

# APPROVAL SHEET

## S50 ASSY BRACKET ANTENNA

<b>CUSTOMER</b>	BLUEBIRD
<b>MODEL</b>	S50 ASSY BRACKET
<b>ANTENNA TYPE</b>	LDS TYPE
<b>ANTENNA MAKER</b>	KDT
<b>DOCUMENT REVISION</b>	Rev 1.0
<b>CUSTOMER CODE</b>	<b>352010131</b>
<b>PART NAME</b>	S50,WWAN,,REV0,KDT

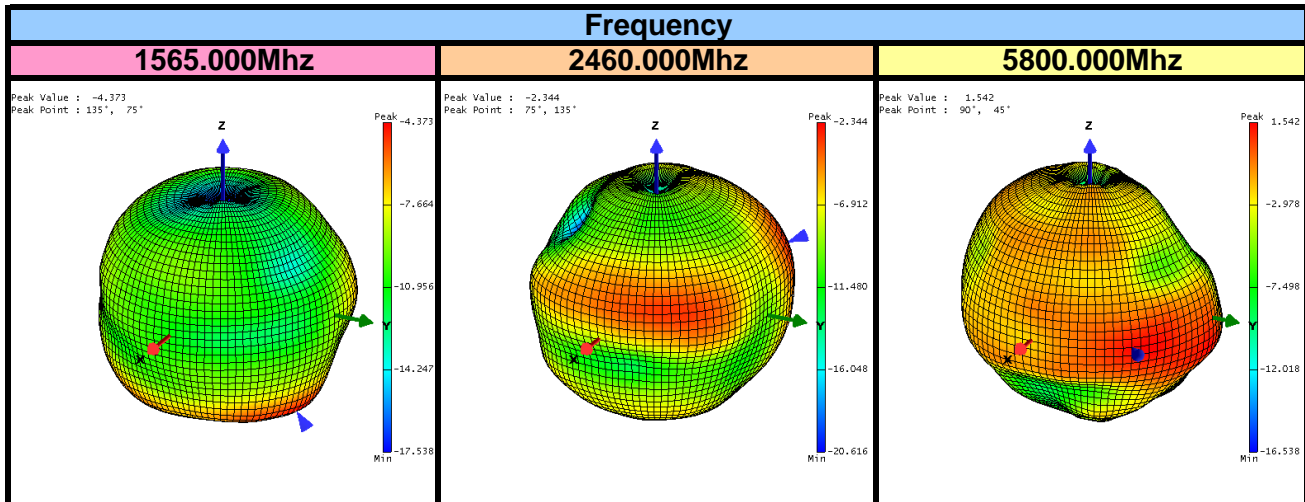
**KDT R&D Center**

413ho, Dongtan-daero 23-gil, Hwaseong-si, Gyeonggi-do, Republic of Korea

# 3D Radiation Pattern Measurement Results

## 1. Ant 8 Informations

Date	230828	Test Engineer	HB
Customer	BB	Antenna Version	ES
Model / Revision	S50/ES		
Test Condition	FREE SPACE		



## 2. Test Results

Frequency	Peak Value		Minimum Value		Avg. Gain	Efficiency
	Value[dBi]	Degree	Value[dBi]	Degree		
1565	-4.373	135 / 075	-17.538	150 / 180	-9.039	12.42%
1570	-3.686	135 / 075	-17.022	150 / 165	-8.376	14.47%
1575	-3.284	135 / 075	-16.802	150 / 165	-7.915	16.09%
1580	-3.573	135 / 075	-17.471	150 / 165	-8.37	14.49%
1585	-3.793	135 / 075	-17.56	150 / 165	-8.604	13.73%
2400	-1.41	075 / 150	-21.05	090 / 285	-6.916	20.25%
2420	-1.686	075 / 150	-19.983	090 / 285	-6.754	21.02%
2440	-1.865	075 / 135	-19.92	045 / 300	-6.706	21.25%
2460	-2.344	075 / 135	-20.616	045 / 300	-7.045	19.66%
2480	-2.363	075 / 135	-17.881	090 / 270	-6.528	22.14%
2500	-2.333	075 / 045	-15.798	045 / 285	-5.977	25.14%
5200	2.603	075 / 000	-31.238	060 / 195	-2.626	54.38%
5300	2.747	075 / 360	-18.261	060 / 180	-2.383	57.50%
5400	3.273	075 / 030	-14.776	075 / 180	-2.042	62.20%
5500	5.253	075 / 060	-15.753	105 / 210	-0.238	94.23%
5600	3.074	075 / 060	-14.295	120 / 210	-1.538	69.86%
5700	2.347	090 / 045	-16.951	120 / 210	-2.141	60.80%
5800	1.542	090 / 045	-16.538	060 / 135	-3.558	43.87%

### H-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-6.516	90	120	-12.15	90	60	-9.637	10.87%
1570	-5.693	90	120	-11.256	90	45	-8.911	12.85%
1575	-5.189	90	120	-10.671	90	195	-8.423	14.38%
1580	-5.325	90	120	-11.301	90	195	-8.765	13.29%
1585	-5.511	90	120	-11.735	90	195	-8.951	12.73%
2400	-2.185	90	135	-21.05	90	285	-7.341	18.44%
2420	-2.454	90	135	-19.983	90	285	-7.189	19.10%
2440	-2.675	90	135	-18.943	90	270	-6.995	19.98%
2460	-2.958	90	135	-18.788	90	270	-6.933	20.26%
2480	-2.741	90	135	-17.881	90	270	-6.343	23.21%
2500	-2.585	90	150	-15.367	90	270	-5.657	27.19%
5200	1.639	90	30	-14.289	90	195	-2.489	56.38%
5300	1.539	90	15	-12.919	90	195	-2.138	61.12%
5400	0.909	90	30	-12.579	90	165	-2.338	58.38%
5500	4.185	90	45	-8.134	90	210	0.568	113.97%
5600	2.859	90	45	-9.824	90	210	-0.726	84.61%
5700	2.347	90	45	-7.818	90	210	-1.372	72.91%
5800	1.542	90	45	-9.33	90	210	-2.515	56.04%

### H-Plan (Vertical)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-7.285	90	120	-28.968	90	195	-13.591	4.38%
1570	-6.394	90	120	-28.916	90	195	-12.7	5.37%
1575	-5.838	90	120	-28.746	90	195	-12.139	6.11%
1580	-5.865	90	120	-29.186	90	195	-12.203	6.02%
1585	-5.976	90	120	-29.011	90	195	-12.243	5.97%
2400	-4.979	90	135	-24.75	90	285	-10.763	8.39%
2420	-5.683	90	135	-24.262	90	285	-10.878	8.17%
2440	-5.993	90	135	-22.71	90	285	-10.758	8.40%
2460	-6.043	90	135	-21.36	90	285	-10.379	9.16%
2480	-6.183	90	135	-19.444	90	285	-10.401	9.12%
2500	-6.508	90	135	-18.448	90	285	-10.271	9.40%
5200	-3.746	90	15	-35.004	90	120	-9.959	10.09%
5300	-4.407	90	15	-20.595	90	255	-9.333	11.66%
5400	-2.814	90	30	-24.157	90	210	-7.341	18.44%
5500	-0.772	90	30	-23.297	90	255	-5.509	28.12%
5600	-4.037	90	45	-21.502	90	315	-7.887	16.27%
5700	-3.049	90	45	-12.76	90	105	-7.306	18.60%
5800	-4.325	90	45	-14.997	90	0	-8.575	13.88%

H-Plan (Horizontal)								
Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-10.018	90	330	-18.759	90	90	-11.873	6.50%



### E1-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-4.601	135	90	-15.433	0	90	-9.001	12.59%
1570	-3.97	135	90	-14.971	0	270	-8.357	14.60%
1575	-3.496	135	90	-14.645	0	90	-7.903	16.21%
1580	-4.047	135	90	-15.304	0	90	-8.376	14.54%
1585	-4.287	135	90	-15.518	0	270	-8.605	13.79%
2400	-5.824	60	90	-14.687	90	270	-8.802	13.18%
2420	-6.036	60	90	-17.05	90	270	-8.812	13.15%
2440	-6.251	150	270	-18.943	90	270	-8.805	13.17%
2460	-6.393	150	270	-18.788	90	270	-9.029	12.51%
2480	-6.216	150	270	-17.881	90	270	-8.5	14.13%
2500	-5.543	15	90	-15.367	90	270	-7.814	16.54%
5200	-0.821	75	90	-8.678	180	90	-3.853	41.18%
5300	-0.782	75	90	-12.877	180	90	-3.281	46.98%
5400	0.344	60	90	-7.548	150	270	-2.689	53.84%
5500	3.502	75	90	-11.447	180	90	-0.656	85.98%
5600	1.422	105	90	-12.465	180	90	-2.238	59.73%
5700	1.38	105	90	-13.843	180	90	-1.779	66.38%
5800	1.376	105	90	-13.253	180	90	-3.029	49.79%

### E1-Plan (Vertical)

Frequency	Peak Value	Minimum Value	Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-6.259	135	90	-20.662	15	270	-12.906	5.12%
1570	-5.646	135	90	-20.478	15	270	-12.176	6.06%
1575	-5.199	135	90	-20.367	15	270	-11.683	6.79%
1580	-5.768	135	90	-22.619	30	270	-11.988	6.33%
1585	-5.982	135	90	-24.8	30	270	-12.088	6.18%
2400	-6.41	150	270	-23.043	90	90	-10.968	8.00%
2420	-6.316	150	270	-21.23	180	90	-10.96	8.02%
2440	-6.495	150	270	-20.573	180	90	-11.037	7.88%
2460	-6.598	150	270	-20.391	180	90	-11.002	7.94%
2480	-6.433	150	270	-21.761	180	90	-11.053	7.85%
2500	-6.301	150	270	-21.124	180	90	-10.718	8.48%
5200	-3.569	15	90	-24.16	90	270	-8.941	12.76%
5300	-3.026	15	90	-22.431	180	90	-8.035	15.72%
5400	-1.269	30	90	-16.099	105	270	-6.671	21.52%
5500	0.738	30	90	-18.305	105	270	-5.048	31.28%
5600	-3.326	15	270	-36.256	105	270	-6.805	20.87%
5700	-2.301	30	270	-27.12	120	270	-5.864	25.92%
5800	-3.7	45	270	-16.962	180	90	-6.698	21.39%

**E1-Plan (Horizontal)**

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-6.3	120	270	-23.315	165	270	-11.27	7.47%





### E2-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-6.273	180	0	-17.538	150	180	-10.188	9.58%
1570	-5.734	180	0	-16.98	150	180	-9.571	11.04%
1575	-5.311	180	0	-16.696	150	180	-9.112	12.27%
1580	-5.916	180	0	-16.852	150	180	-9.649	10.84%
1585	-6.233	180	0	-17.054	150	180	-9.904	10.22%
2400	-2.908	75	180	-14.557	165	180	-7.516	17.72%
2420	-2.981	75	180	-13.918	165	180	-7.303	18.61%
2440	-3.077	75	180	-13.499	180	0	-7.218	18.98%
2460	-4.067	75	180	-14.276	180	0	-7.73	16.86%
2480	-3.844	75	180	-13.065	180	0	-7.077	19.60%
2500	-3.851	75	180	-12.522	105	0	-6.345	23.20%
5200	2.603	75	0	-16.796	60	180	-2.739	53.23%
5300	2.085	75	0	-18.261	60	180	-2.756	53.01%
5400	2.463	75	0	-14.776	75	180	-2.54	55.72%
5500	4.117	75	0	-11.447	180	0	-1.018	79.10%
5600	2.042	75	0	-13.39	120	180	-2.246	59.62%
5700	1.266	75	0	-13.876	120	180	-3.367	46.06%
5800	-1.098	90	0	-16.343	120	180	-4.502	35.46%

### E2-Plan (Vertical)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-11.935	135	0	-20.683	60	0	-15.998	2.51%
1570	-11.547	135	0	-20.371	90	180	-15.398	2.89%
1575	-11.23	135	0	-20.353	90	180	-14.974	3.18%
1580	-11.963	135	0	-21.197	90	180	-15.433	2.86%
1585	-12.23	135	0	-21.687	90	180	-15.606	2.75%
2400	-9.863	75	180	-25.684	165	0	-13.139	4.85%
2420	-9.767	60	0	-25.223	165	0	-12.952	5.07%
2440	-9.388	60	0	-24.909	165	0	-12.856	5.18%
2460	-9.215	60	0	-24.282	165	0	-12.803	5.25%
2480	-9.517	60	0	-25.023	165	180	-13.027	4.98%
2500	-10.03	60	0	-24.862	165	180	-13.059	4.94%
5200	-2.979	165	0	-28.911	90	180	-7.999	15.85%
5300	-3.943	150	0	-22.431	180	0	-7.733	16.85%
5400	-1.085	165	0	-20.528	60	180	-6.429	22.76%
5500	-2.035	90	0	-16.246	75	180	-5.722	26.78%
5600	-3.564	165	180	-22.619	75	180	-6.586	21.95%
5700	-5.339	0	180	-19.651	180	0	-8.201	15.13%
5800	-4.466	150	180	-30.688	75	0	-8.859	13.00%

E2-Plan (Horizontal)								
Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-7.093	180	0	-24.94	150	180	-11.51	7.06%









### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-15.43	-13.81	-11.94	-10.10	-9.15	-10.36	-10.92	-10.08	-9.57	-6.84	-8.30	-9.17	-6.27
15	-15.43	-12.88	-11.82	-9.95	-9.26	-10.25	-11.63	-9.65	-9.00	-6.52	-8.48	-8.70	-6.27
30	-15.43	-12.77	-11.27	-10.50	-9.97	-10.33	-12.10	-9.93	-8.55	-5.96	-8.22	-8.42	-6.27
45	-15.43	-13.09	-11.60	-11.16	-11.21	-10.65	-12.15	-9.74	-8.19	-5.13	-7.97	-8.14	-6.27
60	-15.43	-13.38	-11.92	-12.09	-13.03	-11.26	-12.15	-9.95	-8.12	-4.94	-7.74	-7.82	-6.27
75	-15.43	-13.94	-12.11	-12.31	-13.73	-11.16	-11.32	-9.65	-8.01	-4.37	-7.70	-7.65	-6.27
90	-15.43	-14.11	-11.42	-12.25	-12.49	-10.19	-9.30	-8.90	-8.18	-4.60	-7.96	-8.23	-6.27
105	-15.43	-13.88	-10.93	-10.39	-10.64	-8.50	-7.62	-9.16	-8.08	-5.55	-8.87	-7.74	-6.27
120	-15.43	-13.49	-9.87	-9.68	-9.49	-7.71	-6.52	-7.73	-9.41	-6.36	-11.01	-7.90	-6.27
135	-15.43	-13.11	-9.25	-9.03	-9.21	-7.63	-6.64	-7.75	-10.36	-7.65	-12.03	-8.33	-6.27
150	-15.43	-13.46	-9.02	-9.02	-10.09	-9.38	-7.62	-8.78	-11.62	-10.73	-15.18	-8.70	-6.27
165	-15.43	-13.03	-9.22	-9.03	-9.99	-11.96	-9.67	-9.26	-10.61	-11.68	-17.42	-9.08	-6.27
180	-15.43	-13.16	-9.16	-9.10	-9.87	-14.15	-11.13	-9.53	-9.77	-12.27	-17.54	-9.44	-6.27
195	-15.43	-13.00	-9.24	-8.99	-10.11	-15.93	-11.43	-9.65	-8.85	-10.88	-15.48	-9.89	-6.27
210	-15.43	-13.11	-9.27	-8.79	-10.00	-14.60	-10.79	-9.22	-7.90	-8.96	-13.26	-10.87	-6.27
225	-15.43	-13.32	-9.38	-8.58	-9.70	-12.91	-9.75	-8.65	-7.11	-7.52	-11.59	-10.97	-6.27
240	-15.43	-13.67	-9.72	-8.53	-9.37	-11.83	-9.20	-8.13	-6.54	-6.46	-10.18	-11.64	-6.27
255	-15.43	-14.25	-10.36	-8.69	-9.17	-11.25	-9.01	-7.47	-6.14	-5.86	-9.59	-12.11	-6.27
270	-15.43	-15.02	-11.45	-9.02	-8.88	-10.81	-9.58	-7.20	-5.98	-5.59	-8.38	-12.20	-6.27
285	-15.43	-15.41	-12.64	-9.94	-8.67	-10.48	-10.29	-7.71	-6.03	-5.47	-8.03	-11.71	-6.27
300	-15.43	-15.55	-13.40	-10.66	-8.97	-8.93	-10.43	-8.97	-6.49	-5.45	-7.59	-11.30	-6.27
315	-15.43	-15.17	-13.52	-10.81	-9.50	-8.73	-9.82	-10.73	-7.49	-5.65	-7.44	-10.63	-6.27
330	-15.43	-14.90	-12.98	-10.44	-9.64	-9.51	-9.62	-11.05	-8.75	-6.02	-7.54	-10.04	-6.27
345	-15.43	-14.15	-12.44	-10.06	-9.31	-10.20	-10.02	-10.46	-9.69	-6.51	-7.84	-9.53	-6.27
360	-15.43	-14.01	-11.95	-9.75	-9.13	-10.24	-10.96	-10.06	-9.55	-6.83	-8.19	-9.23	-6.27

Peak Value **-4.373** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-17.13	-16.22	-14.79	-18.22	-20.68	-15.78	-20.42	-15.66	-16.29	-11.94	-15.05	-17.23	-13.92
15	-17.13	-13.90	-14.06	-16.93	-19.15	-15.99	-20.86	-14.02	-16.15	-10.96	-15.98	-14.62	-13.92
30	-17.13	-13.22	-12.85	-17.55	-18.87	-15.92	-21.12	-14.36	-16.33	-9.91	-15.34	-13.52	-13.92
45	-17.13	-13.45	-13.13	-18.00	-19.05	-15.63	-18.55	-13.62	-15.53	-8.50	-14.51	-12.69	-13.92
60	-17.13	-14.16	-13.79	-18.57	-19.46	-15.51	-15.92	-13.50	-15.33	-8.13	-12.97	-11.76	-13.92
75	-17.13	-16.03	-14.70	-17.57	-17.53	-13.60	-12.86	-11.95	-14.31	-6.57	-11.84	-11.04	-13.92
90	-17.13	-18.24	-14.68	-16.86	-14.36	-11.33	-9.82	-10.18	-13.26	-6.26	-11.22	-11.99	-13.92
105	-17.13	-19.74	-14.67	-12.97	-11.78	-8.94	-8.06	-10.30	-12.11	-6.69	-11.21	-10.57	-13.92
120	-17.13	-19.51	-13.28	-12.35	-10.43	-7.92	-7.29	-8.63	-12.47	-6.85	-13.36	-10.81	-13.92
135	-17.13	-18.58	-12.74	-11.79	-10.14	-7.82	-8.07	-8.75	-12.96	-7.75	-13.40	-11.82	-13.92
150	-17.13	-19.38	-13.20	-12.47	-11.71	-9.82	-10.04	-10.16	-15.61	-10.77	-16.48	-13.89	-13.92
165	-17.13	-17.81	-15.45	-13.61	-12.45	-13.43	-14.29	-11.50	-15.28	-12.10	-18.54	-16.15	-13.92
180	-17.13	-18.22	-17.84	-15.75	-14.02	-18.33	-20.60	-13.56	-15.68	-13.40	-18.41	-18.09	-13.92
195	-17.13	-17.93	-21.32	-19.91	-18.14	-26.91	-28.97	-17.14	-14.94	-12.24	-16.54	-17.24	-13.92
210	-17.13	-18.13	-25.23	-30.27	-22.42	-19.35	-23.55	-19.29	-14.07	-10.48	-14.69	-16.35	-13.92
225	-17.13	-18.07	-23.25	-28.30	-21.21	-15.89	-18.29	-20.57	-14.05	-9.33	-13.65	-13.21	-13.92
240	-17.13	-18.24	-19.86	-19.68	-17.92	-14.62	-14.97	-19.80	-15.08	-8.86	-13.15	-12.32	-13.92
255	-17.13	-18.82	-18.44	-16.72	-16.05	-14.46	-13.97	-15.80	-16.59	-9.20	-14.22	-12.14	-13.92
270	-17.13	-20.66	-18.93	-15.79	-14.88	-15.12	-14.90	-13.74	-17.46	-10.28	-13.43	-12.55	-13.92
285	-17.13	-22.63	-20.55	-16.87	-13.81	-16.56	-16.76	-13.38	-15.89	-12.03	-14.92	-13.38	-13.92
300	-17.13	-25.28	-21.40	-17.96	-14.59	-13.08	-19.83	-14.16	-14.34	-13.24	-15.15	-15.53	-13.92
315	-17.13	-24.16	-20.14	-18.45	-16.67	-12.66	-20.42	-16.39	-14.14	-13.16	-15.25	-17.63	-13.92
330	-17.13	-21.46	-18.13	-17.89	-18.52	-14.08	-20.26	-17.20	-14.68	-12.59	-14.60	-19.90	-13.92
345	-17.13	-17.84	-16.27	-17.72	-19.98	-15.13	-19.87	-16.57	-16.24	-12.08	-14.54	-19.00	-13.92
360	-17.13	-16.51	-14.99	-17.16	-20.73	-15.48	-20.90	-15.75	-16.09	-11.92	-14.96	-17.37	-13.92



Peak Value **-6.259** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-20.34	-17.51	-15.12	-10.83	-9.46	-11.83	-11.44	-11.48	-10.61	-8.45	-9.34	-9.91	-7.09
15	-20.34	-19.65	-15.78	-10.92	-9.73	-11.60	-12.18	-11.64	-9.94	-8.46	-9.33	-9.98	-7.09
30	-20.34	-22.80	-16.43	-11.45	-10.57	-11.73	-12.69	-11.87	-9.34	-8.19	-9.16	-10.03	-7.09
45	-20.34	-24.14	-16.87	-12.17	-11.99	-12.31	-13.27	-12.03	-9.08	-7.81	-9.05	-10.02	-7.09
60	-20.34	-21.26	-16.48	-13.20	-14.15	-13.31	-14.51	-12.47	-9.03	-7.78	-9.28	-10.06	-7.09
75	-20.34	-18.13	-15.59	-13.84	-16.08	-14.82	-16.56	-13.51	-9.17	-8.39	-9.82	-10.31	-7.09
90	-20.34	-16.23	-14.21	-14.10	-17.04	-16.56	-18.76	-14.84	-9.80	-9.58	-10.73	-10.60	-7.09
105	-20.34	-15.18	-13.31	-13.88	-17.01	-18.65	-17.77	-15.52	-10.26	-11.91	-12.69	-10.93	-7.09
120	-20.34	-14.74	-12.52	-13.06	-16.62	-20.94	-14.41	-14.97	-12.37	-16.09	-14.81	-11.02	-7.09
135	-20.34	-14.55	-11.82	-12.31	-16.38	-21.38	-12.17	-14.61	-13.83	-24.08	-17.71	-10.91	-7.09
150	-20.34	-14.75	-11.11	-11.63	-15.18	-19.47	-11.31	-14.43	-13.84	-31.06	-21.07	-10.27	-7.09
165	-20.34	-14.79	-10.40	-10.89	-13.63	-17.39	-11.51	-13.22	-12.43	-22.07	-23.83	-10.03	-7.09
180	-20.34	-14.78	-9.80	-10.16	-11.99	-16.24	-11.66	-11.72	-11.05	-18.66	-24.94	-10.08	-7.09
195	-20.34	-14.68	-9.52	-9.35	-10.85	-16.29	-11.51	-10.50	-10.08	-16.59	-22.14	-10.77	-7.09
210	-20.34	-14.75	-9.38	-8.82	-10.25	-16.38	-11.03	-9.67	-9.10	-14.25	-18.79	-12.32	-7.09
225	-20.34	-15.09	-9.56	-8.62	-10.02	-15.95	-10.41	-8.94	-8.09	-12.20	-15.81	-14.91	-7.09
240	-20.34	-15.54	-10.16	-8.88	-10.02	-15.08	-10.54	-8.43	-7.20	-10.17	-13.22	-20.06	-7.09
255	-20.34	-16.11	-11.10	-9.43	-10.16	-14.06	-10.68	-8.17	-6.55	-8.56	-11.43	-33.95	-7.09
270	-20.34	-16.40	-12.30	-10.05	-10.13	-12.83	-11.08	-8.29	-6.30	-7.39	-10.01	-23.31	-7.09
285	-20.34	-16.33	-13.41	-10.93	-10.26	-11.71	-11.40	-9.08	-6.51	-6.56	-9.02	-16.67	-7.09
300	-20.34	-16.03	-14.14	-11.55	-10.36	-11.03	-10.96	-10.54	-7.27	-6.24	-8.43	-13.36	-7.09
315	-20.34	-15.76	-14.59	-11.63	-10.42	-10.98	-10.22	-12.11	-8.55	-6.50	-8.23	-11.59	-7.09
330	-20.34	-15.98	-14.57	-11.30	-10.25	-11.37	-10.02	-12.26	-10.03	-7.09	-8.50	-10.52	-7.09
345	-20.34	-16.57	-14.76	-10.87	-9.70	-11.88	-10.49	-11.68	-10.78	-7.92	-8.88	-10.05	-7.09

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-14.97	-13.06	-11.17	-9.40	-8.27	-9.62	-10.23	-9.50	-8.99	-6.28	-7.74	-8.65	-5.73
15	-14.97	-12.16	-11.07	-9.21	-8.45	-9.52	-10.97	-9.09	-8.41	-5.92	-7.93	-8.06	-5.73
30	-14.97	-12.01	-10.46	-9.79	-9.12	-9.48	-11.24	-9.28	-7.99	-5.30	-7.73	-7.85	-5.73
45	-14.97	-12.31	-10.81	-10.45	-10.41	-9.84	-11.26	-9.09	-7.67	-4.48	-7.42	-7.56	-5.73
60	-14.97	-12.49	-11.22	-11.33	-12.02	-10.48	-11.06	-9.18	-7.58	-4.33	-7.20	-7.27	-5.73
75	-14.97	-13.07	-11.40	-11.53	-12.76	-10.35	-10.36	-8.78	-7.46	-3.69	-7.15	-7.05	-5.73
90	-14.97	-13.28	-10.61	-11.34	-11.65	-9.28	-8.36	-7.98	-7.51	-3.97	-7.40	-7.66	-5.73
105	-14.97	-13.07	-10.15	-9.42	-9.81	-7.60	-6.67	-8.22	-7.50	-4.80	-8.27	-7.23	-5.73
120	-14.97	-12.75	-9.11	-8.81	-8.72	-6.99	-5.69	-6.80	-8.81	-5.61	-10.37	-7.40	-5.73
135	-14.97	-12.56	-8.46	-8.26	-8.50	-6.84	-6.08	-6.93	-9.63	-7.00	-11.58	-7.76	-5.73
150	-14.97	-12.83	-8.24	-8.26	-9.42	-8.55	-6.92	-8.02	-10.94	-9.93	-14.51	-8.20	-5.73
165	-14.97	-12.41	-8.49	-8.38	-9.31	-11.08	-9.03	-8.54	-9.91	-11.06	-17.02	-8.61	-5.73
180	-14.97	-12.53	-8.49	-8.53	-9.22	-13.24	-10.61	-8.90	-9.17	-11.67	-16.98	-8.98	-5.73
195	-14.97	-12.51	-8.60	-8.35	-9.42	-14.94	-10.98	-9.08	-8.22	-10.21	-14.79	-9.43	-5.73
210	-14.97	-12.62	-8.70	-8.24	-9.37	-13.61	-10.21	-8.74	-7.26	-8.34	-12.50	-10.41	-5.73
225	-14.97	-12.91	-8.86	-8.01	-9.12	-11.93	-9.16	-8.13	-6.46	-6.91	-10.91	-10.55	-5.73
240	-14.97	-13.26	-9.28	-7.95	-8.76	-11.06	-8.56	-7.52	-5.92	-5.89	-9.60	-11.16	-5.73
255	-14.97	-13.92	-9.98	-8.13	-8.57	-10.39	-8.31	-6.84	-5.57	-5.31	-8.96	-11.70	-5.73
270	-14.97	-14.66	-11.04	-8.54	-8.28	-10.03	-8.94	-6.52	-5.37	-5.05	-7.84	-11.64	-5.73
285	-14.97	-14.86	-12.18	-9.49	-8.12	-9.64	-9.64	-7.13	-5.40	-4.92	-7.48	-11.20	-5.73
300	-14.97	-14.99	-12.85	-10.19	-8.43	-8.15	-9.66	-8.41	-5.87	-4.88	-7.03	-10.76	-5.73
315	-14.97	-14.57	-12.79	-10.17	-8.89	-8.03	-9.06	-10.15	-6.90	-5.06	-6.96	-10.07	-5.73
330	-14.97	-14.09	-12.19	-9.79	-8.98	-8.81	-8.87	-10.49	-8.25	-5.46	-7.03	-9.44	-5.73
345	-14.97	-13.36	-11.56	-9.33	-8.55	-9.43	-9.39	-9.87	-9.22	-5.97	-7.30	-8.98	-5.73
360	-14.97	-13.26	-11.18	-9.03	-8.31	-9.52	-10.21	-9.52	-8.98	-6.24	-7.66	-8.65	-5.73

Peak Value **-3.686** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-16.81	-15.86	-14.40	-16.98	-19.62	-15.10	-19.59	-14.90	-15.25	-11.55	-14.32	-16.86	-13.52
15	-16.81	-13.35	-13.37	-15.68	-18.23	-15.34	-20.17	-13.48	-14.94	-10.42	-15.04	-14.15	-13.52
30	-16.81	-12.54	-11.97	-16.38	-17.85	-14.80	-19.94	-13.67	-15.34	-9.22	-14.61	-13.17	-13.52
45	-16.81	-12.66	-12.20	-16.63	-18.07	-14.60	-17.25	-12.94	-14.84	-7.83	-13.71	-12.21	-13.52
60	-16.81	-13.21	-12.91	-17.25	-18.25	-14.50	-14.62	-12.68	-14.41	-7.51	-12.15	-11.27	-13.52
75	-16.81	-14.98	-13.89	-16.37	-16.55	-12.65	-11.78	-11.01	-13.35	-5.85	-11.07	-10.51	-13.52
90	-16.81	-17.21	-13.65	-15.79	-13.56	-10.36	-8.81	-9.17	-12.18	-5.65	-10.47	-11.34	-13.52
105	-16.81	-18.92	-13.77	-11.96	-10.97	-8.04	-7.03	-9.31	-11.21	-5.92	-10.47	-10.01	-13.52
120	-16.81	-18.82	-12.43	-11.47	-9.71	-7.21	-6.39	-7.65	-11.60	-6.10	-12.47	-10.30	-13.52
135	-16.81	-18.29	-11.93	-11.03	-9.53	-7.02	-7.46	-7.92	-11.99	-7.12	-12.78	-11.32	-13.52
150	-16.81	-18.94	-12.37	-11.79	-11.08	-9.01	-9.17	-9.45	-14.76	-9.95	-15.54	-13.40	-13.52
165	-16.81	-17.17	-14.54	-13.04	-11.81	-12.57	-13.51	-10.76	-14.39	-11.47	-17.89	-15.81	-13.52
180	-16.81	-17.42	-16.73	-15.48	-13.35	-17.23	-20.37	-13.00	-14.93	-12.85	-17.65	-17.70	-13.52
195	-16.81	-17.25	-20.08	-19.55	-17.52	-25.74	-28.92	-16.70	-14.35	-11.62	-15.76	-16.64	-13.52
210	-16.81	-17.29	-23.49	-31.31	-22.67	-18.48	-21.55	-19.36	-13.50	-9.92	-13.92	-15.92	-13.52
225	-16.81	-17.40	-22.06	-26.81	-20.95	-14.99	-17.03	-20.74	-13.56	-8.80	-13.04	-12.68	-13.52
240	-16.81	-17.68	-19.54	-18.54	-17.18	-13.93	-14.05	-18.96	-14.60	-8.40	-12.61	-11.80	-13.52
255	-16.81	-18.55	-18.62	-16.19	-15.42	-13.57	-13.04	-14.96	-16.23	-8.80	-13.60	-11.72	-13.52
270	-16.81	-20.48	-19.36	-15.34	-14.08	-14.13	-14.40	-12.79	-16.21	-9.97	-12.89	-12.02	-13.52
285	-16.81	-22.81	-21.36	-16.62	-13.23	-15.25	-16.53	-12.71	-14.63	-11.68	-14.35	-12.96	-13.52
300	-16.81	-26.80	-22.30	-17.73	-14.24	-12.00	-19.25	-13.62	-13.17	-12.64	-14.31	-15.14	-13.52
315	-16.81	-26.06	-20.49	-17.75	-16.43	-11.89	-19.09	-15.87	-13.17	-12.58	-14.34	-17.34	-13.52
330	-16.81	-21.96	-17.93	-17.00	-18.31	-13.30	-19.01	-16.61	-14.02	-12.01	-13.64	-19.34	-13.52
345	-16.81	-17.66	-15.80	-16.75	-19.38	-14.32	-18.98	-15.82	-15.51	-11.59	-13.82	-18.55	-13.52
360	-16.81	-16.26	-14.48	-15.92	-19.89	-14.85	-20.10	-14.95	-15.17	-11.46	-14.12	-16.91	-13.52

Peak Value **-5.646** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-19.60	-16.29	-13.97	-10.23	-8.60	-11.06	-10.77	-10.97	-10.17	-7.81	-8.81	-9.36	-6.53
15	-19.60	-18.39	-14.92	-10.32	-8.93	-10.84	-11.52	-11.06	-9.50	-7.83	-8.88	-9.29	-6.53
30	-19.60	-21.43	-15.79	-10.86	-9.74	-11.00	-11.87	-11.25	-8.88	-7.57	-8.73	-9.36	-6.53
45	-19.60	-23.41	-16.42	-11.64	-11.23	-11.61	-12.51	-11.39	-8.59	-7.17	-8.59	-9.39	-6.53
60	-19.60	-20.64	-16.16	-12.62	-13.21	-12.68	-13.59	-11.75	-8.59	-7.18	-8.87	-9.47	-6.53
75	-19.60	-17.56	-15.00	-13.26	-15.11	-14.21	-15.89	-12.75	-8.76	-7.74	-9.42	-9.64	-6.53
90	-19.60	-15.53	-13.58	-13.26	-16.13	-15.86	-18.47	-14.18	-9.32	-8.92	-10.34	-10.09	-6.53
105	-19.60	-14.37	-12.63	-12.96	-16.10	-17.76	-17.62	-14.78	-9.90	-11.22	-12.29	-10.49	-6.53
120	-19.60	-13.98	-11.84	-12.21	-15.62	-20.17	-13.96	-14.27	-12.04	-15.39	-14.54	-10.52	-6.53
135	-19.60	-13.91	-11.06	-11.52	-15.29	-20.56	-11.75	-13.81	-13.41	-22.92	-17.76	-10.28	-6.53
150	-19.60	-14.05	-10.36	-10.81	-14.41	-18.52	-10.86	-13.54	-13.27	-31.96	-21.29	-9.77	-6.53
165	-19.60	-14.18	-9.73	-10.20	-12.90	-16.45	-10.95	-12.53	-11.83	-21.50	-24.44	-9.53	-6.53
180	-19.60	-14.23	-9.19	-9.51	-11.35	-15.45	-11.10	-11.04	-10.51	-17.90	-25.40	-9.61	-6.53
195	-19.60	-14.29	-8.93	-8.70	-10.15	-15.31	-11.05	-9.90	-9.43	-15.79	-21.79	-10.35	-6.53
210	-19.60	-14.43	-8.85	-8.26	-9.58	-15.33	-10.54	-9.13	-8.44	-13.49	-18.05	-11.85	-6.53
225	-19.60	-14.81	-9.07	-8.06	-9.41	-14.90	-9.94	-8.38	-7.41	-11.44	-15.02	-14.68	-6.53
240	-19.60	-15.20	-9.71	-8.34	-9.43	-14.22	-10.00	-7.84	-6.55	-9.47	-12.61	-19.74	-6.53
255	-19.60	-15.76	-10.62	-8.87	-9.58	-13.24	-10.08	-7.56	-5.96	-7.89	-10.78	-35.07	-6.53
270	-19.60	-15.98	-11.74	-9.56	-9.61	-12.18	-10.39	-7.69	-5.74	-6.73	-9.46	-22.35	-6.53
285	-19.60	-15.62	-12.74	-10.42	-9.72	-11.03	-10.64	-8.53	-5.95	-5.95	-8.48	-15.97	-6.53
300	-19.60	-15.29	-13.37	-11.04	-9.76	-10.46	-10.16	-9.97	-6.77	-5.68	-7.94	-12.73	-6.53
315	-19.60	-14.89	-13.60	-11.00	-9.73	-10.34	-9.52	-11.51	-8.07	-5.91	-7.83	-10.98	-6.53
330	-19.60	-14.87	-13.53	-10.71	-9.52	-10.72	-9.31	-11.70	-9.59	-6.54	-8.10	-9.91	-6.53
345	-19.60	-15.38	-13.61	-10.20	-8.92	-11.14	-9.90	-11.14	-10.39	-7.36	-8.39	-9.49	-6.53

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]													
	0	15	30	45	60	75	90	105	120	135	150	165	180	
0	-14.64	-12.42	-10.54	-8.87	-7.74	-8.94	-9.70	-9.10	-8.66	-5.87	-7.35	-8.17	-5.31	
15	-14.64	-11.56	-10.54	-8.72	-7.86	-8.78	-10.34	-8.74	-8.05	-5.48	-7.53	-7.69	-5.31	
30	-14.64	-11.38	-9.91	-9.25	-8.52	-8.84	-10.58	-8.88	-7.64	-4.87	-7.29	-7.43	-5.31	
45	-14.64	-11.68	-10.35	-9.96	-9.77	-9.27	-10.51	-8.60	-7.30	-4.07	-7.04	-7.14	-5.31	
60	-14.64	-11.94	-10.63	-10.72	-11.38	-9.77	-10.35	-8.55	-7.14	-3.94	-6.75	-6.84	-5.31	
75	-14.64	-12.48	-10.78	-10.87	-11.99	-9.66	-9.60	-8.02	-7.01	-3.28	-6.71	-6.63	-5.31	
90	-14.64	-12.70	-10.09	-10.70	-10.96	-8.72	-7.76	-7.23	-7.19	-3.50	-6.97	-7.24	-5.31	
105	-14.64	-12.62	-9.53	-8.86	-9.26	-7.14	-6.14	-7.55	-7.13	-4.44	-7.86	-6.84	-5.31	
120	-14.64	-12.21	-8.58	-8.17	-8.23	-6.50	-5.19	-6.20	-8.38	-5.22	-10.05	-7.07	-5.31	
135	-14.64	-12.04	-7.95	-7.66	-8.02	-6.35	-5.76	-6.38	-9.23	-6.52	-11.20	-7.45	-5.31	
150	-14.64	-12.41	-7.77	-7.75	-8.94	-8.09	-6.52	-7.51	-10.46	-9.63	-14.27	-7.89	-5.31	
165	-14.64	-12.08	-8.00	-7.91	-8.78	-10.46	-8.74	-8.16	-9.43	-10.64	-16.80	-8.25	-5.31	
180	-14.64	-12.04	-7.99	-8.06	-8.76	-12.53	-10.37	-8.47	-8.71	-11.13	-16.70	-8.60	-5.31	
195	-14.64	-12.14	-8.18	-7.99	-8.98	-14.05	-10.67	-8.69	-7.77	-9.73	-14.52	-9.08	-5.31	
210	-14.64	-12.37	-8.31	-7.84	-8.97	-12.95	-9.81	-8.39	-6.88	-7.90	-12.16	-10.17	-5.31	
225	-14.64	-12.64	-8.55	-7.58	-8.74	-11.49	-8.75	-7.79	-6.09	-6.45	-10.41	-10.24	-5.31	
240	-14.64	-13.15	-9.06	-7.57	-8.41	-10.59	-8.08	-7.10	-5.51	-5.45	-9.17	-10.91	-5.31	
255	-14.64	-13.73	-9.78	-7.75	-8.12	-9.98	-7.91	-6.39	-5.12	-4.93	-8.52	-11.33	-5.31	
270	-14.64	-14.44	-10.83	-8.28	-7.90	-9.46	-8.53	-6.09	-4.91	-4.60	-7.41	-11.36	-5.31	
285	-14.64	-14.44	-11.87	-9.20	-7.73	-9.09	-9.15	-6.67	-4.96	-4.46	-7.06	-10.81	-5.31	
300	-14.64	-14.41	-12.32	-9.77	-8.05	-7.57	-9.02	-8.04	-5.52	-4.42	-6.60	-10.34	-5.31	
315	-14.64	-13.91	-12.09	-9.65	-8.51	-7.54	-8.44	-9.82	-6.59	-4.61	-6.56	-9.66	-5.31	
330	-14.64	-13.45	-11.52	-9.15	-8.40	-8.42	-8.35	-10.07	-7.99	-5.04	-6.65	-9.05	-5.31	
345	-14.64	-12.81	-10.88	-8.71	-7.98	-8.93	-8.89	-9.41	-8.90	-5.56	-6.96	-8.56	-5.31	
360	-14.64	-12.60	-10.57	-8.53	-7.72	-8.89	-9.73	-9.10	-8.63	-5.87	-7.24	-8.20	-5.31	

Peak Value **-3.284** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-16.63	-15.85	-14.08	-16.21	-19.21	-14.39	-19.13	-14.52	-14.68	-11.23	-13.73	-16.55	-12.95
15	-16.63	-12.97	-12.93	-14.81	-17.50	-14.35	-19.44	-13.13	-14.34	-10.10	-14.50	-13.97	-12.95
30	-16.63	-12.03	-11.40	-15.33	-17.13	-14.17	-18.92	-13.42	-14.55	-8.91	-13.88	-12.97	-12.95
45	-16.63	-12.08	-11.64	-15.60	-17.30	-13.90	-16.22	-12.55	-14.18	-7.49	-13.04	-11.95	-12.95
60	-16.63	-12.61	-12.15	-16.11	-17.51	-13.63	-13.63	-11.97	-13.69	-7.23	-11.51	-10.99	-12.95
75	-16.63	-14.28	-13.04	-15.47	-15.73	-11.82	-10.94	-10.15	-12.54	-5.51	-10.40	-10.11	-12.95
90	-16.63	-16.36	-13.04	-14.92	-12.89	-9.79	-8.16	-8.37	-11.57	-5.20	-9.89	-10.93	-12.95
105	-16.63	-18.34	-13.17	-11.41	-10.48	-7.60	-6.47	-8.59	-10.54	-5.59	-9.88	-9.59	-12.95
120	-16.63	-18.44	-11.86	-10.79	-9.27	-6.73	-5.84	-7.05	-10.95	-5.73	-11.96	-9.94	-12.95
135	-16.63	-17.86	-11.41	-10.44	-9.11	-6.55	-7.14	-7.41	-11.48	-6.62	-12.23	-11.00	-12.95
150	-16.63	-18.68	-11.90	-11.35	-10.74	-8.56	-8.72	-8.97	-14.13	-9.66	-15.15	-13.05	-12.95
165	-16.63	-16.98	-13.92	-12.72	-11.39	-11.97	-13.21	-10.44	-13.82	-11.03	-17.41	-15.47	-12.95
180	-16.63	-16.84	-16.00	-15.30	-13.08	-16.55	-20.35	-12.63	-14.44	-12.30	-17.29	-17.34	-12.95
195	-16.63	-16.64	-19.13	-19.97	-17.29	-24.31	-28.75	-16.47	-13.96	-11.16	-15.42	-16.18	-12.95
210	-16.63	-16.68	-21.93	-33.15	-23.32	-18.11	-20.46	-19.64	-13.32	-9.50	-13.60	-15.63	-12.95
225	-16.63	-16.83	-21.62	-25.45	-21.36	-14.77	-16.08	-21.31	-13.31	-8.41	-12.59	-12.29	-12.95
240	-16.63	-17.35	-19.69	-18.08	-17.02	-13.60	-13.30	-18.71	-14.46	-8.07	-12.24	-11.49	-12.95
255	-16.63	-18.15	-19.09	-15.94	-14.92	-13.32	-12.53	-14.40	-15.69	-8.61	-13.33	-11.34	-12.95
270	-16.63	-20.37	-20.36	-15.42	-13.66	-13.63	-14.15	-12.28	-15.30	-9.76	-12.52	-11.82	-12.95
285	-16.63	-23.09	-23.04	-16.78	-12.94	-14.40	-16.58	-12.18	-13.61	-11.42	-13.80	-12.75	-12.95
300	-16.63	-28.68	-24.00	-17.63	-14.11	-11.30	-18.61	-13.33	-12.51	-12.24	-13.62	-14.96	-12.95
315	-16.63	-28.91	-21.10	-17.24	-16.44	-11.32	-17.88	-15.86	-12.63	-12.09	-13.62	-17.07	-12.95
330	-16.63	-23.33	-18.20	-16.24	-18.05	-13.00	-18.01	-16.29	-13.64	-11.67	-12.99	-19.08	-12.95
345	-16.63	-17.97	-15.56	-15.83	-18.83	-13.98	-18.25	-15.19	-15.02	-11.39	-13.20	-18.26	-12.95
360	-16.63	-16.03	-14.24	-15.23	-19.33	-14.30	-19.35	-14.45	-14.56	-11.25	-13.56	-16.63	-12.95

Peak Value **-5.199** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-19.00	-15.06	-13.09	-9.76	-8.06	-10.40	-10.23	-10.58	-9.90	-7.37	-8.49	-8.85	-6.13
15	-19.00	-17.12	-14.29	-9.95	-8.36	-10.19	-10.91	-10.70	-9.21	-7.31	-8.50	-8.85	-6.13
30	-19.00	-19.94	-15.28	-10.48	-9.17	-10.34	-11.27	-10.76	-8.63	-7.04	-8.37	-8.85	-6.13
45	-19.00	-22.30	-16.23	-11.35	-10.62	-11.10	-11.87	-10.83	-8.29	-6.70	-8.29	-8.88	-6.13
60	-19.00	-20.43	-15.94	-12.20	-12.60	-12.08	-13.10	-11.19	-8.22	-6.69	-8.51	-8.95	-6.13
75	-19.00	-17.18	-14.71	-12.72	-14.37	-13.72	-15.37	-12.15	-8.44	-7.25	-9.14	-9.21	-6.13
90	-19.00	-15.14	-13.16	-12.77	-15.41	-15.36	-18.39	-13.60	-9.16	-8.39	-10.07	-9.66	-6.13
105	-19.00	-13.98	-12.00	-12.37	-15.36	-17.15	-17.55	-14.28	-9.78	-10.76	-12.16	-10.12	-6.13
120	-19.00	-13.39	-11.33	-11.62	-14.96	-19.34	-13.77	-13.69	-11.88	-14.77	-14.54	-10.24	-6.13
135	-19.00	-13.36	-10.55	-10.92	-14.56	-19.72	-11.43	-13.17	-13.16	-22.63	-17.95	-9.98	-6.13
150	-19.00	-13.58	-9.90	-10.23	-13.64	-17.98	-10.53	-12.95	-12.89	-31.88	-21.65	-9.48	-6.13
165	-19.00	-13.77	-9.28	-9.65	-12.24	-15.79	-10.66	-12.05	-11.40	-21.22	-25.66	-9.17	-6.13
180	-19.00	-13.79	-8.74	-8.97	-10.77	-14.72	-10.83	-10.56	-10.06	-17.41	-25.60	-9.22	-6.13
195	-19.00	-14.05	-8.54	-8.28	-9.68	-14.48	-10.74	-9.48	-8.96	-15.25	-21.82	-10.03	-6.13
210	-19.00	-14.39	-8.50	-7.85	-9.14	-14.53	-10.20	-8.72	-8.00	-12.99	-17.65	-11.63	-6.13
225	-19.00	-14.73	-8.77	-7.66	-8.98	-14.24	-9.64	-7.99	-7.00	-10.85	-14.44	-14.47	-6.13
240	-19.00	-15.24	-9.45	-7.98	-9.05	-13.60	-9.64	-7.41	-6.10	-8.90	-12.12	-19.91	-6.13
255	-19.00	-15.68	-10.32	-8.47	-9.14	-12.68	-9.75	-7.13	-5.52	-7.36	-10.26	-36.82	-6.13
270	-19.00	-15.72	-11.34	-9.21	-9.23	-11.56	-9.93	-7.29	-5.32	-6.18	-9.01	-21.32	-6.13
285	-19.00	-15.08	-12.21	-10.04	-9.29	-10.60	-10.02	-8.11	-5.60	-5.44	-8.10	-15.24	-6.13
300	-19.00	-14.57	-12.62	-10.55	-9.29	-9.96	-9.52	-9.57	-6.49	-5.20	-7.56	-12.18	-6.13
315	-19.00	-14.05	-12.67	-10.49	-9.28	-9.89	-8.97	-11.07	-7.83	-5.47	-7.51	-10.53	-6.13
330	-19.00	-13.92	-12.57	-10.10	-8.90	-10.28	-8.84	-11.25	-9.37	-6.10	-7.79	-9.51	-6.13
345	-19.00	-14.39	-12.69	-9.64	-8.35	-10.56	-9.42	-10.74	-10.11	-6.88	-8.14	-9.06	-6.13

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-15.30	-12.79	-10.94	-9.34	-8.10	-9.43	-10.10	-9.57	-9.19	-6.48	-8.00	-8.83	-5.92
15	-15.30	-11.94	-10.90	-9.07	-8.16	-9.17	-10.71	-9.33	-8.53	-6.03	-8.04	-8.19	-5.92
30	-15.30	-11.83	-10.08	-9.77	-8.87	-9.03	-10.86	-9.19	-8.25	-5.17	-7.84	-8.00	-5.92
45	-15.30	-12.11	-10.44	-10.48	-10.18	-9.45	-10.61	-8.91	-7.90	-4.40	-7.65	-7.72	-5.92
60	-15.30	-11.95	-10.83	-11.24	-11.57	-10.25	-10.40	-8.98	-7.68	-4.35	-7.36	-7.42	-5.92
75	-15.30	-12.88	-11.27	-11.16	-12.15	-10.09	-9.85	-8.36	-7.55	-3.57	-7.34	-7.31	-5.92
90	-15.30	-13.12	-10.29	-11.10	-11.28	-8.70	-7.73	-7.53	-7.50	-4.05	-7.58	-7.83	-5.92
105	-15.30	-12.95	-10.05	-8.94	-9.44	-7.22	-6.18	-7.78	-7.70	-4.53	-8.47	-7.53	-5.92
120	-15.30	-12.65	-9.04	-8.62	-8.41	-6.95	-5.33	-6.18	-8.97	-5.31	-10.60	-7.75	-5.92
135	-15.30	-12.60	-8.48	-8.10	-8.62	-6.44	-6.11	-6.55	-9.46	-7.12	-11.83	-8.18	-5.92
150	-15.30	-12.89	-8.05	-8.26	-9.44	-7.95	-6.85	-7.97	-10.96	-9.55	-14.49	-8.55	-5.92
165	-15.30	-12.46	-8.53	-8.29	-9.38	-10.75	-9.18	-8.45	-10.01	-11.19	-17.47	-8.89	-5.92
180	-15.30	-12.66	-8.47	-8.62	-9.08	-12.53	-11.10	-9.15	-9.31	-11.78	-16.85	-9.28	-5.92
195	-15.30	-12.88	-8.74	-8.60	-9.52	-14.37	-11.30	-9.40	-8.42	-10.35	-14.58	-9.73	-5.92
210	-15.30	-13.12	-8.98	-8.45	-9.54	-13.28	-10.34	-9.01	-7.41	-8.47	-12.28	-10.80	-5.92
225	-15.30	-13.24	-9.23	-8.19	-9.32	-11.74	-9.29	-8.40	-6.72	-7.07	-11.00	-10.96	-5.92
240	-15.30	-13.61	-9.79	-8.17	-8.99	-11.10	-8.64	-7.68	-6.10	-6.10	-9.74	-11.59	-5.92
255	-15.30	-14.51	-10.58	-8.43	-8.74	-10.23	-8.48	-6.96	-5.73	-5.55	-9.13	-12.09	-5.92
270	-15.30	-15.04	-11.61	-8.91	-8.47	-9.83	-9.12	-6.54	-5.44	-5.24	-7.93	-11.72	-5.92
285	-15.30	-14.95	-12.47	-9.77	-8.24	-9.44	-9.67	-7.27	-5.55	-5.07	-7.65	-11.33	-5.92
300	-15.30	-14.78	-12.79	-10.40	-8.73	-8.03	-9.37	-8.67	-6.00	-5.01	-7.25	-11.02	-5.92
315	-15.30	-14.18	-12.42	-10.18	-9.09	-8.08	-8.79	-10.28	-7.15	-5.22	-7.23	-10.22	-5.92
330	-15.30	-13.77	-11.68	-9.58	-8.91	-8.74	-8.80	-10.44	-8.68	-5.64	-7.29	-9.62	-5.92
345	-15.30	-12.96	-11.22	-9.23	-8.33	-9.24	-9.33	-9.99	-9.53	-6.16	-7.62	-9.14	-5.92
360	-15.30	-13.02	-10.80	-8.91	-8.09	-9.30	-10.20	-9.67	-9.14	-6.42	-7.91	-8.80	-5.92



Peak Value **-3.573** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-17.58	-16.84	-14.90	-16.38	-18.86	-14.97	-19.10	-14.45	-14.52	-11.96	-14.29	-17.26	-13.59
15	-17.58	-13.61	-13.48	-14.62	-17.33	-14.60	-19.50	-13.70	-14.09	-10.69	-14.50	-14.22	-13.59
30	-17.58	-12.58	-11.49	-15.46	-16.84	-13.83	-18.81	-13.42	-14.77	-8.90	-13.96	-13.64	-13.59
45	-17.58	-12.52	-11.56	-15.69	-17.39	-13.60	-15.74	-12.64	-14.56	-7.58	-13.48	-12.64	-13.59
60	-17.58	-12.51	-12.09	-16.23	-17.08	-13.91	-13.27	-12.32	-13.98	-7.50	-11.94	-11.59	-13.59
75	-17.58	-14.50	-13.39	-15.15	-15.47	-12.20	-11.11	-10.41	-12.80	-5.65	-10.90	-10.85	-13.59
90	-17.58	-16.50	-12.90	-15.02	-13.22	-9.65	-8.05	-8.63	-11.23	-5.77	-10.32	-11.43	-13.59
105	-17.58	-18.53	-13.58	-11.25	-10.59	-7.64	-6.44	-8.76	-10.84	-5.57	-10.35	-10.28	-13.59
120	-17.58	-18.73	-12.36	-11.22	-9.41	-7.19	-5.86	-6.93	-11.31	-5.77	-12.25	-10.62	-13.59
135	-17.58	-18.67	-11.95	-10.88	-9.80	-6.64	-7.34	-7.50	-11.32	-7.24	-12.73	-11.74	-13.59
150	-17.58	-19.20	-11.86	-11.85	-11.28	-8.40	-8.81	-9.51	-14.44	-9.57	-15.09	-13.82	-13.59
165	-17.58	-17.00	-14.35	-12.93	-12.04	-12.25	-13.27	-10.63	-14.29	-11.58	-17.88	-16.33	-13.59
180	-17.58	-17.26	-15.68	-16.20	-13.16	-16.14	-21.20	-13.39	-15.06	-12.91	-17.21	-18.03	-13.59
195	-17.58	-17.03	-18.42	-20.61	-17.57	-24.39	-29.19	-17.32	-14.66	-11.79	-15.32	-16.87	-13.59
210	-17.58	-17.01	-21.77	-33.38	-24.96	-18.36	-19.67	-20.44	-13.56	-10.10	-13.60	-15.95	-13.59
225	-17.58	-16.79	-21.54	-25.30	-22.62	-14.90	-16.09	-22.16	-14.17	-9.08	-13.15	-12.95	-13.59
240	-17.58	-17.09	-20.80	-18.19	-17.51	-14.30	-13.66	-19.07	-14.69	-8.79	-12.89	-12.15	-13.59
255	-17.58	-18.67	-20.74	-16.67	-15.58	-13.38	-13.08	-14.77	-16.10	-9.39	-13.91	-12.10	-13.59
270	-17.58	-20.78	-22.62	-16.02	-14.26	-13.54	-14.89	-12.26	-14.89	-10.63	-12.89	-12.20	-13.59
285	-17.58	-23.02	-25.76	-17.28	-13.35	-14.24	-17.43	-12.73	-13.67	-12.24	-14.26	-13.29	-13.59
300	-17.58	-29.56	-27.44	-18.66	-15.03	-11.61	-18.42	-14.16	-12.22	-12.87	-14.03	-15.83	-13.59
315	-17.58	-35.65	-22.69	-17.84	-17.53	-11.80	-17.54	-16.18	-12.57	-12.66	-14.02	-18.00	-13.59
330	-17.58	-25.06	-18.71	-16.51	-18.86	-13.01	-17.91	-16.36	-14.10	-12.29	-13.41	-19.69	-13.59
345	-17.58	-18.62	-16.59	-16.15	-18.80	-13.97	-17.94	-15.59	-15.29	-12.05	-13.64	-18.80	-13.59
360	-17.58	-17.19	-14.61	-15.01	-19.03	-14.74	-19.68	-14.97	-14.42	-11.89	-14.12	-17.29	-13.59

Peak Value **-5.572** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-19.20	-14.97	-13.17	-10.30	-8.48	-10.85	-10.69	-11.28	-10.69	-7.93	-9.16	-9.51	-6.73
15	-19.20	-16.89	-14.39	-10.49	-8.72	-10.63	-11.33	-11.32	-9.95	-7.85	-9.16	-9.44	-6.73
30	-19.20	-19.84	-15.68	-11.14	-9.62	-10.77	-11.62	-11.26	-9.35	-7.56	-9.06	-9.38	-6.73
45	-19.20	-22.56	-16.85	-12.04	-11.10	-11.55	-12.20	-11.29	-8.95	-7.25	-8.97	-9.41	-6.73
60	-19.20	-21.15	-16.81	-12.89	-13.00	-12.69	-13.55	-11.68	-8.84	-7.22	-9.22	-9.52	-6.73
75	-19.20	-17.93	-15.41	-13.37	-14.87	-14.24	-15.86	-12.60	-9.09	-7.77	-9.87	-9.85	-6.73
90	-19.20	-15.80	-13.74	-13.35	-15.72	-15.76	-19.20	-14.04	-9.89	-8.90	-10.88	-10.31	-6.73
105	-19.20	-14.36	-12.60	-12.78	-15.76	-17.52	-18.48	-14.72	-10.58	-11.24	-13.01	-10.81	-6.73
120	-19.20	-13.87	-11.77	-12.08	-15.28	-19.56	-14.65	-14.15	-12.77	-15.28	-15.60	-10.91	-6.73
135	-19.20	-13.83	-11.08	-11.35	-14.84	-19.82	-12.20	-13.62	-14.02	-22.86	-19.13	-10.71	-6.73
150	-19.20	-14.05	-10.38	-10.75	-14.05	-18.03	-11.25	-13.22	-13.56	-33.86	-23.38	-10.09	-6.73
165	-19.20	-14.34	-9.85	-10.12	-12.76	-16.10	-11.32	-12.48	-12.04	-21.85	-27.88	-9.76	-6.73
180	-19.20	-14.51	-9.39	-9.46	-11.23	-15.02	-11.55	-11.21	-10.66	-18.17	-27.91	-9.90	-6.73
195	-19.20	-14.99	-9.24	-8.88	-10.26	-14.83	-11.37	-10.16	-9.60	-15.84	-22.62	-10.66	-6.73
210	-19.20	-15.39	-9.21	-8.46	-9.67	-14.90	-10.88	-9.33	-8.61	-13.53	-18.10	-12.38	-6.73
225	-19.20	-15.78	-9.50	-8.27	-9.52	-14.60	-10.31	-8.59	-7.58	-11.38	-15.08	-15.32	-6.73
240	-19.20	-16.20	-10.15	-8.63	-9.65	-13.93	-10.28	-8.01	-6.74	-9.45	-12.61	-20.74	-6.73
255	-19.20	-16.61	-11.02	-9.14	-9.75	-13.11	-10.33	-7.75	-6.15	-7.86	-10.89	-38.16	-6.73
270	-19.20	-16.39	-11.97	-9.85	-9.80	-12.23	-10.46	-7.89	-5.97	-6.72	-9.60	-21.52	-6.73
285	-19.20	-15.69	-12.68	-10.62	-9.85	-11.19	-10.46	-8.72	-6.28	-6.00	-8.72	-15.73	-6.73
300	-19.20	-14.93	-12.94	-11.10	-9.89	-10.53	-9.94	-10.11	-7.18	-5.78	-8.28	-12.76	-6.73
315	-19.20	-14.21	-12.85	-10.99	-9.77	-10.48	-9.41	-11.58	-8.63	-6.08	-8.25	-11.01	-6.73
330	-19.20	-14.10	-12.64	-10.57	-9.37	-10.77	-9.37	-11.72	-10.15	-6.69	-8.51	-10.07	-6.73
345	-19.20	-14.34	-12.71	-10.22	-8.74	-11.01	-9.98	-11.39	-10.87	-7.45	-8.86	-9.64	-6.73

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-15.52	-12.84	-10.99	-9.47	-8.22	-9.49	-10.21	-9.84	-9.50	-6.77	-8.35	-9.15	-6.23
15	-15.52	-11.99	-10.90	-9.30	-8.30	-9.23	-10.79	-9.64	-8.82	-6.32	-8.45	-8.47	-6.23
30	-15.52	-11.91	-10.18	-9.94	-8.99	-9.11	-10.88	-9.46	-8.56	-5.40	-8.18	-8.31	-6.23
45	-15.52	-12.12	-10.55	-10.64	-10.28	-9.54	-10.61	-9.10	-8.22	-4.66	-7.98	-8.03	-6.23
60	-15.52	-11.99	-10.91	-11.39	-11.69	-10.29	-10.24	-9.08	-7.95	-4.56	-7.68	-7.78	-6.23
75	-15.52	-12.92	-11.41	-11.20	-12.20	-10.14	-9.88	-8.34	-7.80	-3.79	-7.55	-7.63	-6.23
90	-15.52	-13.17	-10.57	-11.16	-11.40	-8.73	-7.74	-7.43	-7.69	-4.29	-7.85	-8.09	-6.23
105	-15.52	-13.17	-10.23	-9.04	-9.52	-7.26	-6.27	-7.66	-8.01	-4.64	-8.69	-7.81	-6.23
120	-15.52	-12.94	-9.28	-8.70	-8.59	-7.10	-5.51	-6.18	-9.21	-5.46	-10.78	-8.12	-6.23
135	-15.52	-12.89	-8.67	-8.31	-8.82	-6.61	-6.33	-6.66	-9.64	-7.33	-12.04	-8.53	-6.23
150	-15.52	-13.19	-8.26	-8.43	-9.58	-7.94	-7.12	-8.20	-11.18	-9.55	-14.62	-8.94	-6.23
165	-15.52	-12.79	-8.73	-8.56	-9.57	-10.72	-9.50	-8.69	-10.37	-11.53	-17.56	-9.28	-6.23
180	-15.52	-13.11	-8.71	-8.96	-9.37	-12.39	-11.55	-9.50	-9.65	-12.10	-17.05	-9.63	-6.23
195	-15.52	-13.22	-9.07	-8.88	-9.82	-14.31	-11.73	-9.76	-8.78	-10.60	-14.76	-10.06	-6.23
210	-15.52	-13.58	-9.38	-8.82	-9.94	-13.51	-10.72	-9.46	-7.79	-8.70	-12.48	-11.11	-6.23
225	-15.52	-13.65	-9.65	-8.58	-9.71	-12.01	-9.64	-8.80	-7.10	-7.37	-11.19	-11.28	-6.23
240	-15.52	-14.13	-10.29	-8.51	-9.31	-11.47	-8.92	-7.98	-6.44	-6.40	-9.96	-11.99	-6.23
255	-15.52	-14.86	-11.16	-8.83	-9.09	-10.49	-8.79	-7.25	-6.05	-5.88	-9.37	-12.46	-6.23
270	-15.52	-15.24	-12.12	-9.36	-8.81	-9.87	-9.40	-6.84	-5.71	-5.57	-8.25	-12.04	-6.23
285	-15.52	-15.07	-12.81	-10.15	-8.63	-9.51	-9.90	-7.65	-5.85	-5.39	-7.98	-11.74	-6.23
300	-15.52	-14.69	-12.87	-10.63	-9.10	-8.23	-9.49	-9.08	-6.35	-5.37	-7.62	-11.38	-6.23
315	-15.52	-14.16	-12.41	-10.29	-9.37	-8.37	-8.91	-10.60	-7.50	-5.54	-7.60	-10.61	-6.23
330	-15.52	-13.64	-11.71	-9.73	-9.08	-8.94	-9.00	-10.71	-9.10	-5.98	-7.65	-9.94	-6.23
345	-15.52	-12.99	-11.22	-9.38	-8.50	-9.41	-9.53	-10.25	-9.95	-6.49	-8.07	-9.47	-6.23
360	-15.52	-13.02	-10.83	-9.02	-8.21	-9.45	-10.43	-9.98	-9.46	-6.75	-8.35	-9.16	-6.23

Peak Value **-3.793** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-18.10	-17.53	-15.38	-16.30	-18.67	-14.89	-18.89	-14.43	-14.39	-12.23	-14.47	-17.36	-13.72
15	-18.10	-13.91	-13.62	-14.60	-17.17	-14.53	-19.33	-13.95	-13.95	-10.84	-14.68	-14.49	-13.72
30	-18.10	-12.83	-11.61	-15.18	-16.52	-13.58	-18.36	-13.50	-14.79	-9.00	-14.05	-13.97	-13.72
45	-18.10	-12.57	-11.60	-15.36	-17.26	-13.46	-15.35	-12.75	-14.52	-7.77	-13.44	-12.95	-13.72
60	-18.10	-12.47	-12.03	-15.76	-16.87	-13.67	-12.96	-12.32	-13.91	-7.62	-11.97	-11.97	-13.72
75	-18.10	-14.33	-13.28	-14.76	-15.38	-12.13	-11.06	-10.26	-12.64	-5.85	-10.88	-11.15	-13.72
90	-18.10	-16.26	-12.99	-14.84	-13.28	-9.61	-8.02	-8.45	-11.02	-5.98	-10.37	-11.61	-13.72
105	-18.10	-18.52	-13.63	-11.27	-10.69	-7.68	-6.49	-8.54	-10.82	-5.63	-10.38	-10.51	-13.72
120	-18.10	-18.96	-12.53	-11.24	-9.64	-7.36	-5.98	-6.88	-11.26	-5.91	-12.20	-10.95	-13.72
135	-18.10	-19.33	-12.06	-11.07	-10.05	-6.82	-7.45	-7.59	-11.30	-7.45	-12.82	-12.12	-13.72
150	-18.10	-19.64	-11.93	-12.06	-11.43	-8.38	-9.00	-9.70	-14.38	-9.57	-15.07	-14.23	-13.72
165	-18.10	-17.38	-14.34	-13.25	-12.25	-12.19	-13.42	-10.87	-14.45	-11.90	-17.80	-16.79	-13.72
180	-18.10	-17.53	-15.48	-16.61	-13.40	-15.83	-21.69	-13.67	-15.38	-13.21	-17.29	-18.57	-13.72
195	-18.10	-17.10	-18.05	-20.95	-17.99	-24.09	-29.01	-17.53	-14.99	-11.98	-15.42	-16.92	-13.72
210	-18.10	-17.22	-21.25	-34.67	-26.41	-18.93	-19.36	-21.47	-13.91	-10.31	-13.69	-16.09	-13.72
225	-18.10	-16.76	-21.28	-25.22	-23.82	-15.30	-16.00	-23.04	-14.63	-9.38	-13.37	-13.20	-13.72
240	-18.10	-17.21	-21.36	-18.53	-17.75	-14.72	-13.72	-19.29	-14.97	-9.17	-13.06	-12.47	-13.72
255	-18.10	-18.50	-22.23	-17.22	-15.83	-13.62	-13.36	-14.87	-16.14	-9.84	-14.12	-12.48	-13.72
270	-18.10	-20.50	-24.80	-16.79	-14.61	-13.33	-15.21	-12.41	-14.51	-11.16	-13.20	-12.59	-13.72
285	-18.10	-22.64	-30.40	-18.13	-13.82	-13.86	-17.89	-13.14	-13.42	-12.63	-14.38	-13.82	-13.72
300	-18.10	-28.43	-31.21	-19.06	-15.65	-11.59	-17.94	-14.68	-12.10	-13.15	-14.11	-16.37	-13.72
315	-18.10	-45.69	-24.00	-17.84	-17.94	-12.03	-17.12	-16.58	-12.58	-12.74	-13.95	-18.34	-13.72
330	-18.10	-26.86	-19.47	-16.52	-19.02	-13.11	-17.65	-16.31	-14.32	-12.58	-13.49	-19.80	-13.72
345	-18.10	-19.34	-17.06	-16.15	-18.85	-14.13	-17.97	-15.61	-15.40	-12.40	-13.95	-19.00	-13.72
360	-18.10	-17.82	-15.03	-14.87	-18.84	-14.82	-19.80	-15.00	-14.35	-12.21	-14.45	-17.63	-13.72

Peak Value **-5.634** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-19.00	-14.64	-12.96	-10.48	-8.63	-10.97	-10.84	-11.70	-11.20	-8.23	-9.57	-9.86	-7.09
15	-19.00	-16.46	-14.22	-10.81	-8.90	-10.75	-11.44	-11.64	-10.41	-8.21	-9.63	-9.72	-7.09
30	-19.00	-19.13	-15.70	-11.49	-9.84	-11.03	-11.73	-11.64	-9.74	-7.90	-9.48	-9.68	-7.09
45	-19.00	-22.20	-17.25	-12.43	-11.25	-11.81	-12.38	-11.56	-9.38	-7.57	-9.43	-9.71	-7.09
60	-19.00	-21.71	-17.32	-13.36	-13.25	-12.97	-13.56	-11.87	-9.22	-7.52	-9.70	-9.87	-7.09
75	-19.00	-18.48	-15.98	-13.72	-15.05	-14.48	-16.13	-12.81	-9.53	-8.03	-10.27	-10.18	-7.09
90	-19.00	-16.09	-14.28	-13.60	-15.93	-16.08	-19.68	-14.19	-10.40	-9.19	-11.40	-10.65	-7.09
105	-19.00	-14.67	-12.89	-12.99	-15.78	-17.68	-19.45	-15.00	-11.22	-11.53	-13.61	-11.17	-7.09
120	-19.00	-14.18	-12.06	-12.24	-15.29	-19.45	-15.44	-14.43	-13.44	-15.54	-16.30	-11.32	-7.09
135	-19.00	-14.01	-11.32	-11.59	-14.88	-19.80	-12.76	-13.84	-14.60	-22.95	-19.90	-11.03	-7.09
150	-19.00	-14.31	-10.70	-10.90	-14.18	-18.07	-11.67	-13.54	-14.01	-35.23	-24.67	-10.47	-7.09
165	-19.00	-14.64	-10.13	-10.36	-12.93	-16.14	-11.76	-12.74	-12.51	-22.46	-30.25	-10.13	-7.09
180	-19.00	-15.06	-9.74	-9.77	-11.55	-15.01	-11.99	-11.59	-11.00	-18.59	-29.73	-10.22	-7.09
195	-19.00	-15.50	-9.66	-9.16	-10.54	-14.80	-11.82	-10.55	-9.97	-16.26	-23.28	-11.06	-7.09
210	-19.00	-16.04	-9.67	-8.83	-10.04	-14.98	-11.36	-9.74	-9.00	-13.79	-18.61	-12.78	-7.09
225	-19.00	-16.56	-9.96	-8.67	-9.88	-14.76	-10.79	-8.97	-7.94	-11.68	-15.24	-15.76	-7.09
240	-19.00	-17.07	-10.64	-8.96	-9.99	-14.26	-10.67	-8.32	-7.09	-9.67	-12.88	-21.77	-7.09
255	-19.00	-17.31	-11.51	-9.51	-10.13	-13.39	-10.65	-8.07	-6.50	-8.10	-11.15	-37.31	-7.09
270	-19.00	-16.77	-12.36	-10.23	-10.13	-12.47	-10.72	-8.24	-6.32	-6.97	-9.93	-21.35	-7.09
285	-19.00	-15.91	-12.89	-10.91	-10.19	-11.50	-10.65	-9.09	-6.69	-6.30	-9.10	-15.95	-7.09
300	-19.00	-14.88	-12.93	-11.30	-10.19	-10.92	-10.16	-10.48	-7.69	-6.16	-8.72	-13.04	-7.09
315	-19.00	-14.17	-12.72	-11.13	-10.02	-10.81	-9.62	-11.86	-9.11	-6.46	-8.74	-11.42	-7.09
330	-19.00	-13.85	-12.50	-10.75	-9.54	-11.04	-9.64	-12.10	-10.65	-7.05	-8.97	-10.42	-7.09
345	-19.00	-14.13	-12.53	-10.40	-8.92	-11.19	-10.20	-11.75	-11.41	-7.78	-9.37	-9.98	-7.09

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.48	-10.31	-12.26	-8.75	-5.87	-4.89	-9.55	-11.24	-7.53	-6.67	-7.82	-9.47	-14.55
15	-7.48	-10.67	-12.95	-7.92	-5.24	-4.27	-9.40	-12.49	-7.58	-6.57	-7.26	-9.32	-14.55
30	-7.48	-10.62	-12.33	-8.10	-5.30	-3.97	-8.46	-11.57	-8.14	-6.54	-7.16	-9.65	-14.55
45	-7.48	-9.98	-11.69	-8.54	-5.87	-4.45	-7.29	-10.79	-9.05	-6.80	-7.49	-10.19	-14.55
60	-7.48	-8.95	-10.73	-8.75	-6.23	-6.73	-8.66	-11.69	-10.40	-8.10	-7.71	-11.20	-14.55
75	-7.48	-8.37	-9.62	-7.45	-6.69	-10.08	-12.18	-12.38	-11.48	-9.86	-7.74	-12.20	-14.55
90	-7.48	-7.70	-7.51	-6.74	-5.82	-8.62	-11.16	-9.75	-8.61	-9.91	-8.02	-12.76	-14.55
105	-7.48	-6.85	-6.72	-4.11	-3.79	-4.49	-6.18	-6.07	-5.75	-7.74	-8.30	-12.38	-14.55
120	-7.48	-5.80	-5.75	-4.15	-2.48	-2.42	-3.14	-3.59	-4.31	-5.92	-9.13	-12.14	-14.55
135	-7.48	-6.52	-5.27	-4.03	-2.44	-1.51	-2.19	-3.52	-2.70	-6.32	-9.21	-11.66	-14.55
150	-7.48	-7.14	-5.15	-4.74	-3.67	-1.41	-2.56	-4.27	-3.59	-6.77	-8.86	-12.13	-14.55
165	-7.48	-6.48	-6.51	-5.42	-4.79	-2.32	-4.62	-4.45	-4.48	-8.56	-10.37	-12.94	-14.55
180	-7.48	-6.98	-6.63	-7.09	-5.45	-2.91	-6.12	-6.67	-6.32	-10.22	-11.02	-14.56	-14.55
195	-7.48	-6.93	-7.34	-7.90	-6.42	-4.22	-7.56	-7.97	-7.37	-12.17	-11.13	-16.07	-14.55
210	-7.48	-6.95	-7.56	-8.01	-6.91	-4.66	-8.33	-7.45	-7.76	-13.05	-9.38	-17.15	-14.55
225	-7.48	-6.69	-7.46	-7.42	-7.06	-5.17	-8.23	-6.60	-7.34	-12.55	-8.10	-14.95	-14.55
240	-7.48	-6.64	-8.02	-6.24	-6.87	-6.77	-8.28	-7.10	-6.25	-11.40	-6.88	-13.20	-14.55
255	-7.48	-7.23	-8.49	-6.86	-8.51	-9.13	-10.00	-8.35	-6.66	-10.52	-6.80	-11.64	-14.55
270	-7.48	-7.82	-9.43	-7.56	-10.99	-14.63	-14.69	-11.22	-6.94	-10.21	-6.13	-10.39	-14.55
285	-7.48	-7.44	-9.90	-10.45	-14.02	-15.99	-21.05	-14.10	-9.42	-10.21	-7.57	-10.42	-14.55
300	-7.48	-8.37	-11.44	-16.09	-14.73	-10.41	-12.57	-12.05	-8.73	-10.35	-8.52	-10.68	-14.55
315	-7.48	-8.94	-11.70	-18.43	-11.82	-7.11	-10.31	-9.84	-7.26	-8.84	-9.37	-10.77	-14.55
330	-7.48	-9.74	-11.22	-12.97	-9.50	-5.40	-9.83	-9.51	-7.07	-7.28	-9.15	-10.85	-14.55
345	-7.48	-9.86	-12.45	-9.93	-7.32	-5.10	-9.64	-10.56	-7.56	-6.79	-8.29	-10.03	-14.55
360	-7.48	-10.23	-11.81	-8.31	-5.95	-5.00	-9.62	-11.58	-7.62	-6.67	-7.75	-9.56	-14.55

Peak Value **-1.410** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-12.43	-13.35	-13.68	-12.61	-10.02	-12.88	-13.83	-15.59	-18.24	-17.99	-17.51	-25.68	-22.23
15	-12.43	-15.26	-16.10	-12.46	-10.32	-11.78	-14.81	-16.11	-19.72	-22.20	-15.94	-25.77	-22.23
30	-12.43	-15.77	-15.48	-13.06	-10.43	-9.19	-12.21	-13.91	-18.60	-23.56	-15.30	-23.49	-22.23
45	-12.43	-14.71	-15.49	-12.41	-10.57	-8.54	-9.07	-12.46	-16.30	-21.54	-14.71	-21.72	-22.23
60	-12.43	-11.98	-14.24	-11.07	-9.01	-9.98	-9.60	-13.11	-16.30	-22.07	-13.29	-21.89	-22.23
75	-12.43	-10.52	-12.50	-8.71	-9.18	-12.43	-13.83	-16.09	-19.50	-20.18	-11.56	-21.09	-22.23
90	-12.43	-8.91	-9.29	-8.19	-9.32	-13.53	-23.04	-17.76	-15.69	-14.68	-10.75	-20.26	-22.23
105	-12.43	-7.45	-8.35	-5.14	-6.98	-9.50	-11.52	-11.32	-11.03	-10.00	-9.99	-17.41	-22.23
120	-12.43	-6.07	-6.75	-5.23	-5.37	-6.74	-6.34	-6.37	-8.00	-7.51	-10.32	-15.58	-22.23
135	-12.43	-6.91	-6.22	-5.04	-5.26	-5.12	-4.98	-5.57	-5.34	-7.99	-9.90	-14.08	-22.23
150	-12.43	-8.33	-6.43	-6.07	-6.93	-5.02	-5.38	-6.06	-7.23	-7.85	-9.54	-14.45	-22.23
165	-12.43	-8.68	-9.95	-7.55	-8.88	-7.89	-7.82	-6.43	-8.59	-9.32	-12.35	-16.18	-22.23
180	-12.43	-12.09	-13.50	-12.50	-11.69	-9.86	-10.19	-11.41	-11.94	-11.22	-15.72	-20.13	-22.23
195	-12.43	-15.63	-23.69	-21.49	-22.82	-15.25	-15.49	-19.68	-16.03	-15.64	-22.54	-33.57	-22.23
210	-12.43	-15.73	-17.48	-18.79	-16.46	-14.78	-18.40	-16.13	-23.52	-20.46	-14.29	-23.36	-22.23
225	-12.43	-12.08	-11.11	-11.35	-11.12	-12.43	-13.94	-12.43	-15.75	-15.72	-10.30	-16.46	-22.23
240	-12.43	-9.98	-9.36	-7.29	-8.43	-12.05	-11.46	-11.84	-9.47	-12.24	-7.73	-13.49	-22.23
255	-12.43	-9.44	-8.76	-7.20	-9.35	-11.75	-12.20	-11.55	-7.82	-10.77	-7.17	-11.84	-22.23
270	-12.43	-9.37	-9.67	-7.60	-11.42	-16.06	-16.79	-13.07	-7.15	-11.21	-6.41	-10.83	-22.23
285	-12.43	-8.41	-10.85	-10.45	-14.27	-23.04	-24.75	-18.23	-10.62	-13.27	-8.62	-11.57	-22.23
300	-12.43	-9.50	-14.07	-16.16	-16.02	-16.30	-14.31	-21.24	-15.60	-21.18	-11.73	-13.42	-22.23
315	-12.43	-10.08	-14.16	-19.65	-14.45	-11.93	-12.82	-14.35	-27.90	-26.16	-17.54	-15.47	-22.23
330	-12.43	-11.32	-12.56	-14.93	-12.88	-9.99	-13.39	-12.77	-23.68	-17.96	-29.72	-20.00	-22.23
345	-12.43	-11.94	-13.75	-12.65	-10.90	-11.60	-12.73	-15.00	-19.47	-16.92	-20.34	-23.25	-22.23
360	-12.43	-13.27	-13.07	-11.32	-10.07	-13.08	-14.22	-16.09	-18.24	-17.25	-18.08	-25.56	-22.23

Peak Value **-4.979** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-9.16	-13.30	-17.81	-11.05	-7.98	-5.64	-11.58	-13.23	-7.91	-7.01	-8.32	-9.57	-15.36
15	-9.16	-12.52	-15.82	-9.80	-6.86	-5.12	-10.87	-14.97	-7.86	-6.70	-7.89	-9.42	-15.36
30	-9.16	-12.20	-15.22	-9.77	-6.89	-5.52	-10.84	-15.36	-8.55	-6.63	-7.88	-9.84	-15.36
45	-9.16	-11.76	-14.03	-10.82	-7.67	-6.61	-12.03	-15.74	-9.95	-6.95	-8.41	-10.51	-15.36
60	-9.16	-11.94	-13.29	-12.60	-9.48	-9.51	-15.80	-17.23	-11.70	-8.28	-9.11	-11.59	-15.36
75	-9.16	-12.44	-12.76	-13.45	-10.28	-13.88	-17.18	-14.79	-12.23	-10.29	-10.07	-12.80	-15.36
90	-9.16	-13.85	-12.25	-12.20	-8.40	-10.32	-11.45	-10.50	-9.56	-11.67	-11.32	-13.61	-15.36
105	-9.16	-15.77	-11.78	-10.87	-6.63	-6.13	-7.68	-7.61	-7.28	-11.66	-13.23	-14.02	-15.36
120	-9.16	-18.07	-12.58	-10.73	-5.61	-4.44	-5.97	-6.84	-6.74	-11.08	-15.30	-14.76	-15.36
135	-9.16	-17.18	-12.33	-10.87	-5.65	-3.99	-5.42	-7.77	-6.13	-11.29	-17.56	-15.36	-15.36
150	-9.16	-13.36	-11.10	-10.56	-6.43	-3.89	-5.78	-8.99	-6.04	-13.35	-17.21	-15.98	-15.36
165	-9.16	-10.49	-9.12	-9.53	-6.94	-3.74	-7.45	-8.82	-6.61	-16.53	-14.75	-15.74	-15.36
180	-9.16	-8.58	-7.63	-8.56	-6.62	-3.89	-8.28	-8.44	-7.71	-17.12	-12.82	-15.97	-15.36
195	-9.16	-7.56	-7.44	-8.10	-6.53	-4.57	-8.32	-8.28	-8.00	-14.77	-11.45	-16.15	-15.36
210	-9.16	-7.57	-8.03	-8.39	-7.42	-5.11	-8.78	-8.08	-7.88	-13.92	-11.07	-18.34	-15.36
225	-9.16	-8.17	-9.92	-9.67	-9.22	-6.08	-9.59	-7.91	-8.01	-15.40	-12.11	-20.27	-15.36
240	-9.16	-9.35	-13.80	-12.92	-12.10	-8.29	-11.13	-8.88	-9.07	-18.99	-14.37	-25.17	-15.36
255	-9.16	-11.23	-20.81	-18.04	-16.05	-12.57	-13.99	-11.17	-12.96	-23.03	-17.70	-25.26	-15.36
270	-9.16	-13.05	-22.28	-28.99	-21.22	-20.16	-18.84	-15.82	-20.12	-17.10	-18.20	-20.56	-15.36
285	-9.16	-14.42	-16.97	-44.62	-26.51	-16.94	-23.47	-16.22	-15.58	-13.18	-14.26	-16.79	-15.36
300	-9.16	-14.77	-14.87	-34.04	-20.61	-11.71	-17.39	-12.60	-9.73	-10.72	-11.34	-13.98	-15.36
315	-9.16	-15.29	-15.34	-24.56	-15.25	-8.85	-13.88	-11.74	-7.30	-8.93	-10.09	-12.57	-15.36
330	-9.16	-14.88	-16.97	-17.38	-12.16	-7.26	-12.34	-12.28	-7.16	-7.66	-9.19	-11.41	-15.36
345	-9.16	-14.06	-18.32	-13.26	-9.82	-6.20	-12.58	-12.50	-7.85	-7.24	-8.57	-10.24	-15.36



### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.38	-10.26	-11.64	-8.24	-5.28	-4.41	-8.61	-11.37	-7.24	-6.38	-7.45	-9.02	-13.87
15	-7.38	-10.56	-12.72	-7.48	-4.78	-3.64	-8.30	-12.54	-6.99	-6.16	-6.90	-8.77	-13.87
30	-7.38	-10.31	-12.01	-7.57	-4.70	-3.21	-7.44	-11.73	-7.54	-5.93	-7.00	-8.83	-13.87
45	-7.38	-10.12	-11.53	-8.04	-5.36	-3.59	-6.55	-10.60	-8.40	-6.04	-7.17	-9.45	-13.87
60	-7.38	-9.29	-10.88	-8.70	-6.10	-5.34	-7.42	-11.10	-10.03	-7.19	-7.43	-10.41	-13.87
75	-7.38	-8.53	-10.06	-8.22	-6.57	-8.31	-10.73	-11.65	-11.16	-8.72	-7.57	-11.22	-13.87
90	-7.38	-7.68	-8.40	-7.64	-6.04	-8.49	-11.01	-9.83	-8.65	-9.20	-7.75	-11.87	-13.87
105	-7.38	-6.98	-7.58	-4.92	-4.09	-4.72	-6.83	-6.22	-5.75	-7.62	-7.76	-11.94	-13.87
120	-7.38	-6.22	-6.31	-4.60	-2.71	-2.57	-3.63	-3.81	-4.23	-6.02	-8.64	-11.37	-13.87
135	-7.38	-6.37	-5.97	-4.40	-2.65	-1.72	-2.45	-3.64	-2.85	-5.92	-8.81	-11.37	-13.87
150	-7.38	-7.18	-5.86	-4.85	-3.74	-1.69	-2.58	-4.40	-3.37	-6.83	-8.78	-11.95	-13.87
165	-7.38	-6.08	-6.70	-5.64	-4.90	-2.35	-4.45	-4.60	-4.08	-8.23	-10.19	-12.44	-13.87
180	-7.38	-6.49	-7.03	-6.98	-5.86	-2.98	-6.22	-6.30	-5.85	-9.95	-11.06	-13.92	-13.87
195	-7.38	-6.51	-7.17	-7.73	-6.93	-3.98	-7.14	-7.68	-6.94	-11.80	-10.82	-14.76	-13.87
210	-7.38	-6.60	-7.34	-7.89	-7.28	-4.51	-8.08	-7.12	-7.45	-12.26	-9.28	-14.96	-13.87
225	-7.38	-6.51	-7.49	-7.35	-7.05	-5.18	-8.37	-6.45	-7.09	-11.49	-7.72	-13.24	-13.87
240	-7.38	-6.75	-8.23	-6.43	-7.32	-6.36	-8.70	-6.99	-6.15	-10.60	-6.55	-11.87	-13.87
255	-7.38	-7.15	-9.07	-6.89	-8.55	-8.64	-10.75	-8.31	-6.25	-9.83	-6.64	-10.94	-13.87
270	-7.38	-7.77	-10.12	-8.12	-11.17	-12.73	-17.05	-11.11	-6.60	-9.55	-6.04	-9.84	-13.87
285	-7.38	-7.72	-11.10	-11.41	-14.12	-13.47	-19.98	-13.14	-8.39	-10.03	-7.54	-9.78	-13.87
300	-7.38	-8.58	-12.11	-18.07	-13.99	-9.19	-11.52	-10.72	-7.80	-9.95	-8.74	-10.25	-13.87
315	-7.38	-9.19	-11.75	-16.83	-11.09	-6.29	-9.27	-9.36	-6.55	-8.54	-9.52	-10.46	-13.87
330	-7.38	-9.99	-11.23	-11.67	-8.66	-4.97	-8.91	-9.49	-6.61	-7.03	-9.11	-10.43	-13.87
345	-7.38	-9.81	-11.81	-9.06	-6.34	-4.77	-8.74	-10.58	-7.12	-6.41	-8.05	-9.57	-13.87
360	-7.38	-10.20	-11.38	-7.94	-5.30	-4.30	-8.62	-11.61	-7.08	-6.30	-7.49	-9.08	-13.87

Peak Value -1.686 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.59	-12.72	-12.72	-12.40	-9.77	-12.47	-13.30	-15.84	-17.27	-16.68	-16.79	-25.22	-21.23
15	-11.59	-14.97	-15.72	-12.89	-10.38	-10.94	-13.86	-16.41	-18.85	-19.80	-15.21	-24.91	-21.23
30	-11.59	-15.61	-16.00	-13.86	-10.82	-9.29	-11.47	-15.15	-18.90	-21.23	-14.81	-22.69	-21.23
45	-11.59	-15.29	-15.72	-13.65	-10.65	-8.52	-8.65	-13.25	-16.46	-20.73	-14.58	-21.18	-21.23
60	-11.59	-12.63	-14.33	-12.38	-9.46	-9.48	-8.78	-12.95	-16.78	-20.46	-13.17	-20.44	-21.23
75	-11.59	-10.68	-13.07	-10.01	-9.04	-11.55	-12.64	-14.96	-19.38	-18.06	-11.43	-19.32	-21.23
90	-11.59	-8.76	-10.39	-9.17	-8.93	-13.14	-19.02	-17.22	-15.09	-14.46	-10.39	-19.16	-21.23
105	-11.59	-7.54	-9.08	-5.90	-7.01	-9.60	-12.60	-11.60	-10.34	-10.10	-9.52	-16.34	-21.23
120	-11.59	-6.48	-7.27	-5.54	-5.43	-6.83	-7.16	-6.93	-7.89	-7.63	-9.84	-14.54	-21.23
135	-11.59	-6.73	-6.81	-5.29	-5.22	-5.35	-5.68	-5.99	-5.74	-7.44	-9.48	-13.74	-21.23
150	-11.59	-8.32	-7.14	-6.09	-6.62	-5.63	-5.87	-6.43	-7.31	-7.95	-9.64	-14.20	-21.23
165	-11.59	-8.29	-10.26	-7.80	-8.54	-8.11	-8.47	-7.01	-8.32	-9.07	-12.14	-16.17	-21.23
180	-11.59	-11.28	-14.55	-12.27	-12.09	-9.91	-11.00	-11.30	-11.74	-11.37	-16.20	-21.58	-21.23
195	-11.59	-14.43	-24.68	-21.25	-21.58	-15.01	-14.95	-19.50	-16.62	-16.45	-22.06	-31.16	-21.23
210	-11.59	-16.60	-16.85	-18.84	-16.59	-13.65	-16.81	-15.09	-29.99	-21.64	-13.96	-20.54	-21.23
225	-11.59	-13.65	-11.45	-11.48	-10.46	-11.32	-13.29	-11.22	-14.49	-14.75	-9.66	-14.66	-21.23
240	-11.59	-11.38	-9.87	-7.65	-8.50	-10.58	-11.22	-11.25	-8.95	-11.49	-7.30	-12.10	-21.23
255	-11.59	-10.31	-9.57	-7.36	-9.08	-10.77	-12.18	-10.98	-7.16	-10.31	-6.94	-10.99	-21.23
270	-11.59	-10.04	-10.61	-8.21	-11.44	-14.36	-18.38	-12.93	-6.82	-10.70	-6.32	-10.17	-21.23
285	-11.59	-8.97	-12.29	-11.41	-14.67	-19.49	-24.26	-18.57	-10.01	-13.85	-8.58	-10.72	-21.23
300	-11.59	-9.46	-14.05	-18.24	-15.59	-15.55	-13.78	-18.79	-15.00	-22.55	-11.79	-12.85	-21.23
315	-11.59	-9.75	-13.00	-18.28	-14.09	-11.22	-12.38	-13.72	-21.69	-23.43	-18.79	-15.22	-21.23
330	-11.59	-10.74	-11.68	-13.55	-12.31	-10.11	-12.66	-12.87	-20.47	-16.58	-26.06	-19.36	-21.23
345	-11.59	-11.07	-12.29	-11.94	-10.03	-11.90	-12.27	-14.93	-18.73	-15.66	-18.65	-23.38	-21.23
360	-11.59	-12.38	-12.32	-11.77	-9.71	-12.42	-13.61	-16.12	-17.48	-16.26	-17.05	-24.73	-21.23

Peak Value **-5.219** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-9.44	-13.91	-18.22	-10.34	-7.19	-5.15	-10.42	-13.29	-7.70	-6.81	-7.99	-9.12	-14.75
15	-9.44	-12.52	-15.74	-8.95	-6.18	-4.53	-9.71	-14.84	-7.29	-6.35	-7.59	-8.88	-14.75
30	-9.44	-11.83	-14.22	-8.74	-5.92	-4.44	-9.62	-14.37	-7.87	-6.06	-7.79	-9.02	-14.75
45	-9.44	-11.70	-13.61	-9.43	-6.89	-5.27	-10.72	-14.02	-9.15	-6.19	-8.04	-9.76	-14.75
60	-9.44	-12.00	-13.49	-11.14	-8.79	-7.46	-13.14	-15.69	-11.06	-7.40	-8.78	-10.87	-14.75
75	-9.44	-12.63	-13.06	-12.94	-10.20	-11.10	-15.23	-14.39	-11.87	-9.26	-9.87	-11.95	-14.75
90	-9.44	-14.23	-12.75	-12.93	-9.16	-10.31	-11.75	-10.70	-9.77	-10.74	-11.16	-12.77	-14.75
105	-9.44	-16.11	-12.92	-11.85	-7.20	-6.43	-8.16	-7.71	-7.60	-11.22	-12.53	-13.90	-14.75
120	-9.44	-18.58	-13.35	-11.70	-6.04	-4.61	-6.18	-6.71	-6.68	-11.12	-14.81	-14.22	-14.75
135	-9.44	-17.35	-13.54	-11.73	-6.16	-4.18	-5.26	-7.44	-5.99	-11.20	-17.26	-15.14	-14.75
150	-9.44	-13.56	-11.79	-10.91	-6.88	-3.93	-5.33	-8.67	-5.62	-13.29	-16.24	-15.89	-14.75
165	-9.44	-10.08	-9.23	-9.73	-7.35	-3.69	-6.64	-8.30	-6.14	-15.77	-14.61	-14.84	-14.75
180	-9.44	-8.24	-7.87	-8.51	-7.04	-3.96	-7.99	-7.95	-7.14	-15.50	-12.65	-14.74	-14.75
195	-9.44	-7.27	-7.25	-7.93	-7.08	-4.33	-7.93	-7.97	-7.43	-13.62	-11.16	-14.86	-14.75
210	-9.44	-7.06	-7.86	-8.26	-7.82	-5.08	-8.71	-7.88	-7.47	-12.79	-11.08	-16.37	-14.75
225	-9.44	-7.44	-9.73	-9.47	-9.70	-6.39	-10.06	-8.21	-7.96	-14.26	-12.16	-18.79	-14.75
240	-9.44	-8.59	-13.24	-12.52	-13.55	-8.42	-12.26	-9.03	-9.37	-17.95	-14.53	-24.68	-14.75
255	-9.44	-10.01	-18.67	-16.81	-17.96	-12.75	-16.29	-11.70	-13.48	-19.61	-18.31	-30.28	-14.75
270	-9.44	-11.67	-19.85	-25.22	-23.30	-17.77	-22.84	-15.78	-19.72	-15.88	-18.11	-21.29	-14.75
285	-9.44	-13.75	-17.32	-40.11	-23.35	-14.73	-22.01	-14.60	-13.46	-12.36	-14.24	-16.88	-14.75
300	-9.44	-15.95	-16.54	-32.17	-19.10	-10.33	-15.43	-11.46	-8.72	-10.19	-11.71	-13.73	-14.75
315	-9.44	-18.40	-17.74	-22.29	-14.11	-7.98	-12.19	-11.34	-6.68	-8.69	-10.07	-12.22	-14.75
330	-9.44	-17.99	-21.37	-16.23	-11.10	-6.56	-11.29	-12.16	-6.80	-7.54	-9.20	-11.03	-14.75
345	-9.44	-15.78	-21.67	-12.20	-8.76	-5.71	-11.28	-12.58	-7.43	-6.95	-8.45	-9.76	-14.75

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.09	-9.86	-10.67	-8.31	-5.02	-3.99	-8.02	-12.00	-7.36	-6.40	-7.67	-8.74	-13.50
15	-7.09	-10.26	-11.44	-7.68	-4.53	-3.18	-7.52	-12.72	-7.20	-6.16	-7.30	-8.37	-13.50
30	-7.09	-9.93	-11.11	-7.73	-4.60	-2.64	-6.74	-11.43	-7.55	-5.76	-7.30	-8.54	-13.50
45	-7.09	-10.00	-10.53	-8.08	-5.19	-2.93	-5.72	-10.25	-8.31	-5.93	-7.41	-9.34	-13.50
60	-7.09	-9.01	-10.35	-8.68	-5.69	-4.35	-6.44	-10.22	-9.70	-6.81	-7.42	-9.82	-13.50
75	-7.09	-8.56	-9.93	-8.60	-6.47	-7.17	-9.16	-11.51	-10.76	-7.93	-7.52	-10.62	-13.50
90	-7.09	-7.74	-9.13	-8.41	-6.36	-7.99	-10.42	-9.93	-9.04	-8.63	-7.37	-11.66	-13.50
105	-7.09	-7.25	-8.09	-5.76	-4.52	-4.80	-7.02	-6.82	-6.22	-7.50	-7.50	-11.54	-13.50
120	-7.09	-6.49	-7.14	-5.15	-3.07	-2.70	-3.95	-4.04	-4.62	-6.12	-8.36	-11.47	-13.50
135	-7.09	-6.55	-6.33	-4.94	-2.82	-1.86	-2.68	-3.84	-2.97	-6.06	-8.49	-11.40	-13.50
150	-7.09	-7.06	-6.22	-5.21	-3.93	-1.88	-2.75	-4.66	-3.30	-6.71	-8.88	-12.00	-13.50
165	-7.09	-6.01	-7.00	-5.85	-5.02	-2.55	-4.48	-4.85	-4.12	-8.60	-10.37	-12.70	-13.50
180	-7.09	-6.27	-6.98	-6.82	-6.26	-3.08	-6.17	-6.54	-5.71	-10.32	-11.08	-13.48	-13.50
195	-7.09	-6.51	-7.17	-7.56	-7.31	-4.21	-7.24	-7.66	-7.03	-11.89	-11.27	-13.88	-13.50
210	-7.09	-6.31	-7.28	-7.47	-7.67	-4.63	-7.89	-6.89	-7.50	-12.17	-9.07	-13.77	-13.50
225	-7.09	-6.59	-7.50	-7.11	-7.39	-4.97	-8.45	-6.22	-7.03	-11.09	-7.73	-12.18	-13.50
240	-7.09	-6.73	-8.56	-6.51	-7.12	-6.08	-8.84	-6.82	-6.04	-10.14	-6.53	-10.89	-13.50
255	-7.09	-7.14	-9.43	-7.43	-8.36	-7.67	-11.35	-8.37	-6.17	-9.12	-6.76	-9.93	-13.50
270	-7.09	-7.80	-10.93	-8.84	-11.20	-10.58	-18.94	-11.19	-6.44	-9.25	-6.25	-9.44	-13.50
285	-7.09	-7.72	-11.55	-12.79	-13.96	-11.76	-17.69	-12.85	-8.18	-10.05	-7.75	-9.40	-13.50
300	-7.09	-8.75	-11.96	-19.92	-13.10	-8.57	-10.50	-10.63	-7.45	-9.80	-8.91	-9.82	-13.50
315	-7.09	-9.22	-11.30	-15.37	-10.66	-5.92	-8.57	-9.12	-6.30	-8.44	-9.84	-10.02	-13.50
330	-7.09	-9.52	-10.23	-11.06	-8.03	-4.69	-8.21	-9.70	-6.40	-6.87	-9.38	-10.09	-13.50
345	-7.09	-9.68	-11.02	-9.03	-5.80	-4.40	-7.89	-11.19	-7.30	-6.45	-8.27	-9.52	-13.50
360	-7.09	-9.58	-10.29	-7.88	-5.02	-4.13	-8.24	-11.95	-7.14	-6.41	-7.67	-9.00	-13.50

