

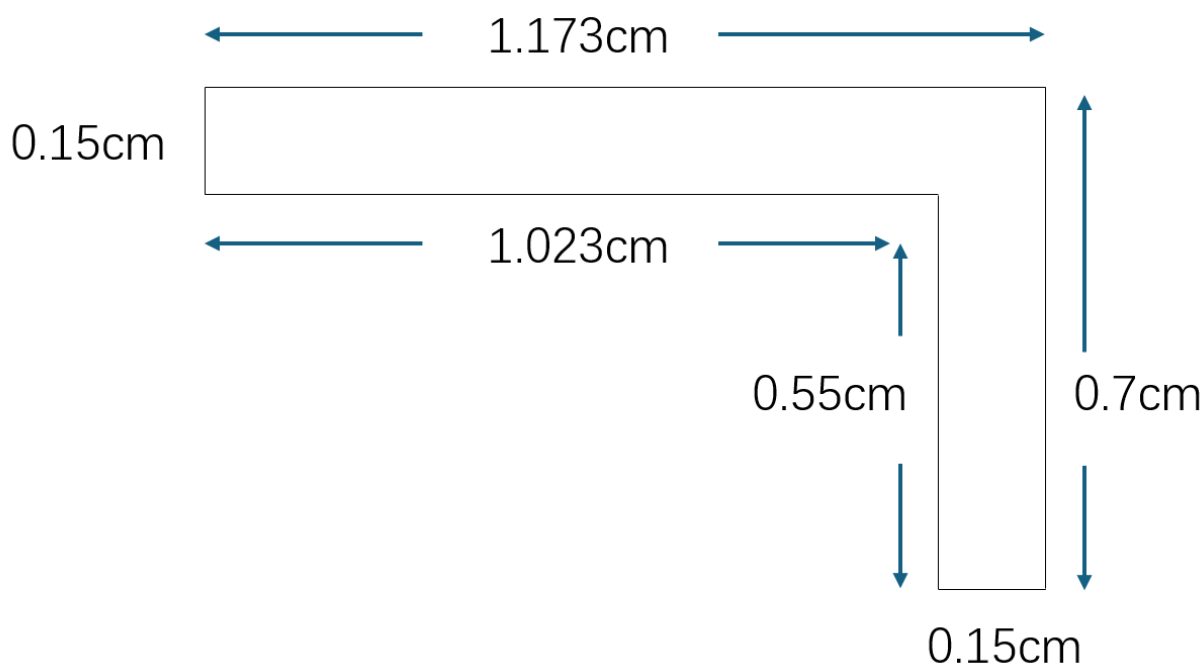
Antenna Specification

Date	2025/3/11
Remark	Initial release

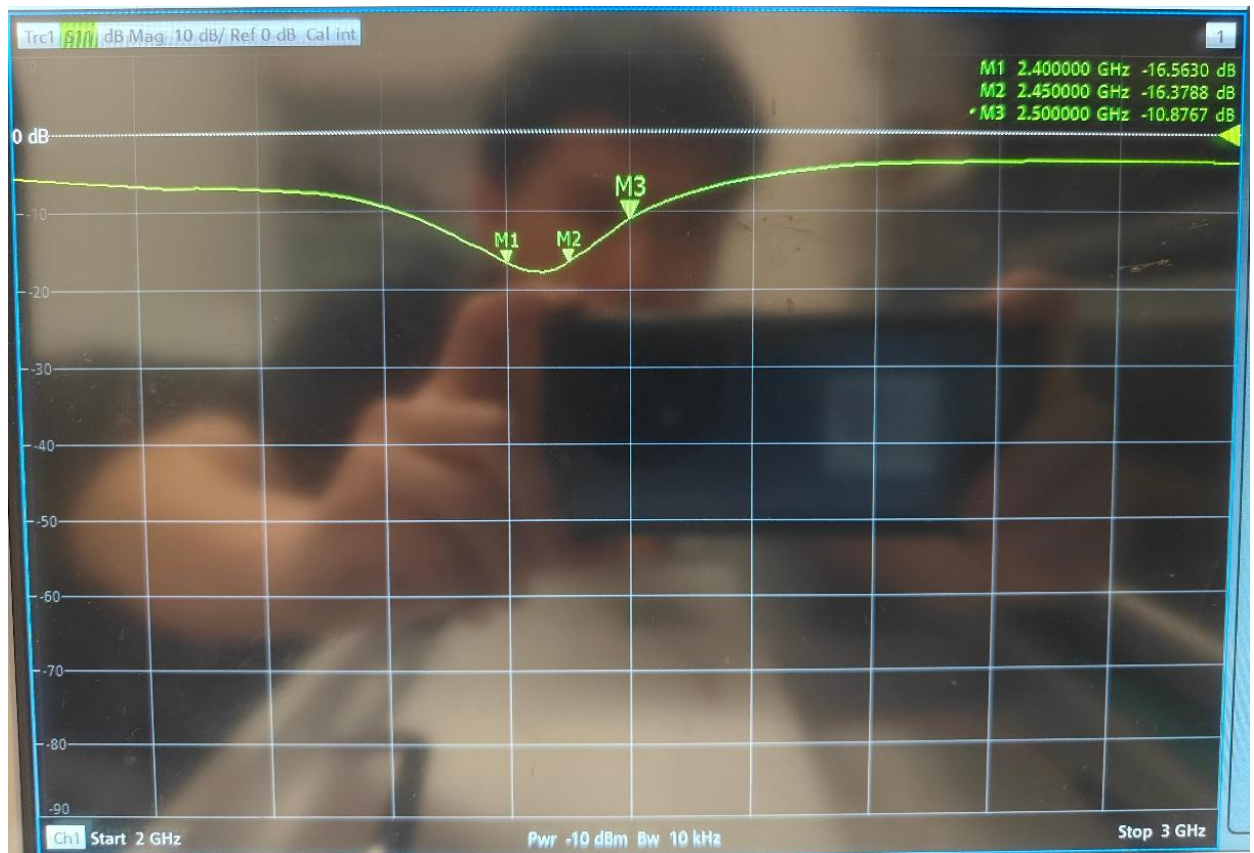
1. Summary

Antenna model	0810000020
Antenna name	CN2202B Inverted-L PCB printed antenna
Frequency range	2400MHz~2500MHz
Peak gain	4.11dBi
Antenna direction	Linear

