	GradiANT (Pattern Antenna )	
	MODEL NAME	<b>WR23-GA</b>

# **WR23-GA**

## ANT Review Report

Rev01 PCB상태  
2022.12.20



### 1.1 Test Result for WR23-GA PCBA **WR23\_GA #01**

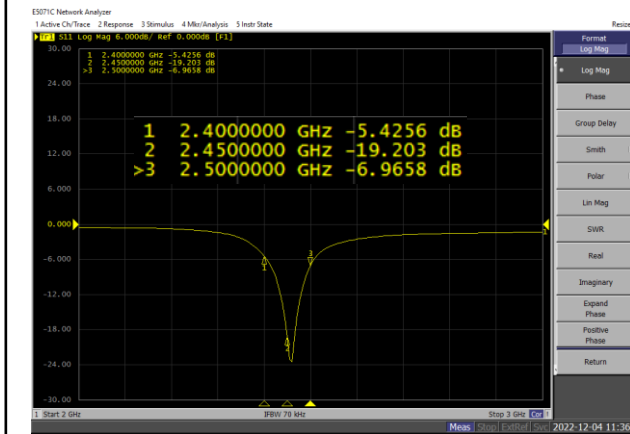
	Peak [dBi]	Average [dBi]	Efficiency [%]
2400MHz	-1.37	-5.64	27.3
2425MHz	0.62	-4.32	36.9
2445MHz	1.84	-3.66	43.0
2465MHz	2.42	-3.46	45.1
2485MHz	1.90	-4.18	38.2
2475MHz	<b>Max peak gain(dBi)</b>		<b>2.72</b>



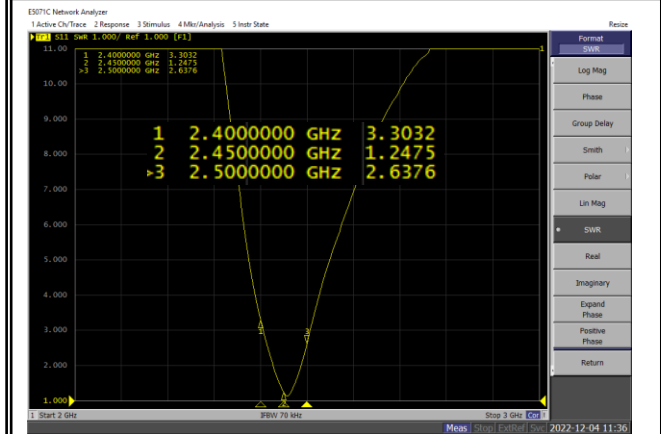
C46 : 2.2pF  
 C47 : 1.2pF  
 C48 : 0.75pF  
 C49 : 7.5pF

#### ➤ Passive Data

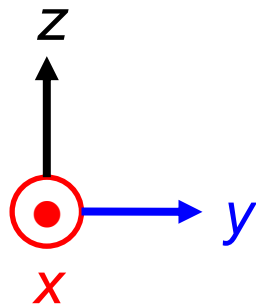
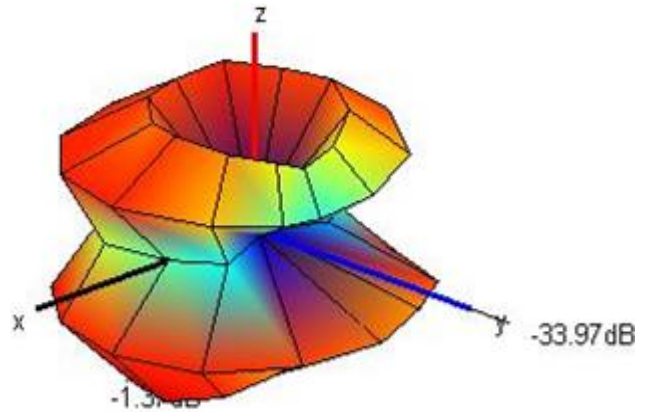
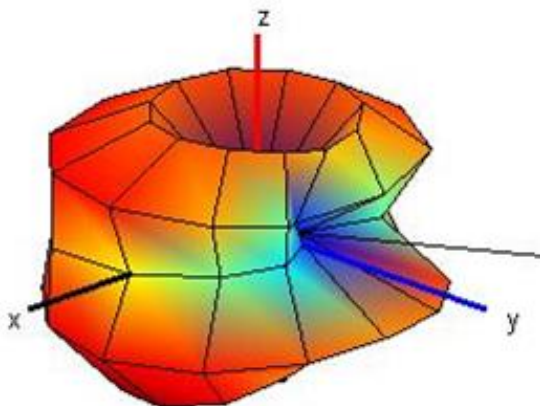
### S11



