

Antenna Composite Gain Test Report

1. Test Information

Equipment	EMT
Brand Name	Nokia
Model Name	B19.1
Applicant	Nokia
Manufacturer	Nokia

2. Testing Location

Testing Location	
AOT Kunshan Lab	ADD: 289 Jinghua Road, Shipai, Bacheng Town, Kunshan City, Jiangsu Province

Test Condition	Test Engineer	Test Environment (°C / %)	Test Date	Signature
Radiated	Changgan Lai	20-24 / 45-60	08.26.2025~08.26.2025	Changgan Lai

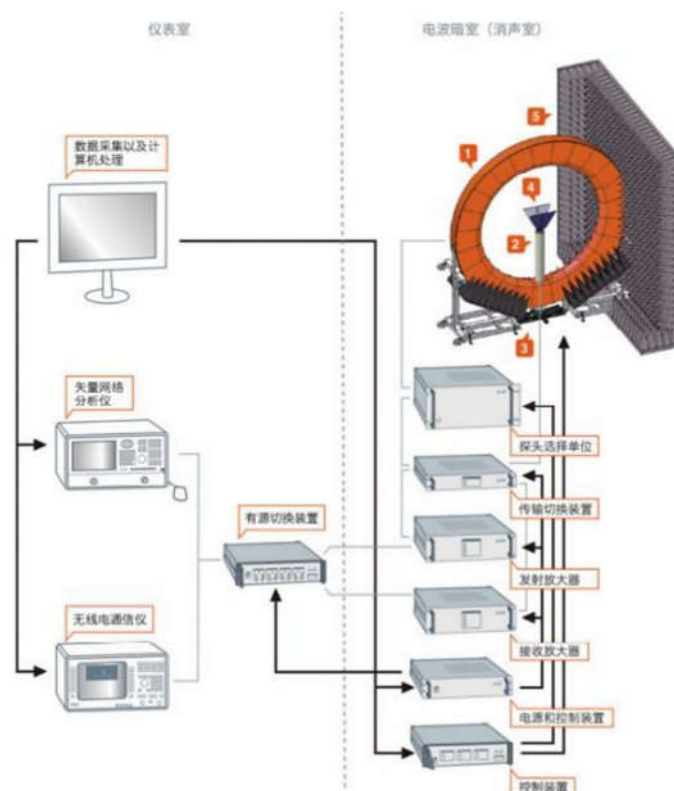
3. Test Frequency

Band (MHz)	Test Frequency (MHz)
2400-2500	2400/2450/2500
5150-5850	5150/5500/5850
5925-7125	5925/6500/7125

4. Antenna Information

Ant. Position	Brand Name	Model Name	Ant. Type	Connector
Antenna 1 (6G)	Nokia	ANT-P5972-N35	Dipole	I-PEX
Antenna 2 (6G)	Nokia	ANT-P5972-N36	Dipole	I-PEX
Antenna 3 (6G)	Nokia	ANT-P5972-N37	Dipole	I-PEX
Antenna 4 (6G)	Nokia	ANT-P5972-N38	Dipole	I-PEX
Antenna 5 (2G&5G)	Nokia	ANT-P2458-N39	Dipole	I-PEX
Antenna 6 (2G&5G)	Nokia	ANT-P2458-N40	Dipole	I-PEX
Antenna 7 (2G&5G)	Nokia	ANT-P2458-N41	Dipole	I-PEX
Antenna 8 (2G&5G)	Nokia	ANT-P2458-N42	Dipole	I-PEX

5. Test Configuration



6. Reference Calibration

CALIBRATION PASS

CAL.DATA: 2025.2.10

NEXT CAL.DATA: 2026.2.9

7. Test Method

The “great circle” cut method, whereby the Measurement Antenna remains fixed and the EUT is rotated about two axes in sequential order. The radiated RF performance of the Equipment Under Test (EUT) is measured by sampling the radiated transmit power of the mobile at various locations surrounding the device. A three-dimensional characterization of the ‘transmit’ performance of the EUT is pieced together by analyzing the data from the spatially distributed measurements.

Data points taken every 2 degrees in the theta and in the phi axes are deemed sufficient to fully characterize the EUT's Far-Field radiation pattern and total radiated power. All of the measured power values will be integrated.

8. Measured Values and Calculation of Correlated /

Uncorrelated Gains

Antenna Peak Gain Table (Ant. Position: 2.4G Ant.5~8)

Band (MHz)	2400-2500		
Frequency (MHz)	2400	2450	2500
Ant.5 Max Gain (dBi)	2.65	3.39	3.87
Ant.6 Max Gain (dBi)	2.92	3.39	3.85
Ant.7 Max Gain (dBi)	1.69	2.81	3.56
Ant.8 Max Gain (dBi)	3.86	3.58	2.87
Max Gain (dBi)	3.86	3.58	3.87

Antenna Peak Gain Table (Ant. Position: 5G Ant.1~4)

Band (MHz)	5150-5850		
Frequency (MHz)	5150	5500	5850
Ant.5 Max Gain (dBi)	2.20	1.98	1.96
Ant.6 Max Gain (dBi)	2.16	2.77	2.98
Ant.7 Max Gain (dBi)	2.19	2.02	2.63
Ant.8 Max Gain (dBi)	2.20	2.59	2.07
Max Gain (dBi)	2.20	2.77	2.98

Antenna Peak Gain Table (Ant. Position: 6G Ant.5~8)

Band (MHz)	5925-7125		
Frequency (MHz)	5925	6500	7125
Ant.1 Max Gain (dBi)	2.64	3.07	2.26
Ant.2 Max Gain (dBi)	2.30	2.73	2.60
Ant.3 Max Gain (dBi)	2.63	3.19	2.52
Ant.4 Max Gain (dBi)	2.01	2.62	2.37
Max Gain (dBi)	2.64	3.19	2.60

Because the antennas are fixed in location within the device the directional antenna gain for MIMO is calculated over a sphere using the raw spatial data taken at 2 degree steps of theta and 10 degree of theta phi for each antenna using the equations from KDB 662911 D01. The raw antenna data is located in the appendix of this report.

The correlated antenna gain was calculated using KDB 662911 D01F(2)(f)(ii) for CDD and KDB 662911 D01, F(2)(e)(ii) for TxBF.

The uncorrelated antenna gain was calculated using KDB 662911 D01F(2)(d)(ii) for SDM.

The correlated and uncorrelated gains were calculated for each point in the spatial data and the highest values reported.

(ii) If antenna gains are not equal, the user may use either of the following methods to calculate directional gain. provided that each transmit antenna s driven by only one spatial stream.

- Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ur} set equal to the gain of the antenna having the highest gain, or.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

If all transmit signals are completely uncorrelated, then

$$Directional\ gain = 10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10})/N_{ANT}] \text{ dBi}$$

Maximum Correlated / Uncorrelated Gain Calculation

Correlated Gain

(Ant. Position: 2.4G Ant.5~8)

Frequency (MHz)	2400	2450	2500
Ant.5 Gain(dBi)	-0.07	-1.21	3.67
Ant.6 Gain(dBi)	-2.76	2.04	-0.37
Ant.7 Gain(dBi)	-3.20	0.39	1.37
Ant.8 Gain(dBi)	3.56	-4.52	-12.48
Phi (°)	14	48	10
Theta (°)	82	-86	-70
Beamforming	5.84	5.52	5.78
Non Beamforming (CDD MODE)	5.84	5.52	5.78

(Ant. Position: 5G Ant.5~8)

Frequency (MHz)	5150	5500	5850
Ant.5 Gain(dBi)	-2.77	-2.45	-0.14
Ant.6 Gain(dBi)	0.08	-0.69	2.88
Ant.7 Gain(dBi)	0.15	-0.47	-5.18
Ant.8 Gain(dBi)	1.42	2.46	0.20
Phi (°)	156	154	90
Theta (°)	84	86	-106
Beamforming	5.87	5.92	5.91
Non Beamforming (CDD MODE)	5.87	5.92	5.91

(Ant. Position: 6G Ant.1~4)

Frequency (MHz)	5925	6500	7125
Ant.1 Gain(dBi)	-1.21	0.40	-0.18
Ant.2 Gain(dBi)	1.73	-0.10	-1.40
Ant.3 Gain(dBi)	-0.49	-0.67	-0.42
Ant.4 Gain(dBi)	-0.64	-0.24	0.76
Phi (°)	4	6	4
Theta (°)	-44	88	-90
Beamforming	5.94	5.88	5.75
Non Beamforming (CDD MODE)	5.94	5.88	5.75

Calculation example

$$10 \times \log\{[10^{(-0.07 \text{ dBi} / 20)} + 10^{(-2.76 \text{ dBi} / 20)} + 10^{(-3.20 \text{ dBi} / 20)} + 10^{(3.56 \text{ dBi} / 20)}]^2\} / 4 = 5.84 \text{ dBi}$$

Uncorrelated Gain**(Ant. Position: 2.4G Ant.5~8)**

Frequency (MHz)	2400	2450	2500
Ant.5 Gain(dBi)	0.22	2.64	3.50
Ant.6 Gain(dBi)	-3.08	-0.32	-0.24
Ant.7 Gain(dBi)	-3.76	1.38	1.74
Ant.8 Gain(dBi)	3.65	-14.91	-14.17
Phi (°)	14	8	10
Theta (°)	80	-66	-68
Uncorrelated Gain	0.30	0.18	0.72

(Ant. Position: 5G Ant.5~8)

Frequency (MHz)	5150	5500	5850
Ant.5 Gain(dBi)	-3.32	-2.74	-0.14

Ant.6 Gain(dBi)	-0.24	-0.87	2.88
Ant.7 Gain(dBi)	0.56	-0.25	-5.18
Ant.8 Gain(dBi)	1.63	2.59	0.20
Phi (°)	152	156	90
Theta (°)	84	86	-106
Uncorrelated Gain	0.00	0.12	0.27

(Ant. Position: 6G Ant.1~4)

Frequency (MHz)	5925	6500	7125
Ant.1 Gain(dBi)	-1.21	0.40	-1.17
Ant.2 Gain(dBi)	1.73	-0.10	-0.38
Ant.3 Gain(dBi)	-0.49	-0.67	2.29
Ant.4 Gain(dBi)	-0.64	-0.24	-3.37
Phi (°)	4	6	122
Theta (°)	-44	88	88
Uncorrelated Gain	0.00	-0.13	-0.18

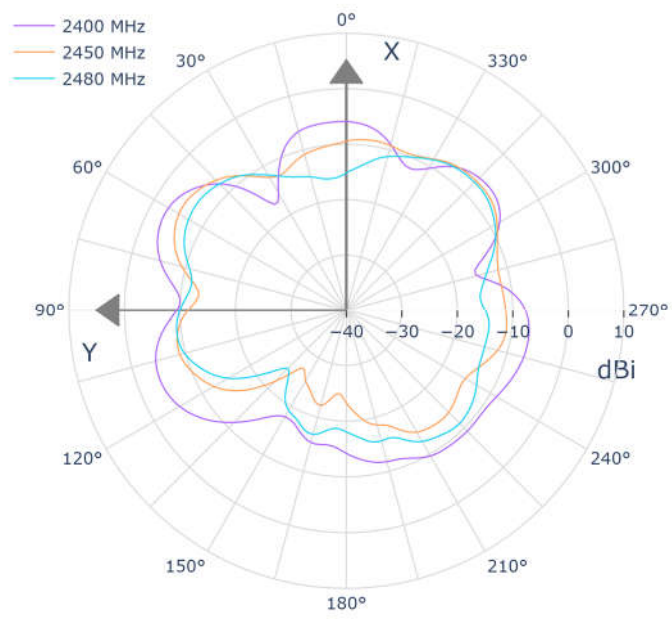
Calculation example

$$=10 \times \log_{10}(((10^{(0.22 \text{ dBi} / 10)} + 10^{(-3.08 \text{ dBi} / 10)} + 10^{(-3.76 \text{ dBi} / 10)} + 10^{(3.65 \text{ dBi} / 10)})) / 4) = 0.30 \text{ dBi}$$

