FCC Part 15 Subpart B&C §15.247
RSS-247 Issue 2

Test Report

Equipment Under Test	**Cycle Gear DWO6-PRO**
Model Name	**SP72**
Variant Model Name	**-**
FCC ID	**S7A-SP72**
IC Number	**8154A-SP72**
FCC Applicant	**SENA TECHNOLOGIES.Inc**
IC Applicant	**Sena Technologies, Inc.**
Date of Test(s)	**2019. 08. 28 ~ 2019. 09. 02**
Date of Issue	**2019. 09. 18**

In the configuration tested, the EUT complied with the standards specified above.

Issue to	Issue by
SENA TECHNOLOGIES.Inc 19, Heolleung-ro 569-gil, Gangnam-gu, Seoul, South Korea 210 Yangjae-dong, Seocho-gu Seoul 137-130 South Korea(Republic Of)	**MOVON CORPORATION** 498-2, Geumeo-ro, Pogok-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17030 7, Seolleung-ro 94-gil, Gangnam-gu, Seoul-si, Korea

Revision history

Revision	Date of issue	Description	Revised by
--	Sep. 05, 2019	Initial	-
1	Sep. 18, 2019	Measurement equipment Rivised	Suhyun Seo

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1. Applicant Information

1.1. Details of applicant

FCC Applicant	:	SENA TECHNOLOGIES.Inc
FCC Address	:	19, Heolleung-ro 569-gil, Gangnam-gu, Seoul, South Korea
IC Applicant	:	Sena Technologies, Inc.
IC Address	:	210 Yangjae-dong, Seocho-gu Seoul 137-130 South Korea (Republic Of)
Contact Person	:	Seunghyeon Kim
Telephone	:	+82-2-573-8283
Fax	:	+82-2-573-7710

1.2. Manufacturer Information

FCC Manufacturer	:	SENA TECHNOLOGIES.Inc
FCC Address	:	19, Heolleung-ro 569-gil, Gangnam-gu, Seoul, South Korea
IC Manufacturer	:	Sena Technologies, Inc.
IC Address	:	210 Yangjae-dong, Seocho-gu Seoul 137-130 South Korea (Republic Of)

2. Laboratory Information

Company name	:	MOVON CORPORATION
Test site number	:	FCC (KR0151), IC (24841)
FCC Address	:	498-2, Geumeo-ro, Pogok-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, South Korea
IC Address	:	7, Seolleung-ro 94-gil, Gangnam-gu, Seoul-si, Korea
Web site	:	http://www.movonlab.com
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Facsimile		+82-31-338-8847

3. Summary of test results

The EUT has been tested according to the following specifications:

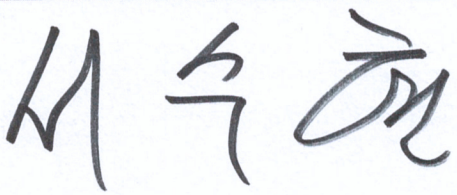
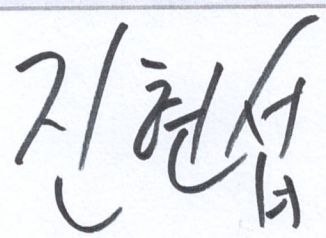
FCC Rule FCC part 15	IC Rule RSS-247, RSS-GEN	Description	Result
15.203 15.247(b)(4)	-	Antenna requirement	C
15.247(a)(2)	RSS-247 5.2(a) RSS-GEN 6.7	DTS Bandwidth & 99 % bandwidth	C
15.247(b)(3)	RSS-247 5.4(d)	Maximum peak conducted output power	C
15.247(e)	RSS-247 5.2(b)	Peak Power Spectral Density	C
15.205(a) 15.209(a) 15.247(d)	RSS-GEN 8.10 RSS-GEN 8.9 RSS-247 5.5	Transmitter radiated spurious emissions, Conducted spurious emission	C
15.207(a)	RSS-GEN 8.8	AC Conducted power line test	C

※ Abbreviation

C Complied
N/A Not applicable
F Fail

The sample was tested according to the following specification:
FCC Parts 15.247; ANSI C63.4:2014, ANSI C63.10:2013
FCC Public Notice KDB 558074 D01 v05r02
RSS-247 Issue 2
RSS-GEN Issue 5

Approval Signatories

Test and Report Completed by :	Report Approval by :
	
Suhyun Seo Test Engineer MOVON CORPORATION	Issac Jin Technical Manager MOVON CORPORATION

4. EUT Description

Kind of product	Cycle Gear DWO6-PRO
Model Name	SP72
Variant Model Name	-
FCC ID	S7A-SP72
IC Number	8154A-SP72
Power supply	DC 3.7 V
Frequency range	2 402 MHz ~ 2 480 MHz
Modulation technique	GFSK
Number of channels	40 ch
Antenna gain	0.30 dBi
Test Site Registration Number	FCC (KR0151), IC (24841)
H/W version / S/W version	1.0 / 1.0
Test S/W version	2.6.0(CSR Bluetest3)

4.1. Table for Test Modes and Frequency

Preliminary tests were performed in different data rate to find the worst radiated emission.
The data rate shown in the table below is the worst-case rate with respect to the specific test item.
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.

Mode	Data rate (Worst case)	Frequency (Freq. MHz)
Bluetooth LE	1 Mbps	**Lowest** (2 402) / **Middle** (2 440) / **Highest** (2 480)

5. Measurement equipment

Equipment	Manufacturer	Model	Serial number	Calibration Interval	Calibration date	Calibration due.
Test Receiver	R&S	ESVS30	829673/015	1 year	2018-12-06	2019-12-06
Signal Generator	R&S	SMB100A	178128	1 year	2018-12-07	2019-12-07
Spectrum Analyzer	R&S	FSV-40	100832	1 year	2019-05-27	2020-05-27
DC Power Supply	Agilent	U8002A	MY56110033	1 year	2018-10-30	2019-10-30
Power Meter	Agilent	E4416A	GB41290645	1 year	2019-05-27	2020-05-27
Power Sensor	Agilent	9327A	US40441490	1 year	2019-05-27	2020-05-27
Horn Antenna	R&S	HF906	100236	2 year	2019-04-09	2021-04-09
Horn Antenna	AH Systems	SAS-572	269	2 year	2017-08-01	2020-08-01
Horn Antenna	AH Systems	SAS-573	164	2 year	2018-04-26	2020-04-26
Bi-Log Ant.	S/B	VULB 9161SE	4159	2 year	2018-06-11	2020-06-11
Loop Antenna	ETS LINDGREN	6502	00118166	2 year	2018-10-30	2020-10-30
Power Amplifier	TESTEK	TK-PA18H	170013-L	1 year	2019-05-27	2020-05-27
Power Amplifier	MITEQ	AFS43-01002600	2048519	1 year	2018-10-29	2019-10-29
Power Amplifier	MITEQ	AMF-6F-26004000-33-8P-HS	1511665	1 year	2018-12-10	2019-12-10
Step Attenuator	Agilent	8494B	US37181955	1 year	2019-05-29	2020-05-29
Controller	INNCO	CO2000	CO2000/064/6961003/L	N/A	N/A	N/A
Antenna Master	INNCO	MA4000	MA4000/038/6961003/L	N/A	N/A	N/A
Controller	INNCO	CO3000	CO3000/812/34240914/L	N/A	N/A	N/A
Antenna Master	INNCO	MA4640-XP-ET	None	N/A	N/A	N/A
RF Cable	SUHNER	SUCOFLEX100	84047746	3 month	2019-06-10	2019-09-10
RF Cable	SUHNER	SUCOFLEX102	801270/2	3 month	2019-06-10	2019-09-10
RF Cable	SUHNER	SUCOFLEX102	801532/2	3 month	2019-06-10	2019-09-10
Band Rejection Filter	Micro-Tonics	BRM50702	064	1 year	2019-05-29	2020-05-29
Test Receiver	R&S	ESR3	101873	1 year	2019-05-27	2020-05-27
Pulse Limiter	R&S	ESH3-Z2	100288	1 year	2019-05-27	2020-05-27
Two Line-V-Network	R&S	ESH3-Z5	100296	1 year	2018-12-06	2019-12-06

※Remark
Support equipment

Description	Manufacturer	Model	Serial number
Notebook computer	DELL	Lattitude D510	-

6. Antenna requirement

6.1. Standard applicable

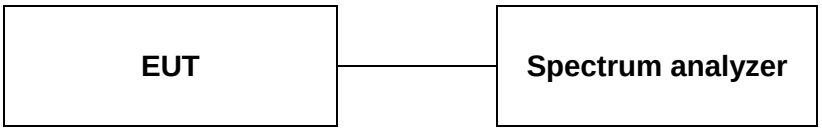
For intentional device, according to FCC 47 CFR Section §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section §15.247 (c) if transmitting antennas of directional gain greater than 6dBi are used.

