EMC TEST REPORT

Test Report No.	:	KES-EM-21T0735
Date of Issue	:	Aug. 25, 2021
Product name	:	Pogme
Model/Type No.	:	Bro-wifi01
Variant Mode	:	-
Applicant	:	10pple
Applicant Address	:	26ho, Yeonji Square L,INDUK University, 12, Choansan-ro, Nowon-gu, Seoul, Republic of Korea
Manufacturer	:	10pple
Manufacturer Address	:	26ho, Yeonji Square L,INDUK University, 12, Choansan-ro, Nowon-gu, Seoul, Republic of Korea
FCC ID	:	2A2WX-BRO-WIFI01
Date of Receipt	:	May. 11, 2021
Test date	:	May. 24, 2021 ~ May. 25, 2021
Test Results	:	☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Hyo Jin, Kim
EMC Test Engineer

Reviewed by

Dong Hun, Jang
EMC Technical Manager

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Aug. 25, 2021	KES-EM-21T0735	Issued

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1.0 General Product Description

Main Specifications of EUT are:

Rated Voltage	DC 12 V / 5 A
Weight sensor	Max 30 ㎏
Maximum temperature	~ 50 ℃
Current	40 W
Dimension	Diameter : 43 ㎝

1.1 Test Voltage & Frequency

Unless indicated otherwise on the individual data sheet or test results, the test voltage and frequency was as indicated below.

☒ AC 120 V, 60 Hz

1.2 Variant Model Differences

Not applicable

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
Pogme	Bro-wifi01	-	10pple	EUT

1.5 System composition

Description	Model Number	Serial Number	Manufacturer	Remarks
AC/DC Adaptor	BSG-60W1205000	-	SHENZHEN BOSHENGGAO TECHNOLOGY CO., LTD	-

1.6 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
Cellphone	SM-J730K	-	Samsung Electronics Co., Ltd.	-
Laptop	P95G001	8KM8HT2	-	-
AC/DC Adaptor	LA65NS2-01	-	LITE-ON TECHNOLOGY (CHANGZHOU)CO.,LTD.	-

1.7 External I/O Cabling

■ wifi Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
Pogme (EUT)	Wireless	Laptop	Wireless	-	-

* Unshielded = U, Shielded = S

■ bluetooth Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
Pogme (EUT)	Wireless	Cellphone	Wireless	-	-

* Unshielded = U, Shielded = S

■ operation Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
Pogme (EUT)	-	-	-	-	-

* Unshielded = U, Shielded = S

1.8 EUT Operating Mode(s)

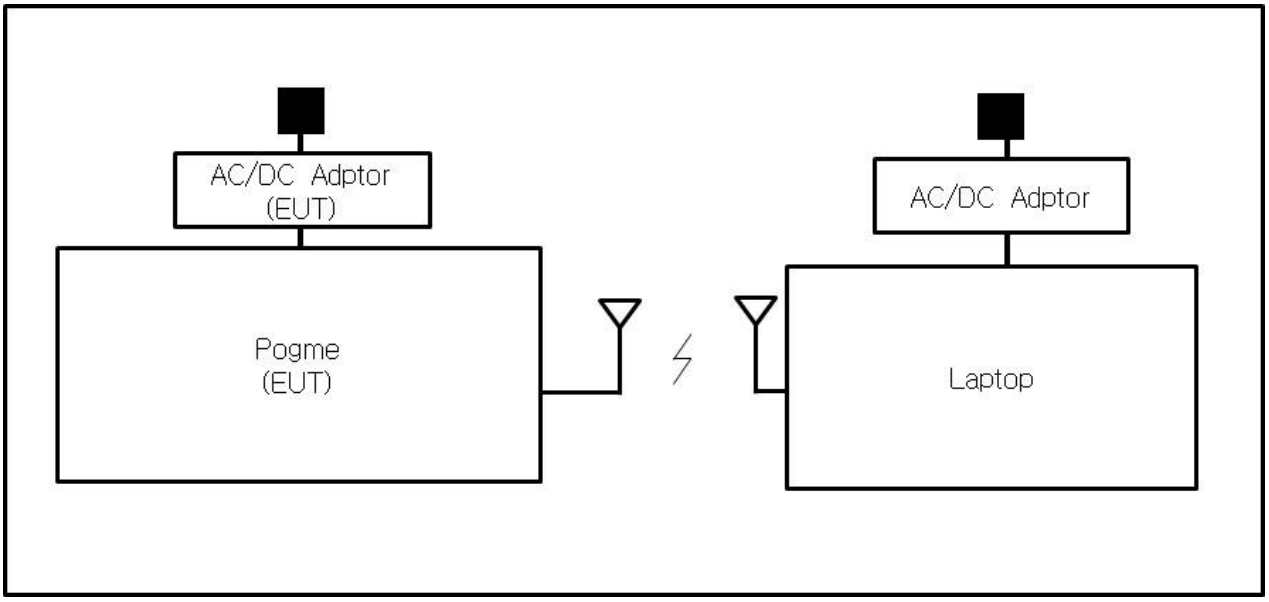
Test mode	operating
wifi	The EUT normal operating was confirmed to be pingtest of the laptop
bluetooth	The EUT normal operating was confirmed to be BLE of the cellphone
operation	Weigh cellphone and set the maximum temperature to 50 degrees.

