FCC RF TEST REPORT

APPLICANT	:	OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT	:	Smart Phone
BRAND NAME	:	ONEPLUS
MODEL NAME	:	LE2117
FCC ID	:	2ABZ2-EF136
STANDARD	:	FCC Part 15 Subpart C §15.249
CLASSIFICATION	:	(DXX) Low Power Communication Device Transmitter

The product was received on Oct. 28, 2020 and testing was completed on Dec. 16, 2020. We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Shenzhen) Inc., the test report shall not be reproduced except in full.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED
Cert #5145.01

Sporton International (ShenZhen) Inc.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR0O2801-02E	Rev. 01	Initial issue of report	Feb. 04, 2021

SUMMARY OF THE TEST RESULT

Applied Standard: FCC Part 15 Subpart C §15.249				
Part	**FCC Rule**	**Description of Test**	**Result**	**Remark**
3.1	15.207	AC Power Line Conducted Emissions	Complies	Under limit 16.24 dB at 24.140MHz
3.2	2.1049	20dB & 99% Occupied Bandwidth	Complies	-
3.3	15.249(a)	Field Strength of Fundamental Emissions	Complies	Max level 87.49 dBμV/m at 2441.000 MHz
3.3	15.249(a)(d)	Radiated Spurious Emissions	Complies	Under limit 7.56 dB at 94.990MHz
3.4	15.203	Antenna Requirements	Complies	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1. GENERAL INFORMATION

1.1 Applicant

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen

1.3 Product Details

For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Items	Description
Modulation	GFSK
Channel Bandwidth (99%)	1.007MHz
ANT+ Channel Number	79
ANT+ Frequency Range	2402-2480MHz

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode
AC Power Line Conducted Emissions	CTX
Field Strength of Fundamental Emissions	CTX
Bandwidth	CTX
Radiated Emissions	CTX

Note:

1. CTX=continuously transmitting.
2. The programmed RF utility, "QRCT Tool" installed in the notebook to make the EUT get into the engineering modes to continuously transmit.

1.6 Table for Testing Locations

<FCC>-SZ

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

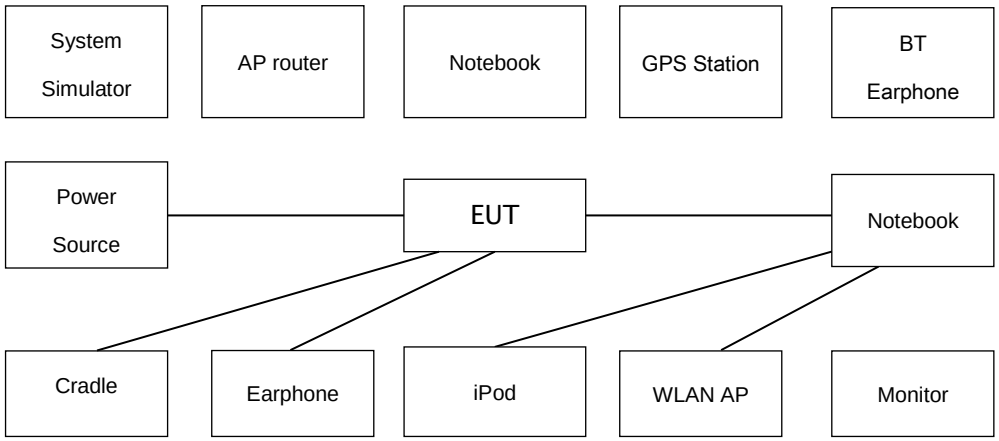
Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-SZ TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH02-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a
2.	CO01-SZ	AUDIX	E3	6.120613b

1.8 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2. TEST RESULT

2.1 AC Power Line Conducted Emissions Measurement

2.1.1 Limit

For a Low-power Radio-frequency device which is designed to be connected to the 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 below limits table.

Frequency (MHz)	QP Limit (dBμV)	AV Limit (dBμV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

