

ANTENNA APPROVAL SHEET

- * Equipment Name: &TEAM OFFICIAL LIGHT STICK VER.2
- * Model Name: HYBEATMOLSV201

Review	Consent	Approval
김동현	김용선	서재운
D.H KIM	Y.S KIM	J.W SEO
26.07.17	26.07.17	26.07.17

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1. Revision History

Ver.	Contents	Data
R0.2	&TEAM OFFICIAL LIGHT STICK VER.2	26.07.17

2. Product Information

2.1 General Features

PART MEMBER	&TEAM OFFICIAL LIGHT STICK VER.2 Antenna
ANTENNA TYPE	PCB PATTERN ANTENNA
APPLICATIONS	Bluetooth

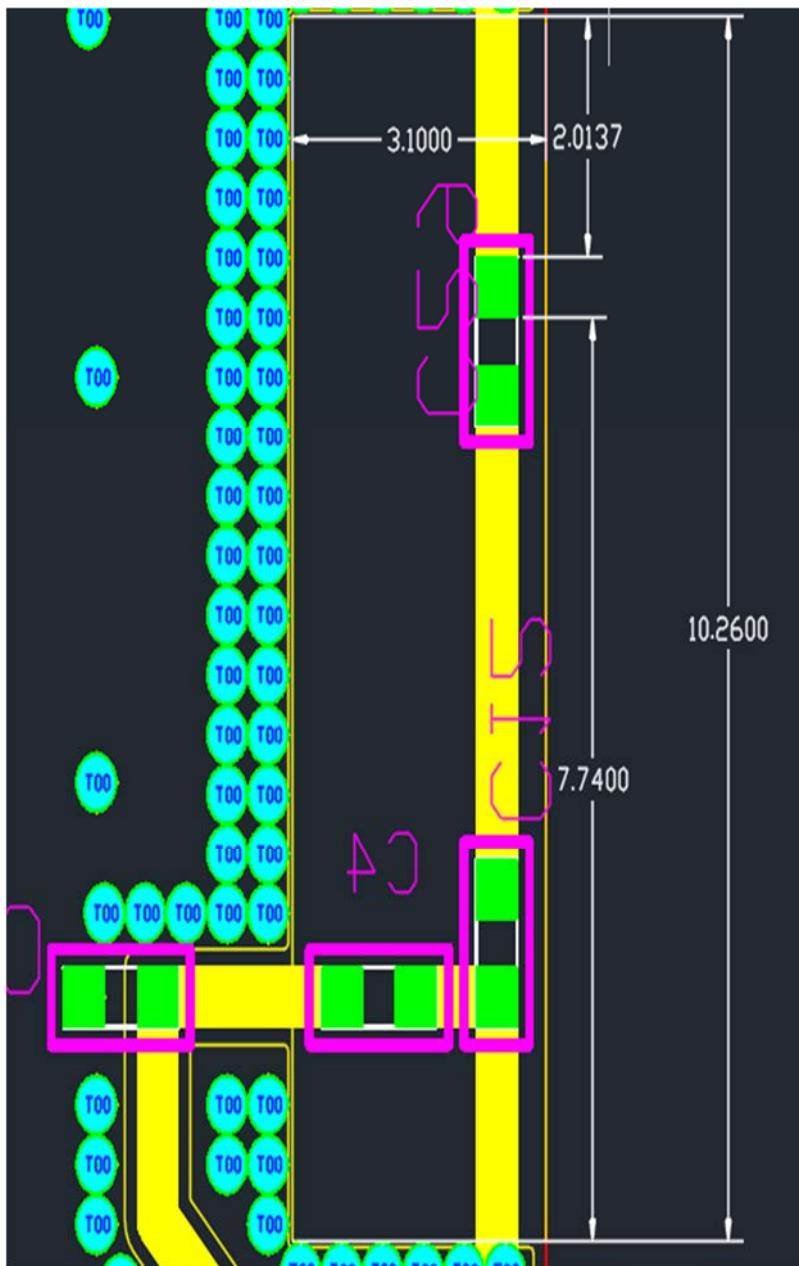
2.2 Electrical Specifications

Frequency Range (Tx)	2400MHz~2480MHz
Frequency Range (Rx)	2400MHz~2480MHz
IMPEDANCE	50Ω
POLARIZATION	Linear