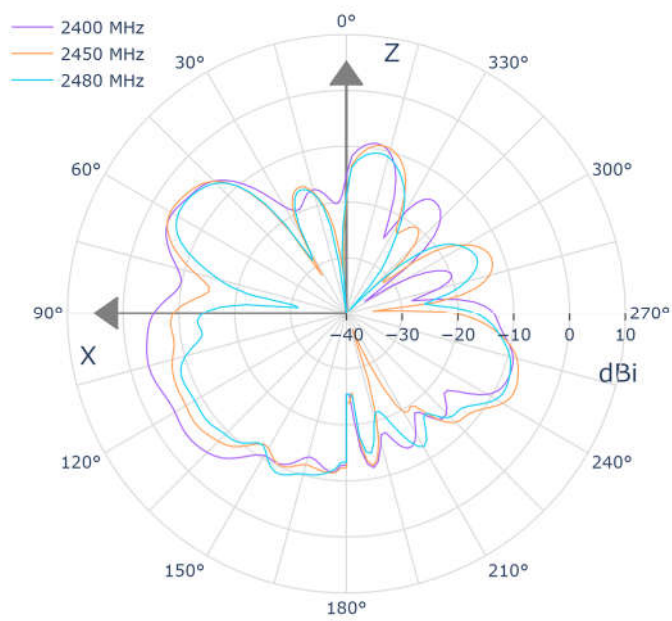
9. Radiation Pattern

Ant. Position: 2.4G Ant.5~8

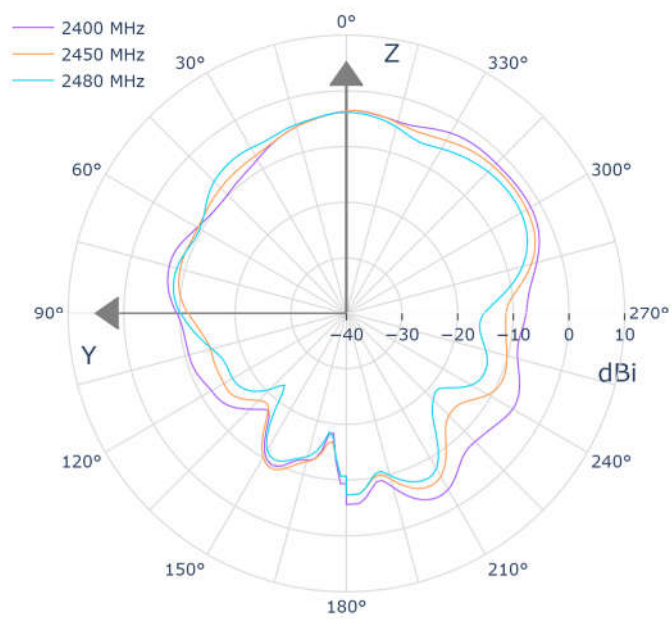
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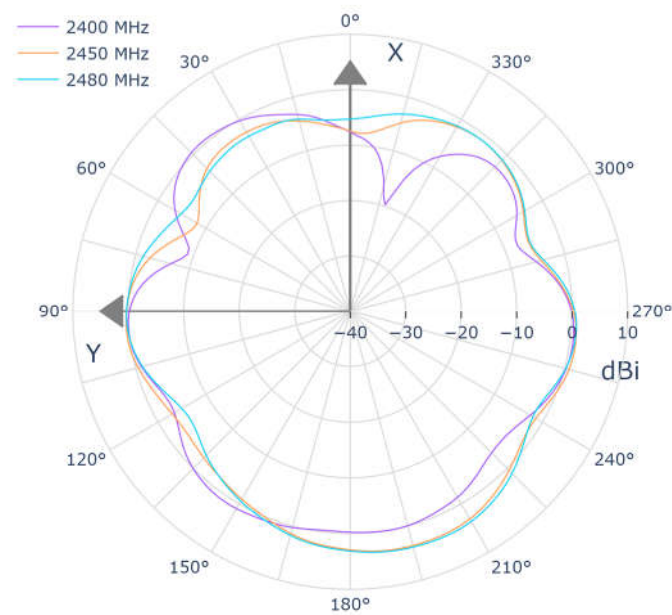
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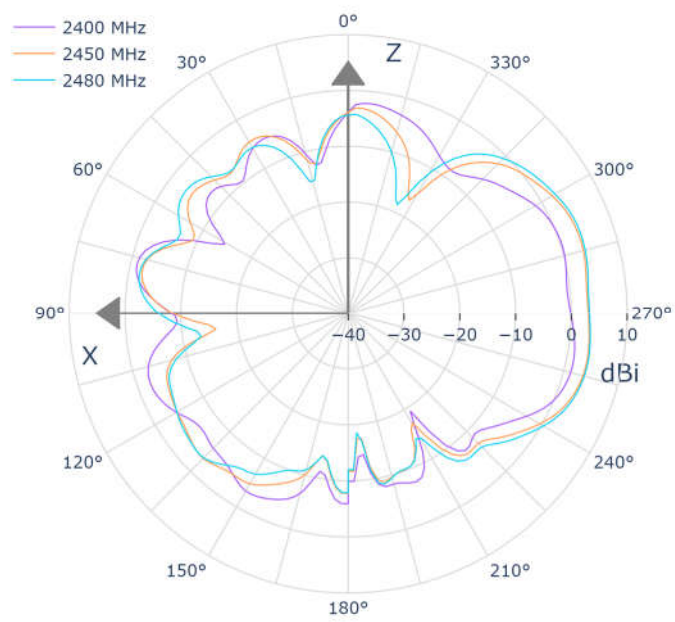
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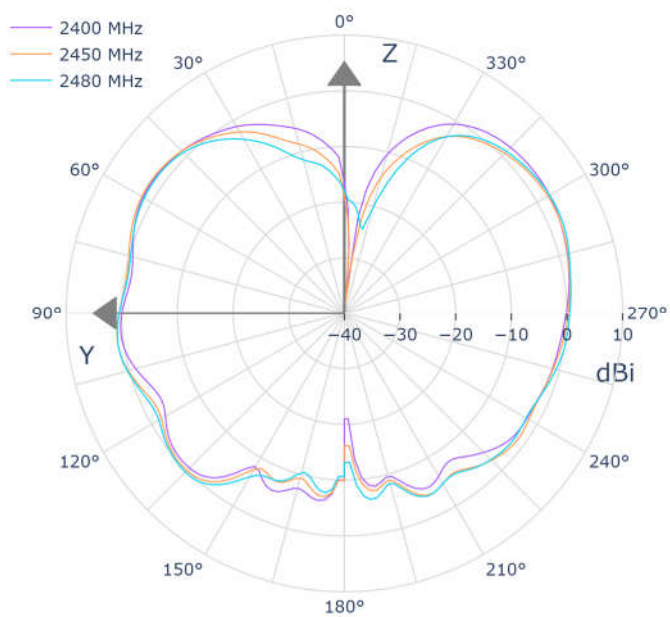
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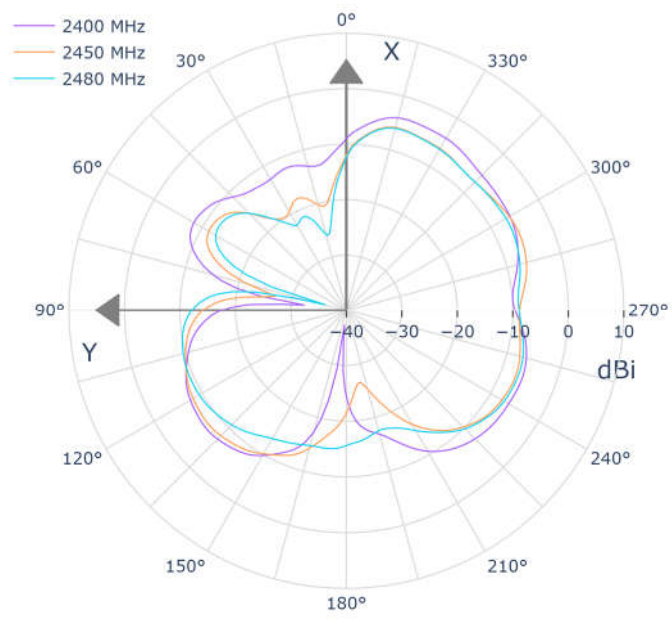
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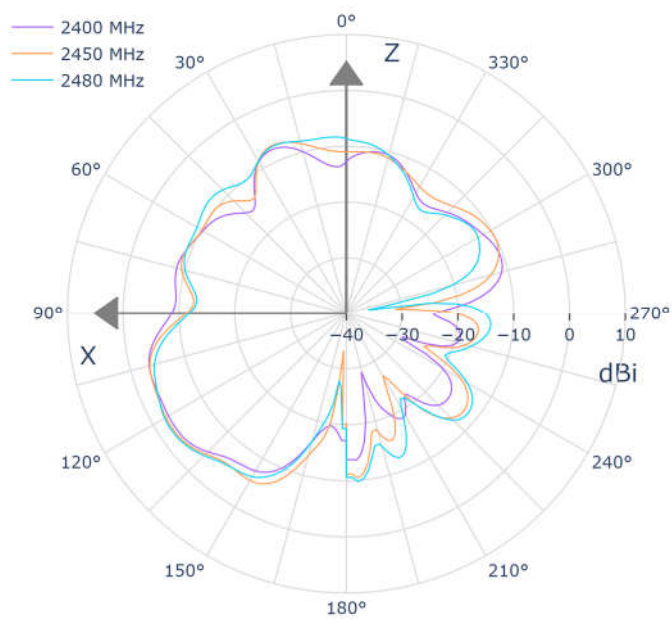
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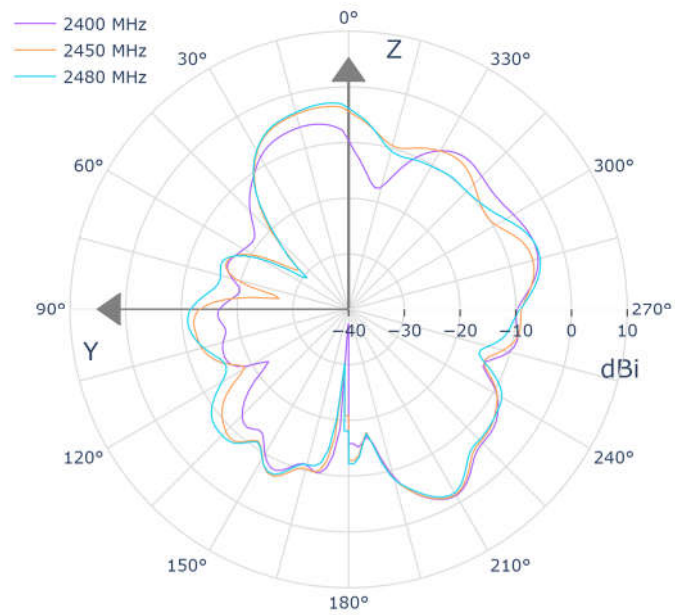
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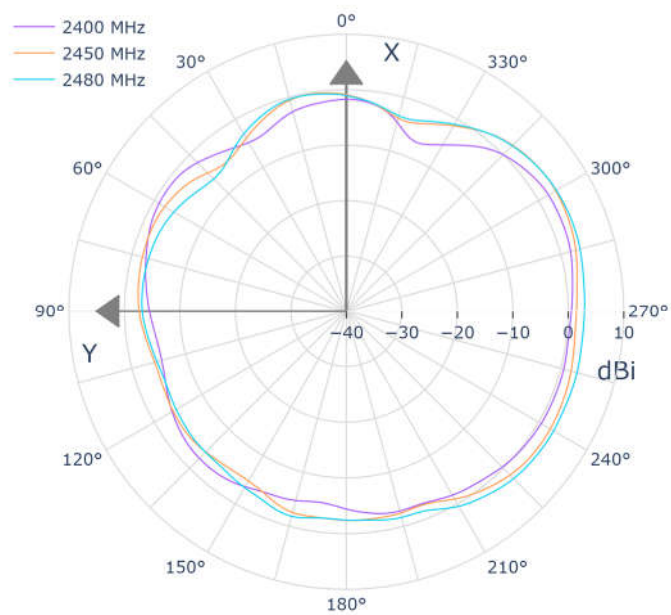
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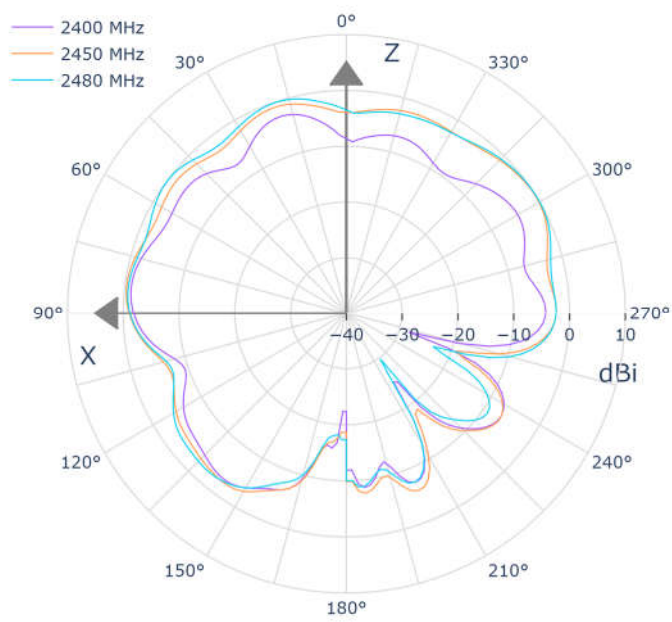
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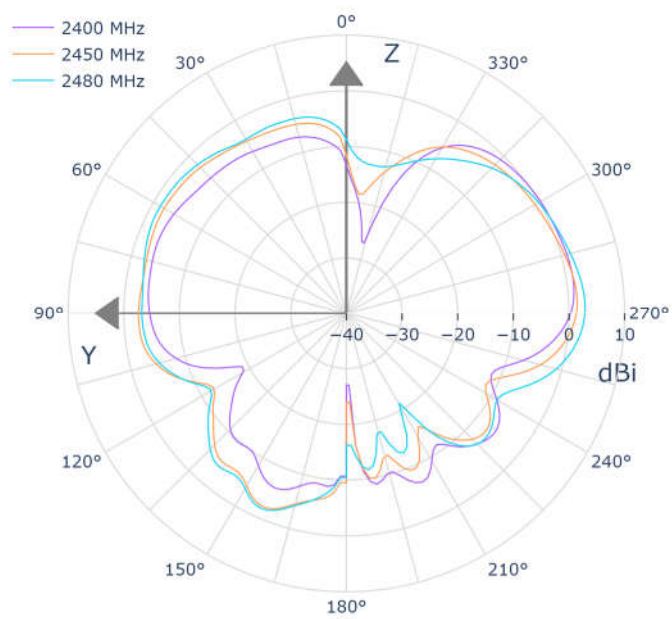
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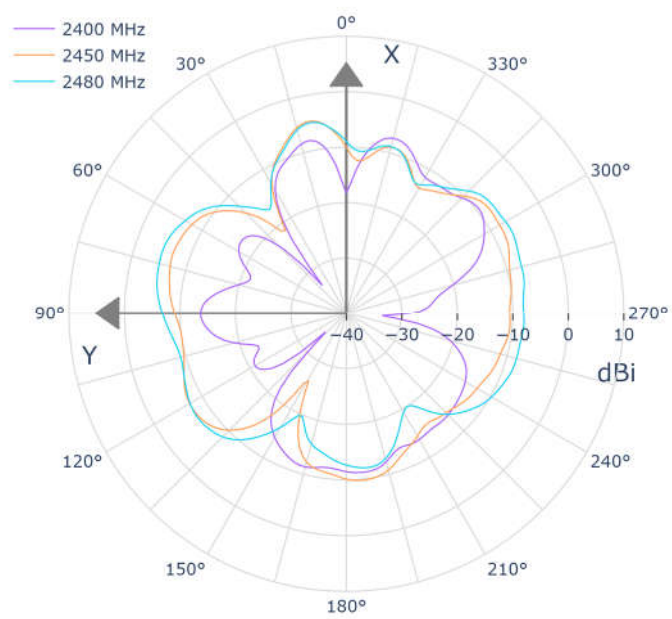