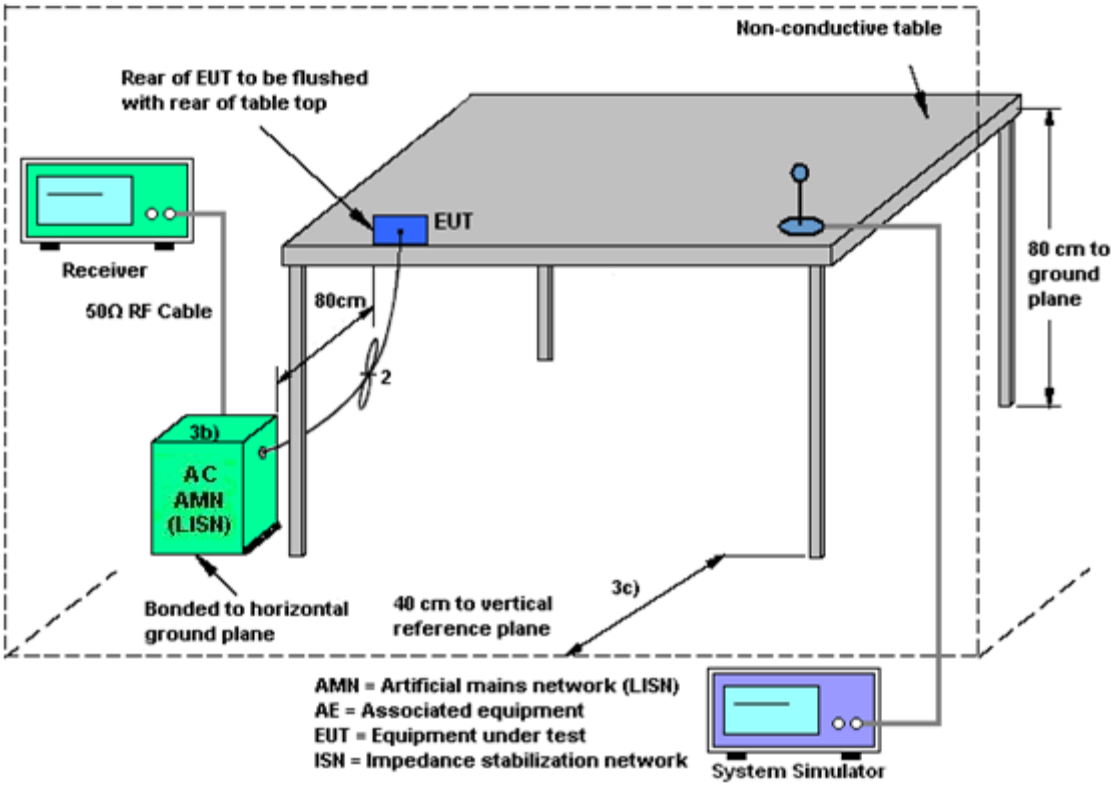
2.1.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

2.1.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

2.1.4 Test Setup Layout

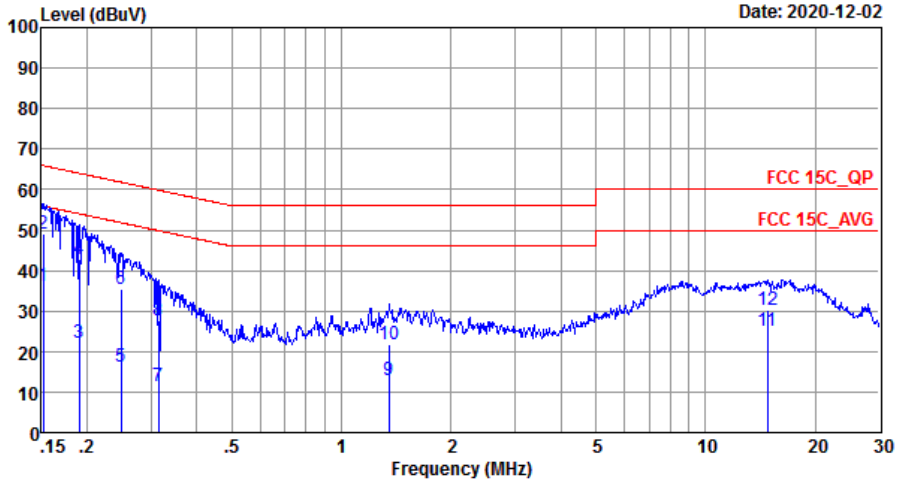


2.1.5 EUT Operation during Test

The EUT was placed on the test table and programmed in transmitting function.

