



FCC 47 CFR PART 15 SUBPART B

CERTIFICATION TEST REPORT

FOR

WCDMA/LTE Tablet + BT/BLE and DTS/UNII a/b/g/n/ac

MODEL NUMBER : SM-W737N0

FCC ID: A3LSMW737N0

REPORT NUMBER: 4788556585-E6V1

ISSUE DATE: AUG 29, 2018

Prepared for
SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Prepared by
UL Korea, Ltd.
26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea

Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433



ACCREDITED*

Testing
Laboratory

TL-637

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	08/29/18	Initial issue	SangWon Lee

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY	5
4.1. <i>MEASURING INSTRUMENT CALIBRATION.....</i>	<i>5</i>
4.2. <i>SAMPLE CALCULATION.....</i>	<i>5</i>
4.3. <i>MEASUREMENT UNCERTAINTY.....</i>	<i>6</i>
5. EQUIPMENT UNDER TEST	7
5.1. <i>DESCRIPTION OF EUT.....</i>	<i>7</i>
5.2. <i>PRELIMINARY TEST CONFIGURATIONS.....</i>	<i>7</i>
5.3. <i>MODE(S) OF OPERATION INVESTIGATED.....</i>	<i>7</i>
5.4. <i>MODIFICATIONS.....</i>	<i>7</i>
5.5. <i>DETAILS OF TESTED SYSTEM.....</i>	<i>8</i>
6. TEST AND MEASUREMENT EQUIPMENT	15
7. APPLICABLE LIMITS AND TEST RESULTS	16
7.1. <i>RADIATED EMISSIONS.....</i>	<i>16</i>
7.2. <i>AC MAINS LINE CONDUCTED EMISSIONS.....</i>	<i>53</i>
8. SETUP PHOTOS.....	78

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION: WCDMA/LTE Tablet + BT/BLE and DTS/UNII a/b/g/n/ac
MODEL NUMBER: SM-W737N0
SERIAL NUMBER: BBMGR34K5005QNN
DATE TESTED: JUL 31, 2018 - AUG 29, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART B	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Korea, Ltd. By:



ChangYoung Choi
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:



SangWon Lee
Suwon Lab Engineer
UL Korea, Ltd.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2014, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro	
<input checked="" type="checkbox"/>	Chamber 1
<input checked="" type="checkbox"/>	Chamber 2

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <http://www.iasonline.org/PDF/TL/TL-637.pdf>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	2.32 dB
Radiated Disturbance, Below 1GHz	4.14 dB
Radiated Disturbance, Above 1 GHz	5.97 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Display out & Rear cam free view & Front cam free view & External USB memory read,write,delete & External micro SD memory read,write,delete & Audio file play mode & Lan mode.

GENERAL INFORMATION

Type of device	Class B personal computers and peripherals
AC adapter power requirements	100-240 VAC / 50-60 Hz, 1.0 A
List of frequencies generated or used by the EUT	30 GHz (5 th harmonic of the frequency of 5.8GHz WLAN)

5.2. PRELIMINARY TEST CONFIGURATIONS

The system was configured for testing in a typical fashion that a customer would normally use.

5.3. MODE(S) OF OPERATION INVESTIGATED

Mode	Description
DP_VGA Cam_Audio Play_Memory	Display out & Front cam free view & External micro SD memory read,write,delete & Audio file play mode
ExUSB_MEGA Cam_Audio Play_Memory	Rear cam free view & External USB memory read,write,delete & External micro SD memory read,write,delete & Audio file play mode
LAN_MEGA Cam_Audio Play_Memory	Rear cam free view & External micro SD memory read,write,delete & Audio file play mode & Lan mode

5.4. MODIFICATIONS

No modifications were made during testing.

5.5. DETAILS OF TESTED SYSTEM

SUPPORT EQUIPMENT & PERIPHERALS

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID/DoC
Charger	SAMSUNG	EP-TA300	R37K3AD15D3SE3	N/A
Charger	SAMSUNG	EP-TA300	R37K5J201B1SE3	N/A
Data Cable	SAMSUNG	EP-DW720CWE	N/A	N/A
Earphone	SAMSUNG	EO-EG920BW	N/A	N/A
Keyboard	SAMSUNG	EJ-CW730	N/A	N/A
LCD Monitor	DELL	U2417Ht	CN-0767T7-WS200 -835-A3ML-A07	DoC
USB memory	infoThink	ARK REACTOR(8G)	N/A	DoC
Micro SD	SAMSUNG	MicroSDXC PRO	-	DoC

I/O CABLES

- ExUSB_MEGA Cam_Audio Play_Memory (with Keyboard)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	EX USB	1	USB C type	-	Direct	From EUT to EX USB memory
4	SD Card	1	-	-	Direct	From EUT to Micro SD Card
5	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone
6	IO	1	IO	Direct	-	From EUT to Keyboard

- LAN_MEGA Cam_Audio Play_Memory (with Keyboard)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	LAN	1	USB C type	Direct	2.5m	From EUT to outside Ethernet
4	SD Card	1	-	-	Direct	From EUT to Micro SD Card
5	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone
6	IO	1	IO	Direct	-	From EUT to Keyboard

- DP_VGA Cam_Audio Play_Memory (with Keyboard)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Unshielded	1.8m	For LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
4	DP	1	USB C type	Shielded	2.0m	From EUT to USB C type port
5	SD Card	1	-	-	Direct	From EUT to Micro SD Card
6	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone
7	IO	1	IO	Direct	-	From EUT to Keyboard

- ExUSB_MEGA Cam_Audio Play_Memory(without Keyboard)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	EX USB	1	USB C type	-	Direct	From EUT to EX USB memory
4	SD Card	1	-	-	Direct	From EUT to Micro SD Card
5	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone

- LAN_MEGA Cam_Audio Play_Memory(without Keyboard)

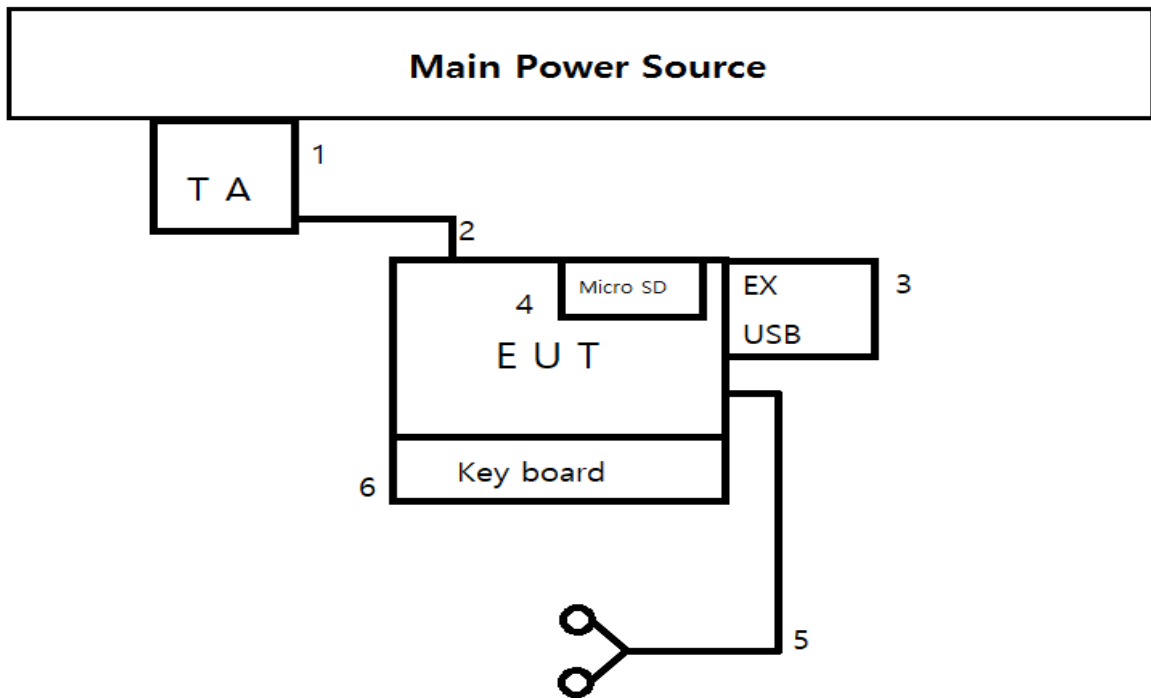
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	LAN	1	USB C type	Direct	2.5m	From EUT to outside Ethernet
4	SD Card	1	-	-	Direct	From EUT to Micro SD Card
5	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone

- DP_VGA Cam_Audio Play_Memory(without Keyboard)

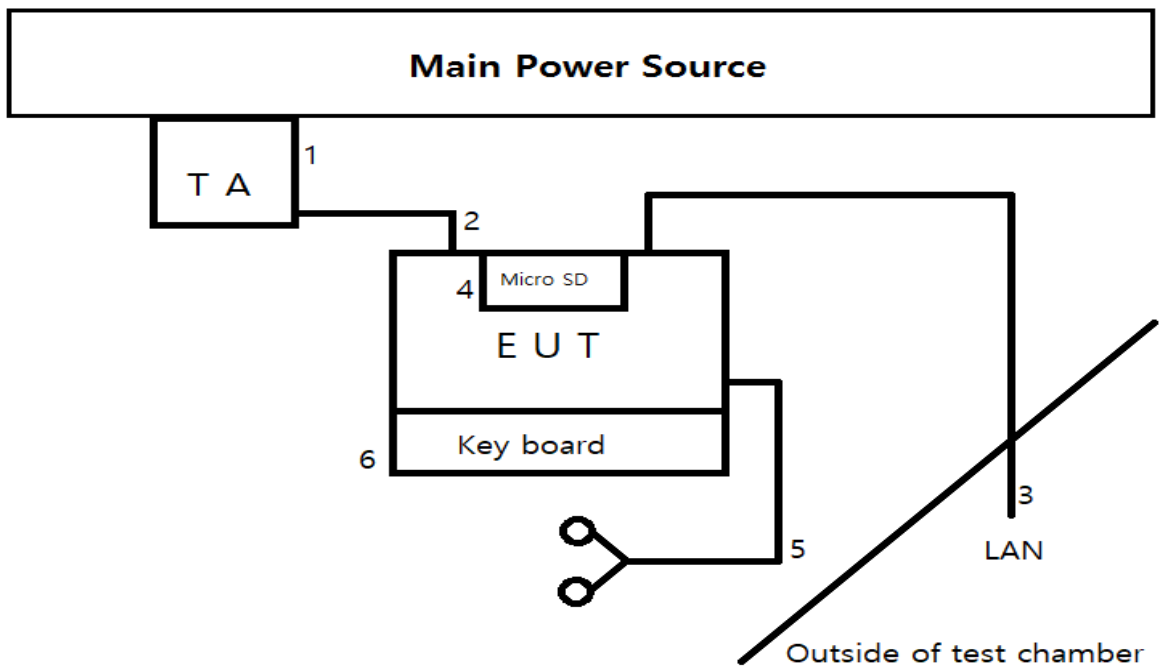
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	Power	Unshielded	1.8m	For LCD Monitor
2	USB	1	Power	Shielded	1.4m	From Travel Adapter to EUT
3	AC Power	1	Power	Direct	-	From Desktop to LCD Monitor
4	DP	1	USB C type	Shielded	2.0m	From EUT to USB C type port
5	SD Card	1	-	-	Direct	From EUT to Micro SD Card
6	Stereo	1	Stereo	Unshield	1.2m	From EUT to Earphone

TEST SETUP DIAGRAM

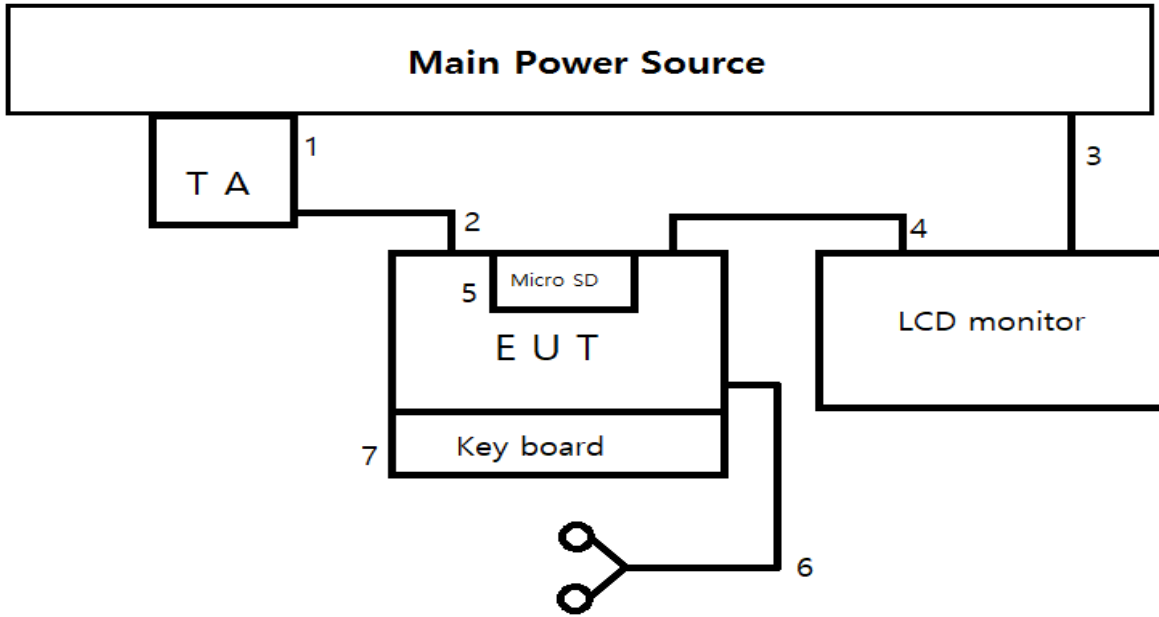
- ExUSB_MEGA Cam_Audio Play_Memory (with Keyboard)



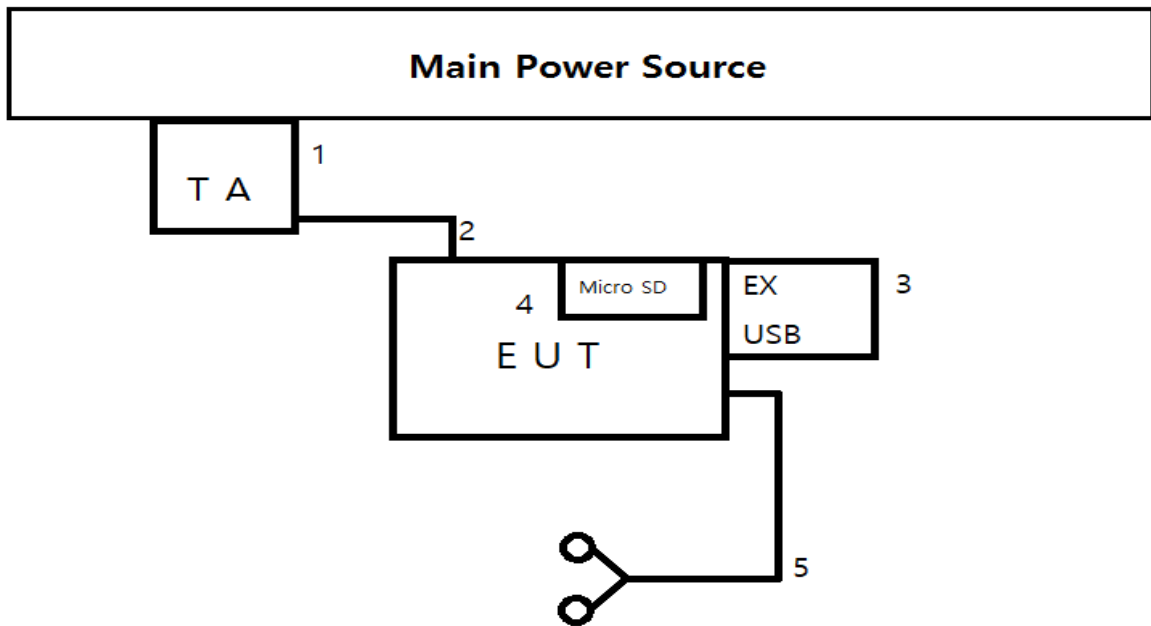
- LAN_MEGA Cam_Audio Play_Memory (with Keyboard)



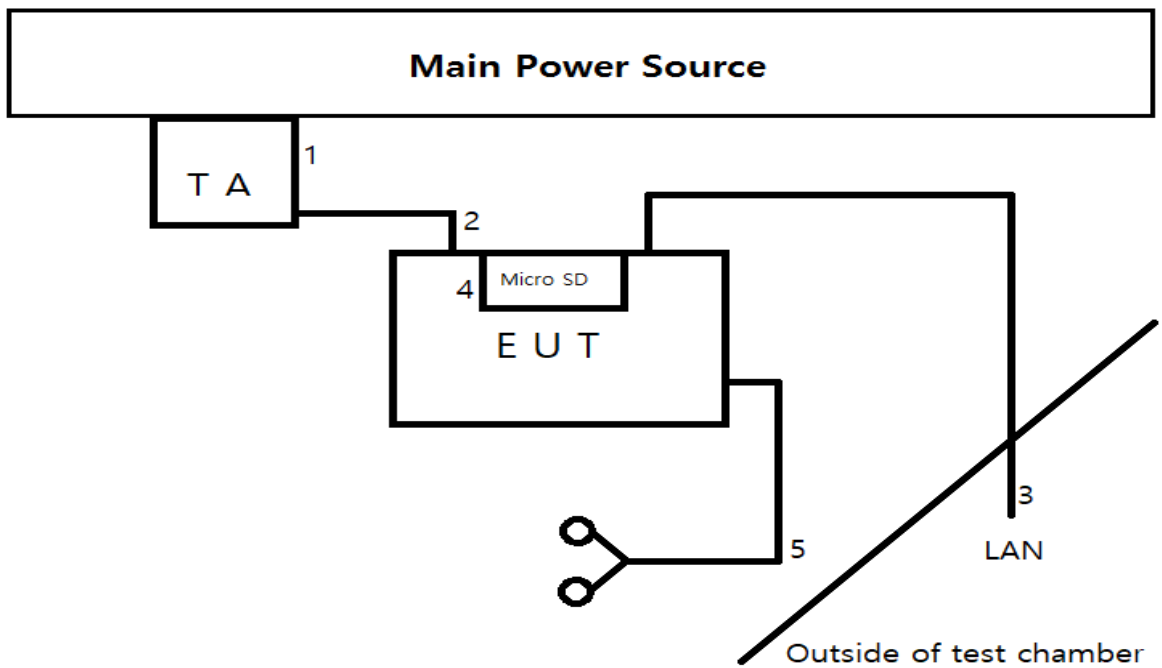
- DP_VGA Cam_Audio Play_Memory (with Keyboard)



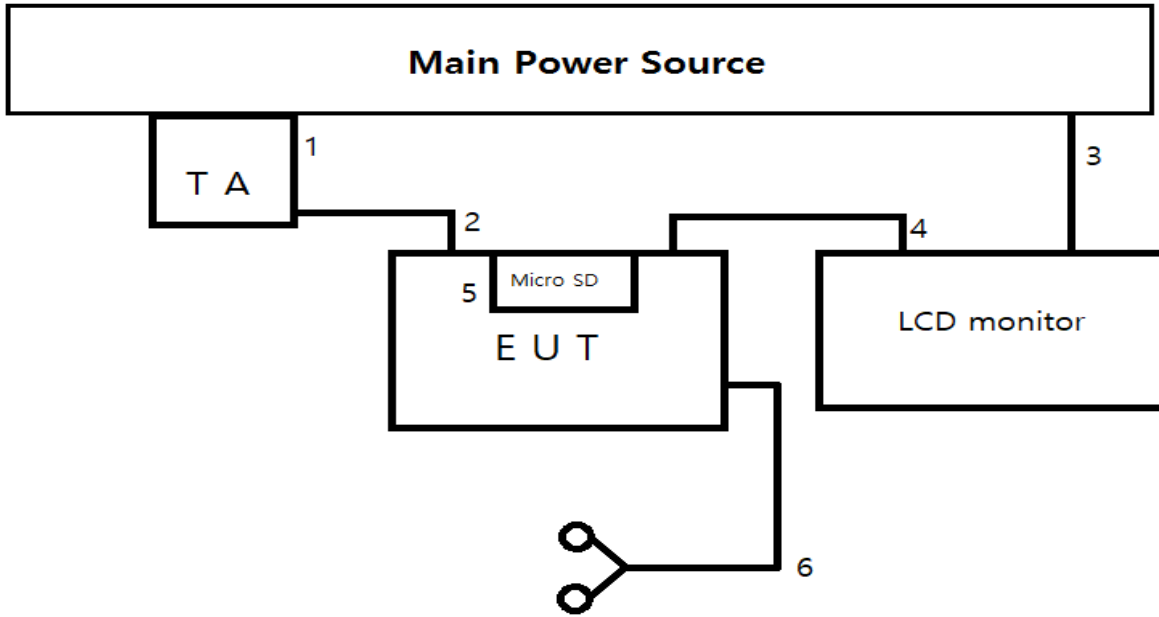
- ExUSB_MEGA Cam_Audio Play_Memory (without Keyboard)



- LAN_MEGA Cam_Audio Play_Memory (without Keyboard)



- DP_VGA Cam_Audio Play_Memory (without Keyboard)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List					
Description	Manufacturer	Model	S/N	Before Cal Due	Cal Due
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	09-14-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3115	00161451	03-10-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168724	05-31-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168717	05-31-19	08-04-20
Antenna, Horn, 40 GHz	ETS	3116C	00166155	12-04-19	12-04-19
Antenna, Horn, 40 GHz	ETS	3116C-PA	00168841	11-13-19	08-09-19
Preamplifier, 1000 MHz	Sonoma	310N	341282	08-09-18	08-07-19
Preamplifier, 1000 MHz	Sonoma	310N	351741	08-07-18	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800 -25-S-42	1896138	08-08-18	08-07-19
EMI Test Receive, 40 GHz	R&S	ESU40	100439	08-08-18	08-06-19
EMI Test Receive, 40 GHz	R&S	ESU40	100457	08-08-18	08-06-19
EMI Test Receive, 3 GHz	R&S	ESR3	101832	08-07-18	08-06-19
Attenuator / Switch driver	HP	11713A	3748A04272	N/A	N/A
LISN	R&S	ENV-216	101836	08-09-18	08-09-19
LISN	R&S	ENV-216	101837	08-09-18	08-09-19
UL Software					
Description	Manufacturer	Model	Version		
Radiated software	UL	UL EMC	Ver 9.5		
AC Line Conducted software	UL	UL EMC	Ver 9.5		

Note: The testing was performed in accordance with ANSI C63.4-2014. C63.4:2014 requires measurement antennas to be calibrated in accordance with C63.5: 2006. The antenna calibration was done in accordance with C63.5: 2006.

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4: 2014

The highest clock frequency generated or used in the EUT is 5.8GHz therefore the frequency range was investigated from 30 MHz to 30 GHz.

