EMC TEST REPORT

Project No.	LBE20200290	**Issue No.**	0
Applicant	**Name of organization**	Samsung Electronics Co., Ltd.	
	Address	(Maetan-dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea	
	Date of application	March 10, 2020	
EUT	**Type of device**	☐ All other Receivers subject to part15 ☒ Class B Personal Computers and peripherals ☒ Other Class B digital devices and peripherals ☐ FM Broadcast Receiver	
	Equipment authorization	☒ Certification ☐ Supplier's Declaration of Conformity	
	FCC ID	A3LSMP610	
	Kind of product	Portable Device	
	Model No.	SM-P610	
	Variant Model No.	Refer to clause 4.6	
	Manufacturer	Samsung Electronics Vietnam Thai Nguyen (SEVT) Yen Binh Industrial Park, Dong Tien Ward, Pho Yen Town, Thai Nguyen Province, Vietnam	
Applied Standards		47 CFR Part 15, Subpart B, Class B / ANSI C63.4-2014	
Test Period		March 10, 2020 ~ March 11, 2020	
Issue date		March 17, 2020	

Test result : **Complied**

The equipment under test has found to be compliant with the applied standards.
(Refer to the attached test result for more detail.)

Tested by : Soo-Joon Kim	**Reviewed by** : Sung-Wook Choi
S. J. Kim	S. W. Choi

Global CS Center of Samsung Electronics Co., Ltd.
(Maetan-dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea

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1. Report Information

1.1 Revision history

No.	Date of Issue	Revised detailed information
Issue 0	17 March 2020	There are no revisions and this version is basic test report.

2. Summary of test results

2.1 Emission

The EUT has been tested according to the following specifications:

Applied	Test type	Applied standard	Result
☒	Conducted Disturbance (Mains port)	47 CFR Part 15 Subpart B / ANSI C63.4-2014 (Class B)	Complied
☒	Radiated Disturbance		Complied

3. General Information

3.1 Test facility

The Global CS Center is located on Samsung Electronics Co., Ltd. at (Maetan-dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea.
All testing are performed in Semi-anechoic chambers conforming to the site attenuation characteristics defined by ANSI C63.4, CISPR 32, CISPR 16-1-4 and Shielded rooms.
And all antennas are properly calibrated using ANSI C63.5:2017.

The Global CS Center is an ISO/IEC 17025:2005 accredited testing laboratory by the National Radio Research Agency with designation No. KR0004. for EMC testing.

4. Test Setup configuration

4.1 Test Peripherals

The cables used for these peripherals are either permanently attached by the peripheral manufacturer or coupled with an assigned cable as defined below.
The following is a listing of the EUT and peripherals utilized during the performance of EMC test:

Mark	Description	Model No.	Serial No.	Manufacturer / Trademark	FCC ID
A	Portable Device	SM-P610	-	SAMSUNG	A3LSMP610
B	Battery	EB-BT725ABU	-	SAMSUNG	-
C	Headset	EHS64AVFWE	-	SAMSUNG	-
D	Data Cable	EP-DR140AWE	-	SAMSUNG	-
E	Micro SD Card	64GB	-	SAMSUNG	-
F	Laptop Computer	Latitude5580	1WYRYM2	Dell	DoC
			D3HRYM2	Dell	DoC
G	Laptop AC Adapter	LA65NM130	5DEA	Dell	DoC
			5B3C	Dell	DoC
H	Mouse	SNJ-B138	Z5F8353	SAMSUNG	DoC
		AA-SM7PCPB	CNBA5903634ADV8J 31O3050	SAMSUNG	DoC
I	OTG Gender	EE-UG970	-	SAMSUNG	DoC
J	Router	DIR-806A	RF0F1D8011501	D-Link	DoC
			RF0F1D8011504	D-Link	DoC
K	Travel Adapter (9 V)	EP-TA200	R37MCGLJGN1DK3	SAMSUNG	-
	Travel Adapter (5 V)	EP-TA50JWE	R37N18A2YS6DK3	SAMSUNG	-
L	S-Pen	CP-911-01B	-	SAMSUNG	-

This Tablet device does not contain the minimum number of ports required for personal computer testing per ANSI C63.4, but the EUT is attached to a computer through its only available port, which represents worst case emissions. All other aspects of ANSI C63.4 testing requirements are maintained.

4.2 EUT operating mode

To achieve compliance applied standard specification including JAB and JBP requirement, the following mode(s) were made during compliance testing:

4.2.1 Conducted Emission

No.	Operating mode
1	Camera (rear) + Charging (w/ 9 V TA)
2	Camera (rear) + Charging (w/ 5 V TA)
3	Camera (front) + Charging (w/ 9 V TA)
4	Camera (front) + Charging (w/ 5 V TA)
5	Video + Audio playback from internal memory data + EMR Touch Solution(S-Pen) + Charging (w/ 9 V TA)
6	Video + Audio playback from internal memory data + EMR Touch Solution(S-Pen) + Charging (w/ 5 V TA)
7	USB Data Communication with PC (from external memory data)

4.2.2 Radiated Emission

No.	Operating mode
1	Camera (rear) + Charging (w/ 9 V TA)
2	Camera (rear) + Charging (w/ 5 V TA)
3	Camera (front)
4	Video + Audio playback from internal memory data + EMR Touch Solution(S-Pen)
5	USB Data Communication with PC (from external memory data)

4.3 Details of Sampling

Customer selected, single unit.

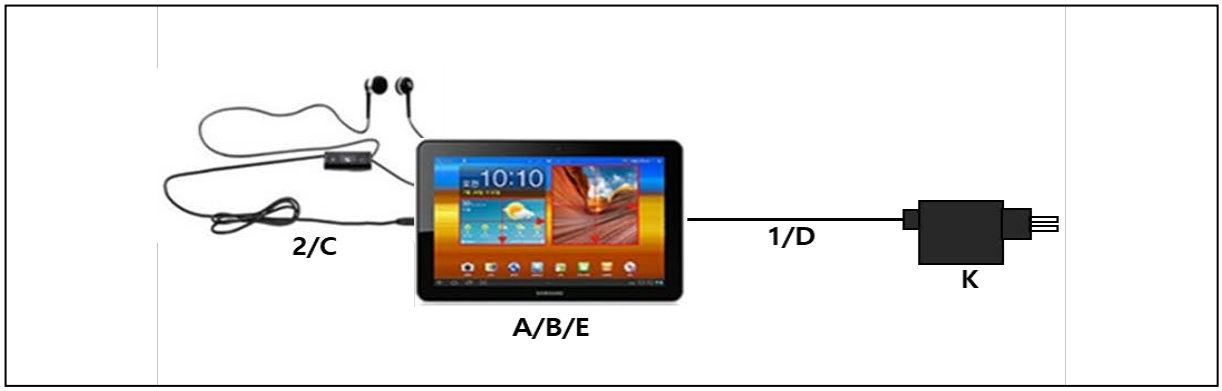
4.4 Used cable description

The EUT is configured, installed, arranged and operated in a manner consistent with typical applications. Interface cables/loads/devices are connected to at least one of each type of interface port of the EUT, and where practical, each cable shall be terminated in a device typical of actual usage. The type(s) of interconnecting cables to be used and the interface port (of the EUT) to which these were connected:

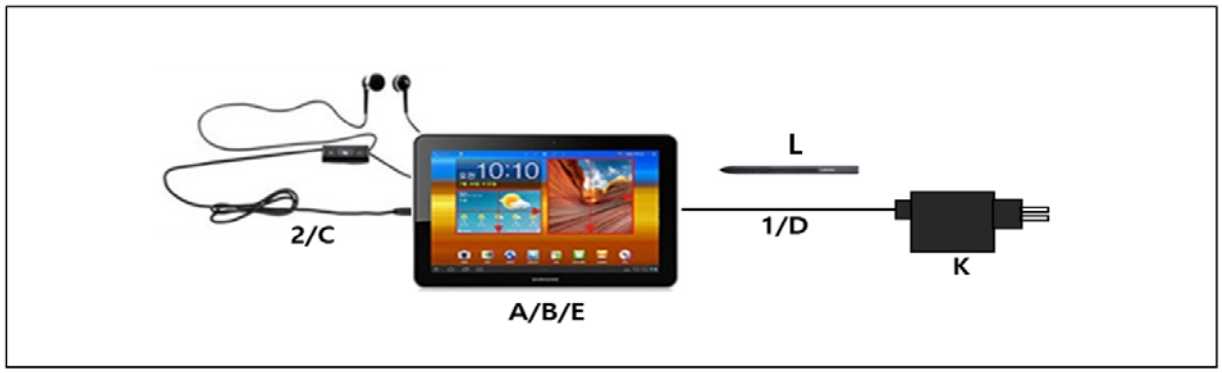
No.	Connected cable	Length [m]	Shielded [Y/N]	Note
1	Data Cable	0.8	Y	From EUT to Laptop Computer / From EUT to Travel Adapter
2	Headset	1.2	N	For EUT
3	Power	1.8	N	From Laptop Computer to AC Adapter
4	Power	1.5	N	For Laptop AC Adapter
5	LAN	1.5	N	From Laptop Computer to Router
6	USB	0.8	Y	From Laptop Computer to Router for DC Power
7	USB	1.8	Y	From OTG Gender to Mouse

4.5 Test arrangement

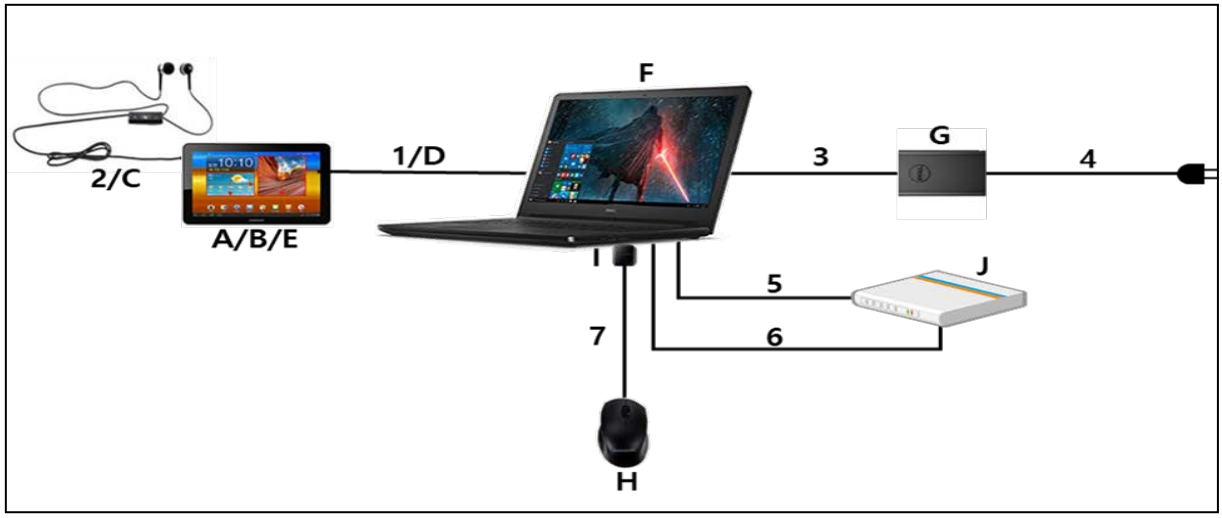
4.5.1 Conducted Emission



[Mode 1 - 4]