2.1.6 Results of AC Power Line Conducted Emissions Measurement

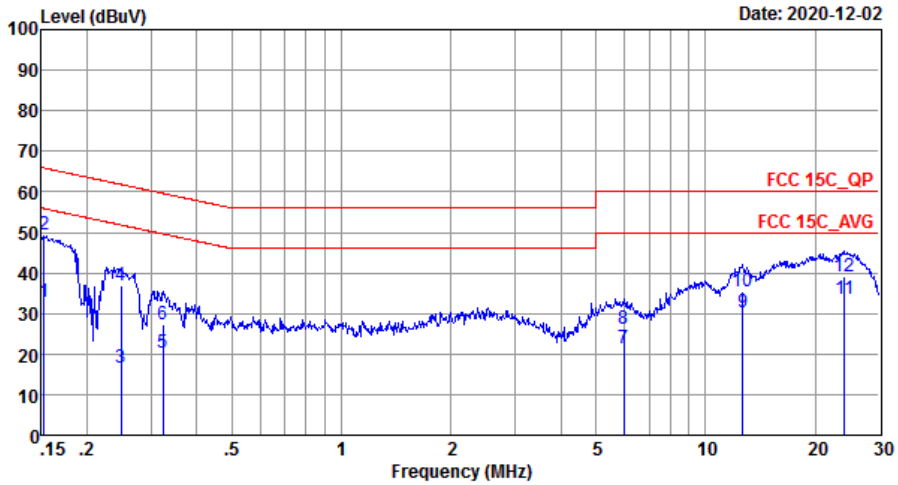
Test Engineer :	Xie YuQiang	**Temperature :**	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ
Condition: FCC 15C_QP LISN_20200719_L LINE
Project : 002801-02

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.15	36.04	-19.87	55.91	26.00	0.03	10.01	Average
2	*	0.15	49.24	-16.67	65.91	39.20	0.03	10.01	QP
3		0.19	22.04	-31.98	54.02	12.00	0.03	10.01	Average
4		0.19	42.94	-21.08	64.02	32.90	0.03	10.01	QP
5		0.25	16.34	-35.48	51.82	6.30	0.03	10.01	Average
6		0.25	35.24	-26.58	61.82	25.20	0.03	10.01	QP
7		0.31	11.44	-38.40	49.84	1.40	0.03	10.01	Average
8		0.31	27.64	-32.20	59.84	17.60	0.03	10.01	QP
9		1.35	12.94	-33.06	46.00	2.80	0.09	10.05	Average
10		1.35	21.74	-34.26	56.00	11.60	0.09	10.05	QP
11		14.83	24.99	-25.01	50.00	14.20	0.50	10.29	Average
12		14.83	30.09	-29.91	60.00	19.30	0.50	10.29	QP

Test Engineer :	Xie YuQiang	**Temperature :**	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ
Condition: FCC 15C_QP LISN_20200719_N NEUTRAL

IMEI : 990017410025130

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	32.84	-23.03	55.87	22.80	0.03	10.01	Average
2	0.15	49.44	-16.43	65.87	39.40	0.03	10.01	QP
3	0.25	16.44	-35.38	51.82	6.40	0.03	10.01	Average
4	0.25	36.94	-24.88	61.82	26.90	0.03	10.01	QP
5	0.32	20.34	-29.28	49.62	10.30	0.03	10.01	Average
6	0.32	27.44	-32.18	59.62	17.40	0.03	10.01	QP
7	5.96	21.46	-28.54	50.00	11.20	0.07	10.19	Average
8	5.96	26.16	-33.84	60.00	15.90	0.07	10.19	QP
9	12.65	30.23	-19.77	50.00	19.70	0.26	10.27	Average
10	12.65	35.53	-24.47	60.00	25.00	0.26	10.27	QP
11 *	24.14	33.76	-16.24	50.00	22.49	0.93	10.34	Average
12	24.14	39.26	-20.74	60.00	27.99	0.93	10.34	QP

2.2 20dB and 99% Occupied Bandwidth

2.2.1 Limit

Intentional radiators must be designed to ensure that the 20 dB bandwidth of the emissions in the specific band.

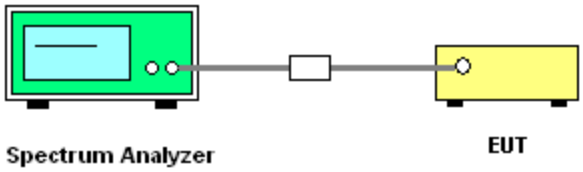
2.2.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

2.2.3 Test Procedures

1. The transmitter output port was connected to the spectrum analyzer.
2. Measured the spectrum width with highest power setting.

2.2.4 Test Setup Layout



2.2.5 Test Deviation

There is no deviation with the original standard.