LIMIT

§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

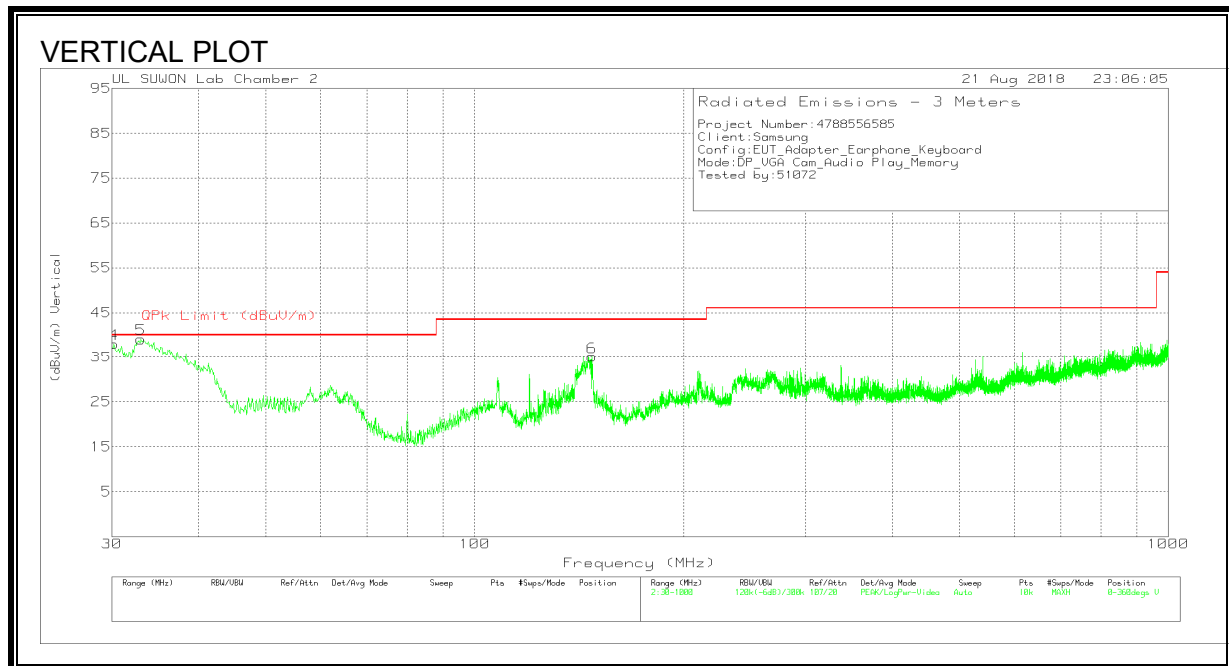
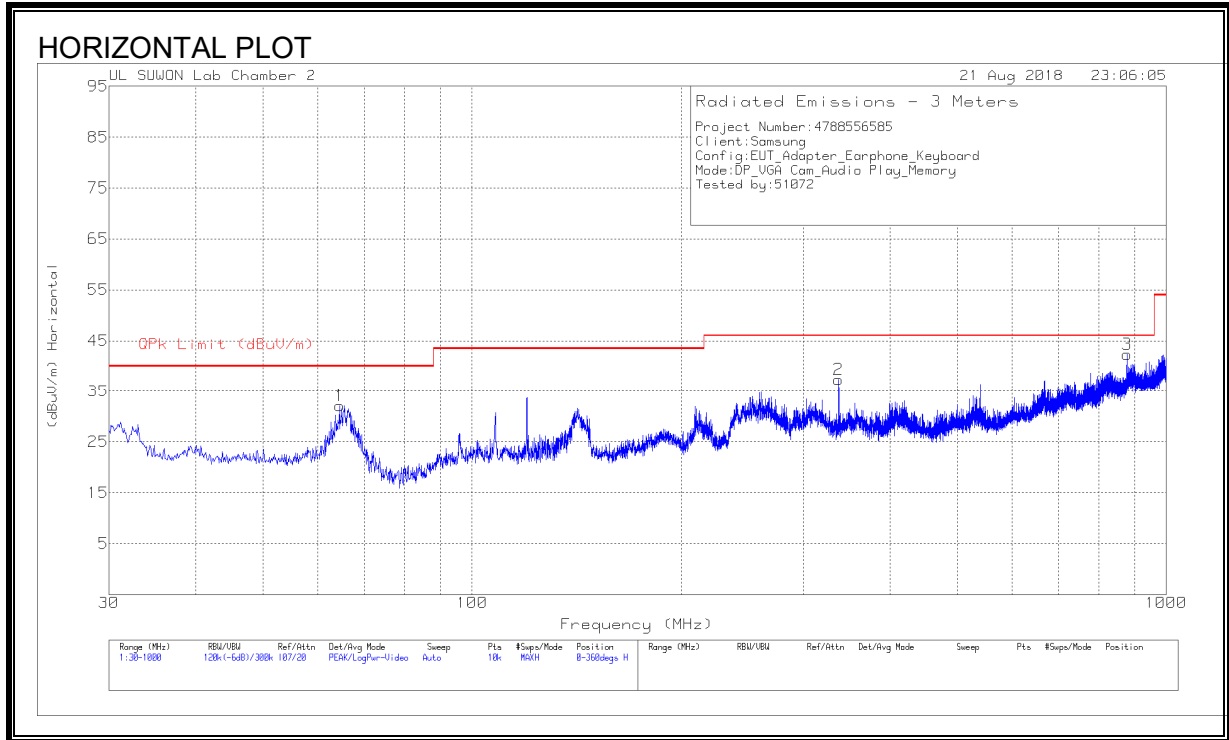
Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dB μ V/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54

Note: The lower limit shall apply at the transition frequency.

RESULTS

RADIATED EMISSIONS 30 TO 1000 MHz

(with Keyboard DP VGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	64.435	46.36	Pk	17.4	-31.7	32.06	40	-7.94	0-360	400	H
2	337.49	47.14	Pk	20.5	-30.3	37.34	46.02	-8.68	0-360	100	H
3	878.071	42.82	Pk	28.1	-28.6	42.32	46.02	-3.7	0-360	100	H
4	30.194	54.15	Pk	15.9	-32	38.05	40	-1.95	0-360	100	V
5	33.007	55.47	Pk	15.6	-32	39.07	40	-.93	0-360	100	V
6	147.661	52.13	Pk	14.1	-31.2	35.03	43.52	-8.49	0-360	100	V

Pk - Peak detector

Radiated Emissions

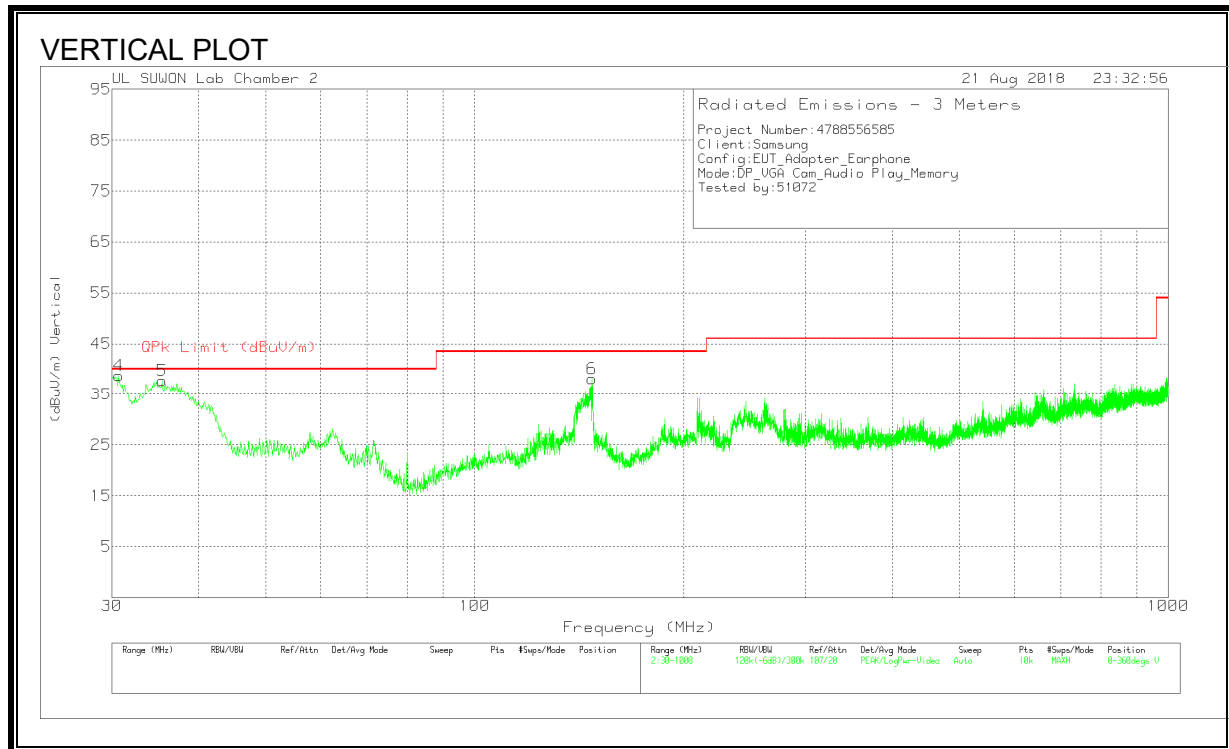
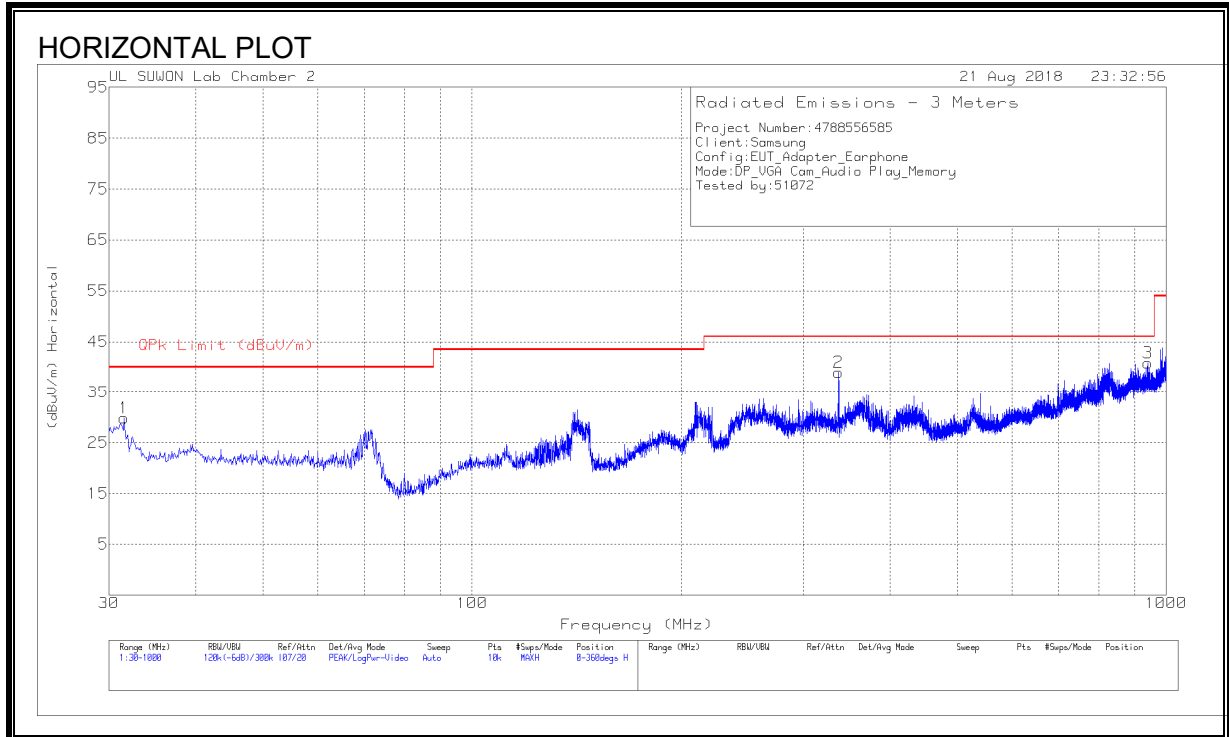
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
877.946	36.55	Qp	28.1	-28.6	36.05	46.02	-9.97	295	100	H
30.366	49.18	Qp	15.8	-32	32.98	40	-7.02	51	103	V
32.9022	51.95	Qp	15.6	-31.9	35.65	40	-4.35	97	112	V

Qp - Quasi-Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 30 TO 1000 MHz

(without Keyboard DP VGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.552	46.35	Pk	15.5	-32	29.85	40	-10.15	0-360	300	H
2	337.49	48.82	Pk	20.5	-30.3	39.02	46.02	-7	0-360	100	H
3	940.248	40.71	Pk	28.2	-28	40.91	46.02	-5.11	0-360	200	H
4	30.679	55.08	Pk	15.7	-32	38.78	40	-1.22	0-360	100	V
5	35.432	52.84	Pk	16.8	-31.9	37.74	40	-2.26	0-360	100	V
6	147.758	55.29	Pk	14.1	-31.2	38.19	43.52	-5.33	0-360	100	V

Pk - Peak detector

Radiated Emissions

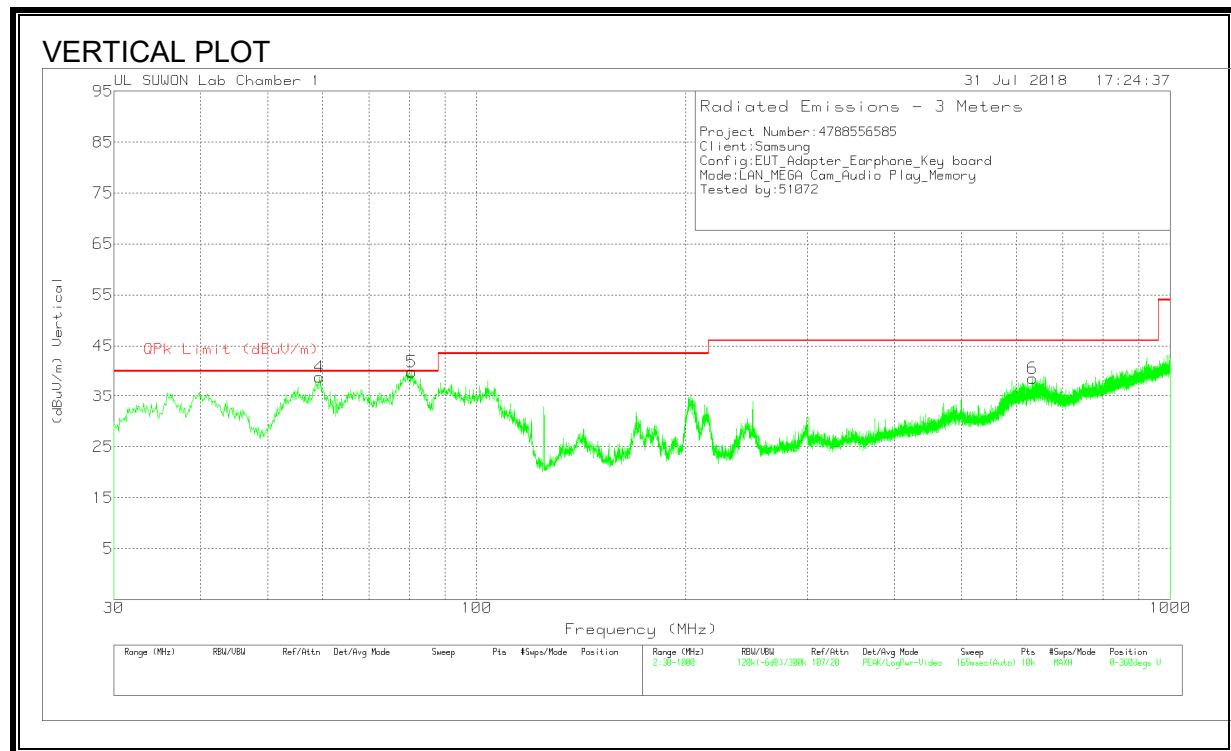
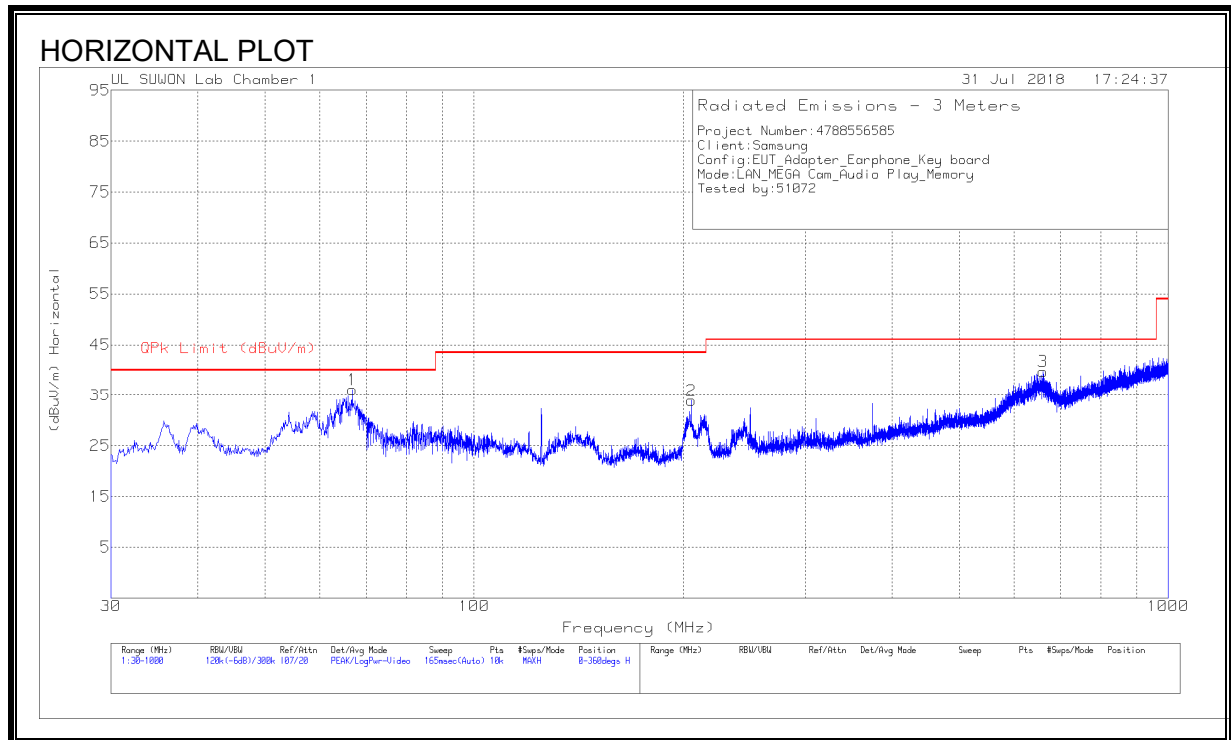
Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
940.011	32.78	Qp	28.2	-28	32.98	46.02	-13.04	55	208	H
30.6776	40.42	Qp	15.7	-32	24.12	40	-15.88	4	207	V
35.672	30.57	Qp	17	-31.9	15.67	40	-24.33	180	156	V

Qp - Quasi-Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 30 TO 1000 MHz

(with Keyboard LAN MEGA Cam Audio Play Memory Mode)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	66.763	48.6	Pk	16.4	-28.9	36.1	40	-3.9	0-360	400	H
2	205.57	44.93	Pk	16.6	-27.6	33.93	43.52	-9.59	0-360	200	H
3	660.5	39.67	Pk	25.3	-25.2	39.77	46.02	-6.25	0-360	200	H
4	59.294	49.4	Pk	18.5	-29	38.9	40	-1.1	0-360	100	V
5	80.634	55.7	Pk	12.9	-28.7	39.9	40	-.1	0-360	100	V
6	633.437	39.03	Pk	25.1	-25.5	38.63	46.02	-7.39	0-360	100	V

Pk - Peak detector

Radiated Emissions

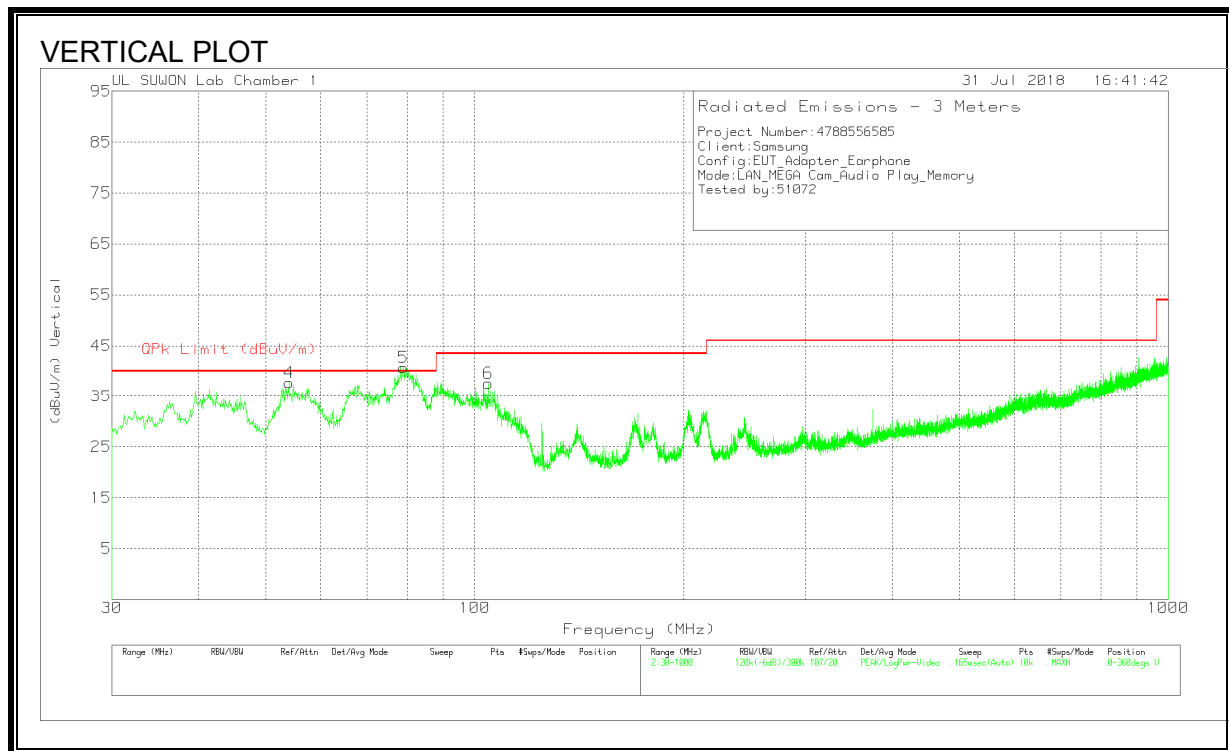
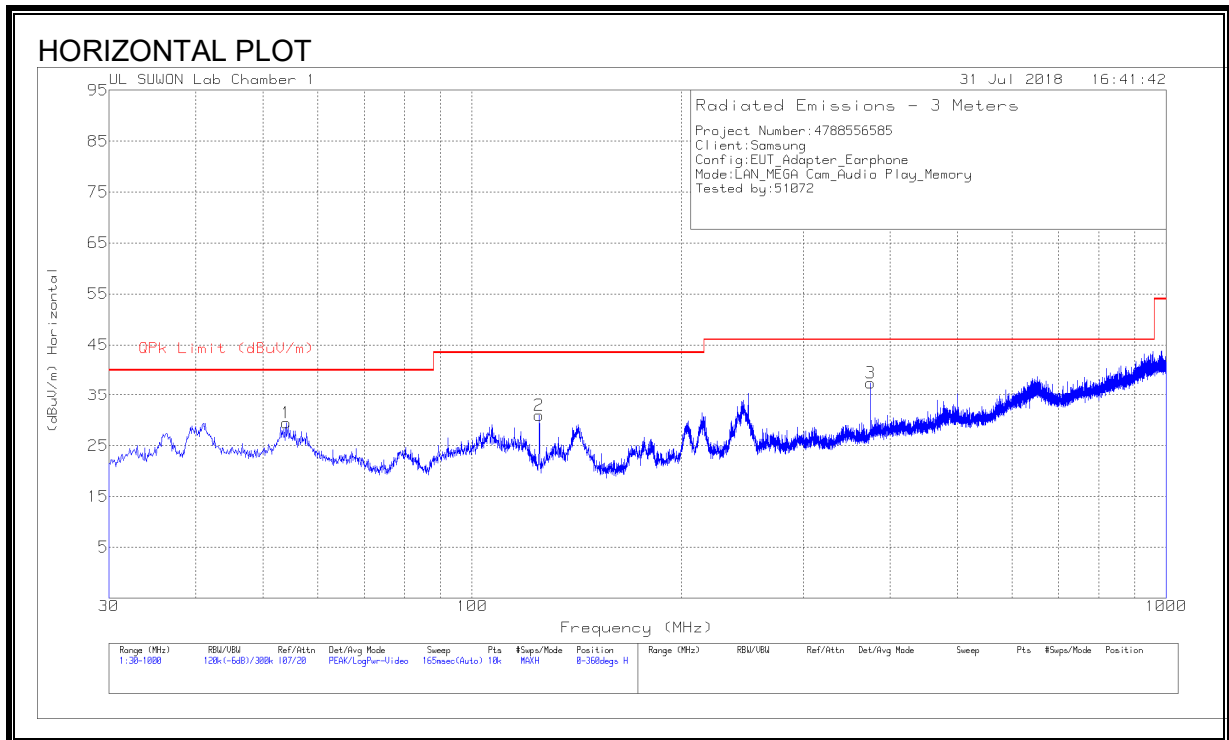
Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
66.5407	40	Qp	16.5	-28.9	27.6	40	-12.4	324	168	H
59.339	40.68	Qp	18.5	-29.1	30.08	40	-9.92	245	169	V
80.6507	51.28	Qp	12.9	-28.6	35.58	40	-4.42	114	122	V

Qp - Quasi-Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 30 TO 1000 MHz

(without Keyboard LAN MEGA Cam Audio Play Memory Mode)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	53.959	39.23	Pk	19.5	-29.2	29.53	40	-10.47	0-360	400	H
2	124.963	44.12	Pk	15	-28.2	30.92	43.52	-12.6	0-360	300	H
3	375.029	43.07	Pk	20.8	-26.4	37.47	46.02	-8.55	0-360	100	H
4	53.959	47.41	Pk	19.5	-29.2	37.71	40	-2.29	0-360	100	V
5	78.985	56.63	Pk	12.8	-28.7	40.73	40	.73	0-360	100	V
6	104.593	48.46	Pk	17.6	-28.4	37.66	43.52	-5.86	0-360	100	V

