



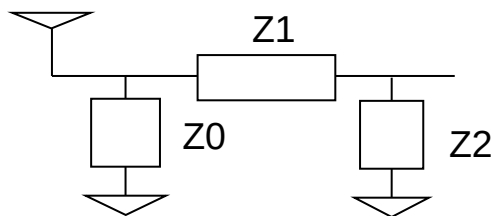
APPENDIX J

: ANTENNA SPECIFICATION

2. Test Result

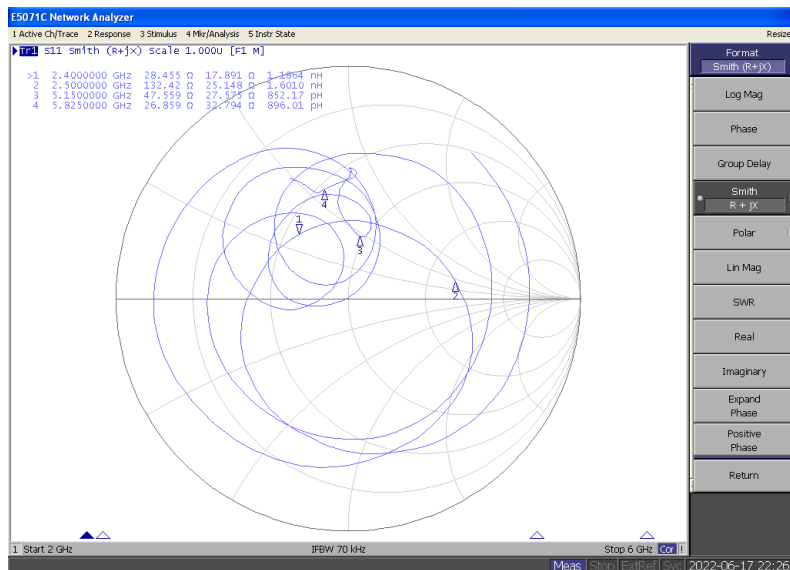
대 외 비 CONFIDENTIAL

• Antenna & matching

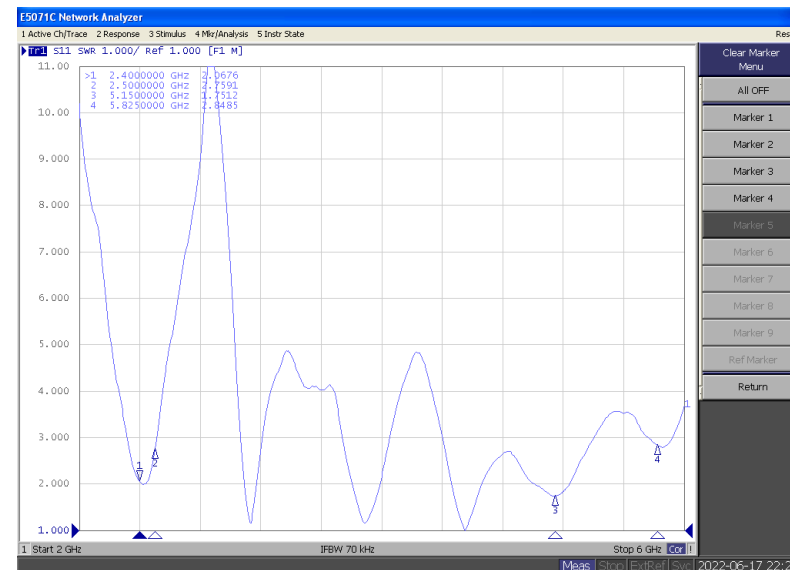


Ant	Sample Ant		
	Z0	Z1	Z2
Matching value			

• Smith Chart & VSWR



Smith chart



VSWR

2. Test Result

대 외 비 CONFIDENTIAL

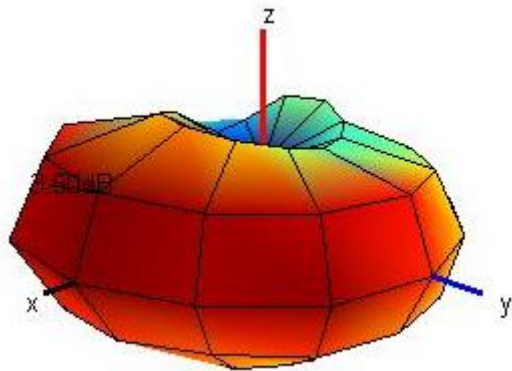
- Passive Efficiency

	1	2	3	4	5	6	7	8	9	10	11	12
Frequency [MHz]	2400	2420	2440	2460	2480	2500	5150	5250	5350	5490	5725	5825
Efficiency [dB]	-2.41	-2.48	-2.27	-2.21	-2.11	-2.27	-2.70	-2.39	-2.41	-2.57	-3.28	-3.15
Efficiency [%]	57.4	56.5	59.2	60.1	61.5	59.3	53.7	57.7	57.4	55.4	47.0	48.5
TRG _g [dB]	-2.61	-2.70	-2.50	-2.44	-2.35	-2.50	-3.32	-2.80	-2.75	-2.89	-3.74	-3.76
Gain _{g Peak} [dB]	3.26	3.40	3.49	3.66	3.50	3.49	2.70	3.10	3.55	3.67	2.98	3.23
Gain _{g Min} [dB]	-23.00	-25.79	-27.05	-23.72	-30.07	-30.19	-30.74	-29.75	-29.90	-33.10	-26.95	-25.21
TRG _e [dB]	-15.96	-15.63	-15.29	-15.04	-14.80	-15.03	-11.52	-12.84	-13.61	-13.99	-13.19	-11.93