2.2.6 EUT Operation during Test

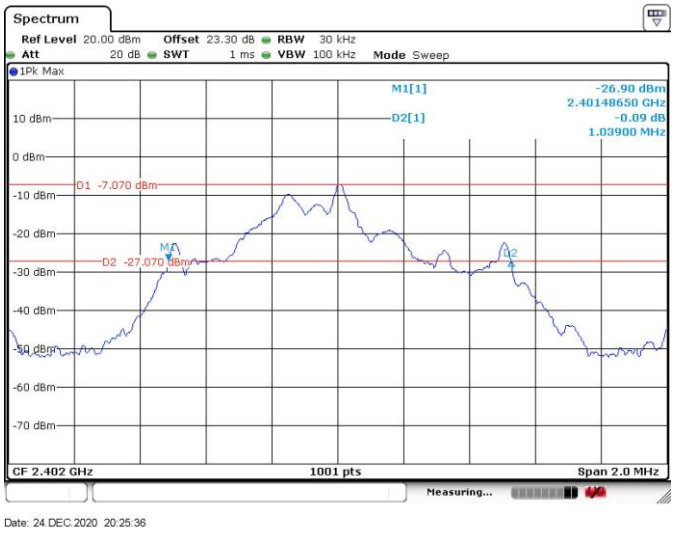
The EUT was programmed to be in continuously transmitting mode.

2.2.7 Test Result of 20dB Spectrum Bandwidth

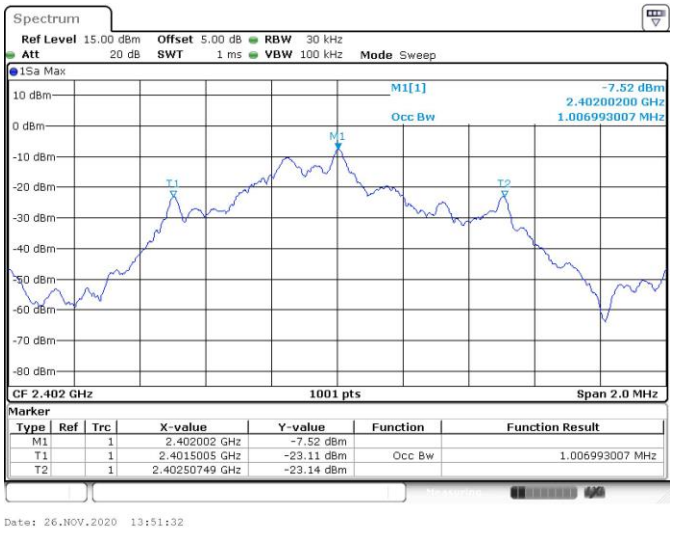
Final Test Date	Nov. 26, 2020	Test Site No.	TH01-SZ
Temperature	21~25°C	Humidity	51~54%
Test Engineer	Zhang Jiang		

Frequency	20dB BW (MHz)	99% OBW (MHz)
2402MHz	1.039	1.007
2441MHz	1.036	1.007
2480MHz	1.039	1.007