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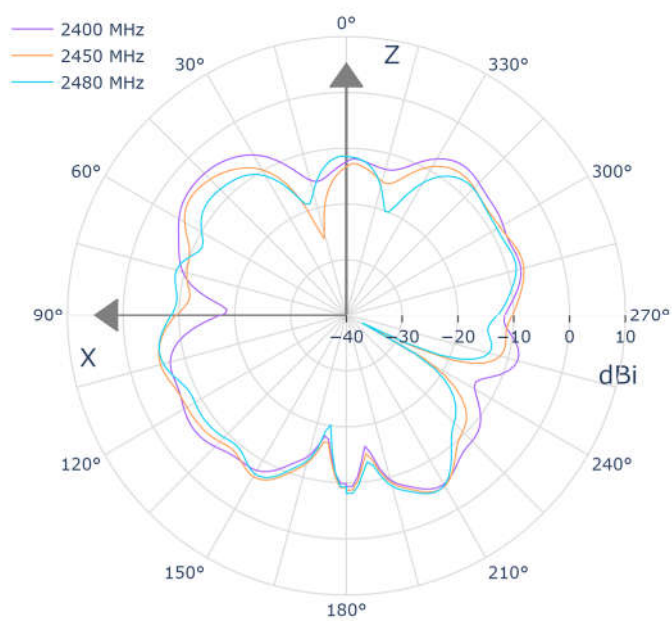
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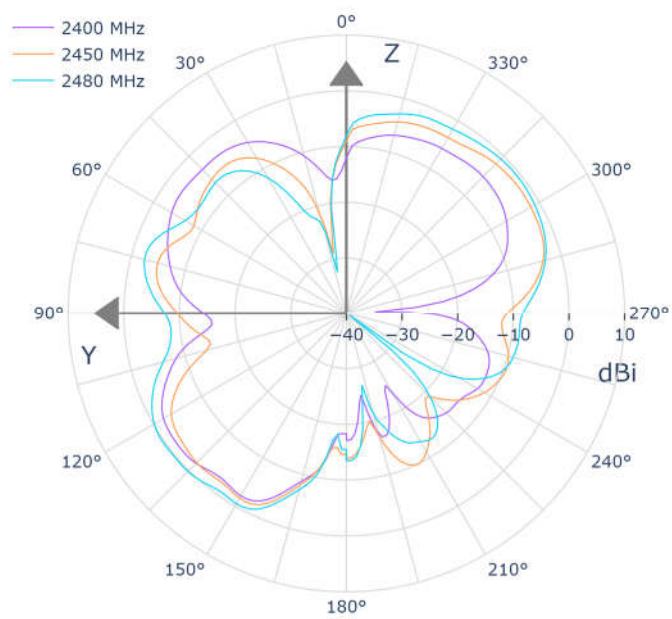
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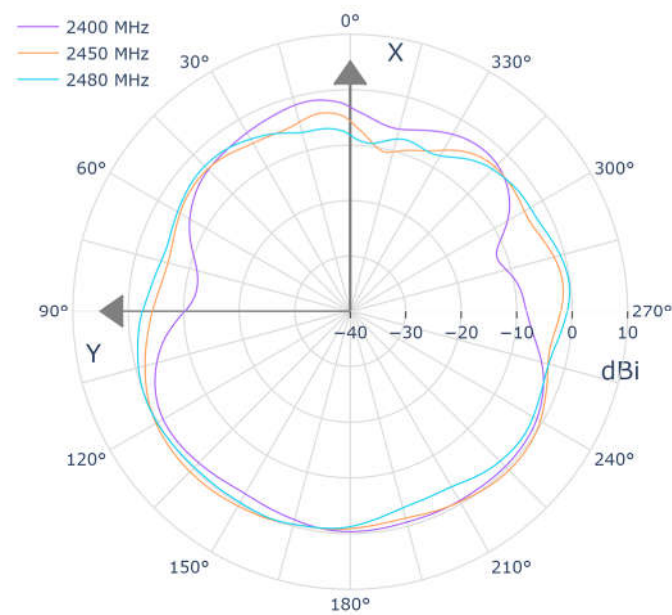
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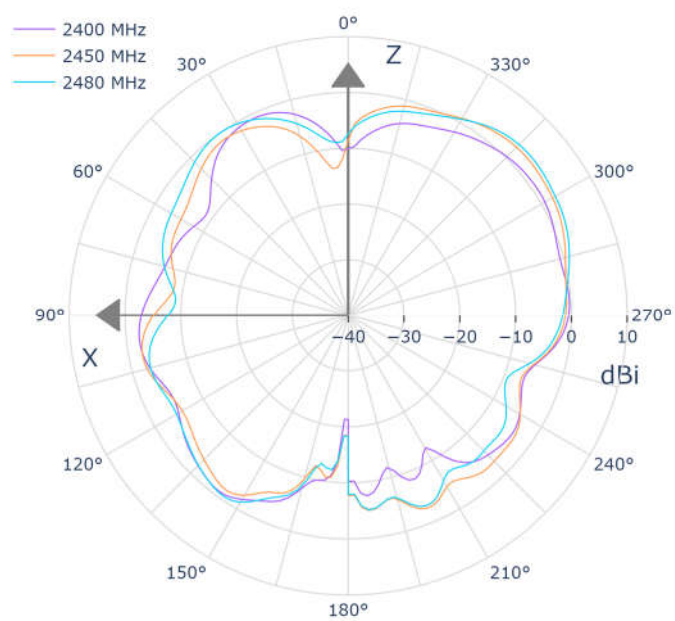
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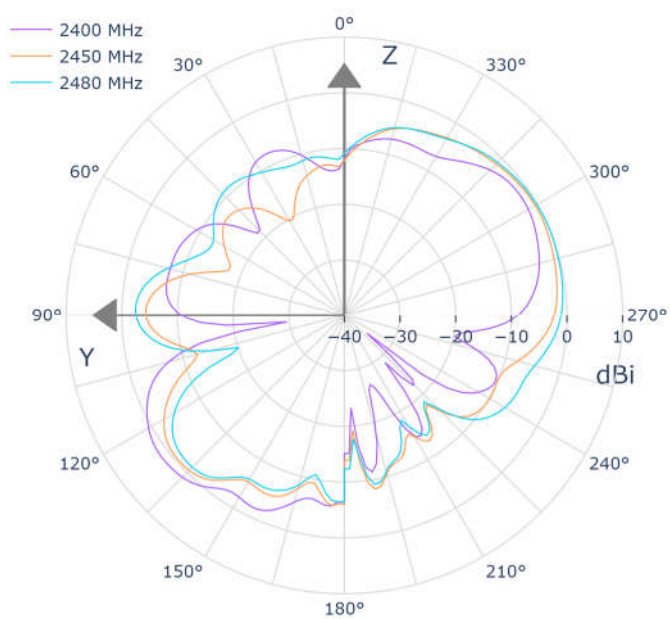
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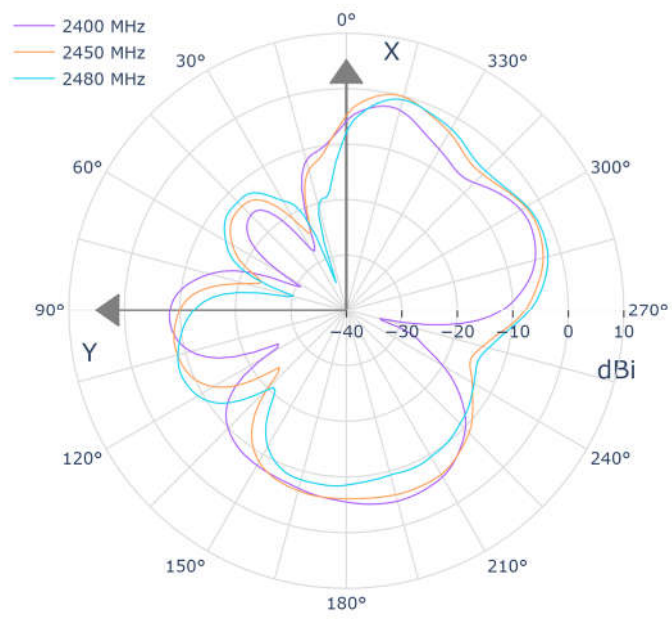
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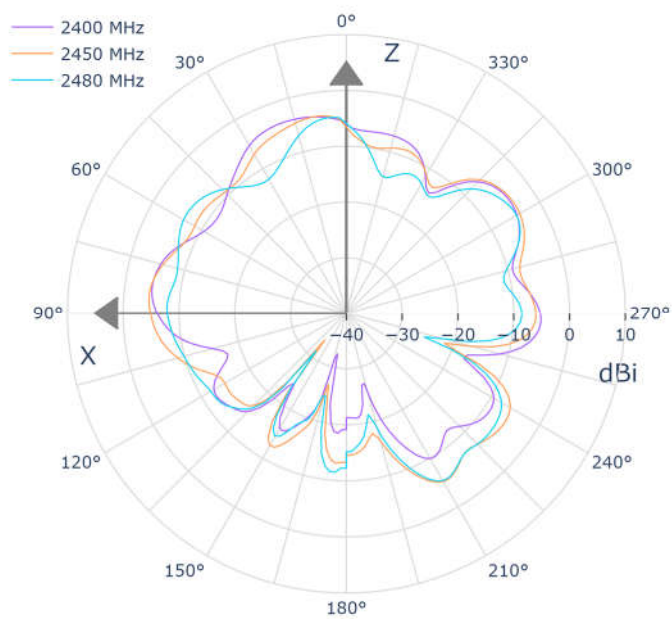
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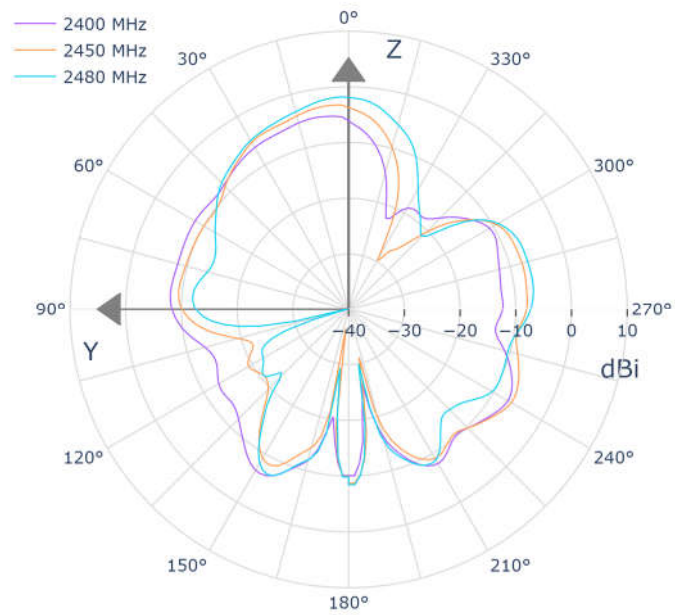
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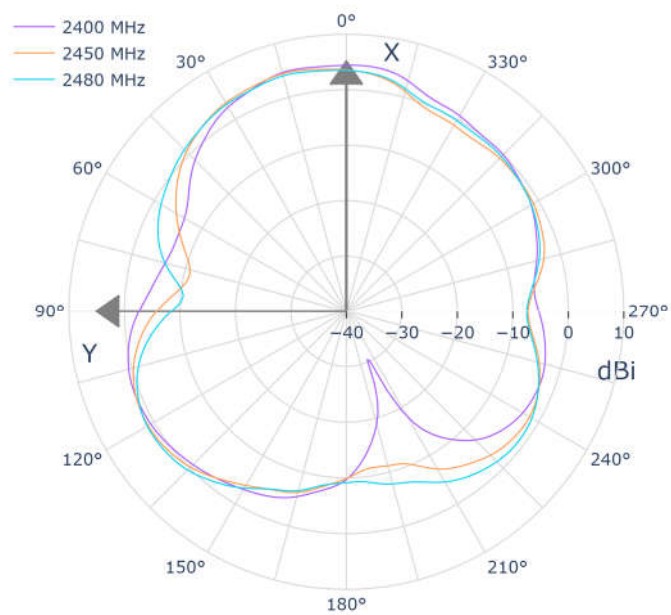
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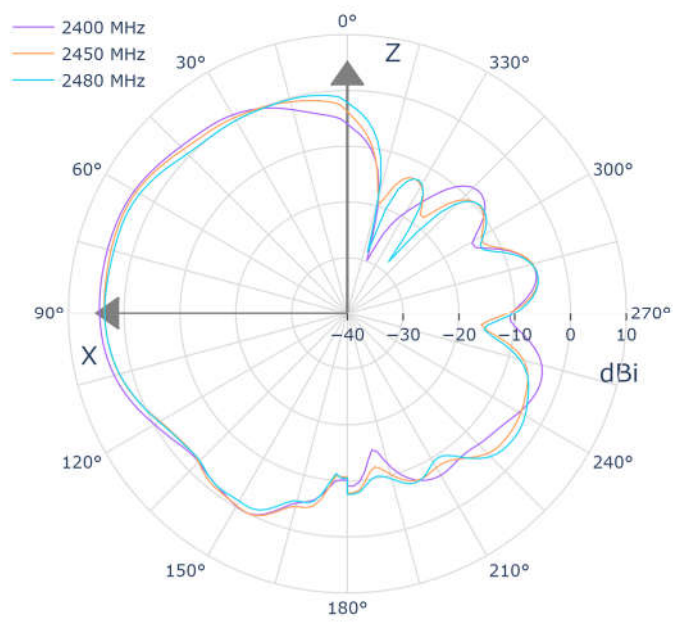
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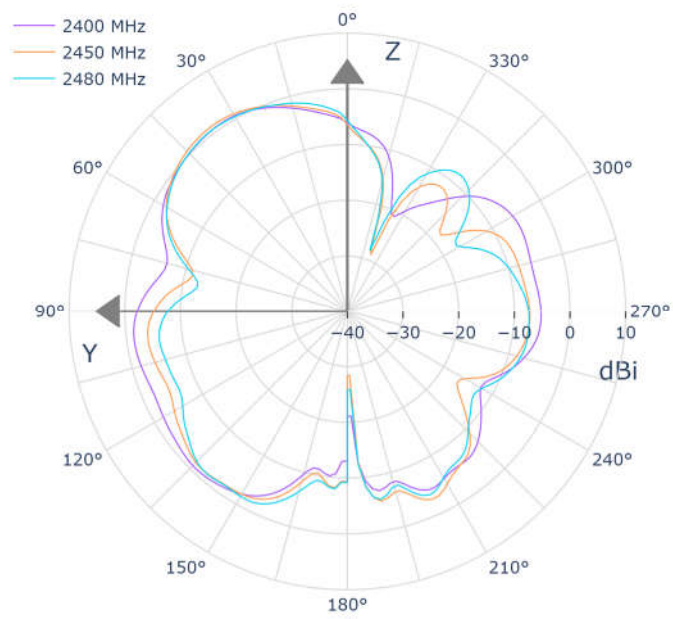
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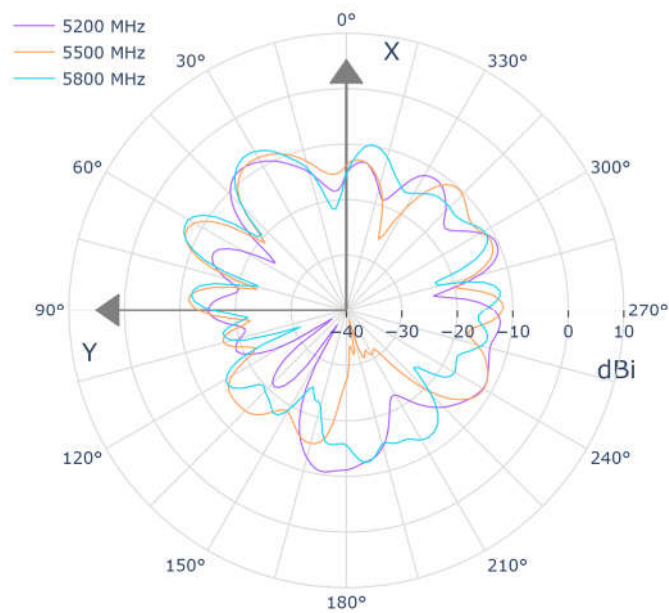


