-18.68	-15.1	-17.42	-18.78	-15.63	-1				



Θ(0°)	-4.72	-5.16	-6.11	-9.75	-15.83	-18.9	-14.03	-9.02	-7.36	-6.18	-5.98	-6.72	-6.56	-8.08	-10.08	-15.5	-19.64	-19.32	-18.67	-12.55	-10.02	-7.77	-6.89	-5.96
Θ(15°)	-2.55	0.01	0.53	0.41	-1.66	-0.47	-0.03	0.25	0.09	-1.8	-8.47	-13.08	-7.03	-7.15	-5.99	-8.61	-8.58	-9.33	-9.63	-6.08	-8.76	-10.59	-7.06	-5.7
Θ(30°)	-13.13	-4.09	-2.08	0.11	0.67	-3.63	-1.55	-2.43	-6.82	-7.03	-7.02	-11.21	-19.97	-6.79	-16.37	-14.1	-4.87	-3.35	-3.99	-3.57	-3.21	-3.45	-4.46	-13.27
Θ(45°)	-13.24	-3.08	-10.17	-1.71	-2.95	-1.47	-3.18	-2.84	-4.15	-4.03	-12.89	-7.45	-9.22	-0.51	-14.14	-19.29	-4.89	-2.25	-1.67	1.24	1.84	-0.35	3.43	-1.97
Θ(60°)	-16.34	-5.42	-9.56	-14.14	-1.21	-4.4	-7.47	-3.96	-4.38	-8.81	-5.95	-1.73	-6.23	-2.33	-3.85	-19.03	-1.83	-0.92	-3.25	0.57	-1.14	2.43	2	-2.66
Θ(75°)	-16.21	-5.33	-8.55	-7.32	-0.63	-2.04	-1.29	-3.85	-3.68	-5.7	0.26	-1.15	-1.07	-0.29	-5.71	-15.79	-10.7	1.03	-1.13	-1.75	-1.01	-1.17	0.9	-4.47
Θ(90°)	-18.19	-9.16	-12.38	-8.86	-6.79	-5.17	-0.39	1.71	-3.69	-3.45	-4.11	-3.39	-3.81	-6.39	-9.32	-18.71	-5.21	-2.44	-3.6	-4.27	-3.71	-3.44	-3.4	-6
Θ(105°)	-19.72	-13.96	-11.91	-12.8	-14.55	-6.88	-4.24	-1.59	-8.93	-8.67	-8.94	-8.07	-8.26	-10.19	-7.38	-14.44	-19.5	-15.48	-12.75	-12.05	-6.56	-10.55	-4.62	-9.95
Θ(120°)	-18.75	-16.63	-14.79	-16.82	-6.89	-13.07	-5.24	-3.92	-11.97	-9.89	-12.88	-11.14	-13.42	-16.95	-18.14	-10.89	-11.6	-13.69	-18.7	-14.94	-19.84	-10.11	-7.56	-12.03
Θ(135°)	-19.89	-18.75	-15.06	-12.4	-18.82	-11.53	-9.97	-6.66	-11	-16.92	-12.34	-19.31	-15.76	-19.67	-19.73	-17.57	-17.45	-16.52	-19.95	-20.3	-10.6	-15.23	-12.04	-9.2
Θ(150°)	-19.93	-19.17	-17.93	-15.84	-16.65	-13.08	-20.2	-8.75	-13.17	-13.36	-18.64	-18.88	-19.81	-18.4	-20.19	-15.77	-17.01	-13.92	-19.38	-19.22	-19.32	-16.45	-12.82	-18.64
Θ(165°)	-18.95	-18.59	-16.52	-13.13	-12.65	-17.46	-19.17	-15.39	-16.82	-14.61	-18.25	-20.15	-19.35	-19.22	-19.56	-19.3	-12.07	-14.85	-17.42	-19.59	-19.77	-14.58	-16.5	-19.4
Θ(180°)	-19.65	-19.17	-19.13	-20.1	-19.14	-19.37	-19.24	-19.94	-19.61	-19.84	-19.35	-19.48	-18.65	-19.13	-19.43	-19.04	-19.63	-19.61	-18.29	-18.8	-20	-20	-20	-19.4
Freq(Hz)	6.995G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.1	-8.21	-9.47	-10.91	-13.1	-13.28	-15.35	-15.46	-17.25	-17.56	-20.26	-19.6	-15.56	-19.36	-15.04	-12.66	-10.49	-9.82	-9.16	-9.14	-9.14	-8.48	-7.91	-7.45
Θ(15°)	-1.29	-2.39	-1.72	-0.77	-0.77	-1.13	-5.72	-8.3	-19.05	-3.65	-2.35	-5.12	-8.69	-3.97	-3.54	-6.06	-6.62	-5.97	-8.81	-4.45	-2.44	-5.02	-8.5	-6.77
Θ(30°)	-0.72	-3.95	-0.67	0.47	3.41	-0.56	-11.38	-14.09	-5.68	-3.59	-4.65	-1.62	-6.38	-5.82	-3.05	-7.99	-5.17	-2.84	-5.45	-1.42	-4.57	-15.39	-6.58	-11.23
Θ(45°)	0.12	-4.11	-2.11	0.18	-0.84	-4.37	-7.24	-11.28	-6.76	-8.23	-3.96	-3.48	-4.2	-19.74	-11.07	-8.92	-7.64	-8.89	-19.65	-8.11	-19.01	-11.67	-12.6	-12.88
Θ(60°)	-6.44	-9.92	-4.7	-10.01	-5.56	0.07	-2.86	-6.13	-3.09	-4.65	-8.08	-15.9	-7.3	-15.61	-8.79	-13.92	-8.9	-7.95	-11.83	-14.81	-9.54	-1.89	-1.77	-7.07
Θ(75°)	-7.91	-7.05	-7.99	-14.21	-4.6	-1.37	-2.62	-6.3	-5.97	-6.5	-10.4	-19.79	-12.16	-16.69	-9.2	-16.4	-10.57	-8.15	-5.38	-6.87	-17.04	-4.62	-0.52	-10.04
Θ(90°)	-12.58	-9.98	-19.08	-20.42	-7.51	-3.48	-2.33	-4.53	-9.16	-8.71	-8.19	-14.6	-19.71	-15.06	-15	-15.39	-9.12	-18.82	-3.58	-16.99	-15.24	-9.99	-5.3	-13.48
Θ(105°)	-16.45	-11.8	-15.7	-19.56	-8.89	-6.76	-6.38	-6.03	-20.29	-15.56	-14.51	-13.71	-20.19	-15.33	-8.6	-18.49	-16.26	-10.35	-10.2	-12.15	-14.67	-10.22	-13	-19.23
Θ(120°)	-14.71	-13.74	-19.32	-18.96	-12.1	-7.03	-15.07	-7.95	-19.44	-17.95	-16.27	-18.89	-18.34	-19.37	-17.68	-19.02	-19.27	-13.37	-16.63	-12.9	-15.03	-16.27	-15.81	-14.97
Θ(135°)	-17.98	-20.5	-18.01	-17.52	-19.82	-8.66	-12.82	-18.04	-19.13	-20.23	-20.05	-20.28	-15.54	-17.68	-19.25	-19.93	-19.14	-14.58	-18.2	-18.45	-17.55	-19.4	-13.17	-17.59
Θ(150°)	-19.12	-17.38	-19.06	-19.32	-14.63	-19.41	-14.78	-19.82	-14.3	-17.16	-20.59	-18.93	-16.83	-20.36	-20.04	-18.93	-19.73	-12.69	-12.09	-16.38	-13.61	-14.96	-19	-19.3
Θ(165°)	-16.71	-13.48	-19.21	-17.88	-16.61	-17.27	-19.45	-18.8	-18.83	-14.96	-17.64	-18.16	-20.33	-19.38	-19.48	-16.01	-19.64	-19.67	-20.07	-19	-15.58	-18.61	-19.03	-17.93
Θ(180°)	-19.65	-18.83	-20.1	-18.86	-19.11	-19.52	-19.17	-19.28	-17.06	-19.23	-19.99	-19.03	-17.42	-20.12	-19.96	-19.95	-19.62	-18.65	-20	-18.49	-17.01	-16.63	-18.8	-17.66
Freq(Hz)	6.995G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-9.23	-9.64	-9.64	-10.59	-9.76	-10.86	-12.92	-15.3	-17.31	-19.05	-15.79	-12.79	-16	-13.28	-12.24	-12.58	-13.27	-11.07	-8.98	-8.12	-8.64	-7.72	-8.46	-9.42
Θ(15°)	-4.77	-5.64	-3.71	-1.04	-2.42	-1.63	0.95	0.53	-0.18	-1.24	-3.2	-6.32	-11.2	-6.84	-7.02	-20.71	-8.98	-7.32	-5.68	-7.1	-13.85	-9.39	-5.91	-8.32
Θ(30°)	-6.01	-7.04	-4.32	0.23	-2.32	-4.32	-6.24	-2.31	-3.15	-6.33	-11.19	-8.06	-20.3	-15.1	-19.43	-11.95	-10.02	-2.78	-0.71	-2.66	-6.66	-11.01	-5.31	-3.39
Θ(45°)	-2.01	-12.57	-6.25	-1.54	-1.53	-2.26	-1.55	-2.47	-6.41	-6.36	-12.53	-9.24	-13.73	-8.46	-13.3	-17.6	0.51	0.12	-3.81	0.07	1.2	-0.63	-1.13	-1.58
Θ(60°)	-10.87	-10.65	-12.95	1.1	0.44	-1.02	-2.82	-5.91	-1.03	-7.56	-4.41	-3.9	-7.12	-5.23	-10.68	-5.93	-5.14	-1.15	-1.29	2.51	0.25	-0.83	1.78	-9.91
Θ(75°)	-15.19	-5.2	-11.81	0.59	-1.79	1.37	-0.76	1.11	-0.12	-6.89	-2.22	-5.76	-4.05	-2.6	-4.45	-3.59	-5.97	-1.49	-2.64	-1.55	-0.74	-4.39	1.31	-6.42
Θ(90°)	-9.25	-3.85	-8.51	-2.38	-4.68	1.45	-0.69	-1.66	-1.92	-13.83	-10.01	-12.11	-5.53	-6.39	-10.41	-7.25	-12.02	-1.46	-2.1	-5.87	-3.34	-10.43	-0.17	-6.09
Θ(105°)	-9.34	-5.12	-9.71	-7.28	-7.28	0.53	-2.53	-6.09	-9.63	-10.19	-9.56	-10.61	-9.49	-16.57	-8.25	-11.45	-11.15	-14.14	-12.42	-10.63	-13.51	-12.54	-3.16	-8.03
Θ(120°)	-12.45	-7.22	-14.99	-12.63	-11.37	-2.27	-3.85	-6.97	-8.63	-11.49	-12.06	-19.57	-11.22	-19.65	-15.72	-8.85	-18.82	-15.71	-14.37	-12.26	-20.29	-11.74	-9.7	-10.5
Θ(135°)	-14.78	-10.51	-13.96	-14.27	-6.36	-15.05	-6.41	-8.92	-13.17	-18.32	-13.93	-17.43	-17.09	-19.84	-13.07	-19.87	-14.87	-20.01	-19.24	-19.21	-11.56	-14.76	-12.11	-12.05
Θ(150°)	-17.99	-13.63	-18.24	-13.36	-19.14	-11.83	-11.39	-11.97	-11.26	-11.3	-19.97	-15.87	-18.99	-19.39	-19.76	-19.33	-18.89	-15.74	-18.77	-19.31	-19.75	-17.27	-15.99	-16.32
Θ(165°)	-19.6	-19.51	-16.11	-14.76	-13.76	-15.46	-19.42	-15.79	-14.12	-15.79	-18.89	-18.86	-17.04	-18.83	-19.76	-14.28	-19.68	-20.06	-19.6	-19.57	-19.66	-19.1	-19.03	-19.27
Θ(180°)	-17.55	-16.01	-18.98	-18.79	-15.09	-19.81	-17.62	-18.94	-18.71	-19.55	-14.12	-18.35	-19.05	-20.14	-18.1	-16.22	-19.86	-17.1	-18.32	-19.12	-19.94	-19.13	-19.31	-19.76



Freq(Hz)	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	3.25	3.68	3.74	2.9	4.16	2.52	0.71	2.03
Ant. 2 Max Gain (dBi)	2.35	4.2	2.48	3.96	4.72	2.06	1.91	2.03
Ant. 3 Max Gain (dBi)	3.07	3.84	2.89	2.61	2.24	1.61	2.74	2.45
Ant. 4 Max Gain (dBi)	3.41	3.65	1.81	3.31	3.43	3.56	2.35	1.93
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/60/345	Theta/45/345	Theta/60/345	Theta/60/345	Theta/45/315	Theta/60/345	Theta/30/345	Theta/30/60
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/0	Theta/45/210	Theta/75/0	Theta/60/240	Theta/60/240	Theta/75/75	Theta/30/135	Theta/45/270
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/105	Theta/75/120	Theta/60/120	Theta/75/90	Theta/45/90	Theta/60/60	Theta/45/90	Theta/75/285
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/30/240	Theta/30/255	Theta/30/120	Theta/45/240	Theta/45/240	Theta/15/0	Theta/15/30	Phi/30/120
Max Gain (dBi)	3.41	4.2	3.74	3.96	4.72	3.56	2.74	2.45
DG [1SS] (dBi)	6.79	6.16	4.51	5.6	7.06	6.25	4.86	5.56
DG [2SS] (dBi)	3.79	4.2	3.74	3.96	4.72	3.56	2.74	2.56
DG [4SS] (dBi)	0.92	0.76	-0.79	0.29	1.39	0.34	-0.72	-0.38



DG 1SS Result

Freq(Hz)	5.2G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.05	-1.36	-0.27	-0.25	1.16	1.13	0.57	-0.52	-1.87	-2.54	-2.14	-0.69	-0.3	0.68	0.32	0.72	0.98	1.05	-0.24	-0.86	-2.5	-2.99	-2.63	-2.95
Θ(15°)	1.13	-1.32	-1.18	-0.52	0.92	-1.06	-4.8	-3.18	-3.91	0.28	2.71	1.97	0.35	1.67	0.89	-1.06	0.02	0.12	-1.99	-2.11	-4.42	-5.12	-0.92	1.31
Θ(30°)	-0.32	-1.42	0.24	1.05	0.3	-1.54	-1.67	-3.35	-0.66	-2.11	-4.75	1.45	-0.32	-1.03	1.96	1.45	-0.55	0.66	2.01	-1.24	-3.68	-1.23	-2.9	-0.42
Θ(45°)	-1.57	-2.68	-3.2	-1.66	-3.02	-1.7	-4.02	-5.2	-6.03	-3.09	-1.56	-3.51	-2.43	-2.05	-1.16	-1.19	-5.48	-2.17	-1.49	0.73	-1.82	-5.59	-3.71	-6.1
Θ(60°)	-2.63	-3.4	-3.92	-5.54	-3.26	0.17	-2.21	-3.64	-1.93	-4.75	-2.12	-1.87	-3.24	-2.1	-3.58	-1.58	-5.24	-2.49	0.48	-0.4	-2.07	-4.36	-7.11	-2.68