Pk - Peak detector

Radiated Emissions

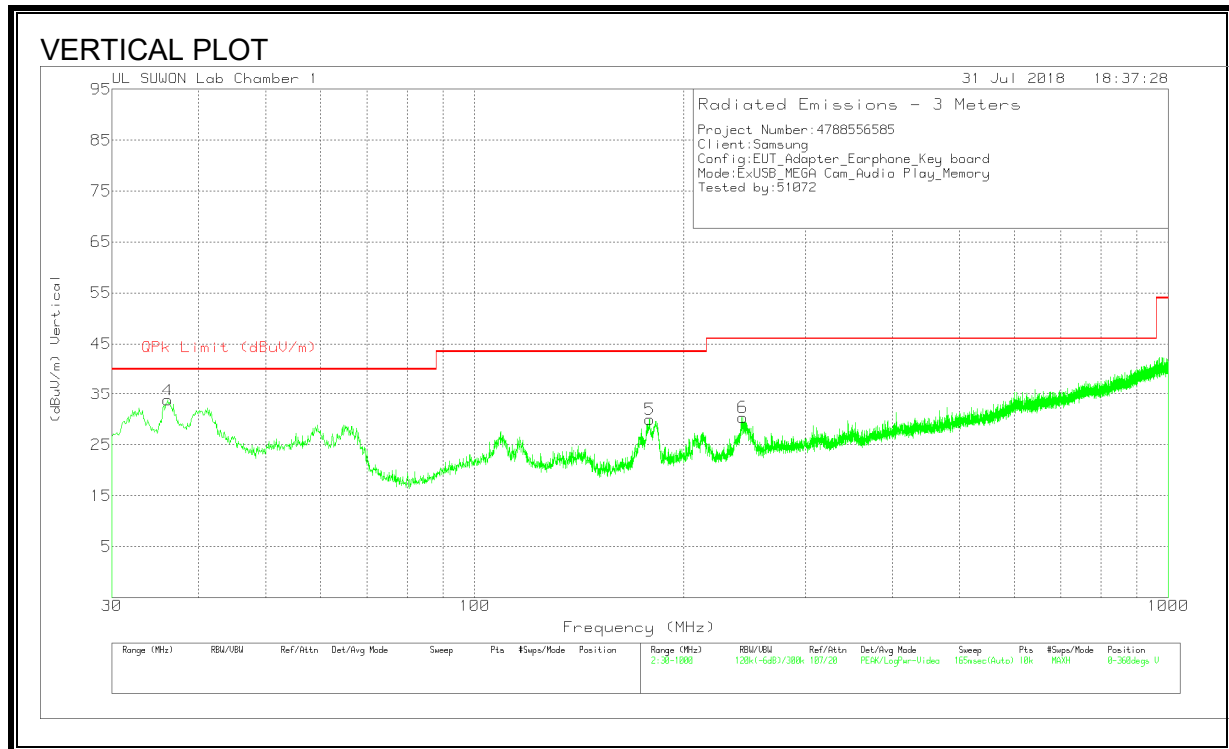
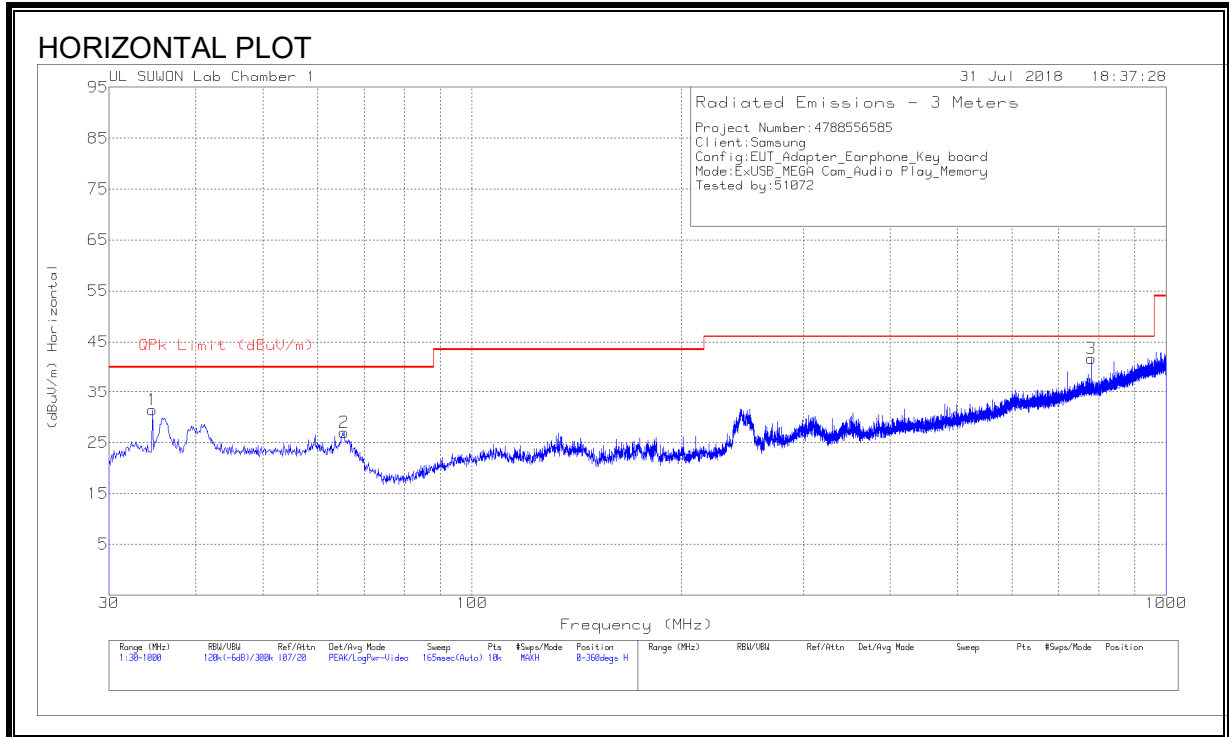
Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
54.184	42.26	Qp	19.5	-29.3	32.46	40	-7.54	256	130	V
79.6152	52.44	Qp	12.7	-28.6	36.54	40	-3.46	212	158	V
104.7519	42.31	Qp	17.6	-28.4	31.51	43.52	-12.01	148	132	V

Qp - Quasi-Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 30 TO 1000 MHz

(with Keyboard ExUSB MEGA Cam Audio Play Memory)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	34.656	44.57	Pk	16.5	-29.6	31.47	40	-8.53	0-360	300	H
2	65.405	39.15	Pk	16.8	-28.9	27.05	40	-12.95	0-360	400	H
3	780.004	39.67	Pk	26.6	-24.6	41.67	46.02	-4.35	0-360	100	H
4	36.111	46.62	Pk	17	-29.8	33.82	40	-6.18	0-360	100	V
5	178.895	42.24	Pk	15.3	-27.6	29.94	43.52	-13.58	0-360	100	V
6	243.691	39.76	Pk	18.1	-27.5	30.36	46.02	-15.66	0-360	100	V

Pk - Peak detector

Radiated Emissions

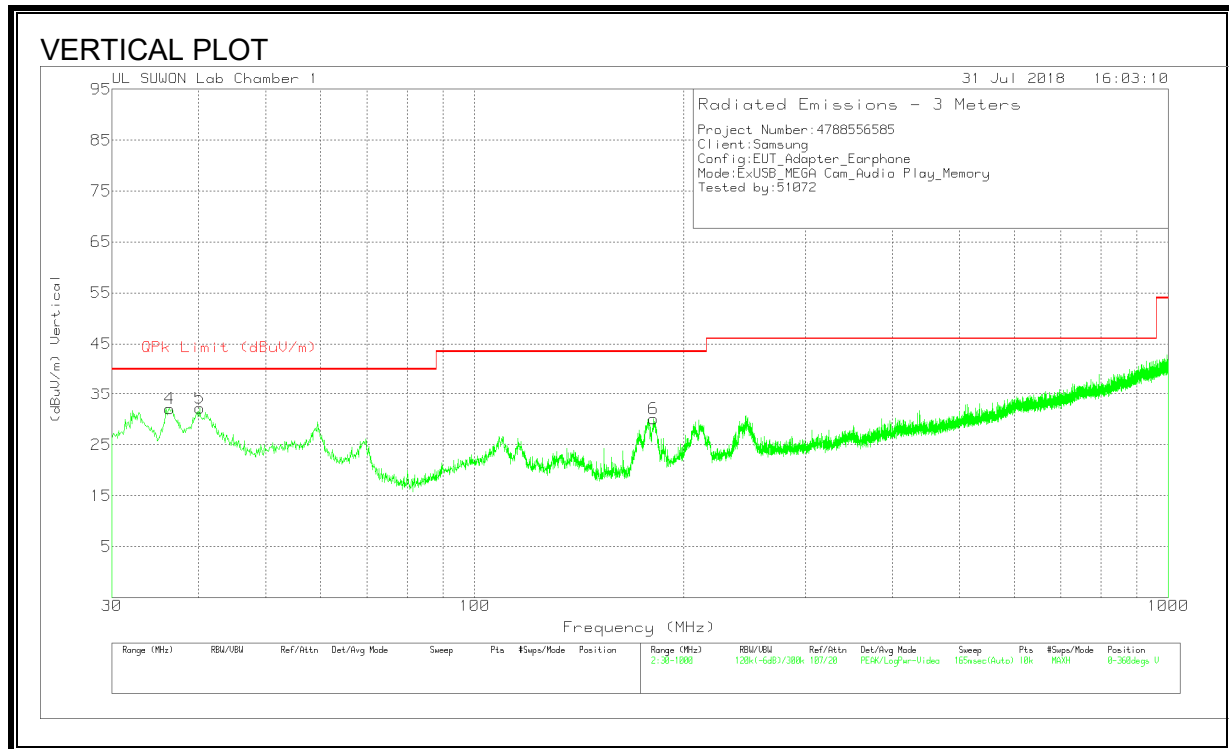
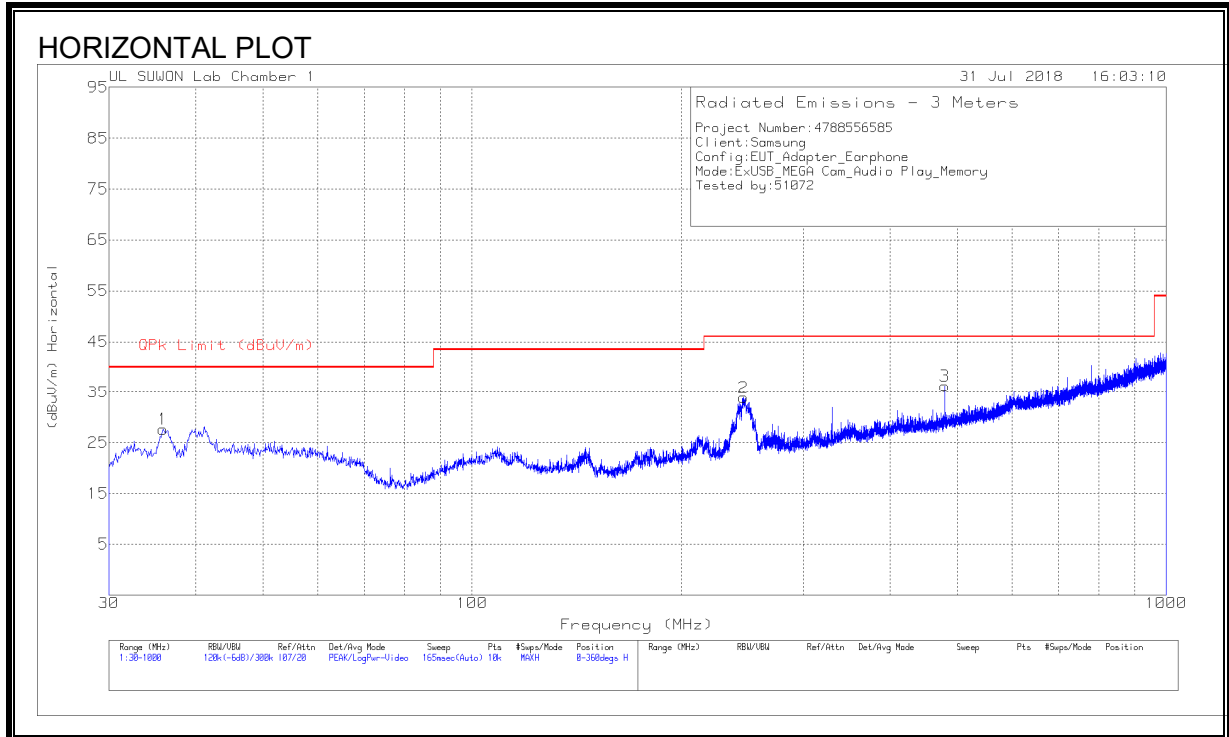
Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
780.0267	39.03	Qp	26.6	-24.6	41.03	46.02	-4.99	6	122	H

Qp - Quasi-Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 30 TO 1000 MHz

(without Keyboard ExUSB MEGA Cam Audio Play Memory)



HORIZONTAL AND VERTICAL DATA

Trace Markers

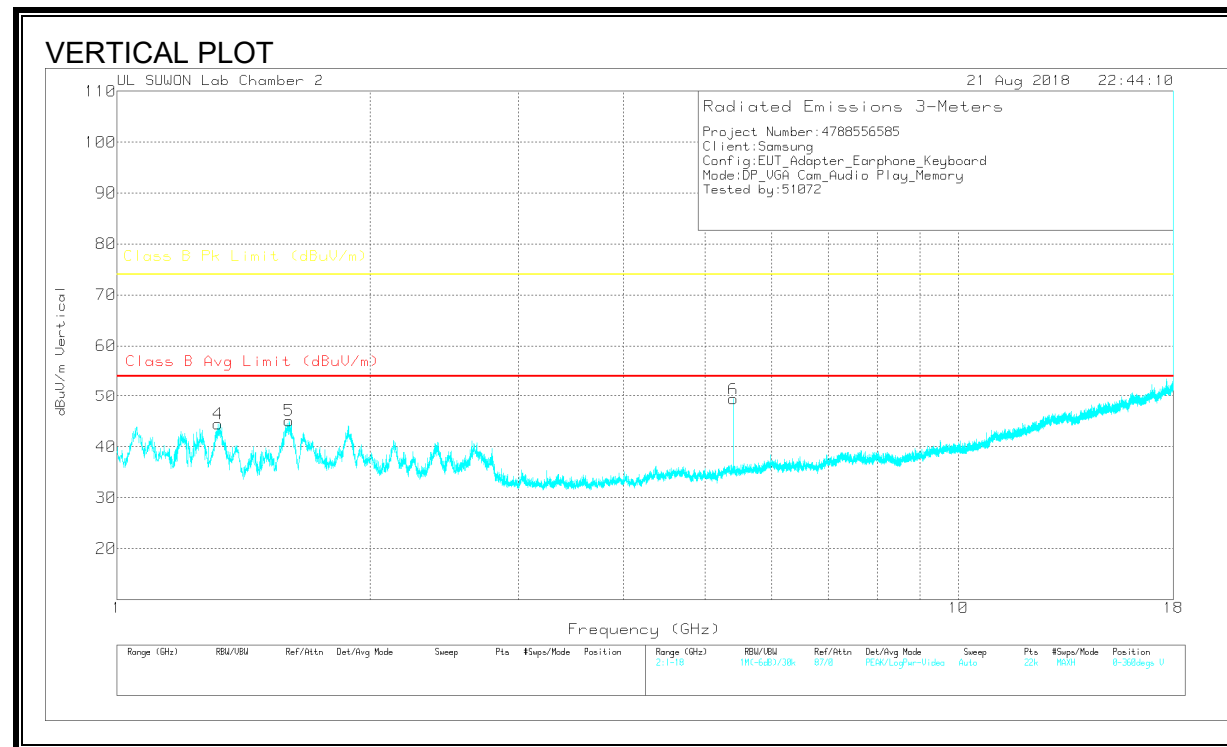
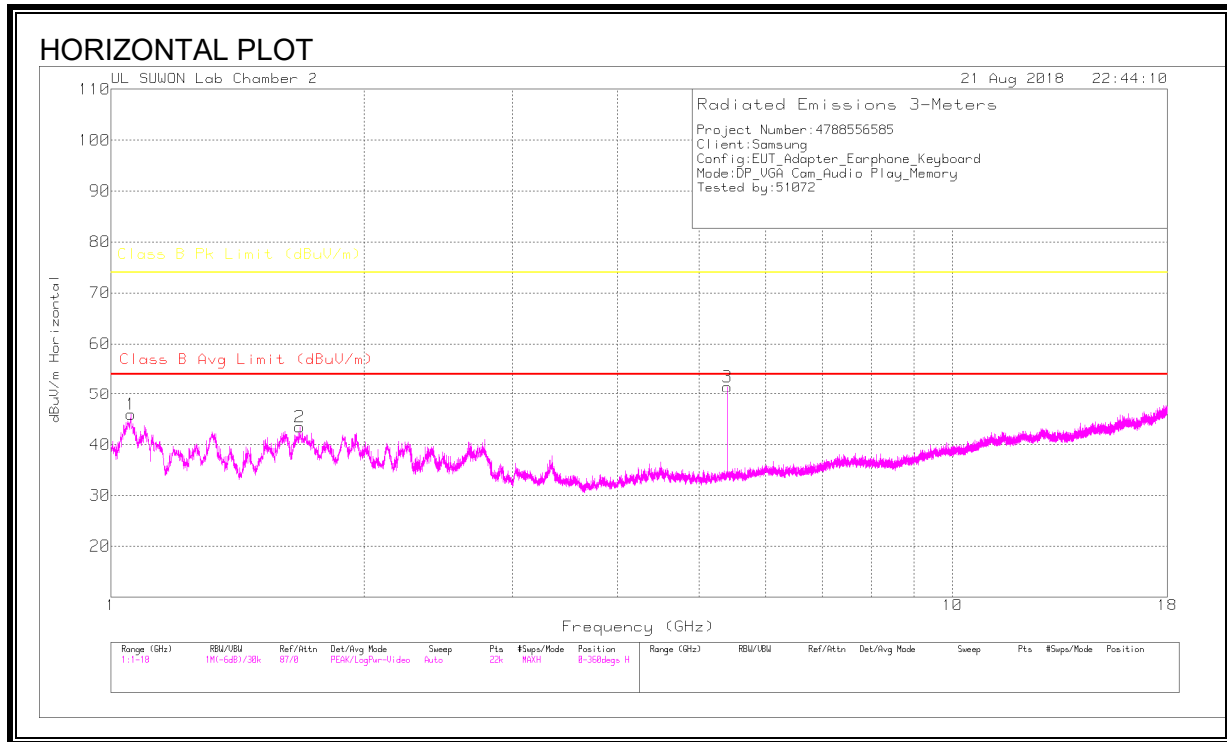
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	750_20170831	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	35.917	40.47	Pk	16.9	-29.8	27.57	40	-12.43	0-360	300	H
2	246.116	43.26	Pk	18.2	-27.5	33.96	46.02	-12.06	0-360	100	H
3	480.08	39.44	Pk	22.7	-25.9	36.24	46.02	-9.78	0-360	200	H
4	36.305	44.87	Pk	17.1	-29.9	32.07	40	-7.93	0-360	100	V
5	40.185	42.94	Pk	18.7	-29.4	32.24	40	-7.76	0-360	100	V
6	181.223	42.15	Pk	15.5	-27.6	30.05	43.52	-13.47	0-360	100	V

Pk - Peak detector

Note: Other frequency measurement was not performed. Because peak measurement result margin was over 6dB in 'QP' limit.

RADIATED EMISSIONS 1GHz to 18GHz

(with Keyboard DP VGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.056	50.33	PK	28	-32.4	45.93	-	-	74	-28.07	0-360	200	H
2	1.676	46.32	PK	28.5	-31.3	43.52	-	-	74	-30.48	0-360	100	H
3	5.4	44.99	PK	34.5	-28	51.49	-	-	74	-22.51	0-360	200	H
4	1.318	46.55	PK	29.7	-31.8	44.45	-	-	74	-29.55	0-360	100	V
5	1.601	48.17	PK	28.3	-31.4	45.07	-	-	74	-28.93	0-360	100	V
6	5.4	41.57	PK	34.5	-26.6	49.47	-	-	74	-24.53	0-360	200	V

PK – Peak Detector

Radiated Emissions

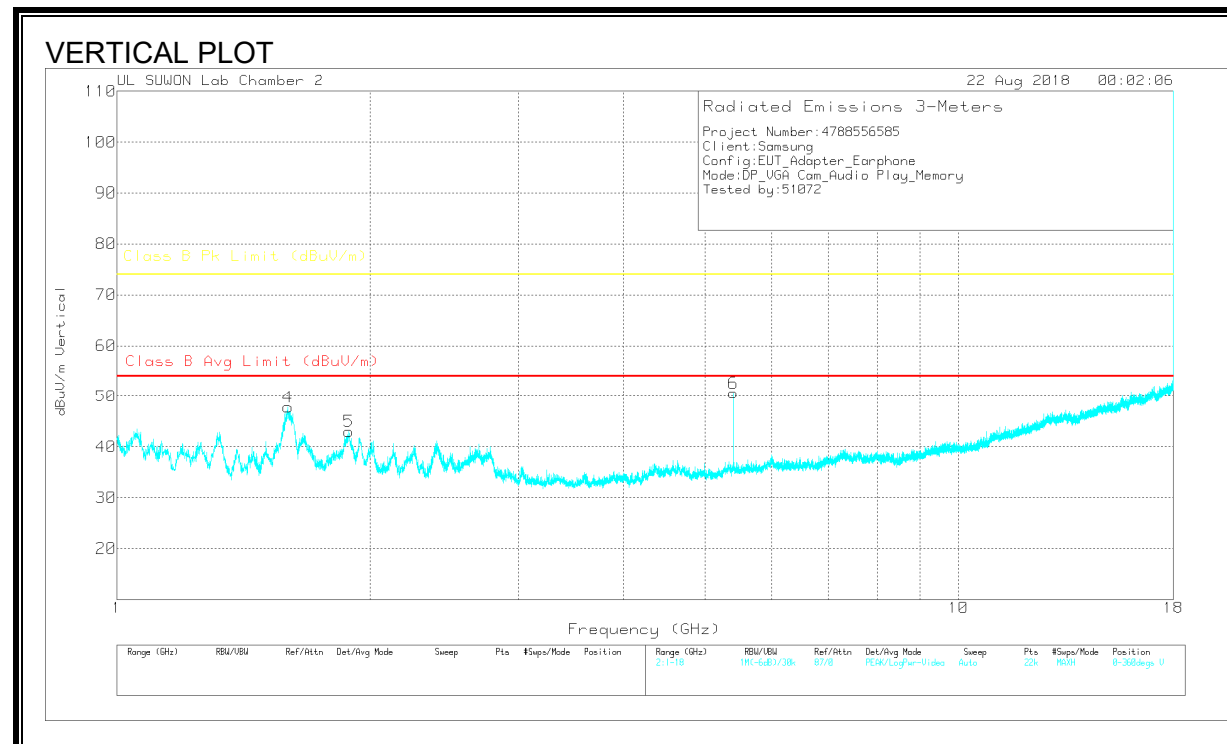
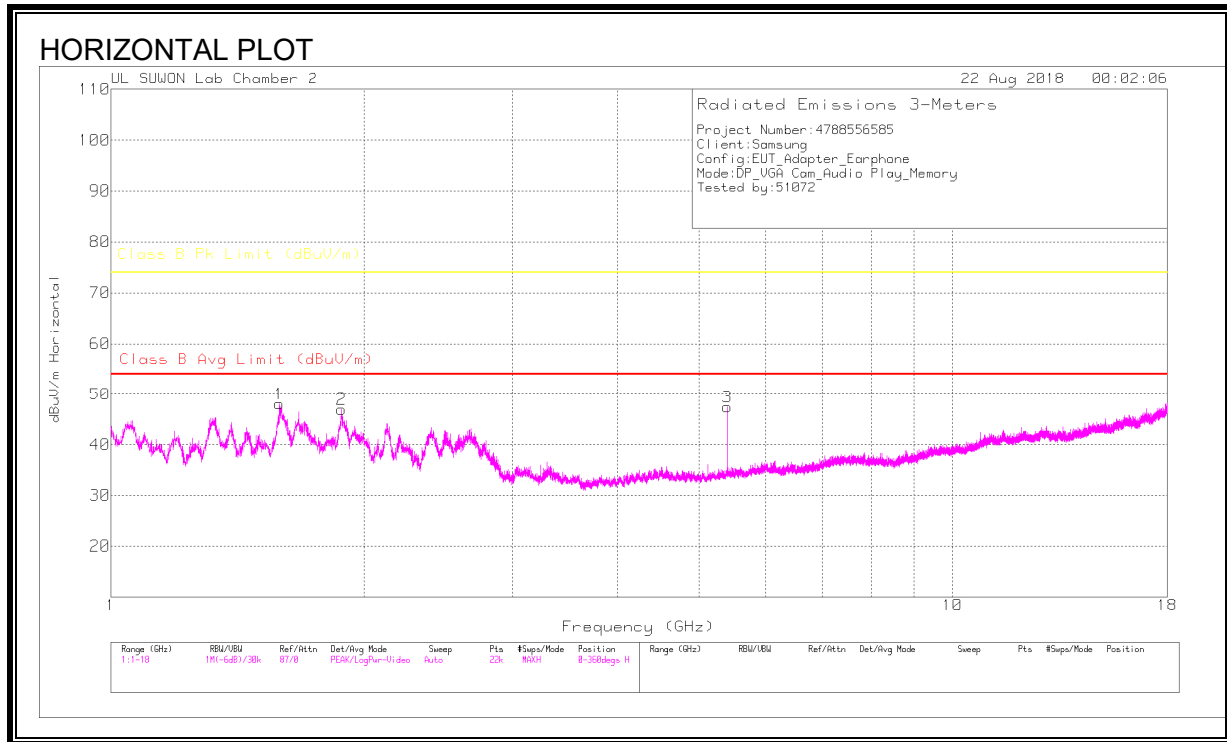
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.4	44.37	Ca	34.5	-28	50.87	54	-3.13	-	-	145	103	V
5.4	39.32	Ca	34.5	-26.6	47.22	54	-6.78	-	-	169	321	V

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 1GHz to 18GHz

(without Keyboard DP VGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.586	51.26	PK	28.3	-31.5	48.06	-	-	74	-25.94	0-360	100	H
2	1.878	47.43	PK	30.6	-31.1	46.93	-	-	74	-27.07	0-360	100	H
3	5.4	40.93	PK	34.5	-28	47.43	-	-	74	-26.57	0-360	100	H
4	1.597	51.03	PK	28.3	-31.5	47.83	-	-	74	-26.17	0-360	200	V
5	1.886	43.34	PK	30.7	-31.1	42.94	-	-	74	-31.06	0-360	200	V
6	5.4	42.77	PK	34.5	-26.6	50.67	-	-	74	-23.33	0-360	200	V

