



EMC TEST REPORT

Test Report No. : KES-EM-22T0998
Date of Issue : Dec. 23, 2022
Product name : Multi Use Breath Analyzer
Model/Type No. : KETOSCAN SMART
Variant Mode : MultiGenix
Applicant : SENTECH GMI Corp.
Applicant Address : 382 Gangnam-daero, Gangnam-gu Seoul, Republic of Korea
Manufacturer : SENTECH GMI Corp.
Manufacturer Address : 382 Gangnam-daero, Gangnam-gu Seoul, Republic of Korea
FCC ID : 2ASFRKETOSCANSKART
Date of Receipt : Nov. 07, 2022
Test date : Nov. 24, 2022 ~ Nov. 25, 2022
Test Results : ☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Yung Ho, Lee
EMC Test Engineer

Reviewed by

Dong Hun, Jang
EMC Technical Manager

**KES Co., Ltd.**

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Report No.:

KES-EM-22T0998

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REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Dec. 23, 2022	KES-EM-22T0998	Issued

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1.0 General Product Description

Main Specifications of EUT are:

Division	Characteristic
Frequency	Bluetooth 2.4 GHz Band
Power	Charge : DC 5 V (USB) Operating : DC 3.7V (Battery)
Port	USB C Type
Components	EUT x 1 EA / Cable x 1 EA
Sensor Type	High Resolution acetone gas sensor
Display Unit	PPM (Parts per million)
Accuracy	Less than 5ppm +/- 0.5ppm , On or above 5ppm +/- 10 %
Battery charge cycle	More than 50 measurements
Analyzing Time	Within 4 seconds
Sensor Module Replacement cycle	300 measurements



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

Management purpose by seller

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
Multi Use Breath Analyzer	KETOSCAN SMART	-	SENTECH GMI Corp.	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
Adapter	S21A27	-	Salcomp (Shenzhen) Co., Ltd	-
SmartPhone	SM-G955N	-	Samsung Electronics Co.,LTD	-

1.6 External I/O Cabling

■ Charge Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
Multi Use Breath Analyzer (EUT)	USB C Type	Adatper	USB	0.2	U

* Unshielded = U, Shielded = S

■ Operating Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
Multi Use Breath Analyzer (EUT)	-	-	-	-	-

* Unshielded = U, Shielded = S

■ Wireless Operating Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
Multi Use Breath Analyzer (EUT)	Wireless	SmartPhone	Wireless	-	-

* Unshielded = U, Shielded = S

1.7 EUT Operating Mode(s)

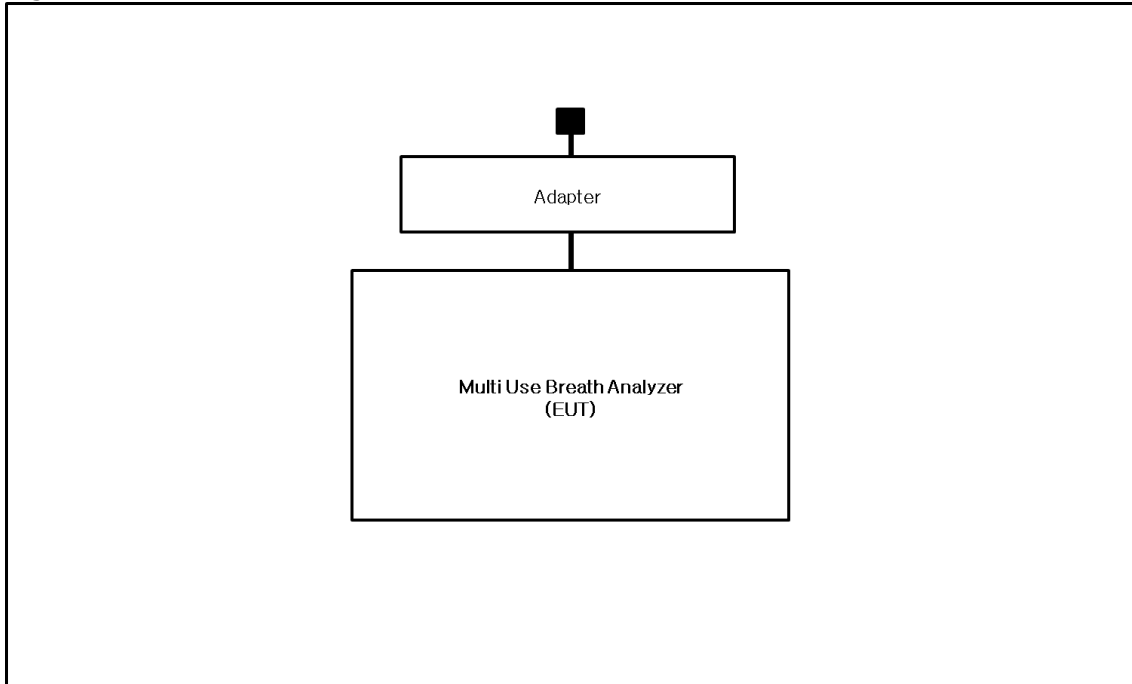
Test mode	operating
Charge	Connected EUT and Adapter with a wire(USB) and checked the charging status with EUT of LCD.
Operating	Tested while checking the normal operation status on the LCD screen of the EUT.
Wireless Operating	Connected EUT and wirelessly(Bluetooth) and checked the operation status with the application of SmartPhone.