EUT Test operating S/W		
Name	**Version**	**Manufacture Company**
-	-	-

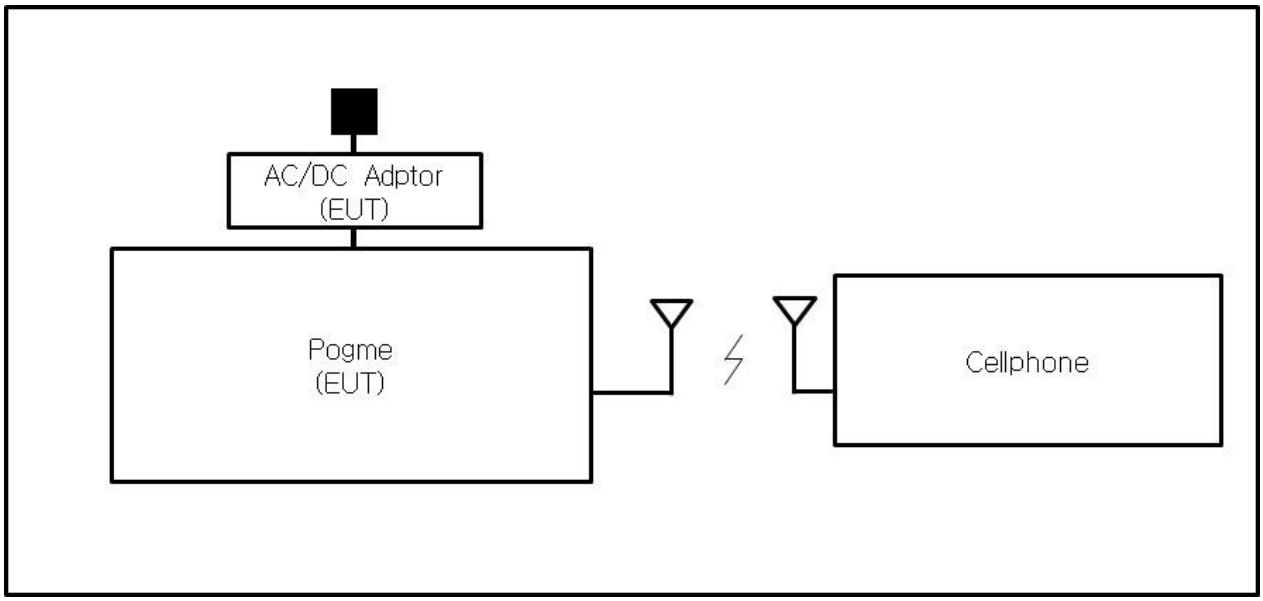
1.9 Configuration

■ AC Main
□ DC Main

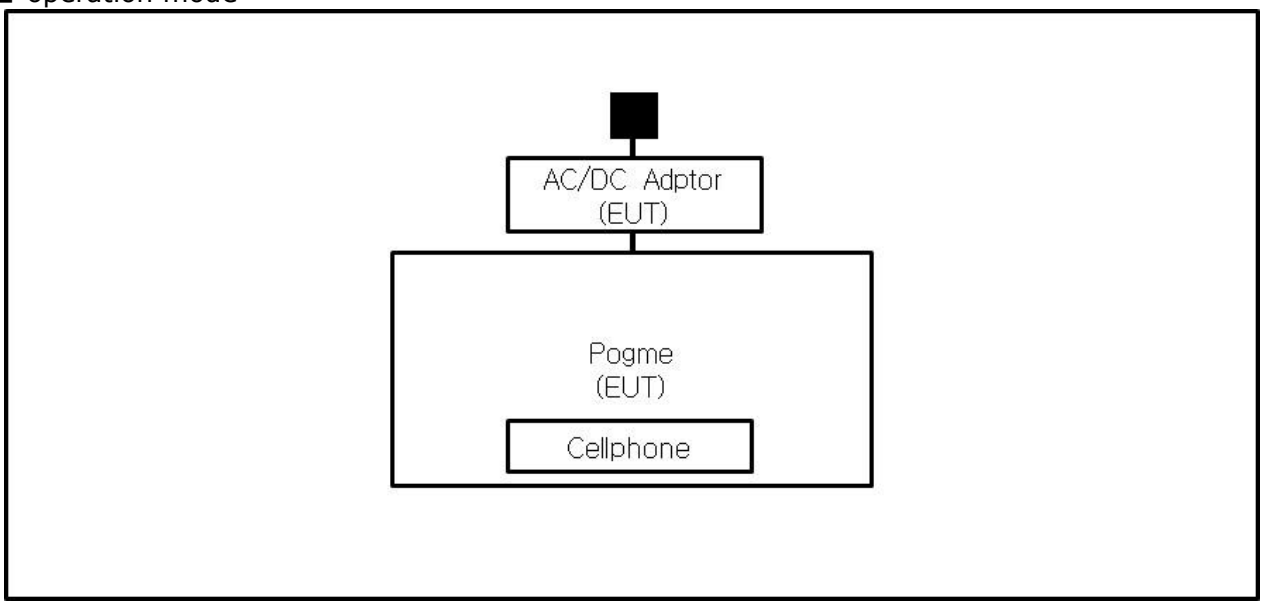
■ wifi mode



■ bluetooth mode



■ operation mode



1.10 Remarks when standards applied

N/A

1.11 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less.

1.12 Test Facility

The measurement facility is located at 473-21 Gayeo-ro, Yeoju-si, Gyeonggi-do, 12658, Korea. The sites are constructed in conformance with the requirements of ANSI C63.4:2014 and CISPR 16-1-4:2019

1.13 Measurement Procedure

- Conducted Emissions

The conducted emission levels were measured on each current-carrying line with the spectrum analyzer operating in the CISPR quasi-peak mode (or peak mode if applicable). The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. If the conducted emission exceed the average limit with the instrument set to the quasi-peak mode, the measurements are made in the average mode. The emission spectrum was scanned from 150 ㎑ to 30 ㎒. The highest emission amplitudes relative to the appropriate limits were measured and have been recorded. Quasi-peak readings are distinguished with a "QP".

- Radiated Electric Field Emissions

The test was done at a SEMI ANECHOIC CHAMBER with quasi-peak detector. The final test data was measured using a Quasi-Peak detector below 1㎓ at 10 m or 3 m distance and a Peak and Average detector above 1 ㎓ at 3 m distance. Test was proceeded worst case test mode and cable configuration.
Measurements were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna height was varied from 1 m to 4 m and the EUT was rotated 360° to find the maximum emitting point for each frequency.

Measurement procedures was In accordance with ANSI C63.4-2014 7.3.3, 7.3.4, 8.3.1.1, 8.3.1.2, 8.3.2.1, 8.3.2.2

1.14 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
KOREA	**RRA**	EMI (3 m & 10 m Semi-Aechoic Chamber ,10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	KR0100
International	**KOLAS**	EMI (3 m & 10 m Semi-Aechoic Chamber , and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	KT489
USA	**FCC**	3 m & 10 m Semi-Aechoic Chamber, 10 m Open Area and Conducted test site to perform FCC Part 15/18 measurements.	KR0100
Canada	**ISED**	3 m & 10 m Semi-Aechoic Chamber and Conducted test site	23298-1
JAPAN	**VCCI**	Mains Ports Conducted Interference Measurement, Telecommunication Ports Conducted Disturbance Measurement and Radiation 10 meter site, Facility for measuring radiated disturbance above 1 GHz	R-20056, C-20036 T-20040, G-20057
Europe	**TÜV SÜD**	EMI (3 m & 10 m Semi-Aechoic Chamber , 10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	CARAT 001633 0004

2.0 Test Regulations

The emissions tests were performed according to following regulations:

☐ **EMC – Directive 2014/30/EU**

☐ EN 61000-6-3:2011

☐ EN 61000-6-1:2007

☐ EN 61000-6-4:2007 +A1:2011

☐ EN 61000-6-2:2005

☐ EN 55011:2007 +A1:2010 ☐ Group 1 ☐ Group 2
☐ Class A ☐ Class B

☐ EN 55014-1:2006 +A2:2011

☐ EN 55014-2:1997 +A2:2008

☐ EN 55015:2013

☐ EN 55032:2015 ☐ Class A ☐ Class B

☐ EN 55024:2010

☐ EN 50130-4:2011 +A1:2014

☐ EN 61000-3-2:2014

☐ EN 61000-3-3:2013

☐ EN 61326-1:2013

☐ **VCCI V-3 / 2015.04**	☐ Class A	☐ Class B
☐ **AS/NZS:2013**	☐ Class A	☐ Class B
☒ **47 CFR Part 15, Subpart B**		
☐ CISPR 22:2009 +A1:2010	☐ Class A	☐ Class B
☒ ANSI C63.4-2014	☐ Class A	☒ Class B
☐ **IC Regulation ICES-003 : 2016**		
☐ CAN/CSA CISPR 22-10	☐ Class A	☐ Class B
☐ ANSI C63.4-2014	☐ Class A	☐ Class B

☐ **RE– Directive 2014/53/EU**

☐ EN 301 489-1 V1.9.2

- ☐ Equipment for fixed use
- ☐ Equipment for vehicular use
- ☐ Equipment for portable use

☐ EN 301 489-3 V1.6.1

☐ EN 301 489-17 V2.2.1

☐ EN 60945:2002

2.1 Conducted Emissions at Mains Power Ports

Test Date
May. 24, 2021

Test Location
Electro wave Shieldroom #6

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EMC32	R & S	9.12.00	-	-
☒	EMI TEST RECEIVER	ESR3	R & S	101783	01, 15, 2022	1 Year
☒	LISN	ENV216	R & S	101787	12, 29, 2021	1 Year
☐	LISN	ESH2-Z5	R & S	100450	12, 29, 2021	1 Year
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 29, 2021	1 Year

Test Conditions
Temperature: (24,3 ± 0,1) ℃
Relative Humidity: (43,8 ± 0,1) % R.H.

Frequency Range of Measurement
150 ㎑ to 30 ㎒

Instrument Settings
IF Band Width: 9 ㎑

Test Results
The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks
See Appendix A for test data.

2.2 Radiated Electric Field Emissions(Below 1 ㎓)

Test Date
May. 25, 2021

Test Location
☐ OPEN AREA TEST SITE #2 ☒ SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.120	-	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	04, 01, 2022	1 Year
☒	BILOG ANTENNA	VULB 9168	SCHWARZBECK	9168-461	11, 11, 2022	2 Year
☒	AMPLIFIER	310N	SONOMA INSTRUMENT	401123	06, 07, 2022	1 Year
☒	ATTENUATOR	6806.17.A	HUBER+SUHNER	-	11, 03, 2021	1 Year

Test Conditions
Temperature: (22,5 ± 0,2) ℃
Relative Humidity: (44,7 ± 0,1) % R.H.

Frequency Range of Measurement
30 ㎒ to 1 ㎓

Instrument Settings
IF Band Width: 120 ㎑

Test Results
The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks
See Appendix A for test data.

2.3 Radiated Electric Field Emissions(Above 1 ㎓)

Test Date
May. 25, 2021

Test Location
SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.120	-	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	04, 01, 2022	1 Year
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	12, 14, 2021	1 Year
☒	PREAMPLIFIER	8449B	HP	3008A00538	06, 21, 2022	1 Year

Test Conditions
Temperature: (22,7 ± 0,0) ℃
Relative Humidity: (44,8 ± 0,0) % R.H.

Frequency Range of Measurement
1 ㎓ to 12,4 ㎓

Instrument Settings
IF Band Width: 1 ㎒

Test Results
The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks
See Appendix A for test data.