6.2. Antenna connected construction

Antenna used in this product is Chip antenna,
Antenna gain is 0.30 dBi.

7. DTS bandwidth& 99% bandwidth measurement

7.1. Test setup



7.2. Limit

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902~928 ㎒, 2 400~2 483.5 ㎒, and 5 725~5 825 ㎒ bands. The minimum of 6 ㏈ Bandwidth shall be at least 500 ㎑

7.3. Test procedure

1. The 6㏈ band width was measured with a spectrum analyzer connected to RF antenna connector(conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency. The analyzer center frequency was set to the EUT carrier frequency, using the analyzer. Display Line and Marker Delta functions, the 6㏈ band width of the emission was determined.
2. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using RBW = 100㎑, VBW≥ 3 x RBW, Span= 2times the DTS bandwidth
   Detector= peak, Trace = max hold, Sweep=auto couple

7.4. Test results

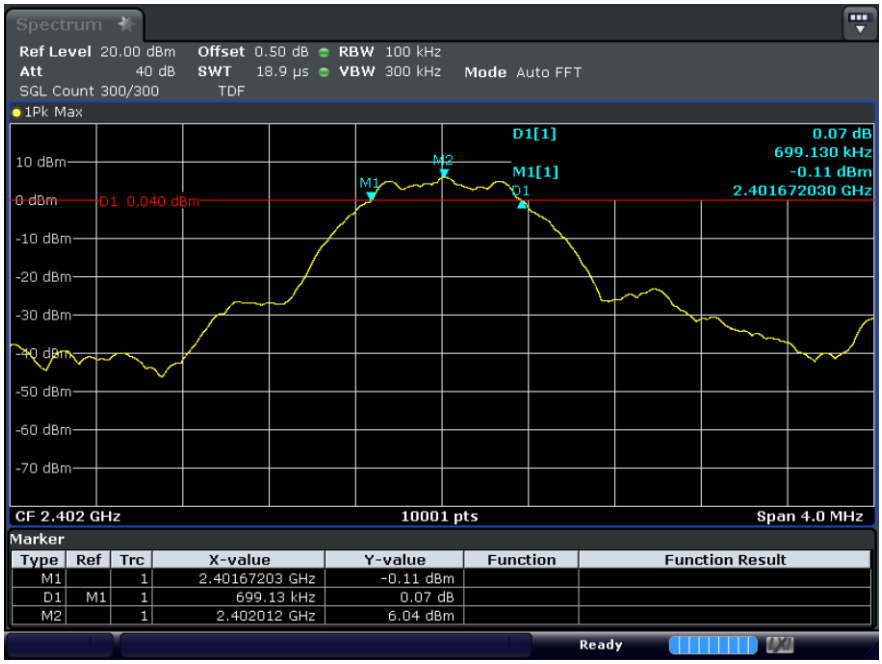
Test mode : Bluetooth LE

Frequency(㎒)	6 ㏈ bandwidth(㎒)	99% bandwidth(㎒)
2 402	0.70	1.03
2 440	0.69	1.03
2 480	0.70	1.03

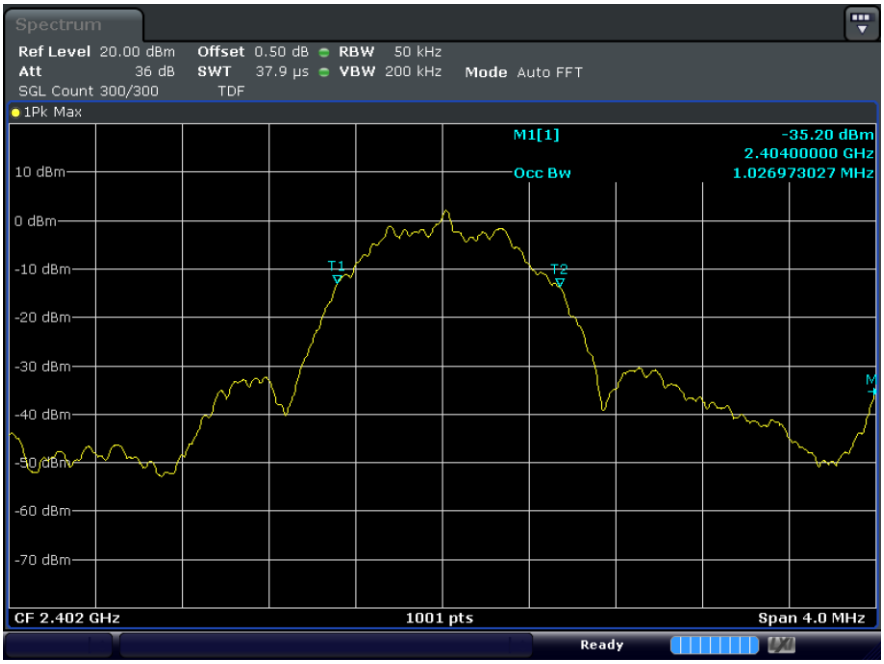
7.4.1. Test plot

Test mode : Bluetooth LE

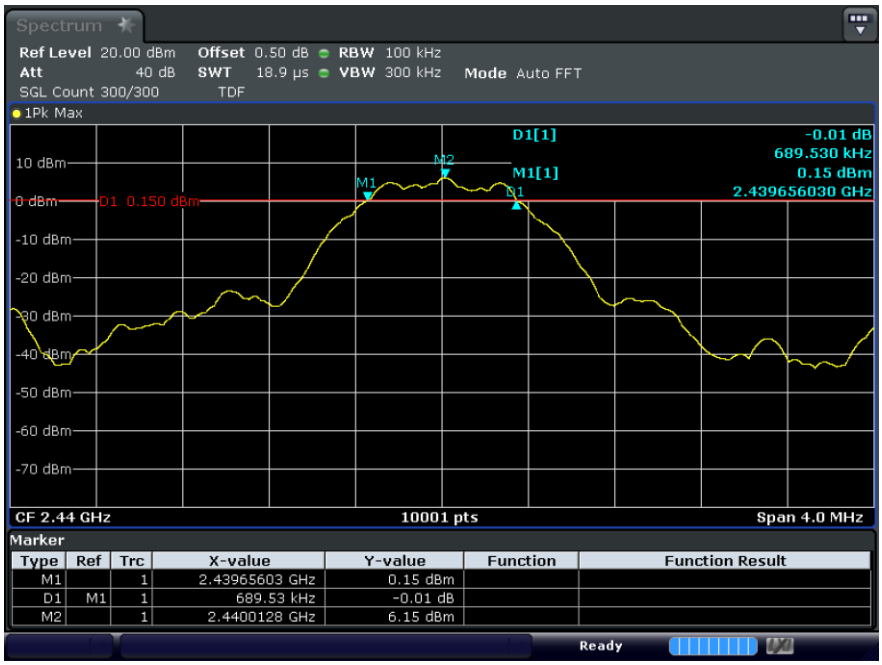
A.1. Lowest Ch. (2 402 MHz)_6dB Bandwidth



