

Antenna Composite Gain Test Report

1. Test Information

Brand name	Askey Computer Corp
Model name	RT5035W-D217
Connector type	I-PEX connector
Antenna type	Dipole antenna
Test date	2023/5/23
Test condition	Free space
Equipment	G-Fiber Router Tri-Band Wi-Fi 6E system

2. Test Frequency

The middle frequency of each bands are selected to represent each frequency bands.

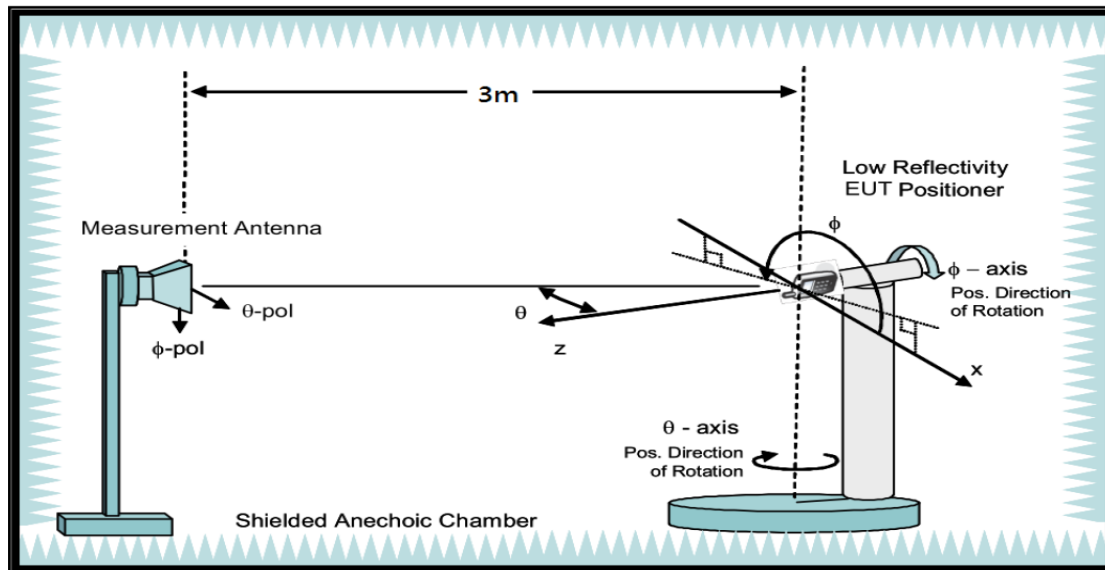
Band (MHz)	Test Frequency(MHz)
2400~2500	2450
5150~5250	5200
5250~5350	5300
5470~5725	5600
5725~5850	5785
5925~6425	6175
6425~6525	6475
6525~6875	6695
6875~7125	6995

3. Antenna System

Antenna No	Brand name	Part number	Ant. type	connector	operating
2G1	ADANT	LEAF2G11065113GY	Dipole	I-PEX	2.4GHz
2G2	ADANT	LEAF2G11045113WH	Dipole	I-PEX	2.4GHz
2G3	ADANT	LEAF2G11155113BL	Dipole	I-PEX	2.4GHz
2G4	ADANT	LEAF2G11105113BK	Dipole	I-PEX	2.4GHz
DB1	ADANT	DB5643055113BL	Dipole	I-PEX	5GHz
DB3	ADANT	DB5640115113OR	Dipole	I-PEX	5GHz
DB5	ADANT	DB5643100113YL	Dipole	I-PEX	5GHz
DB7	ADANT	DB5640155113GY	Dipole	I-PEX	5GHz
DB2	ADANT	DB5640080113GR	Dipole	I-PEX	6GHz
DB4	ADANT	DB5640155113BK	Dipole	I-PEX	6GHz
DB6	ADANT	DB5640100113WH	Dipole	I-PEX	6GHz
DB8	ADANT	DB5640135113RD	Dipole	I-PEX	6GHz

4. Test Configuration

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

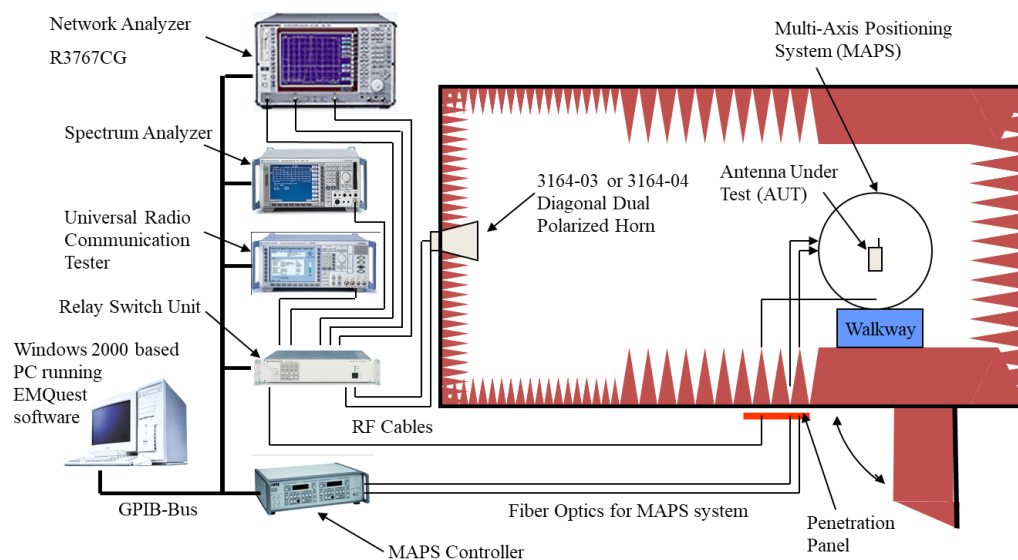


5. Test Method

EUT set on multi-axis positioner. Measurement antenna set at phi polarization and 1.5 meter height. Port 1 of network analyzer connect to antenna 1 of EUT. Record S21 value every 15 degree from 0 to 345 degree on phi angle and 0 to 180 on theta angle of multi-axis positioner. Then set measurement antenna to theta polarization and repeat process to each antenna of EUT.

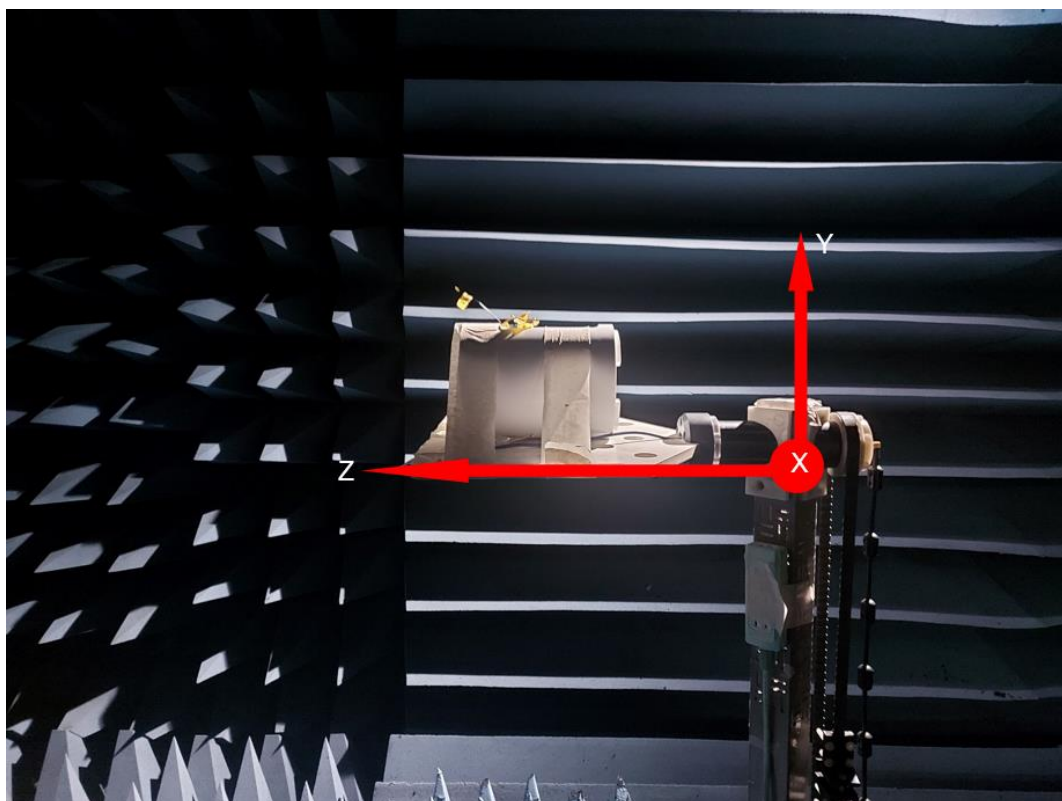
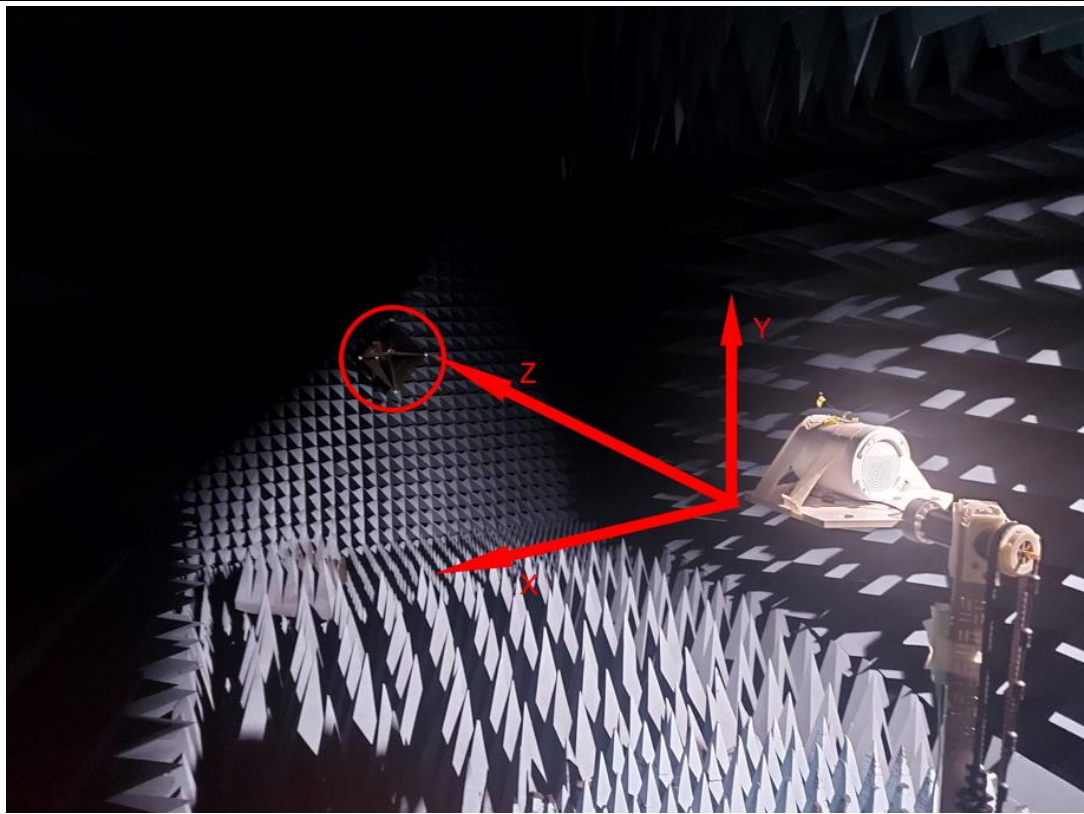
6. System Schematic (ETS. Lindgren typical AMS-8000)