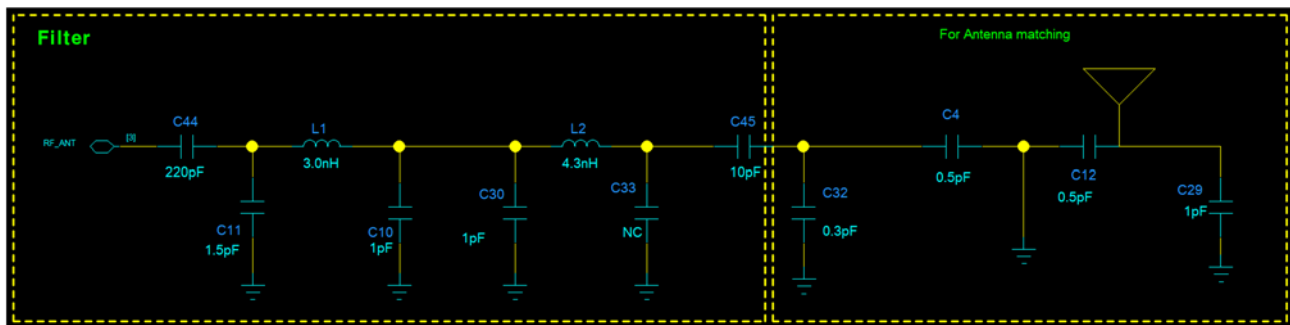
2.3 Company Informaton

Address	22 Samsung 1-ro 2-gil, Hwaseong-si, Gyeonggi-do
Email	wearableas@partron.co.kr