Θ(75°)	-4.68	-2.45	-7.63	-1.27	-2.07	-0.58	-0.66	-2.08	-2.96	-2.07	-1.52	-1.37	-4.13	-3.75	-4.64	-6.01	-8.42	-4.53	-0.49	-2.51	-3.41	-3.92	-10.15	-5.79
Θ(90°)	-6.52	-1.7	-3.82	-4.15	-1	-3.73	-2.54	-4.37	-3.73	-2.79	-2.2	-4.52	-6.33	-7.38	-4.22	-5.75	-5.57	-3.92	-3.36	-5.07	-2.86	-4.38	-7.39	-6.68
Θ(105°)	-7.94	-4.51	-7.23	-5.75	-3.82	-4.94	-4.09	-3.97	-5.38	-4.16	-4.04	-5.5	-11.44	-8.24	-5.29	-3.39	-3.11	-5.39	-4.3	-6.64	-8	-11.17	-7.74	-7.36
Θ(120°)	-5.49	-9.69	-6.95	-4.26	-7.8	-6.45	-4.9	-5.59	-7.81	-5.82	-4.41	-6.72	-7.46	-10.28	-6.01	-6.9	-3.56	-8.71	-1.54	-4.09	-8.09	-8.24	-9.93	-5.8
Θ(135°)	-6.45	-6.94	-7.28	-11.08	-8.7	-9.44	-9.22	-5.68	-8.75	-8.44	-8.37	-8.56	-9.04	-12.96	-8.48	-7.8	-6.8	-8.02	-7.73	-7.56	-10.39	-8.27	-9.52	-8.87
Θ(150°)	-12.47	-12.34	-13.5	-9.99	-7.54	-6.08	-8.51	-7.73	-5.86	-9.32	-7.3	-9.81	-12.24	-11.85	-9.37	-8.2	-10.17	-9.03	-7.85	-9.95	-12.65	-9.38	-10.88	-8.5
Θ(165°)	-11.93	-10.08	-9.47	-7.72	-7.36	-8.4	-9.45	-7.51	-7.53	-11.79	-11.64	-10.47	-13.54	-10.32	-8.33	-9.16	-11.02	-10.52	-12.03	-12.03	-13.24	-13.33	-10.58	-13.28
Θ(180°)	-11.33	-11.01	-9.65	-8.27	-7.21	-6.83	-6.32	-7.28	-7.25	-7.12	-9.64	-10.53	-11.6	-12.18	-11.87	-9.64	-8.82	-8.67	-6.81	-6.38	-5.46	-6.04	-8.14	-11.85
Freq(Hz)	5.2G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.24	-0.94	-2.22	-4.12	-2.58	-1.65	-0.38	-0.14	0.45	0.5	0.78	0.96	-0.09	-0.56	-2.27	-3.39	-2.79	-1.91	-1.35	-0.47	-0.32	0.82	1.66	1.03
Θ(15°)	-4.49	-3.68	-2.68	-2.07	-1.65	-0.82	-0.35	-1.23	0.32	1.21	0.13	0.5	0.43	0.47	1.14	1.39	1.28	2.86	0.36	-1.45	-0.49	-1.92	-3.47	-3.94
Θ(30°)	-2.51	-2.34	-4.31	-2.41	-0.69	-0.72	0.56	3.13	1.74	1.47	-1.54	1.67	2.73	2.82	4.79	6.77	5.85	5.4	4.43	3.05	3	1.81	-0.63	-3.94
Θ(45°)	0.81	-2.79	0.61	0.17	-0.44	-2.19	1.83	4.17	3.1	3.24	0.71	2.64	1.82	3.1	5.1	6.35	6.55	6.79	5.44	2.81	0.03	0.55	2.89	-0.11
Θ(60°)	2.47	-0.87	0.17	2.93	-2.21	0.24	3.48	5.12	4.51	3.47	2.73	-2.06	2.66	2.47	4.64	6.19	5.27	4.45	2.72	3.7	1.38	1.45	3.29	3.77
Θ(75°)	3.51	-2.38	-1.8	3.25	1.08	0.96	4.07	6.25	2.89	4.73	3.44	-4.15	0.18	2.79	3.98	3.95	2.51	3.03	4.14	0.75	2.14	0.66	2.34	2.87
Θ(90°)	1.33	-5.18	-0.3	-0.11	0.17	0.02	3.34	4.38	1.46	2.47	-0.53	-3.08	-1.28	0.59	3.02	0.39	0.54	0.28	2.73	-0	1.73	-0.55	-1.23	-0.25
Θ(105°)	-4.77	-7.18	-5.12	-4.05	-5.07	-3.01	0.29	1.35	-0.8	0.86	-4.54	-2.39	-1.28	-2.46	0.32	-3.56	-0.24	-4.68	-2.63	-3.76	-4.55	-3.67	-7.72	-8.87
Θ(120°)	-8.57	-5.39	-7.57	-4.87	-3.29	-8.4	-5.18	-7.45	-4.25	-3.16	-8.02	-4.14	-2.04	-3.59	-4.31	-7.15	-3.4	-10.23	-2.66	-4.62	-7.29	-4.99	-8.03	-9.46
Θ(135°)	-10.56	-7.05	-5.9	-4.42	-8.6	-7.23	-5.4	-8.86	-3.88	-7.69	-5.76	-7.6	-4.45	-3.19	-6.01	-4.85	-9.45	-9.36	-7.37	-7.63	-9.56	-7.71	-8.47	-9.42
Θ(150°)	-8.97	-9.74	-8.59	-10.03	-10.5	-7.19	-6.2	-12.96	-7.01	-6.22	-7.07	-9.09	-2.83	-3.05	-4.48	-8.66	-11.92	-13.53	-7.98	-13.35	-12.89	-12.01	-8.85	-11.06
Θ(165°)	-5.88	-7.64	-8.32	-8.58	-9.48	-7.7	-8.06	-8.75	-9.26	-7.95	-8.66	-8.44	-7.79	-8.03	-9.33	-9.33	-11.64	-11.85	-10.1	-8.56	-9.81	-11.48	-10.42	-9.25
Θ(180°)	-5.91	-5.31	-5.18	-7.17	-8.16	-8.54	-9.36	-9.85	-7.94	-8.01	-8.31	-5.63	-5.09	-7.03	-7.95	-8.69	-8.64	-10.27	-11.28	-10.04	-9.33	-8.31	-7.08	-6.97
Freq(Hz)	5.3G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.74	-0.44	0.44	0.51	1.55	0.55	-0.34	-1.46	-4.09	-6.01	-4.43	-2.12	-0.34	0.64	1.37	1.61	1.4	0.93	-0.68	-2.7	-5.15	-6.1	-3.82	-2.46
Θ(15°)	0.07	-2.48	-3.52	-2.03	0.45	0.43	-0.73	-1.7	-3.04	-0.01	1.8	2.27	1.41	1.35	0.72	-1.13	-1.27	0	-0.98	-1.71	-1.18	-2.94	-1.01	1.12
Θ(30°)	-2.23	-2.81	-0.63	0.57	-1.76	-1.35	-4.61	-4.69	-2.69	-4.87	-3.6	-1.59	-1	-0.55	1.25	2.04	-0.5	0.2	1.28	0.6	-1.3	-3.06	-0.5	1.25
Θ(45°)	-1.32	-2.72	-3.65	-5.16	-2.97	-1.86	-3.07	-3.24	-5.42	-5.14	0.54	-0.46	-3.56	-3.9	-3.34	-2.01	-5.11	-1.06	0.34	-0.06	-2.57	-4.72	-6.32	-1.77
Θ(60°)	-2.07	-2.94	-4.44	-8.88	-1.25	-1.35	-2.62	-3.54	-0.73	-1.09	-1.27	0.06	-2.21	-2.43	-3.05	-3.31	-4.41	-3.74	-1.44	-1.64	0.22	-4.92	-6.76	-0.97
Θ(75°)	-3.81	-2.93	-6.05	-6.29	-0.49	-0.92	0.36	0.05	0.16	-2.69	-1.56	-0.42	-4.94	-3.65	-7.7	-5.57	-7.28	-4.69	-1.1	-2.86	-3.1	-6.24	-7.46	-3.48
Θ(90°)	-4.24	-0.56	-6.05	-6.09	0.79	-2.79	-2.86	-1.53	-2.89	-3.8	-2.92	-4.6	-5.42	-8.49	-7.12	-6.5	-6.48	-3.81	-3.61	-5.61	-1.44	-3.15	-6.78	-6.45
Θ(105°)	-6.54	-4.68	-4.89	-5.73	-3.17	-5.43	-4.55	-3.22	-5.92	-4.66	-4.77	-5.24	-9.35	-9.67	-6.17	-5.97	-4.19	-6.2	-3.7	-5.13	-7.59	-10.83	-7.82	-6.6
Θ(120°)	-6.08	-9.57	-5.16	-5.75	-7.97	-6.43	-5.76	-7.09	-6.81	-6.46	-6.18	-7.6	-8.81	-8.23	-4.95	-7.68	-2.63	-8.68	-2.74	-4.13	-8.64	-10.04	-10.06	-6.75
Θ(135°)	-7.08	-7.03	-7.49	-10.7	-9.2	-8.9	-7.45	-9.53	-7.13	-8.64	-8.08	-10.38	-8.95	-10.56	-6.77	-7.13	-7.18	-9.44	-7.63	-7.18	-10.87	-7.71	-11.37	-10.07
Θ(150°)	-13.2	-11.72	-11.7	-9.72	-8.3	-6.79	-11.82	-8.6	-7.53	-10.02	-7.24	-10.08	-11.6	-12.3	-7.58	-6.15	-7.42	-9.78	-10.31	-11.56	-13.15	-10.24	-11.27	-9.23
Θ(165°)	-8.73	-7.72	-11.99	-9.23	-9.01	-9.05	-6.99	-6.61	-6.47	-9.09	-8.87	-8.88	-12.31	-10.05	-7.95	-8.52	-8.15	-8.5	-9.19	-12.34	-12.82	-12.91	-9.84	-11.19
Θ(180°)	-10.87	-9.38	-8.16	-7.85	-7.61	-6.99	-6.79	-8.46	-8.76	-9.23	-9.95	-10.05	-11.43	-11	-10.17	-8.47	-9.73	-10.87	-8.21	-6.64	-7.44	-8.42	-10.74	-11.93
Freq(Hz)	5.3G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.34	-2.14	-5.31	-6.94	-3.81	-2.2	-0.68	0.64	1.35	1.53	1.22	0.37	-0.39	-3.09	-4.93	-6.43	-3.5	-2.14	-1.43	-0.44	0.55	1.41	1.49	0.29
Θ(15°)	-5.52	-3.88	-0.88	0.81	-0.03	-1.77	-2.12	-1.64	1.68	2.7	0.14	-3.61	-2.38	-0.82	1.89	2.76	0.84	1.29	0.2	-1.15	-0.87	-0.71	-3.64	-6.6
Θ(30°)	-4.14	-4.54	-4.56	-3.09	-2.62	-1.85	2.33	2.39	3.29	2.25	0.58	0.22	1.35	2.02	3.27	5.77	5.98	5.06	4.12	1.89	2	0.12	0.8	-1.97
Θ(45°)	-1.34	-2.71	-0.4	1.5	-1	-1.11	1.37	2.19	3.23	2.77	1.87	1.04	-0.67	2.67	5.56	5.65	6.16	5.67	4.13	2.28	-0.28	2.1	2.01	1.4
Θ(60°)	2.48	0.48	-0.18	1.89	-0.46	0.01	3.48	4.15	4.51	4.27	1.12	-0.58	3.03	4.21	4.13	5.96	3.7	3.8	2.44	4.14	1.32	3.78	5.35	3.08
Θ(75°)	2.25	-0.73	-0.02	3.33	1.27	1.54	4.08	5.31	4.18	3.83	-1.18	0.04	-1.41	3.07	3.32	3.78	2.35	3.26	4.41	1.55	3.32	3.1	4.12	3.57
Θ(90°)	0.59	-2.17	1.33	-1.91	1.34	-0.11	3.19	3.69	1.78	1.3	0.13	-1.21	-2.14	1.68	2.36	0.43	2.05	0.75	2.57	1.56	1.42	1.68	0.59	0.29



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Θ(180°)	-10.18	-11.18	-10.58	-8.98	-10.15	-9.54	-10.24	-11.35	-11.18	-11.51	-12.24	-12.31	-11.07	-12.28	-10.82	-10.02	-8.38	-9.62	-11.91	-11.14	-10.65	-10.36	-11.27	-11.19
Freq(Hz)	5.785G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	0.88	1.1	-0.03	-2.2	-1.76	-0.81	-0.21	0.49	0.8	1.2	0.89	1.35	0.88	0.85	-0.81	-2	-1.37	-0.32	-0.99	-0.15	0.33	0.7	1.12	0.18
Θ(15°)	-5.59	-3.44	-1.91	-2.01	-1.48	-2.51	-2.53	-2.4	-2.95	-5.16	-6.33	-3.7	-0.91	-1.82	-2.04	-0.15	-0.43	-2.37	-1.95	-0.64	0.43	-0.93	-2.92	-5.09
Θ(30°)	-1.48	-2.12	-1.43	-4.88	-4.88	-2.32	-2.77	-5.13	-0.48	-1.31	-0.25	-0.13	-2.18	-5.76	-3.77	-2.42	0.61	-0	-0.67	1.2	-0.99	-0.58	-1.59	0.88
Θ(45°)	-2.99	-2.58	-6.82	-2.45	-6.47	-3.17	-4.74	-3.85	-1.23	0.63	-1.72	-0.26	1.12	-2.66	-1.51	-2.39	-2.28	-2.94	-0.5	0.78	-1.65	-3.59	-3.45	-3.39
Θ(60°)	-0.51	-3.22	-6.28	-5.46	-2.24	-0.41	-1.49	-1.67	-1.22	-1.06	0.06	-1.25	-2.89	-4.68	-4.58	-3.88	-2.49	-1.58	-1.69	-2.68	-3.99	-7.46	-5.89	-4.39
Θ(75°)	-1.87	-2.81	-8.26	-4.56	-3.96	-0.7	-0.53	-2.59	0.2	-0.22	-3.25	-2.46	-5.07	-4.3	-4.69	-7.61	-7.54	-3.43	-1.29	-1.96	-4.04	-6.99	-7.37	-3.99
Θ(90°)	-4.38	-3.93	-4.94	-5.4	-2.06	-4.66	-1.29	-3.98	-2.29	-2.38	-6.26	-4.1	-8.81	-8.36	-6.7	-9.98	-8.89	-4.55	-9.06	-0.98	-2.94	-3.82	-9.94	-8.03
Θ(105°)	-9.53	-7.38	-5.6	-6.39	-4.33	-5.84	-3.75	-5.31	-7.36	-5.38	-9.08	-6.9	-10.19	-11.61	-7.87	-8.68	-5.28	-5.52	-7.7	-5.84	-7.25	-10.51	-7.73	-12.24
Θ(120°)	-7.03	-9.99	-8.73	-4.54	-12.83	-10.42	-8.02	-7.71	-6.63	-9.41	-9.74	-6.79	-9.98	-11.48	-8.3	-7.08	-5.86	-9.65	-2.63	-6.05	-9.99	-7.88	-11.35	-8.14
Θ(135°)	-9.81	-9.63	-11.19	-12.22	-11.32	-12.14	-9.1	-12.79	-8.01	-8.9	-10.2	-11.24	-11.32	-13.33	-7.65	-8.52	-6.93	-12.73	-8.18	-7.36	-9.75	-8.37	-13.18	-9.28
Θ(150°)	-12.07	-11.94	-11.19	-12.41	-12.49	-13.77	-9.36	-11.36	-10.69	-7.33	-8.3	-9.93	-12.2	-9.01	-9.06	-8.21	-8.93	-9.04	-7.51	-10.24	-11.2	-10.65	-10.16	-13.56
Θ(165°)	-11.63	-12.11	-10.25	-8.29	-9.86	-7.18	-6.47	-7.79	-8.13	-10.42	-9.28	-11.56	-12.22	-12.05	-14.11	-10.25	-9.92	-9.89	-11.44	-10.51	-13.36	-12.24	-8.6	-10.82