APPENDIX A – TEST DATA

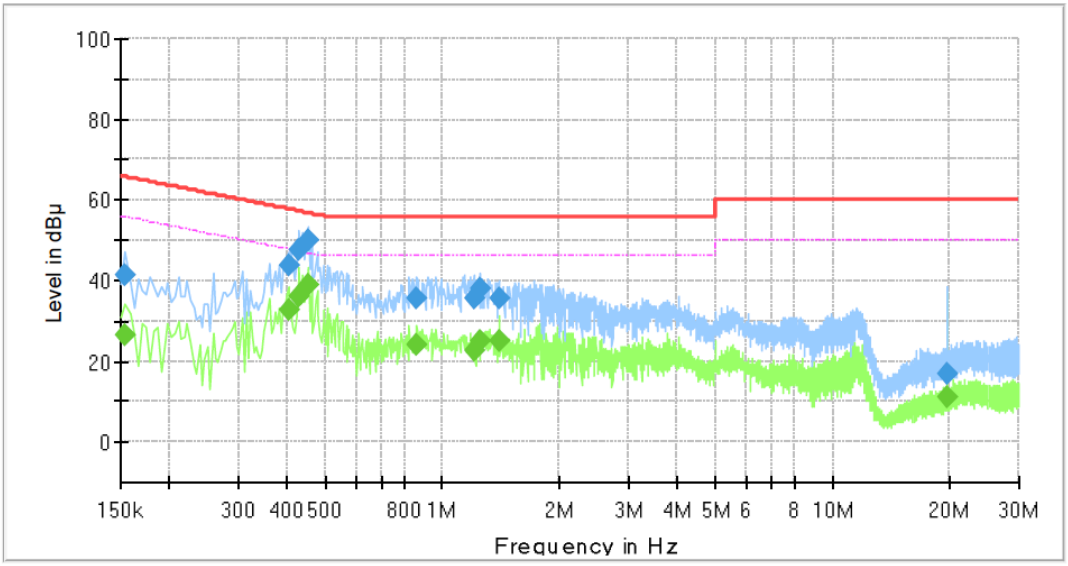
Conducted Emissions at Mains Power Ports

■ wifi mode

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	H
Mode:	WIFI
Operator Name:	KES



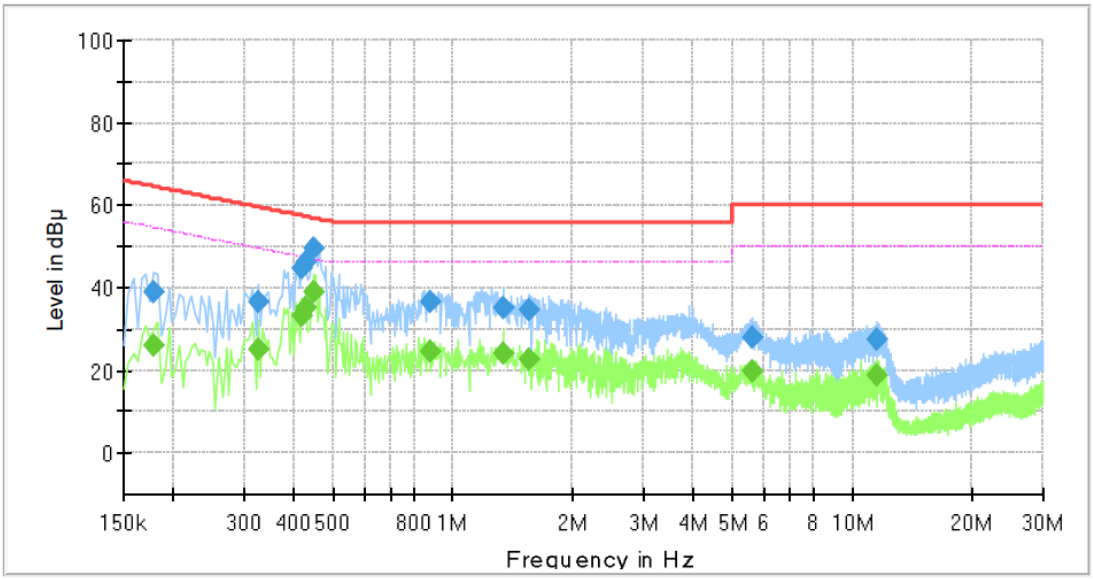
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154000	41.34	---	65.78	24.44	1000.0	9.000	L1	19.4
0.154000	---	26.72	55.78	29.06	1000.0	9.000	L1	19.4
0.402000	---	32.84	47.81	14.97	1000.0	9.000	L1	19.6
0.402000	43.58	---	57.81	14.23	1000.0	9.000	L1	19.6
0.430000	---	36.04	47.25	11.21	1000.0	9.000	L1	19.6
0.430000	47.61	---	57.25	9.64	1000.0	9.000	L1	19.6
0.454000	50.16	---	56.80	6.64	1000.0	9.000	L1	19.7
0.454000	---	39.08	46.80	7.72	1000.0	9.000	L1	19.7
0.862000	---	24.26	46.00	21.74	1000.0	9.000	L1	20.0
0.862000	35.78	---	56.00	20.22	1000.0	9.000	L1	20.0
1.202000	---	22.78	46.00	23.22	1000.0	9.000	L1	20.1
1.202000	35.61	---	56.00	20.39	1000.0	9.000	L1	20.1
1.242000	---	25.13	46.00	20.87	1000.0	9.000	L1	20.1
1.242000	37.86	---	56.00	18.14	1000.0	9.000	L1	20.1
1.398000	35.43	---	56.00	20.57	1000.0	9.000	L1	20.2
1.398000	---	25.16	46.00	20.84	1000.0	9.000	L1	20.2
19.670000	16.87	---	60.00	43.13	1000.0	9.000	L1	20.1
19.670000	---	11.03	50.00	38.97	1000.0	9.000	L1	20.1

NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	N
Mode:	WIFI
Operator Name:	KES



Final_Result

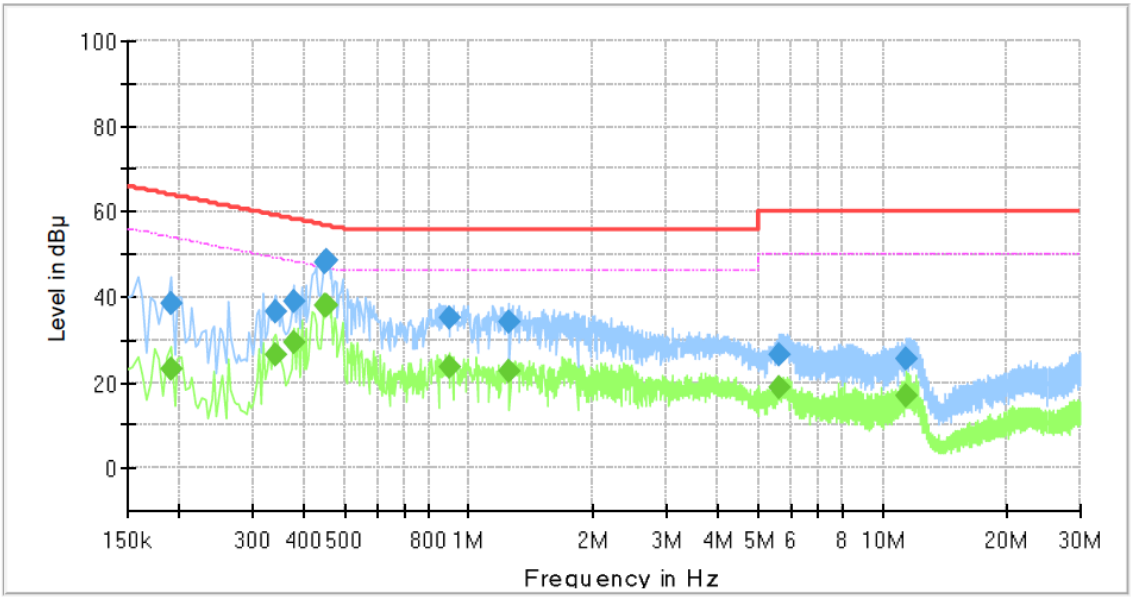
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.178000	38.91	---	64.58	25.67	1000.0	9.000	N	19.4
0.178000	---	25.90	54.58	28.68	1000.0	9.000	N	19.4
0.326000	36.68	---	59.55	22.87	1000.0	9.000	N	19.5
0.326000	---	25.07	49.55	24.48	1000.0	9.000	N	19.5
0.418000	---	33.28	47.49	14.21	1000.0	9.000	N	19.6
0.418000	44.80	---	57.49	12.69	1000.0	9.000	N	19.6
0.426000	46.12	---	57.33	11.21	1000.0	9.000	N	19.6
0.426000	---	35.09	47.33	12.24	1000.0	9.000	N	19.6
0.450000	---	39.06	46.88	7.82	1000.0	9.000	N	19.7
0.450000	49.54	---	56.88	7.34	1000.0	9.000	N	19.7
0.878000	---	24.54	46.00	21.46	1000.0	9.000	N	20.0
0.878000	36.55	---	56.00	19.45	1000.0	9.000	N	20.0
1.338000	35.04	---	56.00	20.96	1000.0	9.000	N	20.1
1.338000	---	24.07	46.00	21.93	1000.0	9.000	N	20.1
1.542000	34.59	---	56.00	21.41	1000.0	9.000	N	20.2
1.542000	---	22.55	46.00	23.45	1000.0	9.000	N	20.2
5.610000	---	19.79	50.00	30.21	1000.0	9.000	N	19.6
5.610000	27.94	---	60.00	32.06	1000.0	9.000	N	19.6
11.554000	27.24	---	60.00	32.76	1000.0	9.000	N	20.0
11.554000	---	18.71	50.00	31.29	1000.0	9.000	N	20.0

