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EMI TEST REPORT
FCC CERTIFICATION

Applicant: **SAMSUNG Electronics Co., Ltd.** **129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea**	**Date of Issue: November 04, 2021** **Test Report No. HCT-EM-2110-FC006-R1** **Test Site: HCT CO., LTD.**

FCC ID : **A3LSMN981B1**

Rule Part(s) / Standard(s) :		47 CFR PART 15 Subpart B Class B ANSI C63.4-2014
Product Name	:	Mobile Phone
Model Name	:	SM-N981B/DS
Series Model Name	:	SM-N981B
Date of Test	:	October 14, 2021 to October 28, 2021

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. (See Test Report if any modifications were made for compliance)
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Tested By

Wook Yi
Test Engineer
EMC Team
Certification Division

Reviewed

Jeong-Hyun Choi
Technical Manager
EMC Team
Certification Division

REVISION HISTORY

The revision history for this document is shown in table.

Rev No.	Issue Date	Information About Changes
0	October 29, 2021	Initial Release
1	November 04, 2021	Added information about EUT and series model in Clause 1.1 Added information about S-pen in Clause 1.2 and Clause 3.3

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS (Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

TABLE OF CONTENTS

PAGE

1. GENERAL INFORMATION

1.1 Description of EUT

FCC ID	A3LSMN981B1
Model Name	SM-N981B/DS
Series Model Name	SM-N981B
Product Name	Mobile Phone
Frequency Band	GSM850/1900, WCDMA B2/4/5, LTE B2/4/5/12/13/17/25/26/41/66, Bluetooth BDR/EDR/LE 5.0, WLAN a/b/g/n/ac/ax, NFC, MST, WPT
Power Supply	Travel adaptor: Input: AC 100 to 240 V, 50 to 60 Hz, 0.7 A Output: (PDO) 5.0 V, 3.0 A or 9.0 V, 2.77 A (PPS) 3.3 to 5.9 V, 3.0 A or 3.3 to 11.0 V, 2.25 A

NOTE. SM-N981B is series model of EUT.
The only difference between SM-N981B/DS and SM-N981B is SIM slot.
SM-N981B/DS : Dual SIM Tray (SIM 1 + SIM 2 Slot)
SM-N981B : Single SIM Tray (SIM 1 Slot)
The test was performed in SM-N981B/DS

1.2 Tested System Details

All equipment descriptions used in the tested system (including inserted cards) are:

Device Type	Model Name	Serial Number	Manufacturer
Mobile Phone	SM-N981B/DS	-	SAMSUNG
Notebook PC	ProBook650G2	5CG6331M0P	HP
Notebook PC Adaptor	Series PPP009L-E	-	LITE-ON TECHNOLOGY (CHANGZHOU) CO., LTD.
Gateway	DIR-806M	-	D-Link
Gateway Adaptor	AMS1-0501200FK	-	D-Link
Serial Mouse	Serial 2 Button mouse	02031069	Radio Shack
RJ45 cable	-	-	-
LED Monitor	34UC98	-	LG Electronics
Monitor Adapter	LCAP31	-	LG Electronics
DP cable	CDP2DPMM1MW	-	STARTECH
TA	EP-TA800		SOLUM
Data Cable	EP-DN980	-	RF TECH
Earphone	YBD-19HS	-	ALMUS
S-Pen	EJ-PN980	-	Wacom

1.3 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	USB Type C (Data Cable)	Y	Y	(P, D) 1.0
	USB Type C (Earphone)	N/A	N	(D) 1.3
Notebook PC	RJ 45	N/A	N	(D) 1.6
	Serial (Mouse)	N/A	Y	(D) 1.8
	DC IN	N	N/A	(P) 1.8
Gateway	DC IN	N	N/A	(P) 1.8
LED Monitor	DC IN	N	N/A	(P) 2.0
	DP port	N/A	Y	(D) 1.0

"(D)" Data Cable and "(P)" Power Cable.

1.4 Noise Suppression Parts on Cable. (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT	USB Type C (Data Cable)	N	N/A	Y	Both End
	USB Type C (Earphone)	N	N/A	Y	EUT End
Notebook PC	RJ 45	N	N/A	N	N/A
	Serial (Mouse)	N	N/A	Y	Notebook End
LED Monitor	DP port	N	N/A	Y	Both End

1.5 Test Facility

Test site is located at 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea.
Those measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2014.
The Normalized site attenuations (30 ㎒ to 1 ㎓) and Site validation (1 ㎓ to 18 ㎓) were performed in accordance with the standard in ANSI C63.4a-2017.
Our laboratories are accredited and designated in accordance with the provisions of Radio Waves ACT and International Standard ISO/IEC 17025:2017. (National Radio Research Agency, Designation No. KR0032)

1.6 Calibration of Measuring Instrument

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards.
Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5:2017.

1.7 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014.
All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Test Item	Test Site (Chamber)	Expanded Uncertainty
Conducted Emission	EMI Shield Room	2.0 ㏈
Radiated Emission (30 ㎒ to 1 ㎓)	3 m Semi Anechoic Chamber #1	5.8 ㏈
Radiated Emission (1 ㎓ to 18 ㎓)	3 m Semi Anechoic Chamber #1	4.8 ㏈
Radiated Emission (18 ㎓ to 40 ㎓)	3 m Semi Anechoic Chamber #1	5.8 ㏈

2. LIST OF TEST EQUIPMENT

Type	Model Name	Manufacturer	Serial Number	Calibration Cycle	Calibration Date
Conducted Emission					
☒ EMI Test Receiver	ESR7	Rohde & Schwarz	101910	1 year	06.17.2021
☒ LISN	ENV216	Rohde & Schwarz	102245	1 year	08.23.2021
☒ LISN	ENV216	Rohde & Schwarz	100073	1 year	04.07.2021
☒ Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	10.19.2021
☒ Antenna (for Communication)	HyperLOG7060	Aaronia	66450	-	-
☐ Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	12.24.2020
☐ Antenna (for Communication)	HyperLOG7060	Aaronia	66451	-	-
☒ Software	EMC32	Rohde & Schwarz	-	-	-
Radiated Emission					
-For measurement below 1 ㎓					
☒ EMI Test Receiver	ESU40	Rohde & Schwarz	100524	1 year	05.10.2021
☒ Bi-Log Antenna	VULB9168	Schwarzbeck	255	2 year	03.15.2021
☒ Antenna master	MA4640-XP-ET	INNCO SYSTEM	-	N/A	-
☒ Antenna master controller	CO3000	INNCO SYSTEM	CO3000/870/ 35990515/L	N/A	-
☒ Turn Table	1060	INNCO SYSTEM	-	N/A	-
☒ Turn Table controller	CO2000	INNCO SYSTEM	CO2000/095/ 7590304/L	N/A	-
☒ Radio communication analyzer	MT8820C	ANRITSU	6201169007	1 year	12.02.2020
☒ Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	10.19.2021
☒ Antenna (for Communication)	HyperLOG7060	Aaronia	66450	-	-
☐ Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	12.24.2020
☐ Antenna (for Communication)	HyperLOG7060	Aaronia	66451	-	-
☒ Software	EMC32	Rohde & Schwarz	-	-	-
-For measurement above 1 ㎓					
☒ EMI Test Receiver	ESU40	Rohde & Schwarz	100524	1 year	05.10.2021
☒ Antenna master	MA4640-XP-ET	INNCO SYSTEM	-	N/A	-
☒ Antenna master controller	CO3000	INNCO SYSTEM	CO3000/870/ 35990515/L	N/A	-
☒ Turn Table	1060	INNCO SYSTEM	-	N/A	-
☒ Turn Table controller	CO2000	INNCO SYSTEM	CO2000/095/ 7590304/L	N/A	-
☒ Low Noise Amplifier	TK-PA18H	TESTEK	170034-L	1 year	03.02.2021
☒ Low Noise Amplifier	TK-PA1840H	TESTEK	170030-L	1 year	03.09.2021
☒ Horn Antenna	BBHA 9120D	Schwarzbeck	01836	1 year	07.20.2021
☒ Horn Antenna	BBHA 9170	Schwarzbeck	BBHA 9170 #786	1 year	11.18.2020
☒ Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	10.19.2021
☒ Antenna (for Communication)	HyperLOG7060	Aaronia	66450	-	-
☐ Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	12.24.2020
☐ Antenna (for Communication)	HyperLOG7060	Aaronia	66451	-	-
☒ Software	EMC32	Rohde & Schwarz	-	-	-

3. DESCRIPTION OF TEST

3.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 7.3

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN).
If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN).
Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
c. The frequency ranges from 150 ㎑ to 30 ㎒ was searched.

[Conducted Emission Limits]

Frequency (㎒)	Resolution Bandwidth (㎑)	Quasi-Peak (dB(㎶))	Average (dB(㎶))
0.15 to 0.5	9	66 to 56*	56 to 46*
0.5 to 5	9	56	46
5 to 30	9	60	50

**Decreases with the logarithm of the frequency.*

3.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 8.3

a. The EUT was placed on the top of a turn table 0.8 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 ㎓.
f. The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 ㎓.
g. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. (1 ㎓ to 40 ㎓)

[Radiated Emission Limits]

Frequency (㎒)	Antenna Distance (m)	Field Strength (㎶/m)	Quasi-Peak (dB㎶/m)
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0
Frequency (㎒)	Antenna Distance (m)	Peak (dB㎶/m)	Average (dB㎶/m)
Above 1 000	3	74	54

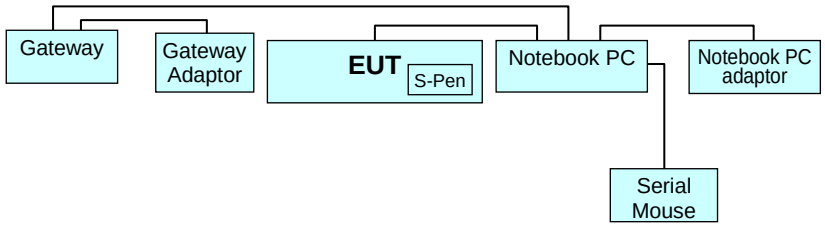
3.2.1 Frequency Range of Radiated Measurements

An unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table.

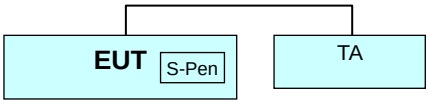
Highest frequency generated or used in the device or on which the device operates or tunes (㎒)	Upper frequency of measurement range (㎒)
Below 1.705	30
1.705 to 108	1 000
108 to 500	2 000
500 to 1 000	5 000
Above 1 000	5^{th} harmonic of the highest frequency or 40 ㎓, whichever is lower

3.3 Configuration of Tested System

[EUT+PC] Data Communication mode

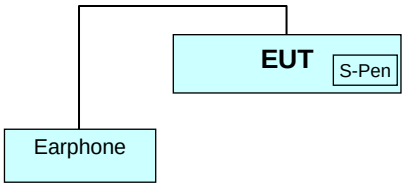


[EUT+TA] Camera / Video+Audio / Receiver mode

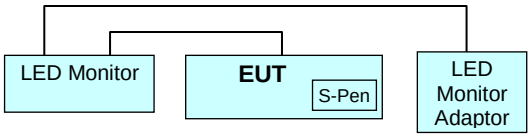


Non-Conductive Table

[EUT+Earphone] Camera / Video+Audio/ Receiver mode



[EUT+LED Monitor] Video+Audio (Display out)



Non-Conductive Table

4. OPERATION OF THE EUT

During preliminary tests, the following operating mode was investigated.

Data Communication (Internal)
Front/Rear Camera (Preview / Recording)
Video+Audio (TA / Earphone)
Video+Audio (Display out)
Receiver mode(GSM 850 Low/Middle/High ch Idle)
Receiver mode(WCDMA B5 Low/Middle/High ch Idle)
Receiver mode(LTE B5_Low/Middle/High ch)
Receiver mode(LTE B12_Low/Middle/High ch)
Receiver mode(LTE B13_Low/Middle/High ch)
Receiver mode(LTE B17_Low/Middle/High ch)
Receiver mode(LTE B26_Low/Middle/High ch)
Receiver mode(Earphone)

NOTE. The worst band is tested.

4.1 Conducted Emission

It was final tested the following operating mode, after connecting all peripheral devices.

Operating Mode:

[EUT+PC]	Data Communication mode (Internal)
[EUT+TA]	LTE B5 Idle(Middle ch)+Front Camera LTE B26 Idle(Middle ch)+Rear Camera Video+Audio

4.2 Radiated Emission

It was final tested the following operating mode, after connecting all peripheral devices.

Operating Mode:

Radiated Emission below 1 ㎓

[EUT+PC]	Data Communication mode (Internal) *
[EUT+TA]	LTE B5 Idle(Low ch) LTE B5 Idle(Middle ch)+Front Camera * LTE B5 Idle(High ch) LTE B26 Idle(Low ch) LTE B26 Idle(Middle ch)+Rear Camera * LTE B26 Idle(High ch) LTE B12+B13+B17 Idle(Low ch) LTE B12+B13+B17 Idle(Middle ch) * LTE B12+B13+B17 Idle(High ch)

[EUT+Earphone]	Video+Audio * LTE B5 Idle(Middle ch)+Front Camera
[EUT+LED Monitor]	Video+Audio (Display out) *

Radiated Emission above 1 ㎓

[EUT+PC]	Data Communication mode (Internal) *
[EUT+TA]	LTE B5 Idle(Middle ch)+Front Camera * LTE B26 Idle(Middle ch)+Rear Camera * LTE B12+B13+B17 Idle(Middle ch)
[EUT+Earphone]	Video+Audio *
[EUT+LED Monitor]	Video+Audio (Display out) *

NOTE.
1. Three orientations have been investigated and the worst case orientation (x-axis: The display of EUT placed on the table is facing upwards) is reported.
2. The worst case of operating mode is reported. [*].