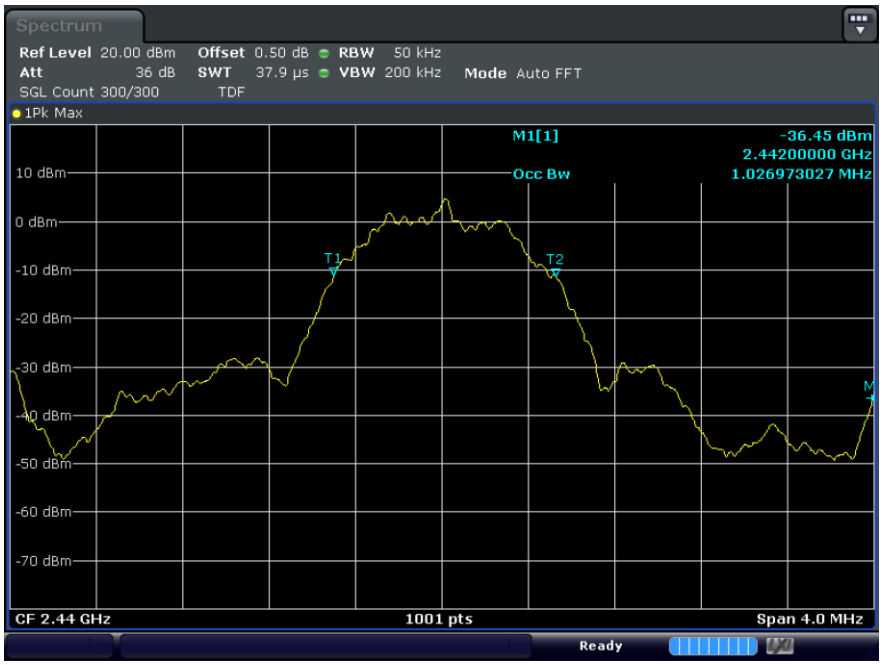
A.2. Lowest Ch. (2 402 MHz)_99% Bandwidth



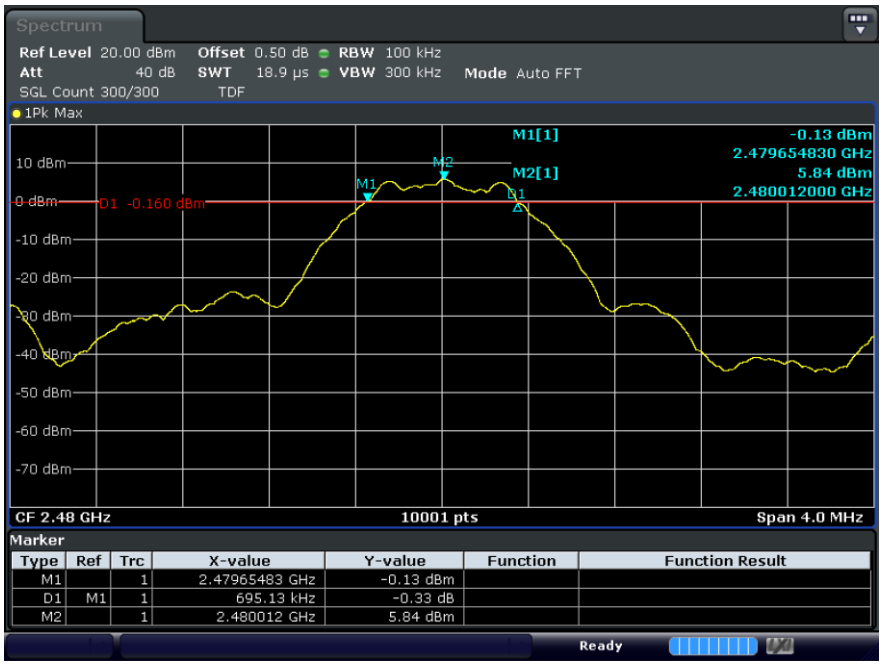
B.1. Middle Ch. (2 440 MHz)_6dB Bandwidth



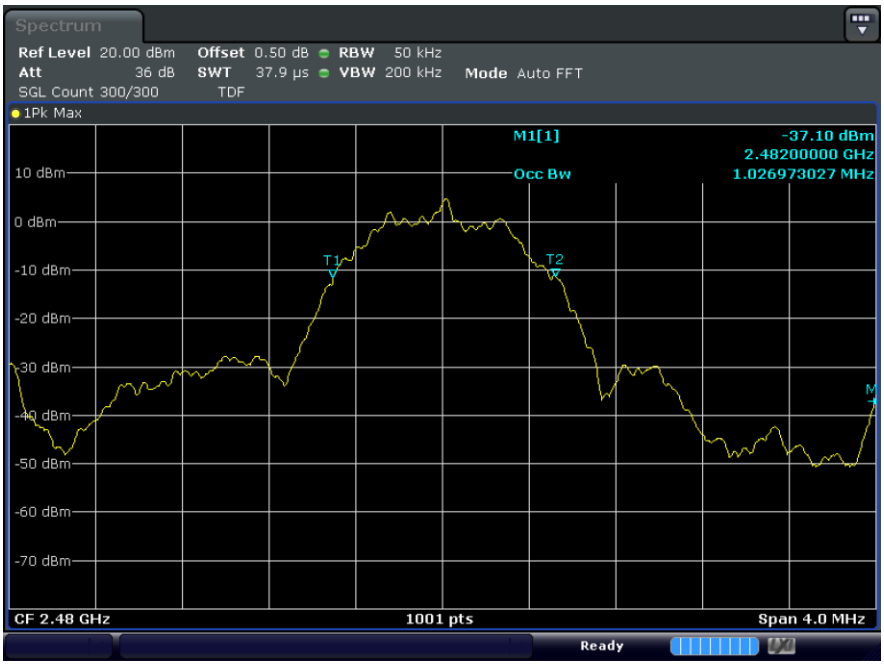
B.2. Middle Ch. (2 440 MHz)_99% Bandwidth



C.1. Highest Ch. (2 480 MHz)_6dB Bandwidth

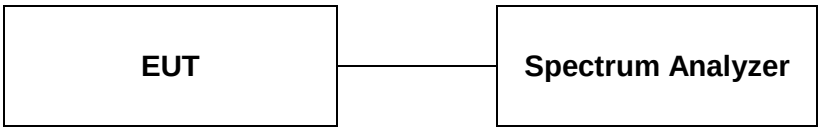


C.2. Highest Ch. (2 480 MHz)_99% Bandwidth



8. Maximum peak conducted output power

8.1. Test setup



8.2. Limit

The maximum peak output power of the intentional radiator shall not exceed the following:
1. §15.247(a)(1), Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 ㎑or the 6 ㏈ bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 ㎽
2. §15.247(b)(1), For frequency hopping systems operating in the 2400–2483.5 ㎒ employing at least 75non-overlapping hopping channels, and all frequency hopping systems in the 5725–5 805 ㎒ band: 1Watt.

8.3. Test procedure

Maximum Peak Conducted Output Power is measured using the following procedure (RBW ≥ DTS bandwidth).
1. Set the RBW ≥ DTS bandwidth.
2. Set VBW ≥ 3 x RBW. / Set Span= 4times the DTS bandwidth.
4. Sweep time = auto couple
5. Detector = peak
6. Trace mode = max hold
7. Allow trace to fully stabilize
8. Use peak marker function to determine the peak amplitude level.

8.4. Test results

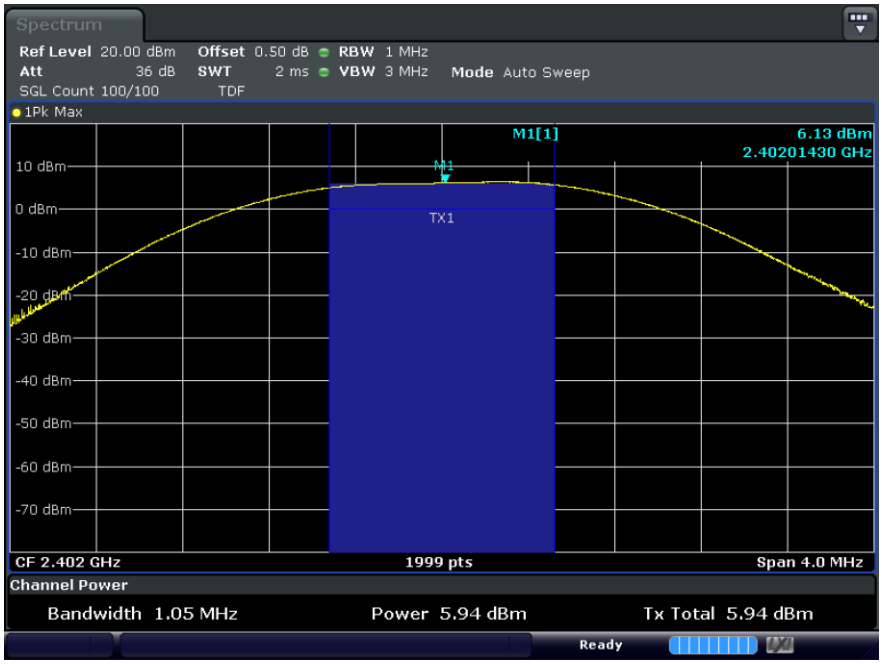
Test mode : Bluetooth LE

Frequency(㎒)	Conducted power (㏈m)	Limit (㏈m)
2 402	5.94	30.00
2 440	6.02	
2 480	5.60	