■ bluetooth mode

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	H
Mode:	bluetooth
Operator Name:	KES



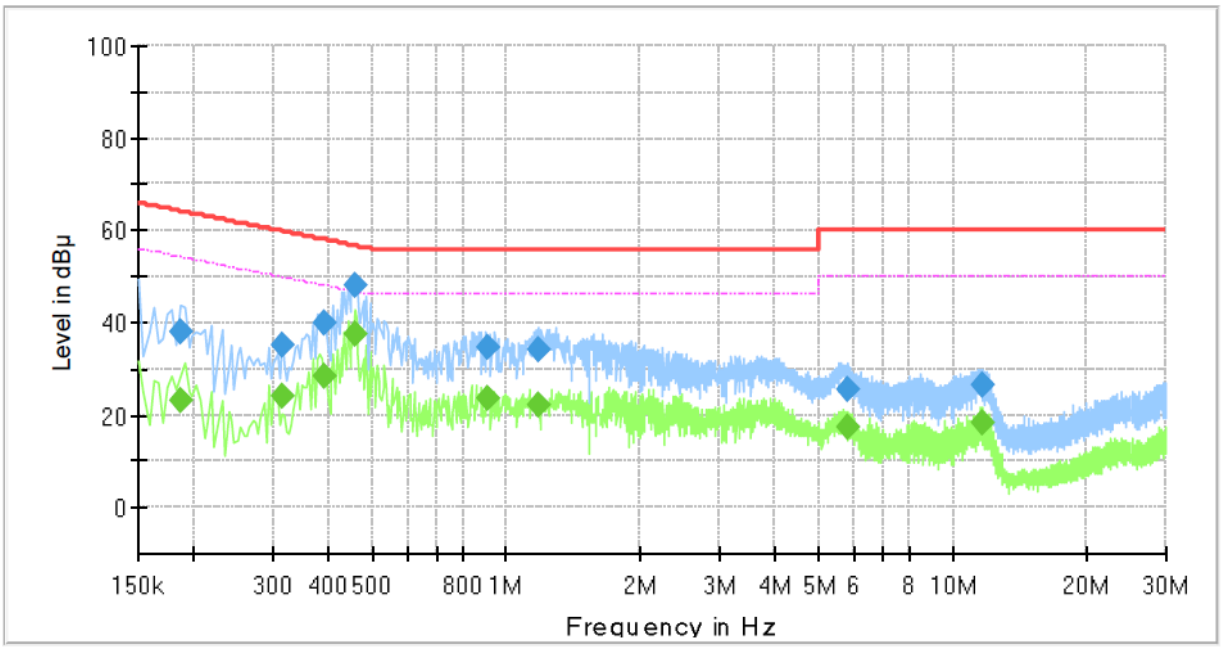
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	---	22.97	54.04	31.07	1000.0	9.000	L1	19.4
0.190000	38.62	---	64.04	25.42	1000.0	9.000	L1	19.4
0.342000	36.45	---	59.15	22.70	1000.0	9.000	L1	19.5
0.342000	---	26.47	49.15	22.68	1000.0	9.000	L1	19.5
0.378000	---	29.26	48.32	19.06	1000.0	9.000	L1	19.6
0.378000	39.15	---	58.32	19.17	1000.0	9.000	L1	19.6
0.446000	---	37.98	46.95	8.97	1000.0	9.000	L1	19.7
0.446000	48.12	---	56.95	8.83	1000.0	9.000	L1	19.7
0.454000	48.60	---	56.80	8.20	1000.0	9.000	L1	19.7
0.454000	---	38.20	46.80	8.60	1000.0	9.000	L1	19.7
0.902000	---	23.83	46.00	22.17	1000.0	9.000	L1	20.1
0.902000	34.92	---	56.00	21.08	1000.0	9.000	L1	20.1
1.250000	---	22.69	46.00	23.31	1000.0	9.000	L1	20.1
1.250000	34.14	---	56.00	21.86	1000.0	9.000	L1	20.1
5.598000	26.49	---	60.00	33.51	1000.0	9.000	L1	19.6
5.598000	---	18.87	50.00	31.13	1000.0	9.000	L1	19.6
11.454000	25.65	---	60.00	34.35	1000.0	9.000	L1	20.0
11.454000	---	16.72	50.00	33.28	1000.0	9.000	L1	20.0

NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	N
Mode:	bluetooth
Operator Name:	KES



Final_Result

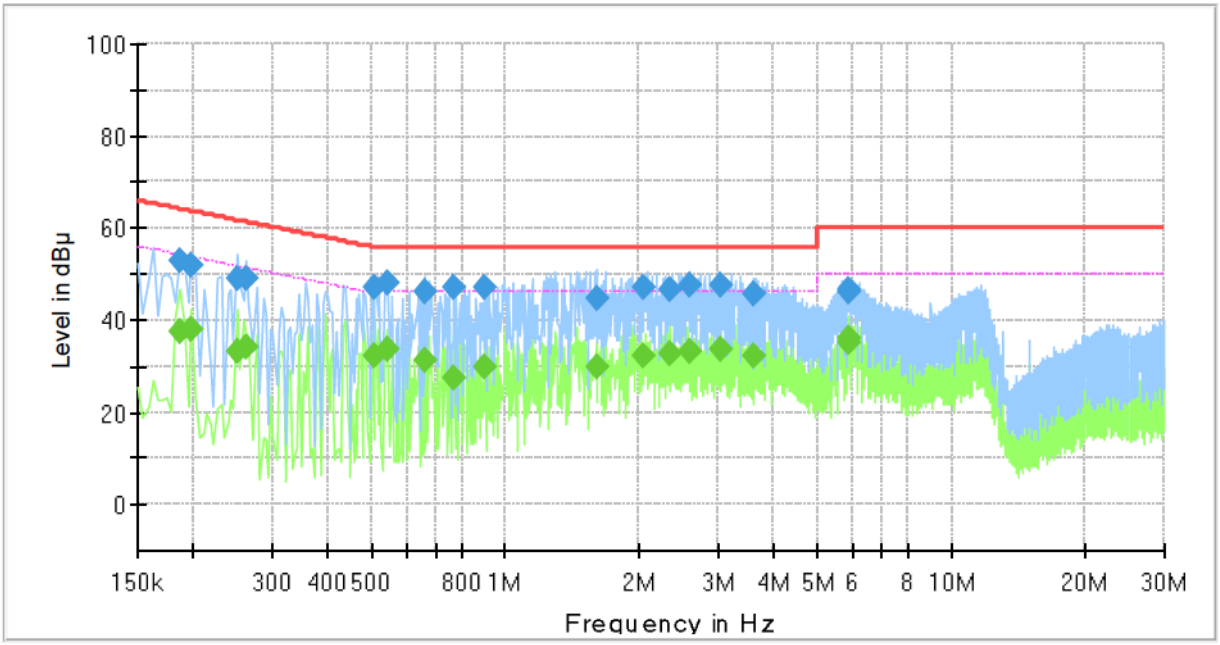
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.186000	---	23.28	54.21	30.93	1000.0	9.000	N	19.4
0.186000	38.22	---	64.21	25.99	1000.0	9.000	N	19.4
0.314000	---	24.15	49.86	25.71	1000.0	9.000	N	19.5
0.314000	35.21	---	59.86	24.65	1000.0	9.000	N	19.5
0.390000	---	28.34	48.06	19.72	1000.0	9.000	N	19.6
0.390000	39.74	---	58.06	18.32	1000.0	9.000	N	19.6
0.458000	47.99	---	56.73	8.74	1000.0	9.000	N	19.7
0.458000	---	37.64	46.73	9.09	1000.0	9.000	N	19.7
0.906000	---	23.77	46.00	22.23	1000.0	9.000	N	20.1
0.906000	34.68	---	56.00	21.32	1000.0	9.000	N	20.1
1.182000	---	21.98	46.00	24.02	1000.0	9.000	N	20.1
1.182000	34.15	---	56.00	21.85	1000.0	9.000	N	20.1
5.846000	25.65	---	60.00	34.35	1000.0	9.000	N	19.5
5.846000	---	17.36	50.00	32.64	1000.0	9.000	N	19.5
11.614000	26.27	---	60.00	33.73	1000.0	9.000	N	20.0
11.614000	---	18.49	50.00	31.51	1000.0	9.000	N	20.0

