	GradiANT (Pattern Antenna)	
	MODEL NAME	MR25

MR25

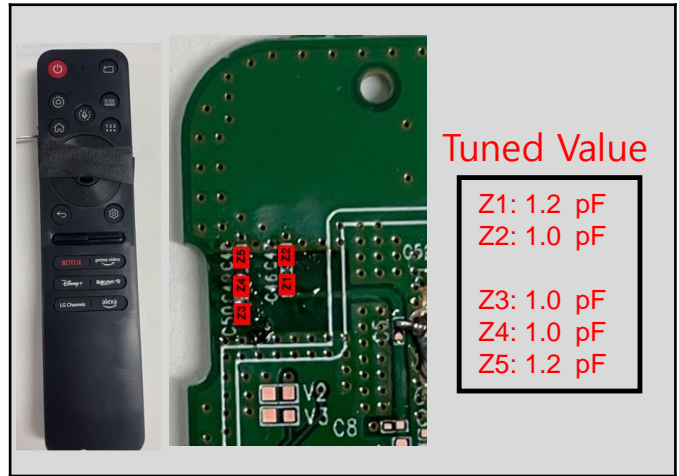
ANT Review Report

Rev02 기구조립
2024.06.19

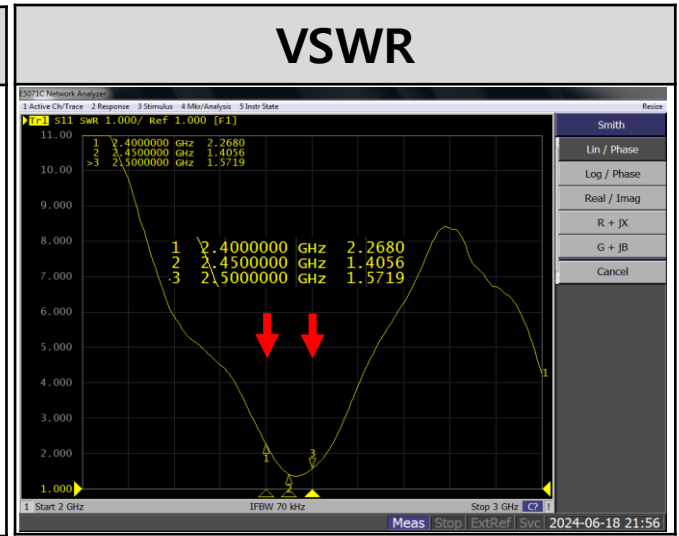
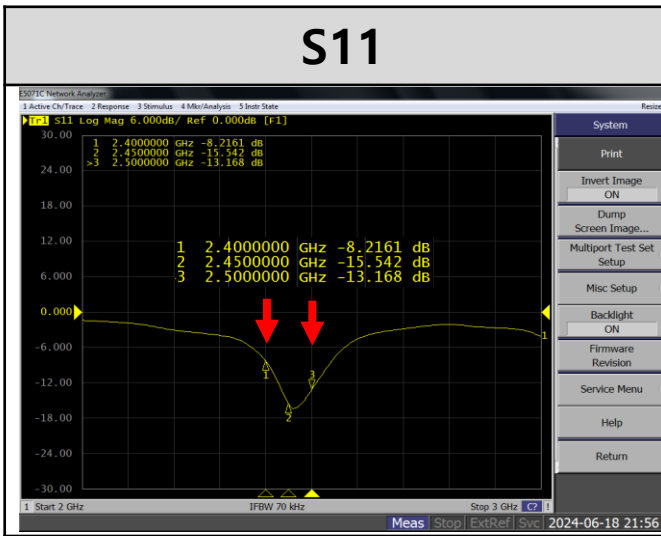


1.1 Test Result for MR25 기구조립 (Tuned)

	Peak [dBi]	Average [dBi]	Efficiency [%]
2400MHz	2.35	-3.22	47.60
2425MHz	2.22	-3.48	44.90
2445MHz	2.37	-2.83	52.10
2465MHz	2.25	-3.08	49.20
2485MHz	1.91	-3.95	40.20
2430MHz	Max peak gain(dBi)		2.38