PK – Peak Detector

Radiated Emissions

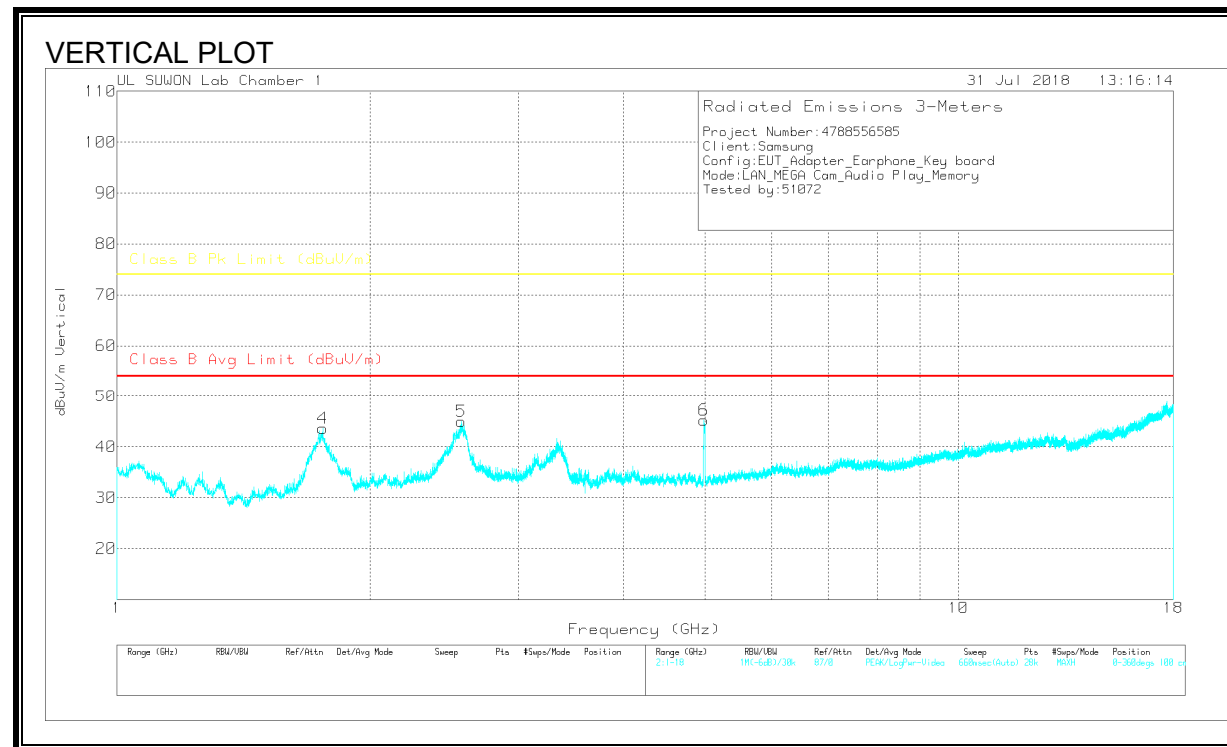
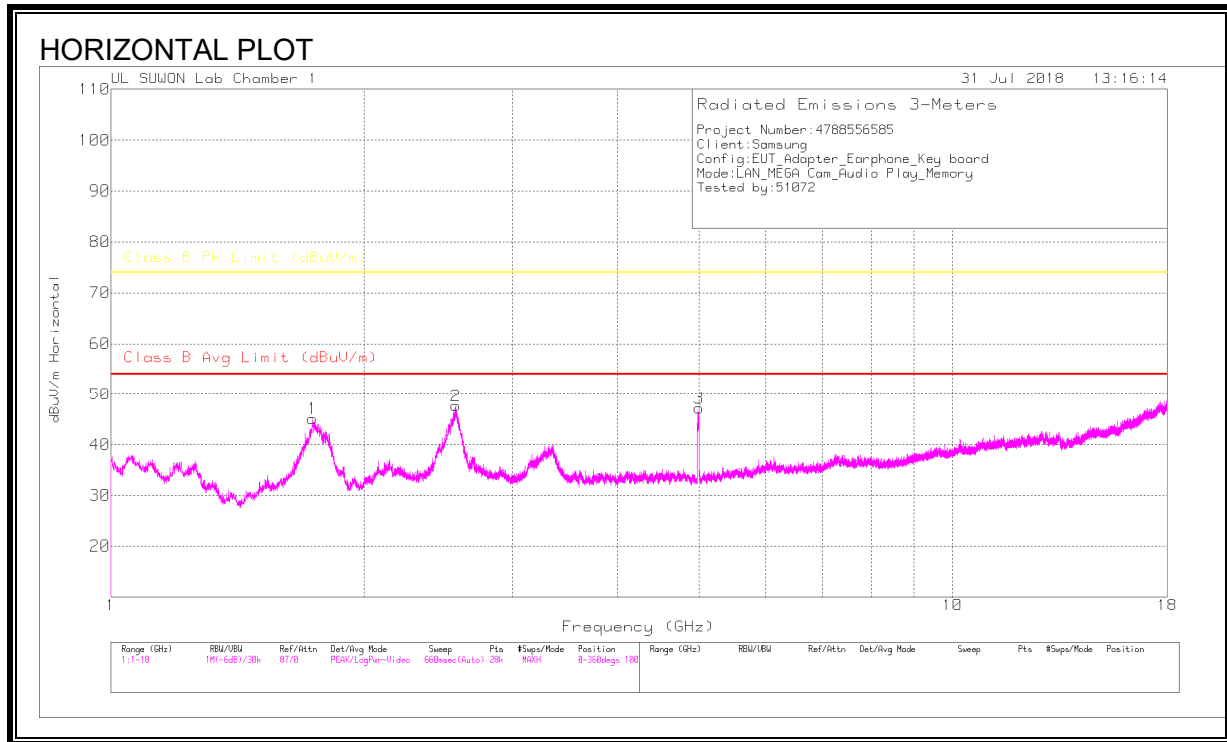
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	1-18GHz[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.4	41.13	Ca	34.5	-28	47.63	54	-6.37	-	-	143	381	H
5.4	42.35	Ca	34.5	-26.6	50.25	54	-3.75	-	-	190	157	V

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 1GHz to 18GHz

(with Keyboard LAN MEGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.736	52.26	PK	29	-36.2	45.06	-	-	74	-28.94	0-360	100	H
2	2.568	50.55	PK	31.8	-34.7	47.65	-	-	74	-26.35	0-360	100	H
3	4.999	45.11	PK	33.8	-31.7	47.21	-	-	74	-26.79	0-360	200	H
4	1.756	50.47	PK	29.3	-36.2	43.57	-	-	74	-30.43	0-360	100	V
5	2.566	48.03	PK	31.8	-34.8	45.03	-	-	74	-28.97	0-360	100	V
6	4.983	43.07	PK	33.8	-31.7	45.17	-	-	74	-28.83	0-360	100	V

PK – Peak Detector

Radiated Emissions

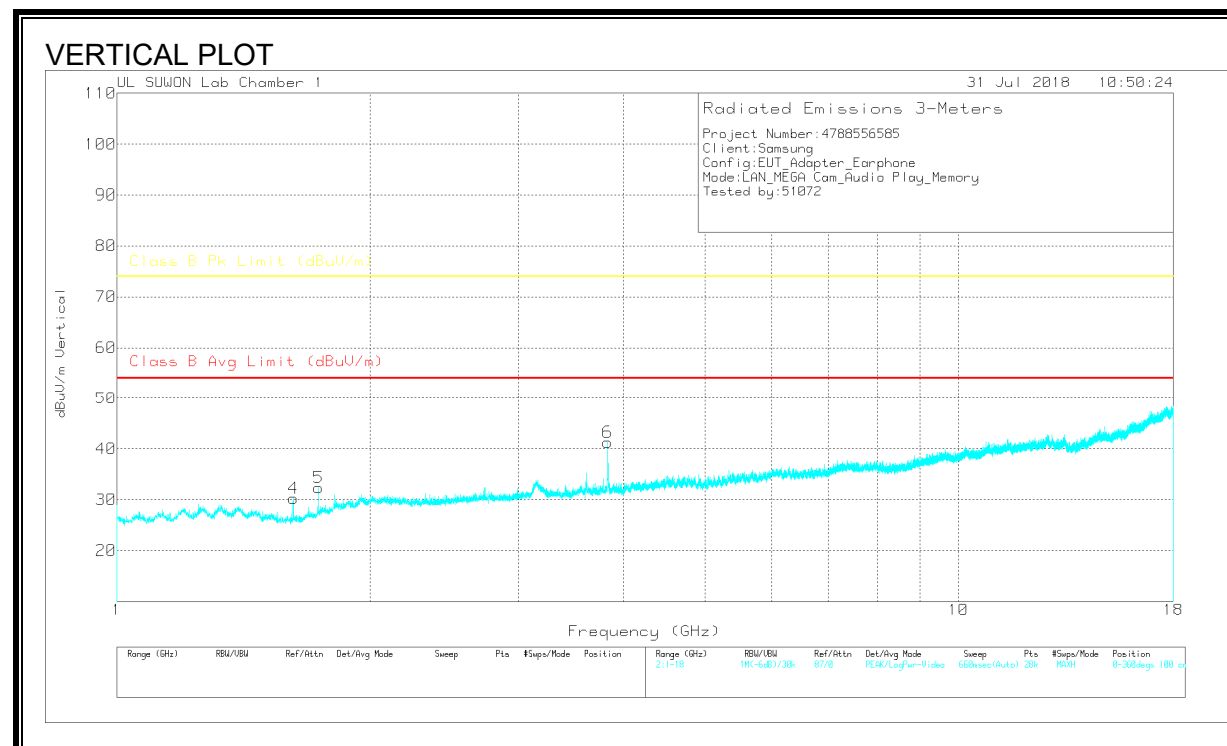
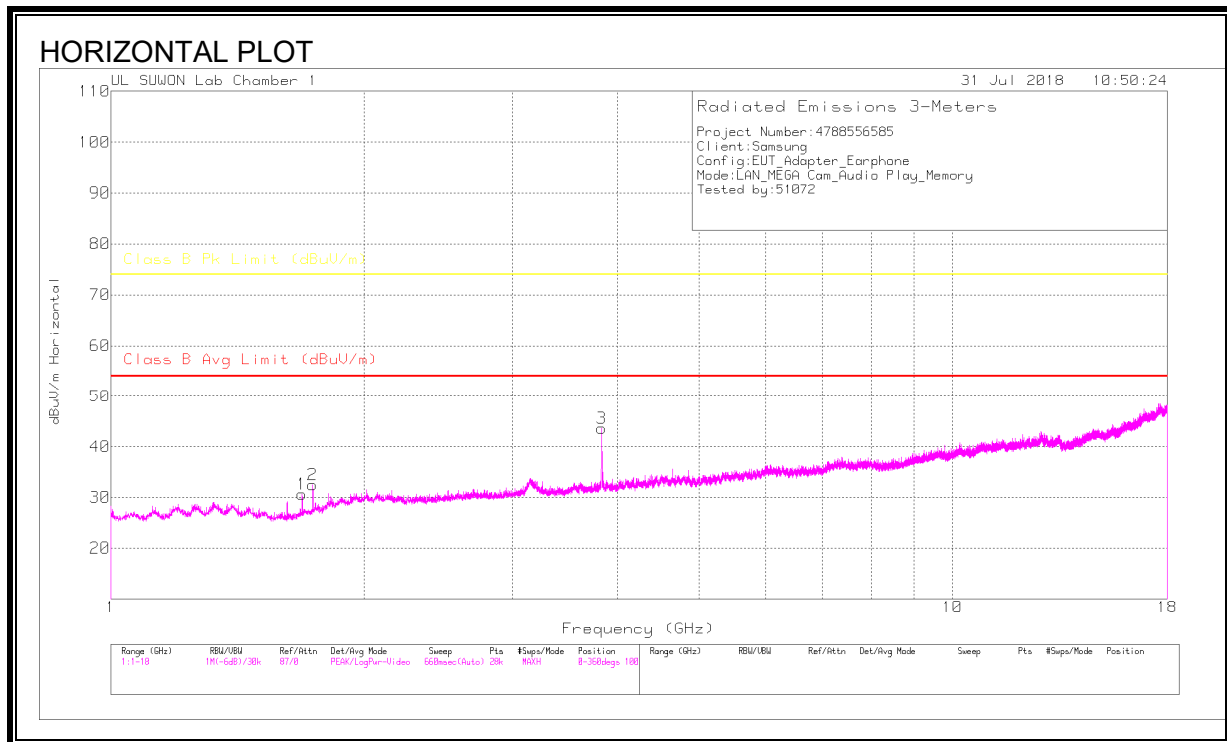
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.737	48.49	Ca	29	-36.2	41.29	54	-12.71	-	-	9	115	H
2.566	43.91	Ca	31.8	-34.8	40.91	54	-13.09	-	-	71	251	H
5	33.12	Ca	33.8	-31.7	35.22	54	-18.78	-	-	255	105	H
1.755	44.99	Ca	29.3	-36.2	38.09	54	-15.91	-	-	310	205	V
2.564	43.8	Ca	31.8	-34.7	40.9	54	-13.1	-	-	279	338	V
4.983	36.18	Ca	33.8	-31.7	38.28	54	-15.72	-	-	61	116	V

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 1GHz to 18GHz

(without Keyboard LAN MEGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.687	38.41	PK	28.4	-36.2	30.61	-	-	74	-43.39	0-360	100	H
2	1.737	39.67	PK	29	-36.2	32.47	-	-	74	-41.53	0-360	200	H
3	3.831	43.62	PK	33.1	-33.1	43.62	-	-	74	-30.38	0-360	200	H
4	1.62	38.91	PK	27.7	-36.4	30.21	-	-	74	-43.79	0-360	200	V
5	1.736	39.58	PK	29	-36.2	32.38	-	-	74	-41.62	0-360	200	V
6	3.83	41.14	PK	33.1	-33	41.24	-	-	74	-32.76	0-360	100	V

PK – Peak Detector

Radiated Emissions

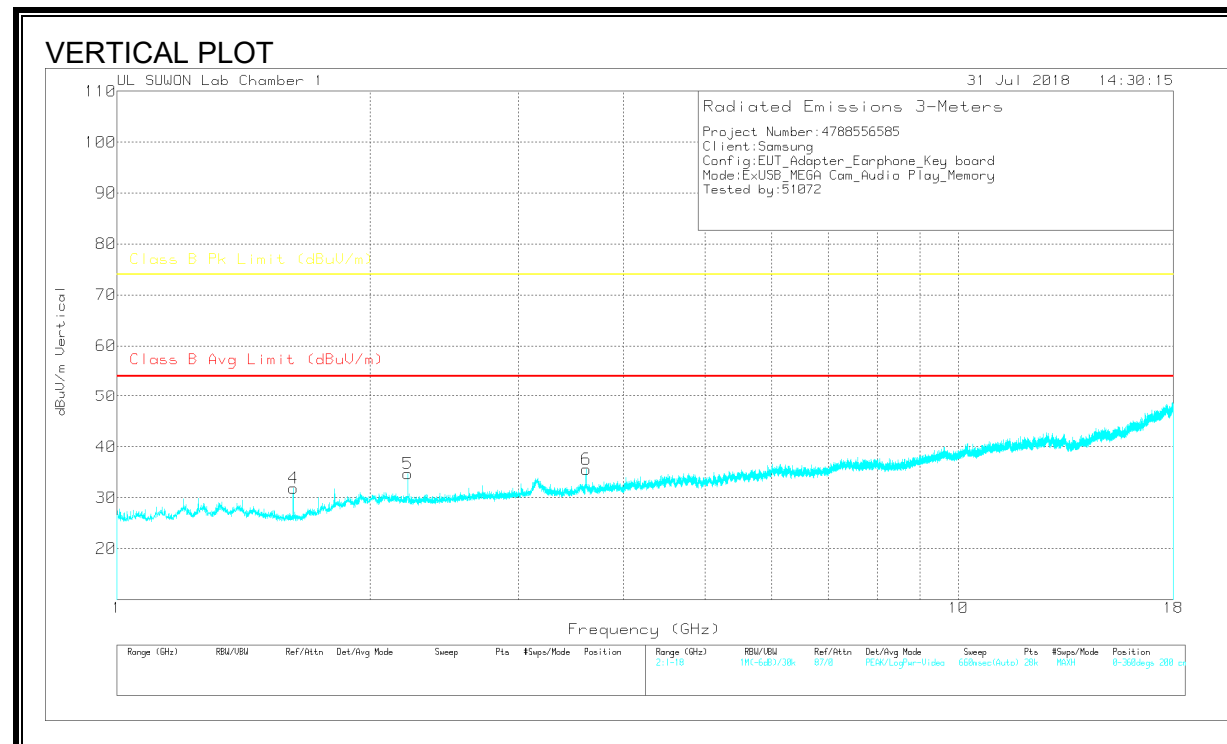
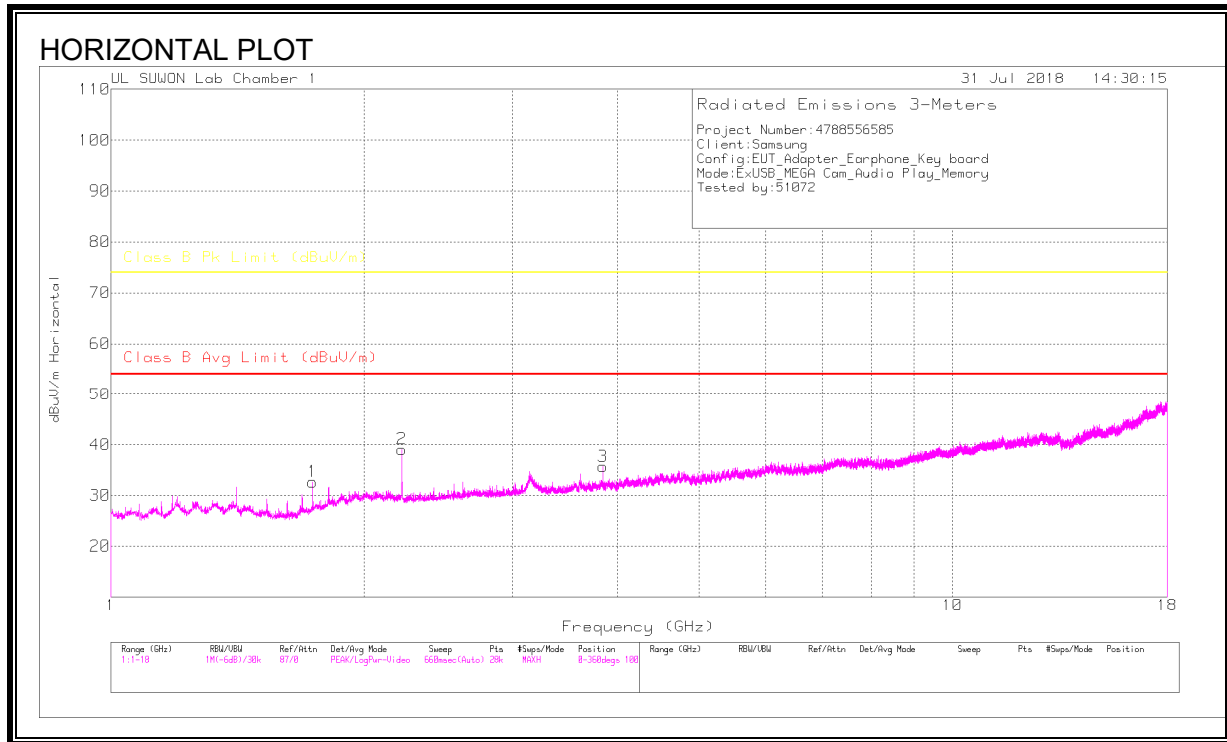
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.831	28.97	Ca	33.1	-33.1	28.97	54	-25.03	-	-	235	238	H
5	33.12	Ca	33.8	-31.7	35.22	54	-18.78	-	-	255	105	H
3.828	29.54	Ca	33.1	-33	29.64	54	-24.36	-	-	43	143	V
1.755	44.99	Ca	29.3	-36.2	38.09	54	-15.91	-	-	310	205	V
2.564	43.8	Ca	31.8	-34.7	40.9	54	-13.1	-	-	279	338	V
4.983	36.18	Ca	33.8	-31.7	38.28	54	-15.72	-	-	61	116	V

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 1GHz to 18GHz

(with Keyboard ExUSB MEGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.736	39.87	PK	29	-36.2	32.67	-	-	74	-41.33	0-360	100	H
2	2.217	43.3	PK	31.3	-35.5	39.1	-	-	74	-34.9	0-360	200	H
3	3.84	35.69	PK	33.1	-33.1	35.69	-	-	74	-38.31	0-360	200	H
4	1.62	40.52	PK	27.7	-36.4	31.82	-	-	74	-42.18	0-360	200	V
5	2.217	38.88	PK	31.3	-35.5	34.68	-	-	74	-39.32	0-360	100	V
6	3.61	36.12	PK	32.9	-33.4	35.62	-	-	74	-38.38	0-360	200	V

PK – Peak Detector

Radiated Emissions

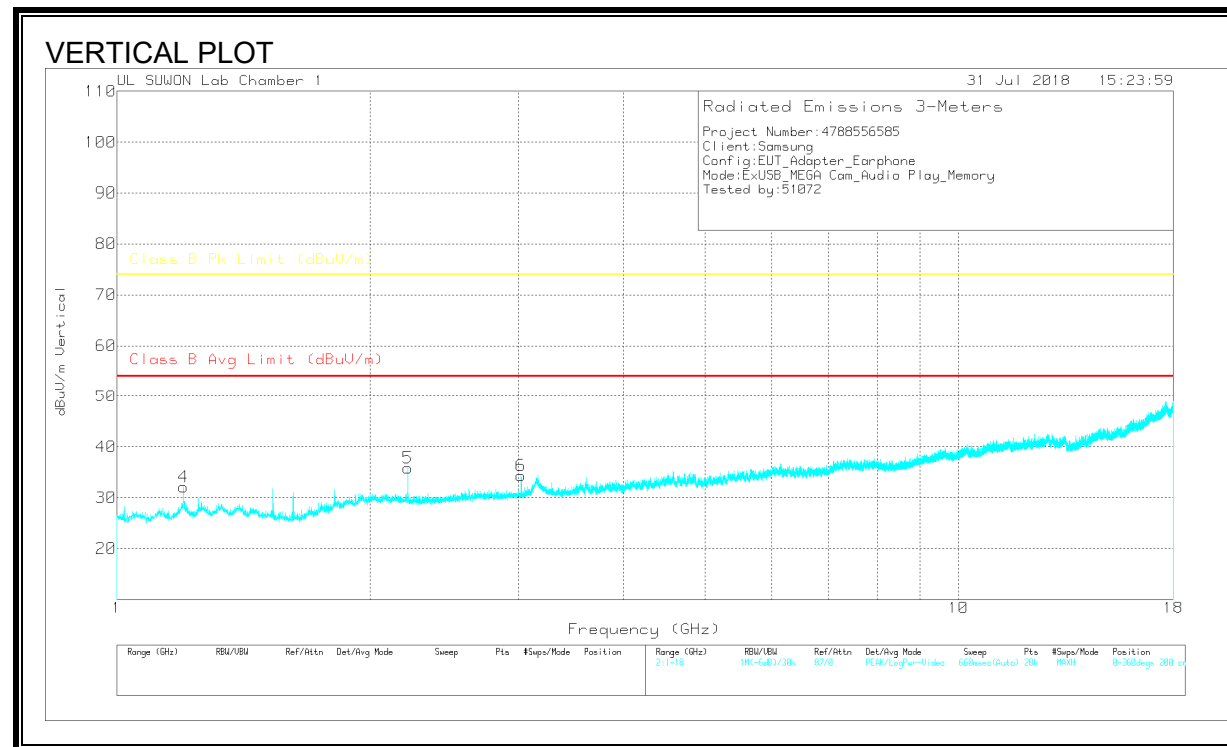
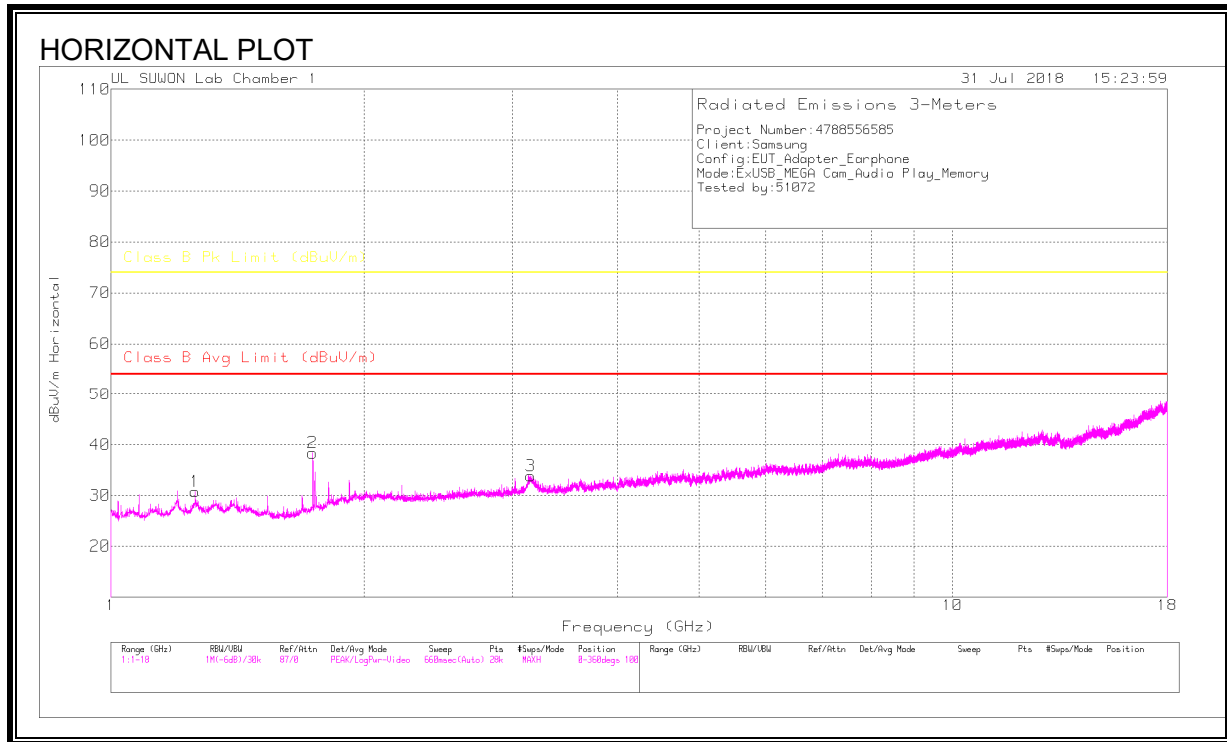
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.216	31.56	Ca	31.3	-35.5	27.36	54	-26.64	-	-	264	189	H
2.217	32.63	Ca	31.3	-35.5	28.43	54	-25.57	-	-	320	305	V