■ operation mode

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	H
Mode:	Operation
Operator Name:	KES



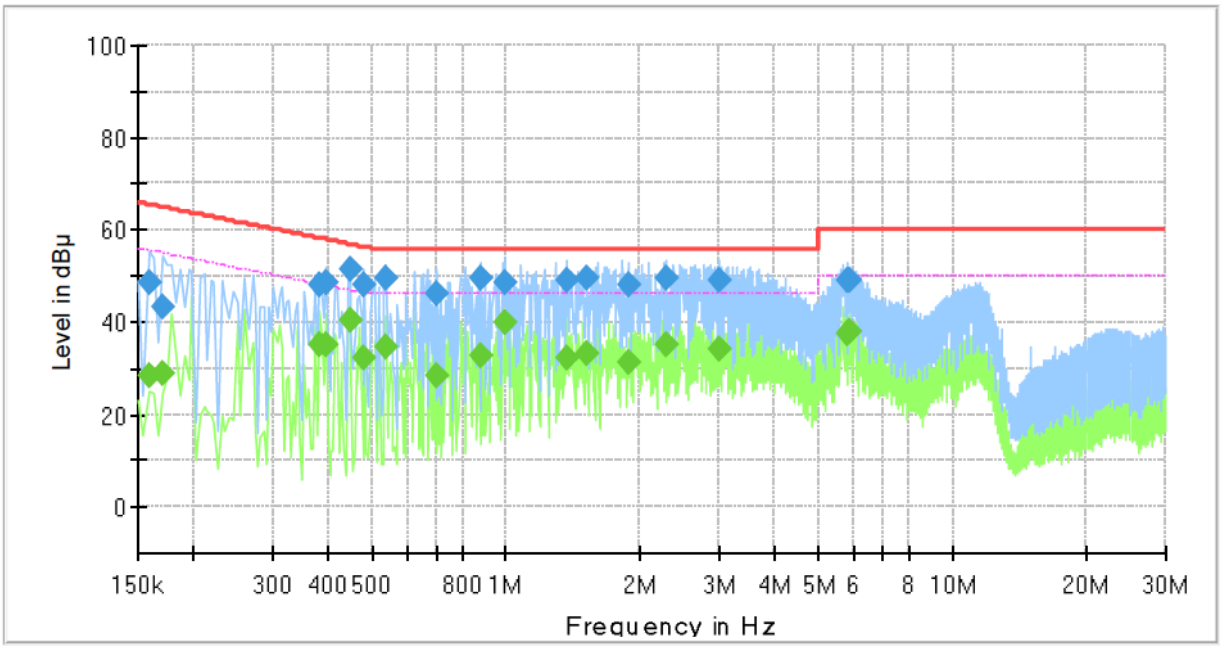
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.186000	52.71	---	64.21	11.50	1000.0	9.000	L1	19.4
0.186000	---	37.50	54.21	16.71	1000.0	9.000	L1	19.4
0.198000	52.02	---	63.69	11.67	1000.0	9.000	L1	19.4
0.198000	---	37.95	53.69	15.74	1000.0	9.000	L1	19.4
0.250000	---	33.26	51.76	18.50	1000.0	9.000	L1	19.5
0.250000	49.02	---	61.76	12.74	1000.0	9.000	L1	19.5
0.262000	49.23	---	61.37	12.14	1000.0	9.000	L1	19.5
0.262000	---	34.08	51.37	17.29	1000.0	9.000	L1	19.5
0.510000	47.23	---	56.00	8.77	1000.0	9.000	L1	19.7
0.510000	---	32.28	46.00	13.72	1000.0	9.000	L1	19.7
0.542000	---	33.73	46.00	12.27	1000.0	9.000	L1	19.8
0.542000	48.00	---	56.00	8.00	1000.0	9.000	L1	19.8
0.662000	---	31.13	46.00	14.87	1000.0	9.000	L1	19.9
0.662000	46.27	---	56.00	9.73	1000.0	9.000	L1	19.9
0.766000	---	27.49	46.00	18.51	1000.0	9.000	L1	20.0
0.766000	47.06	---	56.00	8.94	1000.0	9.000	L1	20.0
0.902000	46.93	---	56.00	9.07	1000.0	9.000	L1	20.1
0.902000	---	29.71	46.00	16.29	1000.0	9.000	L1	20.1
1.606000	44.99	---	56.00	11.01	1000.0	9.000	L1	20.2
1.606000	---	30.08	46.00	15.92	1000.0	9.000	L1	20.2
2.050000	47.01	---	56.00	8.99	1000.0	9.000	L1	20.3
2.050000	---	32.24	46.00	13.76	1000.0	9.000	L1	20.3
2.342000	---	32.61	46.00	13.39	1000.0	9.000	L1	20.2
2.342000	46.89	---	56.00	9.11	1000.0	9.000	L1	20.2
2.598000	47.49	---	56.00	8.51	1000.0	9.000	L1	20.2
2.598000	---	33.21	46.00	12.79	1000.0	9.000	L1	20.2
3.042000	47.82	---	56.00	8.18	1000.0	9.000	L1	20.1
3.042000	---	33.69	46.00	12.31	1000.0	9.000	L1	20.1
3.618000	45.73	---	56.00	10.27	1000.0	9.000	L1	20.0
3.618000	---	32.44	46.00	13.56	1000.0	9.000	L1	20.0
5.866000	---	35.35	50.00	14.65	1000.0	9.000	L1	19.5
5.866000	46.40	---	60.00	13.60	1000.0	9.000	L1	19.5
5.902000	---	36.10	50.00	13.90	1000.0	9.000	L1	19.5
5.902000	46.67	---	60.00	13.33	1000.0	9.000	L1	19.5

NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	Bro-wifi01
Phase:	N
Mode:	Operation
Operator Name:	KES



