MOTOROLA SOLUTIONS

CERTIFICATE 2518.08

SAMM 825

MOTOROLA PENANG ADV. COMM. LABORATORY
Motorola Solutions Malaysia Sdn. Bhd.
Plot 2A Medan Bayan Lepas,
Mukim 12, S.W.D. 11900 Bayan Lepas,
Penang, Malaysia.

FCC / ISED TEST REPORT

Report Revision : **Rev.A**

Date/s Tested	:	26-February-2024 - 14-March-2024
Report Issue Date	:	15-April-2024
Manufacturer/Location	:	Motorola Solutions Malaysia Sdn Bhd Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia
Requestor	:	HOMICIL HARLY
Product Type	:	Hand-held
Product Version (PMN)	:	APX N70
Model Number (HVIN)	:	H35XDT9PW8AN & H35XDT9PW8AN-H
Frequency Band	:	2.402 - 2.480 GHz
Max RF Output Power	:	22.39 mWatts
Applicant Name	:	Motorola Solutions Inc
Applicant Address	:	Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia
FCC Registrations	:	461337
IC Registrations	:	MY0001
Firmware Version (FVIN)	:	D02.76.02

The equipment was tested accordance to the requirement listed below:

(2.4GHz BT) **FCC 47CFR Part 15C** **ISED RSS 247 Issue 2,** **February 2017**	**PASS**

Prepared By:

SITI NUR HIDAYATI BINTI ABDUL HALIM
Test Personnel

Approved Signatory:

MAHESHVARAN A/L RAJAGOPAL
Responsible Engineer

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REVISION HISTORY

Revision History	Description	Date	Originator
Rev. A	Initial Report	**15-April-2024**	**Hidayati**

1.0. General Information

EUT Description:

Technologies	2.4GHz BT
TX Frequency range	2402MHz – 2480MHz
Modulation Type	GFSK, Pi/4 DQPSK,8DPSK
Connector type	PROGRAMMING, TEST & ALIGNMENT CABLE
Antenna type	STAMPED METAL

The EUT contains following accessory devices and data cable:

Item	Brand	Model or P/N
UHF Whip 380-520MHz	MOTOROLA	AN000452A01
UL 3650mAH (using RN 2170 Li-Ion cell)	MOTOROLA	PMNN4818A
CHARGER,CHGR DEKSTOP SINGLE UNIT IMPRES 2 EXT PS BASE ONLY	MOTOROLA	PMPN4590A
PWR SUPPLY WALL CUBE,AC,DC,110VAC FIXED BLADE US 14.5V/2.5A L6 BARREL	MOTOROLA	PS000040A01
CHARGER DEKSTOP MULTI UNIT IMPRES 2 6 DISPLAYS INT PS US	MOTOROLA	PMPN4591A
POWER CORD US for MUC	MOTOROLA	3087791G01

Channel number and frequency information:

79 channels are provided to this EUT:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

FCC 47 CFR Part 15 Subpart C
KDB 558074 D01 15.247 Meas Guidance v05
ANSI C63.10-2013

Deviation from standard

Not applicable as no deviation from standard test method

Modifications to EUT

For RF conducted measurements a pigtail was soldered out of the board while for radiated measurements there were no modifications to the device

2.0. Summary of Test Results

FCC Clause	ISED Clause	Test Item	Result	Remark	Serial number tested	Tested by
15.247 (b)(1)	RSS-247 5.4(b)	Conducted RF Output Power (Peak)	Pass	Highest output power: 12.175 dBm (16.501 mW)	022TAB0463	Hidayati
15.247 (a)(1)	RSS-247 5.1(a) RSS-247 5.1(b)	(1) 20dB Channel Bandwidth (2) Channel Separation	Pass	GFSK- 0.846MHz (846KF1D) Pi/4 DQPSK – 1.177MHz (1M18G1D) 8DPSK – 1.202MHz (1M20G1D)	022TAB0463	Hidayati
15.247(a)(1)(iii)	RSS-247 5.1(d)	Number of hopping Frequency used	Pass	NA	NA	NA
15.247(a)(1)(iii)	RSS-247 5.1(d)	Dwell time on each channel	Pass	NA	NA	NA
15.247 (d)	RSS-247 5.5	Band Edge Conducted Spurious Emission	Pass	NA	NA	NA
15.247 (d)	RSS-247 5.5	Conducted Spurious Emission	Pass	NA	NA	NA
15.205, 15.209, 15.247 (d)	RSS-247 5.5	Radiated Emission within Restricted Bands	Pass	RBE: 42.9672dBuVm (margin: 11.0328dB) RSE: 65.7125dBuV/m (margin: 8.2875dB)	022TAB0346	Nazrin & Rezza
15.207	RSS-Gen 8.8	AC Powerline Conducted Emission	NA	Meet the requirement limit.	022TAB0346	Qawiman
15.203	-	Antenna Requirement	NA	Internal antenna is not accessible to the end-user	NA	NA