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 1GHz to 18GHz

(without Keyboard ExUSB MEGA Cam Audio Play Memory mode)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.26	38.52	PK	29.3	-37.1	30.72	-	-	74	-43.28	0-360	200	H
2	1.737	45.56	PK	29	-36.2	38.36	-	-	74	-35.64	0-360	200	H
3	3.153	32.95	PK	34.8	-33.9	33.85	-	-	74	-40.15	0-360	100	H
4	1.2	40.22	PK	29.2	-37.3	32.12	-	-	74	-41.88	0-360	200	V
5	2.216	39.97	PK	31.3	-35.5	35.77	-	-	74	-38.23	0-360	200	V
6	3.022	36.23	PK	32.3	-34.2	34.33	-	-	74	-39.67	0-360	200	V

PK – Peak Detector

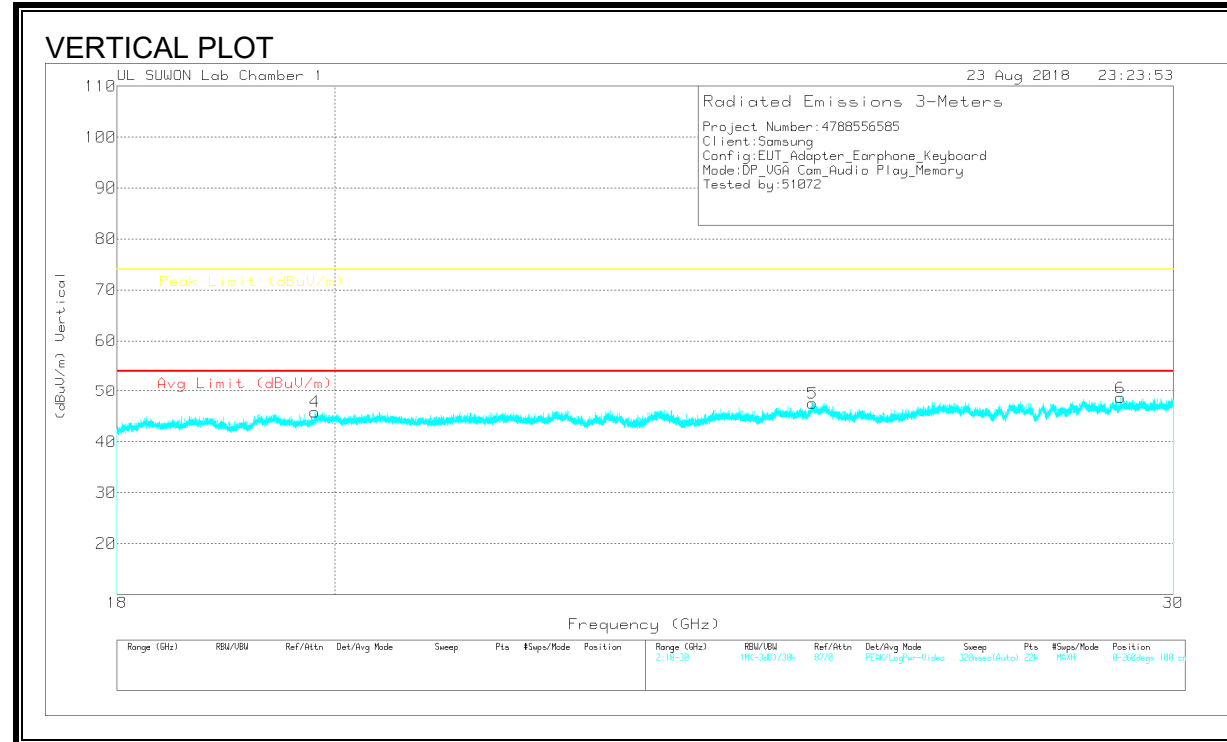
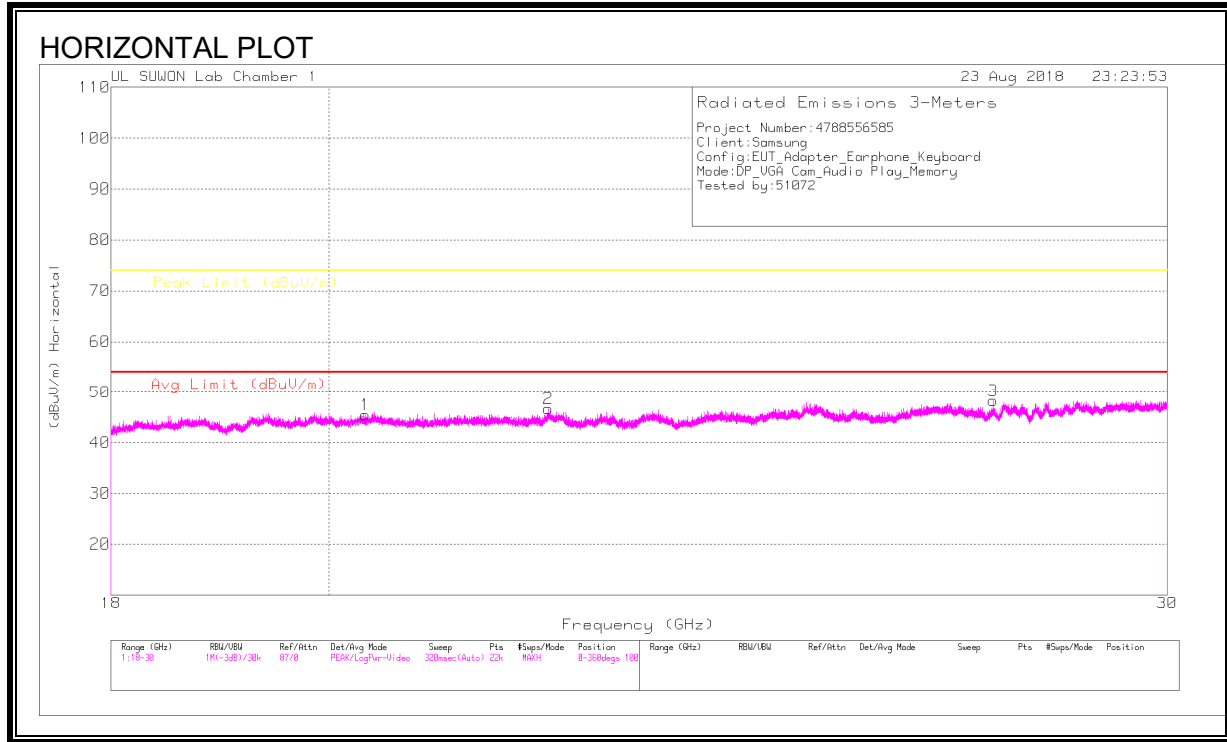
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz(dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.737	35.63	Ca	29	-36.2	28.43	54	-25.57	-	-	31	101	H

Ca - CISPR average detection

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(with Keyboard DP VGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

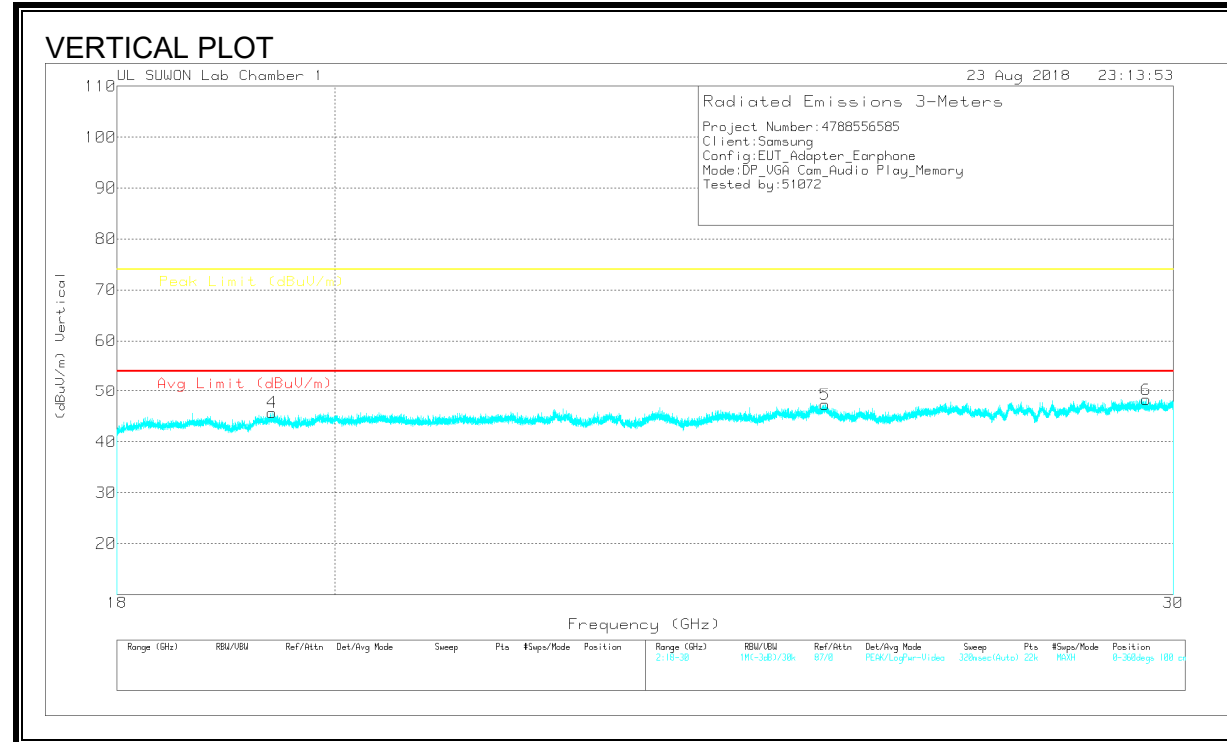
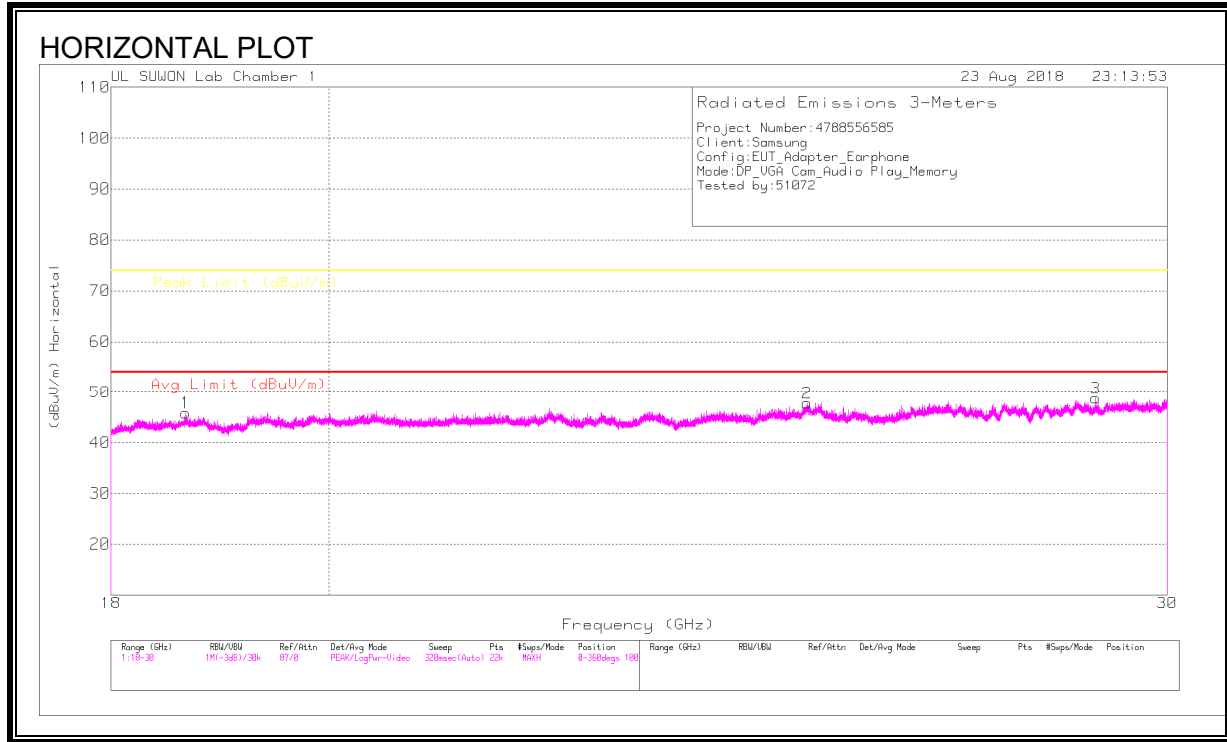
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	20.357	21.02	PK	8.6	15.8	45.42	-	-	74	-28.58	0-360	100	H
2	22.238	18.73	PK	11.4	16.6	46.73	-	-	74	-27.27	0-360	100	H
3	27.576	18.55	PK	11.1	18.7	48.35	-	-	74	-25.65	0-360	100	H
4	19.805	22.79	PK	7.4	15.6	45.79	-	-	74	-28.21	0-360	100	V
5	25.195	20.68	PK	9.1	17.8	47.58	-	-	74	-26.42	0-360	100	V
6	29.246	15.94	PK	13.4	19.3	48.64	-	-	74	-25.36	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(without Keyboard DP VGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

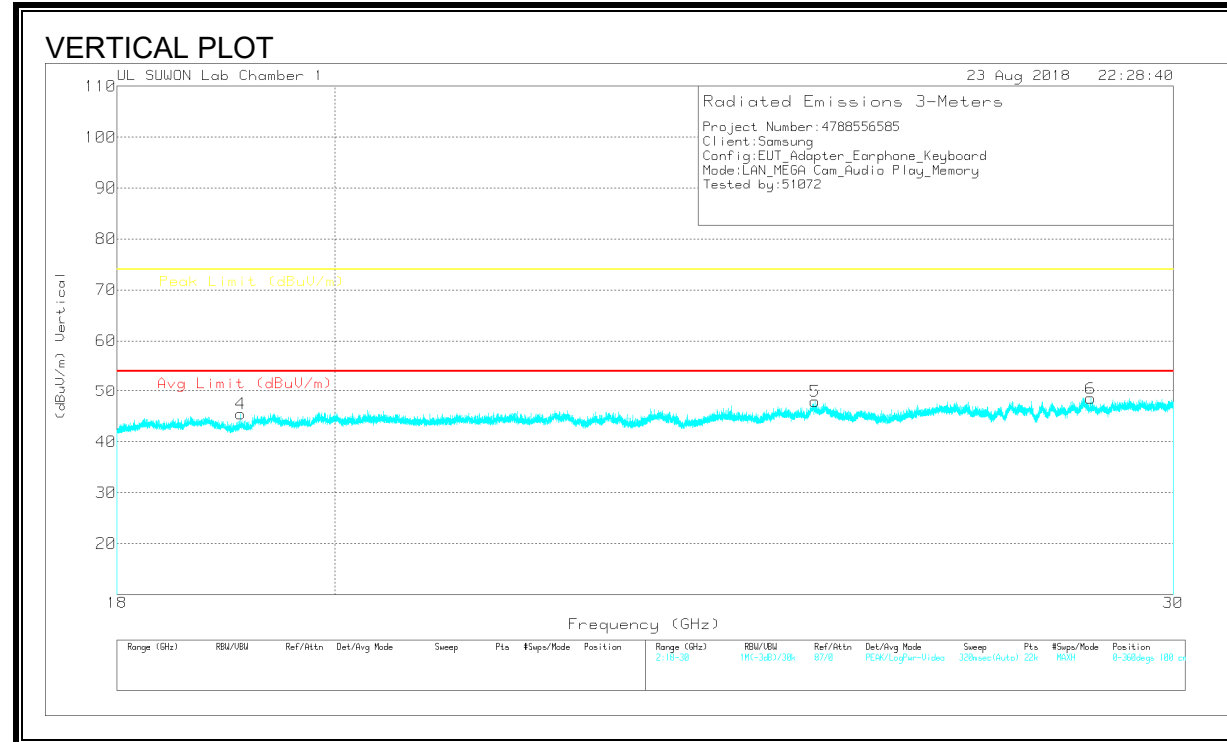
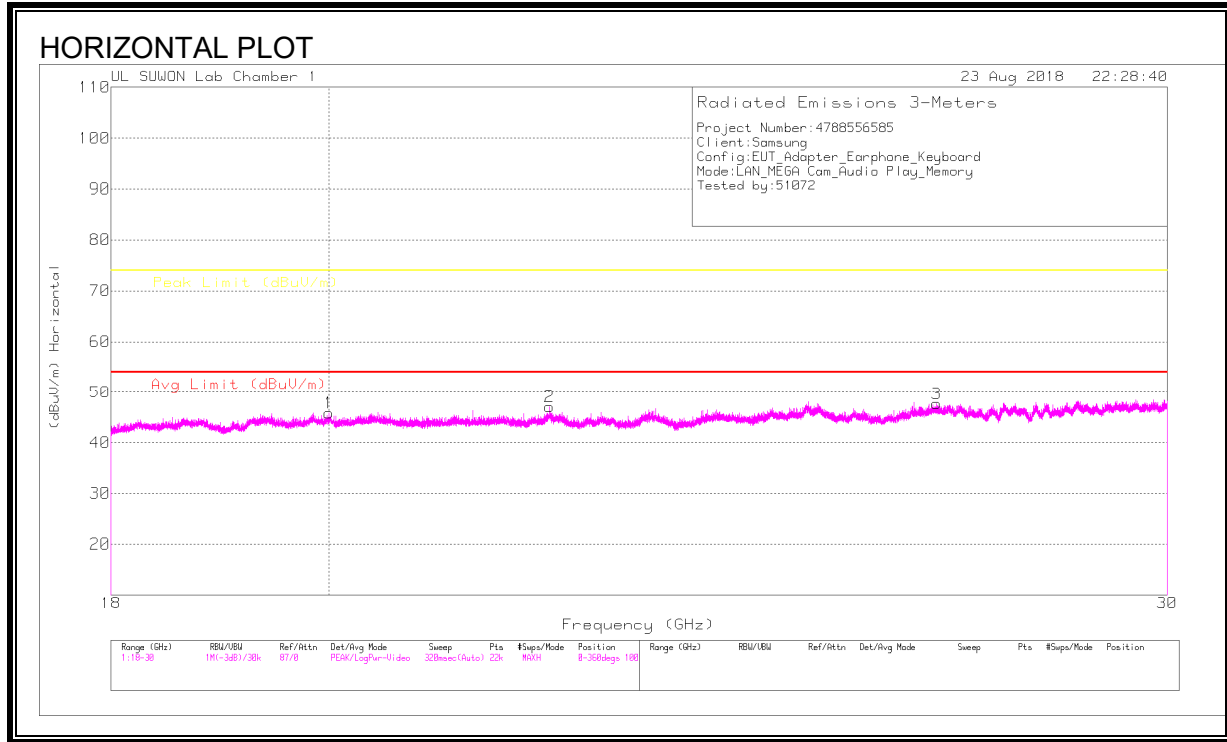
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	18.661	25.74	PK	5	15.1	45.84	-	-	74	-28.16	0-360	100	H
2	25.205	20.88	PK	9.1	17.8	47.78	-	-	74	-26.22	0-360	100	H
3	28.976	16.38	PK	13.1	19.3	48.78	-	-	74	-25.22	0-360	100	H
4	19.4	23.95	PK	6.4	15.4	45.75	-	-	74	-28.25	0-360	100	V
5	25.351	20.78	PK	8.8	17.8	47.38	-	-	74	-26.62	0-360	100	V
6	29.61	14.99	PK	13.8	19.5	48.29	-	-	74	-25.71	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(with Keyboard LAN MEGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

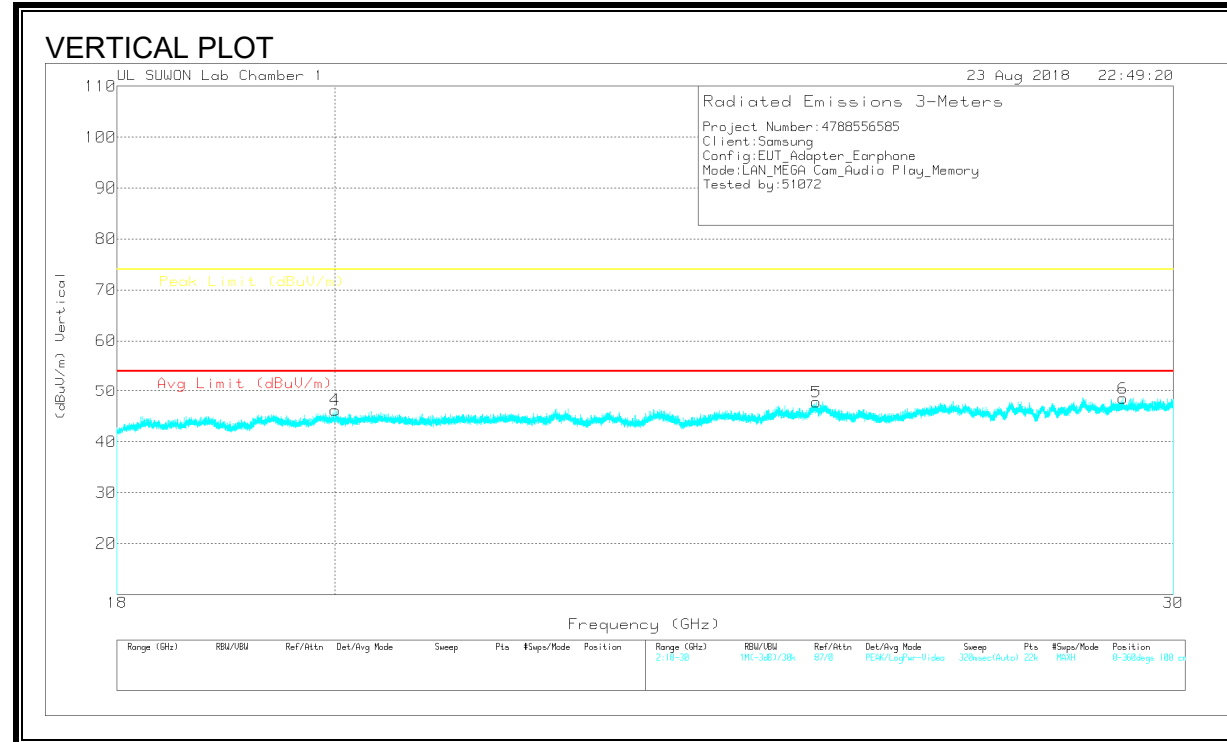
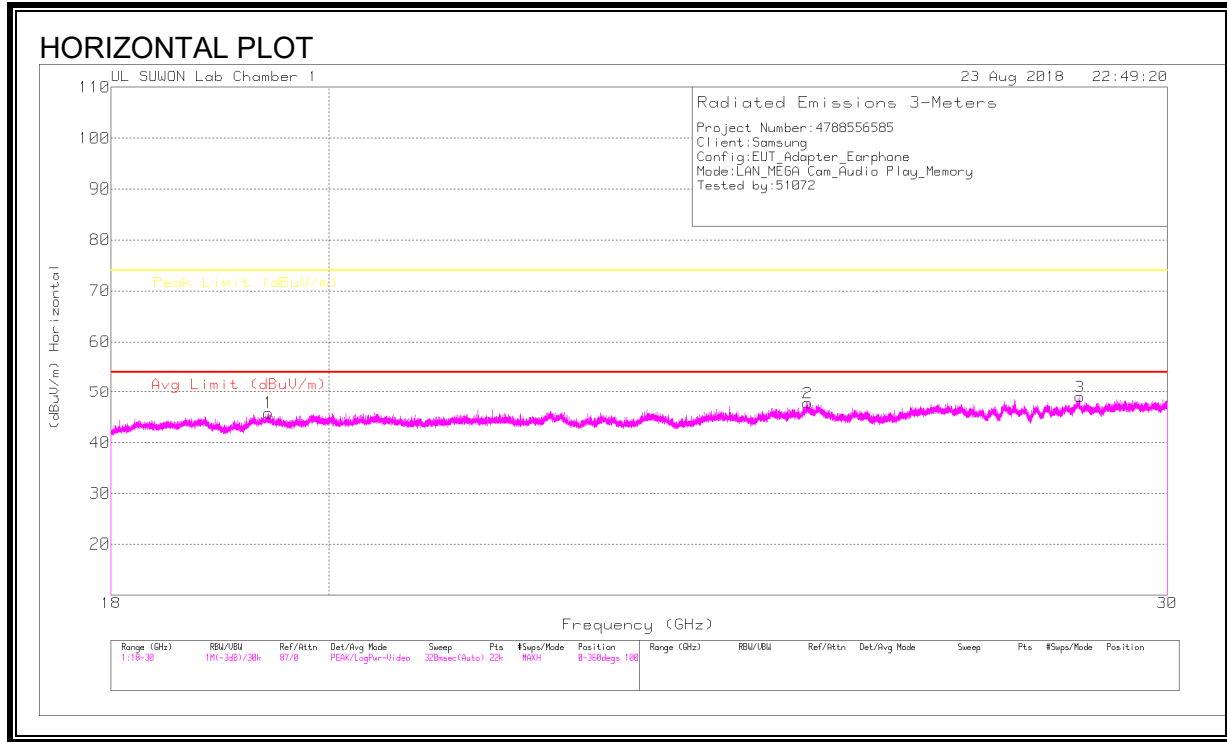
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	20.003	22.3	PK	7.8	15.7	45.8	-	-	74	-28.2	0-360	100	H
2	22.25	19.04	PK	11.4	16.6	47.04	-	-	74	-26.96	0-360	100	H
3	26.832	19.58	PK	9.7	18.4	47.68	-	-	74	-26.32	0-360	100	H
4	19.109	24.48	PK	5.7	15.3	45.48	-	-	74	-28.52	0-360	100	V
5	25.229	21.2	PK	9	17.8	48	-	-	74	-26	0-360	100	V
6	28.824	16.47	PK	12.9	19.2	48.57	-	-	74	-25.43	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(without Keyboard LAN MEGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

