



Antenna Composite Gain Test Report

FCC ID	2AXXQHNRM30
Equipment	Wi-Fi7 Tri-band AP Router
Brand Name	HUMAX NETWORKS
Model Name	HNRM30
Applicant	Humax Networks, INC 216, Hwangsaeul-ro, Bundang-gu, Seongnam-si, South Korea 13595
Manufacturer	Humax Networks, INC 216, Hwangsaeul-ro, Bundang-gu, Seongnam-si, South Korea 13595
Standard	KDB662911 D03 v01
Sample Received	Aug. 06, 2024
Start Test Date	Aug. 20, 2024
Final Test Date	Aug. 20, 2024

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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History of this test report

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1. Operation Mode and Antenna Information

Antenna Position	RF Port		Brand Name	Model Name	Ant. Type	Connector	Modes of Operation
	2.4GHz	5GHz					
2G 5GAnt1	4	1	Galtronics	60-3693-03-2	PCB	I-PEX	2.4GHz, 5GHz
2G 5GAnt2	3	2	Galtronics	60-3693-03-2	PCB	I-PEX	2.4GHz, 5GHz
2G 5GAnt3	2	3	Galtronics	60-3693-03-1	PCB	I-PEX	2.4GHz, 5GHz
2G 5GAnt4	1	4	Galtronics	60-3693-03-1	PCB	I-PEX	2.4GHz, 5GHz

Note:

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

2G 5GAnt1~4 can be used as transmitting/receiving antenna.

2G 5GAnt1~4 could transmit/receive simultaneously.

2. Test Frequency

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

Band [MHz]	Test Frequency [MHz]
2400-2483.5	2450
5150-5250	5200
5250-5350	5300
5470-5725	5600
5725-5850	5785



3. Testing Location

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
Radiated	05CH03-HY	Vivi Jiang	23.5-24.5 / 45-55	Aug. 20, 2024

Note:

Testing Site Information

Brand Name: TDK

Dimension: 11m*6m*6m

Characteristic: Fully Anechoic Chamber

4. Test Facility and Configuration

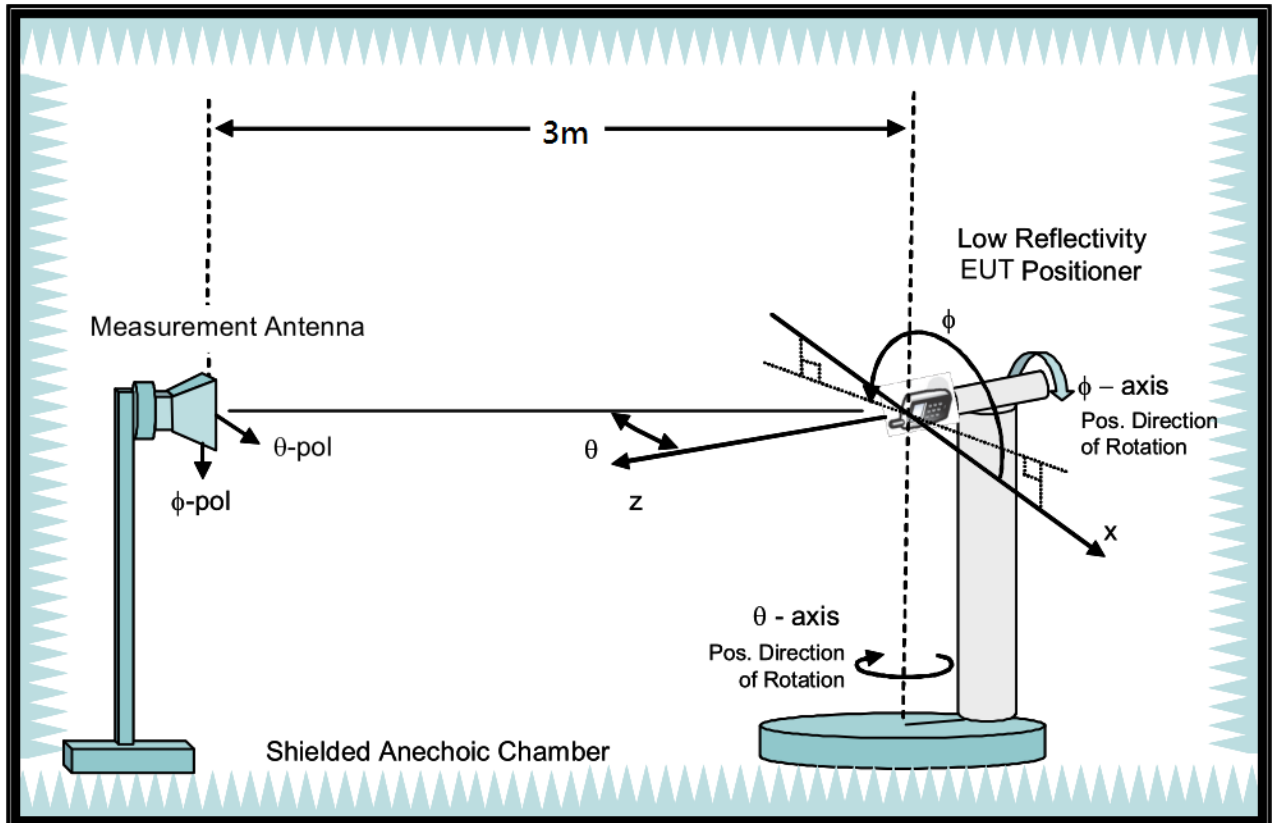
Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Measurement antenna: Dual Polarization Horn antenna

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

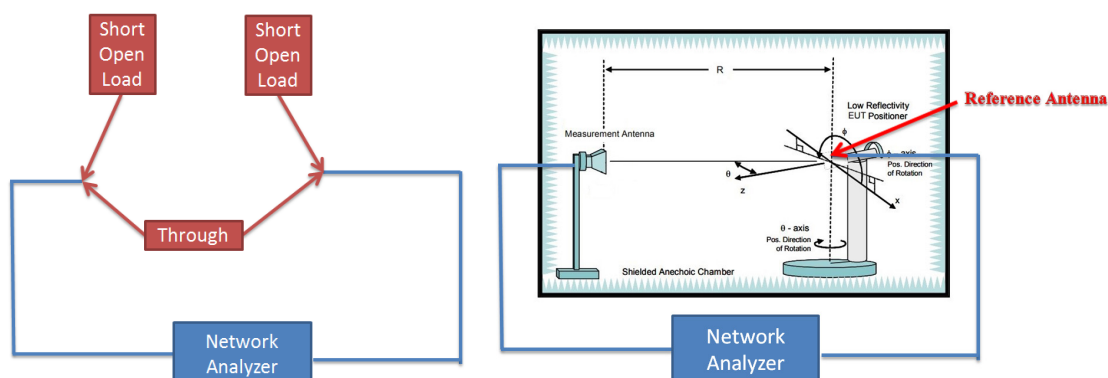
#Reference to CTIA "ctia-test-plan-for-wireless-device-over-the-air-performance-ver-3-7-1"



5. Reference Calibration

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

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



Frequency (MHz)	2400	2450	2500	5150	5200	5300	5600	5750	5800	5900	6000	6500	7000	7200
G(theta) reading (dB)	-33.55	-33.38	-32.91	-32.29	-32.48	-32.25	-32.33	-32.85	-32.67	-33.37	-32.53	-33.75	-34.72	-35.33
G(phi) reading (dB)	-33.11	-32.68	-32.48	-32.45	-32.85	-31.35	-32.76	-32.68	-32.57	-32.81	-32.85	-33.62	-34.33	-35.29
Reference gain (dBi)	10.3	10.3	10.1	11.1	11.3	11.7	12.1	11.5	11.2	11.1	11.3	11	11.1	10.5
Factor(theta) (dB)	43.85	43.68	43.01	43.39	43.78	43.95	44.43	44.35	43.87	44.47	43.83	44.75	45.82	45.83
Factor(phi) (dB)	43.41	42.98	42.58	43.55	44.15	43.05	44.86	44.18	43.77	43.91	44.15	44.62	45.43	45.79

Note:

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

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

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

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

6. Test Method

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

DG steps:

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

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

7. Measured Values and Calculation of Maximum Gain Positions

DG_1SS max value position

Frequency (Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 (dBi)	-2.77	1.52	-4.94	1.56	-6.13
Ant. 2 (dBi)	-1.17	1.49	-2.04	3.48	-14.27
Ant. 3 (dBi)	-5	-1.28	1.89	-5.92	4.48
Ant. 4 (dBi)	2.24	-6.7	2.45	-6.23	2.03
DG [1SS] (dBi)	4.75	5.35	5.86	5.3	5.17
Polarization	Theta	Phi	Theta	Theta	Theta
$\Theta(^{\circ})$	60	15	82.5	22.5	105
$\Phi(^{\circ})$	82.5	337.5	322.5	75	180

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 [$10^{(G/20)}$]	$10^{(-2.77/20)}$	$10^{(1.52/20)}$	$10^{(-4.94/20)}$	$10^{(1.56/20)}$	$10^{(-6.13/20)}$
Ant. 2 [$10^{(G/20)}$]	$10^{(-1.17/20)}$	$10^{(1.49/20)}$	$10^{(-2.04/20)}$	$10^{(3.48/20)}$	$10^{(-14.27/20)}$
Ant. 3 [$10^{(G/20)}$]	$10^{(-5/20)}$	$10^{(-1.28/20)}$	$10^{(1.89/20)}$	$10^{(-5.92/20)}$	$10^{(4.48/20)}$
Ant. 4 [$10^{(G/20)}$]	$10^{(2.24/20)}$	$10^{(-6.7/20)}$	$10^{(2.45/20)}$	$10^{(-6.23/20)}$	$10^{(2.03/20)}$
Ant. 1 [$10^{(G/20)}$] value	0.727	1.191	0.566	1.197	0.494
Ant. 2 [$10^{(G/20)}$] value	0.874	1.187	0.791	1.493	0.193
Ant. 3 [$10^{(G/20)}$] value	0.562	0.863	1.243	0.506	1.675
Ant. 4 [$10^{(G/20)}$] value	1.294	0.462	1.326	0.488	1.263
Sum All Antenna [Amax]	3.457	3.704	3.926	3.683	3.625
DG [$10 \cdot \log(A_{max}^2/N_{ant})$]	4.75	5.35	5.86	5.3	5.17

Note:

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

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

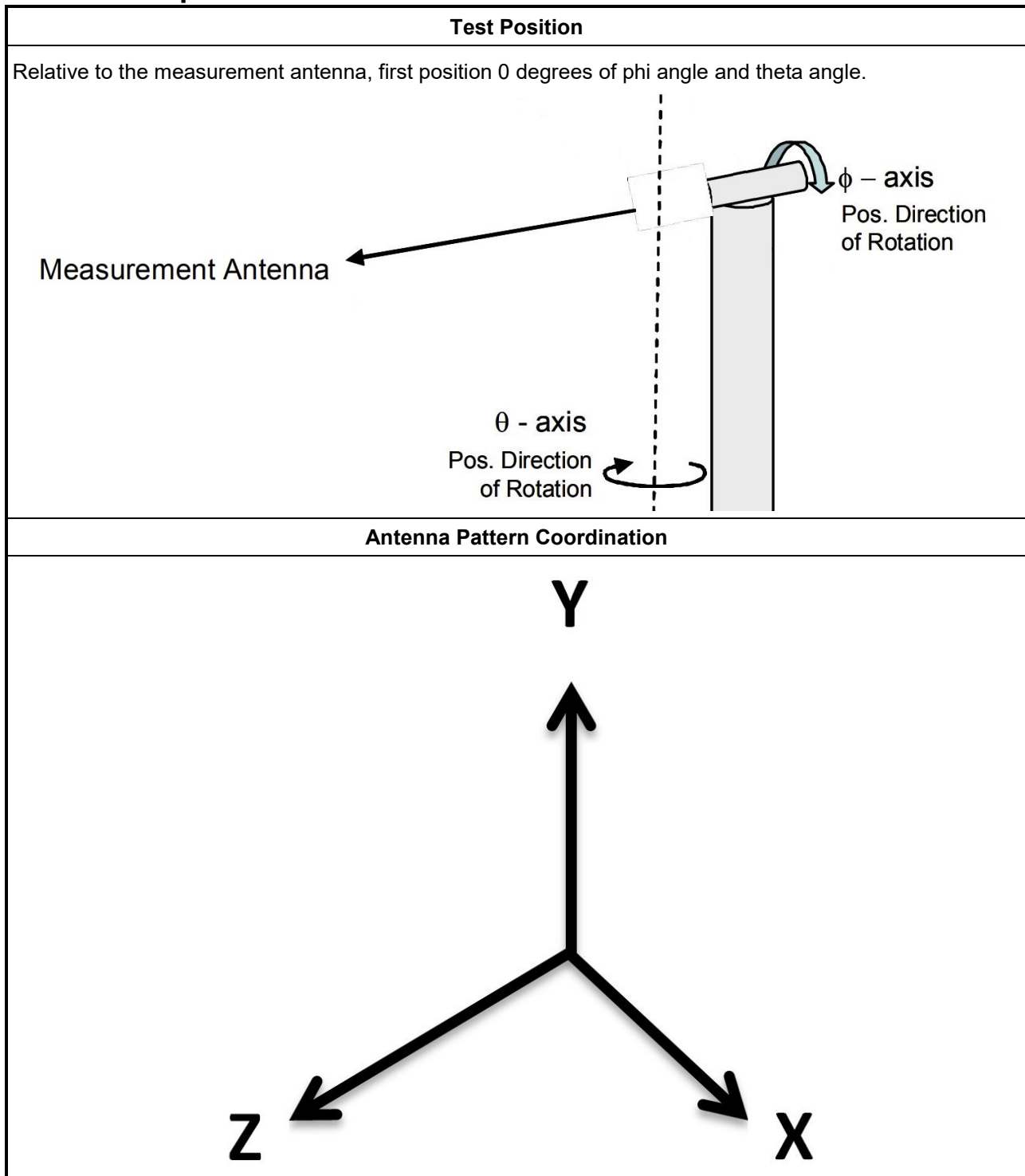
8. Summary of Test Result

Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	3.68	3.73	3.25	3.77	3.16
Ant. 2 Max Gain (dBi)	2.53	3.43	3.21	3.82	3.85
Ant. 3 Max Gain (dBi)	3.76	5.24	5.15	5.05	4.94
Ant. 4 Max Gain (dBi)	4.06	4.8	4.41	3.96	3.87
Ant. 1 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/90/0	Phi/135/345	Phi/135/337.5	Phi/112.5/337.5	Theta/30/240
Ant. 2 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Phi/75/157.5	Phi/37.5/345	Phi/127.5/150	Phi/52.5/150	Phi/52.5/157.5
Ant. 3 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/105/307.5	Theta/97.5/195	Theta/105/240	Theta/97.5/240	Theta/97.5/262.5
Ant. 4 Polarization/ $\Theta(^{\circ})/\Phi(^{\circ})$	Theta/75/105	Theta/97.5/337.5	Theta/105/337.5	Theta/75/22.5	Theta/75/22.5
Max Gain (dBi)	4.06	5.24	5.15	5.05	4.94
DG [1SS] (dBi)	4.75	5.35	5.86	5.3	5.17
DG [2SS] (dBi)	4.06	5.24	5.15	5.05	4.94
DG [4SS] (dBi)	4.06	5.24	5.15	5.05	4.94

Note:

1. Antenna max gain is the max value of each individual antenna through all measurement angles.
2. The max gain is the max value of all antennas.
3. Directional Gain (2SS) = Directional Gain (1SS) – 3dB. If directional gain is less than max gain, use max gain as directional gain. Refer to KDB662911D01 (F) (2) (e) (ii)
4. Directional Gain (4SS) = Directional Gain (1SS) – 6dB. If directional gain is less than max gain, use max gain as directional gain. Refer to KDB662911D01 (F) (2) (e) (ii)

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-1531	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024
Dual Polarization Horn Antenna	Sporton	S0209DP	S0209DP-001	2GHz~9GHz	N.C.R.	N.C.R.
ENA Series Network Analyzer	AGILENT	E5071C	MY46419477	100kHz~8.5GHz	Jul. 30, 2024	Jul. 29, 2025
VNA Calibration Kit	TS RF	TS85033E-F	-	DC~9GHz	N.C.R.	N.C.R.
Multi-axis positioner	Sporton	MAPS01	MAPS01-001	Theta / Phi axis	N.C.R.	N.C.R.
Test Software	SPORTON	SENSE-RDG	V1.0.8	-	N.C.R.	N.C.R.

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

NCR means Non-Calibration required.



11. Test Results

Please refer to the appendix.

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Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G
Ant. 1 Max Gain (dBi)	3.68	3.73	3.25	3.77	3.16
Ant. 2 Max Gain (dBi)	2.53	3.43	3.21	3.82	3.85
Ant. 3 Max Gain (dBi)	3.76	5.24	5.15	5.05	4.94
Ant. 4 Max Gain (dBi)	4.06	4.8	4.41	3.96	3.87
Ant. 1 Polarization/Θ(°)/Φ(°)	Phi/90/0	Phi/135/345	Phi/135/337.5	Phi/112.5/337.5	Theta/30/240
Ant. 2 Polarization/Θ(°)/Φ(°)	Phi/75/157.5	Phi/37.5/345	Phi/127.5/150	Phi/52.5/150	Phi/52.5/157.5
Ant. 3 Polarization/Θ(°)/Φ(°)	Theta/105/307.5	Theta/97.5/195	Theta/105/240	Theta/97.5/240	Theta/97.5/262.5
Ant. 4 Polarization/Θ(°)/Φ(°)	Theta/75/105	Theta/97.5/337.5	Theta/105/337.5	Theta/75/22.5	Theta/75/22.5
Max Gain (dBi)	4.06	5.24	5.15	5.05	4.94
DG [1SS] (dBi)	4.75	5.35	5.86	5.3	5.17
DG [2SS] (dBi)	4.06	5.24	5.15	5.05	4.94
DG [4SS] (dBi)	4.06	5.24	5.15	5.05	4.94



Radiated Composite Gain Data

Appendix A

DG 1SS Result

Freq(Hz)	2.45GPol.	Phi-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	2.772.35	1.821.35	0.69/-0.3	-1.62/-3.3	-4.39/-4.9	-5.22/-4.3	-3.59/-2.6	-1.09/-0.37	1.25/-1.93	2.55/-2.9	3.01/-1.3	3.11/-0.31	2.82/-2.38	1.81/-1.28	0.57/-0.3	-1.92/-3.76	-5.41/-6.36	-5.32/-3.75	-2.46/-1.06	0.18/-1.22	1.99/-2.61	2.99/-3.19	3.28/-3.17	3.08/-2.84
Θ(7.5°)	2.592.27	1.921.44	0.97/-0.21	-0.85/-2.27	-3.14/-3.93	-4.19/-3.79	-2.71/-1.63	-0.56/-0.61	1.58/-2.23	2.75/-3.12	3.27/-2.22	3.15/-2.93	2.58/-2.14	1.63/-1.02	0.24/-0.87	-2.32/-4.05	-5.46/-6.07	-5.17/-3.77	-2.39/-1.13	0.13/-1.33	1.92/-2.66	2.81/-2.98	3.06/-3.08	3.28/-3.82
Θ(15°)	2.292.16	1.831.51	1.160.56	-0.35/-1.6	-2.47/-3.16	-3.8/-3.91	-2.78/-1.73	-0.83/-0.21	1.32/-2.14	2.88/-3.27	3.43/-4.8	3.38/-3.11	2.58/-1.87	1.270.49	-0.34/-1.15	-2.35/-3.75	-5.51/-5.73	-4.96/-3.56	-2.24/-1.01	0.08/-0.87	1.57/-2.09	2.52/-7.3	2.81/-2.69	2.62/-2.4
Θ(22.5°)	1.74/-1.62	1.39/-1.3	0.83/-0.53	-0.12/-1.11	-2.37/-2.87	-3.72/-3.99	-3.27/-2.49	-1.06/-0	1.18/-9	2.54/-0.33	3.17/-3.13	3.01/-2.65	2.17/-1.58	0.88/-0.12	-0.68/-1.21	-2.08/-3.19	-4.47/-5.27	-4.66/-3.27	-1.97/-0.95	-0.22/-0.34	0.78/-1.24	1.45/-1.57	1.82/-1.91	1.96/-1.75
Θ(30°)	1.34/-1.11	0.66/-0.22	0.09/-0.02	-0.35/-0.97	-1.77/-2.68	-4.03/-4.7	-3.59/-2.05	-0.49/-0.5	1.07/-1.74	2.23/-2.55	2.73/-2.82	2.77/-2.49	2.03/-1.49	0.61/-0.44	-1.46/-1.97	-2.63/-3.64	-4.09/-4.68	-4.38/-3.07	-1.75/-0.84	-0.57/-0.15	0.26/-0.53	0.96/-1.11	1.37/-1.58	1.66/-1.44
Θ(37.5°)	1.220.82	0.33/-0.03	-0.34/-0.71	-0.97/-1.56	-2.34/-3.67	-5.62/-5.79	-3.35/-1.23	0.24/-0.94	1.27/-1.64	1.64/-1.85	2.04/-2.33	2.4/-2.28	2.01/-1.26	0.33/-0.78	-1.84/-3.03	-4.5/-5.18	-5.81/-5.9	-4.51/-2.36	-0.91/-0.37	0.88/-1.05	1.39/-1.67	1.76/-1.81	1.86/-1.89	1.81/-1.65
Θ(45°)	0.66/-0.36	0.03/-0.02	-0.28/-0.84	-1.63/-2.3	-3.2/-4.81	-6.12/-6.1	-4.21/-1.69	-0.20/-45	0.85/-1.12	1.61/-1.26	1.67/-2.16	2.24/-2.41	2.39/-2.1	1.43/-0.44	-0.71/-2.12	-4.22/-5.85	-7.55/-8.02	-6.38/-3.61	-1.29/-0.27	1.25/-1.6	1.59/-1.65	1.62/-1.59	1.39/-1.34	1.22/-0.92
Θ(52.5°)	0.890.66	0.390.07	-0.45/-1.64	-2.92/-4.38	-4.77/-4.9	-5.35/-5.58	-4.18/-2.04	-0.82/-0.06	0.420.89	1.08/-1.79	2.48/-2.94	3.13/-1.8	3.26/-2.89	2.1/-1.08	-0.09/-1.27	-3.39/-5.62	-6.98/-7.89	-8.05/-5.86	-2.94/-0.91	0.160.63	0.820.81	1.09/-1.31	1.35/-1.23	1.14/-1.01
Θ(60°)	1.67/-1.52	1.44/-1.04	0.33/-0.88	-2.7/-4.28	-4.46/-4.59	-4.6/-4.58	-3.21/-1.82	-1.07/-0.99	0.89/-0.29	0.71/-29	2.11/-2.61	2.71/-2.61	2.5/-2	1.690.99	0.11/-1.1	-2.99/-5.52	-6.75/-7.54	-7.43/-5.56	-3.99/-3.3	-2.7/-2.4	-1.85/-0.93	0.31/-12	1.63/-1.88	2.12/-1.82
Θ(67.5°)	1.030.61	0.71/-0.5	-0.17/-1.33	-2.41/-3.14	-3.96/-4.95	-5.72/-5.7	-3.88/-2.39	-1.78/-1.28	-0.06/-1.16	1.91/-2.44	2.78/-2.87	2.49/-1.81	0.77/-0.2	-0.19/-0.71	-1.58/-2.94	-4.48/-5.57	-5.91/-6.31	-6.08/-5.15	-4.67/-4.32	-4.34/-3.76	-2.8/-1.6	-0.610.29	0.95/-1.21	1.45/-1.23
Θ(75°)	1.430.81	0.33/-0.17	-1.07/-2.45	-3.27/-3.83	-4.53/-5.91	-6.28/-5.46	-4.02/-2.87	-2.55/-1.86	-0.550.8	1.59/-2.16	2.67/-3.09	3.19/-2.69	1.71/-0.35	-1.12/-2.12	-2.74/-3.01	-3.42/-4.52	-5.71/-6.89	-6.96/-6.35	-4.3/-3.67	-3.2/-2.47	-1.68/-0.66	0.180.76	1.1/-1.4	1.68/-1.54
Θ(82.5°)	1.65/-1.5	1.270.94	-0.15/-1.89	-3.58/-4.53	-5.5/-6.08	-6.75/-6.71	-5.89/-4.54	-3.26/-1.66	-0.480.53	1.21/-85	2.42/-84	2.81/-229	1.380.33	-0.65/-0.81	-0.47/-0.65	-1.92/-3.8	-2.66/-8.7	-8.9/-7.21	-5.24/-4.43	-4/-3.11	-1.58/-0.49	0.240.81	1/-1.05	1.32/-1.62
Θ(90°)	1.91/-1.9	1.74/-1.36	0.36/-1	-1.96/-3.15	-3.51/-4.03	-4.64/-4.9	-4.51/-3.58	-2.55/-1.37	-0.080.9	1.69/-2.16	2.39/-2.5	2.49/-2.43	2.15/-1.93	1.84/-1.78	1.28/-0.06	-2.48/-5	-7.12/-7.86	-6.99/-5.81	-5.36/-4.5	-3.37/-2.18	-1.13/-0.33	0.54/-1.63	1.86/-1.66	1.71/-1.8
Θ(97.5°)	1.83/-1.68	1.220.75	0.520.11	-0.67/-1.65	-2.65/-4.08	-5.11/-5.44	-5.26/-4.08	-2.92/-2.25	-1.43/-0.21	0.74/-1.11	1.46/-1.64	1.75/-1.72	1.190.66	0.430.04	-0.97/-2.63	-4/-4.58	-4.26/-2.43	-4.59/-4.22	-3.96/-4	-3.42/-3.02	-2.42/-1.33	0.21/-32	1.79/-1.83	1.72/-1.77
Θ(105°)	2.482.33	1.91/-1.49	1.48/-1.25	0.57/-0.52	-1.78/-3	-4.29/-5.25	-5.72/-4.74	-3.94/-3.49	-3.59/-2.88	-1.8/-0.84	0.030.41	0.830.78	0.38/-0	-0.25/-0.78	-1.65/-2.9	-3.82/-4.25	-4.03/-3.82	-3.25/-3.2	-3.3/-2.86	-2.3/-2.32	-1.66/-0.21	1.162.18	2.65/-2.53	
Θ(112.5°)	2.562.22	1.54/-1.28	1.52/-1.3	0.24/-1.31	-2.69/-3.67	-4.99/-5.97	-5.85/-4.95	-4.24/-4.56	-4.86/-4.39	-3.37/-1.8	-0.540.3	0.580.69	0.80/-71	0.11/-1.2	-3.22/-5.18	-5.26/-4.88	-4.6/-4.43	-4.67/-4.64	-3.26/-1.87	-1.28/-1.51	-2.49/-2.78	-1.51/-0.12	1.442.51	2.98/-2.9
Θ(120°)	1.84/-1.97	1.972.01	2.12/-1.71	0.39/-1.63	-3.53/-4.1	-4.19/-4.01	-3.1/-2.36	-2.38/-3.24	-3.99/-4.25	-3.67/-2.46	-1.51/-0.9	-0.47/-0.06	0.340.28	-0.49/-2	-3.79/-4.49	-3.53/-2.88	-3.48/-4.6	-4.6/-4.61	-3.51/-1.97	-1.25/-1.23	-1.86/-3.07	-2.73/-1.59	-1.21/-0.29	0.59/-1.1
Θ(127.5°)	0.480.51	0.430.47	0.470.11	-0.31/-0.44	-3.9/-4.64	-4.2/-3.52	-4.24/-2.51	-2.73/-0.8	-3.42/-3.24	-2.62/-1.99	-1.44/-0.87	-0.53/-1.09	-1.79/-2.3	-2.67/-2.65	-1.96/-1.41	-1.53/-2.54	-3.08/-2.84	-2.05/-1.55	-1.24/-1.02	-1.25/-1.05	-0.350.48	0.530.07	-0.160.16	
Θ(135°)	0.560.71	0.37/-0.51	-1.14/-1.55	-2.13/-2.93	-3.86/-4.44	-4.83/-5.13	-5.11/-4.74	-4.37/-4.54	-4.1/-3.4	-2.96/-2.49	-2.19/-1.75	-1.49/-1.28	-1.59/-2.4	-3.09/-3.76	-4.73/-5.62	-5/-3.91	-3.59/-4.07	-3.61/-3.08	-2.77/-3.08	-3.74/-45	-4.3/-3.99	-1.93/-0.67	-0.39/-0.54	-0.120.53
Θ(142.5°)	0.080.62	0.840.26	-0.64/-1.12	-1.28/-1.48	-1.97/-2.89	-4.09/-5.26	-5.7/-6.46	-4.72/-6.43	-4.36/-4.23	-4.29/-3.72	-3.54/-3.55	-3.06/-2.85	-2.55/-2.52	-2.78/-3.21	-3.83/-4.67	-3.75/-2.94	-2.59/-2.63	-2.33/-2.14	-2.57/-3.41	-4.57/-5.88	-7.51/-8.79	-6.17/-3.68	-2.6/-2.35	-1.81/-0.77
Θ(150°)	-0.640.13	0.420.16	-0.31/-0.98	-1.32/-1.58	-1.92/-2.52	-3.36/-3.52	-3.28/-2.81	-2.27/-2.07	-1.65/-1.7	-1.14/-0.45	-0.290.45	-0.53/-0.68	-0.70/-0.52	-0.54/-0.98	-1.46/-1.8	-2.26/-2.57	-2.98/-3.86	-4.14/-4.66	-4.94/-5.35	-5.51/-5.6	-3.82/-2.78	-1.91/-1.4	-1.31/-1.24	
Θ(157.5°)	-1.25/-1.37	-1.59/-2.33	-2.83/-3.73	-4.13/-4.1	-3.66/-3.7	-3.78/-3.74	-3.29/-3	-2.91/-2.6	-2.22/-1.71	-0.94/-0.25	-0.01/-0.07	-0.37/-0.61	-1/-1.22	-1.52/-1.87	-2.45/-3.43	-4.22/-4.84	-5.14/-5.35	-5.44/-5.42	-5.38/-5.61	-6.22/-5.85	-5.22/-4.36	-3.27/-2.51	-1.67/-1.23	-1.2/-1.31
Θ(165°)	-1.45/-1.96	-2.91/-4.38	-5.85/-7.2	-7.94/-8.08	-7.47/-7.24	-7.33/-6.91	-6.16/-5.7	-5.39/-4.78	-3.95/-3.52	-3.07/-2.42	-2.02/-1.87	-1.83/-2.18	-2.78/-3.36	-4.04/-4.92	-5.43/-6.4	-6.44/-6.38	-6.41/-6.15	-6.08/-6.01	-6.37/-6.96	-7.51/-7.36	-6.04/-4.73	-3.81/-2.81	-1.8/-1.24	-1.02/-1.15
Θ(172.5°)	-1.8/-2.55	-4.13/-3.83	-4.54/-5.39	-6.29/-6.24	-6.04/-6.25	-6.63/-6.49	-5.81/-5.93	-5.87/-5.32	-4.88/-4.93	-4.67/-3.96	-3.52/-3.76	-4.58/-4.25	-4.74/-8.6	-5.21/-5.4	-5.57/-5.74	-5.75/-5.2	-5.08/-5.27	-5.17/-5.34	-5.72/-7.11	-6.59/-6.95	-3.05/-2.88	-2.08/-1.66	-1.35/-1.39	
Θ(180°)	-3.55/-3.69	-4.27/-4.61	-4.28/-4.53	-4.56/-4.36	-4.47/-4.89	-5.65/-6.5	-6.3/-6.71	-6.85/-6.3	-5.47/-5.39	-4.75/-4.13	-3.37/-2.72	-2.19/-1.77	-1.43/-1.11	-1.07/-1.39	-2.18/-2.78	-3.16/-3.51	-3.85/-4.09	-4.58/-4.94	-5.53/-6.06	-6.51/-6.6	-6.27/-5.45	-4.49/-3.92	-3.48/-3.19	-3.19/-3.4
Freq(Hz)	2.45GPol.	Theta-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-	Φ-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-2.87/-1.6	-0.370.64	1.442.07	2.39/-2.6	2.65/-2.52	2.412.28	1.99/-1.7	1.350.61	-0.39/-1.33	-2.52/-4.03	-5.31/-6.11	-5.63/-4.24	-2.58/-1.39	-0.330.58	1.35/-1.95	2.332.73	2.922.95	2.952.8	2.41/-85	1.150.21	-0.98/-2.2	-3.9/-5.2	-6.09/-6.34	-5.21/-4.08
Θ(7.5°)	-3.03/-1.69	-0.420.62	1.672.28	2.72.94	3.032.92	2.952.85	2.672.35	1.740.92	-0.25/-1.57	-3.23/-5.09	-6.65/-6.79	-5.37/-3.78	-2.36/-1.15	-0.240.55	1.11/-53	1.761.98	2.172.2	1.971.78	1.450.94	0.36/-0.54	-1.66/-2.79	-4.31/-5.47	-6.38/-6.15	-5.26/-4.17
Θ(15°)	-3.44/-2.13	-0.890.2	1.15/-1.85	2.312.67	2.973.15	3.353.43	3.393.08	2.51/-65	0.37/-1.18	-3.05/-5.23	-6.9/-6.4	-5.32/-3.77	-2.46/-1.56	-0.610.23	0.891.35	1.681.85	2.02.02	1.871.56	1.240.83	0.26/-0.58	-1.6/-2.8	-4.19/-5.47	-6.11/-6.57	-6.09/-5.12
Θ(22.5°)	-4.51/-3.04	-1.67/-0.54	0.38/-1.19	1.822.29	2.512.93	3.332.52	3.279.91	0.71/-0.92	-3.194.76	-5.83/-5.01	-4.09/-2.84	-1.88/-1.06	-0.070.67	1.31/-71	2.022.22	2.392.31	2.222.01	1.81/-41	0.72/-0.19	-1.26/-2.64	-3.65/-6.32	-6.89/-7.51	-6.94/-6.04	
Θ(30°)	-4.79/-3.73	-2.49/-1.48	-0.560.24	1.03/-1.73	2.383.03	3.613.88	4.083.87	3.372.67	1.670.51	-0.87/-2.46	-3.16/-3.25	-2.96/-2.6	-1.97/-1.09	-0.240.6	1.03/-1.29	1.55/-1.92	2.022.03	2.032.04	1.991.69	1.20/-43	-0.68/-1.83	-3.65/-5.27	-6.4/-7.26	-7.15/-6.23
Θ(37.5°)	-4.02/-3.12	-2.3/-1.76	-1.15/-0.49	0.28/-1.21	2.41/-3.3	3.924.37	4.420.46	3.492.86	2.17/-1.4	0.28/-0.8	-1.73/-2.24	-2.23/-2.06	-1.68/-1	-0.38/-0.14	0.070.17	0.370.44	0.560.88	1.21/-149	1.56/-1.51	1.220.69	-0.19/-1.6	-3.21/-3.96	-4.48/-4.49	-4.71/-4.33
Θ(45°)	-2.55/-1.91	-0.71/-0.88	-0.420.15	0.81/-7.9	2.893.69	4.213.38	4.133.68	2.792.17	1.680.99	0.04/-0.75	-1.21/-2.23	-1.24/-1.12	-1.170.88	-0.44/-0.26	-0.16/-0.22	-0.27/-0.29	-0.37/-0.25	0.300.53	1.061.25	1.361.27	0.72/-0.31	-1.61/-2.21	-2.35/-2.66	-3.08/-2.95
Θ(52.5°)	-2.43/-1.44	-0.74/-0.04	0.47/-1.04	1.572.38	3.033.82	4.314.4	4.2																	