5. CONDUCTED AND RADIATED EMISSION TEST SUMMARY

5.1 Conducted Emission

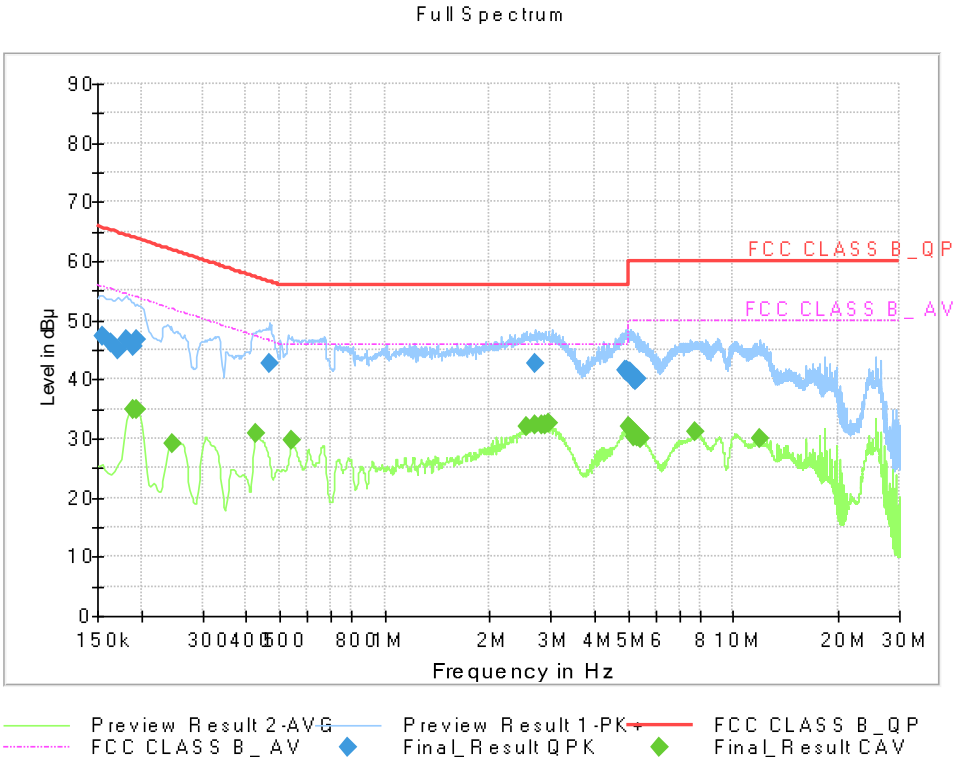
The test results of conducted emission at mains ports provide the following information:

Used Test Standard	47 CFR PART 15 Subpart B Class B ANSI C63.4-2014
Frequency Range	150 ㎑ to 30 ㎒
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 ㎑ (6 ㏈)
Operating Mode	[EUT+PC] Data Communication mode (Internal) [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera LTE B26 Idle(Middle ch)+Rear Camera Video + Audio
Test Site	EMI Shield Room
Temperature	min. 23.3 °C, max. 25.3 °C
Relative Humidity	min. 37.4 % R.H., max. 43.7 % R.H.
Test Date	October 21 / October 28, 2021

- Calculation Formula:

1. Conductor L1 = Hot, Conductor N = Neutral
2. Corr. = LISN Factor+Cable Loss
3. QuasiPeak or CAverage= Receiver Reading+Corr.
4. Margin = Limit – QuasiPeak or CAverage

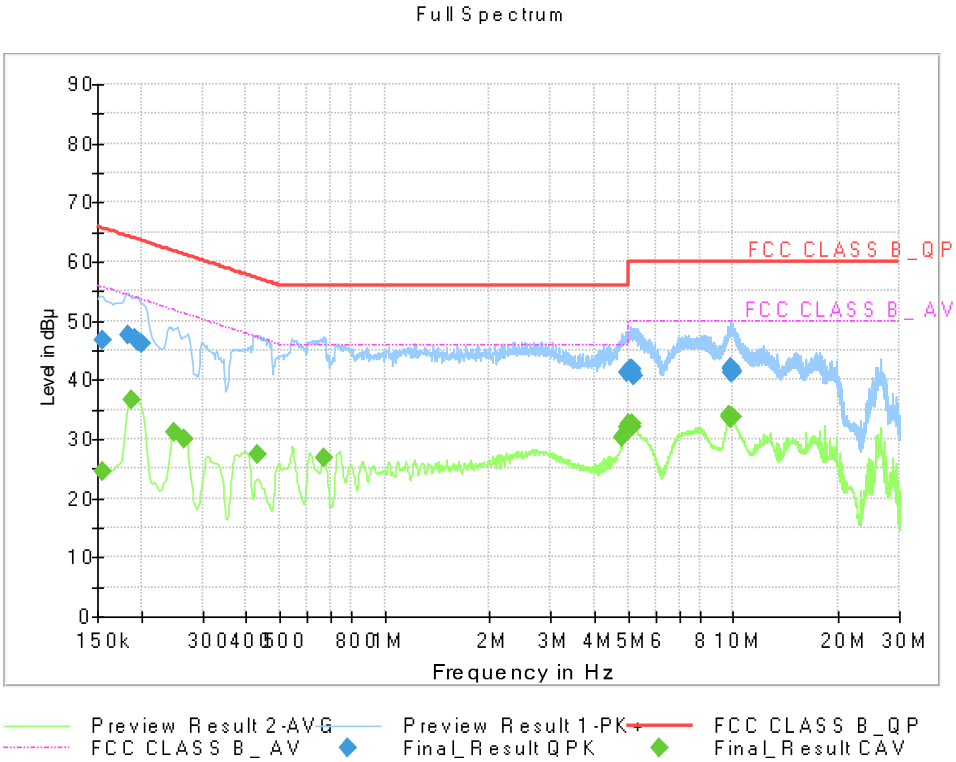
Figure 1: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+PC] Data Communication mode (Internal), Line(L1)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1545	47.30	65.75	18.45	9.000	L1	9.6
0.1635	46.20	65.28	19.08	9.000	L1	9.6
0.1725	45.04	64.84	19.80	9.000	L1	9.6
0.1815	46.79	64.42	17.63	9.000	L1	9.6
0.1905	45.59	64.02	18.43	9.000	L1	9.6
0.1950	46.61	63.82	17.21	9.000	L1	9.6
0.4673	42.65	56.56	13.91	9.000	L1	9.6
2.6938	42.62	56.00	13.38	9.000	L1	9.7
4.9303	41.64	56.00	14.36	9.000	L1	9.7
4.9393	41.45	56.00	14.55	9.000	L1	9.7
4.9753	41.25	56.00	14.75	9.000	L1	9.7
5.0518	41.11	60.00	18.89	9.000	L1	9.7
5.0743	40.99	60.00	19.01	9.000	L1	9.7
5.2003	39.99	60.00	20.01	9.000	L1	9.7
5.2093	40.09	60.00	19.91	9.000	L1	9.7
5.2160	39.97	60.00	20.03	9.000	L1	9.7
5.2273	39.68	60.00	20.32	9.000	L1	9.7
5.2790	40.08	60.00	19.92	9.000	L1	9.7

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1905	34.80	54.02	19.22	9.000	L1	9.6
0.1950	34.79	53.82	19.03	9.000	L1	9.6
0.2468	29.26	51.87	22.61	9.000	L1	9.6
0.4290	30.93	47.27	16.34	9.000	L1	9.6
0.5428	29.82	46.00	16.18	9.000	L1	9.6
2.5588	31.88	46.00	14.12	9.000	L1	9.7
2.6983	32.33	46.00	13.67	9.000	L1	9.7
2.8355	32.22	46.00	13.78	9.000	L1	9.7
2.8895	32.41	46.00	13.59	9.000	L1	9.7
2.9435	32.48	46.00	13.52	9.000	L1	9.7
4.9888	32.16	46.00	13.84	9.000	L1	9.7
5.0518	31.65	50.00	18.35	9.000	L1	9.7
5.2070	30.40	50.00	19.60	9.000	L1	9.7
5.2813	30.25	50.00	19.75	9.000	L1	9.7
5.3533	30.21	50.00	19.79	9.000	L1	9.7
5.4185	29.95	50.00	20.05	9.000	L1	9.7
7.8170	31.07	50.00	18.93	9.000	L1	9.8
11.8918	29.98	50.00	20.02	9.000	L1	9.8

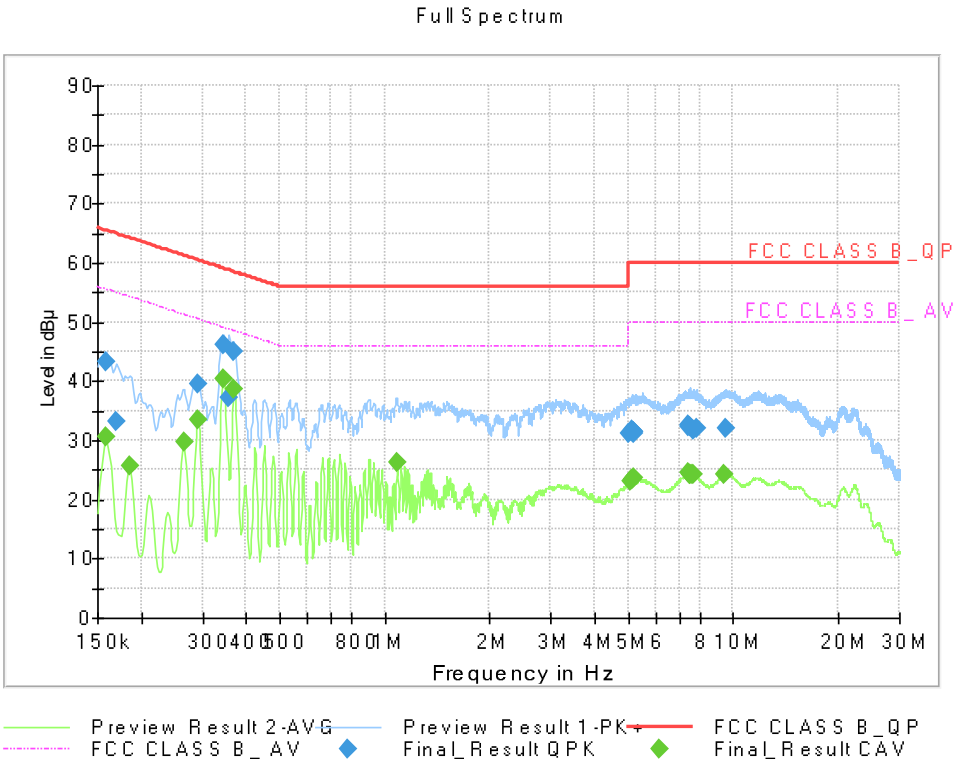
Figure 2: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+PC] Data Communication mode (Internal), Line(N)



Frequency (MHz)	Quasi Peak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	46.61	65.75	19.14	9.000	N	9.6
0.1838	47.49	64.31	16.82	9.000	N	9.6
0.1928	46.90	63.92	17.02	9.000	N	9.6
0.1973	46.31	63.73	17.42	9.000	N	9.6
0.2018	46.08	63.54	17.46	9.000	N	9.6
4.9325	41.15	56.00	14.85	9.000	N	9.7
5.0698	41.40	60.00	18.60	9.000	N	9.7
5.0788	41.90	60.00	18.10	9.000	N	9.7
5.0900	41.64	60.00	18.36	9.000	N	9.7
5.1418	41.80	60.00	18.20	9.000	N	9.7
5.1463	41.13	60.00	18.87	9.000	N	9.7
5.1710	40.66	60.00	19.34	9.000	N	9.7
9.8105	41.79	60.00	18.21	9.000	N	9.8
9.8240	41.88	60.00	18.12	9.000	N	9.8
9.8555	41.31	60.00	18.69	9.000	N	9.8
9.8713	42.06	60.00	17.94	9.000	N	9.8
9.9298	41.19	60.00	18.81	9.000	N	9.8
9.9478	41.68	60.00	18.32	9.000	N	9.8

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	24.62	55.75	31.13	9.000	N	9.6
0.1883	36.51	54.11	17.60	9.000	N	9.6
0.2490	31.18	51.79	20.61	9.000	N	9.6
0.2648	29.86	51.28	21.42	9.000	N	9.6
0.4335	27.52	47.19	19.67	9.000	N	9.6
0.6665	26.81	46.00	19.19	9.000	N	9.6
4.8133	30.31	46.00	15.69	9.000	N	9.7
4.9370	31.97	46.00	14.03	9.000	N	9.7
5.0000	32.54	46.00	13.46	9.000	N	9.7
5.0675	32.41	50.00	17.59	9.000	N	9.7
5.1283	32.50	50.00	17.50	9.000	N	9.7
5.1530	32.09	50.00	17.91	9.000	N	9.7
9.7318	33.67	50.00	16.33	9.000	N	9.8
9.7498	33.91	50.00	16.09	9.000	N	9.8
9.8150	33.67	50.00	16.33	9.000	N	9.8
9.8488	33.72	50.00	16.28	9.000	N	9.8
9.8758	33.53	50.00	16.47	9.000	N	9.8
9.9140	33.63	50.00	16.37	9.000	N	9.8