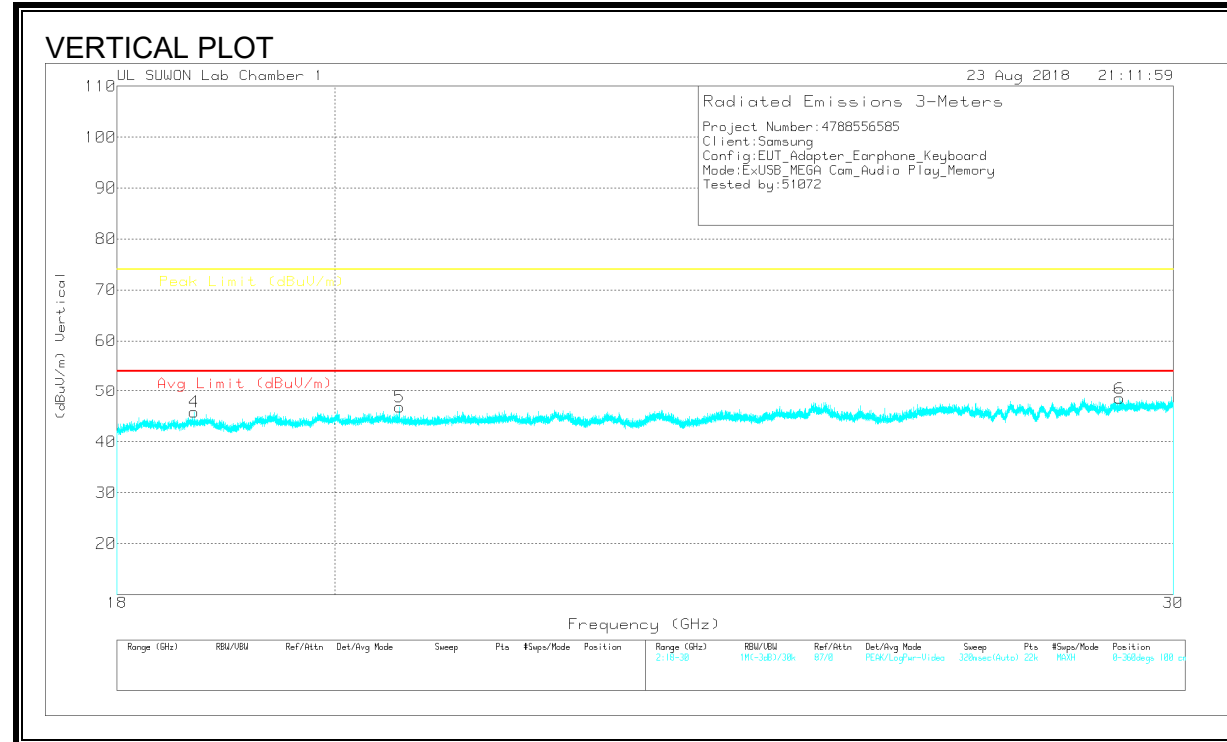
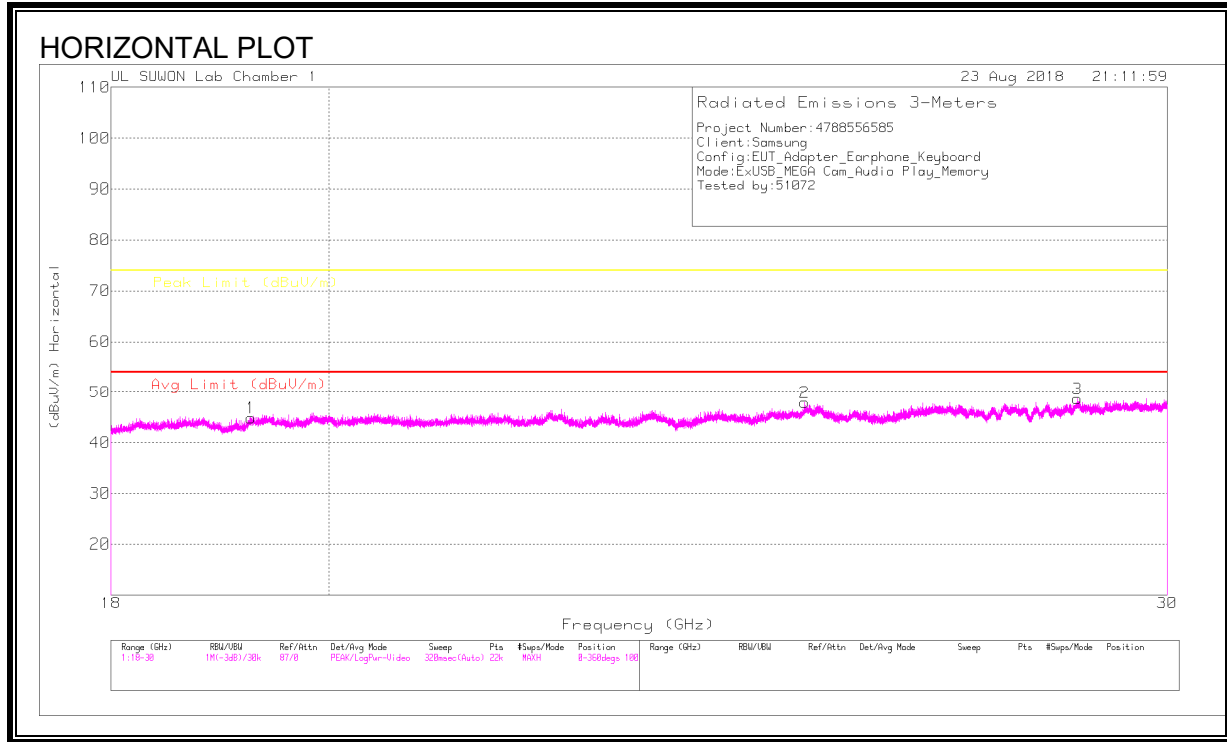
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	19.424	24.06	PK	6.4	15.4	45.86	-	-	74	-28.14	0-360	100	H
2	25.209	20.93	PK	9.1	17.8	47.83	-	-	74	-26.17	0-360	100	H
3	28.756	17.13	PK	12.8	19.1	49.03	-	-	74	-24.97	0-360	100	H
4	20.004	22.74	PK	7.8	15.7	46.24	-	-	74	-27.76	0-360	100	V
5	25.239	21.05	PK	9	17.8	47.85	-	-	74	-26.15	0-360	100	V
6	29.279	15.85	PK	13.4	19.3	48.55	-	-	74	-25.45	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(with Keyboard ExUSB MEGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

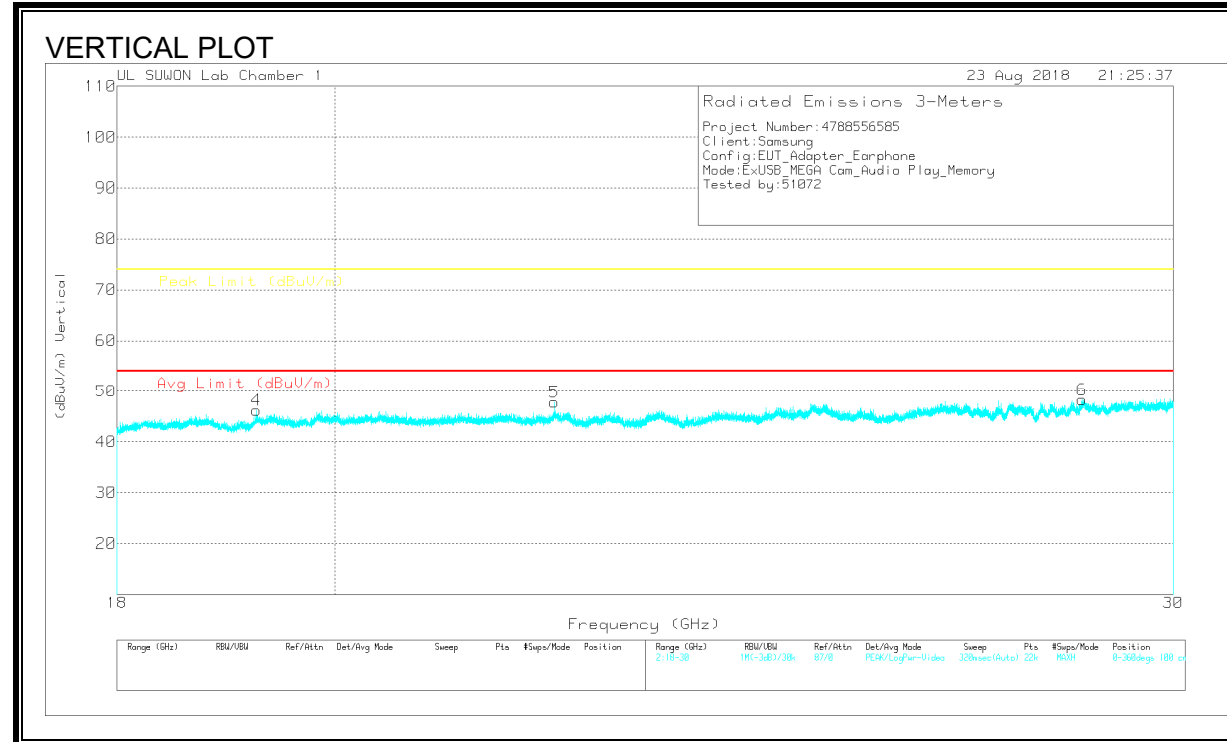
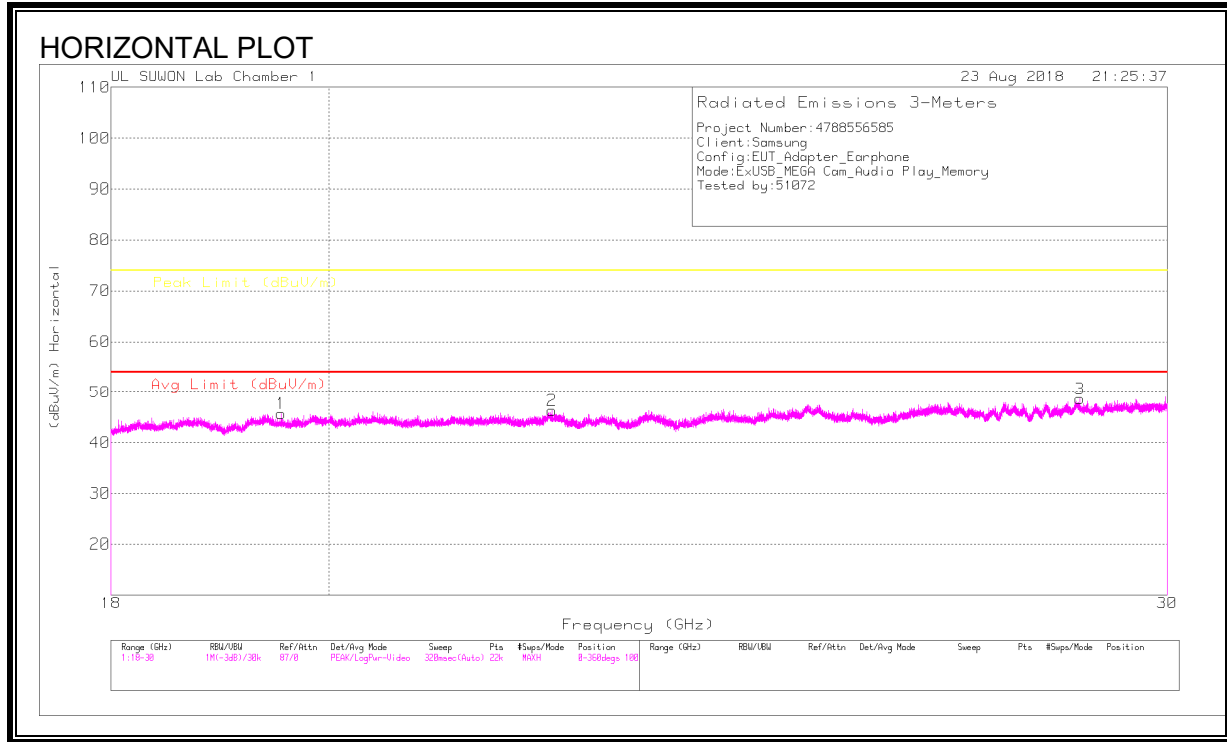
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	19.264	23.45	PK	6	15.4	44.85	-	-	74	-29.15	0-360	100	H
2	25.176	21.04	PK	9.1	17.8	47.94	-	-	74	-26.06	0-360	100	H
3	28.723	16.94	PK	12.7	19.1	48.74	-	-	74	-25.26	0-360	100	H
4	18.685	25.72	PK	5	15.1	45.82	-	-	74	-28.18	0-360	100	V
5	20.635	21.72	PK	9.2	15.9	46.82	-	-	74	-27.18	0-360	100	V
6	29.229	15.89	PK	13.4	19.3	48.59	-	-	74	-25.41	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

RADIATED EMISSIONS 18GHz to 30GHz
(without Keyboard ExUSB MEGA Cam Audio Play Memory mode)



HORIZONTAL AND VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3116C-PA	18-40GHz[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	19.544	23.52	PK	6.7	15.5	45.72	-	-	74	-28.28	0-360	100	H
2	22.282	18.29	PK	11.4	16.7	46.39	-	-	74	-27.61	0-360	100	H
3	28.755	16.64	PK	12.8	19.2	48.64	-	-	74	-25.36	0-360	100	H
4	19.257	24.81	PK	6	15.4	46.21	-	-	74	-27.79	0-360	100	V
5	22.236	19.81	PK	11.4	16.6	47.81	-	-	74	-28.19	0-360	100	V
6	28.706	16.46	PK	12.7	19.1	48.26	-	-	74	-25.74	0-360	100	V

Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

7.2. AC MAINS LINE CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4: 2014

LIMIT

§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

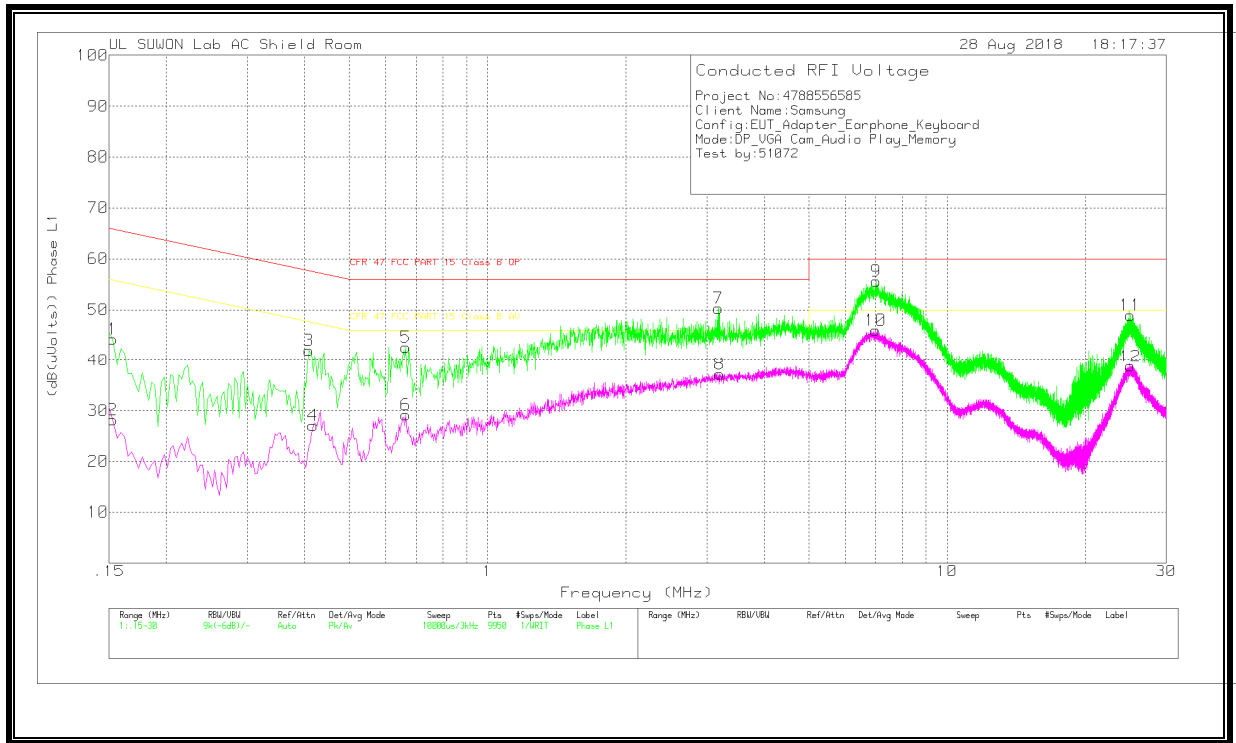
Frequency range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Notes:
 1. The lower limit shall apply at the transition frequencies
 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

RESULTS

WORST EMISSIONS(with Keyboard DP VGA Cam Audio Play Memory mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	34.15	Pk	10	.1	44.25	65.84	-21.59	-	-
2	.153	18.03	Av	10	.1	28.13	-	-	55.84	-27.71
3	.408	32.08	Pk	9.8	.2	42.08	57.69	-15.61	-	-
4	.417	17.04	Av	9.8	.2	27.04	-	-	47.51	-20.47
5	.663	32.6	Pk	9.8	.2	42.6	56	-13.4	-	-
6	.663	19.17	Av	9.8	.2	29.17	-	-	46	-16.83
7	3.177	40.17	Pk	9.8	.3	50.27	56	-5.73	-	-
8	3.195	27.07	Av	9.8	.3	37.17	-	-	46	-8.83
9	7.008	45.68	Pk	9.7	.3	55.68	60	-4.32	-	-
10	6.984	36.03	Av	9.7	.3	46.03	-	-	50	-3.97
11	25.071	38.4	Pk	10.2	.4	49	60	-11	-	-
12	25.089	28.2	Av	10.2	.4	38.8	-	-	50	-11.2

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	30.25	Qp	10	.1	40.35	65.88	-25.53	-	-
.40875	28.05	Qp	9.8	.2	38.05	57.67	-19.62	-	-
.66225	28.83	Qp	9.8	.2	38.83	56	-17.17	-	-
3.17775	32.24	Qp	9.8	.3	42.34	56	-13.66	-	-
7.00815	40.55	Qp	9.7	.3	50.55	60	-9.45	-	-
25.0712	33.21	Qp	10.2	.4	43.81	60	-16.19	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.153	35.3	Ca	10	.1	45.4	-	-	55.84	-10.44
.4164	18.24	Ca	9.8	.2	28.24	-	-	47.52	-19.28
.6624	19.41	Ca	9.8	.2	29.41	-	-	46	-16.59
3.1953	25.45	Ca	9.8	.3	35.55	-	-	46	-10.45
6.984	34.09	Ca	9.7	.3	44.09	-	-	50	-5.91
25.0876	28.35	Ca	10.2	.4	38.95	-	-	50	-11.05

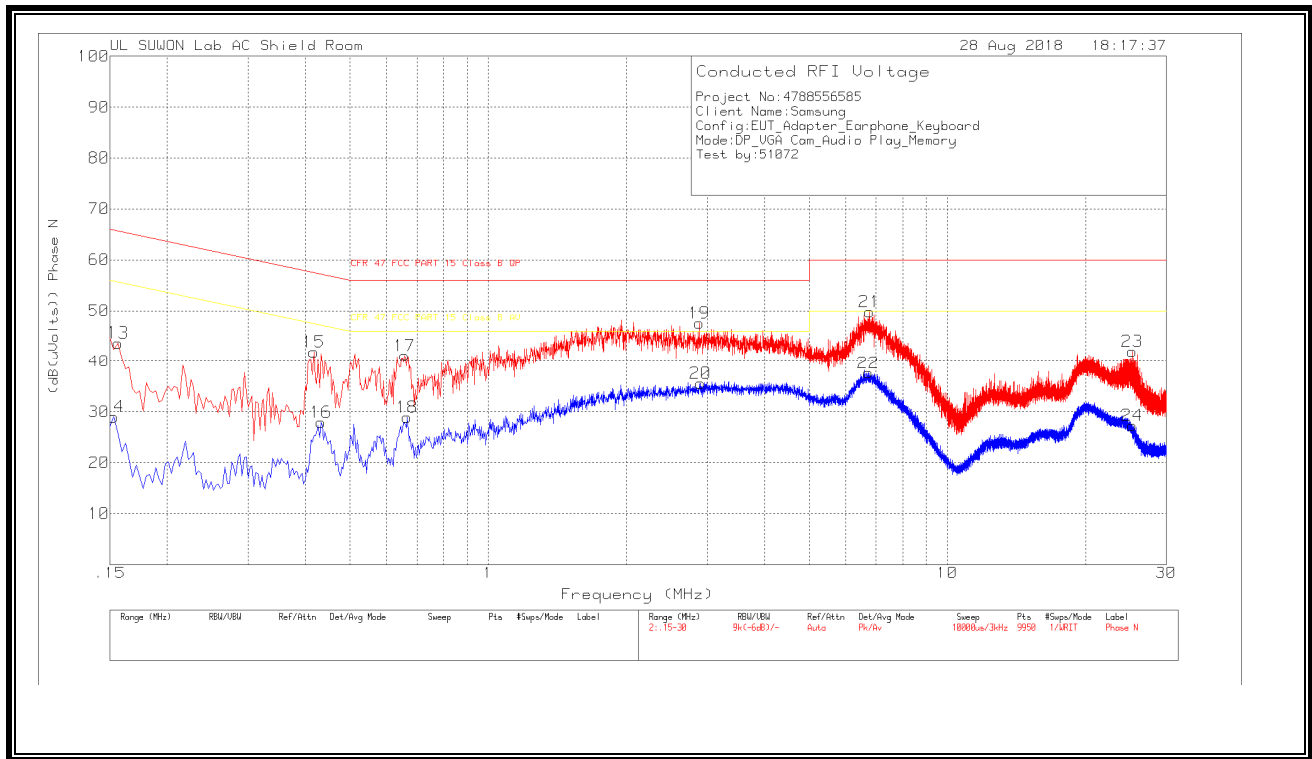
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	33.59	Pk	10	.1	43.69	65.67	-21.98	-	-
14	.153	18.88	Av	10	.1	28.98	-	-	55.84	-26.86
15	.417	31.88	Pk	9.8	.2	41.88	57.51	-15.63	-	-
16	.432	17.96	Av	9.8	.2	27.96	-	-	47.21	-19.25
17	.657	31.2	Pk	9.8	.2	41.2	56	-14.8	-	-
18	.666	18.93	Av	9.8	.2	28.93	-	-	46	-17.07
19	2.883	37.42	Pk	9.9	.3	47.62	56	-8.38	-	-
20	2.901	25.39	Av	9.9	.3	35.59	-	-	46	-10.41
21	6.765	39.68	Pk	9.8	.3	49.78	60	-10.22	-	-
22	6.732	27.61	Av	9.8	.3	37.71	-	-	50	-12.29
23	25.299	31.41	Pk	10.2	.4	42.01	60	-17.99	-	-
24	25.305	16.7	Av	10.2	.4	27.3	-	-	50	-22.7

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	28.59	Qp	10	.1	38.69	65.71	-27.02	-	-
.41715	26.71	Qp	9.8	.2	36.71	57.5	-20.79	-	-
.65775	27.81	Qp	9.8	.2	37.81	56	-18.19	-	-
2.88315	31.05	Qp	9.9	.3	41.25	56	-14.75	-	-
6.76515	33.85	Qp	9.8	.3	43.95	60	-16.05	-	-
25.2992	23.5	Qp	10.2	.4	34.1	60	-25.9	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.1515	26.2	Ca	10	.1	36.3	-	-	55.92	-19.62
.4329	16.18	Ca	9.8	.2	26.18	-	-	47.2	-21.02
.6675	17.16	Ca	9.8	.2	27.16	-	-	46	-18.84
2.8995	24.08	Ca	9.9	.3	34.28	-	-	46	-11.72
6.7305	25.29	Ca	9.8	.3	35.39	-	-	50	-14.61
25.3066	16.87	Ca	10.2	.4	27.47	-	-	50	-22.53