Instrument	Calibration date
Network Analyzer R3767CG	2022/11/10
Slot Switch (SW) Agilent 3499B	2022/7/25
Turn table controller EMCO 2090	2023/3/20



7. Test Setup

Test Position



8. Test Result

Wi-Fi 2.4GHz band Antenna Directional Gain		
Frequency. (MHz)	4 ANT combine uncorrelated	4 ANT combine correlated
2450	0.69	5.18
Wi-Fi 5GHz band Antenna Directional Gain		
Frequency. (MHz)	4 ANT combine uncorrelated	4 ANT combine correlated
5200	0.59	6.01
5300	1.69	5.96
5600	-0.41	4.66
5800	0.63	5.92
Wi-Fi 6GHz band Antenna Directional Gain		
Frequency. (MHz)	4 ANT combine uncorrelated	4 ANT combine correlated
6175	1.72	5.88
6475	-1.51	4.16
6695	-1.25	4.46
6995	1.25	6.16

Antenna passive performance

	Frequency (MHz)	2450	5200	5300	5600	5800	6175	6475	6695	6995
2G-1	Peak Gain (dBi)	2.95								
	Efficiency(%)	69.53								
2G-2	Peak Gain (dBi)	3.20								
	Efficiency(%)	65.74								
2G-3	Peak Gain (dBi)	2.55								
	Efficiency(%)	73.02								
2G-4	Peak Gain (dBi)	3.18								
	Efficiency(%)	58.71								
DB1	Peak Gain (dBi)		3.11	4.18	3.71	3.30				
	Efficiency(%)		56.49	60.55	50.09	50.50				
DB3	Peak Gain (dBi)		3.17	4.05	3.75	4.04				
	Efficiency(%)		56.31	65.81	53.01	61.58				
DB5	Peak Gain (dBi)		2.75	4.03	0.89	2.77				
	Efficiency(%)		55.78	58.24	53.99	52.85				
DB7	Peak Gain (dBi)		4.08	4.03	2.35	3.06				
	Efficiency(%)		53.89	51.34	57.71	54.83				
DB2	Peak Gain (dBi)						3.17	1.24	2.49	3.04
	Efficiency(%)						62.58	56.96	56.91	64.66
DB4	Peak Gain (dBi)						3.08	1.36	2.21	2.08
	Efficiency(%)						55.09	47.80	50.59	54.97
DB6	Peak Gain (dBi)						2.63	1.03	1.85	2.95
	Efficiency(%)						56.63	53.32	52.11	55.66
DB8	Peak Gain (dBi)						3.01	1.79	2.32	2.49
	Efficiency(%)						56.05	52.54	59.22	50.89

4 ANT combine uncorrelated for 2450MHz

4 ANT combine correlated for 2450MHz

Phi\Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	2.190243	2.265607	0.778134	0.593185	2.443635	2.901691	2.492798	4.037556	3.715983	4.60698	2.78769	1.808689	1.24104
15	2.190243	2.415661	1.706487	1.208821	2.288363	3.613685	3.699323	4.766346	3.892229	5.118408	2.921192	1.683432	1.24104
30	2.190243	2.329598	2.754757	2.515758	3.13618	4.252612	3.403254	5.184605	4.238156	4.877099	2.807868	1.289259	1.24104
45	2.190243	2.378852	3.259703	3.225674	3.777739	4.191637	3.652864	4.814977	4.405979	4.593318	3.131579	1.001834	1.24104
60	2.190243	2.512485	3.518882	3.239054	4.256421	3.945791	3.716542	5.133818	4.28951	4.65964	3.232066	1.411967	1.24104
75	2.190243	2.820672	3.652482	3.081624	4.530594	4.596968	3.486726	5.028662	3.630973	4.366749	2.853291	2.079871	1.24104
90	2.190243	3.100027	3.590968	2.632692	4.141591	4.750009	3.211122	4.218763	3.261955	3.362904	3.111033	2.428943	1.24104
105	2.190243	3.255042	3.417594	2.468026	3.752621	3.754922	2.020449	2.794607	1.466414	2.138733	3.303844	2.388367	1.24104
120	2.190243	3.426843	3.178649	2.407649	3.524205	2.859508	2.167428	1.584677	1.977605	1.659528	3.22794	2.285255	1.24104
135	2.190243	3.704678	3.591447	2.931126	3.609178	3.102444	2.797546	1.964053	1.543206	1.110481	2.758214	2.01708	1.24104
150	2.190243	3.913301	3.775176	3.713117	3.891343	3.561925	3.230589	1.939478	0.350743	0.811485	1.872617	1.700475	1.24104
165	2.190243	3.872597	3.510212	4.20451	4.684941	3.836421	3.495685	2.10009	0.498737	0.262112	0.886379	1.430439	1.24104
180	2.190243	3.52073	2.701076	4.619025	3.113126	3.936214	3.24118	2.294742	1.189426	0.326457	1.131491	0.828956	1.24104
195	2.190243	2.921897	2.447158	3.079905	1.576256	3.010056	2.948132	2.946579	1.763562	-0.12203	2.832959	1.09497	1.24104
210	2.190243	2.866863	2.126258	2.227577	0.091178	2.227029	1.789936	2.282796	2.494922	1.868179	2.878053	0.474185	1.24104
225	2.190243	2.839334	2.101569	2.093186	-0.08455	1.143803	-0.7183	1.659546	2.956103	3.210506	2.685562	-0.73885	1.24104
240	2.190243	2.815491	2.140914	2.094121	-0.17248	0.456548	-1.43371	1.729711	2.678082	3.821703	2.815849	-1.73752	1.24104
255	2.190243	2.767455	1.660907	0.503559	-0.15864	-0.75959	-1.56333	0.70064	1.91897	4.163987	3.50176	-2.03705	1.24104
270	2.190243	2.560726	0.867969	-1.00512	0.088053	-1.45836	-2.26863	-0.38151	2.041854	3.804052	3.751918	-1.95276	1.24104
285	2.190243	2.544383	0.090008	-0.20839	0.607467	-0.5924	-0.73732	1.642502	1.810741	3.039944	3.119532	-1.61379	1.24104
300	2.190243	2.664316	-0.09518	0.361546	1.533558	0.280903	-0.53367	2.81802	0.739904	1.407167	2.552524	-1.39503	1.24104
315	2.190243	2.867087	0.786369	0.645528	2.262272	0.986116	0.954909	2.658469	1.984262	1.303507	2.690109	-1.18468	1.24104
330	2.190243	3.045193	1.809174	1.016141	2.483174	2.668811	2.406906	2.987754	3.538725	2.771632	3.189712	-0.71709	1.24104
345	2.190243	3.130094	2.359979	1.479276	2.467859	3.809765	3.674495	3.783091	3.98641	3.683159	3.489719	-0.03946	1.24104
360	2.190243	2.265607	0.778134	0.593185	2.443635	2.901691	2.492798	4.037556	3.715983	4.60698	2.78769	1.808689	1.24104
Max Combination G:	5.184605												