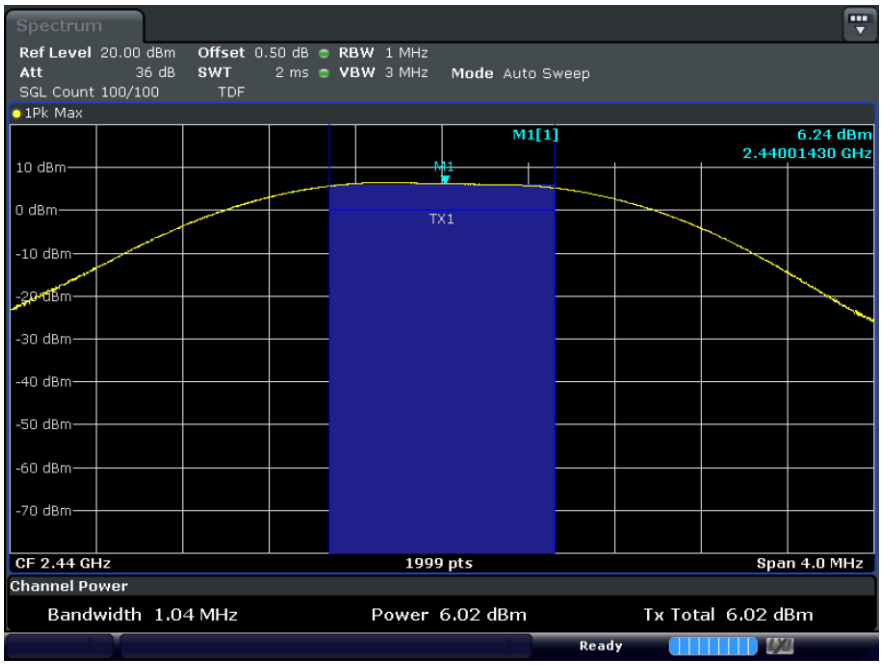
8.4.1. Test plot

Test mode : Bluetooth LE

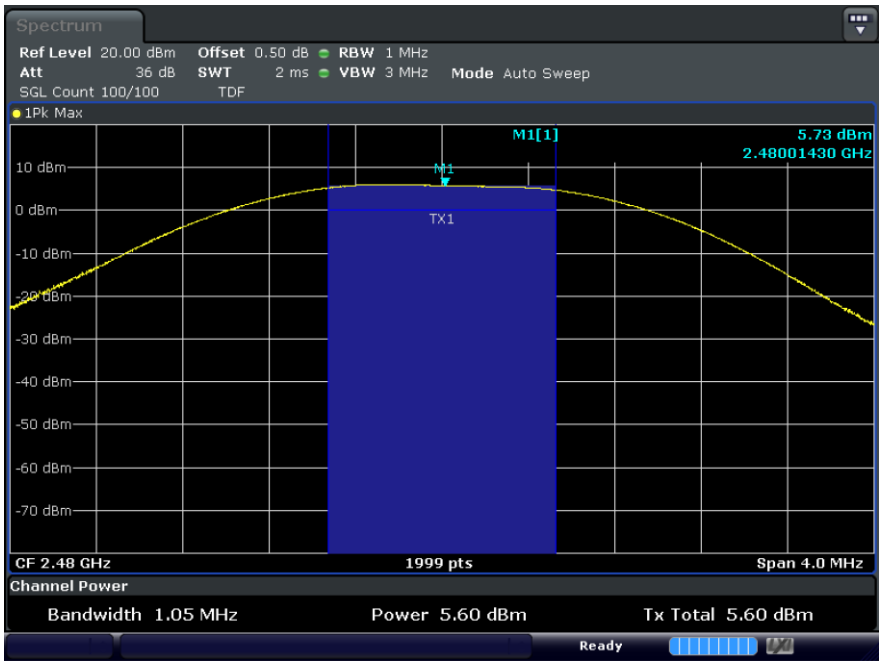
A. Lowest Ch. (2 402 MHz)



B. Middle Ch. (2 440 MHz)

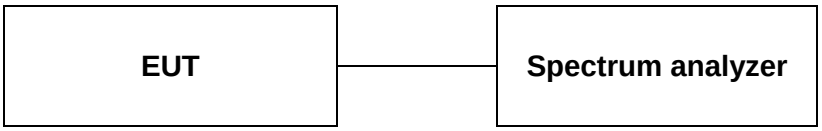


C. Highest Ch. (2 480 MHz)



9. Peak power spectral density

9.1. Test setup



9.2. Limit

< 8dBm @ 3kHz BW

9.3. Test procedure (PKPSD)

1. The RF power output was measured with a Spectrum analyzer connected to the RF Antenna connector(conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency, A spectrum analyzer was used to record the shape of the transmit signal.
2. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using;
   Span = 1.5 times the DTS bandwidth
   RBW = 3㎑ ≤ RBW ≤100㎑
   VBW ≥ 3 x RBW, Sweep = Auto couple
   Detector function = peak, Trace = max hold

9.4. Test results

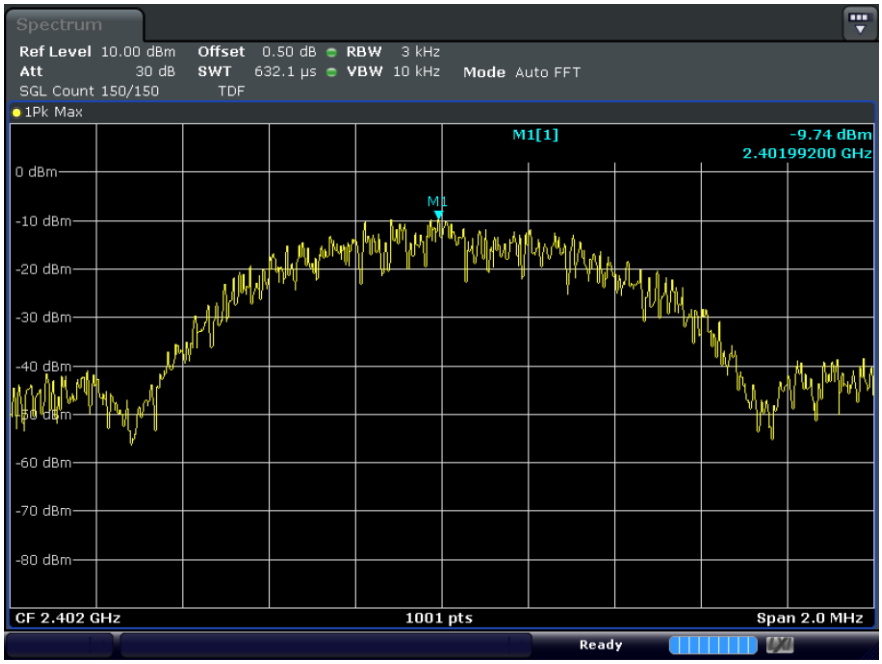
Test mode : Bluetooth LE

Frequency(㎒)	Peak output power(dBm)	Limit (dBm)
2 402	-9.74	8.00
2 440	-9.40	
2 480	-9.98	