2. Dimension

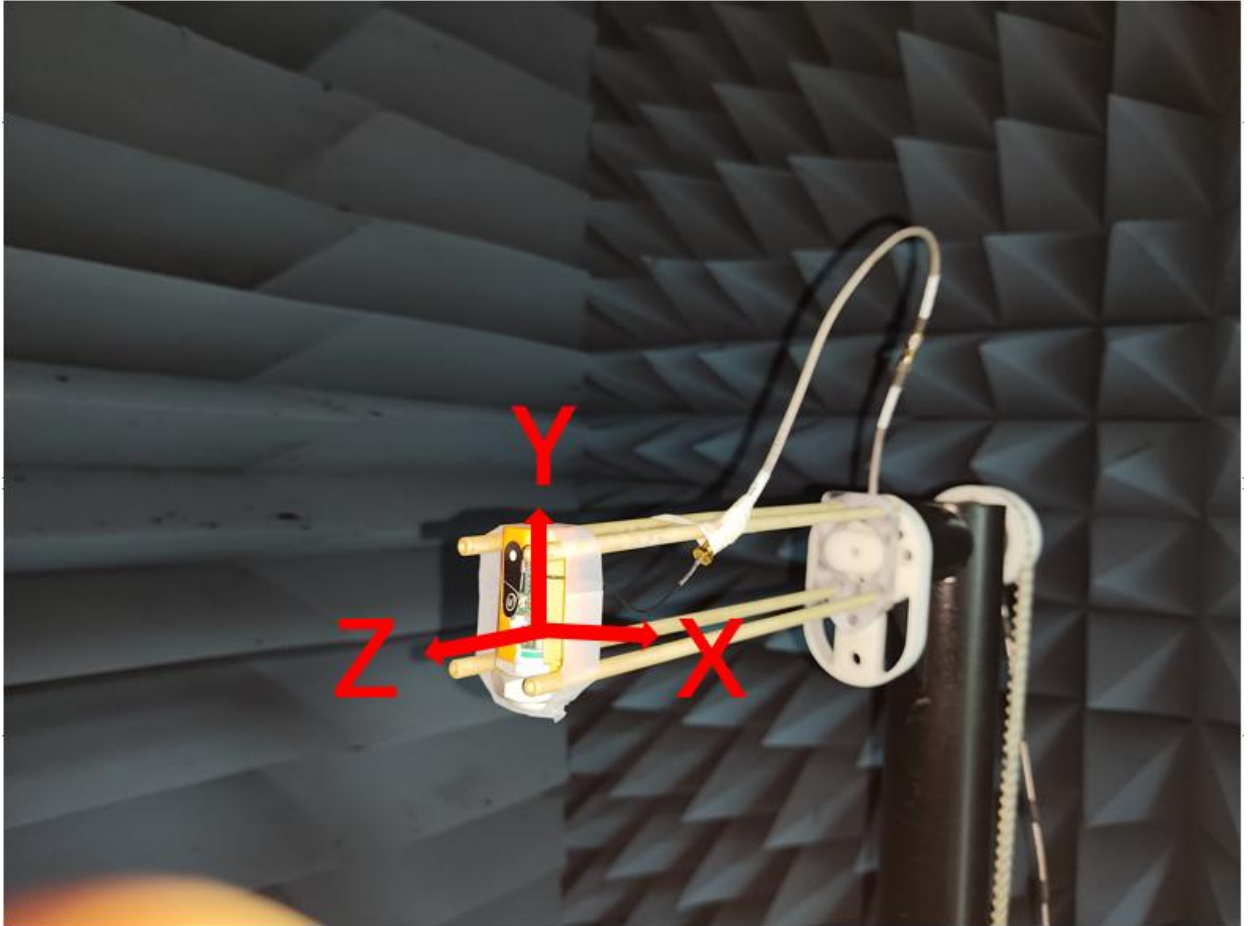


3. S parameter



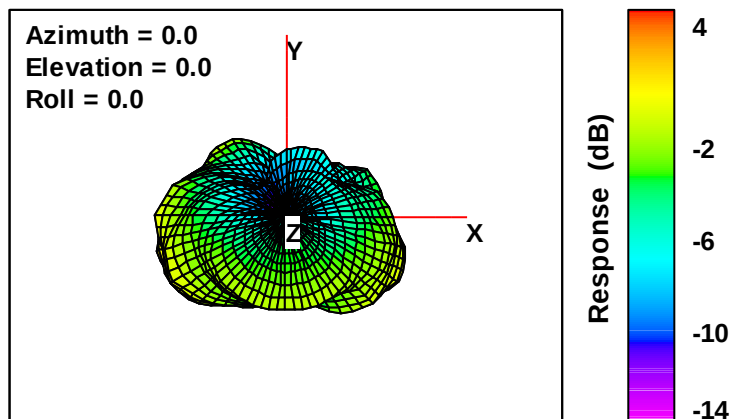
4. Radio parameter

坐标示意图:

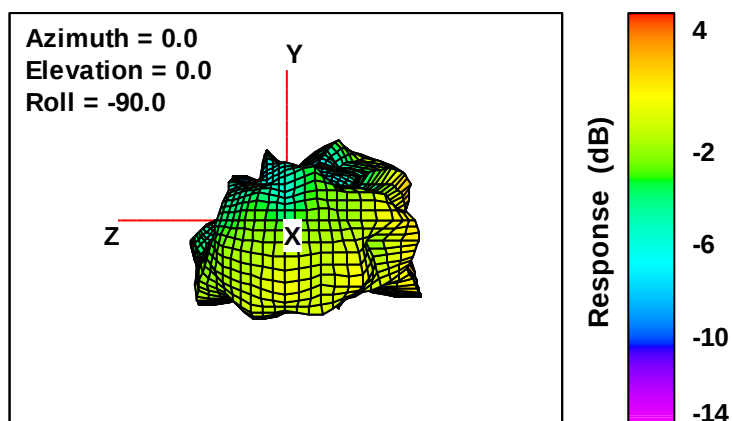


2400MHz:

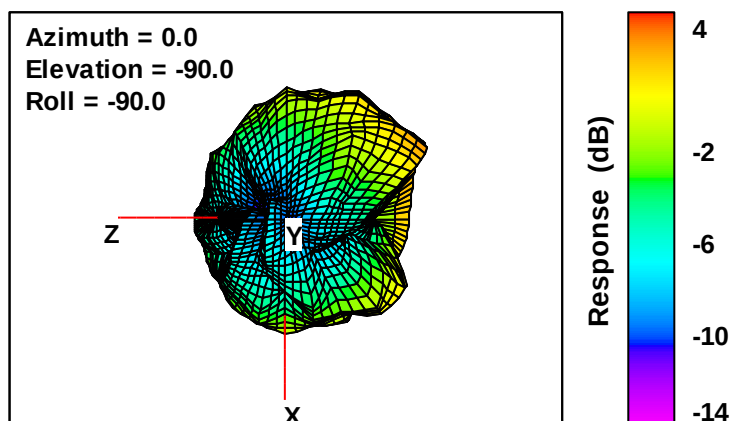
Total



Total

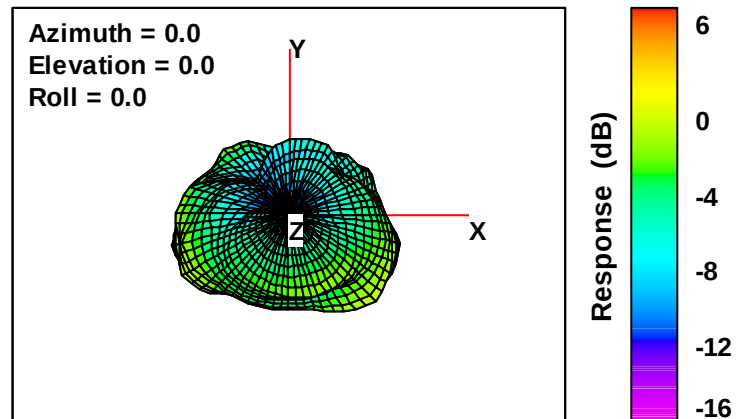


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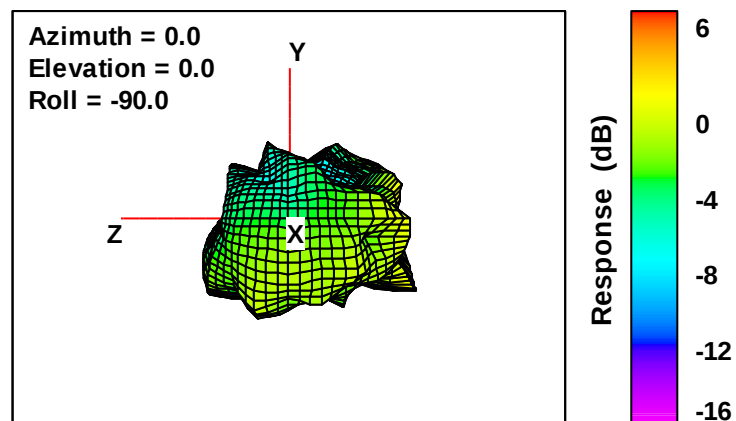


2450MHz:

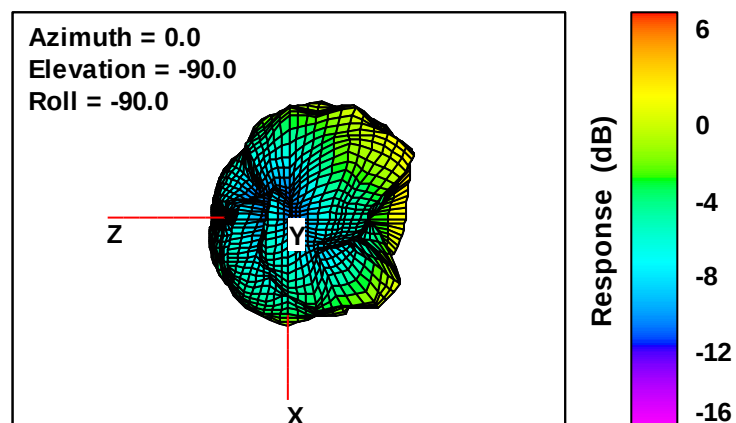
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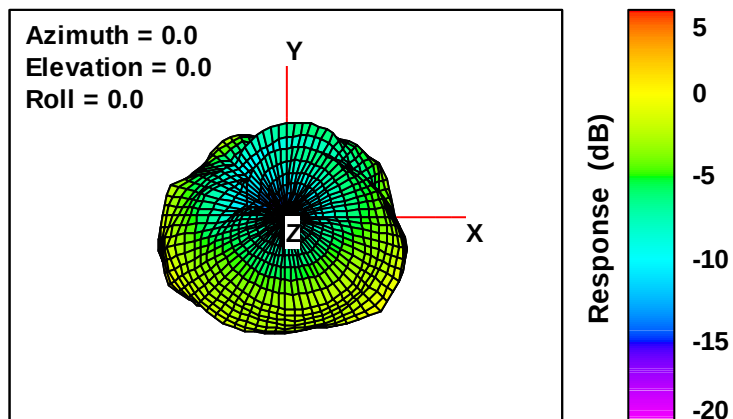


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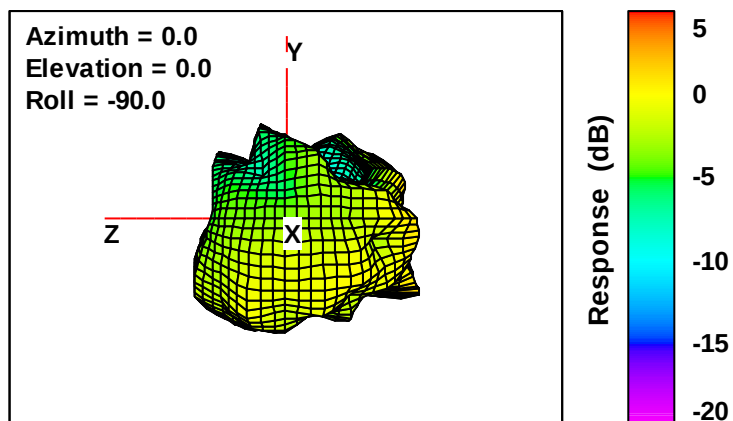