Peak Value **-1.865** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.29	-11.90	-11.95	-12.49	-9.39	-11.94	-12.69	-15.86	-17.61	-16.11	-15.92	-24.91	-20.57
15	-11.29	-15.26	-15.42	-13.27	-10.50	-10.76	-12.98	-17.28	-21.39	-18.79	-14.65	-25.99	-20.57
30	-11.29	-16.81	-15.81	-15.14	-11.23	-9.31	-10.62	-15.23	-19.87	-19.25	-14.47	-23.60	-20.57
45	-11.29	-16.15	-15.68	-15.07	-11.35	-8.44	-8.19	-13.19	-17.31	-18.89	-14.33	-21.26	-20.57
60	-11.29	-12.90	-14.17	-13.88	-9.51	-9.31	-8.42	-12.79	-17.31	-19.29	-12.51	-19.78	-20.57
75	-11.29	-10.94	-13.04	-11.50	-9.16	-11.40	-11.55	-14.84	-19.01	-16.86	-11.29	-19.27	-20.57
90	-11.29	-9.08	-10.95	-10.44	-9.02	-12.28	-16.86	-16.22	-14.97	-14.03	-9.81	-19.26	-20.57
105	-11.29	-7.80	-9.66	-6.90	-6.95	-9.16	-12.69	-11.54	-10.51	-9.98	-8.95	-15.83	-20.57
120	-11.29	-6.72	-7.96	-6.10	-5.41	-6.66	-7.59	-6.94	-7.99	-7.78	-9.46	-14.49	-20.57
135	-11.29	-6.83	-7.13	-5.82	-5.08	-5.31	-5.99	-6.13	-5.75	-7.72	-9.18	-13.80	-20.57
150	-11.29	-8.07	-7.49	-6.36	-6.51	-5.77	-6.20	-6.70	-7.16	-7.85	-9.51	-14.46	-20.57
165	-11.29	-8.04	-10.53	-8.26	-8.24	-8.15	-8.71	-7.43	-8.63	-9.60	-12.06	-17.22	-20.57
180	-11.29	-10.83	-14.39	-12.62	-11.84	-9.96	-11.64	-11.89	-12.09	-12.15	-16.21	-24.04	-20.57
195	-11.29	-14.93	-24.23	-20.21	-21.10	-14.53	-15.41	-18.66	-17.50	-18.42	-21.42	-26.04	-20.57
210	-11.29	-17.99	-18.15	-18.41	-15.89	-12.63	-15.02	-13.72	-36.55	-22.49	-13.44	-18.75	-20.57
225	-11.29	-15.93	-12.05	-11.50	-10.44	-9.83	-12.55	-10.24	-14.13	-14.29	-9.44	-13.46	-20.57
240	-11.29	-12.56	-10.95	-8.01	-8.18	-9.29	-10.63	-10.33	-8.29	-10.97	-7.15	-11.13	-20.57
255	-11.29	-11.13	-10.52	-7.98	-8.85	-9.27	-12.02	-10.75	-6.95	-9.79	-6.96	-9.99	-20.57
270	-11.29	-10.24	-11.73	-8.99	-11.61	-12.09	-19.01	-13.21	-6.80	-10.80	-6.50	-9.77	-20.57
285	-11.29	-8.81	-12.68	-12.83	-14.90	-18.21	-22.71	-19.50	-10.09	-14.24	-8.90	-10.32	-20.57
300	-11.29	-9.32	-12.99	-20.31	-15.16	-14.96	-13.20	-17.90	-14.84	-23.13	-12.30	-12.12	-20.57
315	-11.29	-9.35	-11.62	-16.48	-13.81	-11.08	-12.25	-12.49	-18.66	-22.94	-19.62	-14.51	-20.57
330	-11.29	-9.79	-10.30	-12.57	-11.41	-9.94	-12.27	-12.53	-18.04	-16.07	-23.23	-18.02	-20.57
345	-11.29	-10.61	-11.50	-11.61	-9.45	-11.39	-11.78	-15.16	-17.85	-15.46	-18.26	-23.07	-20.57
360	-11.29	-11.67	-11.26	-11.41	-9.49	-12.12	-13.30	-15.86	-17.59	-15.57	-16.61	-24.37	-20.57

Peak Value **-5.075** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-9.17	-14.13	-16.58	-10.40	-6.99	-4.75	-9.83	-14.30	-7.79	-6.90	-8.38	-8.84	-14.45
15	-9.17	-11.91	-13.67	-9.09	-5.79	-4.02	-8.98	-14.60	-7.37	-6.40	-8.19	-8.44	-14.45
30	-9.17	-10.93	-12.92	-8.61	-5.67	-3.70	-9.02	-13.78	-7.81	-5.96	-8.22	-8.68	-14.45
45	-9.17	-11.21	-12.11	-9.05	-6.40	-4.37	-9.35	-13.34	-8.89	-6.16	-8.40	-9.63	-14.45
60	-9.17	-11.29	-12.68	-10.24	-8.03	-6.03	-10.79	-13.71	-10.53	-7.06	-9.03	-10.28	-14.45
75	-9.17	-12.31	-12.85	-11.73	-9.84	-9.23	-12.90	-14.22	-11.47	-8.52	-9.88	-11.26	-14.45
90	-9.17	-13.53	-13.78	-12.69	-9.75	-10.02	-11.54	-11.09	-10.32	-10.11	-11.05	-12.49	-14.45
105	-9.17	-16.50	-13.28	-12.12	-8.21	-6.79	-8.39	-8.61	-8.24	-11.13	-12.96	-13.57	-14.45
120	-9.17	-19.43	-14.81	-12.25	-6.88	-4.93	-6.41	-7.16	-7.30	-11.09	-14.87	-14.46	-14.45
135	-9.17	-18.65	-14.07	-12.27	-6.75	-4.48	-5.40	-7.70	-6.23	-11.04	-16.85	-15.12	-14.45
150	-9.17	-13.88	-12.20	-11.54	-7.43	-4.17	-5.36	-8.92	-5.60	-13.06	-17.64	-15.65	-14.45
165	-9.17	-10.29	-9.54	-9.56	-7.84	-3.94	-6.54	-8.34	-6.02	-15.50	-15.29	-14.59	-14.45
180	-9.17	-8.14	-7.86	-8.15	-7.67	-4.07	-7.62	-8.03	-6.85	-14.97	-12.68	-13.87	-14.45
195	-9.17	-7.19	-7.25	-7.80	-7.50	-4.64	-7.96	-8.02	-7.44	-12.98	-11.71	-14.16	-14.45
210	-9.17	-6.62	-7.66	-7.84	-8.38	-5.37	-8.82	-7.90	-7.50	-12.59	-11.05	-15.43	-14.45
225	-9.17	-7.13	-9.37	-9.07	-10.36	-6.69	-10.59	-8.42	-7.97	-13.92	-12.60	-18.13	-14.45
240	-9.17	-8.04	-12.31	-11.86	-13.77	-8.91	-13.56	-9.38	-9.97	-17.76	-15.24	-23.54	-14.45
255	-9.17	-9.35	-15.97	-16.68	-18.12	-12.80	-19.85	-12.12	-14.00	-17.57	-20.22	-28.50	-14.45
270	-9.17	-11.46	-18.65	-23.44	-21.66	-15.91	-37.31	-15.48	-17.39	-14.48	-18.88	-20.80	-14.45
285	-9.17	-14.25	-17.97	-33.64	-21.05	-12.87	-19.33	-13.91	-12.67	-12.14	-14.08	-16.57	-14.45
300	-9.17	-17.83	-18.74	-30.56	-17.33	-9.71	-13.85	-11.53	-8.32	-10.01	-11.57	-13.68	-14.45
315	-9.17	-24.54	-22.80	-21.81	-13.54	-7.50	-11.01	-11.80	-6.56	-8.60	-10.32	-11.93	-14.45
330	-9.17	-21.69	-28.38	-16.37	-10.70	-6.22	-10.37	-12.90	-6.71	-7.43	-9.57	-10.86	-14.45
345	-9.17	-16.84	-20.87	-12.53	-8.25	-5.37	-10.17	-13.43	-7.70	-7.03	-8.73	-9.72	-14.45

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.66	-9.64	-9.86	-9.09	-5.42	-4.46	-7.53	-12.28	-8.27	-6.96	-8.41	-9.54	-14.28
15	-7.66	-9.86	-10.82	-8.81	-5.19	-3.66	-7.08	-13.03	-8.17	-6.69	-7.80	-9.14	-14.28
30	-7.66	-10.33	-10.72	-8.89	-5.46	-3.12	-6.25	-11.15	-8.16	-6.49	-7.87	-9.39	-14.28
45	-7.66	-9.84	-10.87	-8.87	-5.59	-3.24	-5.22	-9.84	-8.85	-6.28	-8.02	-9.87	-14.28
60	-7.66	-9.29	-10.03	-9.07	-6.32	-4.44	-5.73	-9.96	-9.60	-7.16	-7.72	-10.31	-14.28
75	-7.66	-8.69	-9.95	-9.54	-7.27	-6.86	-8.18	-10.85	-11.05	-8.12	-7.51	-10.84	-14.28
90	-7.66	-7.81	-9.24	-9.13	-7.12	-8.11	-9.74	-10.41	-9.87	-8.91	-7.24	-11.81	-14.28
105	-7.66	-7.45	-8.86	-6.67	-5.23	-5.44	-7.25	-7.24	-7.07	-7.66	-7.26	-11.54	-14.28
120	-7.66	-6.63	-7.65	-5.77	-3.60	-3.11	-4.25	-4.44	-5.09	-6.49	-8.16	-11.32	-14.28
135	-7.66	-6.84	-6.73	-5.21	-3.37	-2.34	-2.96	-3.97	-3.46	-6.23	-8.30	-11.45	-14.28
150	-7.66	-7.52	-6.74	-5.71	-4.29	-2.46	-3.04	-4.74	-3.90	-7.21	-9.29	-11.84	-14.28
165	-7.66	-6.64	-7.42	-6.39	-5.66	-3.35	-4.83	-5.28	-4.54	-8.78	-10.85	-12.95	-14.28
180	-7.66	-6.89	-7.49	-7.32	-6.94	-4.07	-6.65	-7.03	-6.25	-10.40	-12.32	-13.04	-14.28
195	-7.66	-7.16	-7.97	-7.56	-8.29	-5.39	-7.76	-8.27	-7.61	-12.38	-12.01	-13.55	-14.28
210	-7.66	-7.12	-8.19	-7.88	-8.17	-5.45	-8.24	-7.13	-8.08	-12.30	-9.68	-12.52	-14.28
225	-7.66	-7.46	-8.27	-7.42	-7.60	-5.47	-8.26	-6.44	-7.40	-10.74	-7.77	-11.07	-14.28
240	-7.66	-7.60	-8.89	-6.99	-7.13	-6.10	-8.74	-7.02	-6.28	-9.31	-6.46	-9.92	-14.28
255	-7.66	-7.58	-9.71	-7.74	-8.23	-7.09	-11.07	-8.57	-6.01	-8.89	-6.74	-9.35	-14.28
270	-7.66	-7.87	-10.85	-9.81	-10.73	-10.42	-18.79	-11.81	-6.71	-8.84	-6.39	-8.92	-14.28
285	-7.66	-7.95	-11.47	-14.50	-13.90	-11.71	-16.43	-13.41	-8.27	-10.03	-8.15	-9.17	-14.28
300	-7.66	-8.78	-11.09	-20.62	-13.08	-8.75	-9.93	-10.78	-7.99	-10.74	-9.78	-9.91	-14.28
315	-7.66	-9.09	-10.16	-14.16	-10.64	-6.02	-8.20	-9.16	-6.89	-9.02	-11.11	-10.35	-14.28
330	-7.66	-9.54	-9.66	-10.57	-8.19	-5.12	-7.61	-9.88	-6.95	-7.58	-10.14	-10.45	-14.28
345	-7.66	-9.35	-10.04	-9.45	-6.17	-4.80	-7.57	-11.43	-8.06	-7.01	-8.91	-10.21	-14.28
360	-7.66	-9.31	-9.59	-8.47	-5.34	-4.31	-7.76	-12.17	-8.10	-7.03	-8.25	-9.41	-14.28

Peak Value **-2.344** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.16	-11.92	-11.25	-12.26	-9.22	-11.66	-12.36	-15.46	-17.62	-15.22	-15.57	-24.28	-20.39
15	-11.16	-15.40	-14.93	-14.20	-10.97	-10.81	-11.89	-18.16	-22.61	-17.40	-14.90	-24.51	-20.39
30	-11.16	-18.54	-16.68	-16.54	-12.14	-9.60	-10.21	-15.42	-20.31	-18.45	-14.57	-23.03	-20.39
45	-11.16	-17.38	-16.70	-16.65	-11.50	-8.79	-7.75	-13.02	-17.81	-17.45	-13.55	-20.64	-20.39
60	-11.16	-13.60	-13.72	-15.06	-10.25	-9.39	-7.86	-12.54	-17.44	-18.13	-12.19	-19.60	-20.39
75	-11.16	-10.79	-12.48	-13.31	-9.91	-11.14	-10.65	-13.71	-18.67	-17.03	-10.46	-18.25	-20.39
90	-11.16	-8.88	-10.71	-11.48	-9.23	-12.25	-14.83	-15.24	-14.79	-14.07	-9.39	-17.75	-20.39
105	-11.16	-7.91	-9.92	-7.66	-7.11	-9.02	-12.05	-11.06	-10.24	-9.93	-8.58	-15.06	-20.39
120	-11.16	-6.80	-8.31	-6.63	-5.29	-6.18	-7.51	-6.82	-7.62	-7.97	-9.11	-13.47	-20.39
135	-11.16	-7.08	-7.27	-5.88	-4.95	-5.25	-6.04	-5.99	-5.76	-7.42	-8.78	-13.06	-20.39
150	-11.16	-8.35	-7.75	-6.77	-6.18	-5.65	-6.15	-6.50	-7.26	-8.19	-9.78	-13.95	-20.39
165	-11.16	-8.47	-10.12	-8.75	-8.06	-7.97	-8.76	-7.58	-8.61	-9.78	-12.01	-17.37	-20.39
180	-11.16	-11.19	-13.90	-13.17	-11.51	-10.28	-12.05	-12.25	-12.08	-12.42	-16.69	-23.40	-20.39
195	-11.16	-15.62	-23.34	-20.70	-20.04	-13.94	-15.18	-18.99	-18.15	-20.14	-21.13	-23.87	-20.39
210	-11.16	-20.47	-19.84	-18.81	-15.62	-11.40	-14.36	-12.23	-29.20	-21.23	-12.85	-16.78	-20.39
225	-11.16	-18.58	-13.40	-11.92	-10.14	-8.95	-11.36	-9.71	-12.84	-13.37	-8.88	-12.31	-20.39
240	-11.16	-14.37	-11.69	-8.62	-8.04	-8.20	-9.97	-9.64	-8.08	-10.05	-6.83	-10.20	-20.39
255	-11.16	-11.34	-11.06	-8.35	-8.67	-8.12	-11.52	-10.45	-6.65	-9.51	-6.87	-9.38	-20.39
270	-11.16	-10.20	-11.96	-10.00	-11.12	-11.74	-18.96	-13.73	-7.09	-10.26	-6.60	-9.07	-20.39
285	-11.16	-8.86	-12.26	-14.55	-14.92	-17.71	-21.36	-20.76	-10.40	-13.75	-9.09	-9.84	-20.39
300	-11.16	-9.05	-11.54	-20.83	-14.86	-14.68	-12.69	-16.24	-15.27	-27.33	-13.09	-11.87	-20.39
315	-11.16	-9.10	-10.21	-14.65	-12.79	-10.40	-11.49	-11.86	-17.99	-21.54	-20.93	-13.79	-20.39
330	-11.16	-9.84	-9.74	-11.48	-10.87	-9.75	-11.44	-12.05	-15.79	-15.89	-22.18	-17.91	-20.39
345	-11.16	-10.45	-10.58	-11.43	-9.04	-10.87	-11.18	-14.42	-16.70	-14.60	-16.32	-21.26	-20.39
360	-11.16	-11.61	-10.77	-11.01	-9.08	-11.33	-12.51	-15.50	-17.32	-15.48	-16.14	-23.85	-20.39



Peak Value -4.948 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-10.23	-13.54	-15.49	-11.94	-7.76	-5.38	-9.27	-15.13	-8.81	-7.66	-9.34	-9.69	-15.50
15	-10.23	-11.28	-12.95	-10.29	-6.52	-4.59	-8.82	-14.62	-8.33	-7.08	-8.74	-9.27	-15.50
30	-10.23	-11.04	-12.00	-9.71	-6.51	-4.23	-8.48	-13.18	-8.43	-6.78	-8.92	-9.59	-15.50
45	-10.23	-10.68	-12.18	-9.66	-6.87	-4.66	-8.78	-12.68	-9.44	-6.62	-9.44	-10.25	-15.50
60	-10.23	-11.30	-12.46	-10.33	-8.57	-6.11	-9.86	-13.45	-10.38	-7.52	-9.64	-10.86	-15.50
75	-10.23	-12.85	-13.50	-11.91	-10.68	-8.88	-11.82	-14.02	-11.88	-8.72	-10.59	-11.71	-15.50
90	-10.23	-14.43	-14.67	-12.93	-11.27	-10.23	-11.35	-12.14	-11.56	-10.48	-11.32	-13.09	-15.50
105	-10.23	-17.39	-15.47	-13.57	-9.76	-7.96	-9.01	-9.57	-9.93	-11.57	-13.06	-14.09	-15.50
120	-10.23	-20.75	-16.15	-13.24	-8.54	-6.05	-7.02	-8.18	-8.63	-11.89	-15.22	-15.39	-15.50
135	-10.23	-19.70	-16.08	-13.66	-8.54	-5.46	-5.90	-8.27	-7.31	-12.45	-18.10	-16.52	-15.50
150	-10.23	-15.09	-13.60	-12.35	-8.82	-5.30	-5.95	-9.52	-6.58	-14.17	-19.01	-15.97	-15.50
165	-10.23	-11.27	-10.76	-10.16	-9.38	-5.19	-7.08	-9.13	-6.69	-15.64	-17.13	-14.90	-15.50
180	-10.23	-8.92	-8.61	-8.63	-8.81	-5.25	-8.12	-8.58	-7.56	-14.71	-14.30	-13.46	-15.50
195	-10.23	-7.83	-8.09	-7.77	-8.59	-6.04	-8.63	-8.65	-8.01	-13.18	-12.58	-13.97	-15.50
210	-10.23	-7.33	-8.50	-8.24	-9.04	-6.72	-9.45	-8.74	-8.12	-12.89	-12.53	-14.57	-15.50
225	-10.23	-7.81	-9.87	-9.32	-11.14	-8.07	-11.19	-9.20	-8.87	-14.17	-14.26	-17.11	-15.50
240	-10.23	-8.63	-12.11	-12.02	-14.37	-10.26	-14.82	-10.46	-10.96	-17.36	-17.31	-22.04	-15.50
255	-10.23	-9.96	-15.46	-16.57	-18.39	-13.83	-21.20	-13.12	-14.69	-17.61	-21.94	-31.90	-15.50
270	-10.23	-11.67	-17.30	-23.40	-21.36	-16.22	-32.97	-16.28	-17.44	-14.39	-19.76	-23.50	-15.50
285	-10.23	-15.20	-19.27	-34.08	-20.68	-12.97	-18.12	-14.29	-12.40	-12.43	-15.29	-17.67	-15.50
300	-10.23	-20.92	-21.16	-33.90	-17.83	-10.03	-13.20	-12.24	-8.89	-10.84	-12.51	-14.32	-15.50
315	-10.23	-33.68	-29.48	-23.88	-14.73	-8.00	-10.96	-12.51	-7.25	-9.27	-11.59	-12.97	-15.50
330	-10.23	-21.33	-27.36	-17.85	-11.56	-6.95	-9.93	-13.95	-7.56	-8.27	-10.42	-11.32	-15.50
345	-10.23	-15.84	-19.35	-13.83	-9.33	-6.03	-10.05	-14.46	-8.70	-7.85	-9.78	-10.56	-15.50

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.83	-8.12	-8.17	-8.62	-5.34	-4.18	-6.70	-11.99	-7.30	-6.05	-7.49	-8.97	-13.07
15	-6.83	-8.19	-8.68	-8.45	-5.09	-3.30	-5.97	-12.15	-7.06	-5.62	-7.05	-8.57	-13.07
30	-6.83	-8.15	-8.24	-8.05	-5.07	-2.72	-5.27	-10.50	-6.99	-5.25	-7.04	-8.65	-13.07
45	-6.83	-7.75	-7.82	-7.98	-5.41	-2.68	-4.57	-8.99	-7.25	-5.23	-7.25	-8.84	-13.07
60	-6.83	-7.51	-7.94	-7.85	-5.74	-3.67	-4.88	-8.87	-8.18	-5.78	-7.23	-9.39	-13.07
75	-6.83	-7.43	-8.19	-8.62	-7.04	-6.22	-7.05	-9.82	-9.36	-6.74	-6.99	-10.00	-13.07
90	-6.83	-7.26	-8.26	-8.93	-7.59	-7.82	-8.55	-9.20	-8.38	-7.42	-6.59	-10.48	-13.07
105	-6.83	-7.00	-8.37	-7.25	-5.96	-5.69	-6.66	-6.54	-6.34	-7.03	-6.84	-10.54	-13.07
120	-6.83	-6.74	-7.66	-6.13	-4.22	-3.22	-4.15	-3.95	-4.54	-5.99	-7.48	-10.14	-13.07
135	-6.83	-6.93	-7.20	-5.42	-3.70	-2.36	-2.74	-3.66	-2.96	-6.02	-7.92	-10.54	-13.07
150	-6.83	-7.13	-6.68	-5.57	-4.38	-2.44	-2.83	-4.39	-3.12	-7.22	-8.98	-10.86	-13.07
165	-6.83	-6.46	-7.07	-5.79	-5.39	-3.13	-4.20	-5.04	-3.92	-8.58	-10.44	-11.46	-13.07
180	-6.83	-6.42	-6.86	-6.19	-6.47	-3.84	-5.94	-6.47	-5.57	-10.09	-12.23	-11.38	-13.07
195	-6.83	-6.30	-6.95	-6.42	-7.34	-4.83	-7.04	-7.62	-6.55	-11.33	-11.34	-11.37	-13.07
210	-6.83	-6.21	-7.00	-6.67	-7.45	-5.08	-7.52	-6.61	-7.20	-10.69	-9.09	-10.98	-13.07
225	-6.83	-6.19	-7.41	-6.55	-7.04	-4.87	-7.99	-5.96	-6.43	-9.16	-7.07	-9.79	-13.07
240	-6.83	-6.34	-8.43	-6.88	-6.90	-5.72	-8.47	-6.57	-5.51	-8.21	-6.04	-9.20	-13.07
255	-6.83	-6.64	-8.98	-8.43	-8.08	-6.89	-11.32	-8.60	-5.86	-7.83	-6.40	-8.61	-13.07
270	-6.83	-7.38	-10.00	-11.24	-11.02	-9.89	-17.88	-11.93	-6.65	-8.43	-6.22	-8.25	-13.07
285	-6.83	-7.72	-10.24	-17.08	-13.64	-10.88	-14.40	-12.36	-7.81	-9.50	-7.84	-8.93	-13.07
300	-6.83	-8.20	-9.59	-17.79	-12.65	-7.98	-9.32	-9.97	-7.08	-9.86	-9.37	-9.63	-13.07
315	-6.83	-8.28	-9.03	-12.03	-10.08	-5.74	-7.56	-8.95	-6.16	-8.13	-10.33	-9.99	-13.07
330	-6.83	-8.36	-8.63	-9.65	-7.68	-4.84	-7.02	-9.54	-6.44	-6.53	-9.20	-9.87	-13.07
345	-6.83	-8.18	-8.65	-9.00	-5.96	-4.44	-6.68	-10.94	-7.24	-6.31	-8.19	-9.39	-13.07
360	-6.83	-7.83	-8.07	-8.31	-5.30	-4.20	-6.65	-11.77	-7.14	-5.99	-7.49	-8.75	-13.07

Peak Value **-2.363** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.46	-12.16	-10.99	-11.98	-9.52	-11.55	-12.70	-16.10	-18.46	-14.99	-15.57	-23.10	-21.76
15	-11.46	-17.15	-15.92	-15.21	-11.96	-10.86	-11.79	-18.70	-25.98	-17.33	-14.82	-25.53	-21.76
30	-11.46	-21.49	-18.30	-18.03	-13.02	-10.01	-9.67	-16.28	-22.12	-18.68	-14.69	-23.62	-21.76
45	-11.46	-17.94	-15.90	-18.10	-12.85	-9.09	-7.67	-13.29	-17.61	-17.90	-13.85	-19.75	-21.76
60	-11.46	-12.60	-12.87	-15.76	-11.12	-9.36	-7.55	-12.60	-17.69	-18.07	-12.37	-19.14	-21.76
75	-11.46	-10.42	-11.29	-14.17	-10.85	-11.73	-10.19	-13.67	-19.94	-16.66	-10.48	-16.90	-21.76
90	-11.46	-8.70	-10.07	-12.58	-10.23	-12.89	-14.20	-14.64	-14.39	-13.62	-8.96	-15.52	-21.76
105	-11.46	-7.60	-9.58	-9.17	-7.98	-9.65	-12.05	-10.49	-9.99	-10.04	-8.40	-13.46	-21.76
120	-11.46	-6.95	-8.46	-7.46	-5.92	-6.61	-7.89	-6.73	-7.22	-7.75	-8.57	-11.98	-21.76
135	-11.46	-7.27	-7.90	-6.60	-5.39	-5.64	-6.18	-6.01	-5.49	-7.36	-8.38	-12.14	-21.76
150	-11.46	-8.30	-7.98	-7.38	-6.54	-5.86	-6.45	-6.55	-6.71	-8.37	-9.33	-13.13	-21.76
165	-11.46	-8.86	-10.47	-9.29	-8.22	-8.23	-9.07	-8.03	-8.38	-9.64	-11.74	-16.74	-21.76
180	-11.46	-11.77	-13.94	-13.33	-11.67	-11.08	-11.96	-12.57	-12.09	-13.03	-17.04	-25.02	-21.76
195	-11.46	-16.52	-22.63	-20.99	-18.34	-13.58	-15.59	-18.03	-18.55	-24.00	-18.78	-23.46	-21.76
210	-11.46	-29.36	-21.30	-18.03	-15.23	-10.91	-14.22	-11.87	-25.20	-19.83	-12.15	-15.77	-21.76
225	-11.46	-20.39	-15.05	-12.09	-10.04	-8.09	-11.22	-9.26	-12.08	-11.72	-8.22	-11.32	-21.76
240	-11.46	-13.55	-12.67	-9.44	-8.21	-7.76	-9.77	-9.44	-7.55	-9.09	-6.40	-9.57	-21.76
255	-11.46	-10.99	-11.56	-9.75	-8.85	-8.18	-11.73	-10.63	-6.68	-8.55	-6.45	-8.63	-21.76
270	-11.46	-9.65	-11.63	-11.86	-11.84	-12.11	-19.28	-14.71	-7.40	-9.92	-6.43	-8.42	-21.76
285	-11.46	-8.60	-10.99	-17.70	-15.61	-19.30	-19.44	-21.26	-10.54	-14.21	-9.14	-9.66	-21.76
300	-11.46	-8.31	-9.91	-18.27	-14.95	-14.18	-13.01	-15.84	-15.57	-26.47	-13.17	-11.85	-21.76
315	-11.46	-8.40	-9.18	-12.50	-13.10	-10.40	-11.58	-11.79	-17.98	-19.80	-21.77	-14.04	-21.76
330	-11.46	-9.30	-9.20	-10.48	-10.58	-9.72	-11.44	-12.02	-16.73	-15.35	-20.91	-17.34	-21.76
345	-11.46	-10.45	-10.20	-11.01	-9.20	-11.06	-11.42	-14.62	-16.70	-14.80	-16.40	-20.94	-21.76
360	-11.46	-11.66	-10.67	-11.07	-9.51	-11.66	-12.51	-15.94	-17.71	-15.14	-15.18	-22.34	-21.76

Peak Value -5.392 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-8.67	-10.30	-11.38	-11.30	-7.43	-5.06	-7.96	-14.12	-7.64	-6.64	-8.22	-9.14	-13.70
15	-8.67	-8.79	-9.60	-9.48	-6.09	-4.14	-7.29	-13.24	-7.12	-5.92	-7.85	-8.65	-13.70
30	-8.67	-8.36	-8.69	-8.51	-5.83	-3.62	-7.24	-11.83	-7.13	-5.46	-7.85	-8.79	-13.70
45	-8.67	-8.19	-8.55	-8.42	-6.27	-3.81	-7.50	-11.01	-7.67	-5.47	-8.33	-9.21	-13.70
60	-8.67	-9.12	-9.63	-8.62	-7.22	-5.04	-8.26	-11.26	-8.70	-6.05	-8.81	-9.87	-13.70
75	-8.67	-10.47	-11.11	-10.03	-9.37	-7.65	-9.94	-12.13	-9.76	-7.21	-9.57	-10.99	-13.70
90	-8.67	-12.75	-12.95	-11.38	-11.02	-9.43	-9.93	-10.66	-9.63	-8.62	-10.36	-12.12	-13.70
105	-8.67	-15.95	-14.50	-11.73	-10.27	-7.92	-8.15	-8.79	-8.80	-10.05	-12.06	-13.65	-13.70
120	-8.67	-20.14	-15.40	-11.90	-9.11	-5.88	-6.54	-7.22	-7.90	-10.78	-14.03	-14.74	-13.70
135	-8.67	-18.18	-15.48	-11.67	-8.60	-5.12	-5.36	-7.45	-6.52	-11.77	-17.88	-15.65	-13.70
150	-8.67	-13.42	-12.54	-10.25	-8.44	-5.08	-5.30	-8.46	-5.63	-13.56	-20.14	-14.76	-13.70
165	-8.67	-10.20	-9.72	-8.36	-8.59	-4.74	-5.91	-8.07	-5.84	-15.23	-16.33	-13.00	-13.70
180	-8.67	-7.92	-7.80	-7.12	-8.03	-4.75	-7.19	-7.70	-6.67	-13.18	-13.98	-11.58	-13.70
195	-8.67	-6.73	-7.07	-6.58	-7.70	-5.45	-7.69	-8.03	-6.84	-11.57	-12.20	-11.65	-13.70
210	-8.67	-6.23	-7.16	-7.00	-8.24	-6.39	-8.57	-8.15	-7.27	-11.26	-12.05	-12.73	-13.70
225	-8.67	-6.36	-8.23	-7.97	-10.05	-7.69	-10.80	-8.69	-7.81	-12.67	-13.38	-15.07	-13.70
240	-8.67	-7.25	-10.48	-10.40	-12.75	-9.98	-14.34	-9.73	-9.79	-15.56	-16.98	-20.12	-13.70
255	-8.67	-8.63	-12.47	-14.26	-16.02	-12.79	-21.77	-12.87	-13.53	-15.97	-25.65	-31.79	-13.70
270	-8.67	-11.30	-15.04	-19.95	-18.70	-13.87	-23.49	-15.18	-14.66	-13.80	-19.34	-22.44	-13.70
285	-8.67	-15.09	-18.29	-25.84	-18.02	-11.55	-16.04	-12.96	-11.13	-11.29	-13.72	-17.04	-13.70
300	-8.67	-24.12	-21.16	-27.57	-16.51	-9.17	-11.74	-11.28	-7.74	-9.96	-11.71	-13.59	-13.70
315	-8.67	-23.74	-23.71	-22.01	-13.08	-7.56	-9.76	-12.14	-6.46	-8.44	-10.65	-12.16	-13.70
330	-8.67	-15.47	-17.73	-17.24	-10.82	-6.55	-8.97	-13.17	-6.87	-7.15	-9.51	-10.73	-13.70
345	-8.67	-12.08	-13.86	-13.32	-8.75	-5.51	-8.46	-13.37	-7.76	-6.98	-8.90	-9.71	-13.70

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.65	-6.17	-6.12	-7.28	-5.03	-3.98	-5.70	-12.52	-7.27	-5.90	-7.36	-9.24	-12.03
15	-5.65	-6.14	-6.11	-7.28	-4.76	-3.15	-5.28	-11.22	-7.11	-5.60	-7.16	-8.67	-12.03
30	-5.65	-5.83	-5.67	-6.62	-4.46	-2.35	-4.49	-9.53	-6.68	-5.03	-7.09	-8.89	-12.03
45	-5.65	-5.74	-5.58	-6.19	-4.43	-2.33	-3.80	-8.19	-6.88	-5.14	-7.43	-9.27	-12.03
60	-5.65	-5.61	-5.35	-6.12	-4.91	-2.99	-4.22	-8.08	-7.60	-5.53	-7.38	-9.88	-12.03
75	-5.65	-5.50	-5.71	-6.75	-6.04	-4.81	-5.86	-9.41	-9.10	-6.54	-7.06	-9.72	-12.03
90	-5.65	-5.54	-5.98	-7.48	-6.75	-7.13	-7.69	-9.33	-8.36	-7.21	-6.81	-10.15	-12.03
105	-5.65	-5.60	-6.65	-6.73	-6.15	-5.89	-6.14	-6.11	-6.25	-6.98	-6.52	-9.92	-12.03
120	-5.65	-6.05	-6.76	-5.57	-4.51	-3.23	-3.78	-3.68	-4.26	-6.03	-7.27	-9.39	-12.03
135	-5.65	-5.93	-6.38	-4.60	-3.67	-2.45	-2.60	-3.24	-2.91	-5.90	-7.52	-9.76	-12.03
150	-5.65	-6.40	-6.21	-4.37	-4.23	-2.42	-2.58	-3.82	-2.84	-7.24	-9.02	-10.25	-12.03
165	-5.65	-5.84	-6.18	-4.47	-4.91	-3.06	-3.85	-4.90	-3.26	-8.51	-10.40	-10.31	-12.03
180	-5.65	-5.51	-5.69	-4.94	-5.52	-3.85	-5.24	-6.03	-4.76	-9.27	-11.59	-10.01	-12.03
195	-5.65	-5.19	-5.51	-5.14	-6.16	-4.63	-6.02	-6.69	-5.51	-9.93	-10.71	-10.11	-12.03
210	-5.65	-5.16	-5.89	-5.42	-6.19	-4.53	-6.57	-5.97	-6.17	-9.21	-8.63	-9.80	-12.03
225	-5.65	-5.19	-6.21	-5.80	-6.07	-4.55	-6.81	-5.50	-5.63	-8.09	-6.65	-9.24	-12.03
240	-5.65	-5.21	-6.81	-6.80	-6.01	-5.05	-7.53	-6.40	-5.22	-7.30	-5.64	-8.77	-12.03
255	-5.65	-5.47	-7.45	-8.89	-7.26	-6.67	-10.57	-8.49	-5.65	-7.49	-6.16	-8.40	-12.03
270	-5.65	-6.12	-8.24	-12.55	-10.38	-9.58	-15.37	-12.03	-6.82	-8.16	-6.11	-8.63	-12.03
285	-5.65	-6.55	-8.08	-15.80	-13.02	-9.70	-12.63	-12.44	-7.78	-9.47	-7.69	-9.20	-12.03
300	-5.65	-6.98	-7.76	-12.79	-11.39	-7.12	-8.28	-9.65	-7.01	-9.76	-9.25	-9.66	-12.03
315	-5.65	-7.23	-7.25	-9.52	-8.94	-5.13	-6.64	-8.84	-6.22	-8.03	-10.20	-10.40	-12.03
330	-5.65	-7.20	-7.12	-7.84	-6.99	-4.33	-6.13	-9.34	-6.72	-6.53	-9.11	-10.40	-12.03
345	-5.65	-6.63	-6.59	-7.61	-5.67	-4.27	-5.71	-11.11	-7.45	-6.17	-7.91	-9.64	-12.03
360	-5.65	-6.13	-6.11	-6.99	-5.09	-3.90	-5.80	-11.94	-7.38	-5.97	-7.31	-9.16	-12.03

Peak Value **-2.333** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.41	-12.34	-11.12	-11.30	-10.03	-10.95	-12.15	-16.99	-19.41	-14.91	-15.57	-22.57	-21.12
15	-11.41	-21.53	-16.92	-16.36	-12.63	-10.70	-11.32	-18.50	-33.47	-18.35	-15.74	-25.42	-21.12
30	-11.41	-23.21	-18.21	-19.83	-15.21	-10.23	-9.47	-15.38	-20.73	-20.68	-15.79	-23.54	-21.12
45	-11.41	-15.35	-14.61	-17.91	-13.43	-9.67	-7.45	-12.98	-17.24	-20.00	-14.03	-20.27	-21.12
60	-11.41	-11.11	-10.81	-14.80	-11.94	-9.64	-7.44	-11.92	-17.05	-19.26	-12.49	-18.99	-21.12
75	-11.41	-8.23	-9.07	-13.52	-11.01	-11.80	-9.23	-13.51	-20.59	-17.32	-10.58	-15.67	-21.12
90	-11.41	-6.97	-7.95	-13.34	-10.40	-14.14	-13.41	-14.49	-15.78	-14.03	-9.13	-14.49	-21.12
105	-11.41	-6.17	-7.99	-9.98	-8.78	-10.52	-12.48	-10.24	-9.75	-10.29	-7.95	-11.92	-21.12
120	-11.41	-6.28	-7.57	-7.89	-6.52	-6.80	-8.16	-6.48	-7.18	-7.84	-8.29	-10.53	-21.12
135	-11.41	-6.35	-7.27	-6.38	-5.57	-6.04	-6.51	-5.78	-5.69	-7.26	-7.91	-10.92	-21.12
150	-11.41	-7.79	-7.87	-6.82	-6.61	-6.32	-7.01	-6.17	-6.74	-8.50	-9.32	-12.39	-21.12
165	-11.41	-8.82	-9.64	-9.10	-8.12	-8.65	-9.98	-8.07	-8.20	-10.16	-11.47	-16.12	-21.12
180	-11.41	-11.87	-13.11	-13.94	-11.20	-11.90	-12.46	-12.48	-12.14	-14.04	-16.14	-24.86	-21.12
195	-11.41	-18.04	-23.05	-20.91	-16.64	-13.89	-14.51	-15.97	-18.78	-29.91	-17.97	-23.27	-21.12
210	-11.41	-35.24	-23.42	-16.84	-13.82	-9.92	-13.64	-11.03	-22.39	-17.27	-11.84	-15.02	-21.12
225	-11.41	-17.12	-14.38	-12.04	-9.58	-7.71	-10.24	-8.55	-11.60	-10.96	-7.80	-11.23	-21.12
240	-11.41	-11.67	-11.07	-10.33	-7.75	-7.10	-9.12	-9.25	-7.94	-8.36	-5.96	-9.23	-21.12
255	-11.41	-8.79	-10.21	-11.15	-8.41	-8.35	-11.27	-10.72	-6.67	-8.25	-6.17	-8.44	-21.12
270	-11.41	-7.80	-9.54	-14.25	-11.80	-12.71	-17.88	-15.70	-7.72	-9.60	-6.30	-8.75	-21.12
285	-11.41	-7.05	-8.72	-17.21	-15.77	-18.69	-18.45	-21.17	-10.93	-13.99	-9.01	-9.84	-21.12
300	-11.41	-7.05	-8.08	-13.38	-14.28	-13.16	-12.73	-14.47	-15.54	-33.47	-13.38	-11.77	-21.12
315	-11.41	-7.74	-7.78	-10.37	-11.89	-9.60	-11.12	-11.36	-17.96	-18.85	-22.79	-14.61	-21.12
330	-11.41	-9.19	-8.49	-9.17	-10.22	-9.82	-10.92	-11.93	-16.86	-14.84	-21.91	-17.86	-21.12
345	-11.41	-10.78	-9.59	-10.29	-9.66	-10.87	-10.96	-14.56	-16.98	-14.60	-16.94	-20.15	-21.12
360	-11.41	-11.69	-10.55	-10.91	-9.76	-10.72	-12.12	-16.75	-18.27	-14.93	-16.08	-21.34	-21.12

Peak Value **-5.573** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.00	-7.37	-7.78	-9.47	-6.69	-4.95	-6.82	-14.44	-7.55	-6.48	-8.07	-9.45	-12.60
15	-7.00	-6.27	-6.49	-7.86	-5.54	-3.99	-6.53	-12.12	-7.12	-5.84	-7.81	-8.77	-12.60
30	-7.00	-5.91	-5.92	-6.84	-4.84	-3.12	-6.16	-10.84	-6.86	-5.15	-7.72	-9.04	-12.60
45	-7.00	-6.24	-6.16	-6.49	-5.01	-3.22	-6.24	-9.95	-7.30	-5.28	-8.50	-9.63	-12.60
60	-7.00	-7.05	-6.80	-6.75	-5.86	-4.05	-7.03	-10.39	-8.12	-5.72	-8.98	-10.45	-12.60
75	-7.00	-8.81	-8.39	-7.78	-7.71	-5.79	-8.54	-11.55	-9.42	-6.92	-9.61	-10.99	-12.60
90	-7.00	-11.07	-10.35	-8.79	-9.21	-8.09	-9.04	-10.90	-9.23	-8.22	-10.64	-12.14	-12.60
105	-7.00	-14.70	-12.40	-9.51	-9.58	-7.73	-7.29	-8.24	-8.82	-9.72	-12.05	-14.26	-12.60
120	-7.00	-19.09	-14.46	-9.39	-8.83	-5.75	-5.75	-6.91	-7.37	-10.70	-14.08	-15.75	-12.60
135	-7.00	-16.34	-13.72	-9.33	-8.17	-4.96	-4.87	-6.79	-6.17	-11.63	-18.15	-16.07	-12.60
150	-7.00	-12.01	-11.19	-8.02	-7.98	-4.68	-4.53	-7.60	-5.11	-13.24	-20.88	-14.34	-12.60
165	-7.00	-8.89	-8.79	-6.30	-7.72	-4.47	-5.06	-7.75	-4.94	-13.51	-17.00	-11.64	-12.60
180	-7.00	-6.65	-6.56	-5.53	-6.88	-4.59	-6.16	-7.15	-5.64	-11.03	-13.47	-10.16	-12.60
195	-7.00	-5.42	-5.59	-5.26	-6.57	-5.17	-6.69	-7.23	-5.72	-9.97	-11.61	-10.32	-12.60
210	-7.00	-5.16	-5.97	-5.74	-7.02	-6.02	-7.51	-7.59	-6.28	-9.95	-11.44	-11.35	-12.60
225	-7.00	-5.47	-6.93	-6.97	-8.63	-7.43	-9.45	-8.47	-6.90	-11.25	-12.97	-13.61	-12.60
240	-7.00	-6.33	-8.85	-9.34	-10.81	-9.29	-12.67	-9.57	-8.55	-13.91	-17.11	-18.79	-12.60
255	-7.00	-8.20	-10.72	-12.82	-13.62	-11.61	-18.85	-12.46	-12.45	-15.47	-30.68	-28.96	-12.60
270	-7.00	-11.06	-14.13	-17.44	-15.95	-12.48	-18.94	-14.47	-14.12	-13.65	-19.84	-24.40	-12.60
285	-7.00	-16.23	-16.70	-21.36	-16.31	-10.29	-13.95	-13.06	-10.65	-11.37	-13.51	-17.85	-12.60
300	-7.00	-25.30	-19.19	-21.73	-14.53	-8.36	-10.22	-11.39	-7.66	-9.78	-11.37	-13.79	-12.60
315	-7.00	-16.76	-16.60	-17.02	-12.02	-7.05	-8.56	-12.41	-6.52	-8.40	-10.44	-12.47	-12.60
330	-7.00	-11.55	-12.81	-13.64	-9.80	-5.77	-7.88	-12.81	-7.16	-7.22	-9.35	-11.25	-12.60
345	-7.00	-8.74	-9.61	-10.98	-7.89	-5.35	-7.25	-13.72	-7.97	-6.85	-8.49	-10.04	-12.60

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.60	-1.91	-2.53	0.70	0.94	2.60	0.55	-1.26	0.24	-1.23	-0.32	-1.25	-8.68
15	-3.60	-1.75	-1.39	1.20	1.41	2.05	1.07	-0.37	0.26	-1.59	-0.84	-1.61	-8.68
30	-3.60	-1.87	-1.59	0.75	0.47	1.73	1.64	0.02	0.22	-2.49	-3.61	-1.32	-8.68
45	-3.60	-1.98	-0.90	0.14	-1.21	1.20	-0.38	0.18	0.77	-3.15	-4.32	-2.33	-8.68
60	-3.60	-1.51	-1.52	-0.56	0.82	0.86	-0.95	0.47	0.20	-4.44	-4.48	-2.04	-8.68
75	-3.60	-2.61	-1.73	-0.67	-0.10	0.02	-1.40	-1.01	-0.36	-3.92	-2.95	-3.81	-8.68
90	-3.60	-3.26	-3.71	-1.50	-1.72	-0.82	-2.98	-2.39	-2.49	-3.36	-1.74	-5.92	-8.68
105	-3.60	-4.18	-4.26	-3.11	-3.69	-1.56	-2.48	-2.30	-1.32	-5.11	-3.75	-8.65	-8.68
120	-3.60	-4.55	-6.49	-5.24	-4.56	-5.55	-4.69	-6.17	-2.88	-5.36	-4.55	-7.45	-8.68
135	-3.60	-5.78	-4.71	-5.65	-5.44	-5.51	-6.54	-7.18	-2.55	-6.40	-6.13	-5.99	-8.68
150	-3.60	-8.56	-5.98	-6.81	-11.31	-11.41	-7.64	-8.31	-5.02	-9.18	-7.19	-5.34	-8.68
165	-3.60	-6.87	-8.41	-8.05	-13.17	-11.71	-10.95	-11.30	-5.96	-8.35	-7.33	-3.68	-8.68
180	-3.60	-7.24	-9.12	-10.09	-16.80	-11.83	-13.27	-13.06	-9.45	-9.14	-6.56	-3.62	-8.68
195	-3.60	-5.51	-9.68	-9.40	-31.24	-10.27	-14.29	-15.33	-9.40	-9.57	-5.69	-5.21	-8.68
210	-3.60	-7.14	-12.26	-9.96	-16.99	-15.78	-9.92	-15.65	-11.25	-10.59	-6.03	-4.92	-8.68
225	-3.60	-6.13	-9.67	-10.90	-15.02	-11.55	-8.31	-7.06	-10.75	-7.90	-6.93	-5.43	-8.68
240	-3.60	-7.00	-14.22	-9.24	-10.55	-14.36	-7.81	-4.71	-8.27	-4.84	-7.08	-4.59	-8.68
255	-3.60	-7.12	-11.36	-11.06	-9.05	-8.79	-6.35	-5.44	-5.34	-2.19	-7.99	-5.68	-8.68
270	-3.60	-4.95	-6.47	-5.60	-7.63	-6.44	-4.85	-5.64	-4.60	-2.30	-8.16	-6.22	-8.68
285	-3.60	-4.29	-5.38	-4.19	-4.97	-3.66	-2.69	-7.32	-4.37	-3.07	-6.68	-4.75	-8.68
300	-3.60	-3.91	-4.52	-2.37	-3.96	-2.00	-0.40	-3.74	-3.35	-3.85	-3.08	-5.14	-8.68
315	-3.60	-2.61	-2.17	-1.34	-2.80	-2.34	-0.89	-3.56	-2.39	-4.69	-3.64	-3.21	-8.68
330	-3.60	-2.20	-2.77	-1.18	-2.20	0.08	-0.27	-1.01	-0.31	-2.89	-1.78	-2.34	-8.68
345	-3.60	-1.66	-2.32	0.27	0.30	2.03	0.28	-0.82	-0.79	-2.02	-0.36	-1.48	-8.68
360	-3.60	-1.43	-2.95	0.71	1.25	1.55	0.73	-0.43	0.04	-1.51	0.01	-0.69	-8.68



Peak Value 2.603 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-9.47	-12.11	-23.18	-13.06	-7.75	-4.86	-6.71	-6.77	-5.58	-3.54	-4.10	-2.98	-10.13
15	-9.47	-8.04	-10.75	-8.83	-5.10	-4.25	-3.75	-5.08	-5.15	-4.74	-5.85	-4.60	-10.13
30	-9.47	-8.79	-7.36	-10.86	-4.98	-5.50	-4.33	-6.13	-6.16	-6.29	-9.57	-5.48	-10.13
45	-9.47	-4.77	-4.66	-5.48	-8.49	-6.97	-8.05	-8.04	-6.95	-8.48	-11.11	-8.54	-10.13
60	-9.47	-2.47	-3.99	-4.97	-4.53	-6.04	-13.18	-6.65	-9.28	-10.77	-20.69	-10.29	-10.13
75	-9.47	-3.25	-3.42	-2.87	-4.50	-4.86	-11.09	-8.24	-12.16	-10.27	-12.73	-9.42	-10.13
90	-9.47	-3.57	-5.62	-4.43	-7.60	-6.91	-17.24	-16.49	-14.69	-9.34	-13.04	-8.46	-10.13
105	-9.47	-5.19	-5.74	-6.34	-9.91	-27.12	-24.02	-19.15	-11.40	-9.79	-10.27	-9.24	-10.13
120	-9.47	-7.12	-7.79	-9.68	-7.73	-11.35	-35.00	-18.78	-14.44	-9.64	-11.67	-8.22	-10.13
135	-9.47	-10.54	-5.78	-6.88	-5.81	-7.79	-18.84	-13.56	-8.28	-9.59	-8.81	-7.27	-10.13
150	-9.47	-13.74	-7.06	-6.90	-11.78	-17.53	-11.14	-9.47	-7.77	-11.81	-9.60	-7.40	-10.13
165	-9.47	-14.84	-9.68	-8.33	-14.56	-16.12	-14.43	-15.67	-6.78	-8.44	-7.61	-4.33	-10.13
180	-9.47	-15.81	-11.81	-11.05	-17.65	-15.99	-28.91	-15.90	-10.54	-10.11	-6.95	-4.35	-10.13
195	-9.47	-15.55	-11.50	-14.52	-36.49	-14.08	-21.30	-16.31	-9.66	-10.39	-6.78	-5.43	-10.13
210	-9.47	-13.84	-12.95	-11.15	-22.36	-24.87	-18.06	-17.20	-11.35	-12.61	-8.20	-6.03	-10.13
225	-9.47	-9.88	-9.79	-11.87	-16.02	-16.41	-14.89	-13.33	-10.79	-13.81	-11.46	-7.46	-10.13
240	-9.47	-9.34	-14.65	-10.96	-15.40	-21.29	-15.46	-15.96	-16.80	-14.47	-13.95	-7.25	-10.13
255	-9.47	-7.96	-11.84	-12.96	-22.04	-21.96	-18.80	-23.55	-17.25	-20.61	-11.59	-7.00	-10.13
270	-9.47	-6.30	-8.09	-8.51	-20.94	-14.02	-24.16	-19.22	-15.63	-8.32	-9.71	-8.08	-10.13
285	-9.47	-5.97	-8.65	-9.43	-16.51	-11.56	-9.67	-13.64	-10.32	-6.38	-9.84	-6.13	-10.13
300	-9.47	-8.16	-8.85	-10.43	-9.58	-8.93	-6.75	-6.53	-5.97	-5.91	-6.02	-5.30	-10.13
315	-9.47	-7.12	-8.30	-9.93	-10.39	-7.68	-8.27	-5.32	-4.19	-5.19	-7.63	-3.74	-10.13
330	-9.47	-14.19	-10.92	-11.97	-10.87	-9.17	-7.64	-4.51	-4.23	-3.81	-4.01	-3.28	-10.13
345	-9.47	-12.02	-18.17	-10.40	-7.67	-6.69	-6.14	-5.59	-4.94	-4.90	-3.71	-2.84	-10.13
360	-9.47	-14.91	-16.11	-15.08	-7.52	-5.08	-5.16	-5.68	-5.26	-3.66	-3.62	-2.38	-10.13

Peak Value **-2.377** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-4.90	-2.34	-2.56	0.51	0.31	1.75	-0.35	-2.69	-1.08	-5.07	-2.68	-6.07	-14.15
15	-4.90	-2.91	-1.92	0.74	0.31	0.89	-0.67	-2.16	-1.22	-4.47	-2.48	-4.63	-14.15
30	-4.90	-2.85	-2.93	0.44	-0.99	0.83	0.37	-1.19	-0.92	-4.84	-4.88	-3.42	-14.15
45	-4.90	-5.21	-3.28	-1.26	-2.11	0.49	-1.20	-0.52	-0.03	-4.65	-5.34	-3.52	-14.15
60	-4.90	-8.53	-5.15	-2.51	-0.68	-0.13	-1.22	-0.46	-0.32	-5.59	-4.59	-2.75	-14.15
75	-4.90	-11.26	-6.64	-4.67	-2.06	-1.69	-1.89	-1.92	-0.66	-5.06	-3.44	-5.21	-14.15
90	-4.90	-14.88	-8.20	-4.60	-3.01	-2.05	-3.15	-2.56	-2.76	-4.63	-2.07	-9.46	-14.15
105	-4.90	-11.01	-9.66	-5.92	-4.88	-1.57	-2.51	-2.39	-1.77	-6.91	-4.85	-17.60	-14.15
120	-4.90	-8.04	-12.34	-7.18	-7.42	-6.87	-4.69	-6.41	-3.20	-7.39	-5.48	-15.32	-14.15
135	-4.90	-7.55	-11.31	-11.73	-16.31	-9.41	-6.80	-8.31	-3.90	-9.24	-9.49	-11.94	-14.15
150	-4.90	-10.14	-12.56	-23.82	-21.22	-12.63	-10.21	-14.63	-8.32	-12.60	-10.90	-9.58	-14.15
165	-4.90	-7.63	-14.35	-20.20	-18.77	-13.66	-13.54	-13.27	-13.63	-25.32	-19.34	-12.23	-14.15
180	-4.90	-7.90	-12.48	-17.12	-24.29	-13.93	-13.39	-16.24	-16.00	-16.14	-17.32	-11.72	-14.15
195	-4.90	-5.96	-14.34	-10.99	-32.78	-12.61	-15.25	-22.28	-21.65	-17.22	-12.20	-18.15	-14.15
210	-4.90	-8.19	-20.58	-16.17	-18.48	-16.36	-10.65	-20.89	-27.85	-14.88	-10.08	-11.40	-14.15
225	-4.90	-8.51	-25.49	-17.89	-21.92	-13.27	-9.39	-8.23	-30.92	-9.19	-8.82	-9.72	-14.15
240	-4.90	-10.80	-24.48	-14.11	-12.27	-15.35	-8.63	-5.05	-8.93	-5.34	-8.08	-7.98	-14.15
255	-4.90	-14.65	-21.21	-15.58	-9.28	-9.00	-6.60	-5.51	-5.63	-2.25	-10.48	-11.50	-14.15
270	-4.90	-10.70	-11.55	-8.70	-7.84	-7.27	-4.90	-5.84	-4.96	-3.54	-13.41	-10.79	-14.15
285	-4.90	-9.23	-8.15	-5.73	-5.29	-4.42	-3.66	-8.47	-5.65	-5.80	-9.56	-10.41	-14.15
300	-4.90	-5.96	-6.51	-3.11	-5.35	-2.98	-1.55	-6.98	-6.79	-8.07	-6.16	-19.77	-14.15
315	-4.90	-4.51	-3.38	-1.99	-3.63	-3.84	-1.76	-8.34	-7.07	-14.36	-5.84	-12.55	-14.15
330	-4.90	-2.48	-3.49	-1.56	-2.83	-0.47	-1.15	-3.58	-2.57	-10.11	-5.75	-9.43	-14.15
345	-4.90	-2.08	-2.44	-0.12	-0.45	1.40	-0.85	-2.59	-2.90	-5.18	-3.05	-7.18	-14.15

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.37	-1.51	-2.32	0.25	2.02	2.08	0.78	-0.65	-1.10	-3.86	-1.94	-1.34	-12.88
15	-2.37	-1.73	-3.07	0.57	2.08	2.69	1.54	-0.81	-0.88	-2.86	-2.57	-0.10	-12.88
30	-2.37	-1.15	-1.17	0.39	1.65	2.43	1.47	-0.91	-2.77	-2.73	-4.33	-1.68	-12.88
45	-2.37	-1.11	-0.84	-1.20	0.32	1.67	1.13	-0.94	-1.30	-4.04	-6.26	-1.69	-12.88
60	-2.37	-1.92	-0.71	-1.05	-0.12	2.39	-1.00	-1.93	0.27	-2.97	-3.95	-0.47	-12.88
75	-2.37	-1.61	-2.02	0.10	0.37	0.88	-2.01	-2.68	0.17	-2.55	-2.16	-2.12	-12.88
90	-2.37	-2.25	-3.41	-2.01	-1.52	-0.78	-1.89	-1.97	-1.45	-3.64	-1.30	-4.25	-12.88
105	-2.37	-4.08	-6.40	-3.08	-3.39	-1.21	-3.01	-0.72	-2.70	-4.62	-2.57	-8.47	-12.88
120	-2.37	-4.10	-7.03	-4.36	-3.37	-4.16	-4.28	-3.23	-2.67	-6.73	-2.40	-11.01	-12.88
135	-2.37	-4.88	-7.08	-5.26	-4.23	-6.69	-5.04	-6.36	-3.29	-6.25	-4.30	-8.68	-12.88
150	-2.37	-5.37	-6.02	-6.06	-8.69	-10.65	-6.34	-8.23	-5.41	-7.84	-5.30	-6.56	-12.88
165	-2.37	-4.59	-7.77	-8.28	-12.73	-9.97	-11.39	-12.21	-7.16	-5.35	-6.77	-5.05	-12.88
180	-2.37	-5.39	-5.74	-9.61	-18.26	-11.83	-10.16	-12.60	-9.25	-4.56	-7.07	-5.25	-12.88
195	-2.37	-5.04	-6.99	-7.24	-15.57	-13.89	-12.92	-12.70	-5.98	-6.71	-8.98	-4.54	-12.88
210	-2.37	-4.18	-6.82	-11.52	-13.88	-11.04	-11.77	-10.35	-6.02	-6.13	-7.62	-6.38	-12.88
225	-2.37	-5.34	-8.72	-8.80	-11.40	-9.11	-8.52	-7.10	-10.01	-6.08	-9.32	-5.84	-12.88
240	-2.37	-3.34	-9.96	-6.89	-8.75	-8.09	-5.19	-6.06	-13.13	-3.77	-9.36	-6.05	-12.88
255	-2.37	-3.83	-7.13	-5.13	-10.62	-6.24	-2.92	-9.43	-7.03	-5.49	-5.84	-5.71	-12.88
270	-2.37	-3.18	-6.67	-3.13	-6.74	-5.38	-3.07	-7.60	-4.27	-2.90	-6.96	-4.86	-12.88
285	-2.37	-2.02	-3.70	-2.44	-3.25	-1.99	-2.26	-3.71	-3.56	-3.50	-3.38	-3.94	-12.88
300	-2.37	-2.75	-3.65	-1.92	-2.04	-0.07	-0.77	-3.57	-1.81	-3.89	-2.61	-2.88	-12.88
315	-2.37	-1.38	-4.15	-1.60	-0.70	-0.42	-1.34	-5.71	-1.48	-2.64	-3.73	-1.48	-12.88
330	-2.37	-1.40	-1.92	-1.21	-0.57	1.55	-0.60	-1.98	-1.74	-2.37	-2.80	-2.49	-12.88
345	-2.37	-1.05	-1.83	0.36	1.14	2.34	0.36	-1.73	-2.49	-2.86	-2.45	-0.53	-12.88
360	-2.37	-1.93	-2.28	0.31	2.51	2.75	0.11	-0.50	-1.38	-2.18	-0.97	-0.82	-12.88

Peak Value 2.747 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.99	-10.12	-13.61	-9.81	-7.07	-5.55	-6.34	-5.00	-4.09	-6.01	-3.94	-4.07	-22.43
15	-7.99	-6.05	-12.08	-8.25	-5.06	-4.51	-4.41	-7.44	-4.45	-6.24	-5.16	-4.56	-22.43
30	-7.99	-5.15	-7.40	-8.84	-5.09	-3.63	-4.84	-7.42	-6.68	-6.91	-8.77	-7.47	-22.43
45	-7.99	-2.45	-4.71	-8.45	-6.66	-5.60	-4.50	-7.60	-6.17	-13.61	-11.63	-11.03	-22.43
60	-7.99	-2.58	-2.46	-5.76	-4.00	-6.46	-7.11	-8.43	-7.35	-8.72	-12.77	-9.54	-22.43
75	-7.99	-2.11	-3.57	-2.23	-2.47	-6.28	-8.80	-9.93	-11.99	-8.52	-23.10	-10.20	-22.43
90	-7.99	-3.03	-4.72	-5.09	-4.84	-6.92	-12.46	-11.44	-10.98	-9.47	-16.86	-12.18	-22.43
105	-7.99	-4.97	-9.53	-8.41	-10.13	-10.34	-17.89	-16.36	-12.14	-10.27	-10.93	-12.59	-22.43
120	-7.99	-5.77	-11.12	-7.58	-5.72	-11.42	-16.66	-13.76	-11.12	-9.47	-11.18	-11.59	-22.43
135	-7.99	-8.04	-7.90	-6.11	-5.08	-8.54	-15.54	-13.71	-5.44	-6.69	-11.01	-10.65	-22.43
150	-7.99	-8.45	-8.68	-6.47	-9.16	-15.27	-9.81	-10.40	-6.72	-7.88	-8.86	-8.48	-22.43
165	-7.99	-9.45	-9.29	-9.61	-13.33	-19.15	-13.06	-12.50	-7.68	-5.72	-10.01	-6.93	-22.43
180	-7.99	-8.67	-7.34	-16.35	-19.05	-17.30	-10.61	-16.92	-9.67	-6.54	-7.63	-6.96	-22.43
195	-7.99	-8.07	-9.46	-12.36	-15.90	-20.02	-16.51	-18.71	-7.31	-10.84	-8.99	-5.70	-22.43
210	-7.99	-5.99	-7.45	-12.61	-14.68	-13.17	-13.44	-18.64	-7.24	-12.64	-8.34	-8.20	-22.43
225	-7.99	-6.18	-8.81	-9.60	-13.39	-10.18	-17.76	-13.81	-12.02	-13.79	-14.05	-7.93	-22.43
240	-7.99	-3.74	-10.04	-8.16	-11.08	-11.22	-15.81	-14.57	-20.74	-18.52	-12.38	-7.60	-22.43
255	-7.99	-5.02	-7.68	-9.15	-15.23	-14.86	-20.59	-19.52	-13.02	-12.27	-7.42	-5.88	-22.43
270	-7.99	-4.43	-7.95	-7.53	-11.68	-13.69	-15.06	-16.45	-11.42	-5.93	-10.10	-6.17	-22.43
285	-7.99	-4.28	-6.79	-7.36	-8.69	-8.40	-11.42	-9.29	-10.63	-5.36	-8.95	-5.46	-22.43
300	-7.99	-6.20	-8.31	-8.60	-6.77	-8.96	-6.25	-6.93	-6.00	-5.46	-7.26	-3.90	-22.43
315	-7.99	-7.84	-10.05	-9.20	-8.73	-10.96	-9.01	-8.01	-5.08	-3.89	-6.73	-2.57	-22.43
330	-7.99	-11.96	-11.40	-13.71	-12.11	-9.11	-9.76	-7.09	-6.54	-3.51	-5.26	-3.91	-22.43
345	-7.99	-10.36	-12.02	-11.17	-8.60	-4.46	-8.54	-5.83	-6.68	-5.06	-4.02	-2.53	-22.43
360	-7.99	-11.27	-10.25	-9.40	-5.91	-5.21	-8.21	-6.31	-5.69	-3.70	-2.57	-3.72	-22.43

Peak Value -2.114 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.76	-2.16	-2.65	-0.20	1.45	1.26	-0.16	-2.64	-4.13	-7.94	-6.26	-4.65	-13.39
15	-3.76	-3.74	-3.65	-0.04	1.15	1.78	0.26	-1.88	-3.40	-5.53	-6.05	-2.03	-13.39
30	-3.76	-3.36	-2.35	-0.16	0.62	1.19	0.32	-2.01	-5.04	-4.82	-6.27	-3.01	-13.39
45	-3.76	-6.87	-3.13	-2.11	-0.65	0.76	-0.26	-1.99	-3.01	-4.55	-7.75	-2.23	-13.39
60	-3.76	-10.48	-5.52	-2.85	-2.41	1.79	-2.22	-3.03	-0.55	-4.31	-4.56	-1.05	-13.39
75	-3.76	-11.18	-7.25	-3.72	-2.81	-0.05	-3.03	-3.59	-0.10	-3.82	-2.19	-2.85	-13.39
90	-3.76	-10.13	-9.25	-4.95	-4.24	-1.99	-2.29	-2.49	-1.97	-4.95	-1.42	-5.02	-13.39
105	-3.76	-11.38	-9.30	-4.58	-4.43	-1.78	-3.16	-0.84	-3.23	-5.99	-3.25	-10.59	-13.39
120	-3.76	-9.06	-9.17	-7.17	-7.15	-5.07	-4.54	-3.64	-3.34	-10.03	-3.01	-20.02	-13.39
135	-3.76	-7.74	-14.71	-12.77	-11.75	-11.31	-5.45	-7.24	-7.36	-16.42	-5.34	-13.06	-13.39
150	-3.76	-8.31	-9.41	-16.61	-18.60	-12.49	-8.94	-12.28	-11.27	-27.54	-7.81	-11.03	-13.39
165	-3.76	-6.31	-13.06	-14.07	-21.63	-10.52	-16.36	-24.07	-16.61	-16.28	-9.56	-9.59	-13.39
180	-3.76	-8.15	-10.84	-10.64	-26.05	-13.28	-20.17	-14.61	-19.65	-8.92	-16.18	-10.13	-13.39
195	-3.76	-8.04	-10.62	-8.84	-26.96	-15.10	-15.41	-13.95	-11.77	-8.84	-33.36	-10.84	-13.39
210	-3.76	-8.85	-15.50	-18.06	-21.58	-15.16	-16.75	-11.05	-12.14	-7.22	-15.76	-11.01	-13.39
225	-3.76	-12.88	-25.36	-16.56	-15.76	-15.70	-9.08	-8.14	-14.33	-6.89	-11.10	-10.03	-13.39
240	-3.76	-13.91	-27.29	-12.85	-12.58	-10.97	-5.58	-6.72	-13.96	-3.92	-12.35	-11.28	-13.39
255	-3.76	-10.05	-16.42	-7.32	-12.46	-6.88	-3.00	-9.88	-8.29	-6.51	-11.01	-19.98	-13.39
270	-3.76	-9.20	-12.57	-5.09	-8.41	-6.07	-3.35	-8.21	-5.20	-5.90	-9.85	-10.71	-13.39
285	-3.76	-5.93	-6.64	-4.13	-4.71	-3.11	-2.82	-5.12	-4.50	-8.09	-4.79	-9.25	-13.39
300	-3.76	-5.35	-5.47	-2.97	-3.82	-0.67	-2.22	-6.26	-3.90	-9.07	-4.43	-9.67	-13.39
315	-3.76	-2.49	-5.43	-2.43	-1.44	-0.83	-2.16	-9.57	-3.97	-8.67	-6.75	-8.02	-13.39
330	-3.76	-1.80	-2.43	-1.47	-0.89	1.16	-1.16	-3.59	-3.49	-8.72	-6.44	-8.02	-13.39
345	-3.76	-1.59	-2.27	0.05	0.66	1.33	-0.24	-3.86	-4.57	-6.88	-7.65	-4.86	-13.39

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.48	-2.73	-1.54	-0.91	2.02	2.46	0.44	-2.24	-0.74	-1.52	-2.30	0.16	-7.06
15	-2.48	-0.69	-0.61	-0.90	2.71	3.20	0.30	-1.36	-0.48	-0.66	-2.10	0.31	-7.06
30	-2.48	0.13	-1.68	-0.33	2.17	3.27	0.91	-1.02	0.17	-0.04	-2.92	-0.23	-7.06
45	-2.48	-0.05	-0.81	-0.47	1.93	2.78	0.56	-0.44	0.58	-1.86	-4.00	-1.67	-7.06
60	-2.48	0.10	-0.18	-0.18	0.35	2.69	-1.11	0.42	-0.33	-3.09	-4.50	-1.92	-7.06
75	-2.48	0.04	0.24	0.57	0.75	1.47	-1.90	0.44	-1.35	-4.71	-5.78	-3.43	-7.06
90	-2.48	-1.49	-0.97	-1.96	0.34	-0.10	-1.00	-1.44	-3.03	-3.74	-4.47	-3.92	-7.06
105	-2.48	-3.41	-4.70	-4.54	-2.59	-1.00	0.16	-0.35	-2.49	-3.06	-6.82	-5.62	-7.06
120	-2.48	-5.21	-7.81	-7.30	-2.57	-2.45	-2.01	-3.31	-2.42	-3.48	-7.90	-8.01	-7.06
135	-2.48	-4.89	-7.95	-4.55	-3.61	-4.73	-4.92	-5.38	-2.06	-5.21	-5.49	-5.33	-7.06
150	-2.48	-5.66	-4.69	-6.09	-10.26	-11.06	-8.04	-6.83	-2.97	-4.98	-7.79	-5.38	-7.06
165	-2.48	-4.52	-5.74	-6.65	-14.24	-13.79	-12.58	-9.63	-5.29	-7.61	-6.15	-6.08	-7.06
180	-2.48	-5.13	-3.51	-6.83	-14.59	-14.78	-10.72	-11.84	-9.45	-6.63	-4.48	-3.38	-7.06
195	-2.48	-4.12	-5.22	-5.50	-10.61	-14.53	-11.72	-9.71	-8.21	-8.39	-4.55	-4.69	-7.06
210	-2.48	-4.80	-6.80	-7.88	-9.78	-13.82	-11.83	-8.34	-9.01	-9.68	-6.20	-4.23	-7.06
225	-2.48	-3.14	-6.59	-7.27	-9.90	-6.95	-7.99	-5.91	-11.96	-7.60	-7.43	-4.97	-7.06
240	-2.48	-3.44	-7.40	-6.03	-7.40	-5.90	-5.08	-8.62	-5.27	-4.23	-6.99	-3.48	-7.06
255	-2.48	-2.37	-6.49	-5.67	-5.02	-3.90	-3.61	-13.34	-3.20	-3.13	-8.74	-3.81	-7.06
270	-2.48	-2.27	-2.99	-5.42	-3.45	-2.14	-2.50	-7.46	-4.76	-0.78	-7.55	-7.05	-7.06
285	-2.48	-0.97	-2.22	-2.64	-1.11	-1.76	-1.21	-4.76	-3.39	-2.67	-3.74	-5.18	-7.06
300	-2.48	-2.46	-2.03	-2.10	-0.58	-1.47	-3.24	-4.02	-1.17	-5.69	-3.07	-4.69	-7.06
315	-2.48	-1.24	-1.63	-2.52	-2.20	-0.18	-3.90	-3.22	-0.71	-4.00	-3.71	-3.10	-7.06
330	-2.48	-1.15	-0.84	-1.84	-0.60	0.80	-1.65	-3.34	-0.58	-2.58	-1.50	-1.34	-7.06
345	-2.48	-1.67	-1.56	-0.90	1.50	1.90	0.18	-1.82	-0.32	-2.63	-1.77	-0.90	-7.06
360	-2.48	-1.61	-1.42	-1.21	3.07	3.20	-0.44	-1.78	-0.33	-2.05	-2.22	-0.17	-7.06

Peak Value 3.273 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-8.16	-9.40	-8.04	-6.50	-7.41	-3.49	-4.33	-5.94	-6.03	-3.83	-5.76	-1.09	-7.84
15	-8.16	-3.75	-4.99	-6.69	-4.26	-1.97	-3.00	-5.71	-5.04	-5.71	-5.44	-1.84	-7.84
30	-8.16	-1.46	-5.88	-7.07	-4.05	-2.19	-2.81	-5.24	-3.70	-4.99	-7.27	-2.80	-7.84
45	-8.16	-1.12	-2.78	-10.88	-2.77	-2.96	-3.04	-6.05	-3.28	-8.91	-7.47	-4.68	-7.84
60	-8.16	-0.38	-1.57	-4.92	-4.29	-5.53	-4.98	-6.95	-4.50	-8.10	-10.33	-6.26	-7.84
75	-8.16	-0.35	-0.43	-2.01	-2.57	-5.35	-6.61	-6.63	-7.71	-8.38	-10.99	-7.25	-7.84
90	-8.16	-2.12	-1.27	-4.29	-3.00	-6.73	-8.51	-9.56	-10.15	-11.28	-12.95	-5.72	-7.84
105	-8.16	-5.10	-6.63	-8.32	-7.03	-10.52	-9.80	-10.19	-8.43	-8.87	-12.13	-6.87	-7.84
120	-8.16	-9.72	-12.67	-9.16	-5.90	-10.66	-9.42	-15.49	-7.76	-6.95	-9.75	-8.23	-7.84
135	-8.16	-13.05	-12.29	-4.69	-5.32	-8.60	-10.31	-11.55	-5.65	-7.92	-7.83	-6.34	-7.84
150	-8.16	-10.66	-7.99	-6.83	-10.45	-11.83	-9.72	-8.67	-5.38	-6.10	-8.25	-6.85	-7.84
165	-8.16	-7.24	-7.39	-9.10	-16.43	-16.94	-12.80	-10.58	-6.13	-9.09	-6.26	-6.95	-7.84
180	-8.16	-6.39	-5.68	-10.94	-20.53	-18.46	-11.90	-12.83	-9.76	-7.07	-5.03	-3.71	-7.84
195	-8.16	-4.62	-8.46	-7.32	-11.01	-19.21	-22.72	-15.46	-8.85	-9.85	-6.99	-5.08	-7.84
210	-8.16	-5.16	-7.88	-8.39	-10.27	-14.39	-24.16	-20.36	-9.14	-12.68	-8.71	-4.57	-7.84
225	-8.16	-3.34	-7.51	-7.42	-9.99	-7.32	-20.13	-15.23	-17.65	-13.10	-11.06	-5.61	-7.84
240	-8.16	-3.62	-7.93	-7.10	-9.16	-8.99	-10.94	-16.67	-26.23	-11.23	-10.79	-3.82	-7.84
255	-8.16	-2.86	-8.85	-9.61	-8.26	-18.51	-18.14	-17.60	-13.30	-10.90	-12.04	-4.53	-7.84
270	-8.16	-4.60	-5.00	-9.34	-6.96	-10.23	-12.13	-16.10	-10.22	-5.15	-12.45	-9.79	-7.84
285	-8.16	-3.74	-4.78	-7.39	-5.01	-9.62	-7.07	-8.78	-6.09	-6.02	-6.28	-7.21	-7.84
300	-8.16	-6.88	-7.35	-8.11	-4.61	-8.30	-7.06	-6.06	-3.76	-5.94	-4.87	-6.20	-7.84
315	-8.16	-6.68	-6.86	-11.22	-8.78	-12.26	-6.99	-7.49	-3.03	-4.05	-5.60	-3.70	-7.84
330	-8.16	-11.34	-7.42	-10.12	-7.00	-7.44	-5.54	-8.40	-5.27	-4.49	-3.54	-1.99	-7.84
345	-8.16	-8.71	-8.79	-8.01	-8.06	-5.29	-5.61	-5.58	-6.56	-4.78	-4.90	-2.13	-7.84
360	-8.16	-9.10	-6.49	-9.09	-7.04	-3.60	-6.13	-4.48	-5.52	-4.52	-4.99	-1.49	-7.84

Peak Value -0.347 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.84	-3.79	-2.65	-2.31	1.50	1.19	-1.33	-4.65	-2.26	-5.36	-4.91	-5.88	-14.91
15	-3.84	-3.66	-2.58	-2.24	1.73	1.62	-2.44	-3.34	-2.34	-2.29	-4.80	-3.77	-14.91
30	-3.84	-4.99	-3.77	-1.37	0.99	1.82	-1.49	-3.09	-2.12	-1.71	-4.91	-3.73	-14.91
45	-3.84	-6.66	-5.19	-0.89	0.13	1.44	-1.93	-1.84	-1.72	-2.81	-6.60	-4.67	-14.91
60	-3.84	-9.72	-5.82	-1.96	-1.48	1.98	-3.40	-0.45	-2.42	-4.74	-5.81	-3.91	-14.91
75	-3.84	-10.61	-8.18	-2.92	-1.97	0.46	-3.69	-0.50	-2.49	-7.14	-7.33	-5.76	-14.91
90	-3.84	-10.14	-12.70	-5.77	-2.36	-1.16	-1.85	-2.17	-3.96	-4.59	-5.14	-8.60	-14.91
105	-3.84	-8.34	-9.16	-6.91	-4.53	-1.51	-0.30	-0.82	-3.76	-4.38	-8.34	-11.65	-14.91
120	-3.84	-7.10	-9.53	-11.88	-5.28	-3.16	-2.88	-3.58	-3.93	-6.08	-12.51	-21.00	-14.91
135	-3.84	-5.61	-9.95	-19.83	-8.48	-7.02	-6.40	-6.58	-4.56	-8.54	-9.30	-12.15	-14.91
150	-3.84	-7.31	-7.44	-14.11	-23.98	-18.95	-12.98	-11.47	-6.69	-11.42	-17.83	-10.82	-14.91
165	-3.84	-7.85	-10.72	-10.31	-18.26	-16.68	-25.67	-16.67	-12.86	-13.01	-22.40	-13.51	-14.91
180	-3.84	-11.11	-7.56	-8.97	-15.87	-17.20	-16.97	-18.77	-21.12	-16.79	-13.76	-14.81	-14.91
195	-3.84	-13.80	-8.02	-10.17	-21.20	-16.35	-12.08	-11.05	-16.90	-13.85	-8.21	-15.34	-14.91
210	-3.84	-15.74	-13.39	-17.41	-19.47	-22.95	-12.10	-8.62	-24.13	-12.70	-9.78	-15.43	-14.91
225	-3.84	-16.61	-13.82	-22.13	-27.00	-17.91	-8.26	-6.45	-13.33	-9.03	-9.89	-13.59	-14.91
240	-3.84	-17.56	-16.84	-12.65	-12.16	-8.83	-6.39	-9.36	-5.31	-5.19	-9.33	-14.75	-14.91
255	-3.84	-12.13	-10.26	-7.92	-7.80	-4.05	-3.77	-15.37	-3.65	-3.93	-11.48	-11.96	-14.91
270	-3.84	-6.10	-7.29	-7.68	-6.01	-2.87	-3.00	-8.09	-6.22	-2.75	-9.25	-10.36	-14.91
285	-3.84	-4.24	-5.73	-4.42	-3.39	-2.53	-2.52	-6.95	-6.75	-5.37	-7.28	-9.45	-14.91
300	-3.84	-4.41	-3.55	-3.35	-2.77	-2.48	-5.56	-8.27	-4.65	-18.30	-7.78	-10.02	-14.91
315	-3.84	-2.71	-3.18	-3.16	-3.28	-0.46	-6.84	-5.26	-4.56	-23.33	-8.24	-12.00	-14.91
330	-3.84	-1.59	-1.92	-2.54	-1.73	0.09	-3.93	-4.96	-2.38	-7.06	-5.76	-9.91	-14.91
345	-3.84	-2.62	-2.47	-1.84	0.99	0.98	-1.16	-4.19	-1.50	-6.70	-4.67	-6.99	-14.91



### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-0.29	0.44	1.14	2.00	1.98	4.12	2.97	0.70	-0.06	-1.79	-3.13	0.93	-11.45
15	-0.29	1.18	1.48	1.87	3.04	4.47	3.76	2.23	-0.16	-0.26	-1.79	0.52	-11.45
30	-0.29	0.93	1.83	1.73	2.61	4.67	3.74	1.69	0.85	0.55	-3.07	0.22	-11.45
45	-0.29	0.85	1.20	1.74	2.07	4.17	4.19	2.77	0.70	0.77	-3.82	0.02	-11.45
60	-0.29	1.50	1.24	0.28	1.47	5.25	4.09	2.27	0.83	-0.15	-4.92	0.30	-11.45
75	-0.29	1.10	1.43	-0.35	0.78	3.78	2.87	1.92	0.07	-0.04	-3.24	-1.72	-11.45
90	-0.29	0.01	1.00	-1.11	0.69	3.50	1.51	1.27	-0.44	0.01	-2.81	-1.77	-11.45
105	-0.29	-1.63	-2.33	-4.58	-0.67	2.65	0.91	2.11	-0.56	0.78	-2.08	-3.92	-11.45
120	-0.29	-4.32	-5.71	-4.93	-1.29	1.06	-0.08	0.40	-1.14	-1.40	-2.99	-6.63	-11.45
135	-0.29	-4.08	-6.63	-4.14	-1.62	-1.09	-1.34	-2.30	-1.85	-2.23	-4.47	-9.51	-11.45
150	-0.29	-3.43	-6.41	-4.59	-5.42	-6.71	-2.18	-4.45	-3.00	-2.88	-6.60	-8.68	-11.45
165	-0.29	-1.24	-5.41	-3.85	-6.45	-9.25	-5.89	-4.82	-4.17	-4.86	-5.65	-5.20	-11.45
180	-0.29	-2.22	-3.18	-3.86	-9.07	-9.30	-7.42	-9.82	-7.17	-3.22	-6.84	-5.83	-11.45
195	-0.29	-1.78	-2.63	-4.22	-10.24	-7.98	-6.77	-12.96	-6.82	-4.33	-5.00	-5.82	-11.45
210	-0.29	-0.20	-3.50	-4.01	-6.49	-5.09	-8.13	-15.75	-7.91	-5.58	-7.30	-6.38	-11.45
225	-0.29	-1.63	-3.23	-5.33	-7.34	-4.76	-4.69	-13.31	-12.96	-4.71	-5.12	-4.48	-11.45
240	-0.29	-1.84	-3.10	-4.34	-5.43	-5.04	-4.73	-12.49	-7.18	-4.10	-4.64	-3.89	-11.45
255	-0.29	-0.10	-0.68	-4.31	-4.66	-2.49	-3.15	-5.55	-2.85	-5.69	-2.87	-3.47	-11.45
270	-0.29	-0.38	-0.12	-2.40	-1.56	-0.82	-2.11	-4.38	-1.80	-2.25	-2.55	-3.27	-11.45
285	-0.29	-0.47	-0.22	-0.85	-0.88	0.50	-1.11	-3.76	-0.75	-2.27	0.45	-2.55	-11.45
300	-0.29	0.04	-0.08	-0.04	-0.57	0.85	0.02	-1.75	0.19	-2.10	-1.32	-1.50	-11.45
315	-0.29	0.85	0.39	0.35	-0.88	0.81	-0.64	-0.03	-1.61	-1.94	-2.03	-0.30	-11.45
330	-0.29	1.82	0.61	0.76	0.56	2.40	1.77	0.60	-1.26	-1.07	-2.19	0.33	-11.45
345	-0.29	1.45	1.07	2.31	1.56	2.79	2.57	0.93	-0.35	-2.08	-3.55	1.68	-11.45
360	-0.29	0.81	0.56	1.83	2.74	3.51	2.63	1.07	-0.27	-1.61	-2.93	1.46	-11.45

Peak Value 5.253 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.10	-6.48	-4.25	-3.17	-6.49	-4.70	-2.04	-4.10	-4.38	-4.63	-5.29	-2.64	-14.82
15	-7.10	-3.62	-1.85	-1.68	-4.14	-1.92	-1.28	-3.38	-3.05	-3.91	-3.74	-4.14	-14.82
30	-7.10	-1.48	-2.07	-2.49	-4.29	-2.15	-0.77	-4.21	-3.11	-5.10	-5.75	-4.79	-14.82
45	-7.10	-0.72	-2.45	-2.79	-5.33	-2.72	-1.28	-3.55	-3.26	-5.43	-5.79	-7.25	-14.82
60	-7.10	0.66	-0.87	-4.04	-7.16	-1.94	-2.51	-3.26	-4.23	-5.69	-9.23	-9.12	-14.82
75	-7.10	0.69	0.46	-2.25	-3.27	-2.44	-3.13	-4.48	-6.66	-5.52	-10.69	-7.54	-14.82
90	-7.10	-0.42	0.74	-2.26	-4.70	-4.79	-5.85	-7.18	-6.52	-6.38	-11.34	-8.79	-14.82
105	-7.10	-2.97	-2.67	-7.19	-8.45	-6.27	-9.61	-9.63	-7.55	-4.75	-9.14	-7.31	-14.82
120	-7.10	-8.95	-8.12	-8.47	-3.80	-4.36	-10.50	-9.37	-5.49	-4.21	-10.53	-8.30	-14.82
135	-7.10	-17.84	-9.08	-5.52	-2.08	-4.45	-8.80	-10.21	-3.90	-4.10	-10.63	-9.54	-14.82
150	-7.10	-9.65	-12.54	-5.17	-6.25	-7.33	-5.66	-7.63	-4.51	-3.26	-11.52	-8.88	-14.82
165	-7.10	-3.63	-9.19	-5.70	-10.13	-13.56	-6.59	-5.65	-4.32	-5.16	-6.37	-5.73	-14.82
180	-7.10	-3.94	-5.38	-5.88	-15.40	-16.25	-9.01	-10.62	-9.02	-5.08	-7.24	-6.56	-14.82
195	-7.10	-2.25	-3.42	-4.56	-11.15	-13.25	-11.35	-16.79	-10.22	-7.05	-5.12	-6.97	-14.82
210	-7.10	-0.24	-3.95	-4.14	-6.91	-6.26	-14.76	-23.88	-11.52	-12.43	-8.37	-7.05	-14.82
225	-7.10	-1.84	-3.78	-6.12	-7.38	-4.95	-8.81	-19.45	-19.03	-9.79	-7.49	-4.85	-14.82
240	-7.10	-2.47	-3.91	-5.65	-6.20	-8.87	-12.74	-29.06	-16.45	-8.26	-6.85	-4.09	-14.82
255	-7.10	-0.93	-2.04	-6.86	-6.84	-9.81	-23.30	-12.36	-11.47	-9.91	-5.67	-3.58	-14.82
270	-7.10	-2.80	-2.35	-6.91	-3.92	-7.38	-14.47	-18.31	-9.98	-4.47	-8.11	-4.34	-14.82
285	-7.10	-3.81	-4.31	-7.24	-2.99	-5.95	-9.67	-6.24	-8.65	-3.60	-7.10	-4.49	-14.82
300	-7.10	-5.91	-6.08	-8.16	-4.63	-10.93	-6.43	-3.12	-5.07	-3.28	-7.47	-2.72	-14.82
315	-7.10	-6.97	-7.02	-7.72	-6.37	-12.09	-8.19	-4.62	-4.13	-3.17	-7.77	-2.75	-14.82
330	-7.10	-8.93	-6.92	-6.61	-7.38	-11.11	-5.29	-5.14	-5.74	-3.30	-5.58	-1.78	-14.82
345	-7.10	-6.77	-4.78	-4.73	-6.85	-6.38	-3.70	-3.73	-4.57	-4.26	-6.12	-0.19	-14.82
360	-7.10	-6.41	-4.77	-4.09	-6.37	-5.20	-3.29	-3.81	-5.33	-4.27	-4.71	-2.19	-14.82

Peak Value 0.738 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-1.31	-0.55	-0.35	0.42	1.31	3.51	1.32	-1.05	-2.07	-4.97	-7.19	-1.59	-14.13
15	-1.31	-0.57	-1.24	-0.66	2.12	3.34	2.12	0.83	-3.29	-2.72	-6.21	-1.29	-14.13
30	-1.31	-2.78	-0.44	-0.33	1.61	3.66	1.84	0.40	-1.39	-0.83	-6.44	-1.43	-14.13
45	-1.31	-4.34	-1.26	-0.15	1.20	3.18	2.73	1.61	-1.53	-0.42	-8.20	-0.88	-14.13
60	-1.31	-6.04	-2.90	-1.73	0.82	4.33	3.02	0.84	-0.80	-1.57	-6.93	-0.22	-14.13
75	-1.31	-9.36	-5.58	-4.86	-1.39	2.59	1.62	0.80	-0.97	-1.49	-4.11	-3.05	-14.13
90	-1.31	-10.24	-11.26	-7.45	-0.80	2.81	0.63	0.60	-1.67	-1.12	-3.47	-2.73	-14.13
105	-1.31	-7.38	-13.58	-8.04	-1.47	2.05	0.51	1.81	-1.54	-0.65	-3.03	-6.59	-14.13
120	-1.31	-6.16	-9.43	-7.46	-4.87	-0.41	-0.49	-0.08	-3.13	-4.61	-3.84	-11.59	-14.13
135	-1.31	-4.27	-10.29	-9.81	-11.57	-3.79	-2.19	-3.07	-6.09	-6.79	-5.68	-30.59	-14.13
150	-1.31	-4.61	-7.63	-13.60	-13.00	-15.49	-4.77	-7.31	-8.31	-13.67	-8.29	-22.14	-14.13
165	-1.31	-4.99	-7.76	-8.44	-8.88	-11.25	-14.14	-12.42	-18.81	-16.61	-13.82	-14.60	-14.13
180	-1.31	-7.06	-7.20	-8.15	-10.22	-10.28	-12.55	-17.56	-11.75	-7.79	-17.40	-13.93	-14.13
195	-1.31	-11.70	-10.41	-15.49	-17.50	-9.51	-8.64	-15.29	-9.47	-7.66	-20.81	-12.17	-14.13
210	-1.31	-20.28	-13.52	-19.20	-16.78	-11.35	-9.20	-16.48	-10.39	-6.58	-13.93	-14.86	-14.13
225	-1.31	-14.83	-12.45	-13.09	-28.96	-18.37	-6.82	-14.52	-14.20	-6.32	-8.87	-15.32	-14.13
240	-1.31	-10.58	-10.80	-10.20	-13.30	-7.36	-5.48	-12.58	-7.72	-6.21	-8.64	-17.45	-14.13
255	-1.31	-7.72	-6.39	-7.84	-8.70	-3.38	-3.20	-6.57	-3.49	-7.75	-6.11	-19.28	-14.13
270	-1.31	-4.06	-4.07	-4.30	-5.34	-1.90	-2.37	-4.56	-2.52	-6.24	-3.97	-9.89	-14.13
285	-1.31	-3.16	-2.37	-1.99	-5.02	-0.62	-1.76	-7.38	-1.52	-8.05	-0.39	-6.98	-14.13
300	-1.31	-1.24	-1.34	-0.77	-2.74	0.55	-1.10	-7.44	-1.34	-8.32	-2.53	-7.59	-14.13
315	-1.31	0.07	-0.48	-0.38	-2.32	0.58	-1.48	-1.89	-5.19	-8.03	-3.38	-3.97	-14.13
330	-1.31	1.43	-0.24	-0.12	-0.20	2.21	0.82	-0.75	-3.18	-5.03	-4.85	-3.82	-14.13
345	-1.31	0.74	-0.24	1.35	0.88	2.23	1.40	-0.90	-2.41	-6.13	-7.04	-2.89	-14.13

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-1.98	-1.23	-0.07	1.37	0.63	2.04	1.32	-0.42	-0.95	-2.12	-3.53	-2.19	-12.46
15	-1.98	-0.19	-0.39	1.49	1.44	2.34	2.74	0.72	-0.67	-1.71	-2.29	-1.79	-12.46
30	-1.98	-0.31	0.24	0.95	1.09	1.91	2.17	0.22	0.07	-0.23	-2.15	-1.54	-12.46
45	-1.98	-0.38	-0.90	-0.13	1.45	2.29	2.86	1.29	0.68	0.29	-2.60	-2.50	-12.46
60	-1.98	-0.96	-0.73	-1.33	-1.14	3.07	1.57	1.70	0.58	-1.17	-3.63	-2.18	-12.46
75	-1.98	-0.83	-1.98	-1.86	-1.82	1.35	1.24	2.02	-0.47	-2.04	-3.66	-3.81	-12.46
90	-1.98	-1.88	-2.16	-4.08	-2.37	0.08	0.69	1.42	-2.83	-2.03	-3.60	-5.16	-12.46
105	-1.98	-2.79	-3.79	-5.37	-5.26	-0.91	-0.77	0.82	-1.73	-1.26	-4.71	-6.53	-12.46
120	-1.98	-3.64	-6.98	-6.23	-3.18	-2.27	-1.61	-0.09	-2.39	-2.21	-5.07	-10.14	-12.46
135	-1.98	-3.15	-7.36	-6.62	-3.70	-5.02	-2.04	-2.16	-2.02	-2.02	-4.94	-9.42	-12.46
150	-1.98	-4.34	-5.54	-6.19	-8.15	-8.95	-3.52	-4.53	-3.10	-4.79	-5.51	-6.54	-12.46
165	-1.98	-3.30	-5.91	-4.40	-8.89	-13.07	-5.73	-7.22	-5.43	-5.76	-4.16	-5.20	-12.46
180	-1.98	-1.99	-6.74	-3.97	-6.81	-12.90	-5.48	-12.03	-13.39	-7.25	-3.53	-3.38	-12.46
195	-1.98	-1.98	-4.07	-4.69	-6.45	-10.23	-6.54	-10.98	-14.16	-9.89	-3.70	-4.29	-12.46
210	-1.98	-1.15	-5.01	-4.34	-6.95	-6.29	-9.82	-11.58	-14.30	-10.56	-3.96	-5.15	-12.46
225	-1.98	-0.79	-4.44	-5.80	-6.43	-5.63	-8.14	-9.84	-10.49	-6.31	-4.15	-3.52	-12.46
240	-1.98	-1.19	-2.79	-5.72	-7.49	-5.22	-4.84	-14.07	-4.66	-5.26	-5.31	-3.82	-12.46
255	-1.98	-0.73	-3.07	-4.61	-8.72	-3.61	-3.26	-6.83	-1.94	-4.62	-5.63	-4.80	-12.46
270	-1.98	-0.22	-1.70	-2.13	-4.16	-2.09	-1.83	-4.65	-3.95	-1.63	-5.08	-5.66	-12.46
285	-1.98	-1.06	-1.66	-1.72	-3.47	-0.35	-1.78	-3.04	-2.63	-3.44	-2.59	-5.63	-12.46
300	-1.98	-1.15	-1.42	-1.30	-1.32	0.23	-2.69	-2.70	-1.19	-3.92	-2.80	-4.28	-12.46
315	-1.98	-1.22	-0.13	-1.25	-0.34	0.08	-1.33	-2.13	-1.91	-3.76	-4.01	-3.61	-12.46
330	-1.98	-0.33	0.48	0.35	-0.13	1.60	0.46	-1.14	-1.10	-2.08	-2.61	-3.46	-12.46
345	-1.98	-1.31	0.51	1.03	1.09	2.10	1.53	-0.80	-1.21	-2.66	-3.68	-2.40	-12.46
360	-1.98	-1.96	0.14	0.59	1.23	2.41	0.73	-0.14	-1.31	-2.38	-3.05	-2.09	-12.46

Peak Value 3.074 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.99	-5.96	-6.39	-4.67	-7.27	-9.00	-10.26	-6.58	-6.14	-5.03	-6.31	-3.95	-17.00
15	-6.99	-2.91	-4.24	-1.99	-5.56	-6.49	-6.19	-3.79	-4.66	-5.61	-3.83	-3.89	-17.00
30	-6.99	-2.07	-2.77	-1.80	-5.28	-5.37	-5.12	-4.42	-3.55	-5.28	-4.43	-3.60	-17.00
45	-6.99	-1.78	-2.67	-2.61	-4.41	-6.64	-4.04	-4.73	-3.79	-4.88	-5.88	-5.06	-17.00
60	-6.99	-2.04	-2.12	-4.11	-8.96	-7.95	-5.51	-4.27	-4.39	-6.64	-6.71	-5.64	-17.00
75	-6.99	-1.80	-3.31	-3.67	-4.48	-5.13	-5.38	-7.46	-4.94	-7.57	-6.52	-7.43	-17.00
90	-6.99	-3.46	-3.83	-5.62	-6.06	-7.56	-7.62	-6.69	-7.87	-7.53	-8.45	-8.51	-17.00
105	-6.99	-4.48	-6.26	-12.77	-22.96	-14.30	-13.02	-8.38	-6.95	-7.62	-8.25	-8.42	-17.00
120	-6.99	-8.41	-14.74	-12.52	-7.12	-6.74	-10.73	-8.18	-8.23	-6.98	-7.21	-11.01	-17.00
135	-6.99	-17.94	-13.29	-8.39	-5.35	-8.31	-8.50	-6.89	-4.85	-5.29	-6.98	-9.57	-17.00
150	-6.99	-15.47	-8.51	-7.21	-9.85	-12.28	-6.37	-6.03	-5.92	-7.13	-6.89	-6.96	-17.00
165	-6.99	-6.83	-7.92	-5.01	-12.09	-27.76	-6.34	-7.85	-6.30	-7.83	-4.39	-5.65	-17.00
180	-6.99	-3.95	-7.90	-4.57	-8.00	-22.62	-5.72	-12.68	-13.80	-9.40	-3.72	-3.56	-17.00
195	-6.99	-2.91	-4.23	-4.79	-7.15	-13.77	-7.62	-14.49	-17.76	-11.87	-4.67	-4.47	-17.00
210	-6.99	-1.31	-5.07	-4.42	-6.99	-6.40	-10.55	-19.49	-17.01	-11.27	-6.44	-5.22	-17.00
225	-6.99	-0.82	-4.69	-6.14	-6.54	-6.25	-9.37	-23.03	-15.63	-7.74	-7.94	-3.80	-17.00
240	-6.99	-1.42	-3.20	-6.96	-8.99	-7.06	-6.98	-20.65	-21.35	-10.64	-11.73	-4.62	-17.00
255	-6.99	-1.89	-4.44	-6.91	-11.49	-6.69	-10.92	-20.78	-10.15	-11.89	-13.09	-6.47	-17.00
270	-6.99	-3.33	-4.42	-7.17	-6.78	-5.53	-7.14	-36.26	-11.87	-4.45	-13.85	-12.53	-17.00
285	-6.99	-5.44	-7.08	-8.52	-6.57	-4.62	-9.00	-10.83	-9.60	-4.97	-7.13	-13.10	-17.00
300	-6.99	-9.99	-11.88	-13.11	-6.43	-7.05	-15.18	-9.53	-4.78	-4.64	-6.20	-6.54	-17.00
315	-6.99	-16.06	-12.26	-13.00	-7.42	-7.81	-21.50	-9.94	-5.19	-4.49	-7.42	-5.71	-17.00
330	-6.99	-10.22	-11.58	-11.04	-8.41	-8.19	-16.18	-9.99	-7.51	-3.86	-5.31	-5.00	-17.00
345	-6.99	-8.81	-7.57	-5.97	-7.39	-10.53	-11.12	-7.00	-7.31	-5.25	-6.17	-3.75	-17.00
360	-6.99	-7.71	-7.22	-5.68	-7.29	-13.06	-10.76	-5.50	-7.02	-5.71	-5.81	-3.89	-17.00