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

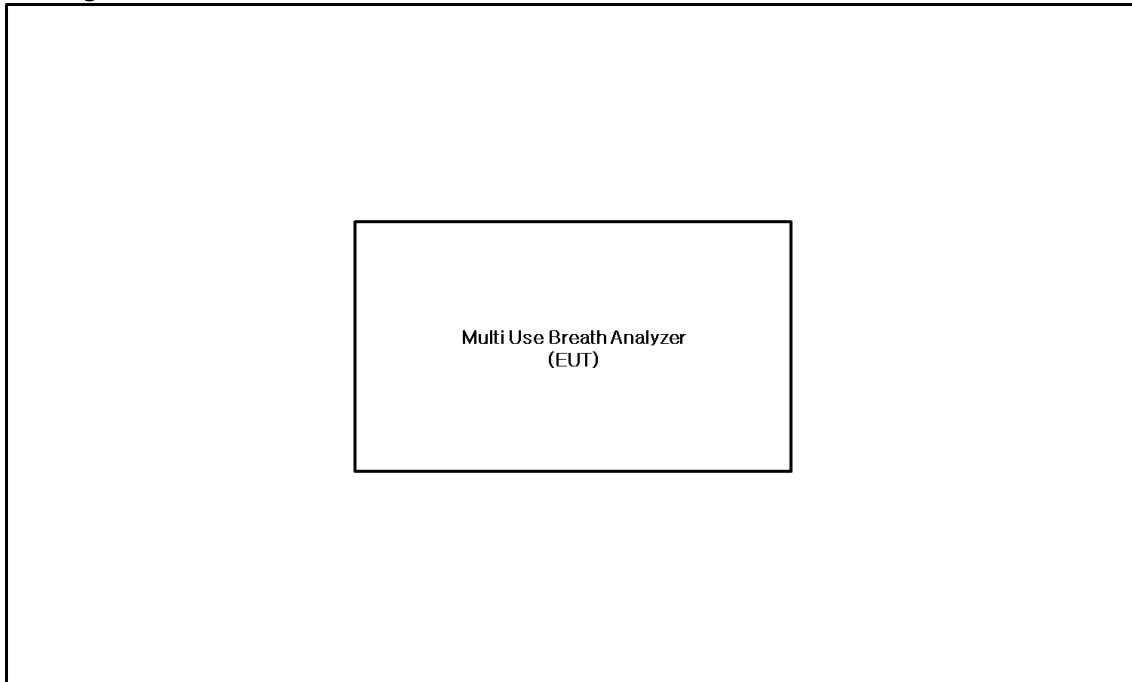
1.8 Configuration

■ AC Main
□ DC Main

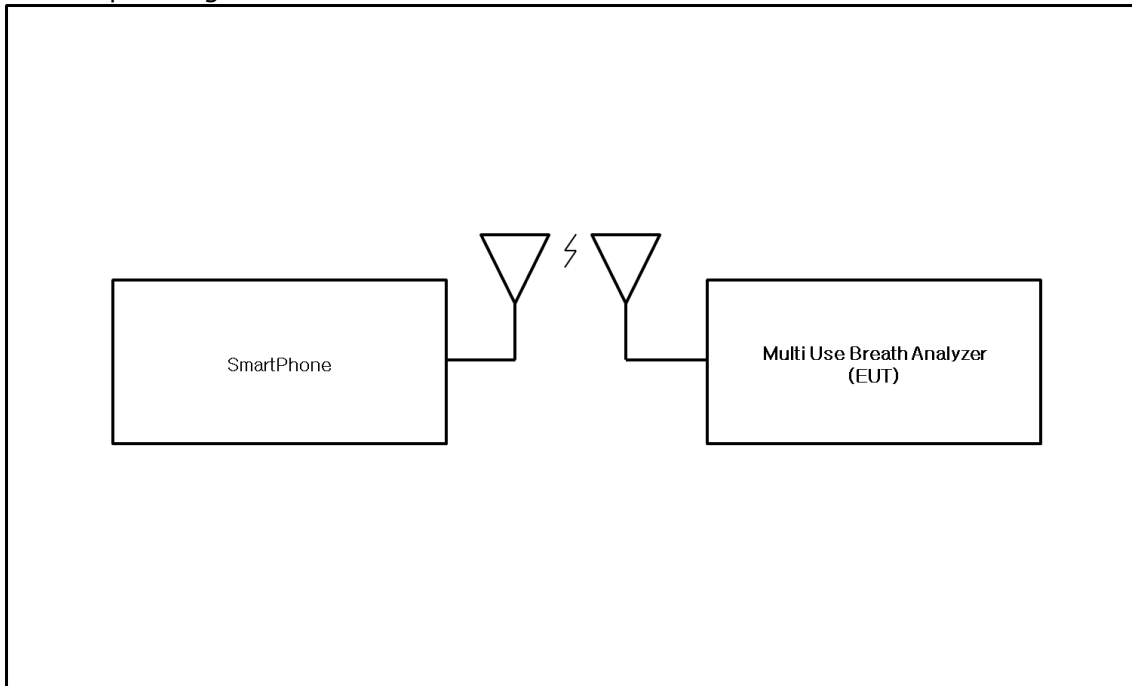
■ Charge Mode



■ Operating Mode



■ Wireless Operating Mode



1.9 Remarks when standards applied

N/A

1.10 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.

1.11 Test Facility

The measurement facility is located at 473-21, Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Korea, Republic of. The sites are constructed in conformance with the requirements of ANSI C63.4a-2017 and CISPR 16-1-4:2019

1.12 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 kHz to 30 MHz. 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 GHz at 10 m or 3 m distance and a Peak and Average detector above 1 GHz 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

1.13 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
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:

☒ **47 CFR Part 15, Subpart B**

☐ CISPR 22:2009 +A1:2010

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☐ Class A

☒ Class B

2.1 Conducted Emissions at Mains Power Ports

Test Date

Nov. 25, 2022

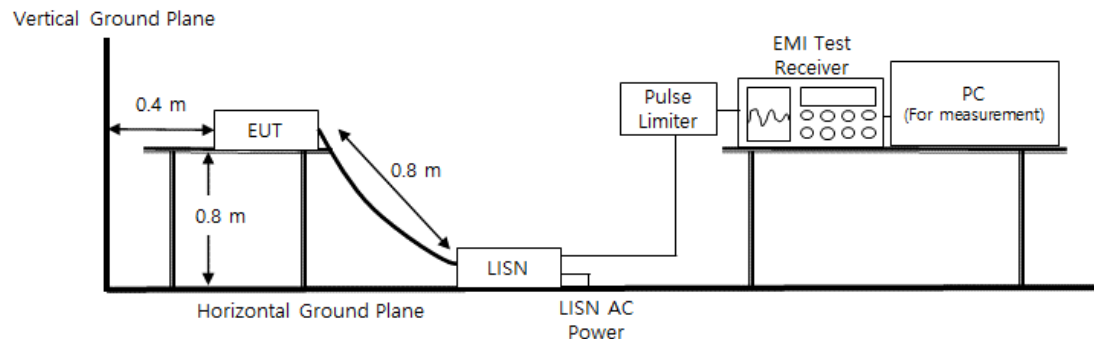
Test Location

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	11, 11, 2023	1 Year
☒	LISN	ENV216	R & S	101787	11, 10, 2023	1 Year
☐	LISN	ESH2-Z5	R & S	100450	11, 10, 2023	1 Year
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 10, 2023	1 Year