4 ANT combine uncorrelated for 5200MHz

4 ANT combine correlated for 5200MHz

Phi/Thet	0	15	30	45	60	75	90	105	120	135	150	165	180
0	4.44594	4.17498	4.22555	2.5072	3.17719	1.30941	0.62997	-0.4918	-1.8219	-0.4285	0.57106	1.09324	0.02302
15	4.44594	3.26593	2.84195	3.00674	3.99033	1.56301	0.21355	0.62334	-1.7066	-2.3036	0.18879	0.13053	0.02302
30	4.44594	2.50311	2.1451	4.04644	6.01454	3.41854	4.21607	2.13641	3.05624	0.46326	2.85265	0.18241	0.02302
45	4.44594	2.46001	2.19645	4.57648	4.24808	3.92665	4.73389	3.84211	2.82799	3.89373	4.05242	1.21378	0.02302
60	4.44594	2.47429	2.0948	3.59494	2.791	2.44678	3.39829	2.74827	3.27458	2.1899	3.28541	1.96735	0.02302
75	4.44594	2.53932	0.70715	2.67867	2.3003	2.71336	2.80236	2.41336	1.5756	2.03811	2.18142	2.22215	0.02302
90	4.44594	2.5765	-0.524	1.66006	0.32952	1.94803	1.97507	1.95643	1.10442	3.43655	2.58866	1.80836	0.02302
105	4.44594	2.56343	0.39207	1.76835	0.00366	-0.3526	2.05715	3.14211	1.21451	2.83335	3.64313	0.81703	0.02302
120	4.44594	2.81124	1.74279	2.69828	2.57671	-0.0052	0.57251	3.40203	3.72842	3.69688	3.41407	-0.9168	0.02302
135	4.44594	3.48611	2.07301	2.6402	2.65195	3.10782	4.21273	3.8668	5.37018	4.6252	1.56468	-2.8663	0.02302
150	4.44594	4.35326	2.22339	1.64767	-1.0417	3.68245	4.39576	5.45329	4.34447	3.19648	-0.9265	-3.207	0.02302
165	4.44594	5.0731	1.3038	2.32698	-2.8743	1.56942	-1.9684	4.78972	2.52331	3.45347	0.09192	-2.0855	0.02302
180	4.44594	5.35349	2.6088	1.5895	-0.011	0.05644	1.5978	4.9122	2.98758	2.88262	2.02719	-1.5852	0.02302
195	4.44594	5.36646	2.31406	0.58397	0.11078	-0.1165	1.39893	-0.0648	2.22351	1.14505	2.05898	-1.6043	0.02302
210	4.44594	4.66169	1.67602	1.43672	-1.3008	-2.7246	3.45804	1.04414	1.71369	0.3736	1.7363	-1.665	0.02302
225	4.44594	3.68167	1.88475	1.30935	0.32535	-0.213	3.49165	1.23176	2.37659	-1.2904	0.55822	-0.6804	0.02302
240	4.44594	3.13365	1.8749	1.35841	2.60735	2.77846	2.4179	0.22215	1.48703	-0.3342	-0.4202	0.16229	0.02302
255	4.44594	3.50952	1.47902	1.07439	2.01469	3.75048	1.87828	1.3772	-0.6886	1.78285	0.14411	-0.2773	0.02302
270	4.44594	4.15551	1.80305	2.22351	1.38385	3.15284	0.53694	-0.106	-1.4682	1.23824	0.13713	-1.139	0.02302
285	4.44594	4.53506	2.8849	2.93594	2.03536	1.93278	-0.3781	-3.7142	0.12829	-0.6501	-0.0995	-1.9226	0.02302
300	4.44594	5.01226	4.39824	2.29765	1.13353	2.64293	0.28386	-0.8176	2.38924	-1.5781	2.01001	-1.6558	0.02302
315	4.44594	5.19525	5.35745	2.98972	2.48255	1.47721	-1.5417	1.22306	1.61171	-0.9853	1.69691	-0.8872	0.02302
330	4.44594	5.01345	5.09926	3.6685	4.43611	1.92324	-1.1532	0.68784	1.98549	0.29246	3.05913	0.11943	0.02302
345	4.44594	4.41487	4.17888	3.04828	4.55591	3.09895	1.39768	0.90606	-0.8162	-0.1974	2.84416	0.7117	0.02302
360	4.44594	4.17498	4.22555	2.5072	3.17719	1.30941	0.62997	-0.4918	-1.8219	-0.4285	0.57106	1.09324	0.02302
Max Combination C	6.01454												

4 ANT combine uncorrelated for 5300MHz

[illegible]

4 ANT combine correlated for 5300MHz

Phi/Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	5.277275	5.112492	5.462314	4.463402	2.727914	2.530853	0.918387	1.614536	0.135782	0.76025	0.558906	1.637337	-0.25682
15	5.277275	4.187029	5.018914	4.049206	5.907903	3.595593	1.852404	2.627365	-0.74472	-1.48849	0.743128	1.825446	-0.25682
30	5.277275	3.2978	4.462902	4.536828	5.124512	4.626113	4.978196	2.921244	2.330519	3.445617	3.873768	2.691998	-0.25682
45	5.277275	2.994449	4.150687	4.891222	5.222111	4.615855	5.92125	4.454173	3.242061	4.868844	4.14564	3.255325	-0.25682
60	5.277275	2.673313	3.479819	4.030139	4.104173	2.782	4.909217	3.42788	1.836115	2.581967	2.831057	3.218542	-0.25682
75	5.277275	2.76351	2.506455	2.91511	2.34667	3.180749	3.582955	4.261338	1.021424	2.864753	2.434271	2.690235	-0.25682
90	5.277275	3.109334	1.72424	1.971547	0.861266	2.876511	1.854563	3.326237	1.037283	3.80052	3.489535	1.467599	-0.25682
105	5.277275	3.711882	2.347081	2.724123	0.438571	-0.02383	2.310133	4.186755	2.341906	4.019768	4.304217	-0.16474	-0.25682
120	5.277275	4.393418	3.18457	3.250108	2.391566	0.540665	1.06997	4.782474	4.341802	4.030927	4.164506	-2.17311	-0.25682
135	5.277275	4.776456	3.091595	2.73147	3.583473	4.925676	5.208093	4.848328	5.928906	4.836074	2.364644	-3.95926	-0.25682
150	5.277275	5.201933	2.242882	2.260797	0.863973	4.92068	5.963267	5.163211	5.216197	3.569933	0.455369	-3.27863	-0.25682
165	5.277275	5.453305	0.068022	3.260046	-0.25745	3.150823	0.304482	5.334532	2.916312	3.799092	2.039552	-1.04056	-0.25682
180	5.277275	5.358707	2.079789	2.575333	1.698165	0.397859	2.861112	5.421338	2.578345	3.702282	3.72752	-0.43489	-0.25682
195	5.277275	5.632071	3.340844	0.09784	0.413771	1.989754	3.126932	0.257779	2.541137	2.661791	3.393817	0.756284	-0.25682
210	5.277275	5.204773	3.065462	1.802674	-0.59791	-0.77199	3.758086	1.020629	2.854606	1.681934	3.23993	1.283344	-0.25682
225	5.277275	4.519539	2.290481	1.435378	0.284156	-0.42833	4.030795	2.970478	2.077161	-0.871	1.664444	1.379453	-0.25682
240	5.277275	3.537184	1.669699	2.547344	3.052626	2.815302	4.475556	1.381062	1.974403	0.073891	1.184397	1.43172	-0.25682
255	5.277275	3.318673	2.182985	1.857784	2.072358	4.070293	3.506533	0.876285	0.137965	1.853945	0.992139	0.723522	-0.25682
270	5.277275	4.201017	2.952098	3.350093	2.399446	3.190477	0.843849	-0.87421	-0.80272	2.984846	1.218822	-0.17032	-0.25682
285	5.277275	5.382917	4.241125	4.636361	3.619091	1.317948	1.266724	-2.0823	0.096229	1.84144	1.84231	-0.60393	-0.25682
300	5.277275	5.321456	5.87012	4.633174	3.017581	4.036171	2.349342	1.572607	2.117619	1.153441	2.09389	-0.8949	-0.25682
315	5.277275	5.912346	5.623122	4.681026	3.146596	2.665757	0.63141	2.418752	1.764208	-0.55797	3.724951	-0.01967	-0.25682
330	5.277275	5.712458	5.632148	5.347771	5.016188	3.149811	-0.37785	2.024626	2.315677	1.174802	3.917539	1.261658	-0.25682
345	5.277275	5.910562	5.645784	4.540899	5.663268	3.987884	1.911077	2.058941	0.375069	1.597518	3.44822	2.453501	-0.25682
360	5.277275	5.112492	5.456232	4.463402	2.727914	2.530853	0.918387	1.614536	0.135782	0.76025	0.558906	1.637337	-0.25682
Max Combination G:	5.963267												