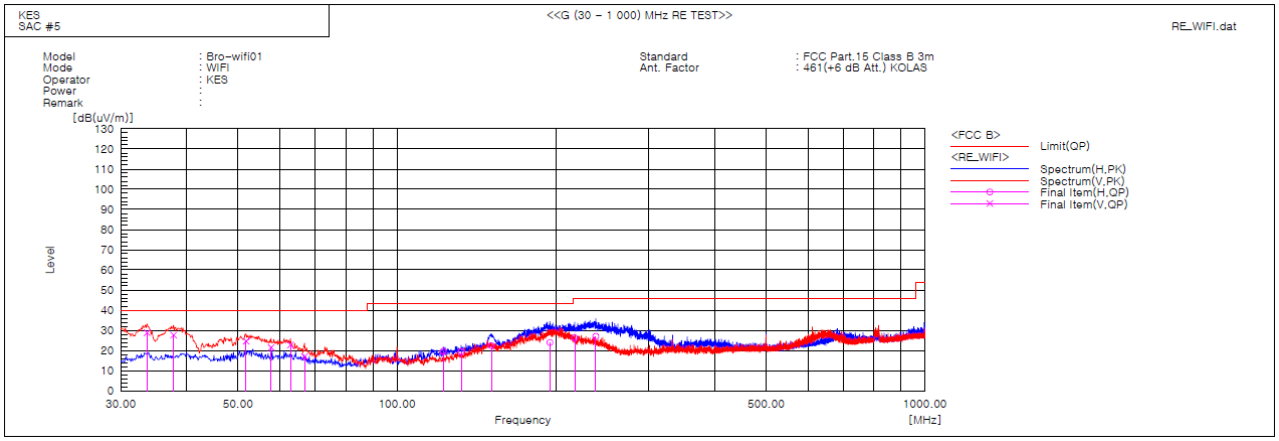
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.158000	48.55	---	65.57	17.02	1000.0	9.000	N	19.4
0.158000	---	28.36	55.57	27.21	1000.0	9.000	N	19.4
0.170000	---	28.82	54.96	26.14	1000.0	9.000	N	19.4
0.170000	43.19	---	64.96	21.77	1000.0	9.000	N	19.4
0.382000	48.34	---	58.24	9.90	1000.0	9.000	N	19.6
0.382000	---	35.01	48.24	13.23	1000.0	9.000	N	19.6
0.394000	---	35.04	47.98	12.94	1000.0	9.000	N	19.6
0.394000	48.59	---	57.98	9.39	1000.0	9.000	N	19.6
0.446000	---	40.61	46.95	6.34	1000.0	9.000	N	19.7
0.446000	51.66	---	56.95	5.29	1000.0	9.000	N	19.7
0.482000	---	32.25	46.30	14.05	1000.0	9.000	N	19.7
0.482000	48.02	---	56.30	8.28	1000.0	9.000	N	19.7
0.538000	---	34.79	46.00	11.21	1000.0	9.000	N	19.7
0.538000	49.36	---	56.00	6.64	1000.0	9.000	N	19.7
0.702000	46.11	---	56.00	9.89	1000.0	9.000	N	19.9
0.702000	---	28.30	46.00	17.70	1000.0	9.000	N	19.9
0.878000	49.47	---	56.00	6.53	1000.0	9.000	N	20.0
0.878000	---	32.73	46.00	13.27	1000.0	9.000	N	20.0
0.994000	---	40.03	46.00	5.97	1000.0	9.000	N	20.0
0.994000	48.48	---	56.00	7.52	1000.0	9.000	N	20.0
1.362000	49.10	---	56.00	6.90	1000.0	9.000	N	20.1
1.362000	---	32.37	46.00	13.63	1000.0	9.000	N	20.1
1.514000	49.61	---	56.00	6.39	1000.0	9.000	N	20.2
1.514000	---	33.04	46.00	12.96	1000.0	9.000	N	20.2
1.874000	---	31.53	46.00	14.47	1000.0	9.000	N	20.3
1.874000	47.92	---	56.00	8.08	1000.0	9.000	N	20.3
2.282000	---	35.37	46.00	10.63	1000.0	9.000	N	20.3
2.282000	49.77	---	56.00	6.23	1000.0	9.000	N	20.3
2.990000	---	34.10	46.00	11.90	1000.0	9.000	N	20.1
2.990000	49.05	---	56.00	6.95	1000.0	9.000	N	20.1
5.786000	---	37.64	50.00	12.36	1000.0	9.000	N	19.5
5.786000	48.94	---	60.00	11.06	1000.0	9.000	N	19.5
5.894000	48.86	---	60.00	11.14	1000.0	9.000	N	19.5
5.894000	---	38.05	50.00	11.95	1000.0	9.000	N	19.5

♦ Calculation
QuasiPeak[dBuV] / CAverage [dBuV] = Reading Value[dBuV] + Corr. [dB]
QuasiPeak / CAverage : The Final Value
Reading Value : Not shown in the table.
Corr. : Correction values (LISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

Radiated Electric Field Emissions(Below 1 ㎓)

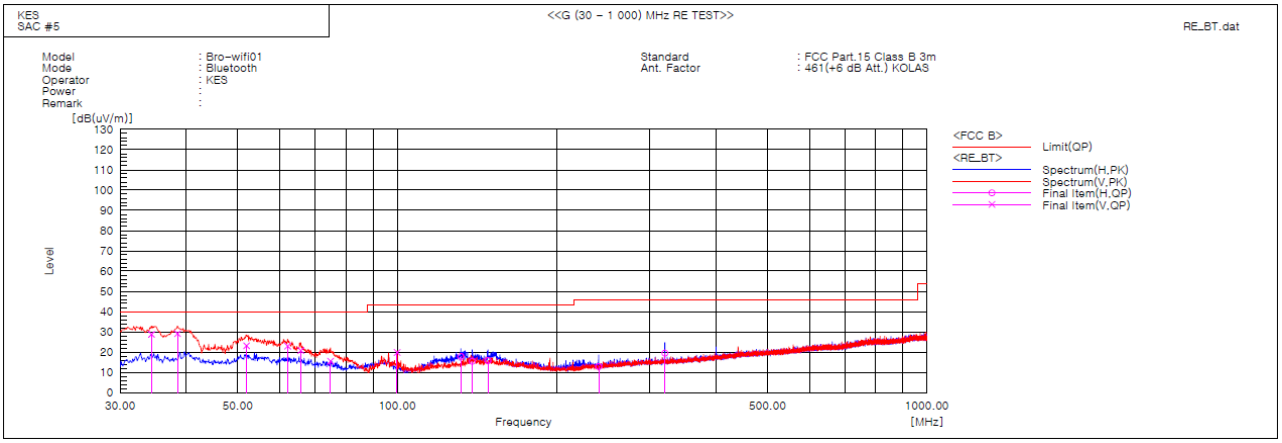
■ wifi mode



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	33.638	V	42.8	-13.9	28.9	40.0	11.1	102.0	283.1	
2	37.760	V	41.2	-13.5	27.7	40.0	12.3	100.0	257.9	
3	51.825	V	37.2	-12.6	24.6	40.0	15.4	100.0	195.2	
4	57.766	V	34.3	-12.8	21.5	40.0	18.5	103.0	186.7	
5	62.859	V	36.0	-13.2	22.8	40.0	17.2	103.0	207.8	
6	66.860	V	30.9	-13.9	17.0	40.0	23.0	100.0	57.6	
7	122.393	H	34.6	-15.0	19.6	43.5	23.9	199.0	129.4	
8	132.335	H	33.2	-13.8	19.4	43.5	24.1	100.0	75.8	
9	150.886	H	34.8	-12.4	22.4	43.5	21.1	201.0	1.3	
10	194.900	H	39.5	-15.5	24.0	43.5	19.5	100.0	67.3	
11	217.089	H	41.5	-15.2	26.3	46.0	19.7	103.0	72.2	
12	237.944	H	41.3	-14.3	27.0	46.0	19.0	103.0	67.3	

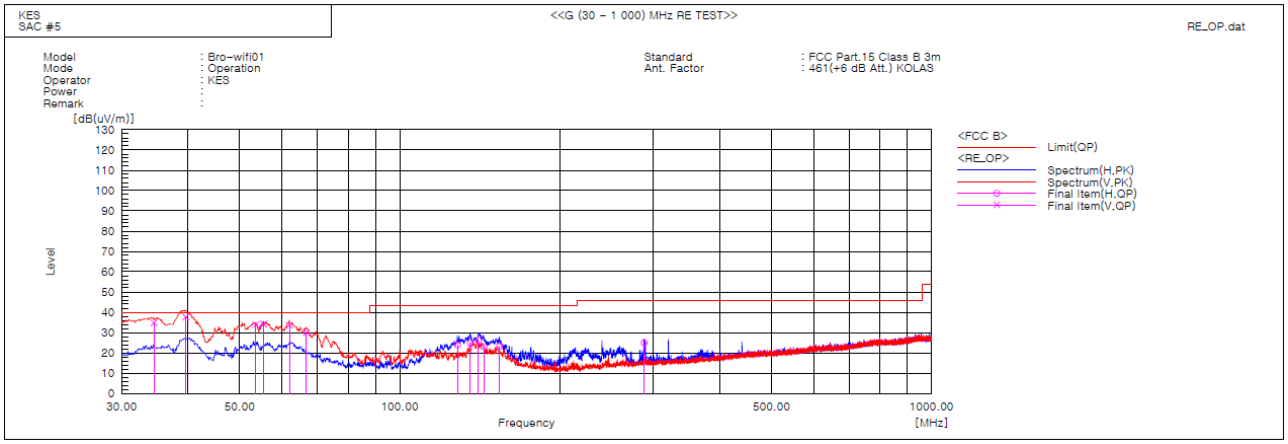
■ bluetooth mode



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	34.365	V	42.6	-13.8	28.8	40.0	11.2	101.0	236.7	
2	38.488	V	42.5	-13.4	29.1	40.0	10.9	100.0	201.7	
3	51.946	V	35.8	-12.6	23.2	40.0	16.8	106.0	198.0	
4	62.131	V	36.1	-13.1	23.0	40.0	17.0	102.0	188.9	
5	65.769	V	34.5	-13.7	20.8	40.0	19.2	103.0	211.2	
6	74.863	V	31.3	-15.8	15.5	40.0	24.5	100.0	30.2	
7	99.961	V	37.5	-17.6	19.9	43.5	23.6	103.0	218.5	
8	131.850	H	31.7	-13.9	17.8	43.5	25.7	205.0	97.1	
9	138.519	H	28.6	-13.2	15.4	43.5	28.1	398.0	146.3	
10	148.340	H	28.2	-12.4	15.8	43.5	27.7	100.0	101.5	
11	240.005	H	27.1	-14.2	12.9	46.0	33.1	205.0	122.4	
12	320.030	H	31.2	-11.7	19.5	46.0	26.5	100.0	194.8	