***NOTE: The Bluetooth chipset is identical to FCC ID AZ489FT7147. The rest of conducted measurements are by similarity. Configurations of radiated emissions based on FCC ID AZ489FT7147 are tested. As per KDB 484596 D01v01, the applicant takes full responsibility that data referenced represents compliance to the relevant rules for this current FCC ID.**

3.0. Measurement Uncertainty

Measurement	Frequency	Expended Uncertainty (k=1.96) (±dB)
AC Power Line Conducted Spurious Emission	150KHz ~ 30MHz	3.48
Radiated Emissions up to 1 GHz	30MHz ~ 1000MHz	5.88
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.84
	18GHz ~ 40GHz	6.02
Conducted Spurious Emissions	9kHz ~ 12.75GHz	2.82

4.0. Equipment List

Bluetooth ATE # 1 (SW Version: Ate Main_3.1.12_R1)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
CHAMBER	SH-641	92003820	18-Jul-23	18-Jul-24
POWER SUPPLY	6652A	3541A02371	18-Jul-23	18-Jul-24
PULSE SENSOR	MA2411B	1726287	22-Aug-23	22-Aug-24
PULSE POWER METER	ML2495A	1845014	16-Aug-23	16-Aug-24
SPECTRUM ANALYZER	E4440A	MY48250517	8-Nov-23	8-Nov-24

Radiated Emission Station (SW Version: EMC FCC RE v1.6.5)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
DRG HORN FREQ.	SAS-571	1143	08-Mar-23	08-Mar-25
DRG HORN FREQ.	SAS-571	720	18-Apr-23	18-Apr-25
DC Power Supply	NR973A	MY54180189	30-Aug-23	30-Aug-24
SIGNAL GENERATOR	SMB 100A	182511	4-Jun-21	4-Jun-24
EMI TEST RECEIVER	ESW44	101731	11-Aug-23	11-Aug-24
5m SEMI-ANECHOIC CHAMBER	S800-HX	J2308	No Cal. Req'd	No Cal. Req'd
BILOG ANTENNA	CBL6112B	2950	14-Dec-23	14-Dec-24
BILOG ANTENNA	CBL6112B	2964	25-Sep-23	25-Sep-24
DATA LOGGER THERMOHYGROMETER	SDL500	A.016800	21-Jun-23	21-Jun-24
SYSTEM CONTROLLER	SC104V	050806-1	No Cal. Req'd	No Cal. Req'd
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	No Cal. Req'd	No Cal. Req'd
ANTENNA POSITIONING TOWER	TLT2	NA	No Cal. Req'd	No Cal. Req'd
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	28-Aug-23	28-Aug-24
PREAMPLIFIER 18-40GHz	Miteq Hi Gain Sucoflex	002	No Cal. Req'd	No Cal. Req'd
PREAMPLIFIER	PAM-0118P	269	28-Mar-23	28-Mar-24
LOOP ANTENNA	6502	00208416	26-Oct-23	26-Oct-24

AC Powerline Station (SW Version: EMC32 Ver.10.60.10)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
DATA LOGGER	DSB	16344143	21-Jun-23	21-Jun-24
V-NETWORK 2-LINE	ENV216V	101039	13-Dec-23	13-Dec-24
EMI TEST RECEIVER	ESIB40	100225	19-Sep-23	19-Sep-24
PROGRAMMABLE AC SOURCE	61604	ABR000000926	25-Jul-23	25-Jul-24