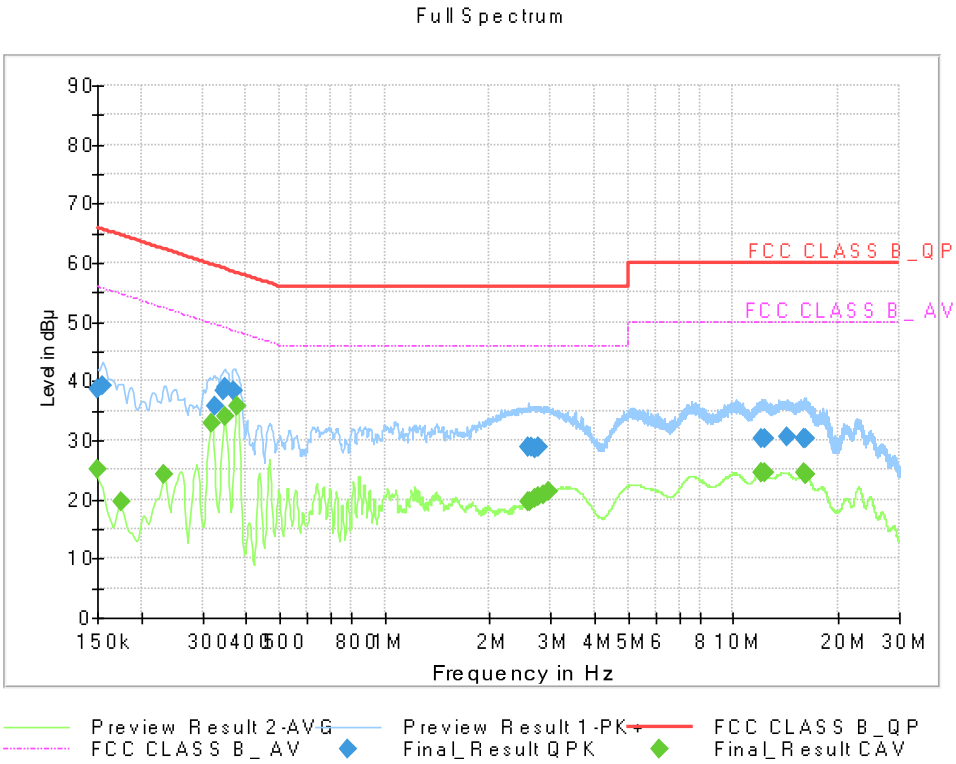
Figure 3: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera, Line(L1)



Frequency (MHz)	Quasi Peak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1590	43.14	65.52	22.38	9.000	L1	9.6
0.1703	33.10	64.95	31.85	9.000	L1	9.6
0.2918	39.44	60.47	21.03	9.000	L1	9.6
0.3458	46.04	59.06	13.02	9.000	L1	9.6
0.3570	37.24	58.80	21.56	9.000	L1	9.6
0.3683	45.05	58.54	13.49	9.000	L1	9.6
5.0293	31.13	60.00	28.87	9.000	L1	9.9
5.1103	31.34	60.00	28.66	9.000	L1	9.9
5.1530	31.60	60.00	28.40	9.000	L1	9.9
5.1598	31.54	60.00	28.46	9.000	L1	9.9
5.1890	31.43	60.00	28.57	9.000	L1	9.9
5.1935	31.26	60.00	28.74	9.000	L1	9.9
7.4435	32.60	60.00	27.40	9.000	L1	9.9
7.4750	32.33	60.00	27.67	9.000	L1	10.0
7.5043	32.22	60.00	27.78	9.000	L1	10.0
7.7023	31.81	60.00	28.19	9.000	L1	10.0
7.8710	31.88	60.00	28.12	9.000	L1	10.0
9.5203	32.01	60.00	27.99	9.000	L1	10.0

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1590	30.64	55.52	24.88	9.000	L1	9.6
0.1860	25.65	54.21	28.56	9.000	L1	9.6
0.2648	29.60	51.28	21.68	9.000	L1	9.6
0.2918	33.36	50.47	17.11	9.000	L1	9.6
0.3435	40.48	49.12	8.64	9.000	L1	9.6
0.3705	38.74	48.49	9.75	9.000	L1	9.6
1.0850	26.15	46.00	19.85	9.000	L1	9.7
5.0765	23.08	50.00	26.92	9.000	L1	9.9
5.1058	23.27	50.00	26.73	9.000	L1	9.9
5.1283	23.30	50.00	26.70	9.000	L1	9.9
5.1530	23.43	50.00	26.57	9.000	L1	9.9
5.2070	23.54	50.00	26.46	9.000	L1	9.9
7.4728	24.41	50.00	25.59	9.000	L1	10.0
7.5020	24.36	50.00	25.64	9.000	L1	10.0
7.5313	24.37	50.00	25.63	9.000	L1	10.0
7.5673	24.30	50.00	25.70	9.000	L1	10.0
7.6595	24.26	50.00	25.74	9.000	L1	10.0
9.4055	24.25	50.00	25.75	9.000	L1	10.0

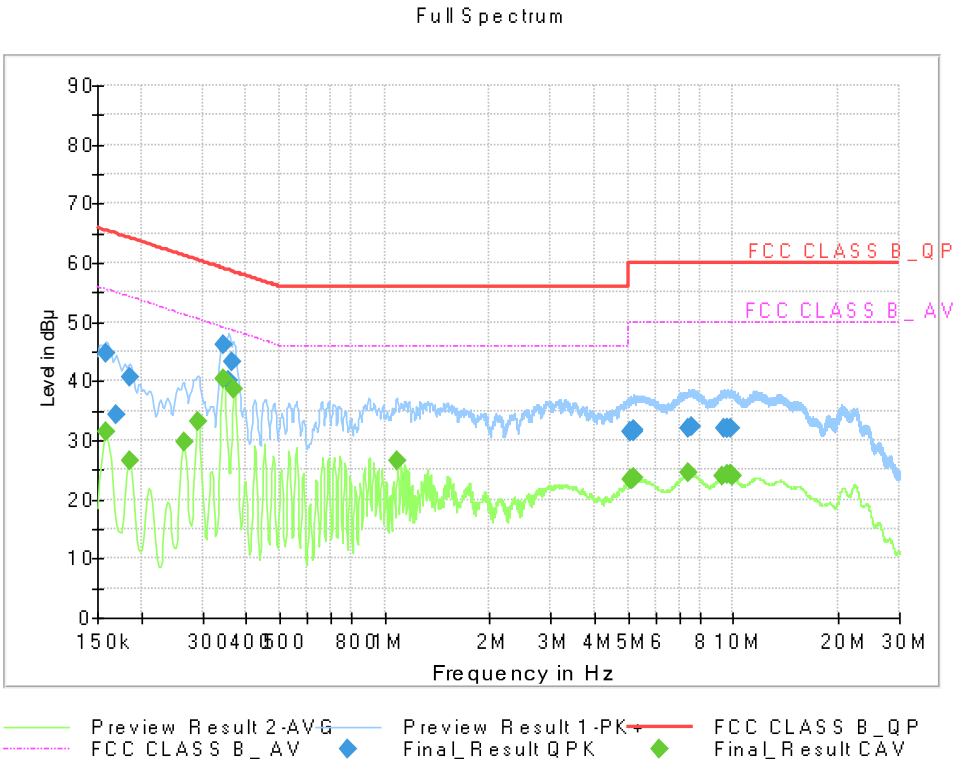
Figure 4: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera, Line(N)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1500	38.73	66.00	27.27	9.000	N	9.6
0.1545	39.35	65.75	26.40	9.000	N	9.6
0.3255	35.68	59.57	23.89	9.000	N	9.6
0.3435	38.30	59.12	20.82	9.000	N	9.6
0.3480	39.04	59.01	19.97	9.000	N	9.6
0.3705	38.42	58.49	20.07	9.000	N	9.6
2.5745	28.73	56.00	27.27	9.000	N	9.8
2.5813	28.98	56.00	27.02	9.000	N	9.8
2.6555	28.74	56.00	27.26	9.000	N	9.8
2.7028	28.49	56.00	27.51	9.000	N	9.8
2.7680	28.85	56.00	27.15	9.000	N	9.8
2.7725	28.85	56.00	27.15	9.000	N	9.8
12.0223	30.27	60.00	29.73	9.000	N	10.2
12.2923	30.25	60.00	29.75	9.000	N	10.2
14.2408	30.49	60.00	29.51	9.000	N	10.2
16.0003	30.19	60.00	29.81	9.000	N	10.3
16.0363	30.23	60.00	29.77	9.000	N	10.3
16.1218	30.17	60.00	29.83	9.000	N	10.3

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1500	25.04	56.00	30.96	9.000	N	9.6
0.1748	19.54	54.73	35.19	9.000	N	9.6
0.2333	24.22	52.33	28.11	9.000	N	9.6
0.3188	32.75	49.74	16.99	9.000	N	9.6
0.3480	34.02	49.01	14.99	9.000	N	9.6
0.3773	35.81	48.34	12.53	9.000	N	9.6
2.5790	19.69	46.00	26.31	9.000	N	9.8
2.6105	19.72	46.00	26.28	9.000	N	9.8
2.6983	20.09	46.00	25.91	9.000	N	9.8
2.7635	20.59	46.00	25.41	9.000	N	9.8
2.8468	20.90	46.00	25.10	9.000	N	9.8
2.9593	21.49	46.00	24.51	9.000	N	9.8
11.9975	24.57	50.00	25.43	9.000	N	10.2
12.1123	24.65	50.00	25.35	9.000	N	10.2
12.2923	24.57	50.00	25.43	9.000	N	10.2
16.0363	24.39	50.00	25.61	9.000	N	10.3
16.0948	24.29	50.00	25.71	9.000	N	10.3
16.2118	24.21	50.00	25.79	9.000	N	10.3

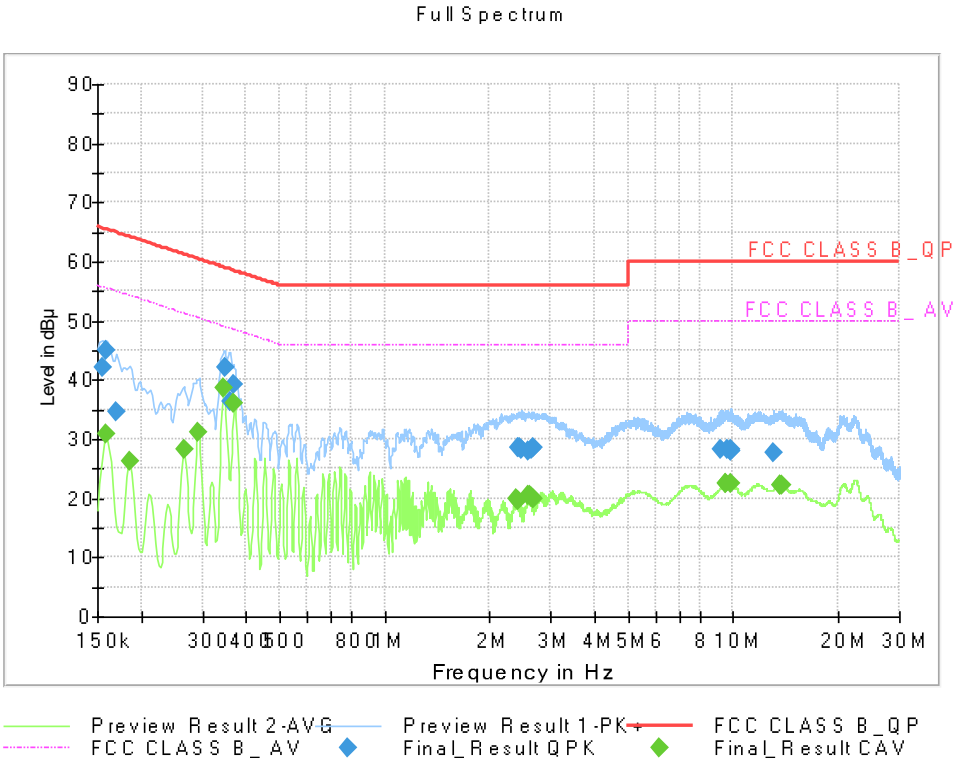
Figure 5: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] LTE B26 Idle(Middle ch)+Rear Camera, Line(L1)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1590	44.78	65.52	20.74	9.000	L1	9.6
0.1703	34.28	64.95	30.67	9.000	L1	9.6
0.1860	40.68	64.21	23.53	9.000	L1	9.6
0.3458	46.09	59.06	12.97	9.000	L1	9.6
0.3570	38.18	58.80	20.62	9.000	L1	9.6
0.3660	43.35	58.59	15.24	9.000	L1	9.6
5.0765	31.33	60.00	28.67	9.000	L1	9.9
5.0810	31.34	60.00	28.66	9.000	L1	9.9
5.1643	31.60	60.00	28.40	9.000	L1	9.9
5.1688	31.40	60.00	28.60	9.000	L1	9.9
5.2048	31.61	60.00	28.39	9.000	L1	9.9
5.2115	31.65	60.00	28.35	9.000	L1	9.9
7.4570	32.13	60.00	27.87	9.000	L1	9.9
7.5763	32.16	60.00	27.84	9.000	L1	10.0
9.4550	31.98	60.00	28.02	9.000	L1	10.0
9.5855	31.98	60.00	28.02	9.000	L1	10.0
9.6440	32.00	60.00	28.00	9.000	L1	10.0
9.8758	31.88	60.00	28.12	9.000	L1	10.1