Diagram of test setup





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Test Conditions

Temperature: $(22,2 \pm 0,1) ^\circ\text{C}$
Relative Humidity: $(47,2 \pm 0,0) \% \text{ R.H.}$

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Results

The requirements are:

- ☒ PASS
- ☐ NOT PASS
- ☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Nov. 25, 2022

Test Location

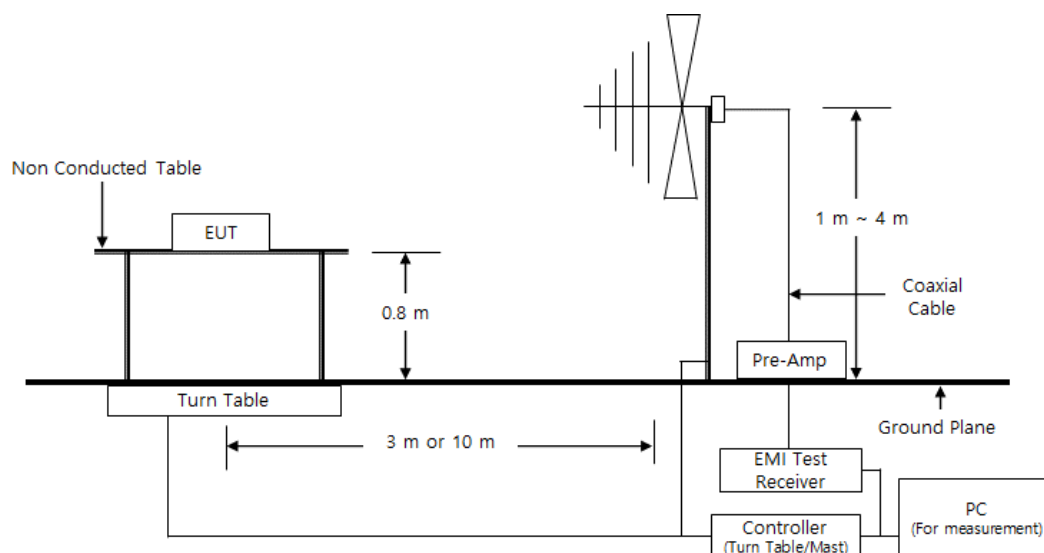
☐ OPEN AREA TEST SITE #2

☒ SEMI ANECHOIC CHAMBER #4(10m)

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.0	-	-
☒	EMI TEST RECEIVER	ESU26	R & S	100551	03, 31, 2023	1 Year
☒	AMPLIFIER	SCU 01	R & S	100603	11, 10, 2023	1 Year
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	11, 17, 2024	2 Year
☒	ATTENUATOR	8491A	HP	32173	03, 08, 2023	1 Year

Diagram of test setup



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Test Conditions

Temperature: (22,7 $\pm$ 0,1) °C
Relative Humidity: (46,2 $\pm$ 0,1) % R.H.

Frequency Range of Measurement

30 MHz to 1 GHz

Instrument Settings

IF Band Width: 120 kHz

Test Results

The requirements are:

- ☒ PASS
- ☐ NOT PASS
- ☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Nov. 24, 2022

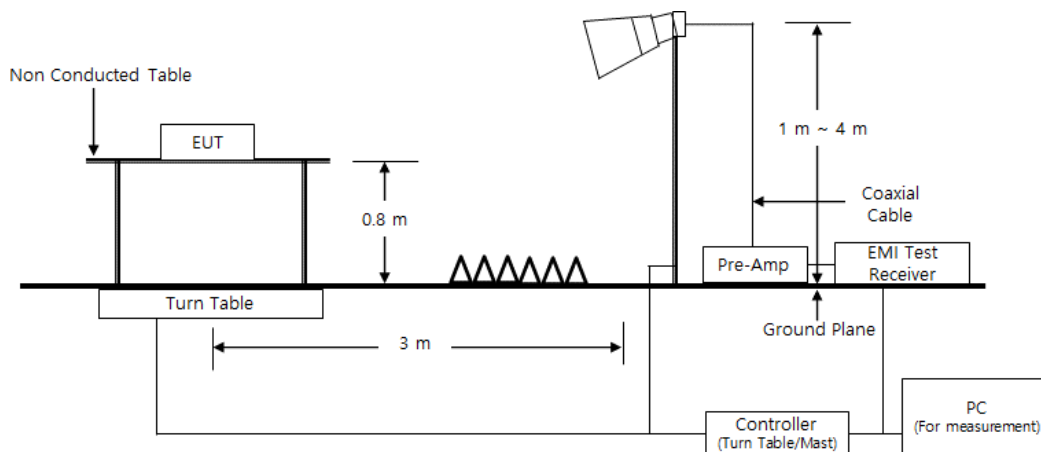
Test Location

SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	ES10/RE	TOYO Corporation	2022.01.000	-	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	03, 31, 2023	1 Year
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	11, 08, 2023	1 Year
☒	PREAMPLIFIER	8449B	HP	3008A00538	06, 02, 2023	1 Year
☒	ATTENUATOR	8491B	HP	23094	04, 21, 2023	1 Year

Diagram of test setup





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Test Conditions

Temperature: (22,4 ± 0,1) °C
Relative Humidity: (46,3 ± 0,2) % R.H.

