

TEST REPORT



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Report No.:
CTK-2017-01157
Page (1) / (42) Pages

1. Client

- Name : TO21 COMMS Co.,Ltd.
- Address : 2-504, Ace high-end tower, 61, Digital-ro-26-gil, Guro-gu, Seoul 08389, Korea
- Date of Receipt : 2017-05-19



2. Manufacturer

- Name : TO21 COMMS Co.,Ltd.
- Address : 2-504, Ace high-end tower, 61, Digital-ro-26-gil, Guro-gu, Seoul 08389, Korea

3. Use of Report : For FCC DoC Report

4. Test Sample / Model: Pocket Theater / RTSB7000L

5. Date of Test : 2017-05-28 to 2017-06-08

6. Test Standard(method) used : FCC Part 15 Subpart B

7. Testing Environment: refer to 10 pages to 23 pages

8. Test Results : refer to 11 pages to 23 pages

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full.

Affirmation	Tested by	Approved by
	Park Sangkyun: (Signature) EMC Test Engineer	Lee Eunwon: (Signature) Technical Manager

2017-06-13

Republic of KOREA **CTK Co., Ltd.**



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REPORT REVISION HISTORY

Date	Revision	Page No
2017-06-13	Issued (CTK-2017-01157)	All

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1.0 General Product Description

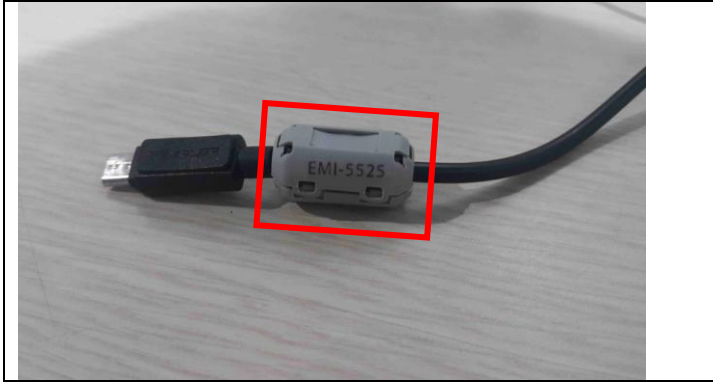
No.	ITEM		APPLICATION	
1	Test Sample		Pocket Theater	
2	Model		RTSB7000L	
3	Variant Model		-	
4	Dimensions (W x L x H)		52 mm × 52 mm × 25 mm	
5	Mobility		☒ Table-top ☐ Floor-standing ☐ Built-in ☐ Portable	
6	Maximum Clock Frequency		24 MHz, Wireless frequency : 2.4 GHz, 5 GHz	
7	Electrical Ratings	EUT	Input:	DC 5 V, 1.5 A
			Output:	-
		Travel Adapter	Input:	AC 100 V – AC 240 V, 50 Hz / 60 Hz
			Output:	DC 5 V, 2.0 A
8	Test Voltage / Frequency		Voltage:	AC 120 V
			Frequency:	60 Hz

1.1 Model Differences

Not applicable

1.2 Device Modifications

The following modifications were necessary for compliance:

	Core penetration : EMI-5525 _Taejin INT
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1.3 EUT Configuration(s)

See Appendix A for individual test set-up configuration(s). The following peripheral devices and/or interface cables were connected during the measurement:

☒ Peripheral Devices

[2.4 GHz Mode]

Device	Model No.	Serial No.	Manufacturer
Travel Adapter	ETA-090KWK	-	RFTech Co.,Ltd
iPhone6	A1586	-	Apple Inc.

[5 GHz Mode]

Device	Model No.	Serial No.	Manufacturer
Travel Adapter	ETA-090KWK	-	RFTech Co.,Ltd
Galaxy Note4	SM-N910S	-	Apple Inc.

☒ Cable Description

[2.4 GHz Mode]

No.	From		To		Type of Cable		
	Device	I/O Port	Device	I/O Port	Length (m)	Shielded or Unshielded	Ferrite Core [Y/N]
1	EUT	DC In	Travel Adapter	DC Out	0.5	S	Y
2		2.4 GHz Communication	iPhone6	2.4 GHz Communication	-	-	-
3	Travel Adapter	AC Power	AC Mains	-	-	-	-

[5 GHz Mode]

No.	From		To		Type of Cable		
	Device	I/O Port	Device	I/O Port	Length (m)	Shielded or Unshielded	Ferrite Core [Y/N]
1	EUT	DC In	Travel Adapter	DC Out	0.5	S	Y
2		5.825 GHz Communication	Galaxy Note4	5.825 GHz Communication	-	-	-
3	Travel Adapter	AC Power	AC Mains	-	-	-	-

* Shielded or Unshielded : Unshielded=U, Shielded=S

1.4 Test Software

- ☐ EMC Test V 1.0
☐ Display Test Patterns – V1.5
☐ Ping.exe
☒ Not applicable

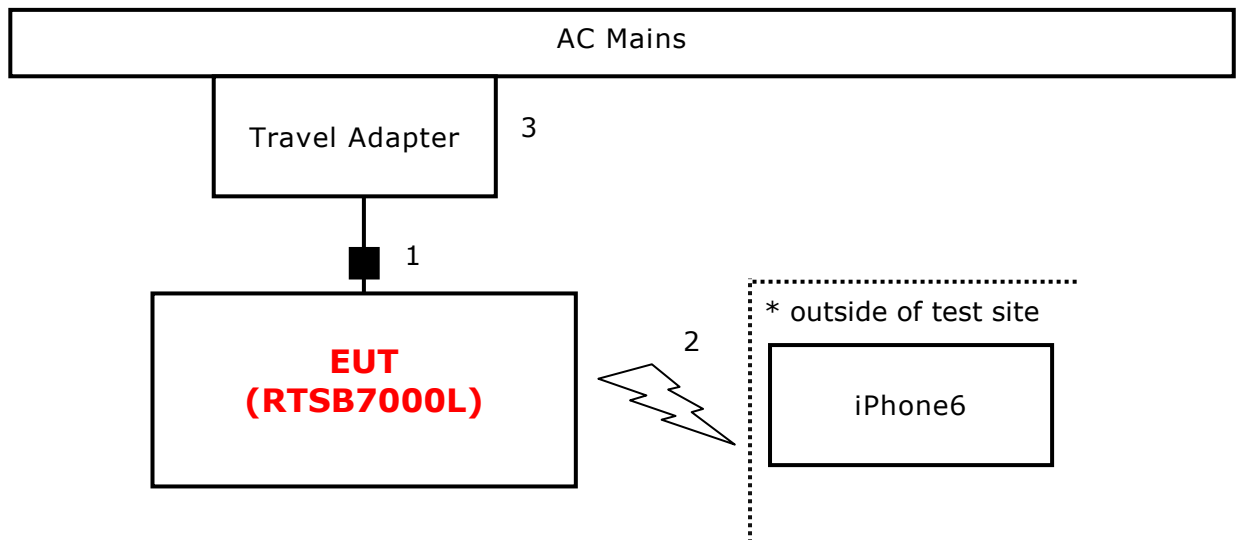
1.5 EUT Operating Mode(s)

Equipment under test was operated during the measurement under the following condition s:

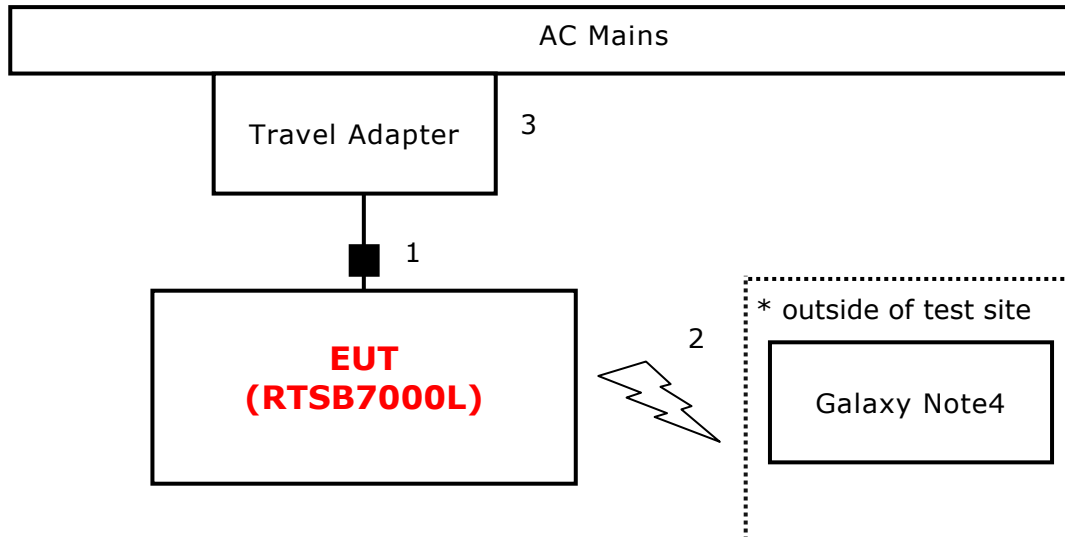
- ☒ 2.4 GHz (2.4 GHz communication via DLNA mode BY iOS)
☒ 5 GHz (5.825 GHz communication via Miracast by Android)

1.6 Configuration

[2.4 GHz Mode]



[5 GHz Mode]



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1.7 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.