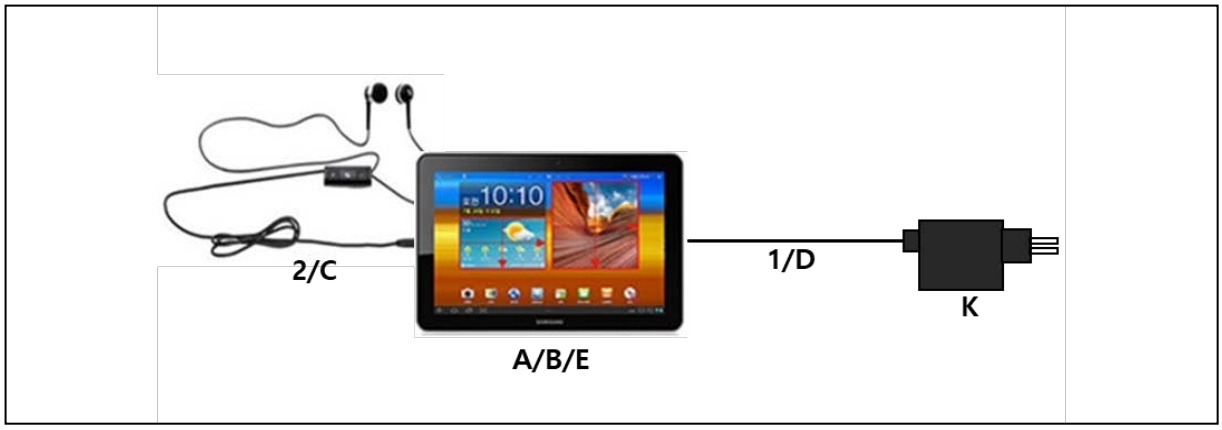


[Mode 5 - 6]



[Mode 7]

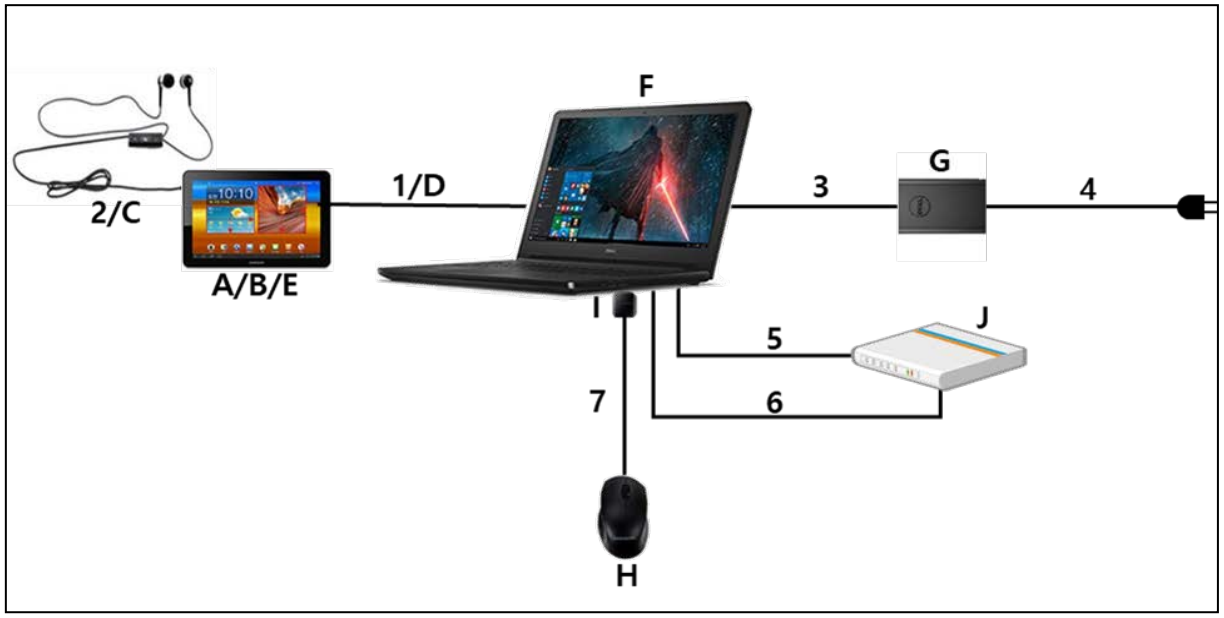
4.5.2 Radiated Emission



[Mode 1 - 2]

[Mode 3]

[Mode 4]



[Mode 5]

4.6 EUT Description

The EUT is a tablet type Portable Device which can incorporate Bluetooth, ANT+, Wi-Fi, GNSS, Camera, Audio and Video.

4.6.1 The variant models

- None

4.7 EUT Frequencies

The highest frequencies (Generated and used)	Frequency [MHz]
Wi-Fi	5 825

4.8 Test configuration and condition

The system was configured for testing in a typical fashion that a customer would normally use. Cables were attached to each of the available I/O Ports. Where applicable, peripherals were attached to the I/O cables. All the external I/O ports are exercised, as well as internal and the external SD card, by writing and reading arbitrary data or charging with TA.

The EUT was investigated in three orientations and the worst case orientation is reported.

The video and audio were repetitively played with earphone connected.

The camera of the EUT was operated continuously.

Power source for the EUT operating was supplied by CVCF made by the Pacific Corp.

- Test Voltage : AC 120 V, 60 Hz

4.9 Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus: (According to CISPR 16-4-2 and UKAS M3003)

4.9.1 Emission

Test type		Measurement uncertainty (C.L. 95 %, k = 2)
Conducted disturbance	AC Mains	2.83 dB
Radiated Disturbance (Below 1 GHz)	Horizontal	4.99 dB
	Vertical	4.91 dB
Radiated Disturbance (Above 1 GHz)	Horizontal	5.11 dB
	Vertical	5.12 dB

5. Results of individual test

5.1 Conducted disturbance

The EUT is connected to a LISN via travel adapter. If the EUT is connected to the Laptop Computer USB port, the Laptop AC adapter is connected to a LISN.

Both conducted lines are measured in Quasi-Peak and CISPR-Average mode, including the worst-case data points for each tested configuration. The EUT measured in accordance with the methods described in standards.

Limits for conducted disturbance at the mains ports of Class B ITE

Frequency range Limits [MHz]	Resolution Bandwidth [kHz]	Limits [dB(μV)]	
		Quasi-peak	Average
0,15 to 0,50	9	66 to 56	56 to 46
0,50 to 5	9	56	46
5 to 30	9	60	50
NOTE 1 The lower limit shall apply at the transition frequency. NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.			

5.1.1 Test instrumentation

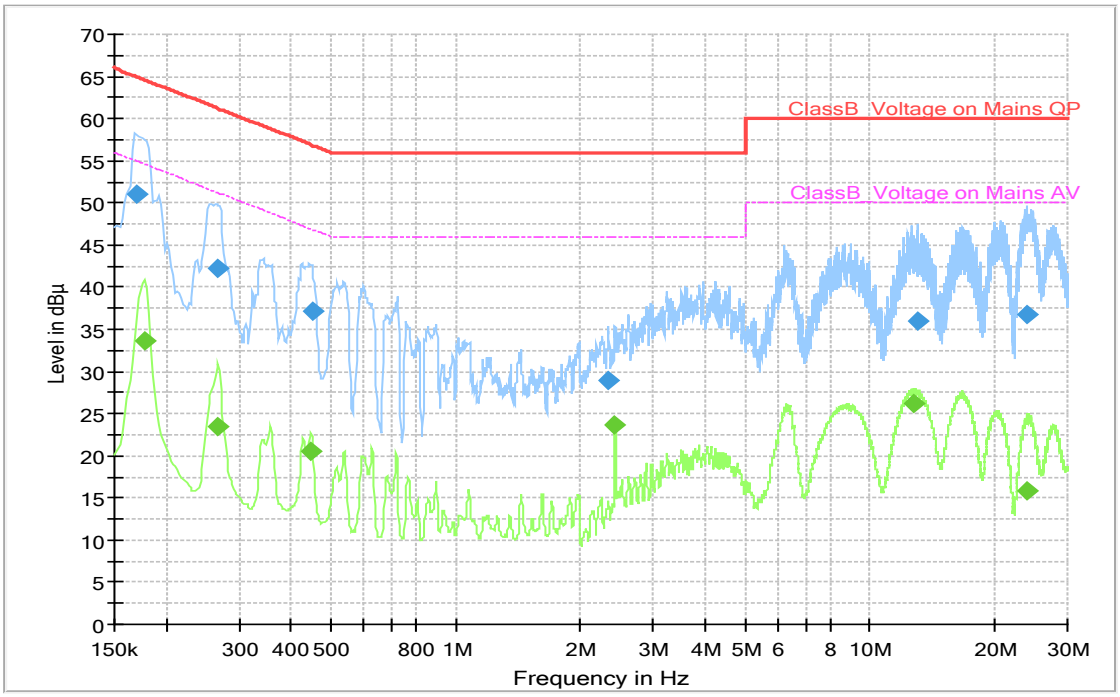
EMC No.	Test Instrument	Model name	Manufacturer	Serial No.	Next Calibration	
					Date	Interval (Month)
E5I-017	EMI Test Receiver	ESU8	R&S	100483	2021-01-20	12
E5I-127	LISN	ENV216	R&S	102061	2020-08-01	12
-	Test software	EMC32	R&S	Ver 9.26.01	-	-

5.1.2 Temperature and humidity condition

Test date	2020-03-10	**Test engineer**	Soo-Joon Kim
Climate condition	Ambient temperature	(21.7 ~ 21.9) ℃	Limit (15.0 to 35.0) ℃
	Relative humidity	(44.1 ~ 44.7) % R.H.	Limit (25.0 to 75.0) % R.H.
	Atmospheric pressure	(102.4 ~ 102.6) kPa	Limit (86.0 to 106.0) kPa
Test place	Shield Room (SR8)		