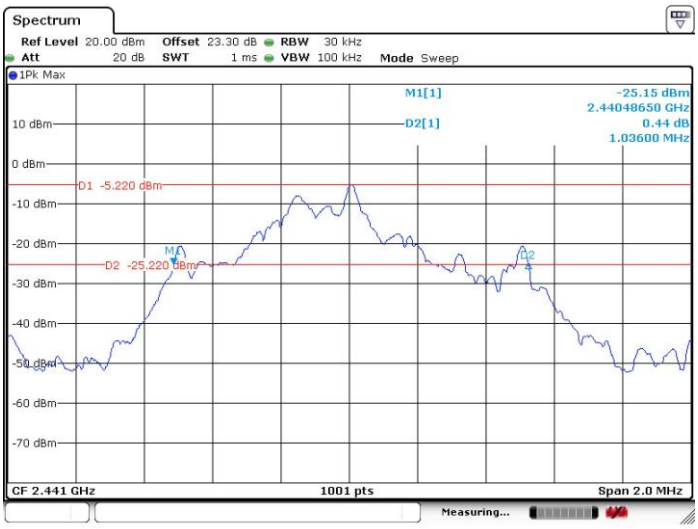
20 dB Bandwidth Plot on 2402MHz



99% Bandwidth Plot on 2402MHz

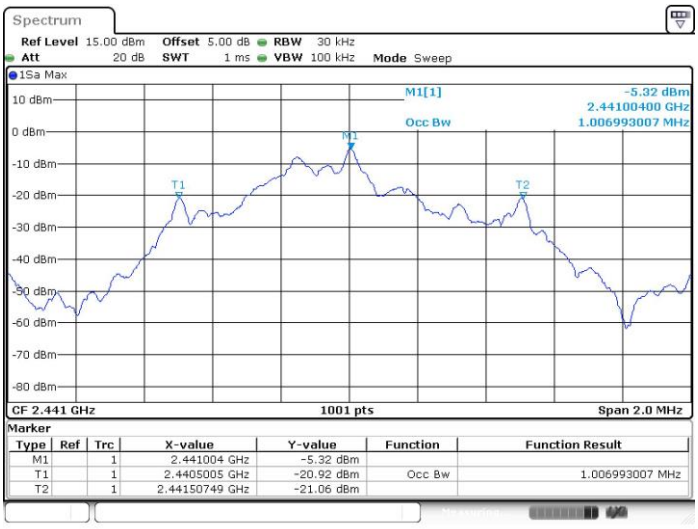


20 dB Bandwidth Plot on 2441MHz



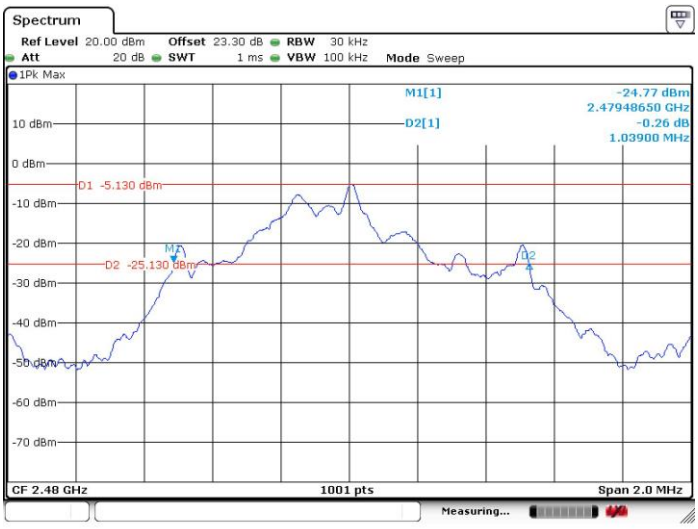
Date: 24.DEC.2020 20:27:38

99% Bandwidth Plot on 2441MHz



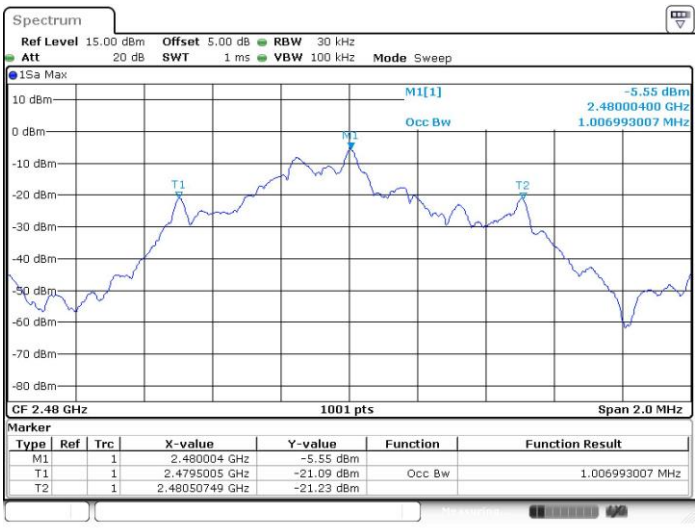
Date: 26.NOV.2020 13:56:02

20 dB Bandwidth Plot on 2480MHz



Date: 24.DEC.2020 20:31:13

99% Bandwidth Plot on 2480MHz



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2.3 Field Strength of Fundamental Emissions and Radiated Spurious Emissions

2.3.1 Limit

The field strength measured at 3 meters shall not exceed the limits in the following table:

Fundamental Frequencies(MHz)	Field Strength(millivolts/m)	
	Fundamental	Harmonics
902~928	50	0.5
2400~2483.5	50	0.5
5725~5875	50	0.5

Note: The limits shown in the above table are based on measurements using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using a CISPR quasi-peak detector.

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in 15.209 as below, whichever is less stringent.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

2.3.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

2.3.3 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
4. Set to the maximum power setting and enable the EUT transmit continuously.

Remark:

1. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
2. For average measurement: use duty cycle correction factor method per 15.35(c).

   Duty cycle = On time/100 milliseconds

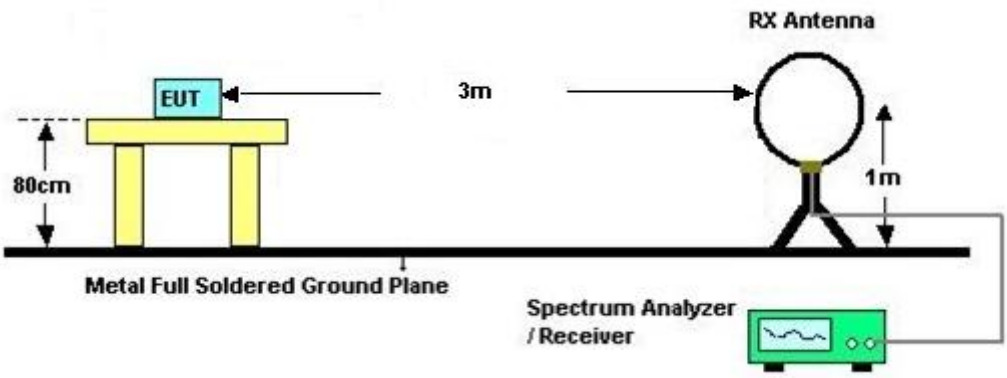
   On time = N1*L1+N2*L2+...+Nn-1*LNn-1+Nn*Ln

   Where N1 is number of type 1 pulses, L1 is length of type 1 pulses, etc.