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1590	31.53	55.52	23.99	9.000	L1	9.6
0.1860	26.68	54.21	27.53	9.000	L1	9.6
0.2648	29.83	51.28	21.45	9.000	L1	9.6
0.2918	33.19	50.47	17.28	9.000	L1	9.6
0.3458	40.42	49.06	8.64	9.000	L1	9.6
0.3705	38.54	48.49	9.95	9.000	L1	9.6
1.0873	26.46	46.00	19.54	9.000	L1	9.7
5.0810	23.24	50.00	26.76	9.000	L1	9.9
5.1305	23.38	50.00	26.62	9.000	L1	9.9
5.1553	23.36	50.00	26.64	9.000	L1	9.9
5.1823	23.52	50.00	26.48	9.000	L1	9.9
5.2093	23.52	50.00	26.48	9.000	L1	9.9
7.4728	24.42	50.00	25.58	9.000	L1	10.0
9.2818	24.03	50.00	25.97	9.000	L1	10.0
9.6350	24.28	50.00	25.72	9.000	L1	10.0
9.8420	24.24	50.00	25.76	9.000	L1	10.1
9.8690	24.21	50.00	25.79	9.000	L1	10.1
10.0085	23.98	50.00	26.02	9.000	L1	10.1

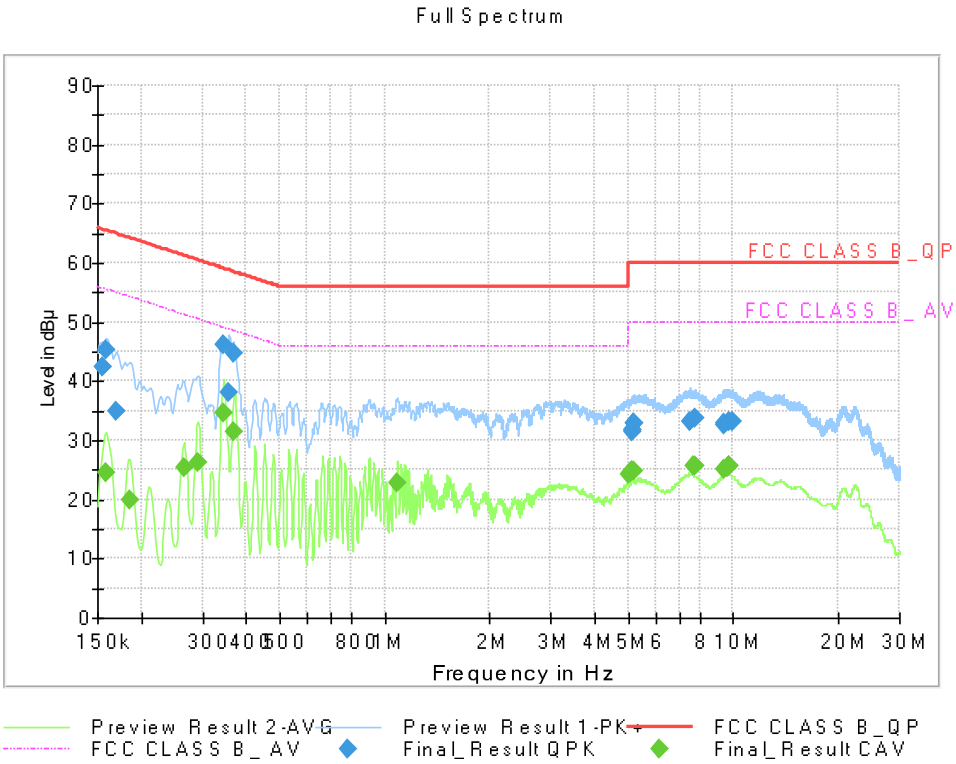
Figure 6: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] LTE B26 Idle(Middle ch)+Rear Camera, Line(N)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1545	42.22	65.75	23.53	9.000	N	9.6
0.1590	44.87	65.52	20.65	9.000	N	9.6
0.1703	34.69	64.95	30.26	9.000	N	9.6
0.3480	42.26	59.01	16.75	9.000	N	9.6
0.3593	36.21	58.75	22.54	9.000	N	9.6
0.3683	39.33	58.54	19.21	9.000	N	9.6
2.4238	28.50	56.00	27.50	9.000	N	9.7
2.4283	28.60	56.00	27.40	9.000	N	9.7
2.4598	28.39	56.00	27.61	9.000	N	9.7
2.5970	28.03	56.00	27.97	9.000	N	9.8
2.6353	28.33	56.00	27.67	9.000	N	9.8
2.6735	28.66	56.00	27.34	9.000	N	9.8
9.2548	28.13	60.00	31.87	9.000	N	10.0
9.6755	28.31	60.00	31.69	9.000	N	10.1
9.8398	28.23	60.00	31.77	9.000	N	10.1
9.8578	28.10	60.00	31.90	9.000	N	10.1
9.8825	28.06	60.00	31.94	9.000	N	10.1
13.0325	27.76	60.00	32.24	9.000	N	10.2

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1590	30.83	55.52	24.69	9.000	N	9.6
0.1860	26.12	54.21	28.09	9.000	N	9.6
0.2648	28.19	51.28	23.09	9.000	N	9.6
0.2918	31.27	50.47	19.20	9.000	N	9.6
0.3458	38.70	49.06	10.36	9.000	N	9.6
0.3705	36.05	48.49	12.44	9.000	N	9.6
2.3990	19.85	46.00	26.15	9.000	N	9.7
2.4238	19.66	46.00	26.34	9.000	N	9.7
2.5835	20.38	46.00	25.62	9.000	N	9.8
2.6105	20.52	46.00	25.48	9.000	N	9.8
2.6375	20.27	46.00	25.73	9.000	N	9.8
2.6645	19.79	46.00	26.21	9.000	N	9.8
9.5158	22.53	50.00	27.47	9.000	N	10.0
9.5270	22.51	50.00	27.49	9.000	N	10.0
9.8398	22.56	50.00	27.44	9.000	N	10.1
13.6963	22.26	50.00	27.74	9.000	N	10.2
13.7233	22.22	50.00	27.78	9.000	N	10.2
13.7975	22.22	50.00	27.78	9.000	N	10.2

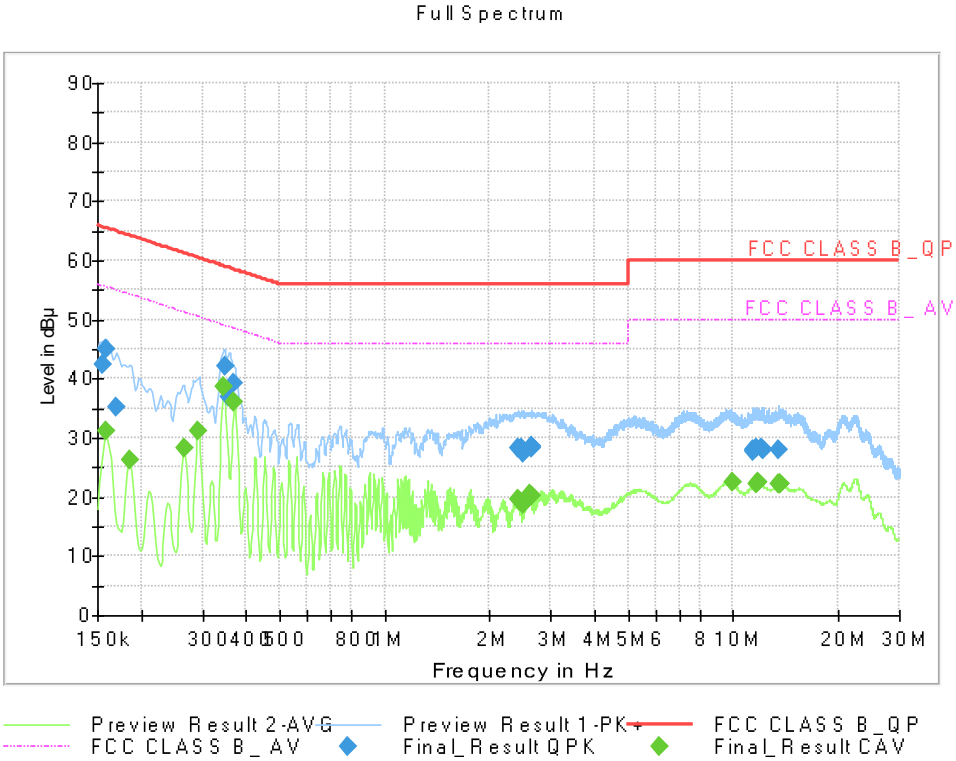
Figure 7: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] Video+Audio, Line(L1)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1545	42.53	65.75	23.22	9.000	L1	9.6
0.1590	45.26	65.52	20.26	9.000	L1	9.6
0.1703	34.85	64.95	30.10	9.000	L1	9.6
0.3458	46.09	59.06	12.97	9.000	L1	9.6
0.3570	38.14	58.80	20.66	9.000	L1	9.6
0.3683	44.83	58.54	13.71	9.000	L1	9.6
5.1035	31.55	60.00	28.45	9.000	L1	9.9
5.1215	31.64	60.00	28.36	9.000	L1	9.9
5.1350	31.62	60.00	28.38	9.000	L1	9.9
5.1665	32.96	60.00	27.04	9.000	L1	9.9
5.1733	33.00	60.00	27.00	9.000	L1	9.9
5.1778	32.96	60.00	27.04	9.000	L1	9.9
7.4885	33.16	60.00	26.84	9.000	L1	10.0
7.7518	33.80	60.00	26.20	9.000	L1	10.0
9.4168	32.51	60.00	27.49	9.000	L1	10.0
9.4280	32.83	60.00	27.17	9.000	L1	10.0
9.7610	33.14	60.00	26.86	9.000	L1	10.0
10.0108	33.30	60.00	26.70	9.000	L1	10.1

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1590	24.49	55.52	31.03	9.000	L1	9.6
0.1860	19.80	54.21	34.41	9.000	L1	9.6
0.2648	25.40	51.28	25.88	9.000	L1	9.6
0.2918	26.39	50.47	24.08	9.000	L1	9.6
0.3458	34.65	49.06	14.41	9.000	L1	9.6
0.3705	31.54	48.49	16.95	9.000	L1	9.6
1.0873	22.68	46.00	23.32	9.000	L1	9.7
5.0000	24.37	46.00	21.63	9.000	L1	9.9
5.0810	24.57	50.00	25.43	9.000	L1	9.9
5.1328	24.81	50.00	25.19	9.000	L1	9.9
5.1575	24.77	50.00	25.23	9.000	L1	9.9
5.2115	24.72	50.00	25.28	9.000	L1	9.9
7.6618	25.80	50.00	24.20	9.000	L1	10.0
7.7518	25.81	50.00	24.19	9.000	L1	10.0
9.4168	25.02	50.00	24.98	9.000	L1	10.0
9.6305	25.36	50.00	24.64	9.000	L1	10.0
9.6935	25.55	50.00	24.45	9.000	L1	10.0
9.7115	25.55	50.00	24.45	9.000	L1	10.0

Figure 8: Conducted Emission (150 ㎑ to 30 ㎒), [EUT+TA] Video+Audio, Line(N)



Frequency (㎒)	Quasi Peak (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1545	42.44	65.75	23.31	9.000	N	9.6
0.1590	45.11	65.52	20.41	9.000	N	9.6
0.1703	35.12	64.95	29.83	9.000	N	9.6
0.3480	42.17	59.01	16.84	9.000	N	9.6
0.3570	36.79	58.80	22.01	9.000	N	9.6
0.3683	39.31	58.54	19.23	9.000	N	9.6
2.4215	28.29	56.00	27.71	9.000	N	9.7
2.4598	28.32	56.00	27.68	9.000	N	9.7
2.5003	27.43	56.00	28.57	9.000	N	9.8
2.6308	28.30	56.00	27.70	9.000	N	9.8
2.6398	28.50	56.00	27.50	9.000	N	9.8
2.6443	28.46	56.00	27.54	9.000	N	9.8
11.3900	28.00	60.00	32.00	9.000	N	10.1
11.4148	27.79	60.00	32.21	9.000	N	10.1
11.6195	28.18	60.00	31.82	9.000	N	10.1
12.0020	28.16	60.00	31.84	9.000	N	10.2
12.2315	27.84	60.00	32.16	9.000	N	10.2
13.4983	28.09	60.00	31.91	9.000	N	10.2