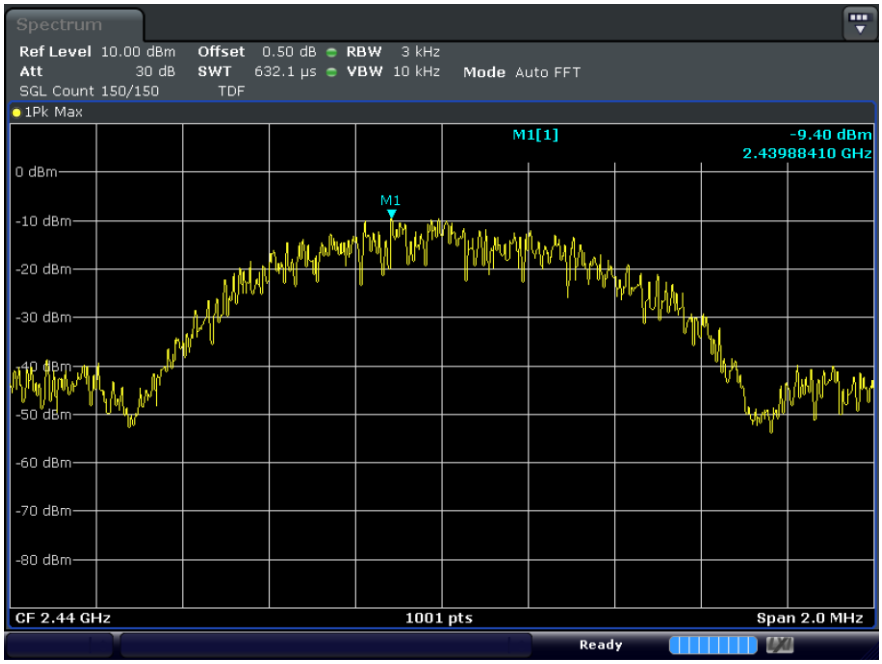
9.4.1. Test plot

Test mode : Bluetooth LE

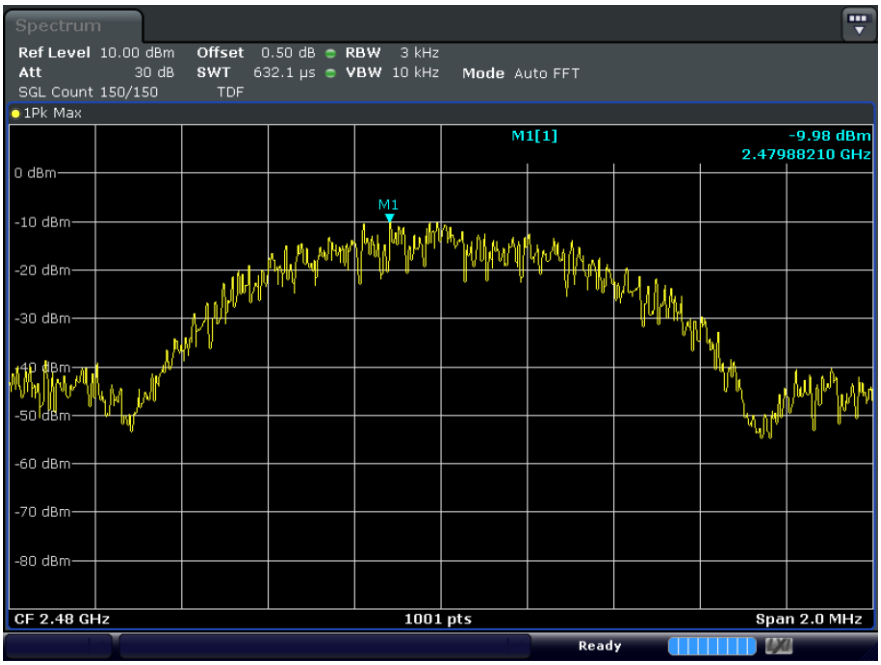
A. Lowest Ch. (2 402 MHz)