1.8 Test Facility

The measurement facility is located at (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yong-in-si, Gyeonggi-do, Korea. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.9 Measurement Procedure

Preliminary AC power line conducted emissions tests were performed shielded room. To find worst mode, several typical mode and typical cable position were tested.

Final AC power line conducted emissions test was performed shielded room. (location is same as Preliminary test)

Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

Preliminary radiated emissions test were performed Semi-Anechoic Chamber or anechoic chamber (Distance of antenna and EUT was 3 m). To find worst mode, several typical mode and typical cable position were tested and peak level and frequency were recorded.

Final radiated emissions test was performed Semi-Anechoic Chamber.

Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

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

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1.10 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Registration Number	Logo
USA	FCC	FCC Part 15 & 18 EMI (Electromagnetic Interference / Emission)	805871	
JAPAN	VCCI	VCCI V-3 EMI (Electromagnetic Interference / Emission)	C-986 T-1843 R-3627 G-387	
KOREA	MSIP	EMI (Electromagnetic Interference / Emission) EMS (Electromagnetic Susceptibility / Immunity)	KR0025	

1.11 Measurement Uncertainty

Compliance of the product is based on the measured value.

However, the measurement uncertainty is included for information purposes.

The measurement uncertainties given below are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Measurement Type	Frequency Range	Expanded Uncertainty
Conducted Emission of Mains Ports	150 kHz to 30 MHz	2.62 dB (C.L.: Approx. 95 %, $k=2$)
Radiated Emission	30 MHz to 1 000 MHz	4.54 dB (C.L.: Approx. 95 %, $k=2$)
Radiated Emission	1 GHz Above	4.98 dB (C.L.: Approx. 95 %, $k=2$)

2.0 EMC Test Regulations/Standards

The tests were performed according to following regulations:

Applied standard	Title	Applied	Test Result
FCC Part 15 Subpart B ☐ Class A ☒ Class B	Conducted Voltage Emissions	☒	☒ MET ☐ NOT MET
	Radiated Electric Field Emissions	☒	☒ MET ☐ NOT MET

3.0 Results of Individual Test

3.1 Conducted Voltage Emissions of Mains ports

Test Date

2017-05-31

Test Location

Shielded Room

Test Equipment

Name of Equipment	Model No.	Manufacturer	Serial No.	Due Date	Applied
EMI Test Receiver	ESCI3	Rohde & Schwarz	100032	2018-02-02	☒
LISN	ENV216	Rohde & Schwarz	101235	2018-05-09	☒
LISN	ENV216	Rohde & Schwarz	101236	2017-08-02	☐
EMI Test Receiver	ESR7	Rohde & Schwarz	101088	2018-05-10	☐
LISN	ENV216	Rohde & Schwarz	101151	2017-11-01	☐
LISN	ESH3-Z5	Rohde & Schwarz	100207	2017-11-01	☐
EMI Test Receiver	ESU40	Rohde & Schwarz	100336	2018-05-12	☐
LISN	ENV216	Rohde & Schwarz	101760	2018-02-03	☐
LISN	NNLK 8121	SCHWARZBECK	8121-644	2018-05-09	☐
Pulse Limiter	VTSD 9561-F	SCHWARZBECK	9561-F064	2018-05-08	☐
LISN	ENV216	Rohde & Schwarz	101150	2018-02-03	☐

Test Software

ESCI7, ESCI3 : EMC32 Ver. 8.50.0

ESR7 : EMC32 Ver. 8.53.0

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Setting

IF Band Width: 9 kHz

Climate Condition

Temperature: (24 ± 1) °C

Relative Humidity: (37 ± 1) %

Atmospheric Pressure: 99 kPa

Test Result

The requirements are: ☒ MET ☐ NOT MET

Test Mode	Frequency (MHz)	Measured Data (dBμV)	Margin (dB)	Remark
2.4 GHz Mode	0.586 500	41.2	14.8	Quasi-peak
5 GHz Mode	0.573 000	29.9	16.1	CAverage

The Result is calculated by using the following formula;

* Result = Limit – Margin (Result included the correction factor)

* Correction factor = Cable Loss + Insertion loss of LISN

Test Data

[2.4 GHz Mode]
[Line: L1]

EMI Auto Test(7)

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Test Report

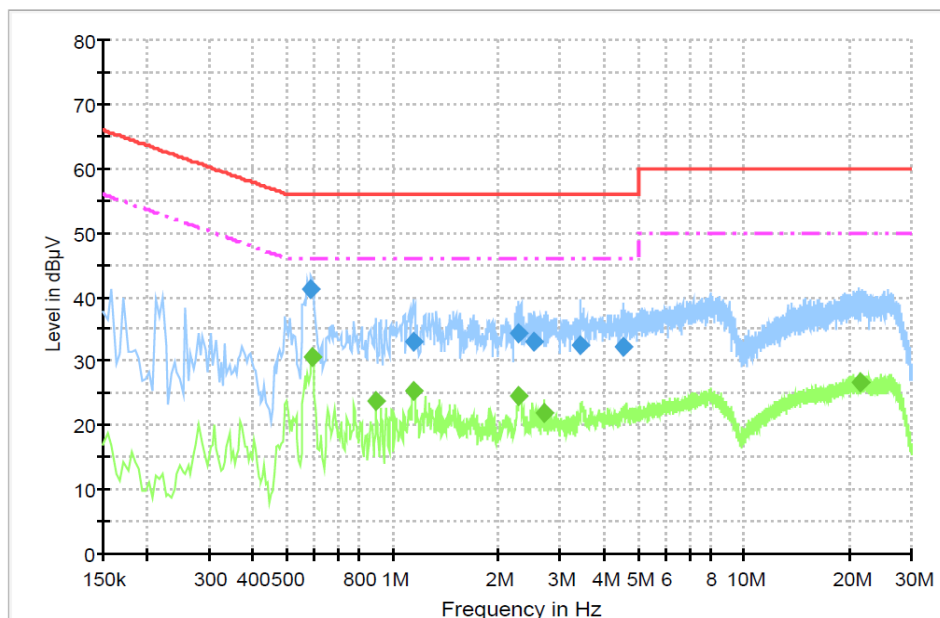
Common Information

Test Model Name: RTSB7000L
Test Mode: 2.4 GHz
Manufacturer: TO21 COMMS Co.,Ltd
Tester: Park Sangkyun

Hardware Setup: EMI conducted\Voltage with ENV216_FO(101235) - [EMI conducted]

Subrange 1
Frequency Range: 150 kHz - 30 MHz
Receiver: ESCI 3 [ESCI 3]
@ GPIB0 (ADR 21), SN 100032/003, FW 4.42
Signal Path: ESCI 3-ENV216 FO(101235)
FW 1.0
Correction Table: 3CE Cable Loss
LISN: ENV216 FO(101235)
Correction Table (Line 0): ENV216_FO_N(101235)
Correction Table (Line 1): ENV216_FO_L1(101235)

3CE_Class B_L1



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EMI Auto Test(7)

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Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.586500	41.2	1000.0	9.000	On	L1	9.8	14.8	56.0
1.149000	32.9	1000.0	9.000	On	L1	9.7	23.1	56.0
2.287500	34.2	1000.0	9.000	On	L1	9.6	21.8	56.0
2.539500	32.9	1000.0	9.000	On	L1	9.7	23.1	56.0
3.430500	32.5	1000.0	9.000	On	L1	9.7	23.5	56.0
4.551000	32.2	1000.0	9.000	On	L1	9.7	23.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.591000	30.6	1000.0	9.000	On	L1	9.8	15.4	46.0
0.897000	23.7	1000.0	9.000	On	L1	9.7	22.3	46.0
1.149000	25.3	1000.0	9.000	On	L1	9.7	20.7	46.0
2.287500	24.4	1000.0	9.000	On	L1	9.6	21.6	46.0
2.692500	21.9	1000.0	9.000	On	L1	9.7	24.1	46.0
21.480000	26.7	1000.0	9.000	On	L1	10.0	23.3	50.0

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[Line : Neutral]

EMI Auto Test(7)