5.0. Test Mode Applicability and Test Channel Detail

Radiated Emission Test (Above 1GHz)

☒Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Environmental Conditions
Test Mode	0 to 78	0,39,78	FHSS	GFSK, Pi/4 DQPSK,8DPSK	22.8°C, 70.1%RH

Radiated Emission Test (Below 1GHz)

☒Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Environmental Conditions
Test Mode	0 to 78	0,39,78	FHSS	GFSK, Pi/4 DQPSK,8DPSK	22.8°C, 70.1%RH

Power Line Conducted Emission Test

☐Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☐Following channel(s) was (were) selected for the final test as listed below.

NAEUT Configure Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Environmental Conditions
Application Mode	0 to 78	AUTO	FHSS	AUTO	NA

Antenna Port Conducted Measurement:

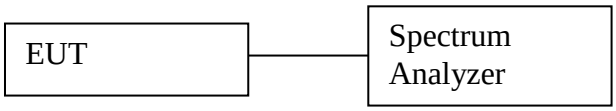
☒This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
☒Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Environmental Conditions
Test Mode	0 to 78	0,39,78	FHSS	GFSK, Pi/4 DQPSK,8DPSK	25°C, 54.8%RH

6.0. Transmitter Test Parameters

6.1. Conducted RF Output Power (Peak)

6.1.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and set EUT to transmit maximum data rate with hopping disable.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
   a. RBW = > 20 dB bandwidth
   b. VBW = RBW
   c. Detector mode = Peak
   d. AMPLITUDE → Scale/Div = 10 dB
   e. Trace = Max hold
   f. Sweep = auto
e) Measure the captured power within the band and recording the plot.
f) Repeat above procedure with other different mode of operation.

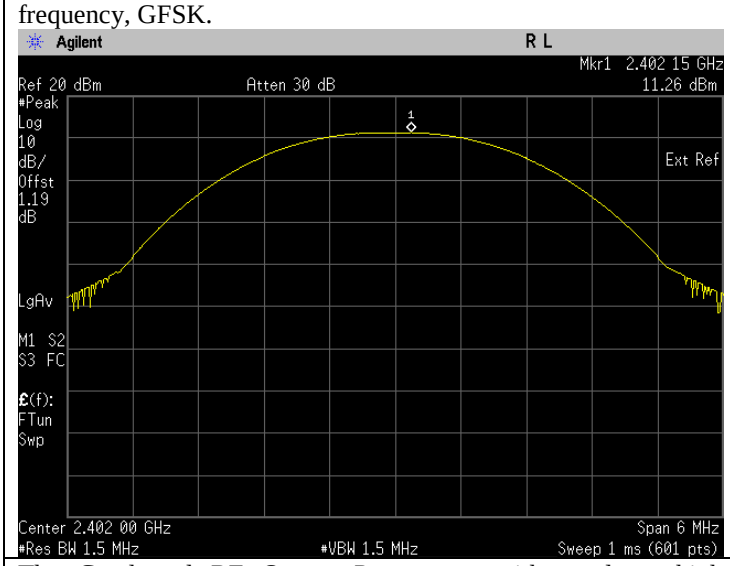
6.1.2. Test Limits:

Normal Condition (25 ° C)
≤ 125mW (or 20.9dBm)