Frequency (㎒)	CAverage (dB㎶)	Limit (dB㎶)	Margin (dB)	Bandwidth (㎑)	Line	Corr. (dB)
0.1590	31.02	55.52	24.50	9.000	N	9.6
0.1860	26.21	54.21	28.00	9.000	N	9.6
0.2648	28.22	51.28	23.06	9.000	N	9.6
0.2918	31.22	50.47	19.25	9.000	N	9.6
0.3458	38.64	49.06	10.42	9.000	N	9.6
0.3705	36.03	48.49	12.46	9.000	N	9.6
2.4260	19.67	46.00	26.33	9.000	N	9.7
2.4530	19.29	46.00	26.71	9.000	N	9.7
2.5093	18.63	46.00	27.37	9.000	N	9.8
2.5588	19.73	46.00	26.27	9.000	N	9.8
2.6105	20.54	46.00	25.46	9.000	N	9.8
2.6375	20.24	46.00	25.76	9.000	N	9.8
9.9410	22.40	50.00	27.60	9.000	N	10.1
11.6105	22.30	50.00	27.70	9.000	N	10.1
11.8243	22.36	50.00	27.64	9.000	N	10.1
13.4623	22.07	50.00	27.93	9.000	N	10.2
13.6130	22.22	50.00	27.78	9.000	N	10.2
13.6423	22.26	50.00	27.74	9.000	N	10.2

5.2 Radiated Emission

5.2.1 For Measurement Below 1 ㎓

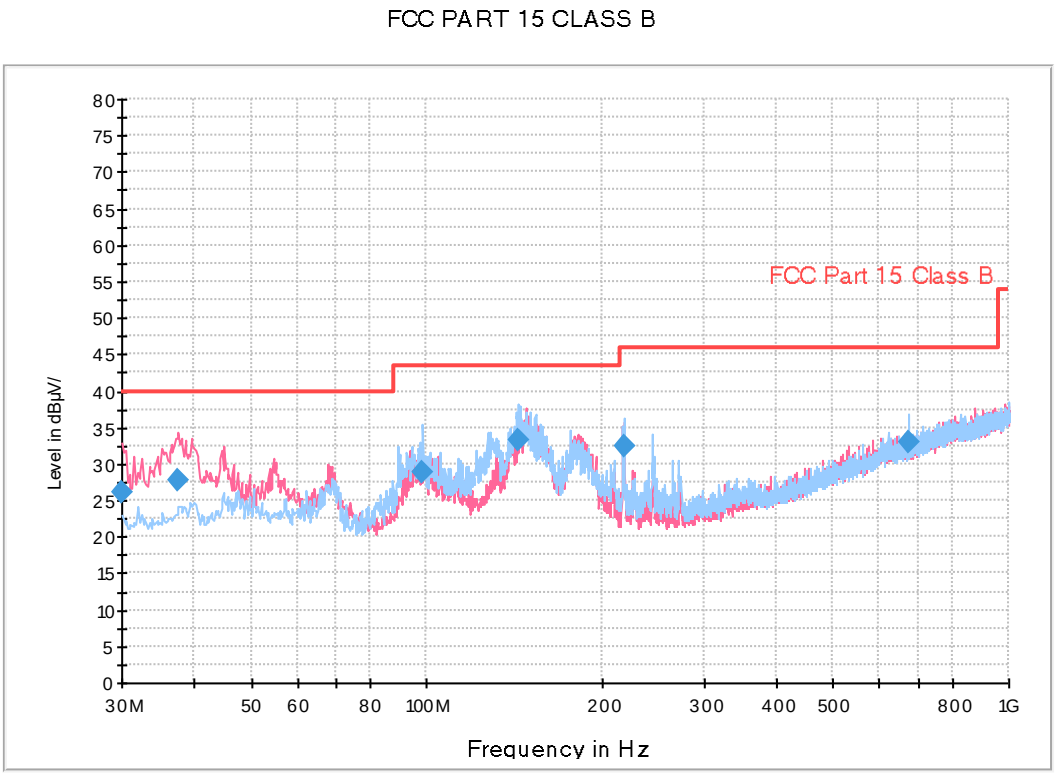
The test results of radiated emission provide the following information:

Used Test Standard	47 CFR PART 15 Subpart B Class B ANSI C63.4-2014
Frequency Range	30 ㎒ to 1 000 ㎒
Detector	Quasi-Peak
Bandwidth	120 ㎑ (6 ㏈)
Worst Case of Operating Mode	[EUT+PC] Data Communication mode (Internal) [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera LTE B26 Idle(Middle ch)+Rear Camera LTE B12+B13+B17 Idle(Middle ch) [EUT+Earphone] Video + Audio [EUT+LED Monitor] Video + Audio (Display out)
Measurement Distance	3 m
Test Site	3 m Semi Anechoic Chamber #1
Temperature	min. 22.5 °C, max. 25.6 °C
Humidity	min. 37.2 % R.H., max. 58.3 % R.H.
Test Date	October 14, 2021 - October 27, 2021

- Calculation Formula:

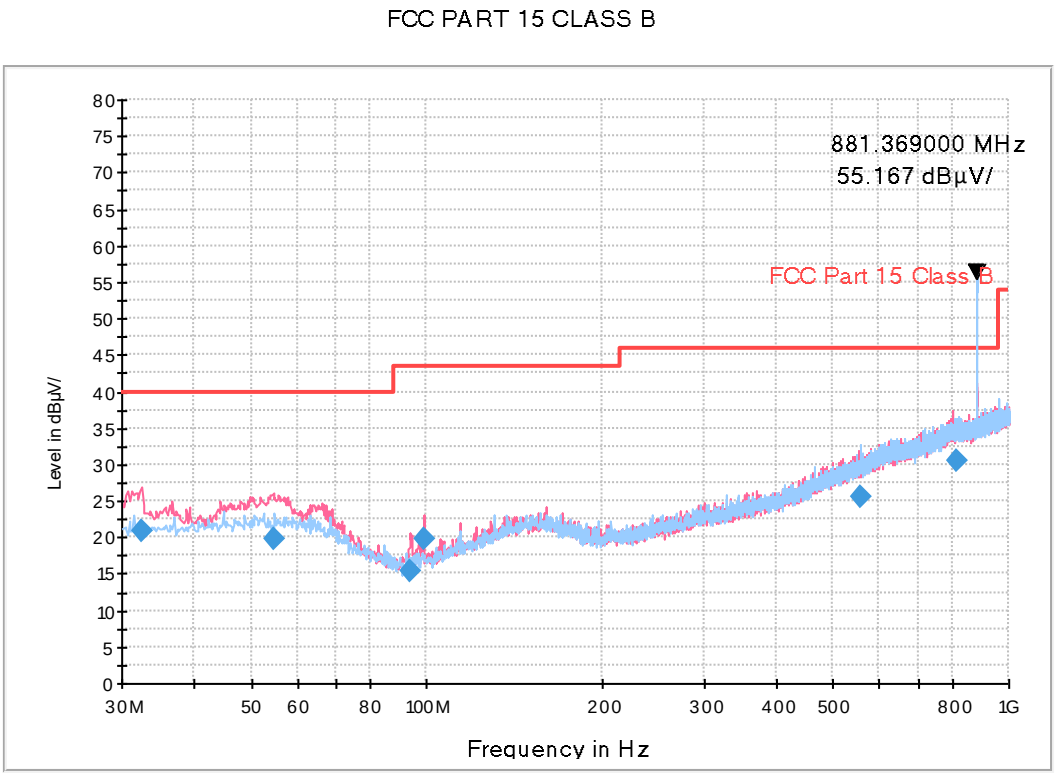
1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak = Reading (Receiver Reading)+Corr.
3. Corr. (Correction Factor) = Antenna Factor+Cable Loss
4. Margin = Limit - QuasiPeak

Figure 9: Radiated Emission (30 ㎒ to 1 ㎓), [EUT+PC] Data Communication mode (Internal)



Frequency (㎒)	Quasi Peak (dBµV/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
30.0093	26.0	100.0	V	32.0	18.5	14.0	40.0
37.5143	27.9	100.0	V	168.0	19.1	12.1	40.0
98.5495	28.8	174.8	H	291.0	14.9	14.7	43.5
144.0341	33.2	205.8	H	80.0	19.3	10.3	43.5
218.8106	32.4	125.0	H	132.0	17.5	13.6	46.0
671.9998	33.0	225.0	H	284.0	28.3	13.0	46.0

Figure 10: Radiated Emission (30 ㎒ to 1 ㎓), [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera

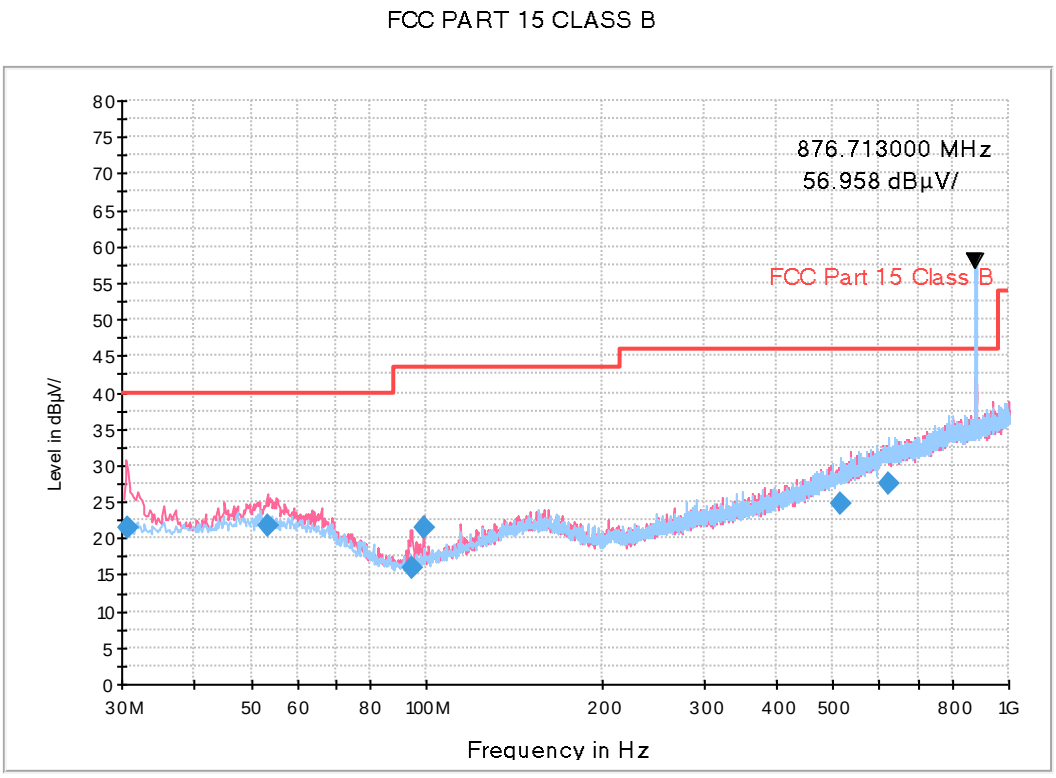


NOTE. 1. Carrier Frequency: RX 881.369 ㎒

2. These are signals for fundamental frequency from the base station

Frequency (㎒)	Quasi Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
32.4866	21.0	100.0	V	89.0	18.7	19.0	40.0
54.5793	19.8	100.0	V	37.0	19.8	20.2	40.0
94.0254	15.4	291.8	V	228.0	14.5	28.1	43.5
98.9537	19.8	100.0	V	89.0	15.0	23.7	43.5
556.7248	25.7	325.3	H	220.0	26.6	20.3	46.0
812.3015	30.5	125.0	H	255.0	30.6	15.5	46.0

Figure 11: Radiated Emission (30 ㎒ to 1 ㎓), [EUT+TA] LTE B26 Idle(Middle ch)+Rear Camera

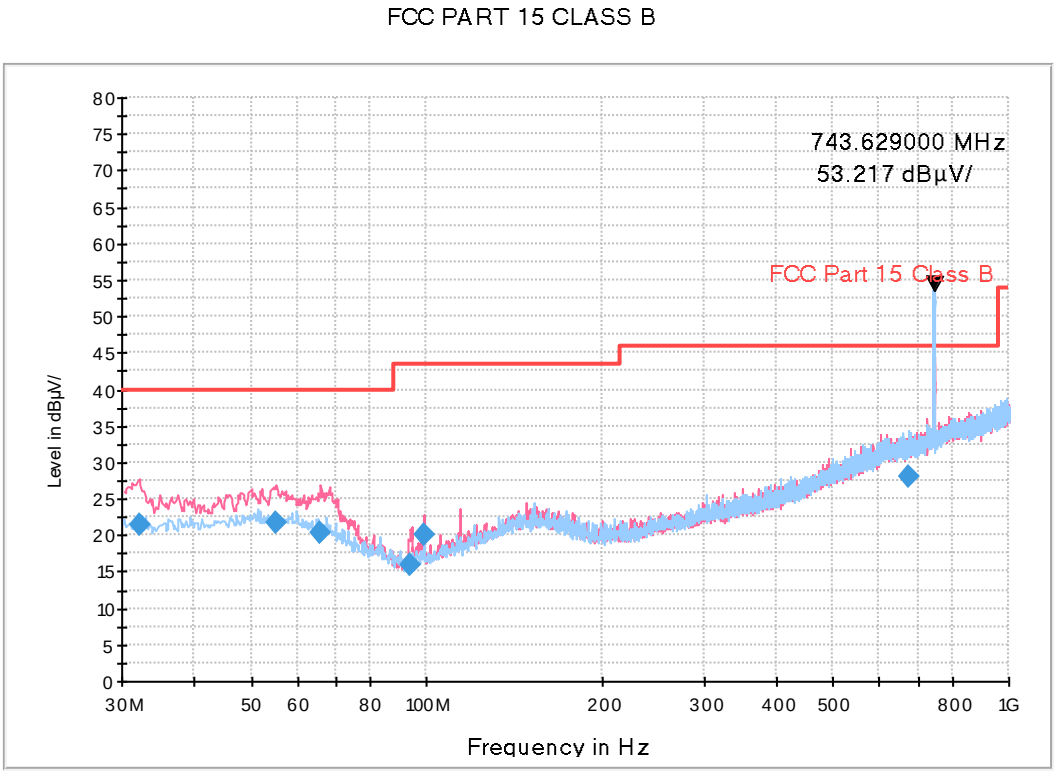


NOTE. 1. Carrier Frequency: RX 876.713 ㎒

2. These are signals for fundamental frequency from the base station

Frequency (㎒)	Quasi Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
30.6540	21.5	100.0	V	31.0	18.5	18.5	40.0
53.4571	21.8	125.2	V	37.0	19.9	18.2	40.0
94.4536	15.9	325.0	V	1.0	14.6	27.6	43.5
98.9681	21.5	325.0	V	130.0	15.0	22.0	43.5
514.3682	24.7	125.2	H	75.0	25.7	21.3	46.0
621.0308	27.6	174.8	H	116.0	27.7	18.4	46.0