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Test Report

Common Information

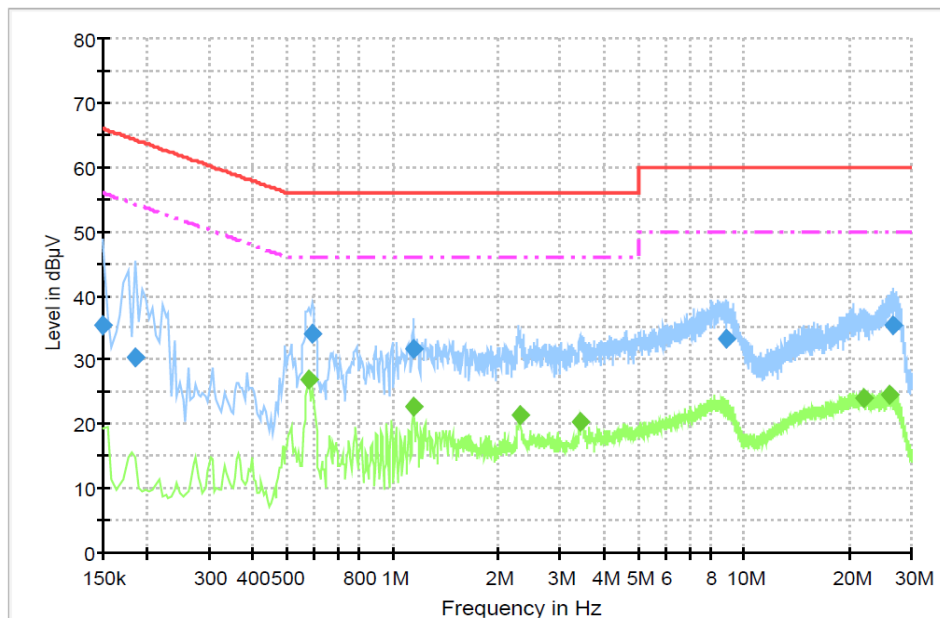
Test Model Name: RTSB7000L
Test Mode: 2.4 GHz
Manufacturer: TO21 COMMS Co.,Ltd
Tester: Park Sangkyun

Hardware Setup: EMI conducted\Voltage with ENV216_FO(101235) - [EMI conducted]

Subrange 1
Frequency Range: 150 kHz - 30 MHz

Receiver: ESCI 3 [ESCI 3]
@ GPIB0 (ADR 21), SN 100032/003, FW 4.42
Signal Path: ESCI 3-ENV216 FO(101235)
FW 1.0
Correction Table: 3CE Cable Loss
LISN: ENV216 FO(101235)
Correction Table (Line 0): ENV216_FO_N(101235)
Correction Table (Line 1): ENV216_FO_L1(101235)

3CE_Class B_N



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EMI Auto Test(7)

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Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	35.2	1000.0	9.000	On	N	9.8	30.8	66.0
0.186000	30.4	1000.0	9.000	On	N	9.9	33.8	64.2
0.591000	33.9	1000.0	9.000	On	N	10.0	22.1	56.0
1.149000	31.6	1000.0	9.000	On	N	9.8	24.4	56.0
8.902500	33.3	1000.0	9.000	On	N	9.9	26.7	60.0
26.628000	35.2	1000.0	9.000	On	N	10.1	24.8	60.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.577500	27.0	1000.0	9.000	On	N	10.0	19.0	46.0
1.149000	22.7	1000.0	9.000	On	N	9.8	23.3	46.0
2.301000	21.5	1000.0	9.000	On	N	9.7	24.5	46.0
3.439500	20.2	1000.0	9.000	On	N	9.8	25.8	46.0
21.957000	24.1	1000.0	9.000	On	N	10.0	25.9	50.0
25.791000	24.6	1000.0	9.000	On	N	10.1	25.4	50.0

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[5 GHz Mode]
[Line: L1]

EMI Auto Test(7)

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Test Report

Common Information

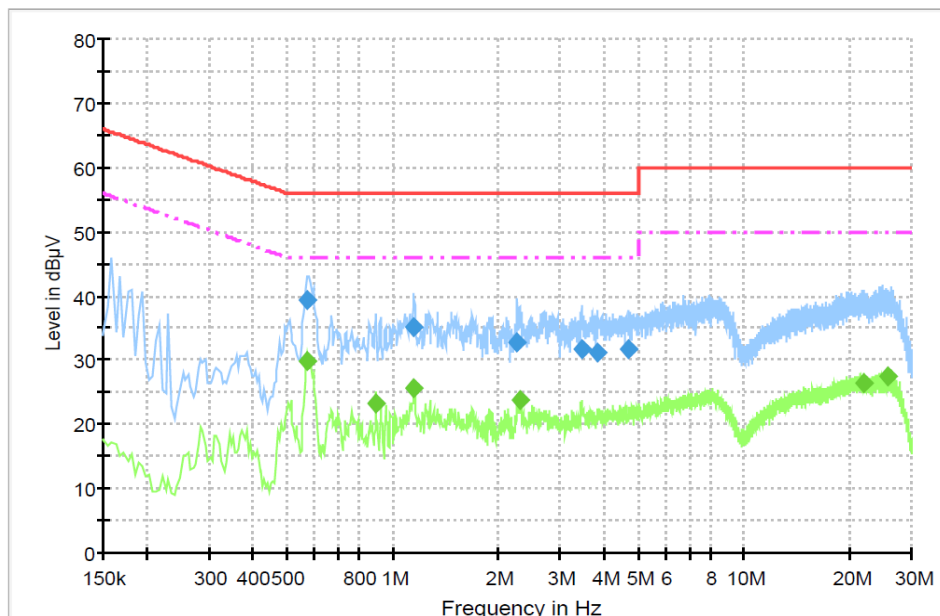
Test Model Name: RTSB7000L
Test Mode: 5 GHz
Manufacturer: TO21 COMMS Co.,Ltd
Tester: Park Sangkyun

Hardware Setup: EMI conducted\Voltage with ENV216_FO(101235) - [EMI conducted]

Subrange 1
Frequency Range: 150 kHz - 30 MHz

Receiver: ESCI 3 [ESCI 3]
@ GPIB0 (ADR 21), SN 100032/003, FW 4.42
Signal Path: ESCI 3-ENV216 FO(101235)
FW 1.0
Correction Table: 3CE Cable Loss
LISN: ENV216 FO(101235)
Correction Table (Line 0): ENV216_FO_N(101235)
Correction Table (Line 1): ENV216_FO_L1(101235)

3CE_Class B_L1



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EMI Auto Test(7)

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Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.573000	39.2	1000.0	9.000	On	L1	9.8	16.8	56.0
1.149000	35.0	1000.0	9.000	On	L1	9.7	21.0	56.0
2.265000	32.8	1000.0	9.000	On	L1	9.6	23.2	56.0
3.471000	31.8	1000.0	9.000	On	L1	9.7	24.2	56.0
3.831000	31.2	1000.0	9.000	On	L1	9.7	24.8	56.0
4.704000	31.6	1000.0	9.000	On	L1	9.7	24.4	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.573000	29.9	1000.0	9.000	On	L1	9.8	16.1	46.0
0.897000	23.3	1000.0	9.000	On	L1	9.7	22.7	46.0
1.149000	25.6	1000.0	9.000	On	L1	9.7	20.4	46.0
2.305500	23.7	1000.0	9.000	On	L1	9.6	22.3	46.0
21.867000	26.4	1000.0	9.000	On	L1	10.0	23.6	50.0
25.570500	27.4	1000.0	9.000	On	L1	9.9	22.6	50.0

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[Line : Neutral]

EMI Auto Test(7)

1 / 2

Test Report

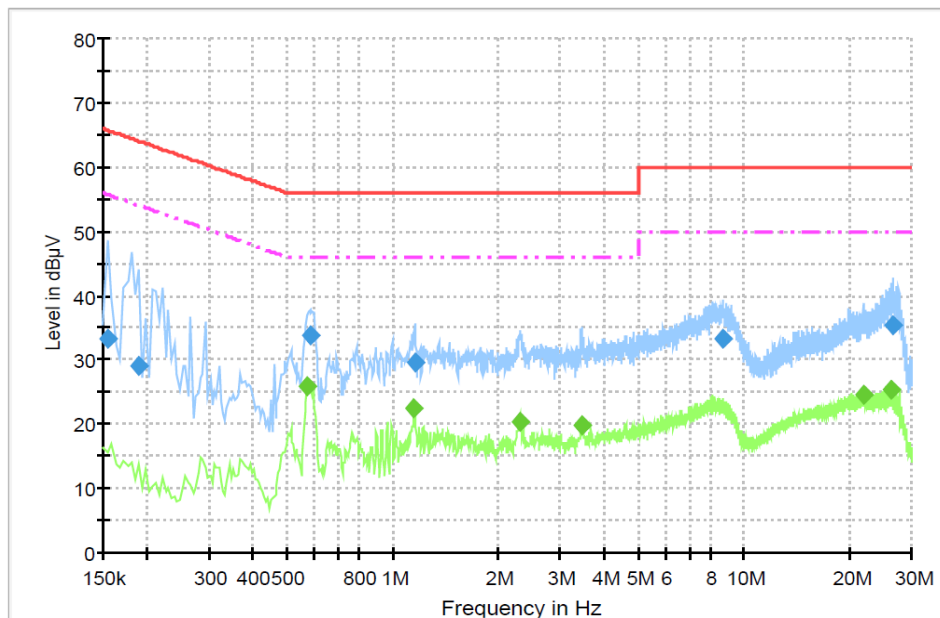
Common Information

Test Model Name: RTSB7000L
Test Mode: 5 GHz
Manufacturer: TO21 COMMS Co.,Ltd
Tester: Park Sangkyun