Θ(180°)	-12.51	-13.23	-12.12	-11.63	-11.27	-9.46	-8.72	-9.73	-9.83	-10.17	-10.73	-10.16	-10.15	-13.06	-11.36	-12.93	-12.47	-12.55	-13.46	-10.34	-11.26	-11.83	-11.77	-12.94
Freq(Hz)	5.785G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	0.93	1.19	1.37	-0.13	0.9	0.91	0.88	0.4	-0.34	-1.92	-2.04	-0.78	0.64	0.49	1.31	1.58	1.42	1.36	-0.73	-0.79	-1.22	-0.38	-0.8	-1.16
Θ(15°)	0.71	0.7	-0.65	-2.71	-3.2	-1.94	0.69	0.84	-0.04	-0.51	-0.46	-0.24	-0.86	-1.63	-2.76	-3.92	-2.22	-0.49	-1.6	-3.06	-4.29	-4.48	-2.33	0.01
Θ(30°)	0.39	-0.09	-1.84	-1	-2.91	-2.25	-0.51	-1.62	1.96	1.14	3.48	1.11	-2.07	-3.83	2.87	1.45	1.98	1.4	1.74	-0.11	0.15	-0.99	1.2	1.04
Θ(45°)	-3.88	0.22	-0.32	1.23	-1.26	-0.99	2.37	1.48	2.99	4.13	2.99	3.84	0.77	-1.61	0.29	4.11	3.75	3.61	4.1	3.86	2.7	-0.91	-0.97	-1.05
Θ(60°)	1.55	2.67	-1.13	1.21	1.45	1.98	1.47	3.88	4.3	3.26	4.81	5.29	3.65	-0.54	1.98	5.2	5.6	4.43	0.68	1.67	3.71	-1.84	0.05	2.89
Θ(75°)	4.15	1.46	0.69	2.75	4.1	3.05	3.6	3.89	4.37	2.13	1.99	5.29	3.12	-1.03	1.27	3.68	3.6	4.45	1.5	1.31	2.48	2.99	2.66	2.4
Θ(90°)	0.77	-2.72	0.72	1.66	2.25	0.04	3.78	1.42	2.88	1.94	0.07	3.51	0.56	0.22	-2.41	-0.28	2.38	1.17	1.27	-1.08	0.49	1.58	-0.61	-2.12
Θ(105°)	-6	-8.6	-3.35	-2.3	-1.58	-3.33	-0.16	-1.42	0.17	-1	-1.63	1.28	-1.2	-3.73	-2.68	-2.13	-1.46	-2.78	-3.27	-5.79	-7.45	-5.18	-8.77	-6.23
Θ(120°)	-10.04	-10.63	-11.35	-4.72	-6.31	-7.21	-5.91	-6.23	-5.68	-6.23	-4.03	-2.48	-3.35	-2.88	-6.1	-3.05	-3.4	-7.19	-6.55	-6.03	-9.94	-8.54	-9.87	-11.98
Θ(135°)	-12.56	-11.39	-7.79	-6.96	-11.66	-8.02	-9.94	-7.53	-8.3	-4.09	-4.69	-4.4	-2.84	-4.03	-5.35	-6.15	-8.4	-8.24	-5.82	-10.25	-9.68	-8.75	-13.76	-13.05
Θ(150°)	-12.68	-10.61	-9.98	-11.62	-10.8	-9.27	-11.25	-10.06	-8.84	-8.61	-8.2	-5.17	-4.19	-4.23	-5.41	-9.02	-13.12	-12.17	-8.71	-13.71	-13.09	-10.21	-13.87	-13.33
Θ(165°)	-10.5	-9.25	-7.58	-10.55	-11.31	-9.3	-10.51	-11.47	-12.89	-9.98	-7.9	-6.19	-6.01	-9.87	-8.22	-8.54	-8.16	-11.22	-12.89	-12.3	-12.45	-13.21	-12.1	-11.4
Θ(180°)	-8.21	-9.59	-9.84	-9.58	-10.2	-9.61	-11.66	-13.42	-12.48	-11.86	-10.74	-9.56	-8.03	-8.57	-9.06	-8.92	-8.73	-11.02	-12.83	-12.28	-10.74	-11.55	-9.71	-11.69
Freq(Hz)	6.175G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.52	-1.53	-1.91	-0.73	0.68	1.22	1.4	2.32	1.83	0.62	-0.44	-1.55	-2.19	-0.57	0.17	1.66	2.24	2.71	1.65	1.27	0.76	1.22	1.24	-4.29
Θ(15°)	-1.74	-1.53	-1.62	-2.96	1.15	0.67	0.07	-0.2	-2.29	0.33	-2.97	-1.79	-0.11	-1.38	-5.72	-2.78	0.27	0.55	0.27	-0.37	-0.5	-1.43	-3.71	-5.96
Θ(30°)	-5.08	-6.55	-3.91	-5.16	-4.45	-2.1	-3.16	-2.36	-1.18	-0.23	-0.66	0.76	-1.54	-4.54	-3.73	0.91	0.66	1.37	-0.13	0.01	-0.38	-2.38	-1.9	0.46
Θ(45°)	-5.63	-5.77	-4.5	-1.83	1.16	-3.34	-1.85	0.08	2.22	-0.94	-0.94	0.94	-4.09	-8.01	-4.07	0.05	-0.8	-3	-1.44	-0.66	0.29	-4.05	-0.69	-3.96
Θ(60°)	-5.68	-0.96	-7.69	-6.16	-6.84	-2.66	-1.45	-2.17	-0.7	0.4	-1.74	-1.47	-4.76	-5.03	-5.65	-2.68	-5.7	-1.75	-3.54	0.75	-3.59	-5.84	-8.46	-2.59
Θ(75°)	-2.54	-0.83	-6.68	-4.98	-2.97	0.61	0.2	-1.3	-1.36	-3.12	-3.42	-2.98	-3.18	-10.76	-7.96	-7.26	-7.83	-4.32	-1.65	-0.57	-4.02	-3.17	-6.25	-6.37
Θ(90°)	-6.21	-0.8	-7.61	-4.88	-2.7	-1.98	-0.36	-5.35	-5.71	-5.99	-8.74	-6.1	-7.58	-9.84	-7.64	-6.52	-8.48	-3.4	-5.21	-0.26	-2.4	-5.93	-11.19	-10.59
Θ(105°)	-11.06	-6.06	-7.52	-5.83	-4.79	-4.38	-2.42	-6.43	-8.72	-7.08	-9.27	-6.57	-9.53	-13.56	-10.14	-7.44	-9.75	-6.72	-7.98	-4.82	-5.78	-11.36	-7.49	-13.7
Θ(120°)	-7.56	-8.71	-5.41	-3.82	-9.47	-8.87	-4.71	-5.8	-6.14	-9.14	-7.66	-8.34	-9.91	-13.59	-12.21	-7.43	-8.65	-7.1	-6.88	-7.29	-6.83	-7.03	-8.2	-11.71
Θ(135°)	-7.55	-8.07	-8.49	-10.07	-12.36	-12.25	-6.52	-6.67	-8.49	-9.01	-13.11	-8.81	-10.41	-12.45	-12.3	-8.41	-7.93	-12.03	-6.19	-9.4	-9.31	-9.57	-11.59	-8.87
Θ(150°)	-13.84	-10.88	-9.02	-10.42	-11.24	-13.33	-11.39	-12.97	-6.42	-7.6	-11.17	-11.57	-12.83	-11.64	-9.15	-6.13	-9.12	-9.95	-5.8	-9.89	-10.96	-9.51	-12.33	-9.23
Θ(165°)	-10.84	-12.35	-13.24	-12	-12.03	-9.18	-6.85	-11.73	-11.12	-10.56	-10	-11.71	-13.18	-11.59	-12.1	-8.84	-10.29	-8.06	-13.31	-7.95	-9.07	-13.45	-10.33	-12.05
Θ(180°)	-10.65	-10.87	-9.87	-8.54	-8.45	-7.34	-8.75	-8.96	-9.9	-10.57	-12.73	-10.51	-10.16	-9.66	-10.62	-11.05	-12.68	-12.1	-10.87	-10.1	-8.77	-8.61	-9.88	-10.73
Freq(Hz)	6.175G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	2.81	3	2.76	0.08	-1.67	-3.31	-4.07	-1.86	-0.24	1.12	1.96	2.43	2.72	2.81	2.2	1.52	0.31	-1.09	-3.28	-3.11	-1.9	1.01	1.82	-0.25
Θ(15°)	3.55	2.7	0.7	1.8	1.22	-1.21	-0.23	1.01	-0.19	-0.14	-0	-1.51	-0.89	0.62	1.95	2.32	1.54	-0.9	0.49	0.24	-1.77	-2.88	-0.15	0.98
Θ(30°)	0.47	-0.39	-0.8	2.3	1.79	1.72	-2.82	-0.58	0.55	3.2	4.52	2.9	1.31	0.92	-0.78	0.98	1.44	0.47	2.51	-0.47	-3.56	-0.14	1.42	-0.94
Θ(45°)	-0.51	-1.09	-0.44	3.67	2.76	4.78	4.06	4.28	2.49	3.16	6.72	4.72	2.51	1.43	2.96	3.34	4.39	4.98	2.39	3.42	3.37	3.65	4.5	-0.93
Θ(60°)	1.43	2.89	2.42	0.78	0.61	3.4	3.05	4.08	2.91	3	4.16	7.06	2.76	1.78	1.8	3.43	6.72	4.67	4.07	2.02	-0.29	1.15	1.35	4.12
Θ(75°)	1.7	3.6	2.28	1.06	1.09	3.65	3.25	4.12	4.24	1.86	1.73	6.04	3.49	0.52	0.37	2.54	5.36							



Freq(Hz)	6.695G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-0.18	-1.68	-2.62	-3.85	-4.98	-3.32	-2.09	-1.04	-0.78	-0.65	-1.57	-1.61	-2.16	-3.74	-4.45	-3.17	-3.13	-1.86	-1.32	-0.5	0.28	0.62	0.85	0.22
Θ(15°)	0.36	0.64	2.42	2.3	-1.88	-2.49	-3.27	-0.46	-1.23	-0.28	0.18	-0.55	-4.51	-2.54	-0.94	1.59	2.47	2.37	1.73	-1.29	-1.65	-1.49	-0.9	-0.09
Θ(30°)	-1.5	-2.8	-3.6	-1.67	3.07	-0.43	-0.71	-1.26	2.58	0.07	-2.42	1.26	-0.91	-3.92	-2.38	-3.85	-0.18	2.49	1.9	2.49	0.72	-1.75	-1	-3.42
Θ(45°)	-5.59	-2.38	-2.25	-0.79	0.75	0.55	-1.55	-0.46	1.85	0.16	-0.45	-3.88	-3.56	-1.96	-3.68	-3.29	-0.79	-2.26	-2.93	-3.05	-0.59	-3.22	0.09	-4.71
Θ(60°)	-8.22	-7.74	-2.99	-3.09	-2.43	-1.35	-0.23	-1.39	-0.97	-2.32	-4.15	-3.33	-5.63	-2.46	-5.01	-8.29	-3.36	-3.57	-3.01	-1.66	-4.9	-4.91	-9.45	-6.97
Θ(75°)	-5.24	-8.7	-7.18	-4.03	-2.63	-1.86	0.5	-2.96	-4.82	-4.81	-6.98	-6.12	-10.17	-5.24	-6.85	-5.97	-7.49	-10.15	-5.02	-3.29	-4.72	-7.14	-7.18	-6.88
Θ(90°)	-3.93	-5.68	-6.17	-4.57	-4.18	-1.67	-0.71	-7.1	-7.38	-8	-7.3	-10.8	-9.5	-9.7	-9.04	-2.82	-8.05	-8.18	-5.9	-5.13	-3.28	-6.52	-13.02	-8.5
Θ(105°)	-10.11	-10.66	-11.78	-4.05	-6.89	-3.82	-5.94	-7.07	-9.2	-8.8	-7.55	-11.48	-10.34	-8.77	-8.99	-5.91	-6.04	-11.09	-8.06	-10.12	-5.72	-7.74	-8.58	-9.67
Θ(120°)	-7.51	-9.21	-8.93	-7.2	-11.08	-6.57	-5.15	-4.48	-9.2	-8.51	-9.21	-12.92	-10.01	-11.37	-9.41	-7.92	-8.49	-8.57	-10.31	-8.35	-9.86	-7.14	-10.96	-10.53
Θ(135°)	-8.77	-12.52	-12.29	-12.27	-13.82	-7.61	-6.74	-2.81	-5.32	-11.68	-11.21	-12.11	-11.51	-12.14	-13.61	-8.69	-8.25	-9.41	-10.66	-9.43	-12.59	-11.25	-12.08	-10.64
Θ(150°)	-13.14	-12.97	-11.63	-12.43	-11.09	-9.72	-12.68	-7.56	-8.9	-11.19	-11.86	-13.14	-10.7	-12.07	-11.31	-10.7	-8.35	-10.15	-8.22	-10.42	-13.27	-14.06	-11.99	-11
Θ(165°)	-10.1	-12.5	-12.22	-12.23	-12.86	-11.83	-12.71	-11.54	-11.5	-11.99	-11.72	-11.8	-13.15	-13.38	-12.12	-10.87	-11.55	-11.72	-12.37	-11.98	-13.13	-12.04	-9.98	-9.44
Θ(180°)	-12.67	-11.88	-11.69	-11.96	-11.15	-10.96	-9.9	-9.42	-11.22	-11.19	-12.21	-12.88	-13.4	-12.55	-13.01	-12.65	-13.16	-11.5	-11.94	-12.06	-11.79	-9.86	-10.71	-10.92
Freq(Hz)	6.695G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-1.64	-0.22	0.46	0.42	-1.23	-2.04	-3.36	-4.76	-6.32	-5.33	-3.59	-1.63	-0.05	0.78	1.3	1.02	0.86	0.33	-0.9	-2.22	-2.62	-2.8	-2.7	-2.66
Θ(15°)	4.32	3.74	4.16	3.58	1.46	0.8	-0.04	0.93	1.79	1.64	1.61	2.43	2.53	2.5	1.14	-3.06	-7.61	-6.2	-0.81	0.95	1.28	1.91	2.66	4.12
Θ(30°)	2.53	3.65	4.04	2.5	1.26	0.13	-3.08	-0.59	2.38	4.86	2.94	2.03	0	-1.13	-0.24	-0.5	-0.18	1.02	1.28	0.38	1.44	0.63	-2.95	3.26
Θ(45°)	-0.2	1.45	1.05	4.23	3.1	3.91	2.84	2.43	3.15	3.67	4.73	3.65	2.56	0.42	-1.2	1.37	2.18	3	2.79	2.37	1.81	1.94	-1.34	-0.96
Θ(60°)	-0.23	0.72	2.59	1.57	4.33	3.29	0.96	1.8	3.5	3.22	3.7	3.97	3.71	1.26	-0.54	0.77	1.7	2.31	2.85	1.28	0.22	0.4	0.13	2.54
Θ(75°)	-0.03	1.54	2.79	3.15	3.3	3.95	0.24	-1.67	2.34	1.07	4.67	3.09	1.56	0.19	0.77	1.55	1.44	3.09	4.26	3.36	2.82	1.69	0.85	2.77
Θ(90°)	-2.13	-0.18	-0.31	0.77	0.29	1.09	2.34	0.03	0.24	-0.13	0.83	-0.44	-1.06	-1.65	-0.15	-0.21	0.99	-0.92	2.96	0.25	2.79	0.69	-1.59	-1.3
Θ(105°)	-7.47	-6.18	-7.35	-2.55	-3.18	-2.8	-0.02	-1.92	-1.58	-3.65	-2.87	-3.69	-2.74	-2.82	-2.39	-3.53	-1.24	-3.19	-4.36	-8.38	-3.45	-5.97	-6.29	-7.12
Θ(120°)	-9.68	-8.56	-8.34	-9.53	-5.25	-6.87	-5.71	-10.13	-7.08	-6.03	-8.07	-8.28	-6.61	-5.82	-6.51	-5.92	-5.89	-8.08	-7.24	-8.19	-8.67	-6.83	-8.17	-12.07