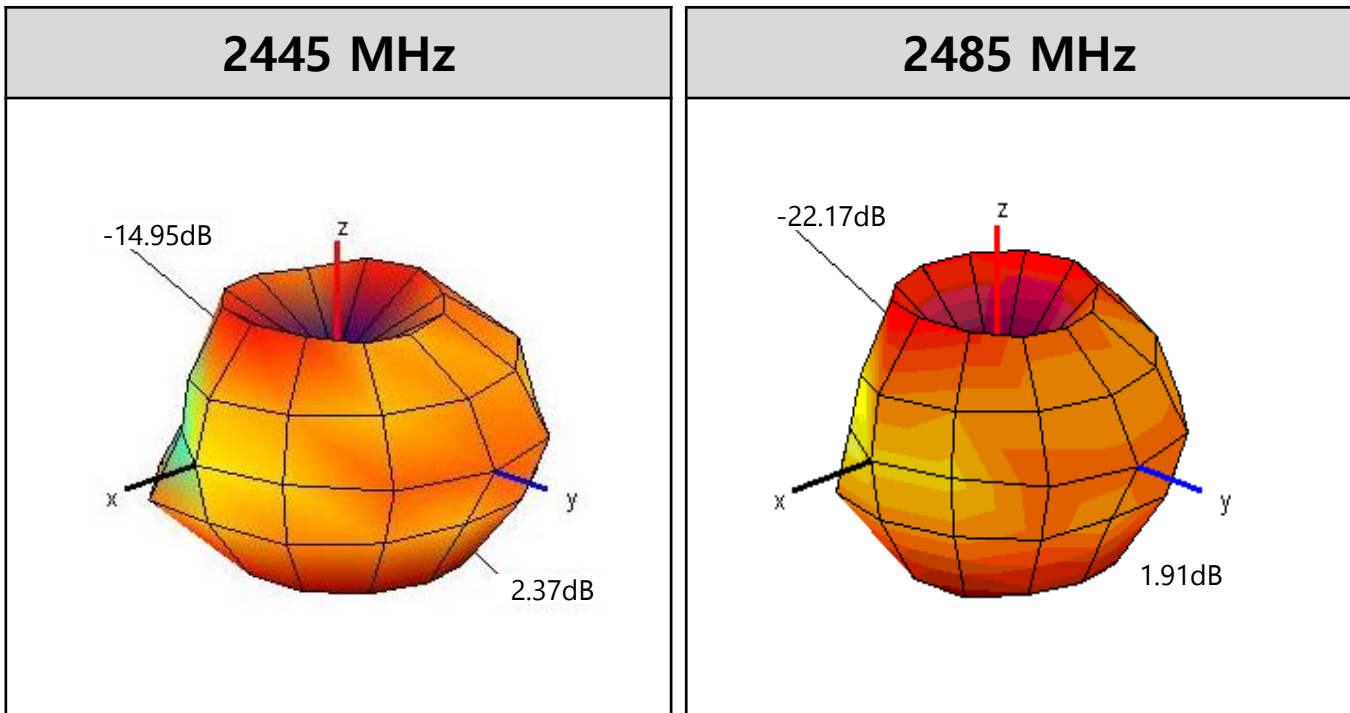
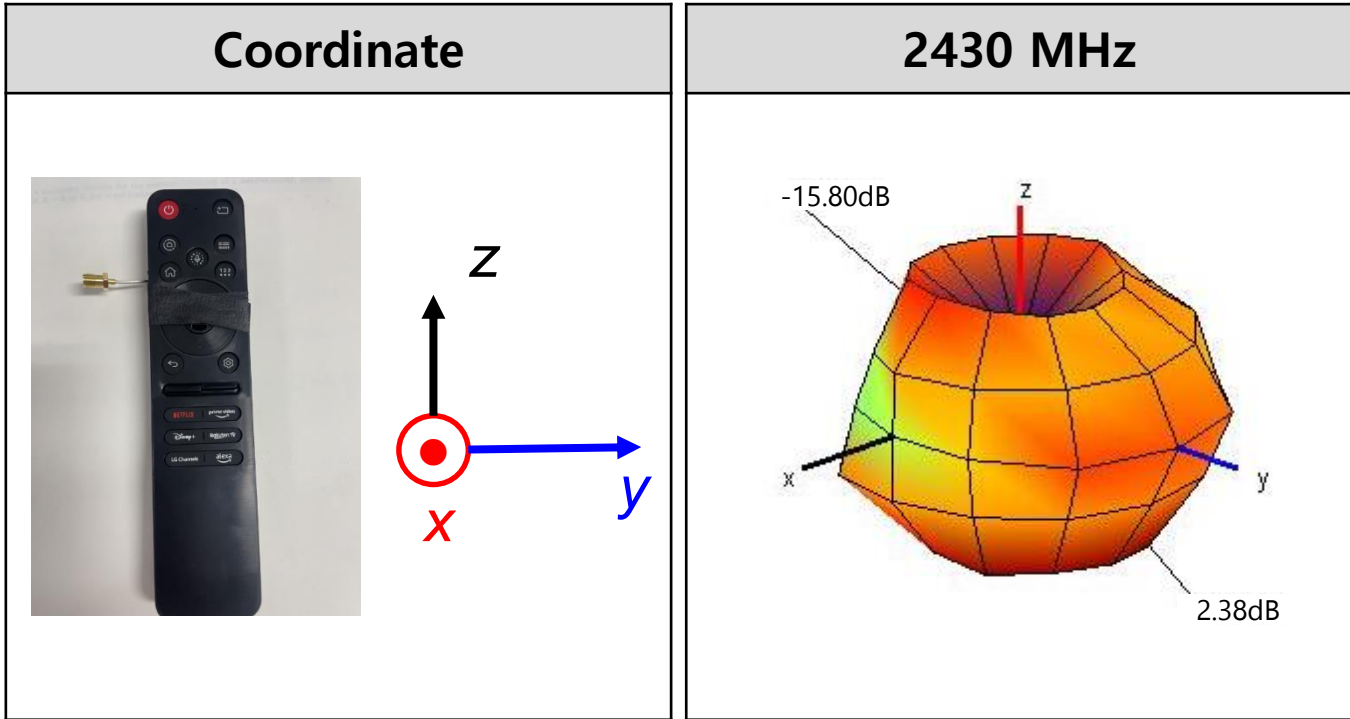