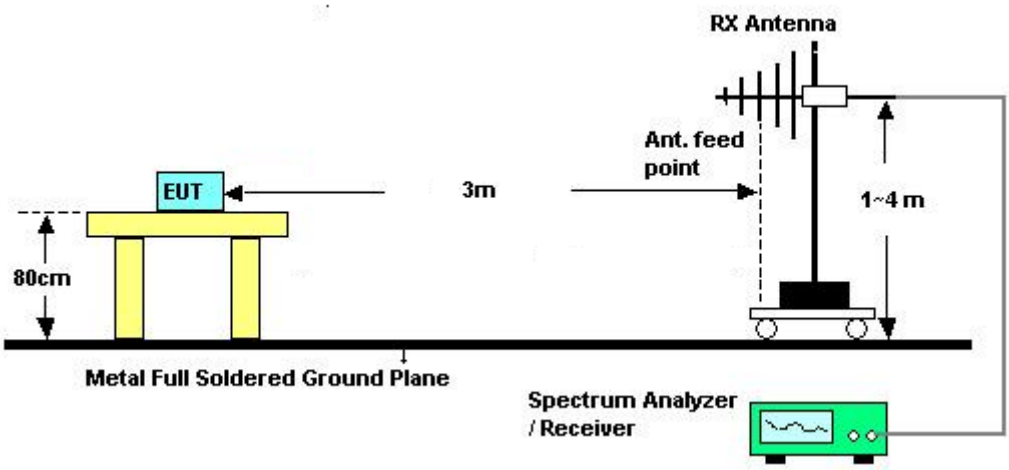
   Average Emission Level = Peak Emission Level + 20*log(Duty cycle)

2.3.4 Test Setup Layout

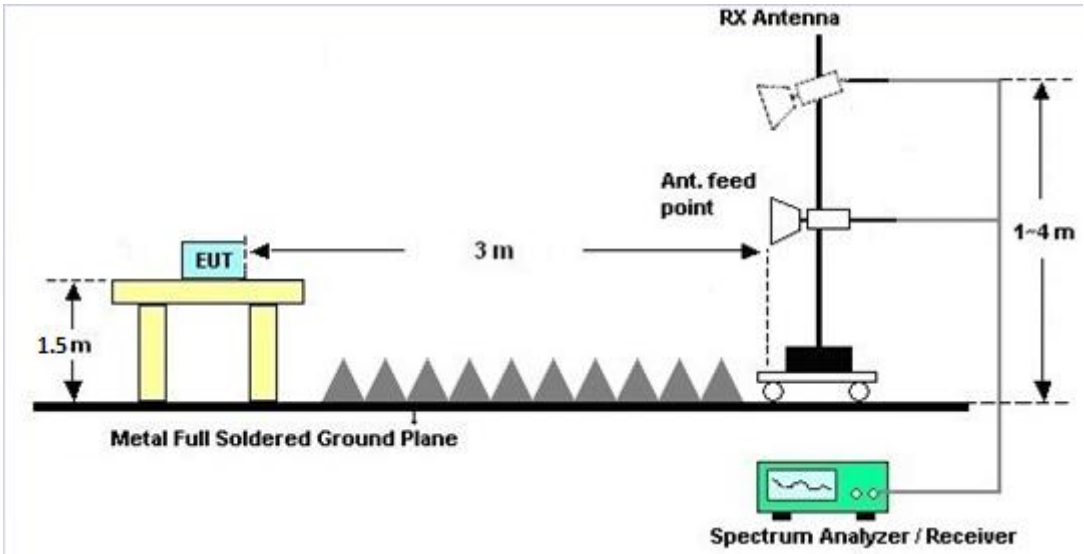
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.3.5 Test Deviation

There is no deviation with the original standard.