Peak Value -0.816 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.63	-3.01	-1.22	0.12	-0.13	1.69	1.01	-1.62	-2.51	-5.23	-6.79	-6.96	-14.35
15	-3.63	-3.52	-2.70	-1.10	0.47	1.73	2.14	-1.18	-2.88	-3.98	-7.54	-5.94	-14.35
30	-3.63	-5.10	-2.78	-2.33	-0.05	1.01	1.27	-1.61	-2.40	-1.86	-6.04	-5.77	-14.35
45	-3.63	-5.98	-5.65	-3.74	0.15	1.69	1.87	0.05	-1.24	-1.28	-5.35	-6.03	-14.35
60	-3.63	-7.52	-6.33	-4.58	-1.93	2.72	0.62	0.44	-1.08	-2.62	-6.58	-4.78	-14.35
75	-3.63	-7.78	-7.75	-6.54	-5.22	0.25	0.17	1.50	-2.39	-3.47	-6.83	-6.29	-14.35
90	-3.63	-7.03	-7.14	-9.33	-4.79	-0.74	0.00	0.69	-4.47	-3.46	-5.32	-7.85	-14.35
105	-3.63	-7.70	-7.41	-6.24	-5.34	-1.12	-1.03	0.26	-3.29	-2.41	-7.26	-11.05	-14.35
120	-3.63	-5.40	-7.78	-7.39	-5.42	-4.19	-2.17	-0.82	-3.70	-3.97	-9.18	-17.57	-14.35
135	-3.63	-3.29	-8.65	-11.36	-8.71	-7.78	-3.15	-3.95	-5.22	-4.79	-9.20	-24.16	-14.35
150	-3.63	-4.69	-8.60	-12.97	-13.03	-11.67	-6.70	-9.88	-6.30	-8.59	-11.17	-16.94	-14.35
165	-3.63	-5.85	-10.22	-13.25	-11.72	-13.22	-14.58	-15.91	-12.85	-9.97	-17.19	-15.29	-14.35
180	-3.63	-6.40	-13.07	-12.89	-13.00	-13.39	-18.16	-20.59	-23.82	-11.34	-17.08	-17.27	-14.35
195	-3.63	-9.09	-18.53	-20.92	-14.71	-12.76	-13.13	-13.54	-16.66	-14.24	-10.67	-18.38	-14.35
210	-3.63	-15.63	-23.57	-21.71	-27.58	-22.18	-17.97	-12.35	-17.62	-18.78	-7.57	-23.26	-14.35
225	-3.63	-22.96	-16.99	-17.13	-22.51	-14.38	-14.24	-10.06	-12.08	-11.83	-6.50	-15.62	-14.35
240	-3.63	-14.12	-13.34	-11.80	-12.85	-9.84	-8.95	-15.15	-4.75	-6.74	-6.43	-11.55	-14.35
255	-3.63	-7.01	-8.74	-8.48	-11.98	-6.56	-4.08	-7.01	-2.65	-5.52	-6.49	-9.77	-14.35
270	-3.63	-3.13	-5.02	-3.76	-7.61	-4.71	-3.34	-4.65	-4.72	-4.85	-5.70	-6.66	-14.35
285	-3.63	-3.04	-3.13	-2.73	-6.38	-2.39	-2.70	-3.83	-3.60	-8.72	-4.47	-6.49	-14.35
300	-3.63	-1.76	-1.83	-1.60	-2.93	-0.67	-2.94	-3.71	-3.68	-12.08	-5.45	-8.21	-14.35
315	-3.63	-1.36	-0.40	-1.55	-1.29	-0.69	-1.37	-2.92	-4.67	-11.83	-6.65	-7.78	-14.35
330	-3.63	-0.80	0.20	0.02	-0.82	1.12	0.36	-1.74	-2.22	-6.83	-5.96	-8.69	-14.35
345	-3.63	-2.15	-0.23	0.06	0.42	1.86	1.29	-1.99	-2.44	-6.12	-7.29	-8.14	-14.35

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.25	-1.77	0.03	-0.05	-0.72	1.27	-0.55	-2.72	-3.69	-4.47	-4.92	-2.21	-13.84
15	-2.25	-0.93	-0.16	0.66	0.81	1.98	1.00	-1.83	-2.57	-3.15	-2.36	-2.24	-13.84
30	-2.25	-0.44	-1.04	0.05	0.31	2.03	1.52	-1.24	-1.56	-1.85	-2.57	-1.88	-13.84
45	-2.25	-0.41	-1.03	-1.39	-1.02	1.97	2.35	0.35	-0.75	-1.07	-2.93	-1.43	-13.84
60	-2.25	-0.54	-0.73	-2.71	-2.49	2.23	1.73	1.18	-0.98	-1.24	-4.13	-0.99	-13.84
75	-2.25	-0.42	-1.06	-3.01	-2.84	0.90	1.05	1.69	-0.87	-1.51	-3.66	-1.44	-13.84
90	-2.25	-1.10	-1.42	-4.78	-3.85	-0.06	0.83	1.38	-1.68	-0.85	-2.95	-3.12	-13.84
105	-2.25	-1.67	-3.34	-8.71	-6.18	-2.41	-1.03	-0.38	-1.99	-0.63	-3.40	-5.07	-13.84
120	-2.25	-2.67	-7.18	-11.09	-5.74	-4.18	-2.67	-0.55	-2.76	-2.49	-4.80	-7.11	-13.84
135	-2.25	-3.52	-8.55	-10.94	-11.54	-7.47	-4.85	-4.00	-3.00	-2.40	-4.45	-8.92	-13.84
150	-2.25	-4.42	-7.83	-8.30	-14.36	-11.84	-5.34	-7.94	-5.02	-4.79	-5.80	-8.58	-13.84
165	-2.25	-3.64	-7.38	-6.75	-8.83	-10.31	-6.62	-13.23	-8.50	-6.27	-5.77	-7.08	-13.84
180	-2.25	-3.22	-6.20	-6.21	-6.31	-9.86	-6.45	-12.91	-13.88	-5.99	-6.12	-6.91	-13.84
195	-2.25	-2.51	-4.73	-3.92	-6.19	-7.64	-7.03	-10.76	-10.61	-7.49	-6.16	-4.90	-13.84
210	-2.25	-1.74	-3.72	-3.62	-6.17	-7.10	-7.82	-12.14	-16.95	-9.22	-6.50	-5.83	-13.84
225	-2.25	-0.88	-2.49	-2.55	-5.90	-7.00	-7.61	-10.93	-12.70	-6.92	-5.67	-3.79	-13.84
240	-2.25	-0.66	-1.47	-3.53	-6.94	-6.05	-4.26	-7.65	-5.30	-5.64	-5.19	-5.31	-13.84
255	-2.25	-0.63	-0.57	-1.60	-4.21	-3.83	-2.91	-4.44	-3.35	-6.39	-4.67	-6.83	-13.84
270	-2.25	-0.54	0.21	0.09	-1.67	-1.03	-1.85	-3.80	-3.65	-3.55	-3.11	-6.98	-13.84
285	-2.25	-0.92	0.77	0.09	-1.44	-0.70	-1.05	-5.00	-2.79	-4.17	-0.94	-4.79	-13.84
300	-2.25	-0.89	0.56	-0.70	-1.58	-1.00	-3.12	-5.09	-3.11	-4.49	-2.00	-3.50	-13.84
315	-2.25	-1.28	0.77	-1.94	-2.07	-0.65	-1.78	-2.87	-6.87	-3.99	-3.86	-2.92	-13.84
330	-2.25	-1.64	0.29	-0.63	-0.79	1.30	-0.17	-2.18	-3.83	-4.33	-4.07	-3.64	-13.84
345	-2.25	-1.76	0.70	0.30	0.15	1.11	-0.54	-2.13	-3.84	-5.34	-5.60	-2.30	-13.84
360	-2.25	-2.27	0.01	0.23	-0.41	1.85	-0.35	-2.59	-3.70	-4.93	-5.74	-2.81	-13.84

Peak Value 2.347 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.34	-7.30	-10.49	-8.47	-11.31	-12.60	-10.46	-12.90	-9.50	-6.35	-6.92	-5.65	-19.65
15	-5.34	-3.47	-6.33	-3.45	-6.30	-5.75	-7.67	-11.27	-6.50	-6.10	-3.56	-6.39	-19.65
30	-5.34	-2.08	-4.72	-3.00	-4.50	-3.55	-5.42	-8.29	-5.56	-4.81	-4.13	-6.44	-19.65
45	-5.34	-1.12	-3.42	-3.98	-5.95	-4.39	-3.05	-6.78	-4.34	-4.54	-4.65	-7.22	-19.65
60	-5.34	-1.31	-1.73	-4.64	-10.61	-8.01	-3.92	-5.58	-5.68	-5.20	-6.93	-7.65	-19.65
75	-5.34	-1.46	-1.78	-4.58	-7.89	-6.86	-5.22	-5.63	-5.31	-6.58	-7.82	-9.19	-19.65
90	-5.34	-2.69	-2.36	-5.59	-6.27	-7.25	-5.87	-5.64	-7.30	-7.26	-9.01	-11.80	-19.65
105	-5.34	-3.56	-5.40	-11.66	-14.92	-14.99	-12.76	-8.12	-7.21	-7.35	-9.45	-11.35	-19.65
120	-5.34	-6.70	-12.84	-24.59	-10.44	-9.85	-11.71	-8.46	-7.29	-5.87	-10.08	-12.91	-19.65
135	-5.34	-11.69	-18.97	-15.28	-12.21	-9.89	-9.67	-10.42	-5.80	-4.65	-9.21	-11.85	-19.65
150	-5.34	-16.17	-10.81	-10.62	-17.82	-12.38	-6.32	-12.24	-7.59	-5.94	-8.49	-9.53	-19.65
165	-5.34	-10.47	-8.66	-8.17	-11.30	-14.34	-7.00	-13.28	-9.35	-6.92	-6.44	-7.91	-19.65
180	-5.34	-7.10	-6.84	-7.15	-7.40	-14.12	-6.71	-13.15	-15.07	-7.09	-6.40	-8.30	-19.65
195	-5.34	-3.74	-4.87	-4.02	-6.88	-9.80	-8.42	-12.10	-12.03	-8.19	-6.40	-6.19	-19.65
210	-5.34	-2.35	-3.77	-3.63	-6.20	-7.74	-9.28	-13.23	-19.52	-13.71	-8.03	-7.12	-19.65
225	-5.34	-1.07	-2.66	-2.81	-6.10	-7.13	-8.48	-11.76	-22.26	-10.99	-8.02	-4.68	-19.65
240	-5.34	-0.87	-1.86	-4.78	-8.36	-8.56	-6.41	-11.87	-19.42	-11.41	-7.40	-5.86	-19.65
255	-5.34	-1.43	-1.65	-4.10	-7.01	-8.27	-9.23	-10.75	-15.07	-10.73	-8.69	-8.04	-19.65
270	-5.34	-2.70	-2.30	-3.16	-4.79	-5.59	-7.06	-10.40	-27.12	-5.63	-9.98	-10.64	-19.65
285	-5.34	-5.63	-4.14	-4.82	-6.33	-5.81	-5.31	-8.80	-11.33	-6.05	-7.33	-7.21	-19.65
300	-5.34	-8.36	-7.19	-7.88	-9.93	-9.37	-10.98	-14.73	-8.55	-5.45	-7.02	-5.43	-19.65
315	-5.34	-12.62	-12.05	-15.10	-14.23	-10.22	-11.05	-17.63	-12.83	-5.47	-7.70	-4.90	-19.65
330	-5.34	-17.36	-23.26	-17.81	-14.55	-12.31	-10.23	-15.24	-9.82	-6.09	-7.40	-6.17	-19.65
345	-5.34	-9.15	-14.11	-8.84	-12.38	-13.62	-10.70	-16.03	-10.10	-6.60	-8.94	-5.18	-19.65
360	-5.34	-9.49	-12.14	-8.35	-13.40	-12.26	-9.09	-14.23	-10.95	-6.13	-7.67	-6.68	-19.65



Peak Value -0.866 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.19	-3.19	-0.38	-0.72	-1.12	1.08	-1.02	-3.16	-5.01	-9.00	-9.25	-4.83	-15.17
15	-5.19	-4.46	-1.36	-1.47	-0.13	1.17	0.36	-2.35	-4.81	-6.22	-8.55	-4.34	-15.17
30	-5.19	-5.47	-3.47	-2.93	-1.43	0.62	0.54	-2.20	-3.77	-4.91	-7.76	-3.75	-15.17
45	-5.19	-8.62	-4.76	-4.87	-2.70	0.83	0.87	-0.59	-3.25	-3.67	-7.79	-2.76	-15.17
60	-5.19	-8.42	-7.61	-7.17	-3.22	1.80	0.35	0.15	-2.77	-3.47	-7.37	-2.05	-15.17
75	-5.19	-7.13	-9.22	-8.17	-4.46	0.11	-0.12	0.80	-2.81	-3.13	-5.76	-2.24	-15.17
90	-5.19	-6.25	-8.51	-12.45	-7.54	-0.98	-0.21	0.42	-3.07	-1.98	-4.19	-3.75	-15.17
105	-5.19	-6.18	-7.57	-11.78	-6.80	-2.66	-1.34	-1.17	-3.54	-1.67	-4.63	-6.23	-15.17
120	-5.19	-4.86	-8.56	-11.29	-7.54	-5.56	-3.24	-1.32	-4.64	-5.17	-6.32	-8.44	-15.17
135	-5.19	-4.23	-8.96	-12.93	-19.98	-11.15	-6.58	-5.12	-6.23	-6.32	-6.21	-12.02	-15.17
150	-5.19	-4.72	-10.86	-12.14	-16.97	-21.18	-12.29	-9.96	-8.52	-11.11	-9.16	-15.63	-15.17
165	-5.19	-4.65	-13.32	-12.31	-12.46	-12.49	-17.38	-32.88	-15.99	-14.84	-14.22	-14.68	-15.17
180	-5.19	-5.51	-14.83	-13.29	-12.85	-11.90	-18.73	-25.72	-20.07	-12.49	-18.14	-12.54	-15.17
195	-5.19	-8.60	-19.90	-20.38	-14.51	-11.72	-12.66	-16.54	-16.15	-15.73	-18.94	-10.80	-15.17
210	-5.19	-10.53	-22.52	-34.30	-27.60	-15.72	-13.25	-18.69	-20.45	-11.13	-11.76	-11.74	-15.17
225	-5.19	-14.68	-16.70	-14.87	-19.42	-22.10	-15.00	-18.52	-13.20	-9.07	-9.47	-11.13	-15.17
240	-5.19	-13.97	-12.23	-9.55	-12.48	-9.63	-8.33	-9.72	-5.47	-6.98	-9.18	-14.58	-15.17
255	-5.19	-8.39	-7.15	-5.20	-7.44	-5.76	-4.07	-5.60	-3.65	-8.38	-6.87	-12.97	-15.17
270	-5.19	-4.61	-3.37	-2.70	-4.58	-2.90	-3.41	-4.87	-3.67	-7.73	-4.11	-9.43	-15.17
285	-5.19	-2.72	-0.93	-1.61	-3.14	-2.31	-3.10	-7.34	-3.44	-8.69	-2.08	-8.47	-15.17
300	-5.19	-1.75	-0.24	-1.62	-2.26	-1.69	-3.89	-5.59	-4.57	-11.53	-3.64	-7.94	-15.17
315	-5.19	-1.62	0.54	-2.16	-2.34	-1.15	-2.32	-3.01	-8.14	-9.37	-6.18	-7.30	-15.17
330	-5.19	-1.75	0.28	-0.72	-0.98	1.11	-0.62	-2.40	-5.09	-9.09	-6.78	-7.20	-15.17
345	-5.19	-2.64	0.55	-0.27	-0.10	0.96	-0.98	-2.31	-5.01	-11.32	-8.31	-5.45	-15.17

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.30	-2.40	-2.27	-1.43	-2.17	-1.37	-1.10	-1.16	-8.30	-7.33	-9.11	-5.46	-13.25
15	-3.30	-1.74	-1.75	-0.99	-2.09	-0.67	-0.91	-0.85	-7.53	-5.59	-5.27	-5.04	-13.25
30	-3.30	-1.04	-1.77	-0.69	-2.32	-0.69	0.29	-0.81	-6.59	-2.19	-5.31	-3.75	-13.25
45	-3.30	-1.52	-2.60	-1.43	-2.31	-0.74	1.54	-0.11	-3.76	-2.42	-3.67	-3.20	-13.25
60	-3.30	-2.72	-2.84	-3.10	-5.20	-0.66	1.44	0.47	-1.82	-2.90	-4.83	-3.30	-13.25
75	-3.30	-2.46	-2.52	-3.37	-5.89	-1.33	0.38	1.06	-2.21	-5.19	-6.12	-4.87	-13.25
90	-3.30	-2.57	-2.58	-3.83	-4.63	-1.56	0.36	1.38	-3.75	-4.29	-6.79	-6.71	-13.25
105	-3.30	-2.97	-3.60	-7.33	-7.81	-4.34	-2.38	0.22	-4.49	-3.58	-7.31	-8.87	-13.25
120	-3.30	-3.46	-6.02	-10.86	-14.13	-7.34	-4.69	-1.04	-5.79	-4.31	-7.58	-13.17	-13.25
135	-3.30	-3.83	-8.14	-12.05	-16.54	-9.87	-7.22	-4.34	-7.79	-4.65	-6.89	-12.10	-13.25
150	-3.30	-4.18	-9.08	-11.08	-14.00	-11.57	-6.96	-8.25	-10.40	-7.44	-7.05	-10.46	-13.25
165	-3.30	-3.15	-7.71	-7.20	-9.43	-9.59	-7.12	-11.32	-14.45	-11.01	-6.08	-7.67	-13.25
180	-3.30	-4.26	-5.28	-6.17	-6.22	-7.82	-8.49	-11.82	-16.34	-10.40	-4.16	-4.49	-13.25
195	-3.30	-2.97	-4.84	-4.36	-4.82	-7.71	-9.14	-9.99	-14.58	-11.81	-4.64	-5.24	-13.25
210	-3.30	-2.67	-5.85	-5.38	-3.81	-6.39	-9.33	-9.57	-12.74	-12.69	-5.99	-4.77	-13.25
225	-3.30	-2.20	-4.80	-5.36	-4.90	-6.90	-7.48	-12.22	-10.57	-8.78	-6.54	-4.37	-13.25
240	-3.30	-2.43	-3.57	-4.89	-5.37	-6.83	-6.44	-7.50	-6.21	-8.68	-6.23	-5.28	-13.25
255	-3.30	-2.47	-1.69	-2.23	-3.25	-4.16	-5.39	-5.17	-5.47	-7.44	-7.18	-7.14	-13.25
270	-3.30	-2.72	-1.54	-1.06	-1.32	-1.91	-3.56	-3.26	-6.27	-7.93	-5.48	-6.30	-13.25
285	-3.30	-2.95	-1.38	-1.03	-2.47	-2.90	-3.72	-4.21	-4.97	-10.24	-4.29	-6.70	-13.25
300	-3.30	-2.89	-1.92	-1.62	-3.69	-3.51	-3.79	-5.32	-6.69	-9.81	-6.14	-5.65	-13.25
315	-3.30	-2.85	-2.18	-1.58	-4.20	-3.31	-2.02	-2.71	-7.21	-6.48	-7.14	-6.90	-13.25
330	-3.30	-1.64	-2.82	-1.32	-1.98	-2.03	-1.80	-1.37	-5.08	-5.92	-6.43	-6.60	-13.25
345	-3.30	-2.33	-2.76	-0.91	-1.59	-1.75	-1.88	-1.01	-7.45	-7.97	-7.67	-5.95	-13.25
360	-3.30	-1.74	-2.46	-1.00	-1.72	-0.67	-2.10	-1.52	-8.39	-8.49	-8.50	-5.47	-13.25

Peak Value 1.542 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.82	-6.48	-10.92	-11.46	-19.87	-30.69	-15.00	-10.57	-13.47	-10.53	-12.11	-7.83	-16.96
15	-5.82	-3.64	-6.57	-5.98	-10.00	-12.05	-10.46	-9.54	-11.44	-9.68	-6.25	-6.81	-16.96
30	-5.82	-2.09	-4.64	-4.64	-7.04	-8.07	-7.84	-7.14	-11.15	-6.77	-6.49	-5.93	-16.96
45	-5.82	-1.86	-4.45	-3.97	-5.61	-7.50	-4.32	-6.64	-7.68	-5.97	-5.61	-5.41	-16.96
60	-5.82	-3.11	-4.33	-5.52	-8.16	-9.72	-5.16	-4.69	-5.02	-6.40	-6.82	-6.46	-16.96
75	-5.82	-3.29	-3.86	-4.98	-15.04	-11.87	-5.09	-5.47	-5.01	-8.70	-8.01	-8.81	-16.96
90	-5.82	-4.91	-3.93	-4.65	-9.76	-8.62	-5.37	-6.38	-5.81	-7.66	-9.24	-11.14	-16.96
105	-5.82	-7.14	-5.42	-8.84	-12.63	-16.56	-11.48	-7.18	-7.44	-9.92	-9.50	-11.82	-16.96
120	-5.82	-11.34	-10.52	-16.86	-18.55	-13.96	-14.36	-8.65	-9.24	-7.60	-9.24	-15.37	-16.96
135	-5.82	-13.31	-17.88	-18.82	-18.02	-11.96	-11.54	-12.41	-10.88	-7.96	-8.51	-12.48	-16.96
150	-5.82	-12.04	-14.34	-15.23	-23.73	-13.89	-8.87	-14.18	-17.59	-9.36	-7.96	-11.03	-16.96
165	-5.82	-7.07	-10.33	-9.88	-12.40	-13.05	-8.19	-12.00	-19.22	-14.49	-6.12	-8.57	-16.96
180	-5.82	-6.13	-7.06	-7.91	-7.77	-10.20	-8.61	-11.95	-25.91	-11.04	-4.47	-4.76	-16.96
195	-5.82	-3.81	-4.91	-5.18	-5.54	-8.95	-10.00	-10.39	-18.72	-12.44	-5.59	-5.66	-16.96
210	-5.82	-2.78	-5.88	-5.46	-3.84	-6.66	-10.22	-9.93	-18.92	-16.13	-8.73	-4.77	-16.96
225	-5.82	-2.26	-5.07	-5.44	-5.23	-6.90	-8.31	-12.40	-17.38	-11.36	-10.05	-4.54	-16.96
240	-5.82	-2.99	-4.34	-5.87	-7.14	-7.77	-8.09	-12.81	-24.14	-13.42	-11.27	-6.48	-16.96
255	-5.82	-3.78	-3.28	-3.82	-5.53	-8.52	-10.92	-11.02	-24.07	-20.06	-17.70	-10.43	-16.96
270	-5.82	-5.48	-4.45	-3.70	-4.03	-4.71	-6.89	-7.38	-15.95	-13.96	-12.62	-15.19	-16.96
285	-5.82	-8.22	-5.87	-4.31	-6.57	-7.07	-8.97	-8.36	-14.09	-11.93	-9.43	-11.68	-16.96
300	-5.82	-12.13	-9.82	-7.41	-10.53	-10.77	-13.38	-13.29	-17.27	-10.82	-9.40	-8.65	-16.96
315	-5.82	-19.62	-15.02	-9.29	-11.52	-11.36	-9.69	-9.94	-18.73	-8.41	-9.45	-8.24	-16.96
330	-5.82	-14.33	-23.23	-12.86	-13.68	-17.36	-11.48	-9.21	-11.87	-9.01	-9.75	-8.15	-16.96
345	-5.82	-8.45	-14.88	-12.03	-14.06	-20.20	-13.96	-12.78	-14.46	-10.27	-10.80	-8.10	-16.96
360	-5.82	-5.99	-12.36	-12.21	-14.09	-25.80	-13.10	-11.94	-13.88	-12.76	-11.47	-7.47	-16.96

Peak Value **-1.863** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.87	-4.54	-2.91	-1.88	-2.25	-1.38	-1.28	-1.69	-9.88	-10.16	-12.14	-9.21	-15.66
15	-6.87	-6.25	-3.49	-2.65	-2.86	-1.00	-1.42	-1.48	-9.79	-7.73	-12.23	-9.78	-15.66
30	-6.87	-7.71	-4.91	-2.92	-4.10	-1.57	-0.43	-1.96	-8.47	-4.05	-11.52	-7.78	-15.66
45	-6.87	-12.68	-7.19	-4.96	-5.06	-1.77	0.24	-1.20	-6.02	-4.94	-8.11	-7.19	-15.66
60	-6.87	-13.40	-8.19	-6.80	-8.27	-1.23	0.37	-1.11	-4.65	-5.48	-9.17	-6.17	-15.66
75	-6.87	-10.07	-8.29	-8.46	-6.46	-1.73	-1.07	-0.03	-5.45	-7.74	-10.63	-7.12	-15.66
90	-6.87	-6.38	-8.32	-11.51	-6.23	-2.51	-0.99	0.58	-8.00	-6.98	-10.44	-8.65	-15.66
105	-6.87	-5.07	-8.24	-12.66	-9.55	-4.61	-2.95	-0.65	-7.56	-4.73	-11.33	-11.93	-15.66
120	-6.87	-4.23	-7.92	-12.12	-16.08	-8.41	-5.19	-1.87	-8.40	-7.05	-12.55	-17.17	-15.66
135	-6.87	-4.35	-8.63	-13.08	-21.93	-14.04	-9.23	-5.08	-10.71	-7.39	-11.96	-22.84	-15.66
150	-6.87	-4.96	-10.62	-13.18	-14.48	-15.41	-11.45	-9.53	-11.32	-11.90	-14.26	-19.51	-15.66
165	-6.87	-5.41	-11.14	-10.56	-12.48	-12.20	-13.74	-19.73	-16.21	-13.60	-26.22	-14.97	-15.66
180	-6.87	-8.83	-10.01	-10.99	-11.44	-11.55	-24.15	-27.14	-16.85	-19.06	-15.88	-16.74	-15.66
195	-6.87	-10.51	-22.31	-12.00	-13.00	-13.75	-16.60	-20.55	-16.69	-20.46	-11.72	-15.64	-15.66
210	-6.87	-18.91	-28.08	-22.84	-25.52	-18.59	-16.67	-20.64	-13.94	-15.30	-9.28	-35.01	-15.66
225	-6.87	-20.99	-17.01	-23.17	-16.21	-34.82	-15.12	-26.08	-11.58	-12.28	-9.10	-18.76	-15.66
240	-6.87	-11.58	-11.49	-11.85	-10.13	-13.92	-11.46	-9.01	-6.28	-10.45	-7.86	-11.44	-15.66
255	-6.87	-8.31	-6.81	-7.37	-7.14	-6.14	-6.82	-6.48	-5.53	-7.68	-7.58	-9.89	-15.66
270	-6.87	-6.00	-4.64	-4.47	-4.66	-5.13	-6.27	-5.39	-6.76	-9.18	-6.42	-6.90	-15.66
285	-6.87	-4.49	-3.30	-3.80	-4.60	-4.99	-5.27	-6.32	-5.53	-15.17	-5.88	-8.36	-15.66
300	-6.87	-3.44	-2.69	-2.95	-4.70	-4.41	-4.30	-6.08	-7.09	-16.65	-8.92	-8.68	-15.66
315	-6.87	-2.94	-2.42	-2.39	-5.09	-4.05	-2.83	-3.62	-7.53	-10.92	-10.98	-12.66	-15.66
330	-6.87	-1.88	-2.86	-1.64	-2.28	-2.16	-2.30	-2.16	-6.10	-8.85	-9.16	-11.85	-15.66
345	-6.87	-3.55	-3.03	-1.26	-1.84	-1.81	-2.16	-1.31	-8.42	-11.83	-10.57	-10.04	-15.66



### H-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-4.908	90	270	-12.844	90	150	-6.609	21.83%
1570	-4.787	90	285	-13.772	90	150	-6.619	21.78%
1575	-3.891	90	60	-13.842	90	150	-5.927	25.54%
1580	-3.58	90	75	-14.354	90	150	-5.859	25.95%
1585	-3.774	90	75	-14.996	90	150	-6.205	23.96%
2400	0.559	90	165	-11.105	90	0	-2.703	53.67%
2420	0.807	90	165	-11.003	90	15	-2.44	57.02%
2440	0.755	90	150	-11.592	90	15	-2.535	55.78%
2460	-0.224	90	150	-12.816	90	15	-3.486	44.81%
2480	0.635	90	150	-11.333	90	15	-2.693	53.80%
2500	1.021	90	150	-9.969	90	15	-2.209	60.14%
5200	1.817	90	135	-8.119	90	0	-3.181	48.07%
5300	2.309	90	135	-7.116	90	300	-1.455	71.54%
5400	0.573	90	135	-11.582	90	285	-2.584	55.15%
5500	2.271	90	150	-9.217	90	300	-1.272	74.61%
5600	-0.292	90	90	-14.034	90	300	-4.586	34.79%
5700	-2.092	90	90	-15.234	90	300	-5.331	29.30%
5800	-2.25	90	150	-12.003	90	315	-5.656	27.19%

### H-Plan (Vertical)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-5.261	90	270	-27.254	90	345	-8.803	13.17%
1570	-5.181	90	270	-31.248	90	345	-8.799	13.19%
1575	-4.314	90	270	-30.336	90	345	-8.076	15.57%
1580	-4.209	90	270	-28.338	90	345	-7.915	16.16%
1585	-4.478	90	270	-26.98	90	345	-8.16	15.28%
2400	-9.797	90	195	-23.914	90	0	-13.516	4.45%
2420	-10.156	90	285	-23.238	90	0	-13.376	4.60%
2440	-9.683	90	75	-23.132	90	15	-13.397	4.57%
2460	-9.299	90	75	-22.129	90	120	-13.474	4.49%
2480	-8.919	90	75	-25.796	90	120	-13.542	4.42%
2500	-8.063	90	60	-27.12	90	135	-13.184	4.80%
5200	-0.922	90	135	-12.008	90	285	-6.11	24.49%
5300	0.701	90	135	-10.482	90	210	-3.792	41.77%
5400	-1.72	90	30	-12.556	90	285	-5.133	30.67%
5500	-0.612	90	30	-15.016	90	300	-5.714	26.83%
5600	-2.42	90	30	-38.533	90	255	-10.21	9.53%
5700	-5.335	90	30	-27.651	90	75	-10.148	9.67%
5800	-6.489	90	165	-20.813	90	60	-9.658	10.82%

**H-Plan (Horizontal)**

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-6.268	90	0	-27.897	90	150	-10.626	8.66%





### E1-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-1.651	135	270	-7.938	165	90	-4.347	36.76%
1570	-1.491	135	90	-7.606	165	90	-4.374	36.53%
1575	-0.641	135	90	-6.662	165	90	-3.714	42.52%
1580	-0.557	135	90	-6.393	165	90	-3.674	42.91%
1585	-0.884	135	90	-6.547	165	90	-4.055	39.31%
2400	0.686	75	90	-14.978	180	90	-3.004	50.07%
2420	1.071	75	90	-16.777	180	90	-3.04	49.66%
2440	1.091	75	90	-18.615	180	90	-3.328	46.48%
2460	0.118	75	90	-18.317	180	90	-4.31	37.07%
2480	0.534	75	90	-17.426	180	90	-4.176	38.23%
2500	0.962	75	90	-15.825	180	90	-4.121	38.72%
5200	-0.565	105	90	-17.003	135	270	-5.353	29.15%
5300	1.955	105	90	-19.65	165	270	-3.017	49.92%
5400	0.395	90	90	-13.583	180	90	-3.579	43.86%
5500	2.203	90	90	-24.644	135	270	-3.253	47.29%
5600	-0.292	90	90	-18.144	180	90	-6.805	20.87%
5700	-2.092	90	90	-20.116	165	270	-6.808	20.86%
5800	-2.955	90	90	-24.896	15	90	-7.706	16.96%

### E1-Plan (Vertical)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-2.89	30	270	-16.615	180	90	-6.383	23.00%
1570	-2.963	135	270	-15.185	180	90	-6.406	22.88%
1575	-2.365	135	270	-13.496	180	90	-5.778	26.44%
1580	-2.404	135	270	-12.873	180	90	-5.721	26.79%
1585	-2.724	135	270	-12.724	180	90	-6.077	24.68%
2400	-2.393	60	270	-24.278	180	90	-6.645	21.65%
2420	-3.043	15	270	-22.488	165	270	-7.287	18.68%
2440	-3.427	15	270	-26.913	165	270	-7.809	16.56%
2460	-4.319	15	270	-27.02	165	270	-8.28	14.86%
2480	-4.556	60	90	-27.183	165	90	-8.726	13.41%
2500	-4.54	60	90	-26.049	165	90	-9.084	12.35%
5200	-1.907	105	90	-23.887	165	90	-7.417	18.13%
5300	1.329	120	90	-29.49	165	270	-4.932	32.12%
5400	-0.257	15	270	-30.013	135	270	-5.495	28.22%
5500	-0.938	120	90	-25.883	135	270	-5.541	27.92%
5600	-4.267	45	270	-30.181	150	270	-9.782	10.52%
5700	-4.546	60	270	-22.858	165	270	-9.688	10.75%
5800	-5.595	60	270	-35.935	15	90	-10.67	8.57%

E1-Plan (Horizontal)								
Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-3.514	180	90	-17.419	75	270	-8.616	13.76%



### E2-Plan (Vertical + Horizontal)

Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-1.64	30	0	-14.626	135	0	-5.894	25.74%
1570	-1.589	30	0	-15.465	135	0	-6.002	25.11%
1575	-0.883	30	0	-15.427	135	0	-5.386	28.93%
1580	-0.897	30	0	-16.011	135	0	-5.43	28.64%
1585	-1.344	30	0	-16.933	135	0	-5.881	25.82%
2400	0.815	75	180	-14.978	180	0	-4.695	33.92%
2420	1.144	75	180	-16.777	180	0	-4.492	35.55%
2440	1.006	75	180	-18.615	180	0	-4.627	34.46%
2460	-0.263	75	180	-18.317	180	0	-5.729	26.74%
2480	0.103	75	180	-17.426	180	0	-5.201	30.19%
2500	0.318	90	180	-17.125	165	180	-4.985	31.73%
5200	-1.049	90	180	-16.428	180	0	-5.575	27.70%
5300	0.328	105	180	-13.4	180	0	-3.372	46.01%
5400	-0.588	105	180	-13.833	165	180	-4.32	36.99%
5500	1.743	105	180	-14.268	180	0	-3.661	43.04%
5600	-1.817	120	180	-18.144	180	0	-7.342	18.44%
5700	-2.245	120	180	-27.516	30	0	-6.827	20.76%
5800	-2.086	120	180	-23.878	135	0	-7.513	17.73%

### E2-Plan (Vertical)

Frequency	Peak Value	Minimum Value	Avg. Gain	Efficiency
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[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-8.968	45	180	-26.656	90	0	-13.406	4.57%
1570	-9.721	45	180	-25.455	165	180	-13.683	4.28%
1575	-9.545	45	180	-24.609	150	0	-13.192	4.80%
1580	-9.127	45	180	-26.268	150	0	-13.215	4.77%
1585	-9.343	45	180	-28.366	150	0	-13.593	4.37%
2400	-7.057	60	180	-24.278	180	0	-11.44	7.18%
2420	-8.271	150	0	-33.902	60	0	-12.39	5.77%
2440	-7.999	150	0	-22.374	90	0	-13.59	4.38%
2460	-7.942	150	0	-21.856	90	0	-14.674	3.41%
2480	-8.273	150	0	-30.468	15	0	-15.351	2.92%
2500	-8.473	150	0	-25.835	105	180	-15.508	2.81%
5200	-4.698	105	180	-26.559	30	180	-9.557	11.07%
5300	-1.028	105	180	-21.017	30	180	-7.045	19.75%
5400	-1.569	105	180	-28.907	60	180	-7.541	17.62%
5500	1.115	105	180	-22.446	0	0	-6.798	20.90%
5600	-2.551	120	180	-25.08	60	0	-10.031	9.93%
5700	-3.436	120	180	-30.78	30	0	-9.058	12.42%
5800	-3.876	120	180	-24.298	135	0	-9.383	11.53%

E2-Plan (Horizontal)								
Frequency	Peak Value			Minimum Value			Avg. Gain	Efficiency
[MHz]	Value[dBi]	Theta	Phi	Value[dBi]	Theta	Phi	[dBi]	[%]
1565	-1.874	30	0	-26.147	135	0	-6.741	21.18%











### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.63	-3.10	-1.64	-3.52	-7.34	-9.31	-6.23	-9.32	-11.28	-14.63	-12.23	-4.48	-3.31
15	-5.63	-3.16	-1.56	-2.76	-5.10	-7.74	-6.23	-7.62	-12.96	-17.15	-13.12	-4.53	-3.31
30	-5.63	-3.80	-2.11	-3.08	-3.90	-5.46	-6.18	-6.44	-9.40	-9.70	-11.72	-4.89	-3.31
45	-5.63	-3.79	-2.28	-2.74	-3.21	-4.06	-6.10	-5.13	-7.20	-6.10	-9.67	-5.21	-3.31
60	-5.63	-3.92	-2.54	-3.51	-3.39	-3.66	-5.01	-4.81	-5.54	-3.48	-7.81	-6.05	-3.31
75	-5.63	-4.81	-3.50	-3.80	-4.29	-4.28	-5.15	-5.03	-5.14	-2.30	-6.67	-6.65	-3.31
90	-5.63	-5.13	-3.63	-4.99	-5.28	-5.46	-6.19	-5.99	-4.78	-1.68	-5.90	-7.94	-3.31
105	-5.63	-5.11	-4.32	-5.17	-6.64	-7.21	-7.47	-7.46	-5.01	-1.78	-5.30	-7.56	-3.31
120	-5.63	-5.41	-4.70	-5.77	-7.95	-8.49	-9.68	-8.88	-5.95	-2.27	-4.95	-7.36	-3.31
135	-5.63	-5.75	-5.06	-6.08	-8.76	-9.72	-12.03	-9.58	-6.51	-3.12	-4.65	-7.12	-3.31
150	-5.63	-5.99	-5.33	-6.30	-9.12	-9.47	-12.84	-9.44	-7.17	-3.74	-4.25	-7.23	-3.31
165	-5.63	-6.07	-5.39	-5.99	-8.58	-9.56	-10.62	-8.94	-7.77	-3.98	-4.50	-7.11	-3.31
180	-5.63	-6.06	-5.21	-5.52	-7.76	-9.43	-9.03	-8.73	-8.22	-3.55	-3.43	-6.96	-3.31
195	-5.63	-6.00	-5.01	-4.49	-7.24	-9.31	-7.06	-7.33	-8.84	-2.94	-3.24	-6.83	-3.31
210	-5.63	-5.75	-4.11	-4.21	-7.79	-8.62	-5.98	-6.45	-7.53	-2.41	-3.26	-7.16	-3.31
225	-5.63	-5.22	-3.57	-3.60	-8.81	-7.11	-6.00	-6.01	-7.43	-2.21	-3.32	-6.89	-3.31
240	-5.63	-4.79	-3.48	-3.37	-6.23	-5.07	-5.27	-5.08	-6.91	-1.84	-3.66	-7.68	-3.31
255	-5.63	-4.68	-3.48	-3.23	-4.96	-4.13	-5.64	-4.36	-6.04	-1.40	-4.05	-7.72	-3.31
270	-5.63	-4.12	-2.18	-3.09	-4.49	-3.62	-4.91	-3.72	-4.77	-1.65	-4.37	-6.73	-3.31
285	-5.63	-3.63	-2.41	-3.08	-4.12	-3.74	-4.94	-3.30	-4.21	-1.76	-5.13	-6.11	-3.31
300	-5.63	-3.41	-2.00	-3.45	-4.50	-4.45	-5.95	-3.31	-4.07	-3.53	-5.92	-6.26	-3.31
315	-5.63	-3.27	-1.72	-3.68	-5.58	-5.84	-6.29	-4.18	-4.12	-4.55	-6.79	-5.31	-3.31
330	-5.63	-3.11	-1.69	-3.75	-7.24	-7.09	-7.26	-5.84	-5.54	-5.77	-8.37	-4.78	-3.31
345	-5.63	-3.04	-1.51	-3.49	-8.08	-8.40	-6.74	-8.55	-8.09	-10.37	-10.64	-4.51	-3.31
360	-5.63	-3.24	-1.55	-3.34	-7.76	-9.26	-6.26	-9.28	-10.88	-13.79	-12.15	-4.45	-3.31

Peak Value -1.395 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-13.32	-13.75	-14.46	-14.90	-13.90	-21.24	-26.66	-16.41	-14.32	-14.94	-21.90	-23.12	-16.62
15	-13.32	-10.15	-8.23	-7.32	-8.23	-11.95	-14.90	-12.53	-18.48	-21.79	-24.00	-13.80	-16.62
30	-13.32	-9.32	-6.80	-6.33	-6.05	-7.74	-10.79	-10.04	-12.82	-11.06	-17.30	-11.32	-16.62
45	-13.32	-6.78	-5.04	-4.64	-4.86	-5.85	-9.07	-7.40	-10.06	-7.34	-13.10	-9.09	-16.62
60	-13.32	-5.83	-4.35	-5.20	-5.00	-5.37	-6.93	-6.70	-8.24	-4.79	-10.63	-8.87	-16.62
75	-13.32	-6.63	-5.34	-5.54	-6.31	-6.31	-6.84	-6.85	-8.38	-4.01	-9.72	-8.77	-16.62
90	-13.32	-7.18	-5.72	-8.06	-8.09	-8.03	-7.73	-7.95	-8.02	-3.88	-9.92	-10.83	-16.62
105	-13.32	-7.72	-7.79	-9.69	-11.04	-10.55	-8.62	-9.55	-8.20	-4.58	-10.39	-10.83	-16.62
120	-13.32	-9.31	-10.16	-13.31	-14.11	-11.79	-10.39	-10.62	-9.26	-5.87	-11.87	-12.01	-16.62
135	-13.32	-11.43	-12.80	-15.19	-14.71	-13.47	-12.32	-10.57	-9.83	-8.11	-13.96	-14.75	-16.62
150	-13.32	-13.30	-13.81	-13.78	-14.51	-12.63	-12.98	-10.34	-10.39	-10.58	-16.68	-19.22	-16.62
165	-13.32	-13.26	-12.35	-10.97	-13.10	-11.78	-11.70	-10.63	-10.94	-13.51	-18.60	-29.87	-16.62
180	-13.32	-11.95	-9.94	-8.97	-10.57	-10.09	-12.14	-11.16	-11.27	-12.95	-17.22	-26.09	-16.62
195	-13.32	-9.94	-8.06	-6.30	-8.70	-9.41	-10.04	-8.70	-13.34	-10.07	-14.37	-16.67	-16.62
210	-13.32	-8.23	-5.48	-5.13	-8.46	-9.10	-7.95	-7.06	-11.23	-7.58	-12.07	-14.24	-16.62
225	-13.32	-6.41	-4.17	-3.94	-9.25	-7.86	-6.97	-6.42	-12.08	-5.89	-10.31	-10.75	-16.62
240	-13.32	-5.30	-3.70	-3.55	-6.63	-5.54	-5.57	-5.52	-11.07	-4.43	-9.30	-10.52	-16.62
255	-13.32	-5.02	-3.76	-3.62	-5.45	-4.41	-5.79	-4.97	-9.67	-3.06	-8.61	-9.19	-16.62
270	-13.32	-4.68	-2.89	-4.01	-5.05	-3.80	-5.26	-4.64	-7.94	-2.94	-7.87	-7.63	-16.62
285	-13.32	-4.89	-4.24	-4.76	-4.81	-3.97	-5.81	-4.69	-7.65	-2.71	-8.28	-7.55	-16.62
300	-13.32	-5.94	-5.42	-6.62	-5.61	-4.98	-7.94	-5.23	-7.66	-4.47	-8.93	-9.86	-16.62
315	-13.32	-7.74	-7.57	-9.49	-7.52	-7.34	-9.26	-6.47	-7.21	-5.21	-9.95	-11.14	-16.62
330	-13.32	-10.45	-12.72	-14.56	-11.20	-10.89	-14.86	-8.37	-8.44	-6.09	-12.45	-14.55	-16.62
345	-13.32	-13.46	-18.02	-17.54	-15.20	-16.71	-27.25	-12.59	-10.79	-10.46	-17.48	-21.74	-16.62
360	-13.32	-14.13	-15.01	-13.02	-15.92	-20.98	-27.87	-16.05	-13.31	-13.91	-21.32	-23.12	-16.62

Peak Value **-2.705** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.44	-3.49	-1.87	-3.84	-8.42	-9.60	-6.27	-10.26	-14.27	-26.15	-12.73	-4.54	-3.51
15	-6.44	-4.13	-2.62	-4.64	-7.98	-9.81	-6.86	-9.31	-14.40	-18.97	-13.49	-5.07	-3.51
30	-6.44	-5.23	-3.91	-5.86	-8.00	-9.34	-8.03	-8.93	-12.05	-15.41	-13.12	-6.02	-3.51
45	-6.44	-6.82	-5.57	-7.26	-8.23	-8.78	-9.15	-9.02	-10.35	-12.15	-12.30	-7.49	-3.51
60	-6.44	-8.42	-7.23	-8.45	-8.48	-8.54	-9.47	-9.33	-8.88	-9.32	-11.01	-9.26	-3.51
75	-6.44	-9.48	-8.14	-8.63	-8.58	-8.55	-10.07	-9.69	-7.94	-7.15	-9.64	-10.79	-3.51
90	-6.44	-9.39	-7.80	-7.95	-8.50	-8.97	-11.43	-10.39	-7.58	-5.69	-8.09	-11.07	-3.51
105	-6.44	-8.56	-6.92	-7.07	-8.60	-9.92	-13.83	-11.63	-7.84	-5.00	-6.91	-10.33	-3.51
120	-6.44	-7.69	-6.15	-6.61	-9.16	-11.23	-17.91	-13.68	-8.68	-4.77	-5.94	-9.19	-3.51
135	-6.44	-7.12	-5.86	-6.65	-10.03	-12.10	-23.92	-16.47	-9.23	-4.78	-5.19	-7.95	-3.51
150	-6.44	-6.88	-5.99	-7.15	-10.60	-12.34	-27.90	-16.73	-9.97	-4.75	-4.51	-7.51	-3.51
165	-6.44	-6.99	-6.37	-7.65	-10.48	-13.53	-17.19	-13.87	-10.64	-4.49	-4.67	-7.13	-3.51
180	-6.44	-7.36	-6.99	-8.14	-10.97	-17.96	-11.94	-12.41	-11.20	-4.07	-3.62	-7.01	-3.51
195	-6.44	-8.25	-7.97	-9.17	-12.68	-25.77	-10.10	-13.00	-10.74	-3.87	-3.59	-7.30	-3.51
210	-6.44	-9.37	-9.78	-11.44	-16.24	-18.36	-10.36	-15.31	-9.95	-3.98	-3.88	-8.11	-3.51
225	-6.44	-11.43	-12.44	-14.93	-18.97	-15.13	-12.98	-16.46	-9.25	-4.64	-4.29	-9.19	-3.51
240	-6.44	-14.32	-16.48	-17.15	-16.72	-14.98	-17.06	-15.19	-9.02	-5.33	-5.05	-10.87	-3.51
255	-6.44	-15.99	-15.59	-13.91	-14.74	-16.24	-20.34	-13.23	-8.51	-6.37	-5.92	-13.13	-3.51
270	-6.44	-13.31	-10.41	-10.31	-13.68	-17.42	-15.99	-10.92	-7.64	-7.55	-6.94	-14.00	-3.51
285	-6.44	-9.61	-7.04	-8.02	-12.45	-16.63	-12.35	-8.91	-6.82	-8.84	-8.00	-11.60	-3.51
300	-6.44	-6.96	-4.64	-6.31	-10.99	-13.81	-10.31	-7.77	-6.56	-10.61	-8.94	-8.75	-3.51
315	-6.44	-5.19	-3.03	-5.00	-10.01	-11.19	-9.34	-8.06	-7.06	-13.05	-9.66	-6.63	-3.51
330	-6.44	-3.99	-2.04	-4.13	-9.47	-9.42	-8.09	-9.39	-8.66	-17.22	-10.52	-5.26	-3.51
345	-6.44	-3.45	-1.60	-3.67	-9.01	-9.09	-6.78	-10.74	-11.44	-27.16	-11.65	-4.60	-3.51

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.96	-3.29	-1.59	-3.28	-7.75	-9.87	-6.20	-8.93	-11.44	-15.47	-12.64	-4.47	-3.33
15	-5.96	-3.38	-1.56	-2.64	-5.32	-7.78	-6.20	-6.97	-11.83	-16.20	-13.15	-4.57	-3.33
30	-5.96	-4.04	-2.13	-2.91	-4.11	-5.29	-6.06	-5.99	-8.54	-9.33	-11.64	-4.91	-3.33
45	-5.96	-3.97	-2.26	-2.77	-3.37	-3.95	-5.91	-4.75	-6.57	-5.83	-9.39	-5.16	-3.33
60	-5.96	-4.17	-2.63	-3.45	-3.73	-3.54	-4.79	-4.61	-5.20	-3.30	-7.61	-6.01	-3.33
75	-5.96	-5.02	-3.62	-3.97	-4.62	-4.34	-4.86	-4.93	-4.89	-2.01	-6.38	-6.58	-3.33
90	-5.96	-5.57	-3.89	-5.21	-5.87	-5.66	-5.97	-5.95	-4.57	-1.49	-5.51	-7.61	-3.33
105	-5.96	-5.61	-4.59	-5.55	-7.41	-7.46	-7.35	-7.59	-4.70	-1.55	-4.97	-7.28	-3.33
120	-5.96	-5.94	-5.13	-6.38	-8.92	-8.93	-9.70	-9.07	-5.57	-2.06	-4.64	-7.07	-3.33
135	-5.96	-6.32	-5.61	-6.81	-9.73	-10.22	-12.64	-9.48	-6.07	-2.91	-4.36	-6.77	-3.33
150	-5.96	-6.62	-5.92	-7.06	-10.11	-10.03	-13.77	-9.18	-6.96	-3.60	-3.97	-6.96	-3.33
165	-5.96	-6.64	-6.13	-6.78	-9.32	-9.96	-10.95	-8.84	-7.85	-3.83	-4.07	-6.92	-3.33
180	-5.96	-6.65	-5.88	-6.25	-8.31	-9.74	-9.04	-8.70	-8.36	-3.34	-3.19	-6.85	-3.33
195	-5.96	-6.50	-5.48	-5.07	-7.65	-9.63	-7.39	-7.18	-8.74	-2.76	-3.01	-6.77	-3.33
210	-5.96	-6.10	-4.60	-4.56	-7.99	-8.99	-6.55	-6.16	-7.12	-2.32	-3.07	-7.08	-3.33
225	-5.96	-5.60	-3.79	-3.73	-8.87	-7.47	-6.41	-5.54	-7.05	-2.08	-3.13	-6.76	-3.33
240	-5.96	-5.14	-3.55	-3.48	-6.26	-5.27	-5.53	-4.75	-6.62	-1.81	-3.48	-7.61	-3.33
255	-5.96	-4.81	-3.60	-3.22	-4.84	-4.21	-5.49	-4.21	-5.93	-1.30	-3.80	-7.67	-3.33
270	-5.96	-4.21	-2.28	-3.01	-4.32	-3.67	-4.82	-3.75	-4.80	-1.69	-4.20	-6.71	-3.33
285	-5.96	-3.85	-2.42	-2.89	-4.13	-3.77	-4.79	-3.49	-4.36	-1.95	-4.97	-6.00	-3.33
300	-5.96	-3.57	-1.98	-3.13	-4.59	-4.56	-5.93	-3.65	-4.32	-3.60	-5.83	-6.21	-3.33
315	-5.96	-3.42	-1.68	-3.37	-5.71	-6.08	-6.39	-4.55	-4.55	-4.87	-6.91	-5.25	-3.33
330	-5.96	-3.30	-1.64	-3.44	-7.54	-7.48	-7.29	-6.35	-6.04	-6.22	-8.64	-4.78	-3.33
345	-5.96	-3.26	-1.45	-3.24	-8.49	-8.92	-6.70	-8.76	-8.56	-11.04	-10.95	-4.54	-3.33
360	-5.96	-3.42	-1.56	-3.16	-8.09	-9.83	-6.22	-8.96	-11.08	-14.51	-12.46	-4.47	-3.33

Peak Value -1.297 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-13.54	-14.25	-15.13	-15.21	-14.43	-22.55	-23.51	-16.28	-14.77	-15.89	-23.83	-20.27	-15.18
15	-13.54	-10.85	-8.43	-7.44	-8.23	-11.49	-14.32	-11.42	-16.17	-20.10	-23.20	-13.13	-15.18
30	-13.54	-9.81	-6.99	-6.20	-6.00	-7.30	-10.33	-9.36	-11.66	-10.83	-16.91	-11.00	-15.18
45	-13.54	-7.11	-5.07	-4.72	-4.71	-5.55	-8.72	-6.94	-9.35	-7.22	-12.70	-8.94	-15.18
60	-13.54	-6.15	-4.49	-5.01	-5.01	-5.04	-6.61	-6.52	-8.01	-4.79	-10.53	-8.90	-15.18
75	-13.54	-6.77	-5.39	-5.50	-6.17	-6.21	-6.44	-6.84	-8.36	-3.90	-9.54	-8.97	-15.18
90	-13.54	-7.50	-5.80	-7.71	-8.17	-8.11	-7.45	-8.07	-8.03	-3.91	-9.59	-10.99	-15.18
105	-13.54	-7.98	-7.58	-9.25	-11.21	-10.60	-8.43	-10.03	-8.10	-4.59	-10.28	-11.23	-15.18
120	-13.54	-9.47	-9.91	-12.91	-14.66	-12.18	-10.38	-11.24	-9.07	-5.92	-11.88	-12.52	-15.18
135	-13.54	-11.46	-12.36	-14.84	-15.22	-14.16	-12.97	-10.68	-9.36	-8.16	-14.14	-15.30	-15.18
150	-13.54	-13.36	-13.50	-13.80	-15.60	-13.91	-13.85	-10.16	-10.29	-10.65	-16.69	-19.29	-15.18
165	-13.54	-13.56	-12.71	-11.68	-14.60	-12.60	-11.94	-10.68	-11.26	-12.91	-17.48	-27.71	-15.18
180	-13.54	-12.66	-10.56	-9.72	-11.79	-10.49	-12.10	-11.50	-11.49	-11.35	-15.68	-25.45	-15.18
195	-13.54	-10.67	-8.56	-7.00	-9.35	-9.70	-10.80	-8.67	-12.78	-8.95	-13.51	-16.61	-15.18
210	-13.54	-8.69	-6.10	-5.54	-8.74	-9.53	-8.82	-6.81	-10.30	-7.01	-11.82	-14.06	-15.18
225	-13.54	-6.95	-4.43	-4.09	-9.42	-8.30	-7.45	-5.99	-11.15	-5.50	-10.18	-10.43	-15.18
240	-13.54	-5.74	-3.80	-3.71	-6.78	-5.78	-5.79	-5.24	-10.59	-4.29	-9.28	-10.30	-15.18
255	-13.54	-5.16	-3.91	-3.68	-5.43	-4.49	-5.62	-4.90	-9.62	-2.87	-8.43	-9.03	-15.18
270	-13.54	-4.73	-3.03	-4.02	-4.95	-3.84	-5.18	-4.78	-8.17	-2.96	-7.85	-7.63	-15.18
285	-13.54	-5.06	-4.28	-4.69	-4.87	-3.98	-5.64	-5.03	-8.07	-2.89	-8.18	-7.47	-15.18
300	-13.54	-6.00	-5.43	-6.29	-5.70	-5.07	-7.82	-5.77	-8.29	-4.53	-8.86	-9.90	-15.18
315	-13.54	-7.73	-7.54	-9.22	-7.60	-7.55	-9.42	-7.04	-8.02	-5.53	-10.19	-11.21	-15.18
330	-13.54	-10.41	-12.62	-14.37	-11.40	-11.35	-15.24	-9.24	-9.32	-6.54	-12.93	-14.73	-15.18
345	-13.54	-13.62	-18.45	-18.05	-15.94	-17.80	-31.25	-13.53	-11.49	-11.13	-18.28	-20.72	-15.18
360	-13.54	-14.49	-15.72	-13.56	-16.19	-22.49	-24.56	-16.12	-13.70	-14.69	-22.78	-20.60	-15.18

Peak Value **-2.867** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.79	-3.65	-1.79	-3.57	-8.81	-10.12	-6.28	-9.81	-14.15	-25.74	-12.99	-4.58	-3.62
15	-6.79	-4.24	-2.56	-4.39	-8.44	-10.19	-6.93	-8.89	-13.82	-18.47	-13.60	-5.22	-3.62
30	-6.79	-5.37	-3.85	-5.66	-8.65	-9.61	-8.09	-8.66	-11.45	-14.67	-13.18	-6.13	-3.62
45	-6.79	-6.84	-5.49	-7.19	-9.14	-9.06	-9.14	-8.76	-9.82	-11.48	-12.11	-7.52	-3.62
60	-6.79	-8.52	-7.21	-8.66	-9.66	-8.89	-9.46	-9.09	-8.42	-8.64	-10.71	-9.14	-3.62
75	-6.79	-9.80	-8.37	-9.23	-9.84	-8.89	-10.04	-9.42	-7.49	-6.52	-9.25	-10.32	-3.62
90	-6.79	-10.01	-8.36	-8.81	-9.73	-9.31	-11.37	-10.09	-7.17	-5.19	-7.67	-10.27	-3.62
105	-6.79	-9.37	-7.62	-7.96	-9.75	-10.35	-13.96	-11.26	-7.35	-4.53	-6.49	-9.51	-3.62
120	-6.79	-8.49	-6.89	-7.47	-10.26	-11.71	-18.10	-13.13	-8.14	-4.36	-5.55	-8.52	-3.62
135	-6.79	-7.90	-6.64	-7.55	-11.17	-12.46	-24.03	-15.64	-8.81	-4.45	-4.84	-7.42	-3.62
150	-6.79	-7.65	-6.75	-8.09	-11.56	-12.32	-31.22	-16.14	-9.67	-4.56	-4.21	-7.22	-3.62
165	-6.79	-7.62	-7.21	-8.48	-10.86	-13.37	-17.81	-13.47	-10.49	-4.41	-4.28	-6.96	-3.62
180	-6.79	-7.90	-7.69	-8.85	-10.91	-17.78	-12.00	-11.94	-11.24	-4.08	-3.44	-6.91	-3.62
195	-6.79	-8.60	-8.42	-9.50	-12.56	-27.43	-10.05	-12.54	-10.91	-3.95	-3.41	-7.24	-3.62
210	-6.79	-9.57	-9.94	-11.49	-16.00	-18.36	-10.46	-14.73	-9.97	-4.12	-3.69	-8.05	-3.62
225	-6.79	-11.33	-12.44	-14.71	-18.12	-15.08	-13.14	-15.66	-9.19	-4.71	-4.08	-9.19	-3.62
240	-6.79	-14.03	-16.02	-16.43	-15.69	-14.82	-17.93	-14.52	-8.85	-5.41	-4.80	-10.97	-3.62
255	-6.79	-15.89	-15.25	-13.17	-13.79	-16.20	-20.73	-12.59	-8.36	-6.48	-5.64	-13.36	-3.62
270	-6.79	-13.73	-10.30	-9.83	-13.01	-17.89	-15.78	-10.51	-7.48	-7.64	-6.65	-13.91	-3.62
285	-6.79	-9.98	-7.02	-7.59	-12.17	-17.04	-12.27	-8.75	-6.77	-9.07	-7.80	-11.41	-3.62
300	-6.79	-7.25	-4.60	-5.98	-11.08	-14.12	-10.46	-7.78	-6.54	-10.77	-8.82	-8.64	-3.62
315	-6.79	-5.42	-2.99	-4.67	-10.24	-11.50	-9.39	-8.15	-7.14	-13.36	-9.66	-6.52	-3.62
330	-6.79	-4.24	-2.00	-3.80	-9.84	-9.77	-8.05	-9.50	-8.81	-17.66	-10.67	-5.24	-3.62
345	-6.79	-3.68	-1.53	-3.39	-9.35	-9.53	-6.72	-10.53	-11.67	-28.33	-11.84	-4.64	-3.62

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.58	-2.79	-0.88	-2.34	-7.07	-9.56	-5.48	-7.80	-10.79	-15.43	-12.28	-3.74	-2.56
15	-5.58	-2.92	-0.90	-1.81	-4.70	-7.05	-5.45	-5.76	-10.30	-14.42	-12.49	-3.77	-2.56
30	-5.58	-3.53	-1.47	-2.16	-3.54	-4.49	-5.28	-4.90	-7.12	-8.16	-10.82	-4.19	-2.56
45	-5.58	-3.61	-1.65	-2.01	-2.93	-3.13	-5.08	-3.87	-5.40	-4.86	-8.53	-4.47	-2.56
60	-5.58	-3.81	-1.99	-2.80	-3.28	-2.86	-3.89	-3.71	-4.18	-2.41	-6.67	-5.28	-2.56
75	-5.58	-4.71	-3.06	-3.21	-4.32	-3.69	-4.04	-4.11	-4.02	-1.23	-5.47	-5.80	-2.56
90	-5.58	-5.22	-3.26	-4.62	-5.62	-5.13	-5.11	-5.34	-3.78	-0.64	-4.59	-6.66	-2.56
105	-5.58	-5.30	-4.13	-5.00	-7.36	-7.12	-6.47	-7.14	-3.98	-0.70	-4.02	-6.28	-2.56
120	-5.58	-5.69	-4.70	-5.92	-8.97	-8.60	-8.94	-8.70	-4.80	-1.18	-3.69	-6.07	-2.56
135	-5.58	-6.05	-5.25	-6.47	-9.86	-10.08	-12.16	-9.03	-5.32	-2.11	-3.44	-5.82	-2.56
150	-5.58	-6.46	-5.62	-6.84	-10.12	-9.97	-13.84	-8.56	-6.23	-2.87	-3.11	-5.94	-2.56
165	-5.58	-6.53	-5.86	-6.63	-9.37	-9.74	-10.65	-8.28	-7.26	-3.11	-3.19	-5.95	-2.56
180	-5.58	-6.50	-5.72	-6.10	-8.16	-9.48	-8.51	-8.20	-7.82	-2.55	-2.35	-5.98	-2.56
195	-5.58	-6.36	-5.38	-4.81	-7.34	-9.30	-6.96	-6.77	-8.06	-1.94	-2.19	-5.94	-2.56
210	-5.58	-5.90	-4.32	-4.19	-7.56	-8.63	-6.23	-5.52	-6.23	-1.51	-2.24	-6.35	-2.56
225	-5.58	-5.31	-3.51	-3.34	-8.38	-7.07	-6.12	-4.77	-6.12	-1.41	-2.33	-6.11	-2.56
240	-5.58	-4.80	-3.24	-2.90	-5.65	-4.74	-5.04	-3.88	-5.68	-1.12	-2.65	-6.99	-2.56
255	-5.58	-4.49	-3.09	-2.54	-4.22	-3.58	-4.94	-3.36	-5.09	-0.71	-3.03	-7.05	-2.56
270	-5.58	-3.88	-1.70	-2.22	-3.67	-2.99	-3.96	-2.99	-4.14	-1.12	-3.46	-6.07	-2.56
285	-5.58	-3.34	-1.79	-2.08	-3.37	-3.10	-3.94	-2.86	-3.77	-1.50	-4.30	-5.41	-2.56
300	-5.58	-3.06	-1.28	-2.28	-3.83	-3.92	-5.19	-3.08	-3.86	-3.18	-5.28	-5.53	-2.56
315	-5.58	-2.91	-0.97	-2.41	-4.97	-5.48	-5.75	-4.15	-4.14	-4.63	-6.41	-4.59	-2.56
330	-5.58	-2.75	-0.90	-2.45	-6.79	-7.01	-6.64	-5.95	-5.71	-6.08	-8.23	-4.07	-2.56
345	-5.58	-2.75	-0.74	-2.26	-7.78	-8.65	-5.94	-8.09	-8.27	-11.10	-10.68	-3.80	-2.56
360	-5.58	-2.88	-0.84	-2.21	-7.40	-9.52	-5.49	-7.88	-10.52	-14.48	-12.18	-3.74	-2.56



Peak Value -0.641 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-12.88	-14.01	-15.10	-14.79	-13.99	-23.28	-21.34	-15.50	-14.55	-16.02	-24.61	-17.88	-13.50
15	-12.88	-10.81	-8.14	-6.84	-7.55	-10.36	-13.08	-10.05	-14.40	-17.65	-21.55	-11.65	-13.50
30	-12.88	-9.70	-6.54	-5.71	-5.32	-6.32	-9.32	-8.23	-10.02	-9.70	-15.79	-9.91	-13.50
45	-12.88	-7.06	-4.65	-4.06	-4.16	-4.57	-7.74	-6.11	-8.19	-6.37	-11.83	-8.09	-13.50
60	-12.88	-5.99	-3.96	-4.46	-4.40	-4.27	-5.64	-5.66	-7.00	-4.04	-9.57	-8.16	-13.50
75	-12.88	-6.62	-4.90	-4.70	-5.66	-5.43	-5.60	-6.10	-7.62	-3.32	-8.64	-8.35	-13.50
90	-12.88	-7.17	-5.13	-6.97	-7.56	-7.48	-6.52	-7.68	-7.48	-3.22	-8.77	-10.45	-13.50
105	-12.88	-7.59	-6.98	-8.39	-10.80	-10.29	-7.46	-9.99	-7.66	-3.93	-9.40	-10.85	-13.50
120	-12.88	-9.00	-9.12	-11.77	-14.25	-11.79	-9.54	-11.32	-8.43	-5.23	-11.10	-12.38	-13.50
135	-12.88	-10.78	-11.46	-13.82	-14.85	-14.32	-12.49	-10.46	-8.75	-7.67	-13.55	-15.24	-13.50
150	-12.88	-12.69	-12.47	-13.08	-15.27	-14.73	-13.88	-9.63	-9.66	-10.37	-16.26	-19.29	-13.50
165	-12.88	-13.15	-11.90	-11.11	-14.95	-13.06	-11.56	-10.27	-10.92	-12.02	-16.28	-26.10	-13.50
180	-12.88	-12.42	-10.17	-9.54	-12.10	-10.45	-11.42	-11.39	-11.23	-9.71	-14.00	-23.64	-13.50
195	-12.88	-10.64	-8.49	-6.77	-9.24	-9.36	-10.49	-8.49	-12.09	-7.39	-12.04	-15.61	-13.50
210	-12.88	-8.70	-5.85	-5.20	-8.39	-9.14	-8.65	-6.22	-9.22	-5.72	-10.63	-13.28	-13.50
225	-12.88	-6.76	-4.19	-3.72	-9.01	-7.95	-7.15	-5.23	-9.93	-4.64	-9.32	-9.86	-13.50
240	-12.88	-5.47	-3.52	-3.15	-6.27	-5.28	-5.26	-4.40	-9.54	-3.49	-8.46	-9.65	-13.50
255	-12.88	-4.88	-3.42	-3.05	-4.93	-3.89	-5.05	-4.10	-8.86	-2.27	-7.78	-8.43	-13.50
270	-12.88	-4.39	-2.47	-3.31	-4.42	-3.17	-4.31	-4.11	-7.72	-2.36	-7.17	-7.04	-13.50
285	-12.88	-4.50	-3.69	-3.95	-4.18	-3.30	-4.76	-4.53	-7.83	-2.46	-7.62	-7.04	-13.50
300	-12.88	-5.39	-4.74	-5.61	-4.99	-4.43	-7.02	-5.36	-8.37	-4.11	-8.44	-9.46	-13.50
315	-12.88	-7.05	-6.84	-8.37	-6.86	-6.96	-8.80	-6.89	-8.06	-5.31	-9.75	-10.94	-13.50
330	-12.88	-9.58	-11.87	-13.54	-10.65	-10.89	-15.29	-9.16	-9.38	-6.41	-12.67	-14.43	-13.50
345	-12.88	-12.90	-18.17	-17.68	-15.64	-17.81	-30.34	-13.76	-11.61	-11.17	-18.55	-19.18	-13.50
360	-12.88	-14.30	-15.75	-13.09	-16.00	-23.15	-22.24	-15.61	-13.58	-14.76	-23.58	-18.32	-13.50

Peak Value -2.266 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.48	-3.13	-1.05	-2.59	-8.05	-9.75	-5.60	-8.61	-13.17	-24.36	-12.54	-3.91	-2.92
15	-6.48	-3.69	-1.81	-3.44	-7.88	-9.78	-6.27	-7.78	-12.43	-17.21	-13.06	-4.54	-2.92
30	-6.48	-4.73	-3.09	-4.69	-8.28	-9.13	-7.46	-7.61	-10.24	-13.39	-12.49	-5.54	-2.92
45	-6.48	-6.21	-4.66	-6.26	-9.02	-8.63	-8.46	-7.83	-8.64	-10.19	-11.27	-6.94	-2.92
60	-6.48	-7.84	-6.38	-7.79	-9.72	-8.44	-8.69	-8.14	-7.38	-7.46	-9.80	-8.42	-2.92
75	-6.48	-9.19	-7.66	-8.58	-10.07	-8.52	-9.27	-8.46	-6.51	-5.42	-8.32	-9.32	-2.92
90	-6.48	-9.63	-7.83	-8.41	-10.06	-8.91	-10.69	-9.13	-6.20	-4.13	-6.68	-9.01	-2.92
105	-6.48	-9.17	-7.31	-7.67	-9.99	-9.97	-13.40	-10.32	-6.41	-3.49	-5.51	-8.15	-2.92
120	-6.48	-8.42	-6.64	-7.23	-10.50	-11.43	-17.80	-12.14	-7.27	-3.35	-4.56	-7.23	-2.92
135	-6.48	-7.84	-6.44	-7.36	-11.52	-12.13	-23.43	-14.54	-7.95	-3.52	-3.88	-6.35	-2.92
150	-6.48	-7.65	-6.62	-8.02	-11.71	-11.73	-34.30	-15.16	-8.86	-3.72	-3.33	-6.14	-2.92
165	-6.48	-7.60	-7.10	-8.54	-10.77	-12.46	-17.84	-12.63	-9.70	-3.71	-3.41	-5.99	-2.92
180	-6.48	-7.78	-7.65	-8.72	-10.40	-16.45	-11.61	-11.03	-10.47	-3.48	-2.66	-6.06	-2.92
195	-6.48	-8.39	-8.29	-9.21	-11.84	-27.96	-9.51	-11.62	-10.25	-3.39	-2.67	-6.43	-2.92
210	-6.48	-9.14	-9.58	-11.03	-15.13	-18.19	-9.92	-13.82	-9.26	-3.58	-2.92	-7.33	-2.92
225	-6.48	-10.78	-11.91	-14.13	-17.08	-14.42	-12.85	-14.72	-8.45	-4.20	-3.30	-8.49	-2.92
240	-6.48	-13.22	-15.27	-15.40	-14.40	-14.02	-18.23	-13.39	-7.98	-4.88	-3.97	-10.37	-2.92
255	-6.48	-15.08	-14.34	-12.11	-12.42	-15.29	-20.99	-11.39	-7.45	-5.92	-4.81	-12.69	-2.92
270	-6.48	-13.37	-9.61	-8.76	-11.69	-16.86	-15.03	-9.42	-6.64	-7.14	-5.86	-13.04	-2.92
285	-6.48	-9.64	-6.29	-6.62	-11.06	-16.42	-11.59	-7.82	-5.94	-8.54	-7.02	-10.43	-2.92
300	-6.48	-6.87	-3.88	-4.99	-10.16	-13.50	-9.85	-6.96	-5.75	-10.33	-8.15	-7.78	-2.92
315	-6.48	-5.01	-2.27	-3.68	-9.49	-10.85	-8.73	-7.44	-6.39	-13.01	-9.11	-5.73	-2.92
330	-6.48	-3.77	-1.26	-2.80	-9.10	-9.29	-7.27	-8.76	-8.15	-17.53	-10.17	-4.49	-2.92
345	-6.48	-3.19	-0.82	-2.39	-8.56	-9.22	-5.95	-9.47	-10.97	-29.42	-11.45	-3.92	-2.92

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.84	-2.95	-0.90	-2.07	-6.95	-9.88	-5.49	-7.41	-10.74	-16.01	-12.73	-3.66	-2.47
15	-5.84	-3.16	-0.86	-1.69	-4.71	-7.02	-5.52	-5.39	-9.35	-13.60	-12.60	-3.73	-2.47
30	-5.84	-3.74	-1.49	-1.80	-3.62	-4.40	-5.21	-4.63	-6.59	-7.77	-10.72	-4.13	-2.47
45	-5.84	-3.62	-1.44	-1.91	-2.71	-3.08	-4.89	-3.39	-4.77	-4.59	-8.17	-4.18	-2.47
60	-5.84	-3.85	-2.05	-2.29	-3.47	-2.52	-3.73	-3.60	-3.96	-2.22	-6.51	-5.22	-2.47
75	-5.84	-4.65	-2.91	-3.14	-4.14	-3.80	-3.58	-4.04	-3.89	-0.78	-5.24	-5.68	-2.47
90	-5.84	-5.53	-3.38	-4.20	-5.96	-5.32	-5.01	-5.06	-3.54	-0.56	-4.19	-6.39	-2.47
105	-5.84	-5.66	-3.97	-4.74	-7.58	-7.06	-6.38	-7.09	-3.83	-0.63	-3.84	-6.02	-2.47
120	-5.84	-6.11	-4.86	-5.96	-9.54	-8.88	-8.85	-9.08	-4.83	-1.12	-3.55	-5.80	-2.47
135	-5.84	-6.54	-5.44	-6.45	-10.48	-10.28	-12.22	-9.42	-5.09	-2.08	-3.35	-5.19	-2.47
150	-5.84	-6.92	-5.92	-6.87	-10.74	-10.26	-14.35	-8.91	-6.29	-2.85	-3.01	-5.63	-2.47
165	-5.84	-7.07	-6.23	-6.92	-9.87	-10.13	-11.06	-8.53	-7.44	-3.15	-3.06	-5.69	-2.47
180	-5.84	-7.06	-6.15	-6.19	-8.54	-9.94	-8.65	-8.38	-8.05	-2.56	-2.27	-5.78	-2.47
195	-5.84	-6.86	-5.52	-5.11	-7.64	-9.80	-7.13	-6.75	-8.00	-1.87	-2.12	-5.84	-2.47
210	-5.84	-6.13	-4.72	-4.41	-7.77	-9.03	-6.48	-5.77	-6.18	-1.43	-2.18	-6.26	-2.47
225	-5.84	-5.76	-3.43	-3.02	-8.32	-7.34	-6.25	-4.86	-5.94	-1.08	-2.17	-5.89	-2.47
240	-5.84	-5.20	-2.97	-3.01	-5.72	-4.90	-5.17	-3.86	-5.49	-1.09	-2.60	-6.92	-2.47
255	-5.84	-4.37	-3.26	-2.61	-3.84	-3.68	-4.37	-3.31	-4.96	-0.36	-2.80	-6.94	-2.47
270	-5.84	-3.70	-1.84	-2.21	-3.20	-3.02	-3.89	-2.95	-4.16	-1.20	-3.48	-6.09	-2.47
285	-5.84	-3.58	-1.85	-1.99	-3.31	-3.14	-3.84	-2.85	-3.85	-1.51	-4.13	-5.13	-2.47
300	-5.84	-3.27	-1.34	-1.88	-3.72	-3.97	-5.17	-3.15	-3.89	-3.33	-5.16	-5.49	-2.47
315	-5.84	-3.06	-0.99	-2.23	-4.84	-5.55	-5.82	-4.09	-4.33	-4.94	-6.67	-4.48	-2.47
330	-5.84	-2.90	-0.90	-2.17	-6.64	-7.19	-6.57	-6.12	-5.97	-6.23	-8.59	-4.05	-2.47
345	-5.84	-2.93	-0.77	-1.99	-7.57	-8.99	-5.93	-7.98	-8.52	-11.78	-10.99	-3.75	-2.47
360	-5.84	-3.03	-0.83	-1.99	-7.26	-9.85	-5.52	-7.53	-10.53	-15.11	-12.52	-3.70	-2.47

Peak Value -0.359 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-12.64	-14.16	-15.66	-14.63	-14.19	-24.12	-20.60	-15.44	-15.01	-16.85	-26.27	-16.27	-12.87
15	-12.64	-11.56	-7.98	-7.00	-7.64	-10.10	-12.86	-9.63	-12.88	-16.31	-20.64	-11.12	-12.87
30	-12.64	-10.27	-6.74	-5.19	-5.39	-6.09	-8.99	-7.95	-9.39	-9.27	-15.36	-9.51	-12.87
45	-12.64	-7.08	-4.33	-4.10	-3.79	-4.42	-7.38	-5.46	-7.24	-6.13	-11.06	-7.36	-12.87
60	-12.64	-6.07	-4.14	-3.86	-4.49	-3.72	-5.41	-5.60	-6.81	-3.94	-9.36	-8.05	-12.87
75	-12.64	-6.51	-4.72	-4.68	-5.21	-5.45	-4.95	-6.11	-7.50	-2.77	-8.43	-8.28	-12.87
90	-12.64	-7.55	-5.26	-6.28	-7.68	-7.63	-6.36	-7.33	-7.11	-3.29	-8.05	-10.41	-12.87
105	-12.64	-7.94	-6.53	-7.69	-10.44	-9.96	-7.33	-10.00	-7.43	-4.05	-9.29	-11.05	-12.87
120	-12.64	-9.33	-9.07	-11.47	-14.46	-12.14	-9.41	-12.23	-8.57	-5.37	-11.01	-12.80	-12.87
135	-12.64	-11.00	-11.23	-12.96	-15.03	-14.37	-12.53	-11.07	-8.25	-7.94	-13.74	-16.01	-12.87
150	-12.64	-12.68	-12.27	-12.29	-15.15	-15.39	-14.37	-10.06	-9.77	-10.47	-16.07	-20.15	-12.87
165	-12.64	-13.31	-11.87	-11.03	-15.17	-14.23	-11.86	-10.63	-11.35	-12.17	-16.03	-25.97	-12.87
180	-12.64	-12.91	-10.41	-9.13	-12.65	-11.20	-11.38	-11.86	-11.81	-9.25	-12.86	-22.58	-12.87
195	-12.64	-11.27	-8.27	-7.01	-9.70	-9.88	-10.58	-8.54	-12.01	-6.80	-11.40	-15.38	-12.87
210	-12.64	-8.80	-6.24	-5.40	-8.66	-9.51	-8.99	-6.52	-9.07	-5.28	-10.13	-13.11	-12.87
225	-12.64	-7.33	-4.04	-3.36	-8.98	-8.24	-7.37	-5.34	-9.55	-3.80	-8.51	-9.33	-12.87
240	-12.64	-5.94	-3.23	-3.27	-6.41	-5.50	-5.35	-4.42	-9.16	-3.31	-8.28	-9.51	-12.87
255	-12.64	-4.74	-3.61	-3.14	-4.56	-4.02	-4.44	-4.09	-8.71	-1.69	-7.13	-8.31	-12.87
270	-12.64	-4.16	-2.63	-3.36	-3.95	-3.22	-4.21	-4.14	-7.88	-2.40	-7.21	-7.12	-12.87
285	-12.64	-4.70	-3.77	-3.97	-4.20	-3.36	-4.60	-4.60	-8.18	-2.41	-7.18	-6.74	-12.87
300	-12.64	-5.51	-4.83	-5.07	-4.94	-4.49	-6.92	-5.52	-8.54	-4.21	-8.06	-9.62	-12.87
315	-12.64	-7.07	-6.89	-8.38	-6.78	-7.02	-8.86	-6.81	-8.62	-5.61	-10.08	-10.78	-12.87
330	-12.64	-9.48	-11.79	-13.01	-10.59	-10.98	-15.05	-9.77	-10.03	-6.53	-13.15	-14.91	-12.87
345	-12.64	-12.74	-18.33	-17.22	-15.81	-18.16	-28.34	-14.56	-12.26	-11.84	-18.83	-18.66	-12.87
360	-12.64	-13.78	-15.91	-13.36	-16.17	-24.14	-21.42	-15.74	-14.04	-15.52	-24.29	-17.28	-12.87

Peak Value **-1.686** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.86	-3.30	-1.04	-2.32	-7.86	-10.04	-5.63	-8.16	-12.77	-23.59	-12.93	-3.90	-2.89
15	-6.86	-3.84	-1.80	-3.21	-7.82	-9.96	-6.41	-7.44	-11.90	-16.92	-13.34	-4.61	-2.89
30	-6.86	-4.83	-3.03	-4.47	-8.37	-9.32	-7.56	-7.34	-9.82	-13.13	-12.54	-5.62	-2.89
45	-6.86	-6.21	-4.59	-5.94	-9.27	-8.84	-8.50	-7.59	-8.40	-9.84	-11.29	-7.03	-2.89
60	-6.86	-7.83	-6.23	-7.48	-10.23	-8.69	-8.69	-7.92	-7.13	-7.06	-9.69	-8.42	-2.89
75	-6.86	-9.21	-7.58	-8.39	-10.73	-8.79	-9.27	-8.26	-6.36	-5.13	-8.08	-9.14	-2.89
90	-6.86	-9.83	-7.91	-8.40	-10.81	-9.15	-10.71	-8.97	-6.05	-3.86	-6.48	-8.59	-2.89
105	-6.86	-9.54	-7.48	-7.80	-10.74	-10.18	-13.45	-10.21	-6.32	-3.26	-5.30	-7.66	-2.89
120	-6.86	-8.93	-6.93	-7.39	-11.24	-11.65	-18.09	-11.96	-7.21	-3.17	-4.41	-6.77	-2.89
135	-6.86	-8.47	-6.76	-7.55	-12.36	-12.43	-23.77	-14.41	-7.95	-3.39	-3.77	-5.57	-2.89
150	-6.86	-8.26	-7.06	-8.34	-12.69	-11.85	-37.63	-15.23	-8.87	-3.67	-3.23	-5.78	-2.89
165	-6.86	-8.24	-7.62	-9.06	-11.39	-12.27	-18.83	-12.68	-9.71	-3.73	-3.28	-5.73	-2.89
180	-6.86	-8.37	-8.19	-9.27	-10.68	-15.93	-11.96	-10.98	-10.43	-3.61	-2.66	-5.88	-2.89
195	-6.86	-8.81	-8.81	-9.60	-11.87	-27.17	-9.74	-11.46	-10.20	-3.55	-2.67	-6.35	-2.89
210	-6.86	-9.51	-10.02	-11.30	-15.12	-18.83	-10.05	-13.73	-9.32	-3.75	-2.94	-7.26	-2.89
225	-6.86	-10.93	-12.25	-14.32	-16.85	-14.59	-12.65	-14.61	-8.43	-4.40	-3.32	-8.51	-2.89
240	-6.86	-13.23	-15.28	-15.40	-14.05	-13.78	-19.03	-13.03	-7.93	-5.08	-3.96	-10.39	-2.89
255	-6.86	-15.20	-14.38	-11.96	-12.00	-14.94	-22.24	-11.16	-7.34	-6.16	-4.79	-12.63	-2.89
270	-6.86	-13.68	-9.64	-8.55	-11.19	-16.42	-15.33	-9.17	-6.57	-7.34	-5.88	-12.84	-2.89
285	-6.86	-10.00	-6.32	-6.35	-10.63	-16.19	-11.79	-7.64	-5.85	-8.81	-7.10	-10.23	-2.89
300	-6.86	-7.20	-3.92	-4.72	-9.84	-13.50	-9.97	-6.91	-5.71	-10.67	-8.27	-7.61	-2.89
315	-6.86	-5.25	-2.28	-3.44	-9.28	-10.96	-8.81	-7.41	-6.36	-13.34	-9.30	-5.64	-2.89
330	-6.86	-3.98	-1.27	-2.54	-8.87	-9.53	-7.23	-8.57	-8.14	-18.08	-10.46	-4.43	-2.89
345	-6.86	-3.41	-0.85	-2.12	-8.27	-9.55	-5.95	-9.06	-10.90	-30.32	-11.77	-3.89	-2.89

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.51	-3.53	-1.34	-2.29	-7.15	-10.60	-5.98	-7.53	-11.01	-16.93	-13.45	-4.02	-2.77
15	-6.51	-3.77	-1.32	-1.94	-5.04	-7.32	-5.94	-5.49	-9.15	-13.25	-12.97	-4.03	-2.77
30	-6.51	-4.33	-1.90	-1.96	-4.04	-4.65	-5.51	-4.79	-6.56	-7.75	-10.96	-4.47	-2.77
45	-6.51	-4.23	-1.82	-2.17	-3.19	-3.42	-5.06	-3.65	-4.77	-4.69	-8.31	-4.46	-2.77
60	-6.51	-4.50	-2.48	-2.46	-3.96	-2.91	-3.97	-3.91	-4.17	-2.47	-6.76	-5.52	-2.77
75	-6.51	-5.22	-3.31	-3.39	-4.61	-4.27	-3.77	-4.35	-4.16	-1.05	-5.49	-5.88	-2.77
90	-6.51	-6.13	-3.82	-4.27	-6.52	-5.83	-5.30	-5.45	-3.92	-0.88	-4.42	-6.55	-2.77
105	-6.51	-6.36	-4.36	-4.97	-8.25	-7.63	-6.70	-7.59	-4.33	-0.97	-4.13	-6.18	-2.77
120	-6.51	-6.82	-5.36	-6.20	-10.34	-9.61	-9.11	-9.82	-5.30	-1.50	-3.86	-5.99	-2.77
135	-6.51	-7.26	-5.97	-6.70	-11.29	-10.90	-12.42	-10.28	-5.54	-2.50	-3.72	-5.39	-2.77
150	-6.51	-7.71	-6.49	-7.18	-11.53	-11.03	-15.00	-9.71	-6.74	-3.37	-3.40	-5.84	-2.77
165	-6.51	-7.93	-6.86	-7.40	-10.57	-10.79	-11.77	-9.24	-7.90	-3.66	-3.40	-5.91	-2.77
180	-6.51	-7.98	-6.88	-6.67	-9.22	-10.66	-9.18	-8.97	-8.62	-3.02	-2.65	-6.04	-2.77
195	-6.51	-7.75	-6.19	-5.70	-8.20	-10.53	-7.62	-7.44	-8.39	-2.25	-2.55	-6.17	-2.77
210	-6.51	-6.97	-5.46	-4.90	-8.17	-9.69	-6.99	-6.44	-6.54	-1.79	-2.57	-6.60	-2.77
225	-6.51	-6.57	-4.04	-3.47	-8.57	-7.86	-6.71	-5.38	-6.17	-1.32	-2.52	-6.22	-2.77
240	-6.51	-5.95	-3.44	-3.46	-6.11	-5.39	-5.58	-4.26	-5.69	-1.46	-2.97	-7.22	-2.77
255	-6.51	-4.97	-3.70	-3.01	-4.23	-4.08	-4.55	-3.60	-5.24	-0.64	-3.17	-7.26	-2.77
270	-6.51	-4.27	-2.32	-2.57	-3.49	-3.38	-4.19	-3.25	-4.54	-1.59	-3.91	-6.47	-2.77
285	-6.51	-4.18	-2.27	-2.32	-3.59	-3.49	-4.16	-3.14	-4.28	-2.03	-4.54	-5.55	-2.77
300	-6.51	-3.84	-1.77	-2.13	-3.96	-4.30	-5.50	-3.54	-4.31	-3.82	-5.63	-5.86	-2.77
315	-6.51	-3.64	-1.43	-2.48	-5.05	-5.87	-6.31	-4.95	-4.89	-5.56	-7.30	-4.88	-2.77
330	-6.51	-3.50	-1.35	-2.40	-6.79	-7.61	-7.04	-6.59	-6.56	-7.09	-9.33	-4.47	-2.77
345	-6.51	-3.48	-1.23	-2.23	-7.72	-9.65	-6.36	-8.23	-9.04	-12.77	-11.80	-4.12	-2.77
360	-6.51	-3.58	-1.28	-2.22	-7.43	-10.60	-6.01	-7.61	-10.95	-16.01	-13.32	-4.07	-2.77

Peak Value **-0.637** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-12.70	-14.44	-16.60	-14.89	-14.67	-25.08	-20.34	-15.84	-15.70	-17.94	-28.37	-15.76	-12.72
15	-12.70	-12.51	-8.59	-7.36	-8.01	-10.18	-12.89	-9.68	-12.44	-15.56	-20.26	-10.97	-12.72
30	-12.70	-11.13	-7.25	-5.33	-5.82	-6.22	-9.03	-8.06	-9.25	-9.20	-15.27	-9.49	-12.72
45	-12.70	-7.91	-4.73	-4.44	-4.26	-4.67	-7.40	-5.73	-7.13	-6.22	-11.01	-7.42	-12.72
60	-12.70	-6.93	-4.65	-4.07	-4.95	-4.03	-5.56	-5.92	-6.94	-4.20	-9.49	-8.17	-12.72
75	-12.70	-7.18	-5.15	-4.98	-5.57	-5.83	-5.08	-6.44	-7.71	-3.08	-8.60	-8.47	-12.72
90	-12.70	-8.22	-5.72	-6.28	-8.10	-8.07	-6.59	-7.78	-7.49	-3.68	-8.22	-10.61	-12.72
105	-12.70	-8.65	-6.82	-7.87	-10.87	-10.50	-7.59	-10.68	-8.02	-4.47	-9.51	-11.48	-12.72
120	-12.70	-9.93	-9.43	-11.54	-14.92	-12.93	-9.60	-13.46	-9.09	-5.86	-11.27	-13.51	-12.72
135	-12.70	-11.43	-11.53	-12.90	-15.38	-15.08	-12.71	-12.19	-8.62	-8.53	-14.19	-16.96	-12.72
150	-12.70	-13.06	-12.53	-12.32	-15.29	-16.84	-15.03	-10.93	-10.22	-11.33	-16.69	-21.61	-12.72
165	-12.70	-13.79	-12.22	-11.24	-15.32	-15.63	-12.43	-11.44	-11.98	-12.75	-16.32	-26.44	-12.72
180	-12.70	-13.68	-10.94	-9.34	-13.24	-12.28	-11.67	-12.65	-12.63	-9.35	-12.77	-22.09	-12.72
195	-12.70	-12.20	-8.76	-7.51	-10.31	-10.66	-10.94	-9.35	-12.43	-6.78	-11.26	-15.54	-12.72
210	-12.70	-9.72	-6.98	-5.85	-9.05	-10.11	-9.42	-7.23	-9.40	-5.31	-9.97	-13.27	-12.72
225	-12.70	-8.23	-4.64	-3.78	-9.19	-8.74	-7.80	-5.87	-9.58	-3.73	-8.48	-9.58	-12.72
240	-12.70	-6.74	-3.69	-3.70	-6.84	-6.01	-5.73	-4.83	-9.17	-3.48	-8.39	-9.75	-12.72
255	-12.70	-5.36	-4.05	-3.55	-4.99	-4.43	-4.60	-4.40	-8.89	-1.85	-7.31	-8.61	-12.72
270	-12.70	-4.72	-3.11	-3.73	-4.26	-3.59	-4.48	-4.45	-8.28	-2.72	-7.53	-7.56	-12.72
285	-12.70	-5.25	-4.16	-4.34	-4.51	-3.72	-4.88	-4.89	-8.70	-2.89	-7.47	-7.21	-12.72
300	-12.70	-5.95	-5.21	-5.33	-5.21	-4.82	-7.11	-5.93	-9.08	-4.66	-8.45	-10.07	-12.72
315	-12.70	-7.42	-7.25	-8.72	-7.05	-7.30	-9.36	-8.15	-9.42	-6.19	-10.68	-11.38	-12.72
330	-12.70	-9.67	-11.93	-13.32	-10.79	-11.21	-15.55	-10.53	-10.91	-7.37	-13.88	-15.68	-12.72
345	-12.70	-12.79	-18.66	-17.76	-16.23	-18.61	-26.98	-15.62	-13.21	-12.81	-19.72	-18.53	-12.72
360	-12.70	-14.01	-16.80	-13.93	-16.37	-25.36	-21.39	-16.23	-14.98	-16.59	-25.93	-16.77	-12.72

Peak Value -1.851 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-7.71	-3.90	-1.48	-2.53	-7.99	-10.76	-6.14	-8.22	-12.81	-23.79	-13.59	-4.32	-3.23
15	-7.71	-4.40	-2.22	-3.41	-8.09	-10.50	-6.92	-7.58	-11.90	-17.09	-13.87	-5.02	-3.23
30	-7.71	-5.35	-3.40	-4.64	-8.78	-9.83	-8.06	-7.55	-9.92	-13.24	-12.98	-6.11	-3.23
45	-7.71	-6.67	-4.94	-6.08	-9.81	-9.46	-8.87	-7.83	-8.55	-9.99	-11.65	-7.53	-3.23
60	-7.71	-8.19	-6.54	-7.56	-10.84	-9.31	-9.08	-8.21	-7.44	-7.29	-10.06	-8.91	-3.23
75	-7.71	-9.62	-7.93	-8.50	-11.60	-9.46	-9.62	-8.52	-6.69	-5.34	-8.41	-9.37	-3.23
90	-7.71	-10.32	-8.33	-8.58	-11.69	-9.78	-11.21	-9.26	-6.44	-4.12	-6.76	-8.71	-3.23
105	-7.71	-10.24	-8.00	-8.09	-11.69	-10.78	-14.06	-10.52	-6.76	-3.55	-5.62	-7.69	-3.23
120	-7.71	-9.74	-7.52	-7.70	-12.21	-12.32	-18.81	-12.27	-7.65	-3.48	-4.73	-6.84	-3.23
135	-7.71	-9.36	-7.38	-7.89	-13.43	-13.00	-24.19	-14.76	-8.48	-3.75	-4.13	-5.71	-3.23
150	-7.71	-9.21	-7.73	-8.76	-13.90	-12.35	-36.65	-15.84	-9.33	-4.12	-3.61	-5.95	-3.23
165	-7.71	-9.23	-8.35	-9.71	-12.35	-12.51	-20.32	-13.25	-10.06	-4.23	-3.62	-5.95	-3.23
180	-7.71	-9.34	-9.05	-10.04	-11.41	-15.74	-12.78	-11.40	-10.81	-4.17	-3.10	-6.15	-3.23
195	-7.71	-9.69	-9.69	-10.39	-12.33	-25.71	-10.35	-11.93	-10.57	-4.13	-3.18	-6.71	-3.23
210	-7.71	-10.25	-10.78	-11.96	-15.52	-20.12	-10.67	-14.22	-9.72	-4.34	-3.44	-7.65	-3.23
225	-7.71	-11.53	-12.97	-15.10	-17.27	-15.26	-13.26	-15.04	-8.81	-5.02	-3.79	-8.90	-3.23
240	-7.71	-13.71	-15.91	-16.02	-14.23	-14.20	-20.25	-13.38	-8.28	-5.75	-4.44	-10.78	-3.23
255	-7.71	-15.62	-14.84	-12.33	-12.17	-15.25	-23.89	-11.34	-7.69	-6.76	-5.28	-12.99	-3.23
270	-7.71	-14.41	-10.11	-8.88	-11.39	-16.69	-16.12	-9.40	-6.92	-7.99	-6.38	-13.02	-3.23
285	-7.71	-10.76	-6.79	-6.60	-10.76	-16.31	-12.36	-7.91	-6.23	-9.48	-7.63	-10.52	-3.23
300	-7.71	-7.99	-4.38	-4.97	-9.95	-13.80	-10.58	-7.27	-6.08	-11.37	-8.85	-7.93	-3.23
315	-7.71	-5.99	-2.75	-3.65	-9.38	-11.40	-9.28	-7.79	-6.79	-14.26	-9.97	-5.98	-3.23
330	-7.71	-4.70	-1.75	-2.77	-9.00	-10.09	-7.70	-8.83	-8.55	-19.14	-11.21	-4.81	-3.23
345	-7.71	-4.02	-1.31	-2.35	-8.38	-10.24	-6.39	-9.10	-11.14	-32.87	-12.56	-4.28	-3.23



### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.53	-3.67	-6.79	-10.41	-11.50	-13.09	-11.11	-10.56	-8.67	-8.68	-7.62	-12.45	-14.98
15	-3.53	-3.25	-5.48	-6.59	-9.07	-8.57	-10.73	-9.62	-7.14	-7.74	-8.24	-14.01	-14.98
30	-3.53	-3.55	-5.58	-3.17	-5.22	-5.52	-7.16	-7.50	-6.41	-7.21	-8.55	-14.19	-14.98
45	-3.53	-2.22	-3.32	-2.14	-1.76	-2.76	-4.32	-5.02	-4.11	-6.78	-6.94	-13.04	-14.98
60	-3.53	-2.28	-3.28	-0.44	-0.32	-0.39	-2.03	-3.39	-3.13	-5.73	-6.97	-12.50	-14.98
75	-3.53	-2.24	-2.59	-0.53	0.82	0.45	-0.98	-2.69	-2.84	-5.16	-6.62	-11.32	-14.98
90	-3.53	-3.33	-2.56	-0.10	0.56	0.69	-0.81	-2.73	-3.48	-5.17	-6.28	-11.28	-14.98
105	-3.53	-3.29	-2.09	-0.54	0.50	0.63	-0.80	-2.87	-4.42	-5.49	-6.55	-10.90	-14.98
120	-3.53	-3.46	-2.72	-1.29	0.08	0.44	-0.47	-2.37	-4.54	-5.35	-6.50	-10.48	-14.98
135	-3.53	-3.58	-3.09	-1.41	0.35	0.88	0.11	-1.16	-3.87	-5.06	-6.47	-9.86	-14.98
150	-3.53	-3.82	-3.51	-1.84	0.31	1.22	0.48	-0.43	-3.90	-4.11	-6.51	-10.43	-14.98
165	-3.53	-3.78	-4.11	-2.66	-0.06	1.03	0.56	-0.72	-3.48	-4.07	-7.01	-10.61	-14.98
180	-3.53	-3.84	-4.55	-3.58	-0.97	0.82	0.01	-1.21	-3.17	-5.16	-6.90	-10.63	-14.98
195	-3.53	-3.92	-4.90	-5.90	-2.13	0.10	-1.17	-1.46	-4.06	-7.26	-6.87	-10.90	-14.98
210	-3.53	-3.40	-5.46	-7.40	-3.65	-1.85	-2.56	-2.88	-5.72	-8.97	-6.60	-12.58	-14.98
225	-3.53	-3.35	-4.61	-5.75	-5.09	-4.67	-4.71	-5.41	-7.35	-10.48	-5.66	-12.04	-14.98
240	-3.53	-3.07	-3.29	-3.48	-4.36	-6.42	-9.63	-7.88	-7.67	-11.01	-5.52	-13.40	-14.98
255	-3.53	-2.06	-2.90	-1.69	-1.71	-4.95	-9.04	-7.20	-7.06	-9.58	-4.48	-13.01	-14.98
270	-3.53	-1.95	-2.05	-0.66	-0.42	-2.97	-5.15	-4.80	-6.15	-10.67	-5.01	-12.62	-14.98
285	-3.53	-2.72	-2.53	-0.83	-0.98	-2.35	-3.38	-3.72	-6.41	-10.50	-5.03	-11.87	-14.98
300	-3.53	-3.09	-3.13	-1.37	-2.15	-3.24	-3.47	-4.33	-6.91	-10.21	-5.56	-11.93	-14.98
315	-3.53	-3.45	-3.74	-3.91	-4.74	-5.72	-4.25	-5.98	-9.17	-9.25	-6.01	-11.33	-14.98
330	-3.53	-3.63	-5.25	-5.83	-8.34	-9.28	-5.82	-7.66	-10.58	-8.58	-6.05	-11.72	-14.98
345	-3.53	-3.72	-6.29	-8.70	-10.61	-13.59	-8.27	-9.17	-9.08	-9.11	-6.22	-12.23	-14.98
360	-3.53	-3.64	-6.50	-10.46	-11.47	-13.04	-10.96	-10.59	-8.39	-8.53	-7.02	-12.78	-14.98