Θ(135°)	-11.08	-11.04	-11.11	-10.21	-9.51	-9.31	-7.72	-9.11	-10.24	-7.74	-9.11	-7.59	-5.53	-6.75	-4.81	-4.99	-6.01	-8.81	-11.94	-13.08	-8.58	-7.57	-12.2	-12.36
Θ(150°)	-9.1	-11.23	-10.02	-9.29	-11.19	-10.66	-11.58	-8.5	-9.31	-12.22	-13.7	-9.29	-6.71	-7.02	-9.36	-11.63	-10.57	-10.28	-11.54	-11.33	-10.71	-11.3	-12.17	-9.52
Θ(165°)	-12.19	-12.27	-12.97	-13.37	-12.72	-13.18	-11.21	-11.41	-11.84	-11.85	-10.51	-9.69	-9.1	-7.03	-6.68	-7.89	-11.55	-11.56	-12.23	-11.82	-12.39	-12.86	-11.9	-12.16
Θ(180°)	-9.26	-9.13	-9.6	-10.79	-10.22	-12.72	-13.58	-11.74	-11.85	-11.79	-10.3	-9.2	-9.96	-10.11	-10.57	-11.67	-11.61	-12.12	-12.26	-12.18	-11.56	-11.22	-10.26	-9.78
Freq(Hz)	6.995G	Pol.	Phi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.24	-2.4	-0.79	0.71	1.23	2.06	2.15	0.41	0	-1.67	-3.21	-4.95	-5.27	-2.61	-1.37	0.64	2.43	2.81	2.97	2.95	2.45	1.23	0.12	-0.89
Θ(15°)	-1.2	0.04	0.96	0.44	1.43	0.45	-0.53	1.39	3.15	2.8	1.79	1.14	-0.97	-1.14	0.63	1.36	1.23	1.88	3.37	2.6	-0.53	-0.45	-0.62	-1.09
Θ(30°)	-3.88	0.52	-2.66	1.19	0.91	0.48	0.51	2.9	2.96	2.36	0.93	-1.55	0.01	2.02	-0.2	1.58	-1.77	1.76	1.56	0.88	0.89	-1.94	-2.47	-1.88
Θ(45°)	-5.96	-3.54	-0.47	-1.31	-1.47	-0.5	1.1	2.1	2.57	2.36	-1.42	-2.66	-0.75	2.19	-4.18	-2.6	-0.36	0.52	-2.03	-2.54	-2.06	-0.63	-1.24	-7.34
Θ(60°)	-6	-6.6	-2.31	-2.25	-2.77	-0.28	2.4	0.87	-1.98	-0.86	-6.3	-3.23	-5.16	-1.71	-4.19	-6.9	-4.15	-1.59	-6.83	-5.44	-4.27	-2.69	-7.68	-5.07
Θ(75°)	-5.42	-8.54	-7.58	-2.45	-4.54	-2.41	1.1	-0.83	-7.01	-5.58	-6.63	-7.03	-4.48	-4.28	-4.69	-2.3	-5.71	-4.57	-2.67	-1.82	-2.21	-5.24	-7.94	-7.6
Θ(90°)	-3.21	-5.16	-6.83	-4.01	-4.66	-2.36	-4.01	-5	-9.15	-7.83	-6.86	-7.61	-6.72	-5.2	-8.19	-2.27	-4.57	-8.91	-6.94	-4	-3.18	-2.97	-10.99	-8
Θ(105°)	-11.23	-8.62	-6.49	-2.84	-4.25	-6.33	-3.34	-7.67	-7.03	-8.15	-11.07	-9.73	-10.69	-6.29	-5.84	-5.08	-3.98	-10.59	-4.45	-11.15	-8.32	-7.89	-8.81	-9.19
Θ(120°)	-7.67	-5.43	-10.93	-10.78	-6.6	-4.61	-4.8	-5.94	-6.44	-10.69	-9.82	-10.35	-10.87	-9.63	-8.46	-8.84	-6.03	-9.25	-10.98	-7.94	-8.1	-12.59	-12.45	-8.2
Θ(135°)	-8.9	-9.9	-9.91	-10.69	-11.51	-6.46	-7.58	-6.62	-10.2	-11.02	-10.36	-10.2	-12.5	-11.17	-8.55	-12.25	-6.53	-12.29	-9.25	-9.67	-8.56	-11.56	-12	-10.86
Θ(150°)	-12.17	-10.46	-10.64	-8.8	-11.13	-8.37	-11.11	-5.02	-8.35	-10.11	-10.37	-9.44	-12.36	-10.94	-9.71	-12.15	-11.17	-10.01	-11.06	-12.91	-14.03	-13.33	-11.26	-12.58
Θ(165°)	-13.16	-12.59	-13.61	-13.36	-9.59	-11.23	-12.07	-11.96	-10.12	-9.93	-11.51	-12.87	-13.55	-12.39	-11.8	-11.7	-11.86	-11.4	-12.76	-12.17	-13.32	-13.54	-13.42	-12.91
Θ(180°)	-13.92	-12.97	-13.38	-12.54	-10.67	-11.41	-12.43	-11.36	-12.46	-11.85	-13.06	-13.1	-13.2	-13.73	-12.53	-13.29	-12.99	-12.23	-13.32	-11.13	-11.36	-13.27	-13.24	-13.4
Freq(Hz)	6.995G	Pol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	3.61	3.07	2.57	1.36	-1.23	-2.96	-5.08	-4.95	-2.95	-1.31	-0.24	0.85	2.39	2.55	1.64	0.58	-0.84	-2.56	-3.81	-2.02	0.01	1.47	2.39	3.6
Θ(15°)	4.86	5.56	4.93	4.25	1.96	0.45	0.79	0.57	0.65	1.69	3.58	4.64	3.09	2.26	0.62	-1.3	-1.9	-4.79	-1.36	1.61	3.29	2.65	3.33	4.23
Θ(30°)	4.49	4.97	2.81	3.55	2.05	3.38	2.63	1.83	1.51	1.17	3.02	2.09	2.01	0.89	2.21	-0.37	3.7	1.18	1.24	-1.61	0.25	1.47	1.15	3.8
Θ(45°)	0.41	3.7	0.48	4.2	2.74	4.49	4.36	1.21	2.04	2.61	3.43	3.32	4.46	3.18	2.09	4.59	3.17	4.35	4.39	4.49	1.18	-0.57	1.68	0.25
Θ(60°)	-0.35	2.07	2.94	3.54	5.42	4.09	3.63	3.43	3.69	3.7	2.61	3.39	1.54	0.31	2.2	2.48	4.23	3.83	3.03	2.8	0.92	0.33	-1.2	-0.08
Θ(75°)	1.92	1.77	2.08	3.98	3.09	4.2	0.59	1.14	-0.17	0.27	0.41	2.84	0.7	-2.63	-0.14	-0.44	1.84	1.76	4.14	2.78	2.92	2.32	1.08	3.82
Θ(90°)	-1.25	-1.7	-1.68	1.78	3.16	-0.34	-1.27	0.48	-1.21	-0.63	-1.66	0.38												



Gain Result

Freq(Hz)	5.2G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.67	-2.1	-0.95	-1.14	-0.31	-1.54	-3.35	-6.31	-12.69	-18.4	-11.81	-4.91	-2.83	-0.42	-0.33	0.56	-0.29	-0.96	-3.53	-6.5	-12.51	-19.74	-13.64	-7.59
Θ(15°)	-1.77	-3.84	-6.43	-8.21	-2.94	-3.95	-18.78	-10.53	-13.62	-5.74	-1.89	-2.6	-0.33	0.14	-2.62	-3.61	-4.14	-6.99	-17.06	-19.71	-20.07	-20.23	-6.95	-2.2
Θ(30°)	-2.7	-9.83	-2.43	-3.66	-8.68	-7.68	-17.64	-18.84	-6.02	-5.03	-4.45	-3.5	-7.02	-3.61	-0.92	-3.99	-5.76	-2.78	-3.57	-12.22	-14.83	-10.08	-7.16	-5.08
Θ(45°)	-2.11	-3.49	-4.63	-6.99	-7.2	-8.43	-18.55	-20.4	-18.21	-8.57	-6.14	-9.86	-6.8	-7.66	-3.76	-5.95	-10.34	-5.15	-6.66	-7.33	-19.37	-16.85	-5.88	-6.96
Θ(60°)	-5.97	-2.24	-8.02	-9.16	-11.7	-9.15	-7.86	-7.41	-6.84	-7.95	-6.32	-4.32	-9.41	-11.38	-6.67	-4.77	-8.05	-6.43	-3.1	-9.45	-10.39	-18.49	-19.33	-9.48
Θ(75°)	-4.84	-6.48	-7.3	-9.5	-20.22	-12.55	-8.83	-5.52	-8.5	-12.91	-8.46	-6.11	-10.45	-15.06	-12.41	-6.81	-12.23	-5.16	-4.48	-12.48	-11.5	-18.68	-18.66	-13.54
Θ(90°)	-10.17	-7.25	-13.34	-12.54	-12.06	-10.45	-4.66	-9.46	-15.85	-16.36	-18.78	-13.29	-16.62	-17.17	-15.28	-10.24	-9.17	-6.25	-6.43	-12.76	-18.82	-12.5	-12.94	-17.57
Θ(105°)	-13.33	-9.84	-18.81	-18.51	-19.97	-8.16	-9.05	-13.5	-17.27	-13.07	-16.92	-19.88	-19.95	-18.69	-17.12	-13.32	-9.63	-9.45	-11.56	-19.48	-19.15	-19.15	-11.38	-8.98
Θ(120°)	-10.65	-17.14	-18.96	-16.08	-20.14	-19.59	-17.71	-15.61	-14.81	-13.77	-19.59	-20.07	-19.04	-18.77	-10.73	-15.78	-14.46	-16.21	-6.56	-11.42	-19.46	-19.35	-14.89	-14.43
Θ(135°)	-18.86	-20.59	-14.71	-19.08	-12.8	-17.77	-16.94	-11.32	-18.85	-10.04	-20.11	-13.12	-17.97	-19.26	-11.32	-20.25	-19.55	-19.43	-16.83	-10.82	-18.5	-8.78	-13.64	-18.68
Θ(150°)	-19.3	-19.48	-18.95	-16.31	-19.26	-12.47	-19.11	-19.32	-13.22	-16.3	-13.56	-16.49	-16.31	-20.36	-15.43	-15.56	-19.43	-19.94	-19.2	-19.57	-19.35	-10.72	-19.12	-14.16
Θ(165°)	-15.25	-15.86	-19.1	-18.6	-19.29	-13.88	-14.44	-14.25	-11.59	-16.55	-17.46	-19.71	-19.86	-19.05	-19.21	-19.5	-17.47	-18.3	-18.39	-16.75	-19.18	-19.76	-20.25	-19.73
Θ(180°)	-13.32	-16.27	-19.68	-18.5	-19.22	-17.5	-12.52	-13.55	-11	-10.06	-10.18	-11.65	-13.29	-18.87	-19.22	-15.47	-16.2	-14.53	-9.95	-9.5	-9.67	-9.42	-11.15	-14.83
Freq(Hz)	5.2G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-3.41	-6.95	-11.88	-19.81	-10.77	-5.82	-2.34	-0.86	-0.01	0.11	-0.62	-1.63	-3.83	-6.16	-14.49	-20.06	-11.67	-6.35	-3.63	-2.02	-0.93	-0.21	-0.05	-2.12
Θ(15°)	-3.98	-5	-3.99	-3.47	-5.74	-5.34	-3.02	-3.71	-3.31	-2.41	-7.53	-15.69	-15.64	-7.8	-8.76	-8.44	-7.03	-3.76	-3.91	-3.47	-2.02	-3.81	-3.15	-1.88
Θ(30°)	-2.69	-3.68	-6.15	-6.97	-2.21	-4.06	-5.03	0.21	-0.47	-3.43	-4.88	-6.1	-5.51	-9.98	-5.26	-1.26	-7.19	-3.48	-0.66	0.77	1.6	1.22	-0.13	-7.2
Θ(45°)	-4.88	-6.39	-5.57	-3.48	-12.66	-10.55	-3.49	-0.91	-3.2	-1	-6.3	-3.9	-3.04	-5.25	-8.86	-5.96	-0.93	-1.95	0.53	-1.83	-0.02	0.32	3.23	1.36
Θ(60°)	-3.22	-4.2	-0.69	-3.95	-4.51	-14.77	-1.66	-1.11	-3.61	-5.74	-1.49	-5.88	-1.87	-2.84	-3.22	-5.71	-1.44	-5.28	0.46	1.75	0.59	0.45	-0.52	3.25
Θ(75°)	-9.03	-9.4	-9.33	0.36	-2.4	-6.71	-9.41	-2.48	-5.12	-3.62	-3.19	-9.68	-3.78	-4.8	-7.7	-8.1	-4.95	-7.77	0.11	-0.69	0.66	-1.37	-2.66	-0.77
Θ(90°)	-3.97	-11.17	-5.32	-3.49	-4.66	-12.03	-12.79	-3.26	-6.75	-6	-6.59	-12.85	-5.75	-4.6	-8.1	-9.23	-6.65	-14.13	-3.43	-4.88	-1.75	-1.8	-2.86	-4.77
Θ(105°)	-9.84	-15.19	-11.45	-8.9	-19.34	-19.11	-16.92	-8.97	-8.28	-7.19	-12.12	-9.69	-8.25	-9.25	-9.5	-9.21	-4.22	-9.12	-8.02	-13.18	-8.02	-10.73	-10.97	-13.41
Θ(120°)	-10.92	-17.26	-12.2	-10.19	-11.63	-14.84	-17.02	-18.18	-13.53	-6.9	-16.25	-12.54	-6.01	-9.88	-19.49	-13.29	-11.7	-12.66	-4.7	-8.73	-7.41	-6.25	-16.47	-16.81
Θ(135°)	-14.73	-14.19	-13.91	-14.61	-18.03	-17.13	-19.64	-19.07	-9.42	-14.86	-12.09	-14.53	-11.97	-6.93	-16.56	-13.19	-17.57	-12.61	-9	-13.91	-14.77	-13.41	-17.06	-18.32
Θ(150°)	-16.26	-16.94	-12.14	-16.54	-18.93	-13.87	-19.59	-17.72	-18.59	-14.79	-18.9	-13.9	-7.43	-9.7	-10.21	-14.12	-20.1	-19.22	-11.03	-19.27	-19.22	-20.02	-18.4	-19.25
Θ(165°)	-12.84	-14.25	-14.5	-14.6	-12.57	-12.38	-16.69	-15.88	-13.02	-12.81	-18.46	-17.54	-18.05	-17.85	-11.94	-12.4	-15.21	-15.56	-10.52	-10.61	-19.13	-19.77	-18.07	-16.24
Θ(180°)	-11.15	-10.42	-8.35	-9.23	-9.4	-10.17	-12.06	-14.14	-15.25	-17.52	-19.07	-15.39	-13.2	-11.86	-10.35	-9.39	-10.64	-12.58	-14.99	-18.14	-19.54	-19.71	-14.53	-13.98
Freq(Hz)	5.3G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-2.31	-1.13	-0.17	-0.5	-0.17	-1.64	-3.55	-6.08	-12.74	-20	-8.79	-5.52	-2.06	-0.83	0.18	-0.02	0.18	-1.27	-3.78	-7.2	-13.5	-18.25	-7.96	-4.99
Θ(15°)	-2.43	-2.64	-6.63	-5.4	-2.77	-2.92	-5.58	-8.86	-19.31	-5.68	-3.38	-1	0.38	-1.34	-4.56	-7.18	-6.1	-4.92	-6.93	-8.57	-8.8	-13	-12.81	-5.07