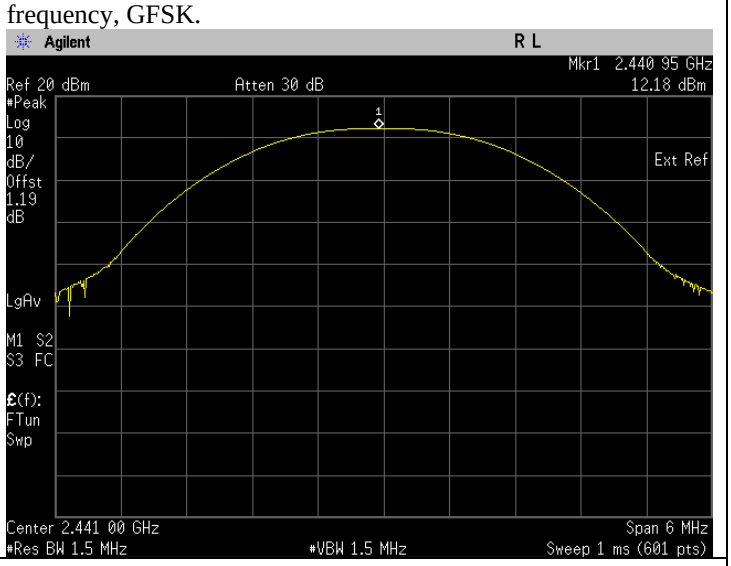
6.1.3. Test Data:

Test Conditions		Test Frequency (GHz)	Results	
Modulation	Voltage(V)		dBm	Status
GFSK	7.50	2.4020	11.264	Pass
		2.4410	12.175	Pass
		2.4800	11.954	Pass
Pi/4DQPSK	7.50	2.4020	10.554	Pass
		2.4410	11.403	Pass
		2.4800	11.338	Pass
8DPSK	7.50	2.4020	10.746	Pass
		2.4410	11.711	Pass
		2.4800	11.509	Pass

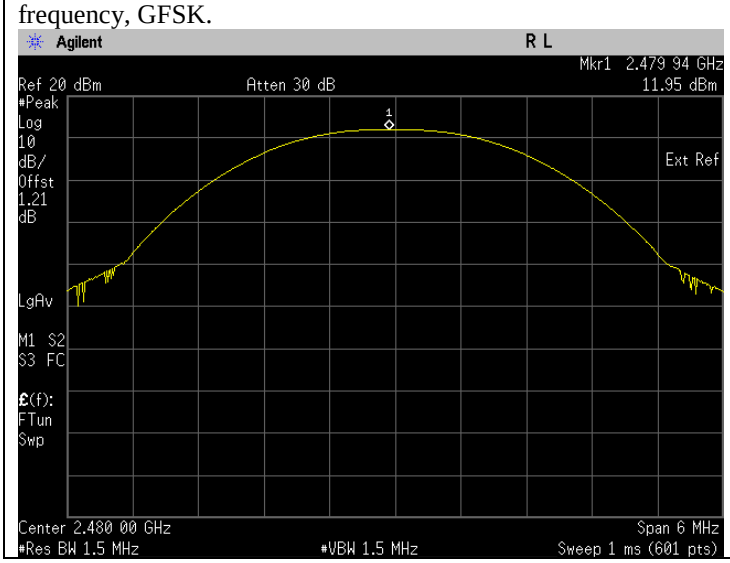
The Conducted RF Output Power test with result at low frequency, GFSK.



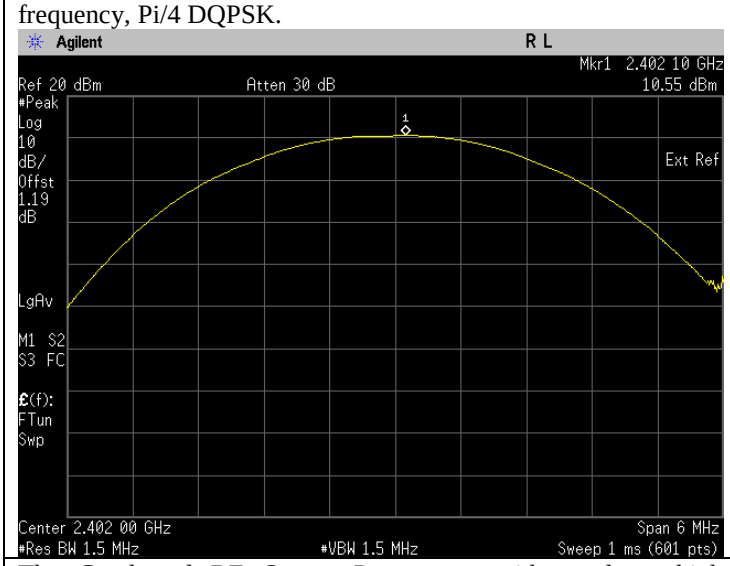
The Conducted RF Output Power test with result at mid frequency, GFSK.