Pk - Peak detector

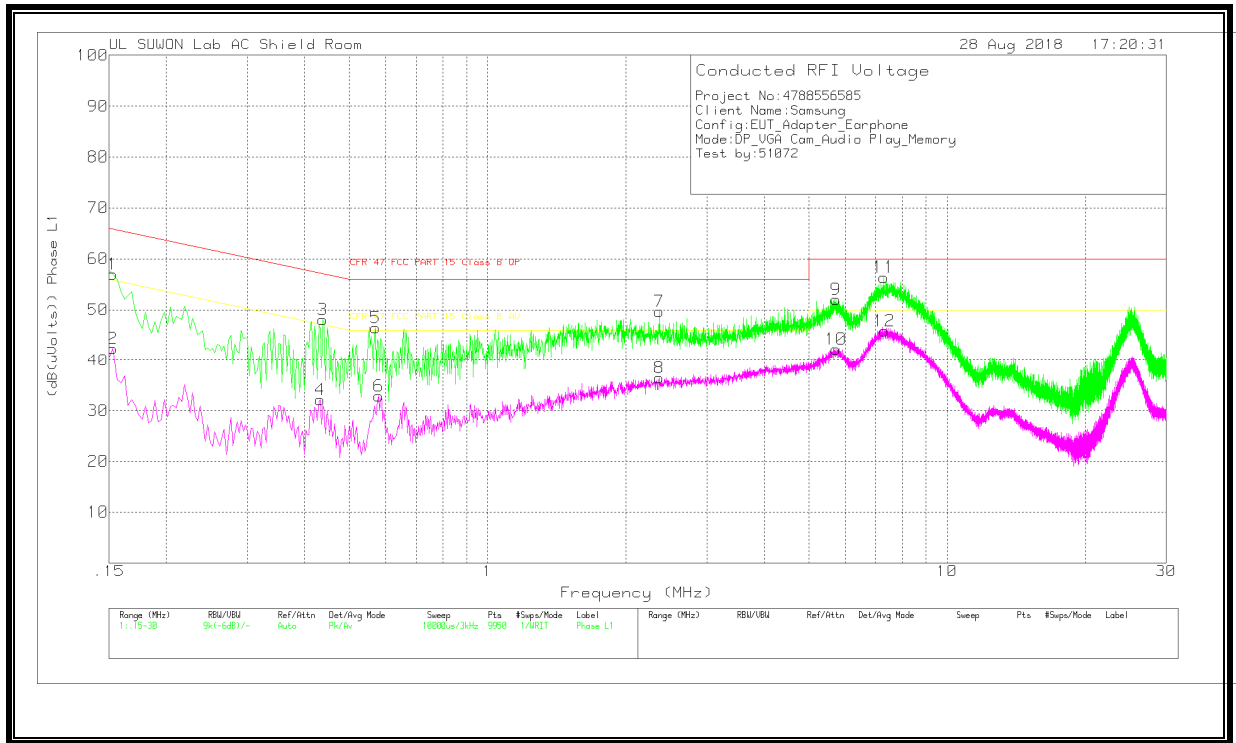
Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

WORST EMISSIONS(without Keyboard DP VGA Cam Audio Play Memory mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	46.84	Pk	10	.1	56.94	65.84	-8.9	-	-
2	.153	32.33	Av	10	.1	42.43	-	-	55.84	-13.41
3	.438	38.13	Pk	9.7	.2	48.03	57.1	-9.07	-	-
4	.432	22.22	Av	9.7	.2	32.12	-	-	47.21	-15.09
5	.57	36.47	Pk	9.8	.2	46.47	56	-9.53	-	-
6	.579	22.87	Av	9.8	.2	32.87	-	-	46	-13.13
7	2.367	39.63	Pk	9.8	.3	49.73	56	-6.27	-	-
8	2.367	26.4	Av	9.8	.3	36.5	-	-	46	-9.5
9	5.727	42.08	Pk	9.7	.3	52.08	60	-7.92	-	-
10	5.724	32.31	Av	9.7	.3	42.31	-	-	50	-7.69
11	7.29	46.43	Pk	9.7	.3	56.43	60	-3.57	-	-
12	7.314	35.89	Av	9.7	.3	45.89	-	-	50	-4.11

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	36.89	Qp	10	.1	46.99	65.88	-18.89	-	-
.43725	31.2	Qp	9.7	.2	41.1	57.11	-16.01	-	-
.57015	28.55	Qp	9.8	.2	38.55	56	-17.45	-	-
2.36775	32.93	Qp	9.8	.3	43.03	56	-12.97	-	-
5.72775	36.07	Qp	9.7	.3	46.07	60	-13.93	-	-
7.29075	41.59	Qp	9.7	.3	51.59	60	-8.41	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	20.8	Ca	10	.1	30.9	-	-	55.88	-24.98
.43125	19.41	Ca	9.7	.2	29.31	-	-	47.23	-17.92
.57915	20.6	Ca	9.8	.2	30.6	-	-	46	-15.4
2.36715	25.84	Ca	9.8	.3	35.94	-	-	46	-10.06
5.72475	28.56	Ca	9.7	.3	38.56	-	-	50	-11.44
7.31415	35.02	Ca	9.7	.3	45.02	-	-	50	-4.98

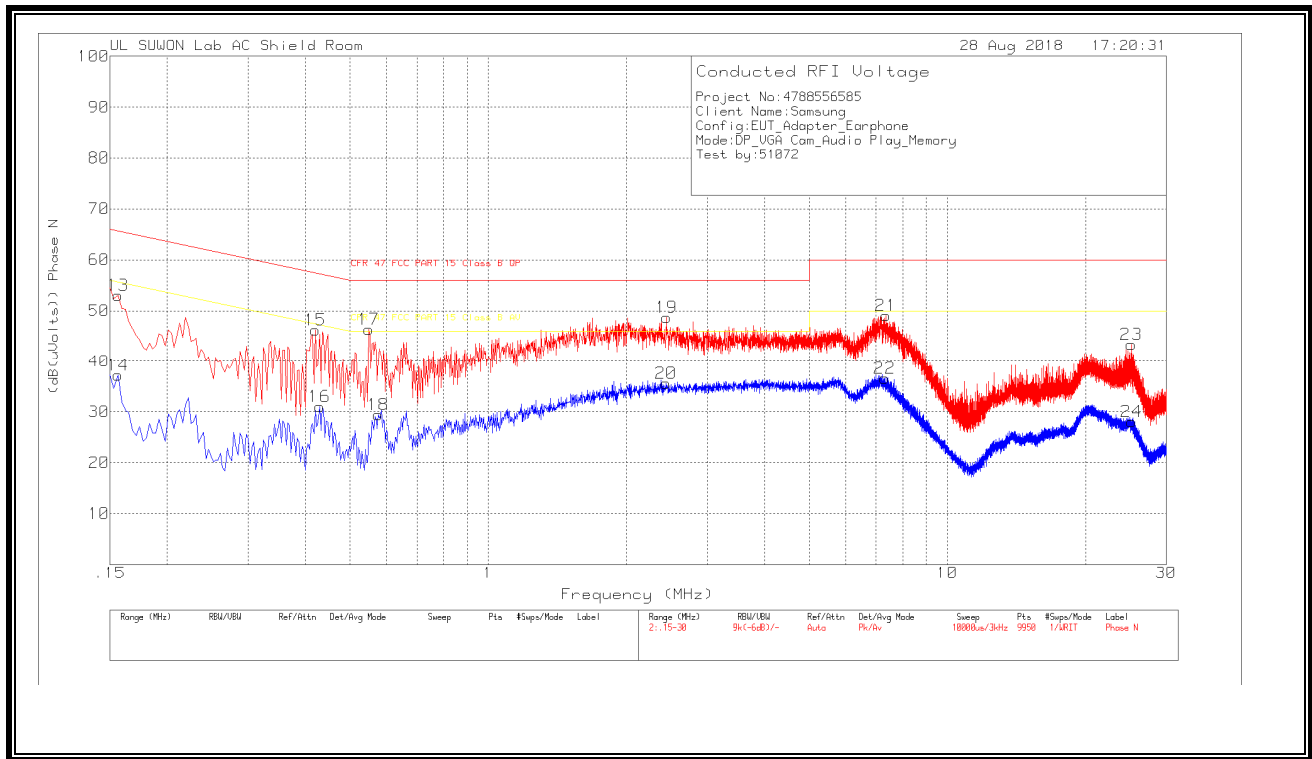
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	42.98	Pk	10	.1	53.08	65.67	-12.59	-	-
14	.156	27.11	Av	10	.1	37.21	-	-	55.67	-18.46
15	.42	36.22	Pk	9.8	.2	46.22	57.45	-11.23	-	-
16	.429	21	Av	9.8	.2	31	-	-	47.27	-16.27
17	.549	36.32	Pk	9.8	.2	46.32	56	-9.68	-	-
18	.576	19.55	Av	9.7	.2	29.45	-	-	46	-16.55
19	2.445	38.52	Pk	9.9	.3	48.72	56	-7.28	-	-
20	2.442	25.36	Av	9.9	.3	35.56	-	-	46	-10.44
21	7.344	38.98	Pk	9.8	.3	49.08	60	-10.92	-	-
22	7.314	26.52	Av	9.8	.3	36.62	-	-	50	-13.38
23	25.173	32.74	Pk	10.2	.4	43.34	60	-16.66	-	-
24	25.191	17.44	Av	10.2	.4	28.04	-	-	50	-21.96

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	32.84	Qp	10	.1	42.94	65.71	-22.77	-	-
.42015	28.04	Qp	9.8	.2	38.04	57.45	-19.41	-	-
.54975	26.62	Qp	9.8	.2	36.62	56	-19.38	-	-
2.44575	32.5	Qp	9.9	.3	42.7	56	-13.3	-	-
7.34325	33.04	Qp	9.8	.3	43.14	60	-16.86	-	-
25.1732	24.28	Qp	10.2	.4	34.88	60	-25.12	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	17.6	Ca	10	.1	27.7	-	-	55.71	-28.01
.42915	17.72	Ca	9.8	.2	27.72	-	-	47.27	-19.55
.57675	17.38	Ca	9.7	.2	27.28	-	-	46	-18.72
2.44275	24.57	Ca	9.9	.3	34.77	-	-	46	-11.23
7.31475	24.83	Ca	9.8	.3	34.93	-	-	50	-15.07
25.1912	16.4	Ca	10.2	.4	27	-	-	50	-23

Pk - Peak detector

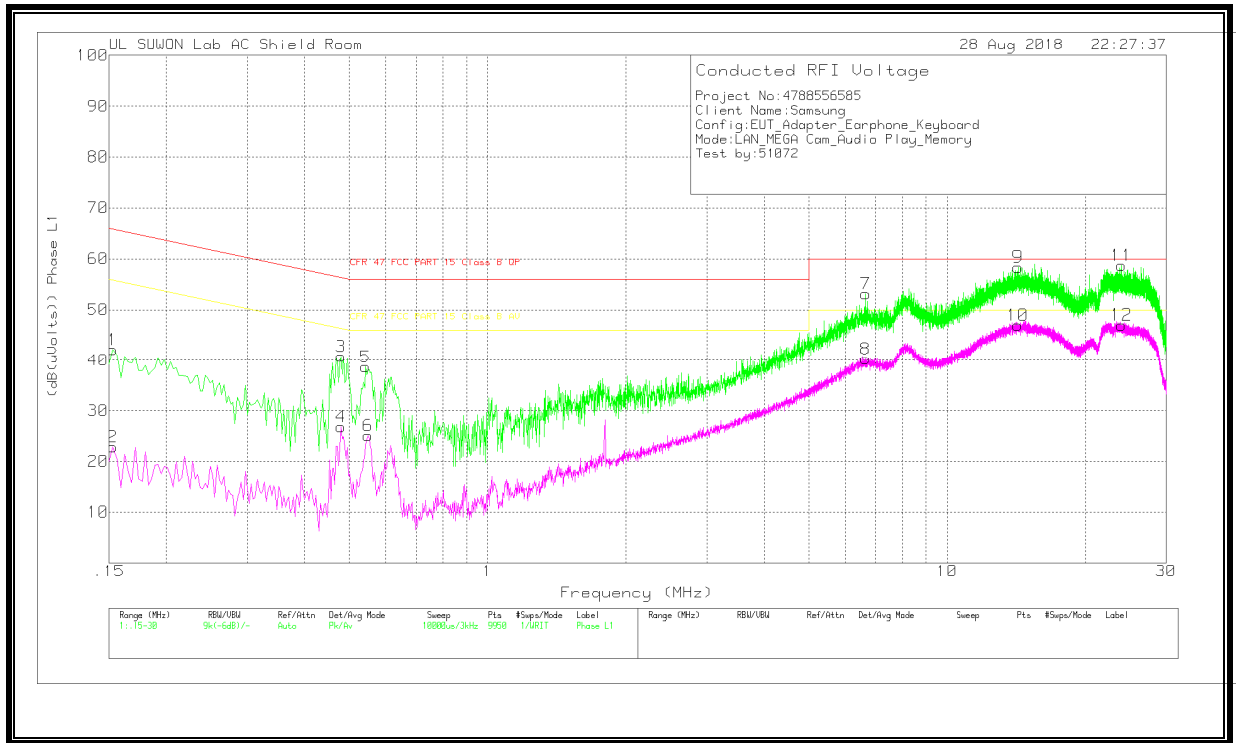
Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

WORST EMISSIONS(with Keyboard LAN MEGA Cam Audio Play Memory Mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	32.06	Pk	10	.1	42.16	65.84	-23.68	-	-
2	.153	12.72	Av	10	.1	22.82	-	-	55.84	-33.02
3	.48	30.9	Pk	9.7	.2	40.8	56.34	-15.54	-	-
4	.48	16.95	Av	9.7	.2	26.85	-	-	46.34	-19.49
5	.543	28.65	Pk	9.8	.2	38.65	56	-17.35	-	-
6	.549	15.04	Av	9.8	.2	25.04	-	-	46	-20.96
7	6.657	43.12	Pk	9.7	.3	53.12	60	-6.88	-	-
8	6.654	30.25	Av	9.7	.3	40.25	-	-	50	-9.75
9	14.274	48.21	Pk	9.8	.4	58.41	60	-1.59	-	-
10	14.268	36.8	Av	9.8	.4	47	-	-	50	-3
11	24.003	48.12	Pk	10.2	.4	58.72	60	-1.28	-	-
12	23.997	36.43	Av	10.2	.4	47.03	-	-	50	-2.97

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15375	30.52	Qp	10	.1	40.62	65.79	-25.17	-	-
.47925	21.54	Qp	9.7	.2	31.44	56.35	-24.91	-	-
.54375	25.2	Qp	9.8	.2	35.2	56	-20.8	-	-
6.65775	35.18	Qp	9.7	.3	45.18	60	-14.82	-	-
14.2742	42.19	Qp	9.8	.4	52.39	60	-7.61	-	-
24.0038	41.75	Qp	10.2	.4	52.35	60	-7.65	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	11.28	Ca	10	.1	21.38	-	-	55.88	-34.5
.48075	8.31	Ca	9.7	.2	18.21	-	-	46.33	-28.12
.54915	17.68	Ca	9.8	.2	27.68	-	-	46	-18.32
6.65325	29.33	Ca	9.7	.3	39.33	-	-	50	-10.67
14.2688	36.41	Ca	9.8	.4	46.61	-	-	50	-3.39
23.9978	35.86	Ca	10.2	.4	46.46	-	-	50	-3.54

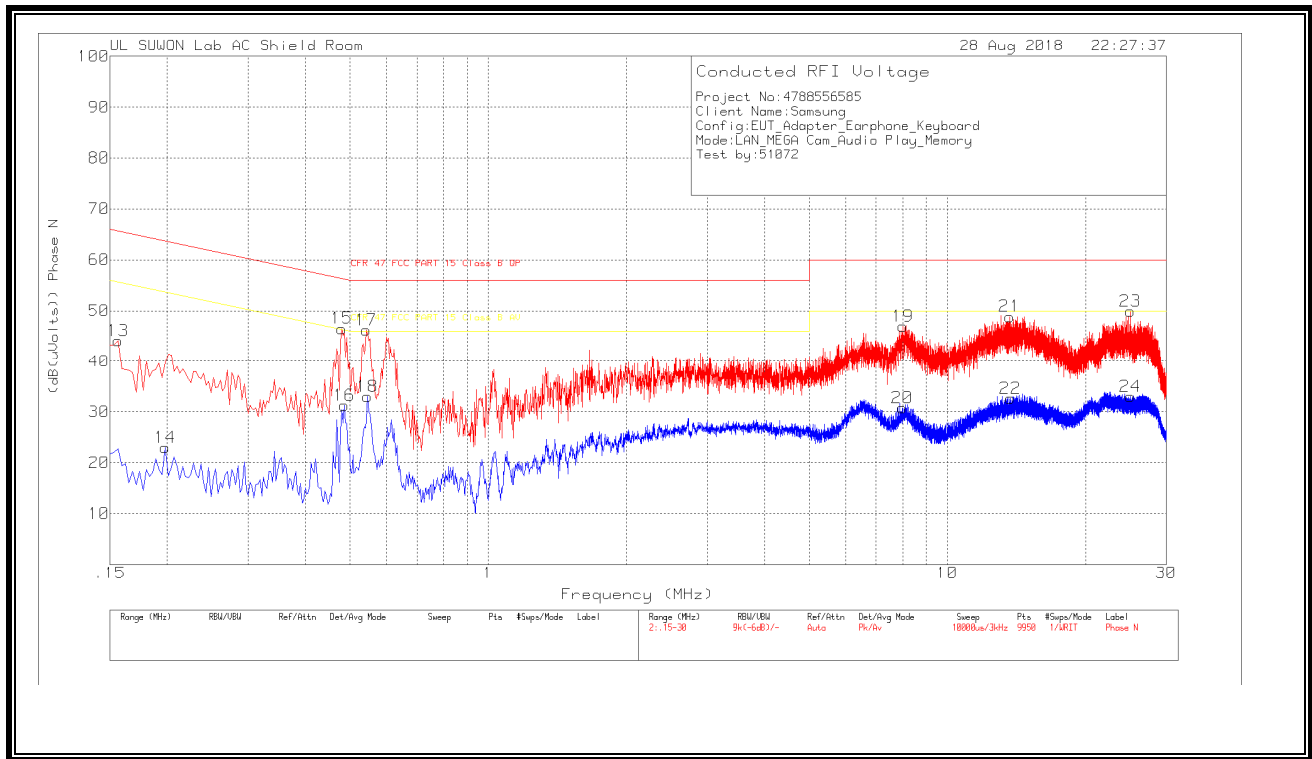
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	34.03	Pk	10	.1	44.13	65.67	-21.54	-	-
14	.198	12.92	Av	9.9	.2	23.02	-	-	53.69	-30.67
15	.48	36.54	Pk	9.8	.2	46.54	56.34	-9.8	-	-
16	.486	21.31	Av	9.8	.2	31.31	-	-	46.24	-14.93
17	.543	36.19	Pk	9.8	.2	46.19	56	-9.81	-	-
18	.546	22.94	Av	9.8	.2	32.94	-	-	46	-13.06
19	8.004	36.84	Pk	9.8	.3	46.94	60	-13.06	-	-
20	7.986	20.63	Av	9.8	.3	30.73	-	-	50	-19.27
21	13.668	38.69	Pk	9.8	.4	48.89	60	-11.11	-	-
22	13.704	22.38	Av	9.8	.4	32.58	-	-	50	-17.42
23	25.074	39.39	Pk	10.2	.4	49.99	60	-10.01	-	-
24	25.074	22.35	Av	10.2	.4	32.95	-	-	50	-17.05

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	30.52	Qp	10	.1	40.62	65.71	-25.09	-	-
.47925	23.62	Qp	9.8	.2	33.62	56.35	-22.73	-	-
.54315	31.74	Qp	9.8	.2	41.74	56	-14.26	-	-
8.00415	29.92	Qp	9.8	.3	40.02	60	-19.98	-	-
13.6673	31.2	Qp	9.8	.4	41.4	60	-18.6	-	-
25.0748	29.94	Qp	10.2	.4	40.54	60	-19.46	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15675	12.78	Ca	10	.1	22.88	-	-	55.63	-32.75
.48525	15.89	Ca	9.8	.2	25.89	-	-	46.25	-20.36
.54525	21.2	Ca	9.8	.2	31.2	-	-	46	-14.8
7.98615	18.81	Ca	9.8	.3	28.91	-	-	50	-21.09
13.7048	20.41	Ca	9.8	.4	30.61	-	-	50	-19.39
25.0748	20.6	Ca	10.2	.4	31.2	-	-	50	-18.8

Pk - Peak detector

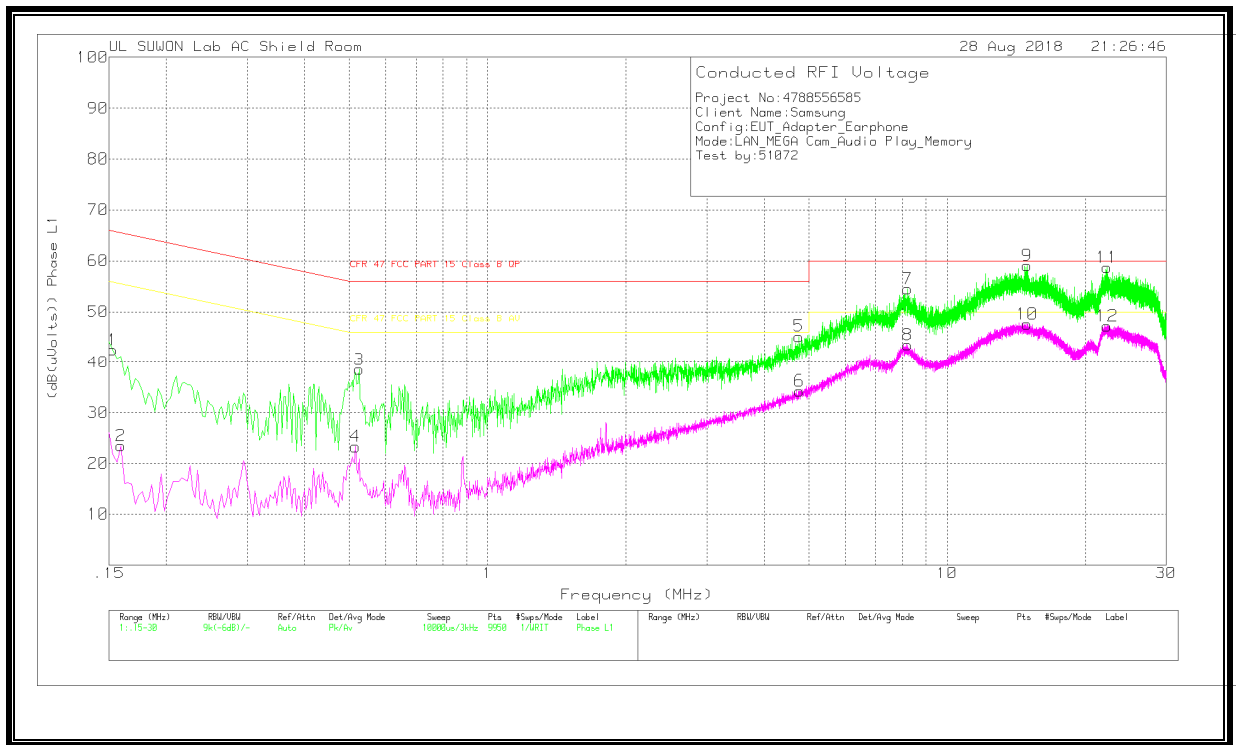
Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

WORST EMISSIONS(without Keyboard LAN MEGA Cam Audio Play Memory Mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	32.4	Pk	10	.1	42.5	65.84	-23.34	-	-
2	.159	13.36	Av	10	.1	23.46	-	-	55.52	-32.06
3	.525	28.7	Pk	9.7	.2	38.6	56	-17.4	-	-
4	.516	13.39	Av	9.7	.2	23.29	-	-	46	-22.71
5	4.761	35.18	Pk	9.7	.3	45.18	56	-10.82	-	-
6	4.779	24.29	Av	9.7	.3	34.29	-	-	46	-11.71
7	8.211	44.47	Pk	9.7	.3	54.47	60	-5.53	-	-
8	8.217	33.5	Av	9.7	.3	43.5	-	-	50	-6.5
9	14.931	48.94	Pk	9.8	.4	59.14	60	-8.6	-	-
10	14.943	37.41	Av	9.8	.4	47.61	-	-	50	-2.39
11	22.302	48.08	Pk	10.2	.4	58.68	60	-1.32	-	-
12	22.329	36.66	Av	10.2	.4	47.26	-	-	50	-2.74

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	29.73	Qp	10	.1	39.83	65.83	-26	-	-
.52425	21.41	Qp	9.7	.2	31.31	56	-24.69	-	-
4.76025	29.32	Qp	9.7	.3	39.32	56	-16.68	-	-
8.21175	38.48	Qp	9.7	.3	48.48	60	-11.52	-	-
14.9312	42.24	Qp	9.8	.4	52.44	60	-7.56	-	-
22.3022	41.59	Qp	10.2	.4	52.19	60	-7.81	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15375	11.73	Ca	10	.1	21.83	-	-	55.79	-33.96
.51525	10.85	Ca	9.7	.2	20.75	-	-	46	-25.25
4.77825	23.01	Ca	9.7	.3	33.01	-	-	46	-12.99
8.21715	32.56	Ca	9.7	.3	42.56	-	-	50	-7.44
14.9438	36.29	Ca	9.8	.4	46.49	-	-	50	-3.51
22.3298	35.68	Ca	10.2	.4	46.28	-	-	50	-3.72