Θ(30°)	-2.27	-5.39	-2.7	-2.34	-11.75	-8.03	-15.2	-18.47	-9.37	-11.87	-6.69	-10	-5.88	-4.94	-0.56	-2.53	-7.52	-4.93	-5.14	-5.95	-10.07	-10.27	-7.16	-7.06
Θ(45°)	-1.12	-3.08	-5.36	-8.96	-8.67	-10.59	-15.93	-15.61	-15.87	-6.83	-2.67	-3.89	-5.73	-8.98	-7.38	-3.58	-7.63	-4.4	-3.3	-6.67	-18.15	-20.17	-8.71	-3.19
Θ(60°)	-2.55	-2.06	-8.29	-11.21	-10.54	-12.89	-8.66	-9.23	-6.71	-6.42	-6.44	-5.16	-4.58	-7.4	-10.17	-5.18	-4.81	-5.27	-3.42	-11.49	-10.54	-19.55	-15.41	-6.51
Θ(75°)	-5.19	-5.29	-5.49	-19.51	-16	-15.85	-7.16	-4.01	-4.99	-19.61	-10.02	-7.33	-6.34	-8.55	-18.62	-7.09	-5.88	-4.24	-4.27	-12.69	-12.55	-18.67	-17.12	-10.07
Θ(90°)	-9.24	-4.79	-12.12	-17.69	-8.87	-8.54	-5.44	-6.4	-9.81	-12.82	-16.46	-11.19	-9.54	-12.15	-16.28	-10.67	-8.11	-6.84	-7.46	-12.42	-17.51	-15.32	-10.86	-14.24
Θ(105°)	-12.46	-9.58	-11.22	-19.15	-16.21	-9.21	-9.69	-15.76	-11.84	-11.72	-13.94	-16.24	-14.57	-19.5	-18.83	-13.78	-13.43	-9.52	-14.59	-15.18	-19.24	-19.77	-15.04	-10.3
Θ(120°)	-9.76	-16.91	-15.38	-19.76	-16.68	-17.73	-15.82	-14.11	-13.58	-11.75	-17.22	-19.74	-19.73	-19.63	-19.69	-13.75	-14.23	-13.33	-11.63	-15.38	-19.24	-18.44	-15.31	-15.71
Θ(135°)	-19.12	-19.87	-13.44	-19.67	-14.54	-15.39	-13.38	-14.98	-16.35	-19.98	-20.49	-19.71	-15.69	-19.8	-19.72	-19.08	-20.11	-18.66	-18.66	-12.08	-18.46	-10.58	-18.39	-20.33
Θ(150°)	-20.24	-19.39	-19.05	-16.33	-19.19	-15.46	-19.02	-19.81	-19.81	-13.08	-15.05	-19.82	-14.26	-18.03	-19.23	-18.98	-19.47	-19.8	-18.57	-19.48	-14.57	-17.73	-15.16	
Θ(165°)	-13.35	-14.54	-20.83	-19.07	-18.99	-14.98	-13.97	-14.26	-10.18	-15.21	-18.91	-19.42	-20.06	-16.82	-19.16	-18.31	-17.96	-15.83	-14.72	-15.27	-18.94	-19.64	-18.88	-19.69
Θ(180°)	-14.11	-13.94	-15.69	-19.79	-19.15	-20.04	-15.99	-14.03	-12.35	-12.11	-12.84	-14.14	-12.61	-15.25	-16.91	-19.08	-18.96	-19.48	-14.97	-10.62	-9.93	-11.82	-14.93	-14.94
Freq(Hz)	5.3G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.64	-7.04	-14.7	-19.68	-9.04	-4.97	-2.24	-0.3	0.01	0.03	-0.5	-1.94	-3.49	-7.55	-13.14	-19.28	-8.26	-4.59	-2.82	-1.25	-0.29	0.34	0.07	-1.69
Θ(15°)	-5.17	-6.86	-6.61	-5.79	-9.21	-6.58	-3.38	-4.7	-3.31	-3.16	-6.19	-11.44	-15.33	-11.51	-7.45	-6.81	-7.91	-5.03	-3.34	-3.43	-2.09	-4.23	-7.64	-7.98
Θ(30°)	-4.33	-4.62	-5.46	-5.34	-6.01	-8.22	-2.19	-1.4	-2.73	-3.3	-6.31	-8.78	-9.18	-17.74	-5.22	-1.97	-3.72	-6.16	-2.38	-0.96	0.81	-1.58	1.26	-3.14
Θ(45°)	-3.59	-4.96	-6.1	-4.18	-12.79	-12.87	-5.85	-2.77	-4.61	-4.31	-4.76	-7.72	-4.45	-2.1	-7.34	-2.29	-2.11	-3.86	-2.39	-1.41	-0.13	0.13	0.97	3.68
Θ(60°)	-2.38	-4.18	-1.13	-5.56	-4.45	-10.67	-1.94	-0.34	-5.24	-2.6	-4.29	-10.09	-1.53	-2.25	-2.22	-12.43	-3.54	-7.33	-0.48	0.74	-0.65	1.31	1.36	1.23
Θ(75°)	-6.5	-8.3																						



Θ(135°)	-16.62	-19.74	-20.37	-19.64	-16.36	-18.47	-17.39	-19.42	-19.58	-19.62	-18.61	-18.32	-19.88	-19.87	-17.87	-19.76	-14.92	-17.65	-10.15	-13.51	-20.34	-11.14	-19.09	-12.77	
Θ(150°)	-19.07	-19.09	-15.52	-20.02	-19.86	-20.45	-17.47	-19.56	-19.43	-19.43	-14.99	-15.67	-15.28	-11.31	-20.09	-18.86	-19.49	-16.85	-12.27	-19.97	-14.96	-13.93	-20.07	-18.88	
Θ(165°)	-19.36	-19.33	-19.3	-19.09	-19.44	-13.77	-12.78	-19	-19.53	-15.35	-14.3	-19.59	-17.6	-19.62	-20.11	-20.49	-19.63	-18.29	-17.54	-16.29	-19.95	-20.04	-15.97	-15.7	
Θ(180°)	-19.99	-20.13	-19.04	-18.3	-15.96	-14.74	-14.01	-16.39	-15.27	-14.69	-15.13	-17.11	-19.87	-19.49	-19.46	-17.61	-16.12	-17.8	-19.98	-18.71	-20.57	-19.79	-19.8	-19.69	
Freq(Hz)	5.785G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-8.49	-6.81	-5.38	-5.82	-4.95	-5.21	-5.6	-7.71	-9.27	-11.31	-14.41	-12.45	-9.88	-7.99	-5.84	-4.42	-4.46	-4.3	-7.7	-8.35	-10.24	-11.1	-14.25	-12.08	
Θ(15°)	-9.2	-10.88	-15.73	-17.07	-10.61	-7.56	-4.59	-5.22	-11.72	-19.97	-20.28	-14.04	-10.45	-18.77	-17.81	-19.1	-19.44	-18.22	-19.64	-10.76	-8.06	-10.51	-6.12	-5.48	
Θ(30°)	-3.21	-7.18	-8.2	-16.02	-12.19	-7.29	-6.31	-9.39	-6.63	-17.77	-6.36	-7.53	-12.24	-8.82	-4.43	-15.92	-14.98	-7.85	-8.8	-2.04	-0.73	0.35	0.76	-1.66	
Θ(45°)	-3.54	-2.73	-6.31	-2.52	-10.42	-5.73	-4.83	-12.75	-3.15	-1.27	-7.89	-3.29	-7.51	-18.67	-11.01	-8.96	-19.46	-10.36	-8.46	-2.99	-0.51	-0.38	1.02	0.35	
Θ(60°)	-2.81	-1.44	-5.31	-2.84	-5.6	-8.48	-1.59	-6.78	-3.38	-1.21	0	-1.79	-1.33	-7.85	-5.5	-0.86	-6.75	-4.71	-7.96	-1.17	-1.01	-3.16	-0.31	2.9	
Θ(75°)	-2.78	-3.01	-3.03	-1.96	0.59	-2.3	-10.98	-6.2	-4.66	-2.57	-1.6	-1.79	-6.35	-12.9	-6.76	-2.39	-7.79	-3.58	-5.55	-3.14	-3.21	-1.46	-1.2	-0.97	
Θ(90°)	-14.67	-9.96	-6.06	-3.31	-0.98	-5.84	-6.83	-8.98	-3.52	-1.89	-4.79	-3.78	-7.36	-5.4	-9.15	-5.76	-4.07	-6.72	-6.04	-7.73	-7.33	-2.86	-4.98	-8.56	
Θ(105°)	-18.67	-10.69	-10.42	-6.17	-6.5	-18.86	-7.15	-8.64	-6.17	-4.29	-6.16	-8.09	-10.23	-8.65	-5.97	-5.07	-7.98	-7.76	-8.87	-19.6	-11.7	-10.46	-13.65	-12.46	
Θ(120°)	-18.9	-16.63	-17.37	-6.38	-8.27	-16.31	-15.91	-19.19	-9.75	-9.83	-11.41	-9.43	-12.47	-11.06	-12.48	-7.12	-9.97	-13.43	-9.62	-18.47	-12.27	-13.58	-18.59	-18.71	
Θ(135°)	-19.07	-16.64	-19.54	-8.53	-13.76	-10.34	-19.59	-9.8	-10.74	-9.7	-10.99	-12.07	-9.99	-9.61	-11.75	-7.16	-14.37	-9.14	-6.48	-19.76	-10.97	-8.7	-19.87	-19.48	
Θ(150°)	-20.21	-18.17	-20.11	-18.47	-19.56	-11.56	-13.29	-20.09	-14.77	-18.93	-14.22	-10.97	-9.28	-11.05	-14.38	-18.87	-20.55	-15.16	-10.77	-18.84	-17.73	-15.35	-19.21	-20.29	
Θ(165°)	-17.84	-13.76	-14.93	-14.94	-13.31	-9.89	-11.22	-13.62	-20	-15.81	-14.43	-19	-14.04	-18.89	-16.97	-10.87	-8.92	-14.35	-18.14	-15.19	-18.66	-19.41	-19.42	-18.65	
Θ(180°)	-12.47	-13.11	-13.87	-15.35	-18.18	-18.02	-18.01	-18.84	-18.36	-18.58	-17.22	-14.2	-12.14	-13.05	-11.42	-11.43	-14.44	-19.2	-18.31	-19.6	-16.3	-18.13	-13.76	-17.43	
Freq(Hz)	6.175G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-8.44	-8.18	-12.33	-13.1	-11.37	-10.83	-8.12	-7.06	-6.74	-7.52	-8.25	-7.77	-8.72	-7.84	-9.2	-8.4	-9.01	-7.57	-8.67	-7.86	-7.72	-6.1	-5.61	-10.6	
Θ(15°)	-4.66	-6.62	-4.52	-4.64	-3.29	-9.3	-14.8	-7.51	-11.3	-5.6	-8.03	-11.41	-11.64	-8.61	-13.55	-18.4	-8.35	-5.66	-7.84	-12.09	-13.8	-13.99	-16.15	-8.31	
Θ(30°)	-5.43	-4.33	-5.58	-6.11	-3.96	-7.08	-10.41	-11.72	-9.06	-3.55	-6.22	-5.38	-17.12	-10.96	-6.83	-6.34	-5.39	-6.83	-10.05	-6.87	-3.37	-7.77	-6.5	-0.31	
Θ(45°)	-5.42	-5.68	-7.17	-4.47	-8.03	-8.39	-13	-7.62	-4.31	-9.39	-20.22	-12.39	-18.61	-19.06	-11.5	-6.13	-5.53	-9.13	-7.2	-3.03	-3.85	-10.6	-9.59	-3.82	
Θ(60°)	-3.75	-3.2	-9.12	-19.2	-16.61	-9.89	-15.56	-10.23	-14.33	-10.06	-19.92	-19.32	-19.2	-13.95	-10.12	-5.98	-8.75	-4.04	-10.18	-4.24	-7.66	-11.24	-12.09	-8.33	
Θ(75°)	-2.23	-5.31	-15.66	-9.8	-9.62	-19.83	-9.13	-8	-7.47	-16.14	-18.69	-16.45	-16.79	-15.74	-15.27	-8.28	-9.04	-3.8	-11.95	-7.5	-7.81	-7.19	-12.2	-8.73	
Θ(90°)	-6.37	-3.5	-17.35	-17.69	-19.95	-16.22	-4.73	-11.44	-13.97	-17.99	-17.25	-14.86	-17.93	-18.94	-15.35	-12.71	-18.85	-5.3	-14.26	-11.39	-9.19	-9.15	-16.72	-17.68	
Θ(105°)	-17.75	-10.79	-17.17	-19.79	-19.69	-13.03	-9.35	-18.55	-19.44	-16.12	-12.6	-15.56	-20.33	-20.01	-13.66	-16.46	-18.41	-10.98	-18.31	-19.44	-14.09	-20.16	-19.48	-19.81	
Θ(120°)	-18.91	-19.76	-16.49	-19.88	-19.25	-18	-15.68	-12.42	-11.59	-17.03	-11.97	-13.53	-18.77	-19.64	-20.07	-18.49	-16.55	-12.33	-18.72	-18.39	-14.96	-13.98	-19.53	-19.17	
Θ(135°)	-13.51	-19.12	-19.07	-18.91	-20.29	-18.08	-19.88	-19.01	-18.67	-18.52	-19.4	-15.28	-19.69	-18.7	-19.26	-17.78	-17.74	-17.21	-12.14	-20.2	-19.36	-20.11	-19.82	-14.79	
Θ(150°)	-19.98	-14.25	-10.58	-19.02	-18.41	-19.04	-19.72	-19.72	-15.09	-17.62	-19.37	-13.79	-17.11	-16.58	-18.18	-18.91	-19.6	-15.66	-10.97	-18.62	-15.78	-12.28	-17.31	-11.82	
Θ(165°)	-13.47	-18.71	-19.33	-18.78	-18.92	-17.02	-16.51	-15.52	-17.13	-19.24	-18.86	-19.96	-20.34	-15.77	-20.76	-19.62	-18.91	-18.46	-18.68	-13.54	-17.88	-19.57	-15.82	-19.1	
Θ(180°)	-18.37	-19.47	-18.91	-19.32	-19.24	-18.77	-19.51	-17.53	-16.74	-20.1	-19.28	-15.91	-19.3	-17.85	-19.2	-18.29	-19.58	-18.8	-19.73	-19.18	-15.71	-17.7	-18.55	-18.22	
Freq(Hz)	6.175G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-7.53	-6.67	-5.86	-7.57	-8.39	-9.2	-11.12	-9.85	-10.26	-8.89	-8.38	-7.31	-7.32	-6.48	-6.05	-5.33	-6.15	-6.45	-8.56	-9.89	-10.7	-10.39	-10.47	-12.25	
Θ(15°)	-3.31	-6.87	-7.77	-6.32	-7.61	-9.36	-9.7	-8.83	-6.28	-10.32	-14.82	-16.56	-8.68	-8.35	-6.24	-6.72	-8.13	-7.67	-4.3	-3.19	-3.96	-3.53	-2.64	-3.41	
Θ(30°)	-3.04	-6.78	-11.87	-4.34	-0.94	-2.74	-7.85	-18.59	-12.47	-5.88	-9.21	-6.8	-7.37	-14.35	-19.85	-12.5	-15.94	-10.06	-0.91	-4.31	-4.39	-1.78	-0.37	-0.71	
Θ(45°)	-1.58	-4.5	-7.27	-4.99	-5.05	-1.18	-6.15	-6.06	-3.12	-0.23	-0.03	0.52	-4.1	-5.81	-9.68	-3.69	-11.12	-3.73	-8.59	-3.91	0.85	4.16	3.41	-0.67	