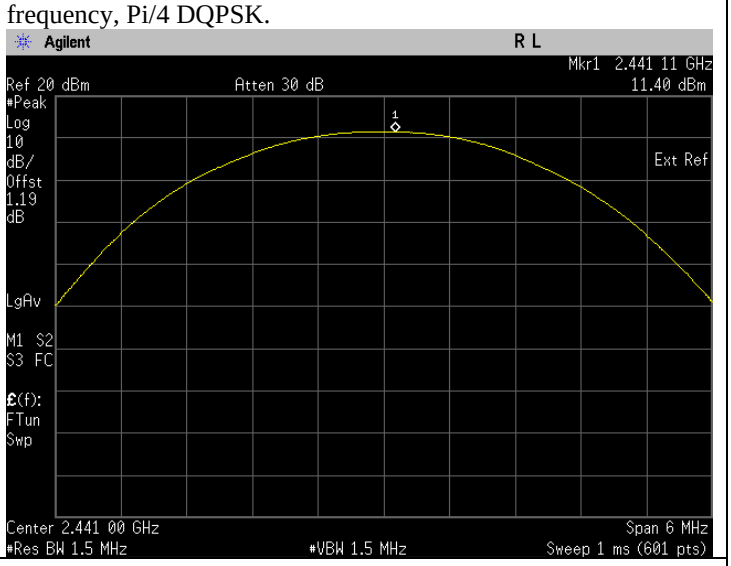
The Conducted RF Output Power test with result at high frequency, GFSK.



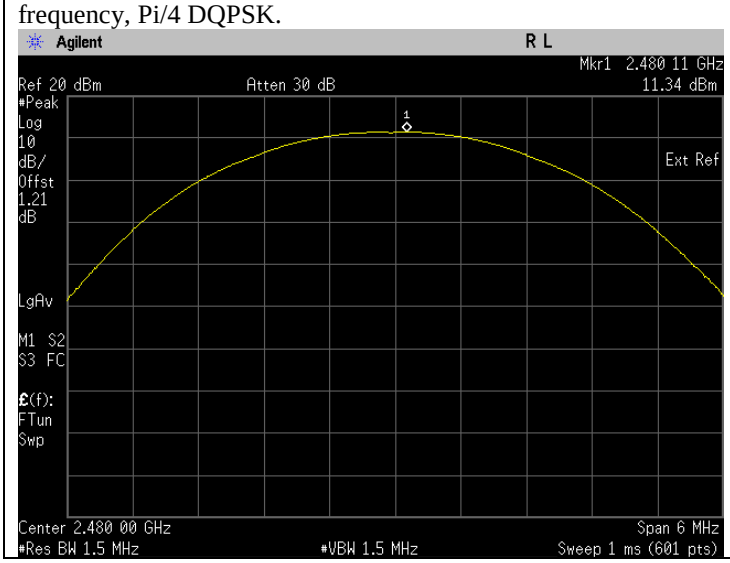
The Conducted RF Output Power test with result at low frequency, Pi/4 DQPSK.



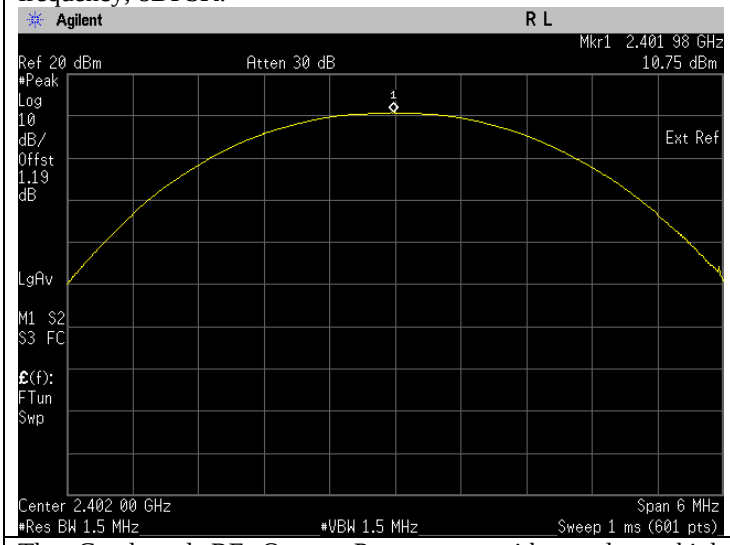
The Conducted RF Output Power test with result at mid frequency, Pi/4 DQPSK.