2.3.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

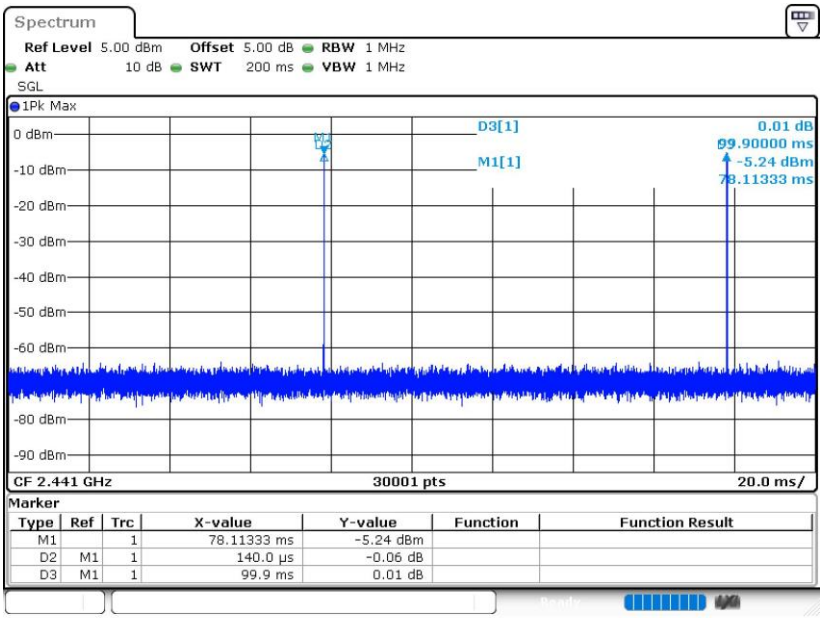
2.3.7 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

2.3.8 Duty cycle correction factor for average measurement

On time (One Pulse) Plot on 2441MHz



Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 0.14 / 100 = 0.28 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -51.06 dB

2.3.9 Test Result of Field Strength of Fundamental Emissions and Spurious Emissions

2.4GHz 2400~2483.5MHz

ANT+ (Band Edge @ 3m)

ANT+	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2402MHz		2387.91	46.1	-27.9	74	42.39	27.82	7.8	31.91	147	6	P	H
		2387.91	-4.96	-58.96	54	-	-	-	-	147	6	A	H
	*	2402	87.02	-26.98	114	83.32	27.79	7.81	31.9	147	6	P	H
	*	2402	35.96	-58.04	94	-	-	-	-	147	6	A	H
		2327.95	46	-28	74	42.3	27.94	7.73	31.97	100	277	P	V
		2327.95	-5.06	-59.06	54	-	-	-	-	100	277	A	V
	*	2402	75.81	-38.19	114	72.11	27.79	7.81	31.9	100	277	P	V
	*	2402	24.75	-69.25	94	-	-	-	-	100	277	A	V
2441MHz		2388.96	47.47	-26.53	74	43.76	27.82	7.8	31.91	148	0	P	H
		2388.96	-3.59	-57.59	54	-	-	-	-	148	0	A	H
	*	2441	87.49	-26.51	114	83.85	27.64	7.86	31.86	148	0	P	H
	*	2441	36.43	-57.57	94	-	-	-	-	148	0	A	H
		2488.1	43.74	-30.26	74	40.03	27.6	7.92	31.81	148	0	P	H
		2488.1	-7.32	-61.32	54	-	-	-	-	148	0	A	H
		2368.66	45.05	-28.95	74	41.34	27.86	7.78	31.93	100	268	P	V
		2368.66	-6.01	-60.01	54	-	-	-	-	100	268	A	V
	*	2441	78.34	-35.66	114	74.7	27.64	7.86	31.86	100	268	P	V
	*	2441	27.28	-66.72	94	-	-	-	-	100	268	A	V
		2485.72	43.93	-30.07	74	40.23	27.6	7.91	31.81	100	268	P	V
		2485.72	-7.13	-61.13	54	-	-	-	-	100	268	A	V

2480MHz		2480	88.96	-25.04	114	85.27	27.6	7.91	31.82	148	5	P	H
	*	2480	37.9	-56.10	94	-	-	-	-	148	5	A	H
		2484.6	43.68	-30.32	74	44.63	27.66	4.9	33.51	200	144	P	H
		2484.6	-7.38	-61.38	54	-	-	-	-	200	144	A	H
		2480	78.7	-35.3	114	75.01	27.6	7.91	31.82	100	270	P	V
	*	2480	27.64	-66.36	94	-	-	-	-	100	270	A	V
		2496.4	43.56	-30.44	74	44.53	27.63	4.9	33.5	153	355	P	V
		2496.4	-7.5	-61.5	54	-	-	-	-	153	355	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

ANT+ (Harmonic @ 3m)