Θ(60°)	-0.44	-2.16	-4.35	-2.65	-4.89	-0.52	-2.57	-6.17	-3.86	-2	-3.38	0.87	-3.69	-3.23	-4.74	-2.04	-3.69	-5.24	-3.48	-7.58	-0.98	-0.95	-1.3	3.65	
Θ(75°)	-3.53	0.29	-5.42	-4.39	-5.37	1.89	-2.42	-9.01	-5.41	-0.83	-4.47	-2.71	-3.71	-8.31	-6.22	-4.48	-3.55	-7.5	-3.47	-10.83	-0.84	-0.6	-0.86	-1.2	
Θ(90°)	-9.18	-5.54	-8.83	-7.18	-2.37	-1.49	-2.75	-7.35	-6.8	-1.79	-5.37	-5.98	-5.11	-8.23	-7.94	-1.25	-3.31	-3.78	-2.46	-9.76	-3.37	-5.03	-7.87	-6.98	
Θ(105°)	-7.96	-8.18	-19.98	-9.39	-8.78	-11.12	-7.48	-10.54	-5.77	-5.32	-7.75	-11.17	-10.26	-14.12	-5.7	-4.23	-8.59	-6.09	-6.4	-10.26	-10.28	-13.6	-16.39	-9.58	
Θ(120°)	-12.36	-8.95	-16.56	-13.19	-13.16	-15.31	-10.37	-10.07	-9.52	-13.64	-12.29	-7.81	-10.83	-19.19	-6.6	-7.86	-9.07	-7.19	-8.6	-14.37	-16.47	-16.57	-18.71	-14.41	
Θ(135°)	-11.45	-18.37	-18.98	-13.82	-10.15	-12.73	-15.02	-14.07	-15.32	-12.29	-18.76	-10.47	-11.88	-9.38	-19.48	-4.58	-11.46	-10.94	-8	-11.94	-8.11	-8.63	-20.03	-13.31	
Θ(150°)	-19.94	-20.22	-19.07	-15.75	-12.36	-20.03	-18.27	-12.07	-17.2	-19.59	-14.77	-13.62	-13.86	-10.33	-16.03	-16.42	-15.27	-12.04	-13.47	-17.4	-13.26	-12.53	-19.77	-13.37	
Θ(165°)	-19.36	-19.32	-17.04	-19.52	-17.81	-17.4	-15.78	-18.17	-19.37	-16.95	-18.51	-19.76	-13.69	-13.31	-13.9	-17.7	-13.3	-14.72	-19.89	-14.66	-17.53	-15.36	-19.93	-17.94	
Θ(180°)	-19.08	-16.77	-16.94	-17.35	-19.04	-18.91	-19.24	-19.39	-19.84	-19.99	-19.71	-18.47	-17.72	-19.27	-19.38	-17.82	-19.59	-16.31	-19.05	-19.74	-18.82	-19.79	-19.33	-19.04	-18.37
Freq(Hz)	6.475G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)	
Θ(0°)	-4.72	-4.79	-4.9	-5.59	-8.27	-9.7	-10.75	-10.22	-9.72	-7.59	-6.79	-4.98	-4.48	-4.05	-4.28	-5.51	-6.36	-7.4	-8.76	-8.18					



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Θ(90°)	-14.93	-4.26	-11.46	-8.24	-3.44	-1.62	-4.21	-3.25	-3.51	-4	-4.59	-5.5	-8.37	-11.76	-5.46	-6.14	-8.8	-6.31	-3.77	-7.57	-4.45	-4.36	-8.9	-7.5
Θ(105°)	-14.17	-8.11	-15.15	-10.44	-9.55	-5.51	-4.29	-5.02	-6.3	-6.57	-10.36	-5.69	-6.9	-11.14	-9.11	-8.74	-8.49	-10.96	-9.51	-15.31	-8.4	-13.92	-19.76	-12.45
Θ(120°)	-19.02	-12.19	-20.34	-12.72	-9.2	-16.38	-8.35	-18.58	-9.56	-11.92	-13.58	-12.83	-10.33	-12.71	-11.86	-14.89	-12.2	-9.78	-12.66	-20.59	-12.48	-19.26	-13.94	-18.95
Θ(135°)	-19.88	-16.66	-17.05	-13.37	-17.46	-19.33	-18.85	-18.59	-14.21	-15.42	-17.08	-16.03	-10.69	-19.79	-18.46	-8.43	-12.07	-13.5	-13.82	-19.09	-13.08	-9.68	-19.74	-16.59
Θ(150°)	-18.81	-20.16	-19.6	-19.75	-18.99	-18.58	-19.32	-14.83	-19.59	-17.61	-19.8	-18.19	-14.64	-13.19	-19.09	-20.52	-11.9	-12.65	-15.66	-19.99	-20.02	-20.32	-19.45	-16.2
Θ(165°)	-18.62	-19.98	-19.12	-20.14	-18.44	-19.57	-17.59	-17.56	-20.57	-19.75	-19.79	-18.81	-17.41	-12.2	-11.24	-15.23	-14.03	-15.61	-19.84	-16.82	-20.23	-19.3	-19.99	-19.45
Θ(180°)	-17.84	-15.38	-14.16	-17.13	-14.73	-17.84	-19.36	-18.84	-18.55	-18.66	-19.02	-19.48	-19.2	-16.65	-15.36	-15.18	-15.83	-18.12	-18.99	-19.13	-19.91	-19.49	-18.52	-20.32
Freq(Hz)	6.995G	Pol.	Phi	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.68	-8.57	-4.91	-2.72	-1.36	0.05	0.24	-1.05	-1.67	-3.47	-6.32	-11.64	-13.74	-8.55	-4.72	-2.38	-0.6	0.18	0.58	0.33	-0.28	-2.24	-3.34	-5.64
Θ(15°)	-10.75	-4.63	-3.39	-2.7	-2.26	-3.54	-4.86	-3.9	-1.8	-3.76	-5.22	-9.33	-14.14	-1.2	1.22	1.51	1.13	-0.56	-1.77	-2.07	-4.07	-7.48	-8.99	-10.59
Θ(30°)	-10.63	-2.34	-4.54	-3.73	-0.2	-2.33	-2.01	-2.89	-3	-4.2	-6.22	-8.57	-7.69	-0.77	1.12	0.52	-1.67	-0.94	-3.14	-8.29	-9.21	-9.47	-16.78	-17.73
Θ(45°)	-14.08	-8.64	-4.35	-4.4	-10.84	-3.86	-1.98	-10.65	-3.69	-8.6	-15.94	-18.69	-10.33	-5.94	-4.08	-4.95	-1.8	-3.59	-8.77	-12.92	-9.32	-8.29	-19.32	-16.69
Θ(60°)	-11.5	-10.11	-6.04	-9.44	-8.04	-10.44	-12.73	-9.44	-11.4	-10.91	-18.86	-19.64	-14.42	-10.28	-4.38	-10.27	-8.97	-6.33	-18.4	-13.7	-10.4	-13.79	-19.63	-12.87
Θ(75°)	-8.53	-13.11	-17.88	-20.38	-8.05	-11.12	-13.2	-19.33	-18.35	-18.9	-15.98	-19.6	-11.12	-14.85	-4.04	-6.89	-7.75	-5.31	-10.82	-14.17	-6.55	-8.4	-16.22	-10.4
Θ(90°)	-9.84	-12.74	-14.14	-19.37	-19.4	-15.33	-17.97	-14.28	-15.78	-18.94	-18.96	-18.85	-15.13	-8.81	-8.43	-6	-8.26	-10.94	-12.14	-18.37	-10.82	-9.77	-15.33	-15.22
Θ(105°)	-18.11	-10.37	-16.1	-8.66	-8.64	-15.89	-11.94	-15.36	-16.48	-15.99	-20.31	-20.15	-19.52	-10.88	-8.04	-8.8	-9.29	-16.04	-13.75	-20.18	-20.04	-19.11	-17.14	-18.83
Θ(120°)	-20.21	-12.05	-19.46	-14.74	-13.49	-16.13	-18.48	-19.51	-15.69	-18.56	-16.57	-19.54	-20.02	-18.41	-13.13	-13.45	-11.01	-18.89	-19.92	-19.14	-18.85	-19.48	-19.62	-14.64
Θ(135°)	-19.52	-19.36	-19.87	-13.37	-19.91	-16.11	-17.58	-15.67	-19.01	-19.51	-19.67	-16.62	-19.62	-14.3	-12.31	-20.23	-13.12	-18.42	-13.97	-19.42	-17.9	-18.8	-18.77	-18.95
Θ(150°)	-19.1	-17.24	-17.01	-16.39	-19.07	-19.22	-17.47	-14	-17.3	-17.68	-14.37	-14.93	-19.16	-15.05	-12.73	-19.98	-19.35	-20.02	-18.54	-19.55	-20.6	-18.33	-18.54	-20.09
Θ(165°)	-18.96	-18.76	-19.61	-20.2	-19.49	-19.6	-18.9	-20.2	-19.51	-19.57	-13.99	-17.63	-20.26	-18.99	-19.23	-18.92	-20.34	-16.73	-18.83	-14.9	-19.13	-19.97	-20.33	-19.92
Θ(180°)	-19.51	-19.39	-19.92	-19.28	-19.5	-19.09	-19.2	-18.83	-19.83	-19.25	-19.11	-19.75	-19.64	-19.45	-18.15	-19.67	-19.5	-18.88	-19.64	-19.47	-20	-19.2	-19.92	-19.47
Freq(Hz)	6.995G	Pol.	Theta	Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	0.87	0.64	-0.04	-1.52	-5.17	-8.03	-12.37	-10.96	-6.16	-3.47	-1.7	-0.57	0.8	0.33	-0.72	-2.39	-5.43	-9.85	-13.15	-8.92	-4.57	-2.75	-1.68	0.5
Θ(15°)	-0.71	-0.32	-1.02	-1.65	-3.47	-4.39	-4.79	-5.26	-8.03	-7.07	-4.02	-4.02	-5.97	-6.66	-8.82	-11.25	-9.39	-6.81	-3.22	-1.17	0.43	1.47	1.36	-0.33
Θ(30°)	0.62	0.3	0.47	-0.55	2.03	-1.44	-2.8	-4.93	-8.4	-12.77	-11.93	-18.77	-16.93	-10.4	-2.5	-5.34	-0.57	-2.01	-0.75	0.18	-2.09	1.95	1.64	0.82
Θ(45°)	-2.11	-0.34	-1.54	-4.37	-2.03	-0.32	-0.24	-5.49	-2.99	-7.76	-8.72	-9.81	-11.57	-8.7	-0.82	1.66	-2.09	-2.59	-4.05	-2.54	-2.11	-4.02	0.37	-1.67
Θ(60°)	-1.69	-0.46	-4.16	-10.58	0.69	-2.25	-0.04	-1.39	-0.66	-3	-2.62	-2.22	-8.34	-5.74	-0.84	-0.48	-1.89	-0.3	-0.6	-1.63	-5.2	-6.73	-3.51	-2.05
Θ(75°)	-6.69	-5.78	-4.42	-4.72	0.05	-0.5	-1.44	-5.73	-3.92	-9.29	-8.18	-2.78	-5.28	-5.92	-4.62	-1.75	-4.01	-1	-0.15	-4.46	-2.9	-2.47	-1.47	-4.86
Θ(90°)	-10.37	-9.47	-17.12	-10.99	-1.12	-4.19	-4.89	-5.87	-6.86	-5.8	-10.53	-3.98	-4.3	-5.72	-5.82	-1.48	-14.3	-4.45	-1.3	-9.28	-6.08	-4.72	-8.16	-10.35
Θ(105°)	-14.16	-11.5	-10.08	-8.87	-6.05	-5.9	-6.79	-6.83	-6.83	-9.62	-8.12	-6.91	-7.56	-10.18	-9.29	-4.46	-16.37	-7.09	-4.21	-13.08	-8.33	-13.51	-13.51	-18.3
Θ(120°)	-12.36	-13.8	-18.88	-15.65	-8.51	-7.02	-13.41	-15.75	-8.48	-12.12	-14.08	-7.58	-11.73	-15.39	-9.34	-9.18	-18.62	-12.41	-9.64	-19.34	-16.48	-16.64	-15.4	-19.1
Θ(135°)	-19.36	-14.96	-14.95	-11.56	-15.97	-14.28	-9.83	-13.13	-15.29	-20.37	-18.88	-11.59	-12.66	-20.2	-17.54	-8.73	-13.73	-20.28	-16.55	-19.69	-11.88	-14.25	-16.58	-19.85
Θ(150°)	-19.8	-17.8	-18.91	-16.61	-19.24	-18.81	-12.78	-13.76	-19.53	-19.89	-20.16	-15.56	-13.81	-15.3	-19.01	-20.08	-16.58	-19.43	-14.25	-19.65	-19.42	-19.79	-19.97	-16.03
Θ(165°)	-19.33	-19.71	-19.46	-18.84	-15.25	-20.29	-18.72	-16.41	-19.14	-17.59	-18.75	-14.22	-19.41	-17.55	-18.66	-19.66	-20.38	-14.37	-16.44	-19.96	-18.24	-17.7	-18.86	-18.78
Θ(180°)	-19.35	-19.63	-19.17	-20.79	-19.55	-18.77	-18.43	-19.41	-20.25	-19.69	-19.64	-19.68	-19.21	-20.72	-18.31	-19.54	-19.7	-17.82	-20.17	-19.38	-19.14	-19.15	-19.55	-19.83
Freq(Hz)	5.2G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-7.96	-6.74	-4.39	-3.81	-2.3	-2.45	-2.46	-3.24	-4.68	-5.64	-7.8	-7.41	-7.8	-4.5	-4.34	-2.92	-2.57	-2.32	-3.6	-3.46	-4.65	-5.99	-7.8	-9.71
Θ(15°)	-6.69	-7.77	-6.81	-5.42	-4.68	-4.81	-5.21	-6.53	-12.21	-8.55	-7.68	-6.27	-9.05	-9.59	-11.69	-11.28	-8.44	-7.68	-7.62	-4.38	-2.85	-4.99	-5.27	-6.02
Θ(30°)	-11.1	-10.98	-9.72	-7.65	-5.25	-5.76	-7.67	-7.33	-10.93	-19.03	-16.47	-5.46	-8.31	-20.05	-10.31	-7.16	-6.61	-8.54	-4.25	-4.83	-5.05	-4.87	-4.76	-4.71
Θ(45°)	-17.16	-7.56	-9.89	-9.43	-6.14	-4.49	-5.14	-5.57	-8.55	-19.31	-20.21	-8.78	-13.3	-11.31	-12.07	-5.73	-8.32	-3.84	-2.62	-4.87	-5.55	-7.06	-7.13	-12.89
Θ(60°)	-15.56	-12.22	-7.66	-18.99	-10.04	-9.75	-6.93	-11.66	-11.57	-17.34	-19.63	-17.75	-13.72	-10.13	-11.27	-8.67	-11.14	-6.07	-3.68	-2.8	-6.95	-8.56	-7.96	-7.36
Θ(75°)	-12.07	-8.67	-20.6	-6.77	-11.32	-8.13	-3.56	-13.47	-12.3	-19.1	-15.48	-9.46	-18.98	-18.16	-10.19	-19.43	-16.15	-17.24	-10.85	-6.52	-5.57	-7.23	-16.29	-8.84