■ operation mode



Final Result

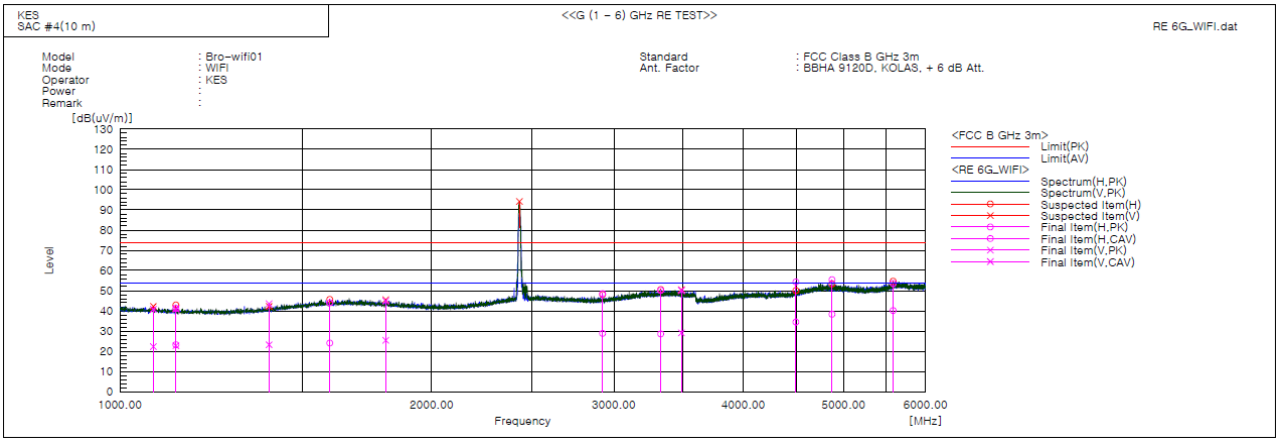
No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	34.486	V	48.6	-13.8	34.8	40.0	5.2	101.0	164.7	
2	39.579	V	50.9	-13.2	37.7	40.0	2.3	100.0	237.9	
3	53.644	V	46.5	-12.6	33.9	40.0	6.1	103.0	159.9	
4	55.463	V	46.9	-12.7	34.2	40.0	5.8	100.0	236.0	
5	62.010	V	46.8	-13.1	33.7	40.0	6.3	105.0	161.7	
6	66.739	V	43.8	-13.8	30.0	40.0	10.0	100.0	337.0	
7	128.455	H	38.3	-14.3	24.0	43.5	19.5	201.0	78.9	
8	135.730	H	38.2	-13.5	24.7	43.5	18.8	200.2	61.6	
9	140.580	H	39.2	-13.0	26.2	43.5	17.3	101.0	310.1	
10	143.975	H	35.8	-12.7	23.1	43.5	20.4	198.0	76.3	
11	153.918	H	35.7	-12.5	23.2	43.5	20.3	199.0	86.3	
12	288.020	H	37.3	-12.3	25.0	46.0	21.0	100.0	60.6	

♦ Calculation – SAC #4(10 m)
Result(QP) [dB(㎶/m)] = (Reading(QP)[dB(㎶)] + c.f[dB(1/m)]
Margin(QP)[dB] = Limit[dB(㎶/m)] - Result(QP) [dB(㎶/m)]
Reading(QP) : Reading value, Result(QP) : Reading value + Factor value
Limit(QP) : Limit value, c.f : (ANT Factor + Cable Loss - Preamp Factor), Margin: Margin value

Radiated Electric Field Emissions(Above 1 ㎓)

■ wifi mode

- (1 ~ 6) ㎓

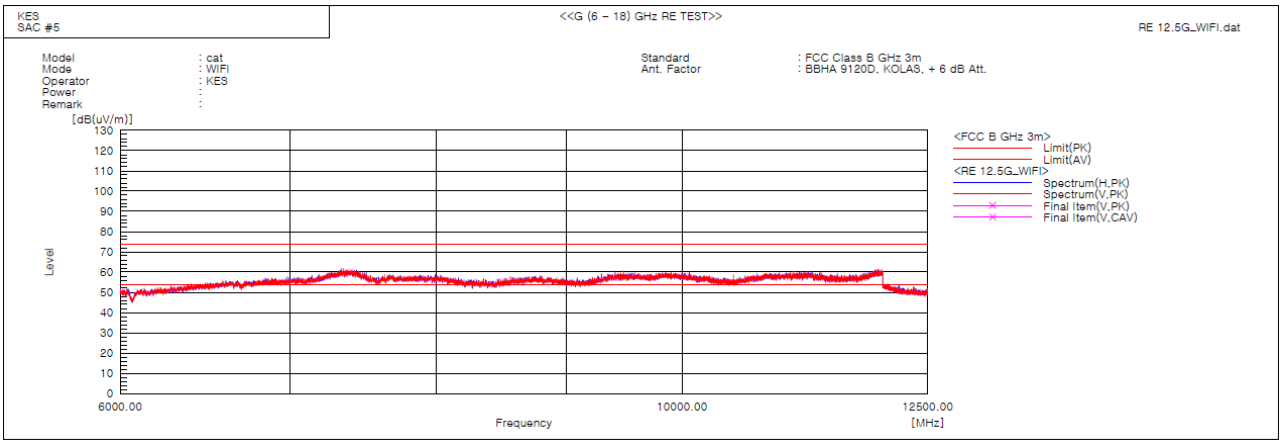


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]	Remark
1	1076.875	V	42.1	23.6	-1.3	40.8	22.3	74.0	54.0	33.2	31.7	149.0	193.0	
2	1132.500	H	42.3	24.3	-1.0	41.3	23.3	74.0	54.0	32.7	30.7	400.0	316.1	
3	1132.500	V	42.0	23.8	-1.0	41.0	22.8	74.0	54.0	33.0	31.2	100.0	311.1	
4	1393.125	V	43.2	22.9	0.4	43.6	23.3	74.0	54.0	30.4	30.7	150.0	15.8	
5	1595.000	H	42.9	23.0	1.1	44.0	24.1	74.0	54.0	30.0	29.9	199.0	156.8	
6	1806.250	V	43.0	23.5	2.0	45.0	25.5	74.0	54.0	29.0	28.5	398.0	95.0	
7	2925.000	H	42.7	23.1	5.8	48.5	28.9	74.0	54.0	25.5	25.1	198.0	125.9	
8	3329.375	H	43.8	22.2	6.4	50.2	28.6	74.0	54.0	23.8	25.4	100.0	173.8	
9	3486.250	V	43.8	22.7	6.4	50.2	29.1	74.0	54.0	23.8	24.9	101.0	2.7	
10	4496.250	H	43.5	23.7	10.8	54.3	34.5	74.0	54.0	19.7	19.5	196.0	35.8	
11	4873.125	H	42.8	25.7	12.6	55.4	38.3	74.0	54.0	18.6	15.7	200.3	48.9	
12	5582.500	H	39.5	26.1	14.1	53.6	40.2	74.0	54.0	20.4	13.8	153.3	124.6	
13	2431.250	V	--------	--------	3.9	--------	--------	74.0	54.0	--------	--------	99.7	134.8	

- Fundamental Frequency: 2.4 ㎓

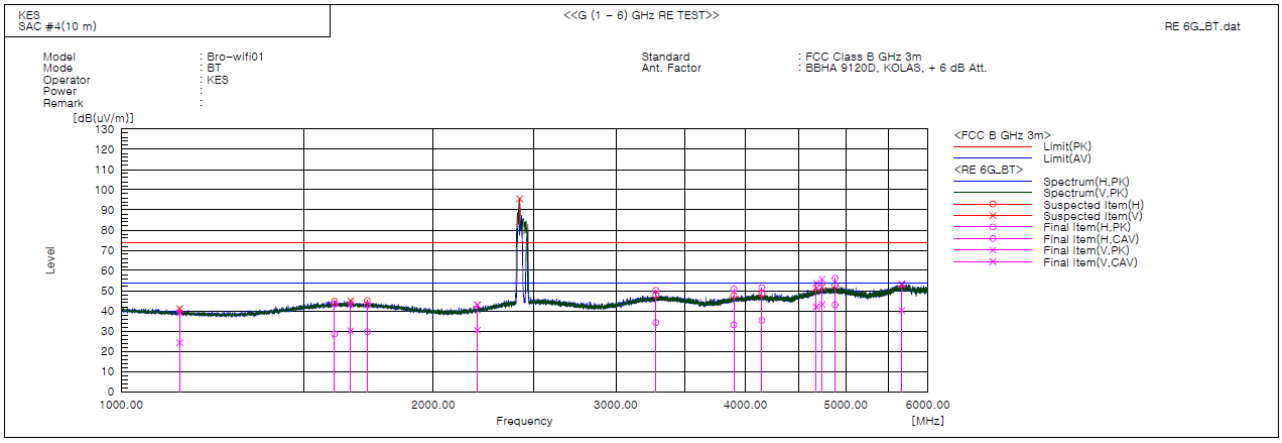
- (6 ~ 12.4) GHz



* No spurious emission were detected above 6 GHz.