5.1.3 Test results

☐ Operating Mode 1: AC Mains

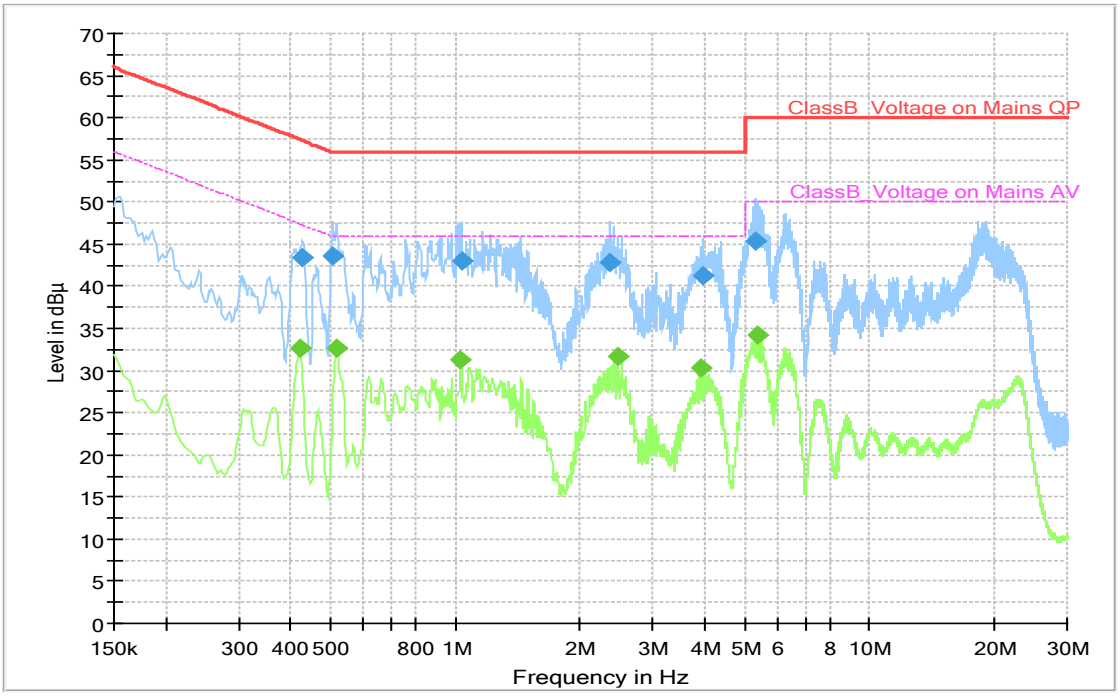


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170	51.0	---	64.9	13.9	N	10.3
0.177	---	33.6	54.6	21.0	N	10.3
0.267	---	23.5	51.2	27.7	N	9.9
0.267	42.2	---	61.2	19.0	N	9.9
0.447	---	20.6	46.9	26.3	L1	10.1
0.449	37.1	---	56.9	19.8	N	10.2
2.335	29.0	---	56.0	27.0	L1	9.9
2.425	---	23.7	46.0	22.3	L1	9.9
12.703	---	26.3	50.0	23.7	N	10.4
13.038	35.9	---	60.0	24.1	N	10.4
24.065	36.7	---	60.0	23.3	N	10.7
24.081	---	15.8	50.0	34.2	N	10.7

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 2: AC Mains

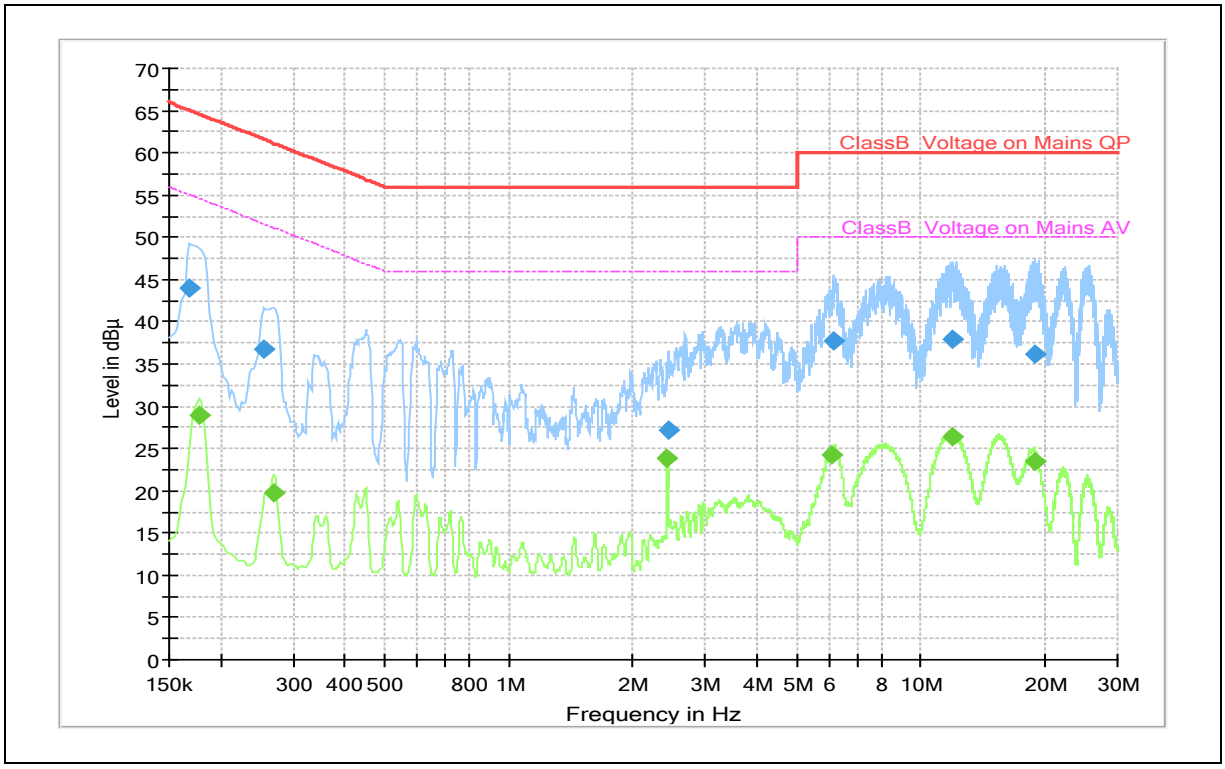


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.420	---	32.7	47.4	14.7	N	10.2
0.429	43.3	---	57.3	14.0	N	10.2
0.506	43.6	---	56.0	12.4	N	10.2
0.517	---	32.6	46.0	13.4	N	10.2
1.032	---	31.2	46.0	14.8	N	10.0
1.034	42.9	---	56.0	13.1	N	10.0
2.369	42.9	---	56.0	13.1	N	9.9
2.474	---	31.7	46.0	14.3	N	9.9
3.921	---	30.2	46.0	15.8	N	10.0
3.971	41.3	---	56.0	14.7	N	10.0
5.307	45.4	---	60.0	14.6	N	10.0
5.366	---	34.1	50.0	15.9	N	10.0

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 3: AC Mains

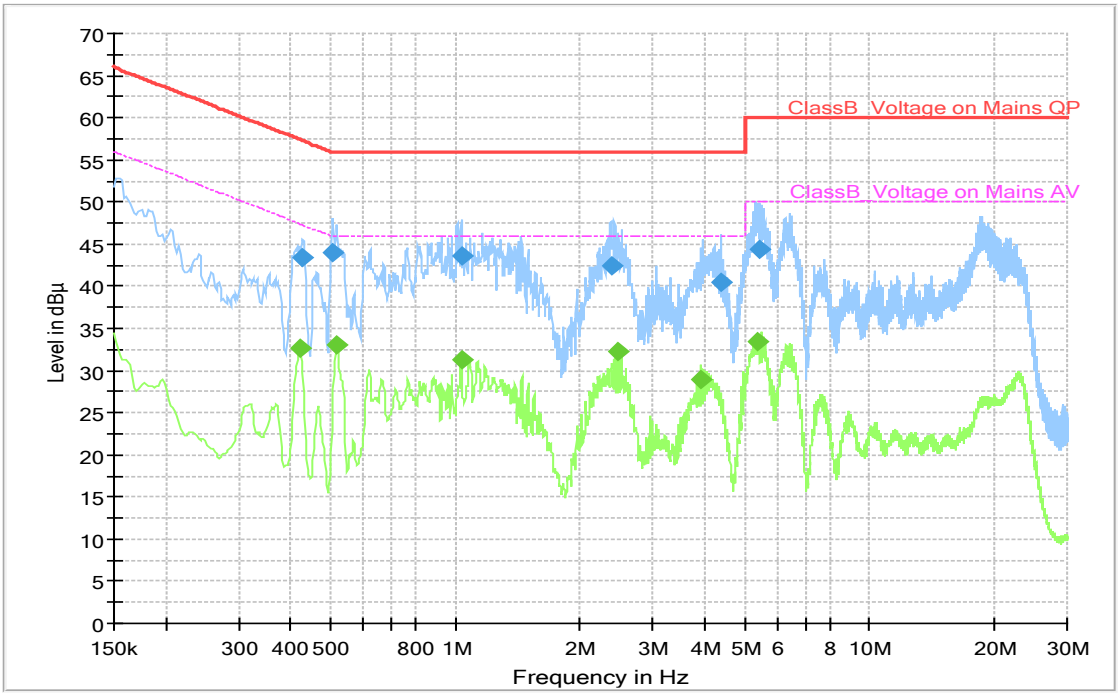


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.168	44.0	---	65.1	21.1	N	10.3
0.177	---	28.9	54.6	25.7	N	10.3
0.256	36.8	---	61.6	24.8	N	9.9
0.269	---	19.8	51.1	31.3	N	9.9
2.427	---	23.9	46.0	22.1	L1	9.9
2.438	27.3	---	56.0	28.7	N	9.9
6.083	---	24.3	50.0	25.7	N	10.1
6.173	37.7	---	60.0	22.3	N	10.1
11.936	38.0	---	60.0	22.0	N	10.3
11.938	---	26.5	50.0	23.5	N	10.3
18.845	---	23.4	50.0	26.6	N	10.6
18.980	36.1	---	60.0	23.9	N	10.6