Radiated Composite Gain Data

Appendix A

Θ(15°)	3.973/2.4	2.191/5.9	0.920/4.1	-1.09/-2.46	-3.71/-4.52	-5.45/-4.39	-1.85/-0.63	0.140/2.72	1.041/1.18	1.140/9.5	1.171/21.29	1.181/33	1.080/7.4	0.510/46	0.31/-0.41	-1.85/-3.84	-5.86/-5.8	-3.97/-2.23	-0.620/46	1.772/66	3.183/7.9	4.274/5.7	4.87/4.86	4.784/5
Θ(22.5°)	3.723/0.1	2.411/5.3	0.8/-0.26	-1.38/-2.46	-3.43/-5.48	-7.74/-5.35	-2.14/-0.6	0.50/9	0.930/68	0.440/59	0.99/12.1	1.461/5.2	1.54/1.15	0.780/54	0.80/31	-1.11/-2.79	-3.56/-3.06	-1.62/-0.23	0.61/24	2.09/2.85	3.34/3.85	4.014/33	4.89/4.86	4.894/43
Θ(30°)	2.662/16	1.88/23	0.82/-0.36	-1.01/-2.32	-4.32/-7.91	-9.37/-6.04	-3.21/-1.21	-0.65/-0.55	-0.35/-0.11	0.150/88	1.77/2.18	1.88/1.78	1.64/1.3	0.840/64	0.530/11	-1.46/-3.44	-4.84/-5.97	-5.3/-3.21	-1.10/0.1	0.61/1.41	1.83/1.83	2.22/62	3.163/32	2.442/66
Θ(37.5°)	1.582/08	2.6/21	1.180/16	-1.11/-2.61	-4.72/-7.65	-7.54/-5.44	-3.73/-2.55	-2.47/-1.67	-1.24/-0.87	-0.46/0.72	1.71/1.44	0.770/65	0.29/-0.35	-1.09/-0.67	-0.14/-0.27	-1.59/-4.46	-7.89/-8.66	-7.89/-5.09	-3.85/-3.81	-3.17/-2.07	-1.9/-0.54	1.252/53	2.983/06	2.792/11
Θ(45°)	0.890/94	1.58/1.17	0.7/-0.28	-1.94/-3.14	-4.29/-5.97	-6.72/-5.13	-3.59/-3.1	-3.8/-3.87	-2.8/-2.72	-1.69/-0.05	1.320/66	-0.11/-0.12	0.580/54	-1.01/-1.73	-3.87/-4.03	-2.88/-3.27	-4.23/-5.72	-6.15/-4.12	-2.2/-1.96	-2.11/-1.99	-0.490/64	1.222/17	2.642/47	1.751/18
Θ(52.5°)	1.491/01	0.802/-0.42	-0.28/-2.91	-3.68/-3.89	-4/-6	-6/-5.81	-4.05/-2.8	-2.46/-3.13	-2.33/-1.32	-0.840/22	1.070/41	0.581/07	1.460/69	0.570/08	-2.22/-3.19	-3.54/-3.51	-5.93/-6.06	-4.7/-3.14	-2.04/-1.68	-1.7/-1.58	-0.480/58	1.21/1.15	1.452/49	2.752/3
Θ(60°)	1.310/42	0.27/-0.36	-0.98/-2.62	-3.49/-4.87	-4.68/-5.74	-5.94/-4.24	-2.37/-1.9	-2.46/-3.87	-4.3/-2.64	-2.45/-1.93	-1.96/-0.96	-0.810/25	0.620/58	0.70/78	-0.76/-3.75	-4.84/-4.81	-5.4/-8.77	-10.82/-8.09	-5.08/-3.15	-2.49/-1.39	-1.23/-0.53	0.781/95	2.081/8	1.81/4
Θ(67.5°)	1.85/1	0.19/-0.63	-2.27/-3.34	-3.13/-3.98	-3.98/-6.57	-4.34/-4.82	-5.56/-5.65	-4.63/-6.06	-5.48/-1.83	-0.55/-0.34	0.822/44	2.55/20.1	0.95/-0.42	-3.12/-4.33	-7.24/-9.08	-9.03/-10.08	-7.97/-7.04	-6.24/-7.43	-2.98/-1.86	-1.6/-1.46	-2/-1.22	-0.160/69	1.1/1.57	
Θ(75°)	0.84/-0.66	-0.16/-0.58	-1.65/-4.2	-5.68/-5.28	-5.11/-5.73	-4.34/-3.33	-3.35/-3.33	-5.49/-6.5	-5.68/-2.91	-0.080/89	0.980/15	0.94/1.71	1.471/92	1.80/44	-1.84/-3.18	-3.79/-4.88	-6.49/-9.22	-6.9/-2.4	-1.57/-1.6	-0.91/-2.3	-2.96/-3.09	-1.66/-0.8	-0.330/16	1.691/47
Θ(82.5°)	-0.14/-1.11	-2.04/-2.9	-3.82/4	-3.45/-4.22	-4.59/-3.91	-2.95/-2.72	-2.71/2.58	-4.32/-5.53	-5.96/-2.03	1.34/1.49	0.53/-0.67	-0.34/-0.15	-0.010/82	0.75/-0.11	-2.51/-3.7	-4.12/-7.25	-8.76/-10.23	-7.05/-4.05	-3.73/-4.55	-5.17/-4.62	-3.92/-2.62	-0.490/64	1.14/1.2	1/1.02
Θ(90°)	-1.27/-2.15	-1.52/-1.45	-2.82/-2.69	-2.71/-5.1	-7.6/-5.55	-5.2/-5.46	-4.84/-4.7	-4.57/-5.8	-5.93/-2.81	-1.110/48	0.940/14	-0.12/-0.27	-1.35/-2.27	-2.28/-2.97	-4.69/-6.08	-7.68/-7.89	-8.36/-8.96	-8.09/-7.74	-3.69/-5.86	-4.59/-4.29	-2.85/-2.91	-2.91/-2.47	-0.630/29	0.70/36
Θ(97.5°)	-1.63/-2.16	-2.52/4	-4.66/-4.67	-5.03/-7.21	-8.08/-6.26	-5.98/-6.07	-4.3/-1.94	-1.54/-0.3	-3.45/-6.9	0.66/1.1	0.36/-1.19	-2.22/-2.57	-2.91/-2.74	-3.67/-5.63	-3.91/-4.8	-5.52/-7.6	-6.65/-7.11	-6.48/-6.14	-3.34/-2.18	-2.81/-2.39	-1.67/-0.95	-2.27/-1.85	-1.36/-0.8	-0.39/-1.02
Θ(105°)	-0.23/-0.64	-0.5/-2.26	-4.06/-3.83	-5.08/-8.22	-6.57/-3.91	-3.35/-4.08	-3.69/-2.07	-1.35/-2.2	-2.75/-2.02	-0.72/-0.36	-0.61/-1.29	-0.92/-2.15	-3.93/-5.04	-7.03/-5.12	-3.18/-2.16	-4.45/-4.66	-8.55/-6.24	-4.1/-5.5	-6/-4.48	-1.9/-0.69	0.06/-0.31	0.55/-0.02	1.422/85	2.650/95
Θ(112.5°)	-1.4/-0.54	-0.61/-1.41	-2.88/-3.7	-7.25/-6.68	-5.47/-7.09	-5.97/-2.99	-6.66/-5.37	-3.87/-3.35	-1.66/-0.29	-0.3/-1.93	-2.73/-2.32	-1.26/-1.2	-1.74/-2.11	-1.78/-1.97	-1.16/-0.74	-4.97/-6.09	-4.63/-4.08	-6.13/-3.37	-2.13/-2.71	-0.630/69	-0.91/-0.11	0.64/1.28	0.36/-1.42	
Θ(120°)	-3.873/2.22	-2.58/-2.15	-2.09/-2.86	-5.02/-6.69	-7.57/-7.49	-9.04/-10.41	-7.18/-4.42	-4.57/-6.01	-0.33/-2.08	-1.09/-1.27	-0.43/-0.23	-0.69/-0.91	-1.92/-4.74	-5.72/-4.48	-4.27/-3.08	-3.05/-5.71	-3.19/-5.12	-4.35/-6.88	-7/-4.34	-3.96/-2.63	-3.4/-3.17	-3.81/-1.65	-2.57/-3.07	-3.96/-3.27
Θ(127.5°)	-3.92/-4.68	-4.47/-2.56	-1.78/-2.05	-4.59/-7.86	-9.37/-8.06	-10.39/-10.08	-6.47/-5.54	-6.79/-5.41	-1.55/-0.02	0.08/-0.28	-0.27/-0.85	-0.29/-1.09	-2.79/-4.75	-3.57/-4.19	-1.83/-1.7	-3.45/-3.4	-4.93/-6.25	-3.66/-3.52	-6.51/-7.86	-6.13/-3.1	-2.1/-3.47	-1.64/-2.76	-1.65/-0.83	-1.95/-3.05
Θ(135°)	-1.79/-1.33	-1.17/-1.65	-1.67/-3.89	-4.78/-3.83	-4.78/-7.5	-10.44/-6.88	-6.36/-6.09	-6.66/-5.37	-3.87/-3.35	-1.66/-0.29	-0.3/-1.93	-2.73/-2.32	-1.26/-1.2	-1.74/-2.11	-1.78/-1.97	-1.16/-0.74	-4.97/-6.09	-4.63/-4.08	-6.13/-3.37	-2.13/-2.71	-0.630/69	-0.91/-0.11	0.64/1.28	0.36/-1.42
Θ(142.5°)	0.02/-0.25	-0.69/-2.26	-3.65/-4.04	-3.29/-3.78	-4.5/-4.62	-3.67/-4.45	-6.16/-7.12	-6.64/-4.78	-2.99/-2.42	-2.28/-2.17	-2.27/-3.13	-3.66/-4.16	-4.02/-2.87	-3.37/-3.57	-4.24/-3.46	-2.11/-1.85	-3.34/-3.61	-2.82/-4	-5.16/-2.8	-2.47/-2.61	-1.61/-0.26	-0.85/-0.61	0.491/63	1.661/09
Θ(150°)	-3.28/-3.56	-3.8/-4.69	-5.1/-4.68	-6.14/-8.68	-7.17/-5.26	-4.39/-4.57	-6.04/-6.54	-5.9/-3.89	-2.29/-1.45	-0.98/-0.72	-1.6/-3.16	-3.91/-5.43	-9.36/-9.82	-7/-4.52	-2.72/-2.44	-2.79/-2.41	-2.07/-2.04	-3.44/-4.73	-4.29/-3.01	-2.49/-2.79	-1.11/-0.29	-0.21/-0.18	-0.14/-0.35	-1.44/-2.49
Θ(157.5°)	-3.71/-4.7	-4.67/-4.19	-4.71/-4.74	-5.08/-5.35	-4.64/-4.31	-4.07/-5.38	-6.17/-6.35	-5.69/-4.66	-4.27/-4.27	-3.85/-6.38	-4.34/-4.82	-4.56/-4.2	-4.23/-4.27	-3.59/-2.55	-1.51/-0.93	-0.86/-1.17	-2.25/-2.99	-4.16/-4.68	-3.78/-2.53	-1.86/-1.58	-1.07/-0.88	-0.95/-0.65	-0.59/-1.11	-1.43/-2.39
Θ(165°)	-2.71/-2.91	-3.63/-4.62	-5.22/-6.04	-6.58/-7.42	-8.02/-8.11	-7.99/-6.26	-5.69/-5.31	-4.77/-4.22	-4.32/-4.58	-4.29/-4.06	-3.81/-3.81	-3.83/-3.95	-3.47/-2.75	-1.58/-0.83	-0.91/-57	-2.73/-3.78	-4.08/-4.64	-4.53/-4.09	-3.36/-2.98	-2.82/-2.72	-1.84/-1.16	-0.55/-0.42	-0.44/-1.19	-1.96/-2.53
Θ(172.5°)	-3/-3.73	-4.62/-5.61	-6.18/-6.79	-7.59/-7.84	-7.94/-7.38	-6.49/-5.25	-4.81/-4.54	-4.09/-3.64	-3.48/-3.6	-3.91/-3.95	-3.98/-4.21	-4.01/-4.25	-4.75/-5.37	-6.04/-6.62	-7.39/-6.77	-6.35/-6.45	-6.71/-7.49	-6.49/-9.26	-8.95/-8.28	-6.97/-5.9	-4.47/-3.51	-2.82/-2.46	-2.13/-2.32	-2.26/-2.45
Θ(180°)	-2.56/-2.82	-3.28/-3.41	-3.71/-4.23	-5.1/-4.2	-6.94/-7.36	-7.61/-7.17	-7.64/-7.25	-6.64/-6.44	-6.32/-6.32	-6.36/-5.71	-5.12/-4.63	-4.2/-3.69	-3.06/-2.59	-2.55/-2.88	-3.22/-3.62	-4.56/-5.57	-6.6/-8.3	-8.93/-9.52	-8.55/-7.99	-7.19/-6.1	-4.99/-4.68	-4.19/-4.23	-3.98/-3.71	-3.1/-2.95
Freq(Hz)	5.3GPol.	Theta1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-4.86/-2.72	-1.13/-0.15	0.571/0.3	1.642/1.9	2.542/7.5	2.82/92	3.133/08	2.512/3	1.480/5	-0.63/-1.81	-3.61/-5.84	-8.02/-8.11	-6.61/-4.03	-2.18/-0.89	0.22/1.19	2.02/49	2.973/04	3.33/55	3.332/85	2.31/86	0.990/13	-0.53/-1.64	-2.84/-4.2	-6.28/-6.14
Θ(7.5°)	-5.47/-3.68	-2.06/-2.82	0.191/0.9	1.912/48	2.582/71	2.67/52	2.76/52	2.14/1.6	0.990/07	-0.68/-1.74	-2.9/-4.34	-5.74/-5.03	-6.14/-1.44	-0.470/39	1.281/86	2.35/27	2.983/2	3.33/46	3.342/95	2.34/1.7	1.250/22	-0.86/-2.13	-3.48/-6	-6.11/-6.58
Θ(15°)	-2.69/-2.23	-1.15/-0.05	0.71/56	2.36/3.3	3.593/62	3.593/27	2.812/0.1	1.20/67	0.080/06	-0.18/-0.72	-1.68/-2.75	-3.45/-2.46	-1.080/45	1.411/78	1.922/1	2.082/22	2.28/2.57	2.72/63	2.432/02	1.410/82	0.23/-0.31	-0.56/-1.18	-1.93/-3.24	-2.94/-3.08
Θ(22.5°)	-1.19/-0.11	0.671/35	1.791/88	2.422/81	3.173/63	3.85/0.4	3.973/5	2.791/77	0.612/0.23	-1/-1.9	-2.6/-2.93	-3.12/-2.8	-1.97/-0.78	0.421/19	1.822/35	2.532/83	2.993/05	2.972/89	2.942/96	2.41/57	0.630/48	0.430/0.4	-0.71/-1.29	-1.14/-0.96
Θ(30°)	-0.140/7.2	1.432/23	2.832/9	3.042/76	2.181	2.172/58	2.72/49	1.880/51	-0.45/-1.21	-1.69/-1.99	-2.76/-3.07	-3.68/-3.65	-2.98/-1.44	0.321/17	1.771/94	1.751/84	2.072/29	2.652/85	2.952/85	2.341/83	1.440/81	0.29/-0.4	-1.31/-1.79	-1.11/-0.18
Θ(37.5°)	0.140/25	1.182/39	3.443/73	3.553/21	2.722/35	2.342/49	2.582/49	1.91/34	0.640/09	-0.58/-1.74	-3.79/-4.79	-6.73/-4.11	-1.02/-0	0.071/19	2.282/73	2.792/74	2.332/13	1.971/78	2.092/08	1.781/46	1.250/77	0.4/-0.5	-1.87/-2.18	-0.92/-1.16
Θ(45°)	-0.270/39	1.852/23	3.013/37	3.733/59	2.832/43	2.642/63	2.321/67	0.960/69	0.5/-0	-0.29/-0.57	-2.57/-2.07	-3.03/-3.4	-0.370/89	1.391/69	2.052/81	2.852/24	2.53/29	3.121/97	1.141/88	3.022/93	1.970/82	0.09/-0.52	-1.77/-1.99	-1.47/-0.67
Θ(52.5°)	-0.910/76	2.192/72	3.43/25	2.932/21	1.922/16	2.21/82	1.240/66	0.250/1	0.621/27	0.48/-0.91	-2.15/-1.27	-0.73/-1.69	-0.86/-0.08	1.511/99	2.05/2	2.131/9	2.362/53	1.721/3	1.161/41	2.071/93	1.982/03	1.310/9	-0.81/-1.24	-1.74/-2.13
Θ(60°)	-1.47/-0.14	1.082/07	3.07/27	2.12/53	1.121/17	0.42/1.31	1.480/74	-0.61/-1.49	-1.120/51	2.160/95	0.710/95	0.98/-0.01	1/1.01	1.371/59	2.022/04	2.172/45	3.192/72	1.610/58	0.42/-0.4	0.121/53	2.252/17	2.772/23	1.050/45	-0.21/-1.83
Θ(67.5°)	-1.26/-0.47	0.81/37	2.162/0.1	2.04/22	1.430/52	1.090/76	-0.44/-1.4	-3.09/-2.86	-1.60/1.2	1.821/16	1.332/29	2.271/23	2.51/2	1.871/25	1.172/18	3.232/92	2.271/56	1.271/34	1.170/82	0.742/98	3.52/81	2.573/29	2.861/73	1.04/-1.23
Θ(75°)	-0.13/-0.48	0.811/57	1.751/19	0.87/-0.2	-0.85/-0.06	1.010/35	-0.050/0.4	-0.76/-2.08	-0.560/25	1.483/25	3.193/52	3.091/25	0.781/72	1.760/02	-1.05/-0.16	1.861/88	2.131/85	1.340/51	0.271/1.63	1.62/09	3.012/78	44.1	3.021/94	1.160/06
Θ(82.5°)	1.410/33	1.72/55	1.910/51	0.3/-2.21	-5.13/-4.86	-3.4/-1.37	0.971/35	0.15/-2.1	-2.88/-0.89	0.993/42	3.664													



Radiated Composite Gain Data

Appendix A

Θ(67.5°)	0.76/0.71	0.59/-1.15	-2.15/-2.74	-4.62/-7.28	-5.46/-5.31	-3.61/-3.18	-4.23/-6.7	-9.95/-5.34	-1.71/0.18	1.34/2.24	1.44/-1.12	1.93/2.05	2.96/2.73	2.49/2.21	0.89/-2.47	-4.31/-4.55	-7.33/-10.36	-6/-3.83	-3.49/-4.17	-4.62/-4.03	-2.23/-1.09	-0.54/-0.27	0.31/0.8	1.09/0.78
Θ(75°)	-0.37/-0.31	-0.47/-0.51	-1.03/-3.8	-4.79/-4.14	-2.39/-1.93	-1.68/-3.22	-4.84/-7.18	-7.82/-4.66	-1.96/-0.62	-1.39/-0.81	0.17/0.52	1.05/1	1.92/0.35	-1.45/-0.44	-0.25/-4.65	-6.66/-6.7	-8.18/-10.19	-8.15/-6.79	-4.23/-2.9	-3.49/-4.26	-5.01/-3.34	-2.44/-1.87	0.17/1.49	0.59/-0.38
Θ(82.5°)	0.16/0.05	0.73/1.06	0.35/-3.3	-4.97/-3.57	-2.61/-1.43	-0.34/-0.57	-3.24/-6.06	-8.63/-6.59	-5.89/-4.23	-2.45/-1.19	-0.91/-0.43	-0.93/-0.34	-0.06/0.02	-2.3/-1.78	-1.16/-2.04	-5.73/-8.48	-9.68/-8.8	-6.9/-5.07	-5.02/-5.67	-4/-3.93	-5.64/-5.94	-5.06/-2.08	-0.28/1.14	0.65/0.34
Θ(90°)	-1.06/-1.01	-0.56/-0.01	-0.9/-3.07	-4.61/-4.91	-4.67/-4.24	-0.65/-0.35	-1.29/-3.75	-8.43/-9.58	-5.55/-3.46	-2.98/-2.18	-1.89/-1.65	-1.38/-1.03	-1.76/-1.27	-1.37/-2.55	-3.42/-2.88	-2.93/-2.79	-5.2/-7.6	-6.94/-4.84	-5.54/-6.77	-4.64/-2.4	-4.95/-5.2	-1.17/-0.34	1.27/0.32	-0.12/-0.5
Θ(97.5°)	-4.61/-5.56	-3.36/-1.24	-0.91/-2.82	-4.96/-5.01	-5.7/-4.14	-3.24/-3.95	-5.49/-7.51	-5.14/-5.62	-7.09/-6	-2.68/-1.13	-1.41/-2.43	-2.89/-2.21	-1.9/-2.85	-1.16/-2.44	-4.8/-3.76	-3.3/-5.56	-5.38/-5.86	-5.47/-7.47	-7.59/-4.06	-2.11/-2.27	-4.65/-5.33	-3.25/-1.84	0.16/0.61	-0.38/-2.21
Θ(105°)	-3.36/-4.33	-2.93/-2.02	-3.04/-4.74	-4.41/-6.91	-8.06/-2.76	-2.64/-3.8	-6.39/-8.5	-4.44/-2.77	-5.11/-5.88	-3.34/-1.56	-0.95/-1.49	-0.97/-1.2	-0.89/-0.65	-0.96/-1.9	-4.88/-4.52	-3.96/-4.76	-7.03/-5.1	-4.04/-4.44	-7.1/-2.99	-2.18/-0.62	-0.96/-2.95	-3.2/-2.37	-0.6/-0.3	0.11/-2.42
Θ(112.5°)	-1.84/-1.28	-0.27/0.08	-0.21/-2.72	-3.96/-4.71	-5.63/-5.75	-5.03/-5.02	-7.44/-7.92	-4.7/-2.8	-3.88/-3.9	-2.33/-3.68	-6.43/-4.31	-2.14/-1.55	-2.22/-2.88	-3.87/-4.86	-7.41/-6.78	-5.62/-6.18	-6.4/-8.53	-7.43/-5.95	-6.63/-5.12	-1.52/-1.48	0.34/-0.38	-0.10/99	1.22/1.74	1.02/0.46
Θ(120°)	-1.44/-0.01	0.96/0.28	-2.26/-3.26	-1.56/-1.19	-3.21/-5.59	-4.09/-3.85	-4.72/-7.34	-5.91/-2.82	-2.25/-2.67	-2.42/-3.03	-4.07/-4.05	-4.06/-3.32	-3.11/-3.9	-3.42/-4.2	-4.93/-6.71	-8.66/-6.54	-8.66/-9.44	-7.03/-6.67	-1.7/-3.2	-5.29/-1.63	0.46/-1.48	0.93/2.03	0.87/-0.36	-0.64/-0.6
Θ(127.5°)	-3.49/-1.68	-1.98/-1.68	-1.82/-1.22	-1.28/-1.45	-2.86/-3.46	-4.26/-3.5	-3.3/-4.46	-3.79/-2.44	-1.08/-0.51	-1.14/-0.86	-1.23/-2.08	-1.88/-2.65	-2.97/-1.78	-0.19/-2.56	-5.04/-2.71	-6.56/-7.27	-5.39/-5.45	-6.19/-7.58	-3.13/-3.57	-2.15/-0.14	-0.09/-3.55	-5.33/-7.04	-3.08/-2.78	-1.96/-2.15
Θ(135°)	1.03/0.85	-1.45/-3.94	-4.67/-3.62	-3.64/-4.11	-5.55/-7.15	-4.12/-3.12	-4.07/-5.24	-4.05/-2.2	-0.33/-0.18	-1.81/-2.8	-1.17/-0.11	0.71/-0.49	-1.15/-1.87	-1.35/0.24	0.5/-1.44	-6.34/-8.44	-5.63/-4.71	-5.12/-5	-3.88/-8.32	-3.2/-1.46	-2.24/-1.42	-1.32/-2.22	-0.36/1.09	1.21/0.23
Θ(142.5°)	-0.7/-2.41	-2.19/-1.06	-0.48/0.21	0.7/0.94	-0.18/-0.85	-1.04/-2.41	-5.32/-6.36	-5.01/-2.3	-1.3/-2.19	-2.56/-1.99	-1.56/-1.35	-1.18/-2.1	-3.09/-4.07	-3.57/-3.49	-3.53/-4.76	-6.31/-5.31	-3.93/-4.35	-5.62/-8.61	-6.22/-7.16	-5.36/-4.63	-1.37/0.37	-1.08/-1.27	0.62/2.46	2.56/0.54
Θ(150°)	-2.79/-2.64	-3.55/-4.21	-4.27/-2.96	-3.1/-4.44	-5.15/-3.6	-2.99/-3.39	-3.95/-4.24	-3.1/-2.06	-1.26/-1.18	-2/-2.2	-2.24/-2.17	-2.06/-3.46	-5.9/-5.06	-4.96/-6.09	-6.28/-4.51	-3.38/-3.58	-2.98/-3.79	-5.39/-7.51	-7.52/-6.08	-5.82/-2.8	-0.59/0.66	0.66/0.3	0.03/-1.03	-2.54/-3.35
Θ(157.5°)	-4.36/-4.66	-3.72/-3.5	-4.62/-5.01	-3.59/-2.42	-2.18/-2.46	-3.22/-3.39	-2.88/-3.12	-2.78/-2.4	-1.84/-1.72	-1.55/-0.99	-0.75/-1.22	-1.94/-2.77	-3.79/-4.7	-3.81/-1.94	-0.83/-1.01	-1.94/-1.99	-2.37/-4.49	-5.67/-4.28	-3.44/-2.75	-2.09/-2.2	-2.74/-2.84	-1.91/-0.83	-0.68/-1.94	-3.44/-4.62
Θ(165°)	0.1/-0.12	-0.66/-1.9	-3.88/-4.06	-4.17/-4.84	-6.8/-7.66	-6.4/-4.91	-4.14/-3.92	-3.7/-3.64	-3.3/-2.35	-1.05/-0.02	0.68/0.72	0.67/0.19	-0.1/-0.42	-1.07/-1.95	-3.37/-4.51	-5.1/-5.35	-5.36/-5.71	-6.5/-5.66	-2.73/-1.13	-0.54/-0.06	0.09/0.38	0.87/0.94	0.71/0.52	0.37/0.23
Θ(172.5°)	-2.36/-3.03	-4.75/-6.62	-6.45/-6.01	-5.94/-5.81	-6.22/-6.09	-5.87/-5.48	-4.95/-4	-3.21/-2.7	-1.79/-1.29	-1.23/-1.33	-1.47/-1.98	-2.69/-3.27	-4.08/-4.93	-6.63/-8.96	-9.34/-9.08	-7.81/-6.68	-5.89/-5.06	-4.44/-4.06	-3.47/-3.56	-3.66/-3.61	-3.23/-3.23	-3.34/-3.3	-3.09/-2.81	
Θ(180°)	-5.96/-6.44	-5.63/-5.09	-4.95/-5.34	-6.13/-7.07	-8.12/-8.45	-7.4/-6.95	-6.26/-5.52	-4.69/-4.28	-4.01/-4.37	-4.39/-4.66	-5.13/-5.68	-6.3/-6.92	-7.3/-7.63	-8.01/-7.92	-8.35/-8.68	-7.74/-7.67	-7.81/-8.44	-8.6/-9.02	-9.35/-9.33	-9.04/-8.11	-7.09/-6.63	-6.24/-5.48	-5.24/-5.34	-5.89/-6.09
Freq(Hz)	5.785GPol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-0.16/0.87	1.59/2.07	2.62/2.75	2.98/2.73	2.8/2.63	2.02/1.71	1.33/0.8	1.02/0.99	0.91/0.46	0.18/-0.18	-0.7/-1.12	-1.45/-1.61	-0.7/0.09	0.79/1.47	1.86/2.12	2.13/2.41	2.46/2.2	2.24/2.58	2.35/2.11	1.77/1.53	0.94/0.37	-0.33/-0.93	-1.06/-1.69	-2.37/-1.84
Θ(7.5°)	-1.2/-2.21	0.73/1.24	1.94/2.63	3.23/3.58	3.38/3.04	2.72/2.66	2.42/1.4	1.28/0.94	0.3/-0.31	-1/-1.79	-2.34/-2.82	-2.76/-1.5	0.04/0.98	2.08/2.91	3.17/3.25	3.03/2.8	2.48/2.01	1.54/0.89	0.33/0.16	-0.23/-0.55	-1.02/-1.36	-1.22/-1.41	-1.24/-1.76	-2.36/-2.29
Θ(15°)	-0.54/0.24	1.07/1.52	2.01/2.81	3.4/3.67	3.7/3.72	3.53/2.91	1.93/0.43	-0.78/-1.66	-2.71/-4.06	-4.86/-5.19	-4.88/-4.16	-3/-1.29	0.04/1.16	1.85/2.46	2.97/3.11	2.85/2.75	2.52/2.06	1.54/0.71	0.55/0.18	-0.42/-0.99	-1.38/-2.26	-3.37/-3.9	-3.68/-3.02	-2.15/-1.75
Θ(22.5°)	0/0.24	0.6/0.87	1.55/2.06	2.85/3.47	4.05/4	3.32/2.67	2.02/1.71	1.55/1.01	0.32/-1.16	-3.24/-4.94	-4.3/-3.41	-2.33/-1.67	-1.01/-0.35	0.71/1.66	2.54/3.12	3.47/3.35	3.23/2.78	2.06/0.78	0.37/0.72	0.63/-0.18	-0.76/-1.59	-2.67/-3.41	-3.61/-2.69	-1.26/-0.09
Θ(30°)	0.25/1.56	2.15/2.47	2.72/2.26	1.87/2.9	3.2/3.29	3.44/3.07	2.55/2.11	1.87/1.61	0.68/-0.82	-2.99/-5.1	-4.98/-4.65	-5.3/-5.78	-4.74/-2.54	-0.64/0.29	1.05/2.41	3.32/3.9	4.4/3.92	2.44/0.45	-0.19/-0.23	-0.03/-0.26	-0.33/-0.55	-0.8/-0.84	-0.34/-0.6	-1.48/-1.03
Θ(37.5°)	2.19/3.45	4.28/4.24	2.83/1.38	0.93/1.86	2.32/2.46	2.03/1.98	1.93/2.09	1.56/0.79	-1.25/-3.95	-5.05/-3.51	-3.23/-5.01	-6.48/-6.4	1.16/1.4	1.01/1.16	1.89/2.63	3.24/3.2	3.18/2.83	2.04/1.33	1.22/1.48	0.96/0.52	-0.4/-1.8	-2.39/-2.44	-1.13/0.72	
Θ(45°)	1.61/3.05	3.84/3.62	3.12/2.22	1.66/1.33	1.47/1.47	0.6/0.52	0.87/0.57	-0.01/-0.84	-1.8/-1.38	-0.64/-0.19	-1.58/-3.1	-3.01/-2.57	-1.47/0.98	1.67/1.13	0.77/0.3	0.68/0.36	2.08/3.22	2.97/1.97	1.48/1.02	-0.2/-1.66	-1.21/-0.54	-0.72/-1.23	-1.69/-2.03	-2.19/-0.2
Θ(52.5°)	2.98/3.14	3.98/3.62	3.64/3.03	2.11/0.99	0.36/-0.99	-1.16/-0.48	-0.11/-0.04	-0.81/-1.19	-0.36/-0.32	-0.11/-0.07	0.07/0.49	0.03/-1.28	-0.74/1.41	1.41/1.81	1.83/1.45	1.05/0.88	1/0.48	0.08/-0.23	-0.3/-0.47	-2.25/-4.05	-2.11/-0.55	-0.19/-0.76	-1.45/-1.59	-0.15/-1.39
Θ(60°)	2.67/3.13	3.66/3.42	3.49/2.61	2.04/1.89	0.51/-1.14	-0.66/-0.24	-1.14/-2.2	-3.01/-3.78	-1.24/0.43	0.92/0.22	-0.88/0.24	0.39/0.36	0.27/2.01	1.71/1.45	1.98/2.36	2.38/1.69	1.47/2.02	0.29/-0.9	-0.41/-0.39	-0.76/-1.33	-3.28/-2.64	0.15/-0.29	-0.65/-0.44	-0.97/1.12
Θ(67.5°)	1.28/1.79	1.93/3.14	2.51/2.28	1.19/1.85	0.71/0.38	-0.61/-2.57	-2.94/-1.4	-0.76/-0.58	-0.61/-0.56	-0.49/0.41	0.37/0.03	0.7/-0.39	-1.53/0.47	0.7/0.32	-0.28/1.15	2.51/2.87	1.53/1.74	1.72/2.03	1.45/-1.18	-1.92/-0.54	0.77/1.72	2.34/1.63	1.02/1.9	1.62/1.32
Θ(75°)	1.96/1.88	2.58/4.05	3/1.69	0.21/-0.46	-0.45/-0.34	-1.89/-4.89	-3.1/-1.13	-0.81/-1.62	-3.18/-3.83	-2.68/-0.84	0.69/0.68	0.9/0.09	-1.99/-0.07	1.22/-0.14	-2.23/-2.71	1.17/2.28	1.23/1.3	1.39/2.76	2.48/-0.4	-0.59/-0.65	1.36/1.84	2.42/1.54	1.83/2.38	1.5/1.43
Θ(82.5°)	1.26/3.17	3.92/3.25	2.34/2.38	2.21/1.64	1.54/1.17	-2.12/-1.86	-1.26/-0.64	0.29/-1.01	-4.47/-4.64	0.03/2.76	3.07/1.72	1.62/0.88	1.23/1.87	2.13/1.48	1.11/0.83	1.19/3.13	0.77/0.95	-1.95/0.21	0.22/-1.91	-0.85/-0.03	-1.02/0.39	1.64/1.79	2.98/1.91	2.11/0.34
Θ(90°)	2.82/88	2.92/3.5	2.53/1.2	1.1/0.67	0.28/0.37	-0.04/0.19	-0.09/0.26	0.52/0.44	-1.5/-3.32	-0.27/2.68	3.12/2.06	2.51/2.31	0.93/0.68	0.37/0.02	0.59/1.13	1.03/4.05	2.83/1.91	-1.77/1.78	2.21/4.2	-0.31/0.31	0.37/1.85	3.4/2.7	1.62/1.45	1.54/0.77
Θ(97.5°)	2.41/2.58	2.76/2.27	1.49/1.13	-0/-0.08	-0.81/0.51	0.88/-0.21	-0.66/-1.31	-0.32/0.61	-0.29/-0.43	0.71/2.87	3.54/3.41	3.37/4.04	2.82/1.18	1.71/1.58	0.54/-1.15	1.02/1.14	0.94/3.14	0.89/2.96	1.61/1.96	0.42/-0.64	0.98/1.18	3.23/2.79	0.12/0	1.07/1.26
Θ(105°)	0.53/1.64	1.63/-1.42	-2.86/-2.53	-2.67/-1.21	-1.58/0.7	1.18/0.5	-0.73/-1.6	-0.03/1.19	0.94/0.28	-0.71/1.76	2.63/1.7	3.43/4.07	5.17/2.76	2.86/0.8	-0.36/-2.64	-1/-0.34	-0.13/3.16	-0.07/1.72	0.03/2.41	-3.09/-3.83	-0.13/0.2	3.48/2.6	0.71/1.73	1.95/1.17
Θ(112.5°)	0.73/1.59	2.16/-0.28	-1.24/-1.9	-2.63/-3.62	-2.88/-1.75	-0.67/0.03	-0.59/0.07	0.19/1.38	1.08/0.07	0.4/2.7	2.77/2.57	2.73/0.07	3.13/2.01	1.61/-2.47	-4.03/-4.3	0.01/-2.53	-1.09/0.94	-2.25/1.6	0.28/1.59	-0.2/0.21	-0.9/-0.85	4.12/1.72	0.66/1.88	2.35/2.81
Θ(120°)	1.42/1.19	2.2/-1	0.97/0.04	-0.68/-4.17	-3.77/-3.81	-2.45/-2.28	-2.23/-0.69	-0.70/4.2	-0.03/-1.1	-1.02/0.17	1.54/2.06	1.68/2.45	2.54/2.55	1.76/-0.34	-3.05/-2.81	-1.62/-2.74	-0.95/-2.1	-3.61/-0.07	-0.38/-1.24	-4.1/0.46	0.54/-0.67	-0.66/-0.33	-1.6/0.01	0.55/1.31
Θ(127.5°)	-0.46/-2.01	-1.3/-1.1	-1.59/-1.74	-1.77/-2.71	-2.81/-1.75	-2.22/-4.39	-3.83/-2.02	-0.7/0	-0.29/-0.93	-1.28/-0.39	1.16/0.71	-0.91/0.61	1.74/2.09	1.82/-0.79	0.21/-1.84	-2.05/0.18	-0.8							

Gain Result

[illegible]



Radiated Composite Gain Data

Appendix A

Θ(22.5°)	2.141/3.8	0.930/27	-0.98/-2.92	-5/-7.45	-10.28/-16.57	-18.17/-12.98	-7.97/-5.75	-4.08/-3.22	-2.71/-2.4	-1.75/-1.04	-0.350/19	1.04/1/28	1.40/69	0.03/-0.85	-1.96/-4.02	-7.44/-11.38	-14.07/-12.6	-9.38/-6.54	-4.42/-2.9	-1.73/-0.68	-0.060/24	0.55/1/6	1.832/33	2.632/52
Θ(30°)	0.780/7	0.870/36	-0.73/-2.18	-3.73/-6.09	-9.36/-14.48	-18.85/-13.41	-8.9/-6.77	-6.3/-3.67	-5.11/-3.61	-1.88/-0.51	0.380/8	0.670/28	0.970/28	-0.71/-1.45	-2.47/-3.96	-6.52/-9.28	-12.13/-13.79	-13.39/-9.58	-6.73/-4.8	-4.05/-3.51	-2.67/-2.09	-1.21/-0.23	0.450/54	0.430/67
Θ(122.5°)	-1/-1.0/74	-0.2/-0.41	-1.27/-2.69	-4.2/-5.37	-6.27/-8.99	-12.19/-11.87	-10.04/-9.08	-9.01/-7.15	-4.62/-2.79	-1.48/-0.48	-0.04/-0.38	-1.52/-1.97	-2.01/-2.59	-3.71/-4.59	-5.29/-6.09	-8.42/-12.03	-16.86/-18.34	-15.72/-14.47	-7.12/-5.81	-4.99/-4.76	-0.620/18	0.480/63	0.380/-0.47	
Θ(45°)	-4.24/-3.92	-2.75/-2.55	-1.99/-2.44	-3.78/-5.57	-7.18/-10.15	-15.26/-15.55	-11.95/-10.23	-10.57/-9.94	-8.4/-5.55	-3.57/-2.38	-1.19/-1.14	-1.77/-1.54	-1.58/-1.83	-1.82/-3.54	-8.75/-15.18	-13.87/-15.95	-18.17/-15.47	-10.47/-7.77	-5.97/-4.5	-3.09/-1.71	-0.880/-0.08	0.420/55	0.16/-1.42	-2.41/-3.2
Θ(52.5°)	-1.59/-1.79	-1.27/-2.27	-3.29/-5.63	-6.13/-5.33	-5.6/-7.49	-11.24/-15.15	-18.39/-13.79	-13.27/-11.71	-8.04/-4.93	-2.93/-1.68	-1.86/-2.65	-1.66/-0.99	-1.07/-0.98	-0.65/-1.7	-2.93/-6.91	-15.36/-18.7	-18.36/-13.19	-9.56/-7.08	-4.96/-3.85	-2.97/-1.3	0.19/1/02	1.050/55	0.460/75	0.35/-0.61
Θ(60°)	-0.5/-1.89	-1.72/-2.22	-3.32/-5.05	-7.16/-7.39	-7.44/-7.23	-8.86/-15.28	-17.49/-13.74	-14.39/-16.93	-9.85/-4.51	-3.16/-3.47	-4.54/-4.69	-1.52/-2.36	-0.88/-0.38	-0.52/-0.64	-1.33/-4.74	-10.98/-18.94	-19.14/-18.16	-14.04/-10.55	-7.35/-4.49	-3.1/-1.57	0.190/35	1.291/46	1.23/1	1.180/48
Θ(67.5°)	0.52/-0.16	-1.28/-2.83	-5.19/-6.59	-8.02/-8.84	-8.41/-8.15	-9.88/-14.33	-18.32/-18.77	-17.94/-12.45	-7.12/-5.39	-4.94/-4.36	-4.14/-3.33	-2.34/-0.32	0.040/28	-0.31/-2.09	-3.43/-5.37	-9.48/-18.36	-15.92/-12.13	-10.46/-13.7	-12.31/-7.29	-3.66/-1.79	-0.74/-0.94	-1.84/-1.86	-1.15/-0.8	-0.110/53
Θ(75°)	-0.59/-0.6	-1.11/-2.16	-4.9/-8.81	-12.24/-13.78	-9.54/-8.07	-8.79/-12.94	-16.94/-18.43	-17.08/-12.08	-10.05/-7.85	-5.41/-5.3	-5.51/-4.84	-2.94/-2.07	-2.12/-0.88	-0.33/-0.83	-1.99/-3.86	-6.88/-13.32	-18.29/-15.3	-9.25/-7.41	-11.87/-8.87	-4.63/-2.16	-1.17/-0.58	-0.73/-1.8	-1.93/-1.65	-0.44/-0.3
Θ(82.5°)	-0.94/-1.59	-2.75/-4.03	-5.56/-8.36	-10.26/-10.66	-7.94/-6.88	-9.24/-14.25	-18.13/-18.05	-18.5/-14.73	-8.33/-5.59	-4.03/-4.36	-4.99/-7.09	-7.32/-7.55	-6.14/-4.11	-4.38/-5.74	-5.8/-5.04	-5.72/-10.85	-17.84/-18.51	-13.54/-8.36	-6.24/-3.29	-2.18/-1.29	-0.080/83	1.561/57	0.730/16	
Θ(90°)	0.56/-1.91	-2.9/-2.66	-3.14/-5.51	-8.9/-10.22	-10.79/-10.79	-12.34/-14.62	-18.55/-18.35	-16.8/-13.1	-10.95/-9.17	-7.13/-5.81	-4.91/-5.8	-5.59/-6.5	-5.87/-6.29	-8.83/-9.22	-8.92/-8.65	-7.77/-8.22	-12.45/-18.39	-18.12/-8.49	-7.18/-11.48	-7.6/-2.54	-0.98/-1.78	-3.06/-2.45	-0.590/84	1.071/46
Θ(97.5°)	0.5/-0.38	-1.89/-2.56	-3.27/-2.22	-7.68/-9.61	-9.61/-8.3	-8.38/-12.41	-19.29/-18.94	-19.06/-16.01	-17.84/-8.59	-7.52/-5.09	-8.36/-12.93	-14.63/-14.19	-7.15/-6.12	-10.28/-12.92	-8.47/-10.3	-15.56/-18.22	-14.12/-7.2	-6.21/-6.26	-4.09/-0.56	1.061/45	0.37/-0.54	-0.040/86	0.01/-0.27	
Θ(105°)	0.410/14	-1.36/-2.68	-5.28/-7.91	-6.89/-9.08	-6.67/-8.95	-7.98/-8.8	-12.27/-15.97	-13.75/-14.22	-17.96/-12.26	-7.45/-6.63	-8.35/-13.83	-11.71/-13.9	-17.27/-14.46	-18.14/-17.15	-11.4/-7.81	-6.36/-8.08	-10.62/-18.27	-12.79/-9.76	-5.62/-3.31	-1.470/41	2.493/01	2.742/06	1.692/71	2.330/97
Θ(112.5°)	-1.74/-0.26	-0.68/-1.93	-3.97/-6.39	-8.39/-10.67	-13.24/-9.75	-8.43/-11.46	-18.35/-14.2	-13.1/-12.69	-13.64/-16.72	-16.24/-19.24	-18.88/-10.68	-9.78/-7.94	-12.09/-17.87	-11.76/-12.49	-18.47/-10.73	-9.62/-10.64	-11.08/-18.54	-11.82/-8.83	-4.8/-1.81	-1.32/-1.26	-0.20/58	0.24/-0.62	1.321/52	1.16/-0.54
Θ(120°)	-3.13/-4.21	-4.56/-4	-3.64/-5.18	-8.86/-14.01	-11.39/-9.67	-12.59/-15.36	-10.59/-9.14	-10.69/-13.82	-14.23/-19.11	-18.76/-18.82	-13.22/-6.5	-9.82/-18.2	-17.8/-10.64	-10.14/-7	-17.03/-18	-17.43/-11.26	-8.84/-4.89	-17.31/-11.39	-8.84/-4.89	-5.11/-6.88	-9.87/-6.21	-6.17/-6.48	-5.37/-3.38	
Θ(127.5°)	-4.9/-74	-6.45/-3.63	-2.83/-3.74	-7.23/-11.5	-10.55/-11.81	-17.95/-11.89	-8.02/-9.11	-15.54/-14.67	-11.92/-137	-17.96/-18.81	-17.95/-18.05	-13.25/-11.74	-18.04/-15.33	-10.62/-11.72	-7.49/-57	-6.87/-9.34	-14.34/-17.52	-18.31/-11.99	-14.18/-13.6	-4.66/-1.88	-0.12/-12.2	-2.65/-2.49	0.31/39	-0.46/-2.9
Θ(135°)	0.35/0.7	-0.37/-1.77	-3.41/-6.1	-6.26/-5.25	-6.09/-9.86	-15.51/-13.13	-11.5/-14.73	-16.66/-12.07	-12.26/-18.74	-13.7/-8.08	-6.9/-10.85	-11.75/-9.41	-7.06/-5.18	-4.74/-5.67	-9.68/-8.06	-5.28/-7.33	-18.34/-18.92	-16.83/-11.95	-18.18/-9.89	-3.74/-0.59	0.651/63	-0.35/-0.86	1.133/25	2.970/9
Θ(142.5°)	-1.2/-0.34	-0.18/-1.19	-2.67/-8.7	-4.96/-6.12	-10.24/-15.71	-17.34/-17.71	-13.54/-11.63	-12.7/-18.76	-17.97/-11.8	-8.48/-6.41	-7.44/-14.93	-18.2/-11.52	-13.81/-19.2	-15.41/-10.72	-10.03/-13.94	-17.54/-15.29	-15.59/-13.68	-17.28/-7.76	-4.6/-2.41	-2.15/-3.29	-4.13/-4.57	-1.470/36	0.589/-0.46	
Θ(150°)	-5.93/-4.97	-5.97/-9.56	-11.03/-10.74	-10.89/-10.78	-10.56/-11.63	-12.71/-13.32	-17.64/-18.59	-18.96/-17.87	-15.93/-17.25	-16.63/-12.81	-11.08/-11.15	-10.29/-10.31	-15.52/-19.31	-15.31/-16.92	-19.11/-17.46	-18.31/-13.07	-16.61/-12.6	-18.11/-13.6	-7.56/-5.31	-3.82/-3.52	-4.46/-4.49	-2.58/-1.15	-2.44/-5.39	
Θ(157.5°)	-4.31/-4.21	-3.48/-3.38	-4.2/-5.27	-5.63/-5.75	-6.57/-8.72	-11.33/-15.25	-17.63/-18.76	-13.2/-11.47	-11.39/-11.49	-10.18/-9.13	-9.58/-9.58	-8.1/-7.02	-7.44/-9.65	-13.05/-14.57	-13.48/-13.14	-13.44/-14.78	-18.53/-18.11	-17.48/-17.32	-15.57/-10.84	-7.59/-5.46	-3.95/-2.68	-2.08/-1.75	-1.98/-1.96	-1.94/-2.79
Θ(165°)	-1.06/-1.99	-3.4/-5.15	-6.32/-16.7	-8.7/-10.51	-12.2/-14.97	-18.72/-17.36	-18.11/-18.54	-17.4/-15.89	-15.4/-15.55	-14.55/-13.34	-12.57/-12.81	-14.31/-16.76	-17.93/-19.01	-11.81/-8.66	-6.97/-6.28	-6.36/-7.72	-10.3/-15.26	-18.58/-16.64	-13/-10.69	-8.93/-6.8	-4.99/-3.84	-2.76/-2.22	-1.26/-0.56	-0.95/-1.07
Θ(172.5°)	-5.03/-6.46	-8.81/-9.27	-8.8/-9.14	-9.63/-11.08	-13.12/-16.62	-18.8/-17.79	-18.94/-18.21	-17.51/-16.32	-15.76/-16.16	-16.6/-16.71	-17.31/-18.55	-18.24/-18.46	-18.16/-17.09	-14.51/-12.49	-11.01/-10.05	-10.09/-10.57	-11.73/-14.88	-19.05/-18.18	-18.45/-15.72	-11.7/-8.66	-6.71/-5.47	-4.75/-3.97	-3.44/-3.39	-3.71/-4.27
Θ(180°)	-10.56/-10.72	-10.69/-9.63	-8.92/-8.66	-9.25/-11.47	-14/-16.63	-19.63/-18.81	-18.74/-18.65	-17.96/-19.38	-18.75/-19.06	-18.91/-15.83	-13.96/-13.25	-13.25/-12.75	-13.28/-13.79	-14.69/-15.85	-17.77/-19.1	-18.49/-19.04	-17.02/-15.52	-13.69/-13.02	-11.97/-12.09	-11.65/-10.39	-9.81/-10.41			
Freq(Pol)	5.3GPol	Theta/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-10.54/-7.36	-4.94/-3.5	2.13/-1.17	-0.230/72	1.21/1.2	1.321/35	1.22/1.02	0.43/-0.46	-1.63/-3.18	-4.89/-6.71	-9.03/-13.42	-18.52/-17.27	-11.6/-8.27	-5.7/-3.9	-2.65/-1.23	-0.68/-0.07	0.51/0.98	1.05/1.27	1.03/0.47	0.05/-0.57	-1.41/-2.67	-4.23/-6.05	-8.54/-12.43	-17.65/-15.71
Θ(7.5°)	-12.86/-9.75	-6.95/-5.15	-3.67/-2.26	-0.680/36	0.870/97	1.181/09	0.860/48	0.06/-0.46	-1.65/-3.05	-4.95/-6.67	-8.77/-12.07	-14.73/-11.5	-8.44/-5.81	-4.32/-6.28	-1.390/-48	0.041	0.841/3	1.371/31	0.910/43	-0.34/-1.18	-2.33/-3.6	-5.45/-7.74	-11.12/-16.2	-17.75/-17.25
Θ(15°)	-15.42/-11.12	-7.66/-5.06	-3.17/-7.19	-0.140/89	1.351/67	1.721/45	0.69/-0.26	-1.66/-2.88	-3.55/-4.64	-5.05/-6.43	-1.22/-9.98	-10.91/-6.01	-6.73/-5.01	-3.63/-2.94	-1.920/-14	-0.790/-31	0.150/44	0.580/62	0.360/08	-0.49/-1.34	-2.41/-3.76	-4.97/-6.77	-9.14/-14.32	-17.13/-19.17
Θ(22.5°)	-14.55/-9.35	-5.12/-2.99	-1.74/-1.16	0.080/9	0.971/3	1.411/36	1.22/1.02	0.2/-1.13	-2.39/-3.78	-4.63/-5.3	-6.34/-7.23	-8.47/-9.4	-8.66/-7.65	-6.17/-4.91	-3.3/-1.82	-1.31/-1.08	-0.89/-0.45	0.130/62	0.740/38	-0.36/-1.25	-2.01/-2.55	-3.06/-3.52	-4.64/-7.15	-10.14/-13.51
Θ(30°)	-14.56/-10.72	-7.08/-4.74	-3.01/-1.87	-0.53/-0.13	-0.36/-0.28	0.230/61	0.660/57	-0.03/-1.39	-2.06/-2.3	-1.96/-2.15	-3.36/-5.55	-8.32/-12.39	-13.31/-8.88	-5.35/-4	-3.12/-2.15	-1.41/-0.69	-0.57/-0.41	-0.3/-0.11	-1.14/-1.71	-2.43/-2.46	-2.27/-2.65	-3.39/-4.55	-5.96/-7.57	-9.04/-12.39
Θ(37.5°)	-17.66/-18.07	-13.98/-8.76	-5.41/-3.31	-2.34/-2.09	-2.47/-2.39	-1.79/-1.1	-0.87/-1.24	-1.97/-2.46	-3.26/-3.55	-3.38/-0.42	-6.33/-10.02	-18.94/-15.49	-8.39/-16.2	-4.67/-3.23	-2.1/-1.27	-0.79/-0.58	-0.52/-1.02	-1.92/-2.82	-2.82/-2.74	-2.39/-1.45	-0.85/-1.08	-2.34/-4.51	-7.27/-9.08	-12/-18.76
Θ(45°)	-17.91/-18.02	-15.94/-12.19	-6.68/-6.38	-4.5/-4.48	-5.65/-5.42	-3.49/-2.05	-1.39/-1.23	-2/-2.45	-3.11/-3.56	-3.46/-4.55	-6.55/-9.04	-11.1/-7.88	-5.39/-4.29	-2.59/-1.54	-1.130/-0.81	-1.061/-1.59	-1.09/-0.43	-0.73/-1.74	-3.12/-2.85	-1.64/-0.98	-0.53/-0.84	-2.18/-4.95	-8.2/-13.68	-15.23/-18.2
Θ(52.5°)	-14.98/-13.01	-13.47/-11.59	-11.89/-11.68	-9.27/-6.4	-4.12/-2.77	-2.5/-2.56	-2.65/-2.79	-2.95/-3.39	-3.82/-4.52	-4.54/-6.06	-8.64/-11.56	-9.66/-7.38	-6.82/-5.21	-3.56/-2.51	-1.32/-1.1	-1.5/-0.9	0.30/-1	-0.771/-93	-2.85/-2.36	-1.16/-0.13	-0.271/-129	-2.96/-5.1	-8.67/-12.46	-16.67/-19.06
Θ(60°)	-17.6/-16.56	-15/-13.85	-10.16/-9.37	-7.55/-6.47	-6.42/-7.14	-7.25/-4.93	-3.28/-2.75	-3.52/-4.91	-4.86/-4.7	-5.03/-7.68	-7.78/-6.18	-3.93/-3.72	-3.73/-4.64	-6.2/-6.29	-6.49/-4.5	-1.04/-0.76	-0.5/-0.42	-0.87/-1.77	-2.33/-2.24	-1.58/-0.91	-1.26/-2.22	-3.68/-5.69	-9.64/-16.26	-17.99/-17.62
Θ(67.5°)	-17.97/-14.43	-15.45/-18.25	-17.51/-14.15	-10.15/-8.33	-7.21/-7.48	-7.57/-6.93	-6.27/-6.01	-6.61/-5.53	-5.41/-5.82	-7.11/-6.53	-5.35/-4.68	-4.24/-7.8	-6.33/-10.03	-11.68/-8.65	-6.80/-6.72	-6.05/-5.18	-2.95/-2.26	-2.63/-3.22	-3.13/-2.89	-1.39/-0.62	-0.1/-1.45	-3.21/-4.16	-6.09/-7.29	-11.71/-17.26
Θ(75°)	-14.87/-18.5	-18.07/-17.35	-19.3/-11.87	-9.78/-8.95	-7.56/-7.79	-8.76/-8.13	-7.58/-7.39	-6.13/-6.33	-6.87/-7.39	-7.13/-7.58	-6.37/-6.67	-7.23/-10.55	-14.84/-17.11	-12.54/-16.91	-13.21/-8.44	-7.15/-4.39	-5.28/-6.45	-4.76/-5.52	-5.47/-					