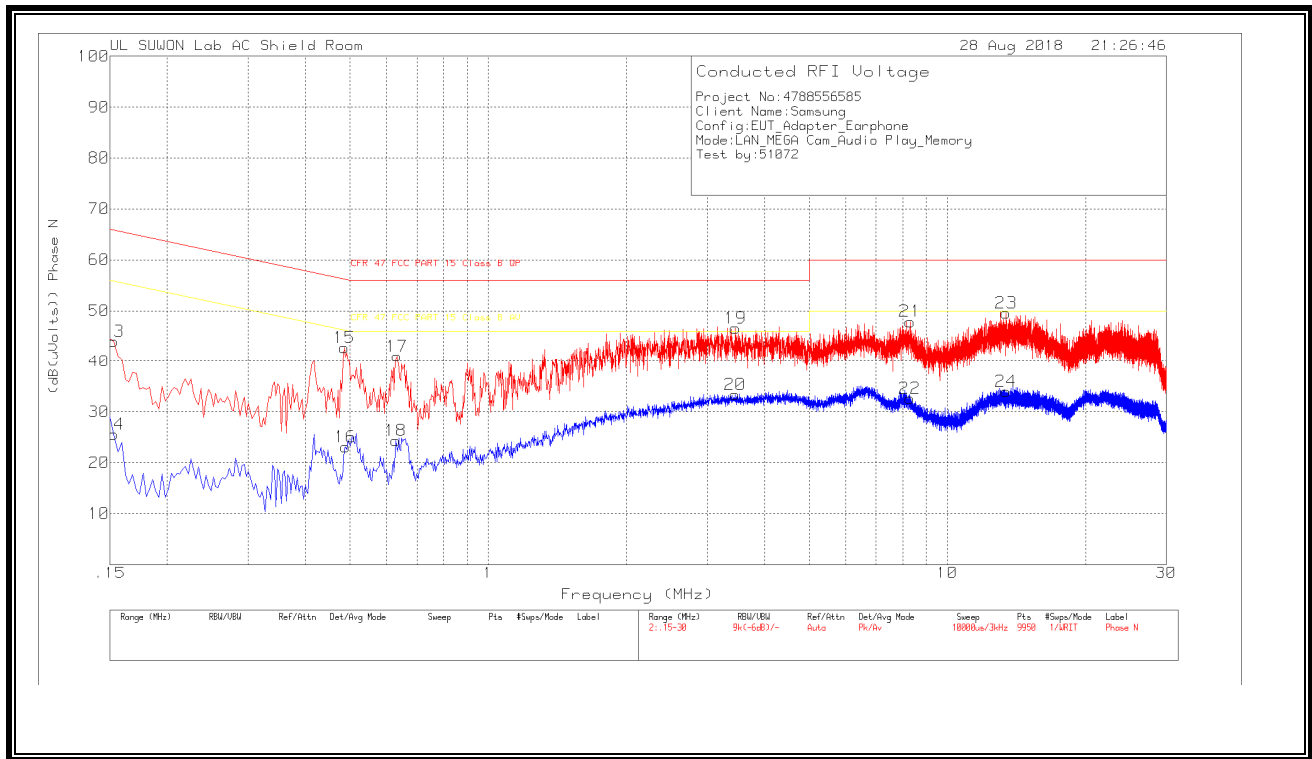
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.153	33.85	Pk	10	.1	43.95	65.84	-21.89	-	-
14	.153	15.42	Av	10	.1	25.52	-	-	55.84	-30.32
15	.486	32.72	Pk	9.8	.2	42.72	56.24	-13.52	-	-
16	.489	13.07	Av	9.8	.2	23.07	-	-	46.18	-23.11
17	.633	30.98	Pk	9.8	.2	40.98	56	-15.02	-	-
18	.63	14.3	Av	9.8	.2	24.3	-	-	46	-21.7
19	3.456	36.55	Pk	9.8	.3	46.65	56	-9.35	-	-
20	3.447	23.23	Av	9.8	.3	33.33	-	-	46	-12.67
21	8.301	37.8	Pk	9.8	.3	47.9	60	-12.1	-	-
22	8.295	22.55	Av	9.8	.3	32.65	-	-	50	-17.35
23	13.443	39.36	Pk	9.8	.4	49.56	60	-10.44	-	-
24	13.44	23.73	Av	9.8	.4	33.93	-	-	50	-16.07

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	29.26	Qp	10	.1	39.36	65.83	-26.47	-	-
.48615	25.73	Qp	9.8	.2	35.73	56.23	-20.5	-	-
.63225	20.49	Qp	9.8	.2	30.49	56	-25.51	-	-
3.45615	26.36	Qp	9.8	.3	36.46	56	-19.54	-	-
8.30025	30.07	Qp	9.8	.3	40.17	60	-19.83	-	-
13.4438	31.75	Qp	9.8	.4	41.95	60	-18.05	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	12.14	Ca	10	.1	22.24	-	-	55.83	-33.59
.48975	9.72	Ca	9.8	.2	19.72	-	-	46.17	-26.45
.63015	8.74	Ca	9.8	.2	18.74	-	-	46	-27.26
3.44625	18.22	Ca	9.8	.3	28.32	-	-	46	-17.68
8.29425	19.52	Ca	9.8	.3	29.62	-	-	50	-20.38
13.4402	20.92	Ca	9.8	.4	31.12	-	-	50	-18.88

Pk - Peak detector

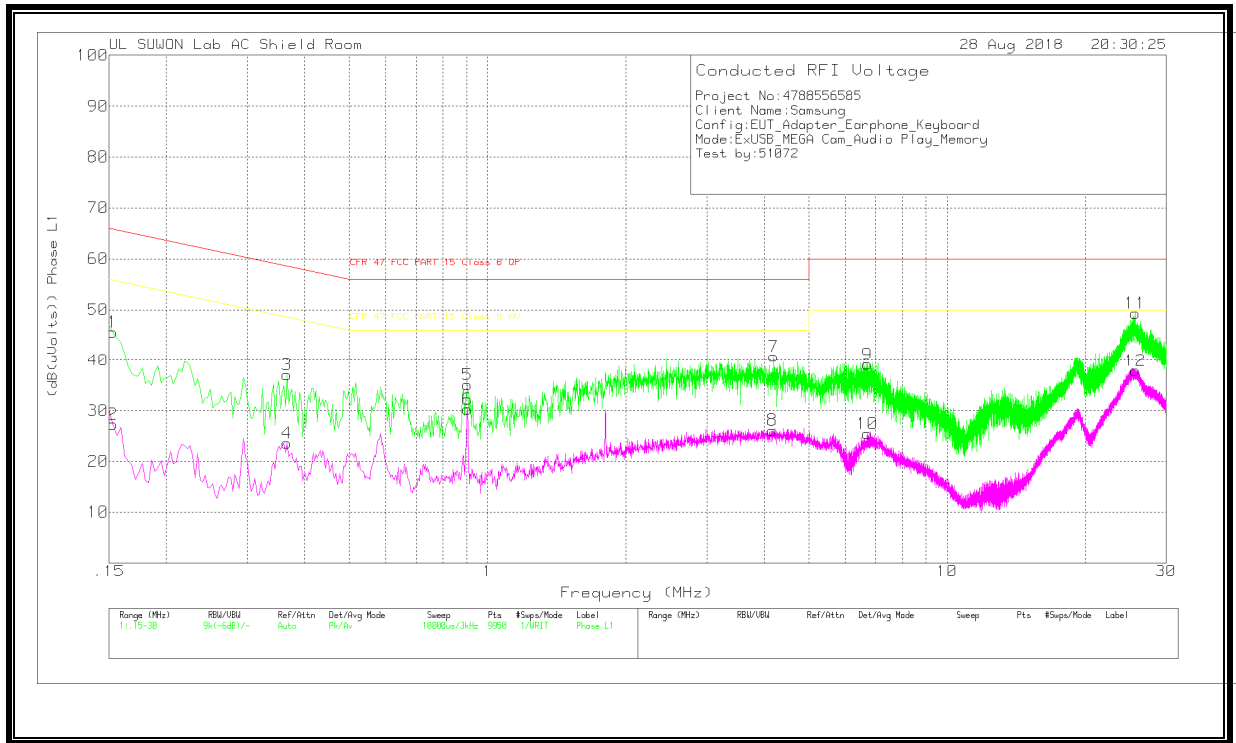
Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

WORST EMISSIONS(with Keyboard ExUSB MEGA Cam Audio Play Memory Mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	35.47	Pk	10	.1	45.57	65.84	-20.27	-	-
2	.153	17.17	Av	10	.1	27.27	-	-	55.84	-28.57
3	.366	27.17	Pk	9.7	.2	37.07	58.59	-21.52	-	-
4	.366	13.75	Av	9.7	.2	23.65	-	-	48.59	-24.94
5	.903	25.14	Pk	9.7	.3	35.14	56	-20.86	-	-
6	.903	20.31	Av	9.7	.3	30.31	-	-	46	-15.69
7	4.194	30.82	Pk	9.7	.3	40.82	56	-15.18	-	-
8	4.167	16.13	Av	9.7	.3	26.13	-	-	46	-19.87
9	6.711	29.15	Pk	9.7	.3	39.15	60	-20.85	-	-
10	6.705	15.43	Av	9.7	.3	25.43	-	-	50	-24.57
11	25.677	38.77	Pk	10.2	.3	49.27	60	-10.73	-	-
12	25.689	27.45	Av	10.2	.3	37.95	-	-	50	-12.05

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	31.48	Qp	10	.1	41.58	65.88	-24.3	-	-
.36525	21.03	Qp	9.7	.2	30.93	58.61	-27.68	-	-
.90225	21.68	Qp	9.7	.3	31.68	56	-24.32	-	-
4.19325	23.15	Qp	9.7	.3	33.15	56	-22.85	-	-
6.71115	23.28	Qp	9.7	.3	33.28	60	-26.72	-	-
25.6778	32.06	Qp	10.2	.3	42.56	60	-17.44	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	15.97	Ca	10	.1	26.07	-	-	55.83	-29.76
.36675	11.93	Ca	9.7	.2	21.83	-	-	48.57	-26.74
.90375	10.79	Ca	9.7	.3	20.79	-	-	46	-25.21
4.16775	14.91	Ca	9.7	.3	24.91	-	-	46	-21.09
6.70515	14.12	Ca	9.7	.3	24.12	-	-	50	-25.88
25.6883	25.97	Ca	10.2	.3	36.47	-	-	50	-13.53

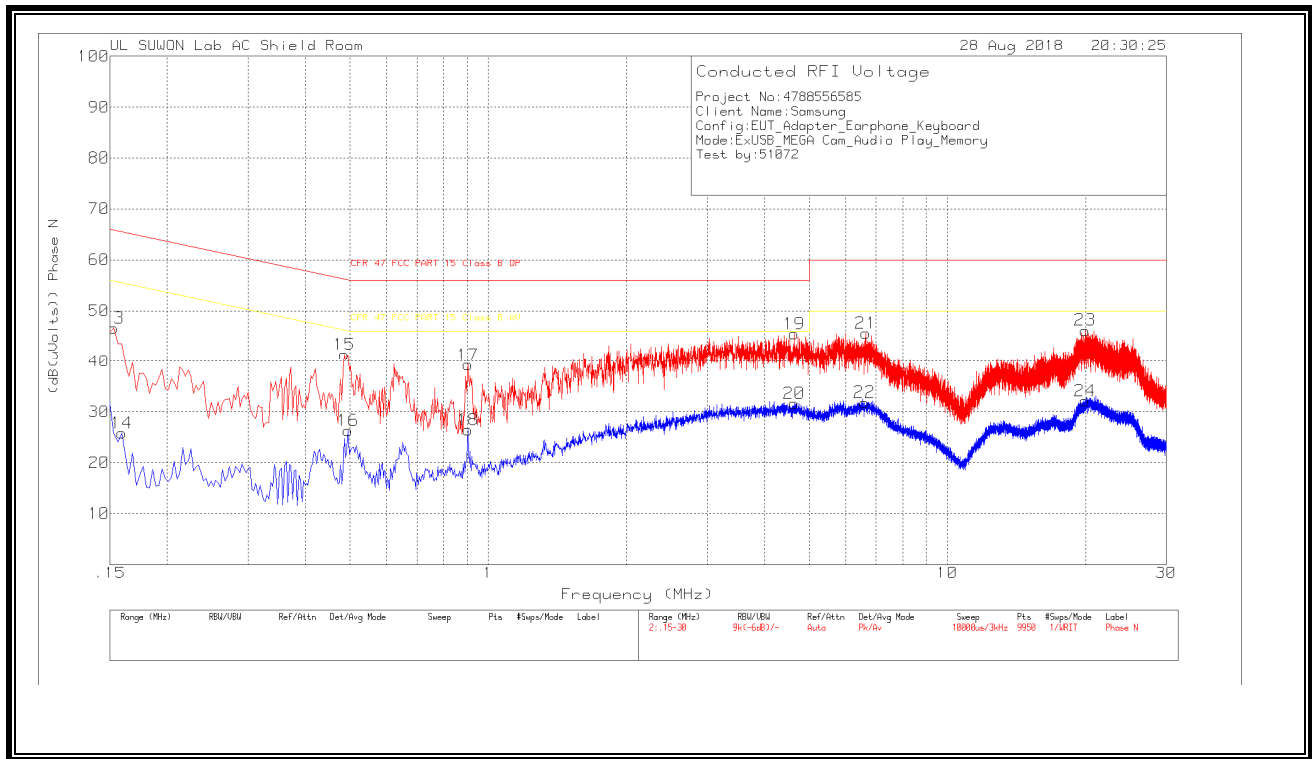
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.153	36.55	Pk	10	.1	46.65	65.84	-19.19	-	-
14	.159	15.76	Av	10	.1	25.86	-	-	55.52	-29.66
15	.486	31.44	Pk	9.8	.2	41.44	56.24	-14.8	-	-
16	.495	16.3	Av	9.8	.2	26.3	-	-	46.08	-19.78
17	.903	29.18	Pk	9.8	.3	39.28	56	-16.72	-	-
18	.903	16.3	Av	9.8	.3	26.4	-	-	46	-19.6
19	4.641	35.39	Pk	9.8	.3	45.49	56	-10.51	-	-
20	4.647	21.55	Av	9.8	.3	31.65	-	-	46	-14.35
21	6.639	35.48	Pk	9.8	.3	45.58	60	-14.42	-	-
22	6.6015	21.72	Av	9.8	.3	31.82	-	-	50	-18.18
23	19.953	35.67	Pk	10.1	.4	46.17	60	-13.83	-	-
24	19.983	21.67	Av	10.1	.4	32.17	-	-	50	-17.83

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	31.03	Qp	10	.1	41.13	65.88	-24.75	-	-
.48675	27.67	Qp	9.8	.2	37.67	56.22	-18.55	-	-
.90225	23.21	Qp	9.8	.3	33.31	56	-22.69	-	-
4.64025	28.35	Qp	9.8	.3	38.45	56	-17.55	-	-
6.63825	28.51	Qp	9.8	.3	38.61	60	-21.39	-	-
19.9532	29.03	Qp	10.1	.4	39.53	60	-20.47	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15825	11.97	Ca	10	.1	22.07	-	-	55.56	-33.49
.49425	14.05	Ca	9.8	.2	24.05	-	-	46.1	-22.05
.90225	10.14	Ca	9.8	.3	20.24	-	-	46	-25.76
4.64775	19.85	Ca	9.8	.3	29.95	-	-	46	-16.05
6.60165	21.19	Ca	9.8	.3	31.29	-	-	50	-18.71
19.9832	21.25	Ca	10.1	.4	31.75	-	-	50	-18.25

Pk - Peak detector

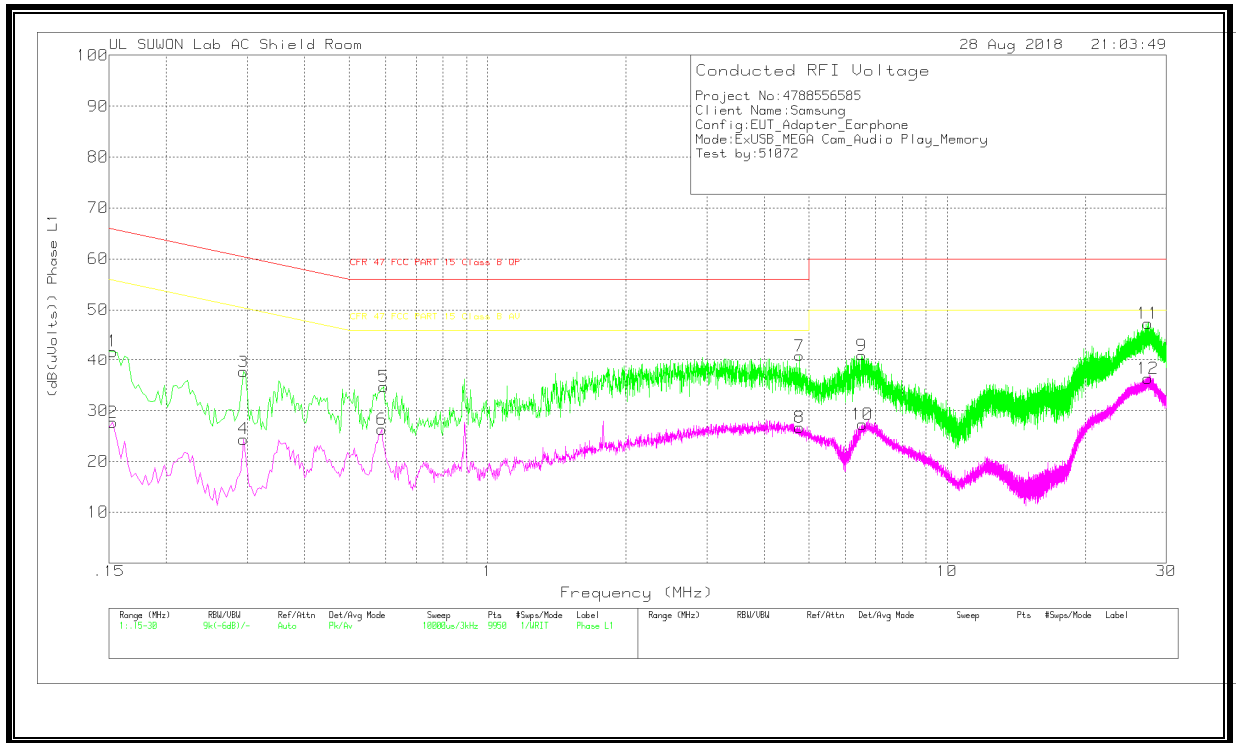
Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

WORST EMISSIONS(without Keyboard ExUSB MEGA Cam Audio Play Memory Mode)

Line-L1 .15 - 30MHz



LINE 1 RESULTS

Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	31.74	Pk	10	.1	41.84	65.84	-24	-	-
2	.153	17.56	Av	10	.1	27.66	-	-	55.84	-28.18
3	.294	27.87	Pk	9.6	.2	37.67	60.41	-22.74	-	-
4	.294	14.6	Av	9.6	.2	24.4	-	-	50.41	-26.01
5	.594	24.74	Pk	9.8	.2	34.74	56	-21.26	-	-
6	.588	16.36	Av	9.8	.2	26.36	-	-	46	-19.64
7	4.767	30.91	Pk	9.7	.3	40.91	56	-15.09	-	-
8	4.767	16.74	Av	9.7	.3	26.74	-	-	46	-19.26
9	6.525	31.03	Pk	9.7	.3	41.03	60	-18.97	-	-
10	6.534	17.36	Av	9.7	.3	27.36	-	-	50	-22.64
11	27.327	36.79	Pk	10.3	.3	47.39	60	-12.61	-	-
12	27.357	25.79	Av	10.3	.3	36.39	-	-	50	-13.61

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15225	30.07	Qp	10	.1	40.17	65.88	-25.71	-	-
.29475	27.24	Qp	9.6	.2	37.04	60.39	-23.35	-	-
.59325	21.21	Qp	9.8	.2	31.21	56	-24.79	-	-
4.76775	22.32	Qp	9.7	.3	32.32	56	-23.68	-	-
6.52425	24.48	Qp	9.7	.3	34.48	60	-25.52	-	-
27.3278	31.13	Qp	10.3	.3	41.73	60	-18.27	-	-

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15315	16.23	Ca	10	.1	26.33	-	-	55.83	-29.5
.29475	12.86	Ca	9.6	.2	22.66	-	-	50.39	-27.73
.58875	15.14	Ca	9.8	.2	25.14	-	-	46	-20.86
4.76625	15.73	Ca	9.7	.3	25.73	-	-	46	-20.27
6.53475	15.87	Ca	9.7	.3	25.87	-	-	50	-24.13
27.3563	24.91	Ca	10.3	.3	35.51	-	-	50	-14.49

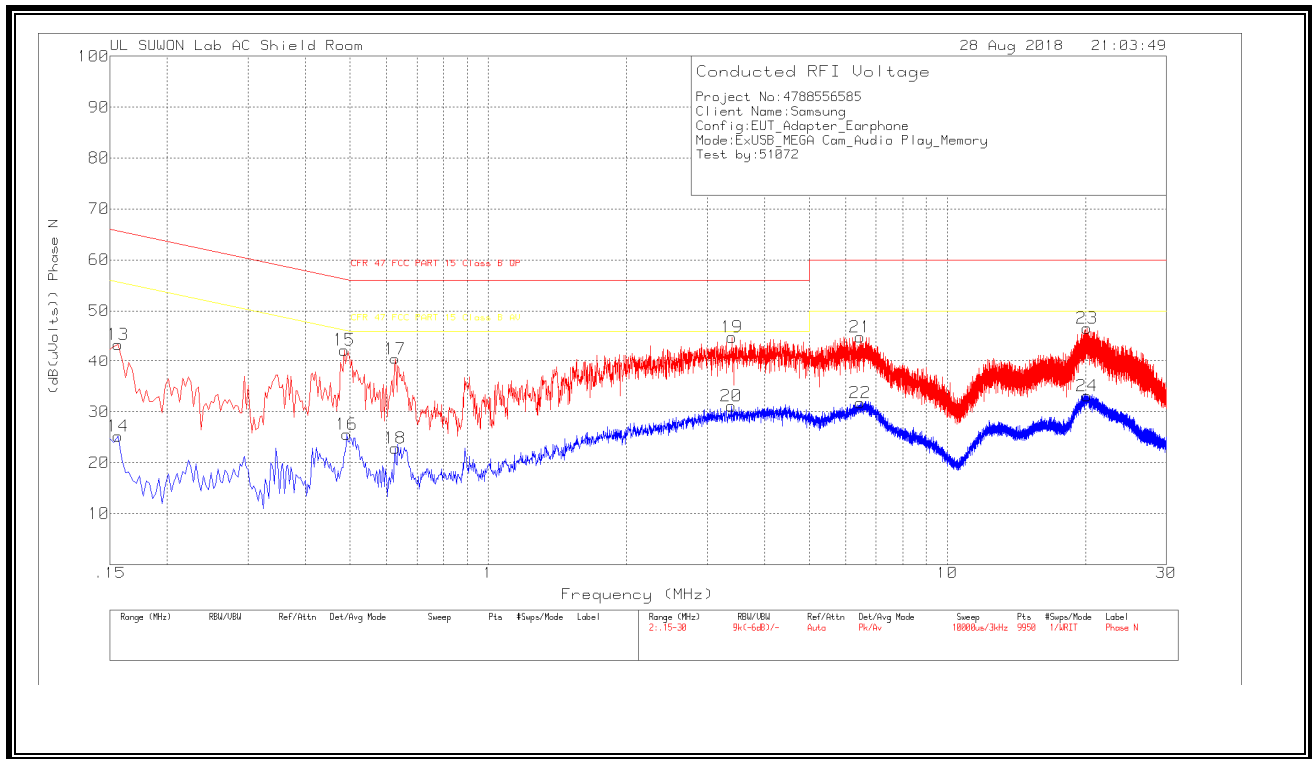
Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection

Line-L2 .15 - 30MHz



LINE 2 RESULTS

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	33.24	Pk	10	.1	43.34	65.67	-22.33	-	-
14	.156	15.09	Av	10	.1	25.19	-	-	55.67	-30.48
15	.486	32.33	Pk	9.8	.2	42.33	56.24	-13.91	-	-
16	.492	15.56	Av	9.8	.2	25.56	-	-	46.13	-20.57
17	.627	30.53	Pk	9.8	.2	40.53	56	-15.47	-	-
18	.627	12.8	Av	9.8	.2	22.8	-	-	46	-23.2
19	3.393	34.71	Pk	9.8	.3	44.81	56	-11.19	-	-
20	3.384	21.07	Av	9.8	.3	31.17	-	-	46	-14.83
21	6.468	34.81	Pk	9.8	.3	44.91	60	-15.09	-	-
22	6.462	21.67	Av	9.8	.3	31.77	-	-	50	-18.23
23	20.175	36.13	Pk	10.1	.4	46.63	60	-13.37	-	-
24	20.181	22.6	Av	10.1	.4	33.1	-	-	50	-16.9

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	28.71	Qp	10	.1	38.81	65.71	-26.9	-	-
.48615	28.49	Qp	9.8	.2	38.49	56.23	-17.74	-	-
.62775	24.77	Qp	9.8	.2	34.77	56	-21.23	-	-
3.39315	27.74	Qp	9.8	.3	37.84	56	-18.16	-	-
6.46725	28.38	Qp	9.8	.3	38.48	60	-21.52	-	-
20.1743	29.32	Qp	10.1	.4	39.82	60	-20.18	-	-

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.15525	13.59	Ca	10	.1	23.69	-	-	55.71	-32.02
.49125	14.72	Ca	9.8	.2	24.72	-	-	46.15	-21.43
.62715	10.37	Ca	9.8	.2	20.37	-	-	46	-25.63
3.38475	19.2	Ca	9.8	.3	29.3	-	-	46	-16.7
6.46215	20.53	Ca	9.8	.3	30.63	-	-	50	-19.37
20.1803	21.63	Ca	10.1	.4	32.13	-	-	50	-17.87

Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Ca - CISPR average detection