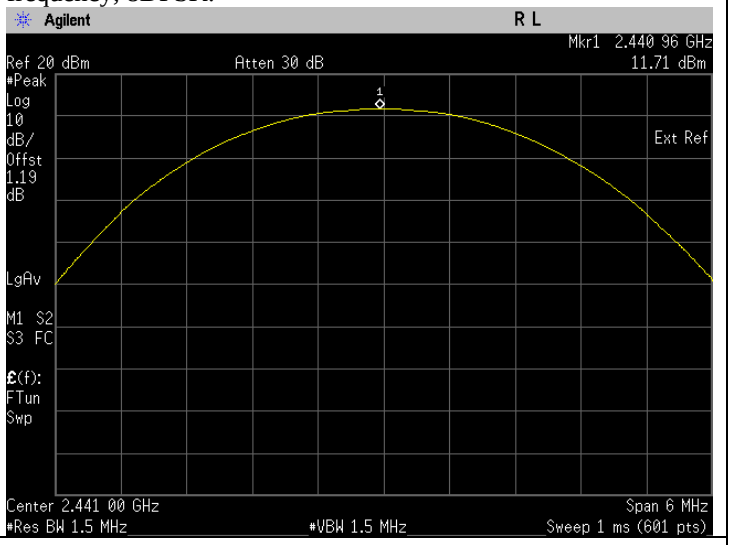
The Conducted RF Output Power test with result at high frequency, Pi/4 DQPSK.



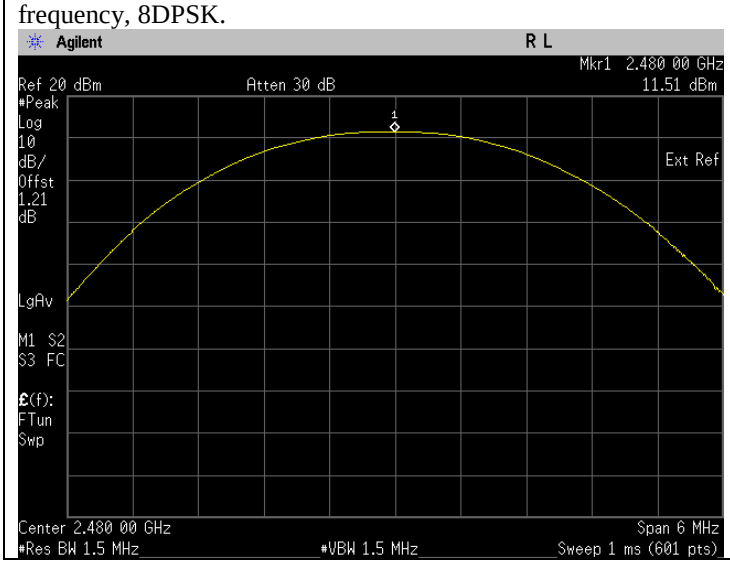
The Conducted RF Output Power test with result at low frequency, 8DPSK.



The Conducted RF Output Power test with result at mid frequency, 8DPSK.

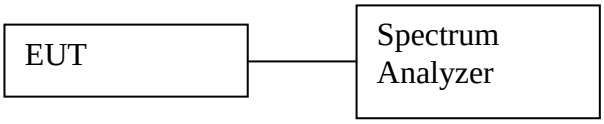


The Conducted RF Output Power test with result at high frequency, 8DPSK.