Radiated Composite Gain Data

Appendix A

Θ(67.5°)	-1.34/-1.08	-0.51/-0.77	-1.37/-3.35	-6.64/-17.63	-9.08/-9.99	-10.28/-10.11	-9.05/-14.14	-17.71/-7.5	-5.06/-4.12	-3.13/-3.04	-2.62/-2.26	-1.56/-0.88	-0.59/0.84	1.63/0.86	0.05/-2.58	-5.81/-9.61	-17.64/-12.05	-7.73/-5.38	-4.97/-6.65	-10.47/-6.55	-3.84/-2.39	-2.19/-1.34	-1.75/-1.91	-1.69/-1.23
Θ(75°)	-3.43/-2.36	-0.98/-0.54	-1.28/-4.57	-10.8/-18.27	-10.52/-9.59	-9.58/-6.23	-7.98/-10.82	-16.57/-9.98	-9.24/-5.68	-3.08/-1.78	-0.75/0.1	0.66/0.11	-0.39/-4.14	-5.86/-1.8	-1.45/-6.29	-14.79/-13.95	-18.64/-17.97	-18.91/-14.51	-8.95/-4.57	-3.91/-6.68	-7.4/-2.09	-10.1	0.33/-0.1	-2.4/-3.22
Θ(82.5°)	-0.28/0.88	-1.20/-2.03	-2.24/-5.85	-10.71/-10.49	-7.71/-7.56	-4.38/-3.86	-7.22/-14.77	-16.92/-15.58	-11.03/-8.21	-4.59/-3.75	-3.51/-3.33	-3.37/-1.46	-1.74/-2.5	-7.61/-6.78	-1.46/-2.26	-4.21/-10.86	-15.12/-11.24	-6.82/-7.51	-8.24/-4.23	-2.11/-3.33	-6.3/-6.58	-8.82/-2.53	-3.31/-3.52	-2.75/-1.39
Θ(90°)	-0.88/-0.18	0.41/0.3	-1.77/-5.25	-9.87/-10.54	-13.22/-10.48	-4.06/-2.82	-4.69/-8.9	-18.83/-18.62	-15.74/-13.91	-8.23/-5.28	-5.46/-6.77	-9.36/-7.26	-9.51/-7.13	-8.99/-9.7	-4.05/-1.21	0.12/-1.51	-3.51/-10.6	-17.95/-6.22	-7.42/-7.97	-4.95/-1.5	-3.31/-4.5	-1.65/-0.59	0.46/-0.31	-0.55/-0.49
Θ(97.5°)	-4.29/-3.94	-1.83/-1.64	-2.09/-6.13	-7.85/-8.2	-16.57/-10.44	-7.03/-5.27	-8.23/-14.92	-18.94/-16.44	-18.41/-12.68	-5.35/-2.84	-3.85/-8.39	-13.01/-13.66	-7.03/-9.3	-7.84/-7.6	-8.65/-5.24	-4.99/-6.46	-6.48/-6.46	-8.38/-17.53	-7.89/-4.08	-1.67/-2.98	-6.3/-5.29	-2.9/-1.29	-1.44/-1.6	-2.87/-3.29
Θ(105°)	-5.05/-5.46	-4.36/-2.42	-2.95/-5.13	-6.63/-9.03	-17.88/-7.92	-6.78/-7.77	-8.46/-18.01	-11.06/-7.03	-12.29/-9.67	-3.68/-2.33	-4.36/-8.12	-5.87/-6.87	-4.39/-7.33	-15.75/-18.52	-19.13/-9.33	-6.78/-7.67	-14.54/-11.5	-8.44/-5.58	-12.22/-4.45	-0.91/0.06	-2.52/-7.9	-8.8/-8.35	-6.07/-4.98	-2.64/-4.81
Θ(112.5°)	-0.89/0.27	0.13/-0.43	-1.27/-2.9	-3.88/-7.09	-14.89/-13.96	-10.34/-10.45	-11.48/-18.33	-10/-6.88	-12.31/-11.23	-3.99/-5.05	-7.5/-10.1	-8.69/-9.97	-9.36/-11.77	-12.39/-8.96	-15.35/-18.48	-7.2/-7.69	-8.68/-18.3	-14.24/-7.51	-14.34/-8.59	-0.75/0.66	-0.89/-1.07	-1.75/-0.4	1.51/2.35	0.71/-0.35
Θ(120°)	1.22/3.4	0.83/-2.11	-4.89/-3.61	-3.3/-6.1	-9.3/-8.67	-8.65/-10.7	-17.77/-18.3	-9.32/-6.5	-7.95/-13.14	-12.42/-11.47	-17.11/-19.71	-12.07/-9.32	-6.48/-7.96	-4.7/-5.68	-7.95/-10.22	-13.6/-9.74	-11.25/-19.48	-13.52/-17.4	-9.59/-8.55	-8.85/-3.26	-1.16/-3.77	-3.47/-3.78	-0.68/-0.7	0.20/39
Θ(127.5°)	-2.39/-1.49	-3.13/-7.2	-9.13/-9.23	-8.02/-7.8	-11.03/-13.46	-11.8/-14.48	-17.52/-14.25	-7.69/-7.55	-10.43/-15.94	-17.23/-14.61	-16.03/-19.22	-16.08/-12.45	-9.79/-6.28	-2.99/-6.69	-9.09/-7.7	-11.71/-12.37	-9.68/-18.78	-19.74/-12.77	-8.53/-5.13	-5.71/-3.31	-4.79/-4.15	-10.62/-8.24	-4.57/-4.09	-6.28/-4.51
Θ(135°)	-0.92/-1.17	-2.04/-3.45	-5.92/-6.72	-6.72/-8.83	-14.11/-17.51	-11.66/-11.78	-15.82/-17.32	-15.9/-13.03	-11.64/-12.37	-16.71/-17.75	-11.13/-6.79	-5.58/-8.5	-10.21/-10.47	-5.29/-3.15	-3.56/-8.8	-15.11/-15.52	-9.94/-18.65	-18.02/-11.1	-8.61/-11.49	-3.77/-1.97	-0.6/-2.7	-4.73/-6.29	-2.93/0.31	0.23/-1.34
Θ(142.5°)	-1.21/-2.36	-2.95/-1.39	-0.17/-1.54	-3.63/-5.3	-6.56/-7.05	-7.2/-8.6	-13.08/-14.8	-16.67/-11.94	-11.08/-17.24	-18.54/-15.2	-15.21/-16.2	-12.63/-14.17	-17.74/-17.79	-17.17/-17.67	-14.01/-11.38	-18.31/-10.14	-9.42/-16.41	-11.92/-18.07	-11.02/-18.6	-6.75/-6.66	-2.62/-2.62	-5.85/-4.76	0.62/1.6	1.44/-22
Θ(150°)	-8.37/-5.7	-5.35/-5.98	-5.99/-4.69	-9.89/-15.24	-16.71/-11.62	-9.71/-6.69	-11.57/-17.79	-17.97/-16.89	-14.47/-15.2	-15.77/-15.01	-11.74/-12.63	-18.82/-11.25	-11.55/-12.44	-10.3/-8.16	-8.97/-12.32	-13.32/-13.97	-9.53/-14.1	-18.42/-9.33	-7.11/-5.65	-5.25/-4.11	-3.01/-2.94	-3.25/-4.65	-7.5/-9.35	
Θ(157.5°)	-5.77/-6.39	-5.12/-5.07	-7.48/-9.9	-8.01/-6.22	-5.45/-4.94	-5.69/-7.83	-12.33/-19.77	-18.27/-14.63	-12.27/-10.75	-9.95/-9.26	-8.82/-8.69	-8.34/-8.99	-11.9/-15.99	-14.61/-12.67	-12.18/-13.93	-17.61/-17.94	-15.97/-17.9	-16.35/-11.08	-7.82/-5.99	-5.43/-5.27	-5.52/-5.37	-4.9/-4.04	-2.98/-3.05	-4.18/-4.52
Θ(165°)	1.04/1.08	0.44/-1.19	-3.13/-4.19	-5.68/-8.56	-11.37/-14.76	-18.56/-17.84	-17.71/-17.8	-18.21/-18.82	-16.17/-13.64	-11.8/-10.71	-10.56/-10.87	-11.44/-12.14	-11.53/-10.78	-11.33/-13.51	-14.91/-12.47	-9.33/-7.97	-7.98/-10.55	-18.74/-17.24	-8.62/-4.83	-2.96/-1.8	-1.07/-0.35	0.52/0.45	0.61/-16	1.44/-22
Θ(172.5°)	-3.54/-5.65	-8.32/-10.8	-9.09/-9.84	-11.43/-11.35	-12.14/-13.08	-14.98/-18.02	-19.26/-17.87	-17.68/-17.43	-16.5/-15.02	-13.46/-11.97	-12.05/-13.04	-15.36/-18.26	-18.19/-14.49	-10.86/-9.06	-8.44/-8.97	-9.84/-11.32	-13.2/-17.63	-18.64/-18.83	-14.08/-11.29	-8.79/-7.59	-6.25/-5.31	-6.62/-4.65	-3.78/-2.95	-3.15/-3.3
Θ(180°)	-9.73/-11.3	-8.34/-6.5	-6.1/-6.05	-6.77/-8.28	-10.35/-12.19	-13.76/-16.27	-17.54/-17.74	-18.18/-19.05	-18.34/-19.43	-16.49/-13.7	-12.39/-11.44	-10.98/-10.21	-9.3/-8.66	-8.51/-9.07	-9.89/-10.62	-11.33/-12.76	-14.99/-18.18	-18.53/-18.33	-18.27/-17.86	-14.47/-12.62	-11.4/-11.08	-10.19/-8.59	-8.13/-8.93	-9.94/-9.87
Freq(GHz)	5.785GPol	ThetaAnt.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-12.13/-7.88	-4.52/-2.95	-1.28/-0.15	0.88/1.72	2.75/2.79	2.65/2.63	2.53/2.38	1.84/1.53	0.67/-0.43	-1.77/-3.31	-5.27/-8.09	-13.47/-18.37	-14.02/-9.09	-5.85/-3.43	-1.73/-0.15	0.57/1.61	2.13/2.49	2.46/2.66	2.54/2.31	1.92/1.11	0.48/-0.67	-2.24/-4.06	-6.28/-10.47	-18.73/-19.23
Θ(7.5°)	-12.87/-8.57	-6.45/-4.87	-3.24/-1.47	-0.24/-1.37	2.22/2.4	2.52/2.7	2.85/2.67	1.53/1.04	-0.02/-1.24	-2.65/-5	-7.99/-14.46	-10.81/-12.26	-7.36/-4.48	-2.42/-0.96	0.14/0.76	0.64/1.3	1.73/1.75	1.59/1.6	1.24/1.04	0.61/0.11	-0.83/-2.21	-3.49/-5.14	-7.42/-10.48	-15.46/-17.6
Θ(15°)	-10.05/-7.86	-6.31/-5.63	-4.6/-2.53	-1.01/0.36	0.83/1.1	1.49/1.34	0.94/1.16	-0.54/-1.32	-2.49/-4.09	-5.88/-8.43	-10.09/-11.23	-10.92/-8.46	-5.94/-4.03	-2.65/-1.31	-0.45/0.37	0.35/0.53	0.63/0.29	0/-0.2	-0.12/-0.42	-0.71/-2.48	-2.07/-2.46	-4.82/-6.32	-8.92/-11.15	-13.02/-13.02
Θ(22.5°)	-6.45/-5.63	-4.69/-5.25	-4.13/-2.83	-2.53/-1.43	-0.72/-0.16	0.25/-0.1	-0.35/-0.43	-0.23/-0.87	-1.87/-3.32	-4.78/-6	-6.86/-8.4	-9.93/-10.69	-8.97/-7.35	-5.21/-3.23	-1.06/0.38	0.93/0.95	1.18/1.07	0.78/0.13	-0.06/0.11	-0.05/-0.93	-2.02/-3.69	-5.18/-6.55	-8.29/-9.27	-9.12/-7.83
Θ(30°)	-6.84/-6.04	-5.56/-4.38	-3.37/-3.62	-3.95/-2.44	-1.93/-1.52	-1.37/-1.56	-1.20/-3.3	0.30/1.2	-1.21/-3.64	-6.65/-8.2	-7.93/-8.76	-11.2/-12.68	-10.86/-8.14	-6.46/-5.38	-3.75/-1.23	0.74/2.62	3.16/2.66	1.53/-0.17	-0.8/-1.56	-1.74/-2.51	-3.89/-5.31	-6.29/-6.84	-9.66/-6.62	-6.03/-6.09
Θ(37.5°)	-4.13/-3.75	-2.77/-2.73	-1.48/-9.42	-5.5/-5.21	-4.31/-3.35	-2.8/-1.6	0.04/0.93	0.51/-1.24	-4.96/-10.2	-10.99/-7.91	-7.3/-9.96	-15.51/-17.12	-9.66/-4.84	-2.99/-3.21	-2.65/-2.49	-0.59/1.46	2.57/2.41	1.71/0.44	-0.34/-0.76	-0.88/-1.37	-2.64/-4.4	-7.15/-11.25	-17.39/-19.29	-10.97/-6.32
Θ(45°)	-7.33/-5.57	-5.35/-6.08	-5.16/-5.94	-6.84/-5.32	-4.55/-4.45	-4.71/-3.97	-2.55/-1.93	-3.19/-6.35	-10.05/-7.73	-6.46/-6.06	-8.03/-13.2	-14.77/-12.01	-6.59/-3.58	-2.23/-1.41	-0.9/-1.14	-2.93/-3.43	-0.51/-1.22	0.72/-0.7	-1.87/-2.82	-3.49/-4.07	-4.31/-5.08	-8.12/-10.11	-11.54/-16.3	-17.7/-11.18
Θ(52.5°)	-10.16/-7.17	-5.56/-6.64	-6.13/-3.71	-3.28/-3.88	-7.2/-9.87	-8.21/-4.3	-1.86/-1.6	-3.18/-4.48	-4.95/-5.08	-6.1/-6.66	-8.41/-9.17	-8.36/-8.83	-7.66/-6.49	-5.03/-2.85	-1.1/-1.37	-2.08/-0.87	0.56/0.61	0.93/0.9	0.12/-2.09	-5.49/-7.83	-7.96/-7.47	-7.39/-10	-12.13/-10.62	-15.97/-17.11
Θ(60°)	-6.81/-5.04	-4.67/-6.19	-9.04/-8.43	-6.56/-8.43	-10.88/-17.87	-11.65/-4.83	-3.51/-5.72	-7.67/-7.23	-3.23/-7.31	-9.97/-8.79	-7.66/-7.23	-6.22/-6.79	-6.04/-4.32	-3.92/-2.85	-0.89/-1.59	-1.24/0.18	-0.79/-2.46	-2.42/-2.21	-3.63/-5.04	-5.87/-6.55	-7.8/-12.91	-18.33/-17.86	-15.67/-10.35	
Θ(67.5°)	-10.54/-7.25	-8.23/-13.48	-13.69/-11.82	-10.04/-10.2	-14.22/-13.67	-9.11/-7.99	-9.79/-11.59	-6.12/-3.86	-3.7/-5.12	-8.09/-9.54	-6.99/-4.91	-5.21/-6.87	-11.78/-12.52	-11.64/-8.95	-5.81/-3.01	-0.92/-0.52	-2.48/-2.21	-0.48/-1.21	-3.19/-6.69	-8.33/-8.71	-4.94/-4	-3.91/-6.28	-8.22/-12.08	-12.49/-10.57
Θ(75°)	-8.02/-4.67	-3.63/-6.91	-10.89/-18.89	-14.44/-11.28	-16.74/-18.27	-13.38/-13.9	-14.16/-10.2	-6.72/-5.7	-7.72/-10.36	-15.35/-12.76	-8.63/-7.08	-6.5/-9.13	-16.54/-15.77	-14.02/-16.8	-12.94/-8.08	-2.91/-4.8	-3.25/-5.72	-3.99/-2.29	-3.44/-3.87	-6.26/-9.5	-9.14/-7.87	-6.18/-6.78	-10.79/-15.55	-18.84/-10.29
Θ(82.5°)	-6.32/-4.48	-2.41/-4.08	-8.46/-17.76	-10.73/-8.76	-9.88/-12.22	-17.73/-18.59	-17.98/-12.53	-12.11/-13.33	-18.14/-19.45	-13.05/-8.5	-8.15/-9.46	-10.64/-12.95	-19.13/-9.4	-11.95/-16.96	-19.28/-10.58	-6.96/-4.2	-4.74/-8.94	-9.9/-10.03	-11.77/-13.09	-9.32/-9.11	-13.49/-16.17	-17.76/-17.41	-16.18/-10.15	
Θ(90°)	-9.06/-8.41	-6.83/-5.81	-9.22/-18.72	-9.75/-8.66	-8.83/-9.63	-12.37/-12.09	-9.57/-10.57	-13.13/-10.57	-10.17/-12.47	-12.41/-9.85	-10.12/-13.25	-19.23/-18.62	-18.13/-15.58	-12.91/-13.91	-17.17/-17.76	-7.24/-2.91	-1.51/-3.97	-7.83/-8.47	-5.67/-7.6	-12.2/-16.42	-12.54/-8.54	-6.82/-11.63	-15.67/-16.18	-15.52/-17.76
Θ(97.5°)	-13.2/-9.05	-8.18/-6.14	-7.69/-12.27	-18.62/-18.69	-18.63/-17.53	-15.9/-14.61	-14.29/-18.43	-17.63/-19.55	-14.44/-16.66	-12.18/-7.32	-8.12/-10.17	-18.41/-17.98	-11.58/-10.51	-11.42/-9.39	-10.89/-17.82	-10.65/-8.68	-5.89/-6.78	-10.55/-12.12	-8.16/-6.95	-8.83/-12.58	-15.96/-12.91	-14.74/-16.56	-18.91/-18.63	-18.13/-14.46
Θ(105°)	-16.97/-14.09	-17.96/-17.95	-17.7/-18.8	-18.99/-15.65	-16.74/-18.02	-17.7/-17.73	-17.81/-15.23	-14.93/-18.15	-13.56/-10.36	-13.92/-13.26	-10.99/-8.7	-6.13/-9.5	-13.51/-11.84	-8.8/-10.58	-13.12/-15.4	-13.23/-10.68	-9.63/-9.42	-18.51/-18.47	-18.34/-18.06	-17.04/-16.03	-15.46/-13.3	-10.99/-13.51	-15.41/-14.13	
Θ(112.5°)	-11.18/-10.85	-12.5/-11	-8.93/-9.18	-10.11/-9.99	-15.24/-16.48	-13.73/-14.42	-18.1/-17.11	-9.72/-7.06	-7.37/-5.13	-7.16/-10.9	-8.58/-10.59	-12.08/-17.61	-16.42/-18.56	-17.47/-19.03	-18.65/-15.7	-12.31/-11.05	-18.35/-18.99	-15.09/-14.54	-16.44/-9.58	-9.93/-12.78	-10.99/-9.24	-11.33/-19.2	-10.85/-6.84	-6.66/-10.19
Θ(120°)	-6.4/-6.09	-7.32/-9.49	-8.35/-6.07	-6.4/-9.93	-10.6/-10.97																			



Radiated Composite Gain Data

Appendix A

Θ(112.5°)	-5.03/-3.72	-3.81/-3.76	-6.74/-10.78	-16.51/-17.45	-18.73/-18.35	-17.99/-18.09	-18.61/-11.89	-7.71/-5.09	-2.65/-1.14	-0.22/-1.11	1.22/0.76	-0.16/-1.77	-2.1/-1.87	-3.39/-3.55	-3.81/-5.36	-8.37/-11.66	-8.34/-8.63	-15.79/-15.39	-9.29/-11.78	-10.21/-10.26	-15.66/-8.04	-5.07/-7.55	-5.59/-4.4	-4.02/-3.66
Θ(120°)	-8.05/-5.77	-5.29/-6.25	-8.58/-12.29	-18.23/-19.23	-14.78/-12.54	-12.77/-17.84	-12.02/-10	-9.52/-6.74	-3.27/-0.88	0.87/-1.32	1.69/-1.21	0.35/-0.08	-0.73/-1.32	-2.63/-2.96	-3.97/-2.99	-5.3/-9.3	-9.01/-8.3	-10.94/-11.58	-17.77/-17.67	-17.39/-16.97	-14.59/-8.79	-6.97/-6.95	-8/-7.09	-9.49/-7.87
Θ(127.5°)	-9.03/-9.9	-10.49/-12.07	-10.77/-10.59	-14.65/-19.01	-14.89/-12.56	-12.71/-13.34	-10.78/-7.39	-2.72/-5.69	-4.8/-1.99	0.44/-1.58	2.48/2.4	2.420/96	-0.12/-2.77	-3.23/-4.35	-3.28/-4.36	-6.49/-11.42	-18.02/-10.86	-6.06/-5.53	-9.9/-17.85	-18.84/-17.14	-19.24/-15.44	-13.29/-16.16	-18.3/-15	-12.8/-10.11
Θ(135°)	-12.84/-11.03	-8.65/-8.3	-7.07/-8.57	-11.48/-17.37	-15.71/-9.83	-9.73/-14.88	-16.91/-10.42	-6.99/-5.08	-4.73/-9.95	-3.7/-20.1	-1.12/-0.4	-0.83/-1.28	-2.51/-4.25	-4.71/-6.27	-5.24/-5.2	-8.74/-15.8	-19.02/-13.62	-13.1/-11.26	-11.22/-11.42	-12.21/-16.32	-18.49/-18.41	-18.93/-16.78	-17.67/-18.77	-19.2/-14.52
Θ(142.5°)	-2.51/-3.5	-4.37/-6.69	-9.84/-14.59	-18.44/-16.23	-9.71/-7.12	-5.79/-8.57	-7.13/-4.71	-5.48/-3.63	-2.71/-2.36	-3.04/-3.8	-4.41/-5.91	-6.68/-7.02	-7.7/-7.51	-8.21/-10.57	-13.61/-14.35	-14.59/-12.8	-11.54/-9.65	-11.25/-16.92	-17.41/-17.91	-18.79/-18.52	-17.85/-18.82	-17.54/-13.47	-9.41/-5.23	-3.39/-2.36
Θ(150°)	-6.38/-5.84	-6.7/-8.2	-10.26/-13.01	-17.51/-14.64	-8.75/-5.43	-2.33/-3.65	-3.35/-3.34	-3.14/-2.82	-2.42/-2.3	-2.22/-2.97	-5.17/-7.65	-10.62/-16.86	-17.89/-15.45	-12.65/-10.25	-9.92/-12.25	-13.16/-14.28	-16.56/-15.72	-13.83/-12.44	-10.93/-10.22	-10.26/-10.89	-8.47/-6.27	-12.84/-15.82	-8.93/-8.18	-7.36/-6.91
Θ(157.5°)	-9.87/-10.12	-11.03/-11.14	-13.98/-18.41	-18/-14.6	-9.87/-7.43	-6.14/-5.43	-5.19/-5.03	-5.55/-6.1	-6.71/-7.14	-7.74/-8.39	-8.63/-7.74	-6.94/-6.31	-5.76/-5.48	-5.71/-6.22	-6.68/-6.72	-7.37/-9.42	-12.03/-12.5	-12.49/-13.42	-14.11/-13.77	-12.96/-11.96	-9.65/-8.33	-8.7/-8.85	-8.78/-9.31	-9.34/-9.61
Θ(165°)	-16.32/-15.41	-14.85/-14.43	-13.85/-14.38	-16.04/-16.86	-12.56/-8.96	-6.84/-5.52	-4.73/-7.7	-3.18/-2.73	-3.11/-3.11	-2.82/-2.58	-2.05/-1.86	-1.72/-1.64	-1.74/-2.06	-2.93/-4.07	-5.88/-8.79	-11.6/-11.59	-9.44/-8.85	-9.1/-9.98	-10.94/-11.59	-11.24/-10.08	-8.36/-7.49	-7.55/-8.77	-10.64/-12.66	-14.24/-15.63
Θ(172.5°)	-15.17/-17.22	-18.52/-18.76	-18.1/-18.62	-17.74/-16.7	-12.8/-10.21	-8.56/-7.6	-6.48/-5.76	-5.3/-5.01	-5.14/-5.14	-5.33/-5.75	-6.26/-6.92	-7.8/-9.4	-11.25/-12.74	-13.82/-14.37	-13.73/-11.76	-9.91/-9.4	-9.83/-10.94	-15.8/-15.75	-15.25/-13.69	-11.73/-10.32	-9.19/-8.71	-8.78/-9.53	-10.46/-12.29	
Θ(180°)	-7.77/-8.48	-9.34/-10.25	-11.56/-13.73	-16.32/-16.69	-18.83/-18.63	-18.54/-16.19	-14.34/-12.82	-11.86/-11.23	-9.88/-9.23	-8.63/-8.14	-7.78/-7.49	-7.35/-7.07	-6.95/-6.96	-7.52/-8.34	-9.28/-10.07	-11.86/-14.19	-18.62/-19.17	-18.62/-16.88	-13.61/-11.6	-10.22/-8.98	-7.55/-6.71	-5.68/-5.36	-5.28/-5.42	-6.08/-6.8
Freq(Hz)	5.2GPol.	ThetaAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-10.68/-7.83	-5.59/-3.86	-2.5/-1.46	-0.72/0.02	0.51/0.6	1.05/1.13	1.09/0.86	0.23/-0.35	-1.2/-2.44	-4.09/-5.8	-8.14/-10.27	-11.92/-11.67	-9.03/-6.39	-4.01/-2.62	-1.68/-0.91	-0.35/-0.12	0.16/0.32	0.43/0.51	0.41/0.2	-0.21/-0.49	-1.08/-2.08	-3.42/-5.44	-7.92/-10.84	-13.65/-13.11
Θ(7.5°)	-7/-5.94	-4.93/-4.4	-3.31/-2.56	-1.77/-0.75	0.06/0.82	1.43/-1.67	1.61/-1.47	1.01/0.33	-0.51/-2.02	-3.3/-5.58	-8.57/-13.31	-18.54/-18.6	-11.98/-14.7	-4.86/-2.96	-1.4/-0.4	0.26/0.63	0.77/0.8	0.73/0.41	0.14/-0.3	-0.81/-1.48	-2.36/-3.47	-4.7/-2.65	-8.45/-10.61	-10.02/-6.59
Θ(15°)	-4.32/-2.93	-2.6/-2.73	-2.92/-2.86	-2.62/-1.47	-0.39/-0.39	1.19/-1.59	1.58/-1.26	0.84/0.67	-0.42/-1.2	-2.82/-5.2	-6.48/-13.16	-17.37/-17.91	-12.57/-7.41	-4.03/-2	-0.54/0.24	0.53/0.43	0.05/-0.35	-0.68/-1.05	-0.97/-0.95	-1.11/-1.6	-2.61/-3.43	-4.62/-8.93	-10.66/-10.78	-8.36/-6.47
Θ(22.5°)	-3.73/-2.08	-1.22/-0.88	-1.13/-1.18	-1.9/-1.87	-1.19/-0.33	0.35/-1.21	1.62/-1.3	1.09/0.21	-1.12/-2.65	-4.84/-7.81	-11.33/-15.33	-18.99/-14.98	-9.5/-5.77	-2.98/-1.57	-0.68/-0.63	-1.22/-1.67	-2.24/-2.46	-2.12/-1.14	-0.45/0.09	-0.08/-0.63	-1.76/-3.29	-5.52/-9.23	-18.3/-17.58	-8.98/-5.78
Θ(30°)	-4.21/-1.97	-0.82/-0.51	-0.04/-0.12	0/-0.48	-0.7/-0.52	-0.21/-0.38	0.48/0.11	-0.76/-1.44	-2.58/-4	-6.13/-8.62	-12.74/-18.79	-18.21/-17.48	-10.66/-7.89	-5.92/-1.48	-0.38/-1.66	-1.76/-1.92	-2.02/-2.04	-0.81/-0.44	1.25/-1.09	0.57/-0.35	-1.55/-3.07	-5.06/-9.74	-12.56/-19.36	-15.9/-12.81
Θ(37.5°)	-5.02/-4.2	-0.93/-0.09	1.18/-1.32	1.35/-1	1.11/-0.7	0.64/-0.24	-1.42/-2.16	-3.07/-3.7	-4.48/-5.29	-6.19/-7.59	-10.26/-13.76	-13.76/-10.08	-7.09/-5.61	-3.59/-1.59	-0.99/-0.67	-0.71/-1.29	-2/-1.07	-0.54/-0.78	-1.43/-1.91	-2.39/-2.48	-2.45/-2.87	-4.28/-6.74	-11.82/-18.78	-15.73/-14.04
Θ(45°)	-6.1/-3.75	-1.53/-0.24	0.74/0.91	0.68/0.87	1.29/-1.98	2.13/-1.66	0.54/-1.29	-2.93/-4.01	-4.74/-5.63	-6/-7.28	-9.2/-11.66	-11.86/-9.81	-7.28/-5.64	-3.51/-1.66	-0.39/0.34	0.27/0.81	-0.92/-1.7	-2.37/-2.82	-3.17/-2.91	-2.01/-1.64	-2.49/-4.29	-6.23/-8.23	-11.65/-14.38	-12.98/-8.88
Θ(52.5°)	-6.73/-3.7	-1.87/-0.52	0.24/0.9	0.76/0.54	0.27/0.94	1.12/-0.46	-0.39/-1.79	-2.67/-2.52	-2.79/-4.21	-6.67/-9.83	-13.45/-15.96	-14.58/-11.41	-9.29/-6.53	-4/-3.08	-3.06/-3.45	-4.05/-4.36	-4.67/-4.88	-4.75/-4.39	-4.23/-4.68	-5.35/-5.76	-4.97/-4.13	-5/-6.66	-8.42/-10.72	-12.41/-9.97
Θ(60°)	-13.02/-8.53	-5.3/-3.24	-1.4/-0.22	0.2/0.7	0.45/0.79	0.7/-0.07	-1.73/-3.97	-4.6/-4.63	-5.67/-7.9	-11.82/-18.18	-18.91/-19.17	-17.29/-13.77	-8.56/-5.36	-3.92/-3.94	-4.44/-4.49	-3.58/-4.36	-3.88/-5.38	-7.29/-12.56	-14.78/-9.74	-6.78/-4.56	-2.84/-2.76	-2.94/-3.94	-5.58/-7.31	-14.66/-12.72
Θ(67.5°)	-11.87/-10.23	-6.8/-5.65	-3.38/-2.44	-1.47/-1.25	-0.69/-0.19	0.24/-0.39	-2.14/-3.7	-6.57/-6.77	-6.75/-7.86	-9.58/-11.31	-13.2/-15.37	-13.83/-11.14	-7.47/-4.89	-3.85/-3.22	-2.9/-2.46	-2.57/-3.7	-4.28/-3.62	-4.25/-5.71	-9.52/-11.59	-11.79/-11.24	-10.67/-7.54	-4/-2.95	-2.89/-5.01	-6.82/-10.09
Θ(75°)	-12.32/-8.7	-5.66/-4.74	-3.61/-3.83	-3.57/-4.69	-5.24/-4.55	-3.27/-2.79	-3.84/-6.08	-6.93/-7.23	-7.68/-7.98	-8.64/-8.23	-9.4/-10.69	-8.91/-8.23	-5.92/-5.15	-4.88/-5.02	-6.34/-7.02	-4.05/-2.7	-3.24/-7.27	-13.21/-12.63	-13.21/-9.76	-7.76/-4.82	-3.73/-3.08	-2.98/-4.55	-8.95/-15.23	
Θ(82.5°)	-11.75/-7.42	-6.49/-4.5	-3.33/-3.27	-3.63/-5.37	-8.28/-14.61	-13.67/-10	-8.5/-7.58	-7.44/-7.38	-8.21/-9.71	-10.87/-12.1	-7.09/-7.4	-9.29/-11.12	-11.38/-9.27	-8.36/-7.71	-9.03/-8.93	-9.17/-9.27	-7.78/-6.94	-10.18/-15.08	-13.13/-18.68	-14.1/-12.08	-7.99/-5.92	-7.73/-3.42	-4.63/-7.9	-11.16/-15.73
Θ(90°)	-16.29/-10.81	-9.13/-6.37	-4.81/-3.5	-2.86/-3.09	-4.18/-7.17	-12.34/-19.04	-17.92/-12.8	-8.7/-6.69	-7.13/-9	-11.81/-12.02	-10.12/-8.85	-8.03/-7.15	-5.67/-4.96	-4.59/-5.45	-6.97/-7.42	-9.38/-10.31	-6.86/-4.09	-4.42/-7.86	-12.31/-12.59	-12.97/-13.31	-10.99/-7.58	-4.46/-4.04	-5.12/-8.37	-14.93/-18.08
Θ(97.5°)	-13.31/-11.96	-11.57/-12.86	-9.97/-9	-6.16/-4.21	-4.08/-5.1	-12.32/-18.51	-19.01/-15.46	-14.1/-14.32	-13.96/-10.72	-8.38/-7.5	-7.19/-10.2	-9.53/-15.39	-11.71/-14.1	-11.13/-9.1	-17.32/-16.14	-7.45/-7.06	-8.44/-13.3	-13.31/-15.1	-17.79/-12.35	-8.67/-4.95	-4.98/-5.06	-1.77/-8.01	-13.59/-15.68	
Θ(105°)	-10.85/-10.19	-9.76/-11.35	-14.69/-19	-18.26/-14.04	-11.22/-8.32	-7.04/-6.97	-7.23/-9.8	-12.85/-15.4	-16.16/-15.67	-10.18/-9.26	-6.99/-7.5	-6.73/-8.18	-8.52/-9.61	-10.28/-10.87	-12.68/-16.5	-8.83/-5.65	-7.05/-7.38	-10.09/-19.17	-15.21/-13.31	-8.58/-7.12	-3.85/-6.59	-9.23/-13.93	-16.42/-17.42	
Θ(112.5°)	-19.08/-19.16	-17.98/-17.43	-18.39/-15.62	-17.43/-15.79	-16.24/-10.26	-10.27/-10.17	-12.48/-12.77	-12.35/-13.2	-10.93/-11.09	-13.69/-9.54	-8.5/-6.93	-6.43/-5.5	-6.9/-7.7	-8.76/-11.52	-16.32/-14.3	-19.13/-11.06	-5.97/-6.35	-8.58/-16.35	-10.88/-13.25	-8.98/-5.25	-8.54/-7.73	-9.92/-8.88	-13.62/-13.9	-19.26/-18.13
Θ(120°)	-10.9/-8.81	-11.44/-11.58	-12.59/-11.02	-11.43/-9.54	-10.39/-8.26	-7.27/-6.53	-11.38/-18.67	-18.77/-16.95	-17.84/-17.1	-16.19/-9.62	-6.41/-4.54	-4.52/-5.53	-7.07/-11.76	-13.3/-18.79	-18.99/-18.37	-17.94/-15.68	-15.16/-18.15	-12.62/-9.72	-12.99/-18.3	-17.61/-17.1	-9.7/-12.61	-17.76/-19.33	-17.06/-18.82	-14.37/-15.51
Θ(127.5°)	-18.4/-13.32	-11.51/-8.37	-8.83/-9.32	-7.54/-5.09	-3.74/-3.1	-3.06/-4.24	-6.82/-11.93	-18.02/-18.33	-19.19/-18.33	-15.31/-12.23	-10.56/-9.63	-9.36/-10.48	-11.61/-31.1	-14.51/-14.87	-10.19/-14.19	-16.66/-17.3	-10.12/-11.36	-11.59/-18.03	-15.32/-17.41	-9.96/-7.02	-12.32/-9.85	-15.96/-12.06	-13.73/-19.26	-10.88/-18.17
Θ(135°)	-12.15/-12.11	-10.76/-10.91	-9.07/-8.57	-8.02/-6.63	-3.98/-2.15	-1.77/-2.62	-4.09/-6.12	-9.49/-14.85	-18.64/-17.52	-13.32/-11.14	-9.7/-7.3	-6.55/-4.59	-4.94/-7.77	-7.93/-13.82	-18.8/-18.33	-17.81/-12.92	-14.42/-12.6	-14.56/-11.61	-14/-18.25	-17.56/-9.18	-12.97/-11.68	-17.81/-17.66	-13.63/-10.3	-10.62/-10.35
Θ(142.5°)	-11.89/-10.04	-9.48/-7.78	-8.47/-11.44	-15.38/-14.03	-7.72/-4.23	-2.77/-2.84	-3.78/-5.53	-7.49/-8.84	-10.15/-10.36	-10.36/-9.5	-7.31/-6.85	-5.06/-4.25	-6.06/-5.91	-5.94/-8.36	-10.31/-10.56	-12.06/-12.9	-17.91/-13.33	-9.03/-8.06	-11.73/-16.89	-15.97/-18.82	-12.48/-8.74	-12.66/-18.55	-19.25/-18.3	-18.88/-17.47
Θ(150°)	-18.96/-14.39	-14.43/-14.44	-10.35/-8.06	-6.02/-4.41	-3.38/-2.47	-2.23/-2.43	-2.98/-4.44	-6.14/-8.34	-10.16/-12.01	-15.05/-19.08	-18.96/-17.48	-11.85/-10.82	-13.32/-12.11	-12.31/-18.35	-18.06/-18.1	-17.86/-13.33	-10.12/-9.02	-9.8/-13.33	-18.47/-18.85	-17.73/-14.88	-9.33/-8.94	-11.73/-15.45	-16.07/-16.69	-18.05/-18.83
Θ(157.5°)	-9.54/-8.58	-11.24/-14.06	-10.39/-7.16	-6.07/-4.85	-3.8/-3.46	-3.84/-4.3	-5.49/-7.29	-10.93/-18.76	-12.71/-15.64	-13.59/-13.49	-12.08/-9.61	-7.65/-7.2	-7.64/-8.96	-10.65/-13.9	-13.61/-8.78	-5.81/-4.8	-5.64/-9.48	-10.91/-10.92	-9.51/-8.96	-10.66/-15.69	-18.74/-18.19	-18.73/-18.26	-14.17/-12.66	-15.57/-13.35
Θ(165°)	-12.66/-14.54	-17.61/-																						