Hardware Setup: EMI conducted\Voltage with ENV216_FO(101235) - [EMI conducted]

Subrange 1
Frequency Range: 150 kHz - 30 MHz
Receiver: ESCI 3 [ESCI 3]
@ GPIB0 (ADR 21), SN 100032/003, FW 4.42
Signal Path: ESCI 3-ENV216 FO(101235)
FW 1.0
Correction Table: 3CE Cable Loss
LISN: ENV216 FO(101235)
Correction Table (Line 0): ENV216_FO_N(101235)
Correction Table (Line 1): ENV216_FO_L1(101235)

3CE_Class B_N



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EMI Auto Test(7)

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Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154500	33.3	1000.0	9.000	On	N	9.8	32.4	65.8
0.190500	29.2	1000.0	9.000	On	N	9.9	34.8	64.0
0.582000	33.7	1000.0	9.000	On	N	10.0	22.3	56.0
1.158000	29.6	1000.0	9.000	On	N	9.8	26.4	56.0
8.704500	33.3	1000.0	9.000	On	N	9.9	26.7	60.0
26.515500	35.4	1000.0	9.000	On	N	10.1	24.6	60.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.573000	25.8	1000.0	9.000	On	N	10.0	20.2	46.0
1.153500	22.4	1000.0	9.000	On	N	9.8	23.6	46.0
2.296500	20.3	1000.0	9.000	On	N	9.7	25.7	46.0
3.453000	19.7	1000.0	9.000	On	N	9.8	26.3	46.0
21.777000	24.5	1000.0	9.000	On	N	10.0	25.5	50.0
26.124000	25.4	1000.0	9.000	On	N	10.1	24.6	50.0

5/31/2017

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3.2 Radiated Electric Field Emissions (Below 1 GHz)

Test Date

2017-06-08

Test Location

10 m SAC (test distance : ☐ 10 m, ☒ 3 m)

Test Equipment

Name of Equipment	Model No.	Manufacturer	Serial No.	Due Date	Applied
EMI Test Receiver	ESCI7	Rohde & Schwarz	100814	2017-11-01	☒
Bilog Antenna	CBL6111C	Schaffner	2551	2018-05-13	☒
6dB Attenuator	DNF	Rohde & Schwarz	272.4110.50-2	2017-11-01	☒
Amplifier	310	Sonoma Instrument Co.	291721	2018-02-02	☒

Test Software

TOYO EMI software Ver. 5.1.0

Frequency Range of Measurement

30 MHz to 1 GHz

Instrument Setting

IF Band Width: 120 kHz

Climate Condition

Temperature: (21 ± 1) °C

Relative Humidity: (38 ± 1) %

Atmospheric Pressure: 99 kPa

Test Result

The requirements are: ☒ MET ☐ NOT MET

Test Mode	Frequency (MHz)	Measured Data (dBμV/m)	Margin (dB)	Remark
2.4 GHz Mode	666.684	39.2	6.8	Quasi-peak
5 GHz Mode	933.275	37.9	2.7	Quasi-peak

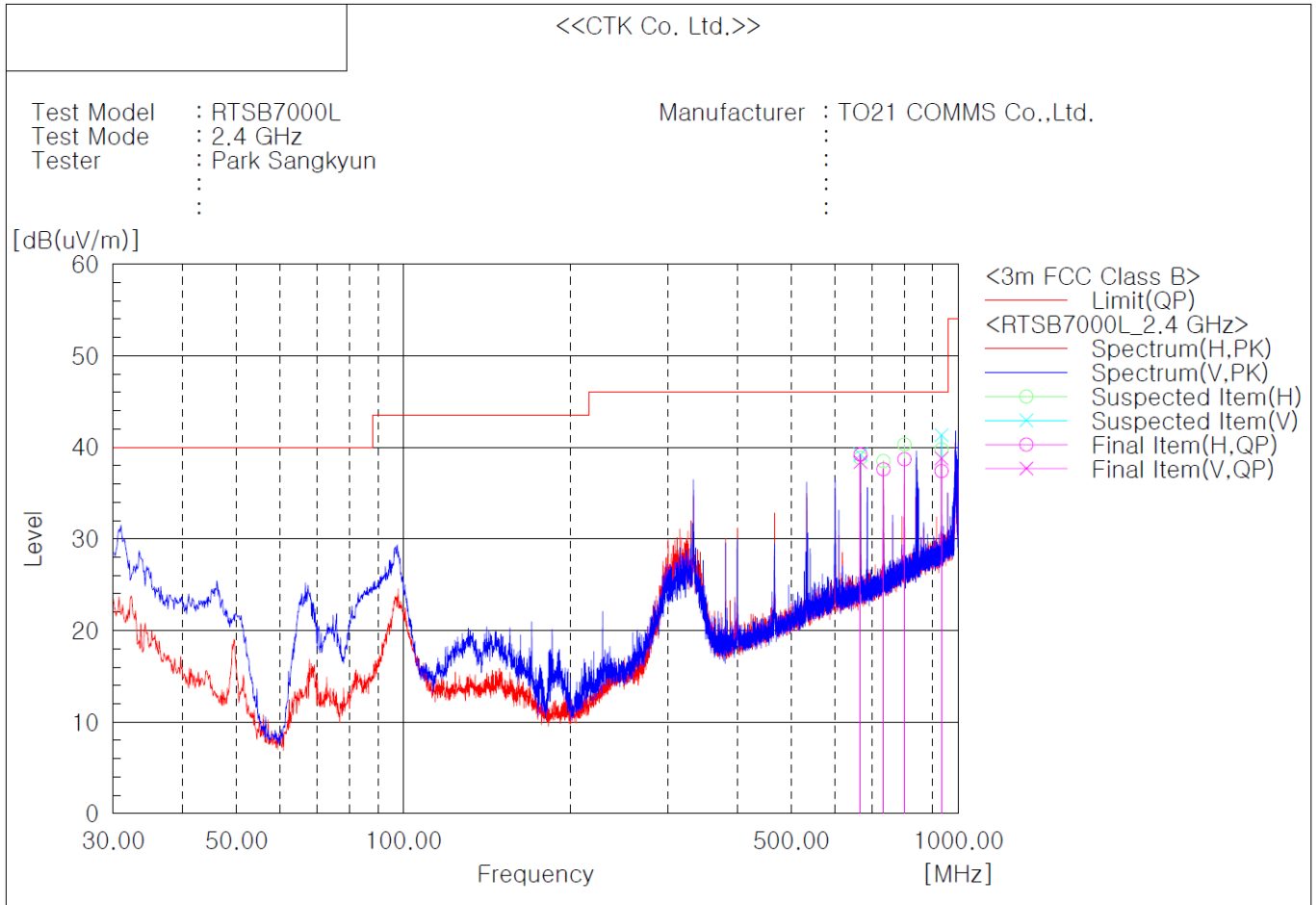
The Result is calculated by using the following formula;