Frequency Range of Measurement

1 GHz to 5 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

- ☒ PASS
- ☐ NOT PASS
- ☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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APPENDIX A – TEST DATA

Conducted Emissions at Mains Power Ports

■ Charge Mode

HOT LINE

Common Information

Test Description:

Conducted Emission

Model No.:

KETOSCAN SMART

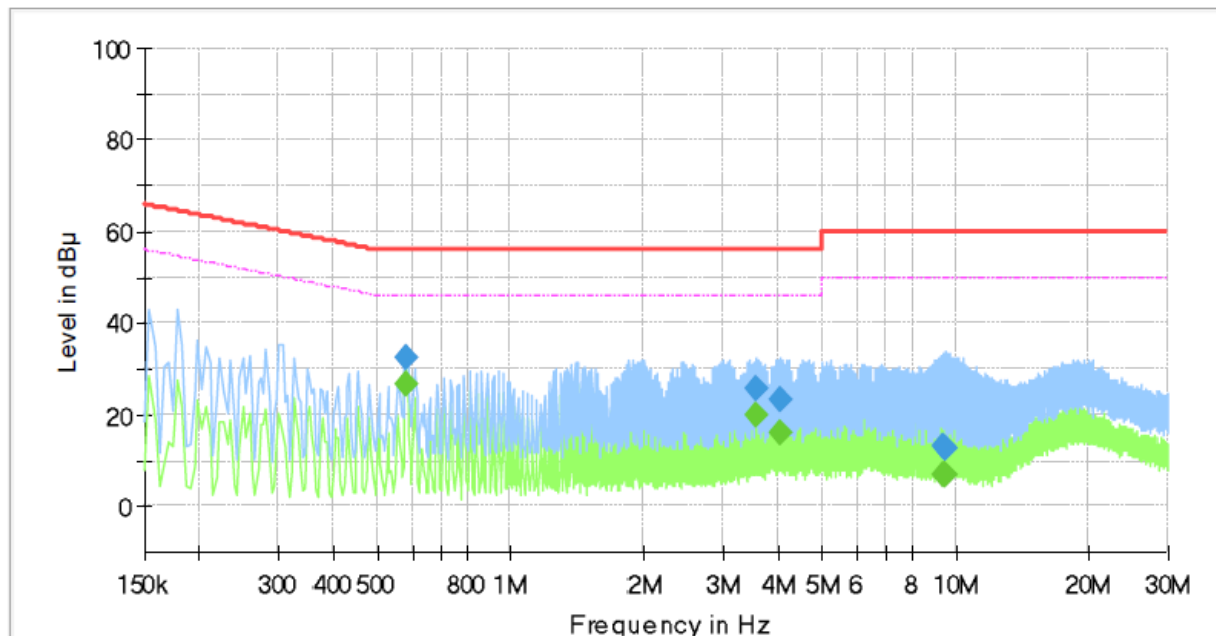
Phase:

Mode:

Charge

Operator Name:

KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.582000	---	26.70	46.00	19.30	1000.0	9.000	L1	20.0
0.582000	32.45	---	56.00	23.55	1000.0	9.000	L1	20.0
3.574000	---	19.83	46.00	26.17	1000.0	9.000	L1	20.2
3.574000	25.67	---	56.00	30.33	1000.0	9.000	L1	20.2
4.030000	---	15.86	46.00	30.14	1000.0	9.000	L1	20.1
4.030000	23.15	---	56.00	32.85	1000.0	9.000	L1	20.1
9.430000	---	7.01	50.00	42.99	1000.0	9.000	L1	20.2
9.430000	13.25	---	60.00	46.75	1000.0	9.000	L1	20.2
9.454000	---	6.89	50.00	43.11	1000.0	9.000	L1	20.2
9.454000	12.68	---	60.00	47.32	1000.0	9.000	L1	20.2

NEUTRAL LINE

Common Information

Test Description:

Model No.:

Phase:

Mode:

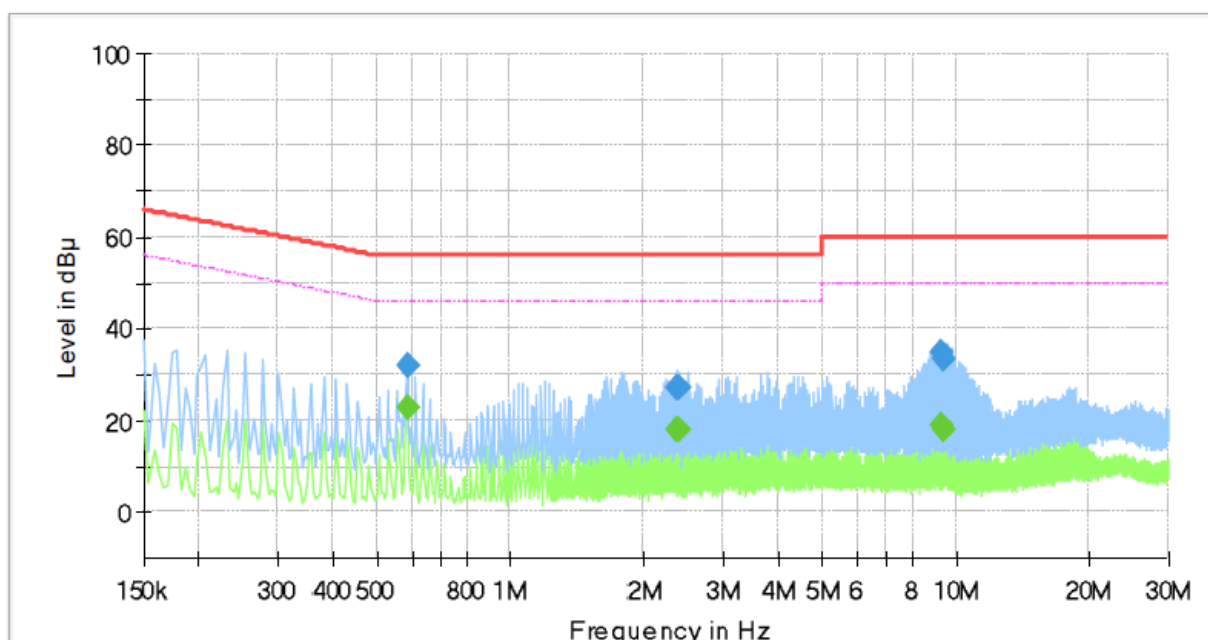
Operator Name:

Conducted Emission

KETOSCAN SMART

Charge

KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.586000	---	22.83	46.00	23.17	1000.0	9.000	N	19.9
0.586000	32.00	---	56.00	24.00	1000.0	9.000	N	19.9
2.362000	---	17.77	46.00	28.23	1000.0	9.000	N	20.4
2.362000	27.28	---	56.00	28.72	1000.0	9.000	N	20.4
2.386000	---	17.81	46.00	28.19	1000.0	9.000	N	20.4
2.386000	27.28	---	56.00	28.72	1000.0	9.000	N	20.4
9.242000	---	19.10	50.00	30.90	1000.0	9.000	N	20.2
9.242000	34.64	---	60.00	25.36	1000.0	9.000	N	20.2
9.394000	---	17.79	50.00	32.21	1000.0	9.000	N	20.2
9.394000	33.61	---	60.00	26.39	1000.0	9.000	N	20.2

◆ Calculation

$$\text{QuasiPeak [dBuV]} / \text{CAverage [dBuV]} = \text{Reading Value [dBuV]} + \text{Corr. [dB]}$$

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

Corr. : Correction values (LISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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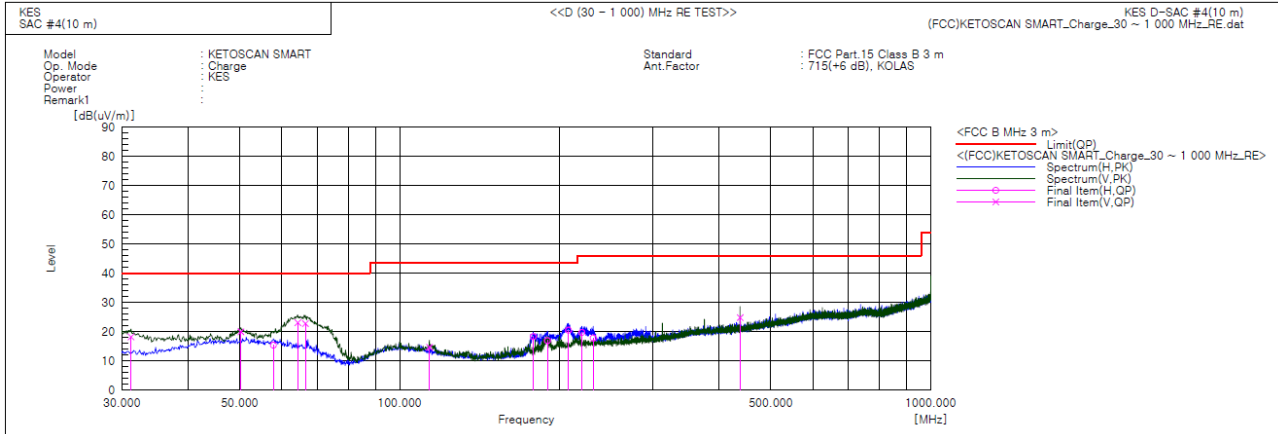
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Radiated Electric Field Emissions(Below 1 GHz)

■ Charge Mode



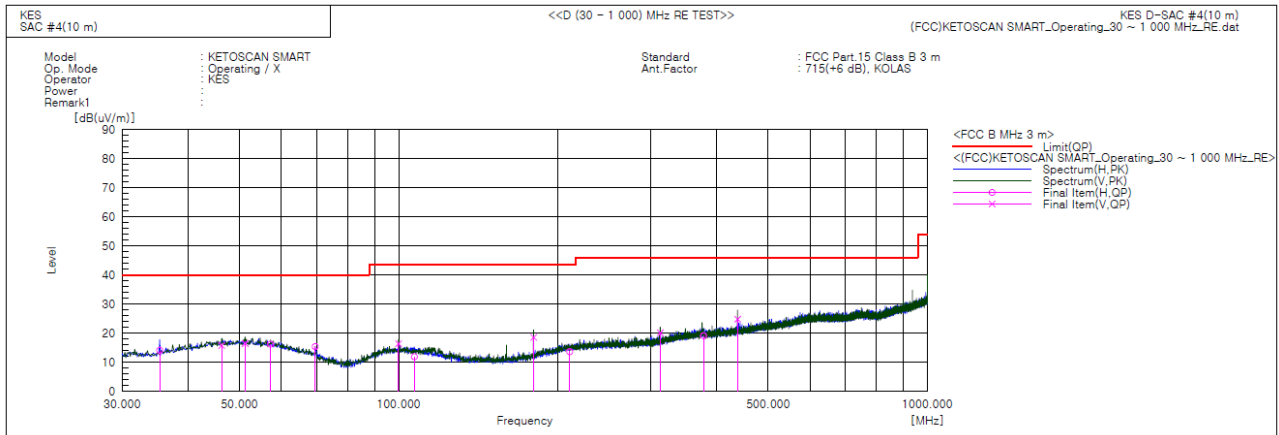
Final Result

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	31.213	V	43.3	-25.1	18.2	40.0	21.8	118.0	137.0	
2	50.249	V	40.9	-20.9	20.0	40.0	20.0	100.0	104.0	
3	57.888	H	37.0	-21.6	15.4	40.0	24.6	350.0	282.0	
4	64.314	V	46.2	-23.1	23.1	40.0	16.9	126.0	137.0	
5	66.496	V	46.5	-23.7	22.8	40.0	17.2	130.0	133.0	
6	113.784	V	38.3	-23.6	14.7	43.5	28.8	100.0	74.0	
7	178.531	H	42.4	-24.1	18.3	43.5	25.2	229.0	329.0	
8	189.929	H	39.8	-22.9	16.9	43.5	26.6	400.0	288.0	
9	207.995	H	41.6	-21.1	20.5	43.5	23.0	400.0	333.0	
10	220.484	H	40.1	-20.4	19.7	46.0	26.3	312.0	144.0	
11	231.518	H	37.8	-20.0	17.8	46.0	28.2	400.0	344.0	
12	437.521	V	38.7	-13.9	24.8	46.0	21.2	120.0	59.0	

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Operating 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	35.335	H	38.4	-24.3	14.1	40.0	25.9	400.0	4.0	
2	46.248	V	36.9	-21.1	15.8	40.0	24.2	106.0	210.0	
3	51.219	V	37.4	-20.9	16.5	40.0	23.5	100.0	208.0	
4	57.281	H	37.7	-21.5	16.2	40.0	23.8	400.0	353.0	
5	69.528	H	40.2	-24.8	15.4	40.0	24.6	400.0	312.0	
6	99.961	V	39.0	-22.6	16.4	43.5	27.1	140.0	323.0	
7	107.115	H	34.8	-22.9	11.9	43.5	31.6	355.0	346.0	
8	179.986	V	42.6	-24.0	18.6	43.5	24.9	100.0	352.0	
9	210.663	H	34.5	-20.9	13.6	43.5	29.9	370.0	145.0	
10	312.513	V	38.1	-17.9	20.2	46.0	25.8	125.0	208.0	
11	377.260	H	34.1	-15.0	19.1	46.0	26.9	400.0	212.0	
12	437.521	V	38.7	-13.9	24.8	46.0	21.2	100.0	260.0	

It was determined that X orientation was worst-case orientation; therefore, al final radiated testing was performed with the EUT in X orientation.