Radiated Composite Gain Data

Appendix A

Θ(165°)	-9.07/-10.87	-15.71/-17.79	-17.2/-18.75	-17.81/-18.64	-17.55/-15.68	-14.29/-11.32	-8.31/-6.24	-4.76/-3.74	-3.15/-2.62	-1.73/-0.81	0.08/0.24	0.44/0.51	0.39/-0.01	-0.8/-1.97	-3.45/-4.93	-7.4/-12.07	-17.19/-15.29	-12.91/-12.46	-12.2/-11.69	-11.71/-11.28	-10.27/-8.89	-7.3/-7.15	-8.9/-11.12	-10.88/-9.33
Θ(172.5°)	-9.59/-10.65	-12.76/-13.51	-13.93/-13.86	-13.83/-14.49	-16.41/-17.6	-16.47/-12.17	-8.51/-9.91	-3.94/-2.56	-1.63/-0.69	-0.10/65	0.81/0.78	0.68/0.14	-0.79/-2.09	-4.16/-6.82	-10.23/-13.1	-13.77/-15.38	-13.21/-15.41	-17.74/-18.44	-18.64/-16.84	-14.47/-12.59	-9.83/-7.95	-7.19/-7.75	-9.55/-10.74	-10.42/-9.78
Θ(180°)	-9.46/-10.61	-12.03/-14.04	-16.41/-19.16	-18.36/-19.18	-18.45/-17.67	-16.31/-13.78	-11.28/-9.48	-7.61/-6.13	-5.48/-5.36	-5.2/-5.43	-5.81/-6.6	-8.29/-9.43	-11.51/-15.88	-17.46/-19.07	-14.36/-14.96	-14.92/-15.38	-17.71/-18.77	-18.14/-14.1	-11.71/-10.01	-8.41/-7.74	-7.18/-6.74	-7.35/-8.95		
Freq(Hz)	5.60/GPol	Theta/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-4.27/-2.64	-1.76/-1.06	-0.59/-0.23	0.01/-0.26	-0.59/-0.9	-1.39/-1.98	-2.85/-3.94	-5.64/-7.2	-9.5/-12.41	-16.07/-19.16	-18.86/-13.39	-9.69/-7.11	-5.21/-3.96	-2.78/-1.84	-1.29/-0.63	-0.3/-0.3	-0.16/-0.53	-0.71/-1.43	-2.23/-2.97	-4.13/-5.44	-7.61/-10.73	-16.11/-19.16	-16.75/-11.3	-7.85/-5.65
Θ(7.5°)	-6.14/-3.7	-3.04/-2.05	-1.32/-0.84	-0.38/-0.26	-0.42/-0.23	-0.28/-0.25	-0.57/-0.97	-1.97/-3.04	-4.71/-6.95	-10.01/-16.25	-18.62/-11.35	-7.13/-4.93	-3.19/-2.14	-1.09/-0.45	0.05/0.11	-0.02/-0.58	-1.5/-2.75	-4.1/-5.66	-7.23/-9.07	-10.57/-11.84	-13.53/-15.43	-15.55/-15.44	-14.26/-12.55	-9.59/-7.47
Θ(15°)	-3.9/-2.35	-1.04/-0.21	0.20/79	0.871/3	1.692/24	2.612/51	1.95/-1.12	0.19/-1.07	-2.87/-4.56	-7.19/-11.33	-17.89/-18.53	-10.77/-6.48	-3.79/-2.44	-1.37/-0.87	-0.14/-0.34	-0.61/-1.32	-2.39/-3.16	-3.68/-4.2	-4.75/-5.06	-5.29/-5.34	-5.95/-7.22	-8.88/-12.17	-16.35/-13.97	-9.48/-5.98
Θ(22.5°)	-2.82/-1.41	-0.29/0.42	1.14/1.62	1.842/26	2.933/47	3.483/45	2.51/1.57	0.54/-0.71	-2.63/-4.66	-7.51/-11.81	-18.64/-19.16	-14.18/-9.05	-5.72/-3.65	-2.31/-1.31	-0.45/-0.54	-0.59/-0.57	-0.82/-1.1	-1.66/-2.35	-2.35/-2.05	-1.99/-2.2	-3.56/-5.48	-8.39/-13.23	-17.48/-13.7	-8.35/-5.21
Θ(30°)	-1.53/-0.15	1.02/1.57	1.61/1.36	1.31/-47	2.132/69	3.012/73	2.21/06	-0.47/-2.36	-4.48/-6.31	-8.29/-10.5	-13.69/-15.12	-13.4/-9.65	-7.04/-5.67	-4.73/-3.71	-2.58/-1.3	-0.97/-1.16	-1.01/-1.52	-2.15/-1.95	-1.95/-2.31	-2.45/-2.54	-3.41/-5.53	-9.42/-14.53	-18.97/-13.16	-7.81/-3.78
Θ(37.5°)	-1.50	0.82/1.52	1.85/0.83	-0.05/-1.16	-0.53/0.94	1.61/36	0.37/-0.7	-1.91/-2.48	-3.58/-5.09	-6.41/-7.95	-10.61/-15.29	-18.63/-18.33	-17.8/-16.84	-13.91/-10.08	-7.64/-5.19	-3.75/-2.29	-2.3/-1.94	-2.19/-2.46	-1.87/-0.66	-0.33/-0.55	-1.5/-2.94	-5.55/-10.4	-15.48/-14.28	-9.05/-4.5
Θ(45°)	-3.26/-0.66	1.1/2.28	2.772/52	1.34/-0.42	-1.71/-2.13	-2.73/-1.8	-0.55/-4.03	-3.83/-4.29	-5.08/-6.61	-7.31/-7.35	-7.68/-9.47	-13.35/-17.94	-18.67/-18.57	-18.09/-15.13	-13.85/-12.57	-10.57/-9.49	-6.95/-5.35	-4.67/-2.78	-1.94/-2.35	-2.65/-1.95	-1.34/-2.15	-3.92/-2.7	-1.61/-19.47	-1.51/-5.9
Θ(52.5°)	-4.13/-1.8	-0.39/1.13	2.663/0.4	2.54/-62	0.79/-0.04	-1.95/-5.13	-8.54/-7.09	-5.21/-5.21	-5.85/-6.85	-6.17/-5.63	-6.28/-7.91	-10.47/-13.09	-14.02/-13.61	-12.48/-10.08	-8.49/-7.97	-7.81/-4.25	-3.9/-4.06	-3.04/-3.1	-2.49/-2.98	-3.55/-3.2	-3.58/-4.48	-6.4/-8.79	-10.41/-11.24	-9.91/-7.25
Θ(60°)	-3.74/-2.21	-1.14/0.03	1.392/1	1.66/0.29	-0.33/-0.04	-1.22/-4.02	-7.18/-5.87	-4.58/-6.21	-11.83/-12.5	-8.09/-6.26	-5.6/-5.61	-8.44/-12.06	-11.32/-9.12	-7.81/-6.19	-8.49/-10.02	-12.74/-12.1	-7.4/-5.12	-2.81/-2.86	-4.54/-5.15	-6.24/-9.01	-8.54/-5.48	-4.9/-4.92	-5.76/-6.15	-6.14/-5.09
Θ(67.5°)	-8.88/-7.84	-5.72/-3.47	-0.92/0.78	1.05/0.64	0/-0.87	-2.17/-4.99	-10.26/-10.32	-8.71/-13.7	-19.17/-15.23	-10.14/-9.47	-8.22/-10.78	-15.31/-18.73	-19.4/-19.03	-19.04/-15.94	-10.88/-10.74	-16.4/-10.67	-9.67/-9.08	-5.77/-6.02	-5.09/-4.57	-5.67/-6.72	-6.58/-7.09	-7.14/-6.1	-6.17/-6.84	-7.68/-8.43
Θ(75°)	-9.63/-6.31	-6.43/-4.3	-3.07/-1.87	-1.81/-1.57	-0.40/0.9	-1.04/-4.93	-11.23/-10.25	-10.24/-13.67	-17.95/-17.21	-18.06/-18.59	-15.55/-16.54	-17.8/-18.78	-15.47/-11.56	-8.73/-8.38	-7.01/-6.84	-6.62/-7.78	-11.84/-7.65	-5.41/-3.23	-5.35/-8.69	-10.84/-9.56	-8.96/-7.5	-4.86/-3.35	-3.47/-5.76	-7.87/-9.03
Θ(82.5°)	-12.3/-10.68	-6.22/-4.32	-2.46/-0.97	-1.31/-3.33	-5.57/-5.68	-6.57/-10.13	-11.92/-8.14	-7.49/-10.21	-15.28/-13.16	-9.13/-4.79	-7.58/-10.14	-16.42/-12.39	-7.57/-5.44	-6.23/-6.81	-7.15/-7.37	-9.36/-15.66	-10.97/-6.08	-3.96/-5.68	-11.75/-17.11	-11.92/-10.22	-11.83/-6.63	-2.63/-1.29	-1.29/-4.08	-12.4/-18
Θ(90°)	-13.3/-10.63	-7.13/-6.85	-4.38/-2.69	-2.41/-3.03	-5.43/-9.66	-14.2/-17.85	-15.79/-15.05	-13.15/-14	-16.13/-10.6	-6.99/-7.58	-9.39/-11.93	-14.28/-14.27	-14.83/-15.4	-12.53/-15.72	-10.87/-5.47	-5.72/-7.58	-13.35/-16.64	-9.48/-8.35	-2.72/-2.85	-3.65/-6.44	-11.75/-18.6			
Θ(97.5°)	-18.71/-18.48	-15.51/-10.34	-6.99/-4.85	-4.16/-3.17	-3.31/-3.21	-3.78/-5.56	-12.37/-18.69	-13.11/-14.9	-14.52/-14.04	-16.43/-12.44	-7.76/-7.44	-10.76/-17.23	-18.71/-12.25	-10.08/-7.38	-9.61/-11.92	-14.43/-16.43	-13.58/-3.73	-2.16/-6.61	-15.23/-9.61	-6.7/-8.94	-9.27/-4.21	-3.17/-4.2	-4.41/-7.31	-15.22/-18.28
Θ(105°)	-10.65/-9.43	-11.71/-18.05	-17.96/-18.23	-12.44/-17.7	-6.51/-9.46	-5.02/-5.36	-8.04/-15.39	-19.01/-12.5	-9.92/-11.92	-17.9/-12.52	-8.5/-8.32	-10.65/-15.88	-18.42/-17.92	-16.24/-18.4	-18.83/-19.07	-12.5/-8.61	-9.85/-18.94	-11.74/-7.54	-9.26/-13.52	-15.02/-8.72	-4.85/-5.04	-9.51/-10.97	-17.09/-14.76	
Θ(112.5°)	-14.9/-14.33	-14.02/-13.17	-11.79/-12.84	-11.47/-14.88	-14.82/-13.59	-9.59/-6.92	-6.37/-8.3	-10.27/-10.77	-10.39/-13.55	-10.92/-10.87	-8.17/-8.68	-11.13/-26	-18.09/-15.28	-13.99/-14.02	-14.06/-10.12	-7.08/-16	-12.73/-8.61	-14.68/-16.8	-8.33/-3.33	-5.16/-9.06	-7.65/-12.91	-8.40/-11.57	-12.01/-17.91	-15.06/-11.16
Θ(120°)	-7.92/-7.12	-11.76/-12.29	-8.17/-6.69	-5.29/-6.15	-6.91/-9.73	-17.54/-19.15	-14.65/-11.99	-11.28/-12.73	-15.96/-16.71	-12.53/-7.98	-5.17/-4.58	-5.93/-7.98	-13.47/-12.49	-11.64/-11.4	-14.88/-11.43	-10.74/-14.86	-15.6/-15.94	-15.87/-11.69	-9.46/-10.48	-13.43/-12.98	-8.3/-8.04	-15.86/-11.17	-8.2/-13.43	-13.95/-9.81
Θ(127.5°)	-12.3/-8.33	-7.24/-6	-7.55/-6.63	-6.17/-4.42	-3.83/-3.19	-4.36/-6.95	-10.99/-13.93	-12.5/-16.01	-19.35/-16.73	-10.62/-8.37	-8.08/-10.15	-11.08/-10.46	-11.44/-15.29	-17.91/-13.29	-9.03/-12	-17.77/-13.33	-15.63/-18.46	-16.91/-13.32	-9.57/-13.72	-14.94/-14.33	-12.78/-13.46	-12.08/-10.87	-15.51/-12.71	-6.75/-10.24
Θ(135°)	-10.43/-8.5	-6.67/-4.17	-4.24/-4.72	-5.07/-4.63	-3.72/-2.75	-3.14/-4.1	-2.56/-9.97	-8.07/-8.58	-11.25/-17.36	-18.28/-15.73	-11.19/-8.58	-6.83/-1.5	-7.6/-10.52	-10.39/-6.54	-9.12/-10.16	-13.1/-15.22	-12.81/-15.6	-8.86/-7.74	-16.05/-15.02	-10.96/-7.5	-8.89/-9.95	-12.72/-10.81	-13.79/-17.58	-9.48/-9.1
Θ(142.5°)	-15.71/-12.45	-8.5/-6.94	-6.87/-6.61	-6.81/-4.91	-2.6/-1.73	-1.85/-3.02	-4.52/-5.84	-7.8/-10.87	-13.43/-12.93	-9.93/-8.98	-8.17/-7.41	-8.12/-6.78	-8.66/-12.84	-12.94/-14.1	-9.08/-8.51	-6.18/-3.32	-6.15/-12.37	-14.32/-14.84	-18.78/-16.44	-17.24/-9.87	-9.12/-17.7	-18.11/-13.62	-8.22/-11.14	-15.74/-18.58
Θ(150°)	-9.24/-6.68	-8.01/-6.77	-4.17/-3.08	-2.06/-1.68	-2.73/-66	-4.81/-5.55	-6.84/-7.88	-7.11/-5.78	-5.48/-6.29	-8.12/-12.18	-18.01/-14.6	-8.25/-6.58	-5.17/-4.99	-6.06/-9.39	-13.93/-18.1	-16.84/-6.73	-5.55/-9.22	-14.21/-19.2	-18.73/-18.94	-18.16/-8.32	-5.04/-5.53	-7.88/-15.9	-17.84/-16.17	-13.13/-12.45
Θ(157.5°)	-7.73/-9.23	-12.54/-17.32	-11.47/-19	-4.43/-1.69	-0.92/-0.42	-0.04/-0.13	-0.07/-0.44	-1.32/-2.51	-4.19/-6.71	-12.44/-18.45	-13.12/-8.49	-9.59/-5.56	-5.95/-6.54	-3.18/-2.15	-2.91/-5.16	-10.42/-13.16	-10.19/-5.16	-3.18/-5.12	-8.38/-7.81	-8.94/-12.16	-13.71/-10.23	-10.31/-17.64	-13.72/-9.48	-8.69/-4.78
Θ(165°)	-7.9/-7.84	-8.83/-10.58	-10.68/-6.98	-4.91/-3.69	-2.34/-2.16	-2.79/-3.88	-4.75/-5.8	-6.79/-7.96	-10.51/-12.51	-13.99/-14.49	-14.94/-15.73	-12.11/-9.39	-7.28/-5.44	-3.62/-2.88	-2.88/-3.59	-4.29/-5.82	-6.76/-11.28	-18.61/-17.9	-17/-16.45	-15.49/-16.03	-18.87/-17.52	-18.38/-18.04	-11.36/-8.6	-8.23/-7.94
Θ(172.5°)	-14.33/-11.98	-9.43/-9.08	-8.27/-6.59	-5.32/-3.89	-2.68/-2.04	-2.05/-2.59	-3.23/-4.1	-4.72/-5.65	-7.01/-8.94	-12.25/-18.5	-17.15/-11.7	-7.31/-4.61	-3.06/-2.02	-2.13/-2.96	-4.93/-8.24	-15.39/-17.9	-12.98/-8.7	-6.31/-5.13	-5.17/-5.61	-7.06/-9.46	-12.41/-16.76	-19.35/-18.46	-16.82/-16.6	-16.16/-15.07
Θ(180°)	-10.41/-9.06	-8.06/-8.39	-8.4/-7.77	-6.54/-5.82	-5.67/-5.92	-6.65/-7.21	-7.77/-8.91	-10.87/-13.41	-17.14/-19.15	-18.5/-17.68	-17.39/-14.72	-13.02/-12.14	-12.25/-12.98	-15.32/-17.07	-14.85/-12.14	-10.43/-8.7	-7.98/-8.48	-8.88/-10.01	-11.57/-14.48	-18.75/-17.41	-17.91/-16.36	-18.28/-18.73	-15.45/-14.13	-13.54/-11.28
Freq(Hz)	5.785/GPol	Phi/Ant. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-3.33/-4.19	-5.41/-6.5	-7.77/-9.48	-11.64/-12.61	-11.36/-9.31	-7.39/-5.89	-4.82/-4.2	-3.39/-2.45	-1.86/-1.77	-1.58/-1.53	-2.02/-1.69	-1.71/-1.96	-2.17/-2.97	-4.09/-5.11	-6.6/-7.81	-8.81/-9.62	-6.68/-9.38	-8.36/-6.68	-5.3/-3.96	-3.47/-2.42	-1.73/-1.21	-0.99/-1.33	-1.66/-2.05	-2.44/-2.98
Θ(7.5°)	-4.18/-4.49	-4.8/-5.14	-5.37/-5.63	-6.55/-8.03	-9.15/-9.73	-8.7/-7	-5.37/-4.04	-2.94/-1.83	-1.29/-0.86	-0.46/-0.47	-0.47/-0.7	-1.16/-2.16	-3.15/-4.57	-5.77/-7.24	-9.73/-13.68	-16/-14.58	-12.9/-12.4	-8.4/-6.62	-5.63/-5.14	-4.7/-4.68	-4.3/-4.34	-3.91/-4.35	-3.36/-2.92	-2.51/-3.2
Θ(15°)	-2.09/-2.63	-3.11/-3.43	-3.62/-3.47	-4.06/-5.41	-7.22/-9.22	-9.68/-9.4	-7.67/-5.98	-4.03/-2.66	-1.39/-0.35	0.14/0.37	0.25/-0.16	-0.41/-0.36	-2.15/-2.9	-4.36/-6.59	-9									



Radiated Composite Gain Data

Appendix A

Θ(7.5°)	-10.6/-10.77	-10.62/-10.24	-10.05/-10.27	-11.12/-11.72	-12.47/-12.57	-11.58/-10.13	-9.05/-8.26	-7.4/-7.02	-7.38/-7.37	-7.19/-7.71	-8.65/-9.62	-10.03/-10.77	-11.3/-12.45	-13.53/-14.99	-16.46/-17.61	-18.7/-19.39	-18.01/-18.09	-18.34/-17.25	-14.84/-13.93	-13.18/-12.94	-12.85/-12.02	-11.28/-11.16	-11.29/-11.02	-10.53/-10.32
Θ(15°)	-8.63/-8.74	-8.88/-8.77	-8.74/-9.11	-9.71/-10.04	-10.11/-9.56	-8.24/-7.06	-6.16/-5.7	-5.56/-5.56	-5.85/-6.11	-6.44/-7.1	-7.95/-8.86	-9.48/-10.27	-11.03/-12	-13.29/-14.22	-15.02/-15.89	-16.42/-16.81	-16.94/-16.69	-16.11/-15.77	-14.44/-12.8	-11.71/-11.22	-11.25/-11.57	-11.18/-11.63	-11.14/-10.62	-9.83/-9.17
Θ(22.5°)	-8.36/-8.05	-8.13/-8.35	-8.79/-19	-9.62/-10.04	-9.88/-8.78	-7.18/-5.84	-5.03/-4.74	-4.71/-4.89	-5.33/-5.41	-5.82/-6.4	-7.12/-7.79	-8.37/-8.66	-9.38/-9.6	-10.91/-9.45	-9.46/-9.88	-10.05/-10.8	-10.22/-10.21	-10.15/-9.48	-8.49/-7.8	-7.59/-7.77	-8.11/-8.88	-9.84/-10.5	-10.57/-10.25	-9.78/-9.02
Θ(30°)	-8.15/-7.71	-7.93/-8.72	-9.92/-11.46	-12.72/-12.92	-11.69/-9.56	-7.4/-6.11	-5.7/-5.74	-5.99/-6.07	-5.95/-7.79	-5.42/-5.33	-5.37/-5.62	-5.86/-6.13	-6.4/-6.51	-6.28/-5.98	-6.25/-7.06	-8.01/-8.48	-8.9/-9.16	-8.76/-7.38	-5.8/-8.41	-4.42/-4.42	-4.76/-5.45	-6.75/-8.16	-8.96/-9.16	-9.32/-9
Θ(37.5°)	-7.07/-6.42	-6.62/-7.85	-9.77/-13.31	-17.91/-19.36	-12.04/-9.44	-7.85/-6.6	-6.96/-8.15	-9.69/-8.99	-8.81/-7.29	-6.33/-5.43	-4.56/-3.92	-3.68/-3.75	-4.18/-4.51	-4.9/-3.57	-6.02/-7.05	-8.18/-9.58	-8.14/-6.55	-5.36/-4.45	-3.82/-3.4	-3.54/-4.16	-5.08/-5.48	-4.66/-7.17	-7.54/-7.41	-7.47/-4.1
Θ(45°)	-5.9/-5.32	-4.96/-5.45	-6.81/-8.94	-11.91/-11.59	-8.6/-6.73	-6.02/-6.19	-7.71/-11.2	-18.35/-18.37	-14.59/-10.97	-9.14/-7.53	-5.43/-3.67	-2.63/-2.36	-2.73/-3.37	-4.1/-4.83	-5.62/-6.8	-8.57/-10.45	-11.73/-10.89	-8.76/-6.78	-5.32/-4.35	-3.23/-2.65	-4.92/-2.74	-3.94/-5.53	-4.78/-5.58	-6.03/-6.19
Θ(52.5°)	-5.45/-4.58	-3.94/-4.02	-5.03/-6.73	-8.45/-9.51	-7.05/-5.82	-5.33/-6.21	-8.09/-11.26	-14.74/-14.47	-12.9/-11.59	-10.97/-9.5	-6.36/-3.74	-2.15/-1.84	-2.3/-3.26	-4.16/-4.73	-5.12/-5.73	-6.9/-8.3	-8.67/-9.35	-7.45/-6.23	-5.94/-5.24	-3.94/-2.75	-1.37/-1.35	-1.77/-2.64	-4.03/-5.2	-5.67/-5.82
Θ(60°)	-4.33/-3.5	-3.1/-3.28	-4.61/-6.99	-9.39/-9.89	-8.54/-6.42	-5.01/-5	-5.84/-7.08	-8.86/-9.63	-10.9/-12.03	-12.87/-11.32	-8.5/-4.67	-2.37/-1.61	-1.73/-2.17	-2.72/-2.91	-3.02/-3.52	-4.45/-5.6	-6.73/-6.79	-6.21/-5.98	-6.1/-5.49	-3.34/-1.39	-0.19/-0.09	-1.01/-2.7	-4.79/-5.89	-5.62/-4.92
Θ(67.5°)	-3.78/-3.24	-3.03/-3.99	-6.9/-11.88	-16.45/-15.54	-12.96/-8	-4.98/-4.38	-4.08/-4.44	-6.37/-8.89	-11.19/-15.4	-17.15/-16.1	-15.14/-8	-9.15/-4.8	-2.31/-1.12	-0.77/-0.92	-1.21/-1.54	-1.95/-2.4	-3.07/-3.88	-4.72/-5.66	-6.8/-5.7	-3.14/-0.89	0.330/-27	-1.11/-3.08	-4.44/-4.73	-4.23/-3.75
Θ(75°)	-5.49/-4.82	-4.41/-5.05	-10.32/-18.24	-18.6/-18.38	-18.95/-10.13	-6.38/-5.43	-4.69/-3.8	-4.62/-7.56	-9.99/-14.69	-19.05/-15.77	-11.06/-6.76	-3.63/-1.22	0.010/28	0.15/-0.56	-1.23/-1.39	-1.44/-1.81	-2.21/-2.38	-2.75/-3.78	-5.6/-6.4	-4.21/-1.56	0.110/34	-0.9/-2.42	-2.54/-3.25	-4.37/-5.48
Θ(82.5°)	-7.26/-5.29	-4.04/-4.57	-8.66/-18.45	-12.3/-9.2	-9.9/-9.03	-9.32/-10.13	-7.96/-6.06	-6.02/-6.78	-7.25/-9.81	-13.42/-10.24	-8.42/-5.98	-2.8/-0.58	0.340/54	0.18/-0.84	-1.68/-1.22	-0.53/-0.84	-1.61/-1.48	-1.1/-2.05	-4.57/-7.74	-5.85/-2.58	-0.640/35	0.31/-0.05	-0.78/-2.26	-5.16/-8.42
Θ(90°)	-7.14/-3.65	-2.03/-2.61	-6.28/-12.33	-8.06/-6.1	-6.52/-8.25	-12.14/-14.84	-9.77/-2.79	-6.13/-5.38	-4.92/-6.45	-8.47/-7.65	-7.24/-5.17	-2.220/49	1.721/83	0.96/-0.78	-1.93/-1.07	-0.05/-0.25	-1.72/-1.59	-0.89/-1.84	-5.83/-11.6	-6.77/-2.02	0.551/66	0.510/05	-0.91/-1.46	-4.67/-6.62
Θ(97.5°)	-5.19/-2.56	-1.41/-2.42	-6.73/-14.97	-9.8/-7.55	-6.86/-7.35	-11.09/-14.17	-8.67/-5.99	-4.52/-3.25	-3.13/-5.12	-7.04/-7.27	-7.49/-4.9	-1.071/-46	2.652/81	2.050/6	0.011/01	1.470/43	-1.22/-1.2	-0.81/-2.92	-8.55/-10.75	-4.44/-0.65	1.652/81	2.421/45	1.110/32	-2.17/-5.24
Θ(105°)	-4.26/-2.61	-1.37/-2.24	-6.17/-10.63	-12.98/-9.72	-9.11/-9.45	-12.87/-15.38	-9.83/-6.33	-3.94/-2.45	-2.38/-3.61	-4.87/-5.88	-6.82/-3.13	-0.581/29	2.432/7	2.031/15	23/25	3.271/-96	0.15/-0.18	-0.48/-2.74	-6.63/-6.77	-2.950/52	2.943/76	3.031/79	0.570/33	-1.26/-3.56
Θ(112.5°)	-2.15/-1.32	-0.72/-1.84	-5.76/-15.5	-13.54/-10.89	-11.77/-15.51	-18.05/-18.21	-14.17/-9.65	-5.55/-3.61	-3.81/-4.26	-4.33/-4.6	-2.96/-0.24	1.492/28	2.672/23	1.271/26	2.693/7	3.341/76	0.510/5	-0.042/-0.06	-5.03/-5.58	-2.99/-0.08	2.063/48	3.091/91	0.70/06	-0.53/-1.36
Θ(120°)	-0.96/-0.85	-1.09/-2.77	-6.81/-16.05	-14.61/-11.04	-11.88/-14.74	-16.64/-15.84	-14.21/-11.45	-6.77/-4.37	-4.55/-4.92	-5.31/-5.33	-3.060/04	1.872/81	2.771/93	1.051/56	3.053/7	3.061/82	1.191/1.6	0.39/-1.79	-5.32/-6.12	-3.4/-0.43	1.933/27	3.192/1	0.590/01	-0.14/-0.5
Θ(127.5°)	-1.24/-1.35	-1.88/-3.38	-6.65/-12.49	-14.71/-11.304	-8.95/-9.4	-10.39/-11.19	-11.45/-9.77	-6.35/-4.59	-4.33/-3.47	-4.68/-4.1	-2.040/06	1.511/98	1.70/77	0.351/18	2.42/73	2.151/34	1.170/97	-0.2/-3.01	-5.73/-5.42	-3.39/-1.21	0.812/85	2.921/9	0.49/-0.61	-1.08/-1.18
Θ(135°)	-1.75/-1.47	-1.85/-2.95	-5.14/-8.63	-11.67/-10.35	-8.48/-7.76	-9.74/-8.66	-6.24/-8.16	-6.24/-4.81	-4.07/-3.64	-3.47/-2.76	-1.190/33	1.231/5	1.110/32	-0.080/25	0.80/84	0.370/03	0.1/-0.21	-1.66/-3.85	-5.25/-5.08	-3.87/-2.05	-0.231/05	1.120/11	-1.31/-2.47	-2.84/-2.45
Θ(142.5°)	-2.31/-1.89	-2.23/-3.27	-5.19/-8.11	-11.26/-11.89	-10.32/-8.86	-8.3/-8.24	-7.8/-6.79	-6.01/-5.11	-4.02/-3.35	-2.99/-2.04	-0.710/36	0.860/98	0.58/-0.04	-0.45/-0.61	-0.73/-1.12	-1.44/-1.52	-1.56/-2.09	-3.37/-4.97	-6.27/-6.3	-5.66/-4.65	-3.09/-1.76	-1.59/-2.29	-3.26/-4.01	-4.11/-3.3
Θ(150°)	-3.27/-3.15	-3.72/-4.54	-6.92/-9.73	-12.97/-14.87	-13.79/-11.64	-9.98/-8.83	-7.44/-6.07	-5.23/-4.68	-3.72/-3.14	-2.69/-2.13	-1.36/-0.55	-0.090/1	-0.17/-0.68	-1.29/-2.03	-2.57/-3.03	-3.46/-3.87	-4.44/-5.39	-6.73/-8.26	-9.45/-4.93	-8.52/-7.05	-5.5/-4.16	-3.44/-4.37	-3.69/-3.95	-4.07/-3.76
Θ(157.5°)	-5.05/-5.55	-6.38/-7.83	-10.01/-12.87	-16.25/-19.07	-18.75/-15.6	-12.76/-10.46	-8.3/-6.63	-5.93/-5.31	-4.48/-3.84	-3.55/-3.13	-2.63/-2.2	-1.85/-1.71	-1.86/-2.28	-2.85/-3.34	-3.74/-4.22	-4.68/-5.13	-5.59/-6.2	-6.48/-6.25	-6.24/-5.59	-5.01/-4.22	-3.66/-2.8	-2.52/-2.59	-2.92/-3.43	-4.05/-4.68
Θ(165°)	-8.11/-9.12	-10.46/-12.37	-14.92/-17.16	-19.57/-18.48	-18.07/-19.17	-18.58/-14.68	-11.65/-9.51	-8.19/-7.38	-6.83/-6.64	-6.45/-6.42	-6.31/-5.85	-5.41/-5.02	-4.85/-4.84	-4.89/-4.82	-4.77/-6.69	-4.64/-4.53	-4.39/-4.55	-5.09/-4.8	-4.51/-4.19	-3.87/-3.8	-3.51/-3.24	-3.47/-3.93	-4.39/-4.82	-5.86/-7.3
Θ(172.5°)	-15.55/-17.71	-18.44/-18.44	-19.48/-16.83	-15.48/-15.43	-16.65/-18.16	-17.49/-18.05	-18.88/-17.83	-16/-15.09	-13.83/-13.4	-13.11/-12.82	-12.69/-12.19	-11.1/-10.17	-9.47/-8.9	-8.13/-7.45	-6.94/-6.36	-5.77/-5.25	-4.94/-5.03	-4.99/-4.66	-4.43/-4.31	-4.45/-4.65	-4.9/5	-5.78/-6.98	-8.1/-9.33	-11.23/-13.92
Θ(180°)	-18.58/-18.37	-17.79/-15.8	-13.61/-11.68	-10.3/-9.59	-9.28/-9.08	-8.91/-8.88	-8.96/-9.26	-10.13/-11.46	-12.37/-13.23	-14.7/-16.2	-17.62/-19.28	-18.39/-18.51	-18.49/-17.08	-14.57/-12.88	-11.85/-10.93	-9.91/-8.96	-8.37/-8.2	-7.71/-7.24	-6.84/-6.98	-7.43/-8.04	-8.92/-9.83	-11.45/-13.77	-15.99/-18.49	-19.3/-18.64
Freq(Hz)	5.2GPol.	PhiAnt. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-7.9/-7.98	-8.34/-8.76	-9.31/-11.04	-10.81/-11.37	-10.91/-10.25	-6.01/-4.1	-3.48/-3	-2.79/-3.4	-3.02/-2.67	-2.5/-2.9	-2.64/-2.81	-3.32/-4.09	-5.25/-5.91	-6.82/-7.83	-8.58/-8.99	-8.28/-8.02	-8.1/-8.11	-6.62/-6.99	-4.66/-5.69	-6.01/-6.04	-4.64/-3.53	-3.75/-3.54	-3.45/-3.89	-5.52/-7.11
Θ(7.5°)	-2.44/-2.94	-4.49/-5.32	-7.56/-9.67	-10.13/-11.55	-9.71/-10.25	-8.47/-7.17	-6.56/-5.66	-5.49/-5.09	-5.49/-6.17	-6.86/-8.44	-8.81/-10.4	-12.28/-14.94	-15.5/-15.75	-14.02/-19.7	-9.16/-7.21	-6.35/-5.54	-4.56/-4.15	-3.84/-3.8	-3.8/-3.69	-2.51/-2.27	-1.86/-1.53	-1.42/-1.2	-0.93/-0.84	-1.76/-1.95
Θ(15°)	-2.49/-4.13	-7.1/-8.53	-10.94/-14.7	-15.95/-17.83	-14.55/-14.41	-12.96/-9.98	-8.53/-7.03	-6.5/-6.09	-7.56/-9.66	-11.56/-13.15	-14.51/-16.85	-17.66/-19.03	-19.29/-18.82	-18.44/-18.73	-12.93/-9.72	-7.5/-5.69	-4.27/-4.22	-4.86/-5.32	-5.34/-5.71	-5.65/-5.87	-4.41/-3.47	-2.51/-1.84	-1.31/-1.28	-1.48/-1.74
Θ(22.5°)	-5.35/-6.75	-7.79/-8.64	-8.9/-9.65	-10.69/-13.02	-17.39/-18.22	-14.06/-9.88	-9.37/-8.23	-6.97/-6.64	-8.12/-9.56	-10.94/-13.34	-17.41/-18.86	-18.08/-18.24	-17.23/-15.99	-18.38/-17.58	-16.65/-10.73	-7.57/-5.52	-4.22/-4.06	-5.04/-5.97	-6.03/-6.69	-9.16/-10.69	-9.11/-6.56	-4.89/-3.09	-2.18/-2.23	-3.21/-3.78
Θ(30°)	-4.5/-5.33	-5.86/-6.18	-6.73/-6.33	-6.74/-7.62	-10.86/-15.68	-18.04/-15.22	-10.74/-10.73	-11.03/-10.18	-9.32/-9.66	-12.43/-10.12	-16.14/-13.42	-13.7/-14.67	-19.33/-18.68	-13.66/-12.15	-12.2/-11.96	-11.41/-10.37	-8.81/-7.88	-8.68/-10.32	-11.51/-12.03	-9.9/-9.17	-6.87/-7.05	-8.64/-7.82	-7.31/-6.83	-6.04/-4.94
Θ(37.5°)	-6.71/-8.55	-4.76/-5.35	-6.06/-5.65	-5.86/-6.99	-9.26/-14.46	-16.77/-10.06	-7.68/-6.67	-8.14/-10.35	-10.93/-9.2	-11.48/-18.38	-12.64/-12.55	-14.32/-10.45	-14.89/-18.09	-14.85/-11.02	-10.15/-8.61	-8.09/-8.38	-8.9/-10.05	-15.24/-18.65	-14.98/-18.05	-17.61/-18.45	-16.27/-11.48	-11.39/-13.69	-13.22/-11.02	-1.48/-1.74
Θ(45°)	-12.7/-11.62	-11.14/-11.97	-11.97/-10.88	-9.64/-7.05	-7.83/-11.2	-17.06/-15.15	-12.14/-12.68	-15.6/-17.84	-13.6/-12.6	-12.53/-10.94	-10.82/-12.92	-15.39/-12.3	-12.08/-11.76	-19.1/-17.7	-11.11/-7.35	-4.93/-5.74	-7.27/-8.46	-12.16/-14.55	-11.44/-7.97	-7.73/-12.06	-18.04/-18.34	-15.63/-12.81	-11.12/-10.53	-15.18/-17.23
Θ(52.5°)	-13.26/-18.95	-18.89/-18.08	-11.91/-19.51	-13.75/-10.04	-9.23/-9.71	-13.34/-18.51	-13.23/-11.78	-12.75/-16.98	-10.09/-7.2	-8.39/-8.55	-7.17/-10.54	-17.48/-17.65	-12.67/-13.79	-17.54/-13.99	-10.29/-6.6	-4.36/-3.68	-4.81/-8.86	-9.29/-6.67	-5.58/-6.5	-8.55/-10.36	-10.62/-10.28	-13.29/-12.85	-17.7/-17.79	-13.61/-11.24
Θ(60°)	-11.58/-12.85	-14.18/-17.26	-18.97/-17.45	-12.6/-11.11	-15.73/-13.83	-18.76/-10.65	-9.13/-13.74	-6.24/-7.98	-7.63/-18.7	-14.65/-8.12	-14.58/-18.1	-10.85/-18.52	-17.29/-1											