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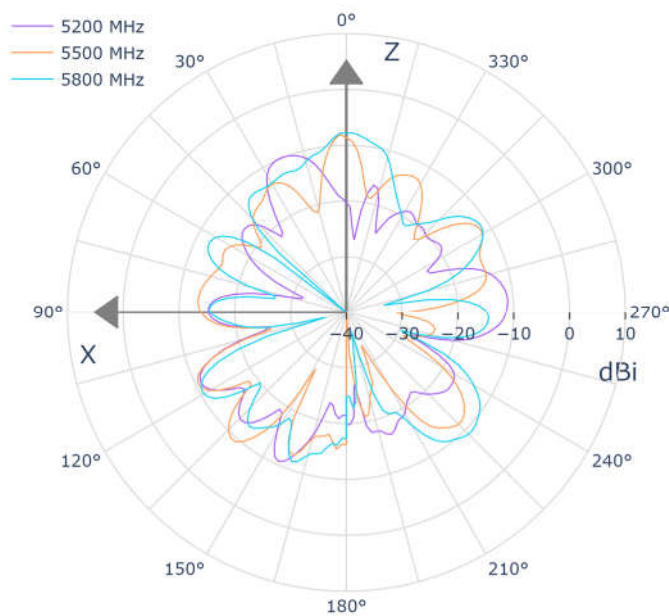