Θ(90°)	-19.2	-6.66	-10.47	-15.59	-5.42	-10.41	-9.35	-17.74	-9.52	-10.62	-8.86	-8.36	-14.32	-17.31	-8.48	-18.51	-14.45	-10.12	-18.91	-19.2	-6.6	-8.44	-12.05	-11.52
Θ(105°)	-13.65	-12.1	-12.72	-18.83	-7.1	-11.23	-6.99	-7.72	-11.45	-12.33	-11.93	-8.83	-17.2	-16.82	-8.89	-14.11	-8.39	-10.63	-8.52	-12.05	-10.88	-18.83	-12.86	-12.85
Θ(120°)	-11.76	-19.36	-16.92	-15.74	-17.66	-13.11	-4.96	-12.13	-18.15	-12.13	-8.35	-12.5	-17.07	-18.99	-12.15	-13.64	-12.57	-13.64	-5.41	-6.47	-11.82	-14.79	-17.51	-14.38
Θ(135°)	-18.84	-18.75	-18.99	-20.37	-16.1	-18.45	-18.6	-13.88	-13.09	-16.87	-11.01	-12.38	-16.02	-18.12	-14.25	-12.64	-19.59	-20.4	-16.42	-12.2	-11.7	-18.33	-14.82	-19.07
Θ(150°)	-16.54	-16.04	-19.6	-18.64	-15.86	-16.4	-12.58	-12.7	-15.03	-14.39	-15.02	-16.16	-18.62	-19.41	-15.06	-16.71	-13.42	-12.51	-14.76	-15.78	-20.03	-14.71	-19.84	-14.03
Θ(165°)	-18.91	-20.26	-19.25	-19.35	-15.66	-16.97	-15.04	-9.97	-12.96	-18.9	-18.82	-17.94	-19.53	-17.08	-12.53	-14.52	-19.04	-14.98	-18.57	-17.37	-18.72	-19.98	-11.16	-20.14
Θ(180°)	-20.3	-20.01	-19.65	-19.54	-18.89	-18.16	-19.77	-19.64	-19.58	-17.62	-20													



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Θ(45°)	-8.37	-9.6	-16.29	-7.27	-9.86	-9.97	-10	-18.03	-18.8	-13.11	-12.65	-18.77	-17.16	-8.72	-5.45	-3.83	-5.11	-3.05	-3.01	-4.1	-7.21	-7.34	-12.09	-20.13
Θ(60°)	-16.18	-16.65	-13.17	-5.88	-7.71	-16.96	-10.17	-8.33	-7.99	-10.06	-19.19	-18.64	-19.42	-12.06	-7.9	-11.37	-10.77	-10.42	-6.09	-4.36	-4.82	-9.82	-6.82	-7.37
Θ(75°)	-11.27	-7.37	-14.19	-11.06	-18.71	-5.44	-6.54	-9	-10.23	-7.19	-11.69	-13.82	-13.56	-6.94	-12.1	-15.93	-18.46	-19.8	-10.34	-5.44	-3.31	-19.05	-10.74	-6.85
Θ(90°)	-11.9	-9.35	-9.77	-12.28	-9.04	-6.58	-8.63	-10.62	-17.14	-11.74	-17.72	-14.69	-15.3	-9.1	-18.9	-19.4	-10.68	-8.53	-19.43	-12.47	-5.99	-11.04	-18.46	-8.92
Θ(105°)	-15.5	-14.72	-9.48	-17.37	-9.57	-9.04	-8.92	-7.53	-13.51	-19.2	-19.38	-10.58	-9.85	-19.97	-19.52	-19.52	-7.87	-8.12	-8.22	-10.27	-14.23	-19	-11.79	-18.69
Θ(120°)	-10.29	-10.93	-13.68	-10.85	-19.12	-11.07	-9.16	-9.14	-8.86	-19.02	-16.54	-10.97	-13.96	-16.59	-11.93	-18.32	-13.03	-18.12	-6.17	-5.66	-16.05	-13.1	-20.39	-19.79
Θ(135°)	-19.49	-18.97	-19.68	-17.72	-12.82	-19.58	-19.37	-14.3	-11.7	-13.65	-19.36	-11.34	-18.68	-14.58	-16.32	-16.83	-11.36	-19.39	-14.68	-11.42	-18.34	-15.06	-17.53	-19.31
Θ(150°)	-19.2	-19.34	-17.14	-17.56	-18.46	-17.25	-12.01	-14.19	-17.28	-10.46	-19.45	-17.94	-19.42	-17.21	-15.12	-12.86	-17.64	-18.5	-12.96	-19.05	-18.81	-19.88	-11.25	-16.43
Θ(165°)	-20.03	-18.71	-19.3	-19.69	-19.25	-14.35	-11.43	-20.24	-17.63	-16.62	-16.96	-16.04	-19.81	-19.3	-19.29	-18.74	-13.46	-15.1	-19.57	-19.64	-19.14	-19.79	-18.65	-17.33
Θ(180°)	-18.79	-13.35	-16.47	-16.03	-15.65	-14.39	-15.59	-14.66	-15.16	-17.8	-19.01	-18.44	-19.26	-14.27	-18.81	-18.48	-18.94	-18.47	-17.71	-19.11	-19.35	-19.5	-19.11	-19.37
Freq(Hz)	5.6G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-9.98	-12.14	-13.69	-18.62	-15.38	-13.98	-12.16	-10.6	-9.11	-8.88	-7.68	-7.43	-6.98	-8.51	-10.69	-12.36	-14.74	-13.26	-13.61	-10.9	-8.7	-7.67	-6.88	-10.16
Θ(15°)	-17.27	-12.78	-6.59	-6.63	-9.91	-11.29	-8.56	-5.41	-3.41	-2.07	-3.04	-3.12	-3.12	-2.3	-2.92	-4.53	-1.55	-1.88	-4.26	-11.7	-19.4	-18.98	-12.3	-14.02
Θ(30°)	-10.56	-11.08	-19.84	-6.26	-4.8	-6.19	-5.24	-5.37	-5.99	-9.59	-5.09	-9.06	-9.8	-3.1	-0.94	-0.91	-0.97	0.24	-4.35	-6.08	-19.71	-12.38	-7.73	-6.67
Θ(45°)	-6.9	-8.9	-6.15	-5.72	-3.65	-2.57	-1.45	-5.92	-3.55	-2.44	-8.68	-7.41	-4.22	-5.41	-1.77	1.58	-0.12	-2.66	-8.42	-9.47	-9.48	-18.55	-12.47	-8.84
Θ(60°)	-2.66	-8.12	-7.01	-0.26	-5.66	-2.03	-2.21	-2.28	-1.8	-2.08	-2.09	-0.67	-15.3	-3.52	-0.57	-0.59	-0.1	-1.18	-2.14	-6.61	-5.51	-11.04	-10.04	-8.62
Θ(75°)	2.48	-6.52	-4.69	-0.3	-8.31	-3.13	-1.83	-2.15	-1.16	-6.21	-0.08	-3.35	-3.72	-4.34	-8.39	-1.13	0.44	-3.3	-1.32	-3.94	-6.11	-4.9	-7.48	-8.73
Θ(90°)	-0.5	-9.88	-7.49	-5.83	-6.89	-3.22	-2.53	-1.91	-4.26	-5.94	-4	-5.43	-3.69	-11.5	-13.1	-3.79	-2.08	-3.33	-1.56	-1.22	-8.26	-0.69	-6	-5.63
Θ(105°)	-6.73	-11.98	-12.01	-14.21	-10.78	-10.55	-4.95	-5.38	-7.41	-6.98	-4.36	-7.19	-5.92	-6.77	-12.1	-4.75	-3.07	-7.41	-7.96	-5.48	-17.85	-8.29	-15.84	-9.26
Θ(120°)	-14.09	-11.66	-16.5	-16.39	-17.03	-16.04	-10.7	-19.11	-10.8	-9.96	-11.13	-12.7	-6.07	-14.78	-8.73	-11.42	-5.35	-10.92	-13.71	-6.62	-18.31	-9.08	-9.95	-18.35
Θ(135°)	-20.32	-14.56	-10.79	-12.31	-20.05	-18.98	-16.23	-19.8	-13.51	-14.15	-14.61	-11.13	-9.61	-14.47	-11.96	-15.16	-16.48	-14.06	-14.29	-10.51	-17.51	-14.2	-19.75	-20.29
Θ(150°)	-19.74	-14.31	-11.09	-20.13	-19.65	-19.52	-20.19	-20.04	-18.65	-11.11	-15.34	-8.7	-10.74	-10.2	-13.69	-14.17	-18.72	-19.01	-19.88	-19.14	-20.24	-17.65	-18.46	-14.83
Θ(165°)	-14.46	-13.44	-13.21	-10.61	-19.02	-18.46	-16.34	-15.11	-19.26	-19.96	-19.54	-10.49	-10.49	-16.3	-16.64	-20.11	-20.18	-18.79	-19.08	-19.1	-18.87	-18.94	-20.18	-17.83
Θ(180°)	-14.58	-16.94	-18.75	-19.74	-19.81	-18.87	-18.56	-17.97	-17.93	-16.98	-15.6	-15.9	-18.91	-19.05	-19.16	-20.03	-19.55	-19.19	-18.74	-19.06	-17.11	-13.91	-13.53	-14.95
Freq(Hz)	5.785G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-12.63	-9.53	-6.71	-8.25	-5.66	-4.89	-4.97	-5.8	-6.34	-7.24	-8.7	-9.41	-8.43	-7.84	-5.3	-5.91	-3.59	-4.68	-7.32	-7.21	-7.76	-12.01	-10.97	-15.22
Θ(15°)	-15.29	-17.3	-15.28	-13.03	-10.13	-7.01	-6.41	-8.85	-13.59	-18.17	-17.31	-16.44	-9.43	-6.02	-4.43	-2.63	-2.26	-4.38	-5.82	-6.36	-10.02	-15.53	-13.28	-12.3
Θ(30°)	-14.91	-7.64	-12.15	-18.63	-19.51	-5.83	-8.67	-11.3	-6.74	-11.15	-13.08	-7.32	-19.35	-13.08	-6.51	-4.32	-1.22	-7.19	-2.81	-7.03	-6.85	-4.61	-5.91	-13.02
Θ(45°)	-9.33	-12.96	-15.04	-6.72	-16.61	-9.83	-14.33	-19.55	-10.95	-20.17	-11.82	-9.47	-8.86	-9.59	-3.32	-4.65	-7.05	-6.16	-5.03	-2.06	-6.91	-7.61	-9.63	-11.79
Θ(60°)	-12.33	-12.83	-11.4	-9.31	-5.07	-8.43	-11.88	-19.77	-10.88	-12.11	-15.07	-10.43	-19.76	-6.35	-11.87	-10.11	-10.9	-7.67	-4.92	-6.24	-10.27	-10.83	-6.48	-5.14
Θ(75°)	-13.4	-9.82	-19.07	-7.9	-16.71	-5.07	-5.19	-16.84	-9.55	-10.04	-11.34	-12.49	-15.73	-6.44	-19.13	-13.79	-19.54	-15.08	-10.89	-6.07	-4.51	-11.66	-8.99	-7.49
Θ(90°)	-18.94	-12.12	-17.38	-9.64	-6.45	-7.4	-6.87	-14.62	-17.87	-13.59	-20.15	-12.59	-13.37	-13.46	-16.98	-12.16	-16.03	-14.6	-19.12	-11.45	-6.25	-8.34	-19.05	-12.4
Θ(105°)	-19.19	-18.76	-12.54	-17.44	-6.2	-12.47	-10.13	-9.11	-18.24	-17.59	-19.24	-11.78	-14.04	-18.57	-18.24	-13.37	-8.79	-14.66	-10.49	-13.88	-14.59	-18.08	-17.76	-19.87
Θ(120°)	-9.72	-13.58	-13.14	-7.89	-16.33	-16.06	-9.67	-13.51	-12.96	-18.45	-15.46	-10	-11.05	-19.48	-18.14	-14.77	-8.92	-14.23	-4.68	-4.79	-15.48	-8.82	-17.99	-18.21
Θ(135°)	-17.77	-16.99	-19	-17.13	-15.42	-19.61	-18.01	-19.79	-11.38	-14.69	-19.23	-17.62	-18.49	-19.34	-19.42	-19.37	-11.2	-20.17	-13.29	-9.51	-13.1	-15.83	-20.2	-13.01
Θ(150°)	-15.11	-16.18	-16.06	-15.69	-18.32	-18.65	-14.21	-15.59	-15.59	-10.59	-15.79	-14.84	-19.21	-15.15	-15.65	-12.94	-13.15	-12.35	-10.16	-11.65	-17.24	-19.2	-12.71	-19.95
Θ(165°)	-16.21	-16.25	-18.45	-18.85	-15.93	-9.05	-13.3	-15.43	-11.74	-18.29	-16.95	-18.04	-18.32	-14.98	-20.41	-12.82	-13.8	-11.22	-17.42	-13.75	-18.46	-19.13	-17.61	-17.41
Θ(180°)	-19.96	-19.69	-18.92	-17.46	-16.43	-10.83	-10.04	-11.19	-11.98	-13.82	-14.24	-14.93	-13.81	-19.32	-19.14	-19.43	-19.3	-18.68	-19.59	-19.23	-15.99	-14.51	-13.79	-19.91
Freq(Hz)	5.785G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-4.83	-5.92	-6.67	-10.98	-11.06	-12.95	-10.33	-8.99	-6.56	-5.05	-5.02	-3.97	-3.62	-4.82	-6.17	-6.85	-9.47	-10.9	-11.7	-10.34	-7.54	-5.15	-4.49	-6.11
Θ(15°)	-5.05	-8.99	-15.34	-18.98	-15.83	-12.36	-10.17	-9.81	-6.09	-4.89	-6.8	-6.89	-7.81	-7.02	-6.39	-6.06	-7.27	-5.12	-5.6	-9.13	-11.78	-8.67	-8.02	-5.7
Θ(30°)	-11.98	-14.66	-19.05	-18.17	-15.82	-16.02	-7.86	-11.52	-8.86	-6.55	-5.63	-9.79	-9.98	-7.16	0.43	1.13	-1.35	-2.24	-4.27	-8.92	-7.79	-8.86	-11.54	-8.37
Θ(45°)	-13.19	-8.92	-7.85	-10.67	-8.04	-1.76	-1.81	-3.94	-3.53	-3.29	-1.94	-4.97	-8.84	-4.47	-4.15	0.3	1.64	1	0.75	-0.62	-2.73	-6.86	-18.02	-12.04
Θ(60°)	-2.33	-19.67	-12.51	-2	-5.38	-0.11	-2.55	-1.19	-2.26	-1.41	-0.6	0.7	-6.11	-6.67	-3.15	3.43	3.96	2.3	-0.46	-5.08	-0.74	-5.71	-10.45	-6.18
Θ(75°)	-1.57	-7.05	-5.3	-0.01	-1.78	-4.8	0.49	-1.58	0.27	-0.75	-3.34	0.28	-3.47	-9.9	-3.29	0.78	1.41	0.7	-2.04	-2.83	-1.88	-1.07	-4.66	-2.8
Θ(90°)	-1.66	-8.93	-9.49	-3.18	-9.53	-9.42	0.14	-2.29	-2.98	-4.68	-6.65	-3.65	-7.14	-10.08	-7.85	-3.81	-1.8	-2.21	-3.42	-2.41	-3.42	0.03	-5.79	-7.56