4 ANT combine uncorrelated for 5600MHz

Phi/Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.3191	-3.40863	-3.09898	-3.60188	-4.46271	-6.62687	-7.13999	-3.52021	-6.83251	-9.6142	-3.65809	-4.82217	-8.36891
15	-3.3191	-4.85591	-1.92029	-4.14703	-5.14627	-3.09456	-4.92863	-1.89855	-4.94093	-7.78749	-4.38178	-5.75415	-8.36891
30	-3.3191	-5.89461	-1.42214	-2.27313	-4.1219	-0.48842	-2.49038	-1.75141	-2.65971	-4.86911	-4.63953	-5.72829	-8.36891
45	-3.3191	-7.15489	-2.50362	-2.70225	-2.86973	-2.73042	-2.28269	-1.41859	-2.21588	-3.64283	-4.07079	-4.75836	-8.36891
60	-3.3191	-8.58504	-4.16801	-3.74319	-3.32227	-3.92373	-2.82794	-2.50404	-3.32664	-4.20414	-3.0932	-4.10067	-8.36891
75	-3.3191	-9.42025	-6.31744	-4.71029	-4.64189	-4.31538	-4.26081	-4.98992	-5.46086	-4.93556	-4.53757	-3.73846	-8.36891
90	-3.3191	-9.76732	-6.17492	-3.81214	-6.67148	-9.0038	-8.50461	-7.05402	-6.32788	-5.37271	-4.98747	-3.53193	-8.36891
105	-3.3191	-8.60609	-5.33987	-2.82419	-7.20223	-8.54404	-6.28584	-5.442	-4.25446	-5.45746	-3.18747	-4.16687	-8.36891
120	-3.3191	-7.22178	-5.25412	-2.68505	-4.53593	-6.63006	-3.65683	-4.23697	-4.47434	-3.92546	-3.02073	-5.48572	-8.36891
135	-3.3191	-5.80369	-4.49539	-3.80428	-3.06762	-4.91282	-5.14985	-4.13079	-4.71464	-5.2684	-3.95801	-6.54461	-8.36891
150	-3.3191	-4.98765	-3.9585	-4.24746	-5.44314	-3.49114	-2.2705	-2.4454	-4.80107	-4.21211	-4.21529	-7.04293	-8.36891
165	-3.3191	-4.61503	-5.03456	-5.10631	-7.972	-3.94767	-4.86073	-2.7104	-6.37493	-2.97447	-4.48735	-6.07524	-8.36891
180	-3.3191	-4.11205	-4.66796	-5.72874	-5.38546	-5.58102	-4.60722	-4.7241	-3.85324	-5.26953	-5.25171	-5.82268	-8.36891
195	-3.3191	-3.66581	-3.34977	-5.38787	-4.61204	-4.5169	-5.43557	-6.60592	-4.80441	-7.58455	-4.7788	-5.24178	-8.36891
210	-3.3191	-3.114	-1.55869	-2.41139	-4.86351	-4.56915	-5.21733	-5.22893	-4.36251	-5.9083	-4.1634	-6.26126	-8.36891
225	-3.3191	-2.14687	-1.64483	-1.29619	-6.61045	-3.86176	-1.89856	-1.73038	-2.70492	-7.35863	-5.30998	-6.33013	-8.36891
240	-3.3191	-1.80876	-2.72199	-2.72053	-3.96964	-3.38364	-2.3778	-4.97953	-4.702	-5.18684	-6.38738	-5.31555	-8.36891
255	-3.3191	-1.80802	-3.18299	-3.62288	-4.26455	-4.14881	-4.18577	-6.07156	-4.57563	-3.03413	-5.45116	-4.68619	-8.36891
270	-3.3191	-1.87966	-2.93444	-3.8461	-3.81659	-4.78982	-5.76067	-6.56324	-5.20954	-3.19642	-3.98134	-4.95324	-8.36891
285	-3.3191	-1.39975	-2.24501	-2.76852	-4.33327	-5.82632	-5.07369	-5.9937	-5.12891	-2.92139	-3.27495	-5.68609	-8.36891
300	-3.3191	-0.94913	-1.82095	-2.70889	-5.12884	-3.72129	-4.20745	-4.42435	-4.35771	-4.47886	-3.26061	-6.58498	-8.36891
315	-3.3191	-0.98602	-1.04916	-2.63152	-4.95771	-4.21125	-5.29541	-4.48054	-5.81819	-7.03777	-2.67266	-6.15199	-8.36891
330	-3.3191	-1.87486	-0.41187	-1.84832	-6.3436	-4.04997	-6.49423	-4.27049	-6.3905	-7.66894	-2.58611	-5.01611	-8.36891
345	-3.3191	-3.46808	-0.73937	-2.03007	-4.40522	-2.38969	-2.91994	-4.17274	-7.81766	-9.2661	-3.81381	-4.1251	-8.36891
360	-3.3191	-3.40863	-3.09898	-3.60188	-4.46271	-6.62687	-7.13999	-3.52021	-6.83251	-9.6142	-3.65809	-4.82217	-8.36891
Max Combination Ga	-0.41187												

4 ANT combine correlated for 5600MHz

Phi Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	2.19347	1.85482	2.22592	1.95241	1.43093	-1.1422	-2.2147	1.68876	-1.4769	-4.1512	1.6949	0.36717	-2.6363
15	2.19347	0.68206	3.5186	1.26165	0.46741	2.49902	0.19052	3.15937	0.25605	-2.5409	0.54367	-0.5895	-2.6363
30	2.19347	-0.3153	4.24527	3.48562	1.01491	4.41061	2.13543	2.48392	2.41072	0.19233	0.45229	-0.0539	-2.6363
45	2.19347	-1.8637	3.10282	2.36603	2.41407	2.19191	2.43803	2.74017	2.01884	1.12415	0.59489	1.04949	-2.6363
60	2.19347	-3.3532	1.32733	0.94523	1.56931	0.94512	1.54851	2.02565	1.20254	0.74163	1.38805	1.70178	-2.6363
75	2.19347	-3.8811	-1.0003	0.996	-0.0769	0.85239	0.41561	0.56641	-0.1388	-0.0076	0.7334	2.09632	-2.6363
90	2.19347	-4.2964	-0.3307	2.10195	-0.9514	-3.2409	-2.6585	-1.3261	-0.9798	-0.3808	0.23729	2.31886	-2.6363
105	2.19347	-3.294	0.64606	2.71011	-2.0248	-2.7164	-0.7322	0.11286	1.3397	-1.0847	2.12709	1.59919	-2.6363
120	2.19347	-1.9807	0.65882	2.43233	1.07173	-1.1265	1.34724	0.92063	1.34005	0.86429	2.20347	0.18904	-2.6363
135	2.19347	-0.6288	1.17141	1.05957	2.47629	0.55882	0.01732	0.92847	0.95502	-1.2539	1.07829	-1.3337	-2.6363
150	2.19347	0.32425	1.33104	0.09651	-0.007	1.88389	3.101	2.9783	0.68027	0.40738	0.62055	-1.4712	-2.6363
165	2.19347	0.8805	0.3699	0.50541	-2.1834	1.4302	0.8766	2.03845	-0.6935	2.21231	0.54392	-0.5434	-2.6363
180	2.19347	1.52922	0.90096	0.17982	-0.6124	0.2017	1.14443	0.86392	2.13215	0.51045	0.2414	-0.5612	-2.6363
195	2.19347	2.14173	2.32435	0.59352	0.84367	1.03227	-0.2093	-0.8175	0.87146	-1.6738	0.55642	0.03522	-2.6363
210	2.19347	2.74552	4.2528	3.52462	0.30641	0.29117	2.1193	0.47317	1.30892	-0.3565	1.13951	-0.8073	-2.6363
225	2.19347	3.78888	4.3104	4.39404	-1.1836	1.41771	3.47469	3.49131	3.19185	-1.7915	0.11676	-0.6827	-2.6363
240	2.19347	3.96125	3.25591	3.13551	1.95582	2.62495	3.47185	0.84467	1.15237	0.36798	-1.6707	0.18724	-2.6363
255	2.19347	3.66556	2.47503	2.07492	1.1483	1.78756	1.17577	-0.1028	0.96039	1.87751	-0.8967	0.56405	-2.6363
270	2.19347	3.35762	2.03205	1.57007	2.14097	0.46583	-1.0319	-1.841	-0.4008	1.30214	0.20258	0.29886	-2.6363
285	2.19347	3.65415	2.30024	2.66882	1.4237	-0.8448	0.0565	-1.0451	-0.6968	0.87675	0.92421	-0.4979	-2.6363
300	2.19347	4.08872	2.91061	2.81658	0.22795	1.18606	0.88819	0.17773	0.80664	-0.1061	1.18965	-1.5779	-2.6363
315	2.19347	4.20198	3.85218	2.74198	0.23226	1.30204	-0.2137	0.83097	-0.587	-2.0169	1.69836	-1.3118	-2.6363
330	2.19347	3.54084	4.66349	3.81709	-0.4949	1.53658	-1.1704	1.08383	-0.8912	-2.8034	1.7285	0.01469	-2.6363
345	2.19347	2.18144	4.53836	3.28227	1.14356	2.9357	2.46522	0.9732	-2.2147	-4.2261	0.45337	1.16244	-2.6363
360	2.19347	1.85482	2.22592	1.95241	1.43093	-1.1422	-2.2147	1.68876	-1.4769	-4.1512	1.6949	0.36717	-2.6363
Max Combination C	4.66349												

4 ANT combine uncorrelated for 5800MHz

Phi/Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.91526	-6.46612	-5.33172	-4.39721	-6.61323	-6.97871	-7.59528	-7.08472	-7.41817	-6.50983	-1.89377	-1.07124	-7.65125
15	-3.91526	-7.05335	-3.58319	-4.1679	-5.6137	-4.85317	-5.55724	-3.37862	-5.05424	-5.39889	-0.71291	-1.11021	-7.65125
30	-3.91526	-5.64886	-2.05288	-2.4623	-3.19556	-2.95221	-4.90741	-4.80774	-3.11236	-2.87973	0.631268	-0.8243	-7.65125
45	-3.91526	-4.33125	-2.08446	-3.13495	-2.62206	-3.24668	-3.0859	-2.79385	-1.70354	-2.57019	-0.07248	-0.76628	-7.65125
60	-3.91526	-4.0958	-3.67689	-5.67669	-4.79949	-4.10661	-3.80728	-3.61943	-0.64506	-1.97485	-0.7612	-0.67476	-7.65125
75	-3.91526	-4.34483	-6.33559	-4.69599	-5.87711	-3.51861	-3.79531	-5.97334	-2.12324	-1.57664	-1.67859	-0.86683	-7.65125
90	-3.91526	-4.35398	-6.07741	-4.5881	-5.06083	-4.81195	-6.51079	-6.94789	-4.56555	-3.67396	-2.44402	-1.3717	-7.65125
105	-3.91526	-3.97953	-5.24244	-2.86932	-7.09833	-7.24682	-5.3271	-5.46579	-4.51083	-3.34201	-1.9853	-2.01528	-7.65125
120	-3.91526	-3.81313	-5.20848	-1.85672	-5.59764	-5.69938	-3.55524	-3.02024	-3.47666	-2.39342	-2.09836	-2.68616	-7.65125
135	-3.91526	-3.62042	-5.32188	-3.15633	-4.76706	-7.509	-4.20586	-4.16327	-4.59569	-3.0807	-2.3745	-2.86966	-7.65125
150	-3.91526	-3.18353	-4.47369	-6.62519	-5.87996	-5.48165	-3.78823	-3.20467	-4.26142	-3.32396	-1.44352	-3.00521	-7.65125
165	-3.91526	-2.45829	-2.20407	-9.52404	-6.4929	-4.33266	-5.06372	-1.48703	-4.91396	-2.72304	-1.26047	-3.43661	-7.65125
180	-3.91526	-1.77159	-1.67109	-6.29974	-4.61167	-5.75449	-2.97032	-6.88074	-7.40559	-5.10401	-0.85066	-4.368	-7.65125
195	-3.91526	-1.50735	-1.6855	-3.51589	-3.909	-5.7877	-5.02313	-5.06364	-7.81795	-7.04528	-2.81635	-5.8211	-7.65125
210	-3.91526	-1.89714	-0.73001	-2.51164	-4.74546	-5.39683	-5.32035	-5.7324	-5.72774	-3.85814	-1.73838	-5.69224	-7.65125
225	-3.91526	-1.90436	-1.15775	-2.17048	-4.07013	-4.40331	-3.02822	-1.75748	-3.42708	-4.19129	-2.11669	-5.11991	-7.65125
240	-3.91526	-2.17888	-1.55406	-2.29391	-3.72867	-3.43872	-1.45059	-3.49291	-3.88757	-2.97005	-2.90561	-4.90424	-7.65125
255	-3.91526	-2.06715	-1.71696	-4.05217	-4.08427	-4.35632	-3.36712	-6.25426	-4.27543	-1.25528	-3.29791	-4.36571	-7.65125
270	-3.91526	-2.0242	-2.1424	-4.29238	-4.19684	-6.19913	-6.16901	-6.55052	-4.03196	-0.90276	-2.57285	-4.71725	-7.65125
285	-3.91526	-1.71444	-1.95942	-2.50066	-3.51411	-7.34328	-8.02107	-5.75965	-2.45059	-2.70026	-2.41661	-5.37703	-7.65125
300	-3.91526	-1.47646	-1.05128	-1.04444	-3.59714	-6.36744	-6.29503	-4.5596	-2.03727	-5.0984	-3.1421	-5.75659	-7.65125
315	-3.91526	-1.39132	-1.03088	-0.78168	-3.06532	-4.32542	-3.64806	-2.9719	-3.81591	-5.47558	-2.92744	-4.88868	-7.65125
330	-3.91526	-1.94225	-1.4186	-1.29686	-4.35692	-3.52765	-4.23002	-4.55856	-5.40336	-4.93274	-2.34345	-3.74091	-7.65125
345	-3.91526	-3.03689	-2.22931	-2.37145	-5.88079	-4.21423	-3.26154	-4.34606	-6.13454	-5.21924	-2.17137	-3.11043	-7.65125
360	-3.91526	-6.46612	-5.33172	-4.39721	-6.61323	-6.97871	-7.59528	-7.08472	-7.41817	-6.50983	-1.89377	-1.07124	-7.65125
Max Combination Ga	0.631268												