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 4: AC Mains

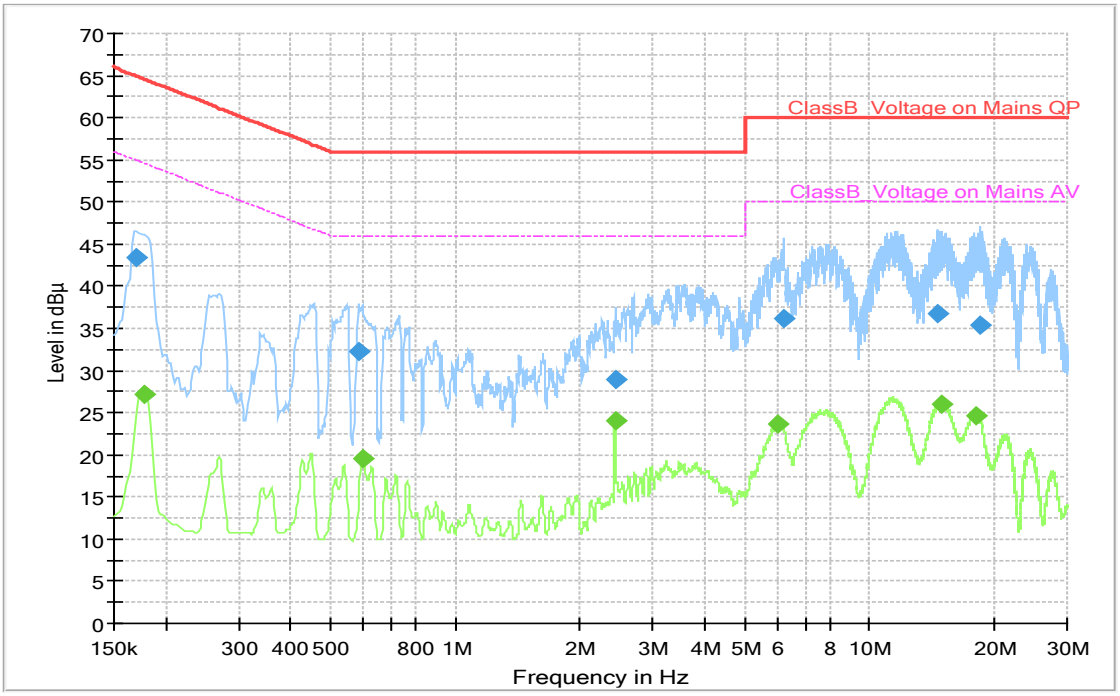


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.420	---	32.7	47.4	14.7	N	10.2
0.429	43.4	---	57.3	13.9	N	10.2
0.506	43.9	---	56.0	12.1	N	10.2
0.517	---	33.1	46.0	12.9	N	10.2
1.034	---	31.3	46.0	14.7	N	10.0
1.034	43.6	---	56.0	12.4	N	10.0
2.375	42.5	---	56.0	13.5	N	9.9
2.479	---	32.2	46.0	13.8	N	9.9
3.930	---	29.0	46.0	17.0	N	10.0
4.389	40.4	---	56.0	15.6	N	10.0
5.377	---	33.4	50.0	16.6	N	10.0
5.424	44.4	---	60.0	15.6	N	10.0

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 5: AC Mains

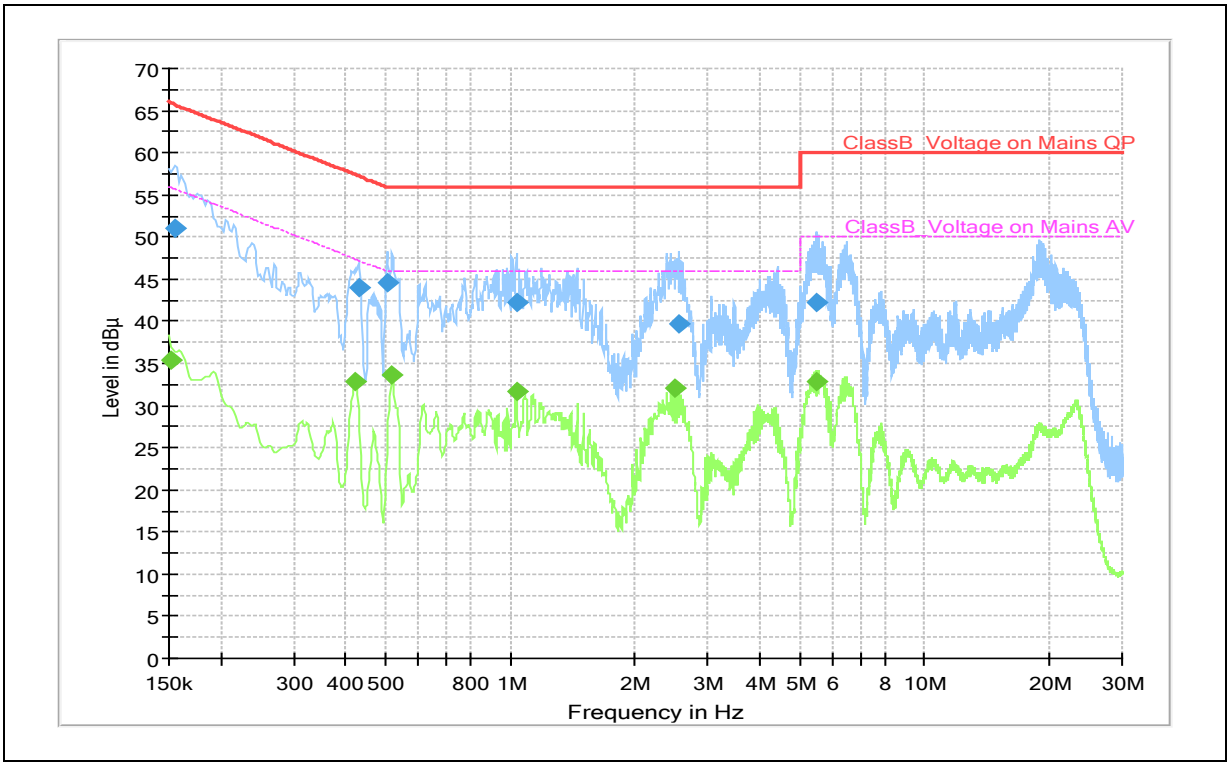


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170	43.5	---	64.9	21.5	L1	10.2
0.177	---	27.1	54.6	27.5	L1	10.2
0.584	32.3	---	56.0	23.7	N	10.2
0.596	---	19.5	46.0	26.5	N	10.2
2.429	---	24.0	46.0	22.0	L1	9.9
2.434	29.0	---	56.0	27.0	L1	9.9
5.980	---	23.7	50.0	26.3	N	10.1
6.205	36.2	---	60.0	23.8	N	10.1
14.548	36.8	---	60.0	23.2	N	10.4
14.917	---	26.1	50.0	23.9	N	10.5
18.040	---	24.6	50.0	25.4	N	10.6
18.584	35.5	---	60.0	24.5	N	10.6

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 6: AC Mains

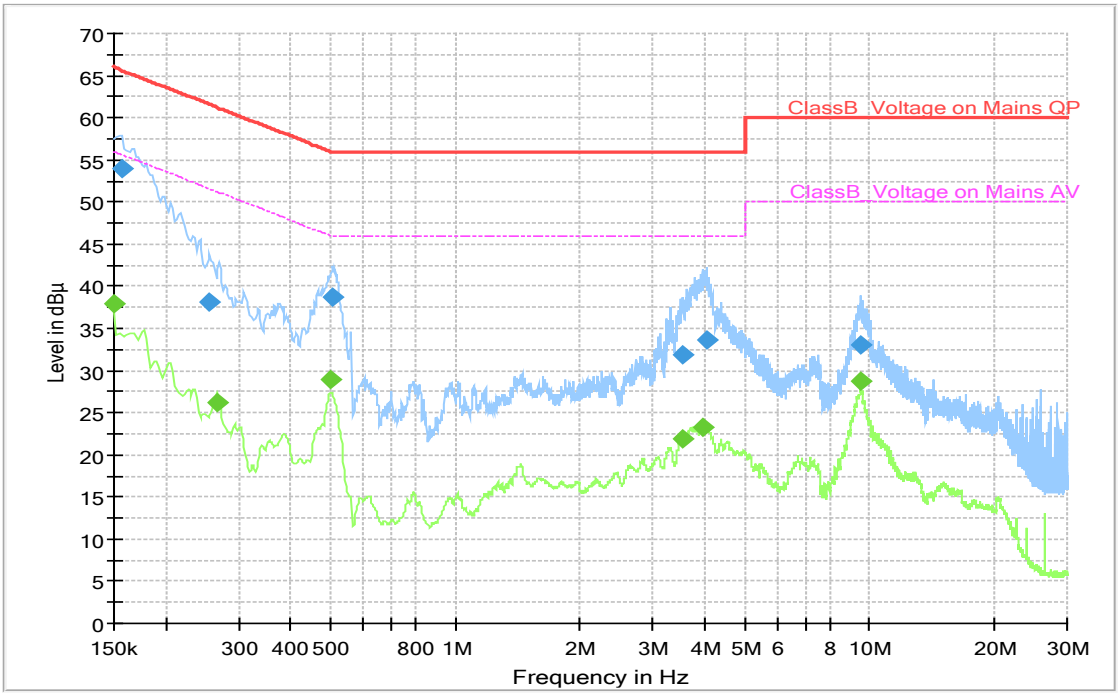


QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.152	---	35.4	55.9	20.5	N	10.0
0.155	51.1	---	65.8	14.7	N	10.0
0.425	---	32.8	47.4	14.6	N	10.2
0.431	43.9	---	57.2	13.3	N	10.2
0.506	44.5	---	56.0	11.5	N	10.2
0.519	---	33.7	46.0	12.3	N	10.2
1.037	---	31.6	46.0	14.4	N	10.0
1.039	42.2	---	56.0	13.8	N	10.0
2.486	---	32.0	46.0	14.0	N	9.9
2.544	39.6	---	56.0	16.4	N	9.9
5.496	---	32.8	50.0	17.2	N	10.1
5.501	42.2	---	60.0	17.8	N	10.1

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 7: AC Mains



QP / CAV final measurement results table:

Frequency (MHz)	QP (dBµV)	CAV (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150	---	38.0	56.0	18.0	N	9.8
0.157	54.0	---	65.6	11.6	L1	10.0
0.256	38.2	---	61.6	23.4	L1	9.7
0.267	---	26.1	51.2	25.1	L1	9.8
0.501	---	28.9	46.0	17.1	L1	10.1
0.506	38.7	---	56.0	17.3	L1	10.1
3.523	---	21.8	46.0	24.2	L1	9.8
3.532	31.8	---	56.0	24.2	L1	9.8
3.946	---	23.3	46.0	22.7	N	9.8
4.067	33.6	---	56.0	22.4	N	9.8
9.535	---	28.8	50.0	21.2	L1	9.8
9.551	33.0	---	60.0	27.0	L1	9.8

Note 1) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.
Note 2) Level (QP and/or CAV) = Meter Reading (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
Margin (QP and/or CAV) = Limit – Level (QP and/or CAV)
QP = Quasi-Peak, CAV = CISPR-Average, Corr. = Correction Factor

5.2 Radiated disturbance

The following data lists the significant emission frequencies, measured levels, correction factors (for antenna and cables), orientation of table, polarization and height of antenna, the corrected reading, the limit, and the amount of margin.