Ant. Position: 5G Ant.5~8

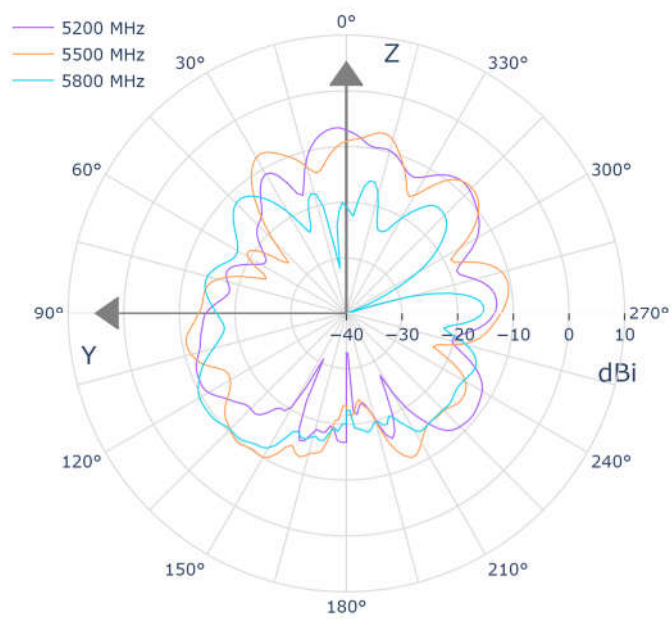
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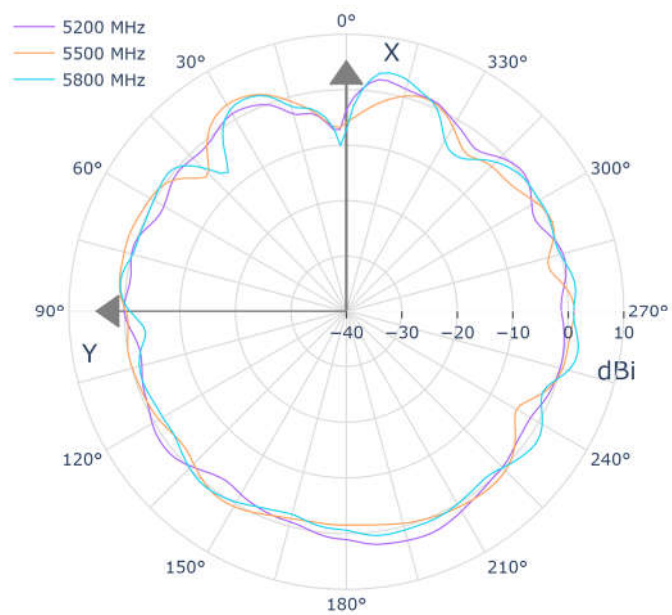
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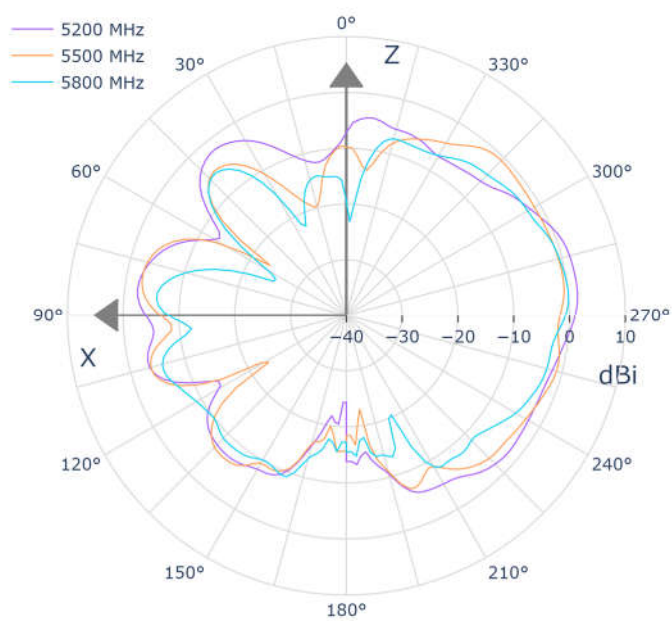
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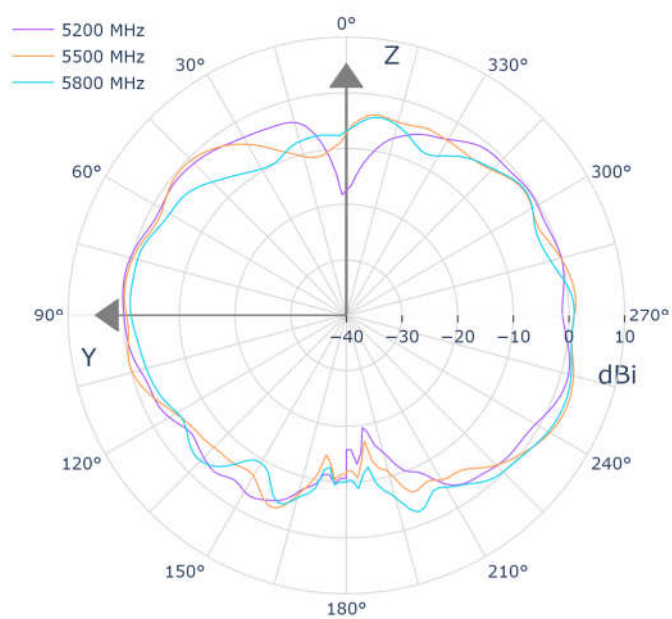
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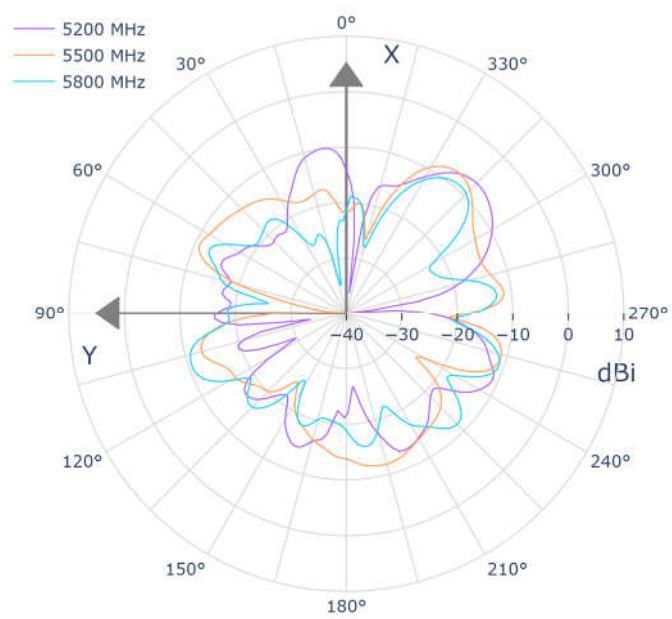
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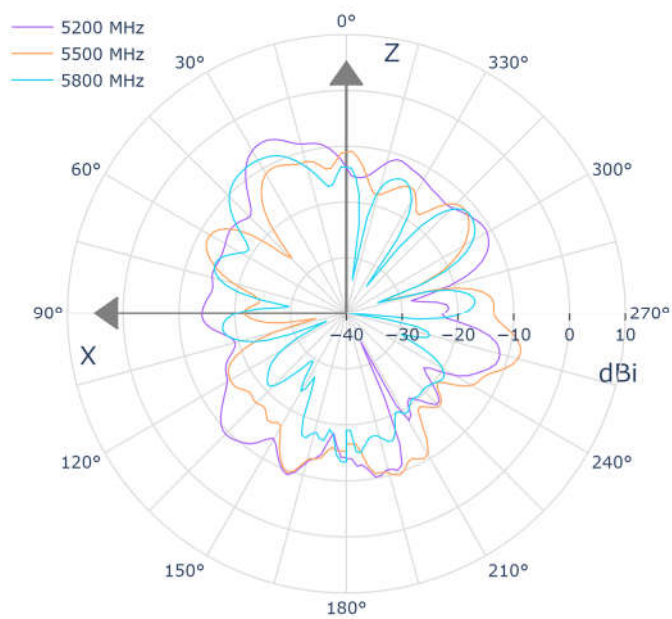
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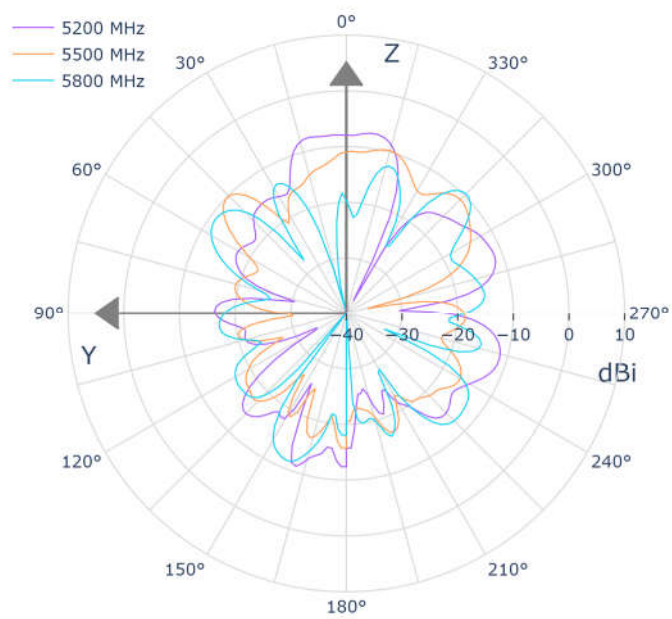
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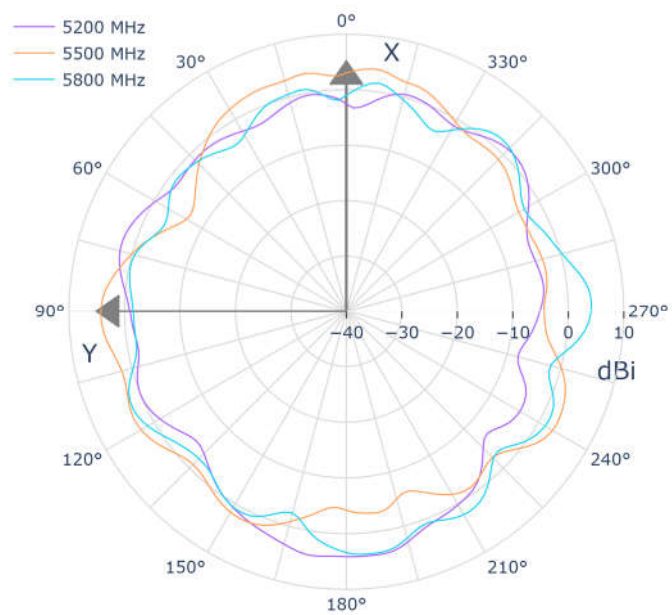
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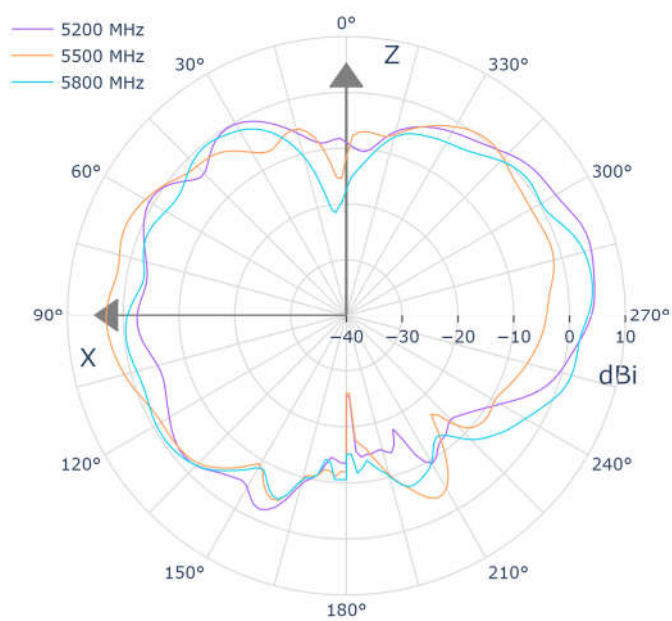
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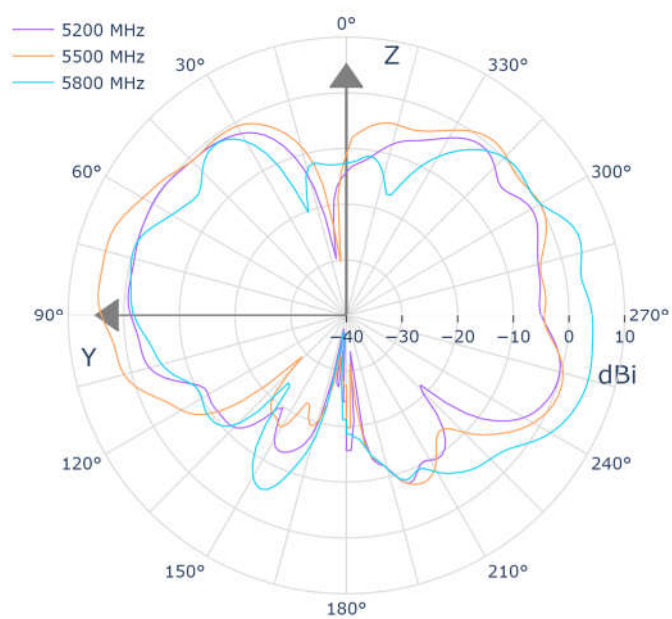
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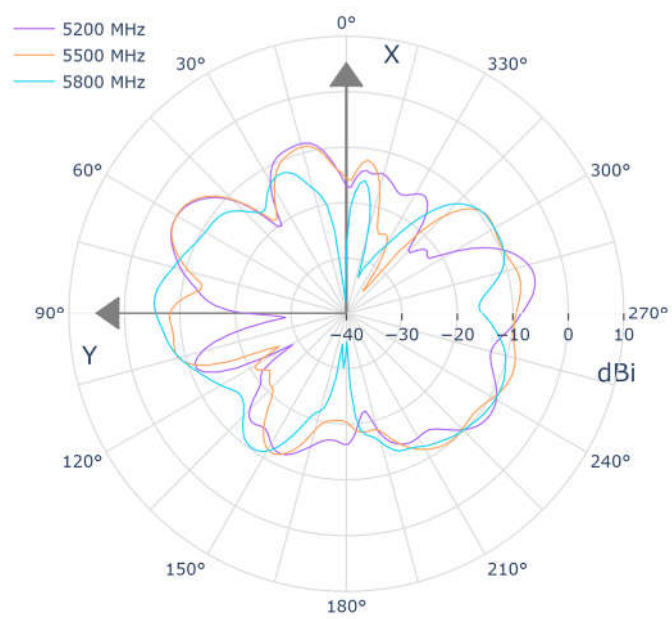
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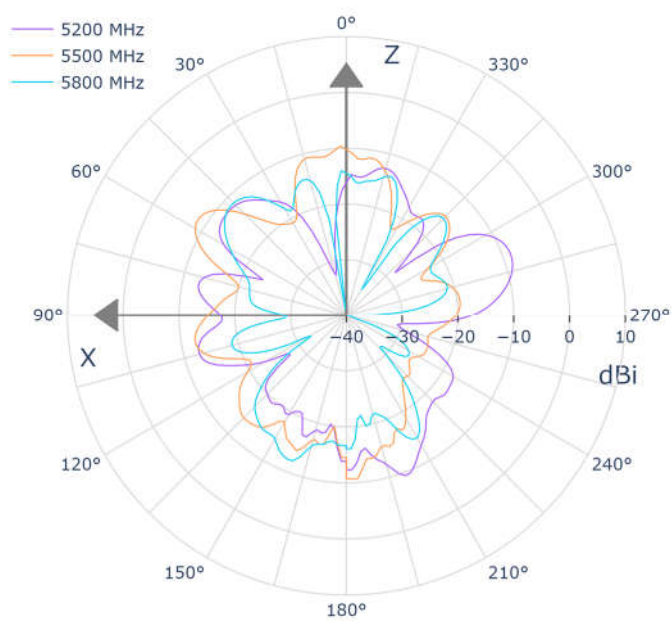
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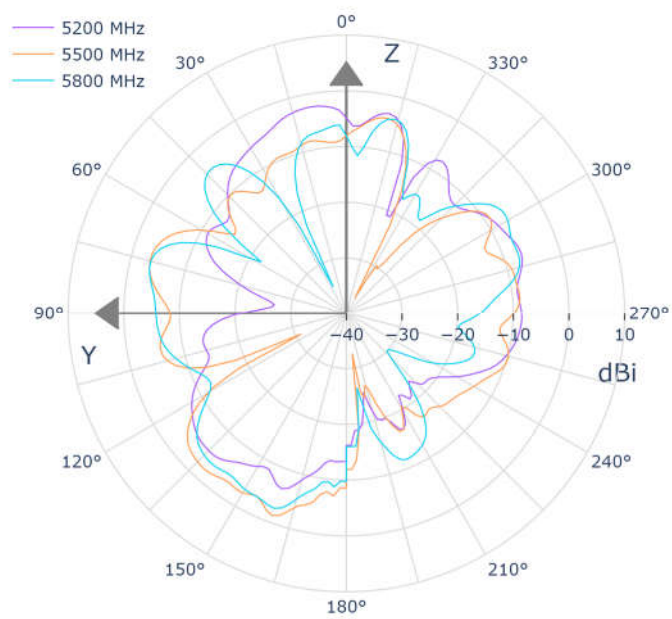
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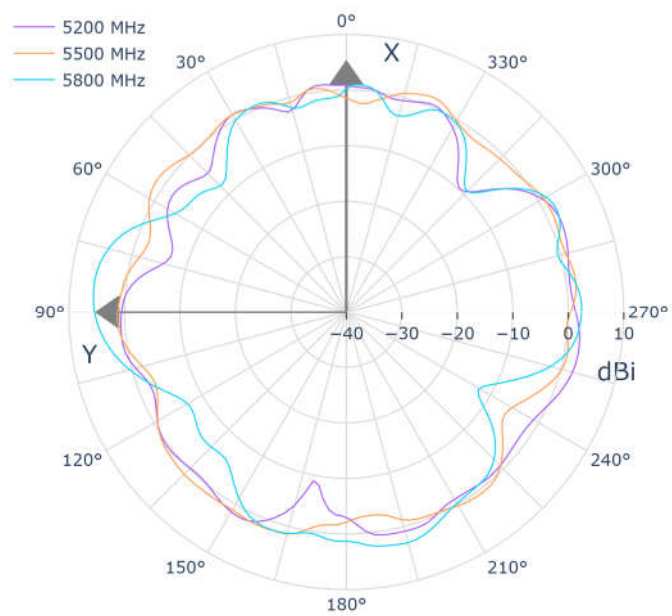
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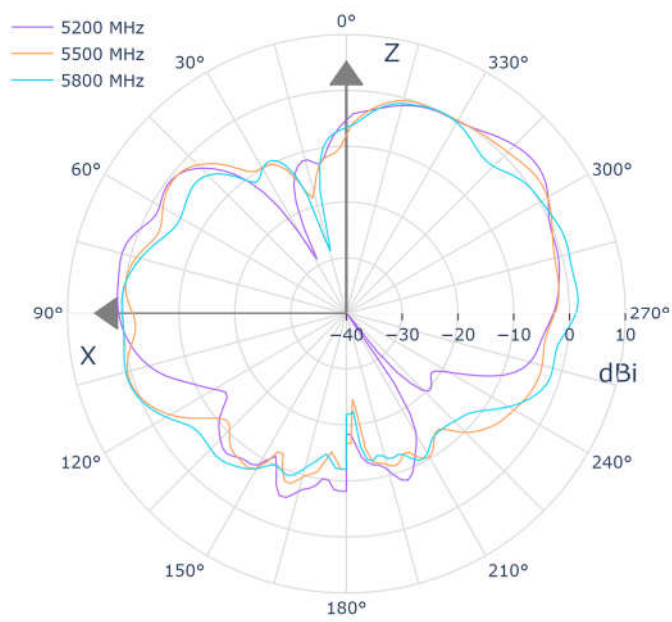
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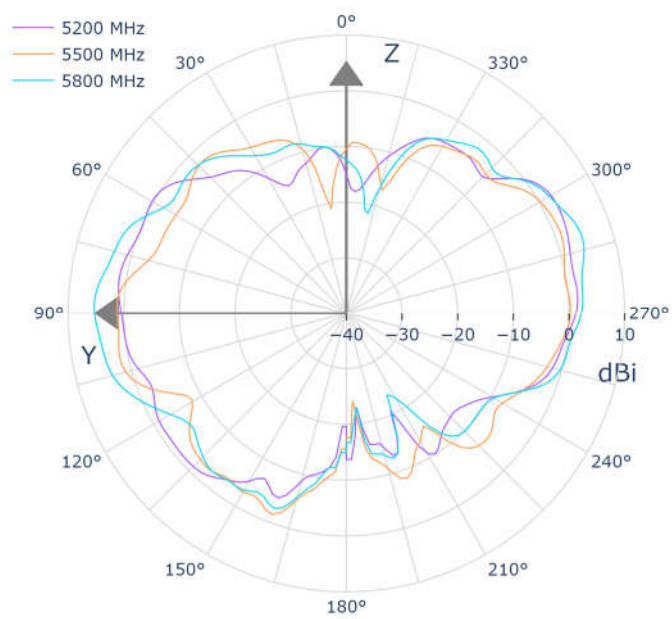
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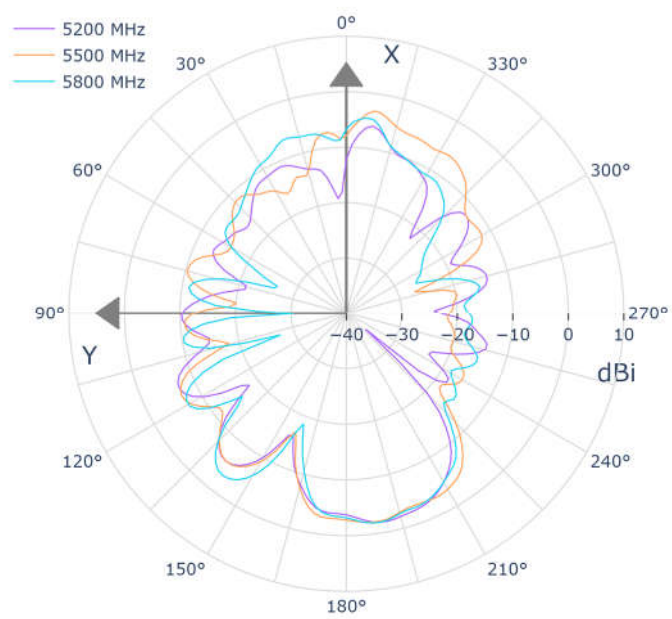
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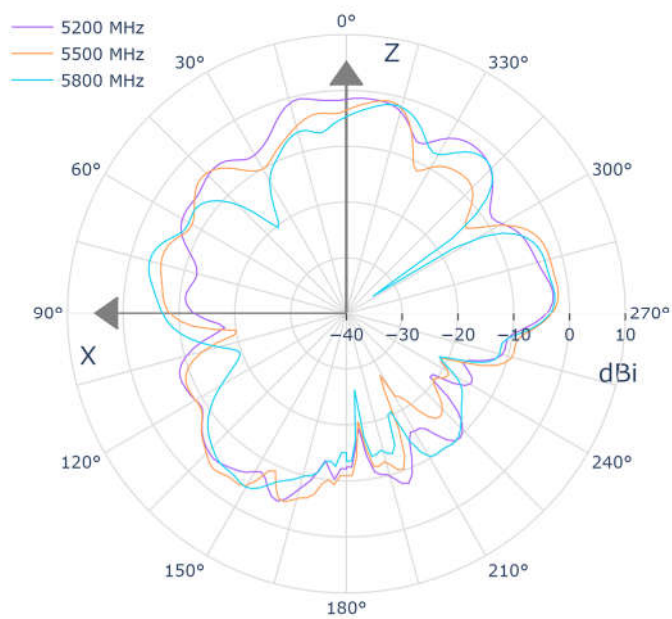
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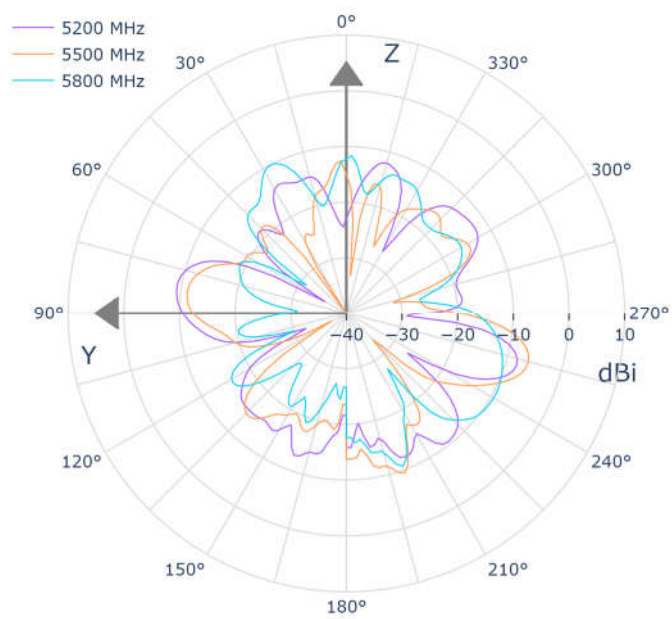
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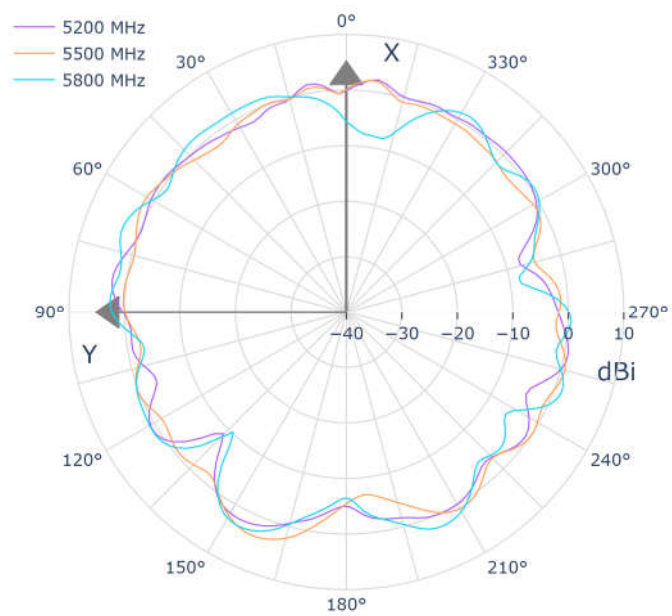
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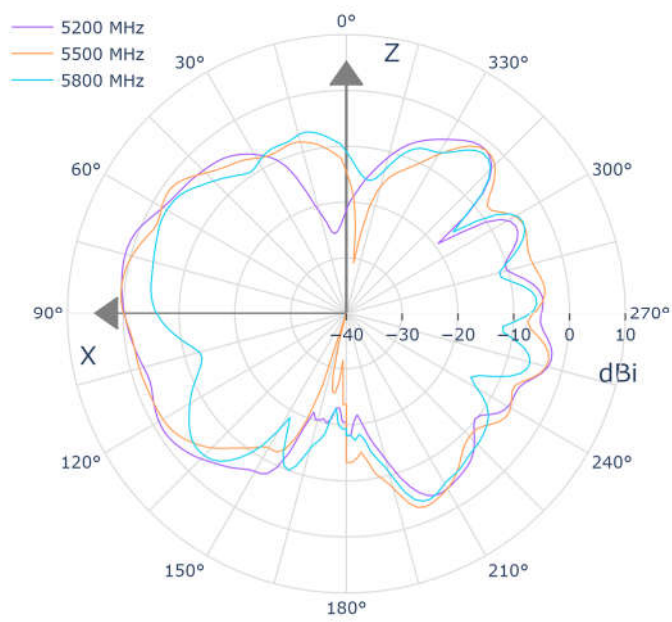
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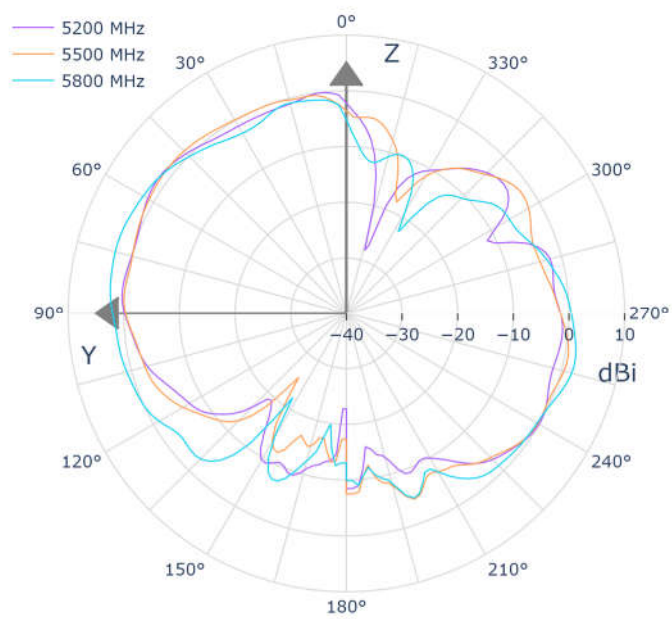
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XZ_Pol._Theta_Ant.8@5G