Figure 12: Radiated Emission (30 ㎒ to 1 ㎓), [EUT+TA] LTE B12+B13+B17 Idle(Middle ch)

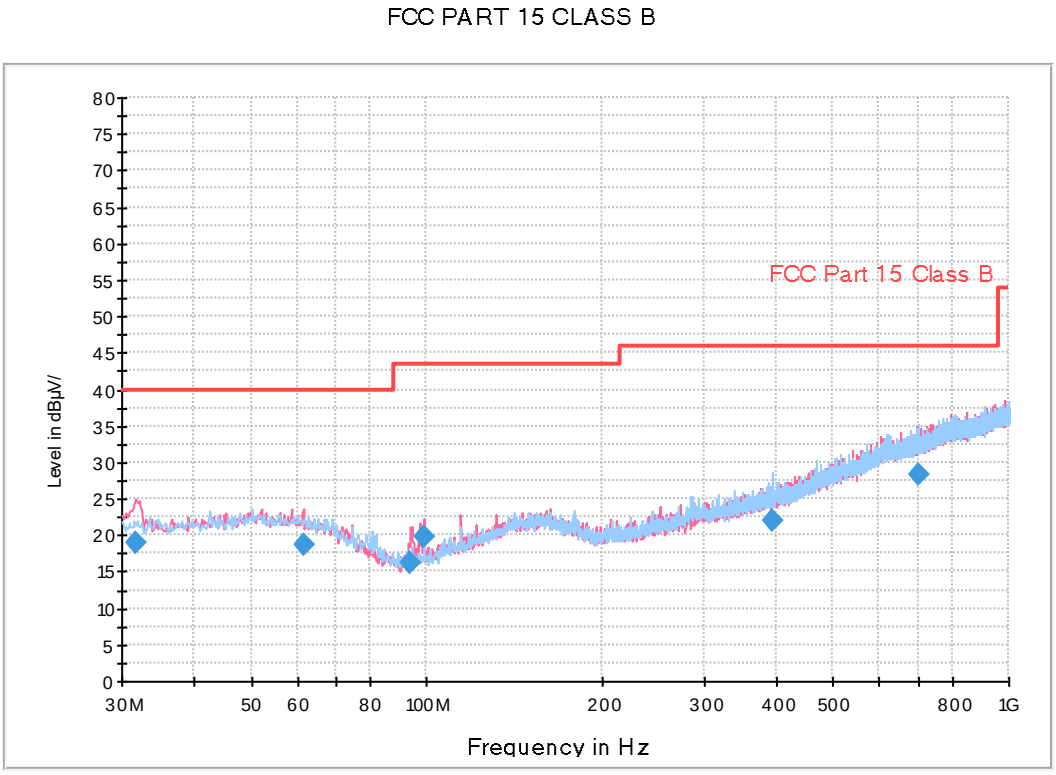


NOTE. 1. Carrier Frequency: RX 743.629 ㎒

2. These are signals for fundamental frequency from the base station

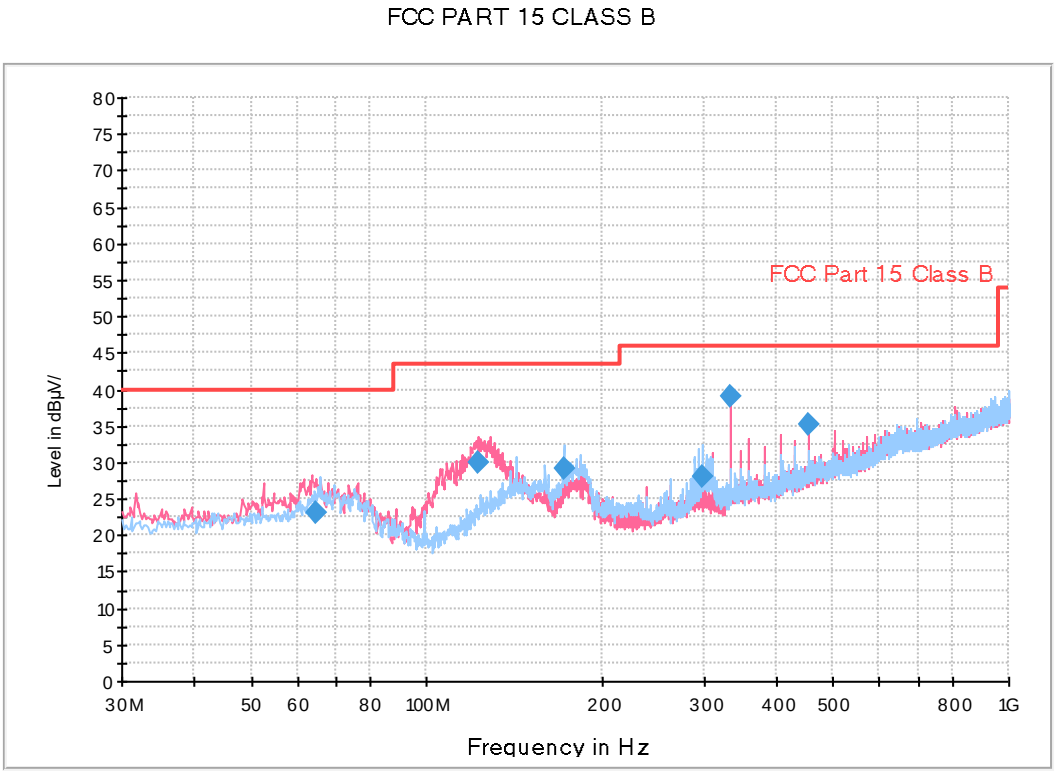
Frequency (㎒)	Quasi Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
32.1037	21.4	100.0	V	0.0	18.6	18.6	40.0
55.1346	21.6	100.0	V	175.0	19.8	18.4	40.0
65.7291	20.3	100.0	V	72.0	18.8	19.7	40.0
93.8794	15.9	225.2	V	119.0	14.5	27.6	43.5
98.9286	20.1	100.0	V	310.0	15.0	23.4	43.5
674.2280	28.1	307.7	H	0.0	28.3	17.9	46.0

Figure 13: Radiated Emission (30 MHz to 1 GHz), [EUT+Earphone] Video+Audio



Frequency (MHz)	Quasi Peak (dBµV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
31.7220	18.9	191.8	V	166.0	18.6	21.1	40.0
61.4716	18.8	125.1	V	318.0	19.4	21.2	40.0
93.9200	16.2	325.1	V	11.0	14.5	27.3	43.5
98.9188	19.7	325.3	V	91.0	15.0	23.8	43.5
392.2750	21.9	100.0	H	0.0	22.6	24.1	46.0
702.8469	28.5	225.1	H	269.0	28.7	17.5	46.0

Figure 14: Radiated Emission (30 ㎒ to 1 ㎓), [EUT+LED Monitor] Video+Audio (Display out)



Frequency (㎒)	Quasi Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
64.6256	23.0	125.1	V	276.0	18.9	17.0	40.0
122.8524	30.0	100.0	V	97.0	17.4	13.5	43.5
172.0463	29.2	174.8	H	174.0	18.9	14.3	43.5
297.4607	28.0	100.0	H	266.0	20.4	18.0	46.0
333.8377	39.1	125.0	V	170.0	21.3	6.9	46.0
453.0193	35.1	100.0	V	46.0	24.2	10.9	46.0

5.2.2 For Measurement Above 1 ㎓

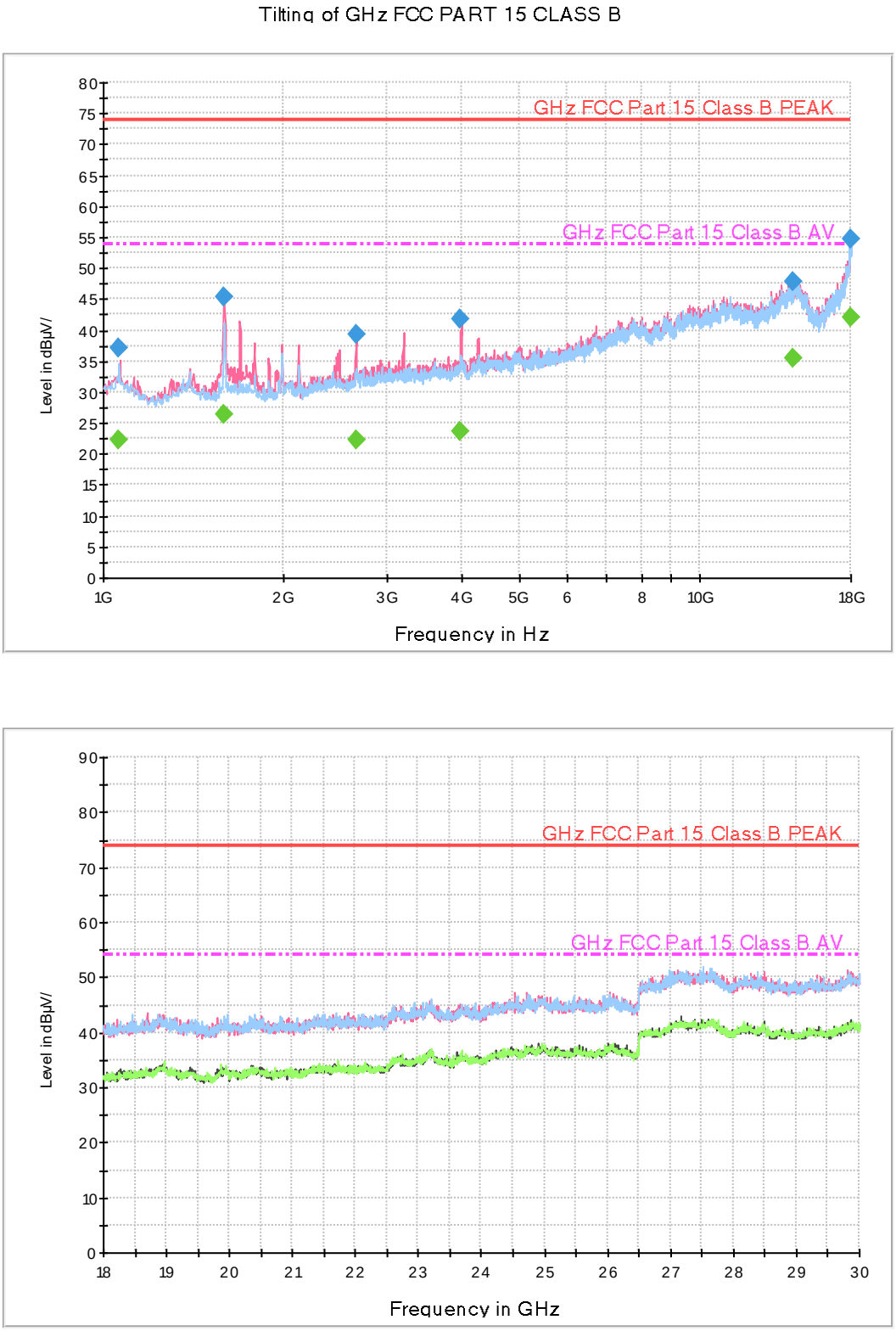
The test results of radiated emission provide the following information:

Used Test Standard	47 CFR PART 15 Subpart B Class B ANSI C63.4-2014
Detector	Peak mode: Peak (RBW: 1 ㎒, VBW: 3 ㎒) CISPR-Average mode: Peak (RBW: 1 ㎒, VBW: 10 ㎐)
Highest Frequency	5 825 ㎒
Tested Frequency Range	1 ㎓ to 30 ㎓
Worst Case of Operating Mode	[EUT+PC] Data Communication mode (Internal) [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera LTE B26 Idle(Middle ch)+Rear Camera [EUT+Earphone] Video + Audio [EUT+LED Monitor] Video + Audio (Display out)
Measurement Distance	3 m
Test Site	3 m Semi Anechoic Chamber #1
Temperature	min. 22.5 °C, max. 25.2 °C
Humidity	min. 38.7 % R.H., max. 44.1 % R.H.
Test Date	October 26, 2021 - October 28, 2021

- Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. Peak or CAverage = Reading (Receiver Reading)+Corr.
3. Corr. (Correction Factor) = Antenna Factor+ Cable Loss –Amplifier Gain
4. Margin = Limit - Peak or CAverage

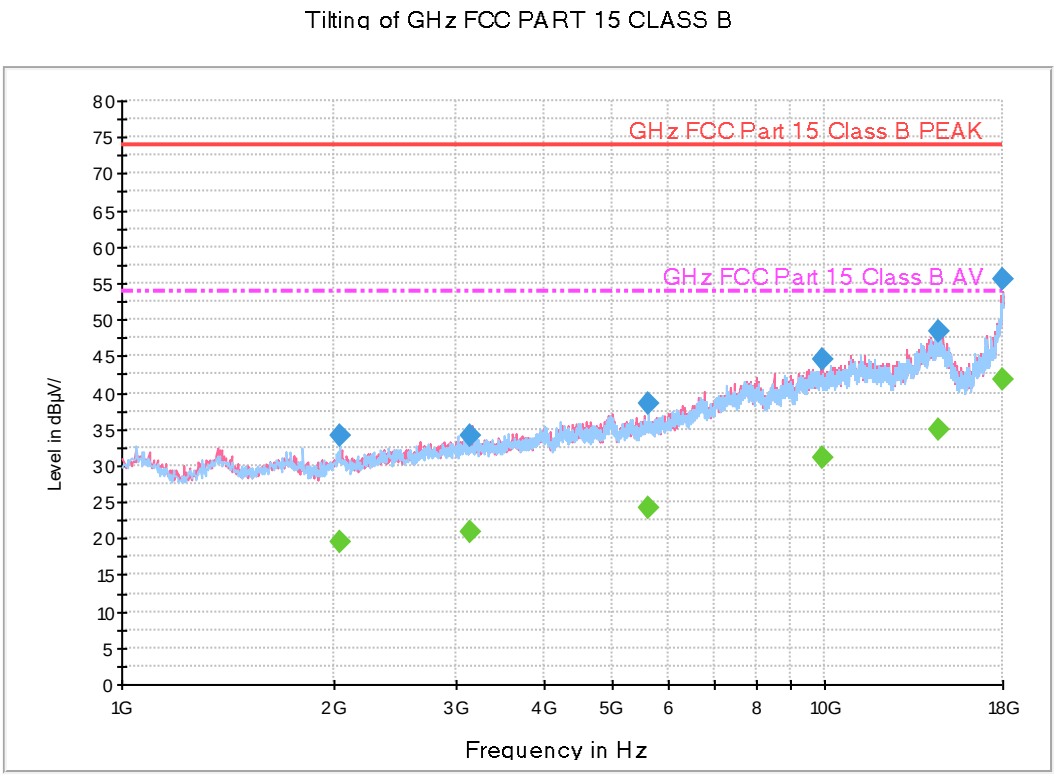
Figure 15: Radiated Emission (1 ㎓ to 30 ㎓), [EUT+PC] Data Communication mode (Internal)

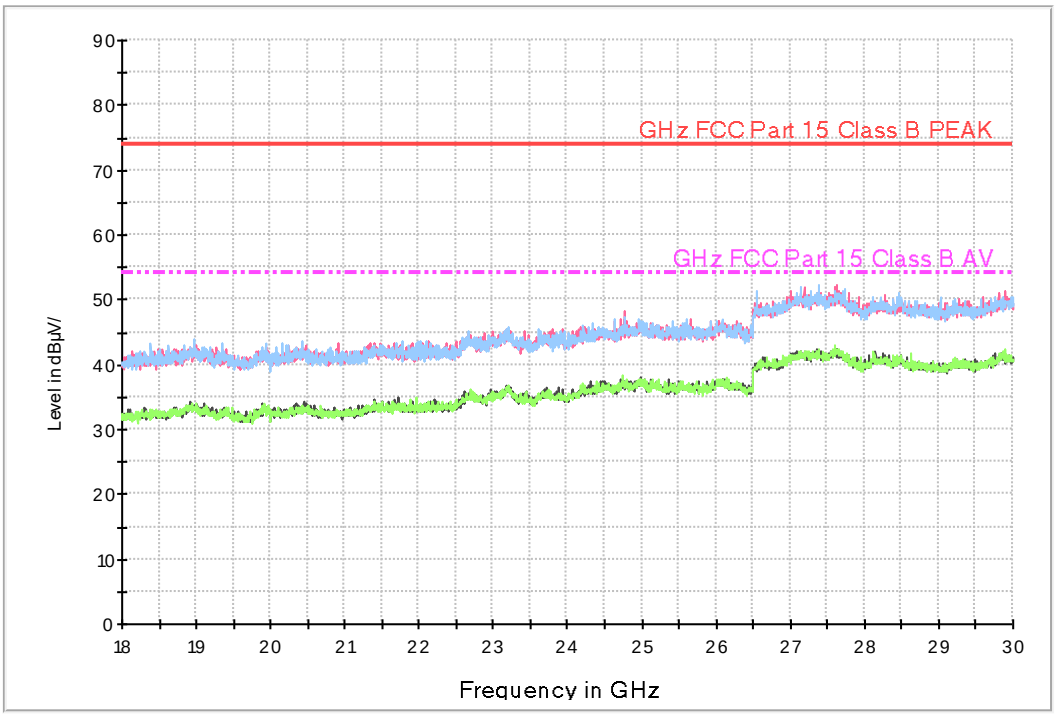


Frequency (㎒)	Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1063.4150	37.1	290.6	V	319.0	-28.1	36.9	74.0
1595.5350	45.5	306.7	V	217.0	-26.5	28.5	74.0
2657.9800	39.4	219.5	V	320.0	-22.8	34.6	74.0
3985.2600	41.7	100.0	V	217.0	-19.1	32.3	74.0
1 4427.0500	48.0	230.4	H	313.0	0.3	26.0	74.0
1 7952.3600	54.7	150.1	V	167.0	8.8	19.3	74.0

Frequency (㎒)	CAverage (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1063.4150	22.2	290.6	V	319.0	-28.1	31.8	54.0
1595.5350	26.4	306.7	V	217.0	-26.5	27.6	54.0
2657.9800	22.3	219.5	V	320.0	-22.8	31.7	54.0
3985.2600	23.5	100.0	V	217.0	-19.1	30.5	54.0
1 4427.0500	35.3	230.4	H	313.0	0.3	18.7	54.0
1 7952.3600	42.0	150.1	V	167.0	8.8	12.0	54.0

Figure 16: Radiated Emission (1 ㎓ to 30 ㎓), [EUT+TA] LTE B5 Idle(Middle ch)+Front Camera

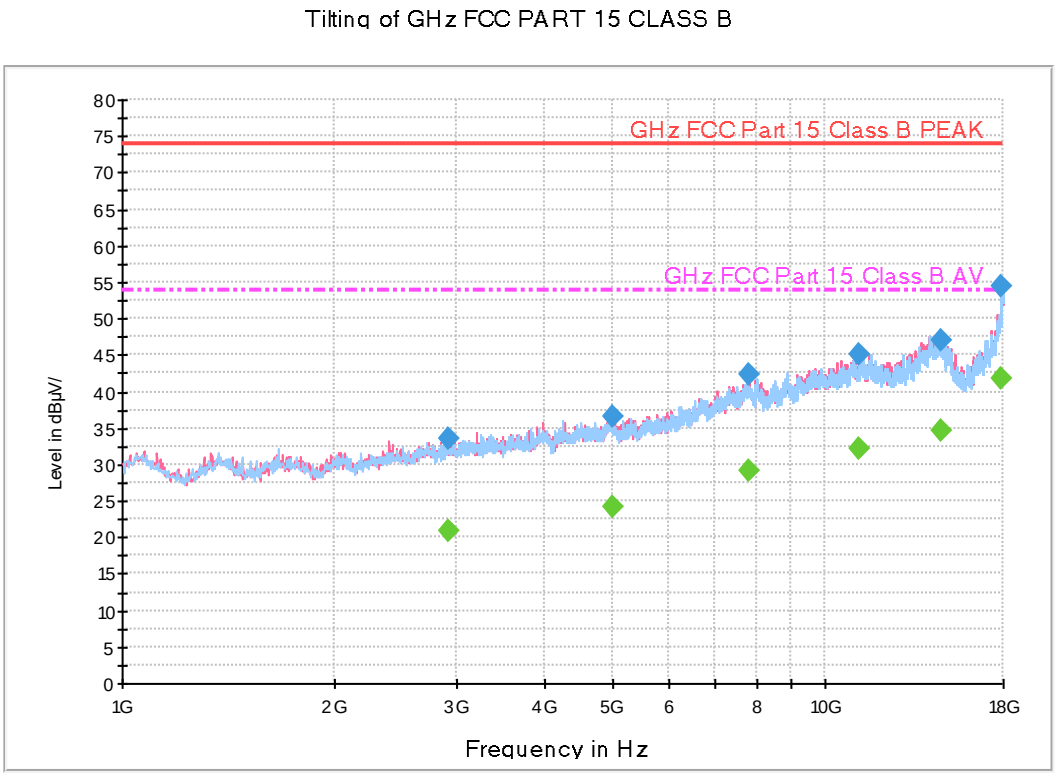


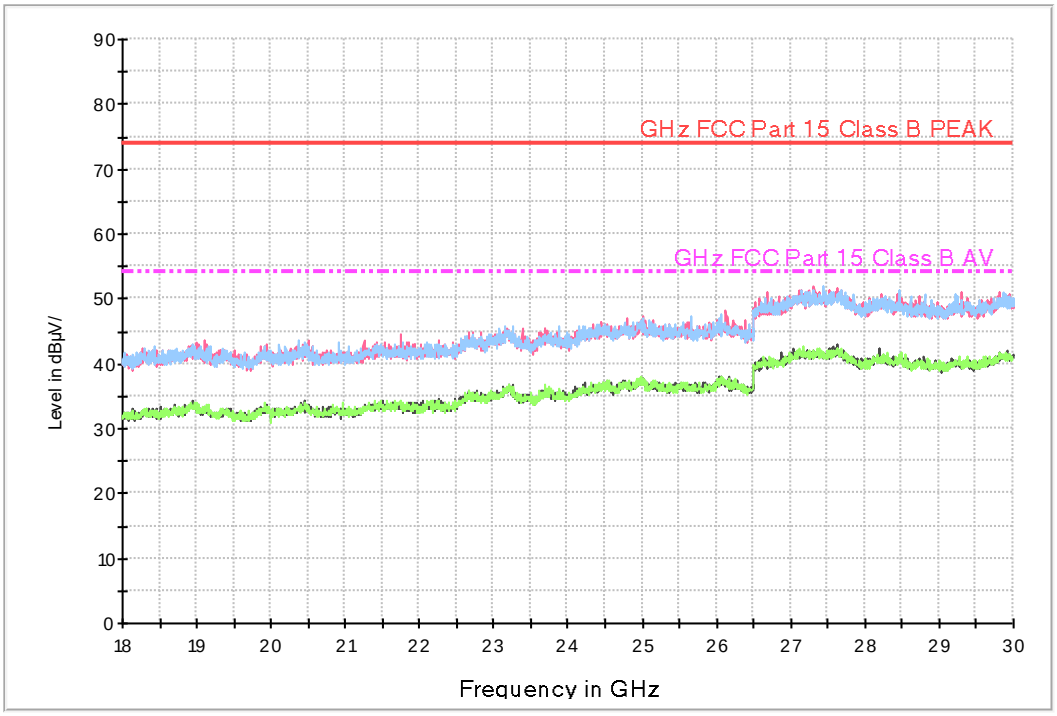


Frequency (㎒)	Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
2043.9950	34.0	350.0	H	123.0	-25.3	40.0	74.0
3137.3200	34.1	150.1	V	43.0	-21.2	39.9	74.0
5617.9300	38.6	150.0	H	155.0	-15.8	35.4	74.0
9964.0450	44.7	149.6	V	124.0	-7.5	29.3	74.0
1 4559.2500	48.3	198.4	H	167.0	0.4	25.7	74.0
1 7975.1303	55.5	150.0	V	50.0	9.2	18.5	74.0

Frequency (㎒)	CAverage (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
2043.9950	19.5	350.0	H	123.0	-25.3	34.5	54.0
3137.3200	21.0	150.1	V	43.0	-21.2	33.0	54.0
5617.9300	24.3	150.0	H	155.0	-15.8	29.7	54.0
9964.0450	31.0	149.6	V	124.0	-7.5	23.0	54.0
1 4559.2500	35.0	198.4	H	167.0	0.4	19.0	54.0
1 7975.1303	41.8	150.0	V	50.0	9.2	12.2	54.0

Figure 17: Radiated Emission (1 ㎓ to 30 ㎓), [EUT+TA] LTE B26 Idle(Middle ch)+Rear Camera