Peak Value 1.216 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-12.47	-11.73	-13.12	-16.44	-22.23	-18.47	-23.91	-14.50	-8.74	-11.51	-9.02	-13.94	-24.28
15	-12.47	-7.58	-7.33	-7.16	-11.86	-11.98	-20.84	-11.25	-7.70	-10.37	-8.98	-16.67	-24.28
30	-12.47	-6.25	-6.29	-3.45	-7.58	-9.77	-14.64	-12.35	-8.59	-10.95	-9.62	-18.40	-24.28
45	-12.47	-3.16	-3.36	-2.76	-4.27	-7.44	-13.75	-12.88	-8.25	-12.54	-8.26	-15.93	-24.28
60	-12.47	-2.75	-3.36	-1.35	-3.80	-4.83	-12.28	-13.42	-10.25	-13.11	-9.68	-15.02	-24.28
75	-12.47	-2.65	-3.13	-2.16	-2.99	-5.07	-10.92	-12.34	-12.34	-12.06	-10.36	-13.32	-24.28
90	-12.47	-4.32	-3.96	-2.42	-4.54	-5.78	-13.23	-11.38	-13.29	-12.52	-10.65	-13.66	-24.28
105	-12.47	-5.05	-4.18	-4.19	-5.41	-7.21	-16.15	-12.54	-14.23	-13.09	-12.78	-14.18	-24.28
120	-12.47	-6.41	-5.99	-6.88	-7.73	-11.61	-18.36	-17.15	-15.20	-14.47	-13.62	-15.22	-24.28
135	-12.47	-7.93	-6.75	-7.01	-7.73	-12.47	-16.13	-15.89	-14.20	-15.34	-15.35	-18.36	-24.28
150	-12.47	-9.46	-7.04	-7.21	-7.59	-10.16	-15.18	-11.56	-17.05	-11.53	-17.83	-23.85	-24.28
165	-12.47	-9.68	-7.18	-7.77	-6.96	-10.32	-11.75	-11.20	-14.60	-10.99	-27.26	-26.21	-24.28
180	-12.47	-9.12	-7.22	-7.51	-7.06	-8.83	-9.93	-12.50	-11.43	-13.22	-21.18	-21.59	-24.28
195	-12.47	-8.14	-7.35	-10.30	-7.93	-7.86	-9.80	-10.60	-12.74	-21.20	-14.44	-17.55	-24.28
210	-12.47	-6.29	-9.36	-14.04	-9.29	-9.05	-11.30	-12.70	-15.77	-25.63	-10.89	-17.63	-24.28
225	-12.47	-5.63	-9.03	-11.09	-10.27	-12.25	-15.01	-17.30	-14.94	-14.79	-7.87	-15.11	-24.28
240	-12.47	-4.67	-7.04	-7.37	-8.40	-13.25	-23.59	-16.72	-10.17	-12.71	-7.05	-16.91	-24.28
255	-12.47	-3.02	-6.12	-4.37	-4.28	-8.45	-16.83	-11.55	-7.98	-9.66	-5.79	-18.16	-24.28
270	-12.47	-2.75	-3.79	-2.67	-2.39	-5.21	-12.05	-9.49	-7.41	-11.38	-7.48	-20.00	-24.28
285	-12.47	-3.88	-3.88	-2.53	-2.83	-4.40	-10.43	-9.45	-8.87	-13.64	-9.28	-21.59	-24.28
300	-12.47	-4.99	-4.30	-2.71	-3.68	-5.37	-11.35	-11.52	-9.91	-15.69	-12.25	-21.34	-24.28
315	-12.47	-7.12	-5.55	-6.00	-6.56	-8.16	-13.11	-12.81	-12.99	-13.76	-12.52	-15.75	-24.28
330	-12.47	-10.16	-9.17	-9.18	-12.72	-12.36	-19.06	-13.21	-12.31	-11.49	-9.97	-14.55	-24.28
345	-12.47	-12.36	-13.12	-16.58	-25.14	-19.37	-21.75	-15.53	-9.18	-12.33	-8.24	-14.13	-24.28
360	-12.47	-11.24	-12.29	-17.40	-23.00	-18.86	-22.71	-15.03	-8.44	-11.37	-8.24	-14.67	-24.28

Peak Value -1.354 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-4.13	-4.41	-7.94	-11.65	-11.88	-14.58	-11.34	-12.81	-26.71	-11.87	-13.21	-17.81	-15.52
15	-4.13	-5.26	-10.06	-15.71	-12.32	-11.23	-11.18	-14.67	-16.34	-11.17	-16.32	-17.40	-15.52
30	-4.13	-6.89	-13.78	-15.30	-9.00	-7.56	-8.02	-9.22	-10.44	-9.60	-15.19	-16.27	-15.52
45	-4.13	-9.31	-22.99	-10.88	-5.35	-4.57	-4.84	-5.80	-6.22	-8.12	-12.77	-16.17	-15.52
60	-4.13	-12.20	-20.21	-7.65	-2.91	-2.33	-2.46	-3.85	-4.06	-6.61	-10.31	-16.06	-15.52
75	-4.13	-12.75	-11.89	-5.59	-1.51	-0.98	-1.45	-3.18	-3.35	-6.15	-9.00	-15.65	-15.52
90	-4.13	-10.22	-8.14	-3.93	-1.04	-0.43	-1.07	-3.37	-3.96	-6.05	-8.26	-15.02	-15.52
105	-4.13	-8.07	-6.27	-3.00	-0.79	-0.16	-0.93	-3.37	-4.90	-6.33	-7.73	-13.66	-15.52
120	-4.13	-6.52	-5.47	-2.69	-0.70	0.16	-0.54	-2.52	-4.93	-5.91	-7.43	-12.26	-15.52
135	-4.13	-5.57	-5.54	-2.81	-0.38	0.67	0.01	-1.31	-4.30	-5.49	-7.08	-10.52	-15.52
150	-4.13	-5.21	-6.05	-3.33	-0.46	0.89	0.36	-0.77	-4.11	-4.98	-6.85	-10.64	-15.52
165	-4.13	-5.07	-7.06	-4.26	-1.05	0.70	0.30	-1.12	-3.83	-5.06	-7.05	-10.74	-15.52
180	-4.13	-5.37	-7.94	-5.83	-2.19	0.32	-0.45	-1.54	-3.88	-5.90	-7.07	-11.00	-15.52
195	-4.13	-5.98	-8.55	-7.86	-3.46	-0.65	-1.82	-2.02	-4.70	-7.44	-7.71	-11.96	-15.52
210	-4.13	-6.54	-7.73	-8.47	-5.04	-2.78	-3.18	-3.36	-6.18	-9.06	-8.62	-14.20	-15.52
225	-4.13	-7.23	-6.56	-7.26	-6.67	-5.50	-5.14	-5.70	-8.18	-12.49	-9.65	-15.00	-15.52
240	-4.13	-8.20	-5.67	-5.76	-6.53	-7.43	-9.81	-8.49	-11.25	-15.92	-10.81	-15.96	-15.52
255	-4.13	-9.09	-5.72	-5.05	-5.21	-7.53	-9.83	-9.18	-14.27	-26.97	-10.35	-14.60	-15.52
270	-4.13	-9.67	-6.87	-4.97	-4.78	-6.92	-6.15	-6.61	-12.14	-18.88	-8.65	-13.50	-15.52
285	-4.13	-9.03	-8.27	-5.75	-5.59	-6.61	-4.33	-5.07	-10.07	-13.39	-7.08	-12.36	-15.52
300	-4.13	-7.60	-9.38	-7.12	-7.43	-7.36	-4.24	-5.25	-9.94	-11.65	-6.61	-12.46	-15.52
315	-4.13	-5.90	-8.41	-8.08	-9.38	-9.38	-4.85	-6.99	-11.49	-11.14	-7.11	-13.28	-15.52
330	-4.13	-4.72	-7.51	-8.53	-10.31	-12.23	-6.04	-9.08	-15.41	-11.70	-8.32	-14.91	-15.52
345	-4.13	-4.36	-7.30	-9.48	-10.76	-14.92	-8.47	-10.32	-25.33	-11.92	-10.52	-16.72	-15.52

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.38	-3.26	-5.23	-8.41	-10.18	-12.10	-9.84	-11.00	-10.18	-8.13	-6.88	-12.01	-16.78
15	-3.38	-2.84	-4.26	-6.24	-9.04	-9.54	-11.00	-11.15	-9.98	-8.20	-7.81	-14.04	-16.78
30	-3.38	-3.12	-4.50	-3.76	-5.42	-6.40	-8.12	-8.82	-8.58	-8.28	-8.49	-14.72	-16.78
45	-3.38	-2.25	-3.06	-2.22	-2.10	-3.05	-4.99	-5.74	-5.71	-7.40	-7.51	-13.56	-16.78
60	-3.38	-2.18	-2.92	-0.79	-0.45	-0.49	-2.26	-3.52	-3.80	-6.07	-7.32	-13.08	-16.78
75	-3.38	-2.43	-2.66	-0.44	0.63	0.72	-0.93	-2.54	-3.02	-5.15	-6.86	-12.47	-16.78
90	-3.38	-3.28	-2.60	-0.28	0.59	1.07	-0.49	-2.43	-3.24	-4.95	-6.77	-12.73	-16.78
105	-3.38	-3.16	-2.50	-0.62	0.43	0.98	-0.38	-2.74	-3.81	-4.98	-6.82	-12.25	-16.78
120	-3.38	-3.38	-2.97	-1.19	0.16	0.96	0.00	-2.21	-3.99	-5.02	-6.77	-11.96	-16.78
135	-3.38	-3.68	-3.35	-1.32	0.32	1.29	0.52	-1.24	-3.30	-4.56	-6.82	-11.50	-16.78
150	-3.38	-3.91	-3.79	-1.74	0.34	1.57	0.74	-0.49	-3.27	-3.95	-6.74	-11.72	-16.78
165	-3.38	-4.15	-4.46	-2.39	0.05	1.51	0.81	-0.74	-3.07	-3.79	-7.41	-11.50	-16.78
180	-3.38	-4.39	-5.09	-3.25	-0.84	1.14	0.32	-1.41	-2.96	-4.69	-7.32	-11.59	-16.78
195	-3.38	-4.37	-5.49	-5.12	-2.00	0.45	-0.83	-1.96	-3.56	-6.35	-7.49	-12.26	-16.78
210	-3.38	-3.96	-5.96	-6.78	-3.43	-1.17	-2.35	-3.38	-4.96	-8.20	-7.64	-13.44	-16.78
225	-3.38	-3.92	-5.17	-6.12	-4.53	-3.49	-4.69	-5.65	-6.46	-10.40	-7.57	-13.55	-16.78
240	-3.38	-3.51	-4.00	-4.01	-3.81	-5.31	-8.82	-7.53	-7.35	-12.36	-7.61	-14.00	-16.78
255	-3.38	-2.82	-3.48	-2.13	-1.74	-4.53	-8.75	-6.40	-7.15	-12.37	-6.91	-12.70	-16.78
270	-3.38	-2.57	-2.42	-1.04	-0.64	-3.04	-4.95	-3.92	-6.38	-12.63	-6.52	-11.82	-16.78
285	-3.38	-3.00	-2.84	-0.98	-0.86	-2.61	-3.13	-2.97	-6.23	-10.45	-6.15	-10.79	-16.78
300	-3.38	-3.31	-3.00	-1.62	-2.11	-3.33	-3.04	-3.71	-6.71	-8.80	-5.94	-10.35	-16.78
315	-3.38	-3.43	-3.51	-3.31	-4.32	-5.43	-3.76	-5.23	-8.65	-7.91	-5.58	-9.96	-16.78
330	-3.38	-3.42	-4.40	-4.92	-7.07	-8.36	-5.24	-6.87	-9.90	-7.38	-5.45	-10.52	-16.78
345	-3.38	-3.26	-4.97	-7.05	-8.97	-11.30	-7.22	-8.81	-9.47	-7.92	-5.83	-11.43	-16.78
360	-3.38	-3.26	-5.26	-8.41	-10.19	-11.80	-9.68	-10.70	-9.51	-8.02	-6.36	-12.07	-16.78

Peak Value 1.572 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-15.48	-13.13	-11.96	-14.89	-33.90	-19.45	-23.24	-15.42	-10.22	-10.73	-8.27	-13.39	-22.27
15	-15.48	-7.52	-6.76	-7.36	-13.22	-13.75	-21.60	-13.77	-10.37	-10.97	-8.77	-16.02	-22.27
30	-15.48	-5.92	-5.58	-4.27	-7.97	-10.38	-15.37	-15.62	-11.44	-12.79	-10.17	-18.04	-22.27
45	-15.48	-3.18	-3.19	-2.90	-4.69	-7.39	-14.12	-15.61	-12.14	-15.87	-10.06	-16.56	-22.27
60	-15.48	-2.53	-2.97	-1.88	-3.81	-5.06	-11.82	-13.80	-13.96	-17.26	-12.24	-15.93	-22.27
75	-15.48	-2.77	-3.22	-2.33	-3.39	-4.82	-10.26	-12.44	-15.06	-14.96	-14.19	-14.90	-22.27
90	-15.48	-4.22	-4.18	-3.15	-4.76	-5.74	-11.71	-12.03	-14.36	-13.72	-15.37	-15.67	-22.27
105	-15.48	-5.04	-5.40	-5.21	-6.55	-7.76	-14.64	-13.80	-14.68	-13.38	-16.59	-16.06	-22.27
120	-15.48	-6.93	-7.93	-8.26	-9.23	-11.75	-19.34	-18.32	-15.95	-14.19	-16.83	-18.10	-22.27
135	-15.48	-9.62	-9.28	-8.80	-9.26	-13.72	-17.54	-18.56	-14.94	-15.12	-18.47	-21.40	-22.27
150	-15.48	-12.03	-9.40	-8.82	-8.71	-11.69	-15.66	-13.53	-17.90	-13.07	-21.88	-30.36	-22.27
165	-15.48	-12.92	-9.14	-8.70	-8.16	-11.08	-12.62	-12.97	-16.93	-12.38	-27.97	-26.60	-22.27
180	-15.48	-11.76	-8.68	-8.36	-8.33	-9.71	-10.80	-14.53	-13.79	-14.66	-19.67	-21.20	-22.27
195	-15.48	-9.48	-8.22	-9.96	-9.20	-8.51	-10.40	-13.04	-15.47	-22.22	-14.50	-18.22	-22.27
210	-15.48	-6.89	-8.54	-12.64	-10.62	-9.43	-11.76	-14.40	-18.33	-28.13	-11.58	-18.06	-22.27
225	-15.48	-5.71	-7.81	-11.66	-10.92	-12.41	-15.15	-17.59	-16.51	-17.02	-9.76	-16.56	-22.27
240	-15.48	-4.43	-6.45	-8.33	-8.28	-12.48	-19.34	-15.84	-11.89	-14.71	-9.14	-18.47	-22.27
255	-15.48	-3.33	-5.71	-5.16	-5.12	-8.81	-15.42	-11.90	-9.47	-12.38	-8.78	-19.84	-22.27
270	-15.48	-3.04	-3.94	-3.47	-3.42	-5.79	-11.53	-9.75	-9.05	-15.03	-10.47	-22.49	-22.27
285	-15.48	-4.04	-4.41	-3.11	-3.36	-4.96	-10.16	-9.94	-10.25	-17.20	-13.15	-22.73	-22.27
300	-15.48	-5.44	-4.91	-3.69	-4.42	-5.64	-10.89	-11.72	-11.07	-16.17	-14.10	-19.36	-22.27
315	-15.48	-7.96	-6.50	-6.15	-7.00	-8.11	-12.40	-13.19	-12.84	-13.06	-11.33	-14.84	-22.27
330	-15.48	-12.07	-10.53	-9.11	-11.98	-12.01	-16.81	-13.29	-12.07	-10.84	-8.91	-13.61	-22.27
345	-15.48	-15.14	-13.34	-14.76	-20.93	-18.44	-19.19	-15.87	-9.89	-11.34	-7.81	-13.50	-22.27
360	-15.48	-13.21	-12.28	-15.04	-32.39	-19.23	-21.91	-15.72	-9.53	-10.79	-7.56	-13.60	-22.27

Peak Value **-1.881** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.66	-3.74	-6.27	-9.52	-10.20	-12.98	-10.04	-12.95	-31.35	-11.59	-12.52	-17.67	-18.22
15	-3.66	-4.65	-7.84	-12.70	-11.13	-11.62	-11.40	-14.60	-20.65	-11.46	-14.85	-18.40	-18.22
30	-3.66	-6.34	-11.08	-13.31	-8.94	-8.62	-9.02	-9.84	-11.76	-10.18	-13.43	-17.44	-18.22
45	-3.66	-9.39	-18.16	-10.59	-5.57	-5.04	-5.56	-6.22	-6.83	-8.06	-11.04	-16.58	-18.22
60	-3.66	-13.28	-22.43	-7.31	-3.15	-2.36	-2.77	-3.94	-4.24	-6.41	-9.00	-16.26	-18.22
75	-3.66	-13.61	-11.91	-4.96	-1.56	-0.71	-1.47	-3.01	-3.30	-5.63	-7.75	-16.16	-18.22
90	-3.66	-10.41	-7.76	-3.44	-0.91	0.06	-0.83	-2.93	-3.59	-5.57	-7.42	-15.80	-18.22
105	-3.66	-7.70	-5.63	-2.48	-0.55	0.35	-0.55	-3.10	-4.18	-5.66	-7.30	-14.59	-18.22
120	-3.66	-5.91	-4.65	-2.14	-0.37	0.72	-0.05	-2.32	-4.27	-5.58	-7.22	-13.18	-18.22
135	-3.66	-4.96	-4.63	-2.18	-0.19	1.15	0.46	-1.32	-3.61	-4.96	-7.13	-11.97	-18.22
150	-3.66	-4.64	-5.18	-2.69	-0.23	1.36	0.64	-0.71	-3.42	-4.52	-6.88	-11.78	-18.22
165	-3.66	-4.76	-6.26	-3.54	-0.66	1.26	0.60	-1.00	-3.25	-4.44	-7.45	-11.64	-18.22
180	-3.66	-5.27	-7.58	-4.85	-1.69	0.77	-0.03	-1.63	-3.34	-5.15	-7.58	-12.09	-18.22
195	-3.66	-5.97	-8.80	-6.84	-2.92	-0.14	-1.34	-2.31	-3.85	-6.46	-8.45	-13.53	-18.22
210	-3.66	-7.06	-9.46	-8.09	-4.35	-1.87	-2.88	-3.74	-5.17	-8.25	-9.88	-15.28	-18.22
225	-3.66	-8.63	-8.58	-7.55	-5.66	-4.09	-5.10	-5.93	-6.92	-11.47	-11.60	-16.57	-18.22
240	-3.66	-10.71	-7.67	-6.01	-5.72	-6.23	-9.23	-8.22	-9.23	-16.15	-12.88	-15.92	-18.22
255	-3.66	-12.38	-7.43	-5.13	-4.41	-6.56	-9.81	-7.84	-11.00	-42.86	-11.46	-13.64	-18.22
270	-3.66	-12.41	-7.72	-4.73	-3.91	-6.32	-6.03	-5.24	-9.75	-16.36	-8.76	-12.20	-18.22
285	-3.66	-9.73	-8.03	-5.08	-4.46	-6.38	-4.09	-3.95	-8.42	-11.48	-7.12	-11.08	-18.22
300	-3.66	-7.43	-7.47	-5.84	-5.95	-7.18	-3.82	-4.46	-8.69	-9.68	-6.66	-10.93	-18.22
315	-3.66	-5.32	-6.55	-6.49	-7.70	-8.81	-4.40	-5.99	-10.73	-9.50	-6.93	-11.66	-18.22
330	-3.66	-4.05	-5.62	-7.01	-8.77	-10.82	-5.56	-8.00	-13.95	-9.98	-8.05	-13.46	-18.22
345	-3.66	-3.55	-5.66	-7.86	-9.26	-12.23	-7.51	-9.77	-19.82	-10.55	-10.21	-15.64	-18.22

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.59	-3.48	-4.41	-6.97	-9.23	-11.15	-9.10	-11.50	-11.92	-8.30	-6.76	-11.85	-18.61
15	-3.59	-3.12	-3.66	-5.55	-8.26	-10.32	-11.59	-13.31	-13.56	-9.26	-7.80	-13.75	-18.61
30	-3.59	-3.39	-3.90	-3.38	-5.11	-6.94	-9.53	-10.78	-11.39	-9.35	-8.48	-14.84	-18.61
45	-3.59	-2.48	-2.59	-2.28	-2.09	-3.45	-5.77	-6.63	-7.54	-8.22	-7.91	-14.08	-18.61
60	-3.59	-2.49	-2.79	-0.86	-0.60	-0.60	-2.72	-4.04	-4.88	-6.51	-7.47	-14.12	-18.61
75	-3.59	-2.63	-2.48	-0.76	0.48	0.68	-0.99	-2.86	-3.58	-5.40	-6.89	-13.97	-18.61
90	-3.59	-3.48	-2.66	-0.65	0.38	1.09	-0.52	-2.65	-3.55	-5.10	-6.74	-14.34	-18.61
105	-3.59	-3.35	-2.71	-1.09	0.06	0.92	-0.39	-3.01	-3.89	-5.24	-6.82	-14.24	-18.61
120	-3.59	-3.70	-3.33	-1.70	-0.28	0.83	-0.04	-2.64	-3.85	-5.21	-7.16	-14.16	-18.61
135	-3.59	-4.04	-3.82	-1.91	-0.16	1.21	0.44	-1.88	-3.42	-4.94	-7.25	-13.21	-18.61
150	-3.59	-4.31	-4.38	-2.10	0.03	1.45	0.75	-1.24	-3.26	-4.36	-7.20	-14.17	-18.61
165	-3.59	-4.59	-4.92	-2.59	-0.24	1.42	0.71	-1.31	-3.33	-4.13	-7.83	-13.50	-18.61
180	-3.59	-4.77	-5.54	-3.24	-0.97	1.01	0.26	-2.08	-3.40	-4.67	-8.00	-13.26	-18.61
195	-3.59	-5.03	-6.20	-4.71	-2.12	0.24	-0.69	-2.95	-3.78	-6.04	-8.48	-13.97	-18.61
210	-3.59	-4.72	-6.61	-6.47	-3.60	-0.99	-2.30	-4.31	-4.66	-7.88	-9.29	-15.55	-18.61
225	-3.59	-4.58	-5.81	-6.53	-4.54	-2.82	-4.42	-6.51	-6.03	-10.35	-9.78	-15.34	-18.61
240	-3.59	-4.29	-4.79	-4.99	-3.74	-4.42	-8.44	-8.01	-6.80	-13.30	-10.60	-15.10	-18.61
255	-3.59	-3.57	-4.51	-2.93	-1.86	-4.33	-9.07	-6.16	-6.98	-15.10	-9.53	-13.37	-18.61
270	-3.59	-3.32	-3.18	-1.68	-0.83	-3.42	-5.56	-3.81	-6.38	-13.79	-8.61	-12.03	-18.61
285	-3.59	-3.65	-3.38	-1.51	-1.08	-3.17	-3.63	-2.65	-6.29	-10.49	-7.33	-10.65	-18.61
300	-3.59	-3.81	-3.36	-1.74	-2.17	-3.97	-3.31	-3.29	-6.94	-8.22	-6.34	-9.95	-18.61
315	-3.59	-3.93	-3.64	-3.07	-4.17	-5.65	-3.93	-4.84	-8.70	-7.33	-5.69	-9.43	-18.61
330	-3.59	-3.94	-4.15	-4.47	-6.45	-7.91	-5.20	-6.69	-10.03	-7.06	-5.49	-10.02	-18.61
345	-3.59	-3.56	-4.32	-5.92	-8.17	-10.06	-6.91	-9.05	-10.41	-7.66	-5.77	-11.20	-18.61
360	-3.59	-3.60	-4.40	-6.93	-9.16	-11.06	-8.95	-11.23	-11.31	-8.04	-6.27	-11.73	-18.61

Peak Value 1.446 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-19.52	-16.32	-12.39	-13.16	-20.52	-17.93	-22.37	-16.97	-12.42	-11.09	-8.00	-13.03	-21.66
15	-19.52	-8.32	-6.45	-7.16	-11.76	-14.32	-23.13	-17.61	-13.70	-12.13	-8.91	-15.49	-21.66
30	-19.52	-6.34	-5.20	-4.06	-7.15	-10.06	-16.87	-20.94	-15.86	-14.81	-10.65	-18.08	-21.66
45	-19.52	-3.47	-2.80	-2.96	-4.20	-7.19	-14.02	-17.88	-18.19	-20.60	-11.89	-18.09	-21.66
60	-19.52	-2.81	-2.81	-1.84	-3.44	-4.94	-11.26	-14.53	-19.78	-27.24	-15.98	-18.60	-21.66
75	-19.52	-2.85	-2.97	-2.62	-2.97	-5.01	-9.68	-12.89	-16.76	-17.89	-21.43	-17.77	-21.66
90	-19.52	-4.23	-4.30	-3.59	-4.77	-5.97	-11.18	-12.89	-13.95	-15.36	-20.62	-18.43	-21.66
105	-19.52	-5.03	-5.69	-6.03	-7.18	-8.16	-14.03	-15.04	-14.25	-14.14	-18.42	-19.39	-21.66
120	-19.52	-6.97	-9.35	-9.81	-11.20	-12.64	-20.23	-20.50	-15.74	-14.25	-17.73	-21.48	-21.66
135	-19.52	-9.80	-12.05	-11.27	-11.66	-14.64	-18.94	-21.61	-15.54	-15.19	-19.21	-27.33	-21.66
150	-19.52	-13.60	-13.56	-10.93	-10.76	-12.80	-16.43	-16.36	-18.04	-14.03	-21.41	-37.83	-21.66
165	-19.52	-17.09	-13.18	-10.39	-9.72	-12.01	-13.39	-15.38	-18.75	-13.24	-22.83	-26.20	-21.66
180	-19.52	-16.33	-11.73	-9.39	-9.85	-10.89	-12.21	-16.93	-16.72	-15.64	-18.78	-20.87	-21.66
195	-19.52	-12.30	-10.11	-10.19	-10.90	-10.02	-11.73	-15.34	-18.01	-22.26	-15.17	-18.72	-21.66
210	-19.52	-8.59	-9.39	-11.74	-12.05	-10.18	-12.89	-16.43	-21.02	-33.27	-13.22	-19.42	-21.66
225	-19.52	-6.62	-7.40	-10.96	-11.25	-12.12	-16.14	-18.16	-18.03	-19.26	-11.79	-17.59	-21.66
240	-19.52	-5.12	-5.88	-8.39	-8.52	-12.46	-17.61	-15.33	-13.53	-17.41	-12.06	-20.27	-21.66
255	-19.52	-3.78	-5.57	-5.68	-5.57	-9.35	-13.81	-11.78	-11.74	-15.58	-12.10	-22.59	-21.66
270	-19.52	-3.43	-4.08	-4.12	-4.05	-7.01	-10.99	-10.41	-11.22	-19.17	-14.93	-26.91	-21.66
285	-19.52	-4.31	-4.69	-3.92	-4.31	-6.04	-9.76	-10.24	-12.13	-19.66	-16.72	-21.16	-21.66
300	-19.52	-5.72	-5.61	-4.23	-5.28	-6.57	-10.70	-11.76	-12.30	-15.32	-13.09	-17.96	-21.66
315	-19.52	-8.30	-7.66	-6.71	-7.72	-8.70	-12.29	-12.95	-13.32	-12.65	-10.37	-13.94	-21.66
330	-19.52	-13.12	-12.24	-9.49	-11.67	-12.10	-15.21	-13.93	-12.71	-10.64	-8.40	-12.99	-21.66
345	-19.52	-19.29	-15.55	-13.36	-17.39	-16.64	-17.84	-16.38	-11.54	-11.18	-7.49	-13.19	-21.66
360	-19.52	-16.58	-12.74	-13.26	-20.74	-17.53	-21.25	-17.01	-11.75	-10.83	-7.47	-13.12	-21.66



Peak Value -1.841 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.70	-3.71	-5.16	-8.17	-9.56	-12.17	-9.31	-12.95	-21.52	-11.55	-12.81	-18.08	-21.59
15	-3.70	-4.68	-6.90	-10.64	-10.83	-12.52	-11.91	-15.33	-28.31	-12.42	-14.24	-18.57	-21.59
30	-3.70	-6.45	-9.76	-11.78	-9.39	-9.85	-10.41	-11.22	-13.32	-10.80	-12.52	-17.64	-21.59
45	-3.70	-9.36	-15.87	-10.66	-6.24	-5.85	-6.47	-6.97	-7.93	-8.47	-10.12	-16.28	-21.59
60	-3.70	-13.92	-25.35	-7.79	-3.78	-2.59	-3.37	-4.45	-5.02	-6.55	-8.13	-16.04	-21.59
75	-3.70	-15.66	-12.17	-5.33	-2.12	-0.68	-1.62	-3.31	-3.79	-5.65	-7.04	-16.31	-21.59
90	-3.70	-11.49	-7.69	-3.74	-1.21	0.14	-0.91	-3.08	-3.96	-5.53	-6.92	-16.49	-21.59
105	-3.70	-8.27	-5.76	-2.77	-0.84	0.34	-0.58	-3.29	-4.31	-5.84	-7.13	-15.82	-21.59
120	-3.70	-6.46	-4.58	-2.43	-0.65	0.63	-0.08	-2.71	-4.14	-5.79	-7.56	-15.06	-21.59
135	-3.70	-5.39	-4.53	-2.44	-0.48	1.10	0.39	-1.93	-3.69	-5.37	-7.53	-13.38	-21.59
150	-3.70	-4.86	-4.94	-2.70	-0.35	1.28	0.67	-1.38	-3.40	-4.85	-7.37	-14.19	-21.59
165	-3.70	-4.84	-5.63	-3.38	-0.76	1.22	0.53	-1.49	-3.45	-4.69	-7.97	-13.74	-21.59
180	-3.70	-5.09	-6.74	-4.44	-1.58	0.72	0.01	-2.22	-3.61	-5.03	-8.38	-14.09	-21.59
195	-3.70	-5.94	-8.47	-6.16	-2.73	-0.20	-1.05	-3.21	-3.95	-6.15	-9.53	-15.73	-21.59
210	-3.70	-7.02	-9.86	-8.01	-4.27	-1.55	-2.69	-4.58	-4.76	-7.90	-11.54	-17.84	-21.59
225	-3.70	-8.85	-10.95	-8.47	-5.59	-3.37	-4.73	-6.81	-6.32	-10.95	-14.10	-19.28	-21.59
240	-3.70	-11.91	-11.30	-7.63	-5.50	-5.16	-9.00	-8.90	-7.84	-15.43	-16.03	-16.68	-21.59
255	-3.70	-16.74	-11.17	-6.21	-4.28	-5.98	-10.84	-7.55	-8.74	-24.92	-13.03	-13.92	-21.59
270	-3.70	-19.30	-10.46	-5.34	-3.65	-5.92	-7.02	-4.88	-8.11	-15.27	-9.77	-12.17	-21.59
285	-3.70	-12.17	-9.24	-5.21	-3.88	-6.33	-4.84	-3.48	-7.61	-11.05	-7.86	-11.06	-21.59
300	-3.70	-8.30	-7.30	-5.35	-5.08	-7.43	-4.18	-3.95	-8.44	-9.16	-7.37	-10.70	-21.59
315	-3.70	-5.91	-5.84	-5.54	-6.70	-8.61	-4.61	-5.57	-10.54	-8.84	-7.50	-11.32	-21.59
330	-3.70	-4.50	-4.88	-6.12	-8.01	-10.00	-5.66	-7.60	-13.39	-9.56	-8.60	-13.09	-21.59
345	-3.70	-3.67	-4.66	-6.78	-8.72	-11.13	-7.28	-9.94	-16.81	-10.22	-10.61	-15.55	-21.59

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.02	-5.04	-4.99	-6.49	-9.02	-11.42	-9.66	-13.02	-13.40	-9.22	-7.00	-11.87	-18.32
15	-5.02	-4.48	-3.91	-4.83	-7.28	-10.00	-12.82	-16.21	-16.60	-10.44	-8.36	-13.43	-18.32
30	-5.02	-4.57	-3.91	-3.34	-4.59	-7.09	-10.67	-12.86	-14.72	-10.83	-9.23	-14.59	-18.32
45	-5.02	-3.69	-2.78	-2.29	-2.03	-3.70	-7.03	-8.11	-9.86	-9.56	-8.66	-14.68	-18.32
60	-5.02	-3.36	-2.65	-1.41	-0.73	-1.06	-3.76	-5.14	-6.77	-7.54	-8.22	-14.59	-18.32
75	-5.02	-3.46	-2.84	-1.47	-0.15	-0.08	-1.90	-3.77	-5.12	-6.41	-7.73	-15.09	-18.32
90	-5.02	-4.20	-3.14	-1.90	-0.55	0.12	-1.39	-3.66	-4.62	-6.11	-7.37	-15.87	-18.32
105	-5.02	-4.15	-3.47	-2.49	-1.24	-0.22	-1.38	-4.15	-5.02	-6.42	-7.47	-16.11	-18.32
120	-5.02	-4.62	-4.29	-3.34	-1.64	-0.41	-1.12	-4.06	-5.16	-6.49	-8.04	-16.95	-18.32
135	-5.02	-5.02	-4.90	-3.44	-1.48	-0.15	-0.58	-3.43	-4.66	-6.21	-8.39	-16.26	-18.32
150	-5.02	-5.50	-5.46	-3.42	-1.28	0.13	-0.22	-2.89	-4.55	-5.73	-8.79	-16.82	-18.32
165	-5.02	-5.85	-6.11	-3.73	-1.51	0.14	-0.34	-2.88	-4.75	-5.42	-9.31	-16.21	-18.32
180	-5.02	-6.29	-6.72	-4.27	-2.02	-0.26	-0.70	-3.67	-4.96	-5.62	-9.67	-15.99	-18.32
195	-5.02	-6.24	-7.10	-5.38	-3.11	-1.03	-1.41	-4.81	-5.16	-6.69	-10.43	-16.58	-18.32
210	-5.02	-5.98	-7.23	-7.01	-4.69	-1.99	-2.87	-6.09	-5.69	-8.28	-11.59	-18.59	-18.32
225	-5.02	-5.60	-6.62	-7.54	-5.64	-3.31	-4.78	-8.13	-6.71	-10.65	-13.03	-18.32	-18.32
240	-5.02	-5.08	-5.79	-6.24	-4.65	-4.67	-8.29	-9.36	-7.26	-13.41	-14.44	-18.04	-18.32
255	-5.02	-4.46	-5.54	-4.14	-2.73	-4.82	-9.71	-7.10	-7.36	-16.86	-13.58	-15.18	-18.32
270	-5.02	-4.31	-4.19	-2.68	-1.73	-4.29	-6.98	-4.63	-6.83	-15.00	-10.91	-13.29	-18.32
285	-5.02	-4.52	-4.46	-2.26	-1.79	-4.39	-4.90	-3.57	-7.08	-11.30	-8.63	-11.37	-18.32
300	-5.02	-4.68	-4.20	-2.50	-2.75	-5.01	-4.63	-4.06	-8.14	-8.86	-7.07	-10.71	-18.32
315	-5.02	-5.04	-4.56	-3.61	-4.50	-6.65	-5.11	-5.48	-9.90	-8.01	-6.04	-10.14	-18.32
330	-5.02	-5.17	-5.00	-4.69	-6.72	-8.49	-6.18	-7.40	-11.04	-7.60	-6.09	-10.45	-18.32
345	-5.02	-5.11	-5.00	-5.81	-8.24	-10.25	-7.72	-10.43	-11.74	-8.63	-6.37	-11.31	-18.32
360	-5.02	-5.08	-5.04	-6.44	-9.24	-11.18	-9.39	-12.49	-13.16	-8.92	-6.62	-12.06	-18.32

Peak Value 0.143 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-21.65	-21.78	-13.28	-12.93	-15.36	-15.69	-21.86	-19.18	-14.85	-11.67	-7.94	-12.76	-18.70
15	-21.65	-10.08	-6.68	-6.64	-9.25	-12.14	-21.52	-23.87	-17.12	-12.95	-9.44	-14.84	-18.70
30	-21.65	-7.61	-5.26	-4.12	-5.89	-9.03	-15.55	-26.90	-21.27	-15.62	-11.59	-18.14	-18.70
45	-21.65	-4.71	-3.01	-2.84	-3.41	-6.47	-13.01	-18.11	-34.90	-21.27	-13.49	-19.86	-18.70
60	-21.65	-3.66	-2.66	-2.14	-2.64	-4.83	-10.47	-14.12	-20.99	-25.24	-19.43	-23.04	-18.70
75	-21.65	-3.60	-3.18	-2.83	-2.79	-5.01	-9.30	-13.30	-16.21	-19.15	-37.87	-23.84	-18.70
90	-21.65	-4.69	-4.37	-4.37	-4.61	-6.32	-10.91	-13.74	-13.36	-16.17	-20.02	-24.46	-18.70
105	-21.65	-5.32	-6.12	-6.93	-7.96	-8.99	-14.37	-17.07	-13.57	-15.36	-16.82	-23.90	-18.70
120	-21.65	-6.94	-9.52	-11.60	-12.79	-13.68	-22.13	-23.25	-16.00	-14.93	-15.92	-25.98	-18.70
135	-21.65	-9.30	-13.14	-14.07	-13.83	-16.23	-21.59	-27.50	-16.30	-15.31	-17.67	-28.49	-18.70
150	-21.65	-12.51	-16.61	-14.01	-12.53	-14.15	-17.93	-19.60	-17.58	-14.66	-19.59	-32.49	-18.70
165	-21.65	-17.46	-18.64	-12.89	-11.83	-13.61	-14.88	-18.00	-19.63	-14.55	-22.79	-23.71	-18.70
180	-21.65	-21.15	-16.95	-11.91	-11.34	-12.26	-14.11	-19.81	-18.74	-16.67	-18.92	-20.27	-18.70
195	-21.65	-16.64	-13.83	-11.84	-12.16	-11.24	-13.41	-18.43	-20.11	-23.08	-16.78	-18.75	-18.70
210	-21.65	-11.34	-11.07	-12.35	-13.68	-11.49	-14.58	-17.86	-21.74	-34.04	-15.32	-20.28	-18.70
225	-21.65	-8.42	-8.44	-10.88	-12.19	-12.39	-17.25	-17.96	-19.79	-23.25	-14.51	-19.52	-18.70
240	-21.65	-6.29	-6.52	-8.27	-8.82	-12.22	-17.44	-14.85	-15.75	-20.74	-15.26	-22.41	-18.70
255	-21.65	-4.78	-5.89	-5.73	-6.01	-10.07	-13.29	-12.17	-13.66	-20.86	-17.28	-26.73	-18.70
270	-21.65	-4.32	-4.43	-4.32	-4.80	-8.01	-10.58	-10.73	-13.10	-23.68	-18.56	-27.02	-18.70
285	-21.65	-4.74	-5.19	-4.33	-4.98	-7.41	-9.58	-10.79	-13.84	-19.73	-15.91	-19.25	-18.70
300	-21.65	-5.79	-6.00	-5.03	-6.09	-7.67	-10.69	-12.01	-13.89	-15.00	-11.52	-16.68	-18.70
315	-21.65	-8.22	-8.46	-7.61	-8.31	-9.67	-12.02	-13.85	-14.15	-12.73	-9.09	-13.48	-18.70
330	-21.65	-12.50	-13.95	-10.76	-12.08	-12.40	-14.52	-14.87	-13.80	-11.04	-8.17	-12.53	-18.70
345	-21.65	-22.55	-17.40	-13.75	-15.20	-15.40	-17.86	-18.59	-13.67	-11.69	-7.61	-12.61	-18.70
360	-21.65	-23.49	-14.49	-12.94	-16.44	-15.56	-20.56	-18.73	-14.52	-11.26	-7.54	-12.96	-18.70

Peak Value -2.143 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.11	-5.14	-5.69	-7.61	-10.17	-13.45	-9.93	-14.23	-18.86	-12.88	-14.09	-19.17	-29.01
15	-5.11	-5.88	-7.18	-9.49	-11.65	-14.08	-13.44	-17.03	-26.06	-14.02	-14.95	-18.98	-29.01
30	-5.11	-7.54	-9.66	-11.19	-10.47	-11.54	-12.38	-13.03	-15.80	-12.58	-13.00	-17.11	-29.01
45	-5.11	-10.46	-15.57	-11.53	-7.67	-6.95	-8.29	-8.56	-9.87	-9.86	-10.39	-16.26	-29.01
60	-5.11	-15.10	-27.69	-9.52	-5.22	-3.42	-4.80	-5.73	-6.94	-7.61	-8.57	-15.26	-29.01
75	-5.11	-18.63	-14.04	-7.17	-3.57	-1.77	-2.78	-4.29	-5.47	-6.64	-7.73	-15.71	-29.01
90	-5.11	-13.98	-9.21	-5.54	-2.72	-1.00	-1.90	-4.11	-5.24	-6.56	-7.61	-16.52	-29.01
105	-5.11	-10.44	-6.87	-4.43	-2.28	-0.84	-1.60	-4.38	-5.67	-7.02	-8.01	-16.90	-29.01
120	-5.11	-8.46	-5.84	-4.04	-1.99	-0.62	-1.15	-4.11	-5.53	-7.16	-8.81	-17.53	-29.01
135	-5.11	-7.05	-5.61	-3.83	-1.74	-0.26	-0.61	-3.44	-4.97	-6.79	-8.93	-16.53	-29.01
150	-5.11	-6.47	-5.80	-3.82	-1.61	-0.04	-0.30	-2.99	-4.77	-6.33	-9.17	-16.94	-29.01
165	-5.11	-6.16	-6.36	-4.29	-1.93	-0.04	-0.49	-3.01	-4.90	-5.98	-9.51	-17.07	-29.01
180	-5.11	-6.43	-7.15	-5.09	-2.56	-0.55	-0.90	-3.78	-5.15	-5.97	-10.21	-18.03	-29.01
195	-5.11	-6.66	-8.14	-6.49	-3.69	-1.47	-1.69	-5.01	-5.31	-6.79	-11.58	-20.65	-29.01
210	-5.11	-7.48	-9.53	-8.51	-5.28	-2.51	-3.17	-6.39	-5.80	-8.30	-13.98	-23.51	-29.01
225	-5.11	-8.80	-11.28	-10.24	-6.72	-3.89	-5.03	-8.61	-6.93	-10.90	-18.42	-24.49	-29.01
240	-5.11	-11.22	-13.87	-10.53	-6.76	-5.51	-8.86	-10.81	-7.92	-14.29	-22.07	-20.01	-29.01
255	-5.11	-15.89	-16.61	-9.26	-5.49	-6.37	-12.21	-8.72	-8.52	-19.07	-15.99	-15.50	-29.01
270	-5.11	-33.00	-16.84	-7.71	-4.67	-6.69	-9.47	-5.85	-8.00	-15.63	-11.73	-13.48	-29.01
285	-5.11	-17.52	-12.59	-6.47	-4.62	-7.40	-6.71	-4.49	-8.11	-11.97	-9.53	-12.14	-29.01
300	-5.11	-11.16	-8.90	-6.06	-5.46	-8.40	-5.87	-4.82	-9.49	-10.07	-8.99	-11.97	-29.01
315	-5.11	-7.89	-6.84	-5.81	-6.84	-9.64	-6.09	-6.16	-11.95	-9.80	-9.01	-12.84	-29.01
330	-5.11	-6.06	-5.59	-5.93	-8.21	-10.75	-6.86	-8.26	-14.31	-10.21	-10.27	-14.65	-29.01
345	-5.11	-5.19	-5.25	-6.57	-9.22	-11.84	-8.17	-11.16	-16.20	-11.59	-12.41	-17.19	-29.01

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.10	-5.38	-4.49	-4.76	-7.20	-10.39	-8.26	-12.95	-13.74	-9.42	-7.30	-11.52	-17.43
15	-5.10	-5.13	-3.78	-3.75	-5.34	-8.74	-11.33	-17.02	-17.70	-10.88	-8.46	-12.64	-17.43
30	-5.10	-5.17	-3.91	-2.82	-3.34	-5.80	-10.03	-12.15	-13.80	-10.57	-9.18	-13.37	-17.43
45	-5.10	-4.75	-3.17	-2.14	-1.31	-2.78	-5.98	-7.14	-9.17	-8.51	-8.27	-13.28	-17.43
60	-5.10	-4.72	-3.16	-1.71	-0.27	-0.47	-2.74	-4.19	-5.84	-6.46	-7.43	-13.05	-17.43
75	-5.10	-4.69	-3.30	-1.90	0.20	0.60	-1.10	-2.85	-4.34	-5.41	-6.68	-13.53	-17.43
90	-5.10	-5.15	-3.36	-2.21	-0.17	0.53	-0.63	-3.00	-4.06	-5.38	-6.30	-14.58	-17.43
105	-5.10	-4.97	-3.47	-2.72	-0.79	0.15	-0.66	-3.46	-4.43	-5.83	-6.67	-15.60	-17.43
120	-5.10	-4.99	-3.75	-2.93	-1.00	0.03	-0.45	-3.38	-4.76	-6.15	-7.24	-16.75	-17.43
135	-5.10	-5.22	-4.25	-2.85	-0.72	0.27	0.23	-2.84	-4.31	-6.01	-7.95	-16.70	-17.43
150	-5.10	-5.55	-4.71	-2.80	-0.55	0.56	0.63	-2.50	-4.23	-5.66	-8.47	-16.74	-17.43
165	-5.10	-5.81	-5.24	-2.84	-0.75	0.61	0.42	-2.41	-4.58	-5.20	-8.89	-16.64	-17.43
180	-5.10	-5.97	-5.60	-3.33	-1.29	0.10	0.01	-2.92	-4.89	-5.04	-9.71	-16.62	-17.43
195	-5.10	-5.92	-6.25	-4.26	-2.32	-0.63	-0.51	-4.34	-4.84	-5.86	-10.64	-17.86	-17.43
210	-5.10	-6.00	-6.45	-5.63	-3.98	-1.44	-1.64	-5.90	-5.07	-7.03	-12.45	-19.79	-17.43
225	-5.10	-5.74	-6.28	-6.62	-5.02	-2.38	-3.31	-7.55	-5.70	-9.10	-15.29	-19.60	-17.43
240	-5.10	-5.46	-6.10	-6.43	-4.52	-3.36	-6.19	-8.98	-6.27	-11.21	-17.88	-18.43	-17.43
255	-5.10	-5.06	-5.89	-5.00	-2.71	-3.82	-8.69	-6.98	-6.12	-14.09	-15.06	-14.92	-17.43
270	-5.10	-5.16	-5.09	-3.32	-1.72	-3.91	-7.34	-4.35	-5.93	-13.45	-11.01	-12.79	-17.43
285	-5.10	-5.32	-5.16	-2.61	-1.57	-4.32	-5.22	-3.14	-6.59	-10.57	-8.18	-10.89	-17.43
300	-5.10	-5.50	-4.94	-2.58	-2.31	-5.46	-4.50	-3.36	-7.88	-8.93	-6.60	-10.26	-17.43
315	-5.10	-5.62	-4.79	-3.18	-3.84	-6.84	-4.77	-4.63	-10.05	-7.90	-6.09	-9.82	-17.43
330	-5.10	-5.47	-4.77	-3.75	-5.60	-8.54	-5.58	-6.87	-11.71	-7.77	-6.18	-10.24	-17.43
345	-5.10	-5.39	-4.53	-4.40	-6.81	-9.72	-6.62	-10.26	-12.65	-8.52	-6.60	-10.86	-17.43
360	-5.10	-5.14	-4.50	-4.82	-7.32	-10.33	-8.26	-12.84	-13.54	-9.08	-7.03	-11.54	-17.43

Peak Value 0.635 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-17.88	-30.47	-15.01	-13.01	-13.05	-14.11	-20.17	-21.95	-17.86	-12.46	-8.27	-12.38	-17.44
15	-17.88	-13.05	-7.59	-6.53	-7.29	-10.35	-17.20	-49.73	-20.32	-13.92	-9.72	-14.21	-17.44
30	-17.88	-9.41	-5.57	-4.00	-4.56	-7.48	-13.76	-22.48	-22.03	-15.41	-12.03	-17.40	-17.44
45	-17.88	-6.34	-3.53	-2.76	-2.60	-5.56	-11.35	-16.22	-21.11	-17.63	-14.43	-20.48	-17.44
60	-17.88	-5.26	-3.20	-2.35	-2.10	-4.35	-9.22	-13.61	-16.71	-18.21	-20.94	-29.51	-17.44
75	-17.88	-4.89	-3.72	-3.22	-2.48	-4.53	-8.92	-12.90	-14.44	-16.73	-25.78	-35.55	-17.44
90	-17.88	-5.57	-4.84	-4.77	-4.56	-6.44	-11.03	-14.74	-12.79	-16.75	-17.19	-27.18	-17.44
105	-17.88	-6.11	-6.71	-7.81	-8.53	-10.21	-14.94	-19.28	-13.15	-16.60	-14.76	-24.91	-17.44
120	-17.88	-7.19	-9.75	-12.81	-14.32	-16.37	-25.80	-28.58	-16.12	-16.40	-14.23	-24.48	-17.44
135	-17.88	-9.26	-13.41	-18.39	-16.51	-18.38	-24.36	-31.25	-17.76	-16.33	-16.15	-25.61	-17.44
150	-17.88	-11.97	-16.90	-18.50	-14.71	-16.13	-19.48	-24.59	-18.23	-16.13	-18.45	-23.60	-17.44
165	-17.88	-15.38	-20.50	-16.90	-13.43	-14.83	-17.08	-21.31	-20.18	-15.93	-21.18	-22.86	-17.44
180	-17.88	-20.09	-22.01	-14.87	-12.94	-14.28	-15.96	-21.57	-20.77	-17.50	-21.25	-20.28	-17.44
195	-17.88	-21.76	-18.94	-14.29	-13.47	-13.28	-15.41	-22.00	-21.14	-22.13	-18.03	-19.58	-17.44
210	-17.88	-15.38	-14.30	-13.50	-15.28	-12.93	-15.95	-19.59	-21.71	-26.24	-17.14	-20.00	-17.44
225	-17.88	-11.04	-10.18	-11.54	-13.08	-13.06	-18.88	-17.32	-19.64	-23.75	-16.63	-20.21	-17.44
240	-17.88	-8.01	-7.93	-8.40	-9.38	-11.93	-17.82	-14.02	-16.99	-22.46	-18.38	-23.64	-17.44
255	-17.88	-6.16	-6.56	-6.08	-6.29	-10.44	-13.52	-11.89	-15.13	-23.41	-19.87	-33.64	-17.44
270	-17.88	-5.43	-5.11	-4.58	-5.29	-9.12	-10.78	-11.12	-14.93	-22.55	-18.26	-24.84	-17.44
285	-17.88	-5.40	-5.51	-4.53	-5.49	-8.97	-9.81	-11.67	-15.47	-17.55	-13.83	-18.06	-17.44
300	-17.88	-6.22	-6.52	-5.53	-6.72	-9.83	-11.00	-12.39	-15.62	-15.28	-10.69	-15.54	-17.44
315	-17.88	-8.06	-9.03	-8.38	-9.00	-11.64	-12.64	-14.44	-15.46	-13.28	-8.89	-12.78	-17.44
330	-17.88	-11.38	-14.65	-12.47	-12.62	-14.15	-15.01	-16.32	-15.63	-11.87	-8.24	-12.15	-17.44
345	-17.88	-18.91	-21.64	-15.05	-14.83	-14.66	-18.37	-19.62	-16.33	-12.17	-7.90	-11.97	-17.44
360	-17.88	-27.24	-16.57	-13.14	-14.18	-14.23	-19.52	-21.88	-16.99	-12.05	-8.06	-12.53	-17.44

Peak Value -2.099 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.34	-5.39	-4.89	-5.46	-8.51	-12.79	-8.55	-13.54	-15.86	-12.40	-14.28	-18.96	-41.55
15	-5.34	-5.89	-6.13	-7.00	-9.75	-13.86	-12.64	-17.02	-21.14	-13.87	-14.44	-17.84	-41.55
30	-5.34	-7.22	-8.91	-9.06	-9.43	-10.74	-12.42	-12.57	-14.51	-12.30	-12.36	-15.55	-41.55
45	-5.34	-9.89	-14.14	-10.95	-7.20	-6.04	-7.47	-7.71	-9.46	-9.08	-9.47	-14.20	-41.55
60	-5.34	-14.11	-23.52	-10.37	-4.90	-2.76	-3.84	-4.71	-6.22	-6.76	-7.63	-13.15	-41.55
75	-5.34	-18.31	-13.59	-7.71	-3.16	-1.00	-1.88	-3.31	-4.78	-5.75	-6.74	-13.56	-41.55
90	-5.34	-15.50	-8.76	-5.73	-2.14	-0.44	-1.04	-3.30	-4.69	-5.71	-6.67	-14.82	-41.55
105	-5.34	-11.35	-6.27	-4.33	-1.59	-0.27	-0.83	-3.58	-5.06	-6.21	-7.40	-16.15	-41.55
120	-5.34	-9.01	-5.00	-3.40	-1.21	-0.07	-0.46	-3.39	-5.09	-6.58	-8.22	-17.55	-41.55
135	-5.34	-7.40	-4.82	-2.98	-0.84	0.21	0.21	-2.84	-4.51	-6.43	-8.66	-17.29	-41.55
150	-5.34	-6.67	-4.98	-2.92	-0.72	0.47	0.59	-2.53	-4.40	-6.07	-8.93	-17.74	-41.55
165	-5.34	-6.32	-5.38	-3.02	-0.99	0.49	0.35	-2.47	-4.70	-5.58	-9.15	-17.82	-41.55
180	-5.34	-6.14	-5.70	-3.64	-1.60	-0.06	-0.10	-2.98	-5.00	-5.30	-10.03	-19.06	-41.55
195	-5.34	-6.03	-6.49	-4.71	-2.67	-0.88	-0.65	-4.41	-4.95	-5.96	-11.52	-22.71	-41.55
210	-5.34	-6.53	-7.23	-6.41	-4.31	-1.77	-1.80	-6.09	-5.17	-7.08	-14.26	-33.20	-41.55
225	-5.34	-7.26	-8.56	-8.31	-5.76	-2.77	-3.43	-8.04	-5.88	-9.25	-21.03	-28.43	-41.55
240	-5.34	-8.99	-10.73	-10.80	-6.23	-4.01	-6.50	-10.61	-6.65	-11.55	-27.55	-19.98	-41.55
255	-5.34	-11.56	-14.33	-11.58	-5.22	-4.89	-10.42	-8.67	-6.70	-14.63	-16.80	-14.97	-41.55
270	-5.34	-17.31	-29.91	-9.29	-4.24	-5.47	-9.96	-5.38	-6.51	-14.03	-11.91	-13.07	-41.55
285	-5.34	-22.97	-16.36	-7.08	-3.82	-6.15	-7.08	-3.80	-7.20	-11.55	-9.56	-11.82	-41.55
300	-5.34	-13.64	-10.11	-5.66	-4.27	-7.44	-5.60	-3.94	-8.69	-10.08	-8.74	-11.78	-41.55
315	-5.34	-9.30	-6.84	-4.74	-5.42	-8.58	-5.55	-5.12	-11.52	-9.38	-9.32	-12.87	-41.55
330	-5.34	-6.76	-5.24	-4.38	-6.56	-9.93	-6.11	-7.40	-13.97	-9.91	-10.42	-14.73	-41.55
345	-5.34	-5.59	-4.62	-4.79	-7.55	-11.39	-6.92	-10.80	-15.08	-10.98	-12.49	-17.35	-41.55

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-5.92	-6.28	-5.07	-3.91	-5.86	-9.33	-7.54	-12.54	-14.61	-9.68	-7.70	-11.12	-15.82
15	-5.92	-6.15	-4.61	-3.20	-4.09	-7.21	-9.97	-15.29	-15.70	-10.87	-8.59	-11.72	-15.82
30	-5.92	-6.61	-4.60	-2.90	-2.40	-4.50	-8.55	-11.12	-11.60	-9.96	-9.41	-12.23	-15.82
45	-5.92	-6.26	-4.28	-2.24	-0.78	-1.63	-5.11	-6.34	-7.93	-7.71	-8.09	-12.01	-15.82
60	-5.92	-6.01	-3.81	-2.26	0.20	0.23	-2.09	-3.57	-5.03	-5.61	-7.10	-11.92	-15.82
75	-5.92	-6.10	-4.09	-2.22	0.29	1.06	-0.57	-2.33	-3.73	-4.78	-6.13	-12.45	-15.82
90	-5.92	-6.12	-3.73	-2.69	-0.01	0.96	-0.18	-2.43	-3.55	-4.86	-5.82	-13.33	-15.82
105	-5.92	-5.75	-3.63	-2.71	-0.60	0.35	-0.25	-3.01	-4.10	-5.47	-6.13	-14.51	-15.82
120	-5.92	-5.70	-3.67	-2.63	-0.55	0.31	-0.03	-2.84	-4.42	-6.22	-6.67	-15.74	-15.82
135	-5.92	-5.80	-3.79	-2.28	-0.30	0.57	0.59	-2.38	-4.13	-6.21	-7.55	-17.14	-15.82
150	-5.92	-5.87	-3.96	-1.98	-0.08	0.75	1.02	-2.11	-3.92	-5.76	-8.39	-17.97	-15.82
165	-5.92	-5.92	-4.58	-2.11	-0.28	0.79	0.78	-2.03	-4.40	-5.08	-8.94	-16.69	-15.82
180	-5.92	-5.86	-4.81	-2.43	-0.75	0.17	0.32	-2.56	-5.02	-4.88	-9.55	-17.12	-15.82
195	-5.92	-5.91	-5.15	-3.09	-1.80	-0.65	-0.04	-3.87	-4.89	-5.14	-10.72	-17.72	-15.82
210	-5.92	-5.76	-5.31	-4.01	-3.37	-1.19	-0.99	-5.30	-4.79	-6.06	-12.37	-20.37	-15.82
225	-5.92	-5.60	-5.29	-5.33	-4.63	-1.78	-2.31	-6.66	-5.36	-7.65	-15.25	-20.36	-15.82
240	-5.92	-5.45	-5.38	-6.20	-4.23	-2.39	-4.32	-8.34	-5.49	-8.95	-18.46	-19.06	-15.82
255	-5.92	-5.54	-5.80	-5.38	-2.89	-2.72	-6.64	-7.36	-5.21	-11.07	-15.48	-15.63	-15.82
270	-5.92	-5.71	-5.63	-4.17	-1.98	-3.20	-7.13	-4.65	-5.07	-11.75	-10.90	-13.23	-15.82
285	-5.92	-5.91	-6.29	-3.35	-1.65	-3.93	-5.56	-3.16	-5.79	-10.59	-8.47	-10.87	-15.82
300	-5.92	-6.20	-6.07	-3.18	-2.20	-5.25	-4.90	-3.10	-7.55	-9.36	-7.06	-10.48	-15.82
315	-5.92	-6.42	-5.83	-3.20	-3.35	-7.06	-4.73	-4.25	-9.83	-8.58	-6.29	-10.04	-15.82
330	-5.92	-6.67	-5.55	-3.41	-4.78	-8.51	-5.37	-6.56	-12.03	-8.45	-6.47	-10.16	-15.82
345	-5.92	-6.43	-5.15	-3.65	-5.80	-9.33	-6.03	-9.64	-13.33	-8.75	-7.34	-10.91	-15.82
360	-5.92	-6.47	-5.05	-3.82	-6.25	-9.48	-7.55	-12.10	-14.78	-9.52	-7.59	-11.18	-15.82



Peak Value 1.063 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-15.05	-22.50	-17.75	-13.83	-11.91	-12.81	-18.46	-24.33	-20.18	-12.48	-8.47	-11.77	-15.84
15	-15.05	-16.15	-8.80	-6.49	-6.10	-8.47	-14.09	-25.71	-19.92	-13.42	-9.73	-13.03	-15.84
30	-15.05	-11.82	-6.45	-4.42	-3.67	-6.05	-11.01	-18.76	-17.85	-14.55	-12.61	-15.69	-15.84
45	-15.05	-8.36	-4.67	-2.80	-2.02	-4.15	-9.33	-14.71	-17.31	-15.27	-15.12	-19.36	-15.84
60	-15.05	-6.67	-3.86	-2.78	-1.45	-3.53	-8.06	-13.05	-14.89	-14.89	-20.41	-27.20	-15.84
75	-15.05	-6.38	-4.68	-3.33	-2.39	-3.83	-8.64	-12.41	-13.54	-15.09	-22.25	-31.62	-15.84
90	-15.05	-6.58	-5.61	-5.60	-4.54	-6.03	-10.58	-14.29	-12.51	-16.01	-15.88	-26.05	-15.84
105	-15.05	-6.86	-7.50	-8.70	-9.04	-11.47	-14.62	-19.93	-13.84	-18.17	-13.56	-24.28	-15.84
120	-15.05	-7.92	-10.41	-13.59	-16.22	-19.38	-24.42	-29.08	-17.38	-18.52	-13.34	-23.35	-15.84
135	-15.05	-9.63	-13.61	-21.16	-19.89	-21.99	-27.12	-33.32	-20.17	-18.39	-14.67	-24.78	-15.84
150	-15.05	-11.59	-16.42	-23.91	-17.16	-18.83	-21.09	-27.02	-18.84	-18.23	-18.21	-24.45	-15.84
165	-15.05	-14.28	-19.73	-21.21	-15.45	-16.54	-20.08	-23.60	-20.84	-18.17	-20.39	-22.56	-15.84
180	-15.05	-17.77	-23.25	-19.12	-14.47	-16.42	-19.87	-25.84	-22.77	-18.49	-20.73	-20.84	-15.84
195	-15.05	-22.93	-25.13	-17.59	-14.54	-16.18	-17.86	-25.48	-21.42	-20.00	-18.60	-19.45	-15.84
210	-15.05	-19.42	-17.81	-15.93	-16.32	-14.77	-18.13	-18.29	-19.26	-19.91	-17.12	-20.86	-15.84
225	-15.05	-13.58	-13.39	-12.31	-14.77	-12.85	-20.36	-15.17	-17.59	-19.35	-17.40	-20.90	-15.84
240	-15.05	-10.00	-9.60	-9.16	-9.45	-11.13	-17.43	-13.29	-15.83	-21.19	-19.03	-25.83	-15.84
255	-15.05	-8.09	-7.88	-6.30	-6.50	-9.91	-13.54	-11.95	-15.13	-23.32	-20.78	-32.64	-15.84
270	-15.05	-6.73	-6.01	-4.85	-5.63	-9.27	-10.73	-11.48	-15.99	-21.36	-17.09	-24.42	-15.84
285	-15.05	-6.04	-6.35	-4.76	-5.67	-9.92	-9.76	-11.83	-16.74	-17.37	-13.35	-17.42	-15.84
300	-15.05	-6.43	-6.97	-6.15	-7.10	-11.47	-11.43	-12.35	-16.24	-15.23	-10.85	-15.59	-15.84
315	-15.05	-7.80	-9.26	-9.03	-9.95	-14.17	-12.89	-14.74	-15.34	-13.81	-8.82	-13.07	-15.84
330	-15.05	-10.68	-15.15	-13.91	-14.38	-15.92	-15.90	-17.08	-16.46	-12.50	-8.41	-11.71	-15.84
345	-15.05	-16.17	-27.02	-17.44	-14.64	-14.44	-18.87	-20.41	-18.80	-12.27	-8.66	-11.81	-15.84
360	-15.05	-21.17	-19.81	-13.54	-13.10	-13.28	-18.51	-23.06	-20.04	-12.24	-8.40	-11.90	-15.84

Peak Value **-1.452** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.48	-6.39	-5.31	-4.38	-7.10	-11.91	-7.91	-12.84	-16.03	-12.92	-15.58	-19.72	-40.38
15	-6.48	-6.60	-6.70	-5.94	-8.42	-13.20	-12.10	-15.71	-17.76	-14.39	-14.98	-17.56	-40.38
30	-6.48	-8.17	-9.21	-8.20	-8.38	-9.72	-12.17	-11.94	-12.78	-11.82	-12.24	-14.85	-40.38
45	-6.48	-10.43	-14.94	-11.43	-6.85	-5.18	-7.18	-7.02	-8.47	-8.54	-9.05	-12.90	-40.38
60	-6.48	-14.51	-22.61	-11.80	-4.80	-2.14	-3.35	-4.09	-5.50	-6.15	-7.31	-12.05	-40.38
75	-6.48	-18.13	-23.05	-8.69	-3.07	-0.64	-1.31	-2.78	-4.21	-5.21	-6.24	-12.51	-40.38
90	-6.48	-16.13	-8.26	-5.81	-1.89	-0.01	-0.59	-2.72	-4.14	-5.21	-6.28	-13.57	-40.38
105	-6.48	-12.20	-5.92	-3.97	-1.28	0.05	-0.41	-3.10	-4.59	-5.71	-7.00	-14.99	-40.38
120	-6.48	-9.67	-4.70	-2.99	-0.67	0.26	-0.05	-2.85	-4.65	-6.49	-7.73	-16.57	-40.38
135	-6.48	-8.11	-4.26	-2.34	-0.35	0.54	0.58	-2.39	-4.24	-6.49	-8.49	-17.96	-40.38
150	-6.48	-7.22	-4.21	-2.00	-0.17	0.70	0.99	-2.12	-4.07	-6.02	-8.87	-19.07	-40.38
165	-6.48	-6.60	-4.72	-2.17	-0.41	0.71	0.75	-2.06	-4.50	-5.30	-9.26	-17.99	-40.38
180	-6.48	-6.15	-4.87	-2.53	-0.94	0.08	0.28	-2.58	-5.10	-5.07	-9.89	-19.53	-40.38
195	-6.48	-6.00	-5.20	-3.25	-2.04	-0.77	-0.12	-3.90	-4.99	-5.28	-11.50	-22.56	-40.38
210	-6.48	-5.95	-5.56	-4.30	-3.60	-1.38	-1.08	-5.53	-4.95	-6.25	-14.15	-30.06	-40.38
225	-6.48	-6.35	-6.02	-6.30	-5.07	-2.14	-2.38	-7.33	-5.63	-7.96	-19.35	-29.66	-40.38
240	-6.48	-7.32	-7.44	-9.27	-5.78	-3.01	-4.53	-10.01	-5.91	-9.21	-27.52	-20.08	-40.38
255	-6.48	-9.07	-9.99	-12.58	-5.38	-3.64	-7.63	-9.21	-5.68	-11.34	-17.00	-15.72	-40.38
270	-6.48	-12.51	-16.41	-12.55	-4.44	-4.43	-9.63	-5.66	-5.44	-12.25	-12.10	-13.57	-40.38
285	-6.48	-21.15	-24.87	-8.91	-3.84	-5.19	-7.63	-3.80	-6.15	-11.61	-10.17	-11.96	-40.38
300	-6.48	-19.12	-13.34	-6.23	-3.90	-6.44	-5.99	-3.65	-8.19	-10.66	-9.40	-12.08	-40.38
315	-6.48	-12.09	-8.46	-4.51	-4.42	-8.00	-5.45	-4.66	-11.27	-10.13	-9.85	-13.05	-40.38
330	-6.48	-8.86	-6.06	-3.81	-5.29	-9.38	-5.78	-6.97	-13.97	-10.62	-10.90	-15.38	-40.38
345	-6.48	-6.92	-5.17	-3.84	-6.41	-10.93	-6.26	-10.02	-14.78	-11.31	-13.17	-18.15	-40.38

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-4.55	-4.92	-7.16	-4.14	-8.06	-5.03	-8.12	-9.60	-7.89	-8.85	-9.30	-9.26	-16.43
15	-4.55	-6.46	-8.55	-8.52	-8.11	-4.54	-5.65	-3.68	-5.94	-10.07	-4.95	-8.63	-16.43
30	-4.55	-5.69	-8.25	-14.47	-12.07	-7.90	-6.58	-3.20	-4.55	-8.02	-4.97	-7.48	-16.43
45	-4.55	-5.69	-8.31	-11.79	-15.02	-7.84	-5.87	-3.81	-4.87	-9.24	-5.80	-8.40	-16.43
60	-4.55	-5.65	-3.42	-8.16	-7.40	-6.53	-6.96	-8.36	-8.98	-8.88	-5.45	-12.02	-16.43
75	-4.55	-3.95	-4.64	-4.94	-5.81	-4.67	-5.20	-4.76	-5.87	-5.08	-7.52	-14.23	-16.43
90	-4.55	-4.74	-3.36	-5.39	-7.70	-3.38	-1.66	-0.57	-1.00	-2.28	-7.31	-13.86	-16.43
105	-4.55	-2.99	-3.97	-5.29	-4.73	-0.27	-1.24	-3.07	-1.51	-3.70	-5.41	-14.46	-16.43
120	-4.55	-4.22	-4.98	-4.12	-2.83	1.01	-0.15	-2.85	-6.91	-4.88	-7.71	-14.53	-16.43
135	-4.55	-3.90	-5.35	-4.50	-2.26	0.99	1.82	0.67	-6.36	-6.56	-6.99	-11.18	-16.43
150	-4.55	-5.24	-5.70	-6.56	-3.03	0.78	0.95	1.65	-4.42	-7.78	-6.19	-9.98	-16.43
165	-4.55	-5.52	-7.46	-7.77	-3.33	-0.50	1.13	0.81	-4.09	-5.70	-5.79	-9.67	-16.43
180	-4.55	-3.91	-6.26	-9.39	-6.06	-1.40	-1.05	-1.74	-4.28	-8.33	-6.58	-9.48	-16.43
195	-4.55	-6.41	-5.50	-10.40	-5.99	-3.06	-3.71	-3.14	-6.92	-10.19	-10.62	-9.28	-16.43
210	-4.55	-4.78	-5.04	-10.62	-9.16	-5.35	-6.05	-6.46	-8.55	-9.98	-20.74	-8.32	-16.43
225	-4.55	-4.90	-5.55	-5.65	-7.75	-7.30	-6.20	-12.40	-12.09	-11.17	-15.93	-7.25	-16.43
240	-4.55	-3.96	-4.48	-6.79	-6.10	-5.79	-7.12	-11.99	-14.11	-14.34	-15.43	-9.99	-16.43
255	-4.55	-5.53	-7.26	-6.84	-7.34	-8.37	-7.50	-10.48	-12.48	-15.44	-12.78	-14.24	-16.43
270	-4.55	-5.43	-6.26	-8.88	-7.49	-6.58	-5.40	-7.77	-13.93	-17.00	-11.65	-14.04	-16.43
285	-4.55	-5.10	-7.29	-6.73	-5.59	-5.59	-6.82	-8.12	-14.73	-15.93	-11.24	-13.20	-16.43
300	-4.55	-5.64	-6.77	-8.42	-6.77	-6.14	-6.68	-10.99	-16.71	-17.51	-13.41	-12.89	-16.43
315	-4.55	-3.94	-6.45	-10.07	-8.55	-5.47	-3.71	-6.01	-13.59	-11.40	-12.64	-10.63	-16.43
330	-4.55	-4.86	-7.12	-6.43	-6.38	-5.24	-5.80	-6.96	-12.92	-11.90	-12.63	-11.94	-16.43
345	-4.55	-4.57	-7.95	-5.73	-6.18	-4.51	-7.11	-7.53	-9.08	-12.79	-8.74	-8.99	-16.43
360	-4.55	-3.79	-7.13	-5.68	-6.60	-5.38	-7.10	-8.05	-7.68	-8.04	-8.39	-10.55	-16.43

Peak Value 1.817 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-21.01	-11.89	-8.00	-10.46	-17.29	-6.91	-8.27	-10.21	-8.10	-10.38	-9.46	-9.69	-16.93
15	-21.01	-11.22	-11.09	-21.88	-13.40	-5.09	-6.02	-4.11	-6.16	-10.41	-6.81	-8.69	-16.93
30	-21.01	-9.03	-9.77	-23.41	-14.53	-7.96	-8.16	-3.93	-4.68	-8.60	-7.15	-7.54	-16.93
45	-21.01	-7.45	-9.29	-12.16	-19.26	-10.54	-7.08	-4.54	-5.27	-13.38	-8.88	-8.73	-16.93
60	-21.01	-7.19	-3.59	-8.56	-15.63	-13.38	-8.32	-9.15	-15.75	-20.20	-8.65	-13.56	-16.93
75	-21.01	-4.68	-4.64	-5.20	-7.60	-9.61	-10.18	-7.10	-9.37	-6.61	-9.70	-19.56	-16.93
90	-21.01	-4.74	-3.74	-6.35	-9.12	-8.45	-5.59	-1.91	-2.33	-2.96	-7.81	-23.89	-16.93
105	-21.01	-3.06	-4.71	-11.12	-15.38	-14.52	-5.56	-5.89	-2.49	-4.29	-5.55	-19.26	-16.93
120	-21.01	-4.68	-8.71	-11.73	-9.41	-7.84	-4.14	-5.80	-8.03	-5.31	-8.02	-15.72	-16.93
135	-21.01	-5.98	-10.89	-7.04	-4.79	-3.78	-0.92	-1.21	-6.84	-6.70	-7.56	-11.40	-16.93
150	-21.01	-8.84	-12.80	-7.49	-4.92	-4.05	-2.26	0.02	-5.53	-8.00	-6.52	-12.34	-16.93
165	-21.01	-12.17	-16.16	-8.84	-5.81	-5.70	-3.07	-1.17	-5.72	-6.45	-5.95	-14.91	-16.93
180	-21.01	-20.20	-26.56	-10.44	-8.68	-8.44	-6.38	-4.70	-5.97	-11.58	-7.37	-15.20	-16.93
195	-21.01	-27.84	-22.34	-12.24	-7.61	-10.73	-10.08	-6.65	-9.29	-15.35	-13.97	-17.27	-16.93
210	-21.01	-14.41	-18.39	-13.78	-9.75	-10.57	-10.40	-8.92	-11.88	-18.39	-23.58	-14.53	-16.93
225	-21.01	-11.20	-11.74	-12.16	-10.34	-9.86	-6.24	-12.63	-23.05	-13.98	-19.13	-12.51	-16.93
240	-21.01	-6.34	-10.84	-13.63	-8.38	-7.70	-7.87	-15.74	-32.24	-19.97	-16.59	-13.00	-16.93
255	-21.01	-6.45	-10.72	-15.20	-10.77	-11.06	-9.30	-12.96	-21.17	-17.43	-14.09	-15.21	-16.93
270	-21.01	-5.58	-7.33	-12.39	-12.30	-8.11	-7.50	-10.79	-19.10	-17.11	-17.76	-17.84	-16.93
285	-21.01	-5.85	-8.11	-8.15	-10.68	-9.77	-12.01	-15.51	-25.03	-16.40	-19.06	-27.16	-16.93
300	-21.01	-7.98	-8.62	-10.65	-12.68	-9.77	-9.55	-12.50	-17.11	-20.74	-19.20	-16.88	-16.93
315	-21.01	-6.49	-7.96	-11.28	-8.99	-5.75	-4.52	-6.22	-14.21	-25.95	-16.86	-11.68	-16.93
330	-21.01	-9.77	-8.19	-6.53	-6.63	-6.14	-6.13	-6.98	-13.24	-15.09	-14.74	-13.00	-16.93
345	-21.01	-10.26	-8.84	-6.43	-11.03	-6.55	-7.83	-7.63	-9.30	-16.52	-10.76	-9.18	-16.93
360	-21.01	-10.93	-7.83	-9.09	-14.59	-7.03	-7.14	-8.81	-7.91	-14.49	-10.49	-10.77	-16.93

Peak Value 0.015 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-4.65	-5.90	-14.69	-5.30	-8.62	-9.59	-22.68	-18.43	-21.17	-14.13	-23.68	-19.50	-26.08
15	-4.65	-8.22	-12.09	-8.73	-9.64	-13.82	-16.57	-13.95	-18.94	-21.28	-9.53	-27.18	-26.08
30	-4.65	-8.40	-13.56	-15.06	-15.71	-26.48	-11.72	-11.28	-20.00	-17.07	-9.00	-26.09	-26.08
45	-4.65	-10.48	-15.26	-22.67	-17.08	-11.19	-12.01	-11.94	-15.44	-11.36	-8.73	-19.84	-26.08
60	-4.65	-10.91	-17.64	-18.65	-8.11	-7.54	-12.66	-16.15	-10.00	-9.21	-8.27	-17.30	-26.08
75	-4.65	-12.05	-35.79	-17.35	-10.51	-6.34	-6.86	-8.57	-8.44	-10.37	-11.57	-15.74	-26.08
90	-4.65	-35.81	-14.11	-12.41	-13.24	-5.00	-3.92	-6.32	-6.77	-10.65	-16.93	-14.32	-26.08
105	-4.65	-20.85	-12.06	-6.61	-5.12	-0.44	-3.24	-6.29	-8.48	-12.72	-20.35	-16.21	-26.08
120	-4.65	-14.20	-7.37	-4.95	-3.91	0.41	-2.36	-5.92	-13.35	-15.08	-19.37	-20.74	-26.08
135	-4.65	-8.09	-6.78	-8.04	-5.82	-0.77	-1.48	-3.88	-16.11	-21.76	-16.08	-24.37	-26.08
150	-4.65	-7.73	-6.64	-13.75	-7.56	-0.95	-1.87	-3.40	-10.90	-20.83	-17.56	-13.75	-26.08
165	-4.65	-6.57	-8.09	-14.37	-6.94	-2.06	-0.95	-3.54	-9.12	-13.68	-20.09	-11.22	-26.08
180	-4.65	-4.02	-6.30	-16.09	-9.50	-2.35	-2.55	-4.81	-9.19	-11.12	-14.36	-10.84	-26.08
195	-4.65	-6.44	-5.59	-15.02	-11.06	-3.88	-4.84	-5.71	-10.68	-11.77	-13.32	-10.03	-26.08
210	-4.65	-5.28	-5.25	-13.48	-18.15	-6.90	-8.04	-10.10	-11.27	-10.66	-23.92	-9.51	-26.08
225	-4.65	-6.06	-6.75	-6.75	-11.23	-10.81	-27.20	-25.33	-12.45	-14.38	-18.75	-8.79	-26.08
240	-4.65	-7.71	-5.62	-7.80	-10.00	-10.27	-15.15	-14.38	-14.18	-15.73	-21.74	-13.00	-26.08
255	-4.65	-12.75	-9.87	-7.52	-9.97	-11.72	-12.19	-14.09	-13.11	-19.79	-18.65	-21.25	-26.08
270	-4.65	-20.41	-12.84	-11.45	-9.24	-11.87	-9.55	-10.77	-15.50	-33.31	-12.87	-16.38	-26.08
285	-4.65	-13.11	-14.98	-12.29	-7.21	-7.67	-8.39	-8.99	-15.15	-25.87	-12.03	-13.38	-26.08
300	-4.65	-9.45	-11.36	-12.39	-8.05	-8.60	-9.84	-16.31	-27.22	-20.32	-14.74	-15.10	-26.08
315	-4.65	-7.47	-11.78	-16.20	-18.72	-17.45	-11.40	-19.21	-22.36	-11.56	-14.71	-17.34	-26.08
330	-4.65	-6.55	-13.70	-23.16	-18.90	-12.51	-17.15	-30.42	-24.33	-14.74	-16.78	-18.59	-26.08
345	-4.65	-5.94	-15.29	-14.00	-7.90	-8.77	-15.23	-24.32	-22.06	-15.18	-13.04	-22.68	-26.08

### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-0.93	-4.53	-3.79	-2.46	-3.57	-4.40	-2.97	-5.09	-5.63	-6.99	-5.24	-5.48	-13.40
15	-0.93	-3.93	-3.92	-3.87	-5.64	-2.58	-4.16	-2.83	-2.53	-5.95	-4.87	-6.37	-13.40
30	-0.93	-3.71	-4.82	-5.10	-7.92	-1.81	-1.64	-2.53	-3.19	-5.72	-5.28	-7.10	-13.40
45	-0.93	-2.42	-3.73	-6.77	-16.92	-3.64	-1.77	-1.99	-3.80	-5.72	-5.26	-6.29	-13.40
60	-0.93	-1.69	-2.59	-2.76	-8.90	-3.50	-1.87	-6.84	-7.69	-3.04	-5.38	-9.84	-13.40
75	-0.93	-0.48	-1.00	-1.70	-5.93	-2.89	-1.47	-2.23	-1.15	-0.60	-6.43	-13.39	-13.40
90	-0.93	-1.52	-1.64	-3.01	-5.14	-0.39	0.70	1.96	1.88	-0.18	-4.10	-10.66	-13.40
105	-0.93	-0.29	-1.65	-4.90	-4.36	1.06	0.61	-0.67	-0.98	-2.54	-4.53	-9.90	-13.40
120	-0.93	-1.02	-4.43	-6.97	-3.44	1.07	1.30	-0.12	-5.91	-5.03	-5.11	-9.75	-13.40
135	-0.93	-1.24	-4.52	-4.74	-3.35	0.96	2.31	3.16	-1.25	-5.42	-5.75	-6.65	-13.40
150	-0.93	-1.98	-4.93	-5.48	-4.18	0.34	2.01	2.90	-0.57	-4.05	-7.08	-6.58	-13.40
165	-0.93	-2.05	-5.69	-6.58	-6.31	0.05	1.66	1.87	-0.29	-2.63	-5.66	-5.24	-13.40
180	-0.93	-1.77	-5.55	-7.33	-9.35	-1.27	0.02	0.33	-0.59	-3.90	-6.62	-5.90	-13.40
195	-0.93	-2.48	-4.14	-8.57	-11.16	-2.41	-1.56	-0.89	-2.01	-4.88	-9.48	-6.23	-13.40
210	-0.93	-2.00	-4.20	-12.08	-8.89	-6.07	-5.16	-5.03	-5.02	-7.03	-10.54	-7.49	-13.40
225	-0.93	-1.07	-3.77	-6.54	-5.75	-6.72	-7.07	-7.68	-8.27	-7.47	-13.74	-7.92	-13.40
240	-0.93	-1.73	-3.38	-7.32	-7.45	-3.53	-5.33	-7.88	-12.73	-10.33	-10.85	-10.58	-13.40
255	-0.93	-1.39	-4.15	-6.15	-7.53	-4.49	-6.63	-10.02	-12.52	-10.78	-12.19	-15.01	-13.40
270	-0.93	-1.44	-5.31	-8.32	-9.11	-7.61	-4.77	-10.03	-12.34	-19.48	-17.16	-19.65	-13.40
285	-0.93	-1.94	-6.65	-9.01	-10.31	-7.50	-6.76	-14.51	-9.85	-13.38	-16.31	-12.70	-13.40
300	-0.93	-3.80	-6.29	-7.87	-9.02	-6.32	-7.12	-8.25	-8.68	-10.33	-12.63	-8.69	-13.40
315	-0.93	-4.58	-5.01	-6.15	-8.01	-7.64	-2.56	-3.39	-6.29	-9.76	-13.22	-7.99	-13.40
330	-0.93	-4.07	-4.48	-3.25	-5.51	-5.21	-1.84	-2.66	-4.26	-8.00	-8.65	-7.92	-13.40
345	-0.93	-5.39	-3.95	-2.87	-3.99	-3.80	-3.23	-4.74	-4.15	-8.04	-6.56	-6.58	-13.40
360	-0.93	-4.48	-3.39	-3.19	-2.80	-4.22	-3.72	-5.85	-4.68	-8.62	-6.32	-6.44	-13.40

Peak Value 3.157 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-11.61	-9.58	-5.67	-9.21	-8.78	-6.71	-4.10	-5.43	-5.87	-9.14	-15.08	-5.70	-13.42
15	-11.61	-6.72	-5.14	-13.89	-11.55	-3.14	-4.37	-2.89	-3.49	-8.08	-8.90	-6.80	-13.42
30	-11.61	-5.02	-6.97	-13.56	-10.45	-2.16	-2.20	-2.61	-3.72	-11.05	-6.93	-7.48	-13.42
45	-11.61	-3.61	-4.55	-9.62	-19.45	-6.08	-2.42	-2.30	-5.08	-15.53	-6.50	-6.79	-13.42
60	-11.61	-1.88	-2.92	-3.39	-9.92	-10.65	-4.65	-11.76	-23.38	-7.22	-6.51	-11.18	-13.42
75	-11.61	-0.51	-1.22	-2.05	-6.18	-7.13	-6.94	-3.86	-3.12	-2.01	-6.76	-14.24	-13.42
90	-11.61	-1.59	-1.84	-3.72	-8.17	-5.67	-4.05	0.45	1.33	-0.76	-4.14	-11.74	-13.42
105	-11.61	-0.84	-2.25	-6.71	-12.24	-18.15	-6.32	-4.37	-1.51	-3.06	-4.57	-10.09	-13.42
120	-11.61	-2.21	-6.41	-11.17	-7.17	-6.06	-3.68	-2.35	-13.08	-5.34	-6.07	-9.87	-13.42
135	-11.61	-4.99	-10.22	-6.58	-4.71	-3.11	0.70	2.22	-3.25	-7.32	-6.34	-6.92	-13.42
150	-11.61	-6.84	-15.71	-6.11	-4.96	-4.98	0.21	2.00	-2.01	-5.29	-7.61	-7.32	-13.42
165	-11.61	-12.50	-23.46	-8.76	-9.05	-6.35	-0.77	1.00	-2.00	-4.97	-6.22	-6.22	-13.42
180	-11.61	-12.49	-21.02	-9.94	-13.91	-8.31	-3.18	-1.03	-3.12	-7.40	-9.15	-8.68	-13.42
195	-11.61	-13.16	-14.13	-12.81	-15.62	-12.81	-5.52	-2.56	-4.64	-10.51	-12.97	-11.02	-13.42
210	-11.61	-8.36	-12.06	-14.44	-9.19	-13.78	-10.48	-7.88	-10.58	-19.58	-19.53	-19.60	-13.42
225	-11.61	-5.03	-6.65	-9.74	-7.77	-7.02	-7.60	-9.54	-12.46	-19.57	-19.66	-13.80	-13.42
240	-11.61	-4.11	-5.99	-8.81	-10.55	-6.04	-5.67	-9.49	-17.57	-13.07	-14.59	-13.89	-13.42
255	-11.61	-2.85	-6.38	-9.95	-13.57	-12.81	-8.58	-11.51	-14.01	-11.19	-14.83	-16.20	-13.42
270	-11.61	-2.01	-6.20	-12.73	-9.79	-9.73	-6.30	-10.14	-18.01	-28.51	-18.65	-29.49	-13.42
285	-11.61	-2.42	-6.84	-9.66	-12.87	-9.15	-9.45	-17.05	-15.34	-14.81	-17.84	-14.58	-13.42
300	-11.61	-5.14	-8.49	-9.12	-12.86	-9.06	-8.42	-8.43	-11.60	-14.67	-12.83	-10.05	-13.42
315	-11.61	-7.97	-7.60	-8.53	-8.39	-7.67	-2.62	-3.66	-8.20	-20.72	-13.79	-8.51	-13.42
330	-11.61	-10.26	-8.01	-3.97	-6.25	-6.04	-2.22	-2.97	-6.14	-14.84	-12.85	-7.95	-13.42
345	-11.61	-11.46	-6.25	-4.87	-7.54	-6.39	-4.44	-5.18	-4.49	-11.81	-14.78	-6.76	-13.42
360	-11.61	-9.78	-4.70	-7.76	-9.08	-6.60	-4.60	-6.42	-5.15	-11.06	-14.18	-7.21	-13.42

Peak Value 2.220 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-1.32	-6.15	-8.34	-3.49	-5.13	-8.24	-9.36	-16.37	-18.24	-11.08	-5.71	-18.55	-36.29
15	-1.32	-7.17	-10.01	-4.33	-6.92	-11.82	-17.49	-21.75	-9.60	-10.06	-7.06	-16.62	-36.29
30	-1.32	-9.54	-8.91	-5.77	-11.48	-12.97	-10.82	-19.57	-12.54	-7.23	-10.29	-17.85	-36.29
45	-1.32	-8.62	-11.40	-9.95	-20.48	-7.31	-10.38	-13.53	-9.72	-6.20	-11.29	-16.00	-36.29
60	-1.32	-15.29	-13.98	-11.46	-15.66	-4.43	-5.13	-8.53	-7.81	-5.13	-11.80	-15.61	-36.29
75	-1.32	-22.40	-14.07	-12.83	-18.53	-4.95	-2.91	-7.28	-5.52	-6.17	-17.79	-20.90	-36.29
90	-1.32	-19.51	-15.21	-11.18	-8.13	-1.92	-1.07	-3.37	-7.37	-9.25	-24.74	-17.25	-36.29
105	-1.32	-9.50	-10.49	-9.59	-5.14	1.01	-0.38	-3.08	-10.38	-12.05	-24.99	-23.63	-36.29
120	-1.32	-7.24	-8.78	-9.05	-5.83	0.14	-0.37	-4.08	-6.83	-16.66	-12.11	-25.40	-36.29
135	-1.32	-3.62	-5.88	-9.34	-9.08	-1.20	-2.79	-3.96	-5.59	-9.93	-14.74	-18.81	-36.29
150	-1.32	-3.70	-5.31	-14.14	-11.99	-1.17	-2.68	-4.36	-6.08	-10.13	-16.47	-14.65	-36.29
165	-1.32	-2.46	-5.77	-10.63	-9.60	-1.08	-2.01	-5.52	-5.17	-6.43	-14.89	-12.21	-36.29
180	-1.32	-2.15	-5.68	-10.78	-11.22	-2.22	-2.82	-5.39	-4.14	-6.48	-10.17	-9.16	-36.29
195	-1.32	-2.87	-4.59	-10.63	-13.09	-2.83	-3.79	-5.87	-5.43	-6.27	-12.06	-7.99	-36.29
210	-1.32	-3.14	-4.97	-15.84	-20.58	-6.88	-6.67	-8.20	-6.44	-7.28	-11.13	-7.76	-36.29
225	-1.32	-3.31	-6.91	-9.37	-10.03	-18.40	-16.41	-12.24	-10.36	-7.75	-15.02	-9.21	-36.29
240	-1.32	-5.49	-6.84	-12.71	-10.37	-7.10	-16.63	-12.96	-14.45	-13.63	-13.24	-13.31	-36.29
255	-1.32	-6.84	-8.11	-8.50	-8.77	-5.18	-11.04	-15.38	-17.90	-21.26	-15.60	-21.23	-36.29
270	-1.32	-10.53	-12.65	-10.27	-17.50	-11.74	-10.04	-26.06	-13.72	-20.06	-22.53	-20.13	-36.29
285	-1.32	-11.75	-20.39	-17.57	-13.83	-12.50	-10.12	-18.04	-11.29	-18.91	-21.60	-17.25	-36.29
300	-1.32	-9.54	-10.29	-13.88	-11.33	-9.61	-12.99	-22.20	-11.78	-12.33	-26.29	-14.40	-36.29
315	-1.32	-7.24	-8.47	-9.90	-18.77	-28.93	-20.90	-15.67	-10.79	-10.13	-22.26	-17.53	-36.29
330	-1.32	-5.26	-7.02	-11.40	-13.57	-12.81	-12.68	-14.27	-8.79	-9.00	-10.72	-28.36	-36.29
345	-1.32	-6.62	-7.82	-7.18	-6.52	-7.27	-9.35	-14.87	-15.44	-10.40	-7.27	-20.52	-36.29



### Vertical + Horizontal

$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.25	-4.33	-4.89	-1.60	-2.33	-4.56	-4.70	-5.12	-5.39	-5.88	-10.90	-12.16	-13.58
15	-2.25	-2.53	-2.98	-2.09	-3.71	-2.76	-4.09	-3.59	-2.89	-9.61	-9.60	-8.59	-13.58
30	-2.25	-1.59	-3.07	-3.41	-7.39	-2.61	-1.28	-2.84	-1.96	-11.58	-8.32	-8.23	-13.58
45	-2.25	-0.78	-1.49	-3.15	-10.14	-5.26	-1.37	-3.90	-6.06	-18.18	-6.23	-9.66	-13.58
60	-2.25	-0.28	-0.54	-2.06	-8.46	-10.73	-3.00	-8.72	-10.90	-4.20	-5.15	-10.07	-13.58
75	-2.25	0.41	-0.11	-1.32	-5.37	-8.18	-2.79	-2.67	-2.08	-1.96	-4.95	-11.78	-13.58
90	-2.25	-0.99	-0.79	-1.91	-7.40	-3.78	0.40	0.02	-0.93	-1.68	-5.13	-11.95	-13.58
105	-2.25	-0.45	-2.17	-3.44	-11.80	-2.48	-0.51	-2.70	-8.16	-5.68	-6.14	-15.73	-13.58
120	-2.25	-0.55	-3.36	-5.69	-7.05	-4.18	-1.34	-1.26	-6.88	-15.07	-8.57	-15.25	-13.58
135	-2.25	-2.85	-3.12	-4.32	-5.57	-5.18	0.57	1.50	-1.17	-13.89	-8.53	-14.74	-13.58
150	-2.25	-2.13	-4.41	-3.93	-7.58	-3.67	-0.47	1.01	-0.84	-8.66	-6.57	-10.75	-13.58
165	-2.25	-2.43	-4.32	-2.51	-10.09	-4.24	0.02	-0.15	-1.72	-8.26	-8.18	-11.44	-13.58
180	-2.25	-1.91	-4.99	-3.57	-12.01	-5.29	-0.98	-0.59	-2.30	-8.04	-8.69	-13.83	-13.58
195	-2.25	-0.06	-4.60	-4.34	-11.00	-6.17	-1.88	0.04	-4.27	-9.98	-9.25	-14.63	-13.58
210	-2.25	-1.27	-3.42	-5.88	-10.12	-9.84	-3.63	-3.47	-8.11	-9.48	-9.15	-13.62	-13.58
225	-2.25	-0.41	-3.49	-6.86	-14.80	-11.19	-4.87	-7.57	-11.50	-8.54	-14.30	-20.73	-13.58
240	-2.25	-0.31	-1.52	-5.23	-18.21	-7.27	-5.76	-12.30	-17.94	-9.47	-11.09	-13.88	-13.58
255	-2.25	-1.09	-1.65	-4.52	-11.91	-8.32	-7.53	-9.34	-15.02	-9.28	-11.13	-12.80	-13.58
270	-2.25	-0.09	-1.46	-5.50	-12.42	-9.17	-5.25	-7.26	-13.16	-11.62	-11.05	-11.98	-13.58
285	-2.25	-1.92	-3.62	-6.66	-11.69	-17.98	-11.58	-9.53	-9.24	-13.26	-8.84	-12.83	-13.58
300	-2.25	-3.03	-5.15	-8.06	-13.57	-13.07	-8.96	-11.94	-13.49	-12.49	-10.35	-15.11	-13.58
315	-2.25	-3.70	-6.29	-8.69	-12.53	-7.38	-3.81	-4.32	-13.50	-11.92	-8.96	-11.62	-13.58
330	-2.25	-5.03	-7.27	-4.96	-4.79	-6.01	-4.00	-3.87	-11.19	-9.49	-8.10	-13.23	-13.58
345	-2.25	-3.98	-4.71	-2.75	-3.19	-5.90	-5.36	-6.35	-7.12	-7.33	-10.29	-11.51	-13.58
360	-2.25	-4.69	-4.08	-1.81	-3.26	-5.37	-5.23	-5.89	-6.12	-5.26	-12.20	-10.42	-13.58

Peak Value 1.500 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-13.01	-10.08	-6.99	-5.34	-7.49	-7.05	-5.93	-5.51	-5.41	-6.39	-12.05	-13.41	-13.78
15	-13.01	-4.32	-3.96	-8.33	-8.38	-3.61	-4.57	-3.90	-2.95	-9.78	-10.39	-8.67	-13.78
30	-13.01	-2.49	-4.00	-10.10	-13.97	-2.84	-1.72	-2.99	-1.99	-11.65	-8.75	-8.30	-13.78
45	-13.01	-1.09	-1.90	-6.58	-18.86	-6.53	-2.62	-4.34	-6.10	-19.83	-6.41	-9.86	-13.78
60	-13.01	-0.34	-0.90	-3.26	-10.08	-23.61	-5.84	-11.38	-14.23	-4.49	-5.82	-10.24	-13.78
75	-13.01	0.34	-0.71	-2.36	-6.97	-11.26	-7.83	-3.84	-2.89	-2.19	-5.53	-13.18	-13.78
90	-13.01	-1.40	-2.04	-4.04	-10.02	-11.12	-4.78	-1.86	-1.50	-2.38	-5.56	-12.83	-13.78
105	-13.01	-1.67	-5.10	-9.09	-17.70	-37.40	-9.32	-7.07	-10.41	-6.12	-7.35	-17.48	-13.78
120	-13.01	-3.40	-10.95	-16.64	-7.76	-9.80	-5.67	-2.18	-7.85	-16.04	-10.26	-19.29	-13.78
135	-13.01	-7.11	-16.93	-10.39	-5.74	-7.49	-1.78	1.05	-1.73	-15.94	-12.12	-17.22	-13.78
150	-13.01	-8.40	-25.27	-11.54	-8.42	-8.23	-3.39	0.52	-1.46	-9.72	-9.85	-12.41	-13.78
165	-13.01	-8.92	-20.74	-11.27	-13.42	-10.99	-2.74	-0.80	-2.31	-8.78	-10.43	-14.51	-13.78
180	-13.01	-9.52	-12.45	-15.04	-28.91	-10.29	-4.29	-1.57	-3.14	-8.68	-9.64	-14.00	-13.78
195	-13.01	-4.17	-11.09	-15.70	-20.26	-14.12	-4.19	-0.98	-5.91	-12.13	-10.77	-14.95	-13.78
210	-13.01	-4.27	-5.98	-19.67	-16.75	-18.39	-8.30	-5.47	-11.56	-14.86	-17.03	-18.73	-13.78
225	-13.01	-2.55	-5.79	-21.41	-17.13	-11.72	-8.83	-11.70	-16.55	-14.88	-24.85	-24.11	-13.78
240	-13.01	-2.14	-3.54	-7.54	-18.48	-7.89	-7.30	-13.31	-19.48	-16.11	-11.11	-15.47	-13.78
255	-13.01	-1.72	-2.90	-5.49	-14.80	-11.73	-8.68	-10.00	-18.65	-13.11	-12.27	-14.26	-13.78
270	-13.01	-0.26	-2.04	-6.23	-18.26	-13.14	-5.73	-7.95	-15.36	-30.01	-17.26	-13.52	-13.78
285	-13.01	-2.27	-3.67	-6.69	-12.53	-23.53	-12.56	-12.47	-11.16	-16.26	-17.78	-22.40	-13.78
300	-13.01	-4.73	-5.80	-8.31	-16.47	-13.31	-9.46	-14.27	-15.43	-13.51	-17.48	-19.79	-13.78
315	-13.01	-7.71	-8.66	-10.12	-17.66	-7.44	-4.01	-4.60	-14.72	-14.35	-10.29	-26.01	-13.78
330	-13.01	-15.31	-10.86	-7.39	-6.36	-8.16	-4.53	-3.88	-11.36	-12.11	-8.16	-15.49	-13.78
345	-13.01	-11.51	-6.20	-6.34	-7.35	-9.51	-7.05	-6.56	-7.21	-8.21	-10.37	-11.99	-13.78
360	-13.01	-11.09	-5.95	-5.37	-8.81	-9.03	-6.60	-6.21	-6.18	-6.88	-12.43	-10.88	-13.78