Gain _{e Peak} [dB]	-8.63	-8.09	-7.38	-7.36	-7.87	-8.71	-4.72	-5.00	-5.21	-5.50	-5.48	-4.58
Gain _{e Min} [dB]	-40.65	-40.63	-37.56	-38.32	-34.93	-36.46	-28.80	-26.46	-35.38	-34.61	-34.26	-31.68
UHRG [dB]	-4.97	-4.92	-4.66	-4.54	-4.45	-4.66	-5.83	-5.51	-5.69	-5.67	-6.13	-5.96
UHRG/TRG [%]	55.6	57.0	57.7	58.5	58.4	57.6	48.7	48.7	47.1	49.0	51.8	52.4
H-Plane	-0.47	-0.54	-0.58	-0.68	-0.74	-0.76	-1.16	-0.53	-0.32	-0.35	-1.18	-1.01
E1-Plane, AVG [dB]	-2.95	-3.04	-2.87	-2.80	-2.82	-2.95	-3.90	-3.58	-3.52	-3.72	-4.70	-4.72
E2-Plane, AVG [dB]	-5.35	-5.60	-5.29	-5.20	-4.96	-5.28	-6.81	-6.52	-6.55	-6.46	-7.01	-6.83
Peak Gain [dB]	3.29	3.44	3.50	3.69	3.55	3.56	3.11	3.36	3.67	3.70	3.06	3.33
Directivity [dB]	5.71	5.92	5.78	5.90	5.66	5.82	5.82	5.75	6.08	6.27	6.34	6.48
Minimum Gain [dB]	-17.13	-16.58	-15.60	-15.76	-16.08	-16.90	-18.51	-21.00	-25.97	-30.78	-25.23	-23.10
Test Condition	FS											
Antenna Type												
Average Efficiency	-2.51 dB		56.13 %									