B. Middle Ch. (2 440 MHz)



C. Highest Ch. (2 480 MHz)

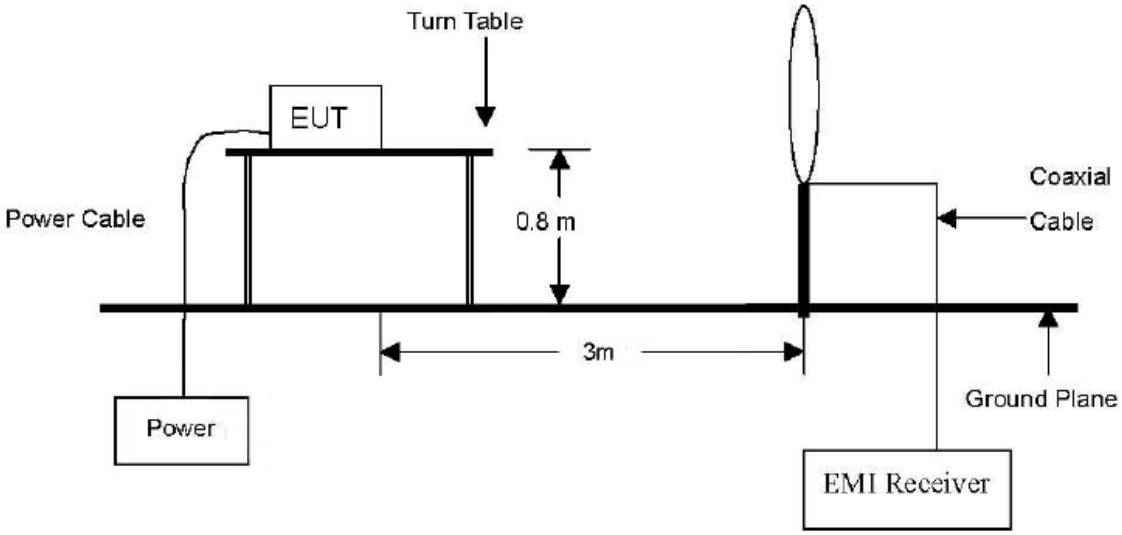


10. Transmitter radiated spurious emissions and conducted spurious emissions

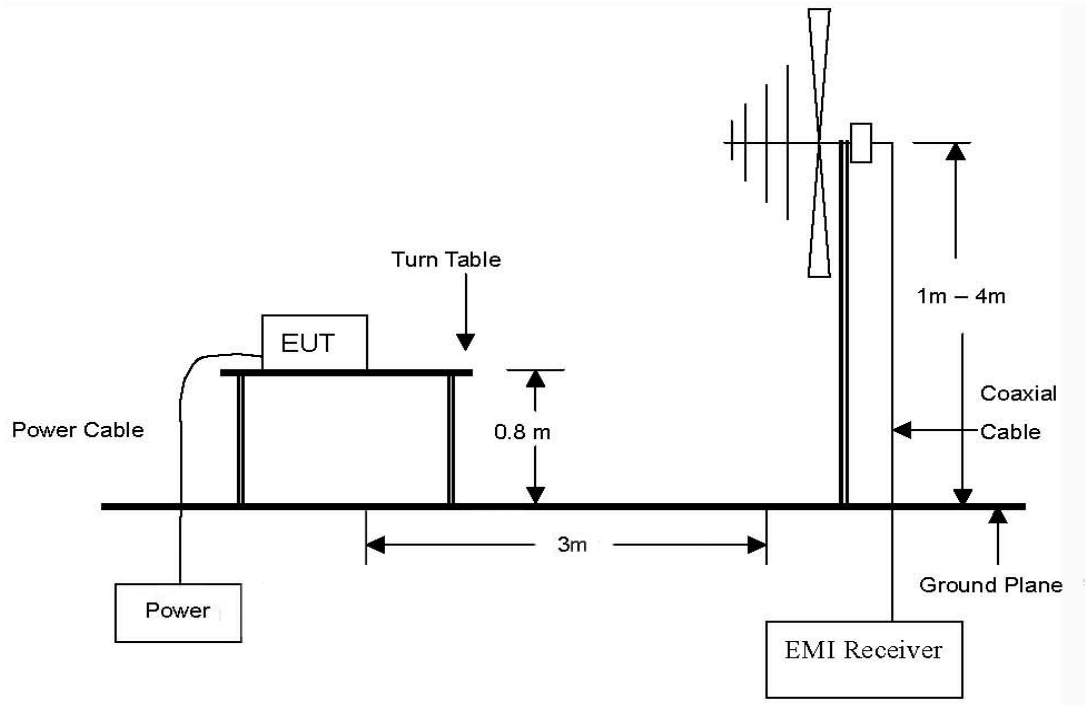
10.1. Test setup

10.1.1. Transmitter radiated spurious emissions

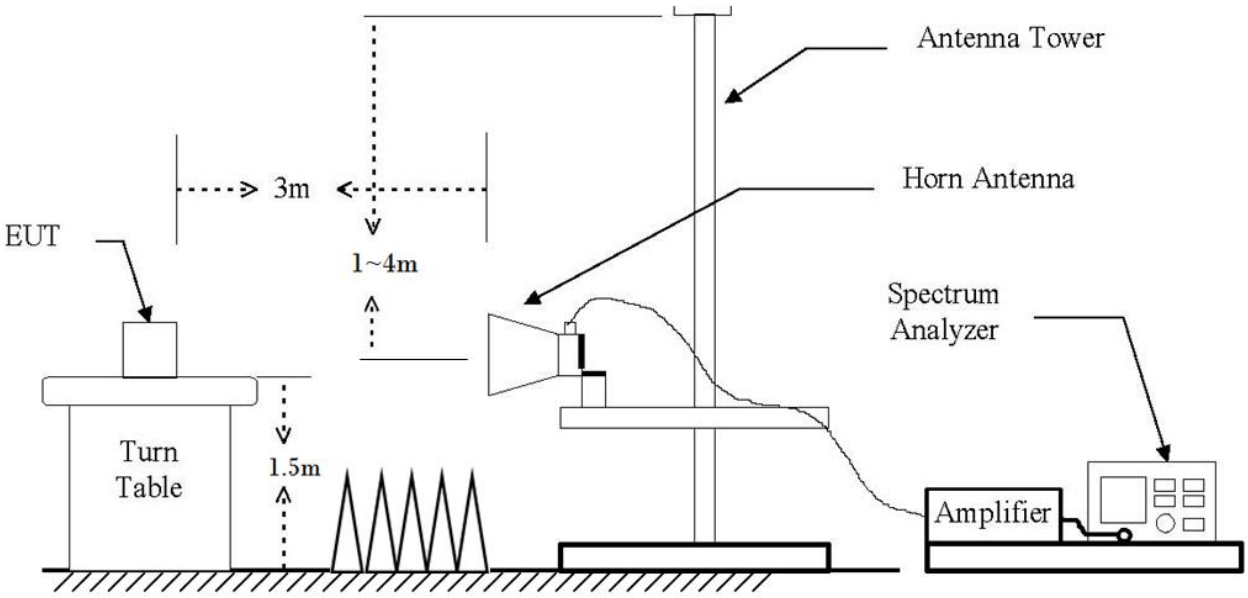
The diagram below shows the test setup that is utilized to make the measurements for emission from 9kHz to 30MHz Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓ emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 ㎓ to 40 ㎓ emissions.



10.2. Limit

According to §15.247(d), in any 100 ㎑ bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 ㏈ below that in the 100 ㎑ bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement , provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval , as permitted under paragraph(b)(3) of this section , the attenuation required under this paragraph shall be 30 ㏈ instead of 20 ㏈. Attenuation below the general limits specified in section §15.209(a) is not required. In addition, radiated emission which in the restricted band, as define in section §15.205(a), must also comply the radiated emission limits specified in section §15.209(a) (see section §15.205(c))
According to § 15.209(a), for an intentional radiator devices, the general required of field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (㎒)	Distance (Meters)	Radiated at 3M (㏈㎶/m)	Radiated (㎶/m)
0.009–0.490	300	See the remark	2400/F(㎑)
0.490–1.705	30		24000/F(㎑)
1.705–30.0	30		30
30 - 88	3	40.0	100
88 – 216	3	43.52	150
216 – 960	3	46.02	200
Above 960	3	53.97	500

※Remark

1. Emission level in ㏈uV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Distance extrapolation factor =20log(Specific distance/ test distance)(㏈)
   Limit line=Specific limits(㏈uV) + distance extrapolation factor.

10.3. Test procedures

Radiated emissions from the EUT were measured according to the dictates of ANSI C63.10:2013
In case of the air temperature of the test site is out of the range is 10 to 40°C before the testing proceeds the warm-up time of EUT maintain adequately

10.3.1. Test procedures for radiated spurious emissions

1. The EUT is placed on a turntable, which is 0.8 m (Below 1 ㎓.)**/** 1.5 m (Above 1 ㎓) above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.

※Remark

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 10 ㎑ for Peak detection (PK) at frequency below 30 ㎒
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 ㎑ for Peak detection (PK) or Quasi-peak detection (QP) at frequency below 1 ㎓.
3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 ㎒ for Peak detection and frequency above 1 ㎓.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 ㎒z and the video bandwidth is 10 ㎐ for Average detection (AV) at frequency above 1 ㎓.

10.3.2. Test procedures for conducted spurious emissions

1. The transmitter output was connected to the spectrum analyzer through an attenuator.
2. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using RBW=100 ㎑, VBW=100 ㎑.

10.4. Test results

10.4.1. Radiated spurious emissions (9 kHz to 30 MHz)

The frequency spectrum from 9㎑ to 30㎒ was investigated. Emission levels are not reported much lower than the limits by over 20 ㏈. All reading values are peak values.
To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Test mode : Bluetooth LE_2 440 MHz (Worst case)

Radiated emissions			Ant.	Correction factors			Total	Limit	
Frequency (MHz)	Reading (dBuV)	Detector Mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Duty factor (dB)	Actual (dBuV/m)	Limit (dBuV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.									

※Remark

1. Actual = Reading + Ant. factor - Amp + CL (Cable loss)
2. 15.31 Measurement standards.
The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

10.4.2. Radiated spurious emissions (30 MHz to 1 000 MHz)

The frequency spectrum from 30 ㎒ to 1 000 ㎒ was investigated. Emission levels are not reported much lower than the limits by over 20 ㏈. All reading values are peak values.
To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Test mode : Bluetooth LE_2 440 MHz (Worst case)

Radiated emissions			Ant.	Correction factors			Total	Limit	
Frequency (MHz)	Reading (dBuV)	Detector Mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Duty factor (dB)	Actual (dBuV/m)	Limit (dBuV/m)	Margin (dB)
95.96	20.11	QP	H	9.66	2.63	-	32.40	40.00	7.60
Above 100 MHz Not detected									

※Remark

1. Actual = Reading + Ant. factor - Amp + CL (Cable loss)
2. 15.31 Measurement standards.
The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

10.4.3. Radiated spurious emissions & Bandedge (Above 1 000 MHz)

The frequency spectrum above 1 000 ㎒was investigated. Emission levels are not reported much lower than the limits by over 20 ㏈.
To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Test mode : Bluetooth LE

A. Lowest Ch. (2 402 MHz)

Radiated emissions			Ant.	Correction factors			Total	Limit	
Frequency (MHz)	Reading (dBuV)	Detector Mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	DCCF (dB)	Actual (dBuV/m)	Limit (dBuV/m)	Margin (dB)
*2314.36	48.25	Peak	V	28.09	38.78	-	37.56	74.00	36.44
*4804.87	48.34	Peak	H	32.86	35.47	-	45.73	74.00	28.27
Above 5 000 MHz Not detected									

B. Middle Ch. (2 440 MHz)

Radiated emissions			Ant.	Correction factors			Total	Limit	
Frequency (MHz)	Reading (dBuV)	Detector Mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	DCCF (dB)	Actual (dBuV/m)	Limit (dBuV/m)	Margin (dB)
*4880.19	52.50	Peak	H	32.86	35.47	-	49.89	74.00	24.11
Above 5 000 MHz Not detected									

※Remark

1. Measuring frequencies from 1 ㎓ to the 10th harmonic of highest fundamental Frequency.
2. Radiated emissions measured in frequency above 1 000 ㎒ were made with an instrument using peak/average detector mode.
3. Actual = Reading + Ant. factor - Amp + CL (Cable loss) + DCCF
4. 15.31 Measurement standards.
The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.
5. * is Restricted band.
6. DCCF(Duty Cycle Correction Factor) = 20 x Log(Worst case dwell time / 100 ms) dB
7. Average measurement did not take place because the peak data did not exceed average limit

C. Highest Ch. (2 480 MHz)

Radiated emissions			Ant.	Correction factors			Total	Limit	
Frequency (MHz)	Reading (dBuV)	Detector Mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	DCCF (dB)	Actual (dBuV/m)	Limit (dBuV/m)	Margin (dB)
*2497.59	46.44	Peak	H	28.09	38.78	-	35.75	74.00	38.25
*4959.42	51.39	Peak	H	32.86	35.47	-	48.78	74.00	25.22
Above 5 000 MHz Not detected									