■ bluetooth mode

- (1 ~ 6) GHz

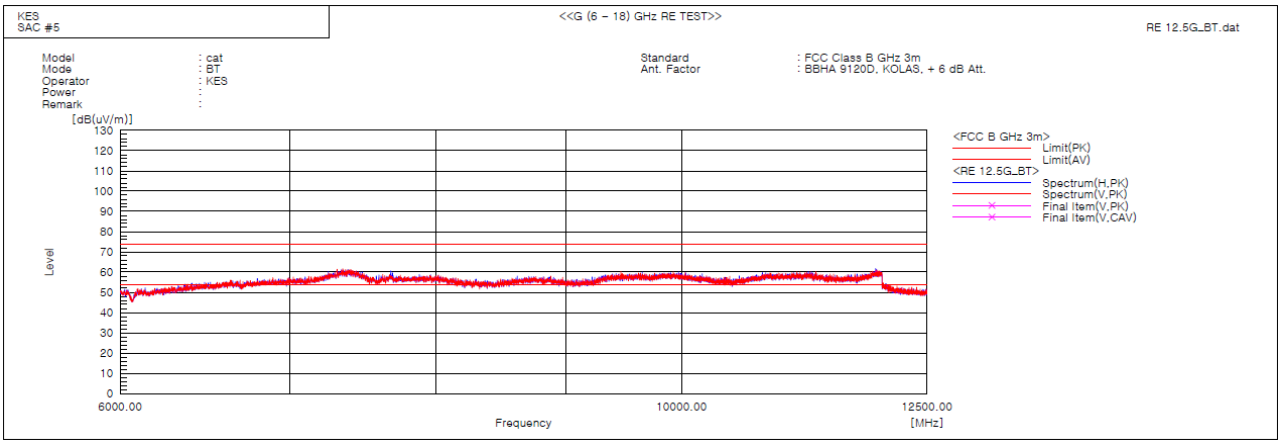


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]	Remark
1	1138.750	V	40.1	25.3	-1.0	39.1	24.3	74.0	54.0	34.9	29.7	399.0	223.7	
2	1605.625	H	42.5	27.5	1.1	43.6	28.6	74.0	54.0	30.4	25.4	101.0	199.6	
3	1664.375	V	41.9	28.8	1.4	43.3	30.2	74.0	54.0	30.7	23.8	400.0	325.8	
4	1727.500	H	41.1	28.0	1.7	42.8	29.7	74.0	54.0	31.2	24.3	400.0	340.8	
5	2205.625	V	39.7	27.3	3.1	42.8	30.4	74.0	54.0	31.2	23.6	396.0	152.9	
6	3279.375	H	43.9	27.9	6.3	50.2	34.2	74.0	54.0	23.8	19.8	102.0	40.3	
7	3898.750	H	43.0	25.3	7.8	50.8	33.1	74.0	54.0	23.2	20.9	199.0	157.5	
8	4148.125	H	42.8	26.6	8.7	51.5	35.3	74.0	54.0	22.5	18.7	399.0	94.6	
9	4681.250	V	42.1	30.3	11.7	53.8	42.0	74.0	54.0	20.2	12.0	151.0	198.5	
10	4743.125	V	43.6	31.3	12.0	55.6	43.3	74.0	54.0	18.4	10.7	100.0	217.9	
11	4881.250	H	43.5	30.3	12.7	56.2	43.0	74.0	54.0	17.8	11.0	100.0	324.4	
12	5660.001	V	39.4	26.3	14.0	53.4	40.3	74.0	54.0	20.6	13.7	356.8	255.8	
13	2422.500	V	--------	--------	3.8	--------	--------	74.0	54.0	--------	--------	99.7	120.3	

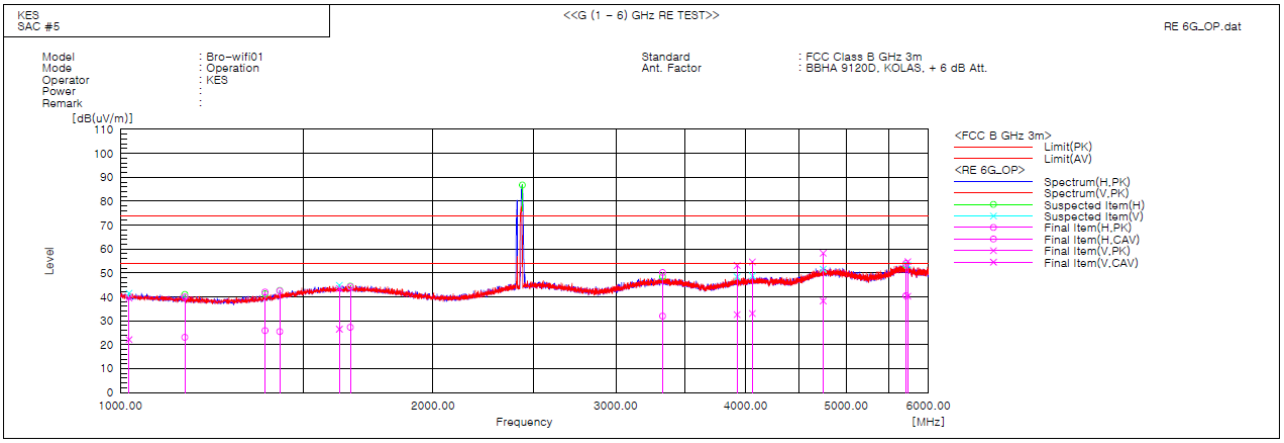
- Fundamental Frequency: 2.4 GHz

- (6 ~ 12.4) GHz



* No spurious emission were detected above 6 GHz.

■ operation mode



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]	Remark
1	1019.375	V	41.1	23.8	-1.6	39.5	22.2	74.0	54.0	34.5	31.8	102.0	326.7	
2	1153.750	H	40.9	24.0	-0.9	40.0	23.1	74.0	54.0	34.0	30.9	396.0	103.3	
3	1378.125	H	41.7	25.6	0.3	42.0	25.9	74.0	54.0	32.0	28.1	200.0	300.7	
4	1423.750	H	42.0	25.0	0.5	42.5	25.5	74.0	54.0	31.5	28.5	103.0	239.3	
5	1625.000	V	42.3	25.3	1.2	43.5	26.5	74.0	54.0	30.5	27.5	153.0	135.0	
6	1665.000	H	42.8	25.9	1.4	44.2	27.3	74.0	54.0	29.8	26.7	101.0	84.9	
7	3327.500	H	43.8	25.6	6.4	50.2	32.0	74.0	54.0	23.8	22.0	100.0	77.4	
8	3925.625	V	45.2	24.7	7.9	53.1	32.6	74.0	54.0	20.9	21.4	101.0	281.9	
9	4060.625	V	46.3	24.8	8.3	54.6	33.1	74.0	54.0	19.4	20.9	150.0	357.1	
10	4749.375	V	46.3	26.3	12.0	58.3	38.3	74.0	54.0	15.7	15.7	103.0	256.4	
11	5709.375	H	40.2	26.7	13.8	54.0	40.5	74.0	54.0	20.0	13.5	210.1	55.1	
12	5731.250	V	41.0	26.5	13.8	54.8	40.3	74.0	54.0	19.2	13.7	99.8	348.1	
13	2438.125	H	--------	--------	3.9	--------	--------	74.0	54.0	--------	--------	200.2	143.4	

- Fundamental Frequency: 2.4 GHz

♦ Calculation

Result(PK/CAV) [dB(μV/m)] = (Reading(PK/CAV)[dB(μV)] + c.f[dB(1/m)]

Margin(PK/CAV)[dB] = Limit[dB(μV/m)] - Result(PK/CAV) [dB(μV/m)]

Reading(PK/CAV) : Reading value, Result(PK/CAV) : Reading value + Factor value

Limit(QP) : Limit value, c.f : (ANT Factor + Cable Loss - Preamp Factor), Margin: Margin value