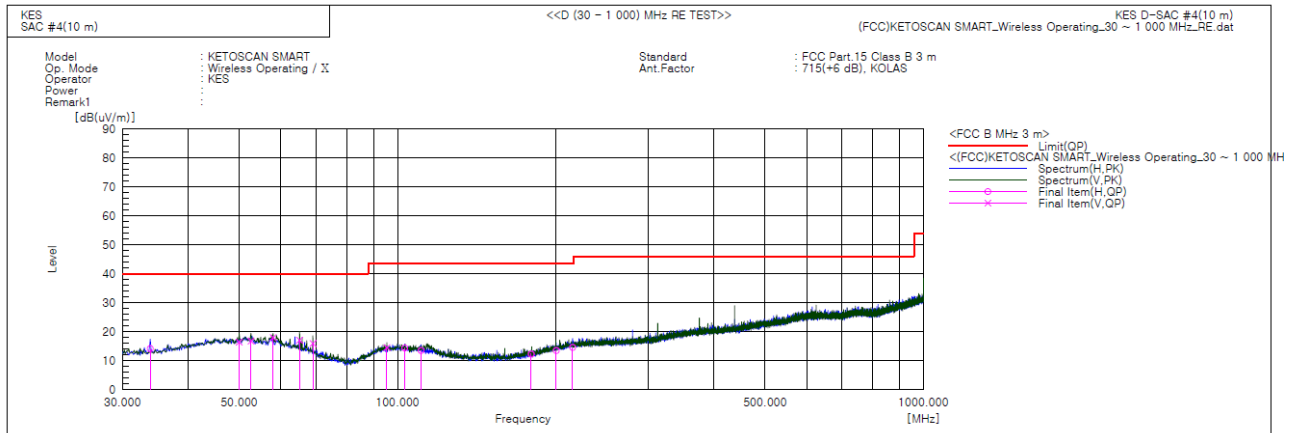


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Wireless Operating Mode



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	33.880	H	38.9	-24.7	14.2	40.0	25.8	400.0	335.0	
2	50.006	V	37.3	-20.9	16.4	40.0	23.6	100.0	26.0	
3	52.674	V	37.7	-20.9	16.8	40.0	23.2	144.0	353.0	
4	58.009	V	39.6	-21.6	18.0	40.0	22.0	121.0	146.0	
5	65.163	V	40.4	-23.3	17.1	40.0	22.9	150.0	48.0	
6	69.043	V	40.6	-24.6	16.0	40.0	24.0	100.0	41.0	
7	95.475	V	37.4	-22.9	14.5	43.5	29.0	110.0	119.0	
8	103.235	H	37.1	-22.7	14.4	43.5	29.1	360.0	63.0	
9	110.874	H	36.8	-23.3	13.5	43.5	30.0	400.0	312.0	
10	179.623	H	36.3	-24.0	12.3	43.5	31.2	400.0	125.0	
11	200.356	H	35.3	-21.8	13.5	43.5	30.0	400.0	86.0	
12	215.270	H	35.3	-20.7	14.6	43.5	28.9	274.0	190.0	

It was determined that X orientation was worst-case orientation; therefore, al final radiated testing was performed with the EUT in X orientation.

◆ Calculation – SAC #4(10 m)

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

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

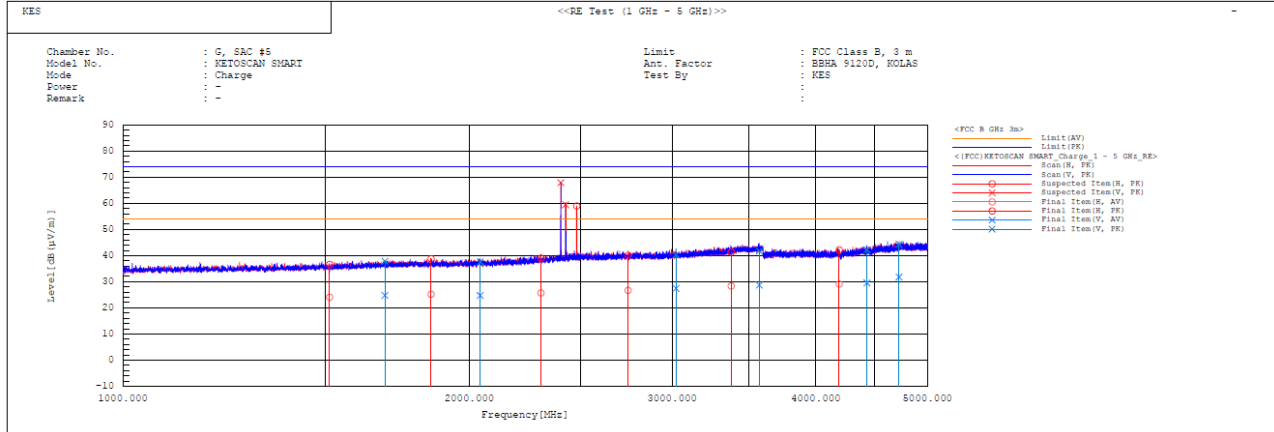
Reading(QP) : Reading value, Result(QP) : Reading value + Factor value

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



Radiated Electric Field Emissions(Above 1 GHz)