Peak Value 1.048 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.63	-5.68	-9.07	-3.99	-3.91	-8.16	-10.79	-15.82	-28.27	-15.41	-17.24	-18.16	-27.22
15	-2.63	-7.26	-9.93	-3.27	-5.52	-10.22	-13.94	-15.20	-21.26	-23.71	-17.38	-26.12	-27.22
30	-2.63	-8.86	-10.22	-4.45	-8.47	-15.49	-11.47	-17.51	-24.23	-29.51	-18.53	-26.48	-27.22
45	-2.63	-12.36	-12.02	-5.77	-10.77	-11.22	-7.40	-14.02	-26.88	-23.20	-20.10	-23.15	-27.22
60	-2.63	-18.99	-11.49	-8.26	-13.53	-10.96	-6.20	-12.11	-13.60	-16.25	-13.62	-24.18	-27.22
75	-2.63	-17.44	-8.98	-8.05	-10.47	-11.12	-4.43	-8.92	-9.76	-14.75	-13.96	-17.39	-27.22
90	-2.63	-11.48	-6.82	-6.03	-10.83	-4.67	-1.18	-4.53	-10.04	-9.97	-15.36	-19.34	-27.22
105	-2.63	-6.56	-5.26	-4.82	-13.09	-2.48	-1.13	-4.68	-12.09	-15.78	-12.29	-20.52	-27.22
120	-2.63	-3.74	-4.19	-6.05	-15.26	-5.57	-3.34	-8.45	-13.86	-22.08	-13.49	-17.43	-27.22
135	-2.63	-4.89	-3.31	-5.56	-19.68	-9.02	-3.22	-8.56	-10.38	-18.15	-11.04	-18.36	-27.22
150	-2.63	-3.30	-4.45	-4.76	-15.11	-5.54	-3.58	-8.76	-9.58	-15.27	-9.32	-15.72	-27.22
165	-2.63	-3.53	-4.42	-3.14	-12.80	-5.27	-3.26	-8.75	-10.69	-17.79	-12.11	-14.39	-27.22
180	-2.63	-2.73	-5.85	-3.89	-12.10	-6.94	-3.71	-7.53	-9.85	-16.66	-15.73	-28.16	-27.22
195	-2.63	-2.19	-5.71	-4.67	-11.55	-6.93	-5.72	-6.78	-9.28	-14.07	-14.53	-26.06	-27.22
210	-2.63	-4.30	-6.92	-6.07	-11.18	-10.49	-5.45	-7.80	-10.73	-10.96	-9.92	-15.22	-27.22
225	-2.63	-4.50	-7.35	-7.02	-18.62	-20.66	-7.10	-9.70	-13.13	-9.69	-14.70	-23.39	-27.22
240	-2.63	-4.94	-5.82	-9.07	-30.43	-16.00	-11.01	-19.14	-23.21	-10.53	-33.38	-19.02	-27.22
255	-2.63	-9.77	-7.68	-11.51	-15.05	-10.97	-13.84	-17.90	-17.49	-11.60	-17.48	-18.25	-27.22
270	-2.63	-14.38	-10.49	-13.61	-13.73	-11.39	-15.04	-15.61	-17.18	-11.69	-12.24	-17.22	-27.22
285	-2.63	-13.07	-22.68	-27.93	-19.24	-19.40	-18.55	-12.62	-13.71	-16.27	-9.43	-13.34	-27.22
300	-2.63	-7.93	-13.75	-20.61	-16.70	-25.69	-18.57	-15.76	-17.92	-19.28	-11.29	-16.92	-27.22
315	-2.63	-5.90	-10.06	-14.23	-14.12	-25.55	-17.14	-16.40	-19.60	-15.60	-14.74	-11.78	-27.22
330	-2.63	-5.46	-9.77	-8.65	-9.97	-10.10	-13.44	-28.60	-25.29	-12.94	-26.52	-17.16	-27.22
345	-2.63	-4.83	-10.09	-5.24	-5.29	-8.39	-10.27	-19.52	-24.02	-14.70	-27.63	-21.31	-27.22

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.19	-7.53	-8.69	-3.97	-5.28	-5.70	-7.31	-7.76	-7.33	-8.93	-10.61	-5.16	-14.27
15	-3.19	-4.76	-6.02	-5.17	-4.27	-2.08	-1.74	-4.42	-5.16	-7.62	-10.80	-5.12	-14.27
30	-3.19	-4.78	-4.37	-6.29	-5.80	-0.74	0.11	-2.51	-5.86	-9.82	-9.57	-7.09	-14.27
45	-3.19	-2.41	-2.37	-4.23	-12.20	-3.84	0.81	-2.64	-14.19	-5.74	-6.71	-7.76	-14.27
60	-3.19	-1.63	-1.59	-1.23	-8.13	-7.61	-2.04	-4.60	-7.41	-2.25	-4.95	-6.80	-14.27
75	-3.19	-1.61	-0.97	-0.44	-5.31	-6.01	-0.95	-0.89	-0.19	0.01	-3.42	-5.93	-14.27
90	-3.19	-1.99	-1.60	-2.25	-11.18	-1.63	2.20	0.61	-0.72	-2.06	-4.67	-7.16	-14.27
105	-3.19	-3.27	-3.55	-3.14	-10.46	-1.40	-0.54	-4.10	-8.17	-11.00	-7.56	-6.63	-14.27
120	-3.19	-2.85	-2.46	-2.72	-8.96	-3.44	0.13	0.64	-1.65	-8.18	-16.01	-7.41	-14.27
135	-3.19	-2.66	-3.48	-1.58	-7.08	-2.50	1.89	3.32	2.45	-6.12	-13.70	-8.62	-14.27
150	-3.19	-3.24	-3.48	-1.02	-6.25	-0.96	2.27	2.61	1.90	-4.57	-10.44	-8.86	-14.27
165	-3.19	-3.33	-3.86	0.00	-4.31	-1.18	1.49	1.10	0.48	-5.31	-8.18	-6.65	-14.27
180	-3.19	-2.33	-2.83	-0.75	-4.91	-1.88	0.84	1.74	0.61	-4.88	-9.68	-6.62	-14.27
195	-3.19	-3.33	-3.34	-1.06	-3.20	-2.49	0.55	1.23	-0.64	-5.93	-10.34	-6.27	-14.27
210	-3.19	-2.47	-4.38	-2.50	-3.66	-3.62	-1.59	-0.67	-1.51	-5.96	-7.51	-7.55	-14.27
225	-3.19	-2.40	-3.12	-3.56	-8.02	-6.66	-2.46	-3.69	-5.20	-7.01	-10.82	-8.37	-14.27
240	-3.19	-1.19	-0.90	-2.14	-7.78	-10.26	-6.53	-5.95	-6.39	-10.27	-11.39	-12.19	-14.27
255	-3.19	-1.04	-0.72	-1.45	-4.70	-9.92	-7.60	-6.53	-8.66	-14.26	-16.98	-18.11	-14.27
270	-3.19	-1.31	-0.73	-1.92	-6.42	-8.96	-5.04	-5.04	-10.29	-24.64	-18.33	-22.16	-14.27
285	-3.19	-2.56	-2.40	-2.14	-4.35	-8.00	-7.38	-7.28	-10.52	-13.55	-16.37	-13.02	-14.27
300	-3.19	-4.80	-4.51	-4.72	-5.73	-12.12	-9.22	-10.76	-16.96	-13.13	-10.98	-12.80	-14.27
315	-3.19	-5.77	-8.00	-7.17	-8.40	-14.76	-5.88	-7.32	-9.98	-11.97	-8.55	-8.51	-14.27
330	-3.19	-7.13	-10.87	-6.94	-8.13	-6.92	-8.38	-5.81	-5.77	-10.45	-7.66	-7.14	-14.27
345	-3.19	-6.89	-8.77	-4.67	-5.82	-6.69	-8.22	-9.88	-6.94	-10.83	-12.55	-6.24	-14.27
360	-3.19	-6.45	-8.48	-7.53	-4.90	-6.24	-5.94	-7.37	-6.10	-7.98	-8.41	-5.36	-14.27

Peak Value 3.319 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-22.45	-14.37	-10.91	-7.32	-10.36	-7.61	-8.05	-9.32	-8.34	-10.71	-12.43	-5.54	-15.08
15	-22.45	-6.69	-6.50	-12.01	-6.88	-2.15	-2.16	-5.31	-5.77	-9.46	-12.71	-5.93	-15.08
30	-22.45	-5.75	-4.90	-11.72	-8.43	-0.98	-0.61	-4.04	-6.43	-12.44	-10.30	-8.78	-15.08
45	-22.45	-2.83	-3.03	-5.96	-17.33	-6.06	-0.97	-5.09	-18.69	-7.53	-7.36	-8.60	-15.08
60	-22.45	-1.69	-2.17	-2.43	-8.89	-19.66	-7.54	-11.93	-8.33	-2.68	-5.19	-7.36	-15.08
75	-22.45	-1.72	-1.51	-1.96	-6.35	-15.32	-8.02	-2.99	-0.31	-0.23	-3.42	-6.72	-15.08
90	-22.45	-2.51	-3.74	-7.29	-14.94	-12.46	-3.67	-1.50	-0.94	-2.37	-5.00	-7.46	-15.08
105	-22.45	-5.47	-9.84	-20.27	-13.01	-10.60	-12.47	-7.84	-9.72	-12.52	-8.70	-7.22	-15.08
120	-22.45	-6.96	-17.86	-13.45	-10.48	-12.15	-6.27	0.05	-1.91	-8.43	-18.01	-7.82	-15.08
135	-22.45	-12.68	-13.06	-11.31	-13.86	-17.65	-2.55	2.81	2.42	-6.52	-14.39	-8.94	-15.08
150	-22.45	-16.74	-10.97	-16.43	-18.91	-18.18	-4.85	2.01	1.72	-5.83	-10.61	-10.91	-15.08
165	-22.45	-11.83	-11.36	-13.51	-16.49	-14.69	-4.67	0.31	0.42	-6.11	-8.27	-8.83	-15.08
180	-22.45	-8.36	-9.52	-9.95	-9.32	-10.76	-4.84	1.12	0.54	-6.47	-10.82	-8.18	-15.08
195	-22.45	-7.43	-9.08	-8.42	-7.08	-9.43	-5.35	0.54	-0.88	-7.36	-12.13	-8.34	-15.08
210	-22.45	-6.70	-6.01	-9.18	-8.21	-12.25	-10.53	-2.34	-2.53	-10.24	-12.23	-11.09	-15.08
225	-22.45	-4.04	-4.58	-7.38	-17.27	-21.08	-9.92	-6.12	-7.99	-12.17	-18.24	-14.61	-15.08
240	-22.45	-2.79	-1.89	-4.03	-8.68	-15.33	-9.77	-7.36	-10.18	-17.79	-15.87	-20.34	-15.08
255	-22.45	-1.76	-1.63	-3.02	-4.84	-17.22	-11.25	-7.20	-14.97	-19.18	-20.56	-25.75	-15.08
270	-22.45	-1.51	-1.39	-3.39	-6.94	-16.54	-7.50	-5.53	-11.37	-25.88	-21.99	-22.87	-15.08
285	-22.45	-2.57	-2.78	-2.82	-4.89	-9.39	-13.06	-8.66	-10.62	-15.95	-25.11	-15.10	-15.08
300	-22.45	-5.45	-5.33	-4.95	-5.80	-13.80	-15.02	-12.51	-26.19	-15.02	-12.53	-13.50	-15.08
315	-22.45	-8.70	-9.29	-7.27	-8.43	-18.62	-6.78	-7.65	-11.65	-13.11	-8.72	-9.04	-15.08
330	-22.45	-16.10	-12.86	-7.50	-9.28	-9.22	-9.06	-5.97	-7.22	-12.31	-7.68	-7.22	-15.08
345	-22.45	-17.72	-10.79	-6.19	-9.20	-9.43	-8.50	-11.22	-8.89	-12.72	-13.85	-6.39	-15.08
360	-22.45	-13.06	-9.11	-12.40	-10.13	-8.59	-6.41	-9.08	-7.33	-9.51	-11.15	-5.67	-15.08

Peak Value 2.808 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.24	-8.54	-12.66	-6.67	-6.90	-10.18	-15.39	-12.95	-14.17	-13.67	-15.27	-15.89	-21.96
15	-3.24	-9.20	-15.83	-6.18	-7.72	-19.88	-12.10	-11.76	-13.97	-12.25	-15.27	-12.79	-21.96
30	-3.24	-11.78	-13.81	-7.75	-9.22	-13.32	-8.02	-7.79	-14.97	-13.26	-17.67	-12.01	-21.96
45	-3.24	-12.74	-10.86	-9.05	-13.79	-7.81	-3.92	-6.31	-16.10	-10.47	-15.27	-15.32	-21.96
60	-3.24	-20.46	-10.59	-7.38	-16.05	-7.89	-3.48	-5.49	-14.61	-12.54	-17.65	-15.91	-21.96
75	-3.24	-17.52	-10.32	-5.74	-12.04	-6.56	-1.90	-5.07	-15.83	-12.68	-36.79	-13.75	-21.96
90	-3.24	-11.48	-5.70	-3.88	-13.56	-2.01	0.90	-3.54	-13.77	-13.63	-15.93	-18.91	-21.96
105	-3.24	-7.28	-4.72	-3.23	-13.98	-1.96	-0.83	-6.50	-13.39	-16.31	-13.93	-15.56	-21.96
120	-3.24	-4.99	-2.59	-3.11	-14.27	-4.06	-1.00	-8.34	-14.06	-20.77	-20.34	-17.93	-21.96
135	-3.24	-3.12	-3.99	-2.06	-8.11	-2.64	-0.05	-6.23	-20.15	-16.68	-22.02	-20.07	-21.96
150	-3.24	-3.44	-4.33	-1.15	-6.49	-1.04	1.33	-6.26	-12.04	-10.57	-24.66	-13.11	-21.96
165	-3.24	-4.00	-4.72	-0.20	-4.58	-1.38	0.28	-6.69	-18.62	-13.07	-25.28	-10.69	-21.96
180	-3.24	-3.57	-3.87	-1.30	-6.87	-2.49	-0.54	-6.97	-17.52	-10.00	-16.03	-11.82	-21.96
195	-3.24	-5.48	-4.69	-1.94	-5.49	-3.47	-0.74	-7.13	-13.20	-11.42	-15.06	-10.49	-21.96
210	-3.24	-4.53	-9.42	-3.56	-5.54	-4.26	-2.18	-5.62	-8.31	-7.99	-9.30	-10.08	-21.96
225	-3.24	-7.43	-8.59	-5.89	-8.57	-6.82	-3.32	-7.36	-8.43	-8.58	-11.69	-9.54	-21.96
240	-3.24	-6.31	-7.81	-6.67	-15.10	-11.88	-9.31	-11.52	-8.74	-11.12	-13.30	-12.91	-21.96
255	-3.24	-9.18	-7.99	-6.63	-19.88	-10.81	-10.06	-15.04	-9.82	-15.95	-19.48	-18.93	-21.96
270	-3.24	-14.75	-9.23	-7.35	-15.90	-9.79	-8.69	-14.75	-16.88	-30.70	-20.79	-30.42	-21.96
285	-3.24	-30.47	-13.25	-10.55	-13.70	-13.65	-8.74	-12.93	-27.06	-17.28	-16.99	-17.21	-21.96
300	-3.24	-13.39	-12.16	-17.53	-23.60	-17.06	-10.54	-15.54	-17.52	-17.67	-16.21	-21.10	-21.96
315	-3.24	-8.86	-13.90	-23.78	-30.75	-17.07	-13.15	-18.68	-14.94	-18.37	-22.72	-17.92	-21.96
330	-3.24	-7.72	-15.21	-16.08	-14.45	-10.79	-16.76	-20.02	-11.24	-15.03	-31.08	-24.54	-21.96
345	-3.24	-7.27	-13.06	-9.98	-8.50	-9.99	-20.23	-15.63	-11.35	-15.34	-18.44	-20.92	-21.96

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-10.48	-10.28	-11.78	-6.07	-11.44	-10.29	-7.70	-7.24	-11.46	-13.67	-12.71	-16.88	-18.14
15	-10.48	-8.87	-11.26	-6.89	-11.40	-6.39	-4.72	-4.20	-10.65	-16.88	-11.85	-20.45	-18.14
30	-10.48	-7.73	-7.99	-7.36	-11.50	-4.31	-1.54	-3.82	-11.90	-15.03	-12.45	-24.38	-18.14
45	-10.48	-6.47	-6.99	-4.59	-10.55	-6.82	-2.35	-4.16	-14.41	-7.28	-10.67	-17.26	-18.14
60	-10.48	-8.00	-4.01	-3.89	-7.76	-9.90	-3.18	-8.59	-8.37	-5.03	-9.64	-15.10	-18.14
75	-10.48	-6.81	-5.11	-4.91	-9.95	-12.60	-1.68	-2.84	-3.17	-3.96	-8.95	-15.94	-18.14
90	-10.48	-8.99	-5.55	-6.07	-13.02	-6.71	-0.29	-1.40	-5.68	-6.72	-10.30	-14.38	-18.14
105	-10.48	-9.76	-7.43	-5.20	-7.71	-5.37	-2.30	-3.80	-8.01	-12.90	-13.26	-16.16	-18.14
120	-10.48	-10.51	-7.09	-5.95	-8.95	-6.91	-4.68	-1.18	-1.82	-7.31	-12.05	-16.91	-18.14
135	-10.48	-10.91	-8.19	-5.97	-8.05	-7.35	-3.35	-0.03	0.46	-6.07	-12.07	-17.14	-18.14
150	-10.48	-10.93	-7.05	-5.51	-6.30	-5.24	-3.47	-2.33	-0.30	-5.84	-11.82	-17.29	-18.14
165	-10.48	-11.77	-8.66	-4.18	-3.61	-4.96	-3.21	-3.68	-1.72	-6.56	-7.61	-14.41	-18.14
180	-10.48	-10.21	-7.87	-3.83	-4.85	-4.48	-4.47	-2.16	-1.82	-6.36	-12.34	-15.82	-18.14
195	-10.48	-11.31	-8.00	-3.88	-3.89	-5.82	-3.96	-2.22	-2.09	-7.62	-19.46	-17.35	-18.14
210	-10.48	-10.25	-8.08	-5.40	-5.14	-6.77	-5.62	-3.42	-2.99	-10.90	-19.72	-13.20	-18.14
225	-10.48	-10.10	-7.19	-7.42	-9.01	-10.81	-7.35	-4.52	-6.42	-13.15	-17.75	-10.21	-18.14
240	-10.48	-6.73	-5.25	-5.58	-10.11	-13.44	-9.94	-7.24	-11.19	-16.17	-15.44	-10.66	-18.14
255	-10.48	-7.10	-5.24	-3.28	-6.80	-9.84	-9.72	-9.12	-10.78	-14.32	-14.31	-13.98	-18.14
270	-10.48	-6.50	-4.51	-2.89	-6.93	-11.67	-7.30	-10.12	-13.96	-14.77	-12.58	-12.27	-18.14
285	-10.48	-5.56	-7.14	-3.61	-6.10	-8.49	-8.13	-11.85	-13.06	-17.69	-11.77	-14.11	-18.14
300	-10.48	-6.11	-9.96	-7.30	-5.83	-10.53	-14.03	-11.67	-10.54	-13.39	-11.14	-14.80	-18.14
315	-10.48	-7.89	-12.39	-7.82	-7.72	-13.59	-11.02	-8.43	-11.44	-12.62	-11.14	-16.37	-18.14
330	-10.48	-9.90	-22.68	-9.63	-7.29	-8.33	-8.92	-7.88	-9.76	-13.58	-12.82	-20.55	-18.14
345	-10.48	-10.02	-17.09	-7.56	-9.25	-9.82	-8.84	-8.20	-10.09	-12.38	-16.56	-35.62	-18.14
360	-10.48	-9.83	-11.44	-8.16	-8.49	-10.66	-8.26	-8.66	-10.13	-12.49	-15.35	-23.54	-18.14

Peak Value 0.456 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-20.47	-19.38	-12.32	-11.98	-25.08	-11.22	-7.92	-7.56	-11.72	-17.25	-23.50	-24.58	-19.90
15	-20.47	-15.76	-13.48	-12.28	-17.46	-6.55	-5.09	-4.48	-11.26	-18.98	-12.94	-26.53	-19.90
30	-20.47	-11.04	-9.89	-12.71	-13.39	-4.75	-2.42	-4.77	-12.24	-17.80	-14.23	-27.44	-19.90
45	-20.47	-8.11	-8.35	-8.63	-13.57	-8.50	-4.40	-5.18	-16.59	-7.59	-12.18	-24.03	-19.90
60	-20.47	-8.49	-5.47	-6.53	-9.71	-16.25	-10.76	-17.53	-9.01	-5.05	-12.05	-17.22	-19.90
75	-20.47	-6.98	-6.86	-7.06	-11.25	-23.53	-12.24	-7.67	-3.17	-3.96	-9.82	-19.12	-19.90
90	-20.47	-9.19	-8.86	-13.35	-24.10	-11.04	-8.08	-7.05	-5.78	-6.80	-11.27	-18.10	-19.90
105	-20.47	-11.78	-15.41	-19.20	-9.61	-7.65	-15.26	-11.24	-9.07	-15.21	-15.57	-20.19	-19.90
120	-20.47	-15.51	-12.81	-14.30	-11.27	-8.83	-20.80	-3.97	-2.58	-7.66	-12.86	-21.83	-19.90
135	-20.47	-20.76	-13.55	-13.96	-17.00	-11.69	-22.33	-2.48	-0.10	-6.30	-12.81	-21.30	-19.90
150	-20.47	-19.15	-11.19	-13.44	-15.77	-8.96	-28.94	-5.05	-0.73	-6.37	-13.71	-29.28	-19.90
165	-20.47	-17.75	-11.96	-11.65	-11.67	-9.48	-25.70	-6.53	-2.41	-7.56	-8.15	-20.64	-19.90
180	-20.47	-14.87	-12.13	-8.59	-7.96	-7.37	-15.50	-4.17	-2.55	-6.88	-12.92	-18.94	-19.90
195	-20.47	-16.25	-10.78	-8.04	-7.69	-8.19	-11.54	-4.45	-2.67	-7.76	-19.77	-21.18	-19.90
210	-20.47	-12.07	-10.58	-6.83	-8.92	-9.31	-15.42	-5.79	-3.65	-11.17	-20.31	-17.48	-19.90
225	-20.47	-12.43	-8.70	-8.50	-11.64	-15.56	-19.67	-8.87	-7.33	-15.26	-17.92	-13.86	-19.90
240	-20.47	-7.77	-6.86	-8.26	-11.46	-15.23	-21.27	-14.97	-13.61	-20.12	-16.65	-13.87	-19.90
255	-20.47	-7.84	-6.22	-5.19	-7.20	-12.67	-38.53	-11.12	-13.33	-18.03	-18.80	-16.71	-19.90
270	-20.47	-6.60	-5.04	-4.27	-8.14	-18.36	-12.92	-10.81	-14.71	-18.21	-30.18	-13.40	-19.90
285	-20.47	-5.57	-7.48	-4.76	-6.72	-9.39	-12.38	-16.10	-17.60	-20.30	-20.67	-22.51	-19.90
300	-20.47	-6.30	-10.03	-7.82	-6.31	-10.57	-15.97	-18.35	-16.87	-13.44	-18.79	-17.14	-19.90
315	-20.47	-8.48	-13.52	-7.83	-7.94	-14.09	-12.32	-9.37	-12.48	-12.75	-13.81	-19.07	-19.90
330	-20.47	-12.80	-28.65	-10.31	-8.33	-9.17	-10.34	-8.25	-9.77	-13.78	-19.52	-27.58	-19.90
345	-20.47	-20.58	-18.40	-10.84	-11.96	-10.81	-9.94	-8.30	-10.58	-14.31	-27.22	-37.11	-19.90
360	-20.47	-19.82	-12.03	-12.16	-13.59	-12.20	-9.01	-9.05	-10.42	-18.20	-27.04	-25.39	-19.90



Peak Value **-0.101** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-10.94	-10.85	-21.13	-7.36	-11.63	-17.45	-20.80	-18.83	-23.80	-16.17	-13.09	-17.69	-22.92
15	-10.94	-9.87	-15.22	-8.37	-12.64	-20.90	-15.58	-16.20	-19.46	-21.04	-18.39	-21.68	-22.92
30	-10.94	-10.47	-12.49	-8.86	-16.01	-14.40	-8.90	-10.90	-23.12	-18.30	-17.17	-27.34	-22.92
45	-10.94	-11.51	-12.67	-6.78	-13.55	-11.76	-6.61	-10.94	-18.46	-18.92	-15.99	-18.29	-22.92
60	-10.94	-17.71	-9.47	-7.31	-12.19	-11.04	-4.01	-9.18	-16.96	-27.58	-13.35	-19.22	-22.92
75	-10.94	-21.03	-9.90	-8.99	-15.83	-12.97	-2.08	-4.57	-31.95	-44.09	-16.36	-18.78	-22.92
90	-10.94	-22.47	-8.28	-6.97	-13.37	-8.70	-1.08	-2.78	-22.01	-24.42	-17.31	-16.79	-22.92
105	-10.94	-14.08	-8.19	-5.37	-12.21	-9.26	-2.52	-4.66	-14.65	-16.74	-17.12	-18.35	-22.92
120	-10.94	-12.17	-8.44	-6.64	-12.78	-11.39	-4.78	-4.43	-9.73	-18.46	-19.74	-18.60	-22.92
135	-10.94	-11.38	-9.69	-6.72	-8.64	-9.35	-3.41	-3.68	-8.74	-18.83	-20.07	-19.25	-22.92
150	-10.94	-11.64	-9.17	-6.28	-6.82	-7.64	-3.48	-5.66	-10.56	-15.29	-16.33	-17.58	-22.92
165	-10.94	-13.04	-11.39	-5.03	-4.35	-6.86	-3.24	-6.86	-10.06	-13.43	-16.90	-15.59	-22.92
180	-10.94	-12.03	-9.91	-5.60	-7.76	-7.62	-4.83	-6.46	-9.90	-15.83	-21.33	-18.73	-22.92
195	-10.94	-12.99	-11.26	-5.98	-6.22	-9.58	-4.79	-6.17	-11.15	-22.65	-31.13	-19.68	-22.92
210	-10.94	-14.92	-11.67	-10.94	-7.51	-10.31	-6.10	-7.18	-11.53	-23.14	-28.69	-15.23	-22.92
225	-10.94	-13.91	-12.51	-14.01	-12.44	-12.58	-7.62	-6.50	-13.69	-17.29	-32.11	-12.66	-22.92
240	-10.94	-13.44	-10.33	-8.96	-15.84	-18.14	-10.27	-8.04	-14.88	-18.42	-21.60	-13.49	-22.92
255	-10.94	-15.16	-12.22	-7.76	-17.34	-13.03	-9.73	-13.45	-14.31	-16.74	-16.22	-17.30	-22.92
270	-10.94	-23.10	-13.88	-8.53	-13.09	-12.71	-8.70	-18.47	-21.95	-17.39	-12.66	-18.67	-22.92
285	-10.94	-35.30	-18.46	-9.94	-14.86	-15.77	-10.17	-13.90	-14.94	-21.13	-12.37	-14.79	-22.92
300	-10.94	-19.81	-28.48	-16.80	-15.63	-30.85	-18.47	-12.72	-11.69	-32.29	-11.95	-18.61	-22.92
315	-10.94	-16.88	-18.79	-42.62	-20.88	-23.19	-16.90	-15.53	-18.14	-27.94	-14.52	-19.71	-22.92
330	-10.94	-13.02	-23.94	-17.97	-14.04	-15.87	-14.47	-18.83	-35.39	-27.02	-13.86	-21.51	-22.92
345	-10.94	-10.42	-22.96	-10.31	-12.58	-16.73	-15.37	-24.59	-19.76	-16.83	-16.95	-40.98	-22.92

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-13.25	-8.68	-27.52	-7.34	-4.49	-7.83	-6.89	-4.75	-9.36	-13.66	-9.00	-9.31	-14.18
15	-13.25	-9.62	-17.78	-8.67	-7.36	-8.70	-5.55	-2.95	-9.01	-12.52	-10.19	-10.31	-14.18
30	-13.25	-9.92	-12.79	-9.30	-7.81	-8.26	-4.26	-3.44	-9.38	-9.54	-9.89	-13.37	-14.18
45	-13.25	-9.69	-9.46	-6.90	-5.78	-7.39	-5.37	-4.71	-13.55	-6.00	-8.60	-15.28	-14.18
60	-13.25	-9.90	-8.14	-6.32	-5.40	-10.18	-6.03	-6.96	-6.21	-3.07	-6.11	-12.64	-14.18
75	-13.25	-13.26	-7.32	-6.67	-7.01	-11.91	-4.86	-2.97	-2.67	-2.78	-4.95	-10.79	-14.18
90	-13.25	-14.34	-7.77	-4.91	-5.60	-6.22	-2.09	-2.90	-5.06	-4.84	-7.37	-10.95	-14.18
105	-13.25	-14.15	-7.13	-3.61	-3.30	-3.51	-2.46	-3.64	-5.44	-7.63	-8.58	-11.01	-14.18
120	-13.25	-14.16	-6.72	-4.04	-5.95	-5.37	-3.30	-1.97	-1.32	-3.92	-8.12	-10.25	-14.18
135	-13.25	-15.75	-7.51	-5.20	-5.81	-6.63	-3.69	-1.00	-0.01	-2.26	-8.37	-9.95	-14.18
150	-13.25	-16.66	-8.99	-4.91	-3.75	-3.92	-2.61	-2.00	-0.64	-2.84	-8.09	-9.53	-14.18
165	-13.25	-17.04	-10.82	-4.65	-3.19	-3.73	-3.17	-2.81	-1.81	-3.40	-7.52	-10.30	-14.18
180	-13.25	-15.88	-11.34	-4.54	-4.07	-5.30	-5.11	-2.57	-2.25	-4.20	-7.05	-9.94	-14.18
195	-13.25	-17.32	-10.58	-5.18	-5.06	-6.04	-4.46	-3.90	-3.32	-4.22	-9.15	-9.16	-14.18
210	-13.25	-14.53	-8.32	-6.13	-5.97	-7.28	-5.46	-5.43	-3.30	-5.51	-11.94	-10.20	-14.18
225	-13.25	-13.35	-7.90	-5.59	-6.28	-8.82	-6.66	-6.66	-6.40	-6.74	-16.51	-10.06	-14.18
240	-13.25	-10.57	-6.26	-5.09	-5.80	-10.29	-9.59	-10.09	-9.44	-12.24	-16.35	-13.27	-14.18
255	-13.25	-9.87	-6.34	-4.40	-4.58	-6.39	-9.87	-11.68	-9.09	-16.27	-13.97	-19.56	-14.18
270	-13.25	-7.07	-5.64	-3.22	-3.53	-7.75	-8.46	-8.42	-9.85	-19.94	-14.11	-20.12	-14.18
285	-13.25	-6.79	-7.16	-4.09	-3.31	-5.75	-7.95	-9.90	-17.26	-16.82	-9.88	-16.18	-14.18
300	-13.25	-6.35	-7.38	-6.31	-5.20	-6.56	-15.23	-12.14	-11.97	-15.56	-12.29	-14.11	-14.18
315	-13.25	-6.83	-9.63	-10.20	-5.78	-10.16	-11.69	-9.52	-8.33	-15.69	-11.42	-12.22	-14.18
330	-13.25	-7.50	-16.43	-12.54	-4.69	-6.03	-7.03	-5.95	-8.53	-14.28	-12.44	-8.89	-14.18
345	-13.25	-7.91	-25.98	-8.48	-4.35	-7.20	-6.63	-5.52	-8.90	-12.76	-13.44	-10.19	-14.18
360	-13.25	-8.76	-22.74	-8.14	-5.06	-8.17	-6.80	-5.30	-8.59	-14.62	-11.55	-11.16	-14.18

Peak Value -0.006 Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-22.13	-15.27	-30.78	-11.35	-8.06	-11.67	-7.21	-5.32	-9.76	-17.25	-13.15	-11.15	-14.33
15	-22.13	-21.06	-22.69	-16.60	-21.99	-9.72	-5.76	-3.87	-9.09	-17.29	-11.88	-13.47	-14.33
30	-22.13	-14.51	-16.77	-17.60	-18.69	-8.35	-5.33	-5.05	-9.65	-12.26	-11.53	-17.88	-14.33
45	-22.13	-12.15	-10.91	-10.10	-9.20	-7.48	-8.49	-8.83	-17.81	-7.21	-9.62	-17.55	-14.33
60	-22.13	-10.48	-8.43	-7.75	-7.62	-10.19	-18.40	-16.27	-6.68	-3.76	-6.94	-14.88	-14.33
75	-22.13	-13.32	-8.88	-10.12	-13.10	-14.94	-27.65	-7.33	-3.27	-3.17	-5.31	-12.26	-14.33
90	-22.13	-16.44	-14.76	-15.75	-10.41	-7.74	-12.10	-12.03	-6.10	-5.27	-7.45	-11.17	-14.33
105	-22.13	-18.85	-14.24	-7.02	-5.47	-4.29	-9.54	-11.21	-7.25	-7.98	-8.87	-11.01	-14.33
120	-22.13	-23.13	-8.69	-6.51	-8.47	-5.88	-12.49	-6.06	-2.38	-4.47	-8.91	-10.35	-14.33
135	-22.13	-17.19	-9.67	-10.40	-9.73	-7.37	-13.45	-5.99	-0.71	-2.79	-8.51	-10.01	-14.33
150	-22.13	-17.51	-11.28	-11.78	-5.86	-4.36	-9.60	-8.30	-1.44	-3.41	-8.09	-10.30	-14.33
165	-22.13	-18.87	-15.31	-7.96	-4.55	-4.14	-8.38	-9.52	-3.13	-4.40	-7.60	-11.50	-14.33
180	-22.13	-19.60	-17.15	-7.76	-5.17	-6.00	-10.74	-8.24	-3.44	-5.28	-7.23	-11.70	-14.33
195	-22.13	-18.50	-16.13	-7.62	-6.12	-6.89	-9.44	-7.84	-4.29	-5.01	-9.38	-10.98	-14.33
210	-22.13	-15.84	-11.67	-8.77	-7.26	-8.12	-10.01	-9.08	-4.64	-6.33	-12.52	-16.80	-14.33
225	-22.13	-16.83	-10.05	-7.19	-7.67	-10.88	-17.92	-10.87	-8.65	-9.37	-19.59	-16.03	-14.33
240	-22.13	-12.86	-8.21	-6.40	-6.86	-13.21	-15.13	-19.21	-16.39	-19.16	-16.77	-19.36	-14.33
255	-22.13	-12.17	-8.78	-6.45	-5.84	-9.13	-17.37	-14.03	-12.70	-21.33	-14.28	-28.67	-14.33
270	-22.13	-8.26	-7.06	-4.83	-4.55	-10.58	-17.20	-9.70	-10.37	-20.64	-15.79	-22.86	-14.33
285	-22.13	-7.40	-7.49	-4.59	-3.79	-6.46	-10.35	-13.19	-19.38	-20.26	-10.61	-16.74	-14.33
300	-22.13	-6.51	-7.51	-6.41	-5.34	-6.56	-19.01	-22.22	-16.71	-27.06	-13.52	-14.23	-14.33
315	-22.13	-7.65	-9.73	-10.21	-6.05	-11.37	-12.62	-10.01	-9.26	-20.58	-11.99	-13.44	-14.33
330	-22.13	-9.15	-16.90	-14.04	-5.76	-7.69	-7.91	-6.12	-8.85	-17.96	-14.57	-9.61	-14.33
345	-22.13	-12.50	-26.09	-12.15	-6.74	-8.46	-7.42	-6.21	-9.10	-15.20	-16.85	-10.89	-14.33
360	-22.13	-15.23	-25.36	-12.65	-9.34	-11.21	-7.03	-5.81	-8.96	-18.15	-14.95	-13.06	-14.33

Peak Value **-0.706** Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-13.85	-9.76	-30.29	-9.54	-7.01	-10.14	-18.47	-13.86	-19.84	-16.15	-11.11	-13.93	-28.93
15	-13.85	-9.94	-19.47	-9.43	-7.51	-15.51	-18.72	-10.14	-26.67	-14.28	-15.08	-13.17	-28.93
30	-13.85	-11.77	-15.01	-9.99	-8.18	-25.37	-10.83	-8.52	-21.60	-12.87	-14.92	-15.27	-28.93
45	-13.85	-13.33	-14.92	-9.72	-8.42	-24.56	-8.27	-6.83	-15.59	-12.16	-15.41	-19.17	-28.93
60	-13.85	-18.90	-20.06	-11.83	-9.39	-37.27	-6.29	-7.50	-16.13	-11.40	-13.72	-16.58	-28.93
75	-13.85	-31.51	-12.53	-9.28	-8.24	-14.91	-4.88	-4.95	-11.56	-13.47	-15.99	-16.20	-28.93
90	-13.85	-18.52	-8.74	-5.28	-7.34	-11.53	-2.55	-3.47	-11.77	-15.15	-24.66	-23.94	-28.93
105	-13.85	-15.94	-8.06	-6.26	-7.35	-11.34	-3.40	-4.47	-10.12	-18.72	-20.50	-38.65	-28.93
120	-13.85	-14.75	-11.09	-7.65	-9.51	-14.91	-3.86	-4.12	-7.99	-13.16	-15.94	-26.66	-28.93
135	-13.85	-21.24	-11.56	-6.76	-8.06	-14.72	-4.17	-2.66	-8.28	-11.64	-23.45	-28.34	-28.93
150	-13.85	-24.14	-12.87	-5.90	-7.89	-14.07	-3.58	-3.15	-8.41	-11.87	-47.69	-17.43	-28.93
165	-13.85	-21.68	-12.72	-7.38	-8.91	-14.23	-4.72	-3.85	-7.62	-10.23	-24.69	-16.49	-28.93
180	-13.85	-18.29	-12.66	-7.36	-10.54	-13.58	-6.49	-3.95	-8.45	-10.80	-20.99	-14.72	-28.93
195	-13.85	-23.54	-12.00	-8.84	-11.71	-13.53	-6.12	-6.15	-10.31	-12.01	-21.90	-13.80	-28.93
210	-13.85	-20.35	-11.01	-9.54	-11.88	-14.87	-7.34	-7.88	-9.07	-13.16	-20.96	-11.28	-28.93
225	-13.85	-15.94	-11.97	-10.71	-11.90	-13.06	-7.00	-8.73	-10.33	-10.17	-19.46	-11.33	-28.93
240	-13.85	-14.44	-10.68	-10.94	-12.44	-13.38	-11.01	-10.66	-10.42	-13.23	-26.64	-14.50	-28.93
255	-13.85	-13.72	-10.01	-8.65	-10.58	-9.68	-10.72	-15.48	-11.58	-17.89	-25.47	-20.13	-28.93
270	-13.85	-13.28	-11.18	-8.32	-10.32	-10.94	-9.08	-14.35	-19.33	-28.21	-19.05	-23.41	-28.93
285	-13.85	-15.60	-18.44	-13.76	-13.06	-14.01	-11.67	-12.65	-21.39	-19.44	-17.97	-25.33	-28.93
300	-13.85	-20.87	-22.44	-22.51	-20.13	-37.13	-17.60	-12.59	-13.75	-15.88	-18.36	-29.65	-28.93
315	-13.85	-14.47	-26.18	-35.80	-17.97	-16.28	-18.83	-19.17	-15.48	-17.39	-20.49	-18.33	-28.93
330	-13.85	-12.49	-26.30	-17.90	-11.29	-11.01	-14.38	-20.06	-20.08	-16.71	-16.56	-17.03	-28.93
345	-13.85	-9.76	-42.10	-10.92	-8.08	-13.21	-14.38	-13.90	-22.42	-16.42	-16.09	-18.47	-28.93

### Vertical + Horizontal

$\phi$ [deg]	$\Theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-18.01	-9.50	-19.96	-11.62	-5.95	-8.98	-7.31	-7.69	-12.73	-23.88	-11.82	-17.64	-22.27
15	-18.01	-11.07	-20.79	-11.75	-7.68	-12.26	-6.43	-5.70	-11.54	-17.07	-9.97	-15.93	-22.27
30	-18.01	-11.31	-16.89	-11.17	-8.44	-11.07	-5.42	-7.35	-12.46	-13.07	-9.32	-16.95	-22.27
45	-18.01	-13.01	-11.33	-8.06	-5.11	-8.95	-5.96	-8.36	-15.10	-7.83	-7.58	-14.52	-22.27
60	-18.01	-14.39	-11.79	-6.77	-4.02	-8.10	-6.57	-7.05	-7.97	-5.24	-6.17	-14.84	-22.27
75	-18.01	-19.20	-11.00	-7.40	-6.69	-8.91	-5.23	-2.79	-5.15	-4.84	-6.18	-12.87	-22.27
90	-18.01	-24.90	-10.10	-6.29	-4.11	-5.74	-2.95	-2.97	-7.47	-8.01	-7.01	-11.05	-22.27
105	-18.01	-18.68	-8.18	-4.87	-3.51	-4.54	-3.62	-3.59	-5.25	-7.74	-6.84	-11.18	-22.27
120	-18.01	-18.13	-9.41	-5.91	-5.89	-6.09	-4.23	-2.61	-1.56	-3.75	-5.93	-10.51	-22.27
135	-18.01	-16.24	-10.21	-6.58	-5.07	-5.44	-2.65	-1.85	-0.47	-2.98	-4.75	-10.05	-22.27
150	-18.01	-15.67	-12.71	-6.49	-3.11	-3.01	-2.25	-3.27	-1.25	-3.17	-4.68	-10.65	-22.27
165	-18.01	-15.42	-13.15	-5.98	-3.27	-3.85	-2.64	-4.08	-2.65	-3.44	-3.78	-10.76	-22.27
180	-18.01	-14.92	-13.32	-5.84	-4.05	-4.34	-4.00	-3.86	-2.09	-4.19	-4.72	-11.01	-22.27
195	-18.01	-14.10	-12.39	-6.48	-4.77	-5.83	-5.28	-4.93	-4.11	-5.42	-5.33	-10.36	-22.27
210	-18.01	-14.20	-11.12	-8.87	-6.69	-7.15	-6.60	-6.76	-4.04	-7.32	-6.92	-12.81	-22.27
225	-18.01	-13.40	-10.59	-7.47	-7.26	-9.21	-7.61	-8.25	-7.17	-8.28	-12.21	-13.74	-22.27
240	-18.01	-12.49	-8.51	-7.47	-7.14	-9.91	-11.14	-10.30	-10.61	-14.23	-16.30	-14.22	-22.27
255	-18.01	-11.31	-7.05	-5.96	-4.93	-7.83	-10.49	-11.27	-14.36	-19.00	-15.02	-12.05	-22.27
270	-18.01	-10.79	-6.80	-5.05	-4.35	-6.79	-8.72	-11.20	-12.06	-15.59	-12.22	-13.65	-22.27
285	-18.01	-8.61	-7.44	-4.90	-3.86	-6.76	-7.23	-11.65	-12.80	-14.34	-11.53	-15.24	-22.27
300	-18.01	-8.95	-8.91	-6.17	-7.05	-8.27	-11.73	-15.84	-12.25	-17.89	-13.36	-16.87	-22.27
315	-18.01	-10.15	-10.73	-11.51	-8.75	-9.20	-12.00	-13.27	-13.39	-17.75	-14.00	-19.49	-22.27
330	-18.01	-9.54	-14.36	-16.46	-7.55	-6.20	-8.14	-8.76	-11.61	-18.96	-16.95	-21.03	-22.27
345	-18.01	-10.22	-21.92	-13.39	-6.05	-7.08	-7.23	-7.32	-10.49	-18.61	-16.56	-18.22	-22.27
360	-18.01	-9.17	-17.56	-13.01	-6.13	-7.58	-7.80	-6.67	-10.40	-23.90	-13.59	-18.27	-22.27

Peak Value **-0.471** Minimum Value #####

Vertical													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-22.23	-17.30	-20.31	-14.41	-8.63	-10.66	-7.42	-8.25	-13.00	-24.30	-11.93	-19.30	-22.46
15	-22.23	-18.13	-23.69	-17.37	-18.66	-17.88	-6.87	-6.63	-11.65	-18.07	-10.42	-15.96	-22.46
30	-22.23	-14.46	-19.03	-15.95	-17.98	-11.77	-7.86	-9.84	-12.84	-14.11	-10.22	-17.97	-22.46
45	-22.23	-14.88	-12.62	-11.33	-8.11	-9.26	-12.56	-17.05	-17.56	-8.79	-8.65	-16.95	-22.46
60	-22.23	-15.41	-14.04	-9.99	-7.22	-8.49	-20.81	-14.16	-8.20	-5.49	-8.03	-19.57	-22.46
75	-22.23	-21.06	-19.57	-18.27	-13.92	-9.67	-19.14	-9.39	-5.47	-4.95	-7.10	-17.04	-22.46
90	-22.23	-35.93	-17.34	-15.82	-7.95	-6.01	-11.79	-15.43	-8.41	-8.07	-7.97	-13.98	-22.46
105	-22.23	-18.83	-10.79	-8.08	-5.37	-4.55	-9.50	-10.04	-6.82	-7.88	-8.35	-13.79	-22.46
120	-22.23	-18.63	-11.07	-9.08	-8.69	-6.09	-9.77	-7.23	-2.56	-4.26	-7.18	-12.79	-22.46
135	-22.23	-17.59	-11.92	-12.95	-7.98	-5.45	-6.72	-9.20	-1.30	-3.57	-5.82	-11.71	-22.46
150	-22.23	-18.40	-15.00	-10.58	-4.27	-3.06	-6.55	-12.41	-2.33	-4.23	-5.62	-12.89	-22.46
165	-22.23	-18.22	-16.34	-9.16	-4.18	-4.08	-6.49	-11.00	-3.99	-4.85	-4.99	-12.67	-22.46
180	-22.23	-16.87	-16.27	-7.63	-4.63	-4.75	-8.81	-10.09	-3.88	-6.29	-5.62	-11.41	-22.46
195	-22.23	-14.92	-13.31	-7.67	-5.28	-6.52	-9.44	-10.39	-5.96	-7.20	-6.25	-10.38	-22.46
210	-22.23	-14.21	-11.89	-10.33	-7.10	-7.48	-9.63	-11.77	-6.64	-8.72	-8.39	-13.54	-22.46
225	-22.23	-13.80	-11.52	-8.88	-8.01	-9.73	-12.97	-13.65	-11.00	-11.88	-17.28	-15.67	-22.46
240	-22.23	-14.14	-10.07	-7.91	-7.74	-11.01	-15.11	-18.21	-17.86	-22.24	-26.67	-18.64	-22.46
255	-22.23	-13.50	-9.06	-7.15	-6.10	-8.82	-13.14	-17.31	-15.95	-21.64	-16.97	-14.15	-22.46
270	-22.23	-12.83	-8.34	-6.82	-5.59	-8.09	-14.40	-12.33	-12.32	-15.62	-16.49	-14.75	-22.46
285	-22.23	-10.59	-9.13	-6.24	-4.69	-7.36	-10.29	-12.77	-17.92	-14.82	-18.55	-17.33	-22.46
300	-22.23	-10.27	-10.08	-6.88	-7.43	-8.35	-14.25	-24.13	-24.39	-18.64	-20.19	-20.95	-22.46
315	-22.23	-11.92	-11.60	-12.02	-8.83	-9.56	-12.25	-14.22	-15.36	-18.02	-16.80	-36.97	-22.46
330	-22.23	-13.11	-15.58	-16.48	-8.09	-6.78	-8.49	-8.79	-12.74	-19.04	-17.84	-24.78	-22.46
345	-22.23	-16.01	-22.38	-14.29	-7.56	-8.28	-7.57	-7.73	-10.51	-20.81	-17.73	-20.23	-22.46
360	-22.23	-16.35	-19.12	-15.44	-8.43	-9.29	-8.02	-7.06	-10.44	-24.63	-13.97	-18.56	-22.46

Peak Value -1.302 Minimum Value #####

Horizontal													
$\phi$ [deg]	$\theta$ [deg]												
	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-20.08	-10.29	-31.07	-14.86	-9.33	-13.91	-23.17	-16.89	-24.99	-34.23	-27.88	-22.63	-35.99
15	-20.08	-12.02	-23.92	-13.15	-8.04	-13.65	-16.60	-12.89	-27.76	-23.92	-20.00	-37.47	-35.99
30	-20.08	-14.19	-20.99	-12.93	-8.95	-19.36	-9.08	-10.95	-23.32	-19.78	-16.59	-23.76	-35.99
45	-20.08	-17.58	-17.23	-10.83	-8.14	-20.53	-7.03	-8.99	-18.74	-14.86	-14.21	-18.21	-35.99
60	-20.08	-21.19	-15.73	-9.57	-6.84	-18.69	-6.73	-7.99	-20.93	-17.79	-10.75	-16.62	-35.99
75	-20.08	-23.79	-11.65	-7.78	-7.60	-16.86	-5.41	-3.86	-16.66	-21.00	-13.38	-14.97	-35.99
90	-20.08	-25.25	-11.00	-6.80	-6.42	-18.02	-3.56	-3.22	-14.61	-26.65	-14.05	-14.15	-35.99
105	-20.08	-33.57	-11.64	-7.70	-8.08	-30.33	-4.92	-4.70	-10.44	-22.81	-12.17	-14.62	-35.99
120	-20.08	-27.74	-14.38	-8.77	-9.12	-37.91	-5.66	-4.45	-8.44	-13.30	-11.93	-14.41	-35.99
135	-20.08	-21.96	-15.07	-7.71	-8.18	-32.30	-4.82	-2.74	-8.07	-11.88	-11.35	-15.03	-35.99
150	-20.08	-18.98	-16.58	-8.64	-9.40	-21.92	-4.27	-3.84	-7.80	-9.78	-11.78	-14.61	-35.99
165	-20.08	-18.65	-16.00	-8.83	-10.51	-16.62	-4.95	-5.06	-8.39	-9.01	-9.91	-15.26	-35.99
180	-20.08	-19.32	-16.40	-10.56	-13.09	-14.84	-5.73	-5.04	-6.80	-8.35	-12.01	-21.49	-35.99
195	-20.08	-21.76	-19.61	-12.67	-14.34	-14.17	-7.38	-6.39	-8.70	-10.16	-12.51	-33.36	-35.99
210	-20.08	-41.20	-19.00	-14.33	-17.08	-18.49	-9.58	-8.41	-7.50	-12.93	-12.33	-20.89	-35.99
225	-20.08	-23.98	-17.77	-13.05	-15.26	-18.68	-9.11	-9.73	-9.48	-10.76	-13.83	-18.19	-35.99
240	-20.08	-17.48	-13.70	-17.59	-15.99	-16.44	-13.37	-11.07	-11.52	-14.98	-16.71	-16.17	-35.99
255	-20.08	-15.35	-11.37	-12.19	-11.20	-14.76	-13.90	-12.51	-19.51	-22.41	-19.44	-16.21	-35.99
270	-20.08	-15.05	-12.07	-9.81	-10.37	-12.65	-10.08	-17.60	-24.40	-37.83	-14.25	-20.17	-35.99
285	-20.08	-12.99	-12.37	-10.66	-11.48	-15.63	-10.20	-18.08	-14.40	-24.10	-12.49	-19.43	-35.99
300	-20.08	-14.79	-15.16	-14.44	-17.76	-25.69	-15.30	-16.54	-12.52	-25.88	-14.37	-19.03	-35.99
315	-20.08	-14.92	-18.14	-21.10	-26.17	-20.14	-24.63	-20.35	-17.76	-29.94	-17.23	-19.57	-35.99
330	-20.08	-12.07	-20.46	-40.54	-16.93	-15.26	-19.26	-30.70	-17.99	-36.23	-24.30	-23.41	-35.99
345	-20.08	-11.55	-31.87	-20.70	-11.39	-13.25	-18.47	-17.79	-32.74	-22.61	-22.83	-22.52	-35.99

Passive Performance

EUT	
Test Date	Wed 11/Oct/2023 09:55:45
Event Status	
Serial Number	
Hardware Version	

	1	2	3	4	5	6	7	8										
Frequency [MHz]	5955	6115	6275	6435	6595	6755	6915	7075										
Efficiency [dB]	-3.05	-2.49	-2.41	-3.06	-2.15	-3.35	-3.75	-3.21										
Efficiency [%]	49.5	56.4	57.4	49.4	60.9	46.2	42.2	47.7										
TRG <sub>θ</sub> [dB]	-4.20	-3.81	-3.85	-4.90	-4.42	-6.06	-7.00	-6.57										
Gain <sub>θ Peak</sub> [dB]	1.12	1.46	0.63	-0.14	0.54	-0.79	-1.72	-1.30										
Gain <sub>θ Min</sub> [dB]	-25.20	-23.03	-20.37	-29.22	-22.26	-20.88	-22.64	-19.95										
TRG <sub>φ</sub> [dB]	-9.41	-8.30	-7.90	-7.68	-6.06	-6.69	-6.53	-5.90										
Gain <sub>φ Peak</sub> [dB]	-1.51	-0.20	-0.97	-1.54	-0.60	-1.69	-1.51	-1.51										
Gain <sub>φ Min</sub> [dB]	-34.49	-26.72	-31.04	-39.55	-25.59	-30.24	-36.53	-21.77										
UHRG [dB]	-6.50	-6.23	-5.98	-6.25	-5.16	-6.26	-6.67	-5.83										
UHRG/TRG [%]	45.2	42.3	43.9	47.9	50.0	51.2	51.1	54.8										
H-Plane	-5.81	-5.20	-4.05	-5.06	-4.55	-6.43	-7.29	-6.21										
E1-Plane, AVG [dB]	-5.62	-4.97	-4.58	-5.31	-4.46	-5.45	-6.33	-5.61										
E2-Plane, AVG [dB]	-4.81	-4.89	-5.38	-6.54	-6.40	-8.32	-9.31	-9.12										
Peak Gain [dB]	1.19	1.50	0.81	0.94	1.51	0.38	-0.17	0.25										
Directivity [dB]	4.25	3.99	3.22	4.00	3.66	3.73	3.58	3.46										
Minimum Gain [dB]	-12.73	-14.59	-13.76	-12.62	-12.26	-16.03	-10.65	-12.22										
Test Condition	FS																	
Antenna Type																		

Average Efficiency	-2.91 dB	51.22 %
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Comment

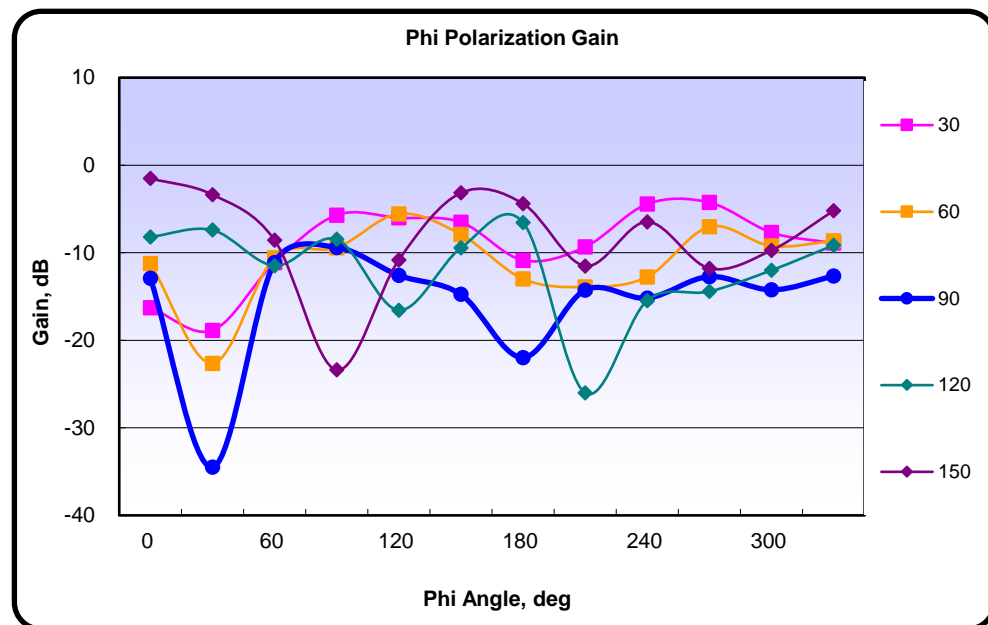
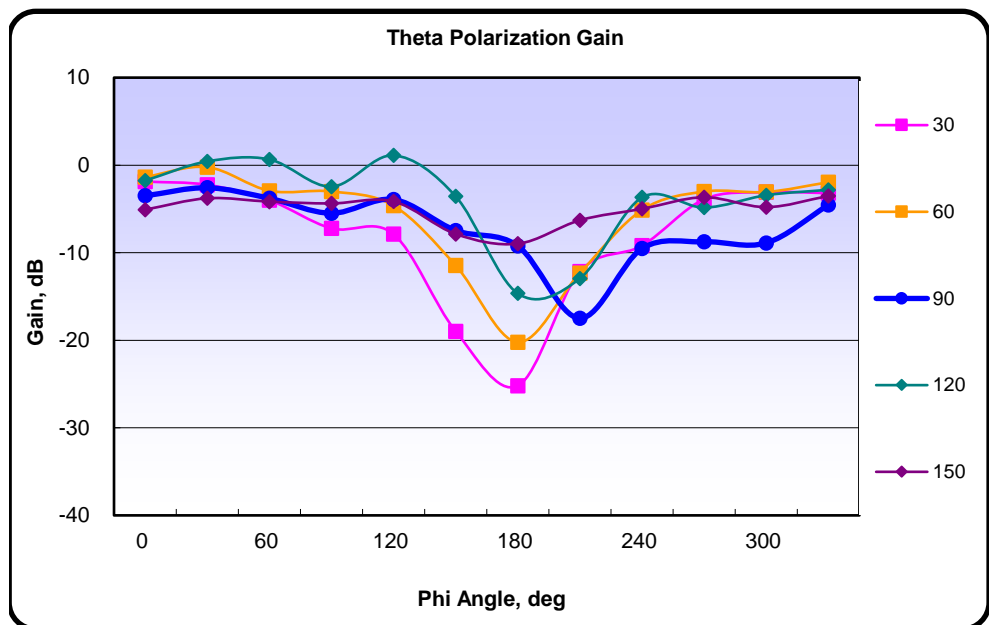


Gain(Theta-Polarization and Phi-Polarization)

5955MHz

EUT		Frequency	5955	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-8.04	-8.21	-9.05	-7.78	-7.31	-6.85	-6.91	-8.04	-8.97	-9.07	-7.75	-7.06	0	-7.64	-7.25	-6.57	-6.02	-8.08	-8.92	-9.26	-7.51	-6.12	-6.61	-7.55	-8.79
30	-1.87	-2.24	-4.00	-7.22	-7.88	-18.97	<b>-25.20</b>	-12.16	-9.19	-3.89	-3.08	-3.19	30	-16.27	-18.86	-11.11	-5.70	-6.01	-6.51	-10.86	-9.34	-4.43	-4.26	-7.69	-8.91
60	-1.35	-0.22	-2.92	-3.00	-4.63	-11.44	-20.22	-12.32	-5.12	-3.01	-3.06	-1.95	60	-11.23	-22.64	-10.56	-9.43	-5.55	-7.91	-12.99	-13.91	-12.76	-7.03	-9.24	-8.65
90	-3.50	-2.58	-3.78	-5.49	-3.92	-7.46	-9.22	-17.49	-9.52	-8.75	-8.88	-4.55	90	-12.92	<b>-34.49</b>	-11.11	-9.39	-12.58	-14.76	-21.97	-14.27	-15.18	-12.72	-14.24	-12.67
120	-1.76	0.43	0.66	-2.45	<b>1.12</b>	-3.56	-14.65	-12.94	-3.68	-4.84	-3.43	-2.81	120	-8.19	-7.41	-11.48	-8.47	-16.56	-9.46	-6.54	-26.01	-15.47	-14.43	-12.00	-9.15
150	-5.08	-3.78	-4.16	-4.37	-4.14	-7.86	-8.97	-6.29	-4.99	-3.66	-4.79	-3.52	150	<b>-1.51</b>	-3.36	-8.55	-23.39	-10.82	-3.16	-4.39	-11.51	-6.47	-11.78	-9.72	-5.20
180	-14.48	-10.70	-10.01	-10.36	-15.86	-21.51	-15.46	-11.03	-10.47	-12.85	-12.95	-17.52	180	-9.76	-12.76	-18.19	-19.20	-13.09	-14.45	-15.46	-15.63	-12.22	-9.13	-8.47	-8.37



<b>Total Gain and Efficiency</b>	<b>-3.055 dB</b>	<b>49.5 %</b>	Theta Pol	-4.2 dB	38.0 %	Phi Pol	-9.4 dB	11.45 %
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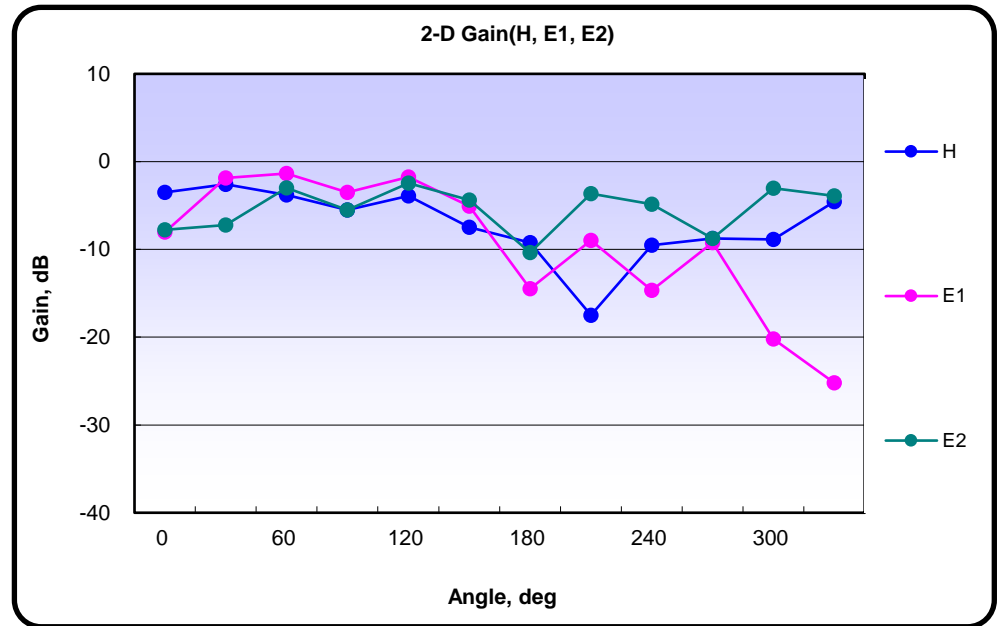
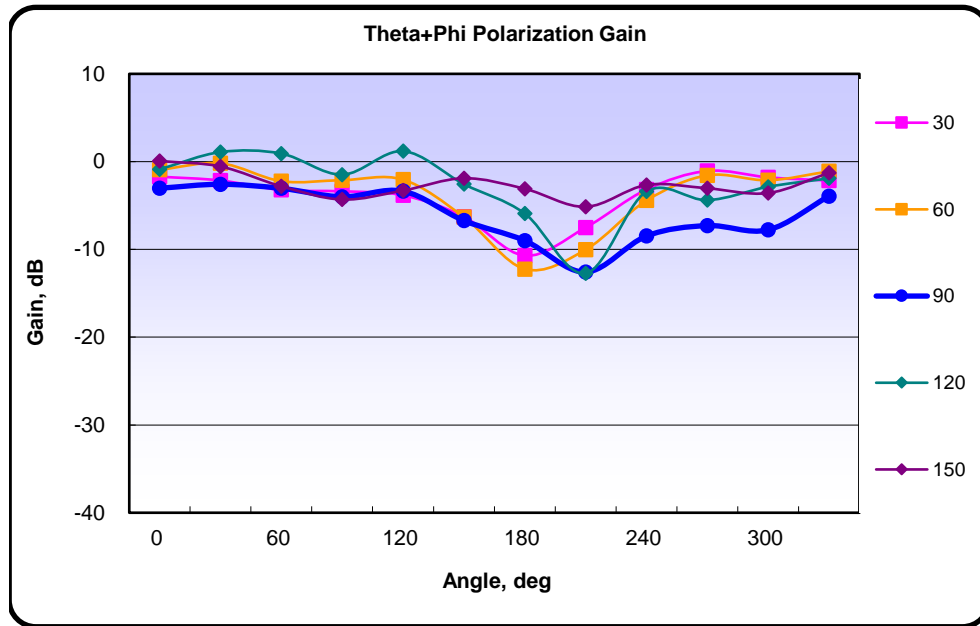
Gain(Theta-Polarization + Phi-Polarization)

Aplustech

5955MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-4.83	-4.69	-4.63	-3.80	-4.67	-4.75	-4.92	-4.76	-4.30	-4.66	-4.64	-4.83	H	-3.50	-2.58	-3.78	-5.49	-3.92	-7.46	-9.22	-17.49	-9.52	-8.75	-8.88	-4.55	
30	-1.72	-2.15	-3.23	-3.38	-3.83	-6.27	-10.70	-7.51	-3.18	-1.06	-1.79	-2.16	E1	-8.04	-1.87	-1.35	-3.50	-1.76	-5.08	-14.48	-8.97	-14.65	-9.22	-20.22	-25.20	
60	-0.93	-0.20	-2.23	-2.11	-2.06	-6.32	-12.24	-10.03	-4.43	-1.56	-2.12	-1.11	E2	-7.78	-7.22	-3.00	-5.49	-2.45	-4.37	-10.36	-3.66	-4.84	-8.75	-3.01	-3.89	
90	-3.03	-2.58	-3.04	-4.01	-3.37	-6.72	-9.00	-12.58	-8.48	-7.29	-7.77	-3.93	Average													
120	-0.87	1.09	0.92	-1.48	1.19	-2.57	-5.92	-12.73	-3.40	-4.39	-2.86	-1.90	H	-5.81 dB												
150	0.07	-0.55	-2.81	-4.32	-3.30	-1.89	-3.09	-5.15	-2.66	-3.04	-3.58	-1.27	E1	-5.62 dB												
180	-8.50	-8.60	-9.40	-9.83	-11.25	-13.67	-12.45	-9.74	-8.25	-7.59	-7.15	-7.87	E2	-4.81 dB												



<b>Total Gain and Efficiency</b>	<b>-3.055 dB</b>	<b>49.5 %</b>	Theta Pol	-4.2 dB	38.0 %	Phi Pol	-9.4 dB	11.45 %
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**Total Radiated Gain(3-D Plots)**



<b>Maximum Gain</b>	Gain	1.19 dB,	$\theta = 120$ deg,	$\varphi = 120$ deg	<b>Minimum Gain</b>	Gain	-12.73 dB,	$\theta = 120$ deg,	$\varphi = 210$ deg
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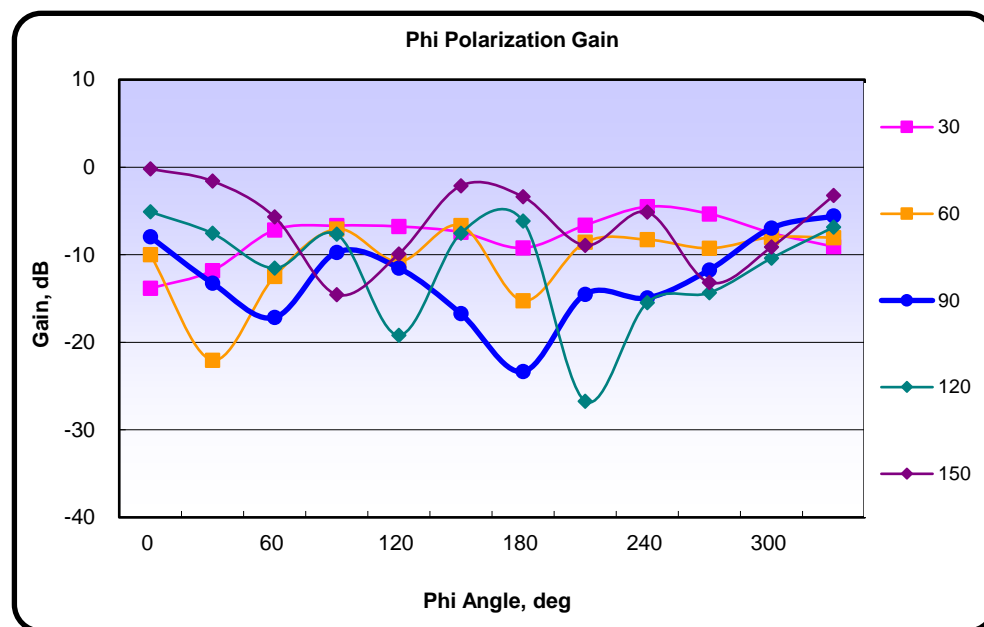
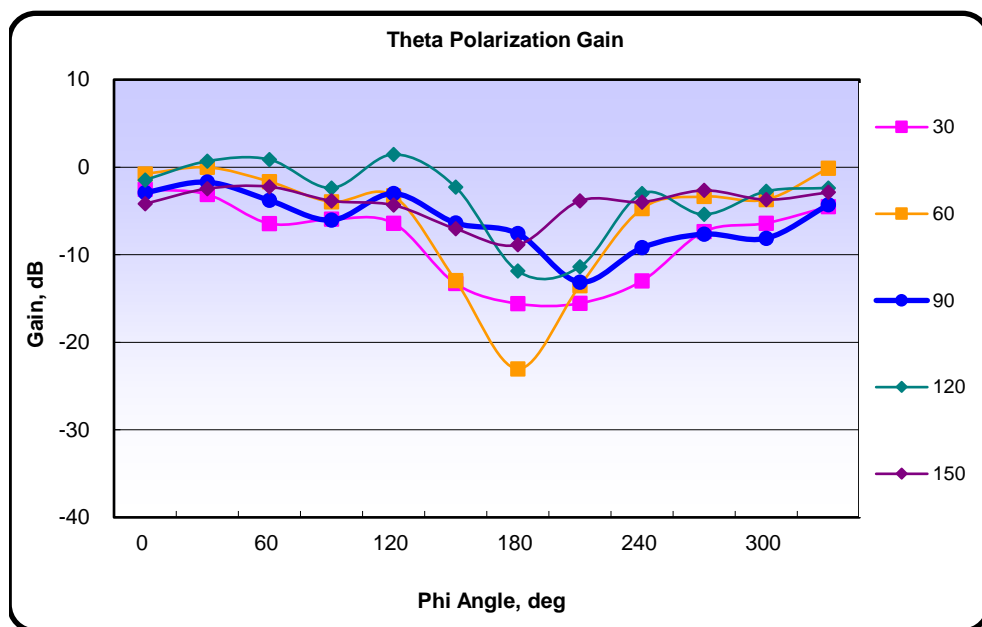
<b>Total Gain and Efficiency</b>	<b>-3.055 dB</b>	<b>49.5 %</b>	Theta Pol	-4.2 dB	38.0 %	Phi Pol	-9.4 dB	11.45 %
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Gain(Theta-Polarization and Phi-Polarization)

6115MHz

EUT		Frequency	6115	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-4.47	-9.22	-11.29	-7.26	-4.00	-3.43	-4.91	-9.87	-14.26	-7.38	-3.88	-3.12	0	-8.03	-3.55	-3.07	-3.02	-9.25	-11.58	-6.96	-4.17	-3.23	-4.38	-8.75	-13.26
30	-2.55	-3.11	-6.44	-5.95	-6.40	-13.30	-15.59	-15.54	-13.00	-7.35	-6.39	-4.51	30	-13.84	-11.82	-7.17	-6.67	-6.77	-7.42	-9.23	-6.63	-4.51	-5.33	-7.51	-9.08
60	-0.76	-0.02	-1.64	-3.96	-3.28	-12.95	<b>-23.03</b>	-13.53	-4.73	-3.35	-3.69	-0.12	60	-10.00	-22.04	-12.48	-7.06	-10.78	-6.67	-15.26	-8.58	-8.27	-9.26	-8.00	-8.04
90	-2.90	-1.71	-3.78	-6.05	-3.01	-6.38	-7.59	-13.12	-9.20	-7.64	-8.12	-4.30	90	-7.96	-13.24	-17.17	-9.72	-11.52	-16.73	-23.35	-14.51	-14.94	-11.73	-6.95	-5.58
120	-1.46	0.68	0.88	-2.37	<b>1.46</b>	-2.28	-11.87	-11.38	-3.00	-5.40	-2.75	-2.37	120	-5.11	-7.55	-11.53	-7.66	-19.20	-7.55	-6.16	<b>-26.72</b>	-15.47	-14.34	-10.40	-6.85
150	-4.18	-2.46	-2.23	-3.84	-4.34	-7.04	-8.87	-3.84	-3.98	-2.65	-3.71	-2.88	150	<b>-0.20</b>	-1.59	-5.69	-14.55	-9.91	-2.12	-3.38	-8.93	-5.13	-13.17	-9.12	-3.24
180	-12.29	-9.90	-8.10	-7.93	-12.20	-16.95	-13.82	-10.13	-9.60	-11.05	-11.37	-12.63	180	-7.92	-12.15	-15.39	-15.51	-11.86	-13.01	-12.62	-12.69	-10.75	-8.35	-8.09	-7.74



<b>Total Gain and Efficiency</b>	<b>-2.491 dB</b>	<b>56.4 %</b>	Theta Pol	-3.8 dB	41.6 %	Phi Pol	-8.3 dB	14.79 %
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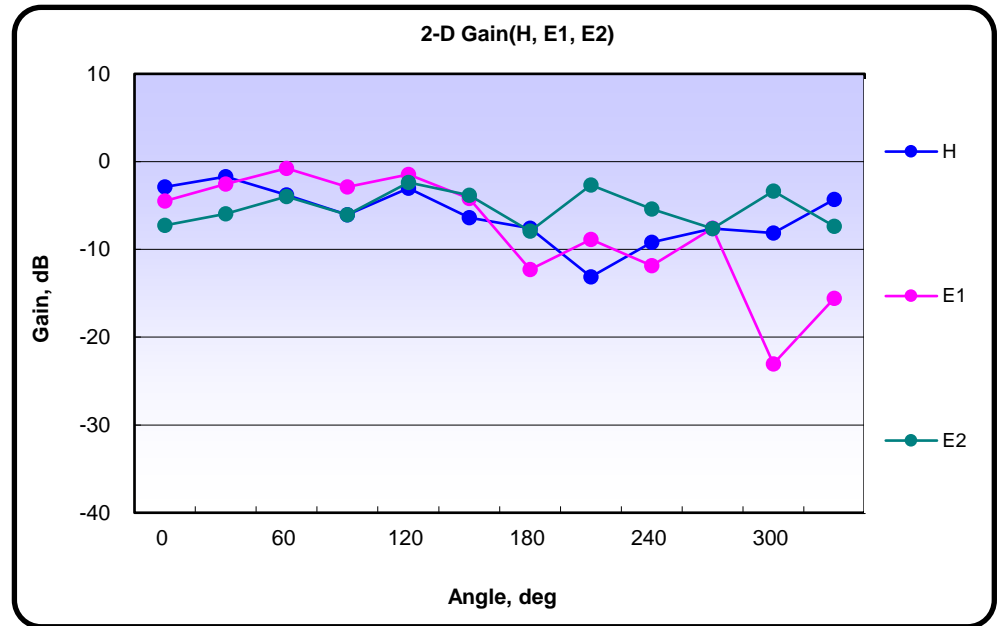
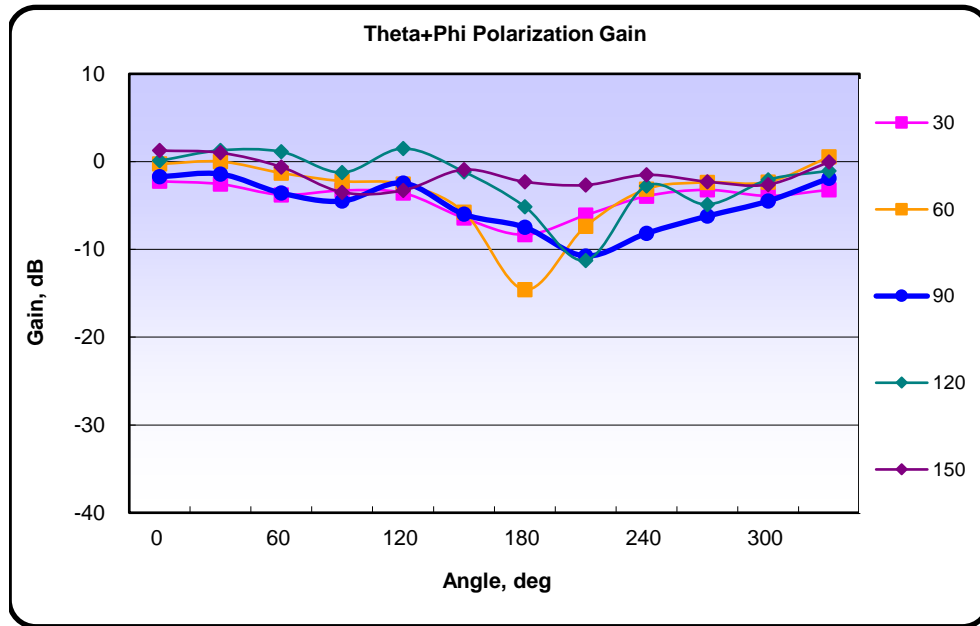
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6115MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-2.88	-2.51	-2.46	-1.63	-2.87	-2.81	-2.80	-3.13	-2.90	-2.62	-2.66	-2.72	H	-2.90	-1.71	-3.78	-6.05	-3.01	-6.38	-7.59	-13.12	-9.20	-7.64	-8.12	-4.30	
30	-2.24	-2.56	-3.78	-3.28	-3.57	-6.42	-8.33	-6.10	-3.93	-3.21	-3.90	-3.21	E1	-4.47	-2.55	-0.76	-2.90	-1.46	-4.18	-12.29	-8.87	-11.87	-7.59	-23.03	-15.59	
60	-0.27	0.01	-1.30	-2.23	-2.57	-5.75	<b>-14.59</b>	-7.37	-3.14	-2.36	-2.32	0.53	E2	-7.26	-5.95	-3.96	-6.05	-2.37	-3.84	-7.93	-2.65	-5.40	-7.64	-3.35	-7.35	
90	-1.72	-1.41	-3.59	-4.50	-2.44	-6.00	-7.48	-10.75	-8.17	-6.21	-4.49	-1.88	Average													
120	0.10	1.29	1.12	-1.24	<b>1.50</b>	-1.15	-5.13	-11.25	-2.76	-4.88	-2.06	-1.05	H	<b>-5.20</b>	dB											
150	1.26	1.01	-0.61	-3.49	-3.28	-0.91	-2.30	-2.67	-1.51	-2.28	-2.61	-0.05	E1	<b>-4.97</b>	dB											
180	-6.57	-7.87	-7.36	-7.23	-9.02	-11.54	-10.17	-8.21	-7.13	-6.48	-6.42	-6.52	E2	<b>-4.89</b>	dB											



<b>Total Gain and Efficiency</b>	<b>-2.491 dB</b>	<b>56.4 %</b>	Theta Pol	-3.8 dB	41.6 %	Phi Pol	-8.3 dB	14.79 %
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Total Radiated Gain(3-D Plots)

**Maximum Gain**      Gain      1.50 dB,       $\theta = 120$  deg,       $\varphi = 120$  deg      **Minimum Gain**      Gain      -14.59 dB,       $\theta = 60$  deg,       $\varphi = 180$  deg

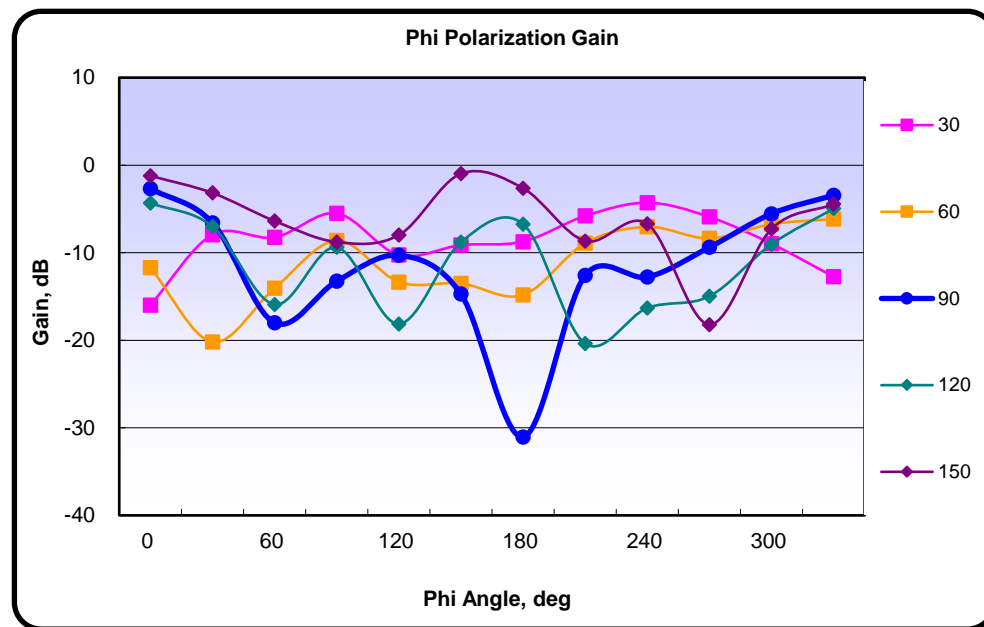
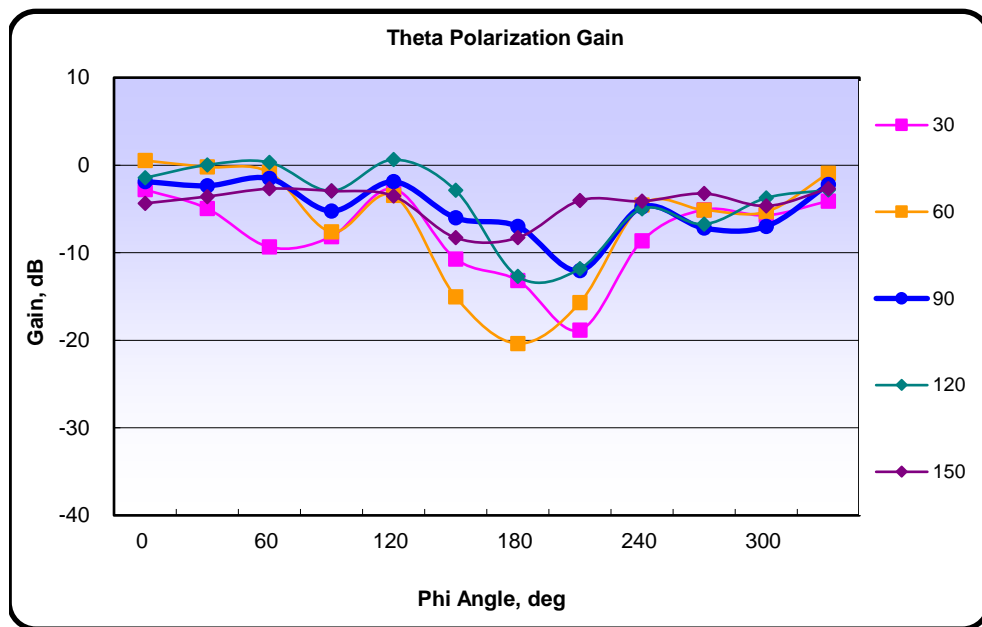
**Total Gain and Efficiency**      -2.491 dB      56.4 %      Theta Pol      -3.8 dB      41.6 %      Phi Pol      -8.3 dB      14.79 %

Gain(Theta-Polarization and Phi-Polarization)

6275MHz

EUT		Frequency	6275	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-5.30	-10.24	-19.59	-7.28	-3.82	-3.31	-5.36	-10.95	-18.96	-9.09	-4.96	-3.76	0	-10.10	-4.49	-4.15	-3.75	-11.13	-14.97	-7.02	-3.48	-3.49	-4.79	-9.14	-25.27
30	-2.80	-4.95	-9.35	-8.15	-2.70	-10.71	-13.16	-18.84	-8.64	-5.08	-5.73	-4.09	30	-15.98	-7.94	-8.25	-5.50	-10.26	-9.13	-8.73	-5.80	-4.29	-5.91	-8.98	-12.74
60	0.53	-0.21	-0.81	-7.62	-3.46	-15.04	<b>-20.37</b>	-15.70	-4.54	-5.12	-5.32	-0.94	60	-11.71	-20.19	-14.06	-8.61	-13.34	-13.50	-14.83	-8.91	-7.04	-8.36	-6.73	-6.15
90	-1.87	-2.35	-1.51	-5.24	-1.89	-6.02	-6.99	-12.04	-4.77	-7.19	-6.99	-2.21	90	-2.67	-6.58	-18.01	-13.25	-10.29	-14.71	<b>-31.04</b>	-12.59	-12.78	-9.38	-5.55	-3.43
120	-1.44	0.03	0.32	-2.95	<b>0.63</b>	-2.88	-12.71	-11.83	-4.97	-6.74	-3.74	-2.83	120	-4.32	-7.01	-15.92	-9.38	-18.13	-8.79	-6.73	-20.37	-16.31	-14.97	-9.03	-4.96
150	-4.36	-3.58	-2.69	-2.94	-3.52	-8.29	-8.29	-4.03	-4.12	-3.24	-4.66	-2.68	150	-1.21	-3.17	-6.37	-8.78	-7.99	<b>-0.97</b>	-2.63	-8.66	-6.70	-18.20	-7.28	-4.45
180	-14.35	-11.38	-9.83	-8.15	-12.40	-17.70	-15.85	-11.48	-12.06	-10.11	-9.86	-12.34	180	-8.82	-10.93	-18.16	-26.14	-15.79	-14.81	-11.37	-11.86	-8.92	-8.54	-9.77	-9.71



<b>Total Gain and Efficiency</b>	<b>-2.411 dB</b>	<b>57.4 %</b>	Theta Pol	-3.9 dB	41.2 %	Phi Pol	-7.9 dB	16.22 %
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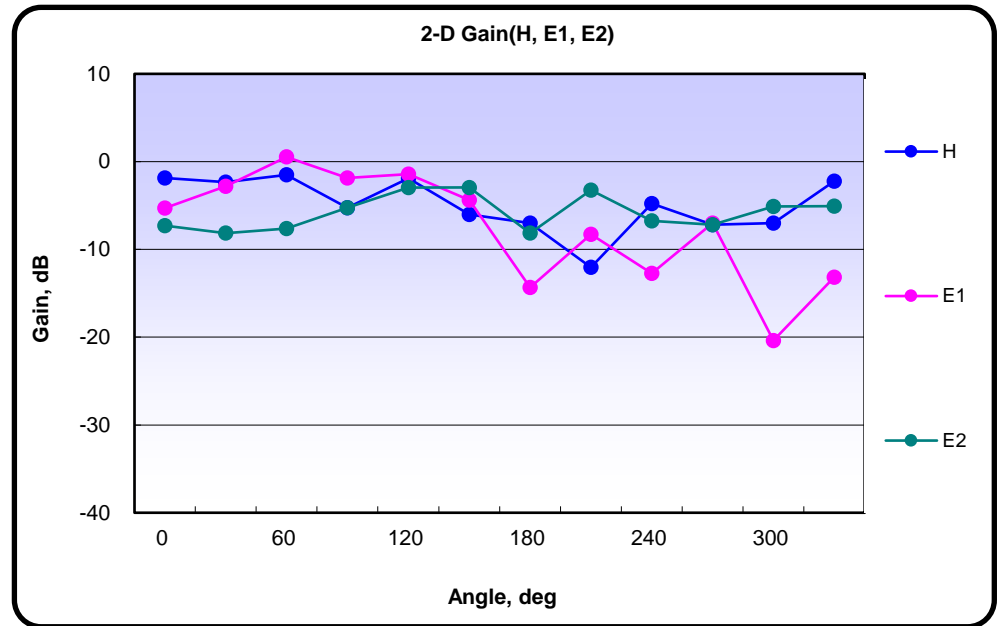
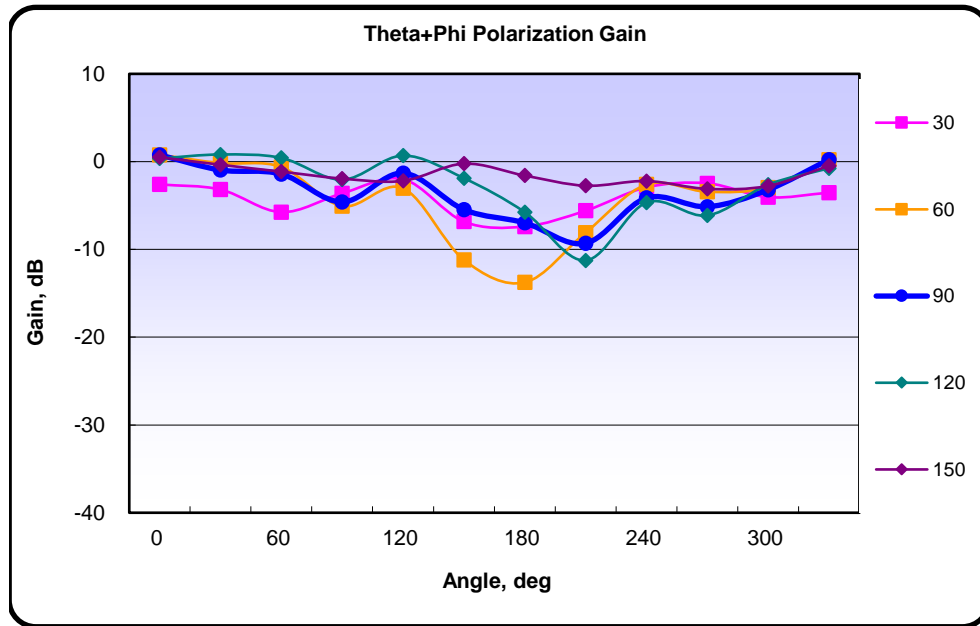
Gain(Theta-Polarization + Phi-Polarization)

Aplustech

6275MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-4.06	-3.47	-4.03	-2.16	-3.08	-3.02	-3.10	-2.76	-3.37	-3.42	-3.56	-3.73	H	-1.87	-2.35	-1.51	-5.24	-1.89	-6.02	-6.99	-12.04	-4.77	-7.19	-6.99	-2.21	
30	-2.60	-3.18	-5.75	-3.62	-2.00	-6.84	-7.39	-5.59	-2.93	-2.46	-4.05	-3.53	E1	-5.30	-2.80	0.53	-1.87	-1.44	-4.36	-14.35	-8.29	-12.71	-6.99	-20.37	-13.16	
60	0.78	-0.17	-0.61	-5.08	-3.04	-11.19	<b>-13.76</b>	-8.08	-2.60	-3.43	-2.96	0.20	E2	-7.28	-8.15	-7.62	-5.24	-2.95	-2.94	-8.15	-3.24	-6.74	-7.19	-5.12	-5.08	
90	0.76	-0.96	-1.41	-4.60	-1.30	-5.47	-6.97	-9.30	-4.13	-5.14	-3.20	0.23	Average													
120	0.36	<b>0.81</b>	0.42	-2.06	0.69	-1.89	-5.75	-11.26	-4.66	-6.13	-2.61	-0.76	H	<b>-4.05 dB</b>												
150	0.50	-0.36	-1.14	-1.93	-2.19	-0.23	-1.59	-2.74	-2.21	-3.10	-2.77	-0.47	E1	<b>-4.58 dB</b>												
180	-7.75	-8.14	-9.23	-8.08	-10.76	-13.01	-10.05	-8.66	-7.20	-6.24	-6.80	-7.82	E2	<b>-5.38 dB</b>												



<b>Total Gain and Efficiency</b>	<b>-2.411 dB</b>	<b>57.4 %</b>	Theta Pol	-3.9 dB	41.2 %	Phi Pol	-7.9 dB	16.22 %
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**Total Radiated Gain(3-D Plots)**



<b>Maximum Gain</b>	Gain	0.81 dB,	$\theta = 120$ deg,	$\varphi = 30$ deg	<b>Minimum Gain</b>	Gain	-13.76 dB,	$\theta = 60$ deg,	$\varphi = 180$ deg
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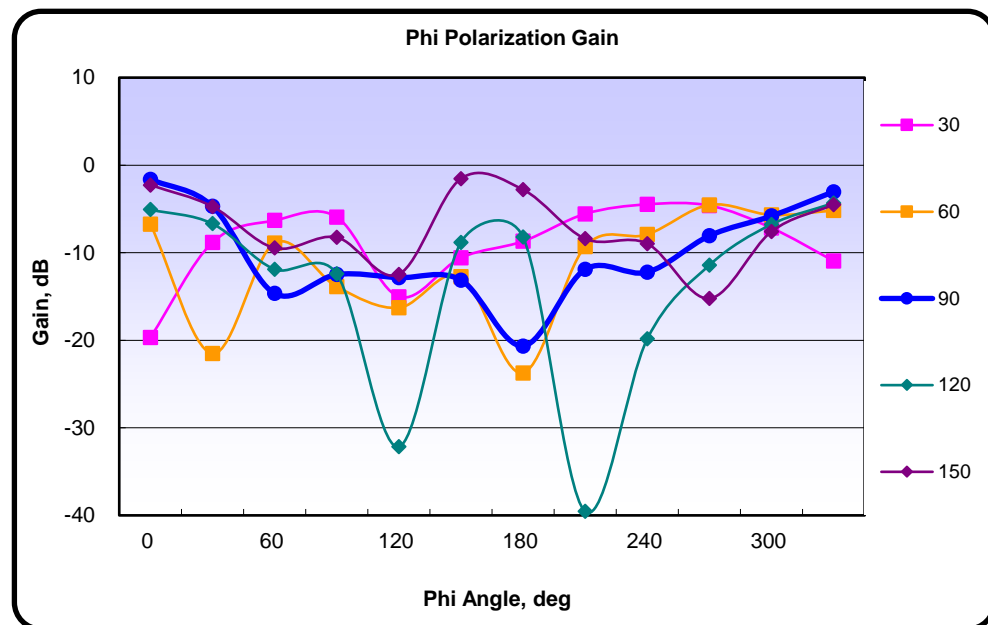
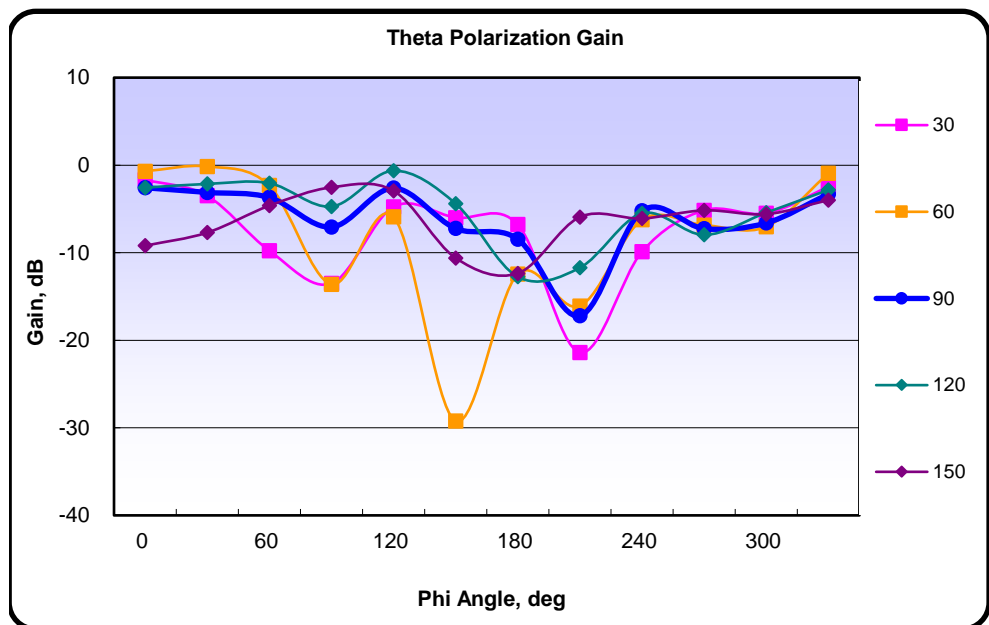
<b>Total Gain and Efficiency</b>	<b>-2.411 dB</b>	<b>57.4 %</b>	Theta Pol	-3.9 dB	41.2 %	Phi Pol	-7.9 dB	16.22 %
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Gain(Theta-Polarization and Phi-Polarization)

6435MHz

EUT		Frequency	6435	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-6.32	-14.70	-13.56	-6.05	-3.44	-4.07	-6.23	-15.11	-14.65	-6.43	-4.41	-4.21	0	-6.52	-3.91	-3.88	-3.75	-16.35	-13.32	-5.71	-2.97	-3.23	-6.05	-12.73	-15.92
30	-1.65	-3.50	-9.76	-13.51	-4.75	-5.99	-6.79	-21.40	-9.88	-5.15	-5.50	-2.47	30	-19.69	-8.82	-6.31	-5.92	-15.02	-10.57	-8.69	-5.56	-4.47	-4.61	-7.17	-10.93
60	-0.69	-0.14	-2.32	-13.61	-5.90	-29.22	-12.43	-16.08	-6.24	-6.84	-7.04	-0.94	60	-6.73	-21.52	-8.89	-13.87	-16.29	-12.72	-23.73	-9.31	-7.92	-4.53	-5.68	-5.18
90	-2.58	-3.11	-3.68	-7.07	-2.62	-7.23	-8.45	-17.21	-5.22	-7.25	-6.60	-3.30	90	-1.61	-4.69	-14.65	-12.49	-12.84	-13.12	-20.65	-11.90	-12.22	-8.06	-5.80	-3.03
120	-2.57	-2.14	-2.05	-4.72	-0.63	-4.39	-12.75	-11.71	-5.50	-7.96	-5.42	-2.83	120	-5.07	-6.68	-11.90	-12.41	-32.16	-8.82	-8.21	-39.55	-19.84	-11.42	-6.76	-4.32
150	-9.20	-7.70	-4.63	-2.53	-2.93	-10.60	-12.35	-5.92	-6.09	-5.16	-5.59	-3.99	150	-2.26	-4.72	-9.46	-8.24	-12.46	-1.54	-2.79	-8.40	-8.96	-15.23	-7.58	-4.50
180	-17.09	-12.97	-11.23	-11.77	-15.21	-18.10	-18.12	-12.98	-9.99	-7.59	-7.32	-10.31	180	-8.58	-10.33	-17.83	-23.57	-15.75	-12.60	-11.21	-10.57	-9.39	-10.07	-11.56	-9.09