4 ANT combine correlated for 5800MHz

Phi Thet	0	15	30	45	60	75	90	105	120	135	150	165	180
0	2.01033	-0.6177	-0.5482	0.92748	-1.0945	-1.7117	-2.2505	-1.3554	-2.099	-1.7006	2.73575	2.39675	-1.8744
15	2.01033	-1.2675	1.84698	1.45727	-0.0283	0.5899	-1.3026	1.58211	0.58933	-0.3404	4.29279	3.16443	-1.8744
30	2.01033	0.07798	3.61321	2.94832	1.41651	1.99088	-0.269	0.35153	2.12153	2.26357	5.9153	4.21755	-1.8744
45	2.01033	1.41531	3.55971	1.46887	2.09169	2.01735	1.75421	2.44561	3.0384	2.73691	4.41675	4.3431	-1.8744
60	2.01033	1.59652	1.71848	-0.194	-0.0062	0.20848	0.4127	1.54304	3.92342	3.84305	4.0771	4.31059	-1.8744
75	2.01033	1.28455	-0.5761	1.06385	-0.4769	0.74446	1.14741	-0.0901	2.32905	3.95671	3.72553	4.1342	-1.8744
90	2.01033	1.22495	-0.4976	1.33554	-0.0129	0.1885	-0.6486	-1.2567	0.91267	2.11667	3.14657	4.13158	-1.8744
105	2.01033	1.5288	-0.3903	3.00377	-1.1577	-1.8494	0.05134	-0.0195	1.11579	2.57446	3.99017	3.82413	-1.8744
120	2.01033	1.4758	-0.1788	3.89761	0.37439	0.13676	1.88792	1.91169	2.30392	3.50896	3.79092	2.95923	-1.8744
135	2.01033	1.49838	-0.1927	2.46827	0.77455	-2.4363	0.7071	0.71599	1.26847	2.55741	3.02036	2.43187	-1.8744
150	2.01033	1.90936	1.15696	-1.0707	-0.0975	0.03605	1.58727	2.14416	1.59491	1.97319	4.26689	2.31083	-1.8744
165	2.01033	2.32516	2.41319	-3.9337	-1.1971	1.29825	0.10456	3.62907	0.73868	1.55284	4.05952	2.30502	-1.8744
180	2.01033	2.78874	2.94233	-0.4086	0.99161	2.01792	2.61432	-0.9234	-1.9463	0.46138	4.37233	1.44959	-1.8744
195	2.01033	3.41519	3.73883	2.47465	1.29991	0.16565	0.31289	0.77181	-2.0031	-1.3576	2.18553	-0.5052	-1.8744
210	2.01033	3.37793	4.81202	3.39301	0.64163	-0.1416	-0.6287	0.14777	0.07947	1.92813	3.82377	-0.9417	-1.8744
225	2.01033	3.74276	4.5886	3.60275	1.70888	0.55331	2.12993	3.99194	1.86516	0.66064	3.36679	-0.1495	-1.8744
240	2.01033	3.64177	4.33423	3.60984	2.19647	2.0684	3.9101	1.88205	2.0143	2.70862	2.33796	0.12126	-1.8744
255	2.01033	3.62665	4.15946	1.59834	1.84815	1.48374	1.99409	-0.9264	1.37737	4.01047	1.91655	0.65688	-1.8744
270	2.01033	3.62833	3.53382	0.89988	1.53292	-0.6109	-0.9364	-1.6258	0.15453	3.6945	1.95321	0.1916	-1.8744
285	2.01033	4.03846	3.20149	2.92398	2.29715	-1.7895	-2.7285	-0.4119	2.17244	1.50372	1.32714	-0.4897	-1.8744
300	2.01033	4.31985	3.93952	3.95377	2.118	-0.7002	-1.0172	0.92496	2.77022	-0.6839	0.80472	-0.3601	-1.8744
315	2.01033	4.37058	3.93909	3.81372	2.38348	1.13797	1.0144	2.04553	1.06163	-0.3091	1.70991	0.35116	-1.8744
330	2.01033	3.78135	3.12565	3.6283	0.80984	2.31543	0.21565	1.02179	-0.3159	0.48407	2.72456	1.21742	-1.8744
345	2.01033	2.73352	2.60231	2.52198	-0.4083	1.38465	2.22916	1.18071	-0.5543	0.1227	2.35237	1.97588	-1.8744
360	2.01033	-0.6177	-0.5482	0.92748	-1.0945	-1.7117	-2.2505	-1.3554	-2.099	-1.7006	2.73575	2.39675	-1.8744
Max Combination C	5.9153												

4 ANT combine uncorrelated for 6175MHz

4 ANT combine correlated for 6175MHz

Phi/Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-0.13591	1.503891	1.105744	2.275652	3.986258	4.027726	3.094243	0.263604	2.656986	4.566092	-0.84774	1.140563	-0.51085
15	-0.13591	1.530774	1.883571	3.29401	2.463997	1.669563	2.046557	2.04185	3.936078	4.071604	1.856601	1.389387	-0.51085
30	-0.13591	1.748511	3.179959	3.687634	3.69381	3.735388	0.201092	3.942008	2.25936	2.825581	2.828422	2.105968	-0.51085
45	-0.13591	1.622427	3.759106	1.820299	1.994061	2.937895	1.234759	2.121755	3.737665	3.877383	3.598222	2.891404	-0.51085
60	-0.13591	1.531919	4.092505	4.441147	3.192351	2.205012	1.704784	4.033525	4.476137	3.816876	4.500732	3.527801	-0.51085
75	-0.13591	1.444339	3.886223	4.48978	2.019853	3.660682	4.069629	3.119879	3.752421	3.041155	5.00002	3.767691	-0.51085
90	-0.13591	2.549981	3.24043	3.890478	2.023584	4.015157	3.669685	2.075232	2.218004	3.090658	5.462974	3.913827	-0.51085
105	-0.13591	3.656593	3.121308	4.561987	0.452883	3.518106	4.470277	3.973074	2.419271	4.976789	5.687809	3.460396	-0.51085
120	-0.13591	4.434017	3.653131	4.129142	2.069677	2.316542	2.765957	5.508957	3.50528	5.222315	5.284032	2.038644	-0.51085
135	-0.13591	5.167481	4.798452	3.619778	4.975048	4.464298	4.427599	2.638078	2.682056	5.761672	2.204756	0.171262	-0.51085
150	-0.13591	5.282623	3.701571	4.13238	3.467511	3.571246	2.217413	3.945739	3.580829	5.715544	3.392584	1.192287	-0.51085
165	-0.13591	4.725418	1.617417	0.968377	-1.28089	3.991149	3.093165	2.728889	-0.12204	0.839409	3.031327	2.843714	-0.51085
180	-0.13591	3.610999	3.456564	4.585123	1.033469	2.150471	2.285431	3.283378	0.44348	1.199348	1.12982	3.028252	-0.51085
195	-0.13591	1.712188	4.752941	3.213994	2.399893	1.008894	3.921552	-0.17981	2.613008	1.72464	2.747983	3.349005	-0.51085
210	-0.13591	1.396749	5.161439	5.017609	2.465076	2.084993	2.565819	2.275603	3.019097	0.029944	3.096281	3.18332	-0.51085
225	-0.13591	3.513016	5.212144	5.564777	3.705376	2.960885	3.793399	4.268969	2.184536	0.509205	2.813886	2.585973	-0.51085
240	-0.13591	3.91066	5.880008	3.04525	3.921508	0.458417	3.86585	3.79281	0.763424	1.737962	3.207562	2.27381	-0.51085
255	-0.13591	3.504621	4.509375	3.642014	1.430845	2.171054	2.055003	1.651973	1.456809	2.961856	3.32471	2.103899	-0.51085
270	-0.13591	3.29083	4.007249	4.544187	0.736888	4.577031	2.816417	3.1083	3.885724	3.584002	2.639033	2.134425	-0.51085
285	-0.13591	2.99784	3.91941	4.254937	2.746161	5.722777	1.795316	3.593807	4.561875	2.019092	2.410929	1.583537	-0.51085
300	-0.13591	2.23878	3.521777	3.195758	5.30976	3.650858	5.153276	4.716041	3.648014	1.954615	0.454866	0.534002	-0.51085
315	-0.13591	1.788668	1.430457	3.875412	5.500123	4.551444	5.438421	5.560507	0.575436	2.721529	-0.47488	-0.08136	-0.51085
330	-0.13591	2.769173	3.2049	3.454094	3.287871	5.3978	2.463035	3.896209	2.994187	2.426814	2.792841	-0.10177	-0.51085
345	-0.13591	2.577544	4.912878	3.061655	3.595324	3.814366	4.620855	2.547978	2.755413	3.515544	3.580247	0.337593	-0.51085
360	-0.13591	1.503891	1.105744	2.275652	3.986258	4.027726	3.094243	0.263604	2.656986	4.566092	-0.84774	1.140563	-0.51085
Max Combination G: 5.880008													