■ Charge Mode



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	Remark
1	1689.297	V	30.2	43.2	-5.4	24.8	37.8	54.0	74.0	29.2	36.2	112.0	178.6	
2	2044.001	V	28.8	41.7	-4.1	24.7	37.6	54.0	74.0	29.3	36.4	135.0	0.8	
3	3024.443	V	28.6	41.5	-1.2	27.4	40.3	54.0	74.0	26.6	33.7	100.0	251.6	
4	3572.789	V	28.0	42.0	-0.3	28.7	41.7	54.0	74.0	25.3	32.3	123.0	233.7	
5	4430.571	V	27.0	39.7	2.5	29.5	42.2	54.0	74.0	24.5	31.8	100.0	86.7	
6	4726.358	V	28.4	40.9	3.4	31.8	44.3	54.0	74.0	22.2	29.7	100.0	127.3	
7	1512.499	H	30.3	42.8	-6.2	24.1	36.6	54.0	74.0	29.9	37.4	400.0	359.6	
8	1853.603	H	29.9	43.5	-4.7	25.2	38.8	54.0	74.0	28.8	35.2	400.0	358.5	
9	2308.718	H	28.9	42.2	-3.2	25.7	39.0	54.0	74.0	28.3	35.0	320.0	290.7	
10	2748.667	H	28.5	41.9	-1.8	26.7	40.1	54.0	74.0	27.3	33.9	320.0	359.5	
11	3376.915	H	29.1	42.0	-0.7	28.4	41.3	54.0	74.0	25.6	32.7	400.0	163.2	
12	4192.478	H	27.7	40.8	1.4	29.1	42.2	54.0	74.0	24.9	31.8	400.0	359.6	
13	2402.000	V	-----	-----	-2.9	-----	-----	-----	-----	-----	-----	400.0	112.4	
14	2425.600	V	-----	-----	-2.6	-----	-----	-----	-----	-----	-----	400.0	0.0	
15	2479.600	H	-----	-----	-2.7	-----	-----	-----	-----	-----	-----	150.0	0.3	

* Exclusion Bands

- Fundamental Frequency: (2 402 ~ 2 480) MHz

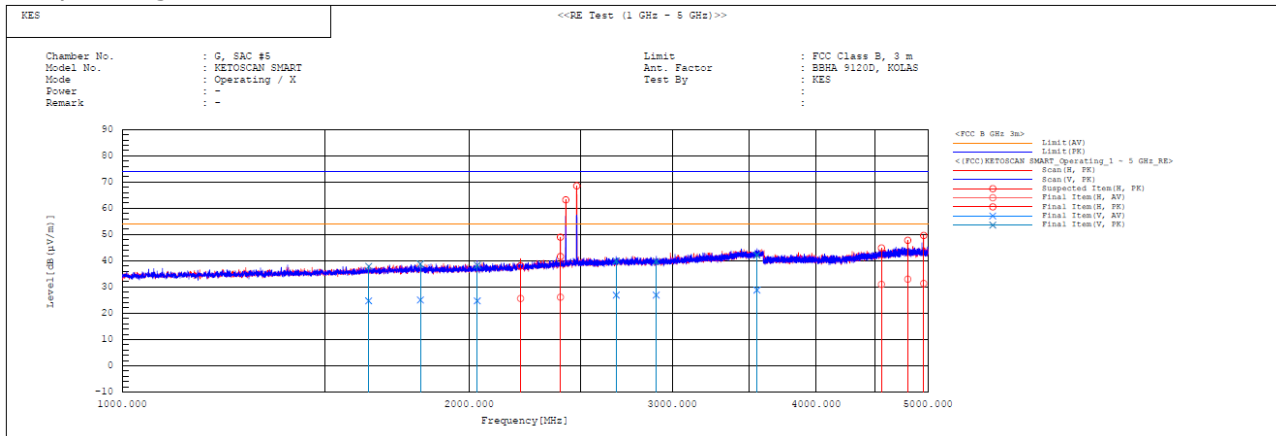


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Operating Mode



Final Result

No.	Frequency	Pol	Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
	[MHz]		AV	PK		AV	PK	AV	PK	AV	PK	[cm]	[deg]	
			[dB (μV)]	[dB (μV)]	[dB (1/m)]	[dB (μV/m)]	[dB (μV/m)]	[dB (μV/m)]	[dB (μV/m)]	[dB]	[dB]			
1	1636.800	V	30.4	43.6	-5.7	24.7	37.9	54.0	74.0	29.3	36.1	130.0	1.8	
2	1814.749	V	30.0	43.6	-4.9	25.1	38.7	54.0	74.0	28.9	35.3	100.0	8.3	
3	2032.885	V	28.8	42.4	-4.1	24.7	38.3	54.0	74.0	29.3	35.7	100.0	311.7	
4	2216.410	H	29.2	41.7	-3.6	25.6	38.1	54.0	74.0	28.4	35.9	400.0	34.0	
5	2400.405	H	29.0	44.5	-2.9	26.1	41.6	54.0	74.0	27.9	32.4	400.0	0.4	
6	2683.209	V	29.0	42.0	-2.1	26.9	39.9	54.0	74.0	27.1	34.1	157.0	359.0	
7	2906.751	V	28.3	41.2	-1.4	26.9	39.8	54.0	74.0	27.1	34.2	104.0	119.0	
8	3554.323	V	29.2	42.5	-0.4	28.8	42.1	54.0	74.0	25.2	31.9	100.0	357.5	
9	4556.890	H	28.2	42.1	2.8	31.0	44.9	54.0	74.0	23.0	29.1	357.0	85.7	
10	4802.492	H	29.2	44.0	3.8	33.0	47.8	54.0	74.0	21.0	26.2	400.0	71.0	
11	4958.004	H	26.8	45.0	4.6	31.4	49.6	54.0	74.0	22.6	24.4	400.0	71.0	
12	2400.400	H	-----	-----	-2.9	-----	-----	-----	-----	-----	-----	400.0	0.4	
13	2480.000	H	-----	-----	-2.7	-----	-----	-----	-----	-----	-----	400.0	359.5	
14	2426.400	H	-----	-----	-2.8	-----	-----	-----	-----	-----	-----	400.0	98.0	