<b>Total Gain and Efficiency</b>	<b>-3.059 dB</b>	<b>49.4 %</b>	Theta Pol	-4.9 dB	32.4 %	Phi Pol	-7.7 dB	17.08 %
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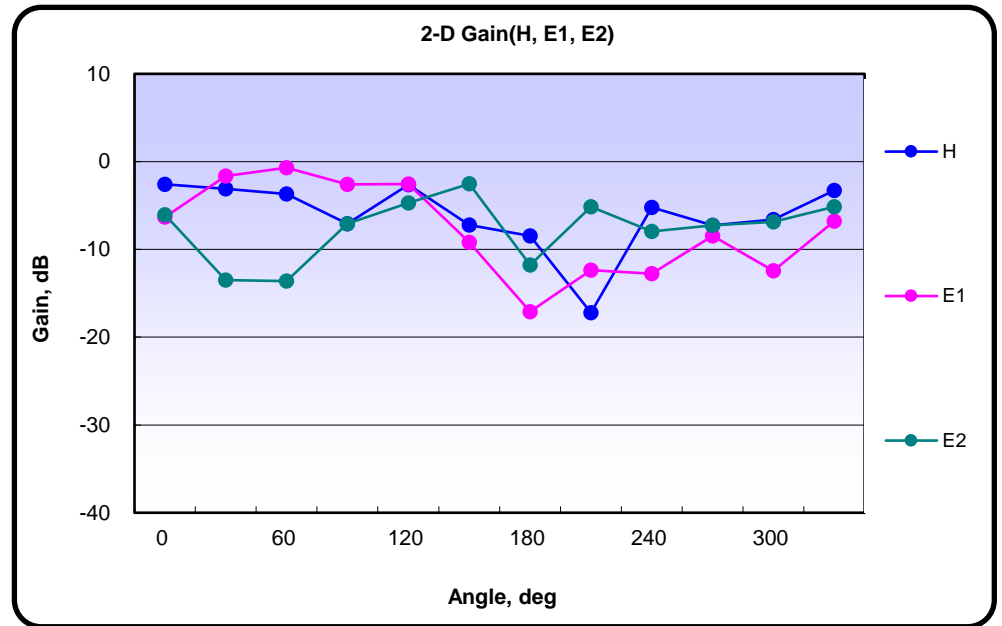
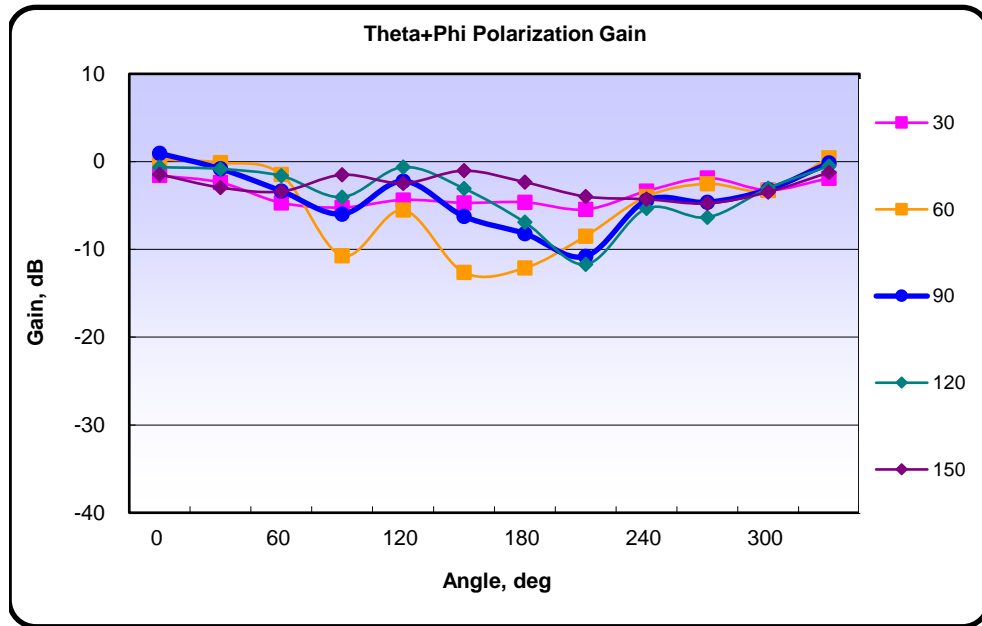
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6435MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-3.41	-3.56	-3.44	-1.74	-3.22	-3.58	-2.95	-2.71	-2.93	-3.23	-3.81	-3.93	H	-2.58	-3.11	-3.68	-7.07	-2.62	-7.23	-8.45	-17.21	-5.22	-7.25	-6.60	-3.30	
30	-1.58	-2.38	-4.69	-5.22	-4.36	-4.69	-4.63	-5.45	-3.37	-1.86	-3.24	-1.89	E1	-6.32	-1.65	-0.69	-2.58	-2.57	-9.20	-17.09	-12.35	-12.75	-8.45	-12.43	-6.79	
60	0.28	-0.11	-1.46	-10.73	-5.52	<b>-12.62</b>	-12.12	-8.48	-3.99	-2.52	-3.30	0.45	E2	-6.05	-13.51	-13.61	-7.07	-4.72	-2.53	-11.77	-5.16	-7.96	-7.25	-6.84	-5.15	
90	<b>0.94</b>	-0.82	-3.35	-5.97	-2.23	-6.23	-8.20	-10.78	-4.43	-4.63	-3.17	-0.15	Average													
120	-0.63	-0.83	-1.62	-4.04	-0.63	-3.05	-6.90	-11.70	-5.34	-6.34	-3.03	-0.50	H	<b>-5.06</b> dB												
150	-1.46	-2.95	-3.40	-1.50	-2.47	-1.03	-2.33	-3.98	-4.28	-4.75	-3.46	-1.23	E1	<b>-5.31</b> dB												
180	-8.01	-8.44	-10.37	-11.49	-12.46	-11.52	-10.40	-8.60	-6.67	-5.65	-5.93	-6.65	E2	<b>-6.54</b> dB												



<b>Total Gain and Efficiency</b>	<b>-3.059 dB</b>	<b>49.4 %</b>	Theta Pol	-4.9 dB	32.4 %	Phi Pol	-7.7 dB	17.08 %
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**Total Radiated Gain(3-D Plots)**

<b>Maximum Gain</b>	Gain	0.94 dB,	$\theta = 90$ deg,	$\varphi = 0$ deg	<b>Minimum Gain</b>	Gain	-12.62 dB,	$\theta = 60$ deg,	$\varphi = 150$ deg
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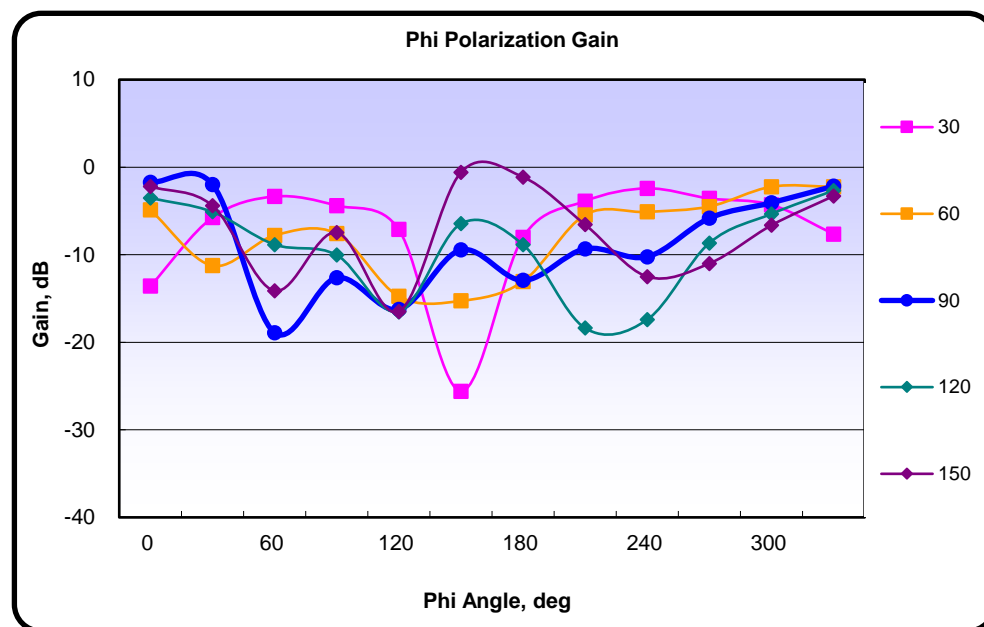
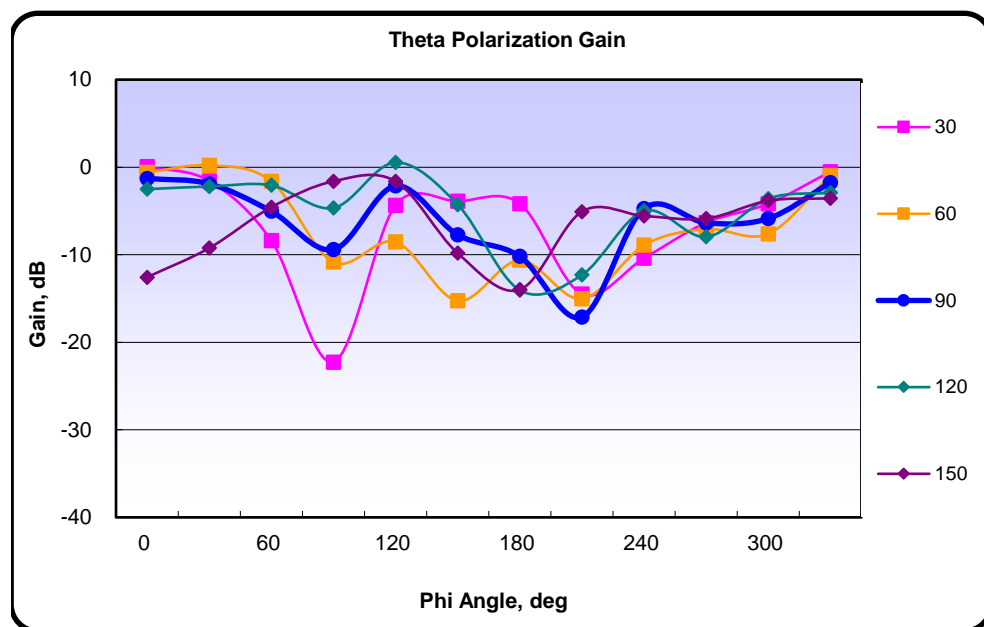
<b>Total Gain and Efficiency</b>	<b>-3.059 dB</b>	<b>49.4 %</b>	Theta Pol	-4.9 dB	32.4 %	Phi Pol	-7.7 dB	17.08 %
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Gain(Theta-Polarization and Phi-Polarization)

6595MHz

EUT		Frequency	6595	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)													Theta Angle	Phi-Polarization Gain(dB)												
	Phi Angle														Phi Angle												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0	-4.06	-9.53	-17.16	-4.31	-1.60	-1.20	-3.98	-10.67	-17.42	-6.24	-2.31	-1.78	0	-5.85	-2.59	-1.44	-1.48	-10.50	-16.29	-5.90	-1.81	-1.24	-3.21	-9.60	-18.49		
30	0.06	-1.57	-8.38	<b>-22.26</b>	-4.36	-3.90	-4.17	-14.49	-10.40	-6.34	-4.17	-0.52	30	-13.59	-5.75	-3.35	-4.39	-7.12	<b>-25.59</b>	-8.00	-3.88	-2.42	-3.57	-4.30	-7.64		
60	-0.60	0.21	-1.61	-10.85	-8.53	-15.27	-10.63	-15.05	-8.91	-7.07	-7.61	-0.95	60	-4.88	-11.25	-7.79	-7.59	-14.76	-15.27	-13.05	-5.44	-5.11	-4.49	-2.23	-2.23		
90	-1.29	-1.90	-5.03	-9.41	-2.14	-7.72	-10.18	-17.12	-4.73	-6.36	-5.86	-1.77	90	-1.73	-1.97	-18.90	-12.63	-16.25	-9.45	-12.93	-9.32	-10.23	-5.82	-4.06	-2.17		
120	-2.51	-2.20	-2.07	-4.66	<b>0.54</b>	-4.27	-14.05	-12.31	-5.00	-7.96	-3.59	-2.91	120	-3.52	-5.10	-8.84	-10.03	-16.52	-6.46	-8.85	-18.38	-17.41	-8.66	-5.33	-2.67		
150	-12.57	-9.24	-4.57	-1.61	-1.61	-9.82	-13.99	-5.08	-5.57	-5.87	-3.83	-3.56	150	-2.20	-4.40	-14.12	-7.46	-16.49	<b>-0.60</b>	-1.13	-6.56	-12.50	-11.00	-6.63	-3.29		
180	-19.30	-13.71	-10.16	-11.91	-13.48	-14.32	-18.45	-13.55	-9.72	-7.23	-6.87	-10.85	180	-6.89	-8.95	-16.64	-26.63	-15.00	-12.27	-10.07	-9.59	-9.58	-11.61	-12.48	-7.48		



<b>Total Gain and Efficiency</b>	<b>-2.151 dB</b>	<b>60.9 %</b>	Theta Pol	-4.4 dB	36.2 %	Phi Pol	-6.1 dB	24.77 %
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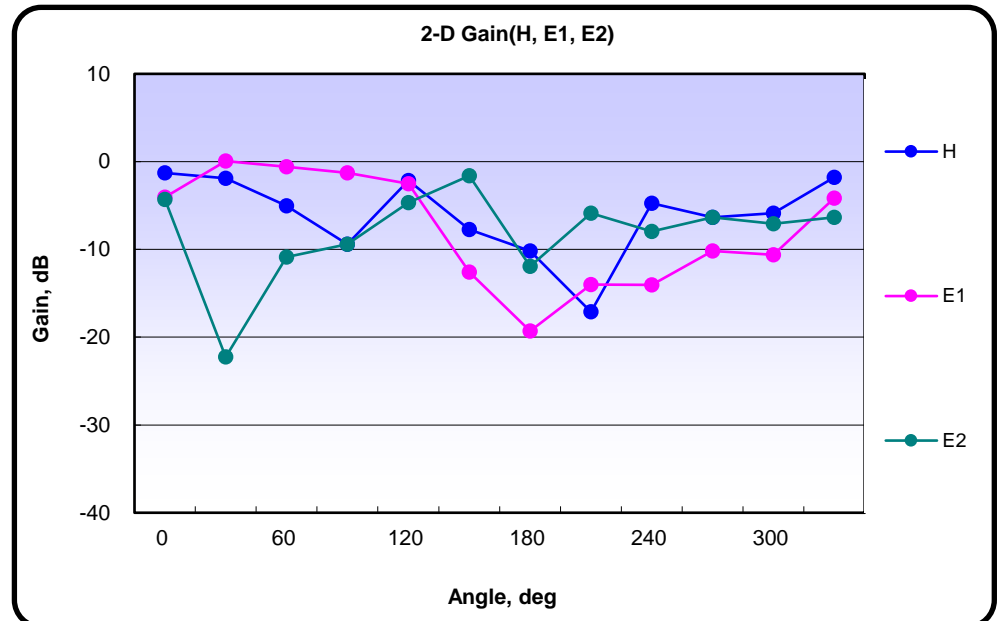
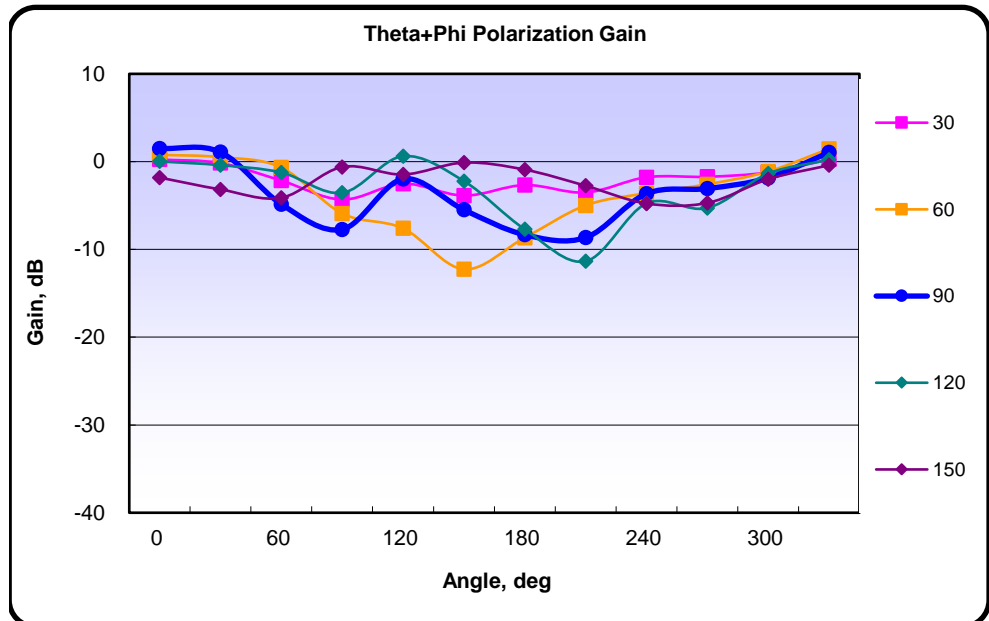
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6595MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-1.85	-1.79	-1.33	0.34	-1.07	-1.07	-1.82	-1.28	-1.14	-1.46	-1.57	-1.69	H	-1.29	-1.90	-5.03	-9.41	-2.14	-7.72	-10.18	-17.12	-4.73	-6.36	-5.86	-1.77	
30	0.24	-0.17	-2.16	-4.32	-2.51	-3.87	-2.67	-3.52	-1.78	-1.73	-1.22	0.25	E1	-4.06	0.06	-0.60	-1.29	-2.51	-12.57	-19.30	-13.99	-14.05	-10.18	-10.63	-4.17	
60	0.78	0.51	-0.67	-5.91	-7.60	<b>-12.26</b>	-8.66	-4.99	-3.60	-2.58	-1.12	1.47	E2	-4.31	-22.26	-10.85	-9.41	-4.66	-1.61	-11.91	-5.87	-7.96	-6.36	-7.07	-6.34	
90	<b>1.51</b>	1.08	-4.86	-7.72	-1.97	-5.49	-8.33	-8.65	-3.65	-3.07	-1.86	1.04	Average													
120	0.02	-0.40	-1.24	-3.55	0.62	-2.22	-7.70	-11.35	-4.76	-5.29	-1.36	0.22	H	<b>-4.55 dB</b>												
150	-1.82	-3.17	-4.11	-0.61	-1.47	-0.11	-0.91	-2.75	-4.77	-4.71	-2.00	-0.41	E1	<b>-4.46 dB</b>												
180	-6.65	-7.70	-9.28	-11.77	-11.16	-10.16	-9.48	-8.12	-6.64	-5.88	-5.82	-5.84	E2	<b>-6.40 dB</b>												



<b>Total Gain and Efficiency</b>	<b>-2.151 dB</b>	<b>60.9 %</b>	Theta Pol	-4.4 dB	36.2 %	Phi Pol	-6.1 dB	24.77 %
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**Total Radiated Gain(3-D Plots)**

<b>Maximum Gain</b>	Gain	1.51 dB,	$\theta = 90$ deg,	$\varphi = 0$ deg	<b>Minimum Gain</b>	Gain	-12.26 dB,	$\theta = 60$ deg,	$\varphi = 150$ deg
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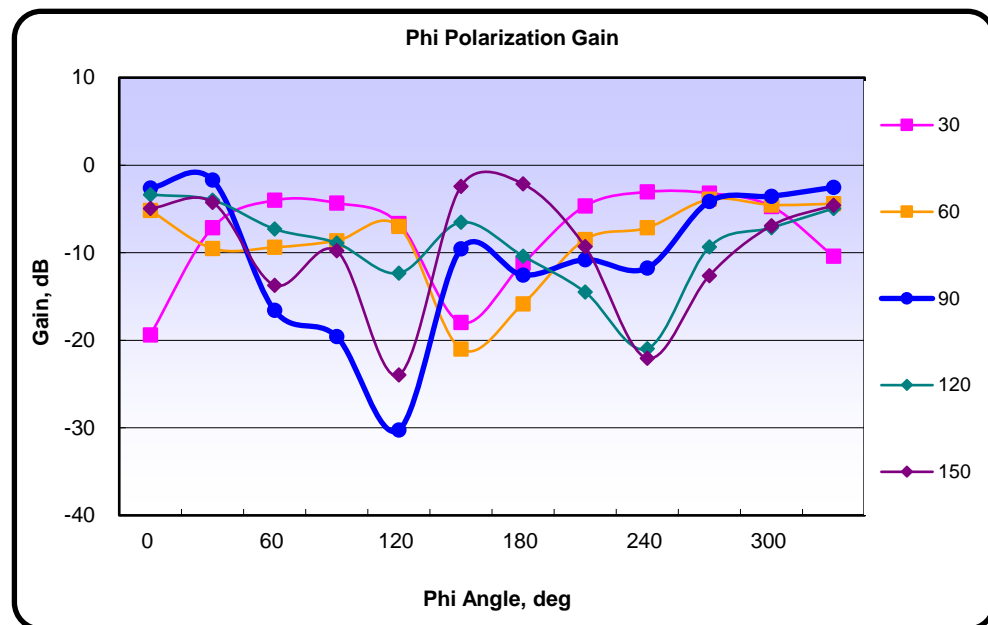
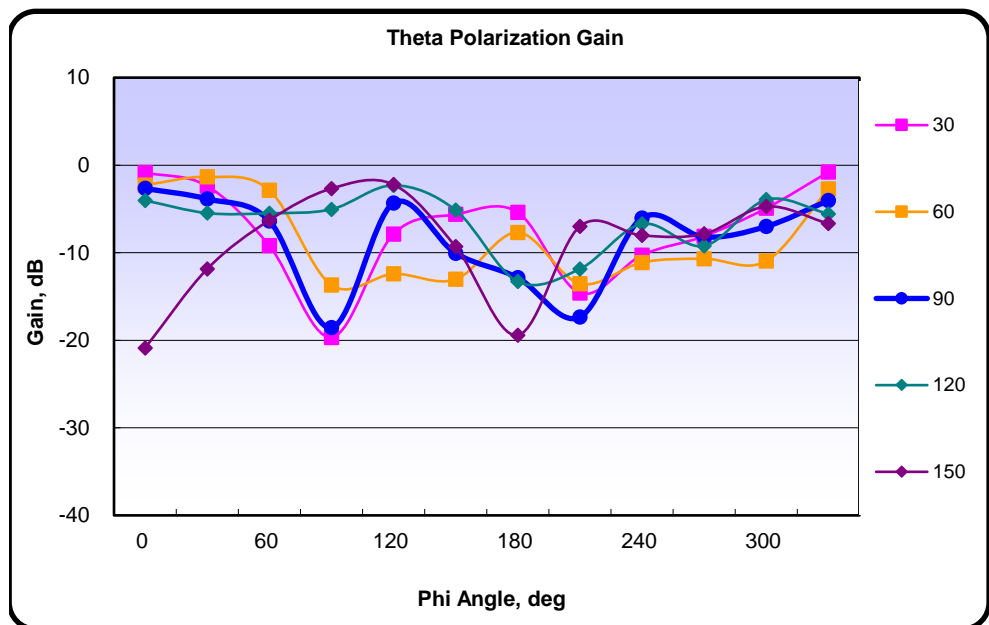
<b>Total Gain and Efficiency</b>	<b>-2.151 dB</b>	<b>60.9 %</b>	Theta Pol	-4.4 dB	36.2 %	Phi Pol	-6.1 dB	24.77 %
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Gain(Theta-Polarization and Phi-Polarization)

6755MHz

EUT		Frequency	6755	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-3.29	-8.01	-22.33	-8.08	-3.28	-2.09	-3.22	-8.44	-19.55	-6.94	-3.44	-2.33	0	-8.65	-3.37	-2.03	-1.98	-8.87	-17.18	-6.70	-3.37	-2.28	-3.45	-8.04	-17.76
30	-0.84	-2.38	-9.20	-19.67	-7.86	-5.62	-5.39	-14.60	-10.27	-8.11	-4.92	<b>-0.79</b>	30	-19.38	-7.14	-4.01	-4.32	-6.65	-17.97	-11.20	-4.65	-3.05	-3.19	-4.71	-10.41
60	-2.27	-1.34	-2.86	-13.69	-12.42	-13.04	-7.67	-13.53	-11.11	-10.68	-10.95	-2.72	60	-5.18	-9.51	-9.38	-8.63	-7.00	-20.99	-15.83	-8.48	-7.15	-3.90	-4.53	-4.41
90	-2.66	-3.85	-6.36	-18.56	-4.32	-10.05	-12.85	-17.35	-6.03	-8.20	-7.00	-4.04	90	-2.61	<b>-1.69</b>	-16.59	-19.58	<b>-30.24</b>	-9.57	-12.56	-10.79	-11.75	-4.15	-3.54	-2.53
120	-4.03	-5.47	-5.49	-5.04	-2.30	-5.14	-13.30	-11.85	-6.70	-9.22	-3.94	-5.55	120	-3.36	-3.99	-7.29	-8.88	-12.33	-6.52	-10.38	-14.50	-20.96	-9.34	-7.14	-4.94
150	<b>-20.88</b>	-11.86	-6.29	-2.67	-2.21	-9.31	-19.43	-6.98	-8.03	-7.85	-4.72	-6.67	150	-4.94	-4.24	-13.71	-9.79	-23.97	-2.41	-2.14	-9.31	-22.06	-12.61	-6.91	-4.57
180	-17.31	-18.58	-15.40	-18.38	-20.68	-20.94	-22.15	-12.91	-9.36	-5.49	-5.08	-8.99	180	-8.35	-12.50	-17.76	-24.02	-17.75	-17.69	-14.03	-11.71	-11.45	-14.43	-14.12	-8.90



<b>Total Gain and Efficiency</b>	<b>-3.353 dB</b>	<b>46.2 %</b>	Theta Pol	-6.1 dB	24.8 %	Phi Pol	-6.7 dB	21.43 %
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Gain(Theta-Polarization + Phi-Polarization)

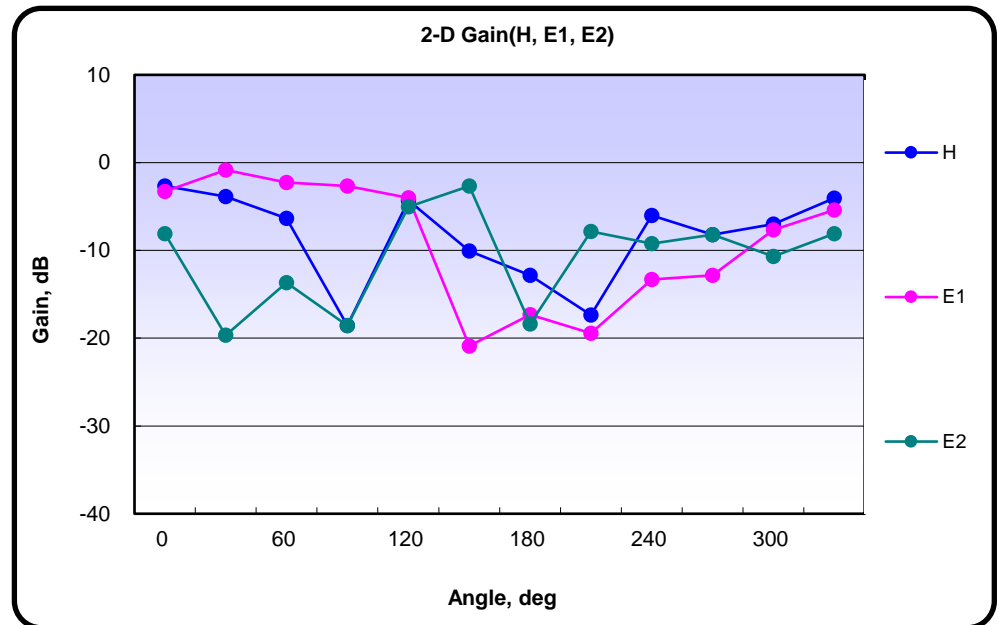
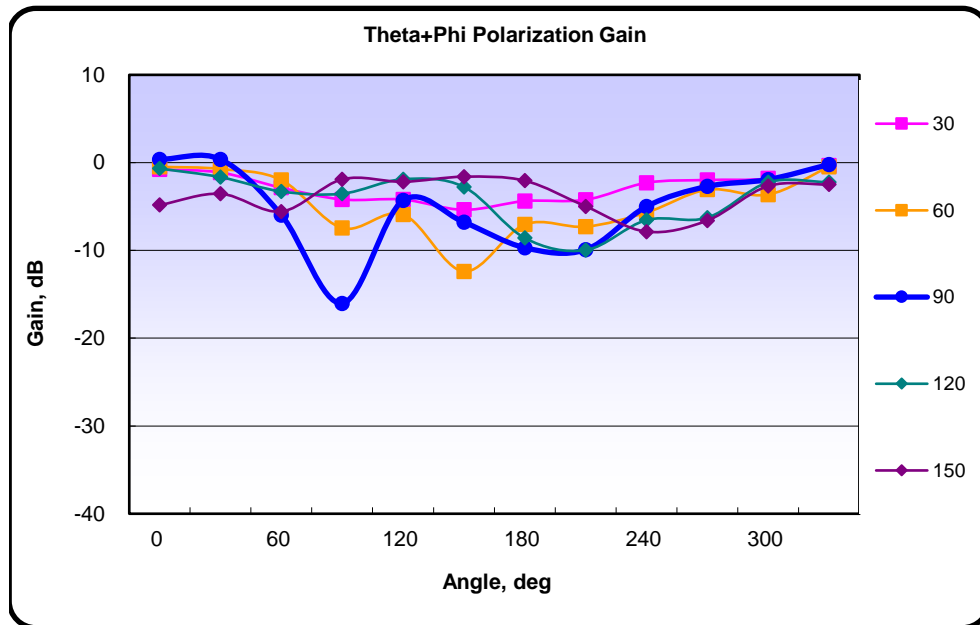
Aplustech

6755MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-2.18	-2.09	-1.99	-1.03	-2.22	-1.96	-1.61	-2.19	-2.20	-1.84	-2.15	-2.21	H	-2.66	-3.85	-6.36	-18.56	-4.32	-10.05	-12.85	-17.35	-6.03	-8.20	-7.00	-4.04	
30	-0.78	-1.13	-2.86	-4.20	-4.20	-5.37	-4.38	-4.23	-2.30	-1.98	-1.80	-0.34	E1	-3.29	-0.84	-2.27	-2.66	-4.03	-20.88	-17.31	-19.43	-13.30	-12.85	-7.67	-5.39	
60	-0.48	-0.72	-1.99	-7.45	-5.90	-12.39	-7.05	-7.30	-5.68	-3.07	-3.64	-0.47	E2	-8.08	-19.67	-13.69	-18.56	-5.04	-2.67	-18.38	-7.85	-9.22	-8.20	-10.68	-8.11	
90	<b>0.38</b>	0.37	-5.97	<b>-16.03</b>	-4.31	-6.79	-9.69	-9.92	-5.00	-2.71	-1.92	-0.21	Average													
120	-0.67	-1.66	-3.29	-3.54	-1.89	-2.77	-8.59	-9.97	-6.54	-6.27	-2.24	-2.22	H	<b>-6.43</b>	dB											
150	-4.83	-3.55	-5.57	-1.90	-2.18	-1.60	-2.06	-4.98	-7.86	-6.60	-2.67	-2.48	E1	<b>-5.45</b>	dB											
180	-7.83	-11.54	-13.41	-17.33	-15.96	-16.01	-13.41	-9.26	-7.27	-4.97	-4.57	-5.93	E2	<b>-8.32</b>	dB											



<b>Total Gain and Efficiency</b>	<b>-3.353 dB</b>	<b>46.2 %</b>	Theta Pol	-6.1 dB	24.8 %	Phi Pol	-6.7 dB	21.43 %
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**Total Radiated Gain(3-D Plots)**



<b>Maximum Gain</b>	Gain	0.38 dB,	$\theta = 90$ deg,	$\varphi = 0$ deg	<b>Minimum Gain</b>	Gain	-16.03 dB,	$\theta = 90$ deg,	$\varphi = 90$ deg
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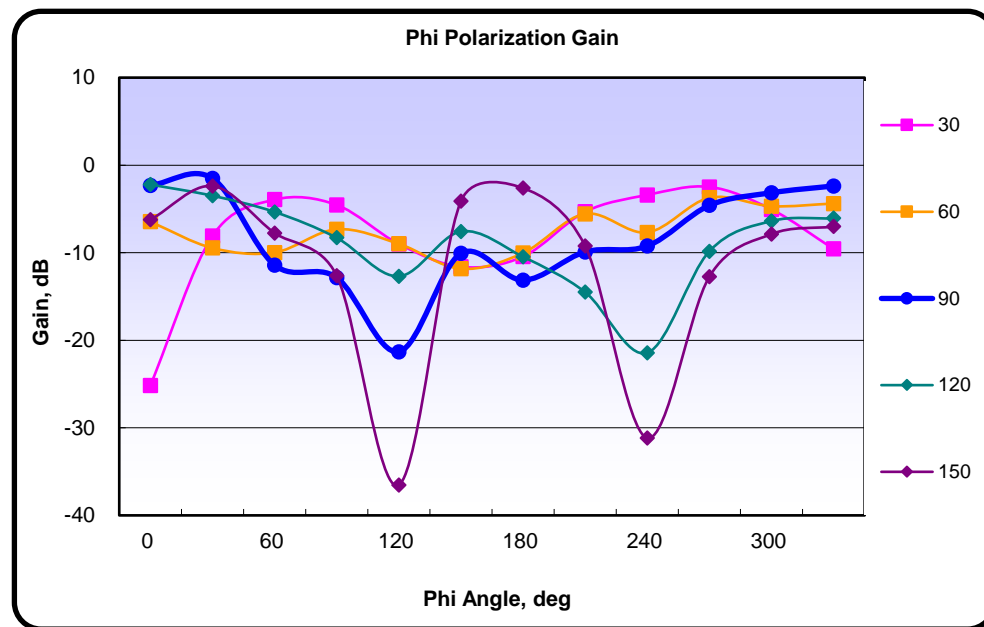
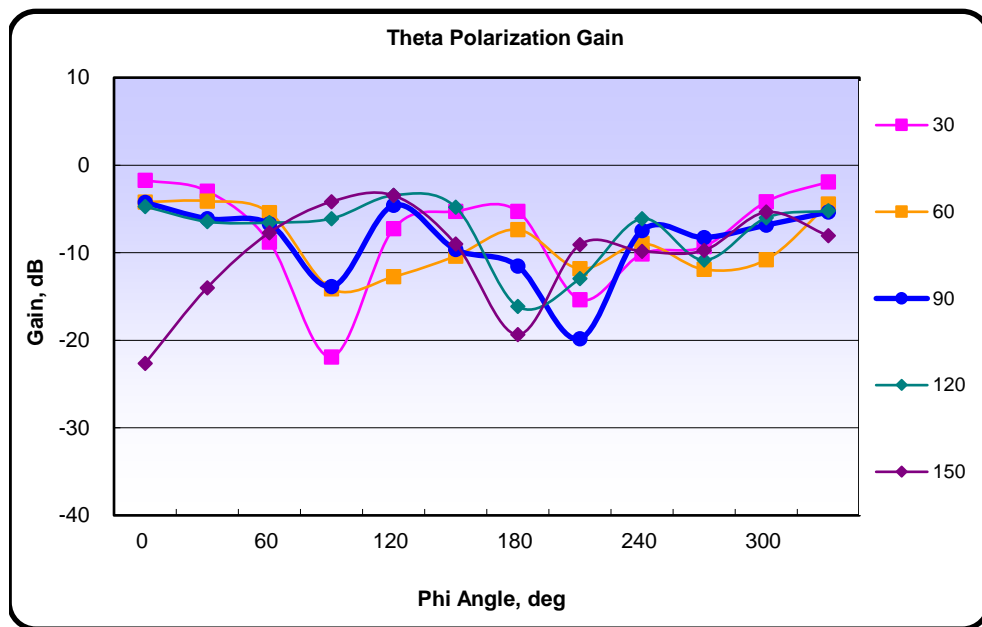
<b>Total Gain and Efficiency</b>	<b>-3.353 dB</b>	<b>46.2 %</b>	Theta Pol	-6.1 dB	24.8 %	Phi Pol	-6.7 dB	21.43 %
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Gain(Theta-Polarization and Phi-Polarization)

6915MHz

EUT		Frequency	6915	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-3.67	-7.46	-16.40	-7.90	-3.48	-2.17	-3.42	-6.87	-14.04	-9.60	-4.31	-2.82	0	-10.10	-3.91	-2.58	-2.63	-8.05	-19.24	-7.91	-3.94	-2.40	-2.85	-6.12	-14.11
30	-1.72	-2.96	-8.77	-21.91	-7.26	-5.27	-5.27	-15.35	-10.13	-9.30	-4.17	-1.90	30	-25.17	-8.10	-3.94	-4.54	-9.00	-11.61	-10.44	-5.32	-3.40	-2.48	-5.05	-9.57
60	-4.21	-4.10	-5.41	-14.11	-12.74	-10.38	-7.36	-11.83	-8.94	-11.91	-10.79	-4.45	60	-6.46	-9.46	-9.98	-7.32	-8.98	-11.83	-10.03	-5.55	-7.68	-3.72	-4.68	-4.38
90	-4.26	-6.11	-6.71	-13.88	-4.58	-9.64	-11.52	-19.82	-7.46	-8.26	-6.84	-5.35	90	-2.31	-1.51	-11.40	-12.84	-21.31	-10.08	-13.13	-9.90	-9.24	-4.59	-3.15	-2.37
120	-4.72	-6.45	-6.56	-6.10	-3.44	-4.80	-16.14	-12.96	-6.11	-10.84	-6.00	-5.21	120	-2.21	-3.49	-5.34	-8.29	-12.69	-7.57	-10.46	-14.50	-21.43	-9.83	-6.38	-6.06
150	-22.64	-14.00	-7.71	-4.17	-3.46	-9.00	-19.36	-9.08	-9.83	-9.73	-5.36	-8.07	150	-6.24	-2.38	-7.75	-12.61	-36.53	-4.12	-2.62	-9.24	-31.16	-12.73	-7.87	-7.01
180	-22.77	-22.38	-20.13	-20.37	-18.64	-17.29	-22.00	-14.39	-10.56	-5.43	-5.07	-10.26	180	-9.90	-14.71	-21.96	-28.08	-27.70	-26.60	-13.86	-14.15	-11.00	-17.02	-14.08	-9.10



<b>Total Gain and Efficiency</b>	<b>-3.747 dB</b>	<b>42.2 %</b>	Theta Pol	-7.0 dB	20.0 %	Phi Pol	-6.5 dB	22.24 %
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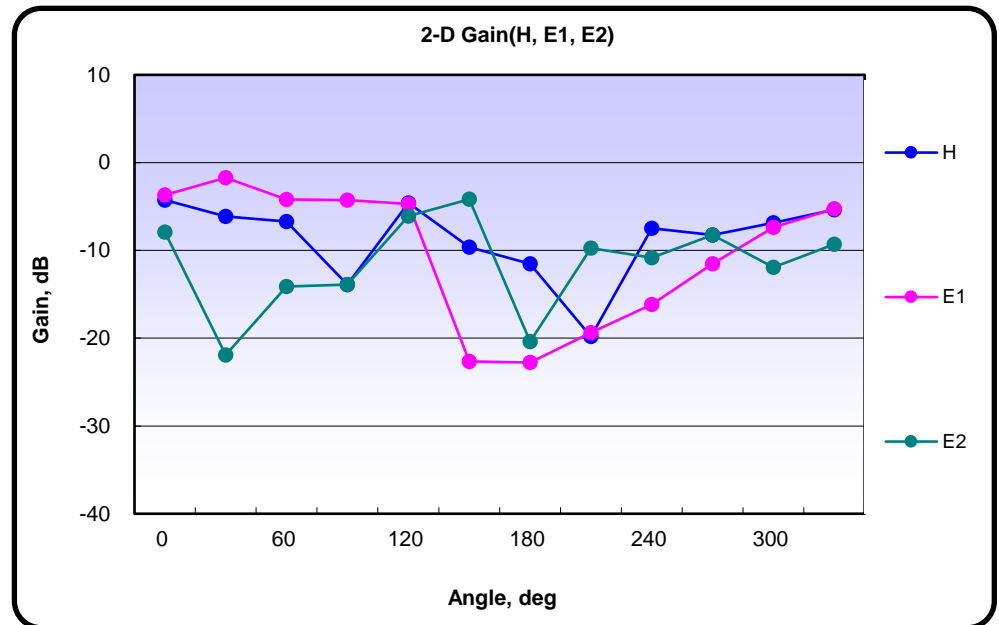
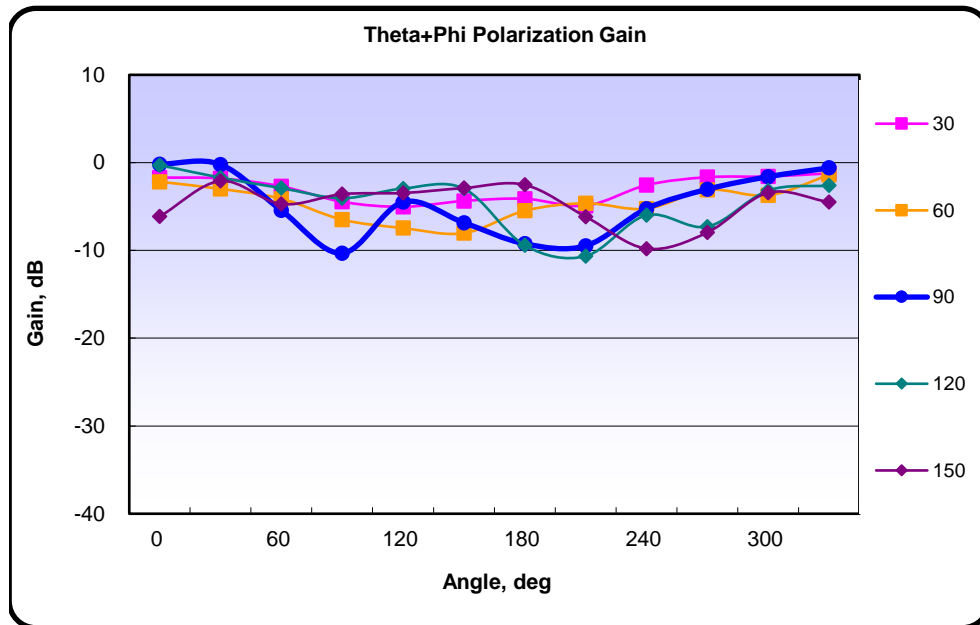
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6915MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-2.78	-2.32	-2.40	-1.50	-2.18	-2.09	-2.10	-2.15	-2.11	-2.02	-2.11	-2.51	H	-4.26	-6.11	-6.71	-13.88	-4.58	-9.64	-11.52	-19.82	-7.46	-8.26	-6.84	-5.35	
30	-1.70	-1.80	-2.71	-4.46	-5.03	-4.36	-4.12	-4.91	-2.56	-1.66	-1.58	-1.21	E1	-3.67	-1.72	-4.21	-4.26	-4.72	-22.64	-22.77	-19.36	-16.14	-11.52	-7.36	-5.27	
60	-2.18	-2.99	-4.11	-6.49	-7.45	-8.03	-5.48	-4.63	-5.25	-3.11	-3.73	-1.40	E2	-7.90	-21.91	-14.11	-13.88	-6.10	-4.17	-20.37	-9.73	-10.84	-8.26	-11.91	-9.30	
90	-0.17	-0.22	-5.44	-10.32	-4.49	-6.84	-9.24	-9.48	-5.25	-3.04	-1.60	-0.60	Average													
120	-0.28	-1.71	-2.90	-4.05	-2.95	-2.96	-9.42	-10.65	-5.98	-7.30	-3.18	-2.60	H	-7.29 dB												
150	-6.14	-2.09	-4.72	-3.59	-3.46	-2.90	-2.53	-6.15	-9.80	-7.97	-3.43	-4.50	E1	-6.33 dB												
180	-9.68	-14.02	-17.94	-19.69	-18.13	-16.81	-13.24	-11.26	-7.76	-5.14	-4.56	-6.63	E2	-9.31 dB												



<b>Total Gain and Efficiency</b>	<b>-3.747 dB</b>	<b>42.2 %</b>	Theta Pol	-7.0 dB	20.0 %	Phi Pol	-6.5 dB	22.24 %
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**Total Radiated Gain(3-D Plots)**

<b>Maximum Gain</b>	Gain	-0.17 dB,	$\theta = 90$ deg,	$\varphi = 0$ deg	<b>Minimum Gain</b>	Gain	-10.65 dB,	$\theta = 120$ deg,	$\varphi = 210$ deg
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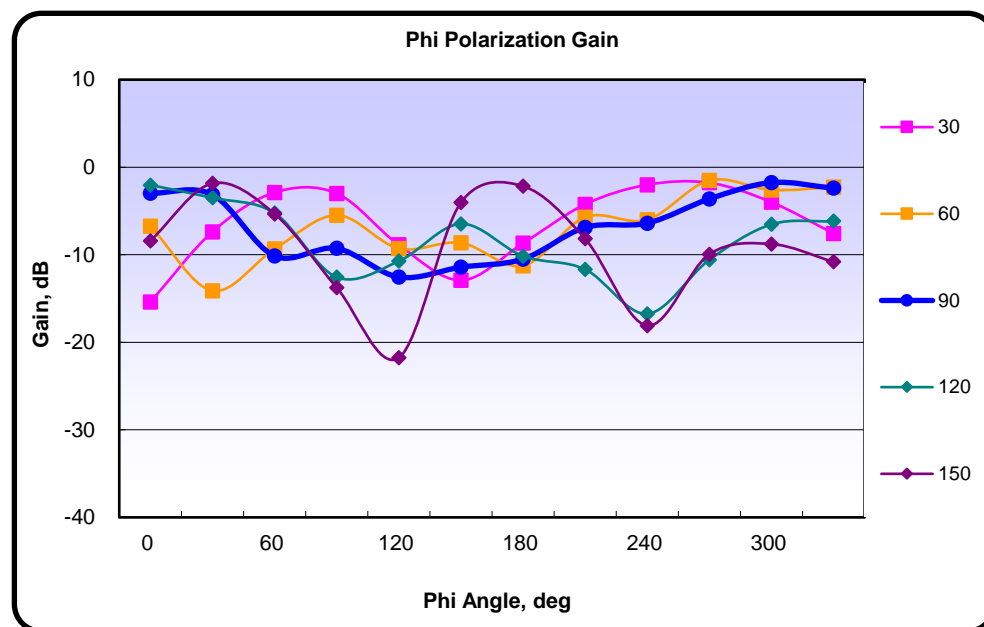
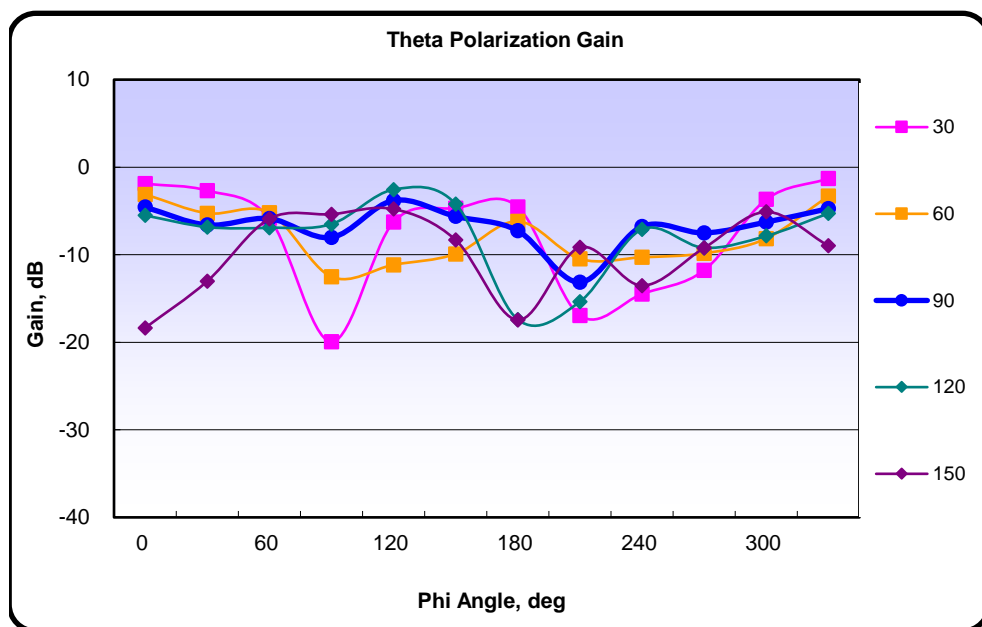
<b>Total Gain and Efficiency</b>	<b>-3.747 dB</b>	<b>42.2 %</b>	Theta Pol	-7.0 dB	20.0 %	Phi Pol	-6.5 dB	22.24 %
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Gain(Theta-Polarization and Phi-Polarization)

7075MHz

EUT		Frequency	7075	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 09:55:45				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-1.59	-4.92	-15.53	-9.96	-3.30	-1.56	-1.63	-5.05	-14.64	-11.14	-4.39	-1.57	0	-11.85	-3.70	-1.43	-1.16	-4.67	-14.18	-11.24	-3.63	-1.47	-1.42	-4.10	-12.33
30	-1.89	-2.67	-5.83	<b>-19.95</b>	-6.27	-4.68	-4.55	-16.94	-14.48	-11.78	-3.68	<b>-1.30</b>	30	-15.41	-7.38	-2.89	-2.99	-8.87	-12.92	-8.69	-4.24	-2.01	-1.78	-4.00	-7.57
60	-3.10	-5.26	-5.19	-12.51	-11.15	-9.90	-6.18	-10.48	-10.29	-9.84	-8.15	-3.29	60	-6.74	-14.11	-9.35	-5.48	-9.29	-8.64	-11.26	-5.71	-6.01	<b>-1.51</b>	-2.60	-2.29
90	-4.56	-6.60	-5.87	-8.02	-3.80	-5.62	-7.26	-13.14	-6.77	-7.51	-6.27	-4.73	90	-2.98	-3.14	-10.14	-9.27	-12.55	-11.42	-10.49	-6.88	-6.39	-3.62	-1.76	-2.40
120	-5.51	-6.84	-6.92	-6.50	-2.56	-4.20	-17.40	-15.36	-7.10	-9.21	-7.85	-5.28	120	-2.04	-3.50	-5.24	-12.56	-10.74	-6.47	-10.16	-11.67	-16.75	-10.57	-6.53	-6.17
150	-18.36	-13.03	-5.90	-5.37	-4.78	-8.31	-17.46	-9.15	-13.52	-9.22	-5.11	-8.97	150	-8.41	-1.85	-5.33	-13.75	<b>-21.77</b>	-4.04	-2.17	-8.17	-18.10	-9.94	-8.78	-10.81
180	-26.51	-14.78	-16.31	-13.48	-13.66	-16.00	-33.88	-15.66	-10.68	-5.43	-5.17	-12.38	180	-10.86	-16.56	-30.29	-27.56	-29.98	-18.05	-12.87	-15.05	-11.75	-31.60	-11.11	-7.99



<b>Total Gain and Efficiency</b>	<b>-3.215 dB</b>	<b>47.7 %</b>	Theta Pol	-6.6 dB	22.0 %	Phi Pol	-5.9 dB	25.69 %
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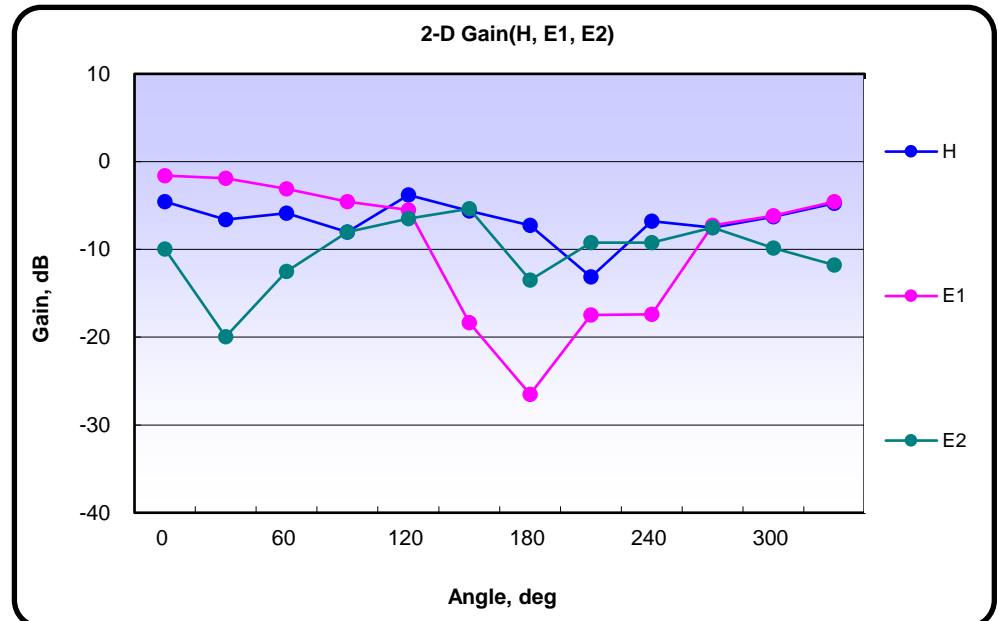
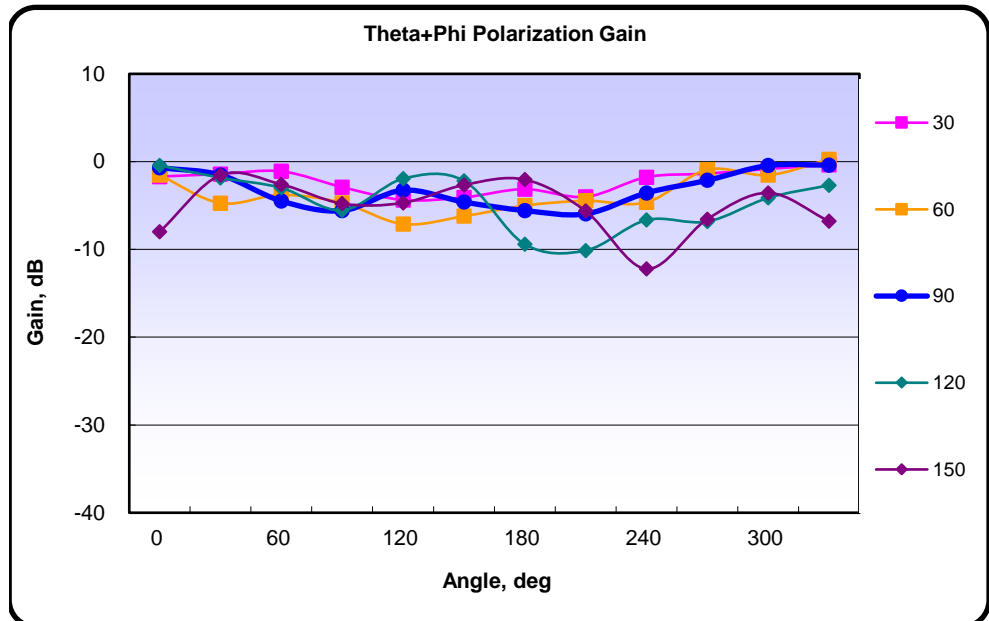
Gain(Theta-Polarization + Phi-Polarization)

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7075MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-1.20	-1.26	-1.26	-0.62	-0.92	-1.33	-1.18	-1.27	-1.27	-0.98	-1.23	-1.22	H	-4.56	-6.60	-5.87	-8.02	-3.80	-5.62	-7.26	-13.14	-6.77	-7.51	-6.27	-4.73
30	-1.70	-1.41	-1.11	-2.90	-4.37	-4.07	-3.13	-4.01	-1.77	-1.37	-0.83	-0.38	E1	-1.59	-1.89	-3.10	-4.56	-5.51	-18.36	-26.51	-17.46	-17.40	-7.26	-6.18	-4.55
60	-1.54	-4.73	-3.78	-4.69	-7.11	-6.21	-5.01	-4.46	-4.63	-0.91	-1.53	0.25	E2	-9.96	-19.95	-12.51	-8.02	-6.50	-5.37	-13.48	-9.22	-9.21	-7.51	-9.84	-11.78
90	-0.69	-1.52	-4.49	-5.59	-3.26	-4.61	-5.57	-5.96	-3.57	-2.13	-0.44	-0.40	Average												
120	-0.43	-1.85	-2.99	-5.54	-1.95	-2.18	-9.41	-10.12	-6.65	-6.83	-4.13	-2.69	H	-6.21 dB											
150	-7.99	-1.53	-2.60	-4.78	-4.69	-2.66	-2.04	-5.62	-12.22	-6.55	-3.56	-6.78	E1	-5.61 dB											
180	-10.74	-12.57	-16.14	-13.31	-13.56	-13.89	-12.84	-12.33	-8.17	-5.42	-4.18	-6.64	E2	-9.12 dB											



<b>Total Gain and Efficiency</b>	<b>-3.215 dB</b>	<b>47.7 %</b>	Theta Pol	-6.6 dB	22.0 %	Phi Pol	-5.9 dB	25.69 %
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**Total Radiated Gain(3-D Plots)**

<b>Maximum Gain</b>	Gain	0.25 dB,	$\theta = 60$ deg,	$\varphi = 330$ deg	<b>Minimum Gain</b>	Gain	-12.22 dB,	$\theta = 150$ deg,	$\varphi = 240$ deg
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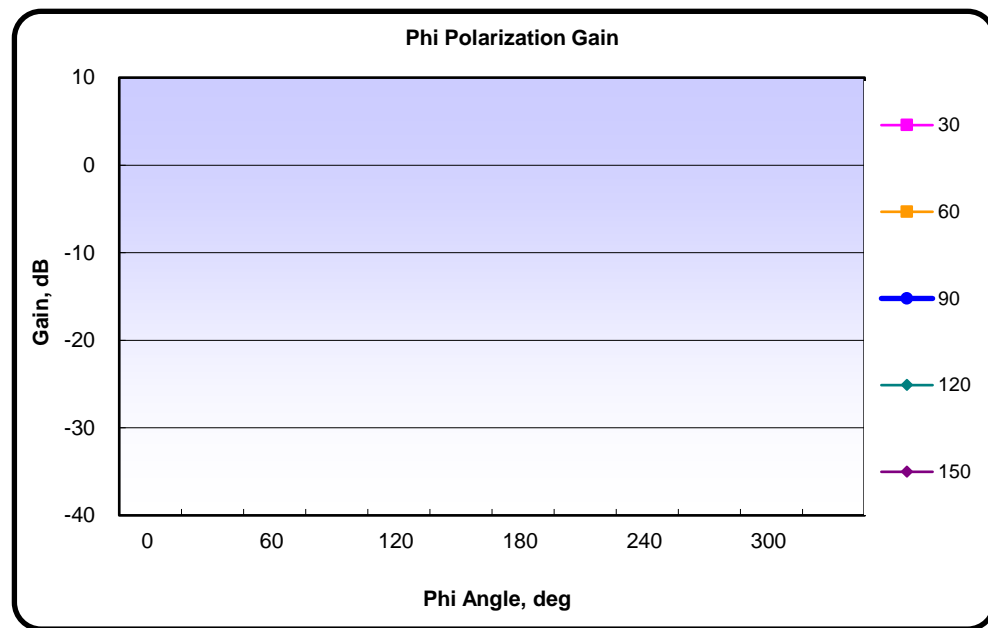
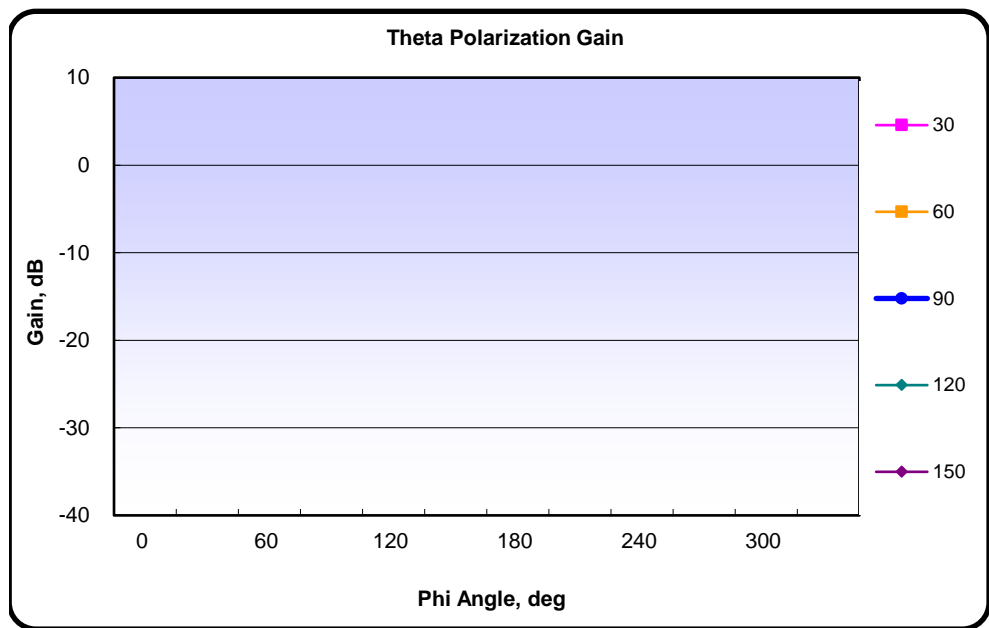
<b>Total Gain and Efficiency</b>	<b>-3.215 dB</b>	<b>47.7 %</b>	Theta Pol	-6.6 dB	22.0 %	Phi Pol	-5.9 dB	25.69 %
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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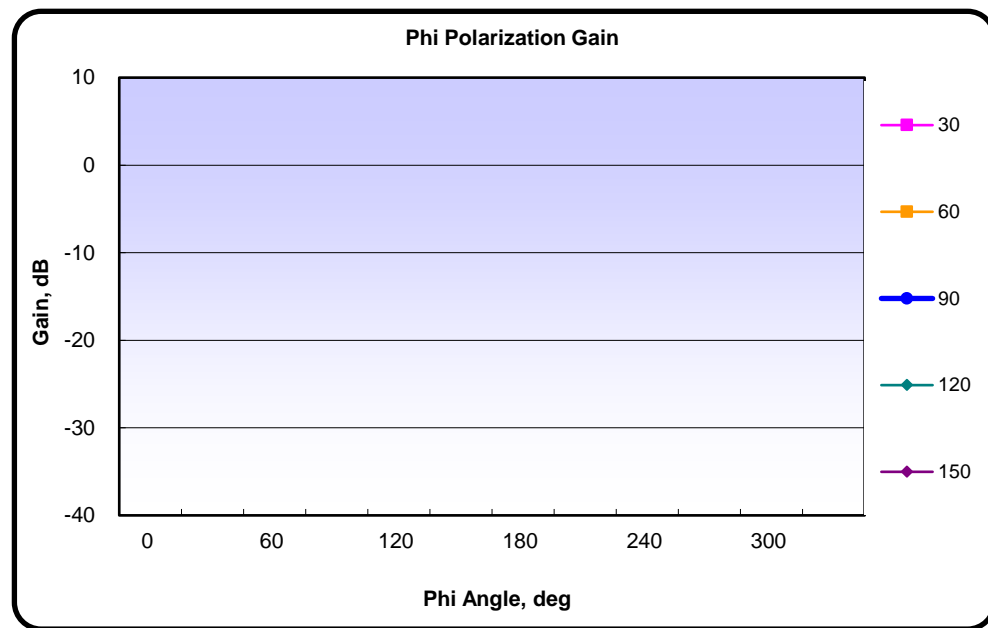
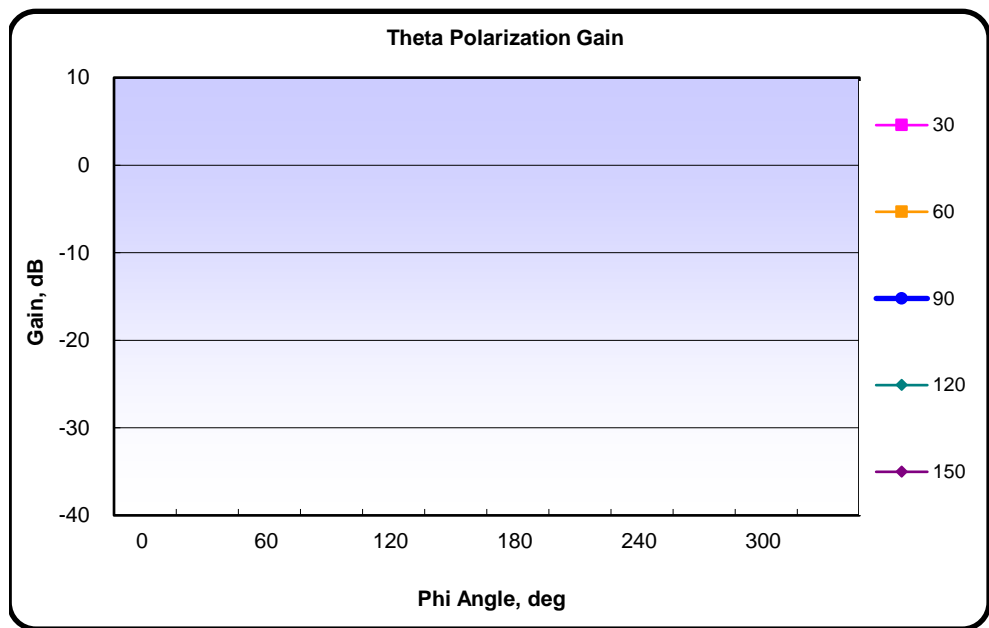
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



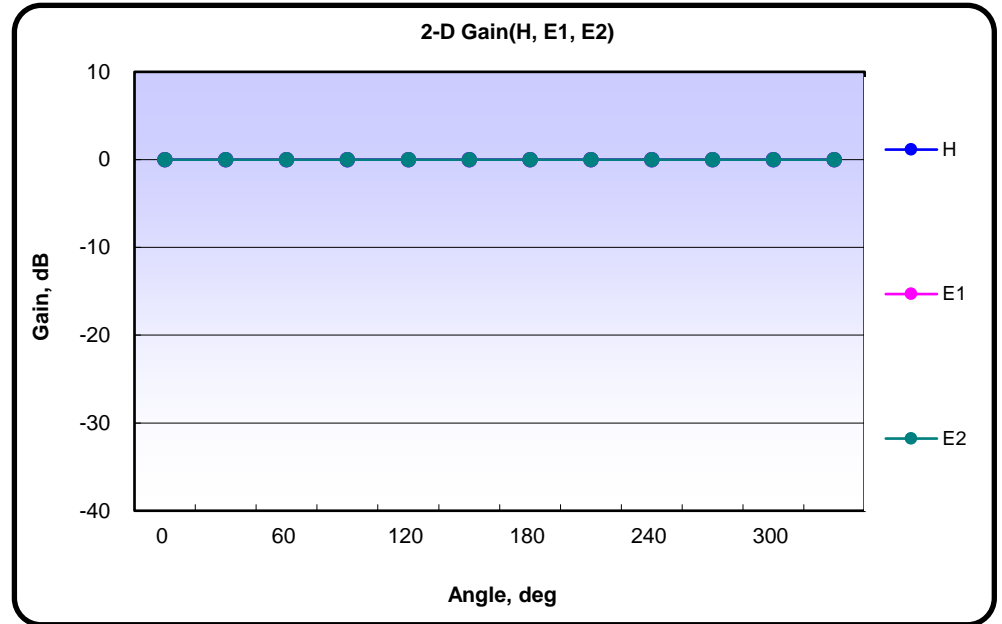
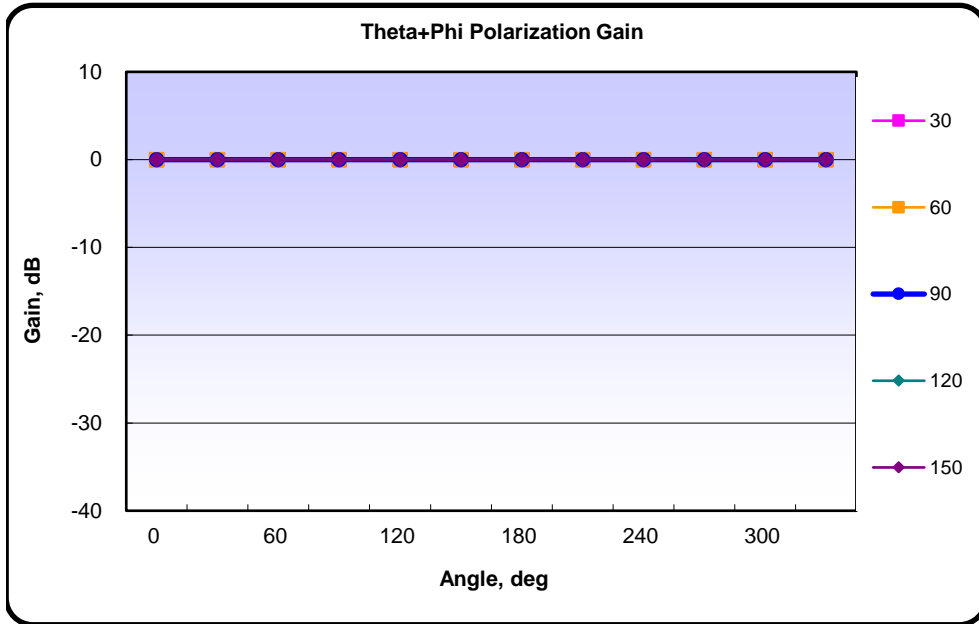
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0														H													
30														E1													
60														E2													
90														Average													
120														H	dB												
150														E1	dB												
180														E2	dB												



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



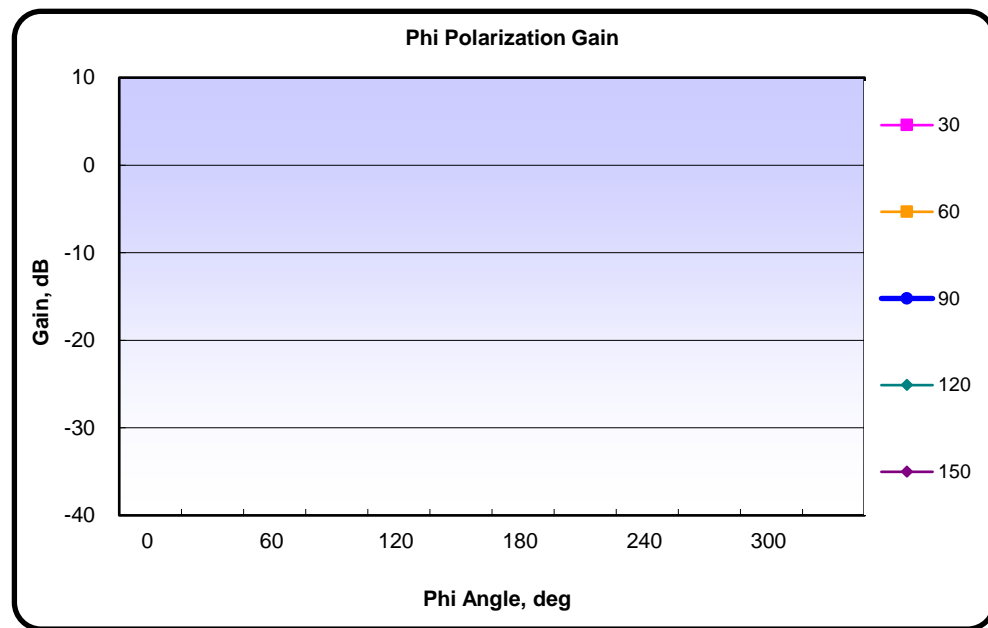
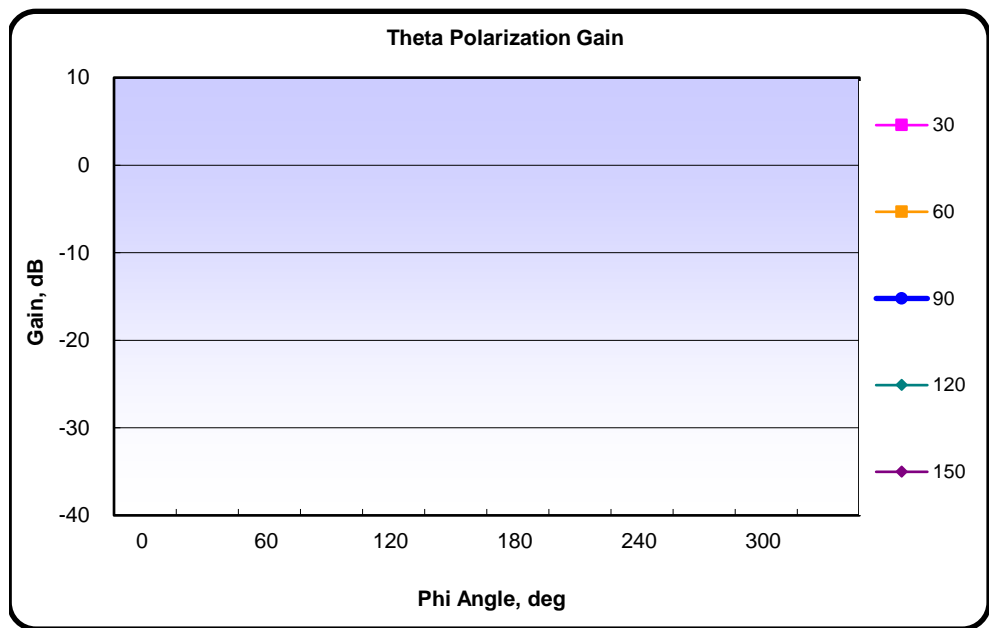
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



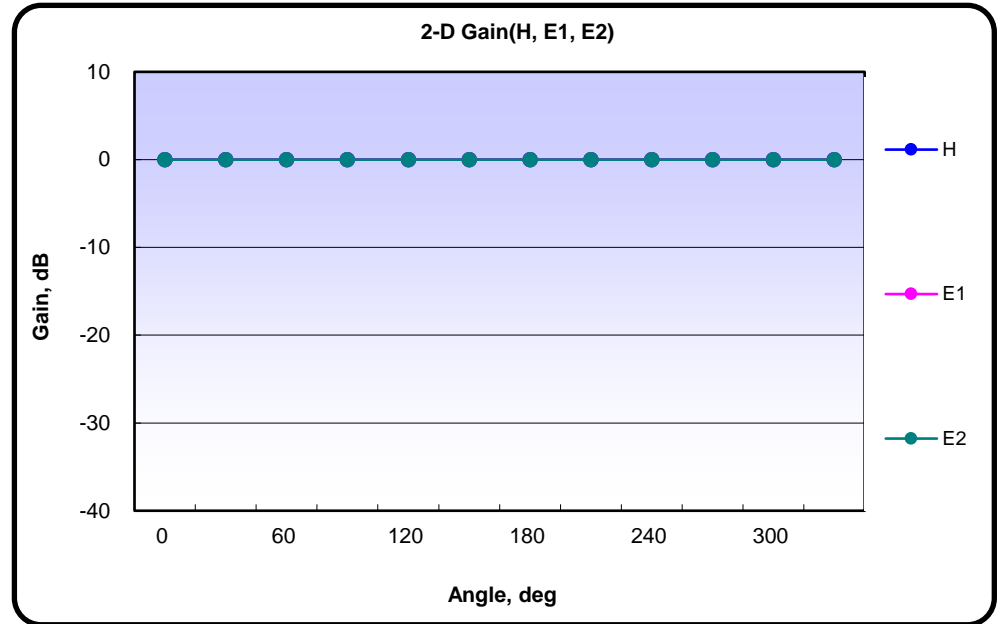
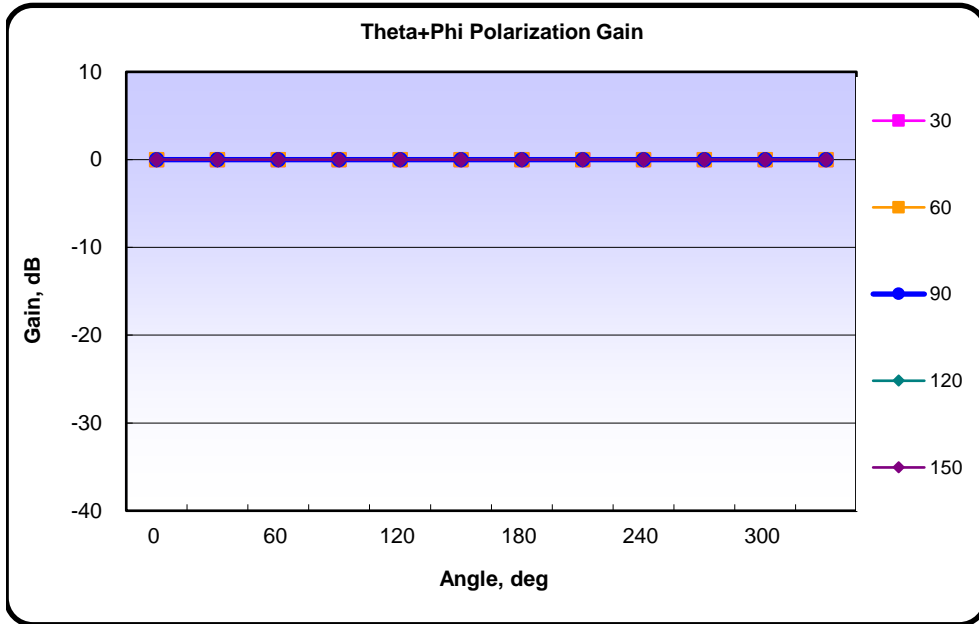
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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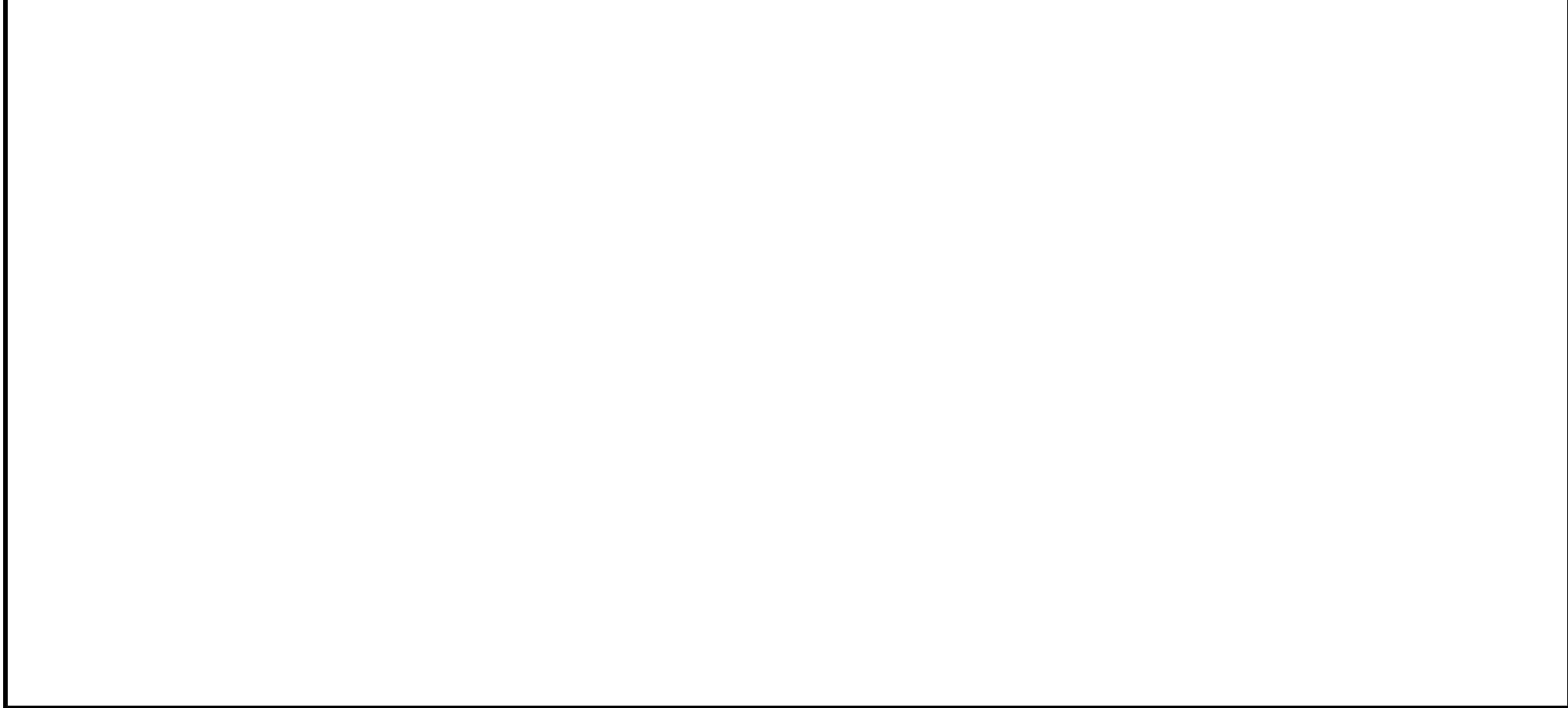
Theta Angle	Phi Angle												Plane	Angle, deg											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													H												
30													E1												
60													E2												
90													Average												
120													H	dB											
150													E1	dB											
180													E2	dB											



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**





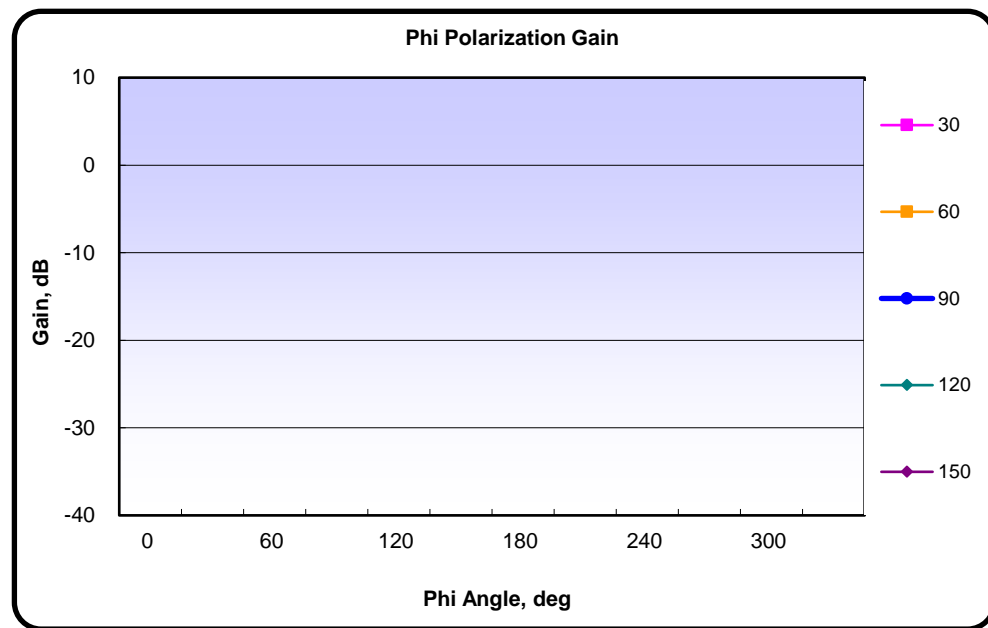
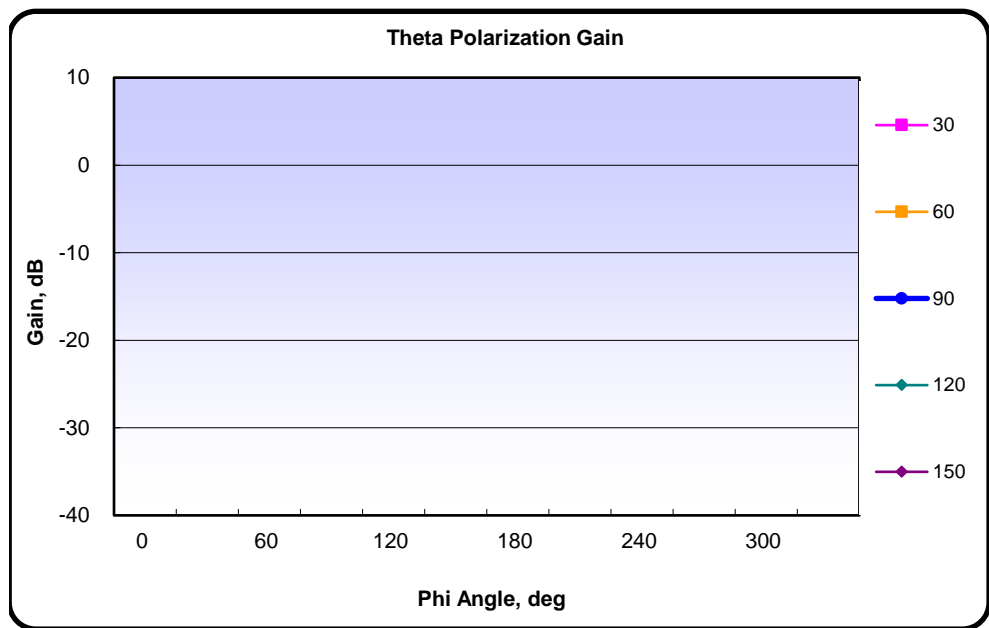
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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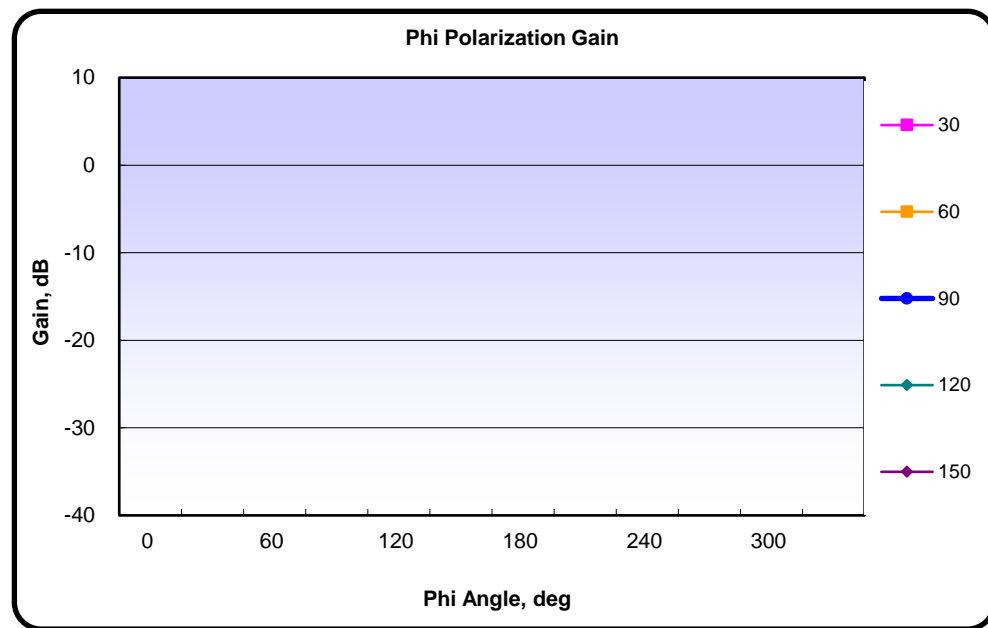
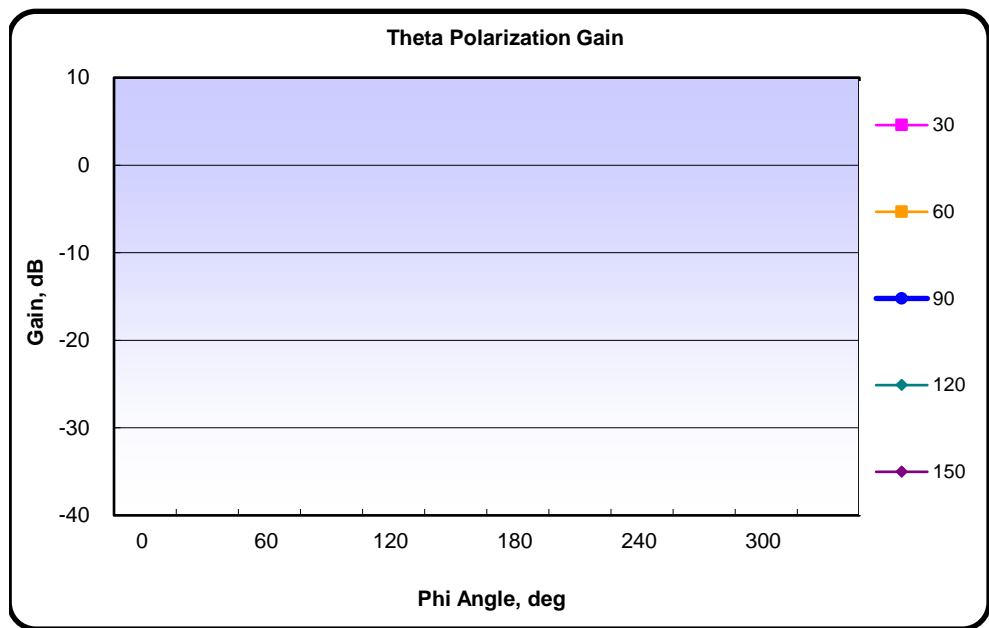
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)												
	Phi Angle													Phi Angle												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0													0													
30													30													
60													60													
90													90													
120													120													
150													150													
180													180													



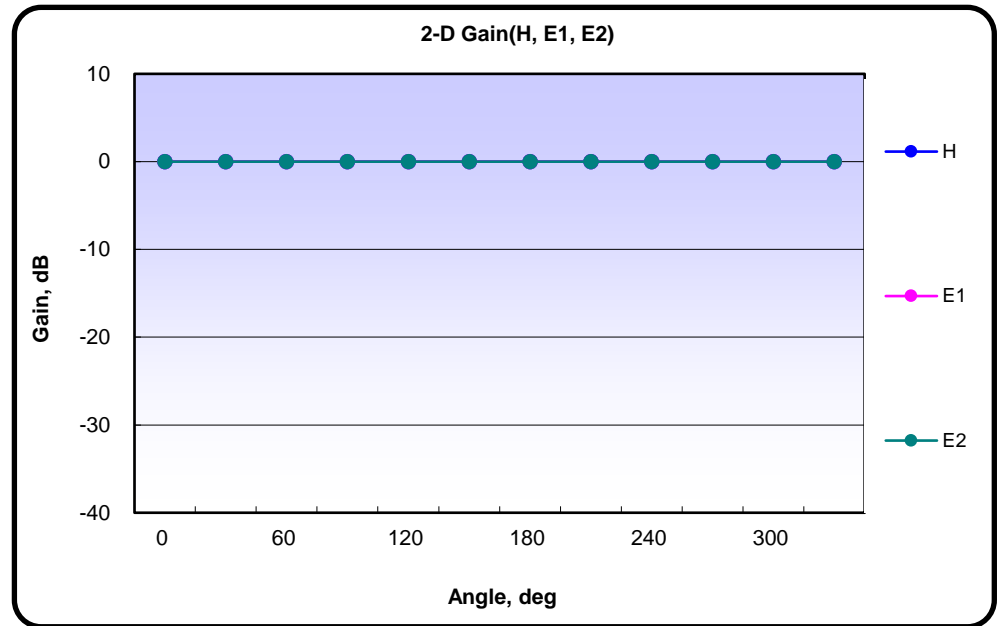
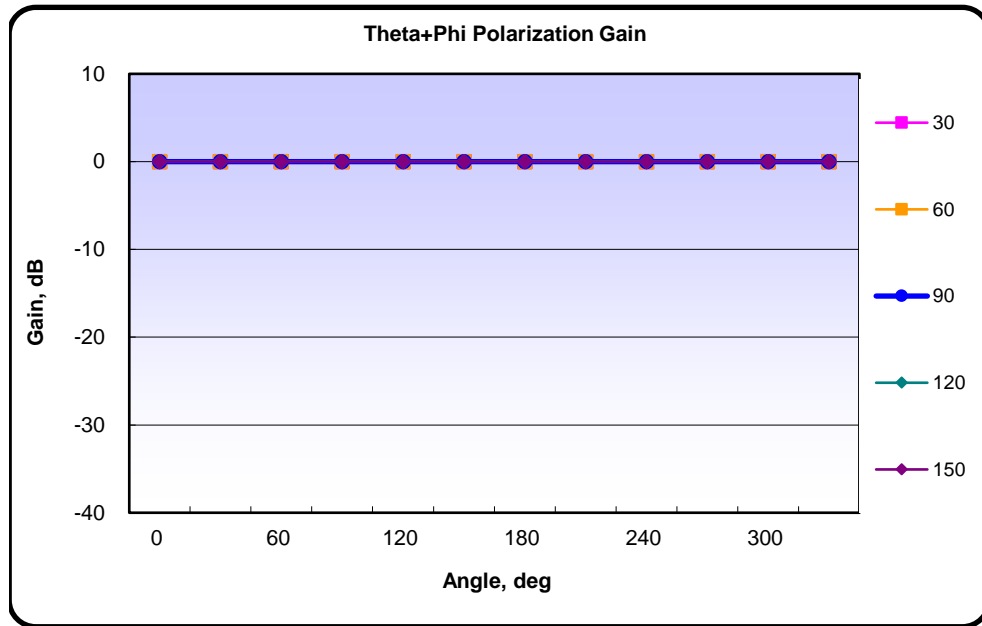
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0														H													
30														E1													
60														E2													
90														Average													
120														H	dB												
150														E1	dB												
180														E2	dB												