Radiated Composite Gain Data

Appendix A

Θ(52°)	-15.1/-9.53	-8.56/-12.84	-9.44/-10.7	-10.39/-18.62	-18.94/-16.71	-15.18/-18.05	-19.23/-18.53	-17.82/-17.52	-12.79/-27.27	-10.19/-17.31	-16.2/-6.81	-5.82/-9.94	-4.75/-2.26	-2.25/-2.77	-2.63/-1.4	-0.37/-1.72	-1.67/-0.89	-2.6/-4.73	-4.31/-3.16	-1.88/-2.49	-2.12/-2.16	-2.77/-3.01	-5.87/-8.2	-8.37/-11.14
Θ(60°)	-11.68/-9.56	-11.11/-11.56	-8.57/-14.4	-19.14/-11.11	-19.16/-16.9	-19.18/-11.64	-9.26/-9.31	-14.25/-18.99	-18.51/-8.3	-2.75/-4.25	-5.4/-3.57	-4.54/-6.48	-1.2/-1.02	0.95/0.36	1.43/2.48	2.32/-1.49	1.72/0.35	-2.39/-3.48	-4.17/-4.47	-3.61/-2.04	-2.44/-2.55	0.01/0.31	-0.92/-2.37	-5.84/-10.24
Θ(72.5°)	-9.82/-9.16	-9/-8.67	-9.44/-11.6	-10.47/-16.23	-8.92/-13.97	-8.78/-8.38	-10.55/-9.36	-12.06/-16.15	-18.51/-11.16	-3.83/-6.55	-8.95/-2.39	-2.64/-4.72	-0.21/-4.8	1.72/1.53	1.99/1.81	1.51/1.6	1.71/-1.53	-2.76/-2.26	-4.27/-3.69	-4.5/-1.27	-1.14/-2.64	-1.69/0.31	-0.29/-2.53	-5.59/-9.32
Θ(75°)	-5.09/-8.46	-9.13/-7.37	-9.58/-18.02	-12.3/-9.31	-11.93/-9.84	-7.32/-14.52	-15.31/-8.69	-8.62/-7.36	-8.1/-12.97	-8.61/-3.05	-3.09/-1.18	-1.26/-4	-2.44/-1.4	1.17/-1.22	-2.39/-3.29	-0.42/-1.25	2.24/0.73	-1.81/-0.31	-1.42/-0.24	-3.04/-0.91	0.46/-1.32	-1.18/-0.38	-2.16/-3.62	-4.29/-4.22
Θ(82.5°)	-2.8/-5.5	-5.92/-4.21	-9.41/-17.1	-8.49/-11.04	-18.91/-17.86	-19.15/-14.09	-5.9/-5.01	-8.77/-8.77	-7.39/-11.87	-6.82/-3.27	-2.17/-0.37	1.02/-0.16	-0.89/-1.12	1.56/-1.24	-2.92/-2.92	0.63/-1.13	2.52/0.28	-0.96/-0.69	-1.73/0.53	-2.01/-2.9	-6.0/-0.5	2.41/-1.89	-0.27/-1.93	-4.23/-2.42
Θ(90°)	-4.67/-9.45	-7.78/-8.07	-11.65/-16.01	-11.88/-12.73	-18.56/-17.63	-14.79/-13.11	-7.15/-11.88	-12.78/-7.15	-3.65/-4.48	-4.32/-3.01	-2.03/-0.3	0.04/0.5	0.02/45	3.94/0.46	-2.71/-2.46	1.63/2.69	3.27/0.4	-2.28/-0.92	-2.48/0.78	-6.55/-6.36	-1.13/-1.13	-1.15/0.35	-0.75/-0.58	-0.27/-0.43
Θ(97.5°)	-0.61/-2.31	-3.01/-6.42	-10.68/-13.01	-15.44/-18.9	-9.44/-8.2	-11.02/-12.84	-7.58/-9.4	-7.79/-3.26	-0.9/-0.77	-0.72/0.86	0.54/0.33	2.18/3.53	2.33/3.92	4.5/0.04	-3.62/-3.38	2.26/2.29	4.38/1.2	-0.34/-0.1	-1.19/0.34	-7.07/-6.09	0.4/-0.88	0.69/-0.23	-10.57/-5.52	-0.18/2.03
Θ(105°)	-0.16/-8.46	-4.33/-4.89	-10.22/-15.62	-18.25/-18.91	-9.06/-9.92	-13.39/-14.54	-15.28/-11.88	-9.64/-2.42	0.04/-0.64	-0.86/-1.76	1.08/-1.8	3.49/3.2	-1.39/2.56	4.43/0.34	-7.86/-4.1	1.38/0.62	5.15/0.89	0.64/-1.41	0.41/3.4	-7.14/-8.62	1.17/-0.6	1.12/6.1	-7.21/-8.52	-2.40/-47
Θ(112.5°)	-2.33/-18.22	-10.15/-31.8	-9.04/-8.68	-10.06/-18.59	-13.74/-15.45	-12.35/-10.19	-14.27/-11.64	-11.09/-6.34	-3.64/-5.53	-3.09/-2.25	-1.93/-0.73	0.37/-1.19	-1.12/-1.9	1.65/-0.77	-8.79/-3.81	-0.71/0.8	3.05/-0.36	0.75/0.69	1.62/3.93	-8.33/-7.01	-0.45/-1.46	-3.81/-1.94	-3.54/-5.73	-1.57/0.42
Θ(120°)	-1.5/-9.64	-11.77/-7.71	-11.32/-13.98	-15.56/-18.54	-16.93/-8.64	-8.06/-10.09	-12.16/-10.11	-9.81/-11.49	-8.71/-3.96	-1.43/-2.42	-4.54/-2.59	-0.93/0.05	-0.46/0.85	1.22/-2.25	-11.61/-6.6	-2.21/0.46	-1.8/-6.03	-5.68/-2.58	-0.45/-1.79	-8.48/-6.55	-2.49/-6.02	-14.64/-6.45	-5.44/-8.02	-3.83/-1.91
Θ(127.5°)	-2.75/-8.31	-14.15/-9.52	-0.99/-12.58	-16.24/-13.08	-11.85/-10.98	-11.92/-16.24	-18.79/-12.42	-12.01/-13.58	-8.45/-2.6	-0.61/-0.63	-0.62/-0.17	1.21/-1.39	1.41/-2.23	1.82/-0.1	-2.65/-3.17	-0.77/-1.11	-3.85/-5.22	-7.62/-3.33	-2.28/-1.66	-5.8/-11.3	-3.58/-3.3	-11.3/-8.98	-3.65/-3.52	-3.27/-2.43
Θ(135°)	-4.62/-9.01	-13.13/-10.16	-16.19/-19.8	-12.94/-10.9	-9.86/-9.93	-9.84/-8.05	-6.35/-7.56	-9.17/-7.63	-3.69/-0.74	0.77/0	-1.15/-0.64	1.03/-1.38	2.12/27	2.48/-0.16	-4.62/-5.54	-3.84/-4.55	-3.77/-3.76	-11.71/-18.54	-5.07/-2.25	-5.56/-10.37	-11.2/-8.58	-11.33/-12.76	-9.84/-11.98	-10.11/-5.37
Θ(142.5°)	-10.02/-14.97	-15.85/-14.61	-14.71/-16.27	-16.44/-17.19	-15.75/-19.3	-17.8/-16.57	-13.32/-16.76	-18.45/-16.18	-7.72/-2.29	0.63/-1.77	1.64/0.12	-2.78/-3.76	-1.35/-1.52	2.09/0.05	-4.15/-5.85	-5.05/-7.59	-11.82/-13.79	-9.18/-9.46	-12.18/-8.22	-6.12/-7.31	-7.45/-7.72	-12.75/-15.6	-17.37/-6.39	-5.12/-7.08
Θ(150°)	-12.48/-12.13	-17.43/-15.52	-18.18/-17.95	-18.87/-18.57	-13.58/-12	-8.33/-8.38	-11.08/-16.57	-18.4/-12.54	-8.38/-6.79	-5.29/-3.72	-2.31/-2.33	-4.28/-2.69	-5.01/-2.25	-0.83/-2.52	-6.13/-10.13	-11.51/-12.55	-17.63/-18.2	-17.71/-18.39	-15.63/-13.8	-16.12/-13.81	-8.88/-8.68	-11.57/-10.6	-8.79/-9.38	-12.73/-18.39
Θ(157.5°)	-7.06/-8.35	-12.17/-15.25	-18.48/-18.35	-18.65/-19.38	-15.74/-11.29	-9.89/-10.46	-11.78/-12.89	-16.71/-15.15	-10.79/-8.27	-6.49/-6.34	-7.18/-9.26	-11.46/-11.04	-3.84/-3.04	-4.86/-6.97	-9.17/-12.31	-12.47/-8.22	-7.09/-7.49	-11.64/-17.97	-18.1/-13.21	-7.87/-4.8	-8.73/-9.29	-7.16/-11	-7.12/-12.48	
Θ(165°)	-10.28/-10.51	-12.75/-14.61	-14.33/-14.34	-17.1/-18.43	-18.24/-15.33	-17.72/-18.17	-18.37/-15.42	-13.86/-12.96	-17.7/-18.92	-16.12/-15.12	-16.46/-18.31	-18.06/-17.87	-14.79/-11.63	-10.13/-10.32	-11.01/-10.73	-9.79/-9.73	-9.67/-9.35	-9.64/-9.97	-11.63/-14.49	-17.57/-17.32	-18.59/-14.06	-12.41/-12.38	-12.02/-11.32	-9/-8.55
Θ(172.5°)	-6.86/-7.18	-7.61/-9.62	-11.39/-12.32	-13.72/-16.16	-17.74/-19.02	-16.85/-13.07	-10.69/-9.18	-8.8/-9.37	-9.79/-10.26	-10.59/-10.36	-12.04/-13.85	-15.71/-17.94	-18.19/-18.52	-18.43/-15.83	-13.74/-12.87	-12.89/-13.37	-14.22/-13.66	-12.08/-11.16	-12.97/-15.31	-15.94/-16.97	-19.09/-15.61	-11.72/-8.75	-8.3/-7.94	-6.89/-12
Θ(180°)	-10.73/-11.97	-13.22/-17.75	-18.18/-15.69	-13.71/-13.72	-12.77/-11.96	-11.62/-10.14	-8.23/-7.36	-7.33/-7.77	-8.36/-8.57	-7.96/-7.64	-7.78/-7.77	-7.76/-8.14	-8.42/-8.64	-9.33/-10.31	-11.31/-12.54	-13.56/-12.53	-9.99/-9.29	-9.6/-10.93	-10.07/-8.85	-8.74/-11.05	-11.66/-10.69	-10.44/-10.4	-11.48/-10.83	-10.22/-10.65
Freq(Hz)	5.6G/Pol	PhiAnt. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-10.13/-10.82	-11.14/-9.37	-7.64/-5.7	-5.65/-6.89	-7.9/-8.46	-8.81/-6.44	-5.06/-6.06	-5.11/-4.43	-4.81/-5.28	-4.81/-5.41	-5.95/-8.39	-9.63/-10.9	-10.07/-10.49	-9.99/-8.75	-6.66/-6.52	-6.13/-7.14	-8.61/-8.69	-9.33/-8.65	-6.13/-7.14	-8.61/-8.69	-9.33/-8.65	-6.13/-7.14	-8.61/-8.69	-9.33/-8.65
Θ(7.5°)	-3.6/-4.98	-5.31/-6.7	-7.39/-9.41	-9.45/-9.49	-9.08/-7.67	-6.77/-6.91	-5.05/-4.61	-4.53/-5.63	-6.21/-6.5	-6.6/-7.58	-7.99/-8.02	-8.72/-9.36	-9.77/-11.57	-12.99/-12.06	-10.01/-8.7	-7.62/-7.56	-6.25/-5.29	-5.53/-6.54	-6.44/-5.45	-5.33/-7.68	-7.54/-7.25	-6.12/-4.95	-4.05/-3.34	-2.87/-2.53
Θ(15°)	-3.22/-3.37	-4.34/-5.56	-7.36/-11.03	-11.19/-11.69	-9.97/-8.2	-5.97/-4.28	-5.2/-6.38	-6.9/-8.41	-10.25/-12.26	-11.09/-11.01	-12.71/-14.64	-13.78/-15.02	-18.01/-19.22	-12.87/-9.57	-17.58/-6.79	-5.47/-4.61	-4.07/-4.83	-5.26/-4.93	-5.06/-6.82	-6.56/-6.71	-5.57/-3.73	-2.58/-2.03	-2.82/-2.98	-2.72/-2.95
Θ(22.5°)	-5.67/-6.57	-8.77/-10.77	-12.21/-11.56	-12.99/-9.65	-8.81/-9.65	-10.99/-9.06	-6.87/-5.53	-5.45/-9.71	-9.51/-12.69	-13.37/-9.51	-10.86/-12.41	-13.86/-15.02	-15.47/-12.64	-9.81/-9.99	-6.96/-7.17	-7.56/-8.71	-9.06/-10.07	-10.84/-10.85	-11.67/-8.77	-6.65/-6.19	-6.08/-6.89	-6.54/-5.96	-5.72/-5.25	
Θ(30°)	-9.49/-9.49	-11.57/-13.52	-13/-12.38	-10.8/-9.53	-11.42/-18.6	-18.73/-14.32	-11.58/-9.02	-7.83/-8.59	-10.44/-15.09	-18.13/-13.69	-12.72/-17.11	-19.5/-13.28	-8.93/-8.88	-10.01/-10.27	-9.93/-10.74	-12.65/-16.11	-14.12/-11.91	-13.04/-13.4	-10.74/-9.46	-8.91/-11.9	-16.64/-18.88	-18.5/-19.27	-18.11/-17.96	-14.25/-10.26
Θ(37.5°)	-8.14/-8.85	-9.93/-9.75	-7.97/-9.46	-4.73/-5.52	-12.64/-18.1	-19.16/-18.2	-16.62/-15.03	-14.15/-14.16	-15.77/-18.71	-11.01/-6.9	-8.6/-18.25	-18.63/-14.78	-8.86/-10.2	-14.56/-9.69	-9.43/-10	-10.61/-16.18	-18.24/-10.29	-8.01/-0.85	-13.62/-18.84	-12.17/-9.53	-13.56/-18.23	-18.13/-14.22	-11.32/-10.24	-11.15/-10.25
Θ(45°)	-13.32/-13.68	-19.27/-17.87	-12.99/-8.88	-10.31/-11.57	-10.12/-12.91	-18.09/-16.3	-12.34/-13.96	-18.22/-13.91	-12.29/-12.27	-11.10/-10.32	-8.51/-12.65	-13.11/-10.84	-19.09/-11.13	-19.09/-10.54	-8.37/-7.38	-6.78/-5.61	-5.08/-5.5	-5.34/-7.01	-10.36/-12.68	-12.91/-15.85	-10.87/-6.22	-5.53/-6.91	-10.24/-15.05	
Θ(52.5°)	-14.19/-11.5	-13.64/-13.03	-17.77/-17.77	-10.62/-9.69	-7.66/-7.56	-11.09/-16.56	-19.06/-18.23	-16.43/-14.61	-14.39/-12.22	-11.37/-13.38	-8.58/-14.15	-19.3/-11.68	-8.99/-18.65	-12.5/-15.21	-19.1/-11.2	-7.6/-7.72	-9.83/-10.34	-8.48/-7.87	-7.39/-6.01	-4.52/-7.24	-13.43/-9.86	-6.92/-5.97	-6.18/-9.01	-15.46/-19.01
Θ(60°)	-9.81/-9.85	-12.18/-12.8	-17.29/-15.04	-6.9/-7.66	-9.52/-13.68	-11.66/-9.3	-11.21/-17.59	-14.36/-13.93	-15.36/-14.16	-18.05/-10.24	-18.4/-12.94	-18.94/-18.66	-15.69/-18.19	-11.29/-14.14	-15.51/-11.67	-9.12/-7.25	-8.94/-10.47	-17.37/-19.05	-12.85/-8.75	-9.37/-18.76	-11.71/-7.76	-8.13/-18.69	-19.23/-19.02	-14.71/-12.66
Θ(67.5°)	-11.13/-19.2	-12.84/-15.1	-13.36/-18.76	-18.52/-13.33	-13.16/-18.82	-14.72/-10	-14.37/-18.85	-9.53/-10.36	-17.98/-17.72	-18.81/-7.98	-12.85/-16.47	-14.42/-17.21	-11.41/-13.3	-13.22/-10.84	-18.15/-11.57	-7.28/-6	-9.58/-18.74	-10.79/-7.53	-6.81/-10.12	-17.71/-19.46	-14.72/-13.1	-9.85/-12.72	-18/-16.05	-15.49/-9.81
Θ(75°)	-11.8/-17.94	-13.84/-9.74	-6.53/-8.97	-9.6/-6.17	-8.65/-14.31	-15.12/-18.27	-18.63/-9.38	-10.34/-12.89	-7.58/-7.72	-15.31/-18.48	-10.39/-18.56	-18.08/-12.65	-7.4/-8.63	-10.15/-10.06	-8.87/-10.34	-7.98/-9	-12.12/-12.56	-6.66/-3.66	-3.64/-5.82	-12.62/-19.06	-18.55/-17.72	-18.65/-14.24	-11.63/-15.87	-16.55/-14.6
Θ(82.5°)	-17.2/-14.92	-10.72/-6.24	-6.12/-11.89	-8.27/-6.03	-7.09/-7.32	-7.74/-9.54	-12.33/-12.27	-12.46/-11.79	-19.14/-12.48	-10.37/-15.11	-18.6/-17.99	-17.09/-17.73	-18.59/-14.31	-12.01/-12.26	-16.74/-17.71	-13.69/-13.25	-18.2/-17.24	-11.37/-10.72	-9.87/-7.63	-9.17/-14.79	-14.09/-18.43	-18.32/-13.65	-12.59/-12.3	-18.02/-18.91
Θ(90°)	-17.44/-19.11	-17.08/-11.01	-10/-13.43	-10.54/-11.2	-15.79/-12.3	-9.01/-15.96	-11.48/-10.66	-15.33/-19.86	-10.05/-6.93	-13.81/-19.86	-18.5/-17.17	-13.72/-12.92	-18.02/-19.23	-18.93/-19.1	-18.75/-16.69	-19.13/-18.29	-18.46/-14.12	-18.99/-18.15	-19.41/-16.88	-13.73/-13.26	-17.6/-18.73	-9.63/-13.74	-8.57/-12.46	-13.41/-17.67
Θ(97.5°)	-14.71/-11.98	-11.48/-7.33	-7.82/-15.65	-18.89/-16.2	-18.37/-19.14	-13.05/-16.09	-17.79/-9.53	-6.69/-7.29	-6.05/-6.96	-12.77/-15.61	-15.1/-19.01	-11.61/-9.44	-15.53/-15.9	-11.83/-14.97	-14.52/-16.52	-16.02/-17.89	-16.94/-12.28							



Radiated Composite Gain Data

Appendix A

Θ(105°)	-8.97/-5.25	-6.16/-17.83	-18.25/-10.67	-8.96/-11.56	-18/-6.95	-5.22/-7.49	-9.3/-10.41	-5.55/-1.87	-0.26/-0.34	-4.83/-0.14	2.72/3.13	0.98/2.46	4.48/-1.77	3.46/-1.43	-4.94/-6.13	-2.47/-0.13	1.67/3.04	-0.03/2.44	4.02/4.59	-2.16/-5.22	-0.94/-2.64	1.39/-2.72	-6.32/-1.79	0.15/-2.3
Θ(112.5°)	-3.88/-3.31	-3.63/-13.05	-18.99/-13.44	-9.05/-18.13	-12.23/-6.52	-7.55/-6.16	-8.9/-6.76	-11.03/-6.35	-2.59/-3.26	-4.98/-0.44	0.92/-1.6	1.23/3.78	4.4/3.15	2.51/-2.06	-4.78/-6.85	0.86/-1.9	-0.1/-1.27	-3.04/3.82	3.3/3.1	0.3/-0.22	-5.61/-7.44	1.44/-1.21	-7.24/-4.04	-1.72/0.8
Θ(120°)	-3.6/-6.94	-3.35/-8.51	-18.99/-13.73	-14.72/-17.89	-14.71/-15.1	-8.17/-9.54	-11.7/-8.1	-18.77/-9.62	-5.29/-3.37	-4.67/-8.03	-1.64/-0.33	-1.63/-1.92	2.96/2.26	1.75/-3.15	-7.08/-4.88	0.21/-0.09	1.5/-4.5	-5.02/3.38	1.81/1.31	-1.77/-1.46	-1.81/-11.86	-4.36/-4.06	-7.72/-13.1	-1.27/-1.29
Θ(127.5°)	-2.55/-8.32	-8.43/-12.82	-17.93/-17.49	-13.33/-13.02	-14.55/-9.79	-9.16/-19.31	-14.12/-12.92	-19.06/-16.93	-8.85/-2.51	-1.23/-1.05	-0.24/-1.16	-3.52/-1.14	1.81/3.2	1.74/-2.7	-5.26/-2.4	-1.31/-1.07	-2.02/-9.43	-4.4/0.43	-1.06/-1.87	-7.97/-3.8	-7.31/-9.15	-12.82/-8.64	-6.54/-3.86	-2.31/-2.11
Θ(135°)	-2.55/-3.11	-5.1/-9.74	-17.09/-17.79	-17.37/-10.8	-6.04/-4.53	-8.83/-15.04	-18.24/-18.19	-10.63/-11.3	-7.07/-1.38	0.51/0.4	0.3/-0.08	-1.01/-0.42	-0.32/-1.39	2.88/1.06	-1.33/-4.47	-5.12/-0.63	-4.44/-12.45	-5.48/-1.84	-4.76/-3.44	-8.05/-6.41	-7.55/-16.92	-16.64/-12.93	-6.56/-10.04	-9.98/-3.7
Θ(142.5°)	-13.23/-16.26	-18.72/-18.86	-18.39/-18.24	-18.81/-11.03	-7.34/-7.44	-11.67/-11.45	-10.3/-9.04	-4.1/-1.69	-1.27/-1.1	0.21/-5.9	1.39/-0.47	-1.46/-0.28	0.60/5.9	-1.59/-7.09	-7.45/-5.8	-9.75/-13.07	-6.57/-4.37	-8.18/-9.26	-17.66/-16.58	-9.46/-11.36	-18.63/-17.83	-16.83/-14.62	-11.71/-11.99	
Θ(150°)	-8.06/-15.28	-18.81/-11.49	-8.25/-8.54	-13.13/-18.9	-17.86/-14.22	-10.82/-10.76	-13.25/-12.63	-10.08/-8.24	-5.58/-3.57	-3.57/-4.05	-2.75/-0.65	0.88/0.67	-0.71/-1.79	-1.48/-0.88	-1.23/-4.06	-9/-12.97	-14.43/-14.99	-10.76/-11.88	-19.05/-16.26	-17.81/-17.5	-13.8/-12.5	-10.58/-7.21	-4.55/-5.25	-4.69/-5.44
Θ(157.5°)	-14.28/-18.01	-13.49/-9.85	-9.74/-12.34	-18.92/-18.13	-17.83/-11.96	-9.59/-10.63	-15.81/-19.16	-14.56/-15.11	-18.84/-15.2	-11.3/-17.9	-4.61/-3.51	-3.18/-3.17	-3.61/-4.18	-5.32/-6.72	-8.26/-10.22	-12.78/-12.72	-9.52/-6.6	-4.94/-6.22	-8.95/-15.18	-17.68/-17.9	-19.2/-15.69	-11.23/-9.81	-9.48/-10.79	-10.91/-12.66
Θ(165°)	-8.58/-7.23	-6.55/-5.98	-5.59/-6.91	-9.38/-12.11	-13.97/-15.94	-17.62/-19.14	-19.06/-16.27	-12.75/-10.83	-9.84/-8.06	-8.21/-8.34	-8.68/-8.5	-8.41/-7.87	-6.22/-5.62	-5.19/-5.33	-6.1/-10.8	-7.82/-8.59	-9.66/-11.26	-12.89/-14.59	-16.08/-13.74	-11.49/-10.49	-10.61/-9.92	-8.55/-7.66	-7.31/-7.65	-7.47/-3.3
Θ(172.5°)	-5.14/-5.22	-5.77/-6.95	-7.83/-8.88	-10.14/-10.11	-9.83/-9.77	-10.04/-10.82	-11.51/-10.62	-9.13/-7.65	-6.4/-5.46	-4.57/-3.86	-4.27/-5.21	-6.18/-6.59	-6.59/-6.27	-5.57/-5.1	-5.22/-4.65	-4.51/-3.53	-3.19/-3.55	-5.74/-8	-9.67/-11.27	-13.33/-12.37	-11.93/-11.93	-11.01/-9.41	-8.96/-9.06	-8.03/-6.6
Θ(180°)	-10.48/-10.75	-11.9/-10.59	-10.36/-9.26	-8.97/-9.07	-9.82/-9.89	-10.43/-13.14	-14.26/-13.55	-12.16/-12.05	-11.19/-10.77	-9.64/-9.2	-8.87/-8.99	-8.97/-9.07	-8.91/-8.68	-8.08/-7.93	-8.17/-8.35	-8.17/-8.86	-9.83/-12.18	-14.85/-12.59	-12/-13.39	-16.07/-17.93	-18.12/-17.54	-17.76/-16.12	-16.94/-15.5	-13.26/-13.11
Freq(Hz)	2.45GPol	PhiAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-8.25/-8.67	-9.01/-9.4	-9.31/-9.5	-9.88/-10.64	-11.55/-12.62	-13.19/-15.13	-17.42/-18.02	-16.29/-14.09	-12.24/-10.95	-10.25/-10.14	-9.91/-9.91	-9.84/-9.87	-9.73/-9.52	-9.2/-8.97	-8.89/-8.58	-9.49/-9.77	-10.35/-10.64	-10.86/-10.86	-11.37/-11.69	-11.27/-10.62	-9.84/-9.18	-8.17/-8.03	-8.08/-8.62	-8.42/-8.37
Θ(7.5°)	-9.22/-9.43	-9.43/-9.24	-9.16/-9.24	-9.61/-10.33	-11.3/-12.29	-13.81/-17.71	-18.16/-18.72	-18.22/-15.46	-12.62/-11.3	-10.08/-9.26	-8.81/-8.74	-8.99/-9.04	-9.07/-9.19	-9.2/-9.1	-9.06/-9.06	-9.51/-9.76	-9.26/-9.94	-8.83/-9.08	-9.51/-9.76	-9.67/-9.6	-9.05/-8.43	-8.63/-8.93	-8.97/-8.8	-8.74/-8.81
Θ(15°)	-11.21/-11.13	-10.81/-10.25	-9.8/-9.53	-9.8/-10.1	-10.71/-11.83	-13.88/-16.61	-17.36/-17.53	-18.92/-18.81	-14.36/-12.19	-10.37/-8.74	-8.11/-7.56	-7.45/-7.85	-8.36/-8.92	-9.46/-10.04	-10.2/-9.91	-9.75/-9.27	-8.18/-8.77	-8.41/-8.61	-8.83/-9.1	-9.04/-9.4	-9.29/-9.52	-9.56/-9.58	-9.62/-10.64	-11.45/-12.15
Θ(22.5°)	-15.77/-15.53	-14.36/-13.11	-11.78/-10.62	-9.82/-9.37	-9.04/-9.04	-9.9/-11.24	-13.06/-15.96	-17.61/-17.92	-16.04/-13.2	-10.8/-8.64	-7.57/-0.76	-7.7/-7.1	-8.17/-9.25	-10.26/-10.95	-10.81/-10.35	-9.56/-8.67	-8.7/-4	-7.02/-6.58	-6.77/-7.1	-7.58/-8.44	-9.09/-9.74	-10.52/-11.72	-12.84/-13.7	-13.95/-17.89
Θ(30°)	-18.19/-18.02	-18.5/-19.26	-16.04/-12.75	-10.52/-8.83	-7.64/-6.97	-6.88/-7.39	-8.4/-10.04	-12.36/-14.59	-17.76/-16.89	-13.95/-10.8	-8.9/-7.88	-7.17/-7.72	-8.47/-9.94	-11.97/-13.98	-14.11/-12.85	-11.6/-10.77	-8.46/-7.61	-6.52/-5.98	-5.98/-6.52	-7.18/-7.76	-8.86/-10.11	-10.62/-12.99	-14.43/-14.66	-15.31/-18.24
Θ(37.5°)	-15.22/-14.82	-15.05/-15.62	-15.65/-14.32	-12.2/-10.02	-8.42/-7.23	-6.5/-6.46	-6.95/-7.94	-9.32/-11.2	-13.77/-15.62	-15.95/-12.37	-10.65/-9.47	-8.9/-8.7	-9.15/-10.31	-12.21/-14.01	-15.19/-16.46	-15.39/-12.9	-9.9/-7.42	-6.04/-5.07	-4.72/-4.97	-5.64/-6.96	-8.49/-10.34	-12.72/-14.53	-15.31/-15.21	-14.03/-14.07
Θ(45°)	-12.22/-10.83	-10.58/-10.73	-11.31/-12.39	-13.43/-13.15	-11.26/-9.24	-7.93/-7.37	-7.27/-7.5	-8.17/-9.12	-10.47/-12.12	-13.43/-13.32	-12.36/-11.07	-10.52/-9.45	-8.96/-9.23	-9.97/-11.23	-12.53/-14.12	-17.36/-17.97	-18.56/-12.19	-8.5/-6.31	-5.39/-4.57	-6.36/-7.87	-9.89/-13.08	-17.16/-17.71	-19.1/-10.72	-13.87/-13.35
Θ(52.5°)	-13.21/-10.9	-9.91/-10.41	-10.82/-12.21	-14.11/-14.76	-13.89/-11.63	-10.07/-8.6	-7.94/-7.48	-7.86/-8.44	-9.53/-10	-11.42/-11.28	-10.49/-13.82	-8.61/-8.43	-9.3/-10.17	-10.88/-11.56	-12.15/-16.62	-8.1/-6.22	-8.32/-9.96	-12.32/-16.38	-18.71/-18.43	-18.73/-19	-18.73/-19	-18.73/-19	-18.73/-19	-18.73/-19
Θ(60°)	-11.38/-9.91	-8.48/-9.11	-9.04/-9.53	-10.52/-11.13	-11.18/-10.7	-9.85/-9.02	-8.19/-7.45	-7.07/-7.36	-7.95/-8.87	-8.9/-11.16	-10.48/-10.69	-10.26/-9.41	-8.46/-8.56	-9.32/-10.52	-10.88/-10.63	-10.51/-10.75	-11.15/-12.03	-11.41/-10.7	-9.67/-9.63	-10.43/-11.87	-13.29/-15.33	-16.21/-15.42	-15.53/-15.84	-11.71/-12.73
Θ(67.5°)	-8.63/-9.09	-7.76/-7.45	-7.5/-8.08	-9.06/-10.13	-11.37/-13.52	-16.58/-17.2	-13.26/-9.83	-7.78/-9.63	-6.97/-7.51	-8.06/-8.78	-9.5/-9.8	-9.46/-9.38	-8.28/-8.71	-10.45/-13.32	-13.25/-13.96	-13.22/-11.65	-11.1/-10.58	-11.86/-13.13	-13.51/-12.7	-12.07/-11.52	-10.79/-9.79	-9.34/-9.07	-10.19/-11.48	-9.97/-9.61
Θ(75°)	-8.84/-8.98	-8.41/-7.79	-7.95/-8.78	-10.01/-11.8	-15.02/-18.66	-17.87/-16.02	-14.9/-8.88	-7.39/-7.18	-13.8/-13.1	-8.13/-8.38	-8.26/-8.73	-7.63/-8.31	-10.22/-11.75	-12.49/-13.68	-15.28/-18.71	-14.97/-14.72	-16.85/-18.96	-19.06/-15.45	-12.36/-10.51	-9.38/-9.32	-8.71/-8.96	-8.75/-9.78		
Θ(82.5°)	-10.06/-9.58	-8.83/-7.54	-7.69/-8.49	-9.95/-12.56	-16.96/-17.44	-17.96/-15.28	-12.67/-10.68	-9.68/-9.29	-9.58/-9.35	-9.5/-9.32	-9.51/-9.9	-9.55/-8.53	-8.33/-8.81	-9.83/-10.24	-10.15/-11.64	-16.39/-18.04	-17.98/-17.89	-17.66/-19.71	-18.22/-17.52	-16.06/-13.14	-10.84/-9.9	-9.67/-9.53	-9.91/-11.31	-11.93/-11.23
Θ(90°)	-9.61/-9.02	-8.29/-6.66	-6.09/-6.1	-6.84/-8.43	-11.01/-14.54	-17.95/-17.54	-15.1/-12.98	-11.64/-12.53	-12.1/-10.9	-13.21/-15.26	-9.34/-8.58	-8.51/-8.04	-7.96/-9.81	-13.25/-12.94	-14.99/-13.65	-16.58/-11.49	-10.85/-12.44	-18.51/-13.78	-14.41/-12.92	-10.77/-11.14	-11.24/-10.29	-9.68/-10.35	-11.1/-10.96	
Θ(97.5°)	-10.36/-9.38	-13.18/-25	-6.46/-6.14	-6.53/-8.05	-10.94/-16.09	-18.62/-15.61	-12.61/-11.74	-11.57/-12.24	-14.13/-13.04	-12.27/-15.5	-18.07/-18.78	-14.11/-9.76	-8.34/-7.99	-7.55/-7.34	-8.78/-12.66	-18.77/-15.65	-10.14/-7.63	-7.37/-9.25	-12.86/-18.5	-18.77/-19.28	-19.48/-18.3	-16.42/-14.21	-11.73/-10.5	-10.33/-10.33
Θ(105°)	-9.03/-9.05	-8.94/-8.63	-7.61/-7.2	-7.49/-8.5	-10.55/-14.28	-18.33/-15.99	-13.18/-11.93	-11.94/-14.47	-18.8/-18.19	-18.92/-18.72	-17.98/-19.44	-12.57/-8.94	-7.67/-6.93	-6.41/-6.79	-8.98/-13.67	-18.9/-14.9	-9.5/-7.21	-7.14/-8.89	-12.35/-12.79	-12.21/-12.67	-15.25/-18.41	-18.26/-14.52	-10.33/-8.03	-7.38/-8.1
Θ(112.5°)	-9.12/-9.43	-9.25/-8.78	-8.48/-8.47	-9.06/-9.92	-11.26/-13.88	-19.42/-19.14	-18.29/-14.19	-12.93/-14.2	-18.05/-16.63	-18.12/-14.89	-18.23/-14.68	-9.23/-9.67	-6.3/-5.9	-6.21/-7.78	-11.77/-18.78	-15.12/-10.07	-8.54/-9.17	-11.63/-14.52	-13.32/-9.51	-7.65/-7.94	-10.41/-16.85	-18.68/-14.18	-10.2/-8.2	-7.59/-8.1
Θ(120°)	-8.53/-9.06	-8.84/-8.87	-8.97/-10.18	-11.92/-13.57	-14.27/-14.65	-14.88/-13.47	-10.54/-9.03	-8.42/-10.02	-11.22/-12.58	-12.73/-12.75	-11.63/-9.19	-6.9/-5.7	-5.14/-9.1	-5.39/-6.21	-9.53/-11.08	-8.01/-5.46	-5.06/-6.97	-10.22/-17.39	-17.72/-11.27	-9.47/-10.24	-14.06/-16.25	-16.77/-11.01	-9.18/-8.35	-7.53/-7.74
Θ(127.5°)	-7.83/-8.09	-8.47/-7.62	-7.87/-8.76	-10.59/-12.55	-13.28/-13.05	-12.56/-11.39	-10.98/-9.37	-8.79/-8.65	-8.89/-8.64	-8.56/-8.3	-7.14/-5.54	-4.26/-3.86	-3.85/-4.15	-4.95/-6.03	-7.44/-7.88	-6.49/-5.45	-5.94/-8.1	-10.87/-17.24	-14.53/-11.52	-10.75/-12.35	-16.22/-18.67	-15.96/-11.94	-10.06/-9.15	-8.63/-7.94
Θ(135°)	-7.93/-7.59	-7.28/-6.46	-7.23/-6.68	-8.96/-10.29	-10.75/-10.78	-11.11/-11.45	-11.61/-11.44	-11.3/-12.71	-12.11/-11.97	-11.51/-10.87	-9.62/-7.86	-6.37/-5.66	-5.75/-6.49	-7.24/-8.75	-11.39/-14.66	-14.44/-12.88	-13.9/-18.05	-17.51/-15.95	-13.11/-11.75	-11.89/-13.68	-16.4/-19.27	-17.72/-15.72	-13.25/-11.73	-9.58/-8.69
Θ(142.5°)	-7.15/-7.27	-6.75/-6.66	-6.74/-7.57	-8.86/-10.19	-11.03/-11.68	-12.61/-13.97	-16.16/-18.97	-18.93/-19.1	-19.05/-17.97	-16.86/-14.36	-13.38/-11.54	-9.69/-6.62	-8.62/-9.45	-10.47/-12.11	-13.57/-17.59	-19.19/-18.41	-18.71/-17.78	-15.96/-15.15	-15.31/-15.95	-17.82/-17.96	-18.4/-18.57	-14.6/-12.57	-11.05/-9.7	-8.69/-7.87
Θ(150°)	-6.37/-6.12	-6.27/-6.62	-7.25/-8.28	-9.63/-11.19	-12.55/-13.52	-14.21/-14.59	-14.67/-14.35	-13.69/-12.72	-10.66/-9.78	-9.02/-8.07	-8.48/-8.96	-9.29/-9.06	-8.99/-9.04	-9.39/-10.09	-10.13/-10.98	-13.07/-14.17	-14.76/-17.48	-						