ANT+	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2402MHz		4804	43.41	-30.59	74	51.28	31.3	10.37	49.54	151	219	P	H
		4804	-7.65	-61.65	54	-	-	-	-	151	219	A	H
		4804	44.36	-29.64	74	52.23	31.3	10.37	49.54	178	97	P	V
		4804	-6.7	-60.7	54	-	-	-	-	178	97	A	V
2441MHz		4882	43.57	-30.43	74	51.35	31.3	10.44	49.52	150	258	P	H
		4882	-7.49	-61.49	54	-	-	-	-	150	258	A	H
		7323	47.56	-26.44	74	49.8	36.04	12.11	50.39	152	309	P	H
		7323	-3.5	-57.5	54	-	-	-	-	152	309	A	H
		4882	43.79	-30.21	74	51.57	31.3	10.44	49.52	100	211	P	V
		4882	-7.27	-61.27	54	-	-	-	-	100	211	A	V
		7323	47.39	-26.61	74	49.63	36.04	12.11	50.39	169	338	P	V
		7323	-3.67	-57.67	54	-	-	-	-	169	338	A	V
2480MHz		4960	43.84	-30.16	74	51.34	31.5	10.51	49.51	118	289	P	H
		4960	-7.22	-61.22	54	-	-	-	-	118	289	A	H
		7440	47.44	-26.56	74	49.33	36.34	12.23	50.46	158	273	P	H
		7440	-3.62	-57.62	54	-	-	-	-	158	273	A	H
		4960	43.88	-30.12	74	51.38	31.5	10.51	49.51	120	269	P	V
		4960	-7.18	-61.18	54	-	-	-	-	120	269	A	V
		7440	47.7	-26.3	74	49.59	36.34	12.23	50.46	184	278	P	V
		7440	-3.36	-57.36	54	-	-	-	-	184	278	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz ANT+ (LF)

ANT+	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
LF		47.46	18.68	-21.32	40	31.31	20.27	2.17	35.07	-	-	P	H
		95.96	26.16	-17.34	43.5	44.72	14.15	2.48	35.19	100	53	P	H
		163.86	25.37	-18.13	43.5	38.56	19.3	2.61	35.1	-	-	P	H
		318.09	24.51	-21.49	46	36.03	20.18	3.2	34.9	-	-	P	H
		398.6	25.32	-20.68	46	34.73	22.08	3.31	34.8	-	-	P	H
		810.85	28.55	-17.45	46	30.58	28.3	3.97	34.3	-	-	P	H
		51.34	23.2	-16.8	40	35.84	20.25	2.21	35.1	-	-	P	V
		94.99	35.94	-7.56	43.5	54.64	14	2.49	35.19	100	118	P	V
		165.8	31.61	-11.89	43.5	44.83	19.27	2.61	35.1	-	-	P	V
		268.62	28.01	-17.99	46	41.17	18.82	2.98	34.96	-	-	P	V
		394.72	27.79	-18.21	46	37.29	22.01	3.3	34.81	-	-	P	V
		708.03	27.31	-18.69	46	30.76	27.03	4	34.48	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

2.4 Antenna Requirements

2.4.1 Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

2.4.2 Antenna Connector Construction

An embedded-in antenna design is used.

3. LIST OF MEASURING EQUIPMENT

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 17, 2020	Nov. 24, 2020~ Nov. 26, 2020	Apr. 16, 2021	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 26, 2019	Nov. 24, 2020~ Nov. 26, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 26, 2019	Nov. 24, 2020~ Nov. 26, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 21, 2020	Dec. 16, 2020	Jul. 20, 2021	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Dec. 16, 2020	Jun. 21, 2022	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2020	Dec. 16, 2020	Jul. 14, 2021	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2020	Dec. 16, 2020	Jul. 24, 2021	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 21. 2020	Dec. 16, 2020	Jul. 20. 2021	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 23, 2020	Dec. 16, 2020	Apr. 22, 2021	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 16, 2020	Dec. 16, 2020	Oct. 15, 2021	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 17, 2020	Dec. 16, 2020	Oct. 15, 2021	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 16, 2020	Dec. 16, 2020	Oct. 15, 2021	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Dec. 16, 2020	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Dec. 16, 2020	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Dec. 16, 2020	NCR	Radiation (03CH02-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 26, 2019	Dec. 02, 2020	Dec. 25, 2020	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Dec. 26, 2019	Dec. 02, 2020	Dec. 25, 2020	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 15, 2020	Dec. 02, 2020	Oct. 14, 2021	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 21, 2020	Dec. 02, 2020	Jul. 20, 2021	Conduction (CO01-SZ)

Note: Test equipment calibration is traceable to the procedure of ISO17025.

4. UNCERTAINTY OF EVALUATION

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.7dB**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**