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



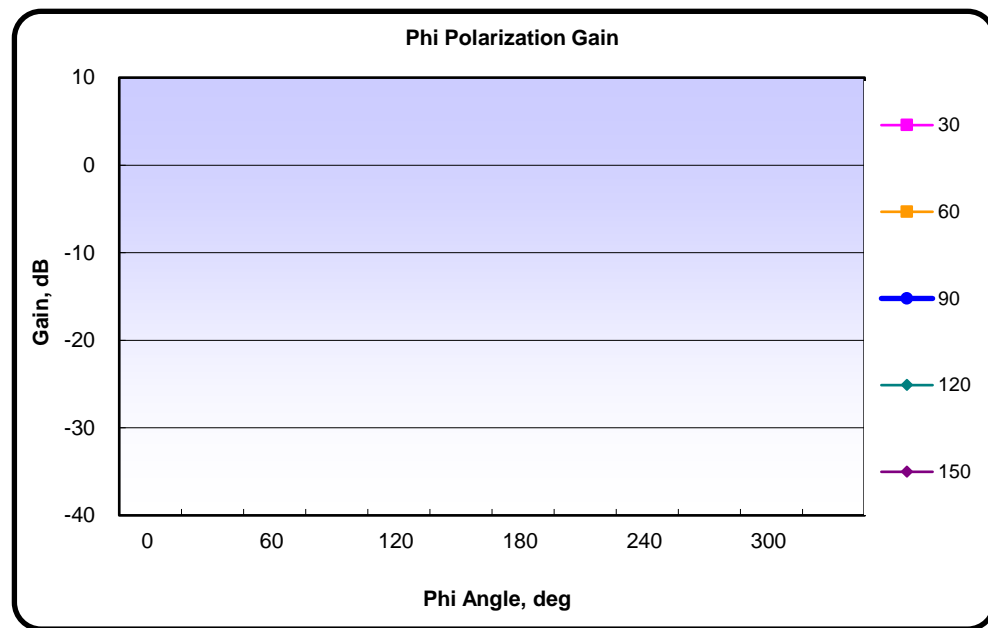
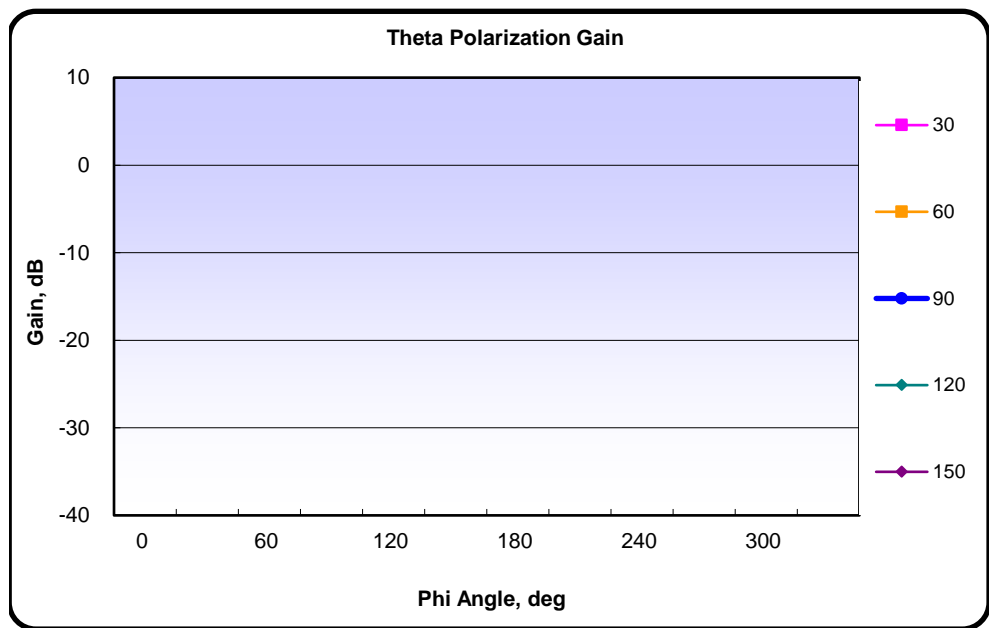
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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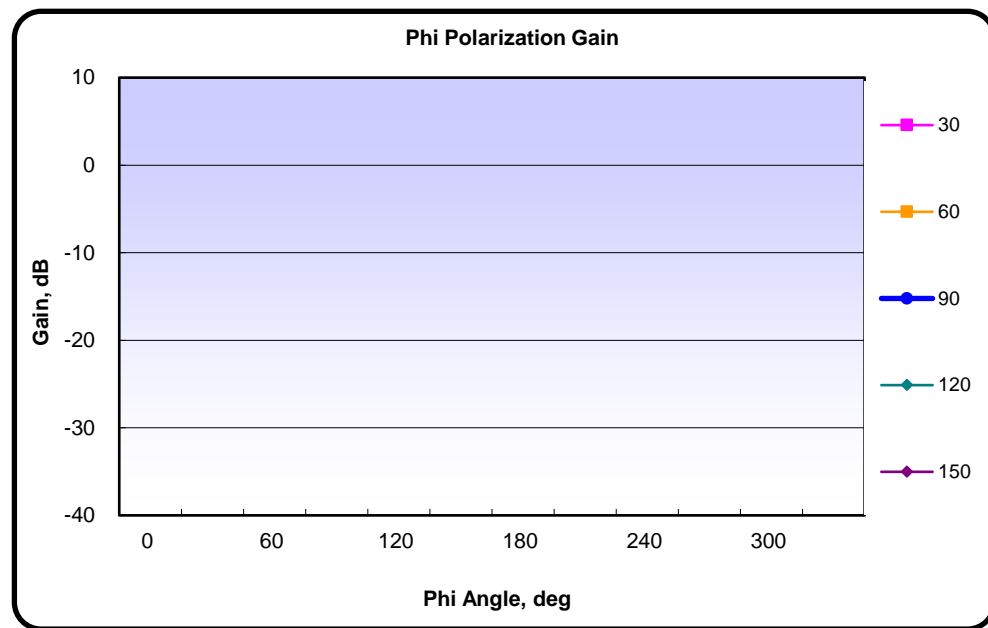
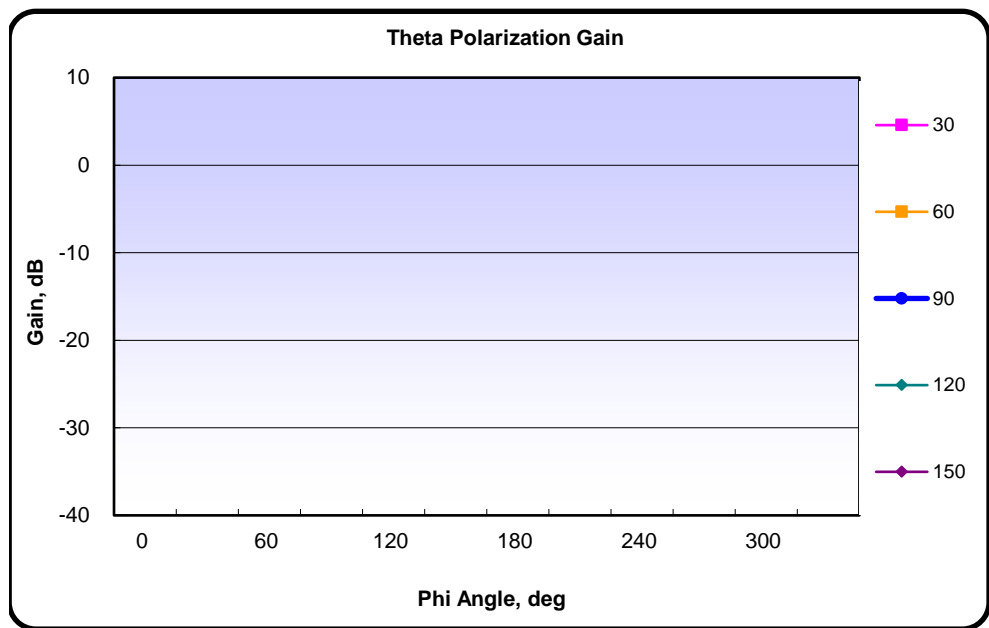
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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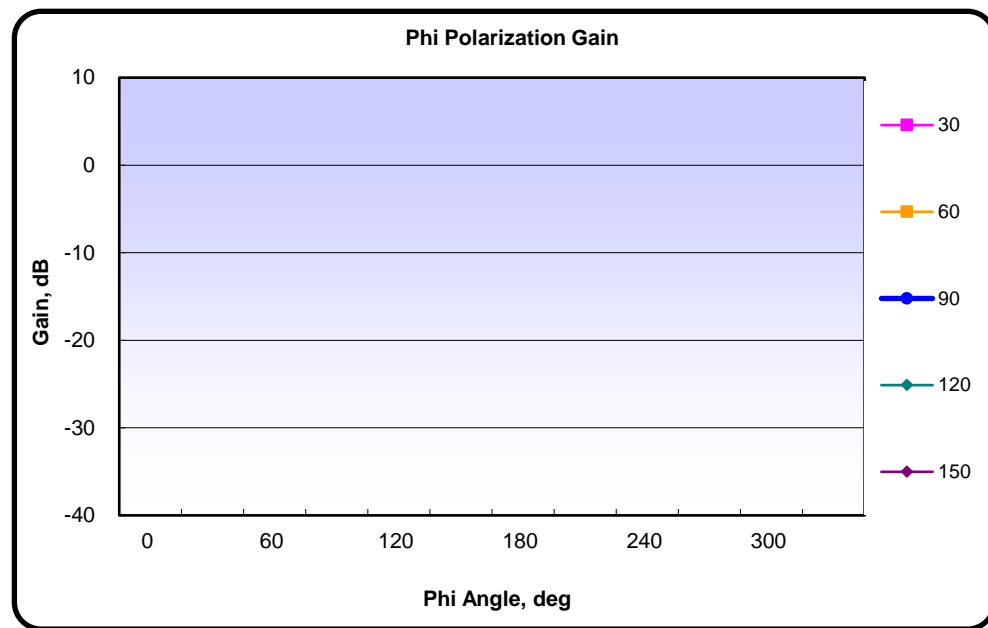
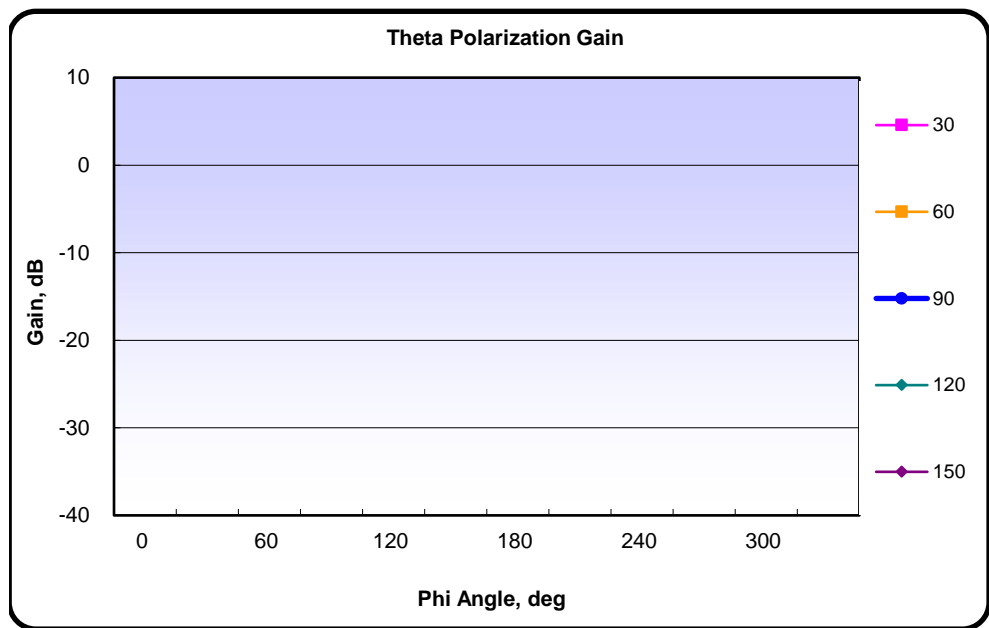
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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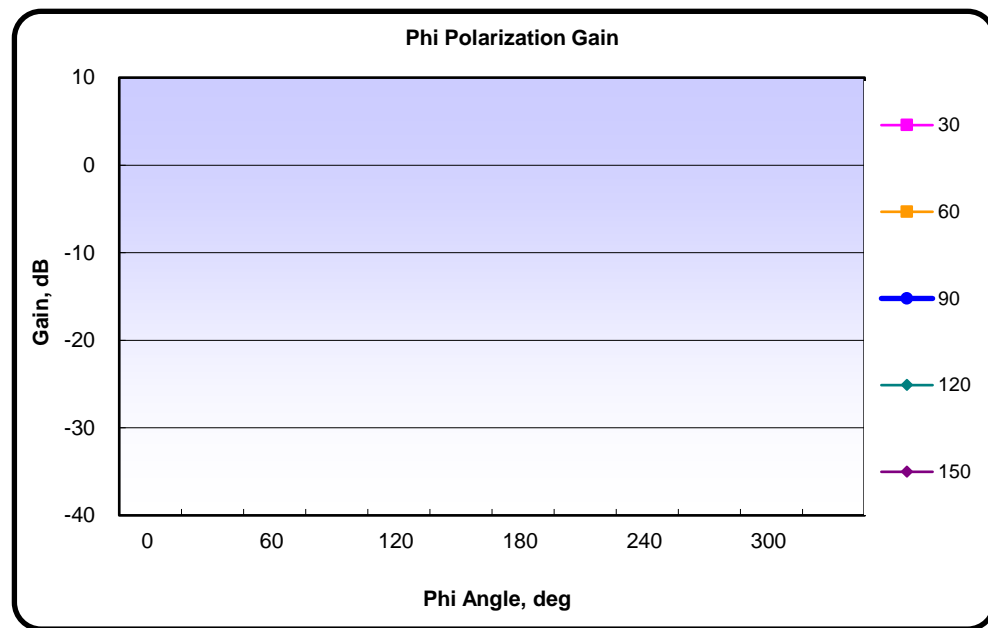
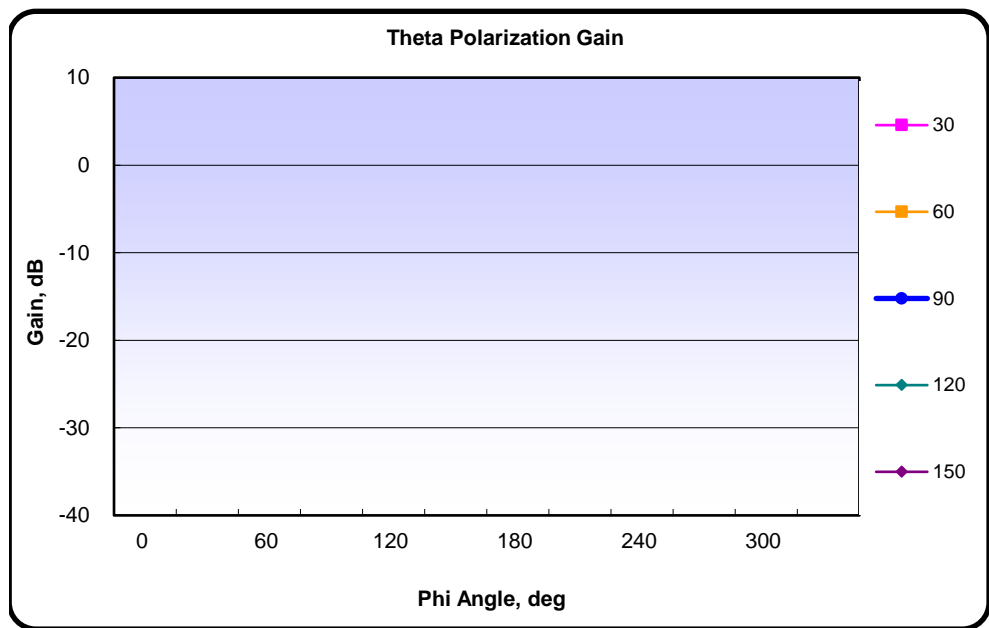
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



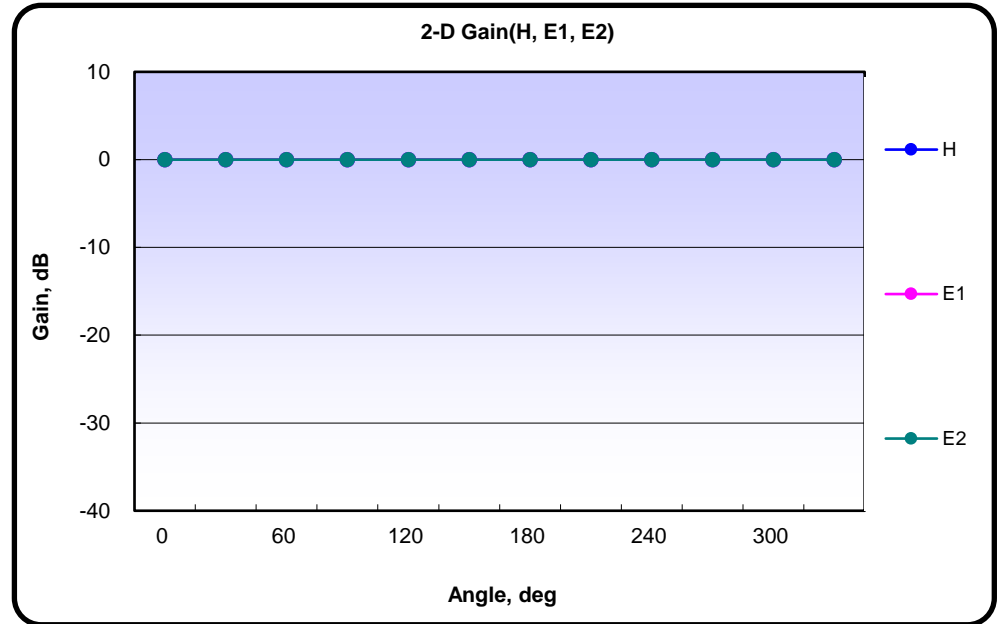
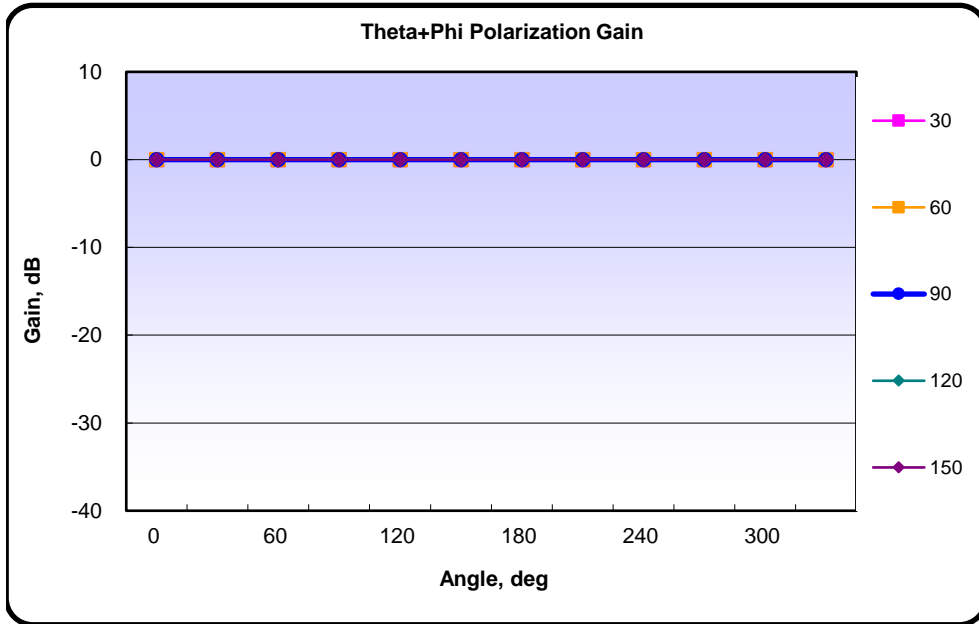
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0														H												
30														E1												
60														E2												
90														Average												
120													H													
150													E1	dB												
180													E2	dB												



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



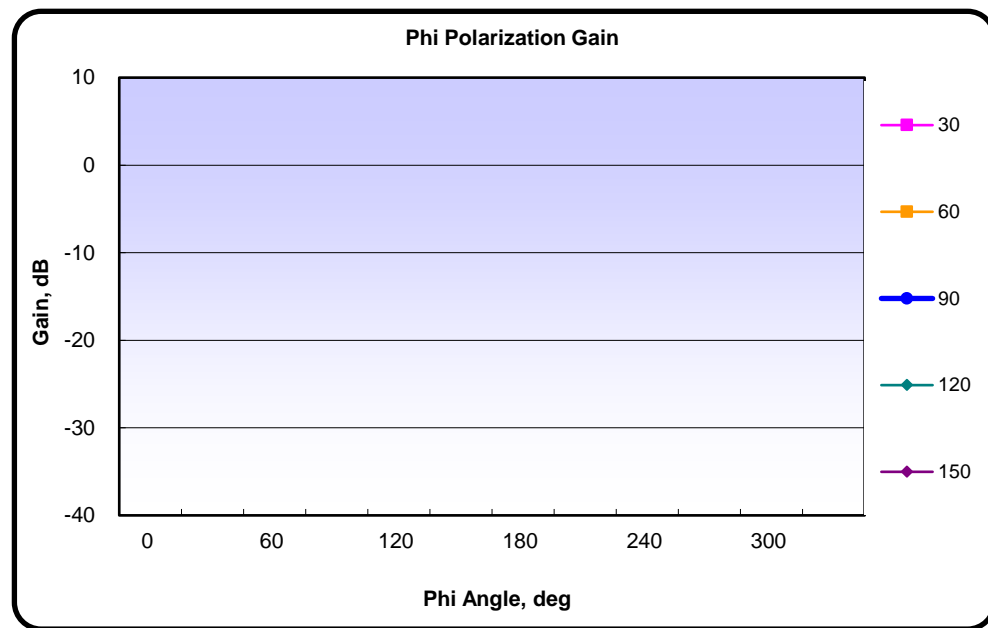
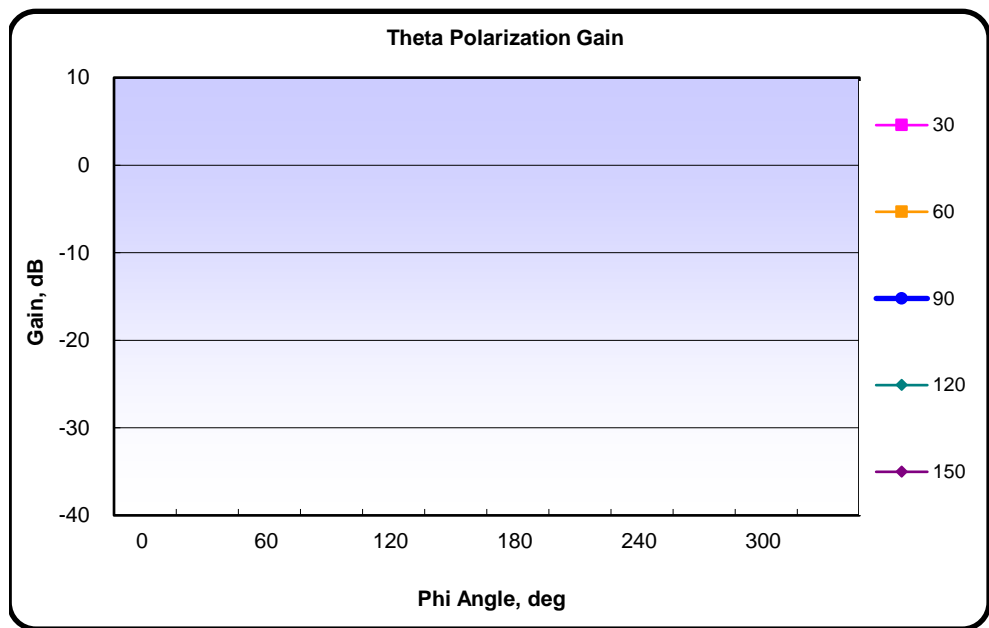
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



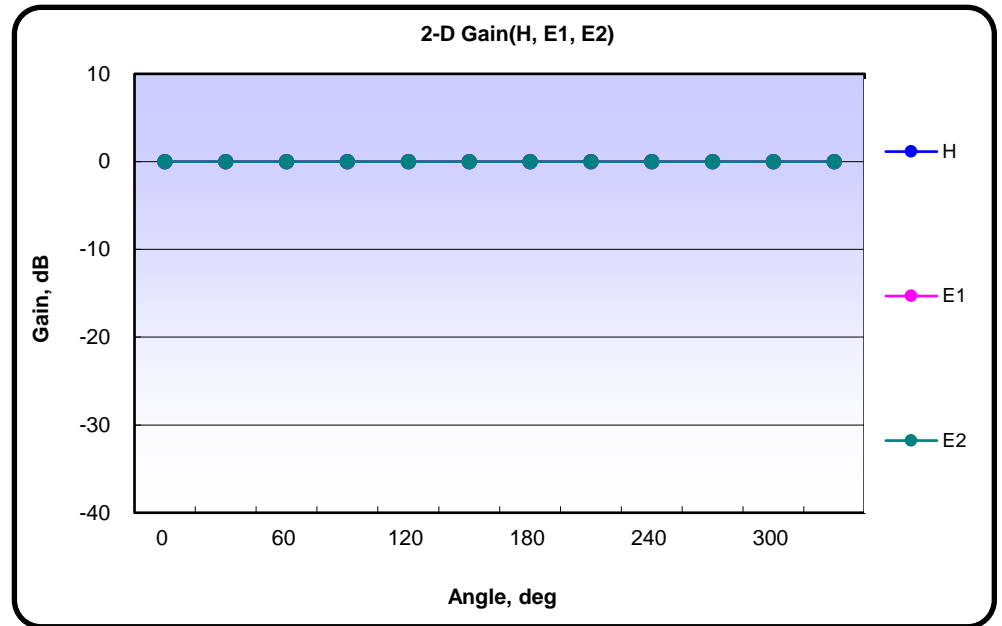
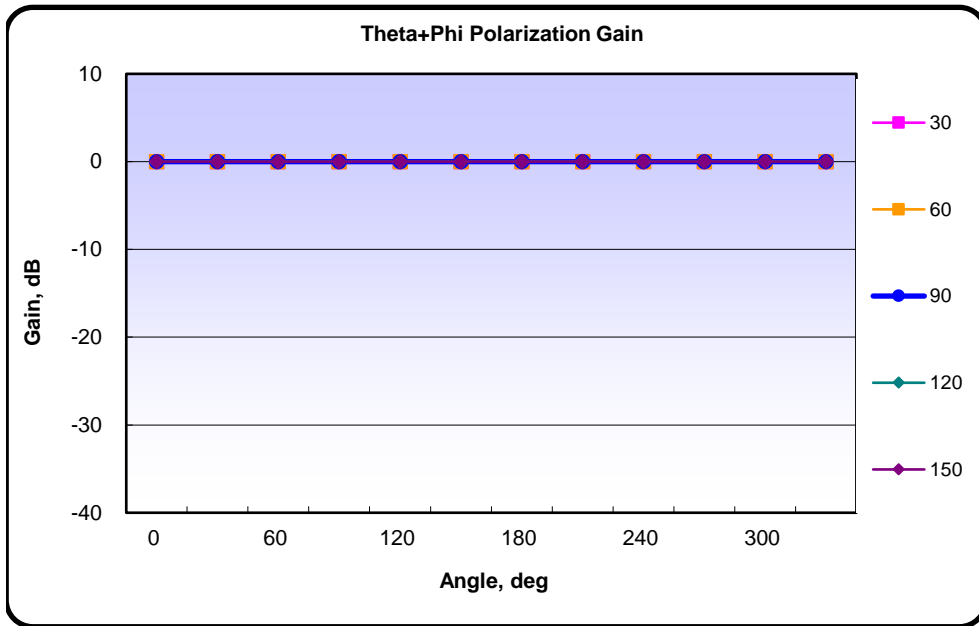
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0														H												
30														E1												
60														E2												
90														Average												
120														H	dB											
150														E1	dB											
180														E2	dB											



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



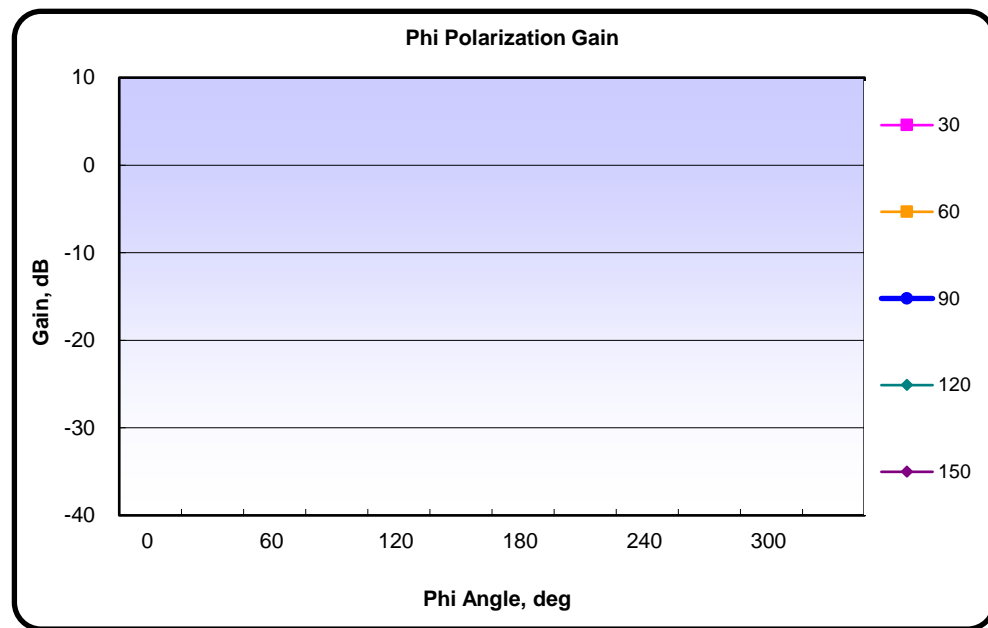
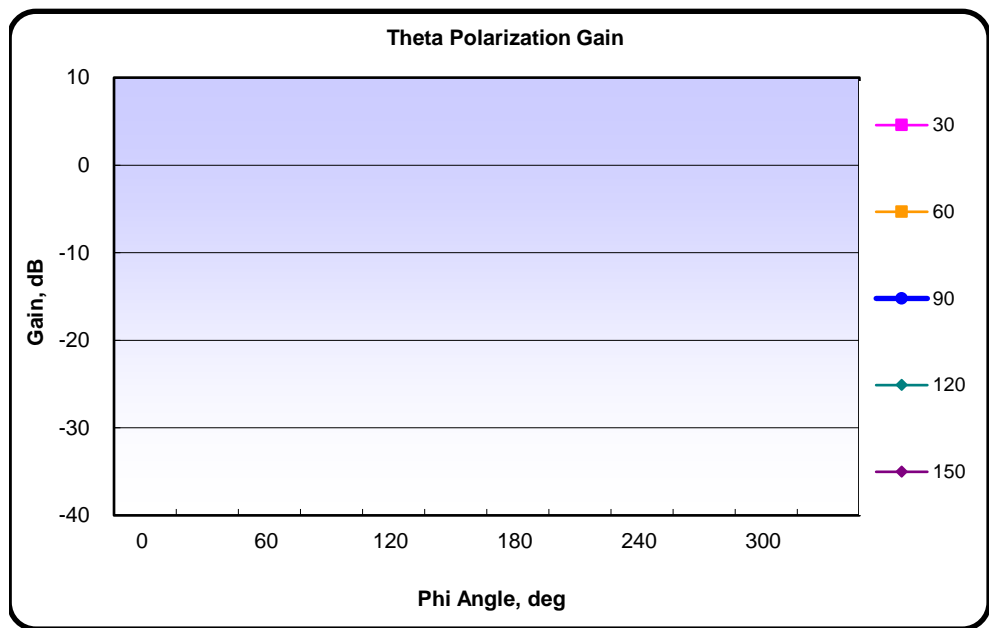
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



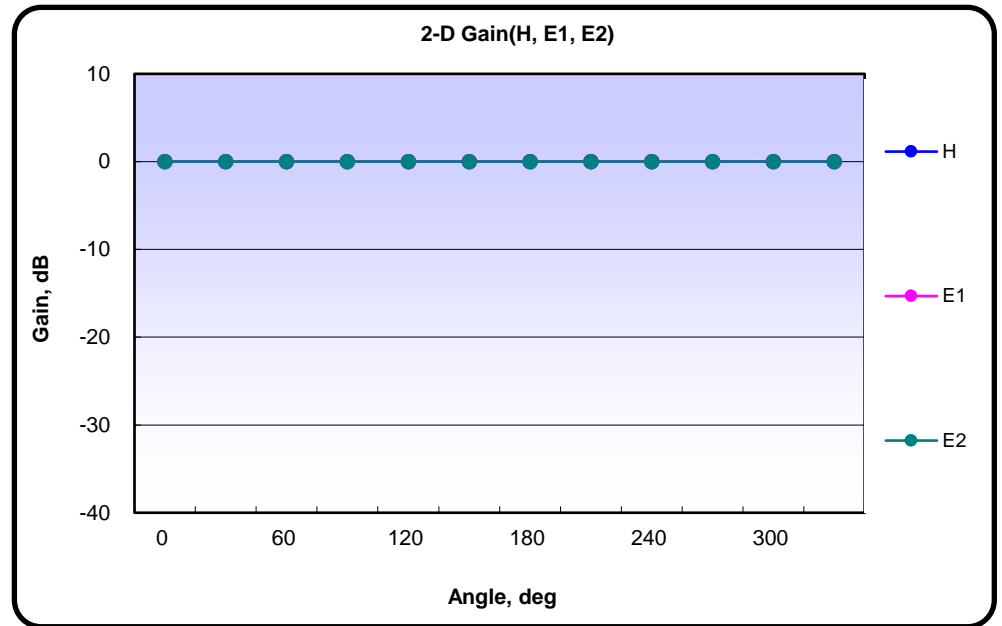
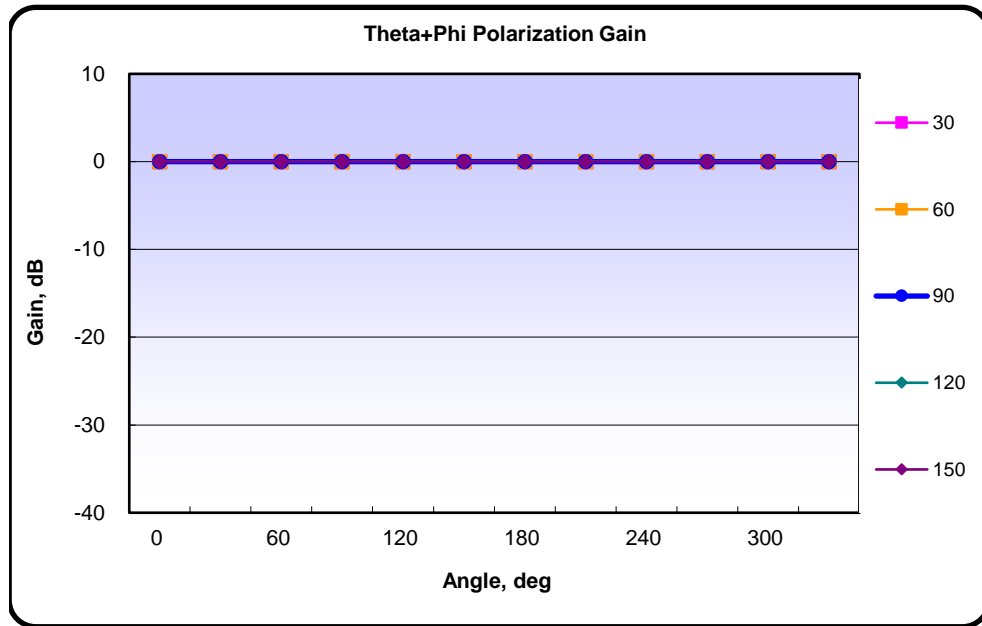
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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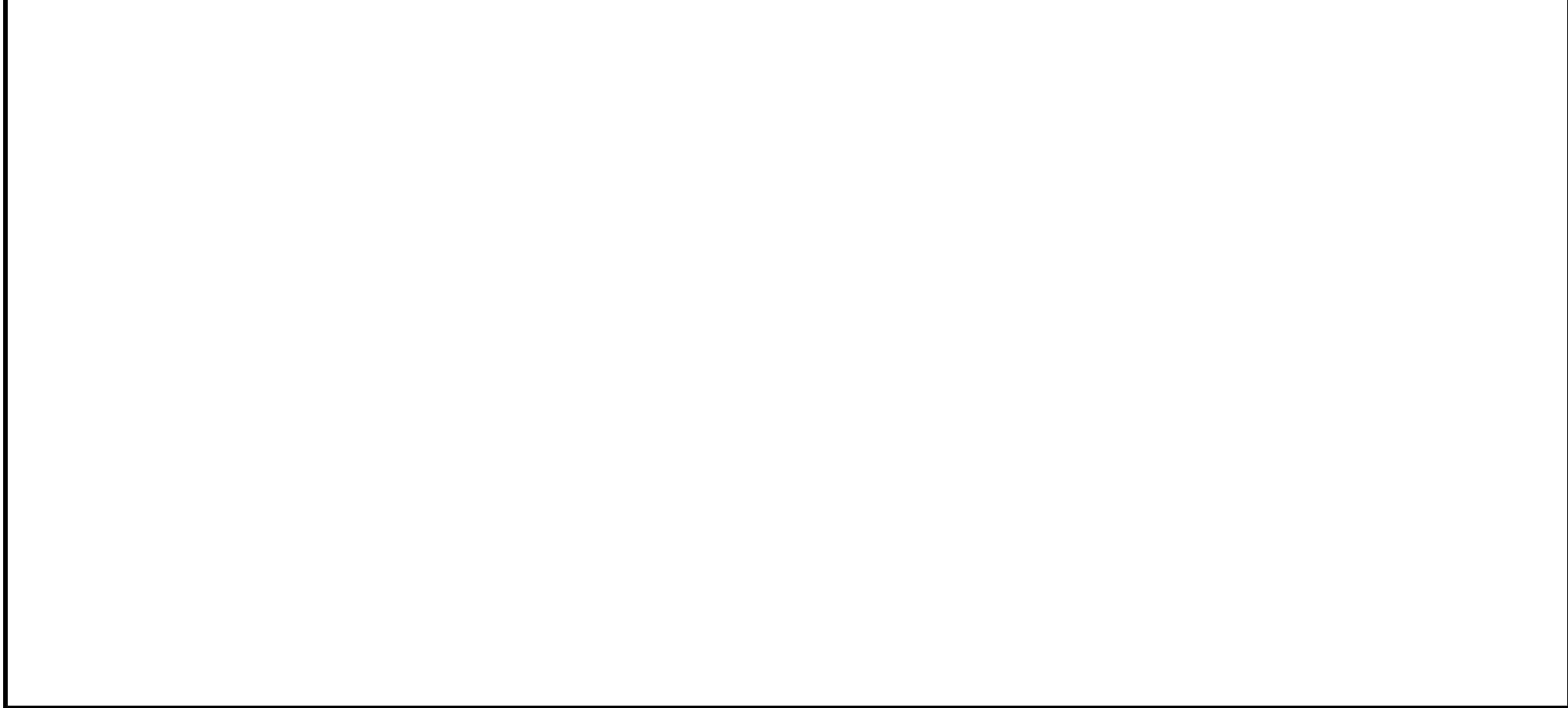
Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0														H													
30														E1													
60														E2													
90														Average													
120														H	dB												
150														E1	dB												
180														E2	dB												



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**





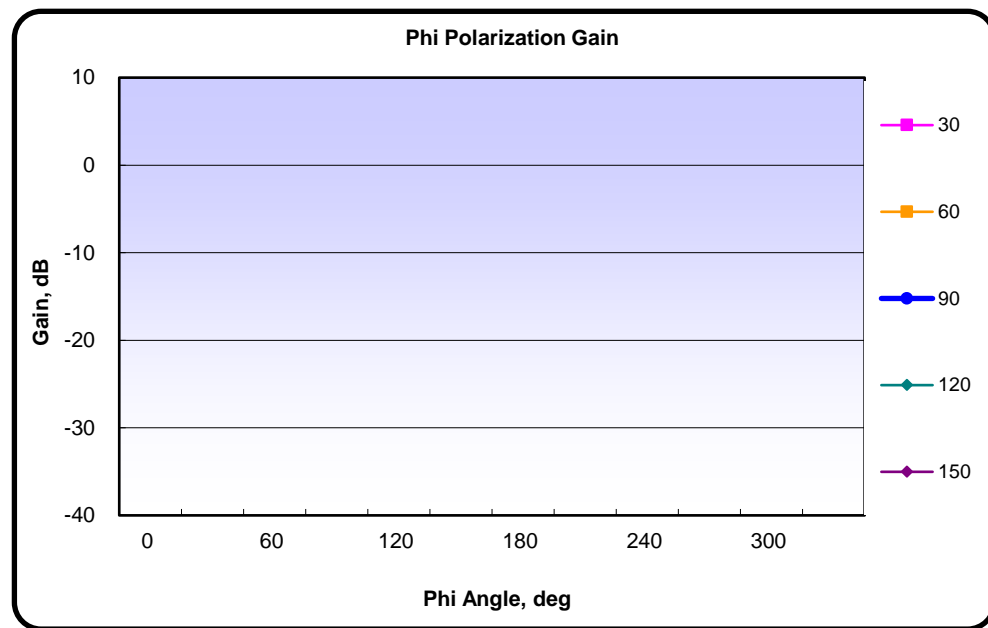
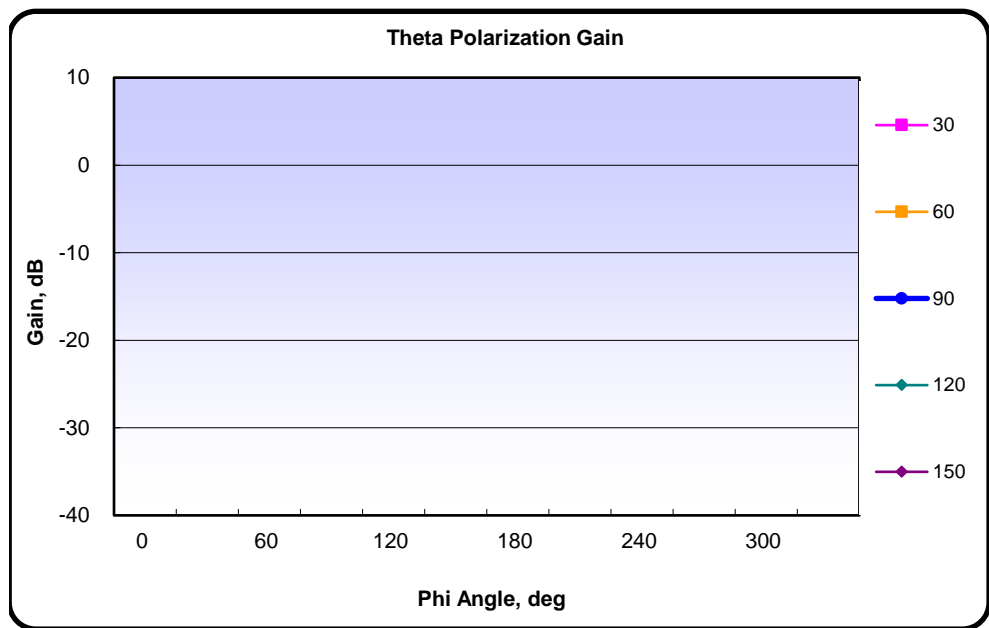
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



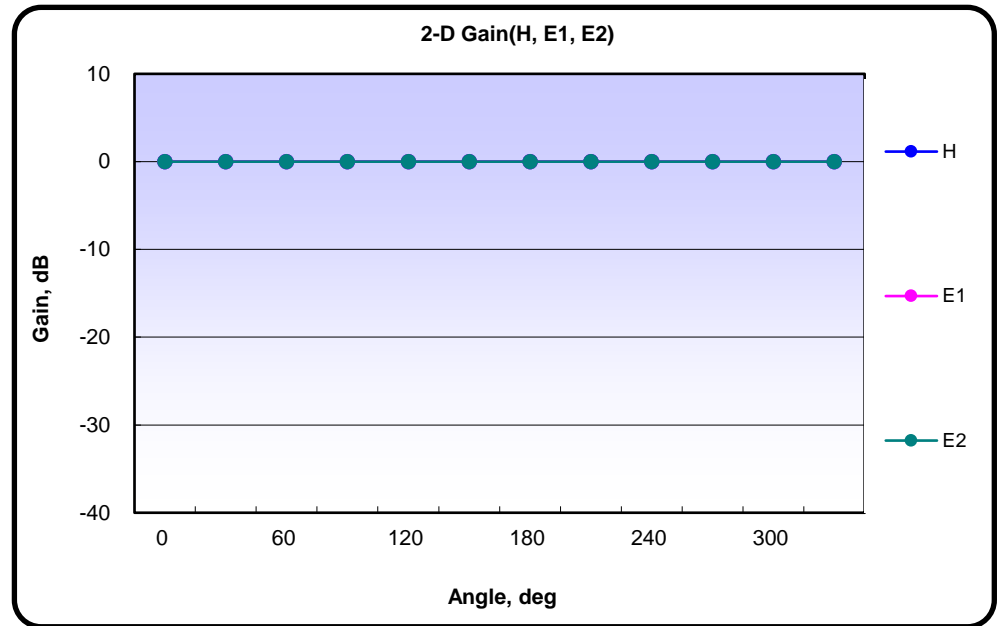
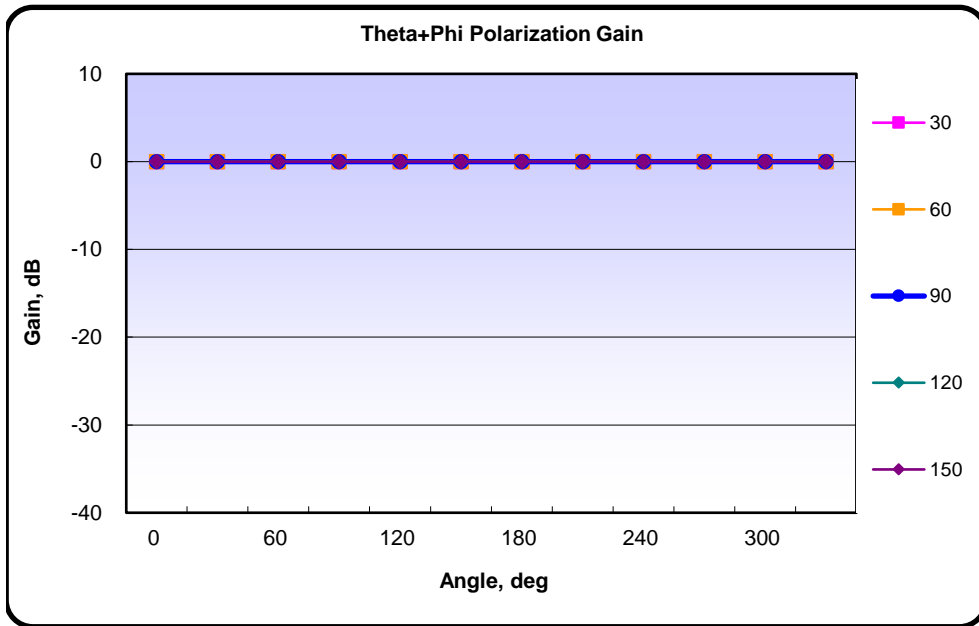
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg															
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330				
0														H															
30														E1															
60														E2															
90														Average															
120														H	dB														
150														E1	dB														
180														E2	dB														



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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Passive Performance

EUT	
Test Date	Wed 11/Oct/2023 10:08:46
Event Status	
Serial Number	
Hardware Version	

	1	2	3	4	5	6	7	8											
Frequency [MHz]	5955	6115	6275	6435	6595	6755	6915	7075											
Efficiency [dB]	-2.20	-6.37	-14.09	-12.18	-7.06	-6.17	-4.93	-4.68											
Efficiency [%]	60.3	23.1	3.9	6.0	19.7	24.2	32.1	34.0											
TRG <sub>θ</sub> [dB]	-5.50	-9.43	-16.02	-15.31	-10.36	-9.47	-8.18	-7.97											
Gain <sub>θ Peak</sub> [dB]	-3.15	-4.86	-8.10	-10.35	-8.75	-7.58	-6.15	-4.37											
Gain <sub>θ Min</sub> [dB]	-21.46	-25.42	-25.12	-30.35	-27.23	-20.59	-27.03	-24.51											
TRG <sub>φ</sub> [dB]	-4.94	-9.33	-18.54	-15.08	-9.79	-8.90	-7.71	-7.43											
Gain <sub>φ Peak</sub> [dB]	-4.63	-9.09	-6.47	-7.93	-6.62	-8.64	-7.43	-7.20											
Gain <sub>φ Min</sub> [dB]	-20.12	-19.38	-20.33	-15.56	-11.32	-14.63	-19.01	-21.45											
UHRG [dB]	-5.75	-9.57	-15.24	-14.77	-10.34	-9.66	-8.39	-8.12											
UHRG/TRG [%]	44.2	47.8	76.8	55.1	47.0	44.7	45.1	45.3											
H-Plane	-4.63	-9.09	-20.33	-15.56	-9.71	-8.64	-7.43	-7.20											
E1-Plane, AVG [dB]	-5.85	-9.07	-12.16	-12.53	-9.83	-9.43	-8.19	-7.66											
E2-Plane, AVG [dB]	-5.95	-10.05	-17.74	-16.41	-10.74	-10.08	-8.80	-8.70											
Peak Gain [dB]	-0.82	-3.47	-6.29	-7.91	-6.19	-5.07	-3.73	-2.55											
Directivity [dB]	1.38	2.90	7.80	4.28	0.86	1.10	1.20	2.13											
Minimum Gain [dB]	-12.43	-11.28	-19.09	-14.34	-10.46	-12.92	-12.62	-12.73											
Test Condition	FS																		
Antenna Type																			

Average Efficiency	-5.95 dB	25.41 %
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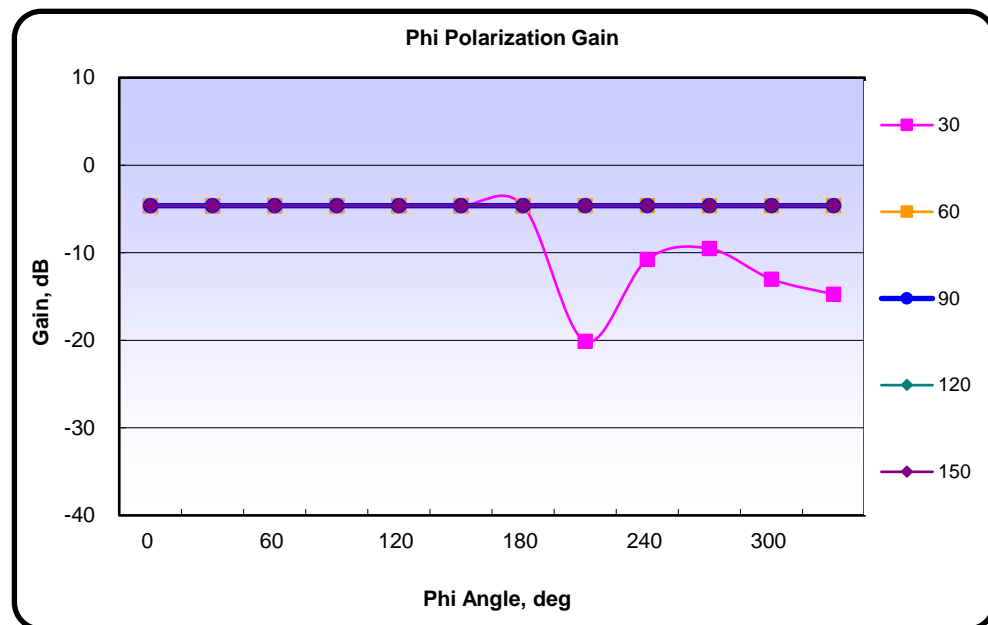
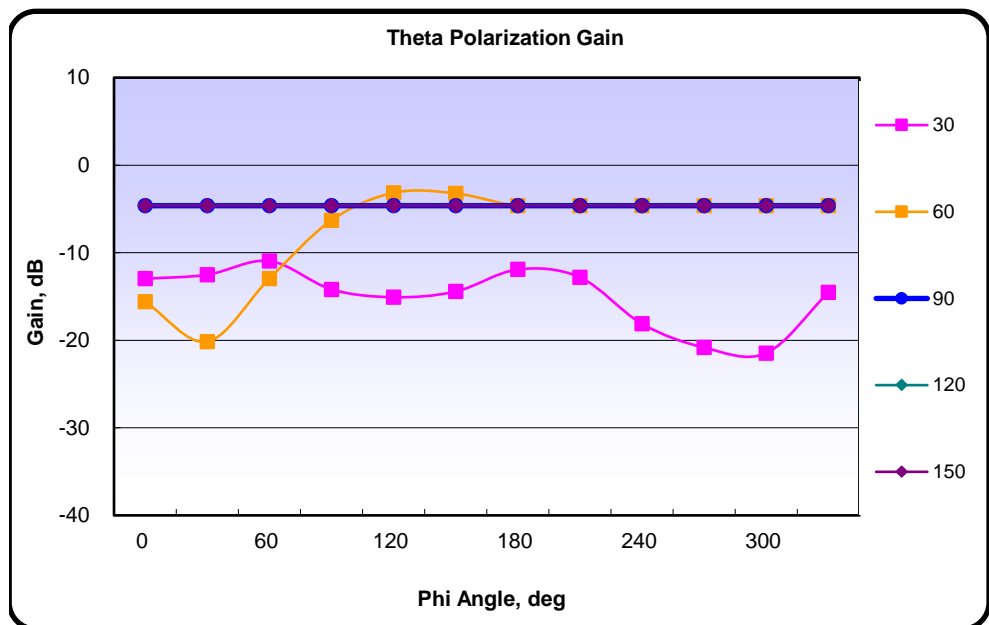
Comment

Gain(Theta-Polarization and Phi-Polarization)

5955MHz

EUT		Frequency	5955	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-6.45	-6.97	-10.77	-18.64	-11.68	-10.23	-6.53	-5.35	-7.77	-17.90	-14.99	-7.40	0	-19.11	-13.47	-9.05	-9.01	-8.32	-8.61	-20.54	-11.64	-5.72	-5.20	-9.24	-12.38
30	-12.97	-12.51	-10.94	-14.18	-15.08	-14.43	-11.91	-12.81	-18.12	-20.83	-21.46	-14.54	30	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-20.12	-10.77	-9.52	-13.01	-14.76
60	-15.59	-20.15	-12.96	-6.30	-3.15	-3.22	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	60	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63
90	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	90	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63
120	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	120	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63
150	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	150	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63
180	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	180	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63



<b>Total Gain and Efficiency</b>	<b>-2.200 dB</b>	<b>60.3 %</b>	Theta Pol	-5.5 dB	28.2 %	Phi Pol	-4.9 dB	32.08 %
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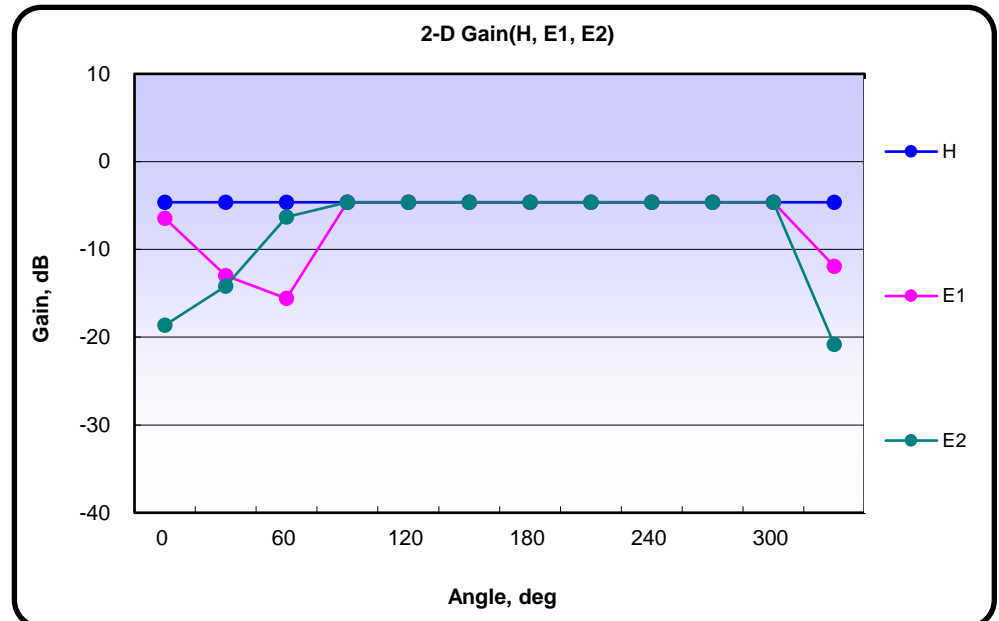
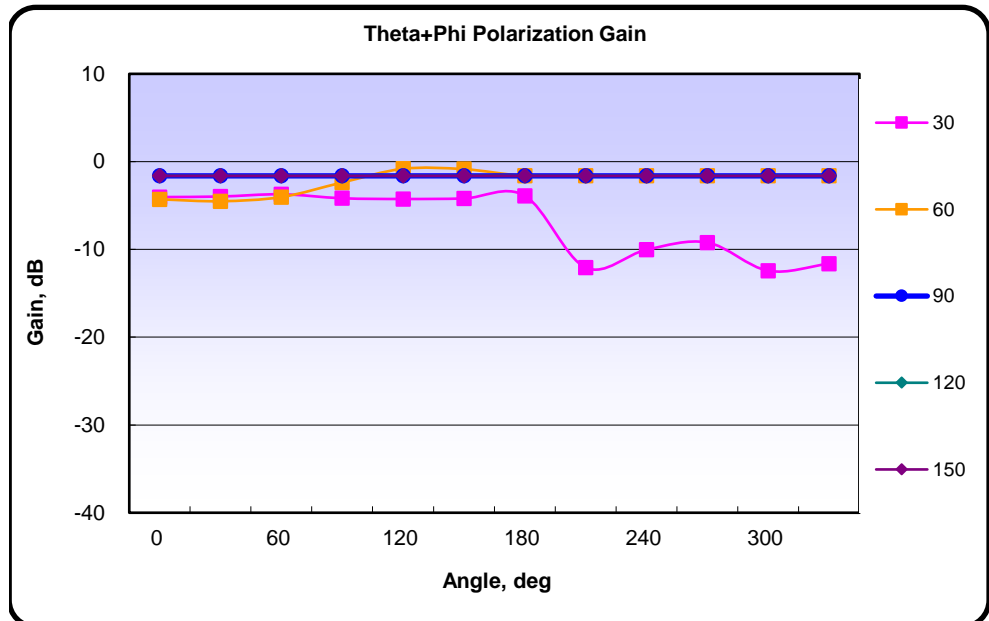
Gain(Theta-Polarization + Phi-Polarization)

Aplustech

5955MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-6.22	-6.09	-6.82	-8.56	-6.67	-6.33	-6.36	-4.43	-3.61	-4.97	-8.22	-6.20	H	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63		
30	-4.04	-3.97	-3.72	-4.17	-4.26	-4.20	-3.89	-12.07	-10.04	-9.21	-12.43	-11.64	E1	-6.45	-12.97	-15.59	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-11.91	
60	-4.30	-4.51	-4.03	-2.37	-0.82	-0.86	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	E2	-18.64	-14.18	-6.30	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-4.63	-20.83	
90	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	Average													
120	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	H	-4.63 dB												
150	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	E1	-5.85 dB												
180	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	-1.62	E2	-5.95 dB												



<b>Total Gain and Efficiency</b>	<b>-2.200 dB</b>	<b>60.3 %</b>	Theta Pol	-5.5 dB	28.2 %	Phi Pol	-4.9 dB	32.08 %
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**Total Radiated Gain(3-D Plots)**

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5955MHz



<b>Maximum Gain</b>	Gain	-0.82 dB,	$\theta = 60$ deg,	$\varphi = 120$ deg	<b>Minimum Gain</b>	Gain	-12.43 dB,	$\theta = 30$ deg,	$\varphi = 300$ deg
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<b>Total Gain and Efficiency</b>	<b>-2.200 dB</b>	<b>60.3 %</b>	Theta Pol	-5.5 dB	28.2 %	Phi Pol	-4.9 dB	32.08 %
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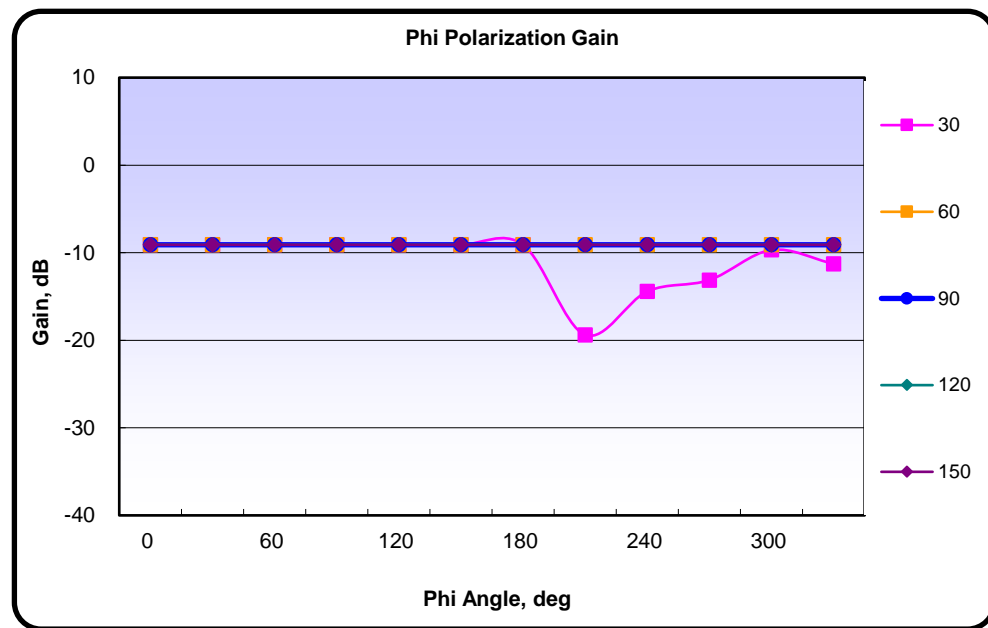
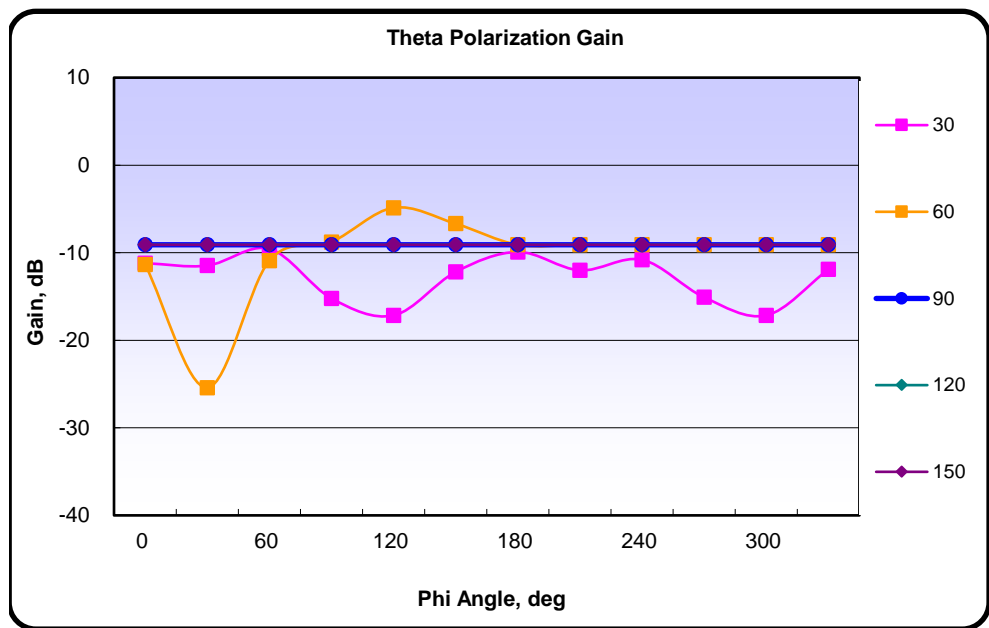


Gain(Theta-Polarization and Phi-Polarization)

6115MHz

EUT		Frequency	6115	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-6.07	-6.51	-10.10	-22.15	-14.21	-11.29	-6.64	-5.35	-8.61	-25.93	-14.74	-7.70	0	-27.79	-14.41	-8.83	-8.64	-7.68	-8.82	-21.80	-12.65	-6.40	-5.93	-9.07	-12.29
30	-11.19	-11.47	-9.55	-15.21	-17.16	-12.19	-9.91	-12.01	-10.80	-15.09	-17.15	-11.91	30	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-19.38	-14.42	-13.12	-9.68	-11.27
60	-11.34	-25.42	-10.92	-8.77	-4.86	-6.68	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	60	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09
90	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	90	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09
120	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	120	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09
150	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	150	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09
180	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	180	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09



<b>Total Gain and Efficiency</b>	<b>-6.367 dB</b>	<b>23.1 %</b>	Theta Pol	-9.4 dB	11.4 %	Phi Pol	-9.3 dB	11.68 %
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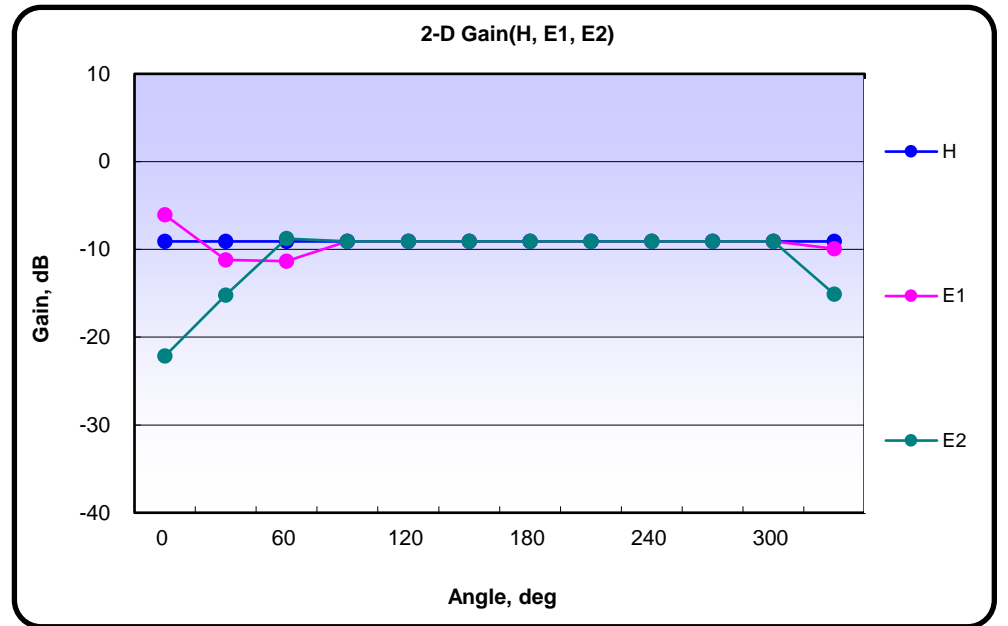
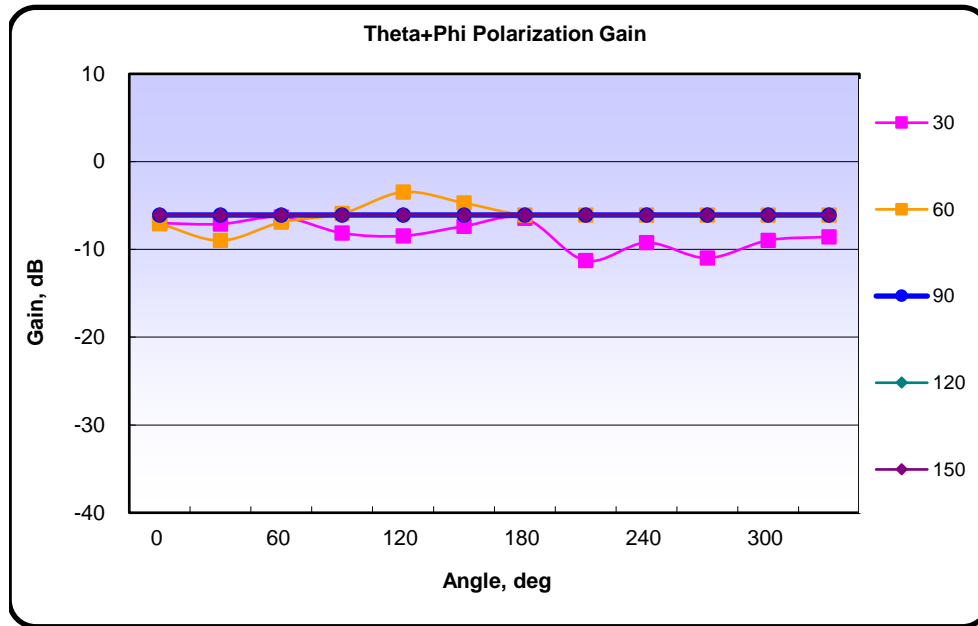
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Gain(Theta-Polarization + Phi-Polarization)

6115MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0	-6.04	-5.86	-6.41	-8.45	-6.81	-6.87	-6.51	-4.61	-4.36	-5.89	-8.03	-6.40	H	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09		
30	-7.00	-7.11	-6.30	-8.14	-8.46	-7.36	-6.47	<b>-11.28</b>	-9.23	-10.98	-8.96	-8.57	E1	-6.07	-11.19	-11.34	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.91		
60	-7.06	-8.99	-6.90	-5.92	<b>-3.47</b>	-4.71	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	E2	-22.15	-15.21	-8.77	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-9.09	-15.09		
90	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	Average														
120	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	H	<b>-9.09</b> dB													
150	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	E1	<b>-9.07</b> dB													
180	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	-6.08	E2	<b>-10.05</b> dB													



<b>Total Gain and Efficiency</b>	<b>-6.367 dB</b>	<b>23.1 %</b>	Theta Pol	-9.4 dB	11.4 %	Phi Pol	-9.3 dB	11.68 %
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**Total Radiated Gain(3-D Plots)**

*Aplustech*  
6115MHz



<b>Maximum Gain</b>	Gain	-3.47 dB,	$\theta = 60$ deg,	$\varphi = 120$ deg	<b>Minimum Gain</b>	Gain	-11.28 dB,	$\theta = 30$ deg,	$\varphi = 210$ deg
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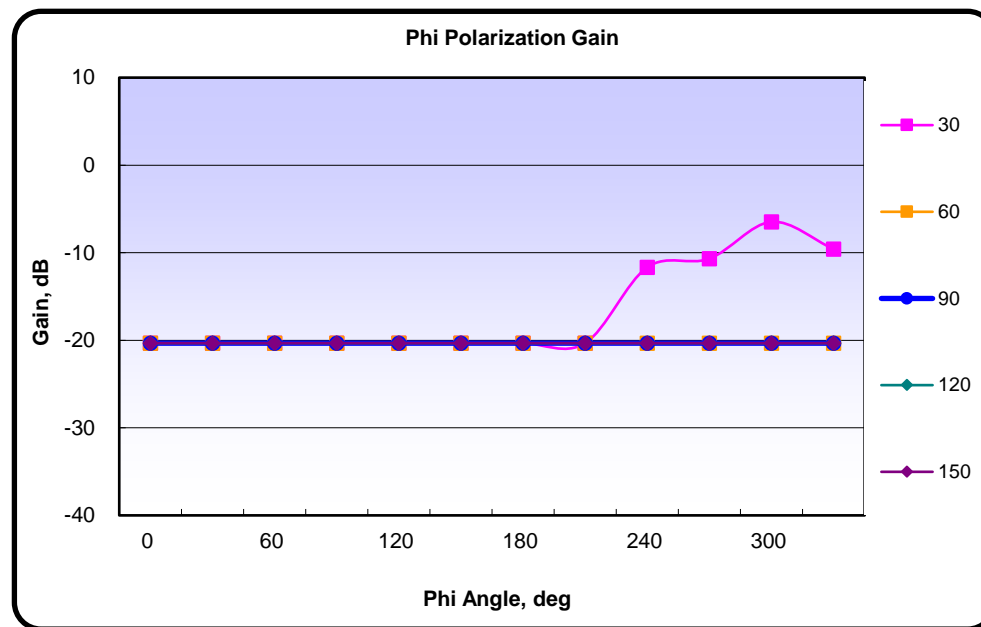
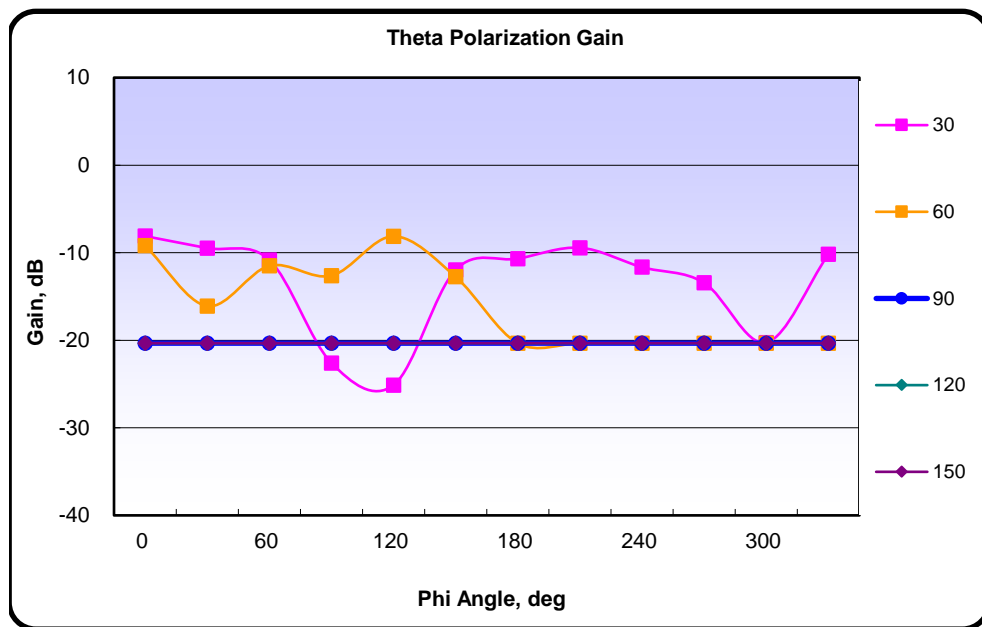
<b>Total Gain and Efficiency</b>	<b>-6.367 dB</b>	<b>23.1 %</b>	Theta Pol	-9.4 dB	11.4 %	Phi Pol	-9.3 dB	11.68 %
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Gain(Theta-Polarization and Phi-Polarization)

6275MHz

EUT		Frequency	6275	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-5.30	-5.50	-8.46	-16.57	-14.82	-11.96	-5.11	-4.84	-7.35	-18.03	-14.25	-7.14	0	-19.00	-14.83	-7.58	-6.12	-5.33	-8.47	-18.88	-14.55	-7.05	-6.58	-7.24	-8.98
30	-8.10	-9.47	-10.82	-22.59	-25.12	-11.95	-10.68	-9.43	-11.65	-13.43	-20.26	-10.19	30	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-11.66	-10.68	-6.47	-9.58
60	-9.18	-16.09	-11.49	-12.62	-8.12	-12.75	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	60	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33
90	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	90	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33
120	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	120	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33
150	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	150	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33
180	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	180	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33



<b>Total Gain and Efficiency</b>	<b>-14.090 dB</b>	<b>3.9 %</b>	Theta Pol	-16.0 dB	2.5 %	Phi Pol	-18.5 dB	1.40 %
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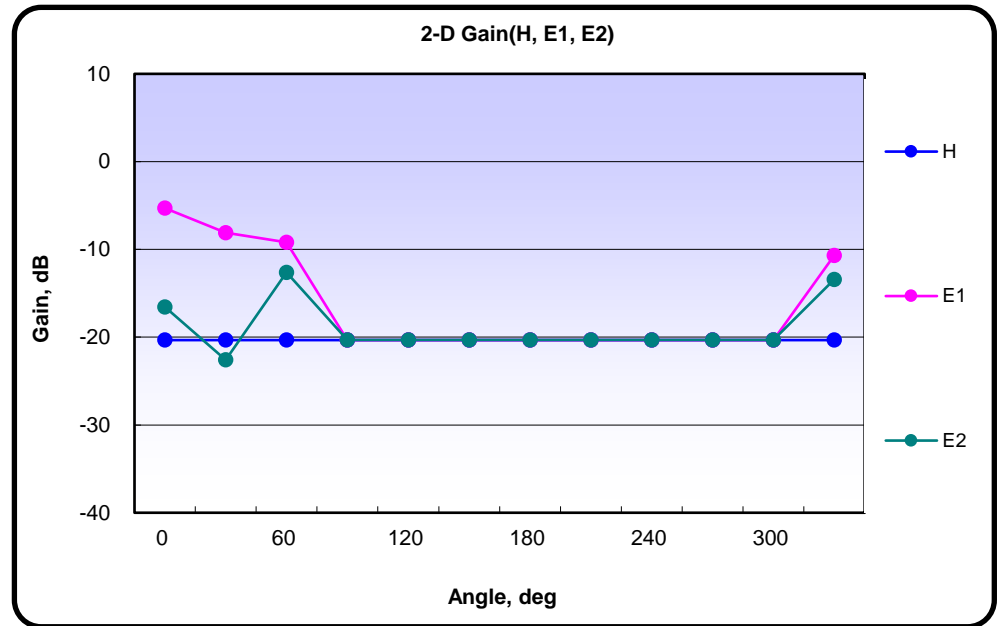
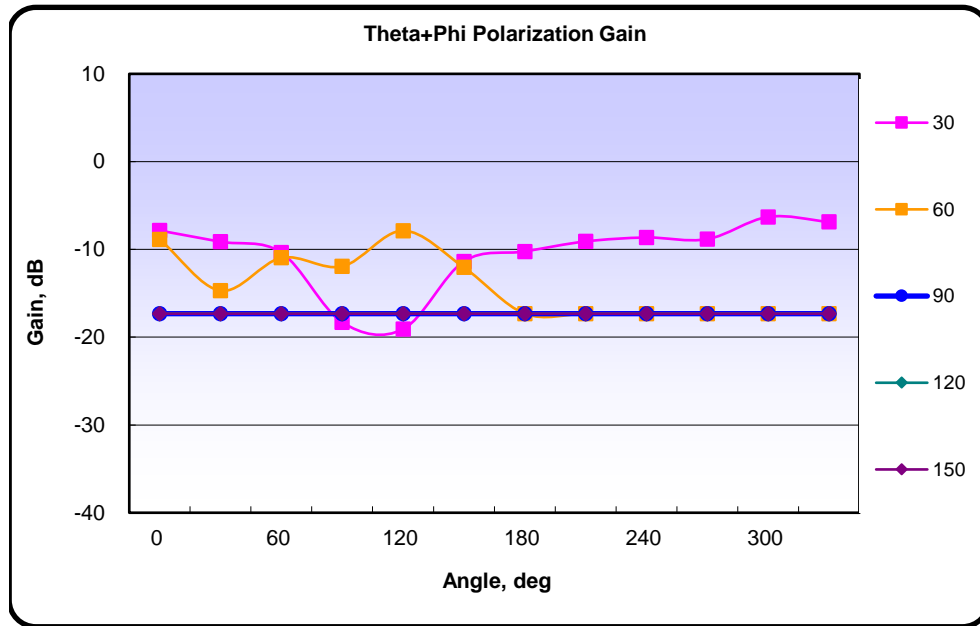
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6275MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-5.12	-5.02	-4.99	-5.75	-4.87	-6.86	-4.93	-4.40	-4.19	-6.28	-6.45	-4.95	H	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	
30	-7.85	-9.13	-10.36	-18.30	<b>-19.09</b>	-11.36	-10.23	-9.09	-8.64	-8.83	<b>-6.29</b>	-6.86	E1	-5.30	-8.10	-9.18	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-10.68	
60	-8.86	-14.70	-10.96	-11.94	-7.87	-12.05	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	E2	-16.57	-22.59	-12.62	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-20.33	-13.43	
90	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	Average													
120	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32													H	<b>-20.33</b> dB
150	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32													E1	<b>-12.16</b> dB
180	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32	-17.32													E2	<b>-17.74</b> dB



<b>Total Gain and Efficiency</b>	<b>-14.090 dB</b>	<b>3.9 %</b>	Theta Pol	-16.0 dB	2.5 %	Phi Pol	-18.5 dB	1.40 %
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**Total Radiated Gain(3-D Plots)**

*Aplustech*  
6275MHz

<b>Maximum Gain</b>	Gain	-6.29 dB,	$\theta = 30$ deg,	$\varphi = 300$ deg	<b>Minimum Gain</b>	Gain	-19.09 dB,	$\theta = 30$ deg,	$\varphi = 120$ deg
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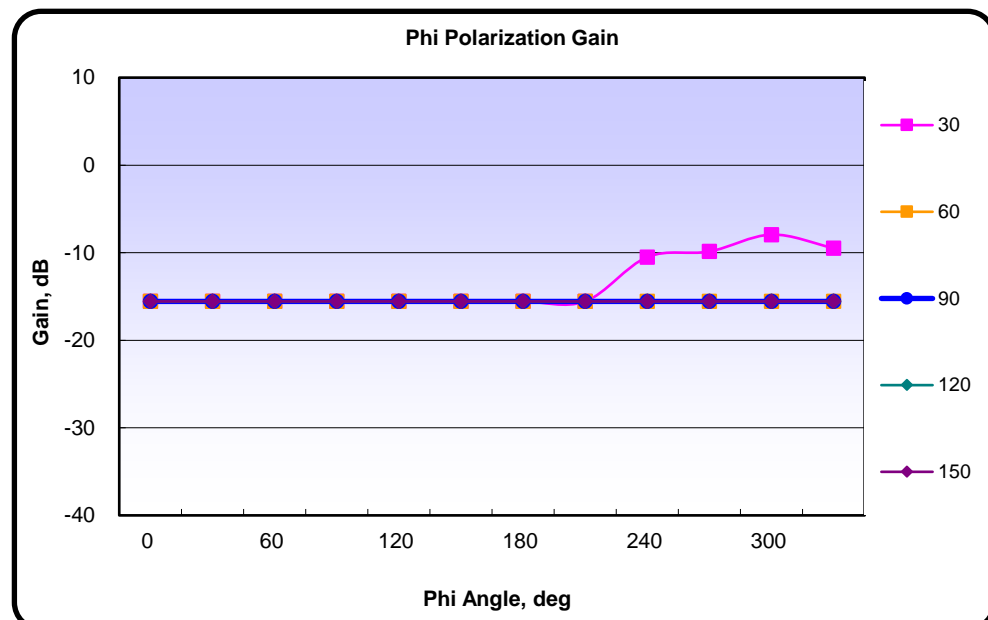
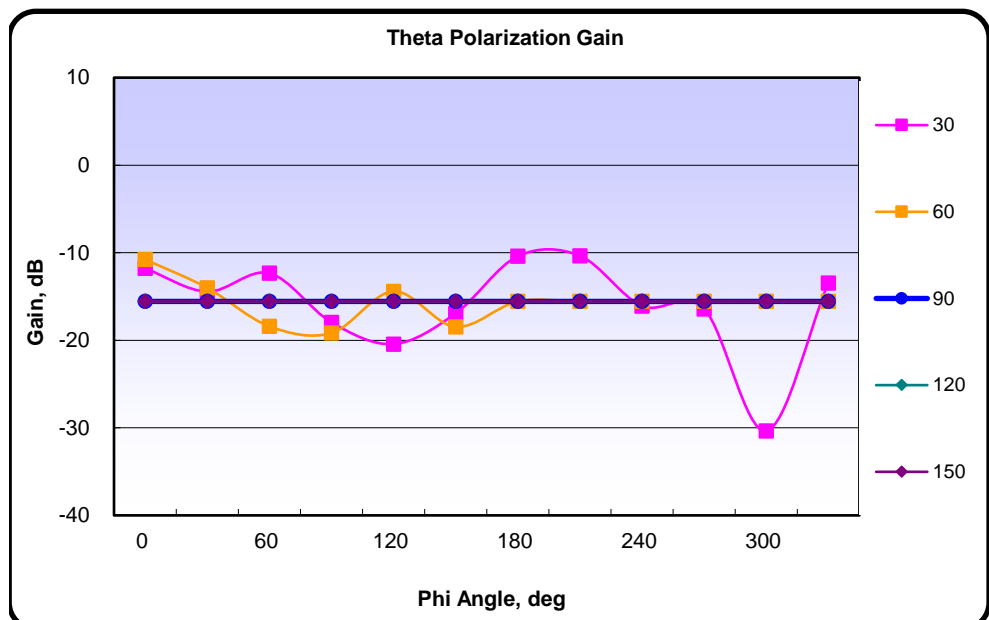
<b>Total Gain and Efficiency</b>	<b>-14.090 dB</b>	<b>3.9 %</b>	Theta Pol	-16.0 dB	2.5 %	Phi Pol	-18.5 dB	1.40 %
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Gain(Theta-Polarization and Phi-Polarization)

6435MHz

EUT		Frequency	6435	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-6.86	-7.72	-11.97	-31.55	-13.68	-12.40	-7.06	-7.82	-11.33	-30.58	-13.46	-8.33	0	-21.70	-15.74	-9.05	-7.45	-7.94	-13.84	-29.19	-12.99	-8.07	-7.50	-7.85	-10.80
30	-11.78	-14.44	-12.33	-17.95	-20.43	-16.93	-10.40	-10.35	-16.08	-16.42	-30.35	-13.45	30	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-10.49	-9.86	-7.93	-9.47
60	-10.76	-14.01	-18.40	-19.18	-14.41	-18.46	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	60	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56
90	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	90	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56
120	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	120	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56
150	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	150	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56
180	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	180	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56



<b>Total Gain and Efficiency</b>	<b>-12.185 dB</b>	<b>6.0 %</b>	Theta Pol	-15.3 dB	2.9 %	Phi Pol	-15.1 dB	3.10 %
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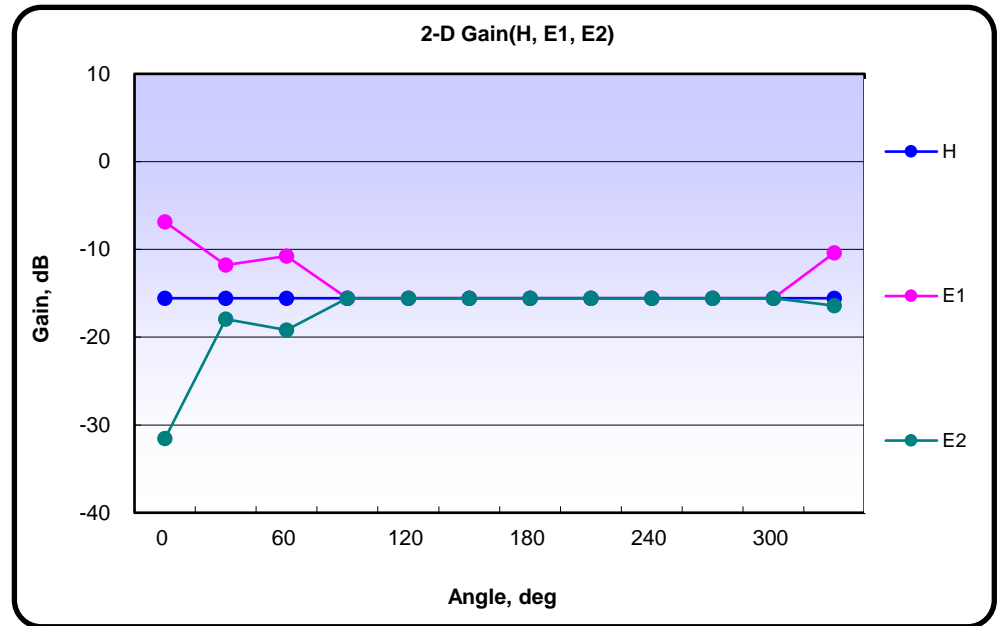
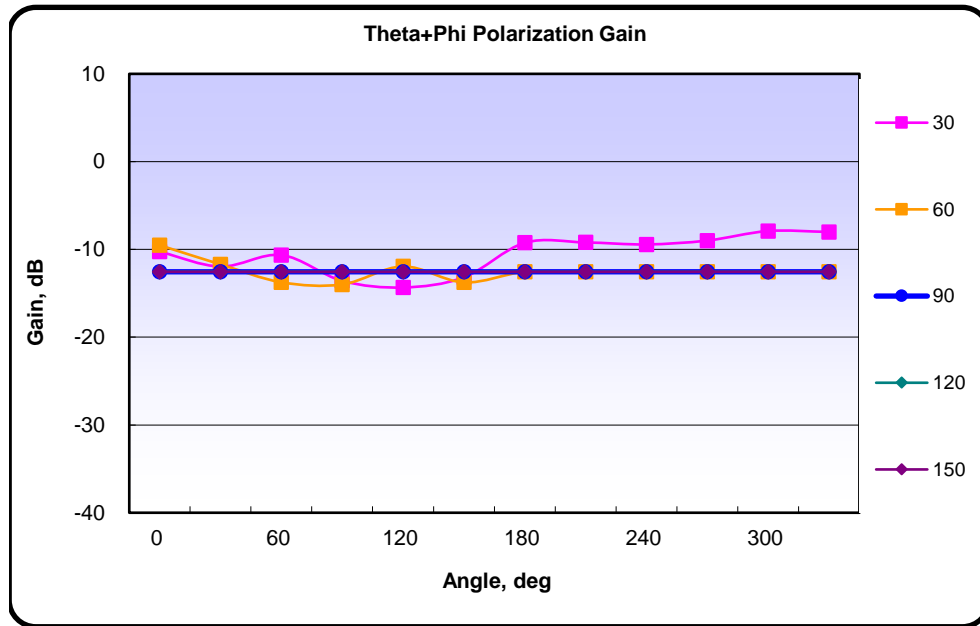
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6435MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0	-6.72	-7.08	-7.26	-7.43	-6.91	-10.05	-7.03	-6.67	-6.39	-7.48	-6.80	-6.38	H	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56		
30	-10.26	-11.95	-10.64	-13.58	<b>-14.34</b>	-13.18	-9.24	-9.21	-9.43	-8.99	<b>-7.91</b>	-8.01	E1	-6.86	-11.78	-10.76	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-10.40		
60	-9.52	-11.71	-13.74	-13.99	-11.94	-13.76	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	E2	-31.55	-17.95	-19.18	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-15.56	-16.42		
90	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	Average														
120	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55															
150	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55													H	-15.56	dB
180	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55	-12.55													E1	-12.53	dB
													E2	-16.41	dB												



<b>Total Gain and Efficiency</b>	<b>-12.185 dB</b>	<b>6.0 %</b>	Theta Pol	-15.3 dB	2.9 %	Phi Pol	-15.1 dB	3.10 %
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**Total Radiated Gain(3-D Plots)**

*Aplustech*  
6435MHz





<b>Maximum Gain</b>	Gain	-7.91 dB,	$\theta = 30$ deg,	$\varphi = 300$ deg	<b>Minimum Gain</b>	Gain	-14.34 dB,	$\theta = 30$ deg,	$\varphi = 120$ deg
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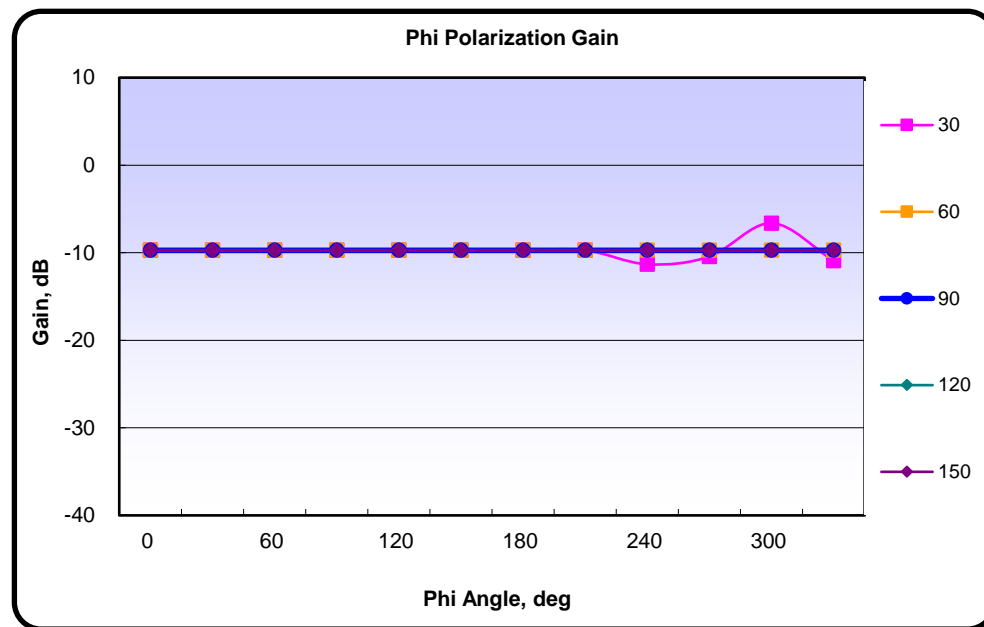
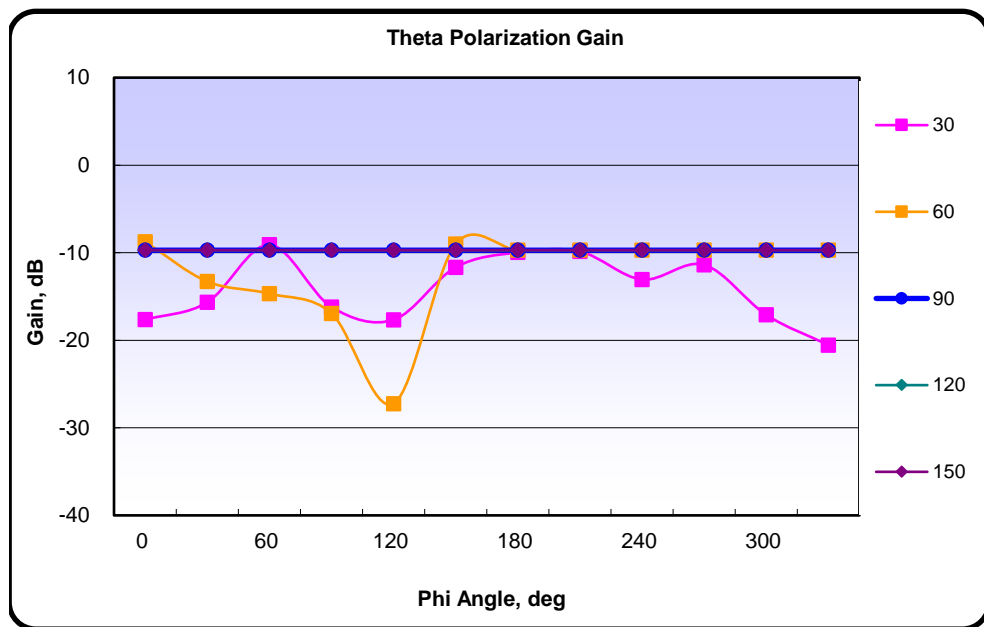
<b>Total Gain and Efficiency</b>	<b>-12.185 dB</b>	<b>6.0 %</b>	Theta Pol	-15.3 dB	2.9 %	Phi Pol	-15.1 dB	3.10 %
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Gain(Theta-Polarization and Phi-Polarization)

6595MHz

EUT		Frequency	6595	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-8.50	-8.71	-11.09	-13.93	-14.87	-15.36	-8.34	-8.89	-9.94	-13.02	-15.54	-11.03	0	-11.64	-11.09	-9.91	-10.11	-10.87	-10.14	-16.60	-22.64	-13.37	-12.57	-6.91	-9.11
30	-17.65	-15.67	-9.09	-16.19	-17.66	-11.66	-9.96	-9.85	-13.06	-11.38	-17.09	-20.54	30	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-11.32	-10.44	-6.62	-10.91
60	-8.75	-13.28	-14.67	-16.92	-27.23	-9.02	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	60	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71
90	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	90	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71
120	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	120	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71
150	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	150	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71
180	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	180	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71



<b>Total Gain and Efficiency</b>	<b>-7.057 dB</b>	<b>19.7 %</b>	Theta Pol	-10.4 dB	9.2 %	Phi Pol	-9.8 dB	10.48 %
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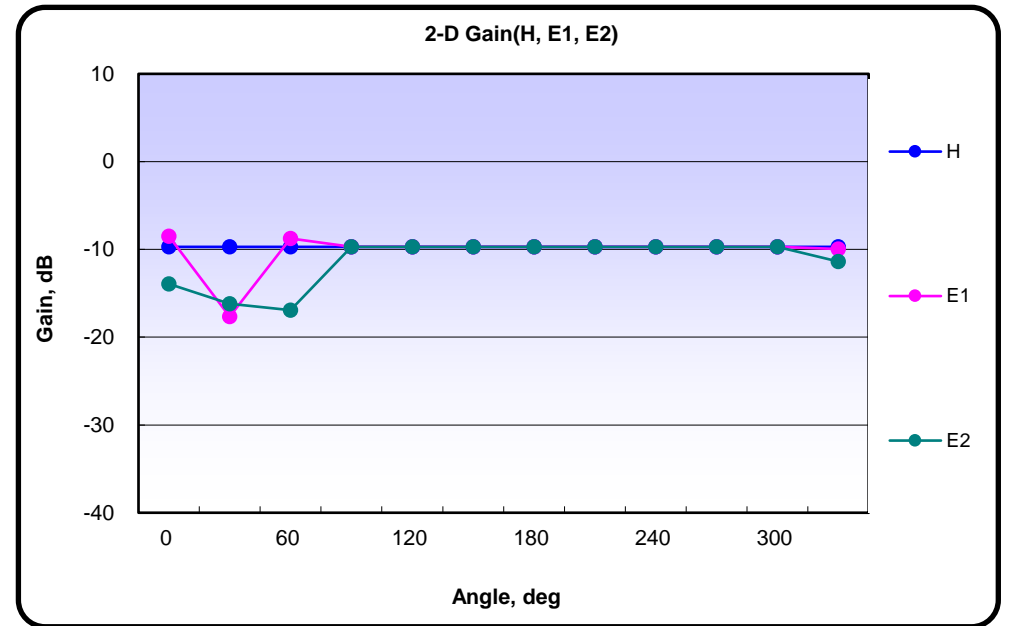
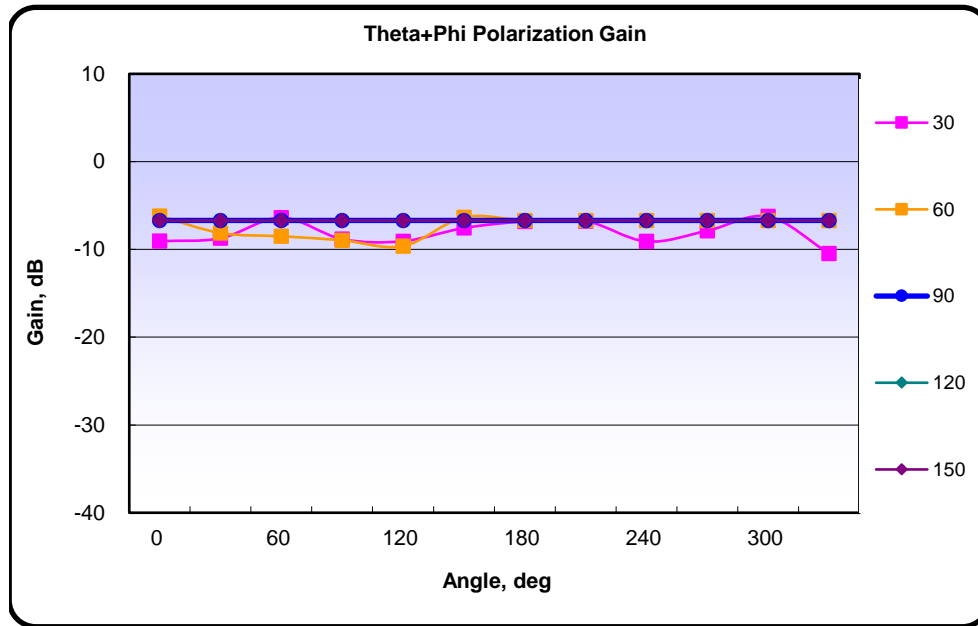
Gain(Theta-Polarization + Phi-Polarization)

Aplustech

6595MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-6.78	-6.73	-7.45	-8.60	-9.41	-9.00	-7.74	-8.71	-8.31	-9.78	-6.35	-6.95	H	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	
30	-9.06	-8.73	-6.38	-8.83	-9.06	-7.57	-6.82	-6.77	-9.09	-7.87	-6.25	<b>-10.46</b>	E1	-8.50	-17.65	-8.75	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.96	
60	<b>-6.19</b>	-8.13	-8.51	-8.95	-9.63	-6.34	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	E2	-13.93	-16.19	-16.92	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-9.71	-11.38	
90	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	Average													
120	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	H	<b>-9.71</b> dB												
150	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	E1	<b>-9.83</b> dB												
180	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	E2	<b>-10.74</b> dB												



<b>Total Gain and Efficiency</b>	<b>-7.057 dB</b>	<b>19.7 %</b>	Theta Pol	-10.4 dB	9.2 %	Phi Pol	-9.8 dB	10.48 %
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**Total Radiated Gain(3-D Plots)**

*Aplustech*  
6595MHz



<b>Maximum Gain</b>	Gain	-6.19 dB,	$\theta = 60$ deg,	$\varphi = 0$ deg	<b>Minimum Gain</b>	Gain	-10.46 dB,	$\theta = 30$ deg,	$\varphi = 330$ deg
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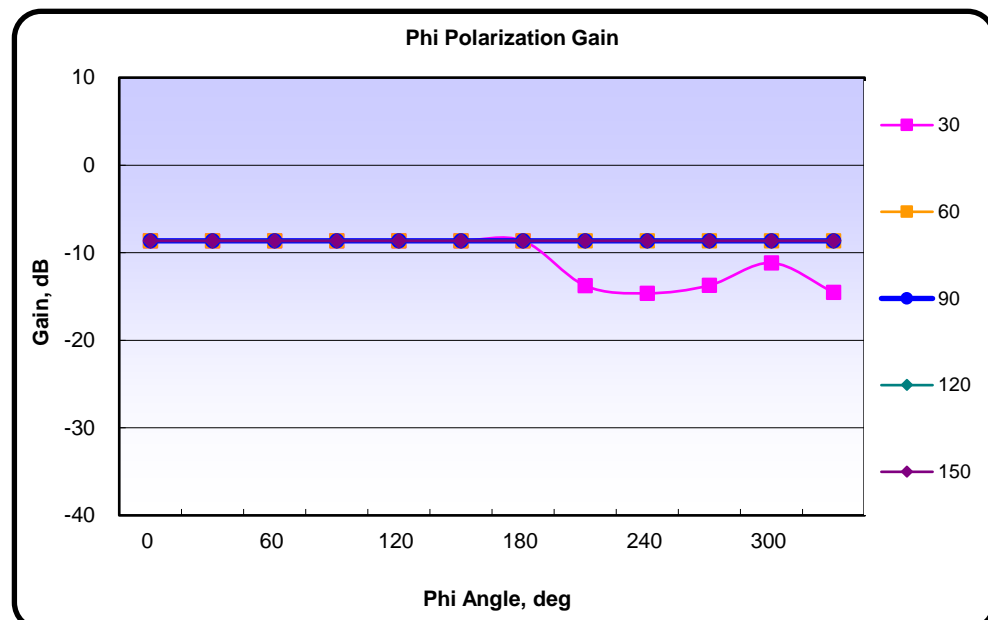
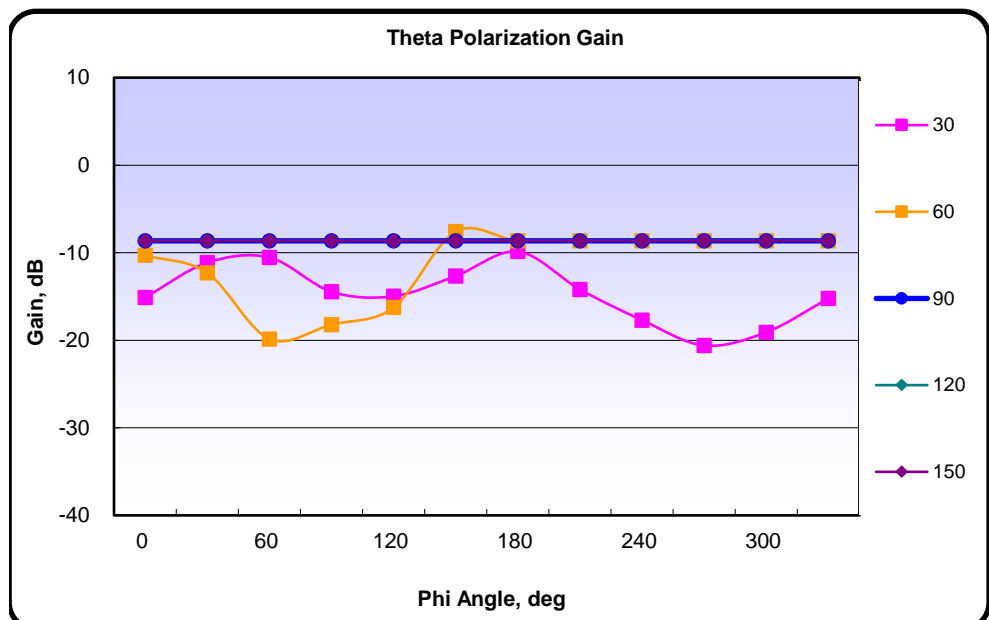
<b>Total Gain and Efficiency</b>	<b>-7.057 dB</b>	<b>19.7 %</b>	Theta Pol	-10.4 dB	9.2 %	Phi Pol	-9.8 dB	10.48 %
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Gain(Theta-Polarization and Phi-Polarization)

6755MHz

EUT		Frequency	6755	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-13.21	-15.41	-17.40	-16.36	-14.12	-14.18	-15.48	-16.22	-15.22	-17.17	-17.27	-14.00	0	-16.13	-13.71	-13.10	-14.73	-19.20	-14.72	-16.12	-18.32	-16.07	-15.80	-13.04	-17.19
30	-15.12	-11.14	-10.54	-14.45	-14.97	-12.66	-9.86	-14.19	-17.69	-20.59	-19.08	-15.23	30	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-13.76	-14.63	-13.73	-11.16	-14.53
60	-10.30	-12.29	-19.85	-18.21	-16.26	-7.58	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	60	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64
90	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	90	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64
120	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	120	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64
150	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	150	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64
180	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	180	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64