3. Pattern Specifications



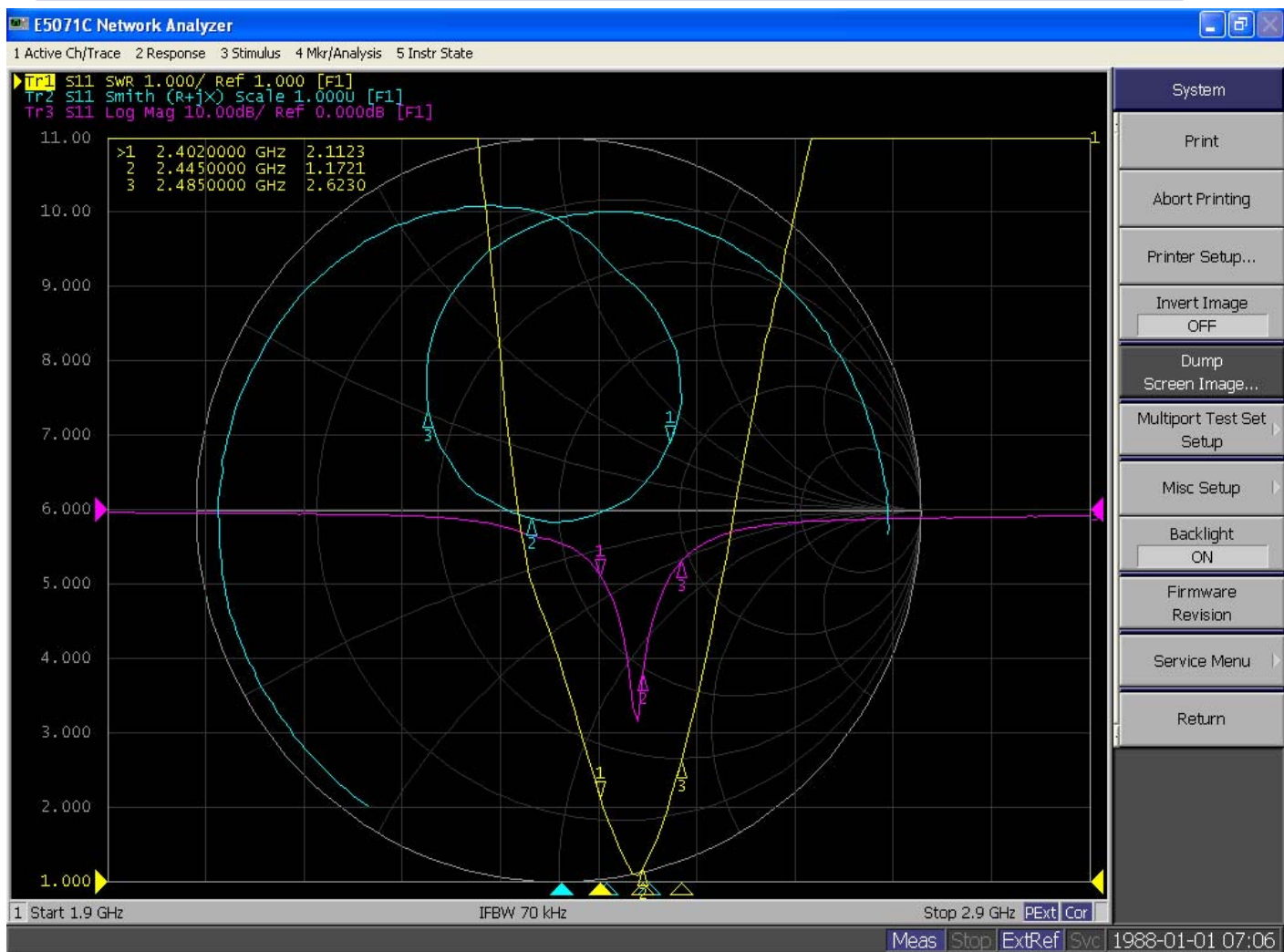
4. Matching Network



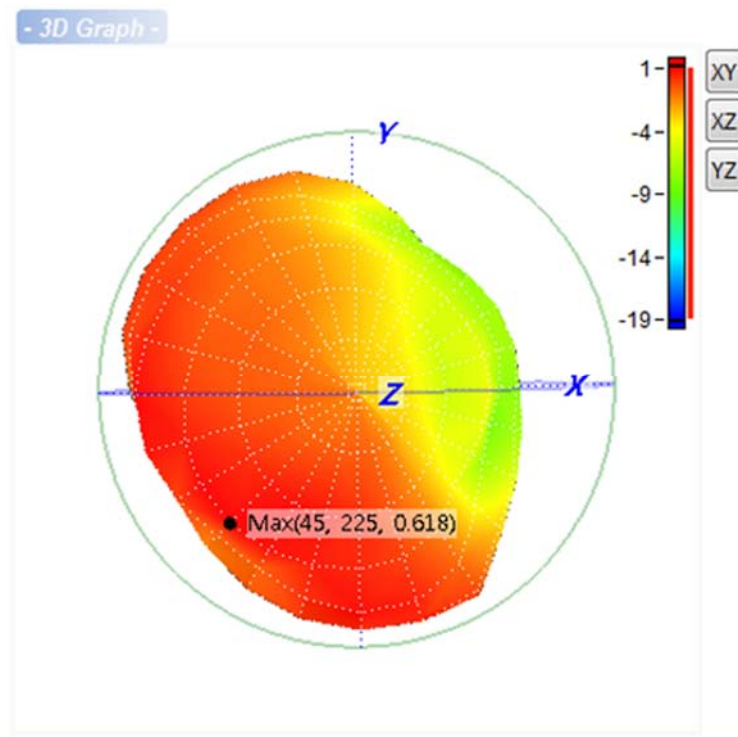
5. Electrical Characteristics

5.1 VSWR

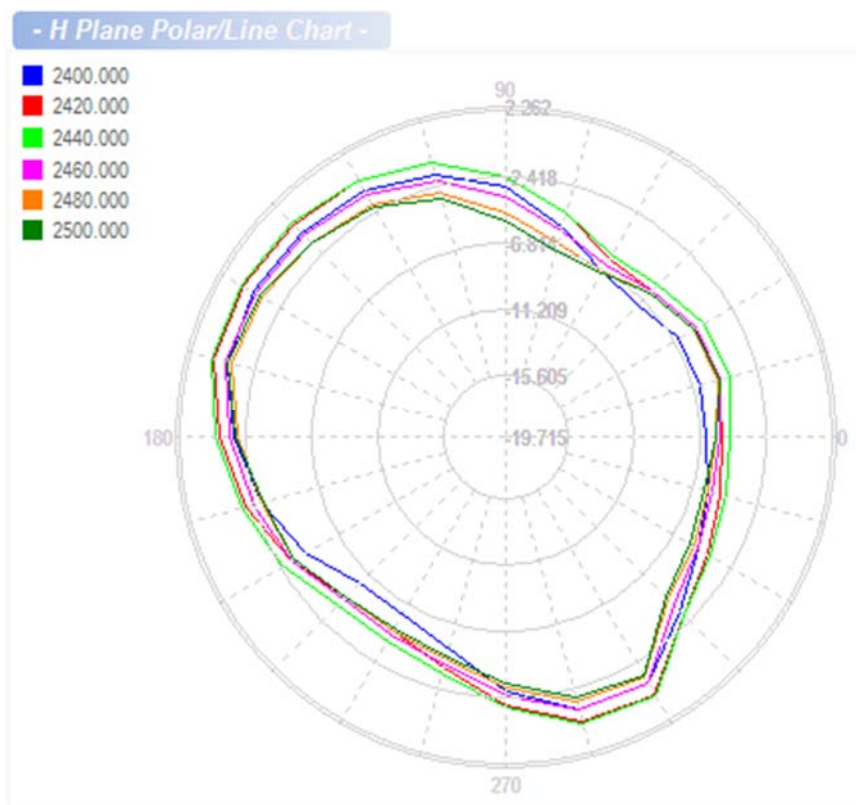
5.2 SMITH CHART



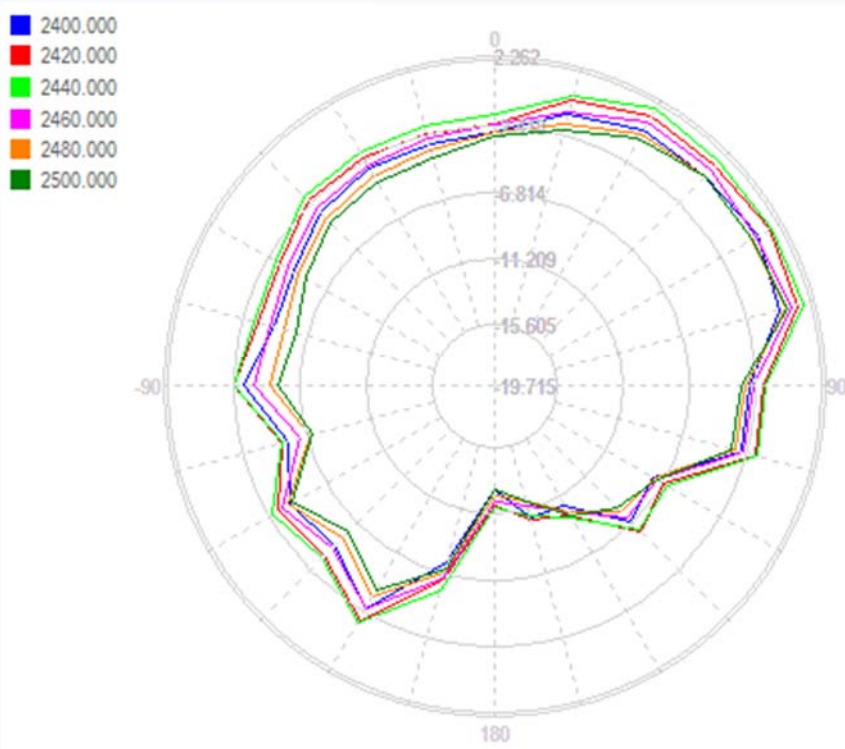
5.3 3D-PLOTS



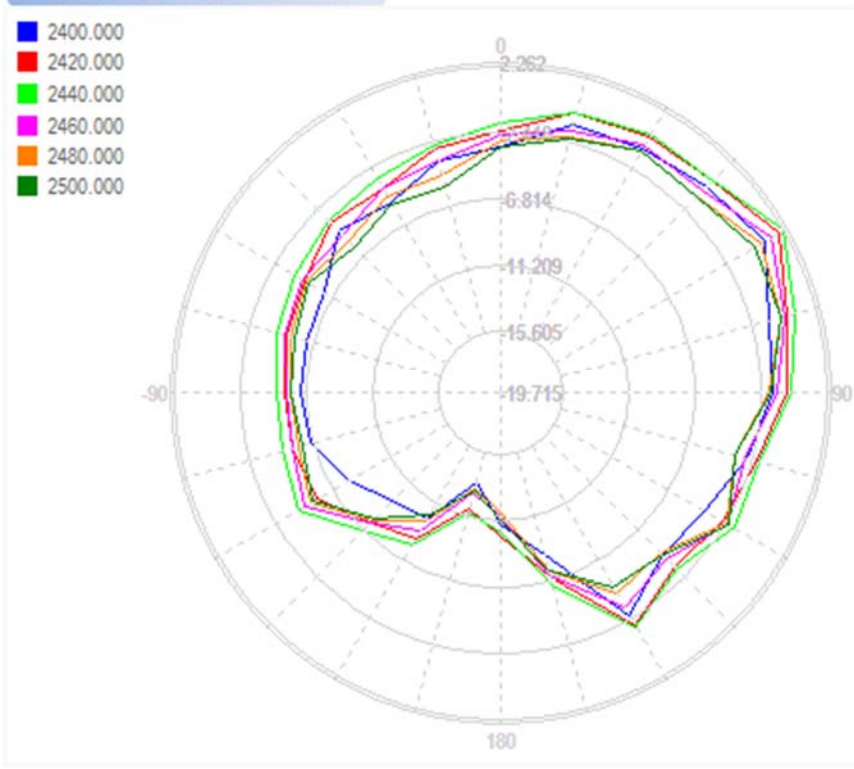
5.4 2D-Gain



- E1 Plane Polar/Line Chart -



- E2 Plane Polar/Line Chart -