* Result = Reading + Correction factor

* Correction factor = Antenna Factor + Cable Loss + 6 dB attenuator – Amp Gain

Test Data

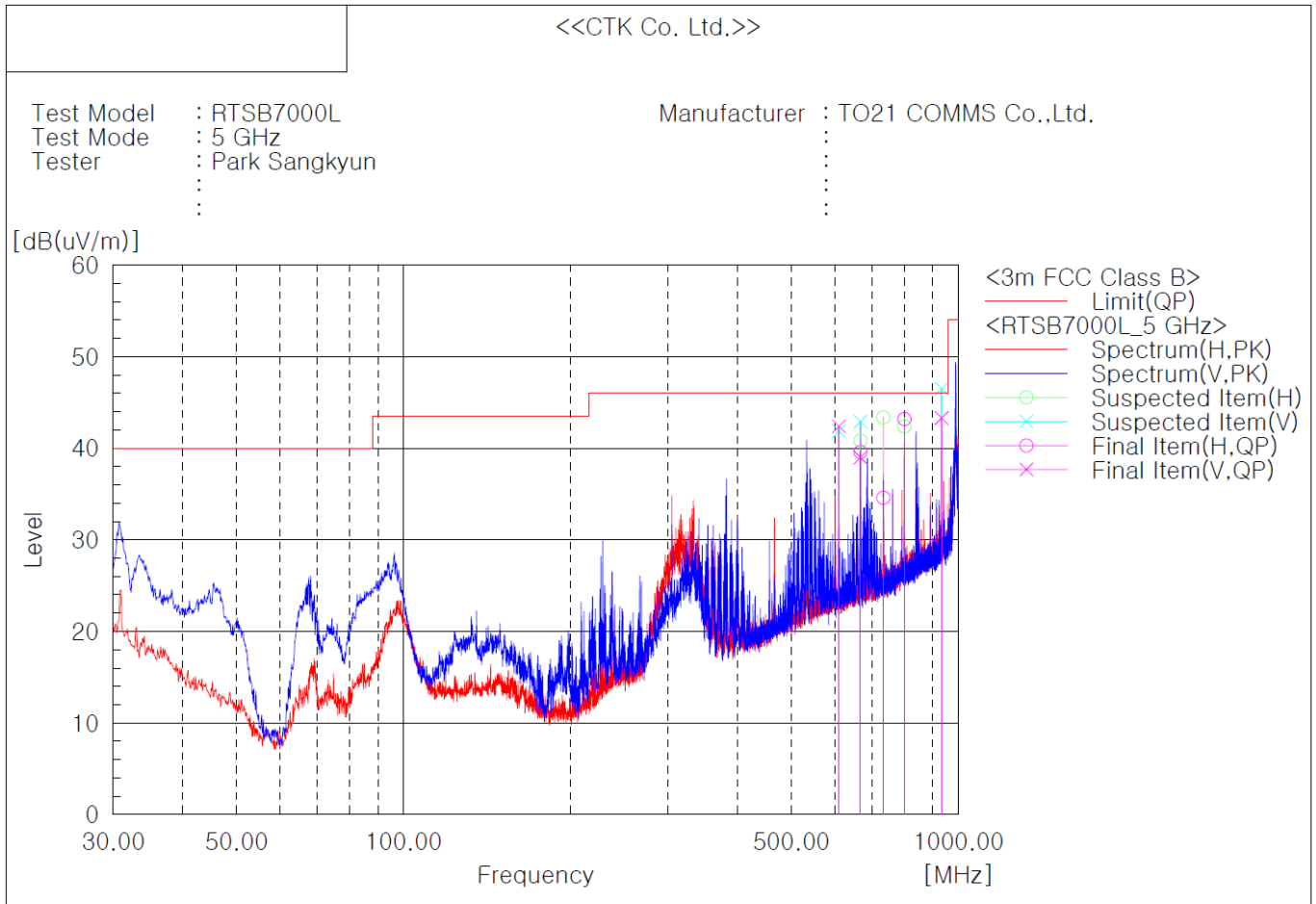
[2.4 GHz Mode]



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	666.684	V	38.5	-0.1	38.4	46.0	7.6	100.0	0.0
2	666.684	H	39.3	-0.1	39.2	46.0	6.8	100.0	38.0
3	733.371	H	36.5	1.1	37.6	46.0	8.4	100.0	38.0
4	800.059	H	36.1	2.6	38.7	46.0	7.3	100.0	248.0
5	933.282	V	33.4	5.4	38.8	46.0	7.2	100.0	269.0
6	933.372	H	32.0	5.4	37.4	46.0	8.6	100.0	65.0

[5 GHz Mode]



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	933.275	V	37.9	5.4	43.3	46.0	2.7	100.0	274.0
2	799.998	H	40.6	2.6	43.2	46.0	2.8	200.0	222.0
3	733.323	H	33.5	1.1	34.6	46.0	11.4	100.0	322.0
4	666.692	V	39.1	-0.1	39.0	46.0	7.0	200.0	3.0
5	666.680	H	39.7	-0.1	39.6	46.0	6.4	100.0	322.0
6	609.517	V	43.1	-0.7	42.4	46.0	3.6	100.0	196.0

3.3 Radiated Electric Field Emissions (Above 1 GHz)

Test Date

2017-05-28

Test Location

3 m SAC

Test Equipment

Name of Equipment	Model No.	Manufacturer	Serial No.	Due Date	Applied
EMI Test Receiver	ESU40	Rohde & Schwarz	100336	2018-05-12	☒
Double Ridged Guide Antenna	3117	ETS-Lindgren	00154525	2017-09-02	☒
Preamplifier	8449B	Agilent Technologies	3008A02011	2017-12-01	☒
Double Ridged Guide Antenna	3116	ETS-Lindgren	00062916	2019-04-25	☒
Signal Conditioning Unit	SCU-40	Rohde & Schwarz	10023	2017-11-03	☒

Test Software

TOYO EMI software Ver. 5.1.0

Frequency Range of Measurement

1 GHz to 6 GHz

Instrument Setting

IF Band Width: 1 MHz

Climate Condition

Temperature: (24 ± 1) °C

Relative Humidity: (39 ± 1) %

Atmospheric Pressure: 99 kPa

Test Result

The requirements are: ☒ MET ☐ NOT MET

Test Mode	Frequency (MHz)	Measured Data (dBμV/m)	Margin (dB)	Remark
2.4 GHz Mode	1 979.880	32.7	21.3	CAverage
5 GHz Mode	1 983.280	55.8	18.2	Quasi-Peak

The Result is calculated by using the following formula;

* Result = Reading + Correction factor

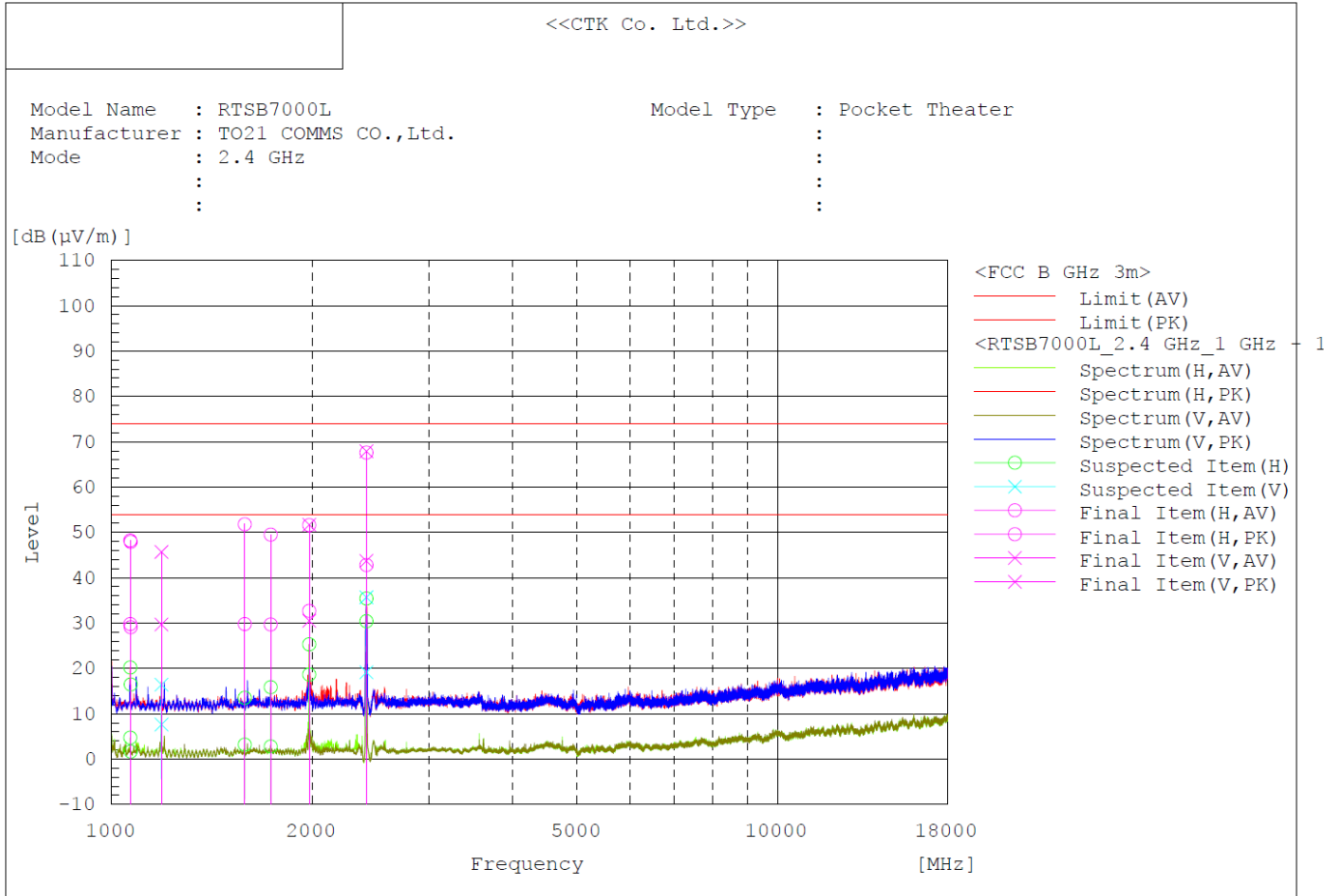
* Correction factor = Antenna Factor + Cable Loss- Amp Gain

* Antenna factor does not apply to spectrum mode, only final result is applied.