Peak measurements were made over the changeable frequency range 30 MHz to 1 GHz at a measurement distance of 3 m for the following antenna and turntable arrangements:

Antenna Height [cm]	Antenna Polarisation	Resolution Bandwidth [kHz]	Video Bandwidth [kHz]	Turntable position [degrees]
100 ~ 400	Horizontal, Vertical	120	300	Continuous

Measurements within 6 dB of the limit were then maximized by adjusting turntable position.
Final measurements were made using quasi-peak detector.

Peak/CISPR-Average measurements were made over the changeable frequency range 1 GHz to 40 GHz or 5th harmonics of the highest frequency generated or used in the device or on which the device operates or tunes at a measurement distance of 3 m for the following antenna and turntable arrangements. The measurements above 1 GHz were performed with the bore-sighting antenna aimed at the EUT.

Antenna Height [cm]	Antenna Polarisation	Resolution Bandwidth [MHz]	Video Bandwidth [MHz]	Turntable position
100 ~ 400	Horizontal, Vertical	1	3	Continuous

Measurements within 6 dB of the limit were then maximized by adjusting turntable position.
Final measurements were made using peak and CISPR-average detectors.

Limits for radiated disturbance of Class B ITE at a measuring distance of 3 m and 10 m

Frequency range Limits [MHz]	Field Strength		
	3 m [μV/m]	3 m [dB(μV/m)]	10 m [dB(μV/m)]
30 to 88	100	40.0	29.5
88 to 216	150	43.5	33.0
216 to 960	200	46.0	35.5
Above 960	500	54.0	43.5

Note) Distance correction formula from D_1(3m) to D_2(10m)
: Limit at D_2 = Limit at D_1 + 20log(D_1 /D_2)

Results checked manually; and points close to the limit line were re-measured.

5.2.1 Test instrumentation

EMC No.	Test Instrument	Model name	Manufacturer	Serial No.	Next Calibration	
					Date	Interval (Month)
E5I-020	EMI Test Receiver	ESU40	R&S	100375	2020-09-02	12
E5I-015	EMI Test Receiver	ESU8	R&S	100481	2020-06-28	12
E5I-036	Horn Antenna	HF907	R&S	100507	2020-06-15	24
E5I-040	Signal Conditioning Unit	SCU-18	R&S	10210	2020-04-05	12
E5I-037	WideBand Horn Antenna	WBH 18-40K	R&S	11201	2021-01-31	24
E5I-042	Signal Conditioning Unit	SCU-40A	R&S	10004	2020-09-11	12
E5I-070	BiLog Antenna	CBL6112D	TESEQ	35383	2020-10-12	24
E5I-121	BiLog Antenna	CBL6112D	TESEQ	36999	2020-10-12	24
E5I-075	Preamplifier	310N	SONOMA	332018	2020-05-27	12
E5I-076	Preamplifier	310N	SONOMA	332019	2020-05-27	12
-	Test software	EP7RE	TOYO	Ver 5.8.2	-	-
-	Test software	EMC32	R&S	Ver 9.25.00	-	-

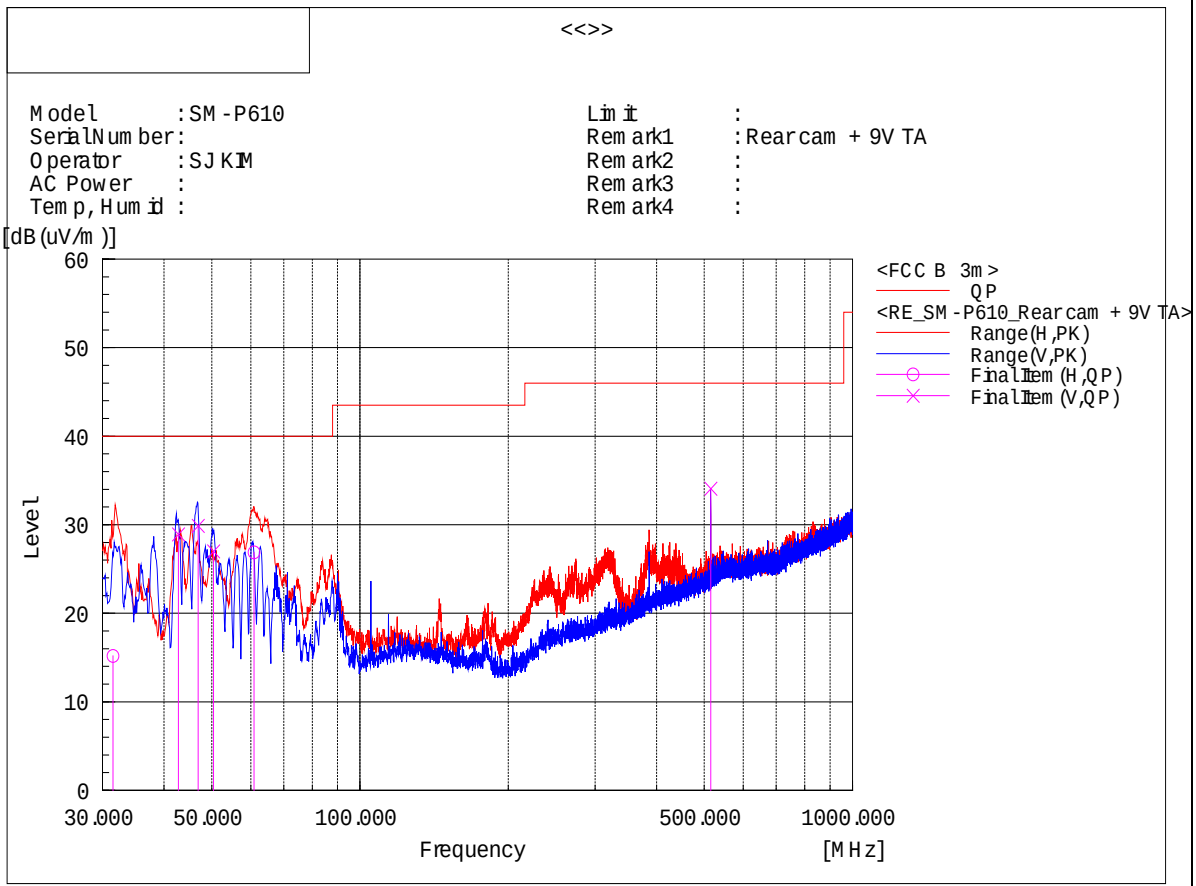
5.2.2 Temperature and humidity condition

Test date	2020-03-11	**Test engineer**	Soo-Joon Kim
Climate condition	Ambient temperature	(21.5 ~ 21.8) ℃	Limit (15.0 to 35.0) ℃
	Relative humidity	(41.2 ~ 41.8) % R.H.	Limit (25.0 to 75.0) % R.H.
	Atmospheric pressure	(101.8 ~ 102.1) kPa	Limit (86.0 to 106.0) kPa
Test place	Semi-Anechoic Chamber (SAC5)		

5.2.3 Test results

☐ Operating Mode 1

- Frequencies below 1 GHz

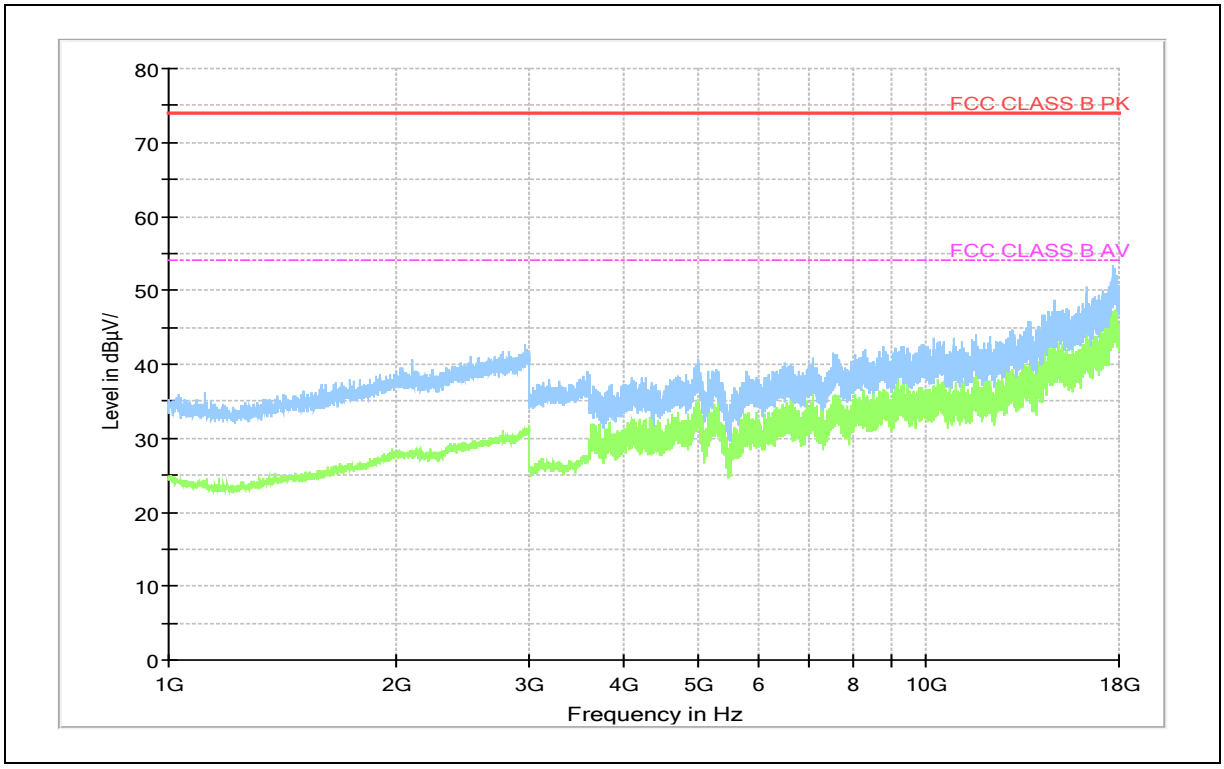


Final Result

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]
1	31.526	H	22.8	-7.6	15.2	40.0	24.8	103	267
2	42.773	V	41.8	-12.9	28.9	40.0	11.1	103	357
3	46.898	V	45.3	-15.4	29.9	40.0	10.1	103	347
4	50.424	V	44.3	-17.3	27.0	40.0	13.0	103	341
5	60.911	H	45.9	-19.0	26.9	40.0	13.1	320	268
6	515.137	V	38.6	-4.5	34.1	46.0	11.9	106	1

Note1) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Result (QP) = Reading (QP) + c.f (Antenna Factor + Cable Loss - Amp. Gain)
Margin (QP) = Limit – Level (QP)
QP = Quasi-Peak, c.f = Correction Factor