Radiated Composite Gain Data

Appendix A

Θ (150°)	0.15/-1.43	-3.6/-6.36	-8.96/-8.56	-6.48/-4.96	-4.57/-5.96	-8.35/-11.54	-15.25/-19.66	-18.56/-17.41	-18.4/-17.57	-17.18/-17.16	-17.08/-16.16	-12.46/-9.55	-8.26/-7	-7.2/-6.72	-8.47/-12.1	-15.67/-17.29	-15.18/-8.84	-5.92/-5.72	-8.66/-13.41	-17.86/-14.68	-6.39/-2.19	0.44/-1.44	1.91/-2.18	1.71/-1.25
Θ (157.5°)	-2.04/-3.92	-6.49/-8.81	-11.79/-12.05	-9.92/-8.1	-8.14/-10.47	-13.58/-15.99	-18.43/-18.61	-19.17/-17.25	-18.93/-18.11	-17.84/-19.17	-18.76/-17.64	-17.47/-18.12	-18.57/-18.56	-18.25/-18.28	-16.39/-14.15	-12.98/-12.12	-8.82/-5.51	-4.04/-3.4	-3.58/-4.22	-5.72/-9.99	-17.9/-10.79	-5.61/-3.22	-2.08/-1.22	-1.16/-1.41
Θ (165°)	-8.59/-9.71	-10.35/-12.3	-13.82/-13.58	-11.78/-9.79	-8.39/-8.06	-9.04/-10.67	-18.81/-18.28	-18.18/-16.34	-16.33/-14.45	-14.78/-14.27	-14.78/-14.27	-13.22/-12.37	-11.31/-10.59	-11.56/-12.56	-14.97/-14.98	-15.09/-13.9	-11.91/-10.69	-10.27/-10.69	-10.48/-9.47	-8.86/-9.29	-10.61/-16.2	-10.14/-9.04	-8.55/-8.02	-8.04/-5.52
Θ (172.5°)	-14.14/-15.6	-15.71/-13.88	-12.19/-10.26	-8.2/-5.94	-5.17/-4.74	-5.21/-6.42	-7.94/-9.89	-12.27/-14.51	-18.26/-16.33	-17.86/-18.34	-16.78/-14.76	-12.86/-11.15	-9.81/-9	-8.25/-8.28	-8.23/-9.99	-7.67/-7.11	-6.75/-7.3	-8.31/-9.79	-11.81/-13.35	-14.42/-14.38	-13.26/-11.78	-10.12/-9.34	-9.28/-9.18	-10.51/-12.84
Θ (180°)	-18.37/-14.51	-12.07/-10.24	-9.51/-9.33	-8.1/-6.6	-6.18/-5.78	-5.87/-6.1	-7.42/-8.25	-9.46/-11.02	-13.01/-15.17	-16.38/-18.52	-18.23/-18.49	-18.02/-19.33	-14.64/-12.11	-10.13/-9.08	-8.68/-8.4	-8.27/-7.85	-7.41/-7.17	-7.09/-7.08	-7.28/-7.47	-7.99/-8.93	-10/-11.63	-12.3/-13.45	-16.13/-18.71	-18.9/-17.19
Freq(Hz)	5.3G/Pol	Phi/Ant.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-16.08/-12.66	-11.02/-11.43	-12.47/-11.18	-11.39/-11.39	-11.47/-12.16	-12.88/-13.46	-14.24/-12.67	-11.43/-10.85	-10.71/-11.2	-11.84/-13.46	-15.55/-17.33	-17.95/-17.95	-16.14/-15.75	-15.38/-14.46	-13.85/-12.97	-12.84/-13.03	-14.52/-15.51	-16.65/-16.91	-16.1/-15.24	-15.02/-15.27	-16.78/-18.9	-18.16/-17.07	-18.68/-19	-17.35/-18.01
Θ (7.5°)	-18.13/-18.6	-14.99/-13.73	-12.43/-11.38	-11.76/-12.58	-12.65/-11.65	-10.46/-9.75	-10.06/-10.99	-12.28/-13.8	-16.95/-18.96	-19.14/-18.42	-17.98/-17.97	-17.66/-14.72	-13.39/-12.23	-11.71/-11.67	-11.68/-11.57	-11.84/-12.09	-13.09/-14.75	-15.63/-16	-15.61/-14.96	-14.79/-14.64	-14.44/-14.67	-15.49/-15.37	-14.93/-14.39	-14.97/-16.95
Θ (15°)	-18.05/-17.11	-13.56/-11.06	-9.54/-8.44	-8.45/-7.7	-7.63/-6.57	-5.91/-6.26	-6.49/-6.99	-7.95/-9.46	-10.71/-13.17	-15.21/-18.01	-18.3/-17.72	-16.78/-12.75	-11.55/-9.7	-8.65/-8.49	-8.27/-8.93	-11.33/-15.34	-18.33/-14.3	-10.27/-10.82	-6.8/-6.31	-5.89/-5.66	-5.83/-5.98	-6.54/-7.39	-8.08/-10.29	-13.08/-15.14
Θ (22.5°)	-18.02/-16.4	-12.2/-10.42	-9.54/-9.06	-8.28/-7.35	-6.15/-6.23	-7.11/-7.09	-7.38/-7.48	-8.2/-9.2	-11.25/-14.28	-17.28/-18.01	-17.88/-16.2	-14.82/-14.57	-14.62/-14.21	-12.5/-13.5	-9.13/-10.18	-15.02/-17.85	-11.48/-6.83	-4.16/-3.12	-3.24/-3.67	-3.81/-3.71	-3.42/-3.71	-5.34/-7.3	-8.56/-11.35	-13.86/-15.93
Θ (30°)	-12.33/-16.23	-14.77/-10.44	-9.92/-11.85	-11.81/-10.11	-9.88/-11.74	-12.34/-10.56	-9.63/-8.33	-8.49/-10.49	-13.68/-17.81	-18.6/-12.6	-10.45/-8.87	-11.1/-14.13	-16.01/-12.66	-10.38/-10.85	-15.11/-17.28	-11.98/-7.75	-5.84/-5.28	-5.37/-7.03	-3.38/-8.22	-7.72/-7.58	-8.32/-9.93	-11.02/-11.4	-12.89/-13.77	
Θ (37.5°)	-18.72/-14.89	-11.57/-7.73	-7.65/-7.81	-8.21/-9.75	-14.66/-19.26	-19.12/-17.64	-19.01/-16.58	-13.77/-12.99	-16.06/-17.57	-13.69/-8.28	-6.7/-7	-7.63/-7.78	-8.6/-10.32	-12.23/-10.86	-7.57/-6.48	-8.84/-16.74	-17.95/-9.43	-8.13/-10.05	-12.3/-14.15	-17.07/-18.4	-18.15/-15.53	-15.05/-13.59	-17.49/-18.67	-19.09/-17.65
Θ (45°)	-13.27/-11.06	-10.05/-7.47	-7.51/-7.05	-7.43/-8.88	-11.52/-12.13	-13.33/-12.26	-12.72/-12.03	-11.77/-10.99	-10.71/-12.92	-13.41/-11.49	-9.75/-11.32	-16.08/-16.47	-13.32/-11.93	-14.09/-13.23	-10.39/-9.17	-9.47/-8.83	-8.93/-10.12	-16.01/-12.64	-12.2/-18.19	-17.87/-16.43	-13.12/-12.32	-18.17/-18.46	-17.56/-18.17	-19.02/-17.87
Θ (52.5°)	-18.5/-18.52	-17.1/-13.26	-10.61/-9.27	-12.1/-15.95	-13.25/-11.17	-13.3/-15.13	-11.85/-10.29	-11.45/-13.71	-13.45/-10.92	-7.91/-7.31	-7.64/-9.49	-9.65/-19.7	-8.08/-8.93	-9.02/-10.75	-16.28/-18.78	-12.32/-10.28	-12.44/-11.16	-10.89/-13.77	-11.11/-12.73	-16.81/-18.86	-18.43/-18.32	-18.65/-17.26	-17.49/-17.74	
Θ (60°)	-17.81/-18.98	-18.12/-11.81	-8.2/-8.25	-9.66/-11.12	-10.42/-12.05	-16.47/-14.27	-10.9/-7.84	-7.4/-11.62	-18.61/-10.4	-7.93/-7.65	-9.36/-10.67	-12.27/-10.13	-9.04/-11.19	-13.48/-11.67	-12.08/-18.14	-11.29/-8.47	-9.86/-15.18	-19.18/-17.23	-16.59/-9.9	-8.03/-10.56	-17.31/-18.87	-13.62/-15.23	-17.4/-17.79	-18.8/-18.81
Θ (67.5°)	-17.26/-12.7	-11.5/-10.35	-9.42/-9.53	-8.6/-8.3	-7.52/-9.64	-11.53/-15.8	-17.8/-19.7	-11.9/-16.61	-14.14/-16.16	-5.11/-5.91	-11.23/-18.34	-13.73/-8.72	-6.7/-8.3	-12.27/-13.3	-11.55/-13.03	-18.38/-16.06	-12.41/-19.09	-14.47/-13.18	-14.82/-9.7	-6.39/-9.1	-17.57/-16.45	-16.07/-14.95	-15.61/-11.9	-11.15/-13.98
Θ (75°)	-17.24/-18.91	-13.29/-10.04	-8.22/-8.41	-9.26/-8.21	-7.71/-8.22	-7.79/-8.96	-14.47/-15.91	-18.71/-17.9	-18.29/-10.79	-5.11/-4.42	-7.2/-17.52	-18.52/-12.22	-11.28/-9.24	-13.08/-15.12	-15/-11.91	-14.88/-16.83	-13.34/-13.18	-11.12/-14.13	-9.88/-8.81	-11.09/-15.62	-10.87/-9.49	-11.45/-16.18	-14.61/-14.75	
Θ (82.5°)	-15.96/-18.3	-17.98/-17.61	-14.78/-10.92	-8.24/-7.14	-6.03/-5.96	-6.12/-7.95	-9.98/-9.73	-11.68/-13.55	-17.79/-13.51	-6.52/-5.99	-9.33/-18.12	-13.67/-11.25	-15.31/-13.02	-12.04/-10.82	-14.77/-15.34	-11.87/-16.36	-18.34/-18.45	-13.03/-13.39	-18.61/-14.28	-17.4/-11.52	-11.74/-14.16	-11.97/-12.21	-12.18/-11.55	-12.52/-13.05
Θ (90°)	-18.78/-17.37	-11.09/-9.32	-7.72/-7.57	-5.58/-7.08	-13.38/-12.91	-15.09/-15.6	-13.15/-18	-16.32/-18.92	-16.62/-9.95	-6.7/-5.39	-7.48/-12.03	-17.64/-19.12	-10.84/-12.73	-13.9/-17.14	-18.12/-15.47	-17.41/-18.07	-12.54/-19.01	-12.09/-18.8	-10.26/-17.47	-18.54/-18.54	-16.33/-13.55	-14.25/-15.13	-15.07/-18.81	
Θ (97.5°)	-17.53/-16.39	-13.4/-13.99	-12.99/-10.95	-9.08/-10.27	-13.1/-15.47	-18.82/-14.78	-8.2/-5.06	-5.63/-16.02	-14.9/-8.79	-5.74/-10.9	-5.63/-10.24	-12.63/-11.39	-19.02/-17.9	-16.21/-17.99	-13.28/-14.47	-15.11/-18.12	-13.29/-18.46	-16.23/-18.51	-13.72/-17.82	-11.75/-14.9	-18.19/-18.35	-14.03/-8.66	-10.55/-14.65	-16.1/-18.2
Θ (105°)	-13.44/-14.75	-12.99/-10.83	-8.66/-7.53	-9.48/-15.34	-11.47/-9.36	-8.89/-10.27	-9.59/-7.79	-9.83/-16.76	-14.1/-10.8	-9.87/-8.5	-7.89/-7.9	-8.44/-10.19	-13.82/-18.46	-17.91/-15.07	-10.6/-12.24	-19.04/-10.73	-18.87/-13.33	-13.02/-18.82	-18.28/-17.21	-9.22/-10.02	-11.69/-19.27	-18.22/-18.45	-13.43/-10.12	-11.11/-12.22
Θ (112.5°)	-11.24/-11.04	-11.16/-9.2	-7.38/-6.2	-7.88/-10.84	-9.65/-7.28	-7.47/-11.19	-10.01/-7.1	-9.74/-17.16	-19.18/-10.53	-9.62/-13.05	-11.81/-8.94	-8.63/-12.58	-16.35/-18.84	-19.14/-18.99	-17.99/-16.52	-10.17/-17.77	-11.12/-14.71	-15.93/-17.5	-10.05/-10.38	-12.24/-12.54	-8.17/-8.76	-10.03/-8.76	-9.66/-10.8	
Θ (120°)	-17.56/-18.7	-19.32/-13.61	-8.59/-5.47	-5.62/-7.75	-10.34/-11.33	-17.44/-18.04	-13.42/-8.65	-6.94/-11.69	-18.36/-10.63	-8.63/-9.84	-12.51/-18.03	-18.06/-18.27	-17.75/-18.95	-19.05/-18.79	-11.31/-8.77	-12.26/-16.33	-10.81/-17.37	-17.22/-18.84	-18.52/-18.94	-12.4/-9.18	-8.72/-10.35	-9.83/-9.58	-10.21/-11.68	-12.13/-14.47
Θ (127.5°)	-11.13/-11.16	-11.05/-9.77	-7.61/-6.95	-7.27/-10.32	-17.09/-17.31	-17.6/-17.41	-16.59/-18.27	-18.87/-18.17	-10.06/-7.91	-8.23/-9.35	-12.24/-18.46	-19.11/-17.38	-17.87/-18.18	-18.32/-18.03	-10.84/-8.77	-12.35/-18.68	-16.68/-12.47	-12.35/-11.91	-19.17/-15.95	-15.89/-17.09	-13.72/-12.48	-11.4/-10.88	-10.51/-10.25	-10.29/-11.91
Θ (135°)	-13.09/-15.38	-14.23/-14.71	-11.47/-10.92	-10.64/-10.79	-13.62/-17.4	-18.25/-16.78	-12.11/-12.72	-17.79/-15.86	-14.64/-11.17	-9.17/-5.33	-11.98/-18.17	-18.49/-17.22	-13.06/-13.62	-15.31/-14.23	-12.75/-18.15	-18.23/-11.47	-8.6/-10.07	-17.76/-19.31	-18.71/-15.56	-10.64/-6.64	-4.56/-4.59	-5.09/-6.58	-8.64/-11.45	
Θ (142.5°)	-12.05/-15.17	-18.19/-18.05	-17.64/-16.53	-13.41/-15.47	-12.43/-16.43	-12.43/-11.29	-9.97/-10.96	-18.18/-18.84	-12.77/-10.11	-8.32/-8.31	-11.2/-16.69	-13.23/-9.24	-7.71/-7.35	-7.34/-9.07	-11.42/-18.2	-13.69/-10.1	-10.52/-13.97	-17.89/-18.48	-18.36/-19.77	-5.06/-2.57	-1.51/-1.68	-2.98/-4.77	-7.14/-9.19	
Θ (150°)	-12.22/-15.5	-19.21/-18.8	-16.46/-11.44	-11.58/-17.21	-18.22/-12.06	-9.29/-10.15	-13.21/-17.93	-19/-17.77	-12.63/-9.35	-7.34/-6.77	-7.4/-8.9	-12.27/-14.01	-15.7/-17.21	-18.56/-18.82	-13.19/-10.12	-9.07/-7.78	-5.49/-4.97	-9.06/-19.24	-12.19/-10.21	-15.36/-18.86	-9.35/-5.6	-3.29/-2.91	-3.89/-5.75	-8.08/-10.3
Θ (157.5°)	-18.81/-17.8	-16.49/-13.27	-11.22/-10.03	-11.25/-15.99	-18.34/-15.3	-11.5/-10.32	-9.98/-10.42	-11.18/-14.27	-14.93/-15.62	-13.9/-13.29	-13.03/-15.48	-17.63/-16.49	-18.01/-17.7	-15.03/-10.98	-7.52/-5.65	-5.73/-8.43	-15.25/-19.83	-16.82/-18.52	-18.28/-13.28	-9.84/-8.3	-8.53/-9	-10.38/-12.1	-14.48/-16.4	
Θ (165°)	-15.45/-12.72	-11.32/-12.79	-14.37/-16.02	-16.94/-18.01	-18.97/-16.12	-10.58/-8.35	-7.93/-8.5	-9.13/-9.87	-11.44/-13.09	-15.29/-17.74	-18.5/-18.97	-18.11/-18.03	-16.98/-13.89	-11.73/-9.77	-8.78/-8.16	-8.89/-10.09	-12.73/-16.84	-18.84/-18.28	-17.99/-17.96	-16.04/-11.95	-10.03/-9.96	-10.12/-10.42	-10.6/-11.98	-12.91/-14.79
Θ (172.5°)	-8.26/-7.53	-7.42/-8.68	-8.89/-11.38	-13.28/-15.87	-18.34/-17.4	-15.96/-13.6	-11.69/-10.72	-9.46/-8.5	-8.48/-10.8	-10.16/-12.01	-13.3/-15.2	-16.37/-17.13	-18.73/-18.71	-18.67/-17.25	-18.51/-17.38	-17.35/-18.17	-18.45/-18.78	-18.32/-18.94	-19.15/-18.83	-18.81/-18.82	-17.19/-18.54	-18.4/-15.09	-12.87/-11.68	-9.81/-8.71
Θ (180°)	-8.39/-8.95	-9.47/-10.23	-12.21/-13.33	-15.12/-17.44	-18.2/-18.81	-19.14/-17.97	-19.15/-15.58	-12.3/-10.21	-9.23/-8.83	-8.85/-8.92	-8.98/-9.01	-8.87/-8.4	-8.16/-8.19	-8.38/-8.97	-9.9/-10.88	-11.84/-13.37	-15.05/-16.39	-18.28/-18.3	-18.22/-19.02	-18.74/-17.22	-14.17/-11.88	-10.37/-9.31	-9.34/-9.32	-9.31/-8.87
Freq(Hz)	5.3G/Pol	Theta/Ant.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)														



Radiated Composite Gain Data

Appendix A

Θ(0°)	-15.14/-14.52	-11.92/-10.51	-11.87/-10.16	-8.99/-7.55	-6.39/-5.68	-5.92/-6.47	-7.23/-8.11	-8.6/-8.21	-8.42/-9.93	-10.2/-11.25	-12.68/-15.73	-19.22/-18.62	-19.15/-14.27	-11.01/-9.68	-8.36/-7.14	-6.64/-5.99	-5.18/-4.4	-3.67/-3.4	-3.58/-4.34	-5.17/-6.37	-7.3/-7.97	-7.9/-8.31	-9.56/-11.5	-13.58/-16.48
Θ(7.5°)	-15.52/-12.05	-9.65/-8.73	-6.98/-5.68	-6/-6.62	-6.36/-5.59	-4.56/-3.79	-3.64/-3.76	-3.77/-4.34	-4.71/-5.59	-6.89/-9.28	-10.7/-13.16	-14.61/-17.77	-18.28/-18.18	-19.29/-17.97	-16.64/-13.33	-10.95/-9.14	-7.51/-6.13	-5.33/-5.23	-5.67/-6.13	-7.2/-8.12	-8.93/-9.89	-10.97/-12.49	-14.29/-17.1	-16.16/-16.65
Θ(15°)	-14.31/-12.99	-12.8/-12.91	-10.45/-9.95	-10.4/-10.51	-9.73/-7.82	-5.92/-4.62	-3.65/-2.8	-2.22/-2.76	-3.66/-5.16	-6.94/-8.63	-10.29/-11.69	-14.03/-17	-18.44/-19.27	-17.19/-15.12	-13.91/-13.74	-13.07/-10.9	-9.09/-7.8	-7.16/-7.37	-7.45/-8.63	-9.97/-11.95	-13.63/-16.95	-18.74/-19.18	-18.46/-17.74	-15.2/-14.76
Θ(22.5°)	-17.77/-14.6	-12.91/-11.63	-11.65/-14.69	-18.59/-19.36	-14.96/-12.6	-12.58/-11.78	-9.83/-8.01	-7.25/-7.61	-9/-10.67	-12.89/-14.25	-13.03/-12.54	-14.53/-16.34	-15.86/-16.42	-18.16/-17.89	-15.79/-12.12	-12.71/-16.1	-17.97/-18.97	-18.21/-18.48	-15.95/-12.42	-10.99/-10.95	-12.35/-14.79	-18.4/-17.86	-18.73/-17.96	-18.52/-19.26
Θ(30°)	-9.39/-7.79	-7.3/-7.42	-8.02/-11.34	-15.09/-13.78	-12.62/-13.29	-11.11/-10.51	-8.62/-8.01	-8.14/-8.61	-9.87/-12.2	-16.81/-18.08	-17.43/-13.13	-13.07/-13.28	-11.77/-11.26	-11.71/-13.81	-13.66/-11.86	-14.17/-18.05	-16.79/-8.95	-5.84/-5.18	-5.73/-7.11	-7.45/-7.49	-9.08/-11.31	-12.44/-12.39	-13.29/-13.35	-13.82/-11.21
Θ(37.5°)	-16.25/-10.63	-7.95/-7.23	-6.51/-7.77	-10.93/-10.52	-9.92/-7.45	-7.47/-7.95	-8.47/-9.08	-10.96/-11.46	-11.86/-12.53	-14.02/-17.35	-18.05/-15.96	-14.07/-12.58	-10.02/-9.45	-9.52/-11.49	-10.83/-10.37	-10.38/-11.28	-9.65/-6.51	-5.08/-5.06	-6.68/-9.69	-12.32/-10.59	-10.32/-11.89	-10.13/-9.11	-9.98/-11.97	-17.16/-18.14
Θ(45°)	-17.39/-18.57	-13.23/-10.08	-7.38/-8.69	-8.97/-9.11	-7.26/-5.25	-4.55/-3.71	-5.21/-8.1	-11.51/-14.98	-13.7/-11.16	-11.47/-13.42	-13.64/-12.21	-11.96/-14.26	-16.64/-12.1	-11.71/-14.61	-13.36/-8.08	-5.14/-7.98	-18.55/-13.88	-10.67/-17.14	-14.9/-18.24	-18.44/-14.14	-11.65/-12.31	-11.29/-10.54	-11.72/-12.84	-15.25/-17.82
Θ(52.5°)	-14.28/-14.58	-11.88/-13.67	-16.61/-17.85	-18.73/-11.84	-7.88/-7.12	-5.83/-5.59	-6.95/-9.68	-14.64/-18.43	-14.02/-13.21	-15.37/-18.46	-11.37/-8.89	-9.64/-10.86	-13.47/-10.05	-11.29/-10.61	-12.08/-11.84	-12.78/-14.66	-9.78/-9.81	-17.88/-16.06	-18.39/-19.03	-17.95/-17.63	-14.68/-13.91	-13.45/-10.96	-11.37/-17.73	-19.2/-18.08
Θ(60°)	-19.21/-17.23	-9.54/-7.74	-6.53/-6.19	-7.18/-8.69	-8.62/-8.27	-7.34/-9.39	-14.67/-17.33	-18.16/-13.94	-14.32/-16.52	-19.14/-19.06	-18.42/-15.29	-17.17/-18.25	-17.33/-13.34	-18.31/-17.33	-15.78/-12.61	-13.44/-12.5	-12.13/-18.8	-16.4/-14.97	-15.08/-13.94	-18.6/-19.61	-14.52/-11.93	-13.35/-18.23	-18.34/-18.84	-16.22/-18.67
Θ(67.5°)	-16.12/-13.9	-12.82/-16.28	-12.63/-9.72	-8.96/-9.31	-8.84/-9.22	-8.27/-9.49	-10.47/-12.02	-13.58/-11.07	-10.46/-10.26	-10.67/-11.82	-13.86/-14.67	-15.45/-17.06	-15.53/-17.85	-17.79/-16.03	-13/-19.44	-18.19/-17.25	-18.46/-18.65	-12.67/-12.62	-15.42/-13.12	-13.56/-17.24	-15.17/-15.7	-17.01/-15.87	-14.94/-13.72	-12.08/-15.78
Θ(75°)	-14.72/-16.28	-16.44/-19.01	-12.55/-8.89	-7.5/-6.67	-4.73/-4.05	-4.24/-9.53	-14.11/-15.93	-16.82/-16.08	-11.62/-10.48	-13.19/-13.51	-13.86/-11.1	-12.95/-17.73	-18.29/-15.73	-15.02/-13.06	-11.01/-14.45	-18.41/-17.44	-17.25/-18.89	-15.43/-13.83	-12.08/-12.98	-16.23/-17.32	-13.97/-17.8	-13.82/-12.63	-10.24/-14.34	
Θ(82.5°)	-14.71/-17.15	-17.29/-18.35	-14.17/-11.88	-10.03/-10.44	-9.18/-8.01	-7.76/-9.12	-14.9/-17.44	-17.95/-18.1	-18.15/-12.9	-14.05/-12.89	-11.27/-11.28	-16.81/-19.16	-16.58/-12.35	-9.66/-6.23	-9.16/-9.13	-16.3/-16.94	-14.96/-18.87	-18.16/-11.69	-13.29/-15.81	-13.74/-13.43	-14.03/-14.3	-18.28/-18.56	-12.32/-7.47	-7.98/-11.64
Θ(90°)	-10.25/-12.65	-14.12/-12.01	-11.19/-12.27	-12.67/-12.63	-11.54/-8.24	-5.04/-4	-5.23/-9.09	-13.36/-17.6	-18.85/-15.2	-11.02/-11	-12.28/-13.97	-18.58/-19.17	-18.09/-14.91	-10.76/-10.24	-19.09/-17.57	-18.39/-10.05	-18.72/-18.23	-15.39/-18.97	-12.49/-17.9	-15.78/-14.11	-17.97/-14.57	-15.94/-17.41	-16.9/-11.15	-9.29/-9.75
Θ(97.5°)	-19.08/-18.14	-18.06/-17.77	-14.94/-13.95	-18.23/-18.05	-12.02/-9.24	-8.53/-12.26	-15.96/-19.68	-12.22/-14.2	-18.17/-16.58	-12.22/-10.32	-9.76/-12.33	-18.54/-14.42	-13.38/-14.01	-10.15/-11.35	-13.4/-19.01	-12.85/-17.3	-17.83/-18.95	-15.69/-16.95	-19.47/-17.99	-15.18/-13.09	-16.91/-18.45	-15.87/-16.74	-15.66/-16.25	-15.54/-19.34
Θ(105°)	-18.75/-18.51	-18.24/-19.43	-18.21/-17.74	-16.81/-19.02	-9.85/-5.01	-4.6/-8.56	-16.22/-18.72	-17.81/-19.17	-15.88/-12.35	-10.06/-8.21	-7.98/-11.13	-17.35/-18.99	-16.22/-11.15	-9.04/-11.79	-18.75/-12.46	-11.8/-17.43	-17.37/-13.68	-14.52/-13.97	-17.6/-12.75	-9.22/-12.37	-15.08/-12.85	-9.99/-9.49	-10.94/-10.89	-17.46/-18.83
Θ(112.5°)	-19.04/-18.98	-17.24/-12.57	-10.32/-10.71	-13.74/-18.48	-14.98/-10.1	-6.55/-7.07	-13.17/-18.61	-18.97/-18.22	-18.38/-15.35	-13.05/-13.95	-14.26/-16.34	-18.11/-18.59	-18.3/-17.02	-12.92/-16.04	-18.27/-15.76	-18.02/-16.71	-12.54/-11.47	-14.63/-17.62	-18.48/-19	-10.43/-7.32	-6.72/-9.31	-10.88/-10.63	-16.14/-18.33	-18.13/-18.03
Θ(120°)	-15.22/-14.5	-12.38/-9.69	-8.77/-7.52	-5.8/-6.79	-8.75/-8.21	-7.41/-7.39	-8.82/-12.81	-19.64/-17.19	-16.65/-15.13	-12.57/-13.08	-16.17/-17.95	-17.72/-18.46	-18.86/-18.66	-14.35/-10.54	-11.58/-12.97	-13.71/-16.54	-14.32/-15.55	-12.29/-12.06	-11.84/-19.19	-10.96/-9.04	-10.9/-11.8	-11.31/-13.25	-14.87/-15.71	-17.62/-17.91
Θ(127.5°)	-14.93/-15.69	-17.88/-13.16	-5.94/-3.06	-2.88/-3.17	-4.07/-4.03	-4.3/-5.32	-7/-8	-8.96/-8	-7.1/-7.86	-9.59/-11.31	-12.16/-11.42	-10.09/-12.15	-15.65/-14.47	-10.14/-12.76	-19.04/-9.92	-15.21/-18.08	-18.14/-9.06	-8.51/-19.97	-10.52/-18.32	-9.56/-7.7	-11.2/-14.27	-11.56/-12.01	-14.23/-16.84	-15.52/-15.58
Θ(135°)	-7.88/-8.22	-9.88/-17.43	-18.98/-9.83	-7.37/-6.69	-8.06/-8.58	-7.53/-7.25	-8.65/-9.3	-8.1/-7.2	-7.46/-7.69	-8.33/-10.18	-14.22/-18.46	-15.25/-13.8	-18.96/-18.76	-13.16/-7.38	-4.92/-6.36	-17.4/-15.94	-12.78/-7.64	-14.46/-14.28	-9.28/-12.92	-14.28/-11.79	-11.24/-9.83	-7.72/-5.78	-5.99/-7.49	-7.83/-7.44
Θ(142.5°)	-7.72/-10.18	-15.03/-17.72	-13.88/-8.09	-5.81/-4.22	-4.13/-4.14	-4.16/-5.26	-7.3/-4.8	-6.28/-6.1	-7.07/-8.22	-9.35/-9.94	-11.58/-11.97	-11.28/-11.37	-12.81/-12.58	-10.19/-7.79	-10.02/-10.81	-12.31/-14	-11.27/-8.22	-15.12/-13.11	-11.06/-15.47	-19.28/-11.71	-8.75/-5.22	-3.92/-3.69	-4.22/-5.48	-6.14/-6.68
Θ(150°)	-11.14/-12.8	-14.42/-14.68	-18.07/-14.71	-10.15/-8.76	-8.7/-9.59	-10.05/-9.33	-8.41/-7.59	-7.61/-7.68	-8.14/-9.14	-10.87/-14.67	-19.33/-18.28	-13.48/-11.88	-12.95/-11.55	-10.72/-13.8	-13.96/-8.29	-6.62/-7.96	-9.39/-11.84	-16.04/-10.72	-10.14/-13.32	-14.09/-10.38	-8.44/-6.98	-5.85/-5.56	-5.84/-8.18	-9.88/-10.96
Θ(157.5°)	-9.67/-10.44	-10.22/-10.32	-12.58/-13.21	-12.58/-12.05	-12.91/-13.99	-15.74/-16.16	-14.9/-13.07	-10.19/-9.17	-8.31/-8.15	-8.94/-10.45	-15.98/-14.46	-15.98/-17.79	-17.73/-14.17	-11.37/-10.46	-10.52/-9.63	-9.58/-12.83	-13.75/-10.27	-10.94/-13.42	-12.97/-11.15	-9.03/-7.54	-6.77/-7.55	-8.51/-9.24	-9.24/-9.79	
Θ(165°)	-7.81/-7.91	-8.91/-10.61	-12.45/-11.72	-10.72/-10.85	-11.29/-11.48	-12/-12.32	-12.12/-11.34	-10.61/-10.45	-10.37/-9.88	-9.49/-9.33	-10.31/-11.33	-13.05/-16.84	-18.69/-18.77	-18.37/-16.05	-15.48/-16.14	-17.23/-16.72	-15.8/-16.39	-17.38/-17.39	-17.77/-18.17	-18.64/-14.41	-11.19/-9.42	-9.01/-9.29	-8.43/-7.46	-6.92/-7.16
Θ(172.5°)	-9.49/-9.08	-9.75/-11.08	-10.79/-9.3	-8.66/-9.02	-10.58/-11.84	-13.34/-13.46	-12.45/-11.72	-11.14/-11.12	-11.3/-11.29	-11.78/-12.2	-12.97/-13.95	-14.46/-14.71	-15.47/-16.86	-18.73/-18.34	-18.6/-18.92	-17.68/-16.07	-14.52/-13.61	-13.97/-15.17	-18.45/-17.93	-18.38/-18.32	-17.69/-16.44	-14.9/-13.22	-11.57/-10.34	-9.33/-8.82
Θ(180°)	-18.31/-18.52	-18.26/-17.86	-16.43/-15.36	-16.36/-17.36	-17.95/-17.21	-15.42/-13.94	-12.76/-12.52	-12.15/-13.01	-13.78/-14.99	-16.23/-17.28	-18.41/-18.73	-18.16/-18.07	-18.44/-17.18	-18.14/-19.16	-16.98/-15.57	-14.61/-14.92	-15.51/-16.34	-17.71/-17	-15.79/-15.04	-14.74/-14.94	-15.01/-14.7			
Freq(Hz)	5.785GPol.	ThetaAnt.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-5.51/-5.43	-6.5/-6.75	-7/-7.27	-7.71/-9.09	-11.28/-12.67	-18.14/-17.8	-17.58/-19.34	-15.48/-12.07	-10.54/-9.17	-7.94/-7.02	-6.52/-6.27	-5.93/-6.02	-5.45/-5.97	-6.34/-6.9	-7.62/-8.07	-10.12/-12.38	-15.27/-19	-18.33/-18.69	-18.07/-15.5	-12.44/-10.51	-9.4/-8.85	-7.82/-6.98	-6.22/-5.82	-5.55/-5.44
Θ(7.5°)	-5.54/-5.65	-5.65/-6.01	-5.86/-5.84	-5.49/-6.36	-8.24/-10.88	-13.59/-14.84	-16.17/-15.1	-13.72/-13.02	-13.05/-11.97	-10.96/-9.55	-9.14/-8.93	-9.52/-9.2	-9.04/-8.68	-8.53/-8.28	-8.05/-9.26	-10.04/-11.59	-14.1/-18.1	-17.96/-18.32	-18.48/-15.68	-12.87/-10.92	-9.77/-8.17	-5.99/-5.4	-4.43/-4.72	-4.97/-6
Θ(15°)	-6.04/-6.02	-5.78/-5.13	-4.46/-4.64	-5.18/-6.93	-8.36/-7.97	-7.45/-8.51	-9.98/-12.31	-16.72/-17.19	-18.66/-18.65	-15.86/-14.05	-14.69/-17.37	-18.93/-18.73	-19.05/-17.32	-15.82/-13.97	-12.23/-11.79	-12.65/-15.34	-18.27/-18.87	-18.57/-16.37	-13.61/-12.11	-10.34/-8.65	-7.3/-6.18	-5.5/-5.52	-5.5/-5.78	-5.21/-5.97
Θ(22.5°)	-3.56/-4.07	-4.76/-4.38	-3.67/-3.77	-3.7/-3.87	-3.65/-4.47	-6.16/-7.09	-8.3/-9.42	-10.88/-13.31	-14.98/-17.76	-18.49/-18.27	-17.66/-19.02	-18.87/-18.76	-18.12/-16.6	-15.91/-16.27	-18.55/-18.65	-18.38/-19.42	-17.67/-18.66	-18.14/-17.54	-14.99/-10.8	-7.78/-5.86	-5.09/-4.93	-5.69/-5.97	-5.16/-4.49	-3.7/-3.29
Θ(37.5°)	-0.160/67	-0.38/-1.4	-2.01/-3.34	-2.37/-1.54	-2.06/-2.27	-2.37/-2.79	-3.57/-4.14	-5.25/-6.19	-7.17/-8.72	-11.08/-12.31	-10.85/-13.4	-14.19/-14	-9.78/-9.1	-9.98/-12.81	-14.95/-17.47	-17.75/-18.29	-17.89/-15.69	-18.17/-17.72	-15.41/-12.04	-12.22/-10.7	-9.9/-9.16	-6.36/-5.7	-4.02/-2.81	-1.58/-1.25
Θ(45°)	0.811/57	1.560/94	0.43/-0.69	-0.99/-2.1	-2.49/-2.19	-2.67/-3.33	-3.85/-4.94	-4.86/-3.65	-3.08/-2.82	-3.56/-5.83	-7.88/-7.06	-6.97/-7.41	-8.48/-7.15	-10.37/-11.87	-12.67/-16.86	-11.91/-12.45	-12.42/-11.72	-10.46/-10.32	-11.59/-12.13	-14.5/-19.31	-11.59/-9.72	-8.7/-7.03	-5.4/-4.53	-3.5

Total Gain Data

Freq(Hz)	2.45GPol.	TotalAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	2.15/2.06	1.901/1.88	1.92/1.93	1.88/1.86	1.78/1.56	1.75/1.21	1.11/1.11	0.92/0.73	0.80/1.06	1.25/1.39	1.54/1.73	1.75/1.71	1.70/1.60	1.60/1.66	1.61/1.75	1.60/1.71	1.62/1.68	1.77/1.80	1.70/1.70	1.77/1.86	1.91/2.04	1.89/1.85	1.91/1.92	1.86/1.81
Θ(7.5°)	1.86/1.87	1.86/1.83	1.85/1.88	2.02/2.04	2.00/1.66	1.54/1.44	1.41/1.38	1.24/1.13	1.32/1.50	1.73/1.85	1.99/1.87	1.83/1.70	1.68/1.49	1.59/1.59	1.58/1.46	1.27/1.27	1.26/1.27	1.27/1.30	1.30/1.33	1.35/1.42	1.42/1.45	1.47/1.54	1.66/1.73	1.79/1.88
Θ(15°)	1.91/1.95	1.88/1.81	1.83/1.77	1.71/1.59	1.51/1.36	1.41/1.45	1.49/1.50	1.59/1.66	1.55/1.84	2.05/2.19	2.12/2.21	2.06/1.96	1.52/1.17	1.08/0.98	0.99/0.96	0.87/0.81	0.83/0.82	0.83/0.81	0.86/0.91	0.93/0.94	0.98/1.12	1.22/1.37	1.49/1.63	1.87/1.90
Θ(22.5°)	2.14/2.04	1.901/1.80	1.59/1.42	1.15/0.98	0.76/0.72	0.60/0.57	0.69/0.72	0.81/0.82	0.83/0.99	1.14/1.30	1.36/1.24	1.13/0.99	0.78/0.65	0.58/0.51	0.50/0.66	0.50/0.34	0.37/0.25	0.32/0.42	0.52/0.62	0.65/0.76	0.84/0.95	1.02/1.24	1.56/1.79	2.02/2.18
Θ(30°)	2.35/0.23	1.75/1.43	1.09/0.68	0.28/0.00	-0.11/0.07	0.01/0.26	0.59/0.73	0.73/0.73	0.53/0.40	0.41/0.46	0.60/0.58	0.54/0.32	0.06/0.13	-0.25/-0.49	-0.54/-0.50	-0.59/-0.62	-0.63/-0.70	-0.49/-0.23	0.14/0.49	0.61/0.99	1.26/1.37	1.55/1.74	2.01/2.16	2.30/2.36
Θ(37.5°)	2.05/1.64	1.17/0.70	0.14/-0.45	-0.88/-1.12	-1.01/-0.67	-0.36/-0.05	0.42/0.54	0.66/0.53	0.28/0.15	0.03/0.09	0.18/0.43	0.61/0.56	0.36/-0.18	-0.51/-0.79	-1.07/-1.43	-1.85/-2.30	-2.72/-2.50	-2.13/-1.53	-1.04/-0.22	0.15/0.64	1.26/1.75	2.05/2.30	2.48/2.57	2.48/2.29
Θ(45°)	1.90/1.42	0.82/0.25	-0.38/-0.89	-1.18/-1.44	-1.62/-1.69	-1.81/-1.74	-1.51/-1.19	-0.99/-0.93	-0.71/-0.48	-0.15/0.28	0.69/1.12	1.28/1.49	1.59/1.43	1.19/0.77	1.08/-0.54	-1.36/-2.03	-2.80/-3.56	-3.43/-3.56	-2.64/-1.68	-0.51/0.53	1.21/1.81	2.25/2.50	2.60/2.60	2.48/2.25
Θ(52.5°)	2.23/1.91	1.22/0.42	-0.45/-1.14	-1.78/-2.41	-2.88/-3.10	-3.17/-2.85	-2.46/-1.97	-1.54/-1.19	-0.83/-0.43	0.14/0.64	1.17/1.62	1.63/1.78	2.13/2.07	1.85/1.47	0.88/0.21	-0.65/-1.34	-1.95/-2.56	-3.41/-3.98	-3.90/-2.89	-1.77/-0.61	0.41/1.32	1.97/2.26	2.46/2.57	2.63/2.63
Θ(60°)	2.24/1.65	0.85/-0.19	-1.43/-2.47	-3.34/-3.71	-3.69/-3.34	-2.94/-2.65	-2.29/-2.06	-2.12/-2.42	-2.34/-2.29	-2.10/-1.77	-1.57/-1.52	-1.53/-1.31	-0.61/-0.34	0.01/0.08	-0.33/-0.97	-1.85/-2.70	-3.04/-3.38	-3.13/-3.41	-3.92/-4.28	-3.93/-3.17	-2.10/-0.91	0.72/1.68	2.37/2.79	2.75/2.67
Θ(67.5°)	2.39/1.63	0.79/-0.20	-1.37/-2.31	-2.73/-3.01	-3.13/-3.36	-3.66/-4.00	-4.00/-3.97	-3.91/-3.49	-2.73/-2.15	-1.86/-1.77	-1.27/-1.32	-0.48/-0.35	-2.54/-2.37	-2.49/-2.90	-3.86/-1.48	-4.15/-3.84	-3.38/-3.14	-2.85/-2.72	-3.04/-2.64	-1.91/-0.45	0.70/1.82	2.60/3.07	3.14/3.83	
Θ(75°)	2.78/2.13	1.19/0.14	-0.86/-1.66	-2.27/-2.53	-2.40/-2.46	-2.76/-3.33	-4.23/-5.02	-5.82/-5.40	-4.70/-4.05	-3.89/-3.91	-3.94/-3.47	-4.89/-5.22	-5.26/-4.70	-3.72/-2.64	-1.75/-1.59	-2.06/-2.67	-3.06/-3.16	-3.22/-3.13	-2.72/-2.09	-1.46/-1.05	-0.26/0.70	1.44/2.15	2.73/3.12	3.22/3.08
Θ(82.5°)	3.27/2.92	2.29/1.34	-0.06/-1.76	-3.28/-3.97	-3.68/-3.42	-4.01/-4.57	-4.71/-5.07	-6.41/-4.79	-4.01/-4.05	-3.92/-3.05	-3.24/-2.26	-2.37/-2.63	-2.97/-3.16	-2.85/-2.26	-1.83/-2.02	-2.51/-2.98	-3.56/-4.24	-4.65/-4.40	-3.33/-2.82	-1.90/-1.48	-0.25/0.68	1.50/2.04	2.42/2.75	3.07/3.29
Θ(90°)	3.80/3.55	2.71/1.29	-0.60/-2.77	-4.16/-4.69	-4.21/-3.95	-4.45/-5.57	-6.51/-6.07	-4.82/-4.05	-3.98/-4.43	-4.12/-2.86	-1.89/-1.73	-2.18/-2.62	-2.95/-2.77	-2.02/-1.26	-0.98/-1.16	-1.81/-2.54	-3.88/-5.47	-6.25/-5.98	-4.84/-3.74	-2.65/-1.70	-0.70/0.63	1.49/2.58	3.04/3.40	3.66/3.72
Θ(97.5°)	3.46/3.04	2.20/1.00	-0.26/-1.15	-1.94/-2.49	-2.80/-3.43	-5.04/-7.27	-9.04/-9.00	-8.37/-8.55	-9.78/-10.02	-8.09/-6.01	-4.72/-4.15	-4.31/-5.29	-6.75/-6.84	-5.54/-4.28	-3.39/-3.23	-3.66/-4.58	-6.37/-7.91	-8.90/-7.63	-5.78/-4.01	-2.55/-1.27	-0.16/0.43	1.28/1.93	2.52/3.12	3.46/3.56
Θ(105°)	3.33/3.02	2.42/1.00	0.14/-1.14	-2.19/-2.35	-3.96/-4.83	-5.82/-6.79	-7.73/-8.13	-8.28/-8.27	-9.60/-11.40	-10.30/-8.10	-6.60/-6.20	-6.80/-7.72	-7.96/-7.01	-5.79/-4.87	-4.10/-3.84	-6.28/-5.35	-7.17/-8.22	-9.68/-7.73	-5.54/-3.95	-2.24/-0.89	-0.03/0.62	1.07/1.28	1.76/2.29	3.01/3.24
Θ(112.5°)	3.15/2.72	1.83/0.77	0.02/-0.87	-2.13/-2.46	-6.43/-7.79	-8.81/-10.33	-11.46/-11.98	-12.93/-15.15	-16.62/-14.94	-13.39/-9.83	-8.91/-7.93	-7.73/-7.29	-7.07/-7.24	-7.36/-7.14	-6.89/-6.53	-6.09/-6.31	-8.97/-6.37	-4.21/-2.54	-1.29/-0.29	0.44/0.96	1.37/1.58	1.87/2.11	2.67/3.12	
Θ(120°)	2.41/1.90	1.20/0.55	-0.03/-0.65	-1.72/-3.29	-5.36/-7.12	-8.24/-8.66	-8.34/-9.75	-7.79/-8.14	-8.76/-8.99	-8.74/-9.22	-11.26/-11.84	-8.67/-6.61	-6.69/-6.73	-12.07/-11.96	-9.80/-8.62	-8.40/-8.99	-12.84/-12.93	-11.50/-10.90	-8.07/-5.61	-3.78/-2.56	-1.30/-1.03	-0.39/0.08	0.30/0.82	1.21/1.46
Θ(127.5°)	1.65/1.44	0.78/-0.31	-0.29/-2.35	-3.47/-5.35	-8.06/-11.75	-13.09/-12.66	-11.62/-11.35	-11.72/-12.01	-12.80/-13.42	-14.60/-15.19	-15.28/-12.91	-9.92/-9.78	-12.19/-15.83	-14.00/-10.36	-8.22/-1.75	-7.89/-9.25	-10.43/-10.56	-10.23/-8.83	-6.62/-0.52	-3.99/-3.28	-2.45/-1.58	-1.01/-0.75	-0.58/-0.09	0.60/1.10
Θ(135°)	0.34/0.16	-0.85/-2.10	-1.36/-3.51	-7.33/-8.58	-8.73/-9.02	-9.64/-10.56	-11.58/-12.33	-13.80/-15.47	-16.83/-15.59	-15.19/-14.67	-13.71/-11.85	-10.32/-10.05	-12.12/-9.05	-7.42/-6.57	-6.47/-10.15	-8.29/-10.29	-12.26/-13.09	-13.11/-11.35	-7.36/-4.94	-3.32/-2.40	-1.62/-1.15	-0.33/-0.28	-0.75/-1.02	-0.31/0.16
Θ(142.5°)	-2.11/-1.43	-1.07/-1.19	-1.77/-2.60	-3.53/-4.19	-4.66/-5.58	-7.29/-9.53	-11.90/-13.15	-13.44/-15.94	-14.88/-14.80	-14.57/-12.10	-10.61/-10.26	-10.09/-9.11	-7.98/-6.72	-6.00/-5.63	-6.26/-7.60	-9.27/-11.03	-11.50/-12.00	-11.60/-9.44	-7.26/-5.34	-4.67/-4.12	-3.85/-3.44	-2.96/-2.71	-3.05/-3.83	-3.93/-3.01
Θ(150°)	-1.63/-1.06	-0.75/-0.87	-1.55/-2.99	-4.71/-6.37	-8.04/-10.06	-12.46/-13.20	-13.17/-12.68	-12.67/-13.54	-14.38/-15.10	-12.94/-10.39	-9.20/-8.79	-9.24/-9.08	-8.58/-8.00	-7.55/-7.54	-8.02/-8.92	-10.41/-11.41	-13.26/-15.46	-13.07/-9.43	-6.67/-4.98	-3.32/-2.89	-3.13/-2.89	-2.58/-2.21	-1.92/-1.93	-2.10/-1.99
Θ(157.5°)	-2.05/-2.05	-2.23/-2.88	-4.02/-5.93	-8.77/-12.97	-15.51/-14.99	-14.74/-15.07	-12.61/-11.52	-11.38/-12.00	-12.73/-12.74	-11.85/-10.49	-9.61/-9.07	-9.37/-9.85	-10.73/-10.67	-10.54/-10.61	-10.85/-11.27	-12.10/-13.65	-14.95/-15.50	-15.22/-12.02	-8.42/-6.38	-5.29/-4.62	-4.22/-4.04	-3.93/-3.63	-3.32/-2.95	-2.57/-2.20
Θ(165°)	4.57/-8.21	-5.31/-6.00	-7.05/-8.80	-11.09/-13.86	-15.05/-15.14	-14.18/-13.27	-12.49/-11.86	-11.63/-11.80	-11.56/-11.38	-11.56/-11.70	-12.21/-12.27	-12.77/-13.33	-13.07/-13.76	-14.61/-15.16	-13.87/-13.24	-13.04/-12.88	-14.03/-14.14	-13.74/-12.27	-10.31/-9.30	-8.28/-7.77	-7.44/-7.25	-7.00/-6.80	-6.40/-5.61	-4.91/-4.59
Θ(172.5°)	-7.83/-8.21	-8.51/-9.22	-10.18/-11.51	-11.88/-11.71	-11.28/-11.30	-11.28/-11.51	-11.67/-11.65	-11.67/-10.72	-12.46/-12.69	-12.79/-12.81	-13.04/-13.96	-13.96/-14.58	-15.29/-14.66	-14.79/-14.78	-13.65/-13.18	-13.05/-12.98	-12.78/-12.36	-12.06/-11.37	-10.55/-10.21	-9.77/-9.45	-9.31/-9.20	-9.22/-9.10	-8.86/-8.41	-7.99/-7.94
Θ(180°)	-12.01/-11.82	-11.64/-11.49	-10.15/-11.38	-10.98/-10.74	-10.43/-10.30	-10.36/-10.58	-10.76/-10.95	-10.97/-11.19	-11.73/-12.69	-12.10/-12.16	-12.64/-13.92	-12.67/-14.24	-15.02/-11.95	-11.57/-11.36	-11.49/-11.46	-11.49/-11.18	-10.74/-10.58	-10.83/-10.82	-10.68/-10.31	-10.21/-10.35	-10.55/-10.89	-11.46/-11.66	-11.56/-11.67	-11.67/-11.86
Freq(Hz)	5.2GPol.	TotalAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-0.24/-0.70	-0.37/-0.47	-0.58/-0.45	-0.76/-1.03	-1.02/-1.04	-0.84/-0.80	-0.67/-0.67	-0.25/-0.18	0.25/0.29	0.25/0.43	0.41/0.10	0.05/-0.14	-0.14/-0.26	-0.10/-0.19	-0.50/-0.38	-0.67/-0.69	-0.82/-0.81	-0.93/-0.73	-0.67/-0.96	-0.84/-0.69	-0.65/-0.43	-0.35/-0.06	-0.04/-0.12	0.09/0.18
Θ(7.5°)	-0.71/-0.41	-0.07/-0.24	-0.21/-0.57	-1.15/-1.55	-1.62/-1.63	-1.73/-1.86	-1.63/-1.43	-1.18/-0.83	-0.51/-0.20	-0.17/0.21	0.19/0.04	0.10/-0.20	-0.04/0.03	0.21/0.47	0.55/0.51	0.30/0.21	0.43/0.59	0.51/0.52	0.61/0.57	0.64/0.76	0.66/0.71	0.47/0.24	-0.05/-0.14	-0.52/-0.65
Θ(15°)	1.32/1.32	1.38/0.98	0.37/-0.37	-1.10/-1.20	-0.94/-0.75	-0.94/-0.55	-1.04/0.25	0.33/0.69	1.31/1.28	1.43/1.27	1.12/1.02	0.69/0.65	0.25/0.27	0.02/0.48	0.77/1.07	0.92/0.93	1.10/1.21	1.32/1.31	1.19/0.83	0.96/1.19	1.19/1.18	1.31/1.60	1.13/1.60	1.33/1.09
Θ(22.5°)	1.93/2.07	1.75/1.15	0.83/0.49	0.34/0.54	0.83/0.81	0.96/1.15	1.10/0.89	0.74/1.01	1.10/1.12	1.30/1.21	0.98/1.08	1.47/1.61	1.59/1.28	1.18/1.13	1.35/1.59	1.46/1.46	1.49/1.43	1.35/1.09	0.67/0.24	0.02/0.20	0.35/0.70	0.72/0.80	0.89/1.04	1.10/1.61
Θ(30°)	0.53/0.44	1.22/1.66	1.77/1.61	1.02/0.22	-0.53/-1.25	-1.17/-1.00	-0.89/-0.48	-0.31/-0.56	-0.23/0.63	1.51/1.87	1.90/1.77	1.68/1.84	1.75/1.32	1.40/1.64	1.99/2.29	2.21/2.22	1.69/0.90	0.00/0.84	-1.40/-1.64	-1.76/-1.37	-0.71/0.14	0.93/1.08	1.03/0.77	0.88/0.83
Θ(37.5°)	0.35/0.61	1.62/1.87	1.57/1.17	0.80/0.18	-0.63/-1.59	-1.74/-1.26	-0.92/-0.56	-1.02/-0.95	-0.83/0.11	1.07/1.41	0.93/0.49	0.55/0.85	0.92/0.86	1.17/1.66	1.32/1.06	1.31/1.55	1.33/0.26	-1.23/-2.29	-2.63/-2.08	-1.35/-0.37	0.50/1.07	1.19/0.85	0.93/0.52	0.93/0.26
Θ(45°)	0.50/0.54	1.20/1.84	1.96/1.25	-0.23/-1.6																				