2500 MHz:

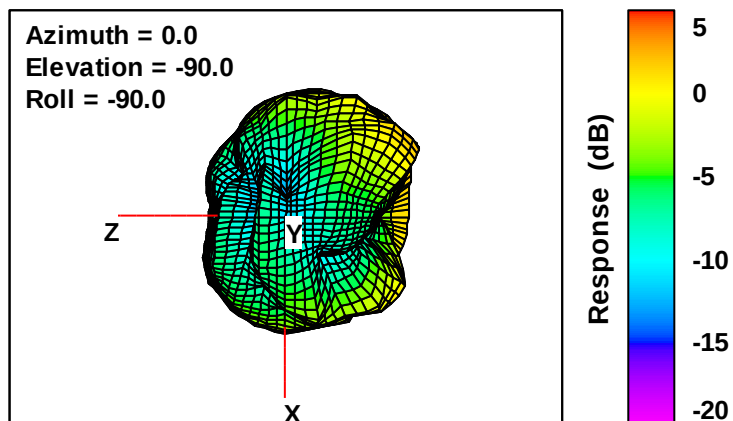
Total



Total



Total



Total	Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	Point Values											
	Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0
	Tot. Rad. Pwr. (dBm)	-2.68237	-2.77621	-2.796	-2.87523	-2.85223	-2.92063	-3.02122	-2.90208	-2.96414	-2.90256	-3.0033
	Peak EIRP (dBm)	3.52853	3.65249	3.78994	3.85567	4.00185	4.07574	4.04566	4.11724	3.99463	3.90384	3.68013
	Directivity (dBi)	6.2109	6.4287	6.58594	6.7309	6.85408	6.99637	7.06688	7.01932	6.95877	6.80641	6.68343
	Efficiency (dB)	-2.68237	-2.77621	-2.796	-2.87523	-2.85223	-2.92063	-3.02122	-2.90208	-2.96414	-2.90256	-3.0033
	Efficiency (%)	53.9216	52.7691	52.5291	51.5794	51.8534	51.0431	49.8744	51.2616	50.5343	51.2559	50.0807
	Gain (dBi)	3.52853	3.65249	3.78994	3.85567	4.00185	4.07574	4.04566	4.11724	3.99463	3.90384	3.68013
	NHPRP Pi/4 (dBm)	-4.40072	-4.50687	-4.52182	-4.60351	-4.58567	-4.65682	-4.74829	-4.60434	-4.63046	-4.52577	-4.59577
	NHPRP Pi/6 (dBm)	-6.06103	-6.16777	-6.17881	-6.26625	-6.2555	-6.33745	-6.43509	-6.28056	-6.28887	-6.16666	-6.22198
	NHPRP Pi/8 (dBm)	-7.2744	-7.38305	-7.39807	-7.49476	-7.49167	-7.58359	-7.6862	-7.52528	-7.52727	-7.39813	-7.44698
	Upper Hem. PRP (dBm)	-7.10656	-7.19635	-7.22221	-7.32523	-7.35067	-7.45938	-7.59596	-7.52909	-7.60564	-7.53848	-7.59866
	Lower Hem. PRP (dBm)	-4.62778	-4.7239	-4.74026	-4.80612	-4.75623	-4.80261	-4.88381	-4.73693	-4.79138	-4.73274	-4.85488
	NHPRP4 / TRP Ratio (dB)	-1.71835	-1.73066	-1.72582	-1.72827	-1.73344	-1.73619	-1.72707	-1.70226	-1.66633	-1.62321	-1.59247
	NHPRP4 / TRP Ratio (%)	67.3232	67.1326	67.2075	67.1696	67.0897	67.0473	67.1883	67.5731	68.1346	68.8144	69.3031
	Near Horz. TRP for Pi/4 (dBm)	-2.89557	-3.00172	-3.01667	-3.09836	-3.08052	-3.15167	-3.24314	-3.09919	-3.12531	-3.02062	-3.09062
	NHPRP6 / TRP Ratio (dB)	-3.37866	-3.39157	-3.38281	-3.39102	-3.40327	-3.41682	-3.41387	-3.37848	-3.32474	-3.2641	-3.21868
	NHPRP6 / TRP Ratio (%)	45.934	45.7976	45.8901	45.8035	45.6744	45.5321	45.563	45.9359	46.5079	47.1618	47.6576
	Near Horz. TRP for Pi/6 (dBm)	-3.05073	-3.15747	-3.16851	-3.25595	-3.2452	-3.32715	-3.42479	-3.27026	-3.27857	-3.15636	-3.21168
	NHPRP8 / TRP Ratio (dB)	-4.59203	-4.60684	-4.60207	-4.61952	-4.63944	-4.66296	-4.66498	-4.62319	-4.56313	-4.49557	-4.44368
	NHPRP8 / TRP Ratio (%)	34.7374	34.6191	34.6572	34.5182	34.3602	34.1747	34.1587	34.489	34.9693	35.5176	35.9445
	Near Horz. TRP for Pi/8 (dBm)	-3.1028	-3.21144	-3.22646	-3.32315	-3.32007	-3.41198	-3.5146	-3.35367	-3.35567	-3.22653	-3.27537