### VSWR



	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)	-5.64	-5.49	-5.37	-5.00	-4.85	-4.32	-3.99	-3.79	-3.95	-3.66	-3.62	-3.39	-3.49	-3.46	-3.32	-3.37	-3.55	-4.18	
Efficiency(%)	27.3	28.3	29.1	31.6	32.7	36.9	39.9	41.8	40.3	43.0	43.4	45.8	44.8	45.1	46.6	46.0	44.1	38.2	
TRG <sub>θ</sub> [dB]	-6.46	-6.29	-6.18	-5.83	-5.73	-5.23	-4.89	-4.70	-4.93	-4.66	-4.64	-4.46	-4.64	-4.66	-4.59	-4.65	-4.88	-5.59	
Gain <sub>θ Peak</sub> [dB]	-1.42	-1.27	-0.80	-0.45	-0.15	0.44	0.96	1.34	1.24	1.78	1.62	2.10	2.26	2.25	2.45	2.40	2.34	1.83	
Gain <sub>θ Min</sub> [dB]	-49.02	-40.95	-35.40	-30.68	-34.70	-32.06	-38.40	-33.05	-55.20	-28.15	-26.40	-34.99	-24.99	-31.83	-31.38	-29.39	-50.24	-32.74	
TRG <sub>φ</sub> [dB]	-13.31	-13.19	-13.04	-12.59	-12.24	-11.59	-11.26	-11.00	-10.91	-10.52	-10.40	-9.99	-9.81	-9.65	-9.28	-9.31	-9.35	-9.75	
Gain <sub>φ Peak</sub> [dB]	-6.42	-6.42	-6.32	-5.92	-6.07	-5.54	-5.14	-4.83	-4.54	-4.19	-3.83	-3.32	-3.17	-2.74	-2.25	-2.41	-2.23	-2.41	
Gain <sub>φ Min</sub> [dB]	-40.45	-39.05	-39.47	-38.63	-42.07	-46.97	-30.17	-33.50	-34.94	-31.87	-36.37	-30.32	-32.79	-33.94	-41.11	-34.61	-32.46	-44.62	
Peak Gain [dB]	-1.37	-1.04	-0.76	-0.28	0.06	0.62	1.14	1.47	1.38	1.84	1.81	2.40	2.29	2.42	2.55	<b>2.72</b>	2.49	1.90	
Directivity [dB]	4.27	4.45	4.60	4.72	4.91	4.95	5.13	5.25	5.33	5.50	5.43	5.79	5.78	5.88	5.87	6.09	6.04	6.07	
Minimum Gain [dB]	-33.97	-33.66	-33.96	-26.49	-27.88	-29.57	-23.75	-24.62	-24.47	-23.34	-25.11	-23.43	-22.17	-29.75	-26.43	-24.64	-24.30	-23.90	
Average Efficiency	<b>-4.15 dB, 38.49 %</b>																		
	<b>Peak Gain 2.72 dBi</b>																		

1.1 Radiation Pattern for WR23-GJ PCBA **WR23\_GA #01****Coordinate****2400 MHz****2445 MHz****2485 MHz**