Antenna Pattern

Appendix B

Θ(22.5°)	-0.24/0.66	-1.48/-2.16	-1.73/-1.08	-1.02/-0.82	-0.50/-0.10	0.42/0.51	0.73/1.06	1.58/1.52	1.29/0.78	0.66/0.51	0.28/0.10	0.02/-0.20	0.19/0.18	0.43/0.74	1.41/1.82	1.56/1.20	1.29/1.32	1.31/1.00	0.98/1.12	0.88/0.11	-0.74/-1.75	-2.29/-2.40	-2.05/-1.45	-0.82/-0.35
Θ(30°)	-1.68/-2.26	-1.95/-1.85	-1.69/-1.99	-2.24/-0.94	-0.86/-0.82	-0.71/-0.70	-0.29/0.54	1.29/1.65	1.41/0.94	0.72/0.86	0.13/1.30	0.63/0.48	0.52/0.40	-0.27/-0.88	-0.74/0.48	1.52/2.92	2.28/1.06	0.91/0.28	0.22/-0.30	-1.27/-2.08	-2.71/-2.41	-1.86/-1.68	-0.86/-1.13	
Θ(37.5°)	1.02/0.39	0.80/0.35	-1.37/-0.26	-2.58/-1.98	-1.94/-1.91	-2.16/-1.27	0.30/1.32	1.41/0.81	-0.52/-1.83	-2.02/-1.32	-0.33/-0.45	-1.75/-1.93	-1.47/-1.09	-1.13/-1.12	-1.92/-2.17	-0.43/-1.51	2.62/2.66	2.48/2.16	2.02/1.55	1.21/2.27	0.88/0.55	0.11/0.09	0.30/0.78	0.88/0.98
Θ(45°)	2.03/1.89	1.51/-0.97	-2.07/-3.73	-4.54/-2.57	-2.18/-2.39	-3.25/-3.51	-2.44/-1.31	-1.51/-3.18	-5.86/-4.90	-3.32/-2.00	-1.35/-1.84	-2.21/-1.13	-0.04/0.46	0.72/0.31	-0.42/-0.97	-2.74/-3.29	-0.44/-1.53	1.50/0.60	0.08/0.14	-0.09/-0.40	0.36/0.58	1.00/-1.22	1.71/-1.97	2.35/-1.66
Θ(52.5°)	1.34/0.00	0.35/-0.55	-1.41/-2.02	-3.15/-2.97	-3.69/-4.43	-4.46/-3.20	-1.75/-1.45	-2.80/-0.45	-3.69/-1.76	-0.29/0.35	-0.35/-1.21	-1.46/-1.31	-1.39/-1.36	-1.63/-1.23	-0.00/-0.63	-1.87/-0.79	0.63/0.82	1.42/1.78	1.55/0.32	-0.73/-1.77	-1.94/-1.25	-0.76/-0.45	0.06/1.02	2.19/2.22
Θ(60°)	2.26/1.12	-0.28/-1.47	-3.15/-3.09	-3.20/-6.23	-7.36/-6.43	-6.50/-4.62	-3.15/-4.49	-7.44/-5.78	-3.24/-1.95	-1.60/-2.32	-3.13/-2.35	-1.57/-3.04	1.45/2.53	3.03/2.75	0.92/-0.42	0.06/-1.27	-1.17/0.38	-0.41/-2.13	-1.72/-0.52	-0.44/-1.52	-3.42/-4.86	-3.01/-0.86	0.55/-1.82	
Θ(67.5°)	-0.85/-0.14	0.17/-0.54	-1.12/-2.77	-5.01/-9.48	-7.92/-6.95	-6.65/-5.91	-6.39/-9.67	-5.83/-2.30	-1.32/-1.58	-1.93/-2.16	-1.27/-0.38	-0.00/0.10	-0.27/-1.04	1.83/1.29	1.05/0.22	0.30/-0.02	-2.35/-1.78	0.27/0.20	-0.98/-3.66	-6.26/-4.49	-1.34/-0.11	0.04/-0.13	-0.87/-1.51	-1.34/-0.75
Θ(75°)	-2.13/-0.94	0.90/0.36	-0.83/-4.41	-9.24/-10.49	-9.59/-9.04	-8.07/-5.54	-7.04/-9.54	-6.29/-4.32	-5.40/-4.41	-2.83/-1.45	-0.09/0.79	1.42/0.60	-0.29/-3.85	-5.24/-1.71	-1.15/-0.48	-2.63/-1.24	-3.13/-5.47	-3.85/-2.61	-2.36/-1.20	-1.92/-4.85	-5.17/-1.07	0.15/0.91	0.65/0.11	-2.30/-2.44
Θ(82.5°)	0.69/1.99	2.78/1.27	-1.31/-5.58	-8.77/-6.53	-5.69/-6.28	-4.18/-3.72	-6.87/-10.50	-10.86/-11.30	-10.26/-7.90	-4.01/-2.50	-2.23/-2.38	-2.62/-1.16	-1.66/-2.20	-6.25/-6.38	-1.39/-1.66	-2.36/-3.35	-4.36/-6.93	-5.08/-5.58	-7.03/-3.70	-1.61/-2.69	-4.54/-4.65	-3.43/-2.35	-3.16/-3.35	-2.56/-0.85
Θ(90°)	-0.27/0.43	1.16/1.25	-1.05/-5.06	-6.80/-6.49	-7.48/-7.02	-3.46/-2.33	-3.47/-6.64	-12.09/-9.94	-9.52/-10.12	-6.83/-3.98	-4.18/-5.89	-8.93/-6.95	-8.95/-6.55	-7.51/-8.30	-3.84/-1.11	0.85/0.86	0.61/3.12	-7.43/-2.48	-3.45/-4.77	-4.20/-1.36	-2.82/-3.06	-0.50/-0.26	0.56/-0.20	-0.41/-0.41
Θ(97.5°)	-3.76/-2.77	-0.92/-0.32	-1.03/-5.18	-7.50/-7.83	-14.47/-9.66	-6.56/-4.79	-7.27/-13.32	-15.23/-13.20	-12.98/-11.22	-4.53/-1.52	-2.47/-6.18	-11.85/-12.29	-5.72/-6.87	-6.26/-5.39	-6.62/-5.01	-3.95/-4.42	-3.16/-3.61	-6.32/-11.02	-5.01/-2.27	-0.91/-2.53	-5.85/-4.60	-2.62/-1.16	-1.36/-1.51	-2.74/-2.97
Θ(105°)	-4.78/-4.90	-4.17/-2.30	-2.81/-4.95	-6.38/-8.17	-14.26/-7.52	-6.44/-6.44	-12.79/-13.38	-9.57/-6.73	-11.12/-8.58	-3.26/-1.65	-3.90/-6.96	-4.71/-4.68	-2.16/-5.27	-11.48/-11.00	-8.42/-6.90	-5.87/-6.99	-10.83/-8.00	-5.98/-4.08	-11.30/-4.26	-8.83/0.13	-2.37/-5.40	-7.95/-1.79	-4.86/-4.41	-2.42/-4.31
Θ(112.5°)	-0.50/0.59	0.36/-0.06	-0.58/-1.98	-2.95/-5.29	-11.95/-12.03	-8.70/-8.99	-10.62/-14.67	-6.85/-3.96	-6.13/-5.64	-2.26/-2.53	-5.00/-7.33	-7.05/-9.28	-8.58/-10.94	-11.22/-8.55	-13.68/-13.86	-6.03/-6.04	-8.24/-15.62	-11.63/-6.72	-12.25/-6.05	-0.25/0.85	-0.49/-0.45	-1.30/-0.34	1.76/2.84	1.44/0.08
Θ(120°)	1.90/2.92	1.45/-1.38	-3.27/-1.66	-1.58/-4.60	-6.89/-6.66	-5.88/-6.94	-11.33/-15.99	-7.97/-4.24	-4.35/-6.21	-7.51/-8.97	-15.01/-16.04	-9.21/-7.76	-7.32/-5.83	-3.84/-3.28	-7.50/-9.60	-11.23/-9.17	-10.26/-12.95	-11.04/-14.06	-8.68/-7.07	-7.76/-3.11	-0.83/-2.46	-3.30/-3.51	-0.60/-0.26	0.82/-1.24
Θ(127.5°)	-1.90/-1.23	-2.91/-6.43	-6.54/-6.21	-6.42/-7.30	-10.42/-10.66	-9.22/-12.05	-15.05/-12.08	-5.24/-3.41	-3.81/-5.43	-10.60/-11.87	-8.05/-4.75	-8.99/-7.39	-7.80/-5.99	-2.03/-6.43	-7.89/-7.35	-6.81/-4.19	-6.60/-10.35	-8.92/-11.59	-8.02/-3.11	-4.45/-2.33	-4.28/-2.13	-7.93/-6.54	-4.29/-3.95	-5.81/-3.84
Θ(135°)	-0.77/-1.09	-1.74/-2.12	-2.79/-3.03	-3.78/-6.64	-12.79/-13.44	-8.26/-8.18	-12.10/-14.33	-10.90/-7.29	-7.35/-11.26	-12.45/-10.10	-7.25/-4.47	-5.24/-7.72	-9.11/-9.74	-5.03/-2.82	-2.12/-8.22	-8.73/-11.56	-6.07/-6.74	-6.21/-7.49	-6.99/-10.50	-2.83/-1.87	-0.16/-2.51	-2.81/-3.55	-2.02/0.43	0.28/-1.23
Θ(142.5°)	-1.08/-1.59	-1.57/-0.34	0.68/-0.71	-2.87/-8.84	-5.18/-3.38	-16.02/-4.7	-4.60/-8.60	-10.61/-7.98	-8.62/-14.31	-15.14/-13.01	-13.35/-10.55	-5.62/-9.45	-12.77/-5.92	-13.66/-11.88	-12.77/-5.92	-9.15/-8.43	-5.97/-6.84	-1.52/-13.97	-5.25/-7.88	-5.62/-3.26	-2.43/-2.27	-5.25/-4.32	-0.65/-1.70	1.40/-0.57
Θ(150°)	-7.95/-5.11	-4.36/-4.47	-4.16/-4.41	-7.38/-12.84	-14.53/-10.20	-8.06/-14.59	-15.12/-12.64	-11.42/-13.12	-13.55/-13.12	-14.00/-13.53	-10.58/-7.01	-7.57/-9.61	-7.04/-8.47	-9.55/-7.62	-8.46/-6.05	-5.13/-3.60	-1.50/-3.02	-4.40/-3.03	-2.44/-1.54	-11.71/-14.3	-11.71/-3.27	-2.83/-3.91	-6.42/-8.71	
Θ(157.5°)	-5.48/-5.93	-4.79/-4.88	-6.99/-7.26	-4.70/-3.06	-2.11/-1.52	-2.37/-4.14	-6.18/-7.78	-8.24/-8.98	-10.13/-10.12	-9.43/-8.25	-8.22/-7.94	-6.13/-5.29	-6.81/-11.83	-11.89/-6.32	-5.33/-7.41	-8.28/-6.66	-4.61/-4.02	-3.37/-2.25	-1.12/-0.74	-1.06/-1.75	-2.12/-2.46	-2.99/-2.83	-2.10/-1.95	-3.01/-3.86
Θ(165°)	1.10/1.15	0.65/-0.49	-1.69/-2.47	-3.82/-6.31	-9.29/-13.06	-15.47/-13.04	-10.94/-10.95	-13.06/-15.50	-14.25/-12.34	-10.78/-10.10	-8.69/-8.78	-8.60/-8.30	-7.80/-6.29	-5.05/-4.79	-5.36/-5.08	-2.88/-0.95	-0.25/0.22	0.27/0.31	1.15/1.60	1.50/1.33	1.27/1.34	1.71/1.44	1.42/-1.62	1.69/-1.29
Θ(172.5°)	-3.39/-5.46	-7.79/-9.57	-8.62/-8.16	-7.96/-7.40	-7.55/-7.59	-7.70/-7.59	-8.82/-9.39	-10.09/-11.03	-12.00/-12.85	-12.03/-11.12	-11.10/-10.86	-10.13/-9.25	-9.08/-9.61	-9.66/-8.49	-7.58/-6.23	-4.72/-3.71	-3.41/-4.06	-4.64/-5.03	-4.90/-5.33	-4.88/-4.81	-4.59/-4.07	-3.79/-4.07	-3.42/-2.76	-3.02/-3.15
Θ(180°)	-9.21/-10.18	-8.00/-6.23	-5.26/-4.30	-4.40/-5.33	-6.87/-7.87	-8.77/-11.03	-12.79/-12.61	-11.44/-10.03	-9.10/-9.09	-8.72/-8.09	-8.34/-8.76	-9.13/-9.18	-7.87/-8.24	-7.76/-7.70	-7.77/-1.80	-7.42/-7.07	-7.26/-7.54	-7.21/-7.04	-6.87/-6.81	-6.55/-6.23	-6.32/-6.24	-6.52/-7.82	-8.84/-9.08	
Freq(Hz)	2.45GPol	TotalAnt.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	0.26/0.21	0.21/0.33	0.38/0.53	0.61/0.68	0.72/0.58	0.81/0.76	0.62/0.64	0.72/0.99	0.88/0.92	1.09/1.16	1.03/1.16	1.13/1.09	1.05/0.80	0.49/0.40	0.38/0.22	0.25/0.28	0.38/0.22	0.26/0.33	0.33/0.37	0.40/0.46	0.10/0.69	0.76/0.81	0.76/0.65	0.55/0.58
Θ(7.5°)	-0.15/-0.28	-0.19/-0.20	0.48/0.60	0.69/0.72	0.82/0.76	0.82/0.87	0.88/1.08	1.12/1.12	1.22/1.29	1.31/1.20	1.18/1.16	1.14/1.06	0.97/0.97	0.69/0.54	0.58/0.41	0.30/0.31	0.35/0.41	0.17/0.18	0.02/0.00	0.18/0.27	0.36/0.60	0.48/0.51	0.41/0.29	0.15/-0.08
Θ(15°)	-0.75/-0.70	-0.64/-0.42	-0.05/0.23	0.35/0.43	0.66/0.77	0.83/0.82	0.99/1.12	1.22/1.28	1.33/1.24	1.44/1.48	1.47/1.35	1.29/1.21	1.14/0.81	0.67/0.57	0.53/0.41	0.37/0.71	0.77/0.82	0.65/0.49	0.40/0.34	0.31/0.32	0.34/0.44	0.41/0.34	0.24/-0.02	-0.16/-0.43
Θ(22.5°)	-1.23/-1.27	-1.15/-0.93	-0.52/-0.07	0.33/0.49	0.51/0.70	0.93/1.03	1.17/1.31	1.42/1.47	1.52/1.54	1.40/1.57	1.41/1.31	1.27/1.08	0.93/0.83	0.71/0.62	0.64/0.78	0.92/1.03	1.07/0.98	0.87/0.58	0.41/0.15	-0.16/-0.45	-0.79/-0.90	-1.03/-1.11	-0.80/-0.94	-1.04/-1.02
Θ(30°)	-1.25/-1.40	-1.53/-1.37	-0.92/-0.42	0.18/0.48	0.67/0.87	1.10/0.93	1.32/1.45	1.53/1.71	1.67/1.72	1.67/1.60	1.47/1.34	1.15/0.90	0.69/0.70	0.57/0.59	0.46/0.64	0.89/1.07	1.06/0.88	0.70/0.37	-0.07/-0.61	-1.15/-1.66	-2.01/-2.15	-2.09/-1.79	-1.50/-1.36	-1.27/-1.22
Θ(37.5°)	-1.35/-1.33	-1.53/-1.60	-1.50/-1.08	-0.45/-0.08	0.20/0.44	0.65/0.87	1.12/1.31	1.41/1.39	1.36/1.31	1.10/0.88	0.63/0.43	0.05/-0.05	-0.18/-0.26	-0.28/-0.49	-0.36/-0.16	0.11/0.23	0.22/0.19	0.20/0.12	0.02/0.03	0.03/0.06	0.11/0.05	-0.12/-0.37	-0.71/-0.94	-1.18/-1.16
Θ(45°)	-2.74/-2.59	-2.44/-2.23	-2.08/-1.79	-1.37/-1.00	-0.70/-0.60	-0.47/-0.40	-0.70/-0.15	-0.15/-0.06	-0.05/-0.07	-0.21/-0.30	-0.43/-0.41	-0.54/-0.42	-0.37/-0.23	-0.45/-0.69	-0.84/-0.84	-0.77/-0.87	-0.81/-0.76	-0.41/-0.01	0.44/0.87	1.15/1.21	1.07/0.84	0.01/0.75	-1.40/-2.03	-2.68/-2.87
Θ(52.5°)	-2.87/-2.79	-2.85/-2.69	-2.42/-1.94	-1.39/-0.99	-0.66/-0.41	-0.56/-0.78	-1.05/-1.26	-1.36/-1.34	-1.11/-0.70	-0.27/0.18	0.70/1.25	1.65/1.80	1.76/1.29	0.62/-0.05	-0.54/-0.85	-1.62/-1.51	-1.61/-1.76	-1.56/-1.33	-0.79/-0.30	0.03/0.01	-0.29/-0.61	-0.93/-1.16	-1.43/-1.74	-2.32/-2.68
Θ(60°)	-2.04/-2.01	-2.44/-2.65	-2.67/-2.47	-2.13/-1.76	-1.17/-0.84	-0.60/-0.73	-1.13/-1.42	-1.55/-1.57	-1.47/-0.97	-0.16/0.73	1.52/2.18	2.46/2.59	2.12/1.10	-0.02/-1.33	-2.35/-2.96	-3.25/-2.98	-2.63/-2.69	-2.95/-3.31	-3.42/-3.43	-3.57/-3.71	-3.73/-3.30	-2.48/-1.80	-1.46/-1.17	-1.52/-2.16
Θ(67.5°)	-5.86/-5.41	-5.28/-4.51	-6.14/-5.88	-4.84/-3.82	-3.43/-3.26	-2.96/-2.67	-2.68/-2.62	-2.52/-2.15	-1.61/-0.76	0.16/1.14	1.87/2.34	2.28/1.77	0.81/-0.60	-1.77/-2.76	-3.20/-2.81	-1.93/-1.29	-0.98/-1.33	-2.14/-3.44	-5.06/-7.38	-10.10/-11.27	-10.71/-10.06	-8.93/-7.61	-6.07/-5.13	-4.94/-5.46
Θ(75°)	-4.05/-4.30	-4.45/-5.05	-6.22/-6.75	-5.28/-3.74	-3.00/-2.92	-2.97/-3.01	-3.25/-2.80	-2.70/-2.15	-1.35/-0.46	0.59/1.52	2.19/2.57	2.48/1.80	0.85/-0.43	-1.90/-3.51	-4.10/-3.34	-2.34/-1.78	-1.22/-1.90	-3.06/-4.37	-5.64/-6.76	-7.10/-7.04	-6.89/-6.80	-6.48/-6.28	-5.65/-	



Antenna Pattern

Appendix B

Θ (75°)	0.870/8.84	0.23/-0.03	-0.81/-1.11	-1.39/-1.31	-0.31/0.37	0.17/-1.64	-4.13/-6.03	-8.97/-12.15	-8.53/-5.39	-4.66/-4.51	-3.94/-3.24	-2.12/-1.22	-0.72/-0.68	-1.11/-1.96	-2.74/-4.42	-6.29/-6.52	-5.08/-3.05	-4.75/-6.69	-6.09/-5.36	-4.45/-5.27	-4.23/-2.16	-0.90/-0.12	0.33/0.89	
Θ (82.5°)	-1.26/-2.08	-1.72/-1.44	-0.70/-1.1	-0.62/-2.99	-5.38/-4.30	-2.49/-2.82	-4.18/-5.21	-6.77/-8.95	-7.79/-4.39	-1.31/-0.01	0.44/0.36	0.15/0.26	0.55/0.22	-0.96/-4.24	-4.11/-5.60	-8.47/-13.63	-9.65/-5.81	-3.83/-5.46	-11.05/-9.72	-6.81/-8.67	-9.62/-6.37	-2.32/-0.21	1.09/0.50	
Θ (90°)	-5.84/-6.46	-5.13/-4.77	-2.49/-1.21	-1.48/-2.80	-4.96/-5.79	-4.19/-2.75	-2.84/-5.35	-6.90/-5.81	-3.64/-3.24	-1.66/-1.18	0.16/0.58	0.64/0.61	0.54/-0.07	-1.10/-3.10	-5.13/-4.88	-7.27/-11.12	-8.55/-5.00	-4.19/-5.59	-12.23/-8.25	-7.15/-8.56	-9.03/-7.92	-2.38/-1.43	-1.14/-2.04	
Θ (97.5°)	-7.77/-11.31	-13.72/-9.71	-6.01/-2.97	-2.28/-2.10	-2.49/-1.44	-1.17/-2.57	-6.89/-9.80	-8.52/-8.06	-6.51/-3.84	-2.29/-0.90	0.31/0.85	0.91/0.64	0.70/0.21	-0.68/-1.83	-2.66/-3.01	-5.67/-8.42	-9.90/-2.74	-0.18/-4.04	-13.27/-4.75	-3.18/-4.78	-7.31/-3.78	-2.49/-2.54	-2.36/-3.02	
Θ (105°)	-5.71/-5.95	-7.10/-10.96	-15.24/-15.75	-10.81/-7.08	-6.11/-4.23	-3.60/-3.02	-3.56/-4.74	-4.45/-3.33	-2.11/-4.17	-1.68/-1.36	-0.76/-0.45	-0.61/-0.76	-0.76/-1.30	-2.47/-3.51	-8.36/-7.14	-5.30/-7.86	-9.14/-8.68	-5.27/-6.37	-10.52/-6.50	-5.72/-6.49	-6.22/-6.94	-4.28/-4.03	-4.06/-2.70	
Θ (112.5°)	-6.99/-8.39	-7.97/-7.86	-7.44/-10.04	-10.81/-12.53	-12.25/-12.28	-8.46/-4.86	-3.25/-3.30	-2.65/-1.00	0.60/0.40	-0.82/-1.96	-2.99/-4.55	-5.11/-5.24	-5.23/-5.90	-8.06/-10.25	-8.87/-5.19	-4.33/-8.85	-9.02/-6.60	-7.95/-8.37	-7.38/-2.71	-3.45/-4.24	-6.05/-9.92	-4.75/-6.99	-4.54/-4.20	
Θ (120°)	-6.38/-5.02	-5.93/-5.53	-5.61/-6.14	-5.09/-5.69	-5.80/-8.40	-11.74/-9.36	-9.22/-7.35	-4.33/-2.09	-0.50/0.46	1.07/1.77	2.19/1.49	0.61/-0.31	-2.49/-3.56	-6.16/-8.52	-7.87/-6.35	-4.94/-5.69	-8.83/-13.10	-13.93/-8.29	-4.84/-7.24	-9.58/-9.83	-5.11/-3.92	-3.39/-2.98	-4.81/-8.29	
Θ (127.5°)	-9.45/-5.78	-4.29/-2.54	-3.26/-3.49	-5.83/-3.80	-2.68/-1.97	-3.50/-5.42	-5.08/-4.07	-3.75/-2.82	-0.58/-1.44	2.55/2.21	3.22/2.67	1.47/0.12	-1.64/-4.15	-6.56/-9.08	-6.96/-6.22	-9.49/-8.38	-7.66/-15.27	-12.52/-5.69	-5.94/-11.87	-10.91/-8.08	-9.35/-7.22	-7.24/-9.27	-13.93/-11.44	
Θ (135°)	-3.49/-2.80	-3.37/-2.15	-2.87/-3.80	-4.90/-4.37	-2.95/-1.87	-2.56/-3.62	-3.29/-2.25	-1.73/-2.35	-2.17/-2.32	-1.19/0.04	1.00/1.20	1.79/1.10	0.64/-1.59	-2.59/-4.08	-7.13/-8.35	-10.71/-11.32	-9.15/-9.66	-8.33/-7.09	-10.16/-7.00	-6.87/-5.46	-7.62/-8.96	-10.17/-7.20	-8.12/-6.75	
Θ (142.5°)	-4.88/-6.68	-7.05/-6.34	-5.27/-4.99	-5.16/-3.20	-1.26/-0.41	-0.67/-1.99	-3.35/-3.77	-3.64/-3.62	-3.90/-4.08	-3.05/-1.74	-0.83/-0.15	-1.00/-1.42	-3.02/-6.71	-6.97/-8.52	-6.50/-6.72	-5.91/-3.04	-4.76/-6.48	-8.40/-11.73	-12.86/-11.01	-11.61/-9.30	-8.40/-12.63	-11.19/-8.18	-4.38/-2.74	
Θ (150°)	-5.40/-4.16	-5.06/-4.44	-2.90/-2.21	-1.44/-1.10	-1.91/-2.81	-3.42/-3.32	-3.44/-3.17	-1.63/-0.19	1.08/1.14	0.38/-0.46	-1.31/-2.09	-2.36/-2.28	-3.22/-3.90	-5.19/-8.15	-11.68/-15.47	-14.42/-6.44	-5.29/-8.81	-12.96/-16.02	-12.84/-11.52	-10.12/-6.37	-3.16/-2.00	-2.37/-4.52	-8.03/-8.64	
Θ (157.5°)	-7.42/-8.32	-10.28/-11.55	-8.14/-5.00	-3.11/-1.00	-0.41/0.05	0.70/1.18	1.77/1.97	1.79/1.45	1.07/0.82	0.46/0.31	-0.06/-0.30	-0.50/-0.41	-0.80/-0.85	-1.51/-2.59	-4.11/-5.07	-4.69/-3.04	-2.55/-4.94	-8.40/-9.17	-6.98/-5.25	-4.73/-5.38	-6.16/-6.07	-5.73/-5.99	-6.25/-6.80	
Θ (165°)	-5.44/-6.09	-8.02/-9.82	-9.81/-6.70	-4.69/-3.55	-2.21/-1.97	-2.49/-3.16	-3.16/-3.00	-2.65/-2.35	-2.42/-2.20	-1.48/-0.63	0.21/0.35	0.67/0.93	1.08/1.08	1.03/0.61	-0.15/-1.20	-2.56/-4.90	-6.38/-9.83	-11.87/-11.37	-10.96/-10.44	-10.19/-10.03	-9.71/-8.33	-6.97/-6.81	-6.95/-6.67	
Θ (172.5°)	-8.33/-8.25	-7.77/-7.74	-7.23/-5.84	-4.75/-3.53	-2.50/-1.92	-1.90/-2.14	-2.10/-1.90	-1.30/-0.83	-0.52/-0.08	0.16/0.70	0.88/1.02	1.32/1.39	1.23/0.96	-0.02/-1.46	-3.81/-7.01	-11.49/-12.02	-10.09/-7.86	-6.01/-4.93	-4.98/-5.29	-6.34/-7.74	-7.92/-7.41	-6.93/-7.40	-9.06/-9.74	
Θ (180°)	-6.90/-6.76	-6.60/-7.34	-7.76/-7.47	-6.26/-5.62	-5.45/-5.64	-6.20/-6.35	-6.17/-6.18	-5.93/-5.39	-5.16/-5.18	-4.93/-5.18	-5.52/-5.98	-6.66/-7.57	-9.07/-11.18	-13.25/-14.95	-13.03/-10.31	-9.11/-7.86	-7.49/-8.03	-8.43/-9.41	-10.62/-13.11	-15.35/-12.65	-10.77/-9.42	-7.98/-7.41	-6.58/-6.01	
Freq(Hz)	5.785GPol.	TotalAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Φ(0°)°Φ(7.5°)	Φ(15°)°Φ(22.5°)	Φ(30°)°Φ(37.5°)	Φ(45°)°Φ(52.5°)	Φ(60°)°Φ(67.5°)	Φ(75°)°Φ(82.5°)	Φ(90°)°Φ(97.5°)	Φ(105°)°Φ(112.5°)	Φ(120°)°Φ(127.5°)	Φ(135°)°Φ(142.5°)	Φ(150°)°Φ(157.5°)	Φ(165°)°Φ(172.5°)	Φ(180°)°Φ(187.5°)	Φ(195°)°Φ(202.5°)	Φ(210°)°Φ(217.5°)	Φ(225°)°Φ(232.5°)	Φ(240°)°Φ(247.5°)	Φ(255°)°Φ(262.5°)	Φ(270°)°Φ(277.5°)	Φ(285°)°Φ(292.5°)	Φ(300°)°Φ(307.5°)	Φ(315°)°Φ(322.5°)	Φ(330°)°Φ(337.5°)	Φ(345°)°Φ(352.5°)
Θ (0°)	-1.15/-1.13	-1.10/-1.14	-1.32/-1.49	-1.90/-2.41	-2.27/-1.73	-1.43/-1.38	-1.55/-1.76	-1.63/-1.07	-0.84/-1.08	-1.03/-1.07	-1.59/-1.23	-1.04/-0.96	-0.68/-0.87	-1.16/-1.18	-1.56/-1.53	-1.47/-1.61	-1.29/-1.19	-0.83/-0.19	-0.09/-0.10	-0.73/-0.53	-0.41/-0.40	-0.52/-0.95	-1.17/-1.33	
Θ (7.5°)	-2.55/-2.21	-1.67/-1.32	-1.03/-0.81	-0.93/-0.98	-1.12/-1.09	-1.05/-1.00	-0.87/-0.54	-0.44/-0.07	-0.07/-0.03	0.10/-0.07	-0.03/-0.05	-0.17/-0.65	-0.88/-1.32	-0.84/-0.64	-1.12/-1.55	-1.52/-1.72	-2.05/-2.13	-1.98/-1.71	-1.65/-2.23	-2.69/-3.37	-3.44/-3.84	-3.55/-3.94	-2.85/-2.19	
Θ (15°)	-0.59/-0.60	-0.44/-0.19	-0.21/0.32	0.38/0.33	0.04/-0.33	-0.75/-1.25	-1.43/-1.53	-1.13/-0.82	-0.34/0.21	0.04/0.62	0.62/0.51	0.37/0.31	0.27/0.35	0.21/0.22	-0.60/-1.59	-2.01/-1.95	-2.05/-2.02	-2.24/-2.30	-2.29/-2.01	-1.75/-1.83	-1.91/-2.00	-1.76/-1.34	-0.70/-0.77	
Θ (22.5°)	0.90/1.36	1.37/1.74	2.03/2.32	2.66/2.56	2.24/1.71	1.09/0.44	-0.30/-0.65	-0.96/-0.70	-0.64/-0.16	0.30/0.93	1.27/1.48	1.38/1.09	0.67/0.30	-0.29/-0.58	-0.96/-1.65	-1.37/-0.98	-1.05/-1.08	-1.09/-0.98	-0.78/-0.36	-0.69/-0.49	-0.76/-0.63	-0.81/-0.52	-0.58/-0.16	
Θ (30°)	1.26/1.38	1.29/1.07	1.39/1.58	1.75/2.12	2.33/2.40	2.37/2.02	1.27/-0.14	-1.28/-1.33	-0.73/-0.41	-0.32/0.22	0.35/0.43	0.70/0.88	0.58/0.20	-0.56/-1.61	-2.54/-2.48	-2.53/-2.36	-1.78/-1.68	-2.10/-2.47	-1.45/-0.43	0.06/0.29	0.53/1.00	1.45/1.26	1.23/1.31	
Θ (37.5°)	1.23/1.79	1.92/2.10	1.61/1.09	0.77/0.77	1.24/1.01	0.44/0.08	-0.75/-1.60	-2.38/-1.75	-0.75/-0.03	0.76/1.73	2.14/2.60	2.87/2.80	0.61/0.35	-0.54/-4.89	-5.59/-5.82	-4.12/-1.60	-0.94/-0.54	0.40/1.13	0.68/-0.46	-0.66/-0.92	-0.78/-0.47	-0.80/-0.79	0.48/0.79	
Θ (45°)	2.25/2.69	2.54/2.42	1.57/0.31	-0.76/-1.02	-0.67/-0.80	-1.04/-1.23	-2.21/-3.37	-2.82/-1.74	-0.16/1.09	1.88/2.28	2.87/0.01	3.19/3.45	2.71/1.96	1.55/1.23	0.77/1.05	-3.43/-6.49	-5.94/-5.26	-6.36/-6.43	-3.73/-1.33	-0.14/0.22	-0.83/-1.00	-0.00/0.87	1.68/2.23	
Θ (52.5°)	3.20/2.57	2.13/2.05	2.07/0.72	-1.56/-1.89	-1.98/-2.67	-4.56/-5.02	-5.85/-7.36	-8.36/-6.00	-2.69/-0.01	2.14/3.55	4.22/4.25	3.81/3.39	2.41/0.96	-0.48/-0.88	-2.47/-4.27	-10.59/-12.18	-9.89/-12.11	-11.67/-9.08	-5.40/-2.77	-1.78/-2.13	-1.98/-1.58	-0.25/-1.11	1.40/2.33	
Θ (60°)	1.68/1.52	1.21/1.32	1.99/1.79	-0.51/-1.83	-2.40/-2.71	-4.90/-7.86	-9.59/-9.33	-9.66/-10.39	-3.91/0.24	2.43/3.75	4.07/3.98	3.69/3.32	3.06/1.39	0.16/-0.48	0.39/-2.24	-5.10/-6.26	-8.40/-7.49	-6.87/-6.56	-6.74/-6.53	-6.34/-5.22	-5.07/-3.96	-1.55/-0.42	1.02/1.49	
Θ (67.5°)	-0.50/-0.63	-0.72/-1.33	-1.51/-1.38	-1.95/-2.22	-2.66/-3.28	-4.11/-6.44	-6.00/-4.86	-5.85/-6.89	-3.85/0.15	2.49/2.77	2.35/1.71	1.78/2.32	2.62/2.08	0.99/0.44	-1.52/-3.55	-9.08/-10.08	-10.61/-10.36	-8.85/-7.48	-6.69/-6.27	-9.05/-7.27	-4.90/-2.87	-1.69/-0.47	-0.64/-0.36	
Θ (75°)	-0.99/-0.82	-1.41/-1.88	-1.92/-2.25	-2.99/-3.26	-3.06/-2.01	-3.76/-7.32	-8.48/-7.83	-4.55/-3.03	-2.93/-2.97	-2.68/-2.57	-1.95/-0.86	-0.19/-0.21	-1.63/-3.56	-3.93/-5.62	-7.22/-10.35	-10.35/-11.02	-10.80/-7.88	-8.54/-11.16	-11.25/-6.38	-4.95/-5.86	-4.26/-3.05	-2.05/-0.69		
Θ (82.5°)	-3.08/-1.68	-1.13/-0.42	-0.44/-0.77	-1.57/-3.70	-5.27/-4.95	-5.13/-6.22	-6.50/-6.76	-8.36/-9.24	-7.35/-5.17	-4.27/-3.10	-2.12/-1.39	-1.29/-1.29	-1.11/-0.65	-1.07/-2.02	-3.03/-4.24	-6.45/-7.21	-11.06/-14.08	-11.00/-10.80	-10.41/-15.36	-14.06/-10.18	-11.06/-7.57	-3.63/-1.18	0.12/-0.03	
Θ (90°)	-3.27/3.68	-4.07/-2.73	-1.04/-0.90	-2.04/-4.51	-5.11/-6.18	-7.32/-7.12	-6.86/-7.54	-10.10/-9.94	-5.85/-3.32	-2.84/-3.11	-2.42/-1.11	-0.09/0.70	0.54/-0.01	-0.31/-2.09	-3.33/-4.27	-5.69/-6.46	-9.34/-14.20	-7.58/-8.00	-12.73/-9.53	-8.35/-8.84	-12.09/-8.14	-3.89/-1.88	-1.48/-2.87	
Θ (97.5°)	-9.27/-11.72	-9.92/-7.73	-5.13/-3.08	-2.92/-1.46	-4.70/-4.74	-4.59/-5.71	-6.01/-6.73	-7.89/-8.92	-7.79/-6.41	-4.43/-4.27	-3.44/-2.16	-1.29/-0.70	-1.54/-2.25	-2.98/-4.07	-3.67/-2.24	-2.96/-5.38	-7.45/-8.89	-5.02/-5.67	-15.54/-9.74	-7.48/-9.18	-10.70/-7.15	4.01/-5.46	-4.49/-4.82	
Θ (105°)	-4.55/-5.39	-3.31/-7.74	-9.17/-8.37	-8.57/-9.44	-9.31/-7.31	-5.72/-5.51	-6.97/-9.71	-7.68/-5.35	-6.29/-8.70	-11.08/-7.62	-3.86/-1.73	-0.60/-0.54	-0.70/-0.73	-1.29/-2.50	-5.44/-4.75	-5.54/-6.76	-5.12/-5.42	-5.54/-6.94	-13.19/-9.79	-12.92/-7.73	-5.22/-5.81	-4.00/-3.64	-3.28/-1.72	
Θ (112.5°)	-6.96/-6.31	-5.66/-6.91	-9.11/-11.47	-10.30/-9.41	-9.81/-13.28	-11.80/-9.28	-9.31/-9.40	-6.45/-3.99	-2.09/-2.75	-6.39/-9.53	-10.13/-6.61	-3.57/-2.61	-3.15/-3.86	-4.86/-6.65	-8.43/-6.98	-8.33/-9.69	-8.66/-5.48	-5.78/-7.49	-9.39/-7.38	-8.14/-7.21	-5.66/-4.70	-1.88/-2.96	-2.05/-2.09	
Θ (120°)	-8.83/-7.83	-6.18/-6.60	-5.25/-6.82	-5.63/-7.87	-7.15/-10.58	-14.26/-12.30	-8.29/-0.73	-5.08/-3.62	-2.51/-2.12	-1.74/-1.30	-1.40/-1.76	-6.84/-6.92	-6.32/-8.60	-8.67/-9.36	-10.31/-9.47	-14.16/-6.39	-6.14/-12.29	-8.25/-12.69	-15.27/-9.25	-3.95/-2.00	-0.35/-0.64	-3.47/-3.35	-8.44/-6.23	
Θ (127.5°)	-9.31/-6.50	-4.23/-3.19	-4.83/-6.90	-6.92/-4.48	-3.00/-3.38	-0.30/-3.68	-6.31/-5.74	-7.14/-5.68	1.33/1.89	1.57/0.63	-3.88/-1.72	-2.10/-3.13	-2.98/-3.06	-2.67/-3.06	-8.63/-14.52	-11.94/-7.64	-6.93/-14.09	-6.14/-3.81	-5.87/-7.21	-10.01/-10.35	-14.22/-10.12	-5.34/-6.86		
Θ (135°)	-1.20/-1.92	-3.84/-4.57	-5.89/-8.13	-7.60/-5.89	-3.84/-3.12	-3.65/-4.07	-4.12/-4.29	-4.99/-6.65	-5.75/-4.02	-2.21/-0.98	-0.16/0.05	0.37/0.01	0.18/-0.86	-1.80/-1.39	-2.82/-4.28	-6.39/-8.64	-6.79/-10.40	-5.77/-5.94	-12.40/-14.88	-10.17/-5.83	-7.91/-10.23	-10.31/-6.97	-6.88/-4.84	
Θ (142.5°)	-4.86/-4.98	-3.55/-2.66</																						