Θ(105°)	-7.9	-16.55	-14.33	-10.29	-10.51	-11.7	-5.99	-7.24	-8.4	-11.11	-8.75	-5.49	-8.11	-13.37	-6.42	-6.75	-3.2	-4.82	-6.6	-6.51	-14.31	-9.33	-14.84	-7.21
Θ(120°)	-15.26	-13.58	-15.91	-19.99	-15.1	-19.32	-10.14	-14.18	-13.69	-13.1	-12.49	-8.23	-7.63	-11.82	-16.33	-7.81	-5.69	-9.61	-11.07	-5.76	-20.35	-14.77	-13.64	-16.18
Θ(135°)	-16.32	-16.17	-9.76	-18.25	-18.82	-16.38	-12.85	-15.02	-13.83	-10.11	-8.19	-6.36	-5.1	-12.57										



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Θ(0°)	-6.87	-10.2	-14.93	-19.74	-20.81	-12.9	-10.36	-6.31	-5.14	-4.24	-4.51	-4.33	-4.81	-7.38	-10.23	-16.23	-19.74	-12.87	-7.79	-6.25	-4.16	-3.8	-3.96	-5.66
Θ(15°)	-6.91	-7.92	-8.16	-10.78	-12.27	-11.92	-10.36	-7.52	-4.47	-5.3	-10.78	-11.29	-11.24	-9.24	-7.5	-6.4	-3.93	-4.91	-5.12	-3.58	-8.96	-11.21	-10.86	-7.73
Θ(30°)	-17.13	-11.9	-15.4	-8.01	-7.27	-18.8	-6.81	-5.33	-0.9	-1.4	0.75	-1.52	-3.18	-5.44	-6.7	-7.6	-5	-4.08	-3.72	-3.49	-6.36	-11.56	-7.04	-19.02
Θ(45°)	-7.82	-15.2	-6.15	-5.92	-3.95	-2.96	-1.97	-1.67	0.62	0.08	1.22	1.04	1.67	-1.92	-8.76	-11.54	-0.47	0.29	0.22	1.33	-0.65	-7	-8.73	-8.55
Θ(60°)	-12.01	-4.3	-5.61	-5.76	-1.39	-5.44	-3.17	-1.58	-5.94	-4.01	-5.4	1.09	-0.99	-3.21	-4.78	-3.41	1.74	0.76	1.2	-0.99	-3.95	-8.25	-12.91	-8.6
Θ(75°)	-7.38	-9.96	-0.7	-2.81	-1.12	2.06	-1.39	-4.08	-4.88	-2.85	-5.43	-1.78	-0.13	-4.1	-5.21	-3.89	-2.22	-3.47	1.75	-4.14	-3.09	-2.9	-4.05	-5.94
Θ(90°)	-19.89	-8.93	-6.35	-4.11	-6.56	-11.48	0.32	-4.27	-5.02	-4.34	-8.7	-5.14	-2.92	-3.46	-5.62	-5.67	-3.62	-6.81	-1.29	-5.06	-4.62	-3.49	-9.35	-10.06
Θ(105°)	-7.7	-8.19	-10.88	-9.96	-9.27	-9.52	-4.99	-9.85	-9.46	-9.02	-12.57	-11.3	-6.57	-6.78	-7.53	-7.84	-4.52	-7.34	-5.58	-13.08	-13.01	-14.14	-12.33	-9.9
Θ(120°)	-19.47	-15.58	-8.19	-18.52	-14.91	-16.67	-10.72	-14.1	-12.85	-18.18	-19.87	-19.7	-13.42	-9.51	-12.72	-5.73	-6.03	-15.14	-10.45	-12.77	-18.07	-10.04	-14.58	-12.91
Θ(135°)	-19.38	-13.04	-12.07	-16.84	-14.42	-18.65	-14.07	-16.65	-16.16	-20.16	-18.84	-15.42	-13	-9.41	-9.52	-9.18	-12.65	-16.43	-19.99	-18.94	-15.6	-10.33	-19.02	-19.37
Θ(150°)	-18.5	-15.95	-19.49	-18.72	-14.87	-18.55	-16.98	-19.92	-16.31	-16.47	-16.26	-8.89	-6.38	-9.38	-7.94	-13.29	-11.82	-19.62	-16.79	-15.28	-18.87	-19.48	-17.64	-16.52
Θ(165°)	-14.42	-13.01	-19.11	-18.94	-19.07	-19.81	-19.07	-19	-19.53	-16.82	-16.05	-11.56	-9.51	-10.91	-13.55	-12.06	-11.84	-18.68	-19.61	-19.06	-14.28	-14.5	-14.76	-18.69
Θ(180°)	-16.2	-16.04	-18.51	-19.06	-18.4	-19.87	-19.32	-14.39	-16.3	-15.2	-15.89	-12.54	-16.19	-14.33	-18.57	-19.98	-20.3	-19.31	-16.73	-16.07	-16.67	-12.1	-13.74	-13.48
Freq(Hz)	6.695G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-9.86	-13.41	-16.13	-16.29	-19.96	-13.57	-11	-10.23	-8.55	-7.1	-8.7	-11.25	-10.91	-14.93	-13.18	-11.06	-11.61	-10.76	-9.79	-9	-8.08	-8.56	-7.94	-10.02
Θ(15°)	-8.59	-12.74	-3.27	-1.21	-4.81	-8.01	-4.56	-2.61	-7.32	-11.2	-6.63	-9.51	-6.29	-3.58	-6.12	-7.85	-3.04	-3.17	-4.67	-4.1	-3.24	-7.08	-11.22	-11.3
Θ(30°)	-8.4	-6.31	-12.95	-13.7	-7.41	-7.94	-6.7	-5.79	-5.54	-6.64	-8.56	-4.51	-6	-10.91	-11.94	-12.39	-4.44	-3.71	-4.77	-4.98	-6.57	-5.79	-9.03	-8.33
Θ(45°)	-11.09	-5.89	-11.63	-12.3	-2.55	-9.5	-15.8	-7.18	-7.58	-7.48	-8.68	-10.19	-7.83	-9.24	-15.87	-8.84	-5.41	-18.9	-19.05	-18.57	-10.35	-5.77	-7.88	-14.47
Θ(60°)	-16.13	-18.23	-13.02	-6.38	-10	-6.53	-3.99	-4.48	-6.48	-10.06	-14.79	-11.32	-16.64	-8.21	-19.88	-17.25	-4.81	-16.31	-18.11	-9.6	-12.58	-11.96	-13.53	-17.13
Θ(75°)	-12.35	-12.78	-19.23	-11.8	-11.72	-8.99	-4.48	-8.45	-6.84	-8.2	-12.11	-16.49	-19.52	-11.76	-16.62	-12.99	-8.07	-20.59	-17.49	-12.38	-11.01	-11.96	-6.66	-10.01
Θ(90°)	-10.64	-13.62	-10.66	-9.03	-13.79	-4.22	-4.19	-12.97	-15.7	-11.71	-12.68	-20.44	-12.41	-19.99	-17.16	-7.84	-11.65	-18.59	-14.36	-14.72	-5.97	-8.8	-18.78	-18.79
Θ(105°)	-18.43	-19.26	-19.08	-16.8	-15.79	-9.42	-17.31	-13.94	-14.2	-15.46	-13.93	-16.11	-11.88	-15.34	-14.1	-9.98	-15.83	-18.49	-18.42	-19.94	-12.28	-9.69	-11.87	-19.94
Θ(120°)	-18.62	-15.03	-18.04	-10.06	-13	-12.02	-7.53	-10.43	-16.03	-15.76	-13.47	-17.31	-13.17	-19.55	-14.61	-12.33	-13.48	-14.81	-12.43	-9.67	-18.57	-7.73	-14.29	-14.87
Θ(135°)	-13.83	-18.27	-14.22	-18.45	-20.07	-16.09	-11.55	-8.35	-12	-19.59	-15.98	-15.01	-15	-18.75	-20.27	-14.89	-19.61	-14.15	-14.97	-9.36	-16.83	-17.88	-17.65	-12.98
Θ(150°)	-19.89	-18.1	-14.39	-19.79	-20.02	-19.92	-17.69	-11.07	-18.21	-19.6	-15.8	-15.62	-18.81	-17.44	-20.31	-18.21	-13.89	-17.31	-11.89	-16.86	-19.8	-20.02	-14.92	-19.13
Θ(165°)	-18.27	-17.09	-19.3	-19	-19.72	-19.1	-19.42	-19	-17.99	-15.35	-16.95	-19.11	-19.84	-19.27	-19.14	-18.69	-19.82	-16.84	-19.26	-17.87	-19.57	-15.12	-12.95	-14.11
Θ(180°)	-19.31	-19.14	-19.95	-20.13	-17.56	-15.06	-13.42	-14.1	-19.17	-18.12	-18.02	-19.6	-19.94	-19.96	-18.45	-16.06	-18.62	-19.85	-19.23	-19.65	-14.73	-13.72	-13.4	-17.32
Freq(Hz)	6.695G	Pol.	Theta	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-10.12	-8.82	-7.92	-7.87	-9.97	-10.54	-12.04	-14.51	-19.98	-19.71	-15.16	-10.87	-8.2	-6.52	-6.19	-7.15	-7.56	-9.34	-10.76	-12.93	-12.59	-11.28	-11.81	-12.04
Θ(15°)	-5.18	-6.66	-9.84	-12.46	-13.25	-12.01	-12.72	-7.12	-4.51	-5.73	-7.26	-2.06	-2.13	-3.99	-7.05	-9.04	-18.74	-10.71	-5.58	-3.64	-4.03	-4.32	-6.48	-4.46
Θ(30°)	-7.89	-2.85	-10.73	-6.38	-15.3	-6.38	-8.04	-4.65	0.19	1.91	0.2	0.05	-3.55	-6.93	-6.13	-3.58	-6.8	-5.62	-4.61	-4.86	-3.12	-12.38	-10.45	-5.87
Θ(45°)	-14.8	-12.26	-8.78	-2.07	-7.87	-4.38	-4.67	-4.2	-1.7	-0.14	0.92	-0.2	1.35	-5.13	-5.29	-1.4	-0.84	0.59	0.25	1.55	-0.71	-10.52	-10.89	-18.47
Θ(60°)	-19.1	-8.69	-1.93	-6.28	-0.29	-0.95	-2.52	-3.95	-1.5	0.69	1.78	-1.35	-0.78	-4.62	-9.22	-6.16	-3.35	-0.81	-1.73	-3.17	0.16	-9.67	-10.08	-6.57
Θ(75°)	-19.45	-6.38	0.82	-2.66	-3.96	1.35	-7.1	-6.1	-2.21	-1.63	-0.43	-3.38	-3.85	-6.88	-4.46	-1.98	-0.21	-2.02	-0.1	-2.77	-0.13	-6.28	-9.03	-8.23
Θ(90°)	-11.2	-10.47	-4.73	-2.02	-3.66	-4.28	-0.21	-3.95	-3.2	-4.03	-4.63	-4.52	-10.91	-8.06	-4.45	-3.8	-2.08	-7.22	-1.6	-3.93	-3.78	-4.74	-6.91	-7.19
Θ(105°)	-16.01	-17.06	-17.27	-7.87	-5.96	-12.46	-5.76	-7.58	-4.28	-8.13	-7.45	-13.1	-8.25	-7.44	-9.65	-5.82	-3.89	-9.58	-6.03	-14.89	-10.88	-8.79	-10.54	-13.5
Θ(120°)	-20.05	-19.19	-10.16	-19.1	-14.83	-12.81	-15.22	-18.73	-11.33	-13.15	-18.19	-18.68	-19.43	-19.41	-16.03	-8.18	-9.79	-11.98	-9.08	-10.91	-16.14	-10.06	-10.93	-15.69
Θ(135°)	-16.63	-13.98	-13.59	-18.91	-15.58	-16.37	-16.03	-15.09	-20.1	-18.99	-19.39	-17.62	-12.56	-10.28	-8.46	-12.46	-12.99	-12.15	-19.61	-20.39	-10.32	-13.32	-19.87	-19.47
Θ(150°)	-14.4	-18.9	-15.97	-17.21	-18.04	-14.47	-18.68	-19.23	-18.61	-19.11	-18.65	-15.47	-16.68	-11.52	-11.11	-17.9	-19.75	-15.47	-18.08	-13.1	-13.38	-19.73	-19.46	-14.35
Θ(165°)	-20.05	-16.62	-19.76	-18.22	-18.61	-20.09	-19.06	-19.24	-19.73	-14.54	-14.65	-15.91	-10.52	-11.01	-11.03	-11.65	-18.46	-17.07	-17.75	-18.7	-14.86	-19.09	-19.54	-20.2
Θ(180°)	-13.49	-12.47	-14.13	-14.31	-15.41	-17.97	-19.81	-19.85	-19.11	-19.81	-19.47	-14.82	-14.86	-13.85	-13.73	-17.23	-16.66	-18.4	-17.47	-18.97	-18.8	-15.43	-15.27	-14.81
Freq(Hz)	6.995G	Pol.	Phi	Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)	Φ(15°)	Φ(30°)	Φ(45°)	Φ(60°)	Φ(75°)	Φ(90°)	Φ(105°)	Φ(120°)	Φ(135°)	Φ(150°)	Φ(165°)	Φ(180°)	Φ(195°)	Φ(210°)	Φ(225°)	Φ(240°)	Φ(255°)	Φ(270°)	Φ(285°)	Φ(300°)	Φ(315°)	Φ(330°)	Φ(345°)
Θ(0°)	-19.15	-15.53	-10.13	-7.28	-6.97	-6.08	-6.17	-8.17	-9.96	-12.37	-14.54	-19.82	-16.78	-11.95	-10.16	-7.15	-4.96	-4.84	-4.37	-4.99	-5.25	-7.29	-10.59	-14.83
Θ(15°)	-13.11	-14.39	-4.92	-2.93	-2.93	-2.83	-2.45	-1.44	-1.19	-1.01	-2.85	-7.03	-16.62	-17.49	-4.88	-3.54	-3.04	-2.14	-0.38	-0.96	-4.82	-3.21	-5.95	-8.17
Θ(30°)	-14.04	-6.29	-6.68	-6.9	-13.57	-5.45	-6.72	-3.46	-3.75	-5.74	-2.76	-8.75	-12.42	-6.05	-5.4	-5.24	-7.03	-1.91	-3.49	-6.03	-3.63	-7.18	-7.64	-6.5
Θ(45°)	-10.4	-9.3	-19.85	-7.87	-3.95	-8.38	-5.31	-3.04	-5.68	-6.05	-7.15	-10.53	-7.82	-3.49	-19.1	-14.42	-7.32	-5.78	-15.74	-9.67	-10.52	-4.51	-7.26	-19.05
Θ(60°)	-11.98	-19.55	-9.59	-3.83	-12.43	-5.3	-1.82	-4.19	-4.37	-6.5	-9.82	-19.72	-9.67	-8.69	-9.95	-9.3	-6.21	-6.01	-12.93	-19.7	-13.12	-6.43	-11.64	-13.49
Θ(75°)	-11.68	-15.79	-18.49	-9.97	-19.6	-12.38	-2.53	-3.7	-7.04	-8.83	-15.6	-16.97	-12.11	-9.58	-14.71	-5.26	-9.5	-9.13	-8.14	-6.83	-4.63	-13.28	-8.42	-14.85
Θ(90°)	-10.86	-11.24	-8.81	-10.63	-13.27	-1.26	-6.94	-14.33	-13.33	-16	-18.63	-15.15	-14.32	-20.27	-19.55	-7.26	-7.5	-13.81	-9.92	-8.93</				