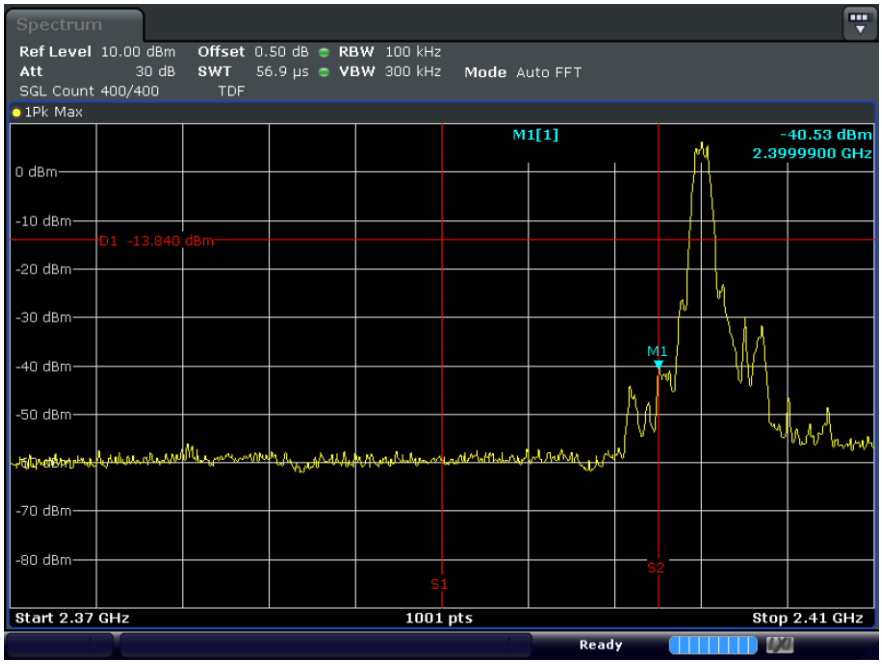
※Remark

1. Measuring frequencies from 1 ㎓ to the 10th harmonic of highest fundamental Frequency.
2. Radiated emissions measured in frequency above 1 000 ㎒ were made with an instrument using peak/average detector mode.
3. Actual = Reading + Ant. factor - Amp + CL (Cable loss) + DCCF
4. 15.31 Measurement standards.
The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.
5. * is Restricted band.
6. DCCF(Duty Cycle Correction Factor) = 20 x Log(Worst case dwell time / 100 ms) dB
7. Average measurement did not take place because the peak data did not exceed average limit

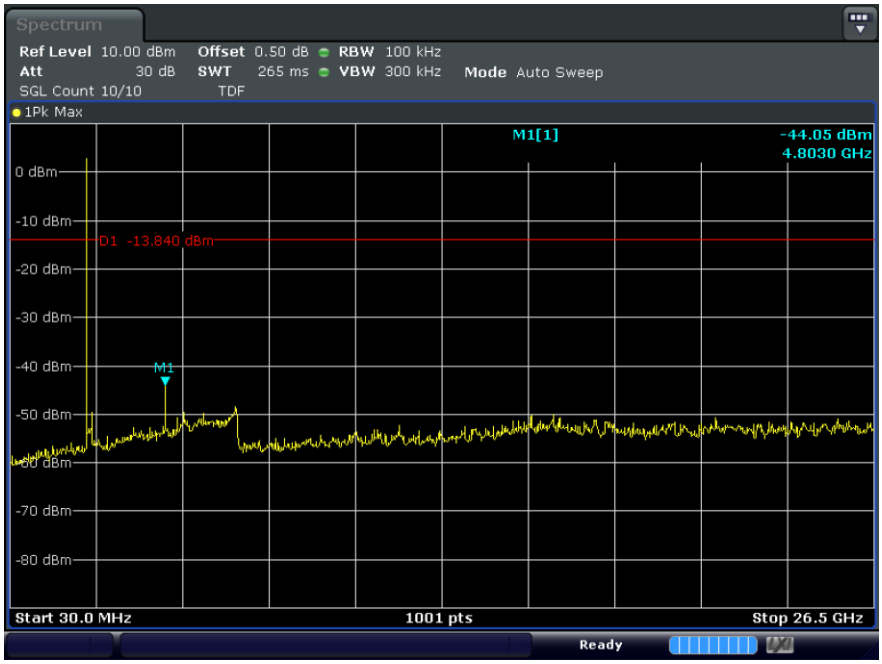
10.4.4. Test plot (Conducted spurious emissions & Bandedge)

Test mode : Bluetooth LE

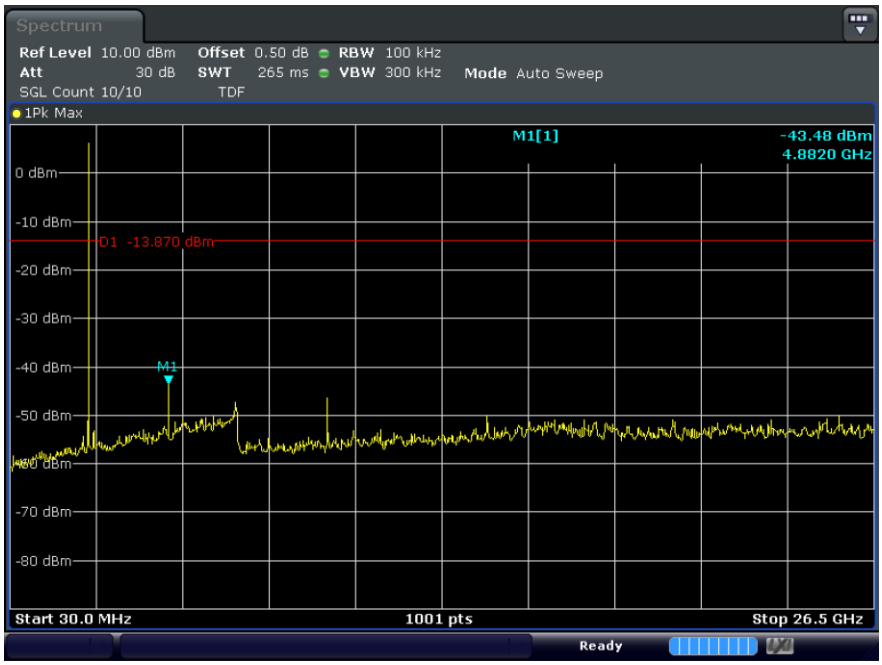
A.1. Lowest Ch. (2 402 MHz)_Band edge



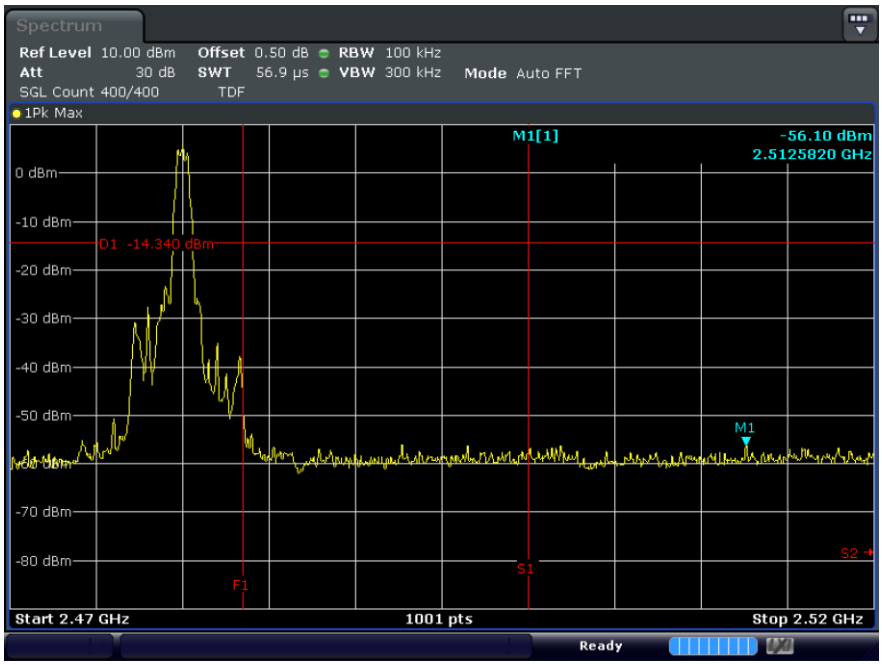
A.2. Lowest Ch. (2 402 MHz)_Spurious emissions