* Exclusion Bands

- Fundamental Frequency: (2 402 ~ 2 480) MHz

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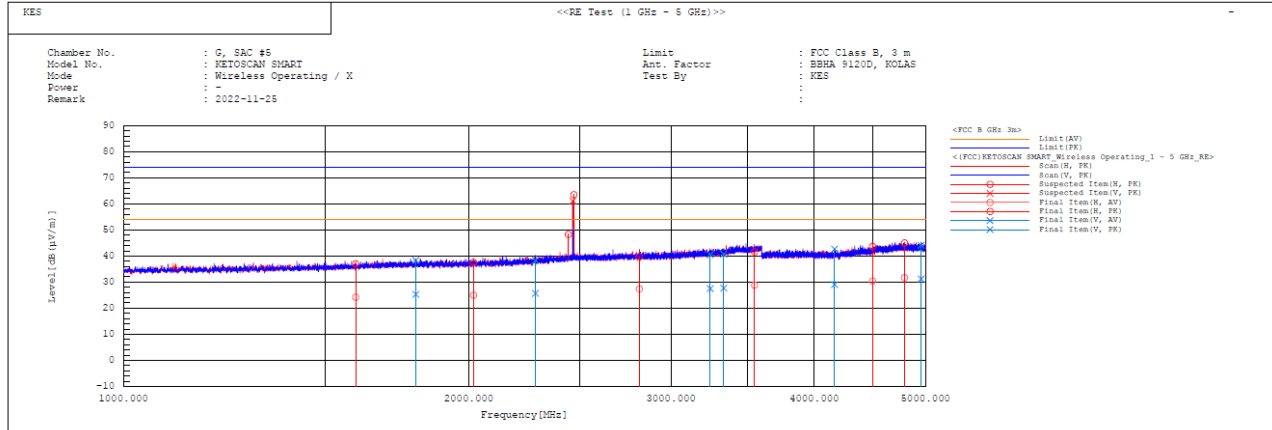
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■ Wireless Operating Mode

- (1 ~ 5) GHz



Final Result

No.	Frequency	Pol	Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Remark
	[MHz]		AV	PK		AV	PK	AV	PK	AV	PK	[cm]	[deg]	
			[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]			
1	1594.123	H	30.1	42.9	-5.9	24.2	37.0	54.0	74.0	29.8	37.0	400.0	25.9	
2	1798.251	V	30.2	43.2	-4.9	25.3	38.3	54.0	74.0	28.7	35.7	100.0	271.2	
3	2019.174	H	29.2	41.8	-4.2	25.0	37.6	54.0	74.0	29.0	36.4	351.0	20.0	
4	2286.937	V	29.0	41.7	-3.3	25.7	38.4	54.0	74.0	28.3	35.6	120.0	1.0	
5	2816.455	H	29.0	41.4	-1.6	27.4	39.8	54.0	74.0	26.6	34.2	400.0	112.2	
6	3246.997	V	28.3	41.3	-0.8	27.5	40.5	54.0	74.0	26.5	33.5	107.0	28.5	
7	3336.823	V	28.5	41.5	-0.8	27.7	40.7	54.0	74.0	26.3	33.3	100.0	357.5	
8	3549.222	H	29.2	42.0	-0.4	28.8	41.6	54.0	74.0	25.2	32.4	378.0	350.1	
9	4167.768	V	27.7	41.3	1.3	29.0	42.6	54.0	74.0	25.0	31.4	123.0	0.0	
10	4496.981	H	27.8	41.1	2.6	30.4	43.7	54.0	74.0	23.6	30.3	350.0	214.7	
11	4794.094	H	28.0	41.3	3.7	31.7	45.0	54.0	74.0	22.3	29.0	400.0	74.1	
12	4857.263	V	26.6	39.5	4.6	31.2	44.1	54.0	74.0	22.8	29.9	120.0	146.2	
13	2442.800	H	-----	-----	-2.8	-----	-----	-----	-----	-----	-----	-----	129.1	
14	2464.000	V	-----	-----	-2.7	-----	-----	-----	-----	-----	-----	-----	1.9	
15	2469.600	H	-----	-----	-2.7	-----	-----	-----	-----	-----	-----	-----	268.6	

* Exclusion Bands

- Fundamental Frequency: (2 402 ~ 2 480) MHz

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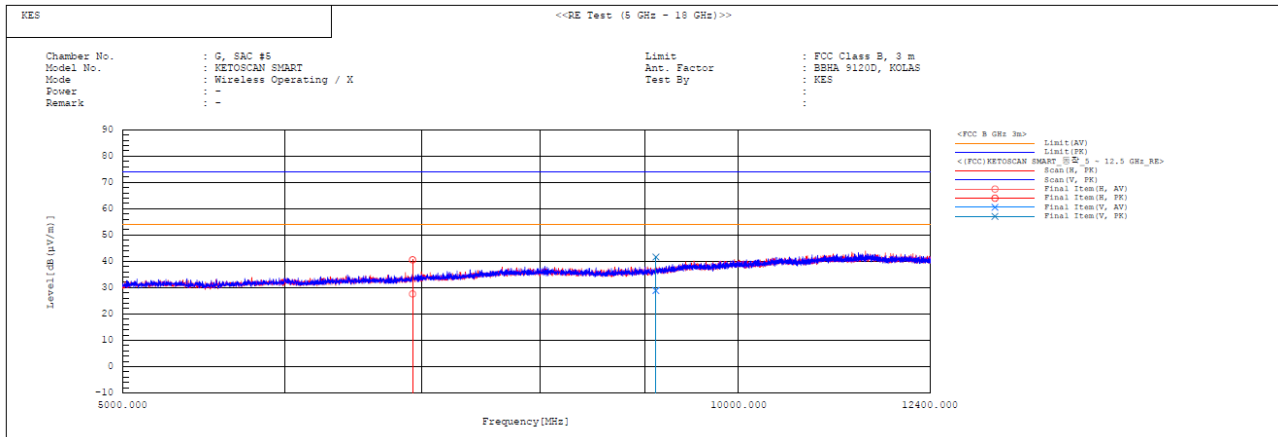


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- (5 ~ 12,4) GHz



- PK

Frequency (MHz)	Reading PK (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
6 930.500	40.400	H	1.000	35.940	7.600	34.830	49.110	74.000	24.890
9 111.000	38.500	V	1.000	37.760	8.590	34.330	50.520	74.000	23.480

- CAV

Frequency (MHz)	Reading CISPR AV (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
6 930.500	27.400	H	1.000	35.940	7.600	34.830	36.110	54.000	17.890
9 111.000	25.800	V	1.000	37.760	8.590	34.330	37.820	54.000	16.180

◆ 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