➤ Passive Data



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Frequency [MHz]	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency [dB]	-3.22	-3.19	-3.20	-3.31	-3.31	-3.48	-3.15	-2.90	-2.89	-2.83	-2.98	-3.06	-3.12	-3.08	-3.08	-3.19	-3.33	-3.95
Efficiency [%]	47.6	48.0	47.9	46.7	46.7	44.9	48.4	51.3	51.5	52.1	50.3	49.4	48.8	49.2	49.2	48.0	46.5	40.2
TRG ₀ [dB]	-4.04	-4.02	-4.06	-4.18	-4.20	-4.39	-4.07	-3.83	-3.87	-3.86	-4.01	-4.09	-4.24	-4.21	-4.20	-4.34	-4.48	-5.20
TRG ₂ [dB]	-10.86	-10.74	-10.68	-10.70	-10.65	-10.73	-10.35	-10.03	-9.79	-9.58	-9.76	-9.83	-9.56	-9.46	-9.52	-9.51	-9.66	-9.98
UHRG [dB]	-7.91	-7.78	-7.75	-7.88	-7.84	-7.92	-7.54	-7.29	-7.23	-7.02	-7.21	-7.30	-7.35	-7.23	-7.23	-7.30	-7.54	-8.12
UHRG/TRG [%]	34.0	34.7	35.1	34.9	35.2	36.0	36.4	36.4	36.8	38.1	37.8	37.7	37.8	38.4	38.5	38.8	37.9	38.3
H-Plane	-6.55	-6.56	-6.53	-6.51	-6.35	-6.43	-6.23	-5.70	-5.73	-5.79	-5.74	-6.06	-6.18	-6.10	-6.02	-6.10	-6.42	-7.05
E1-Plane, AVG [dB]	-4.53	-4.60	-4.64	-4.70	-4.62	-5.00	-4.57	-4.38	-4.36	-4.44	-4.72	-4.58	-4.78	-4.86	-4.76	-4.91	-4.88	-5.39
E2-Plane, AVG [dB]	-3.29	-3.24	-3.26	-3.50	-3.57	-3.59	-3.24	-3.03	-2.81	-2.92	-3.02	-3.13	-3.34	-3.18	-2.99	-3.25	-3.33	-4.12
Peak Gain [dB]	2.35	2.37	2.10	2.16	2.21	2.22	2.38	2.27	2.19	2.37	2.31	2.24	2.36	2.25	2.37	2.23	2.27	1.91
Directivity [dB]	5.57	5.56	5.30	5.47	5.52	5.70	5.53	5.17	5.08	5.20	5.29	5.30	5.48	5.33	5.45	5.42	5.59	5.86
Minimum Gain [dB]	-12.49	-13.43	-14.21	-14.68	-14.16	-14.20	-15.80	-14.99	-14.93	-14.95	-14.71	-15.59	-17.85	-16.74	-16.20	-17.36	-16.80	-22.17
Average Efficiency	-3.25 dB		47.34 %		Peak Gain : 2.38dBi													