4 ANT combine uncorrelated for 6475MHz

Phi Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-4.8388	-7.28051	-3.77308	-3.11773	-3.94988	-4.00697	-5.61924	-3.84571	-5.56729	-5.39865	-4.01663	-3.53346	-5.11816
15	-4.8388	-8.00139	-5.34727	-5.81499	-5.03766	-4.38783	-4.37362	-3.98256	-4.47333	-5.59486	-6.03793	-3.97246	-5.11816
30	-4.8388	-7.46002	-4.09037	-2.9267	-4.31829	-6.33157	-2.75418	-4.3305	-4.63228	-3.39394	-5.0494	-5.15397	-5.11816
45	-4.8388	-5.44319	-3.88841	-4.45134	-4.25861	-4.01041	-4.00598	-5.44011	-4.02316	-4.26941	-3.44748	-6.15002	-5.11816
60	-4.8388	-5.04412	-3.98222	-6.58569	-4.52389	-5.33077	-4.51097	-6.92296	-4.27464	-6.22215	-2.90603	-6.89244	-5.11816
75	-4.8388	-5.28522	-4.13262	-5.90387	-5.41872	-5.43299	-4.44992	-4.68532	-5.86607	-4.72667	-2.6807	-7.72308	-5.11816
90	-4.8388	-5.45729	-4.67417	-4.20723	-6.53655	-4.61939	-3.21878	-4.61245	-4.53142	-3.59397	-2.96753	-7.8404	-5.11816
105	-4.8388	-6.05327	-5.20828	-5.2434	-4.4521	-5.07591	-3.76389	-3.91096	-1.99312	-3.31717	-5.31157	-5.88818	-5.11816
120	-4.8388	-6.24434	-5.37213	-5.91981	-5.18585	-4.03943	-4.16735	-4.06636	-6.15893	-4.77239	-5.99762	-3.67471	-5.11816
135	-4.8388	-5.5653	-5.44105	-4.24873	-4.24149	-4.59137	-5.45065	-2.50507	-3.33393	-2.91312	-3.38859	-3.12945	-5.11816
150	-4.8388	-5.29328	-5.57541	-4.93882	-3.79911	-3.36871	-3.75762	-3.9588	-5.73682	-5.04189	-5.14239	-4.2055	-5.11816
165	-4.8388	-6.10797	-4.90335	-4.39417	-5.0994	-5.49904	-4.79306	-5.3482	-5.22575	-4.46994	-6.66266	-5.36032	-5.11816
180	-4.8388	-7.27535	-5.41017	-6.12549	-6.35397	-5.82134	-5.87638	-4.15631	-4.54217	-4.94402	-4.3851	-4.04435	-5.11816
195	-4.8388	-5.7575	-4.84367	-6.22655	-4.17524	-5.02451	-3.83996	-4.61101	-4.57727	-3.75113	-3.56927	-3.88127	-5.11816
210	-4.8388	-4.91375	-4.53795	-3.77567	-5.09747	-5.12956	-4.24034	-4.5622	-5.0014	-5.01709	-3.84008	-4.22744	-5.11816
225	-4.8388	-4.50466	-3.61865	-2.93175	-3.60279	-5.34158	-3.42047	-5.09243	-6.10297	-5.06761	-4.48958	-4.62543	-5.11816
240	-4.8388	-4.11816	-3.78266	-2.78511	-4.77511	-3.51917	-3.89542	-4.92557	-5.24223	-5.08039	-5.48514	-5.36313	-5.11816
255	-4.8388	-4.26516	-4.67414	-3.65797	-4.8926	-4.17259	-5.53896	-4.18001	-2.88561	-6.25615	-5.43186	-6.06527	-5.11816
270	-4.8388	-4.82594	-4.85068	-5.3894	-3.82544	-5.69556	-5.58503	-4.04699	-4.3429	-5.18973	-5.72798	-6.27888	-5.11816
285	-4.8388	-5.44659	-4.45265	-4.97816	-2.72248	-8.02854	-3.79012	-3.62232	-7.03315	-4.95059	-5.24964	-5.51573	-5.11816
300	-4.8388	-5.41317	-4.2154	-2.97637	-1.50853	-3.877	-2.11669	-4.17131	-6.2038	-5.12856	-4.32307	-5.11994	-5.11816
315	-4.8388	-4.90858	-3.05905	-5.45899	-3.64006	-2.77934	-4.33495	-5.9571	-4.16912	-5.65175	-3.38696	-5.05802	-5.11816
330	-4.8388	-4.23125	-3.63801	-4.45074	-5.12691	-3.96035	-3.95725	-3.80859	-4.57708	-4.8746	-4.86142	-5.46486	-5.11816
345	-4.8388	-4.3479	-4.68214	-5.15205	-4.71159	-5.77924	-4.14033	-4.26166	-4.32458	-6.7726	-6.50535	-4.97063	-5.11816
360	-4.8388	-7.28051	-3.77308	-3.11773	-3.94988	-4.00697	-5.61924	-3.84571	-5.56729	-5.39865	-4.01663	-3.53346	-5.11816
Max Combination Ga	-1.50853												

4 ANT combine correlated for 6475MHz

Phi Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	1.1627	-1.3367	2.08056	2.7525	1.7032	1.86266	0.20373	2.01274	0.17384	0.55054	1.94266	2.24875	0.86383
15	1.1627	-2.0665	0.46906	-0.0152	0.76405	1.38969	1.57133	1.82669	1.39585	0.41818	-0.2668	1.87809	0.86383
30	1.1627	-1.5202	1.52844	2.8211	1.4462	-0.5911	3.00626	1.41469	1.16701	2.38417	0.90662	0.81833	0.86383
45	1.1627	0.50104	1.7625	1.44201	1.61166	1.62627	1.8527	0.53828	1.71652	1.72976	2.33849	-0.1623	0.86383
60	1.1627	0.92907	1.82965	-0.5974	1.37175	0.63472	1.37156	-0.9919	1.65615	-0.2872	2.60334	-1.0736	0.86383
75	1.1627	0.67851	1.7058	-0.0768	0.49485	0.29679	1.43596	1.07964	0.19337	1.17322	2.7814	-2.0723	0.86383
90	1.1627	0.49612	1.19398	1.47705	-0.5365	1.06753	2.50999	1.20562	1.48231	2.33654	0.65171	-2.1215	0.86383
105	1.1627	-0.0881	0.74286	0.65482	1.50115	0.8459	2.08775	1.59528	3.75066	2.46165	0.18702	0.00655	0.86383
120	1.1627	-0.3236	0.6088	-0.1749	0.68257	1.84241	1.68795	1.7541	-0.3416	0.94313	-0.6369	2.19946	0.86383
135	1.1627	0.18206	0.48911	1.54256	1.68408	1.19631	0.49873	3.28775	2.46038	2.97212	2.48138	2.77536	0.86383
150	1.1627	0.54136	0.36851	0.92499	2.03277	2.56364	2.1982	1.70207	0.08828	0.51779	0.83249	1.69894	0.86383
165	1.1627	-0.2244	0.98448	1.43856	0.78508	0.32721	1.09165	0.19614	0.78774	1.41828	-0.6594	0.18266	0.86383
180	1.1627	-1.5956	0.57085	-0.1421	-0.5197	0.11806	0.12454	1.75952	1.41335	0.76269	1.59827	1.621	0.86383
195	1.1627	0.198	0.93387	-0.3372	1.7055	0.95665	2.01721	1.40264	1.39566	2.15246	2.28395	1.83944	0.86383
210	1.1627	1.07002	1.33153	2.06242	0.86117	0.69102	1.72131	1.44206	0.8129	0.95667	2.10296	1.34659	0.86383
225	1.1627	1.49327	2.17234	2.99341	2.38418	0.48426	2.36119	0.57507	-0.1338	0.94805	1.51111	1.01859	0.86383
240	1.1627	1.85006	2.06904	3.11591	0.99292	2.4809	2.09024	0.99395	0.77324	0.75183	0.46245	0.54808	0.86383
255	1.1627	1.65455	1.30573	2.30825	1.08682	1.82265	0.32346	1.65595	3.028	-0.2961	0.56862	-0.0753	0.86383
270	1.1627	1.04253	0.92361	0.61593	1.84196	0.25638	0.36342	1.89878	1.56587	0.42017	0.05641	-0.3824	0.86383
285	1.1627	0.49405	1.44658	0.65058	3.13964	-2.2702	1.95282	2.09622	-1.2048	0.86755	0.27482	0.43969	0.86383
300	1.1627	0.58783	1.70342	2.35254	1.4577	1.4575	3.53074	1.63621	-0.2537	0.7795	1.52116	0.86276	0.86383
315	1.1627	1.01828	2.90897	0.38591	2.35174	2.95113	1.59126	-0.0312	1.53789	0.30487	2.52676	0.84777	0.86383
330	1.1627	1.56615	1.78099	1.49558	0.65334	1.762	2.02951	2.00375	1.28064	1.0116	1.0816	0.32892	0.86383
345	1.1627	1.39524	1.23497	0.83675	1.24003	-0.37	1.84092	1.58584	1.51881	-0.8114	-0.6023	0.96004	0.86383
360	1.1627	-1.3367	2.08056	2.7525	1.7032	1.86266	0.20373	2.01274	0.17384	0.55054	1.94266	2.24875	0.86383
Max Combination C	4.1577												