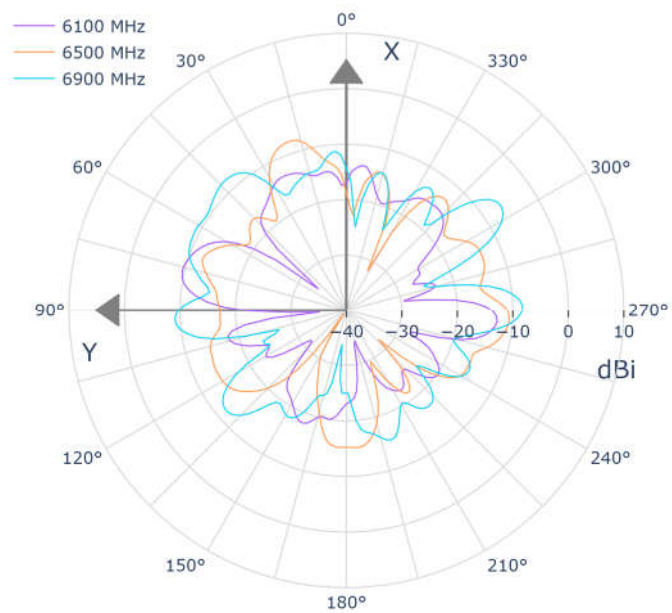


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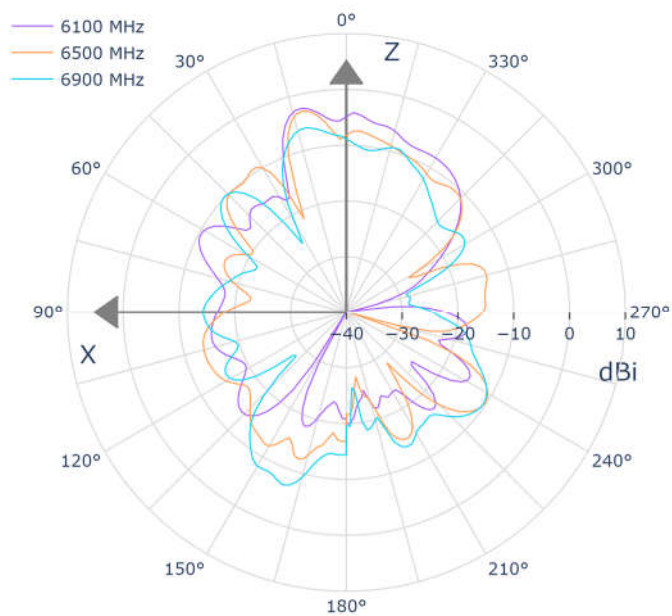