No emission were detected at above 8 GHz

Test Data

[2.4 GHz Mode]
[1 GHz - 18 GHz]

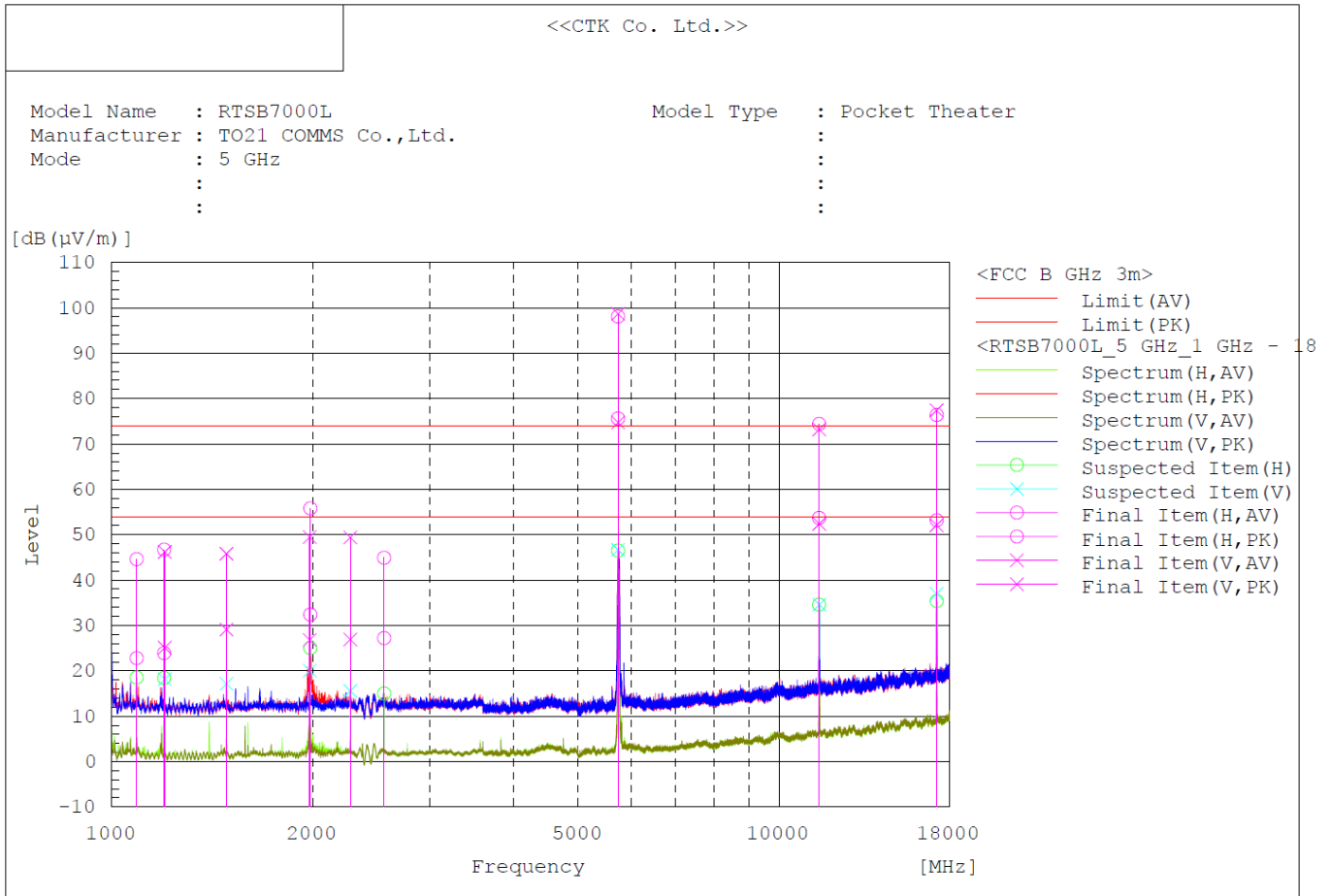


Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB (μV)]	Reading PK [dB (μV)]	c.f [dB (1/m)]	Result AV [dB (μV/m)]	Result PK [dB (μV/m)]	Limit AV [dB (μV/m)]	Limit PK [dB (μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1066.640	H	39.3	57.7	-9.5	29.8	48.2	54.0	74.0	24.2	25.8	223.0	6.7
2	1068.000	H	38.6	57.4	-9.5	29.1	47.9	54.0	74.0	24.9	26.1	100.0	235.1
3	1187.680	V	38.7	54.7	-9.0	29.7	45.7	54.0	74.0	24.3	28.3	344.7	224.8
4	1584.120	H	37.5	59.5	-7.7	29.8	51.8	54.0	74.0	24.2	22.2	343.2	359.9
5	1733.040	H	36.0	55.8	-6.3	29.7	49.5	54.0	74.0	24.3	24.5	355.4	112.8
6	1979.880	H	36.6	55.5	-3.9	32.7	51.6	54.0	74.0	21.3	22.4	99.8	266.0
7	1979.880	V	34.4	55.6	-3.9	30.5	51.7	54.0	74.0	23.5	22.3	464.0	230.4
8	2412.360	V	46.1	70.3	-2.4	43.7	67.9	54.0	74.0	10.3	6.1	464.0	250.1
9	2413.720	H	45.2	70.0	-2.4	42.8	67.6	54.0	74.0	11.2	6.4	234.1	63.6

※ Operating frequency (2.4 GHz (No. 8, 9)) emissions are excluded from test result.

[5 GHz Mode]
[1 GHz - 18 GHz]