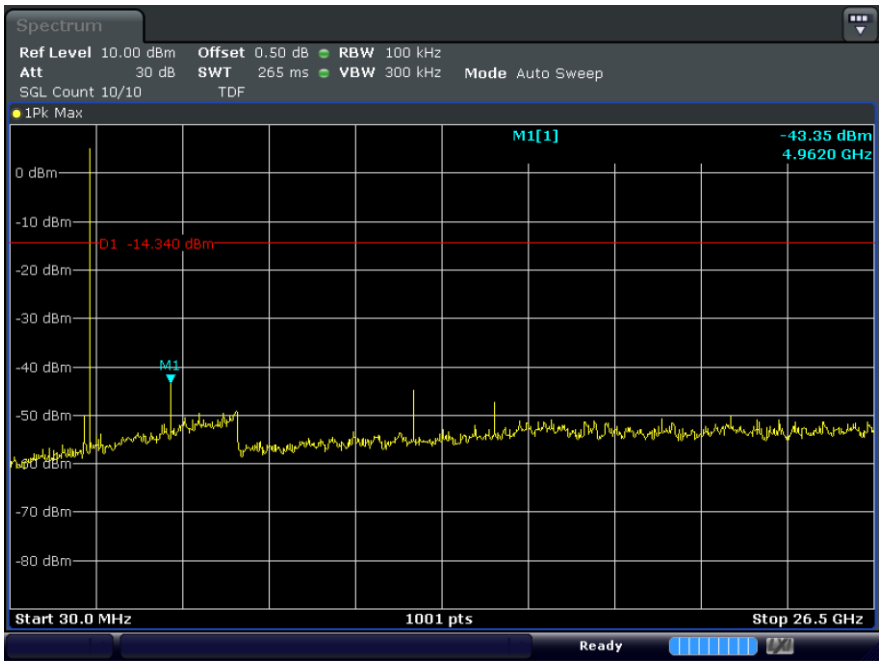
B.1. Middle Ch. (2 440 MHz)_Spurious emissions



C.1. Highest Ch. (2 480 MHz)_ Band edge



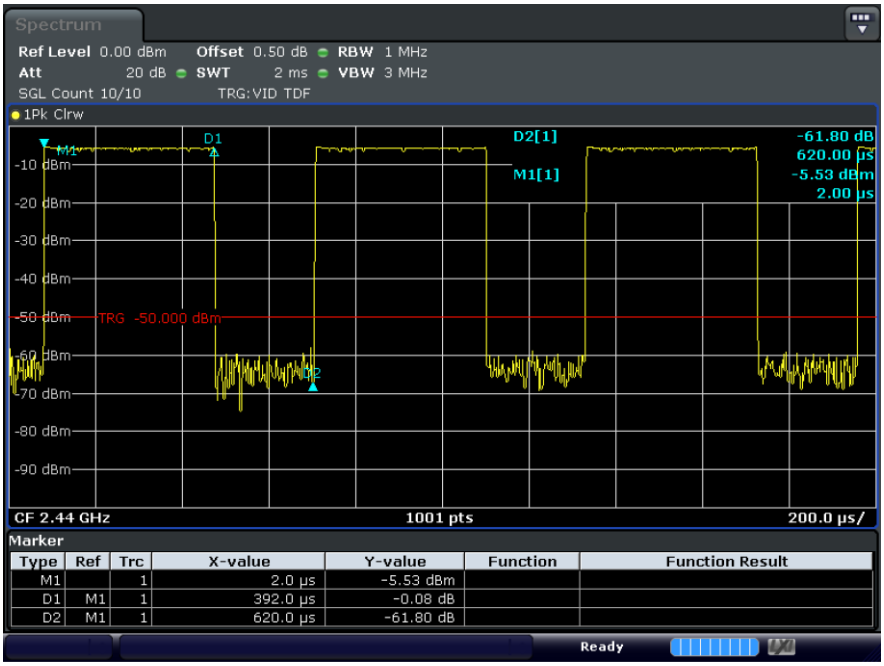
C.2. Highest Ch. (2 480 MHz)_Spurious emissions



10.4.5. Test plot (Duty Cycle)

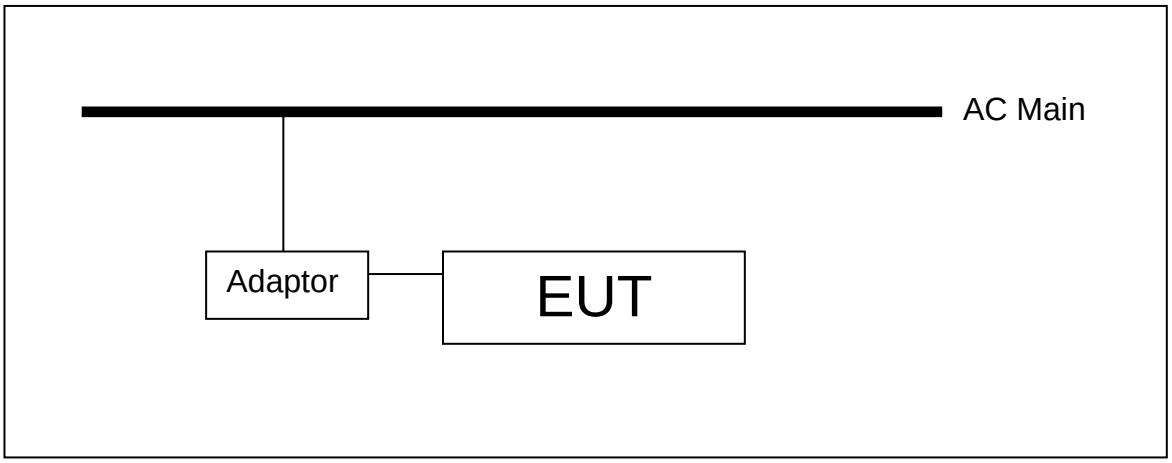
Test mode : Bluetooth LE

A.1. Middle Ch. (2 440 MHz)



11. AC Conducted power line test

11.1. Test setup



11.2. Limit

According to §15.107(a) for an intentional radiator 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 ㎑ to 30 ㎒, shall not exceed the limits in the following table, as measured using a 50 uH/50 ohms line impedance stabilization network(LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequencies ranges.

Frequency of Emission (㎒)	Conducted limit (dB㎶/m)	
	Quasi-peak	Average
0.15 – 0.50	66-56*	56-46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

※Remark

Decreases with the logarithm of the frequency.

11.3. Test procedure

The test procedure is performed in a 6.5 m × 3.6 m × 3.6 m (L×W×H) shielded room. The EUT along with its peripherals were placed on a 1.0m(W)× 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

11.4. Test results

Frequency range: 0.15 ㎒ ~ 30 ㎒
Measured bandwidth: 9 ㎑

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.15	---	10.84	55.78	44.94	7000.0	9.00	N	GND	9.98
0.16	32.43	---	65.57	33.14	7000.0	9.00	N	GND	9.98
0.37	24.52	---	58.59	34.07	7000.0	9.00	L1	GND	9.99
0.37	---	18.12	48.59	30.47	7000.0	9.00	L1	GND	9.99
1.65	25.22	---	56.00	30.78	7000.0	9.00	N	GND	10.03
1.68	---	19.00	46.00	27.00	7000.0	9.00	L1	GND	10.04
3.21	24.67	---	56.00	31.33	7000.0	9.00	N	GND	10.07
3.26	---	12.65	46.00	33.35	7000.0	9.00	N	GND	10.08
6.97	---	11.85	50.00	38.15	7000.0	9.00	L1	GND	10.26
6.97	25.01	---	60.00	34.99	7000.0	9.00	N	GND	10.24
27.96	---	20.55	50.00	29.45	7000.0	9.00	N	GND	10.90
27.96	24.44	---	60.00	35.56	7000.0	9.00	N	GND	10.90

※Remark

Line(L1): Hot
Line(N): Neutral

11.4.1. Test plot