4 ANT combine uncorrelated for 6695MHz

Phi Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-6.81092	-6.40717	-4.72158	-4.34517	-6.65902	-6.20033	-7.247	-6.92358	-4.31501	-4.65157	-5.28747	-7.0334	-10.708
15	-6.81092	-7.7548	-7.06063	-5.40069	-6.87611	-3.98125	-4.76411	-5.72602	-5.80187	-5.87174	-4.3637	-6.52708	-10.708
30	-6.81092	-8.94118	-6.18173	-3.20541	-7.0109	-4.17744	-3.53865	-5.91248	-4.67061	-4.6624	-5.51259	-6.4287	-10.708
45	-6.81092	-9.15884	-4.43145	-2.76115	-5.09484	-2.26823	-5.01317	-8.14478	-5.88109	-4.58933	-4.48389	-6.85435	-10.708
60	-6.81092	-8.93482	-4.77286	-4.01098	-5.93382	-4.03585	-4.18556	-8.33875	-3.50172	-3.67951	-4.10815	-6.66918	-10.708
75	-6.81092	-8.329	-5.27398	-5.79399	-5.51873	-5.21948	-4.55627	-6.24625	-3.98111	-3.12287	-4.01473	-5.71814	-10.708
90	-6.81092	-7.84504	-4.96128	-7.26196	-6.10292	-3.96796	-3.31426	-3.89955	-3.51166	-3.87257	-4.16933	-4.71563	-10.708
105	-6.81092	-7.01134	-4.34832	-6.98207	-5.24466	-3.59984	-4.11072	-3.51215	-3.85147	-4.52813	-3.41315	-4.365	-10.708
120	-6.81092	-6.33067	-5.53091	-5.81192	-4.85263	-4.30767	-2.60815	-2.66803	-3.6509	-3.2836	-2.82206	-5.30574	-10.708
135	-6.81092	-5.94521	-4.29195	-4.08179	-5.33338	-2.33726	-1.29936	-3.70045	-3.62804	-3.36828	-4.4167	-6.77341	-10.708
150	-6.81092	-5.80606	-4.00836	-2.18009	-4.636	-2.57987	-1.56435	-3.6099	-3.09223	-4.04799	-5.99471	-6.79615	-10.708
165	-6.81092	-5.18649	-5.26899	-5.67856	-5.3581	-4.08386	-3.55121	-4.0651	-5.0497	-8.78089	-6.23575	-5.39486	-10.708
180	-6.81092	-4.1596	-5.36548	-4.31752	-7.55662	-9.90125	-5.80086	-5.61033	-8.12392	-5.90876	-7.0946	-5.39142	-10.708
195	-6.81092	-2.88469	-4.93511	-3.68435	-5.84618	-7.728	-5.11325	-6.14739	-5.59649	-9.12248	-6.98375	-5.91234	-10.708
210	-6.81092	-3.57281	-2.49738	-4.20568	-4.91438	-4.09102	-3.04564	-7.80283	-6.81611	-8.63549	-7.28553	-6.42444	-10.708
225	-6.81092	-4.02419	-1.24781	-1.58365	-4.12869	-3.2902	-1.74232	-4.25527	-4.39308	-8.1444	-6.47271	-7.44126	-10.708
240	-6.81092	-4.19257	-1.65148	-2.90145	-5.7734	-4.09869	-4.41715	-4.15402	-4.26306	-7.2854	-4.54987	-8.74788	-10.708
255	-6.81092	-4.52738	-3.21749	-4.44161	-5.73191	-6.70286	-5.75083	-6.30547	-6.69218	-6.26555	-3.30041	-8.15386	-10.708
270	-6.81092	-4.96012	-4.32175	-3.99649	-4.8263	-6.04396	-5.63777	-6.4039	-6.08262	-6.17222	-3.90126	-6.92661	-10.708
285	-6.81092	-5.12374	-4.01913	-3.50046	-3.25814	-2.17784	-3.58161	-4.36178	-4.14616	-8.22203	-6.20489	-7.81795	-10.708
300	-6.81092	-5.72569	-3.29366	-3.22759	-2.1579	-1.80053	-1.86943	-3.00825	-3.846	-6.31534	-7.90772	-8.66015	-10.708
315	-6.81092	-6.47221	-4.51336	-2.25651	-2.68189	-2.53213	-1.63662	-2.53155	-5.76383	-6.26312	-8.14764	-8.3955	-10.708
330	-6.81092	-7.45743	-4.40652	-5.05642	-4.58513	-3.88477	-6.47621	-6.08553	-7.1799	-6.36165	-6.67291	-7.72819	-10.708
345	-6.81092	-7.74133	-4.44201	-4.389	-6.27311	-4.68769	-5.04441	-6.92123	-5.45105	-4.21809	-4.1519	-8.1054	-10.708
360	-6.81092	-6.40717	-4.72158	-4.34517	-6.65902	-6.20033	-7.247	-6.92358	-4.31501	-4.65157	-5.28747	-7.0334	-10.708
Max Combination Ga	-1.24781												

4 ANT combine correlated for 6695MHz

Phi/Thet	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-2.2802	-0.7918	0.58159	0.74842	-0.8861	-0.7175	-1.2788	-1.204	1.40446	1.07135	0.3712	-1.1542	-5.0345
15	-2.2802	-2.0084	-1.5038	-0.1211	-0.965	1.014	0.99355	-0.3527	-0.2362	-0.1184	0.67176	-0.7146	-5.0345
30	-2.2802	-3.135	-0.7462	1.54008	-1.0751	0.98685	1.72942	-0.8076	0.5927	0.25775	-0.7012	-1.0792	-5.0345
45	-2.2802	-3.4798	-0.0333	2.69524	0.39699	2.53276	0.70443	-2.4942	-0.6988	0.85507	0.87929	-1.593	-5.0345
60	-2.2802	-3.2442	-0.369	1.63729	-0.7091	0.00732	0.98537	-2.6947	0.94119	1.92655	1.41082	-1.0412	-5.0345
75	-2.2802	-2.5222	-0.1486	0.3154	-0.0445	-0.0976	0.7544	-0.8524	1.00013	2.47989	1.69731	-0.167	-5.0345
90	-2.2802	-1.9135	0.69454	-1.5233	-0.302	1.16645	1.70797	0.82195	1.49703	1.80919	1.24112	0.9188	-5.0345
105	-2.2802	-0.9976	1.54581	-1.4667	0.16337	1.11237	1.17076	0.86636	1.37154	1.44113	1.7194	1.46446	-5.0345
120	-2.2802	-0.3927	-0.1141	-0.0216	0.95877	1.08762	2.81247	2.5108	1.37566	2.35943	2.63849	0.5305	-5.0345
135	-2.2802	-0.0695	0.8904	0.18701	0.24382	3.22944	4.46418	1.94592	2.18616	1.90656	1.51333	-1.1878	-5.0345
150	-2.2802	-0.1946	1.28406	2.72786	0.38824	1.99554	3.66939	1.81942	2.85864	1.70378	-0.3568	-1.0618	-5.0345
165	-2.2802	-0.1315	-0.1495	-0.5601	-0.5902	1.27408	1.76182	1.59497	0.84111	-3.4417	-0.3706	0.39928	-5.0345
180	-2.2802	0.34414	-0.2517	1.4426	-2.1032	-4.0022	-1.1512	-0.2334	-2.1545	-0.3002	-1.4058	-0.0347	-5.0345
195	-2.2802	1.9334	0.49324	1.7858	-0.7498	-1.9808	0.22043	-0.7277	-0.2089	-3.7355	-1.3099	-0.2667	-5.0345
210	-2.2802	1.39034	2.6144	0.81334	0.75247	1.131	2.16244	-2.3712	-1.1941	-2.831	-3.0038	-1.162	-5.0345
225	-2.2802	1.33029	4.05274	3.94633	1.22732	2.06763	2.51879	1.05557	0.75523	-2.4149	-1.5114	-1.9798	-5.0345
240	-2.2802	1.00115	4.03757	2.67551	-0.0556	1.07925	0.67271	1.41334	1.31693	-1.3893	-0.0132	-3.1365	-5.0345
255	-2.2802	0.7169	2.68861	1.33558	-0.3538	-1.3559	-0.3548	-0.5108	-1.6315	-0.4493	1.22335	-2.7658	-5.0345
270	-2.2802	0.62146	1.57168	1.83111	1.09271	-0.2765	-0.2436	-0.5272	-0.2016	-0.4561	1.28115	-1.8228	-5.0345
285	-2.2802	0.53868	1.94442	1.94892	2.6007	3.46335	2.18165	1.38773	1.72605	-3.1472	-0.5893	-2.5407	-5.0345
300	-2.2802	-0.0175	2.45253	2.0714	3.46113	3.53921	3.82899	2.85048	1.95587	-0.5112	-2.2899	-2.9324	-5.0345
315	-2.2802	-0.6283	0.96403	3.03506	2.6061	2.4299	3.35847	2.92814	-0.1891	-0.6006	-2.7935	-2.9404	-5.0345
330	-2.2802	-1.4973	1.21025	0.60307	0.82237	1.23619	-1.3157	-0.2613	-1.2428	-0.5102	-1.3357	-2.5847	-5.0345
345	-2.2802	-1.9105	1.19064	1.19955	-0.6916	0.96817	0.42541	-1.3598	0.24515	1.56134	1.18789	-3.4671	-5.0345
360	-2.2802	-0.7918	0.58159	0.74842	-0.8861	-0.7175	-1.2788	-1.204	1.40446	1.07135	0.3712	-1.1542	-5.0345
Max Combination C	4	46418											