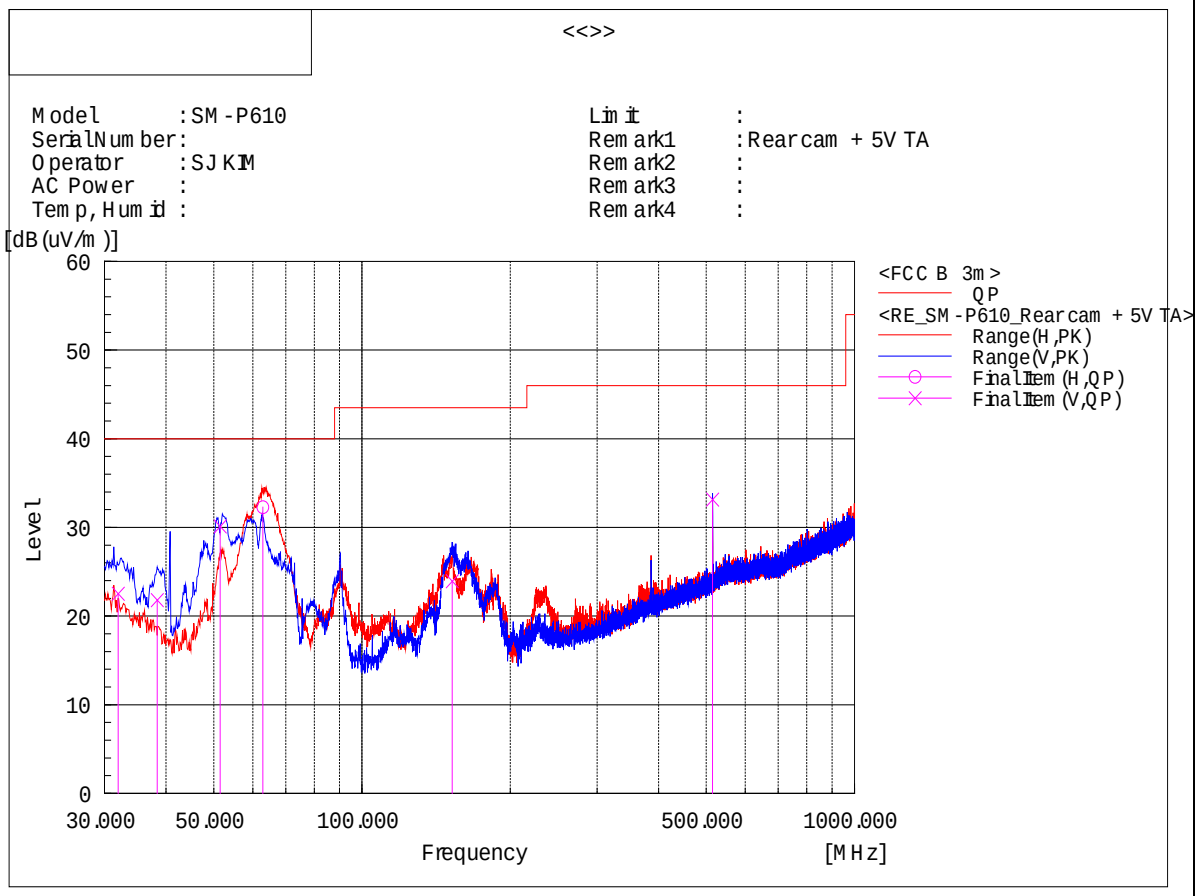
- Frequencies above 1 GHz



Note 1) We have also tested from 18 GHz to 30 GHz and found no emissions
Note 2) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Level (PK and/or CAV) = Reading (PK and/or CAV) + Corr. (Antenna Factor + Cable Loss - Amp. Gain)
Margin (PK and/or CAV) = Limit – Level (PK and/or CAV)
PK = Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 2

- Frequencies below 1 GHz



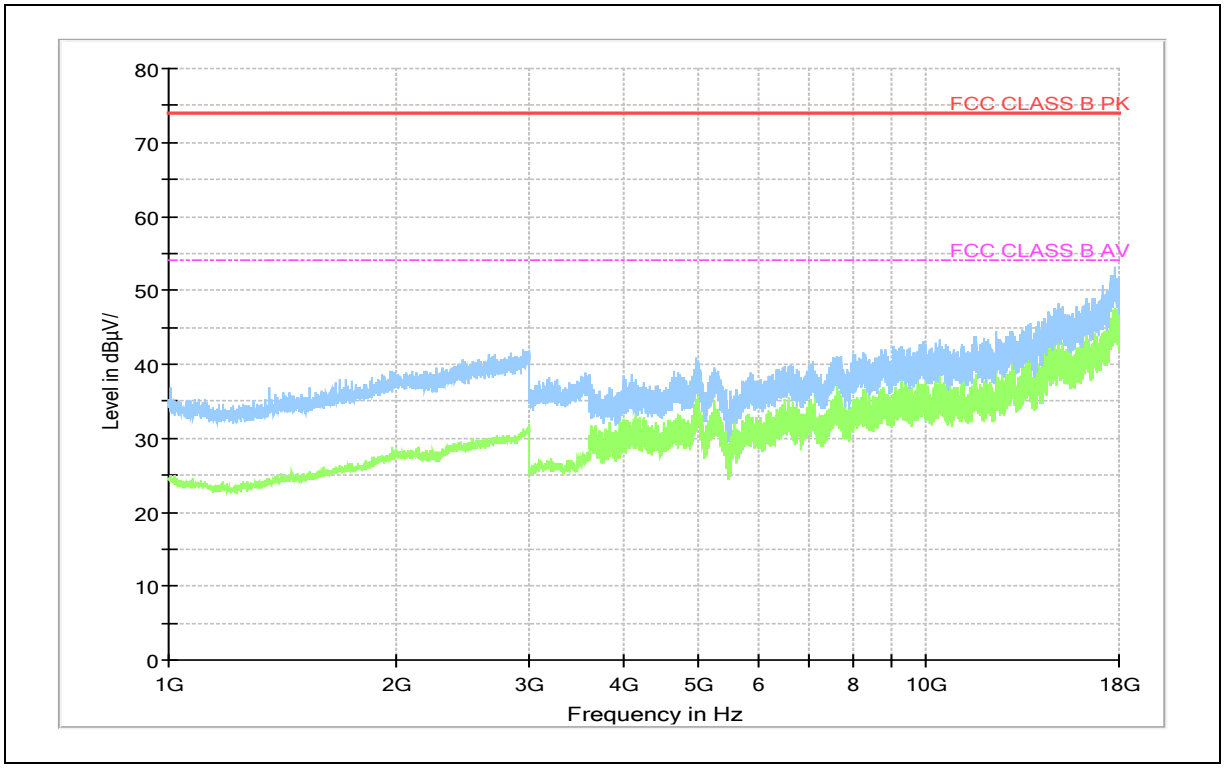
Final Result

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]
1	31.990	V	30.3	-7.8	22.5	40.0	17.5	103	359
2	38.365	V	32.2	-10.4	21.8	40.0	18.2	101	346
3	51.541	V	47.8	-17.7	30.1	40.0	9.9	103	1
4	62.929	H	51.3	-19.0	32.3	40.0	7.7	308	267
5	152.407	V	37.9	-14.0	23.9	43.5	19.6	103	151
6	515.112	V	37.6	-4.5	33.1	46.0	12.9	106	18

Note1) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Result (QP) = Reading (QP) + c.f (Antenna Factor + Cable Loss - Amp. Gain)
Margin (QP) = Limit – Level (QP)
QP = Quasi-Peak, c.f = Correction Factor

.

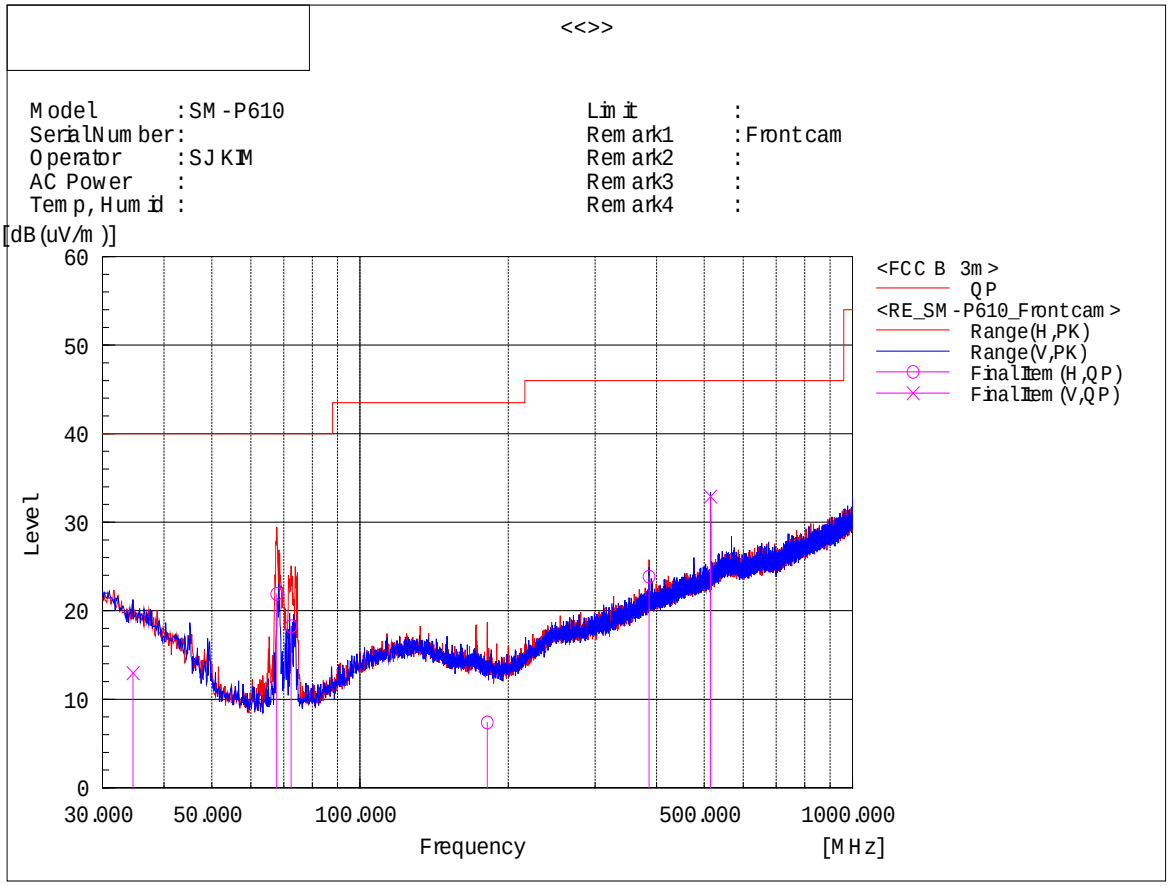
- Frequencies above 1 GHz



Note 1) We have also tested from 18 GHz to 30 GHz and found no emissions
Note 2) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Level (PK and/or CAV) = Reading (PK and/or CAV) + Corr. (Antenna Factor + Cable Loss - Amp. Gain)
Margin (PK and/or CAV) = Limit – Level (PK and/or CAV)
PK = Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 3