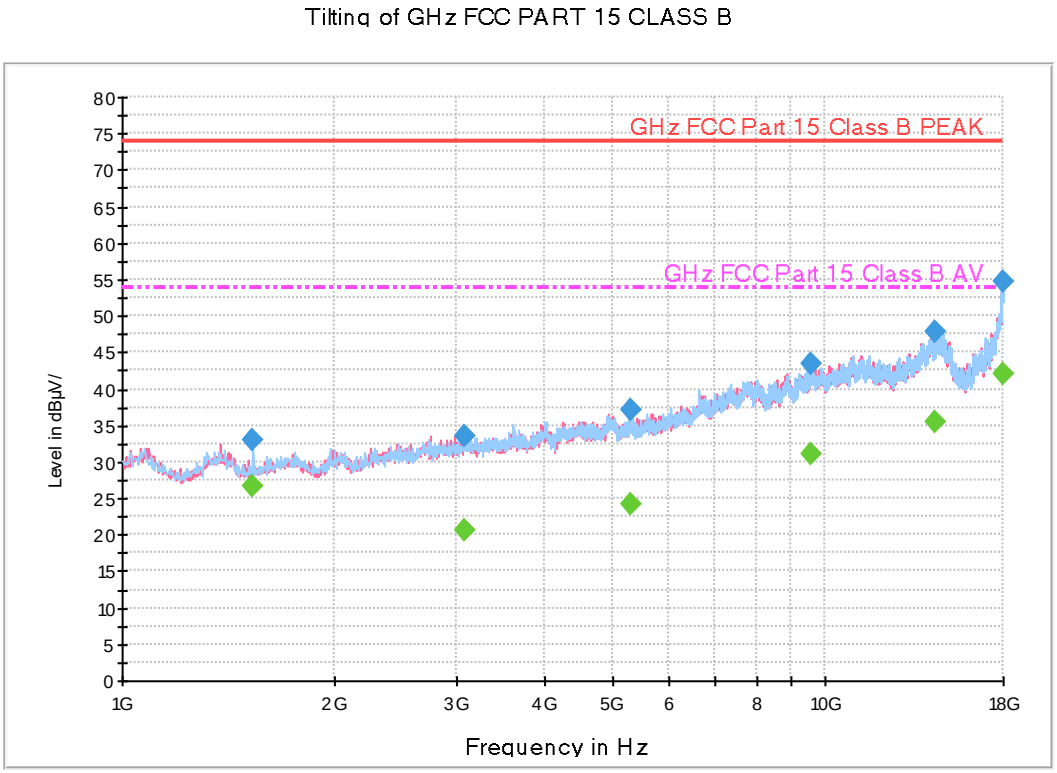


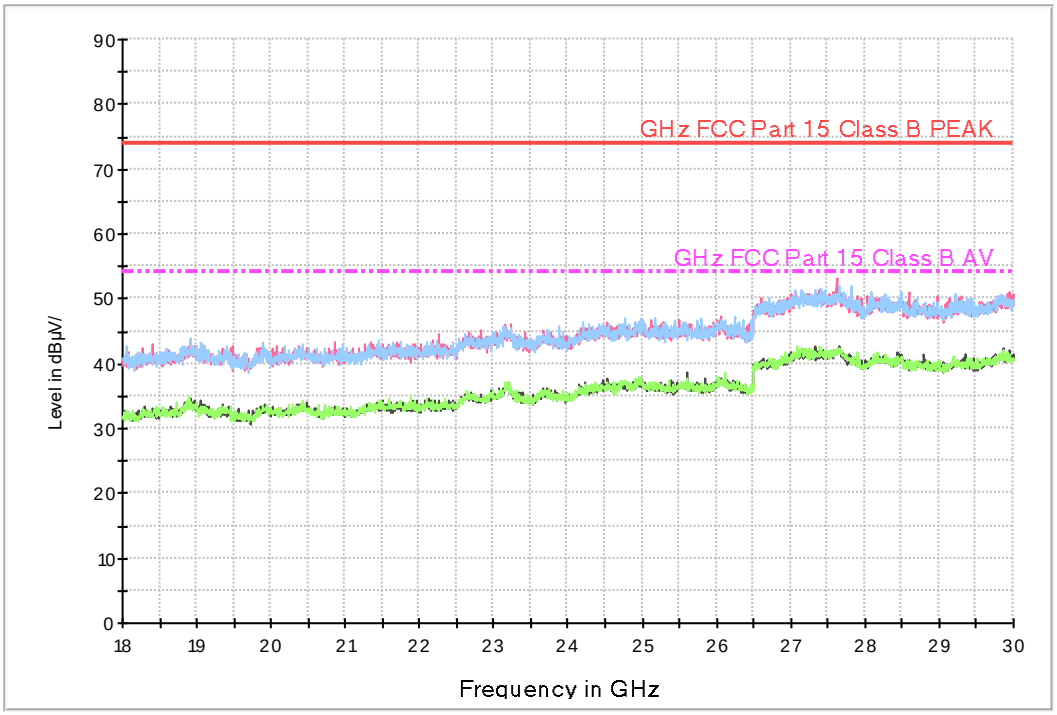


Frequency (㎒)	Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
2913.2400	33.5	125.8	V	0.0	-21.8	40.5	74.0
5005.9650	36.5	275.4	V	317.0	-16.5	37.5	74.0
7822.7650	42.4	189.5	V	235.0	-10.5	31.6	74.0
1 1252.7400	45.2	249.4	H	315.0	-4.1	28.8	74.0
1 4728.9100	47.1	100.0	V	302.0	0.0	26.9	74.0
1 7915.0700	54.4	291.5	V	183.0	8.2	19.6	74.0

Frequency (㎒)	CAverage (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
2913.2400	20.8	125.8	V	0.0	-21.8	33.2	54.0
5005.9650	24.1	275.4	V	317.0	-16.5	29.9	54.0
7822.7650	29.2	189.5	V	235.0	-10.5	24.8	54.0
1 1252.7400	32.1	249.4	H	315.0	-4.1	21.9	54.0
1 4728.9100	34.6	100.0	V	302.0	0.0	19.4	54.0
1 7915.0700	41.7	291.5	V	183.0	8.2	12.3	54.0

Figure 18: Radiated Emission (1 ㎓ to 30 ㎓), [EUT+Earphone] Video+Audio

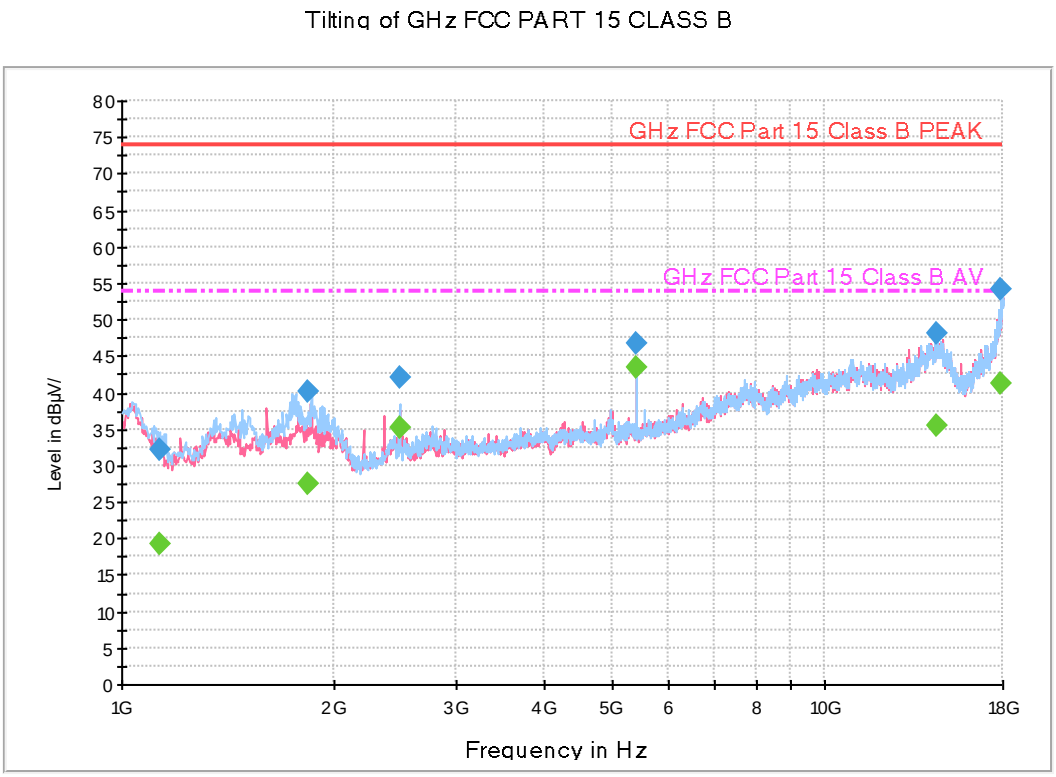


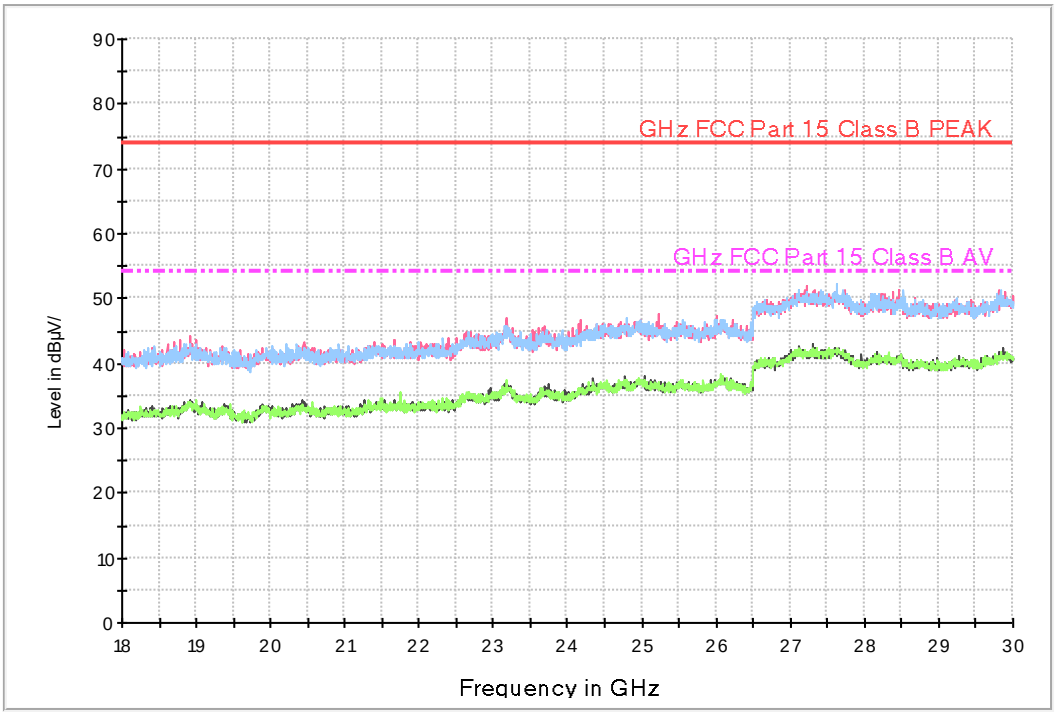


Frequency (㎒)	Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1536.0150	33.1	111.4	H	66.0	-26.7	40.9	74.0
3081.4250	33.4	292.5	V	80.0	-21.3	40.6	74.0
5297.0200	37.2	249.9	V	311.0	-16.2	36.8	74.0
9604.7800	43.4	248.9	H	335.0	-8.2	30.6	74.0
1 4441.6750	47.9	150.0	V	37.0	0.4	26.1	74.0
1 7976.9958	54.6	234.6	H	0.0	9.2	19.4	74.0

Frequency (㎒)	CAverage (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1536.0150	26.6	111.4	H	66.0	-26.7	27.4	54.0
3081.4250	20.8	292.5	V	80.0	-21.3	33.2	54.0
5297.0200	24.1	249.9	V	311.0	-16.2	29.9	54.0
9604.7800	31.0	248.9	H	335.0	-8.2	23.0	54.0
1 4441.6750	35.4	150.0	V	37.0	0.4	18.6	54.0
1 7976.9958	42.2	234.6	H	0.0	9.2	11.8	54.0

Figure 19: Radiated Emission (1 ㎓ to 30 ㎓), [EUT+LED Monitor] Video+Audio (Display out)





Frequency (㎒)	Peak (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1134.9600	32.2	299.7	V	303.0	-27.9	41.8	74.0
1845.3950	40.0	289.7	H	139.0	-25.9	34.0	74.0
2485.1850	42.0	150.0	H	233.0	-23.4	32.0	74.0
5399.9850	46.8	202.5	H	186.0	-16.1	27.2	74.0
1 4474.5800	48.1	248.6	H	172.0	0.4	25.9	74.0
1 7910.8000	54.2	125.7	V	314.0	8.2	19.8	74.0

Frequency (㎒)	CAverage (dB㎶/m)	Antenna Height (㎝)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB㎶/m)
1134.9600	19.4	299.7	V	303.0	-27.9	34.6	54.0
1845.3950	27.4	289.7	H	139.0	-25.9	26.6	54.0
2485.1850	35.1	150.0	H	233.0	-23.4	18.9	54.0
5399.9850	43.4	202.5	H	186.0	-16.1	10.6	54.0
1 4474.5800	35.4	248.6	H	172.0	0.4	18.6	54.0
1 7910.8000	41.3	125.7	V	314.0	8.2	12.7	54.0

6. CONCLUSION

The data collected shows that the **Product Name: Mobile Phone and Model Name: SM-N981B/DS** complies with §15.107 and §15.109 of the FCC rules.

7. APPENDIX A. TEST SETUP PHOTO

Please refer to EMI Test Setup Photo and test setup photo file no. as follows;

Rev. No.	Issue Date	File No.
0	October 29, 2021	HCT-EM-2110-FC006-P

End of report