<b>Total Gain and Efficiency</b>	<b>-6.166 dB</b>	<b>24.2 %</b>	Theta Pol	-9.5 dB	11.3 %	Phi Pol	-8.9 dB	12.87 %
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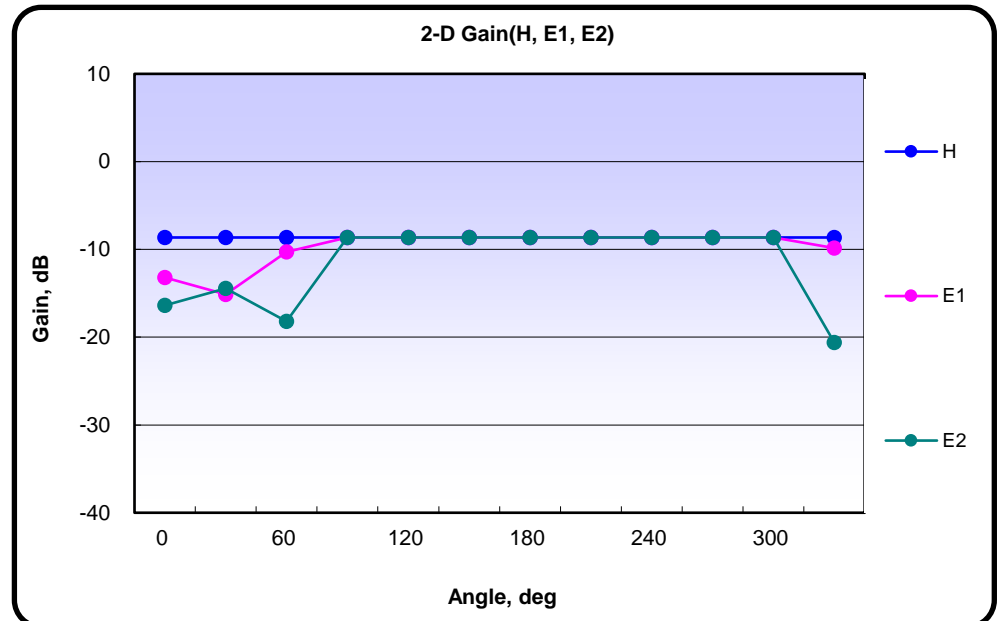
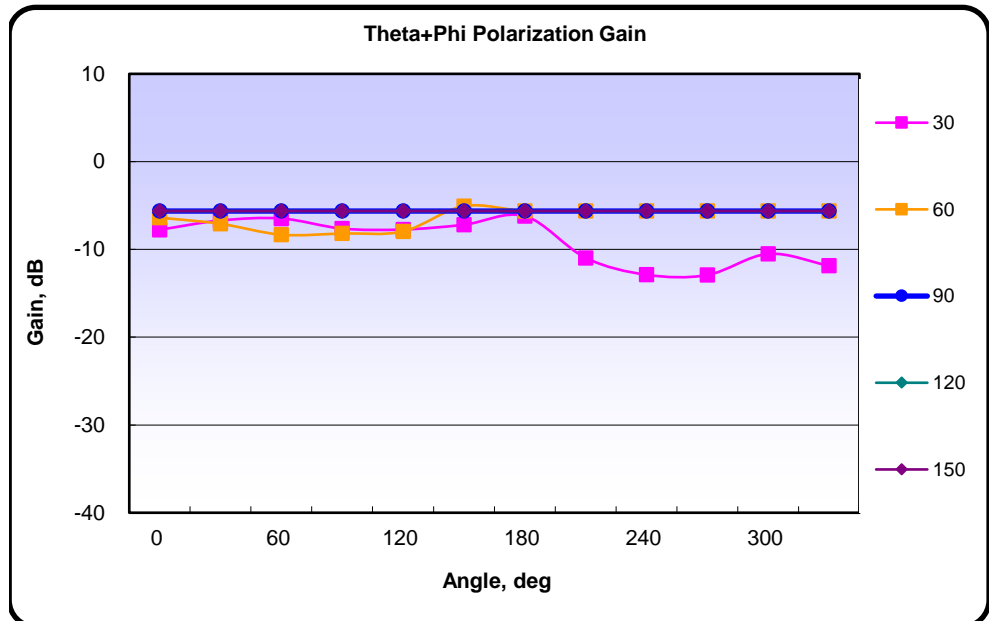
Aplustech

Gain(Theta-Polarization + Phi-Polarization)

6755MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg														
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330			
0	-11.42	-11.47	-11.73	-12.46	-12.95	-11.43	-12.78	-14.13	-12.61	-13.42	-11.65	-12.30	H	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64			
30	-7.76	-6.70	-6.48	-7.63	-7.73	-7.19	-6.20	-10.96	-12.89	-12.92	-10.51	-11.86	E1	-13.21	-15.12	-10.30	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-9.86			
60	-6.38	-7.08	-8.32	-8.19	-7.95	-5.07	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	E2	-16.36	-14.45	-18.21	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-8.64	-20.59			
90	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	Average															
120	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	H	-8.64 dB														
150	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	E1	-9.43 dB														
180	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	-5.63	E2	-10.08 dB														



<b>Total Gain and Efficiency</b>	<b>-6.166 dB</b>	<b>24.2 %</b>	Theta Pol	-9.5 dB	11.3 %	Phi Pol	-8.9 dB	12.87 %
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**Total Radiated Gain(3-D Plots)**

*Aplustech*  
6755MHz



<b>Maximum Gain</b>	Gain	-5.07 dB,	$\theta = 60$ deg,	$\varphi = 150$ deg	<b>Minimum Gain</b>	Gain	-12.92 dB,	$\theta = 30$ deg,	$\varphi = 270$ deg
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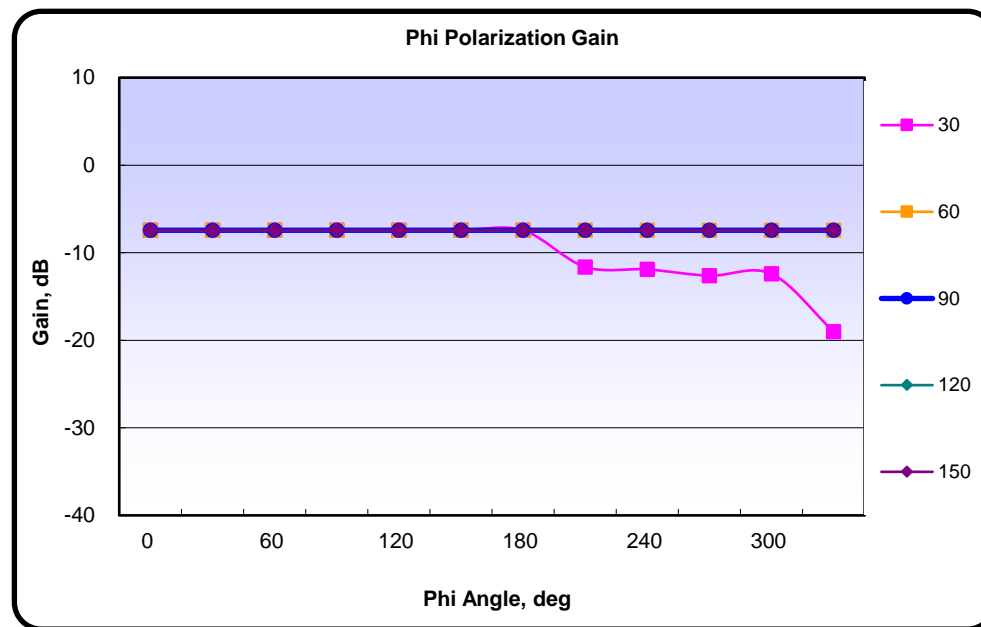
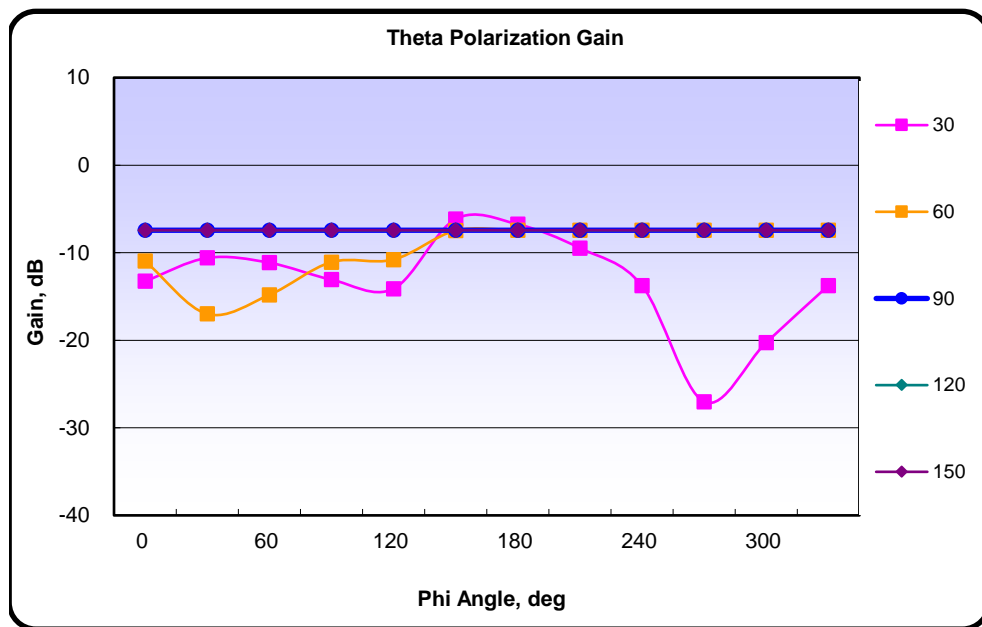
<b>Total Gain and Efficiency</b>	<b>-6.166 dB</b>	<b>24.2 %</b>	Theta Pol	-9.5 dB	11.3 %	Phi Pol	-8.9 dB	12.87 %
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Gain(Theta-Polarization and Phi-Polarization)

6915MHz

EUT		Frequency	6915	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-14.27	-16.58	-26.50	-22.20	-15.25	-14.43	-14.52	-16.83	-21.07	-18.81	-13.73	-12.60	0	-21.47	-14.53	-11.82	-11.72	-14.86	-29.48	-17.51	-13.65	-12.91	-13.04	-17.91	-24.63
30	-13.25	-10.59	-11.14	-13.07	-14.11	-6.15	-6.75	-9.47	-13.76	-27.03	-20.25	-13.75	30	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-11.62	-11.90	-12.62	-12.41	-19.01
60	-10.95	-16.99	-14.82	-11.07	-10.78	-7.47	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	60	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43
90	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	90	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43
120	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	120	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43
150	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	150	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43
180	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	180	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43



<b>Total Gain and Efficiency</b>	<b>-4.929 dB</b>	<b>32.1 %</b>	Theta Pol	-8.2 dB	15.2 %	Phi Pol	-7.7 dB	16.95 %
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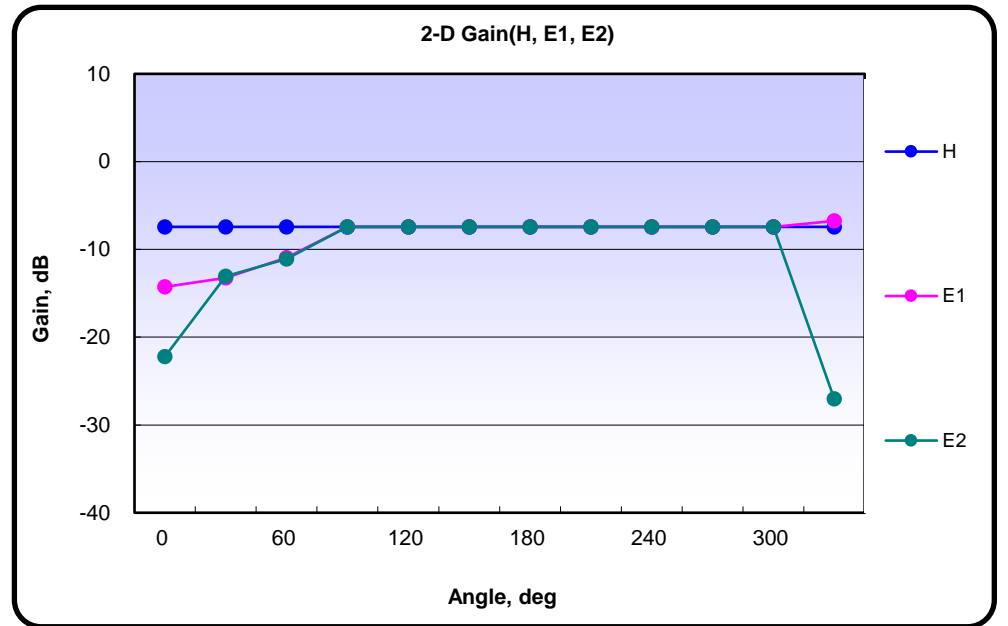
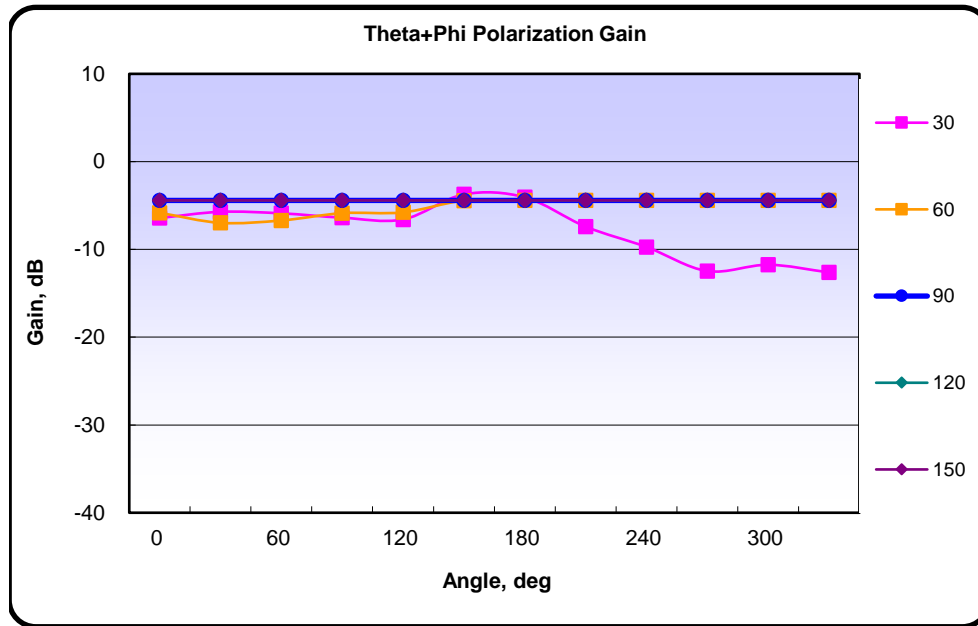
Gain(Theta-Polarization + Phi-Polarization)

6915MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0	-13.51	-12.42	-11.67	-11.35	-12.04	-14.30	-12.75	-11.94	-12.29	-12.02	-12.33	-12.34	H	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43
30	-6.42	-5.72	-5.89	-6.38	-6.59	-3.73	-4.07	-7.40	-9.72	-12.47	-11.75	-12.62	E1	-14.27	-13.25	-10.95	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-6.75
60	-5.83	-6.97	-6.70	-5.87	-5.78	-4.44	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	E2	-22.20	-13.07	-11.07	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-7.43	-27.03
90	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	Average												
120	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	H	-7.43 dB											
150	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	E1	-8.19 dB											
180	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	-4.42	E2	-8.80 dB											



<b>Total Gain and Efficiency</b>	<b>-4.929 dB</b>	<b>32.1 %</b>	Theta Pol	-8.2 dB	15.2 %	Phi Pol	-7.7 dB	16.95 %
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**Total Radiated Gain(3-D Plots)**

<b>Maximum Gain</b>	Gain	-3.73 dB,	$\theta = 30$ deg,	$\varphi = 150$ deg	<b>Minimum Gain</b>	Gain	-12.62 dB,	$\theta = 30$ deg,	$\varphi = 330$ deg
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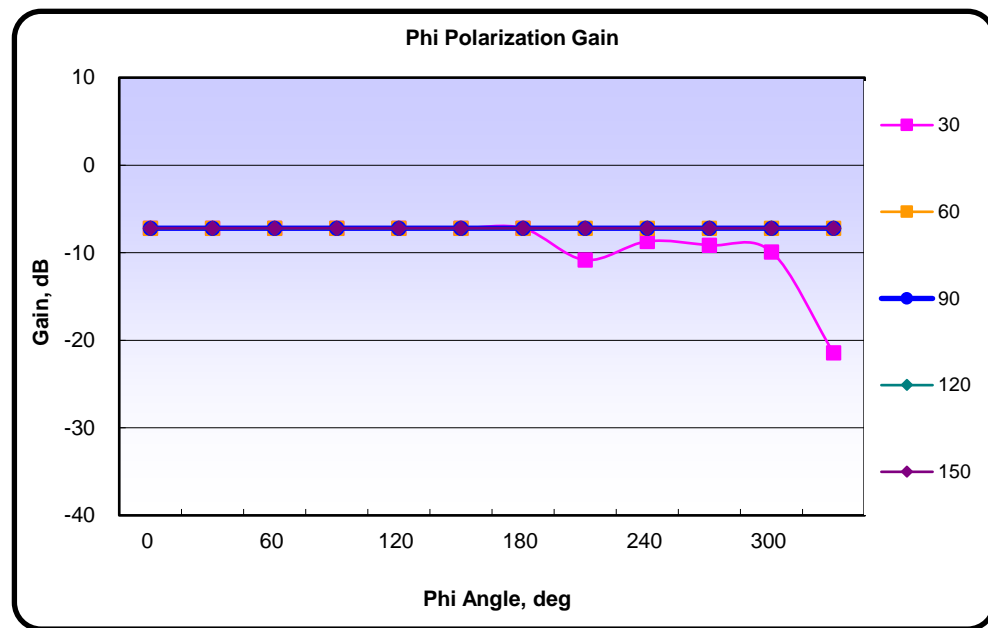
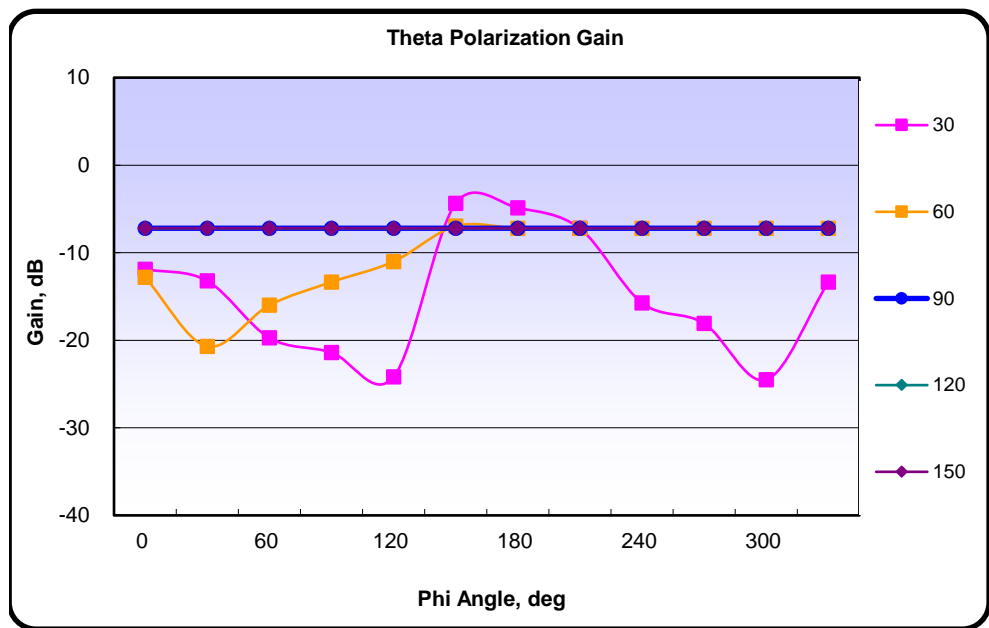
<b>Total Gain and Efficiency</b>	<b>-4.929 dB</b>	<b>32.1 %</b>	Theta Pol	-8.2 dB	15.2 %	Phi Pol	-7.7 dB	16.95 %
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Gain(Theta-Polarization and Phi-Polarization)

7075MHz

EUT		Frequency	7075	MHz	Comment
EUT Version		Antenna Type			
Test Date	Wed 11/Oct/2023 10:08:46				
Test Condition	FS				
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)												
	Phi Angle													Phi Angle												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-10.41	-15.59	-35.96	-15.94	-10.27	-9.39	-10.94	-19.66	-21.84	-12.69	-10.37	-9.47	0	-14.75	-10.12	-8.60	-9.54	-13.12	-25.99	-14.07	-10.35	-9.38	-9.44	-17.93	-24.73	
30	-11.88	-13.21	-19.72	-21.38	-24.18	<b>-4.37</b>	-4.88	-7.23	-15.73	-18.07	<b>-24.51</b>	-13.36	30	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	-10.83	-8.70	-9.15	-9.90	<b>-21.45</b>	
60	-12.81	-20.69	-16.00	-13.35	-11.01	-6.96	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	60	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>
90	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	90	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>
120	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	120	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>
150	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	150	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>
180	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	180	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>	<b>-7.20</b>



<b>Total Gain and Efficiency</b>	<b>-4.683 dB</b>	<b>34.0 %</b>	Theta Pol	-8.0 dB	15.9 %	Phi Pol	-7.4 dB	18.07 %
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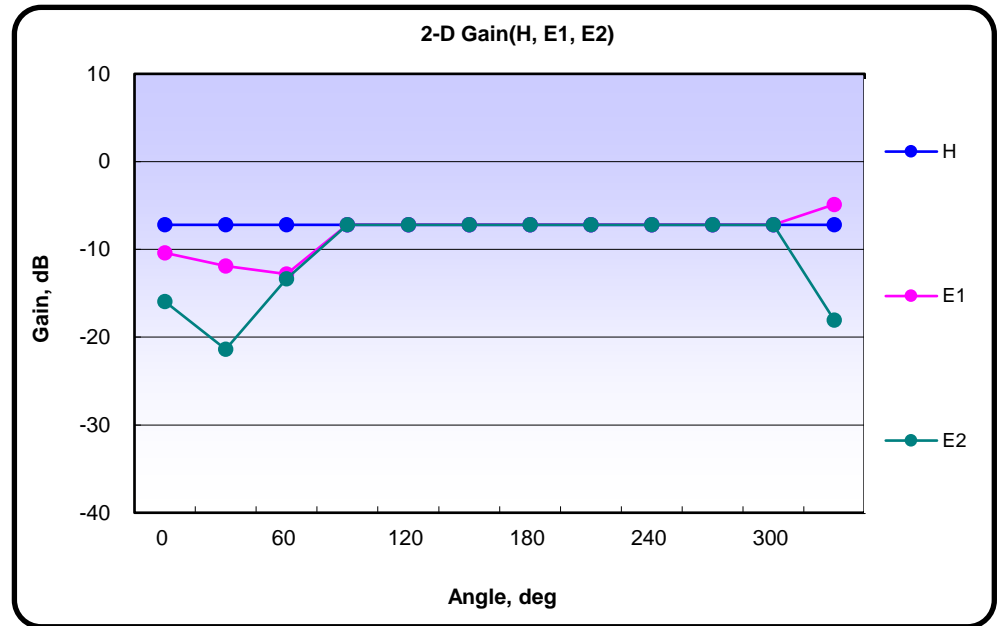
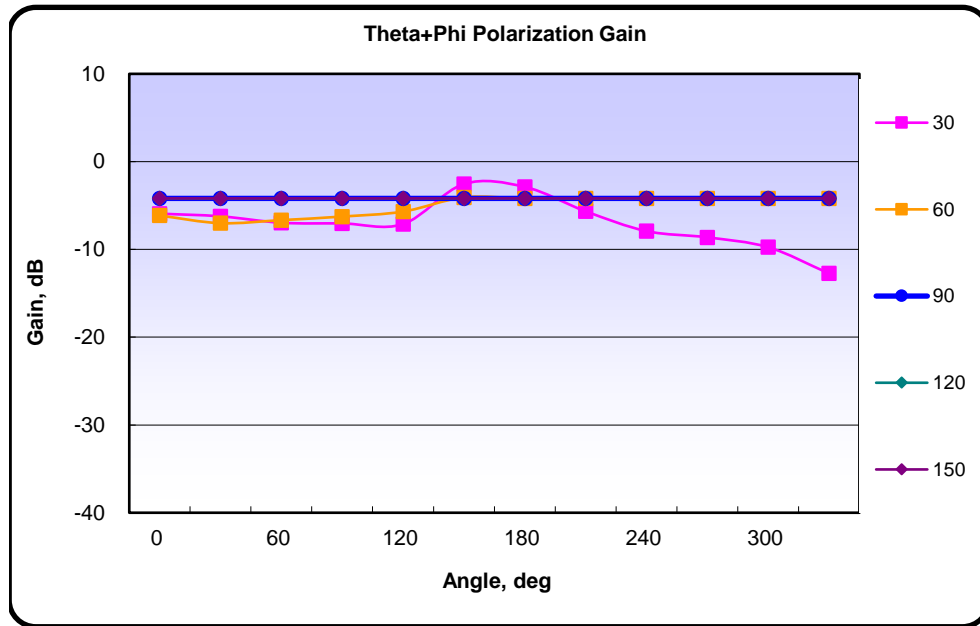
Gain(Theta-Polarization + Phi-Polarization)

Aplustech

7075MHz

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0	-9.05	-9.04	-8.59	-8.64	-8.45	-9.30	-9.22	-9.87	-9.14	-7.76	-9.67	-9.34	H	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	
30	-5.93	-6.23	-6.96	-7.04	-7.11	-2.55	-2.88	-5.66	-7.91	-8.63	-9.75	-12.73	E1	-10.41	-11.88	-12.81	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-4.88	
60	-6.15	-7.01	-6.66	-6.26	-5.69	-4.07	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	E2	-15.94	-21.38	-13.35	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-7.20	-18.07	
90	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	Average													
120	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	H	-7.20 dB												
150	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	E1	-7.66 dB												
180	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	-4.19	E2	-8.70 dB												



<b>Total Gain and Efficiency</b>	<b>-4.683 dB</b>	<b>34.0 %</b>	Theta Pol	-8.0 dB	15.9 %	Phi Pol	-7.4 dB	18.07 %
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**Total Radiated Gain(3-D Plots)**

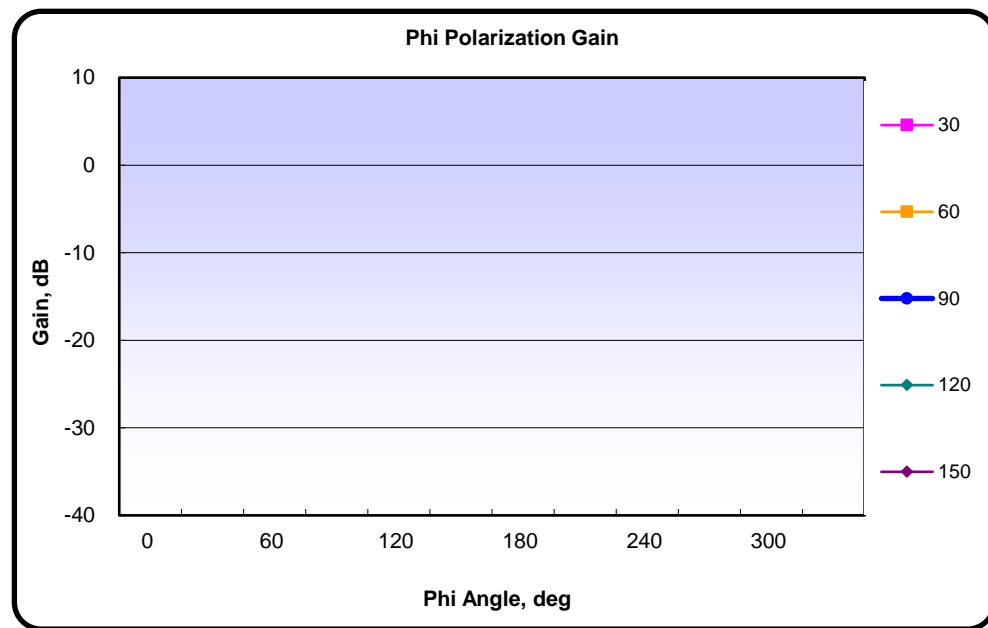
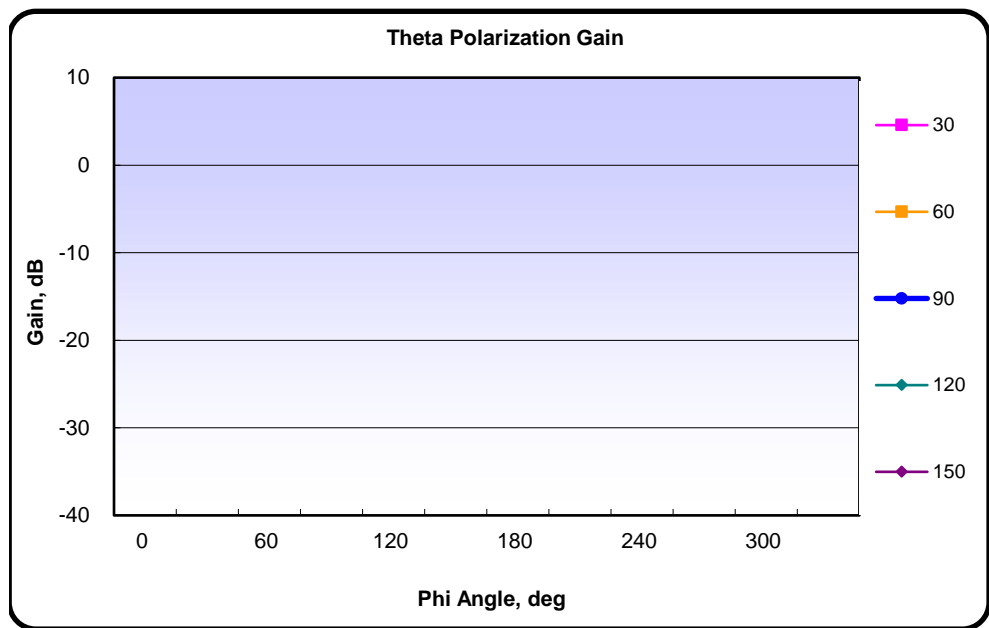
<b>Maximum Gain</b>	Gain	-2.55 dB,	$\theta = 30$ deg,	$\varphi = 150$ deg	<b>Minimum Gain</b>	Gain	-12.73 dB,	$\theta = 30$ deg,	$\varphi = 330$ deg
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<b>Total Gain and Efficiency</b>	<b>-4.683 dB</b>	<b>34.0 %</b>	Theta Pol	-8.0 dB	15.9 %	Phi Pol	-7.4 dB	18.07 %
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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**Maximum Gain** Gain          dB,           $\theta = 330$  deg,           $\varphi = 2310$  deg | **Minimum Gain** Gain          0.00 dB,           $\theta = -30$  deg,           $\varphi = -30$  deg

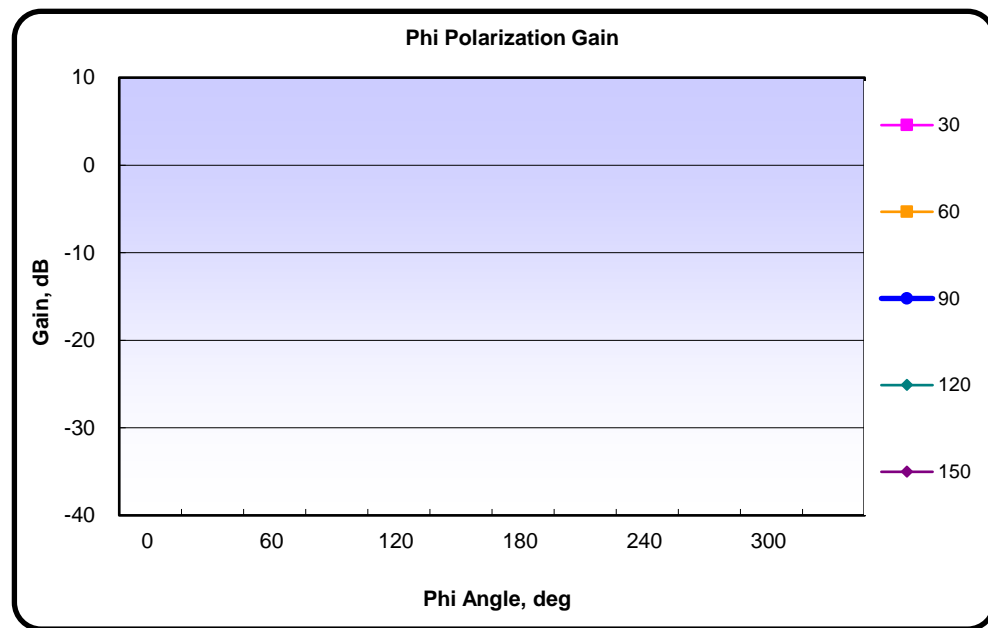
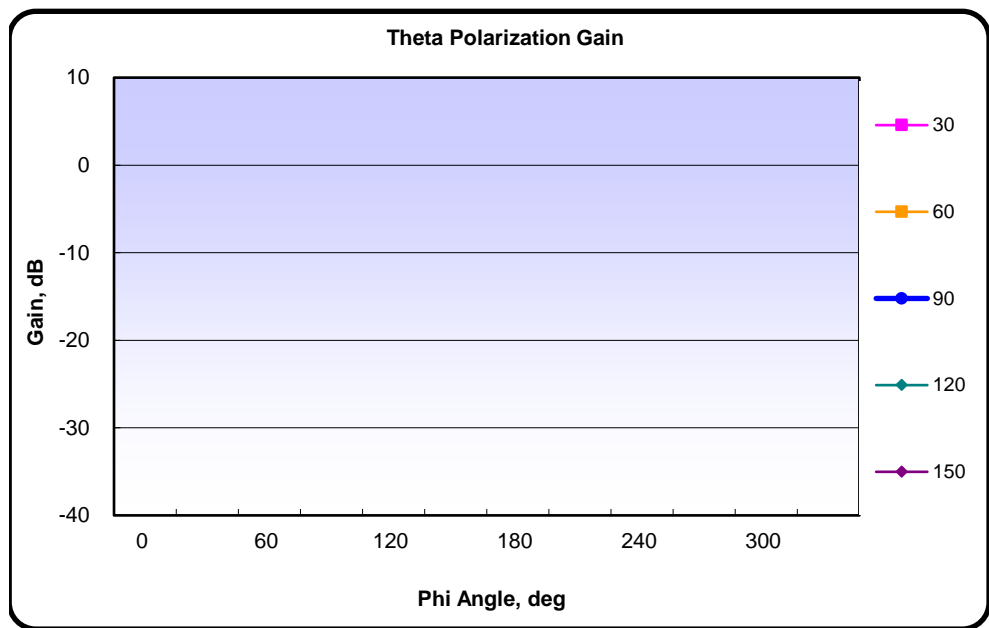
**Total Gain and Efficiency**



**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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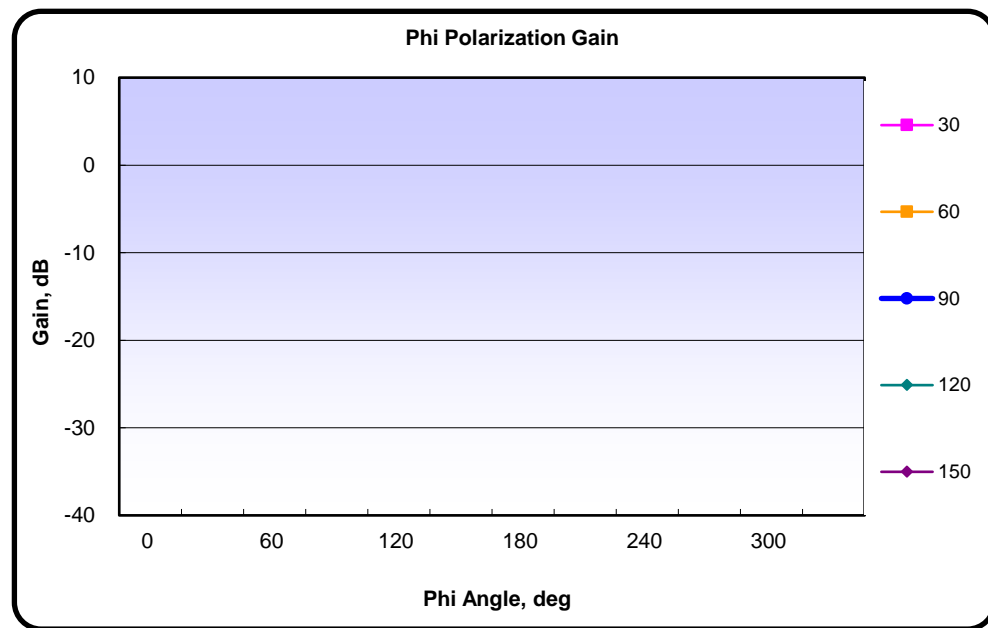
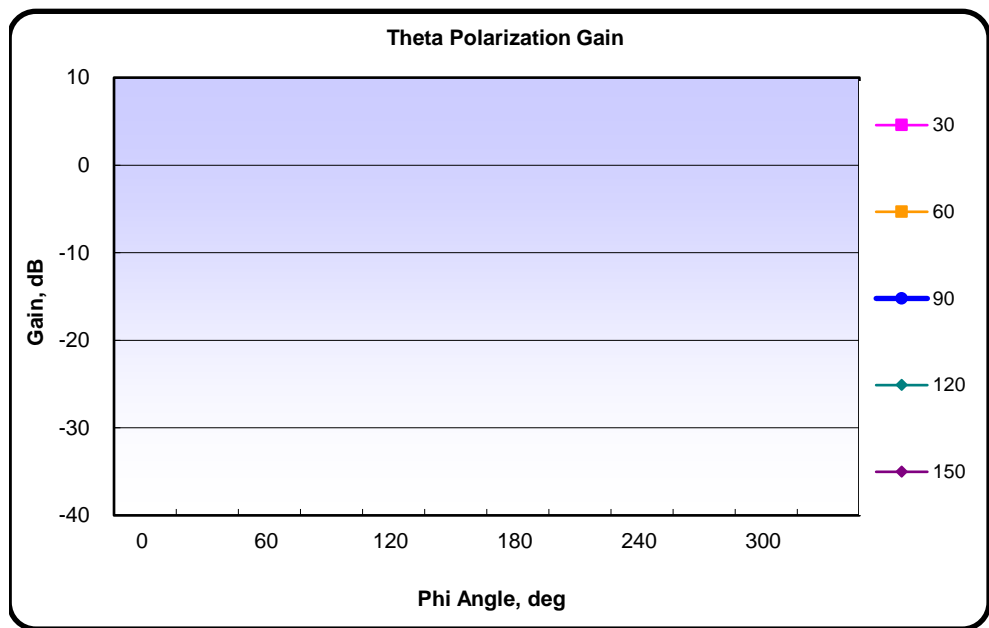
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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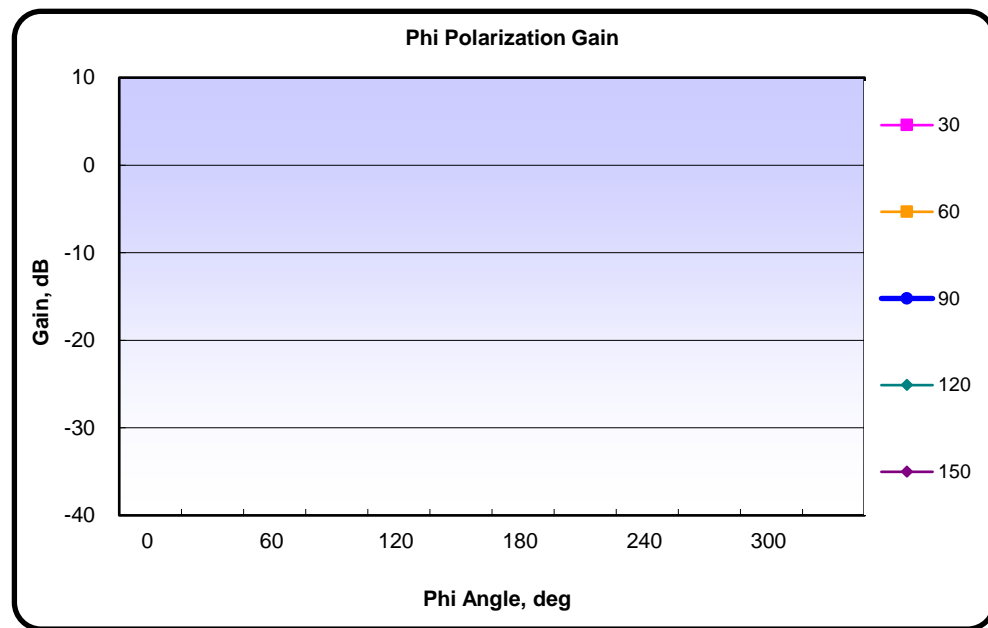
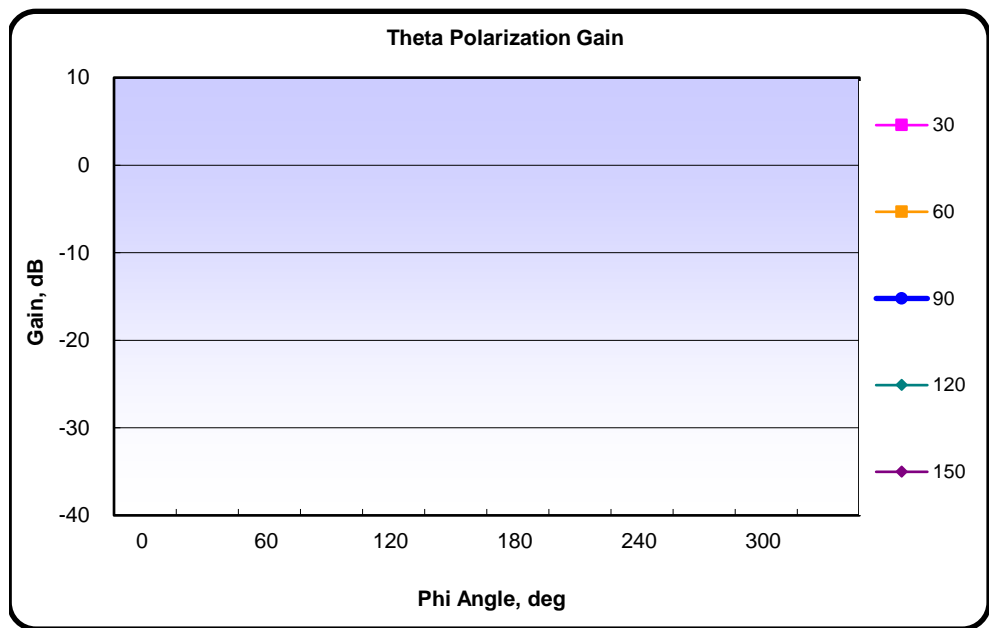
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



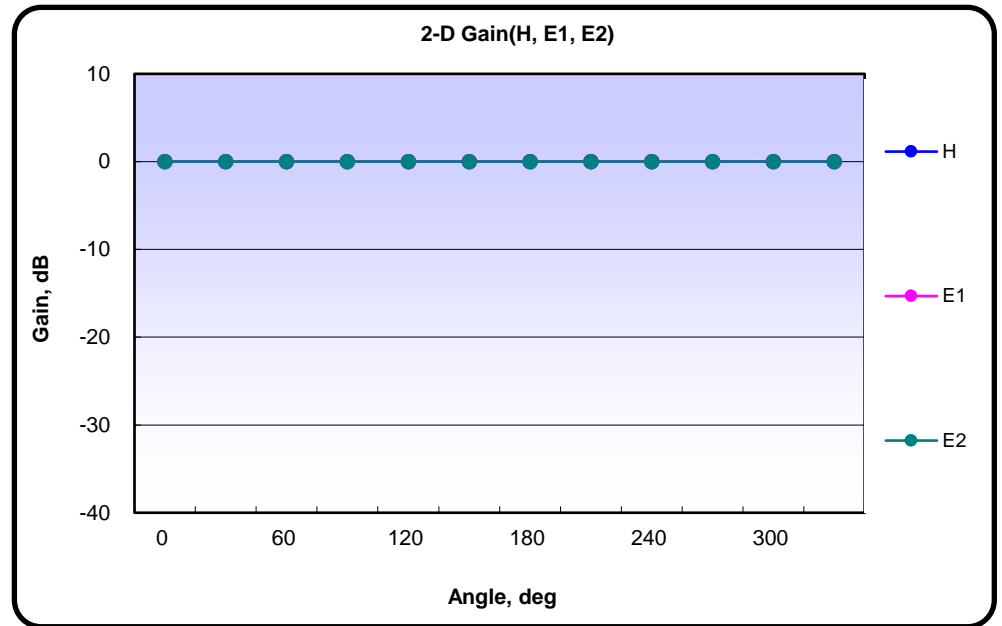
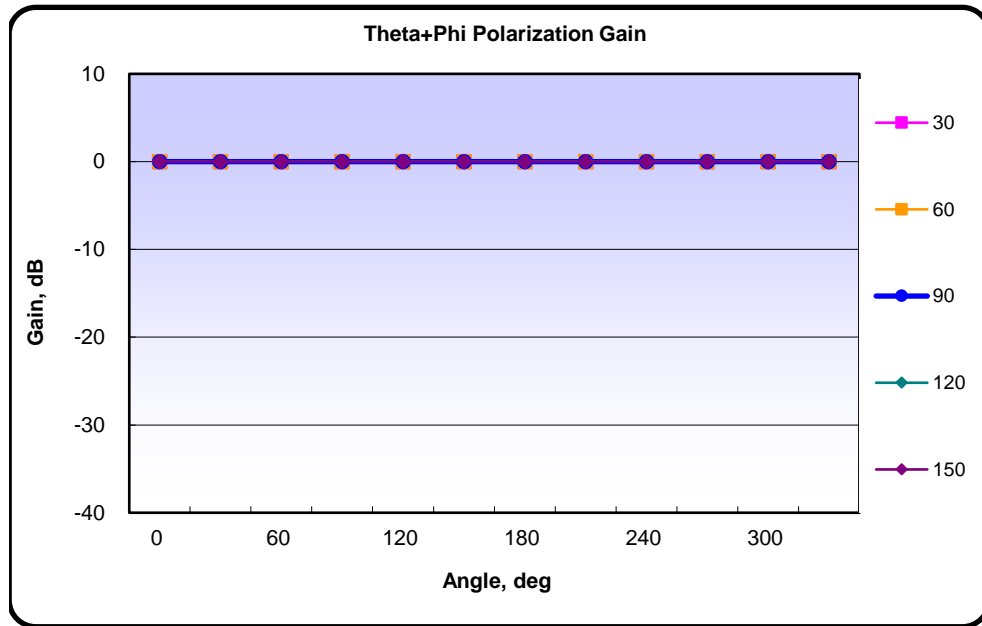
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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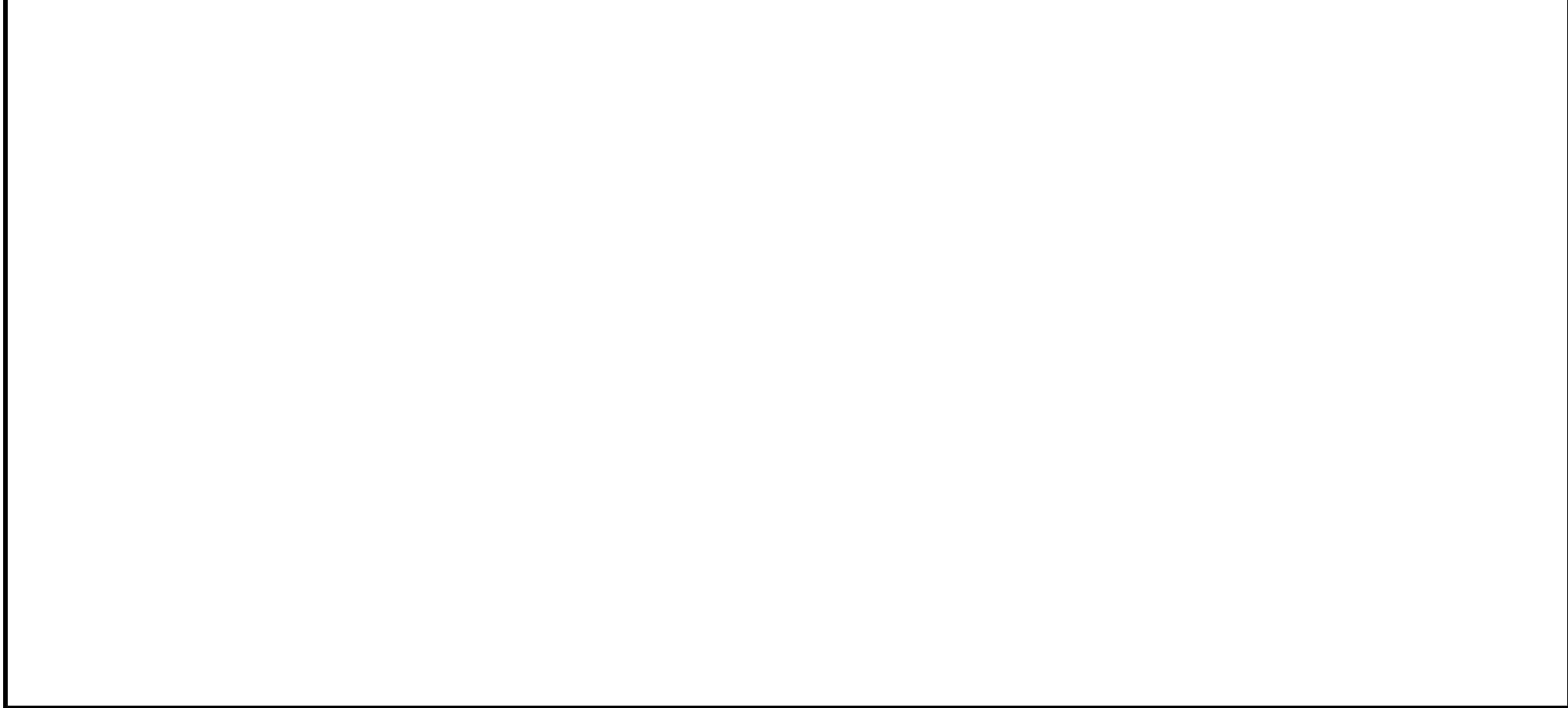
Theta Angle	Phi Angle												Plane	Angle, deg																																			
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330																								
0																										H																							
30																											E1																						
60																										E2																							
90																										Average																							
120																										H	dB																						
150																										E1	dB																						
180																										E2	dB																						



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**





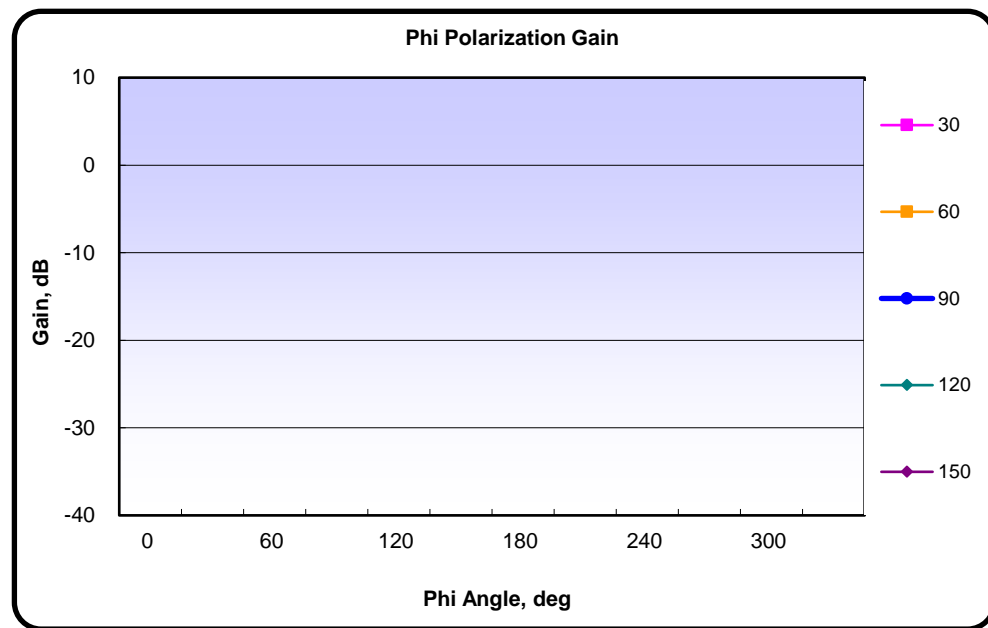
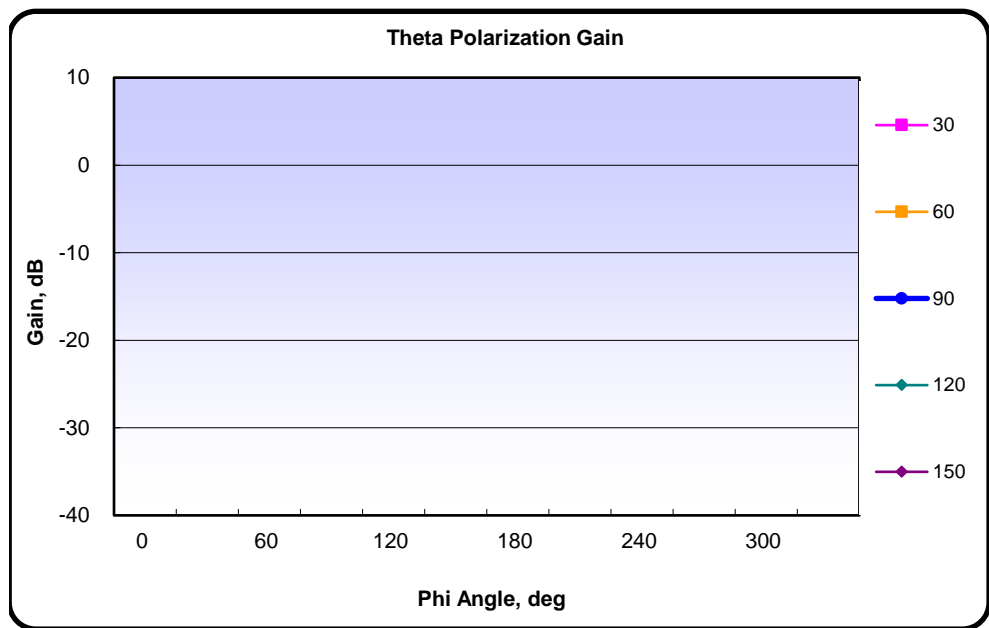
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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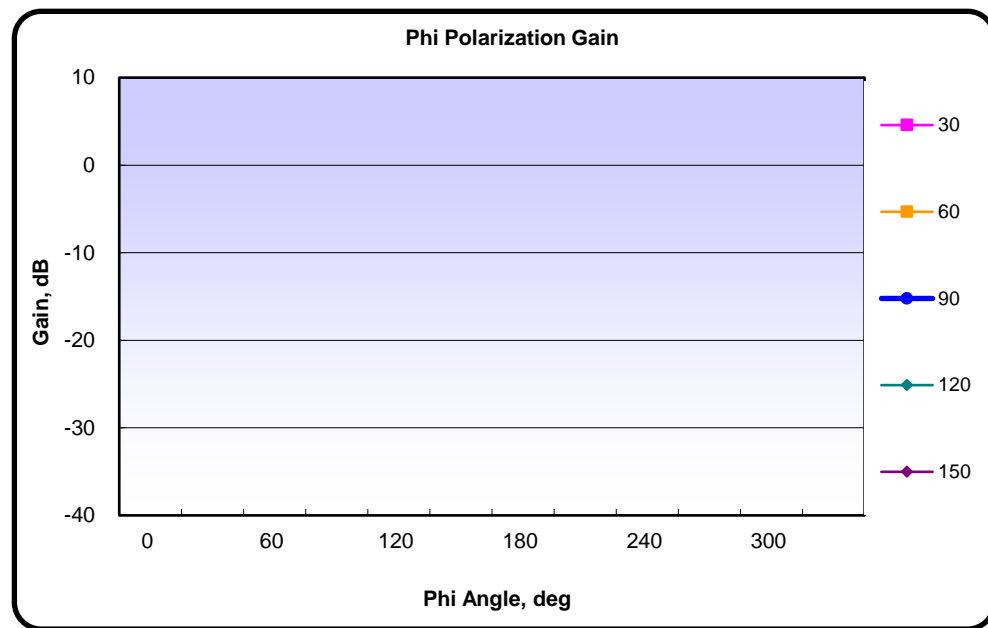
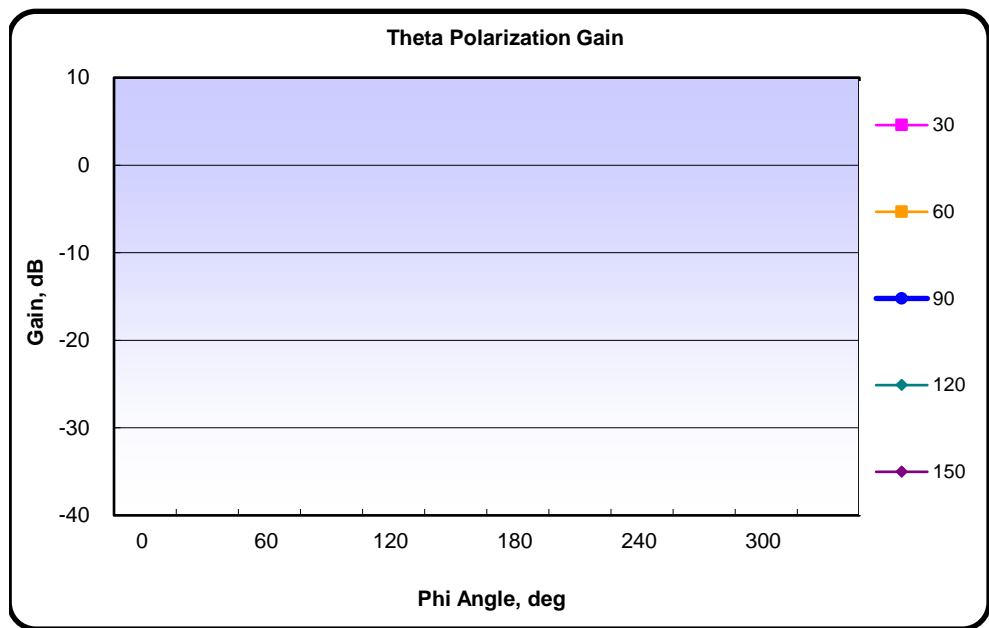
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



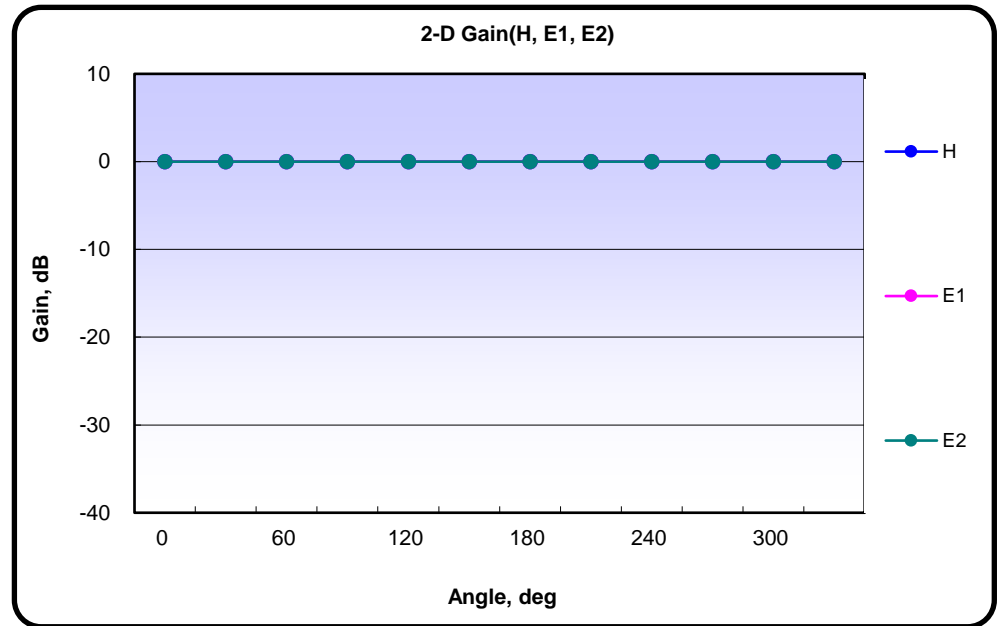
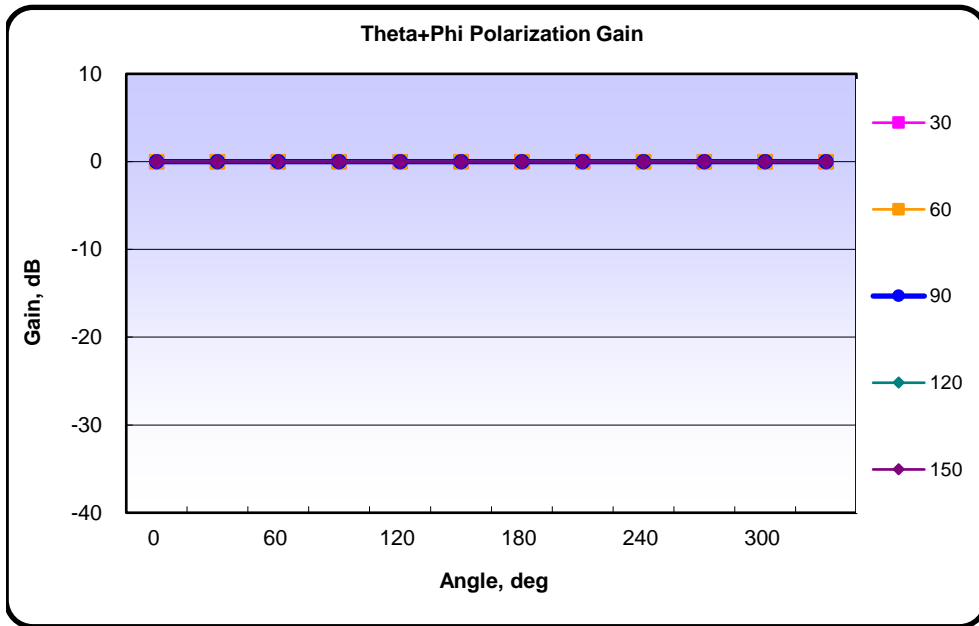
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													H												
30													E1												
60													E2												
90													Average												
120													H	dB											
150													E1	dB											
180													E2	dB											



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



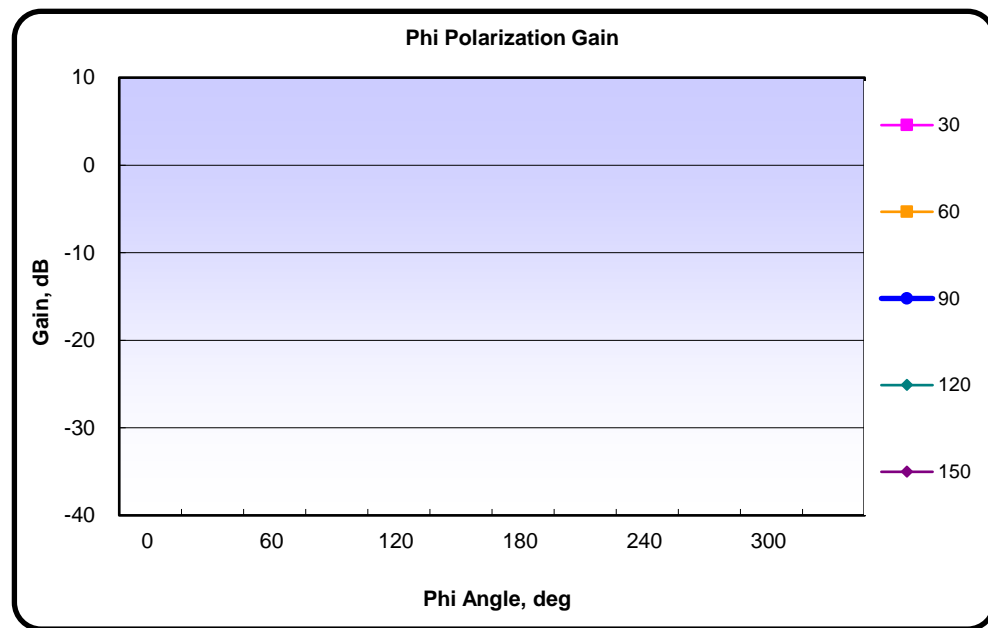
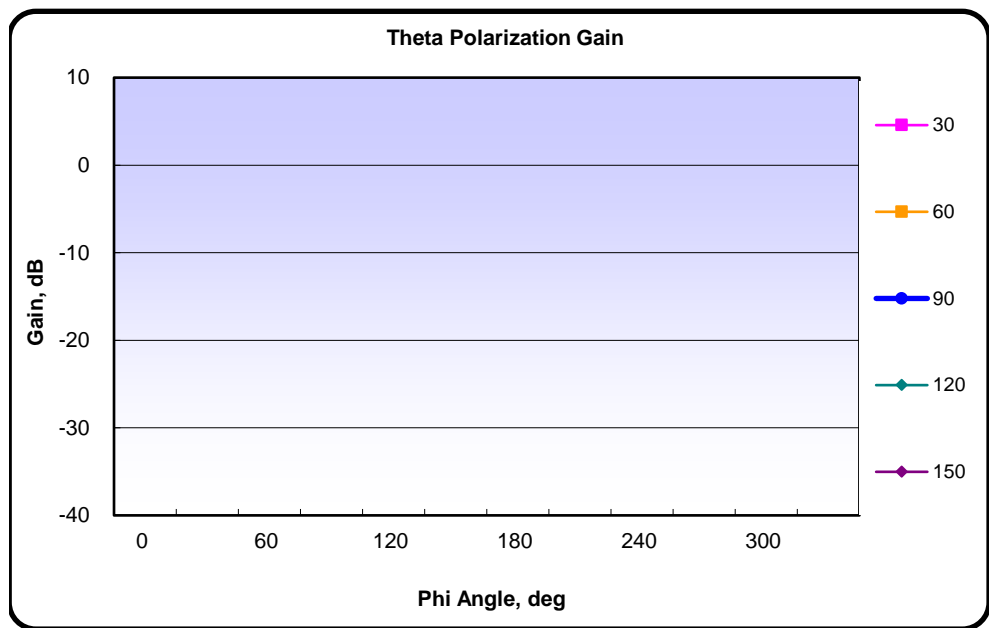
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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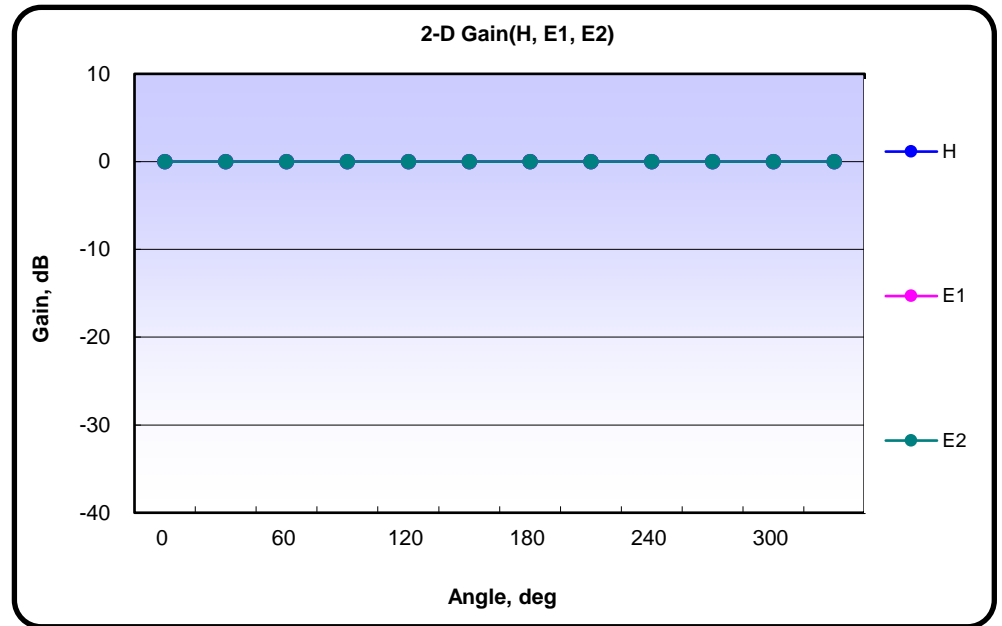
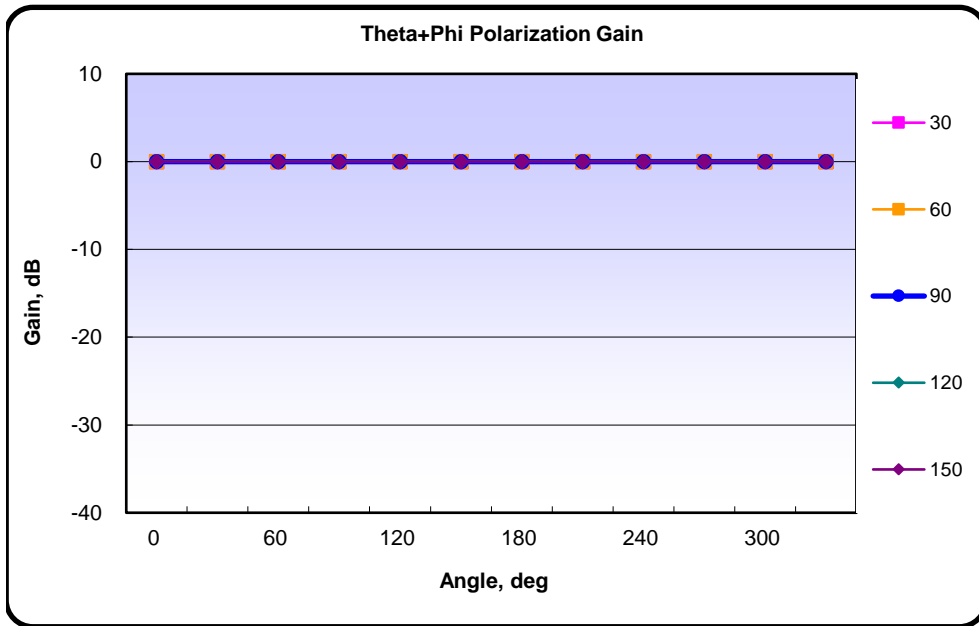
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg												
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330	
0														H												
30														E1												
60														E2												
90														Average												
120														H	dB											
150														E1	dB											
180														E2	dB											



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



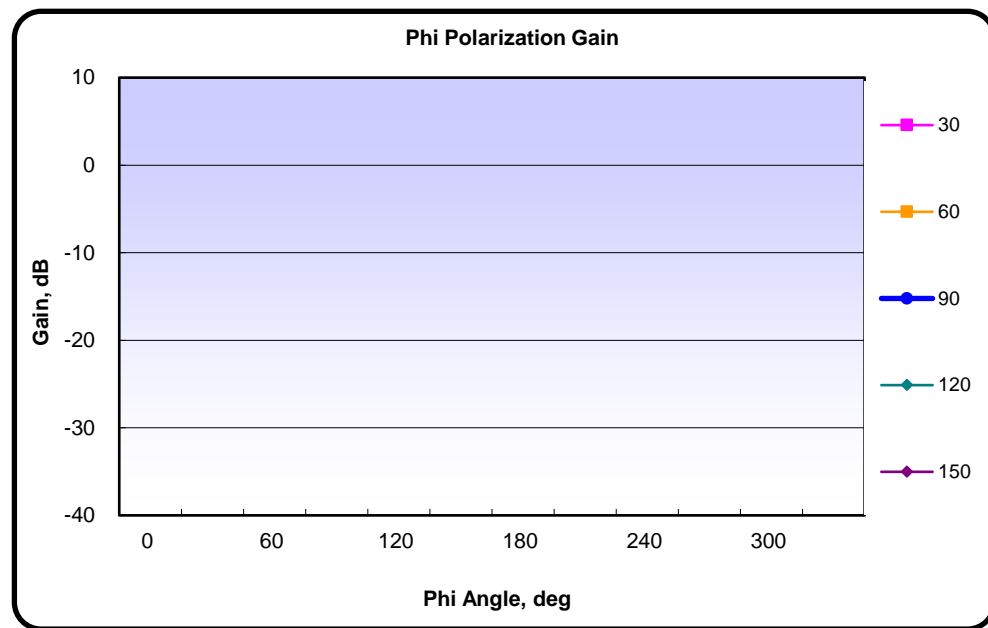
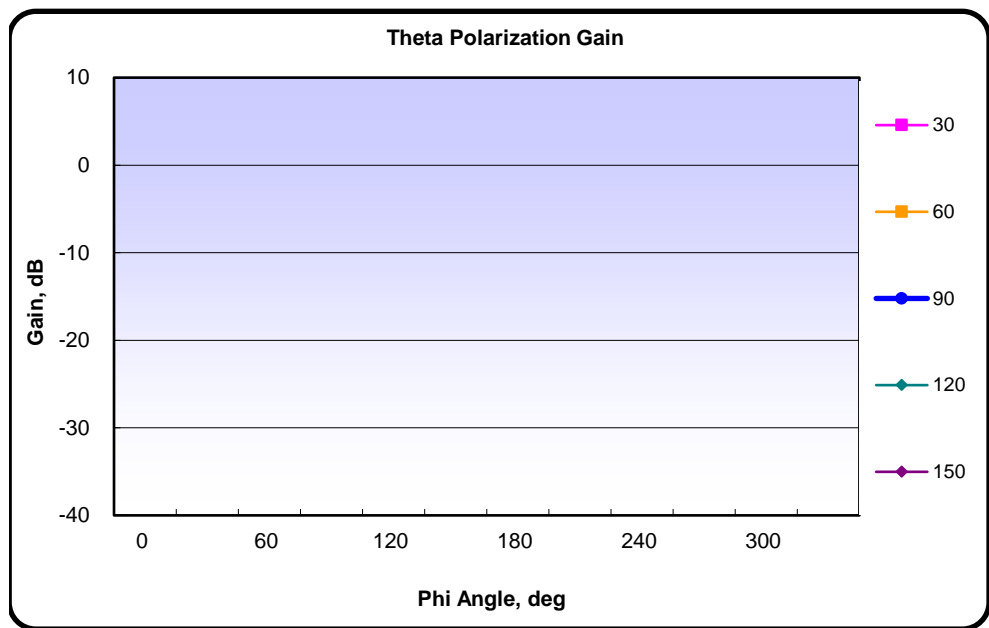
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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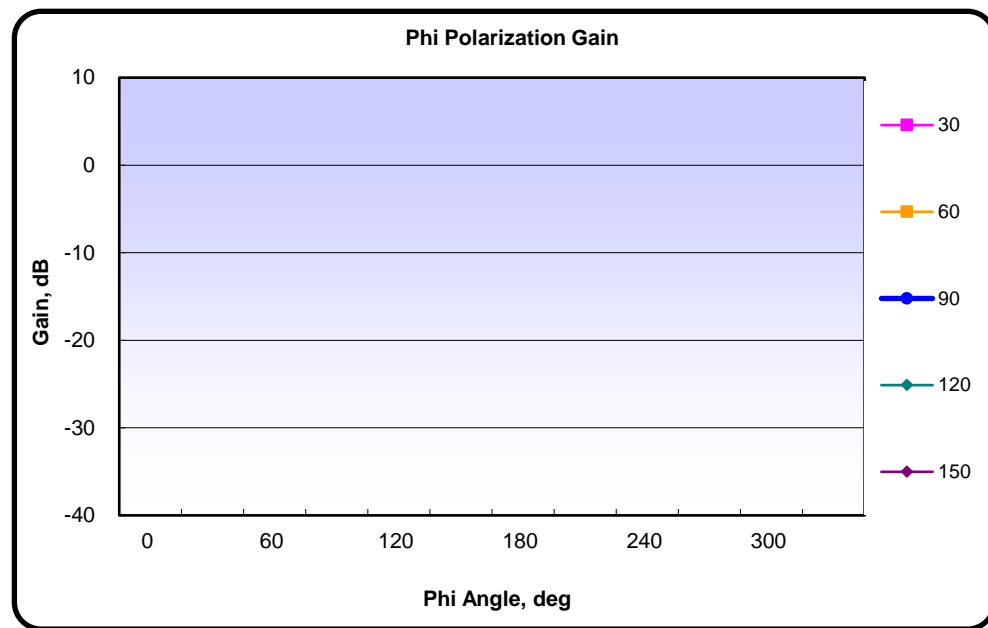
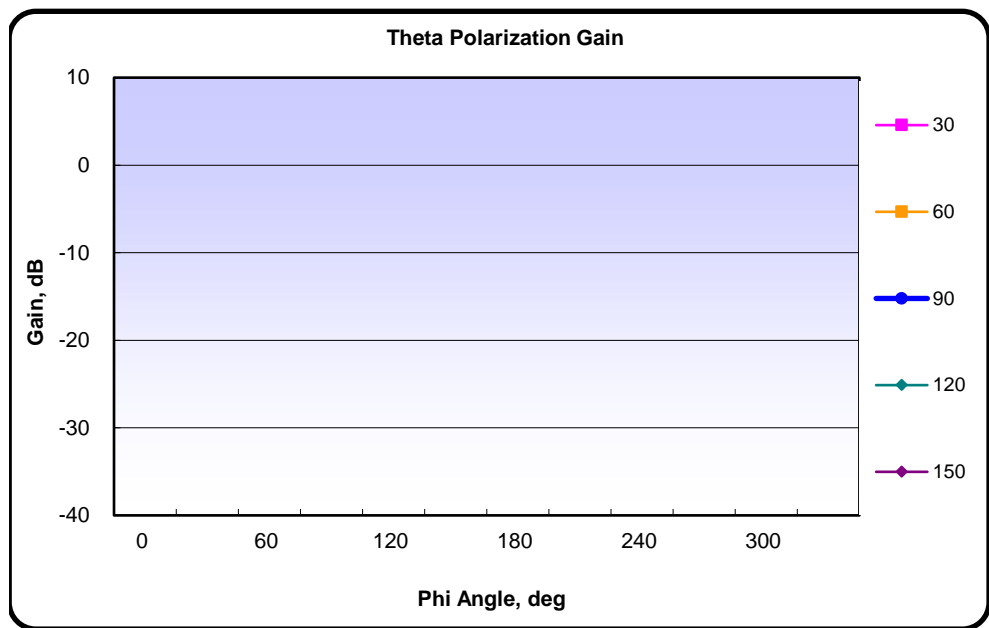
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
----------------------------------	--

**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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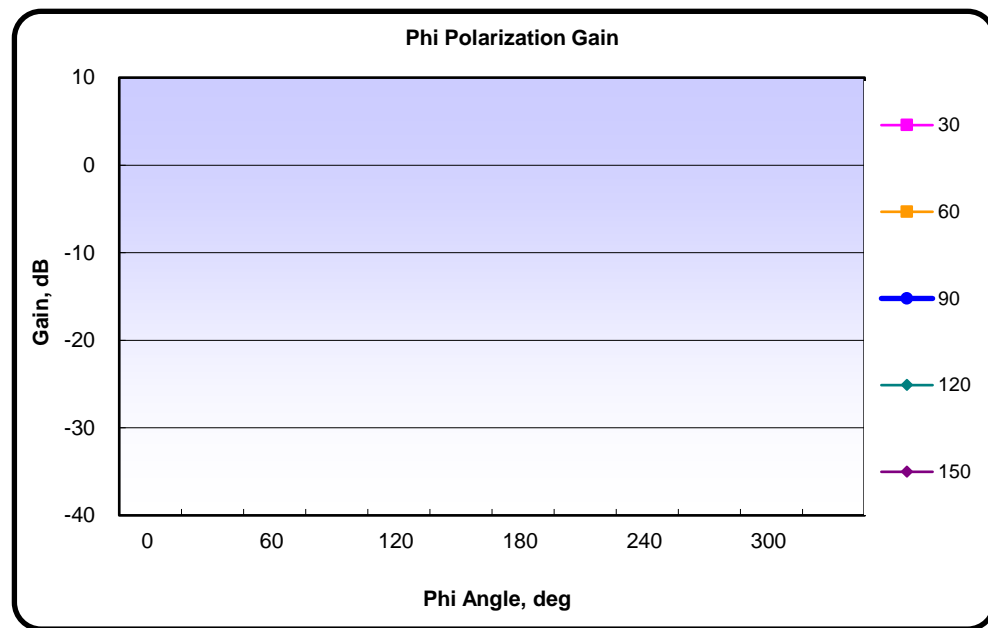
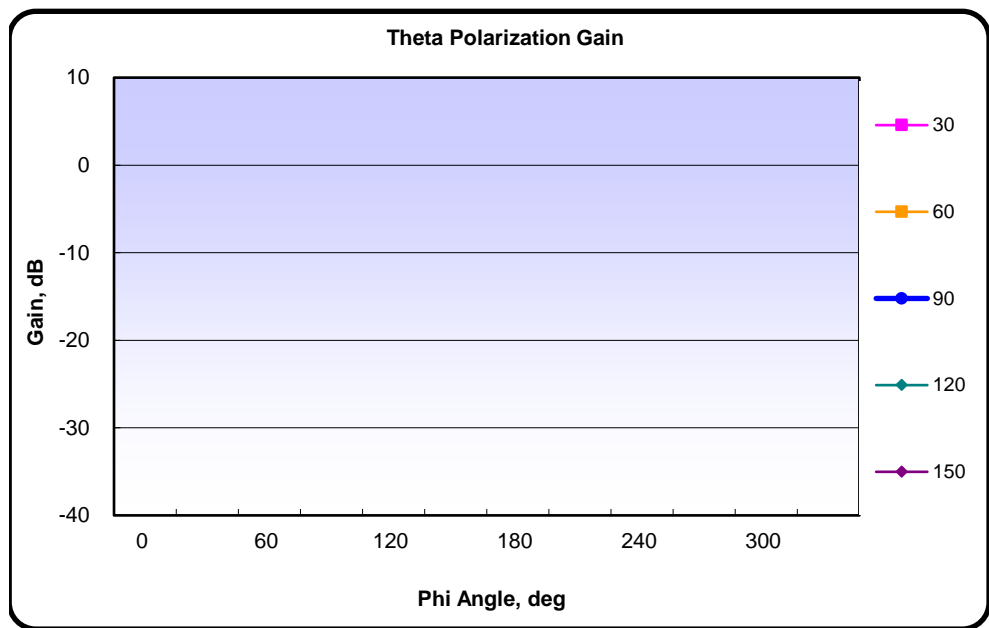
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



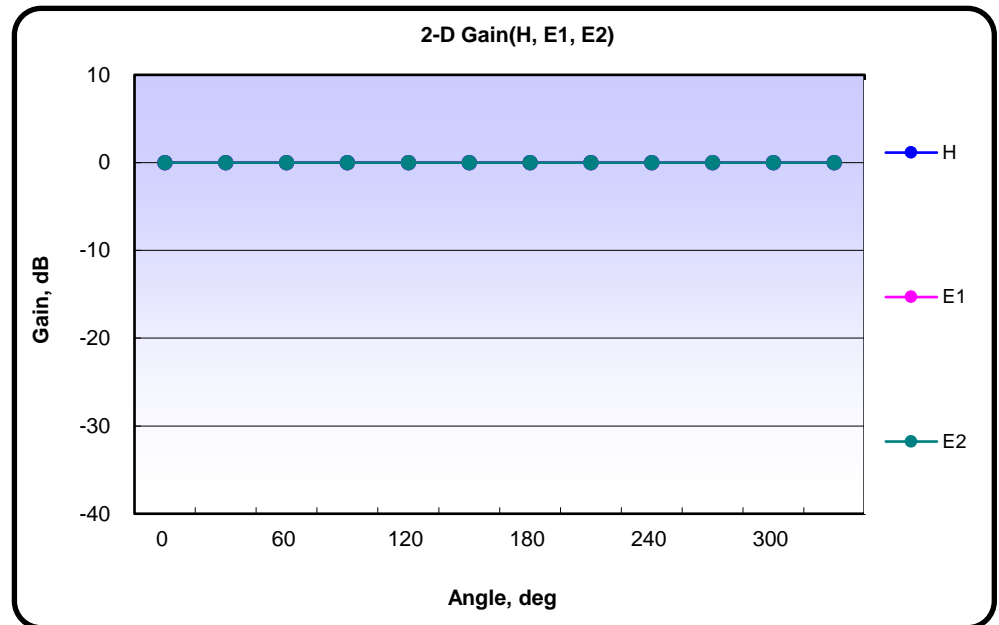
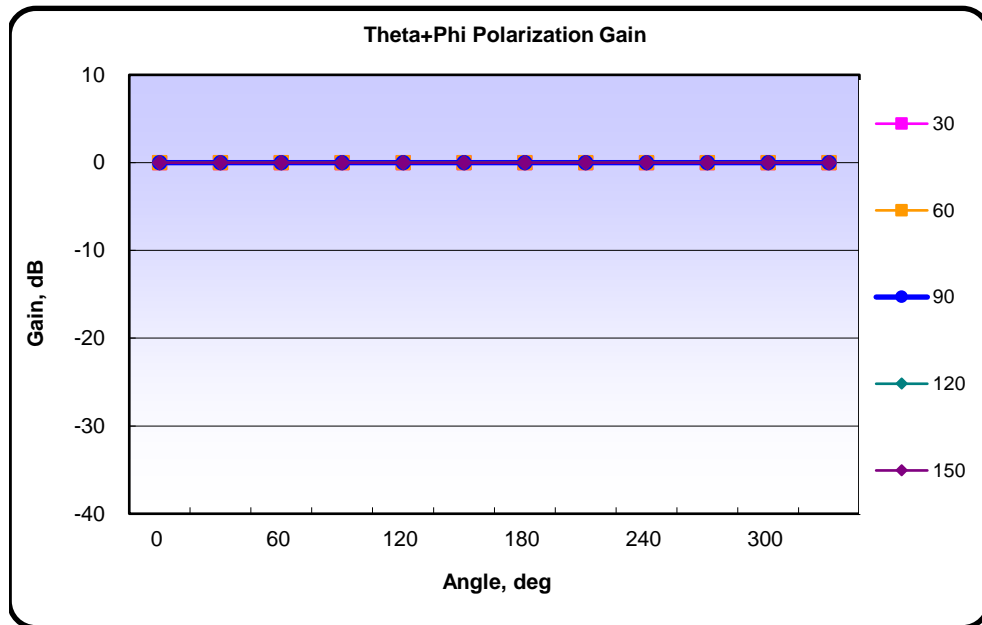
<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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Theta Angle	Phi Angle												Plane	Angle, deg													
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330		
0														H													
30														E1													
60														E2													
90														Average													
120														H	dB												
150														E1	dB												
180														E2	dB												



**Total Gain and Efficiency**

**Total Radiated Gain(3-D Plots)**



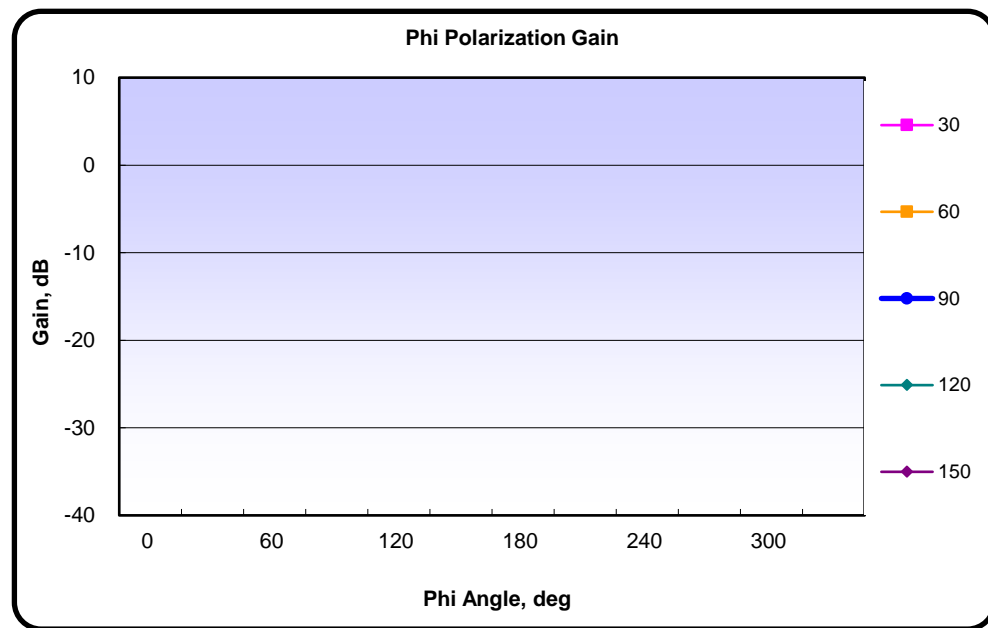
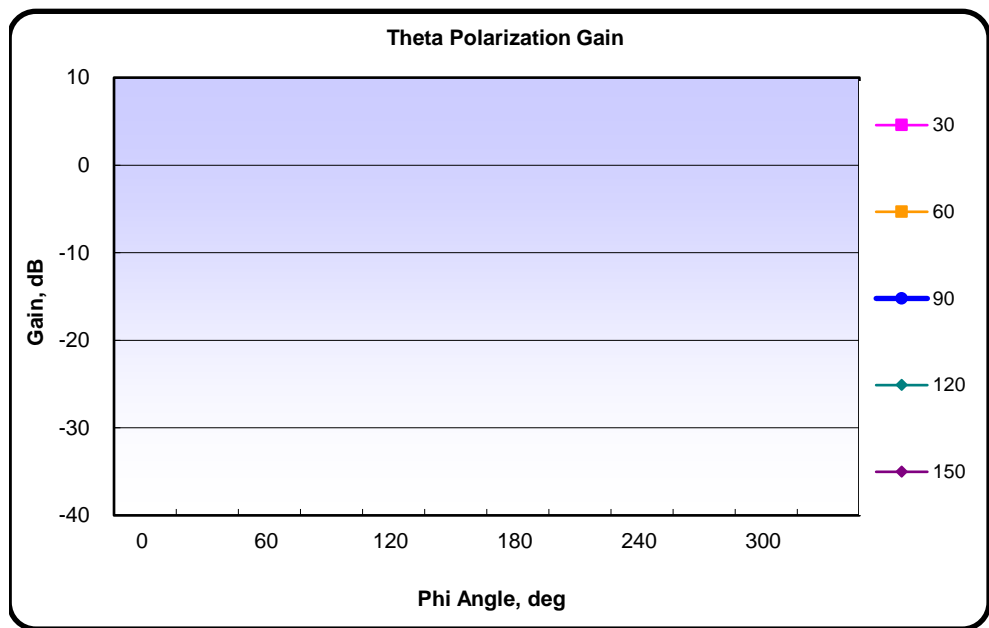
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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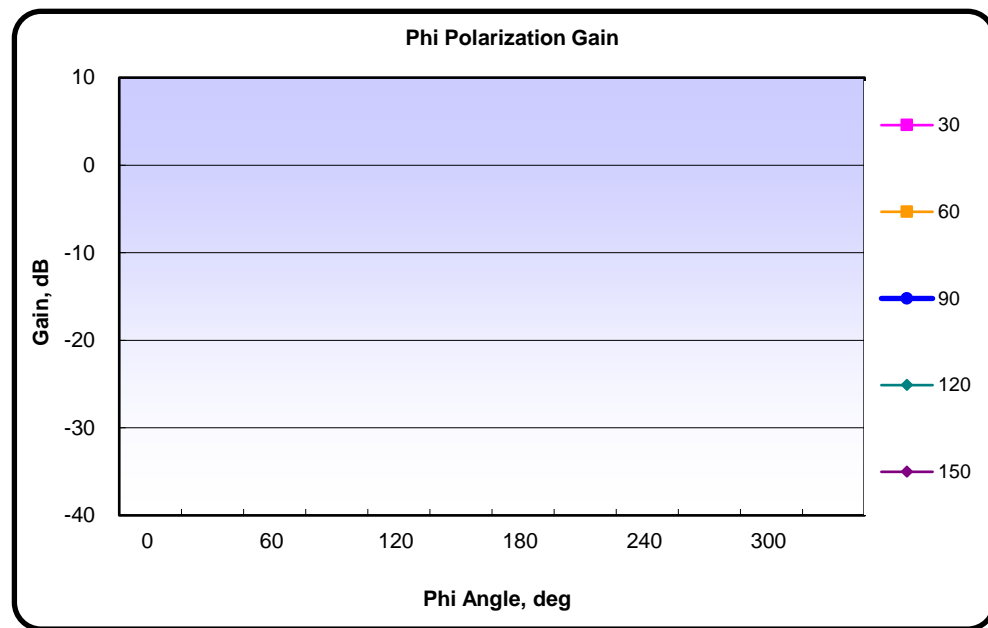
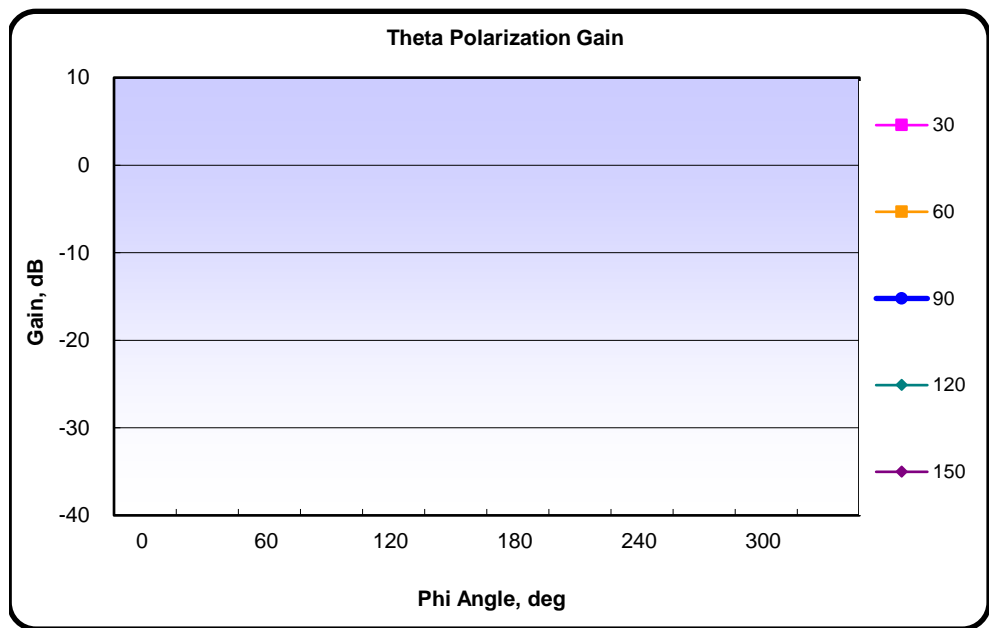
<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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**Gain(Theta-Polarization and Phi-Polarization)**

EUT		Frequency		Comment	
EUT Version		Antenna Type			
Test Date					
Test Condition					
Tester					

Theta Angle	Theta-Polarization Gain(dB)												Theta Angle	Phi-Polarization Gain(dB)											
	Phi Angle													Phi Angle											
	0	30	60	90	120	150	180	210	240	270	300	330		0	30	60	90	120	150	180	210	240	270	300	330
0													0												
30													30												
60													60												
90													90												
120													120												
150													150												
180													180												



<b>Total Gain and Efficiency</b>	
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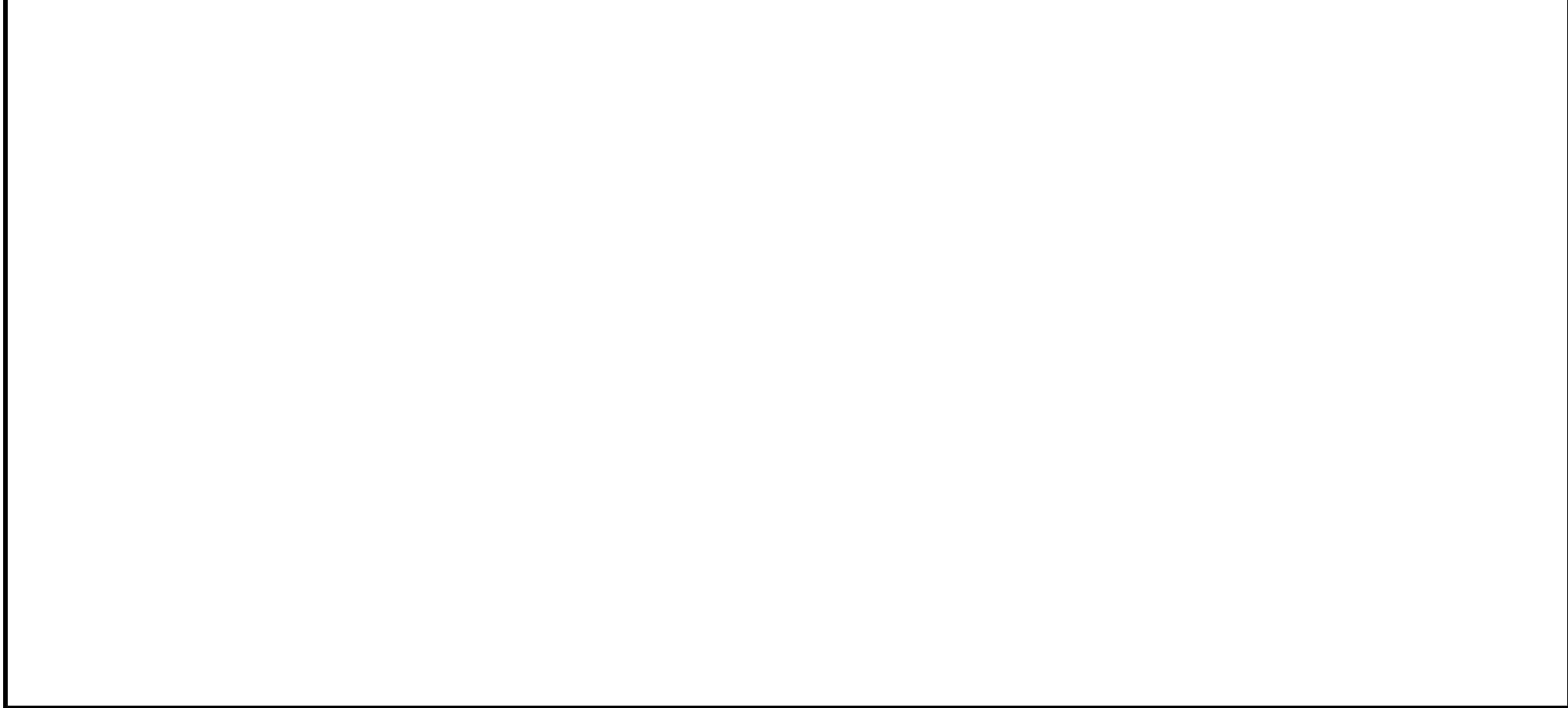
*Aplustech*

**Gain(Theta-Polarization + Phi-Polarization)**

Theta-Polarization + Phi-Polarization(dB)	2-D Gain
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<b>Maximum Gain</b>	Gain	dB,	$\theta = 330$ deg,	$\varphi = 2310$ deg	<b>Minimum Gain</b>	Gain	0.00 dB,	$\theta = -30$ deg,	$\varphi = -30$ deg
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<b>Total Gain and Efficiency</b>	
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