Antenna Pattern

Appendix B

Θ(120°)	-1.41/-7.93	-7.08/-6.61	-9.74/-12.56	-13.76/-12.51	-14.20/-8.26	-6.85/-8.62	-11.32/-8.37	-8.64/-10.78	-8.27/-3.31	-1.27/-2.30	-4.04/-2.39	-0.87/0.24	-0.07/0.99	1.31/-1.99	-10.82/-5.99	-1.32/-1.08	0.24/-3.11	-1.98/-2.16	-0.06/-2.26	-7.84/-6.05	-2.11/-5.00	-12.76/-4.73	-4.08/-5.25	-2.95/-1.79
Θ(127.5°)	-2.65/-7.59	-12.82/-8.66	-8.60/-11.24	-14.44/-12.26	-10.75/-8.51	-9.99/-14.18	-12.73/-9.35	-10.38/-10.55	-5.29/-1.36	-0.22/-0.55	1.48/-1.60	1.58/2.26	2.05/0.29	-2.30/-3.03	-0.71/-1.00	-1.96/-2.82	-3.31/-4.24	-1.82/-1.21	-0.87/-8.68	-2.97/-3.16	-6.56/-7.76	-3.31/-3.08	-2.91/-2.31	
Θ(135°)	-4.47/-6.55	-10.98/-8.65	-10.94/-14.52	-11.32/-7.26	-1.07/-9.17	-9.34/-6.74	-8.66/-7.22	-2.96/0.02	1.37/0.53	-0.70/-0.51	1.07/-1.42	2.13/0.08	2.67/0.49	-2.10/-3.20	-1.68/-0.09	-0.63/-1.69	-3.91/-0.62	-3.36/-9.83	-6.86/-5.62	-10.70/-8.96	-7.77/-5.52	-8.75/-5.12		
Θ(142.5°)	-9.41/-12.12	-12.03/-12.83	-12.52/-9.47	-6.19/-7.00	-10.67/-13.67	-9.09/-8.38	-9.84/-13.35	-14.52/-11.66	-5.49/-1.13	1.23/2.06	1.82/0.23	-2.67/-3.34	-0.93/-1.76	2.38/-1.16	-1.26/-2.78	-1.84/-1.24	-1.40/-1.66	-2.32/-3.82	-4.10/-2.13	-2.06/-5.94	-6.61/-4.87	-9.99/-13.01	-13.12/-5.85	-4.77/-6.67
Θ(150°)	-11.44/-11.32	-11.56/-9.72	-9.78/-9.51	-11.39/-15.51	-11.61/-13.04	-7.40/-7.44	-10.30/-14.14	-14.80/-8.74	-5.47/-4.25	-3.47/-2.64	-1.78/-1.99	-3.62/-5.49	-4.68/-1.76	0.22/0.39	-0.13/-1.01	-1.46/-1.49	-1.84/-2.66	-4.44/-6.01	-6.11/-6.75	-5.57/-5.84	-5.48/-7.40	-10.86/-10.03	-8.34/-8.85	-11.84/-14.79
Θ(157.5°)	-5.80/-7.85	-11.44/-13.50	-15.14/-13.49	-12.53/-11.47	-8.06/-7.26	-6.82/-8.90	-10.97/-11.87	-14.58/-11.14	-7.85/-6.75	-5.79/-5.85	-6.69/-8.47	-10.28/-0.18	-7.06/-3.52	-1.33/-0.52	-3.97/-0.88	-2.26/-3.53	-3.84/-2.66	-2.39/-2.74	-3.34/-3.08	-3.29/-4.65	-3.73/-5.46	-7.07/-7.65	-5.46/-5.82	-5.14/-5.82
Θ(165°)	-9.44/-9.71	-11.73/-12.41	-11.43/-11.51	-10.99/-10.19	-9.91/-10.27	-15.17/-14.98	-15.04/-13.79	-12.69/-12.00	-14.99/-16.10	-14.10/-13.11	-14.56/-15.58	-15.39/-15.19	-11.49/-8.11	-6.30/-5.65	-5.98/-6.73	-6.93/-6.72	-5.41/-4.43	-3.74/-3.52	-3.16/-3.41	-4.32/-7.37	-8.29/-7.04	-6.22/-6.25	-6.86/-7.99	-7.07/-7.57
Θ(172.5°)	-5.98/-6.38	-6.66/-8.44	-9.83/-10.46	-11.44/-11.97	-11.60/-10.36	-8.64/-6.96	-6.53/-6.39	-6.68/-7.56	-8.11/-8.73	-9.24/-8.70	-9.03/-8.85	-8.00/-7.32	-7.02/-6.78	-7.14/-7.68	-8.64/-8.84	-9.16/-9.93	-10.44/-9.37	-7.97/-7.38	-7.34/-7.59	-8.51/-10.38	-10.43/-9.63	-7.90/-7.01	-6.81/-6.87	-5.97/-5.37
Θ(180°)	-6.33/-6.42	-6.86/-7.35	-6.81/-6.79	-6.71/-6.95	-6.11/-5.71	-5.53/-5.10	-4.87/-4.86	-5.22/-5.73	-6.45/-6.58	-6.17/-5.73	-5.55/-5.28	-4.96/-4.90	-4.62/-4.42	-4.86/-5.50	-5.79/-5.91	-6.71/-6.86	-5.91/-5.75	-6.45/-7.83	-7.39/-6.64	-6.66/-7.52	-7.88/-8.13	-8.49/-9.08	-9.86/-9.61	-8.22/-7.71
Freq(Hz)	5.6GPol.	TotalAnt.3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-4.25/-4.73	-4.60/-4.17	-3.61/-3.02	-2.99/-3.73	-3.87/-4.14	-2.57/-3.12	-2.54/-3.87	-3.11/-2.44	-2.50/-2.61	-2.57/-2.43	-2.20/-2.29	-2.69/-2.80	-3.24/-3.48	-3.77/-4.10	-3.94/-4.27	-4.57/-4.03	-4.00/-4.43	-4.74/-4.08	-3.74/-4.37	-4.64/-5.32	-4.71/-6.39	-4.44/-5.65	-5.30/-4.70	
Θ(7.5°)	-1.90/-2.53	-2.13/-2.03	-2.04/-2.56	-2.60/-2.82	-3.09/-3.14	-3.23/-4.13	-3.80/-4.14	-4.36/-5.36	-5.66/-5.58	-5.50/-5.86	-5.35/-4.56	-4.54/-4.62	-4.06/-4.33	-4.06/-3.58	-3.04/-2.86	-2.72/-3.59	-3.70/-2.87	-2.84/-3.66	-3.74/-2.42	-1.97/-3.36	-3.81/-3.52	-3.27/-3.11	-2.69/-2.00	-1.41/-1.20
Θ(15°)	-1.25/-1.09	-1.81/-2.21	-2.76/-3.57	-3.42/-3.33	-3.13/-3.03	-2.55/-2.13	-1.91/-2.38	-3.11/-3.52	-3.54/-3.59	-4.02/-3.92	-3.50/-3.74	-4.04/-3.64	-3.26/-2.85	-2.34/-2.25	-1.53/-1.21	-1.28/-1.69	-1.74/-1.93	-2.28/-3.44	-4.32/-4.47	-4.56/-6.11	-4.90/-4.89	-4.03/-2.77	-1.89/-1.23	-1.28/-1.56
Θ(22.5°)	-4.46/-5.89	-8.22/-10.03	-11.38/-10.59	-8.38/-6.73	-5.94/-5.31	-4.74/-3.98	-3.53/-3.20	-2.95/-3.01	-3.54/-3.77	-3.77/-3.45	-3.17/-3.58	-3.41/-3.05	-2.95/-3.19	-2.34/-1.35	-0.47/0.20	0.52/0.39	0.08/-0.83	-1.76/-3.78	-5.65/-5.78	-5.56/-6.68	-5.05/-5.96	-5.82/-6.51	-6.08/-5.43	-4.72/-4.12
Θ(30°)	-6.19/-6.63	-7.52/-8.06	-10.19/-11.40	-10.10/-9.06	-10.67/-15.65	-12.54/-11.30	-10.40/-8.04	-8.02/-4.99	-4.98/-6.49	-8.34/-9.17	-8.81/-7.68	-6.89/-6.05	-4.47/-3.59	-2.67/-1.85	-1.11/-0.15	0.51/0.51	0.54/-0.32	-1.23/-2.56	-3.65/-4.81	-5.56/-8.28	-9.97/-12.20	-11.73/-13.79	-15.42/-14.43	-7.39/-5.35
Θ(37.5°)	-5.56/-6.22	-6.01/-9.96	-7.62/-6.45	-4.49/-7.20	-11.70/-14.62	-15.46/-12.00	-10.87/-11.53	-12.30/-11.59	-12.12/-15.06	-10.37/-6.50	-6.75/-9.26	-11.72/-10.46	-5.44/-1.42	-0.23/-0.84	-2.21/-1.48	-0.29/-0.68	-1.30/-0.18	0.78/-0.28	-3.00/-3.64	-2.14/-1.76	-2.96/-4.44	-8.35/-11.81	-10.28/-6.68	-5.77/-9.43
Θ(45°)	-6.17/-9.90	-8.24/-12.61	-10.55/-7.40	-9.56/-10.52	-8.58/-9.95	-15.39/-13.22	-9.25/-10.54	-12.33/-12.40	-11.36/-11.27	-10.31/-7.92	-6.26/-5.05	-4.77/-7.79	-5.29/-6.45	1.26/-0.24	-3.36/-2.46	-0.44/-0.75	0.12/-1.70	0.97/0.12	-0.05/-0.55	-2.81/-1.97	-2.73/-3.72	-4.59/-3.62	-3.15/-2.71	-4.86/-9.36
Θ(52.5°)	-7.89/-10.29	-11.77/-12.10	-8.20/-14.71	-8.00/-9.14	-6.48/-7.20	-10.31/-14.37	-13.89/-9.40	-11.46/-12.98	-12.91/-8.75	-5.14/-7.44	-6.65/-4.07	-2.79/-3.44	-0.69/0.89	1.40/0.41	-1.33/-0.83	1.19/-1.59	2.14/-1.10	0.12/-0.46	-1.82/-2.62	-2.97/-3.36	-4.07/-2.56	-0.75/0.06	-0.85/-1.48	-3.22/-5.76
Θ(60°)	-5.66/-6.32	-11.32/-8.40	-6.09/-13.63	-6.52/-4.07	-7.22/-11.76	-8.39/-7.52	-9.41/-13.25	-12.55/-12.52	-11.42/-6.99	-3.77/-6.90	-11.18/-3.01	-2.78/-5.99	-2.02/0.27	2.95/-1.69	1.86/2.46	1.70/0.86	1.46/0.22	-2.34/-5.05	-5.28/-3.52	-4.76/-3.42	-2.09/-1.84	-0.32/0.32	-0.57/-2.82	-4.75/-5.61
Θ(67.5°)	-6.47/-9.46	-11.91/-7.23	-9.20/-12.60	-7.93/-3.97	-9.39/-13.45	-13.30/-8.95	-11.31/-16.00	-6.82/-6.12	-11.09/-11.66	-9.66/-4.81	-5.91/-4.08	-1.55/-1.21	1.46/0.62	-0.02/0.68	1.39/2.08	3.54/2.76	-0.16/-0.28	-0.96/-1.57	-3.49/-1.03	-0.25/-1.47	-0.61/0.05	-0.70/-1.89	-3.49/-5.52	
Θ(75°)	-5.32/-8.38	-7.49/-2.31	-4.84/-7.40	-6.92/-5.14	-8.08/-13.00	-9.40/-15.19	-10.10/-6.37	-6.12/-6.47	-5.93/-5.59	-6.89/-3.24	-4.00/-7.14	-2.95/-2.13	-1.68/-1.05	0.39/0.67	-1.19/-1.55	-1.28/0.75	3.03/2.80	1.04/3.14	1.27/0.59	-3.16/-0.90	1.58/-0.41	0.13/-0.39	-0.51/-0.40	-1.27/-3.47
Θ(82.5°)	-8.04/-7.28	-5.19/-3.41	-3.64/-6.28	-4.52/-4.24	-3.93/-5.28	-7.14/-8.65	-9.24/-7.67	-5.98/-2.45	-4.37/-4.15	-4.19/-1.92	0.96/0.85	-0.22/-0.60	0.90/0.84	2.43/-4.5	-2.82/-6.24	-3.70/-3.30	2.96/2.58	0.48/3.65	1.84/-1.20	-4.68/-3.96	-0.57/-0.17	0.67/0.83	1.72/-0.76	-0.40/-3.50
Θ(90°)	-3.42/-3.91	-3.81/-5.96	-7.89/-10.35	-6.86/-5.15	-8.02/-8.24	-10.80/-5.99	-4.00/-5.49	-9.32/-3.77	-0.74/0.34	0.34/0.40	2.81/2.79	1.68/-2.37	-4.47/-4.33	0.00/2.03	0.59/3.01	0.07/2.84	2.02/-0.26	-3.47/-5.80	-1.40/-2.10	1.28/0.10	-0.35/-1.52	-0.04/-0.22		
Θ(97.5°)	0.89/-0.81	-1.80/-1.82	-3.65/-6.72	-8.61/-11.84	-6.66/-6.17	-4.91/-11.85	-7.89/-4.20	-2.99/-3.47	-0.36/0.63	-1.55/-0.03	2.41/2.01	0.08/0.05	3.30/3.02	3.39/0.17	-3.41/-2.50	2.00/2.27	5.08/3.16	1.134.99	4.12/2.85	-1.57/-3.50	0.97/-0.30	1.74/-1.28	-0.89/-1.05	0.06/2.38
Θ(105°)	-5.17/-6.40	-3.91/-7.38	-11.32/-11.69	-9.27/-11.96	-8.44/-6.66	-9.31/-13.97	-13.16/-8.11	-3.29/-2.20	0.03/-1.12	-0.88/-0.98	1.87/3.16	-1.15/3.62	3.88/-1.86	4.53/2.79	0.03/-5.92	0.85/-1.14	3.69/2.43	0.57/3.60	2.40/4.85	0.30/-3.62	0.50/-0.68	2.14/0.07	-3.16/-0.90	1.89/-2.33
Θ(112.5°)	-4.68/-7.58	-4.92/-7.79	-10.50/-12.86	-9.86/-8.46	-6.46/-6.97	-7.25/-5.84	-6.12/-3.82	-0.92/-2.30	-4.89/-2.68	-0.04/2.26	0.85/2.61	3.02/3.20	4.46/3.03	-5.46/2.70	-0.62/3.03	1.83/-1.62	1.70/-5.85	-5.62/0.70	0.42/-1.40	-3.37/-1.84	-1.77/-6.37	1.01/0.91	-1.12/-3.28	0.89/-2.11
Θ(120°)	-0.13/-5.00	-2.44/-2.07	-5.28/-8.29	-8.46/-7.75	-9.57/-13.75	-7.06/-6.69	-7.52/-5.88	-9.08/-9.83	-6.60/-3.45	-4.04/-5.63	-0.95/0.55	-2.24/0.46	2.57/3.82	3.18/-1.36	-4.40/-3.10	0.61/-1.38	2.61/-3.39	-2.75/3.32	2.71/2.27	-2.43/-1.79	-2.56/-6.12	-4.04/0.10	-4.86/-3.84	-1.25/-1.13
Θ(127.5°)	-2.40/-7.45	-8.72/-6.61	-7.77/-8.77	-8.36/-9.69	-11.74/-7.73	-6.45/-6.56	-5.31/-6.22	-11.27/-12.30	-4.74/-0.48	-0.11/-0.46	0.19/0.80	0.64/-1.30	-1.04/-1.69	1.68/-1.80	-2.69/-1.48	1.05/3.87	1.23/-0.97	-2.44/0.14	1.05/2.45	-5.20/-4.62	-0.06/-2.74	-6.80/-7.48	-2.93/-2.27	-0.14/-0.16
Θ(135°)	-2.02/-5.82	-6.32/-8.94	-8.38/-8.37	-13.64/-11.19	-7.50/-7.26	-7.00/-4.99	-5.54/-10.13	-15.67/-10.71	-3.28/-0.26	0.26/-0.11	0.61/-1.53	1.89/-0.40	-1.23/-1.19	2.71/2.17	-0.09/-3.14	-1.66/-0.20	-4.58/-5.09	-8.89/-2.86	-5.91/-1.72	-3.50/-6.69	-7.50/-1.31	-4.77/-8.61	-6.65/-7.92	-4.11/-0.81
Θ(142.5°)	-10.84/-12.96	-13.33/-15.12	-15.42/-8.74	-7.33/-5.32	-7.33/-8.51	-10.91/-10.62	-13.55/-15.25	-14.25/-8.30	-3.18/-1.32	-0.69/-0.59	-0.72/-0.13	0.19/-0.02	-0.31/0.71	1.84/2.45	1.13/-1.15	-1.24/-0.58	-1.42/-4.97	-3.64/-1.34	-3.36/-4.41	-6.55/-13.89	-11.69/-9.09	-14.34/-13.96	-10.46/-8.07	-7.30/-3.80
Θ(150°)	-12.08/-11.62	-10.80/-10.06	-8.72/-7.63	-7.56/-11.93	-15.51/-12.77	-8.52/-11.47	-15.20/-15.04	-14.98/-14.20	-8.85/-6.81	-4.56/-2.95	-1.54/-1.39	-1.66/-1.51	-0.76/-1.02	2.79/3.01	2.16/2.25	-1.79/-2.19	-1.99/-3.49	-5.08/-6.95	-8.79/-6.87	-5.78/-6.72	-7.42/-4.94	-4.76/-8.74	-8.63/-8.17	
Θ(157.5°)	-10.32/-11.33	-10.78/-11.62	-12.73/-14.56	-14.33/-9.02	-6.53/-6.62	-7.43/-9.31	-11.05/-15.76	-13.83/-10.65	-10.53/-10.67	-7.75/-5.80	-3.74/-2.37	-1.48/-0.28	0.63/0.83	0.67/-0.28	-1.65/-2.29	-2.35/-1.72	-1.25/-1.36	-3.71/-5.14	-4.07/-4.45	-5.40/-6.59	-7.82/-5.54	-5.21/-5.82	-7.88/-8.54	
Θ(165°)	-6.42/-6.87	-7.66/-8.35	-9.72/-9.86	-9.00/-11.16	-15.79/-16.13	-12.55/-10.15	-9.65/-8.94	-9.08/-10.29	-1.14/-6.99	-8.02/-6.43	-5.50/-5.07	-4.57/-4.28	-3.44/-2.76	-2.24/-2.34	-2.94/-3.88	-5.19/-5.56	-5.00/-3.89	-2.82/-2.62	-2.76/-1.81	-2.22/-4.25	-6.76/-8.93	-10.55/-9.71	-7.81/-6.80	-5.74/-5.49
Θ(172.5°)	-4.04/-5.40	-6.44/-8.26	-9.14/-11.31	-12.45/-10.58	-7.27/-5.62	-4.97/-5.41	-6.83/-7.08	-6.54/-7.43	-7.78/-7.97	-6.71/-5.58	-5.25/-5.29	-5.37/-5.63	-5.72/-5.65	-5.75/-6.20	-6.21/-5.83	-5.88/-4.77	-3.36/-2.20	-2.28/-2.79	-3.15/-3.77	-5.91/-7				



Θ(172.5°)	-7.73/-7.80	-8.23/-8.59	-8.85/-8.14	-7.06/-5.53	-4.85/-4.25	-4.47/-5.24	-6.06/-7.07	-7.98/-8.22	-9.50/-10.41	-11.05/-11.49	-11.51/-11.34	-10.77/-10.09	-9.21/-8.62	-7.89/-7.86	-7.59/-7.07	-6.66/-6.22	-6.01/-6.71	-7.74/-9.06	-10.58/-11.59	-11.93/-11.96	-11.48/-10.63	-9.60/-8.77	-8.55/-7.68	-7.55/-7.76
Θ(180°)	-6.86/-6.73	-6.82/-6.87	-6.67/-6.93	-6.58/-5.85	-5.75/-5.45	-5.47/-6.24	-6.87/-7.06	-7.48/-7.21	-7.15/-7.10	-6.79/-6.58	-6.51/-6.19	-6.03/-6.19	-5.92/-5.86	-5.72/-5.75	-5.84/-5.90	-6.16/-6.22	-6.39/-6.61	-6.79/-6.76	-7.01/-7.13	-7.07/-7.01	-6.73/-6.98	-6.23/-6.27	-6.66/-6.76	-6.41/-6.43
Freq(Hz)	5.3GPol.	TotalAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-11.55/-10.08	-9.31/-9.44	-10.19/-10.00	-10.60/-10.47	-10.69/-11.27	-11.91/-12.37	-11.92/-10.61	-9.54/-9.16	-9.06/-9.43	-9.64/-10.19	-11.00/-11.45	-11.28/-11.56	-11.30/-11.76	-12.20/-12.23	-12.31/-11.82	-11.76/-11.97	-12.87/-14.06	-14.74/-14.39	-13.27/-12.60	-12.13/-12.09	-12.42/-12.31	-11.40/-10.83	-11.90/-11.74	-11.94/-12.35
Θ(7.5°)	-9.20/-9.52	-9.19/-9.25	-9.27/-9.29	-10.12/-11.42	-11.66/-10.81	-9.85/-9.21	-9.36/-10.25	-11.12/-12.09	-12.38/-12.15	-11.30/-11.35	-11.35/-11.31	-11.33/-10.95	-11.12/-10.81	-10.83/-10.92	-10.76/-10.86	-10.96/-11.15	-11.94/-13.03	-13.43/-13.56	-13.23/-12.84	-12.51/-12.24	-11.65/-11.41	-11.23/-10.42	-10.02/-9.22	-9.42/-9.21
Θ(15°)	-5.06/-5.05	-4.79/-4.16	-4.55/-4.67	-5.32/-4.88	-5.20/-4.70	-4.57/-5.16	-5.77/-6.56	-7.55/-8.94	-9.65/-10.60	-10.45/-9.76	-9.12/-9.06	-9.49/-8.77	-9.09/-8.09	-7.54/-7.74	-7.68/-8.18	-9.95/-11.93	-12.75/-10.97	-8.86/-7.38	-6.50/-6.07	-5.65/-5.40	-5.43/-5.30	-5.10/-4.80	-4.39/-4.89	-4.89/-4.88
Θ(22.5°)	-3.61/-2.77	-2.07/-1.74	-1.85/-2.56	-3.14/-3.48	-3.23/-3.52	-4.15/-4.25	-4.39/-4.64	-5.95/-7.35	-10.07/-12.49	-14.52/-15.14	-14.15/-11.87	-11.32/-11.91	-12.49/-12.29	-11.03/-9.58	-8.38/-8.34	-9.02/-8.17	-6.67/-5.16	-3.60/-2.93	-3.11/-3.45	-3.48/-3.27	-2.87/-2.86	-3.24/-3.27	-3.05/-3.46	-3.06/-3.43
Θ(30°)	-1.38/-0.58	0.290.62	0.37/-0.63	-1.59/-2.54	-3.53/-4.73	-5.18/-4.61	-4.16/-3.74	-4.29/-6.51	-8.99/-12.09	-12.45/-9.70	-7.83/-6.73	-5.73/-6.18	-9.01/-12.88	-14.22/-10.61	-9.25/-10.07	-12.67/-12.08	-9.59/-6.75	-5.22/-4.91	-4.93/-6.23	-7.07/-6.64	-5.63/-4.99	-4.95/-5.57	-6.09/-5.18	-3.56/-2.63
Θ(37.5°)	-0.380.26	1.222.28	2.11/-1.70	0.84/-0.39	-1.73/-2.72	-3.73/-4.43	-5.44/-6.14	-6.84/-7.15	-7.46/-6.85	-6.28/-4.55	-3.59/-3.82	-4.21/-3.83	-4.50/-7.12	-11.12/-9.71	-6.24/-5.14	-7.08/-12.36	-15.36/-8.95	-7.33/-8.57	-9.59/-9.47	-8.99/-9.05	-10.14/-10.66	-8.04/-6.39	-5.76/-4.30	-3.62/-2.00
Θ(45°)	0.310.04	1.302.46	2.462.57	2.13/-1.33	0.08/-1.62	-2.78/-3.25	-3.71/-4.16	-5.09/-4.98	-5.15/-5.10	-4.28/-3.76	-4.05/-4.65	-5.36/-5.67	-4.32/-5.06	-8.00/-8.15	-8.36/-8.01	-8.69/-8.34	-8.26/-7.73	-9.77/-8.95	-8.60/-9.41	-8.53/-9.48	-9.56/-10.35	-8.73/-5.34	-3.41/-1.39	-1.30/-0.87
Θ(52.5°)	0.360.96	2.393.02	3.012.29	0.51/-1.21	-3.02/-4.07	-4.55/-4.33	-3.66/-3.41	-4.73/-5.81	-4.36/-2.38	-1.10/-0.30	-0.80/-1.41	-1.57/-2.78	-3.82/-6.12	-5.28/-6.27	-10.18/-14.75	-10.87/-8.12	-10.98/-10.34	-10.13/-10.44	-11.47/-11.00	-10.27/-11.70	-13.61/-9.74	-8.47/-6.79	-6.05/-2.62	-1.91/-1.41
Θ(60°)	0.271.01	2.443.20	3.482.60	1.14/-0.72	-3.07/-4.19	-5.85/-5.23	-4.38/-3.72	-3.89/-5.17	-3.87/-0.99	1.23/-1.26	1.32/-0.00	-0.71/-1.87	-3.00/-6.99	-6.21/-5.29	-6.09/-14.84	-10.56/-6.93	-9.26/-12.81	-14.60/-14.97	-10.91/-8.19	-6.60/-6.62	-8.50/-7.93	-6.93/-7.21	-6.30/-2.76	-0.42/-0.82
Θ(67.5°)	0.410.82	2.453.21	3.552.56	1.04/-1.95	-3.38/-5.77	-6.50/-7.08	-6.74/-7.19	-8.28/-9.59	-4.48/-0.10	1.64/-1.94	2.020.40	0.35/-0.19	0.12/-2.83	-4.79/-8.93	-10.82/-8.64	-5.17/-6.44	-11.57/-12.49	-10.37/-7.89	-4.94/-5.57	-5.19/-3.90	-3.63/-3.52	-5.24/-4.39	-3.33/-2.06	1.060.35
Θ(75°)	0.660.93	2.332.87	3.672.73	0.50/-2.60	-3.34/-3.57	-2.88/-2.78	-3.45/-3.79	-6.86/-15.02	-5.80/-0.63	1.662.67	2.342.02	1.540.82	-0.05/-1.23	-3.04/-5.95	-9.10/-7.95	-4.49/-8.66	-8.24/-12.00	-7.11/-5.22	-2.62/-2.82	-2.99/-4.34	-10.18/-0.01	-1.19/-1.31	-6.09/-5.34	0.080.30
Θ(82.5°)	1.551.56	2.813.09	3.112.22	0.46/-2.73	-3.88/-3.54	-2.76/-1.99	-0.97/-0.65	-2.10/-8.87	-10.28/-0.84	1.502.97	2.502.42	1.890.66	-0.57/-3.78	-4.81/-4.08	-4.52/-4.93	-3.86/-6.44	-8.58/-10.58	-11.55/-12.04	-6.69/-1.93	-3.41/-3.31	-3.44/-1.59	2.052.60	0.240.46	1.691.77
Θ(90°)	0.641.89	3.263.40	2.941.88	-0.34/-3.54	-6.13/-5.44	-3.78/-3.04	-1.64/-1.36	-2.51/-9.11	-11.29/-0.60	1.582.99	2.902.91	2.040.44	-0.51/-3.11	-3.03/-4.37	-3.18/-5.44	-6.24/-6.33	-14.95/-6.40	-7.16/-16.03	-9.42/-5.71	-4.20/-3.08	-1.370.54	2.372.34	1.070.49	0.270.25
Θ(97.5°)	1.382.45	2.631.99	1.572.07	-2.80/-5.70	-8.29/-7.17	-5.66/-2.36	0.141.05	-0.04/-8.00	1.642.80	2.332.54	1.130.56	-0.04/-0.92	-0.67/-0.32	-0.53/-4.21	-4.78/-7.29	-10.23/-3.56	-9.72/-8.40	-12.10/-3.77	-1.79/-1.33	-3.84/-4.22	2.040.38	2.873.21	1.862.01	1.862.01
Θ(105°)	2.282.38	2.131.37	0.980.19	-1.51/-5.08	-6.48/-5.12	-5.36/-4.69	-2.80/-1.46	-2.74/-7.63	-9.45/-2.69	-0.011.68	2.343.14	2.902.28	0.38/-1.56	-4.56/-4.54	-6.07/-3.76	-2.34/-5.47	-5.90/-3.62	-10.67/-9.42	-12.22/-6.12	-4.07/-3.07	-6.70/-4.86	2.713.51	3.484.56	4.053.86
Θ(112.5°)	2.332.66	2.202.21	0.81/-0.37	-2.00/-5.69	-6.56/-6.69	-5.13/-5.48	-2.74/-1.21	-3.37/-8.91	-9.95/-2.49	0.320.81	1.962.87	1.94/-0.17	-0.91/-2.59	-6.18/-6.47	-8.46/-7.84	-12.02/-14.34	-6.43/-4.14	-8.48/-6.70	-4.85/-12.38	-6.16/-1.12	-4.07/-2.33	1.112.00	1.722.14	1.862.78
Θ(120°)	0.741.16	1.271.33	0.750.61	-0.57/-8.58	-6.67/-8.58	-10.03/-7.27	-4.75/-3.32	-3.90/-10.64	-8.97/-2.65	-0.20/-0.50	-0.18/-0.23	-0.25/-1.14	-2.28/-2.92	-5.30/-4.99	-4.07/-6.22	-11.70/-12.72	-13.34/-5.96	-10.34/-5.37	-4.90/-15.46	-9.12/-2.64	-3.00/-1.68	-0.58/-0.91	-0.58/-0.19	0.020.42
Θ(127.5°)	0.950.24	-0.43/-0.70	-0.10/-0.19	-0.78/-2.84	-4.57/-5.78	-5.24/-4.46	-3.64/-3.98	-5.97/-12.14	-8.90/-4.00	-1.67/-0.84	-1.24/-2.78	-3.24/-2.83	-1.93/-2.71	-2.99/-4.02	-4.39/-7.96	-11.44/-11.85	-6.99/-9.29	-10.44/-4.81	-7.62/-13.71	-13.86/-7.66	-5.51/-3.87	-2.23/-0.51	0.471.70	1.561.31
Θ(135°)	1.150.11	-0.57/-1.32	-0.91/-0.90	-1.07/-1.87	-2.90/-3.38	-3.21/-4.02	-6.72/-10.24	-10.02/-11.57	-13.56/-13.94	-12.58/-11.43	-11.82/-13.72	-14.88/-13.41	-14.62/-15.03	-13.71/-9.62	-13.19/-6.62	-6.16/-4.54	-6.79/-7.39	-6.87/-5.07	-6.32/-10.12	-11.20/-6.84	-3.41/-0.95	0.681.45	1.682.35	1.961.68
Θ(142.5°)	0.761.09	-2.57/-4.51	-4.96/-3.53	-2.09/-5.44	-3.41/-3.46	-3.48/-2.60	-2.10/-2.66	-4.96/-8.25	-10.83/-9.47	-7.27/-6.84	-8.46/-11.26	-9.86/-5.89	-4.68/-3.47	-3.49/-3.88	-4.94/-5.10	-4.54/-4.37	-7.45/-8.54	-7.76/-7.43	-11.11/-9.43	-8.65/-6.32	-8.62/-6.69	-6.21/-7.06	-8.15/-9.71	
Θ(150°)	-1.01/-2.37	-4.78/-7.09	-7.94/-6.28	-5.39/-5.71	-6.06/-6.50	-6.52/-7.95	-10.69/-15.24	-15.67/-15.13	-11.52/-8.62	-6.62/-5.83	-6.18/-7.84	-8.37/-7.74	-7.43/-7.91	-8.94/-9.12	-8.89/-8.49	-7.85/-6.76	-5.24/-4.26	-4.94/-6.30	-7.47/-9.08	-13.94/-11.89	-3.81/-0.28	1.902.38	2.251.66	1.19/-0.04
Θ(157.5°)	-3.91/-4.54	-6.07/-7.56	-7.89/-6.68	-5.80/-5.25	-5.01/-5.58	-5.78/-6.51	-7.42/-6.36	-10.02/-11.57	-13.56/-13.94	-12.58/-11.43	-11.82/-13.72	-14.90/-15.22	-14.38/-13.41	-14.62/-15.03	-13.71/-9.62	-6.16/-4.54	-4.33/-4.19	-4.31/-4.05	-4.12/-8.47	-7.12/-9.97	-8.98/-5.57	-3.64/-2.55	-2.38/-2.43	-2.60/-3.47
Θ(165°)	-10.80/-10.31	-9.12/-10.03	-10.91/-10.95	-10.77/-10.93	-11.49/-10.52	-8.57/-7.40	-7.50/-8.07	-8.66/-9.34	-12.05/-11.84	-13.01/-13.69	-12.24/-13.10	-10.71/-10.16	-9.55/-9.88	-8.69/-8.12	-7.64/-7.26	-7.90/-6.38	-9.23/-10.21	-10.98/-11.51	-11.11/-9.43	-8.65/-6.32	-8.40/-8.48	-7.62/-6.69	-6.21/-7.06	-8.15/-9.71
Θ(172.5°)	-7.24/-6.84	-6.43/-6.94	-6.93/-6.63	-6.10/-4.96	-4.38/-4.30	-4.86/-5.86	-6.71/-7.67	-7.85/-7.79	-7.94/-8.62	-9.54/-11.23	-11.62/-11.23	-10.44/-10.25	-10.05/-9.75	-9.93/-9.87	-9.99/-9.51	-9.27/-9.17	-9.09/-9.52	-10.50/-11.68	-13.17/-14.14	-14.30/-13.24	-11.77/-10.24	-9.40/-8.18	-7.28/-7.34	-7.14/-7.20
Θ(180°)	-7.56/-7.48	-6.73/-6.55	-7.15/-6.84	-6.14/-5.46	-4.85/-4.74	-5.50/-6.33	-7.49/-7.86	-7.73/-7.62	-7.70/-7.84	-8.27/-8.49	-8.55/-8.56	-8.37/-7.54	-6.82/-6.41	-6.22/-6.44	-6.60/-6.40	-6.07/-5.98	-6.16/-6.79	-7.67/-8.27	-8.77/-9.58	-10.55/-10.94	-10.32/-9.35	-8.61/-8.23	-8.72/-8.85	-8.85/-8.12
Freq(Hz)	5.6GPol.	TotalAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-7.48/-7.11	-8.31/-8.87	-8.93/-9.45	-10.22/-9.35	-8.40/-7.03	-6.44/-6.70	-7.46/-7.90	-8.00/-8.16	-8.88/-8.15	-7.31/-7.18	-6.83/-6.95	-6.23/-6.65	-5.52/-6.34	-7.58/-8.04	-8.46/-8.39	-7.47/-6.77	-6.38/-6.31	-6.16/-6.71	-7.27/-7.79	-7.85/-7.39	-6.89/-7.05	-6.99/-6.68	-6.82/-6.86	
Θ(7.5°)	-5.27/-4.57	-4.69/-4.98	-4.95/-5.33	-5.34/-4.87	-4.34/-4.49	-4.91/-5.61	-6.39/-6.47	-6.33/-6.70	-7.21/-7.43	-7.96/-8.32	-8.70/-9.53	-10.60/-11.00	-10.72/-10.21	-10.43/-10.69	-10.15/-9.23	-9.35/-9.98	-10.41/-9.76	-9.35/-9.28	-8.70/-8.40	-8.10/-7.50	-7.23/-6.53	-6.43/-6.17	-5.45/-5.48	-5.52/-5.90
Θ(15°)	-4.71/-4.90	-5.33/-5.07	-4.54/-4.35	-4.43/-4.36	-5.00/-5.30	-5.64/-5.36	-5.09/-5.16	-5.81/-7.38	-9.18/-10.70	-12.48/-12.72	-13.01/-13.60	-14.74/-15.78	-15.65/-14.92	-15.67/-15.04	-14.22/-12.18	-12.09/-12.49	-14.15/-15.59	-15.17/-14.40	-12.59/-10.40	-8.43/-6.66	-5.70/-5.53	-5.59/-5.82	-5.80/-5.66	-4.85/-4.82
Θ(22.5°)	-3.47/-3.43	-4.16/-4.47	-3.95/-3.25	-2.95/-3.76	-4.64/-5.20	-4.38/-4.08	-4.16/-4.67	-4.89/-5.59	-7.45/-9.67	-10.88/-10.85	-11.29/-12.47	-13.61/-14.12	-14.88/-14.86	-16.13/-13.89	-12.72/-13.76	-15.19/-15.59	-13.90/-10.53	-9.46/-8.97	-8.01/-6.34	-5.14/-4.24				

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