- Frequencies below 1 GHz

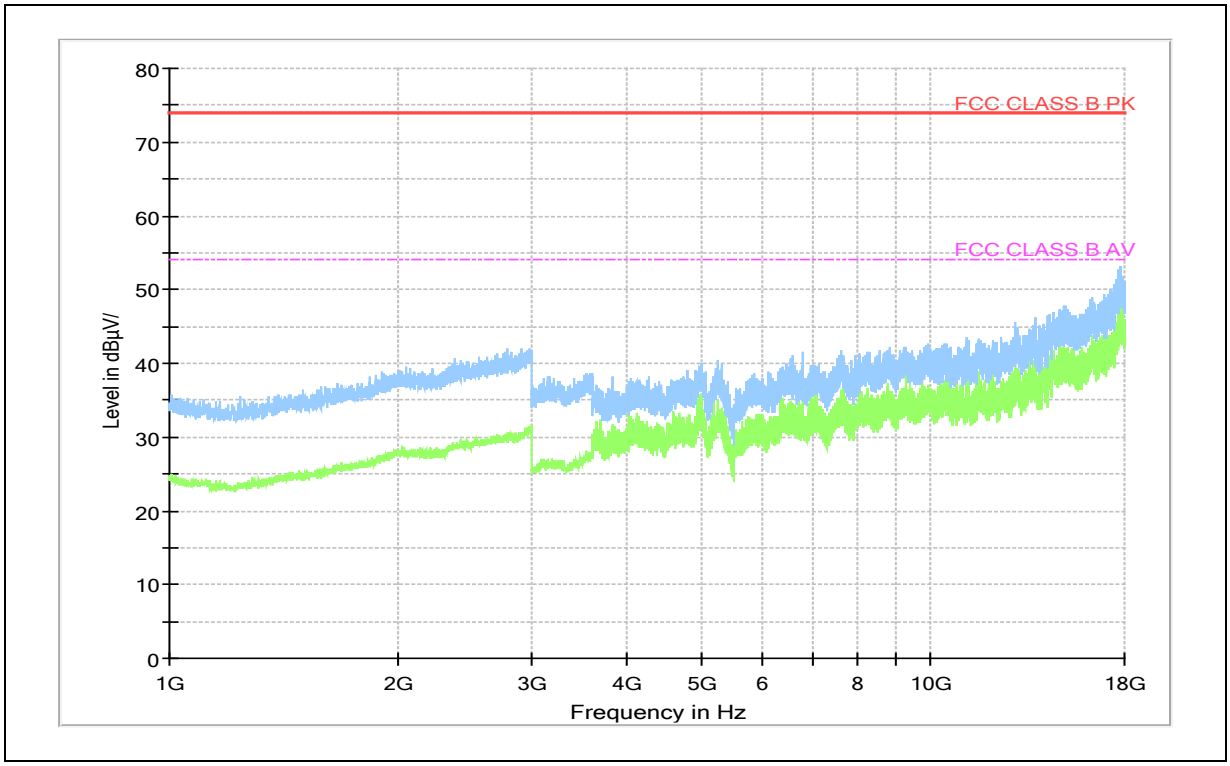


Final Result

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]
1	34.608	V	21.8	-8.8	13.0	40.0	27.0	106	80
2	67.709	H	40.7	-18.8	21.9	40.0	18.1	292	80
3	72.438	H	36.8	-18.6	18.2	40.0	21.8	237	284
4	181.199	H	22.0	-14.6	7.4	43.5	36.1	123	281
5	386.354	H	31.1	-7.3	23.8	46.0	22.2	187	359
6	515.121	V	37.4	-4.5	32.9	46.0	13.1	109	2

Note1) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Result (QP) = Reading (QP) + c.f (Antenna Factor + Cable Loss - Amp. Gain)
Margin (QP) = Limit – Level (QP)
QP = Quasi-Peak, c.f = Correction Factor

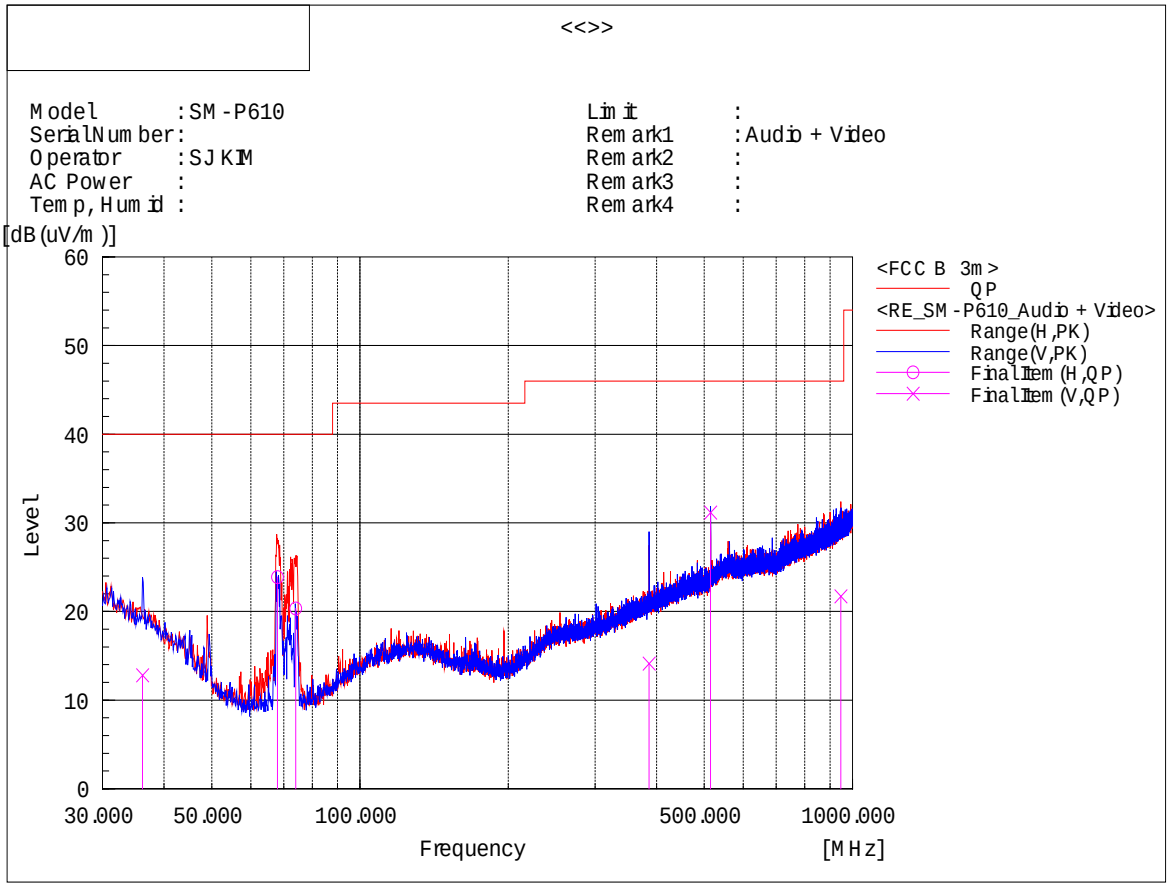
- Frequencies above 1 GHz



Note 1) We have also tested from 18 GHz to 30 GHz and found no emissions
Note 2) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Level (PK and/or CAV) = Reading (PK and/or CAV) + Corr. (Antenna Factor + Cable Loss - Amp. Gain)
Margin (PK and/or CAV) = Limit – Level (PK and/or CAV)
PK = Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 4

- Frequencies below 1 GHz

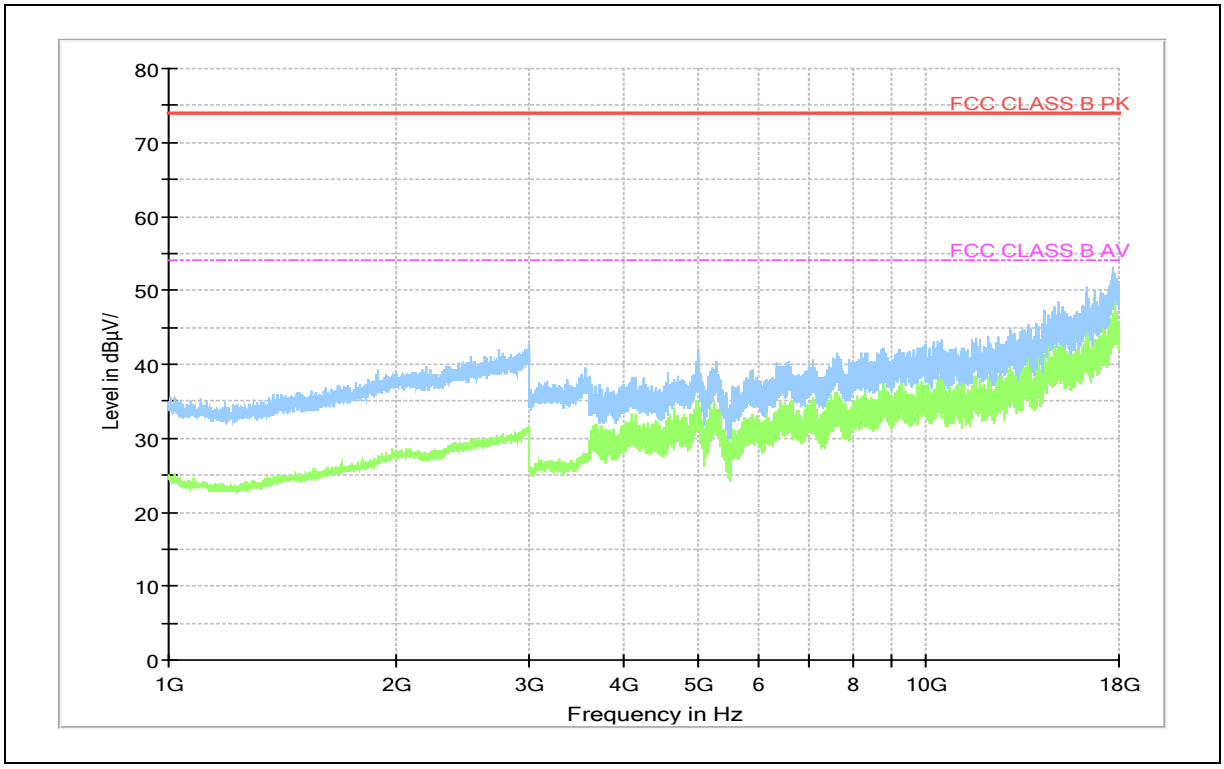


Final Result

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]
1	36.184	V	22.2	-9.4	12.8	40.0	27.2	137	93
2	67.973	H	42.7	-18.8	23.9	40.0	16.1	259	57
3	74.066	H	38.9	-18.6	20.3	40.0	19.7	254	41
4	386.354	V	21.4	-7.3	14.1	46.0	31.9	368	55
5	515.122	V	35.7	-4.5	31.2	46.0	14.8	109	5
6	946.538	V	20.9	0.8	21.7	46.0	24.3	397	128