Ant. Position: 6G Ant.1~4

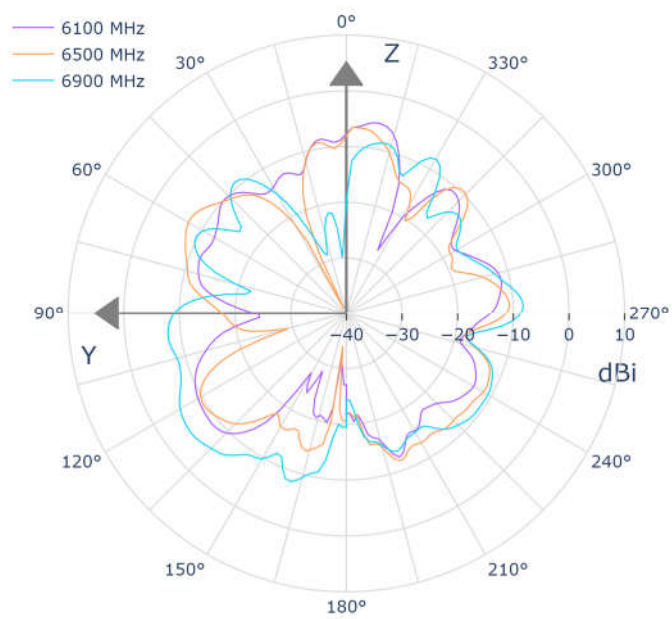
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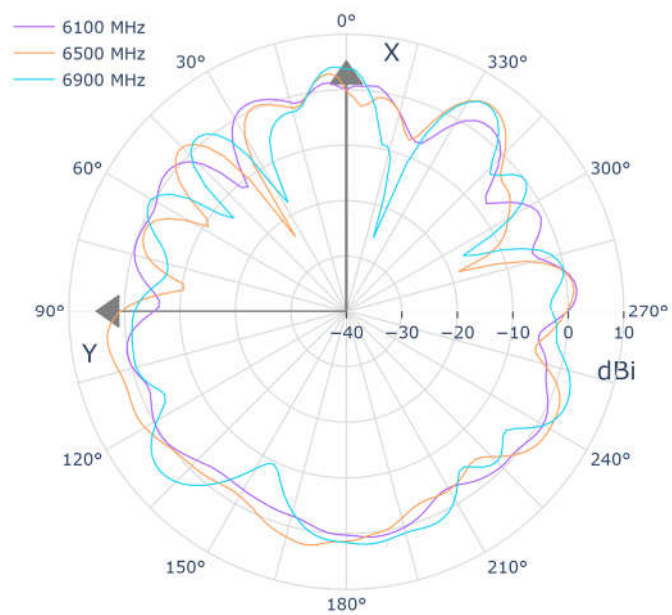
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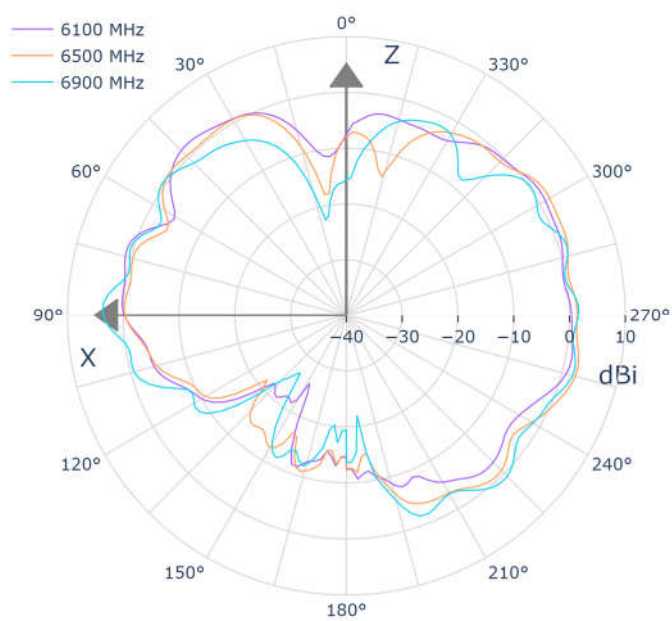
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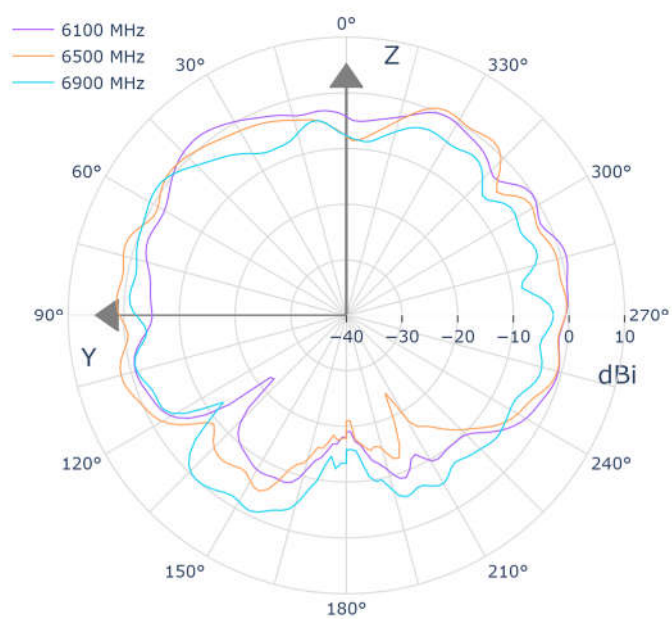
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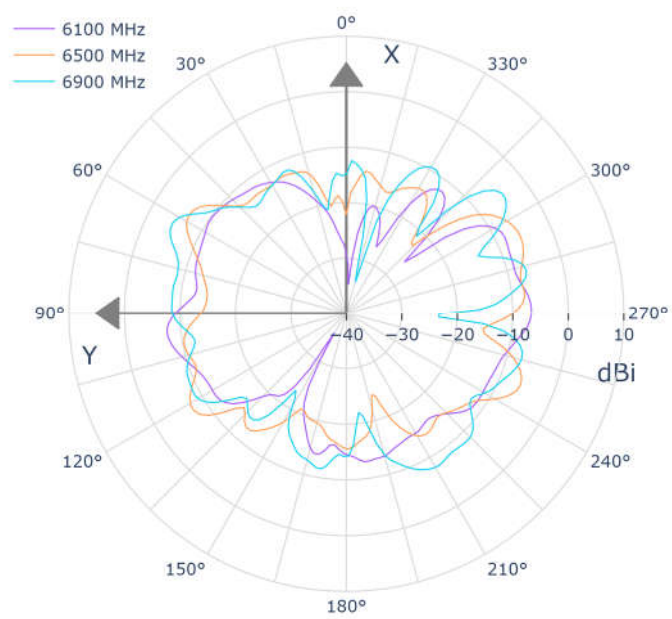
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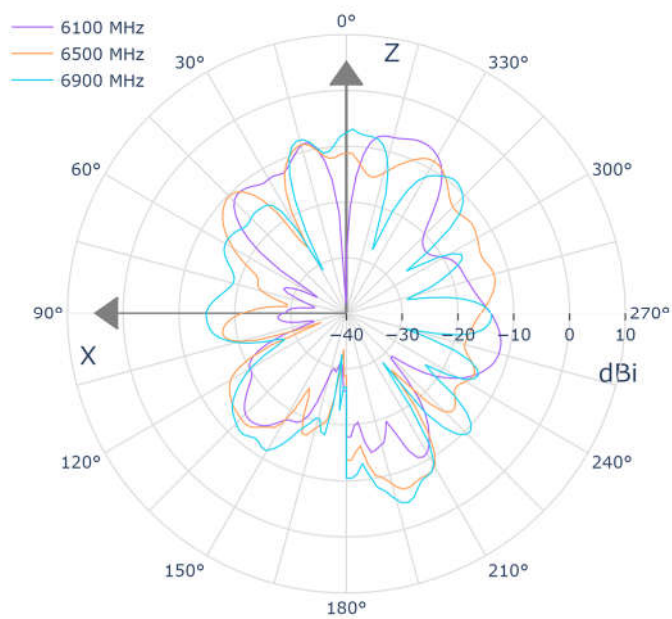
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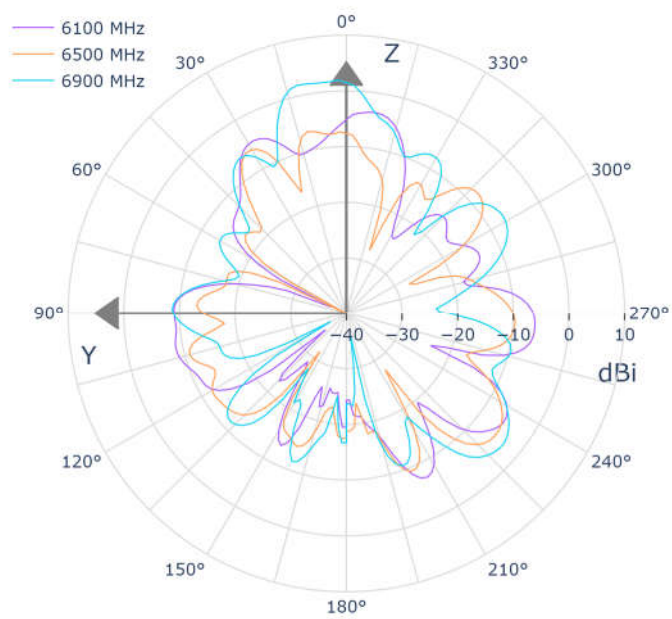
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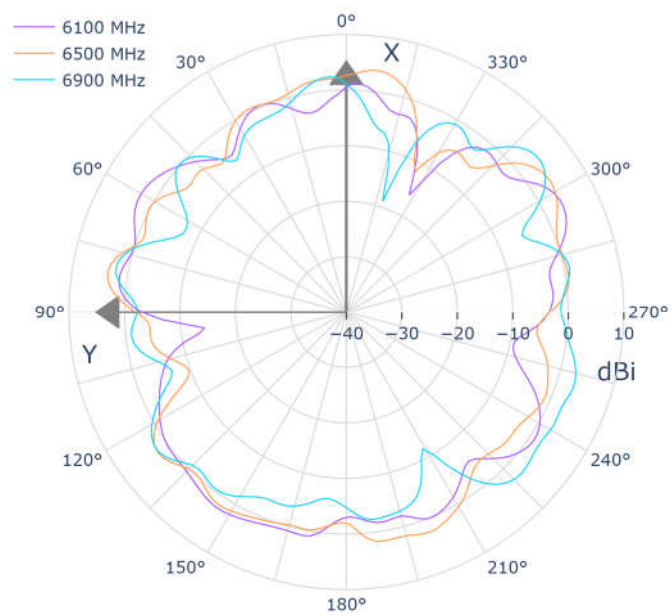
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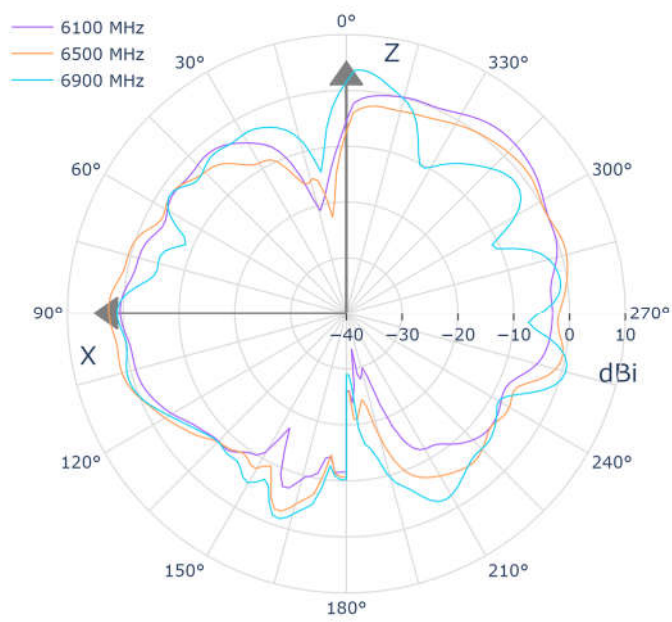
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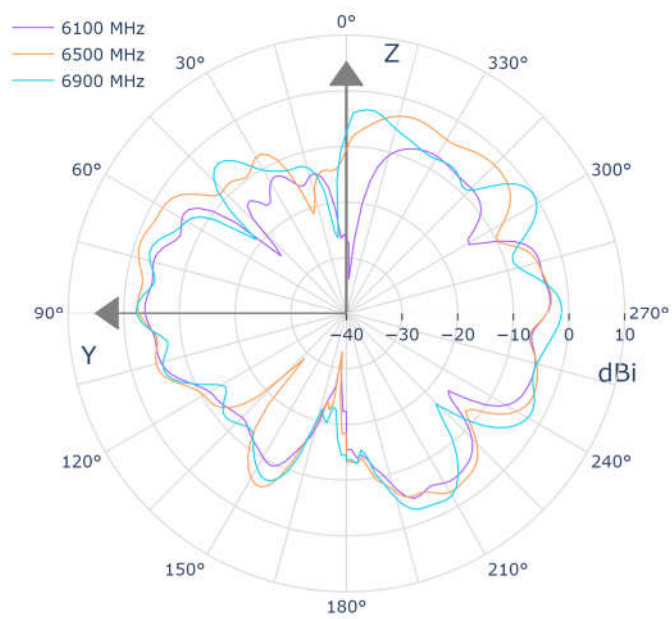
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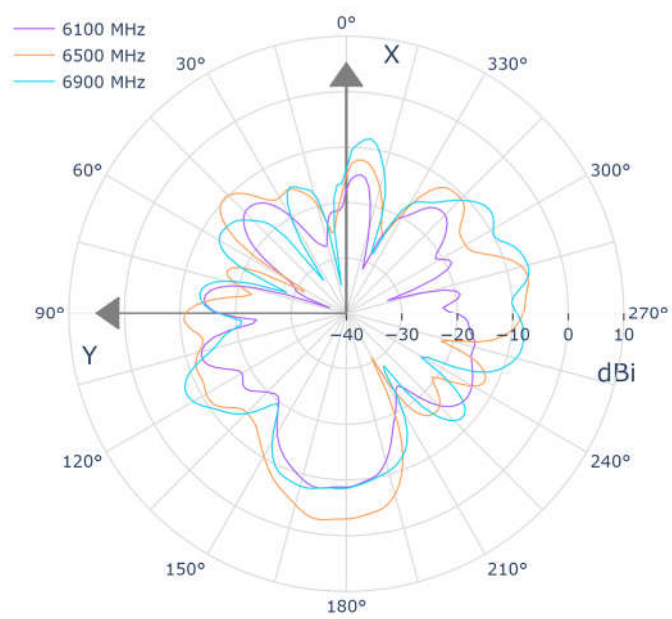
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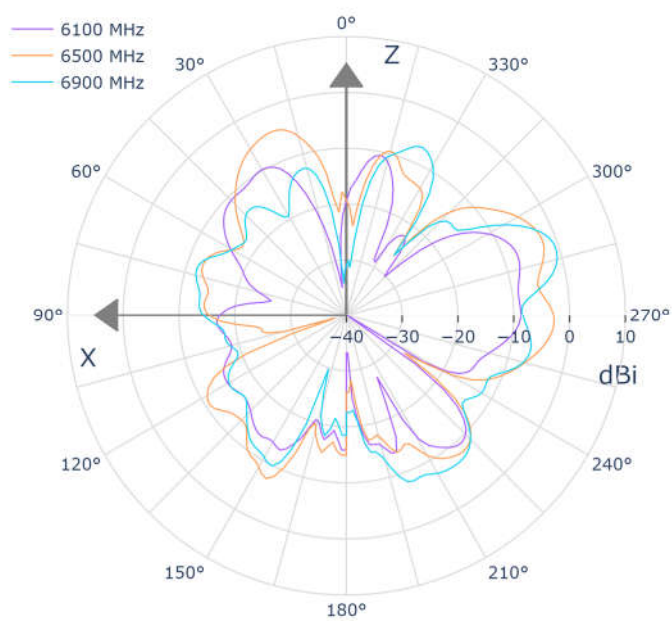
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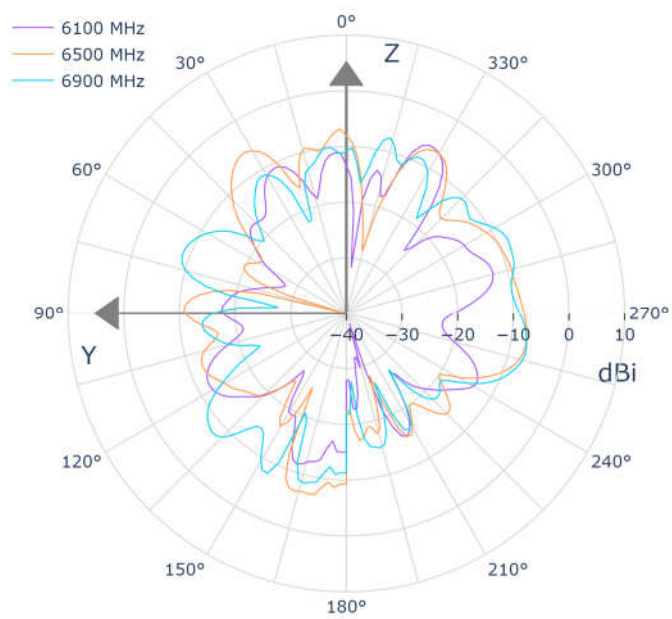
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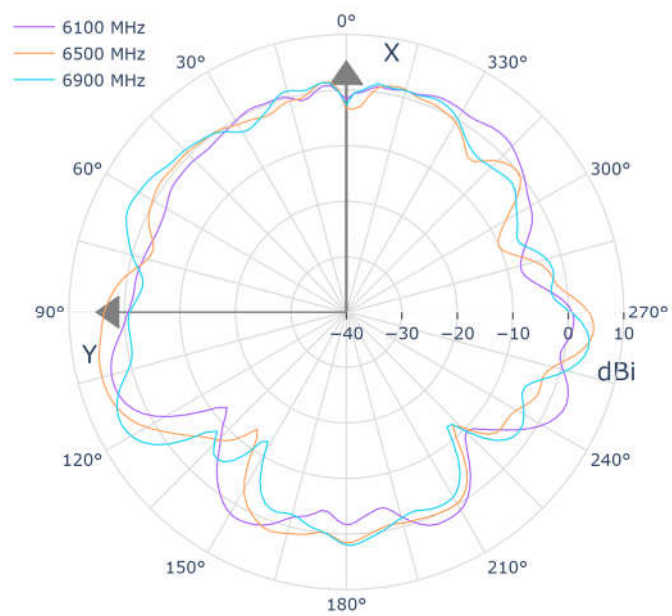
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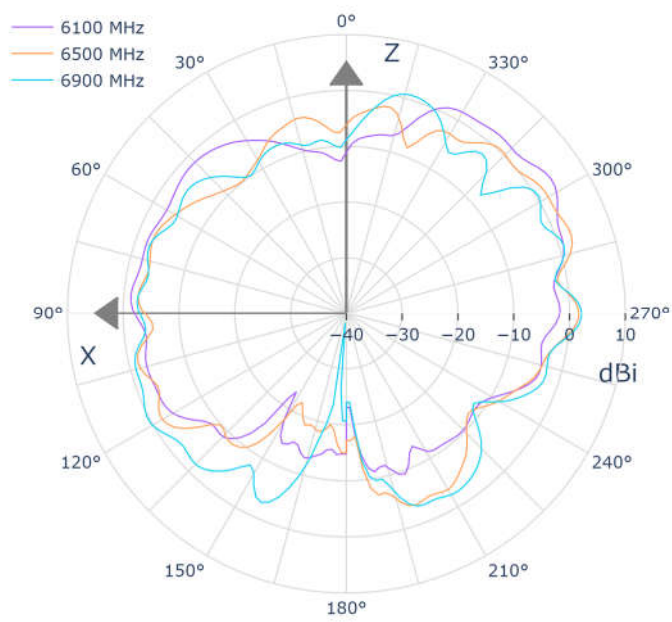
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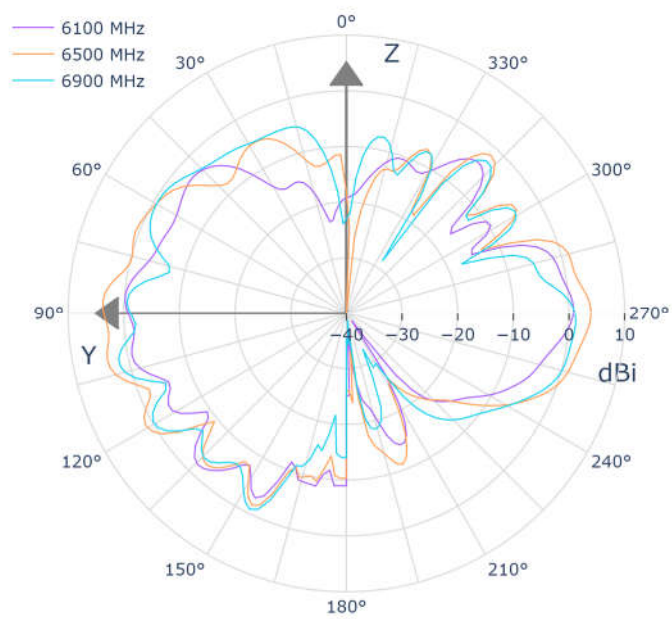
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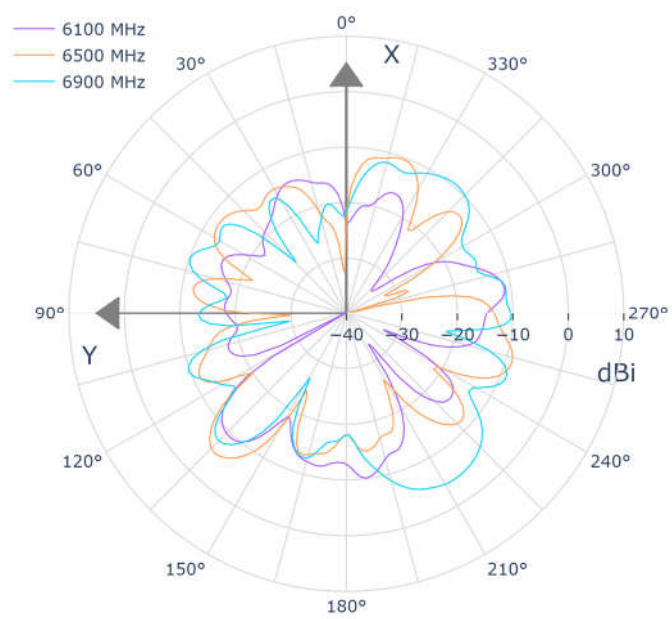
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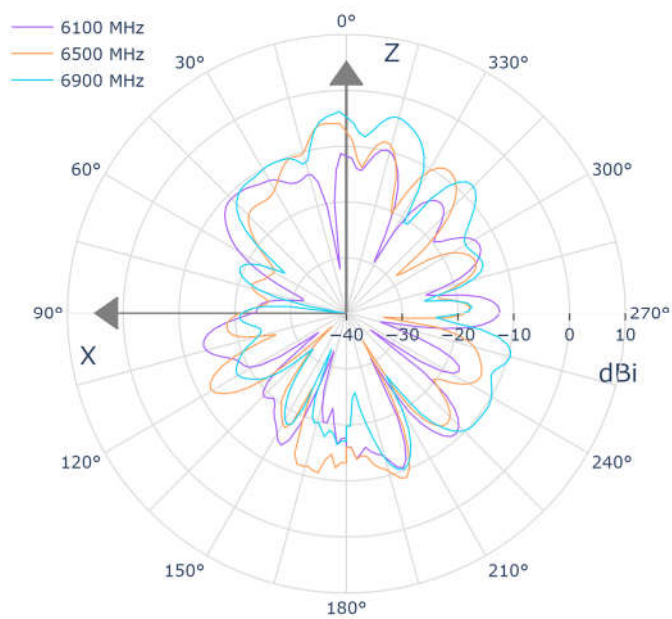
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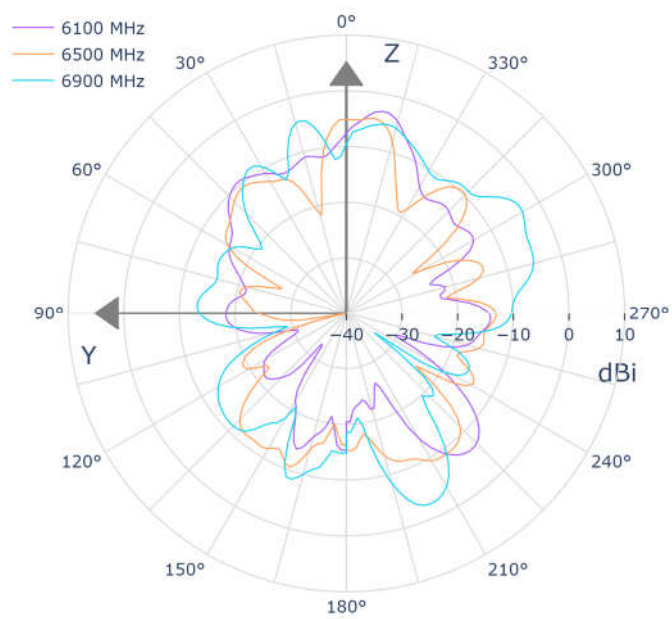
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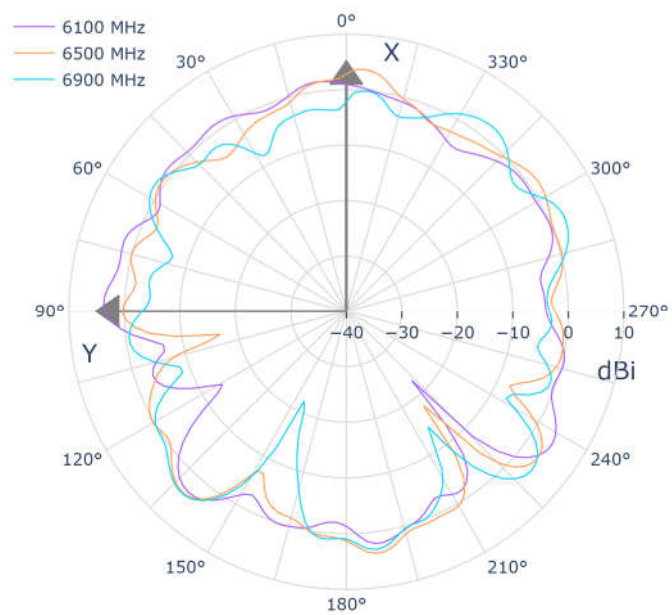
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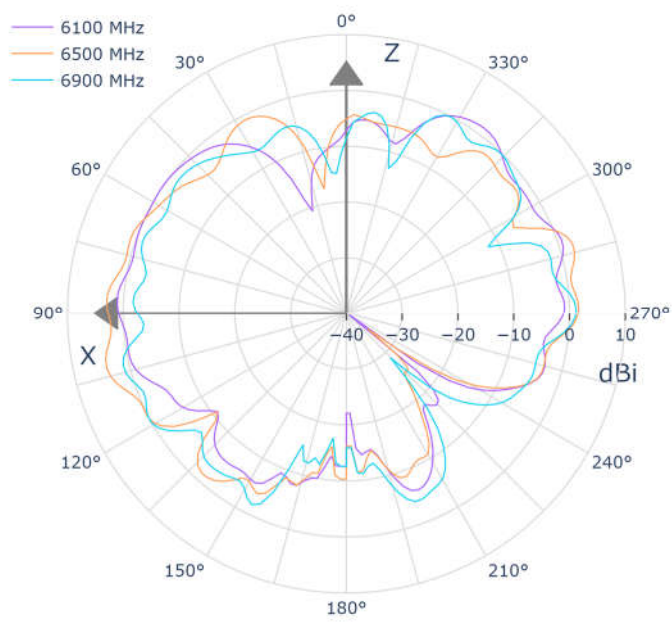
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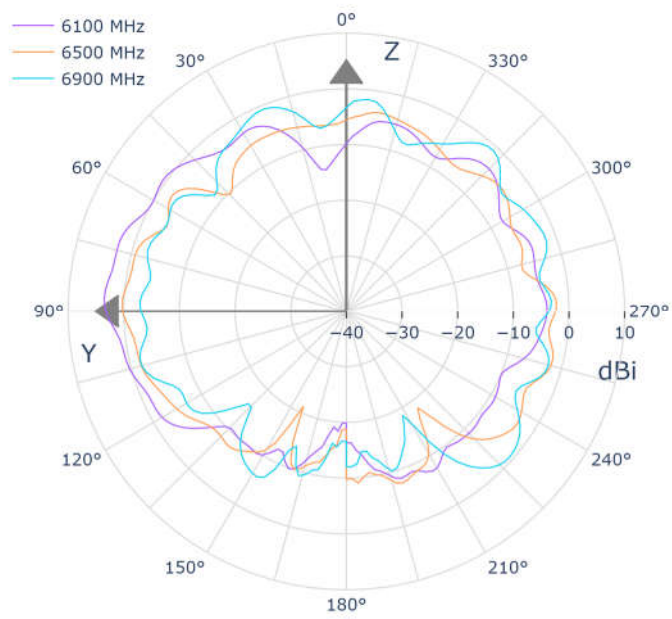
XY_Pol._Theta_Ant.4@6G