6.2. 20dB Channel Bandwidth

6.2.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and set EUT to transmit maximum data rate with hopping disable.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 30 kHz
    b. VBW = 100 kHz
    c. SPAN = 3 MHz, center on test frequency
    d. AMPLITUDE → Scale/Div = 10 dB
    e. Detector mode = Peak
    f. Trace = Max hold
    g. Sweep = auto
e) Measure the freq different of two frequencies that were attenuated 20dB from peak of the emission & record the frequency difference as the emission bandwidth.
f) Save the plot result from spectrum analyzer screen.
g) Repeat above procedure with other different mode of operation.

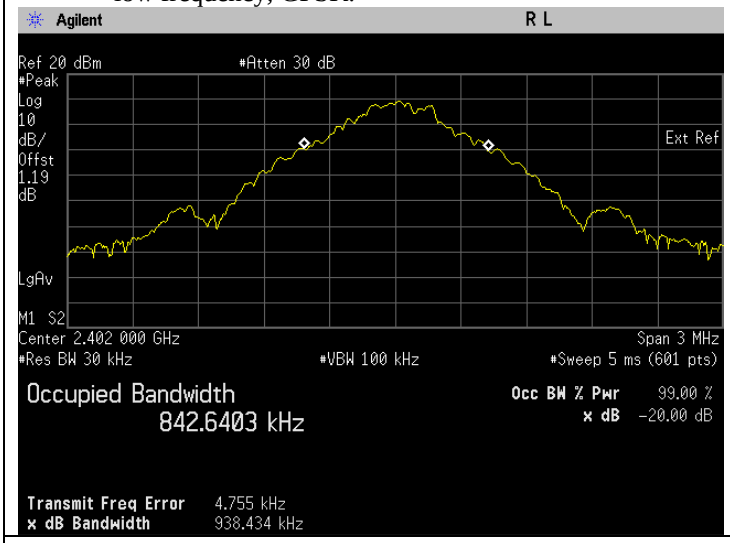
6.2.2. Test Limits:

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

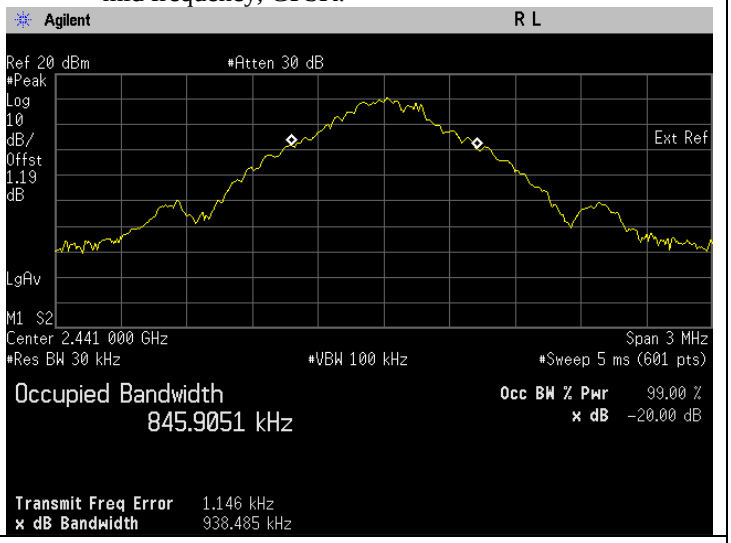
6.2.3. Test Data:

Test Conditions		Test Frequency	Results		
Modulation Type	Voltage(V)	TX (GHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Status
GFSK	7.50	2.4020	0.938	0.843	Pass
		2.4410	0.938	0.846	Pass
		2.4800	0.935	0.842	Pass
Pi/4 DQPSK	7.50	2.4020	1.279	1.176	Pass
		2.4410	1.280	1.173	Pass
		2.4800	1.278	1.177	Pass
8DPSK	7.50	2.4020	1.299	1.197	Pass
		2.4410	1.300	1.184	Pass
		2.4800	1.298	1.202	Pass