4 ANT combine correlated for 6995MHz

Phi/Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	-3.62651	-6.33734	-2.85637	-3.49065	-6.63344	-4.18802	-6.38675	-3.00317	-2.13103	-2.66369	-3.39494	-4.29358	-5.14591
15	-3.62651	-6.40924	-3.49573	-2.44109	-4.60525	-4.00196	-4.12134	-6.01657	-2.85994	-1.66014	-3.87834	-5.82016	-5.14591
30	-3.62651	-6.44083	-4.17525	-3.61495	-6.22196	-4.74606	-0.98479	-4.50307	-4.11853	-4.8127	-1.59967	-5.91284	-5.14591
45	-3.62651	-7.00126	-2.77377	-1.49101	-2.27941	-1.82742	-6.64857	-5.87668	-4.21614	-2.14514	-3.72543	-4.9342	-5.14591
60	-3.62651	-8.08098	-1.68288	-2.09868	-1.67876	-1.47321	-2.44785	-4.86876	-2.27549	-3.07032	-6.26997	-4.81857	-5.14591
75	-3.62651	-8.974	-2.24543	-2.17533	-1.2205	-2.25284	-2.08907	-3.36443	-1.92969	-2.58646	-5.9608	-4.93656	-5.14591
90	-3.62651	-9.4563	-4.47217	-1.7245	-3.62664	-0.24271	-1.70553	-2.59337	-2.81943	-1.3233	-3.84144	-5.38795	-5.14591
105	-3.62651	-7.3445	-7.51447	-1.89791	-3.49999	-0.34974	-1.74704	-1.77655	-2.75267	-1.76428	-1.22161	-5.29019	-5.14591
120	-3.62651	-4.652	-5.39227	-3.37688	-3.81863	-0.87002	-0.29019	-0.96472	-1.21762	-3.10959	-1.12436	-3.50642	-5.14591
135	-3.62651	-2.48738	-1.85342	0.004724	-1.67049	0.334927	0.611293	0.5929	-1.5145	-1.26187	-1.51873	-3.01231	-5.14591
150	-3.62651	-2.04088	-1.4661	-0.64165	-2.65596	-1.17405	-0.07438	0.072589	-2.18042	-1.18818	-2.06143	-3.04936	-5.14591
165	-3.62651	-2.21405	-1.43986	-4.83703	-2.32136	-4.34855	-1.96572	-4.53959	-3.21228	-1.10136	-4.8076	-2.66434	-5.14591
180	-3.62651	-2.16997	-1.77585	-4.14	-3.71609	-5.0516	-4.76063	-3.56808	-3.85786	-5.57396	-6.63816	-2.23553	-5.14591
195	-3.62651	-1.88915	-3.57189	-2.94373	-7.44279	-4.92085	-4.84266	-5.77275	-6.24254	-5.94066	-4.88654	-5.16214	-5.14591
210	-3.62651	-1.83982	-2.90084	-3.71122	-4.26555	-3.54353	0.147207	-0.40758	-4.35054	-8.14402	-1.54865	-4.89756	-5.14591
225	-3.62651	-2.57941	-2.782	-1.15678	-6.79854	-2.53368	-1.60214	-1.76159	-2.77533	-4.39825	-1.22285	-3.69638	-5.14591
240	-3.62651	-3.38477	-3.50088	0.323991	-6.5363	-6.5045	-1.64974	-4.39012	-5.56158	-3.44865	-3.34707	-3.91459	-5.14591
255	-3.62651	-4.22151	-3.35719	-0.89419	-2.69607	-4.58549	-2.08801	-3.67151	-4.10463	-4.43714	-4.57675	-5.17709	-5.14591
270	-3.62651	-4.82831	-1.73943	-3.41701	-1.2912	-4.5458	-3.43498	-3.48777	-3.79514	-5.00597	-5.51262	-6.75647	-5.14591
285	-3.62651	-4.47385	-0.64517	-3.86343	-0.05574	-3.10163	-0.160146	-2.52251	-3.24588	-3.22712	-5.53691	-7.97848	-5.14591
300	-3.62651	-3.03995	-1.09888	-0.71194	0.356189	-0.19204	-1.157503	-1.32366	-2.48074	-2.74574	-2.6006	-8.52818	-5.14591
315	-3.62651	-1.99277	-2.0079	-2.0034	-0.39248	0.494812	1.252769	-1.02704	-4.65128	-2.07857	-0.91367	-7.45422	-5.14591
330	-3.62651	-2.32762	-1.7368	-2.46874	-3.8431	-3.06836	-4.15182	-3.40908	-2.2728	-2.53615	-4.26871	-4.19356	-5.14591
345	-3.62651	-3.82545	-2.29142	-1.22247	-4.55483	-3.0234	-4.38989	-4.78788	-5.15514	-1.96575	-2.93274	-2.45404	-5.14591
360	-3.62651	-6.33734	-2.85637	-3.49065	-6.63344	-4.18802	-6.38675	-3.00317	-2.13103	-2.66369	-3.39494	-4.29358	-5.14591
Max Combination Ga	1.252769												

4 ANT combine correlated for 6995MHz

Phi\Theta	0	15	30	45	60	75	90	105	120	135	150	165	180
0	2.363254	-0.39386	2.761822	1.817143	-1.11956	1.352111	-0.41518	2.706205	3.403031	2.948424	2.539246	1.13108	0.001214
15	2.363254	-0.75788	2.290437	2.539552	0.70377	1.501429	1.746551	-0.52208	2.486643	3.012389	1.655622	0.039215	0.001214
30	2.363254	-0.66413	1.722198	2.351649	-0.22189	0.820934	3.765442	0.778286	1.440327	0.893626	3.561537	-0.123	0.001214
45	2.363254	-1.04208	2.576136	4.038929	3.21032	3.561823	-0.84173	0.083302	1.288844	3.370115	1.306343	1.000842	0.001214
60	2.363254	-2.11664	3.899131	3.449899	3.711972	3.478816	2.853542	0.948576	3.392091	2.199328	-0.67466	1.176712	0.001214
75	2.363254	-3.25673	3.380371	3.758985	3.137491	2.513471	3.223611	2.251118	3.754997	2.979428	-0.0166	0.942533	0.001214
90	2.363254	-4.41169	1.389357	4.151843	1.63903	5.187237	3.545731	2.983185	2.928056	4.351555	1.830254	0.104771	0.001214
105	2.363254	-1.69137	-1.51124	3.608921	1.942014	5.332012	3.680804	3.839481	2.541672	3.701285	4.180417	-0.01796	0.001214
120	2.363254	1.144592	0.032064	2.213549	2.048714	5.009334	5.302792	4.701893	4.201581	2.375169	4.584537	1.772202	0.001214
135	2.363254	3.14049	3.028587	5.02248	4.300011	6.099021	6.012312	5.825641	4.172348	4.636368	4.027354	2.517908	0.001214
150	2.363254	3.515962	3.542305	3.225898	2.731467	4.620691	5.620697	5.867233	3.708256	4.453753	3.825778	2.509431	0.001214
165	2.363254	3.444096	3.853037	1.042778	2.952435	0.866068	0.944116	1.465721	2.580462	4.273975	0.894196	2.338452	0.001214
180	2.363254	3.326697	3.378056	1.233642	1.849216	0.796852	0.938322	1.433689	1.3592	0.216387	-0.66177	2.561367	0.001214
195	2.363254	3.430633	1.860291	3.054536	-1.76183	0.684549	0.707716	-0.9363	-0.51095	0.071524	0.64712	0.563205	0.001214
210	2.363254	3.599979	2.425637	2.152433	0.803348	1.558418	5.254561	1.241413	1.154479	-2.53079	3.162385	0.112981	0.001214
225	2.363254	3.039823	2.108944	4.723213	-1.26067	2.524032	3.750991	3.278187	2.268468	1.160315	3.05242	1.178339	0.001214
240	2.363254	2.395451	1.963413	6.161158	-0.67891	-1.95574	3.332118	1.097808	-0.03004	2.105427	1.667076	1.230331	0.001214
255	2.363254	1.646068	2.205702	5.11843	3.128027	1.005927	3.749663	2.004561	1.379598	1.489297	1.148715	0.481696	0.001214
270	2.363254	0.870842	4.095291	2.339692	4.508715	1.325841	2.448698	2.288376	2.052652	0.085106	0.149051	-0.78127	0.001214
285	2.363254	1.27029	5.275874	1.90695	5.305691	2.49948	3.788597	2.708485	2.478117	2.436542	0.313742	-2.01419	0.001214
300	2.363254	2.890614	4.817642	4.790016	5.361781	5.077419	5.645971	3.957309	3.123218	3.1553	3.281679	-2.56346	0.001214
315	2.363254	3.737518	3.947373	3.463093	4.460583	5.720972	5.840006	4.251385	0.874626	3.839693	4.536214	-1.4699	0.001214
330	2.363254	3.186663	3.798727	3.538769	1.567508	2.607263	1.730912	2.020689	3.282265	2.999924	1.392548	1.534815	0.001214
345	2.363254	1.673852	3.258965	4.682521	1.306392	2.700038	1.359026	1.127313	0.476085	3.236916	2.42336	2.96251	0.001214
360	2.363254	-0.39386	2.761822	1.817143	-1.11956	1.352111	-0.41518	2.706205	3.403031	2.948424	2.539246	1.13108	0.001214
Max Combination G: 6.161158													