Note1) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Result (QP) = Reading (QP) + c.f (Antenna Factor + Cable Loss - Amp. Gain)
Margin (QP) = Limit – Level (QP)
QP = Quasi-Peak, c.f = Correction Factor

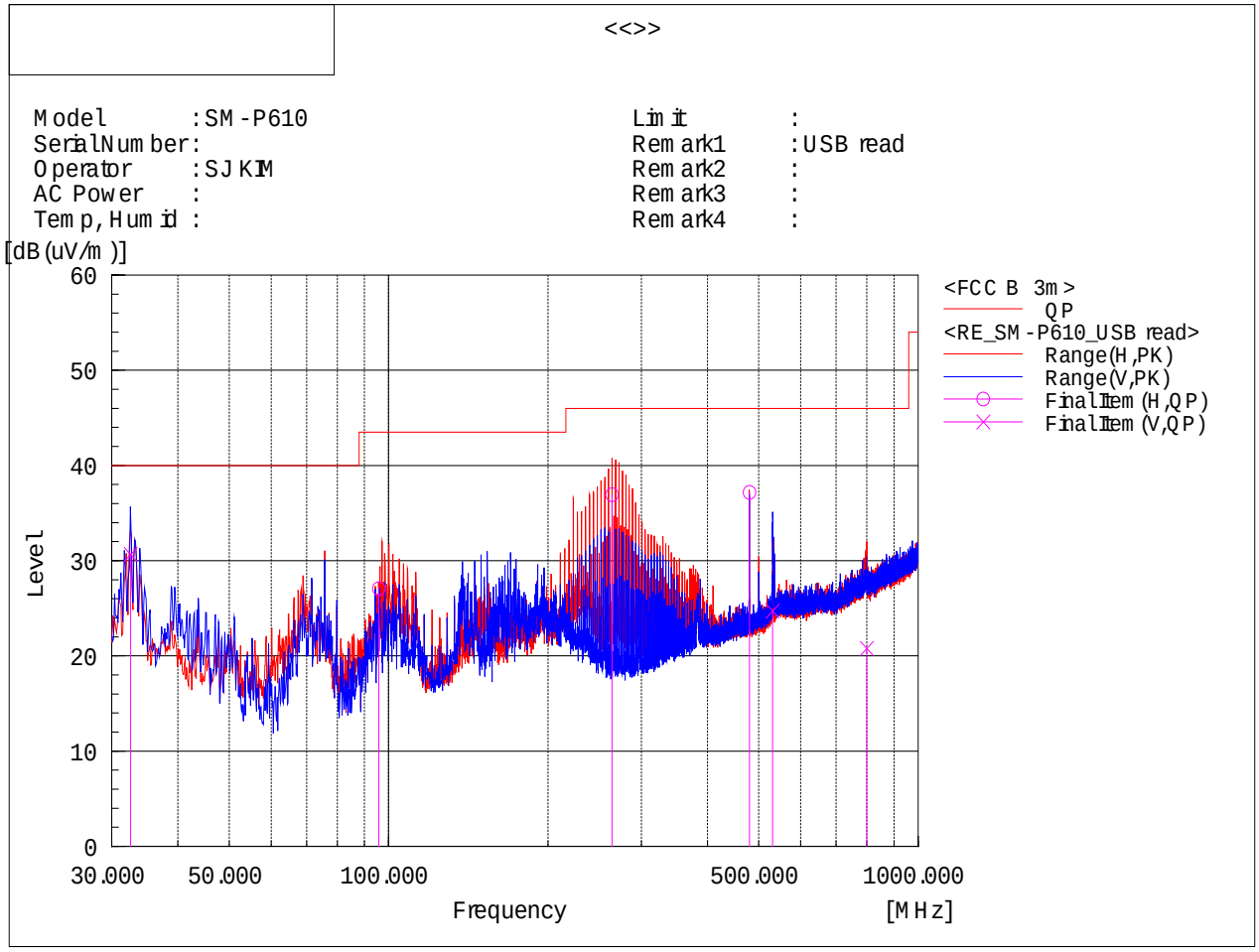
- Frequencies above 1 GHz



Note 1) We have also tested from 18 GHz to 30 GHz and found no emissions
Note 2) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Level (PK and/or CAV) = Reading (PK and/or CAV) + Corr. (Antenna Factor + Cable Loss - Amp. Gain)
Margin (PK and/or CAV) = Limit – Level (PK and/or CAV)
PK = Peak, CAV = CISPR-Average, Corr. = Correction Factor

☐ Operating Mode 5

- Frequencies below 1 GHz

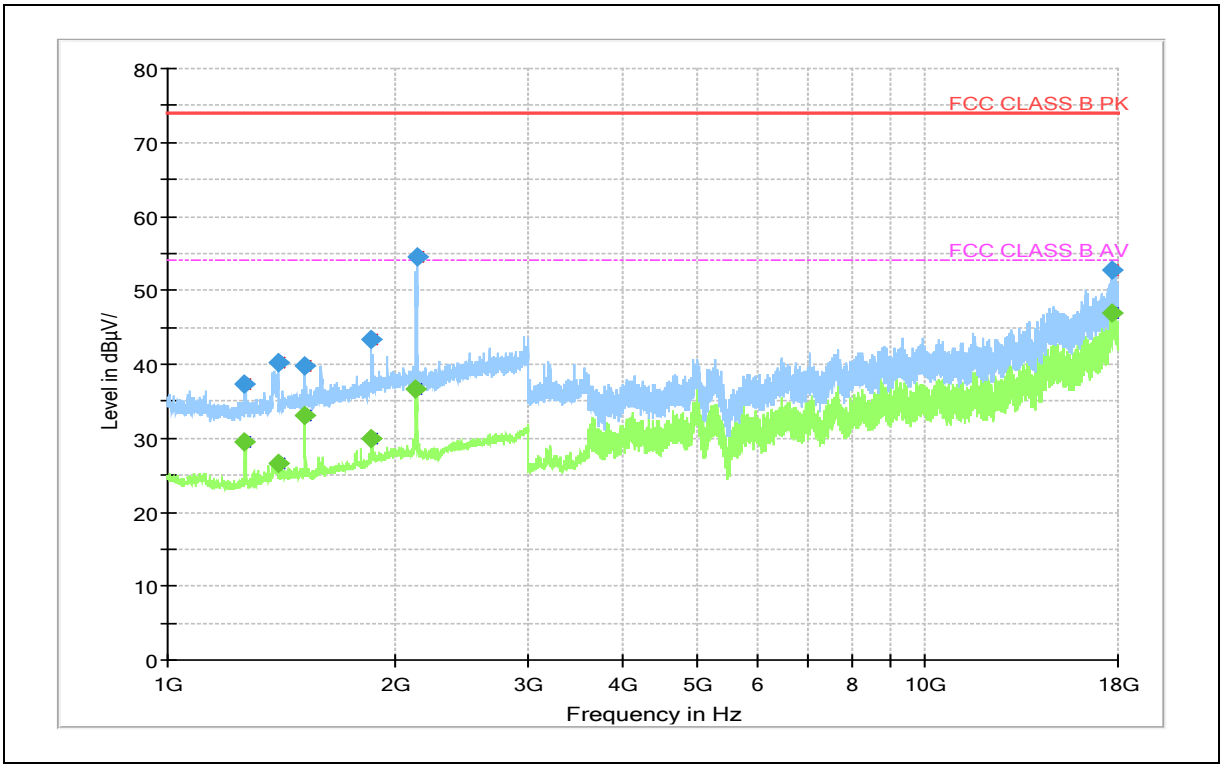


Final Result

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]
1	32.558	V	38.7	-8.0	30.7	40.0	9.3	100	306
2	95.821	H	42.0	-14.9	27.1	43.5	16.4	324	291
3	264.176	H	47.5	-10.6	36.9	46.0	9.1	100	249
4	480.004	H	42.6	-5.4	37.2	46.0	8.8	190	357
5	531.044	V	28.5	-3.8	24.7	46.0	21.3	102	338
6	799.373	V	22.1	-1.3	20.8	46.0	25.2	147	11

Note1) Receiving antenna polarization : Horizontal, Vertical
Test Distance : 3 m, Antenna Height : 1 to 4 meters
Result (QP) = Reading (QP) + c.f (Antenna Factor + Cable Loss - Amp. Gain)
Margin (QP) = Limit – Level (QP)
QP = Quasi-Peak, c.f = Correction Factor

- Frequencies above 1 GHz



Frequency (MHz)	PK (dBµV/	CAV (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1 265.500	37.3	---	74.0	36.7	108.0	V	61.0	6.5
1 265.500	---	29.5	54.0	24.5	122.0	V	61.0	6.5
1 400.000	---	26.6	54.0	27.4	120.0	V	13.0	7.6
1 400.000	40.3	---	74.0	33.7	100.0	V	13.0	7.6
1 516.500	---	33.2	54.0	20.8	113.0	V	343.0	8.4
1 516.500	39.7	---	74.0	34.3	107.0	V	343.0	8.4
1 860.000	43.3	---	74.0	30.7	125.0	V	0.0	10.6
1 861.500	---	29.9	54.0	24.1	100.0	V	359.0	10.6
2 128.000	---	36.6	54.0	17.4	110.0	V	141.0	11.9
2 132.000	54.4	---	74.0	19.6	110.0	V	147.0	11.9
17 668.500	---	47.0	54.0	7.0	100.0	V	229.0	37.6
17 699.000	52.8	---	74.0	21.2	100.0	V	2.0	38.0

Note 1) We have also tested from 18 GHz to 30 GHz and found no emissions

Note 2) Receiving antenna polarization : Horizontal, Vertical

Test Distance : 3 m, Antenna Height : 1 to 4 meters

Level (PK and/or CAV) = Reading (PK and/or CAV) + Corr. (Antenna Factor + Cable Loss - Amp. Gain)

Margin (PK and/or CAV) = Limit – Level (PK and/or CAV)

PK = Peak, CAV = CISPR-Average, Corr. = Correction Factor