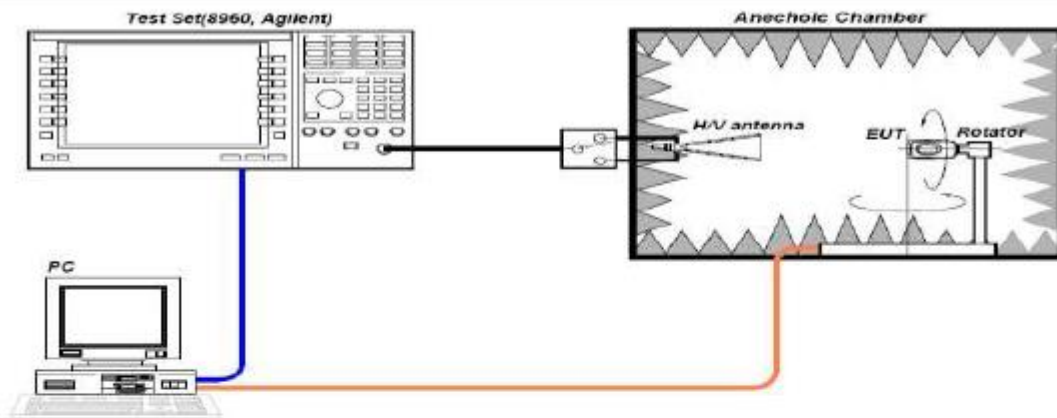
1.2 Radiation Pattern for MR25 기구조립 (Tuned)



2. Antenna Gain Measurement Set-Up

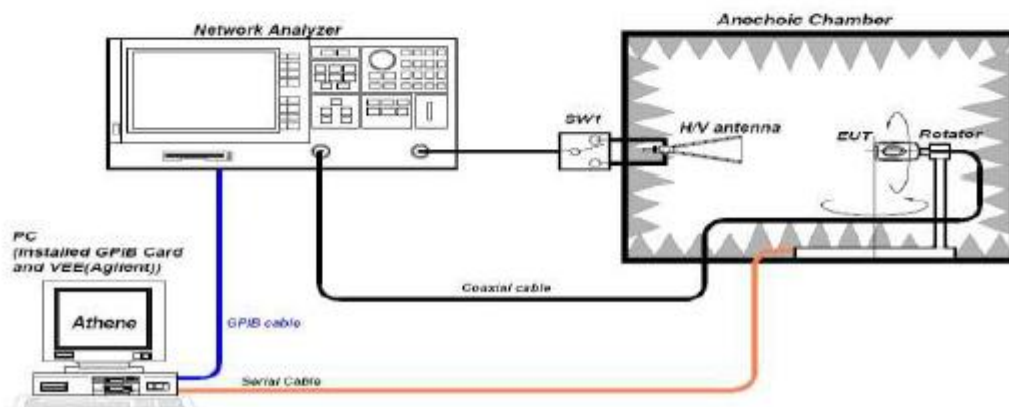
Active test System


- TRP, NHPRP,UHRP
- TIS, NHPIS, UHIS
- Relative Sensitivity



Passiver test System

- Efficiency
- Peak Gain, Avg, Gain
- Min, Max PWR



	Rev02 PCB antenna performance review(GradiANT)				
	MODEL NAME	MR25	REV.	02	Page

3. Antenna Gain Measurement Instruments

3.1 SWR / Return Loss

	Set Condition
Network Analyzer	Agilent 8753ES
Cable	Semi-rigid (40mm, 60mm)
Test condition	

3.2 Gain

: Antenna gain is measured in the anechoic chamber of this company.



4. Antenna Gain Measurement Date : June 19, 2024

5. Test engineer : 이동열 (Lee Dong Youl) Lab Director (RADINA. Co., Ltd)

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