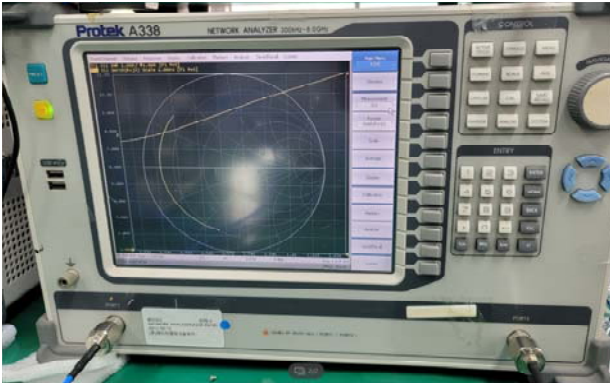


6. Passive Measurement

Frequency	Max Gain			Min Gain			Average Gain	Efficiency
[MHz]	θ [Deg]	Φ [Deg]	Gain[dBi]	θ [Deg]	Φ [Deg]	Gain[dBi]	Gain[dBi]	[%]
2,400.000	45.0	225.0	0.618	135.0	240.0	-18.502	-3.395	45.764
2,420.000	45.0	225.0	1.825	135.0	240.0	-19.548	-2.385	57.740
2,440.000	45.0	240.0	2.262	135.0	240.0	-19.715	-2.029	62.677
2,460.000	45.0	240.0	1.450	135.0	240.0	-18.348	-2.960	50.577
2,480.000	45.0	240.0	1.171	135.0	240.0	-17.040	-3.498	44.691
2,500.000	45.0	240.0	1.119	135.0	240.0	-15.504	-3.694	42.722

7. Measurement Process

7.1 SWR/Return loss

	Set Condition
Network Analyzer	Protek A338
Cable	RF cable (300 mm)
Test condition	

7.2 Gain

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



7.3 Gain Test block diagram