XZ_Pol._Theta_Ant.4@6G



YZ_Pol._Theta_Ant.4@6G



Appendix _Radiated Total Gain Result

Regulatory WIFI Antenna Information

150000	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	122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Ant. Position: 5G Ant.7_GAIN THETA

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
0	0	1	4	9	16	25	36	49	64	81	100	121	144	169	196	225	256	289	324	361	400	441	484	529	576	625	676	729	784	841	899	959	1020	1083	1148	1215	1284	1355	1428	1503	1580	1659	1740	1823	1908	1995	2084	2175	2268	2363	2460	2559	2660	2763	2868	2975	3084	3195	3308	3423	3540	3659	3780	3903	4028	4155	4284	4415	4548	4683	4820	4959	5100	5243	5388	5535	5684	5835	5988	6143	6299	6457	6617	6779	6943	7108	7275	7444	7615	7788	7963	8140	8319	8500	8683	8868	9055	9244	9435	9628	9823	10020																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1	1	2	5	8	13	18	25	34	45	58	73	90	109	130	153	178	205	234	265	298	333	370	409	450	493	538	585	634	685	738	793	850	909	970	1033	1098	1165	1234	1305	1378	1453	1530	1609	1690	1773	1858	1945	2034	2125	2218	2313	2410	2509	2610	2713	2818	2925	3034	3145	3258	3373	3490	3609	3730	3853	3978	4105	4234	4365	4498	4633	4770	4909	5050	5193	5338	5485	5634	5785	5938	6093	6250	6409	6569	6731	6895	7061	7228	7397	7567	7739	7913	8089	8267	8447	8628	8811	8995	9181	9368	9557	9748	9941	10135	10331	10528	10727	10928	11130	11334	11539	11746	11954	12164	12375	12588	12802	13018	13235	13454	13674	13896	14119	14344	14570	14798	15027	15258	15490	15724	15960	16197	16436	16677	16920	17165	17412	17661	17912	18165	18420	18677	18936	19197	19460	19725	20000	20277	20556	20837	21120	21405	21692	21981	22272	22565	22860	23157	23456	23757	24060	24365	24672	24981	25292	25605	25920	26237	26556	26877	27199	27524	27851	28180	28511	28844	29179	29516	29855	30196	30539	30884	31231	31580	31931	32284	32639	33000	33363	33728	34095	34464	34835	35208	35583	35960	36339	36720	37103	37488	37875	38264	38655	39048	39443	39840	40239	40640	41043	41448	41855	42264	42675	43088	43503	43920	44339	44760	45183	45608	46035	46464	46895	47328	47763	48200	48639	49080	49523	49968	50415	50864	51315	51768	52223	52680	53139	53600	54063	54528	55000	55473	55948	56425	56904	57385	57868	58353	58840	59329	59820	60313	60808	61305	61804	62305	62808	63313	63820	64329	64840	65353	65868	66385	66904	67425	67948	68471	68994	69517	70040	70563	71086	71609	72132	72655	73178	73701	74224	74747	75270	75793	76316	76839	77362	77885	78408	78931	79454	79977	80500	81023	81546	82069	82592	83115	83638	84161	84684	85207	85730	86253	86776	87299	87822	88345	88868	89391	89914	90437	90960	91483	92006	92529	93052	93575	94098	94621	95144	95667	96190	96713	97236	97759	98282	98805	99328	99851	100374	100897	101420	101943	102466	102989	103512	104035	104558	105081	105604	106127	106650	107173	107696	108219	108742	109265	109788	110311	110834	111357	111880	112403	112926	113449	113972	114495	115018	115541	116064	116587	117110	117633	118156	118679	119202	119725	120248	120771	121294	121817	122340	122863	123386	123909	124432	124955	125478	126001	126524	127047	127570	128093	128616	129139	129662	130185	130708	131231	131754	132277	132800	133323	133846	134369	134892	135415	135938	136461	136984	137507	138030	138553	139076	139599	140122	140645	141168	141691	142214	142737	143260	143783	144306	144829	145352	145875	146398	146921	147444	147967	148490	149013	149536	150059	150582	151105	151628	152151	152674	153197	153720	154243	154766	155289	155812	156335	156858	157381	157904	158427	158950	159473	160000	160523	161046	161569	162092	162615	163138	163661	164184	164707	165230	165753	166276	166799	167322	167845	168368	168891	169414	169937	170460	170983	171506	172029	172552	173075	173598	174121	174644	175167	175690	176213	176736	177259	177782	178305	178828	179351	179874	180397	180920	181443	181966	182489	183012	183535	184058	184581	185104	185627	186150	186673	187196	187719	188242	188765	189288	189811	190334	190857	191380	191903	192426	192949	193472	193995	194518	195041	195564	196087	196610	197133	197656	198179	198702	199225	199748	200271	200794	201317	201840	202363	202886	203409	203932	204455	204978	205501	206024	206547	207070	207593	208116	208639	209162	209685	210208	210731	211254	211777	212300	212823	213346	213869	214392	214915	215438	215961	216484	217007	217530	218053	218576	219099	219622	220145	220668	221191	221714	222237	222760	223283	223806	224329	224852	225375	225898	226421	226944	227467	227990	228513	229036	229559	230082	230605	231128	231651	232174	232697	233220	233743	234266	234789	235312	235835	236358	236881	237404	237927	238450	238973	239496	240019	240542	241065	241588	242111	242634	243157	243680	244203	244726	245249	245772	246295	246818	247341	247864	248387	248910	249433	249956	250479	251002	251525	252048	252571	253094	253617	254140	254663	255186	255709	256232	256755	257278	257801	258324	258847	259370	259893	260416	260939	261462	261985	262508	263031	263554	264077	264600	265123	265646	266169	266692	267215	267738	268261	268784	269307	269830	270353	270876	271399	271922	272445	272968	273491	274014	274537	275060	275583	276106	276629	277152	277675	278198	278721	279244	279767	280290	280813	281336	281859	282382	282905	283428	283951	284474	284997	285520	286043	286566	287089	287612	288135	288658	289181	289704	290227	290750	291273	291796	292319	292842	293365	293888	294411	294934	295457	295980	296503	297026	297549	298072	298595	299118	299641	300164	300687	301210	301733	302256	302779	303302	303825	304348	304871	305394	305917	306440	306963	307486	308009	308532	309055	309578	310101	310624	311147	311670	312193	312716	313239	313762	314285	314808	315331	315854	316377	316900	317423	317946	318469	318992	319515	320038	320561	321084	321607	322130	322653	323176	323699	324222	324745	325268	325791	326314	326837	327360	327883	328406	328929	329452	329975	330498	331021	331544	332067	332590	333113	333636	334159	334682	335205	335728	336251	336774	337297	337820	338343	338866	339389	339912	340435	340958	341481	342004	342527	343050	343573	344096	344619	345142	345665	346188	346711	347234	347757	348280	348803	349326	349849	350372	350895	351418	351941	352464	352987	353510	354033	354556	355079	355602	356125	356648	357171	357694	358217	358740	359263	359786	360309	360832	361355	361878	362401	362924	363447	363970	364493	365016	365539	366062	366585	367108	367631	368154	368677	369200	369723	370246	370769	371292	371815	372338	372861	373384	373907	374430	374953	375476	376000	376523	377046	377569	378092	378615	379138	379661	380184	380707	381230	381753	382276	382799	383322	383845	384368	384891	385414	385937	386460	386983	387506	388029	388552	389075	389598	390121	390644	391167	391690	392213	392736	393259	393782	394305	394828	395351	395874	396397	396920	397443	397966	398489	399012	399535	400058	400581	401104	401627	402150	402673	403196	403719	404242	404765	405288	405811	406334	406857	407380	407903	408426	408949	409472	410000	410523	411046	411569	412092	412615	413138	413661	414184	414707	415230	415753	416276	416799	417322	417845	418368	418891	419414	419937	420460	420983	421506	422029	422552	423075	423598	424121	424644	425167	425690	426213	426736	427259	427782	428305	428828	429351	429874	430397	430920	431443	431966	432489	433012	433535	434058	434581	435104	435627	436150	436673	437196	437719	438242	438765	439288	439811	440334	440857	441380	441903	442426	442949	443472	443995	444518	445041	445564	446087	446610	447133	447656	448179	448702	449225	449748	450271	450794	451317	451840	452363	452886	453409	453932	454455	454978	455501	456024	456547	457070	457593	458116	458639	459162	459685	460208	460731	461254	461777	462300	462823	463346	463869	464392

Ant. Position: 6G Ant.1_GAIN THETA

Frequency(MHz)	-180	-170	-160	-150	-140	-130	-120	-110	-100	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1500	-0.00001	-0.00011	-0.00021	-0.00031	-0.00041	-0.00051	-0.00061	-0.00071	-0.00081	-0.00091	-0.00101	-0.00111	-0.00121	-0.00131	-0.00141	-0.00151	-0.00161	-0.00171	-0.00181	-0.00191	-0.00201	-0.00211	-0.00221	-0.00231	-0.00241	-0.00251	-0.00261	-0.00271	-0.00281	-0.00291	-0.00301	-0.00311	-0.00321	-0.00331	-0.00341	-0.00351	
1501	-0.00012	-0.00022	-0.00032	-0.00042	-0.00052	-0.00062	-0.00072	-0.00082	-0.00092	-0.00102	-0.00112	-0.00122	-0.00132	-0.00142	-0.00152	-0.00162	-0.00172	-0.00182	-0.00192	-0.00202	-0.00212	-0.00222	-0.00232	-0.00242	-0.00252	-0.00262	-0.00272	-0.00282	-0.00292	-0.00302	-0.00312	-0.00322	-0.00332	-0.00342	-0.00352		
1502	-0.00023	-0.00033	-0.00043	-0.00053	-0.00063	-0.00073	-0.00083	-0.00093	-0.00103	-0.00113	-0.00123	-0.00133	-0.00143	-0.00153	-0.00163	-0.00173	-0.00183	-0.00193	-0.00203	-0.00213	-0.00223	-0.00233	-0.00243	-0.00253	-0.00263	-0.00273	-0.00283	-0.00293	-0.00303	-0.00313	-0.00323	-0.00333	-0.00343	-0.00353			
1503	-0.00034	-0.00044	-0.00054	-0.00064	-0.00074	-0.00084	-0.00094	-0.00104	-0.00114	-0.00124	-0.00134	-0.00144	-0.00154	-0.00164	-0.00174	-0.00184	-0.00194	-0.00204	-0.00214	-0.00224	-0.00234	-0.00244	-0.00254	-0.00264	-0.00274	-0.00284	-0.00294	-0.00304	-0.00314	-0.00324	-0.00334	-0.00344	-0.00354				
1504	-0.00045	-0.00055	-0.00065	-0.00075	-0.00085	-0.00095	-0.00105	-0.00115	-0.00125	-0.00135	-0.00145	-0.00155	-0.00165	-0.00175	-0.00185	-0.00195	-0.00205	-0.00215	-0.00225	-0.00235	-0.00245	-0.00255	-0.00265	-0.00275	-0.00285	-0.00295	-0.00305	-0.00315	-0.00325	-0.00335	-0.00345	-0.00355					
1505	-0.00056	-0.00066	-0.00076	-0.00086	-0.00096	-0.00106	-0.00116	-0.00126	-0.00136	-0.00146	-0.00156	-0.00166	-0.00176	-0.00186	-0.00196	-0.00206	-0.00216	-0.00226	-0.00236	-0.00246	-0.00256	-0.00266	-0.00276	-0.00286	-0.00296	-0.00306	-0.00316	-0.00326	-0.00336	-0.00346	-0.00356						
1506	-0.00067	-0.00077	-0.00087	-0.00097	-0.00107	-0.00117	-0.00127	-0.00137	-0.00147	-0.00157	-0.00167	-0.00177	-0.00187	-0.00197	-0.00207	-0.00217	-0.00227	-0.00237	-0.00247	-0.00257	-0.00267	-0.00277	-0.00287	-0.00297	-0.00307	-0.00317	-0.00327	-0.00337	-0.00347	-0.00357							
1507	-0.00078	-0.00088	-0.00098	-0.00108	-0.00118	-0.00128	-0.00138	-0.00148	-0.00158	-0.00168	-0.00178	-0.00188	-0.00198	-0.00208	-0.00218	-0.00228	-0.00238	-0.00248	-0.00258	-0.00268	-0.00278	-0.00288	-0.00298	-0.00308	-0.00318	-0.00328	-0.00338	-0.00348	-0.00358								
1508	-0.00089	-0.00099	-0.00109	-0.00119	-0.00129	-0.00139	-0.00149	-0.00159	-0.00169	-0.00179	-0.00189	-0.00199	-0.00209	-0.00219	-0.00229	-0.00239	-0.00249	-0.00259	-0.00269	-0.00279	-0.00289	-0.00299	-0.00309	-0.00319	-0.00329	-0.00339	-0.00349	-0.00359									
1509	-0.00100	-0.00110	-0.00120	-0.00130	-0.00140	-0.00150	-0.00160	-0.00170	-0.00180	-0.00190	-0.00200	-0.00210	-0.00220	-0.00230	-0.00240	-0.00250	-0.00260	-0.00270	-0.00280	-0.00290	-0.00300	-0.00310	-0.00320	-0.00330	-0.00340	-0.00350											
1510	-0.00111	-0.00121	-0.00131	-0.00141	-0.00151	-0.00161	-0.00171	-0.00181	-0.00191	-0.00201	-0.00211	-0.00221	-0.00231	-0.00241	-0.00251	-0.00261	-0.00271	-0.00281	-0.00291	-0.00301	-0.00311	-0.00321	-0.00331	-0.00341	-0.00351												
1511	-0.00122	-0.00132	-0.00142	-0.00152	-0.00162	-0.00172	-0.00182	-0.00192	-0.00202	-0.00212	-0.00222	-0.00232	-0.00242	-0.00252	-0.00262	-0.00272	-0.00282	-0.00292	-0.00302	-0.00312	-0.00322	-0.00332	-0.00342	-0.00352													
1512	-0.00133	-0.00143	-0.00153	-0.00163	-0.00173	-0.00183	-0.00193	-0.00203	-0.00213	-0.00223	-0.00233	-0.00243	-0.00253	-0.00263	-0.00273	-0.00283	-0.00293	-0.00303	-0.00313	-0.00323	-0.00333	-0.00343	-0.00353														
1513	-0.00144	-0.00154	-0.00164	-0.00174	-0.00184	-0.00194	-0.00204	-0.00214	-0.00224	-0.00234	-0.00244	-0.00254	-0.00264	-0.00274	-0.00284	-0.00294	-0.00304	-0.00314	-0.00324	-0.00334	-0.00344	-0.00354															
1514	-0.00155	-0.00165	-0.00175	-0.00185	-0.00195	-0.00205	-0.00215	-0.00225	-0.00235	-0.00245	-0.00255	-0.00265	-0.00275	-0.00285	-0.00295	-0.00305	-0.00315	-0.00325	-0.00335	-0.00345	-0.00355																
1515	-0.00166	-0.00176	-0.00186	-0.00196	-0.00206	-0.00216	-0.00226	-0.00236	-0.00246	-0.00256	-0.00266	-0.00276	-0.00286	-0.00296	-0.00306	-0.00316	-0.00326	-0.00336	-0.00346	-0.00356																	
1516	-0.00177	-0.00187	-0.00197	-0.00207	-0.00217	-0.00227	-0.00237	-0.00247	-0.00257	-0.00267	-0.00277	-0.00287	-0.00297	-0.00307	-0.00317	-0.00327	-0.00337	-0.00347	-0.00357																		
1517	-0.00188	-0.00198	-0.00208	-0.00218	-0.00228	-0.00238	-0.00248	-0.00258	-0.00268	-0.00278	-0.00288	-0.00298	-0.00308	-0.00318	-0.00328	-0.00338	-0.00348	-0.00358																			
1518	-0.00199	-0.00209	-0.00219	-0.00229	-0.00239	-0.00249	-0.00259	-0.00269	-0.00279	-0.00289	-0.00299	-0.00309	-0.00319	-0.00329	-0.00339	-0.00349	-0.00359																				
1519	-0.00210	-0.00220	-0.00230	-0.00240	-0.00250	-0.00260	-0.00270	-0.00280	-0.00290	-0.00300	-0.00310	-0.00320	-0.00330	-0.00340	-0.00350																						
1520	-0.00221	-0.00231	-0.00241	-0.00251	-0.00261	-0.00271	-0.00281	-0.00291	-0.00301	-0.00311	-0.00321	-0.00331	-0.00341	-0.00351																							
1521	-0.00232	-0.00242	-0.00252	-0.00262	-0.00272	-0.00282	-0.00292	-0.00302	-0.00312	-0.00322	-0.00332	-0.00342	-0.00352																								
1522	-0.00243	-0.00253	-0.00263	-0.00273	-0.00283	-0.00293	-0.00303	-0.00313	-0.00323	-0.00333	-0.00343	-0.00353																									
1523	-0.00254	-0.00264	-0.00274	-0.00284	-0.00294	-0.00304	-0.00314	-0.00324	-0.00334	-0.00344	-0.00354																										
1524	-0.00265	-0.00275	-0.00285	-0.00295	-0.00305	-0.00315	-0.00325	-0.00335	-0.00345	-0.00355																											
1525	-0.00276	-0.00286	-0.00296	-0.00306	-0.00316	-0.00326	-0.00336	-0.00346	-0.00356																												
1526	-0.00287	-0.00297	-0.00307	-0.00317	-0.00327	-0.00337	-0.00347	-0.00357																													
1527	-0.00298	-0.00308	-0.00318	-0.00328	-0.00338	-0.00348	-0.00358																														
1528	-0.00309	-0.00319	-0.00329	-0.00339	-0.00349	-0.00359																															
1529	-0.00320	-0.00330	-0.00340	-0.00350																																	
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1698																																					

Ant. Position: 6G Ant.2_GAIN

[illegible]

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Ant. Position: 6G Ant.3_GAIN PHI

[illegible]

Ant. Position: 6G Ant.4_GAIN PHI

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