	UHPRP / TRP Ratio (dB)	-4.42419	-4.42015	-4.42621	-4.45	-4.49844	-4.53875	-4.57474	-4.62701	-4.6415	-4.63592	-4.59536
	UHPRP / TRP Ratio (%)	36.1061	36.1398	36.0893	35.8922	35.4941	35.1661	34.876	34.4587	34.3439	34.3881	34.7107
	Upper Hem.Total Radiated Pwr (dBm)	-4.09626	-4.18605	-4.21191	-4.31493	-4.34037	-4.44908	-4.58566	-4.51879	-4.59534	-4.52818	-4.58836
	LHPRP / TRP Ratio (dB)	-1.94541	-1.9477	-1.94427	-1.93089	-1.904	-1.88198	-1.86259	-1.83485	-1.82725	-1.83017	-1.85158
	LHPRP / TRP Ratio (%)	63.8939	63.8602	63.9107	64.1078	64.5059	64.8339	65.124	65.5413	65.6561	65.6119	65.2893
	Lower Hem. Total Radiated Pwr(dBm)	-1.61748	-1.7136	-1.72996	-1.79582	-1.74593	-1.79231	-1.87351	-1.72663	-1.78108	-1.72244	-1.84458
	PRP (dBm) (theta = 0 to 120)	-4.80086	-4.9099	-4.93441	-5.03351	-5.04159	-5.13658	-5.25579	-5.14344	-5.18923	-5.10132	-5.17154
	Front/Back Ratio (dB)	11.8881	12.2415	12.5765	12.8473	13.1034	13.121	13.2949	13.212	13.4006	13.4355	13.4812
	Phi BW	88	86	84	82	81	79	72	74	79	80	82
	+Phi BW	24	24	23	23	23	23	24	24	24	24	25
	- Phi BW	64	62	61	59	58	56	48	50	55	56	57
	Theta BW	20	20	20	20	20	20	20	20	20	20	20
	+ Th. BW	9	9	9	9	9	9	9	9	9	9	9
	- Th. BW	11	11	11	11	11	11	11	11	11	11	11
	Boresight Phi	240	240	240	240	240	240	240	240	240	240	240
	Boresight Th.	150	150	150	150	150	150	150	150	150	150	150
	Maximum Power (dBm)	3.52853	3.65249	3.78994	3.85567	4.00185	4.07574	4.04566	4.11724	3.99463	3.90384	3.68013
	Minimum Power (dBm)	-13.001	-12.8052	-13.5465	-14.2908	-14.9911	-15.6422	-16.0985	-16.1908	-16.7717	-16.7404	-17.0989
	Average Power (dBm)	-3.04344	-3.14444	-3.18394	-3.27978	-3.27816	-3.3742	-3.50902	-3.42703	-3.52951	-3.50581	-3.63224
	Max/Min Ratio (dB)	16.5295	16.4577	17.3364	18.1465	18.993	19.718	20.1442	20.308	20.7664	20.6442	20.779
	Max/Avg Ratio (dB)	6.57197	6.79693	6.97388	7.13544	7.28001	7.44994	7.55468	7.54427	7.52414	7.40965	7.31237
	Min/Avg Ratio (dB)	-9.95754	-9.66079	-10.3625	-11.011	-11.713	-12.268	-12.5895	-12.7638	-13.2422	-13.2346	-13.4666
	Minimum Gain (dB)	-13.001	-12.8052	-13.5465	-14.2908	-14.9911	-15.6422	-16.0985	-16.1908	-16.7717	-16.7404	-17.0989
	Maximum Gain (dB)	3.52853	3.65249	3.78994	3.85567	4.00185	4.07574	4.04566	4.11724	3.99463	3.90384	3.68013
	Average Gain (dB)	-2.68237	-2.77621	-2.796	-2.87523	-2.85223	-2.92063	-3.02122	-2.90208	-2.96414	-2.90256	-3.0033
	E-Plane BW	23	23	22	22	22	22	21	21	21	21	22
	+ E-Plane BW	12	12	11	11	11	11	10	10	10	10	10
	- E-Plane BW	11	11	11	11	11	11	11	11	11	11	12
	H-Plane BW	101	96	94	92	91	87	76	87	89	92	94
	+ H-Plane BW	36	34	34	33	33	33	32	32	33	33	34
	- H-Plane BW	65	62	60	59	58	54	44	55	56	59	60