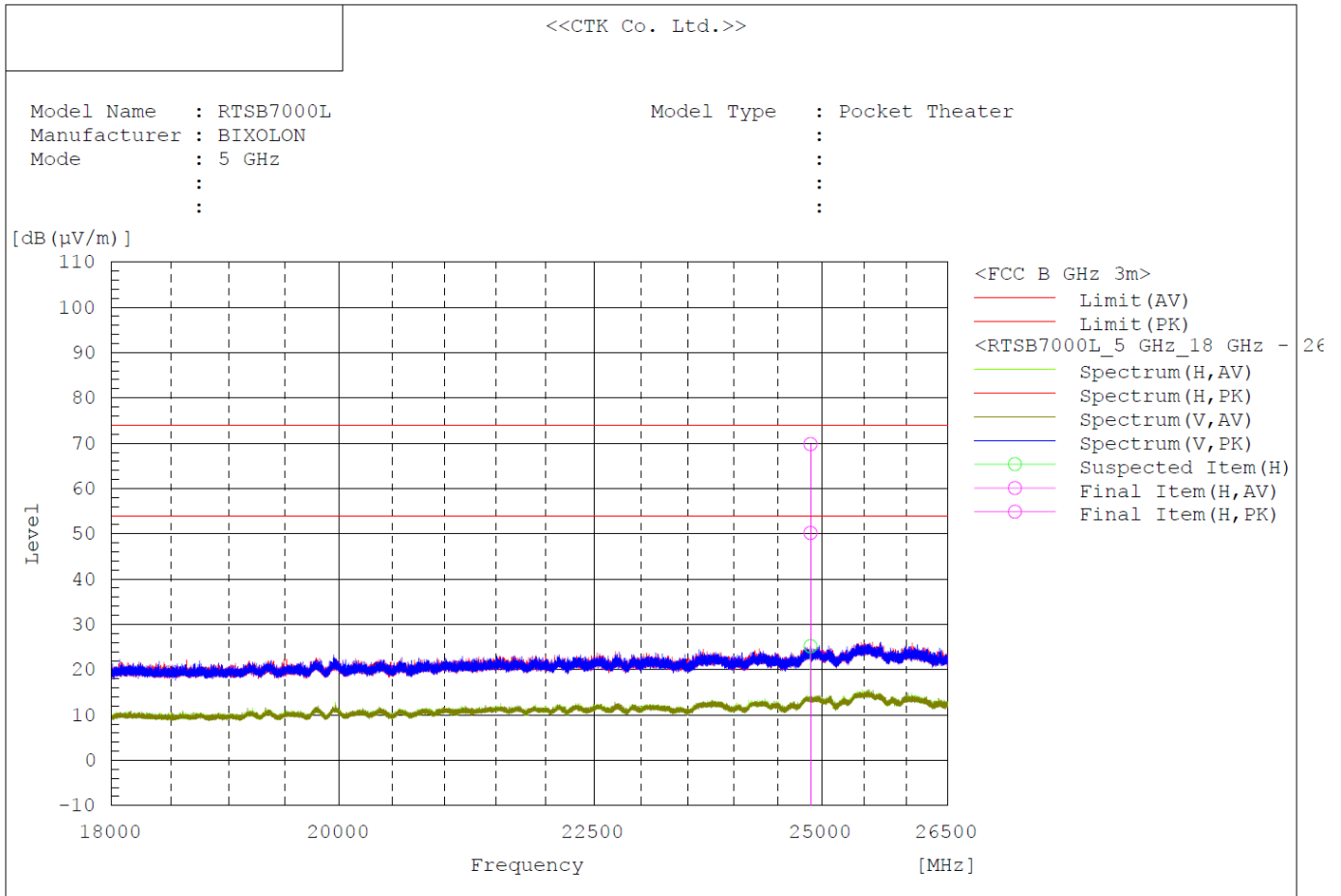


Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB (μV)]	Reading PK [dB (μV)]	c.f [dB (1/m)]	Result AV [dB (μV/m)]	Result PK [dB (μV/m)]	Limit AV [dB (μV/m)]	Limit PK [dB (μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1089.080	H	32.2	54.0	-9.4	22.8	44.6	54.0	74.0	31.2	29.4	356.3	145.3
2	1197.880	H	32.8	55.6	-8.9	23.9	46.7	54.0	74.0	30.1	27.3	464.3	259.3
3	1199.920	V	34.0	55.1	-8.9	25.1	46.2	54.0	74.0	28.9	27.8	358.1	263.0
4	1484.840	V	37.1	53.8	-8.0	29.1	45.8	54.0	74.0	24.9	28.2	358.1	222.3
5	1979.200	V	30.7	53.4	-3.9	26.8	49.5	54.0	74.0	27.2	24.5	234.3	290.6
6	1983.280	H	36.3	59.7	-3.9	32.4	55.8	54.0	74.0	21.6	18.2	99.9	264.2
7	2277.040	V	29.4	51.9	-2.5	26.9	49.4	54.0	74.0	27.1	24.6	234.3	271.4
8	2559.240	H	29.3	47.0	-2.1	27.2	44.9	54.0	74.0	26.8	29.1	99.9	0.0
9	5737.560	V	72.2	96.2	2.5	74.7	98.7	54.0	74.0	-20.7	-24.7	234.3	6.7
10	5737.560	H	73.1	95.6	2.5	75.6	98.1	54.0	74.0	-21.6	-24.1	356.3	30.3
11	11485.599	H	45.5	66.2	8.2	53.7	74.4	54.0	74.0	0.3	-0.4	237.5	7.0
12	11488.999	V	44.2	65.0	8.2	52.4	73.2	54.0	74.0	1.6	0.8	99.8	324.4
13	17222.758	V	37.9	63.2	14.2	52.1	77.4	54.0	74.0	1.9	-3.4	358.1	0.0
14	17237.038	H	39.0	62.2	14.2	53.2	76.4	54.0	74.0	0.8	-2.4	464.3	0.0

※ Operating frequency (5 GHz (No. 9, 10)) and harmonic frequency (5 GHz (No. 11, 12, 13, 14))'s harmonic emissions is excluded from test result.

[18 GHz - 26.5 GHz]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB (μV)]	Reading PK [dB (μV)]	c.f [dB (1/m)]	Result AV [dB (μV/m)]	Result PK [dB (μV/m)]	Limit AV [dB (μV/m)]	Limit PK [dB (μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	24871.740	H	31.5	51.1	18.7	50.2	69.8	54.0	74.0	3.8	4.2	99.8	7.3

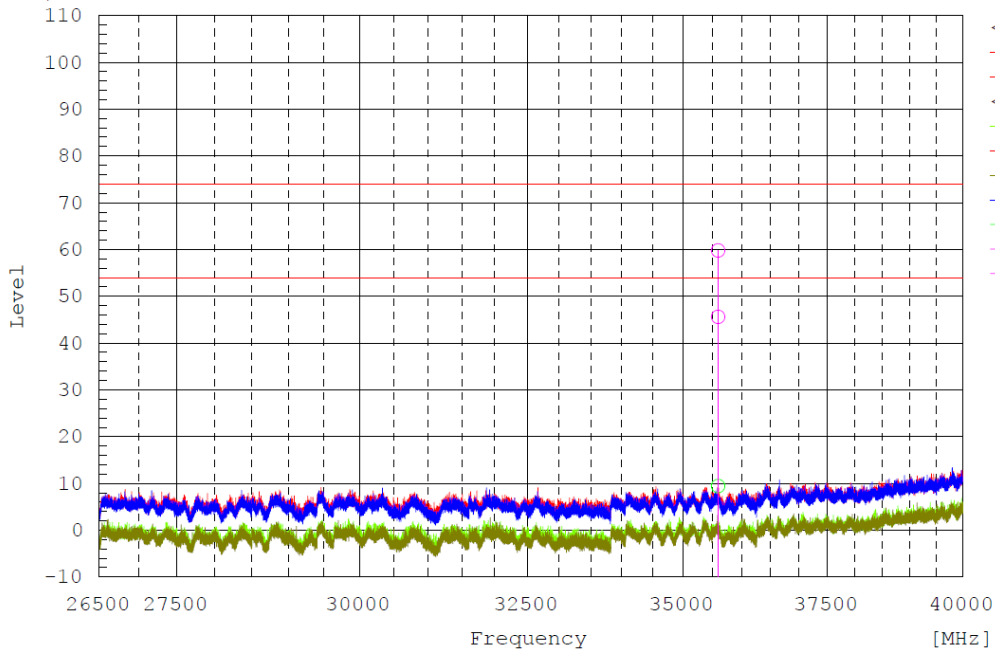
[26.5 GHz - 40 GHz]

<<CTK Co. Ltd.>>

Model Name : RTSB7000L
Manufacturer : TO21 COMMS Co.,Ltd.
Mode : 5 GHz
:
:

Model Type : Pocket Theater
:
:
:
:

[dB (μV/m)]



<FCC B GHz 3m>
Limit (AV)
Limit (PK)
<RTSB7000L_5 GHz_26 5 GHz ->
Spectrum (H,AV)
Spectrum (H,PK)
Spectrum (V,AV)
Spectrum (V,PK)
Suspected Item (H)
Final Item (H,AV)
Final Item (H,PK)

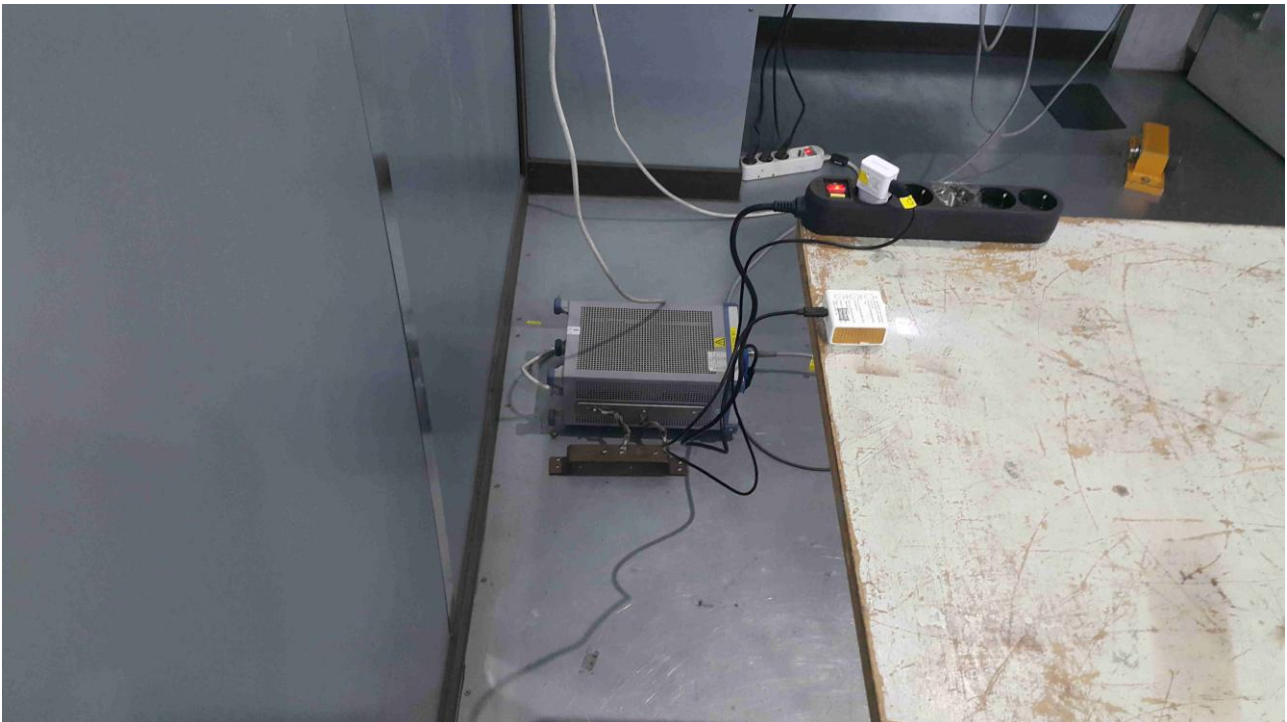
Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB (μV)]	Reading PK [dB (μV)]	c.f [dB (1/m)]	Result AV [dB (μV/m)]	Result PK [dB (μV/m)]	Limit AV [dB (μV/m)]	Limit PK [dB (μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	35597.920	H	30.8	45.0	14.8	45.6	59.8	54.0	74.0	8.4	14.2	355.6	7.2