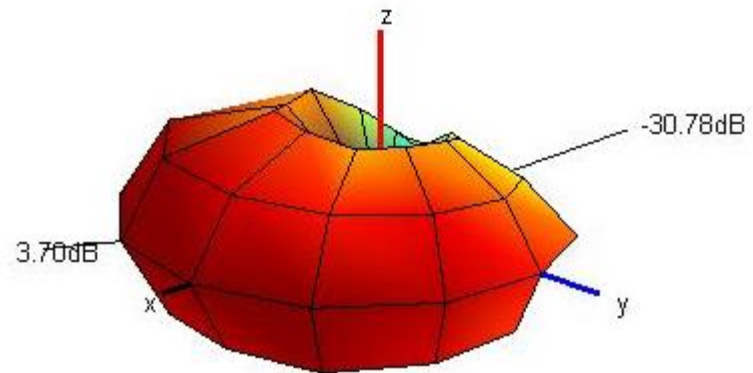
2. Test Result

대 외 비 CONFIDENTIAL

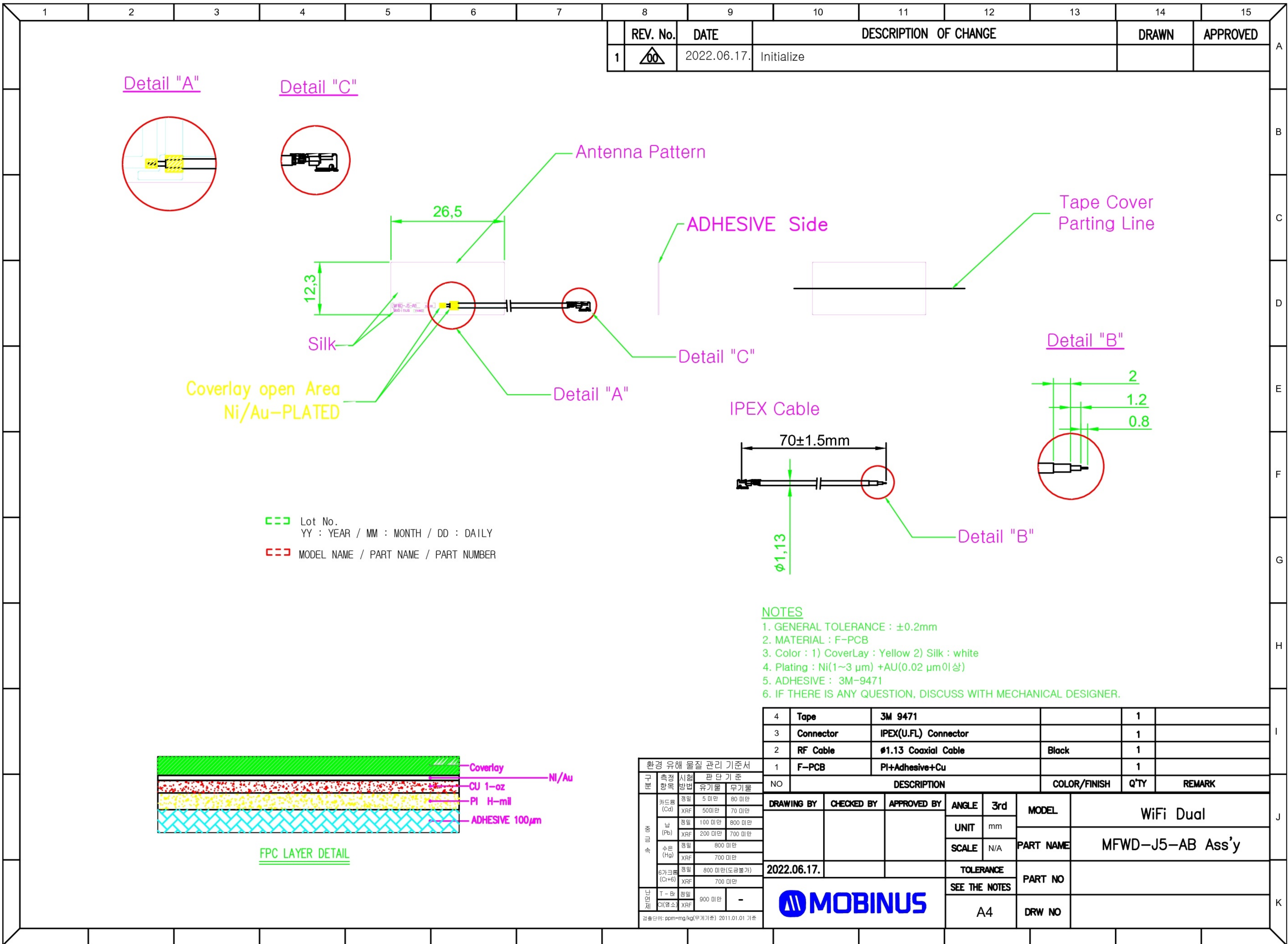
- Radiation Pattern



2.44GHz



5.49GHz



REV. No.	DATE	DESCRIPTION OF CHANGE	DRAWN	APPROVED
1	2022.06.17.	Initialize		

Lot No.
YY : YEAR / MM : MONTH / DD : DAILY
MODEL NAME / PART NAME / PART NUMBER

- NOTES
- GENERAL TOLERANCE : ±0.2mm
 - MATERIAL : F-PCB
 - Color : 1) CoverLay : Yellow 2) Silk : white
 - Plating : Ni(1~3 µm) +AU(0.02 µm이상)
 - ADHESIVE : 3M-9471
 - IF THERE IS ANY QUESTION, DISCUSS WITH MECHANICAL DESIGNER.

4	Tape	3M 9471		1	
3	Connector	IPEX(U.FL) Connector		1	
2	RF Cable	ø1.13 Coaxial Cable	Black	1	
1	F-PCB	PI+Adhesive+Cu		1	

측정 방법	시정 방법	판단 기준
카드론 (Cd)	XRF	5 미만 80 미만
납 (Pb)	XRF	500 미만 70 미만
수은 (Hg)	XRF	100 미만 800 미만
6가크롬 (Cr+6)	XRF	200 미만 700 미만
카드론 (Cd)	XRF	800 미만
카드론 (Cd)	XRF	700 미만
카드론 (Cd)	XRF	800 미만(도금불가)
카드론 (Cd)	XRF	700 미만
카드론 (Cd)	XRF	900 미만

NO	DESCRIPTION	COLOR/FINISH	Q'TY	REMARK
	DRAWING BY	CHECKED BY	APPROVED BY	
	ANGLE	3rd	MODEL	WiFi Dual
	UNIT	mm	PART NAME	MFWD-J5-AB Ass'y
	SCALE	N/A	PART NO	
	TOLERANCE	SEE THE NOTES	DRW NO	
	A4			