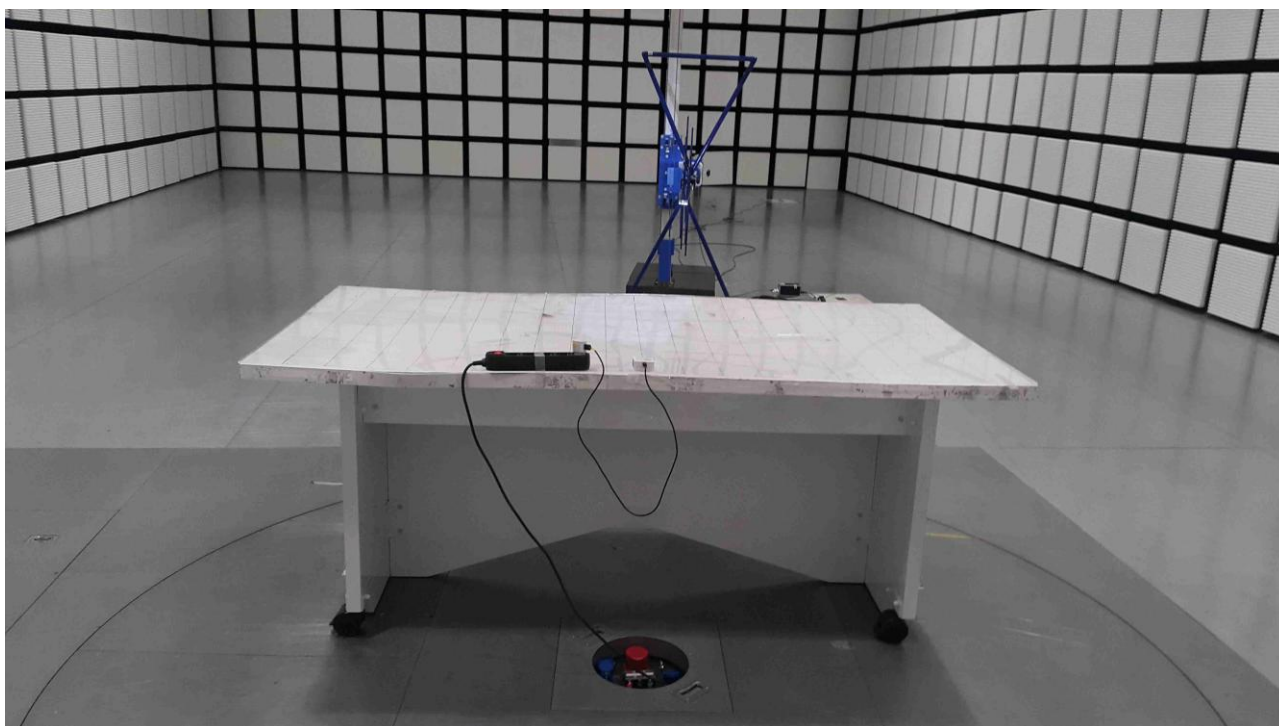
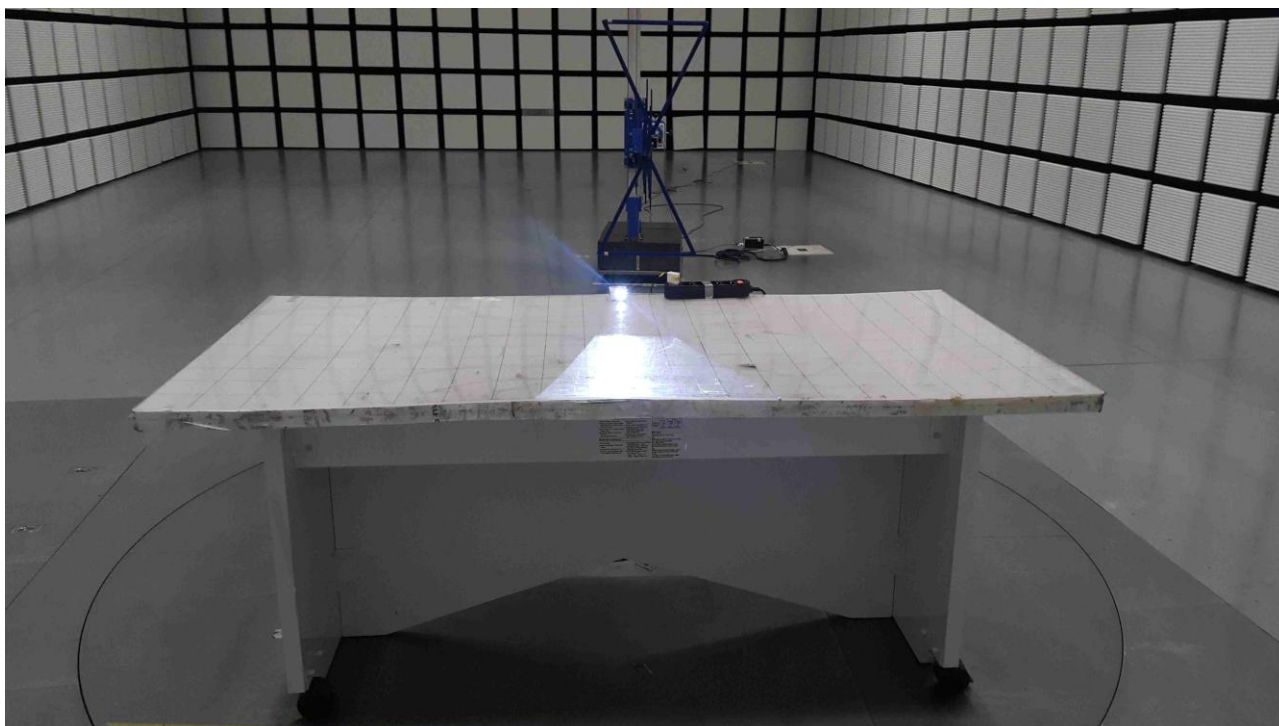
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APPENDIX A - Test Setup Photos and Configuration

Conducted Voltage Emissions of Mains Ports



Radiated Electric Field Emissions (Below 1 GHz)



Radiated Electric Field Emissions (Above 1 GHz)

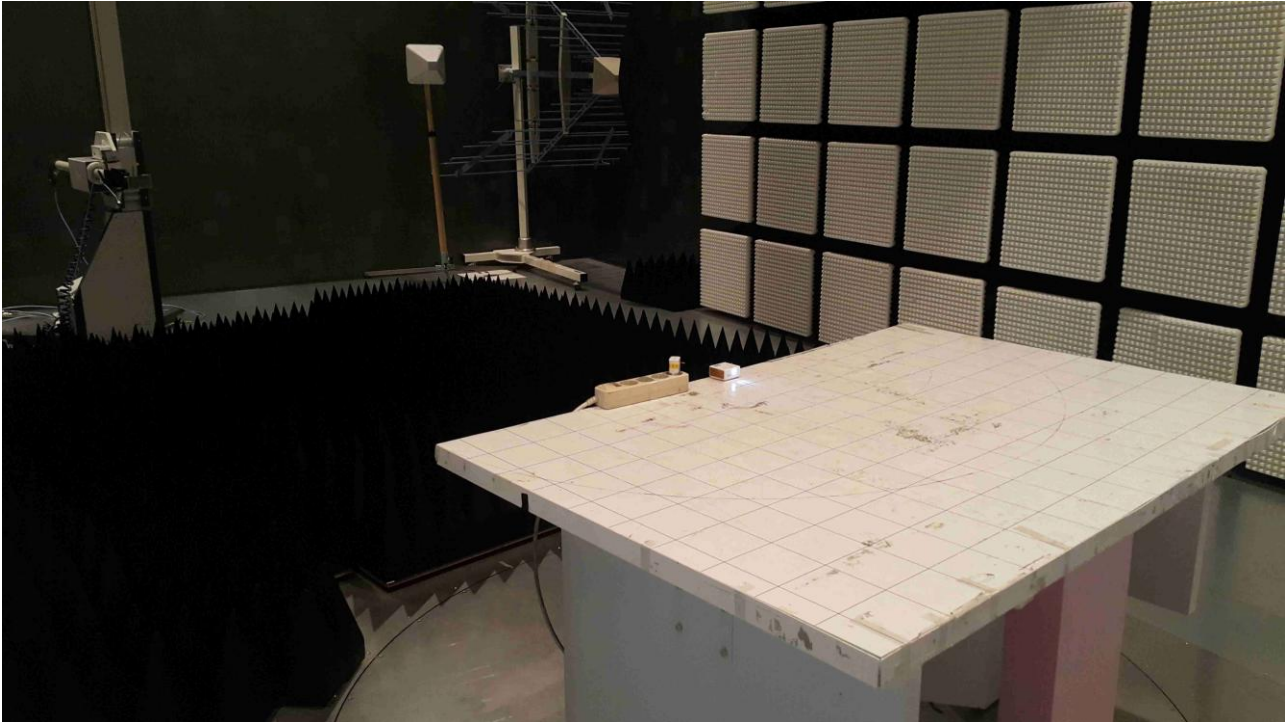
[1 GHz - 18 GHz]



[18 GHz - 26.5 GHz]



[26.5 GHz - 40 GHz]



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APPENDIX B – EUT Photographs

EUT External Photographs





EUT Internal Photographs



PCB