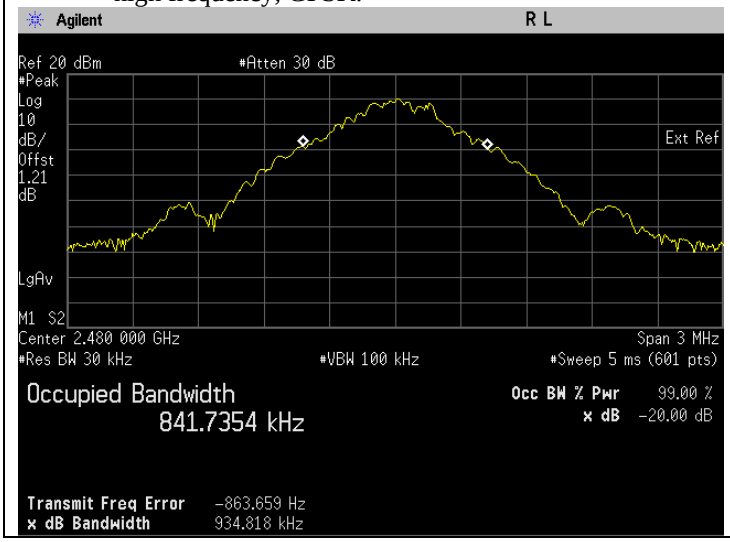
i. The 20 dB BW & occupied bandwidth test with result at low frequency, GFSK.



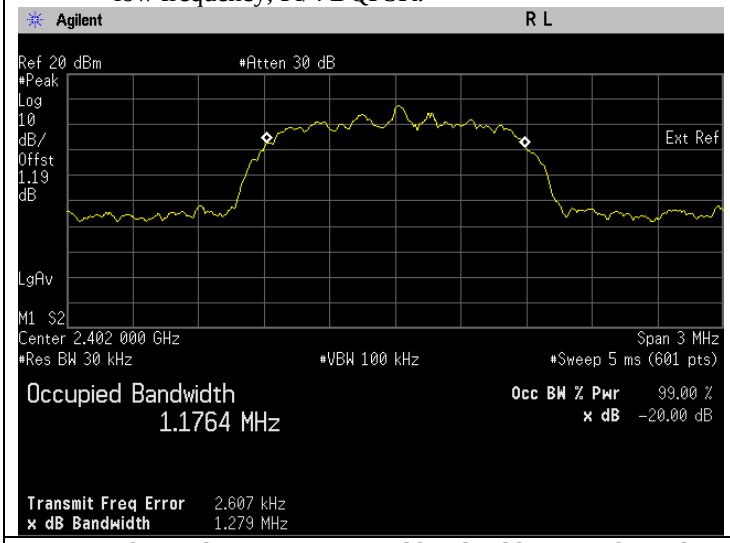
ii. The 20 dB BW & occupied bandwidth test with result at mid frequency, GFSK.



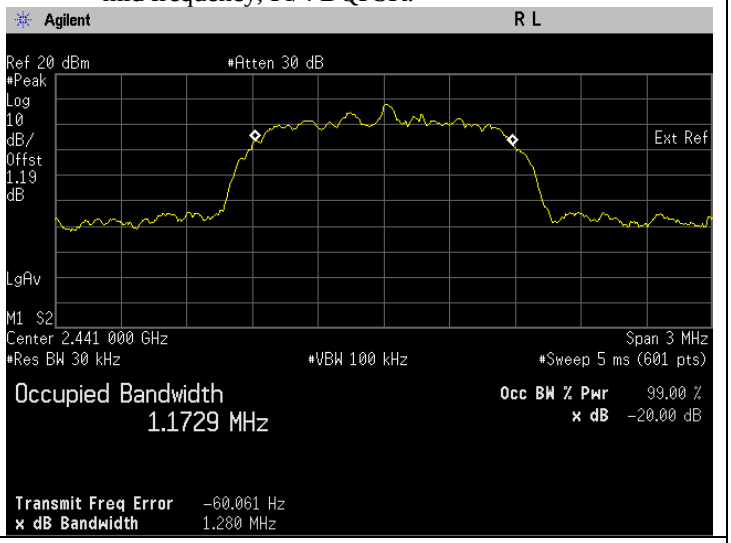
iii. The 20 dB BW & occupied bandwidth test with result at high frequency, GFSK.



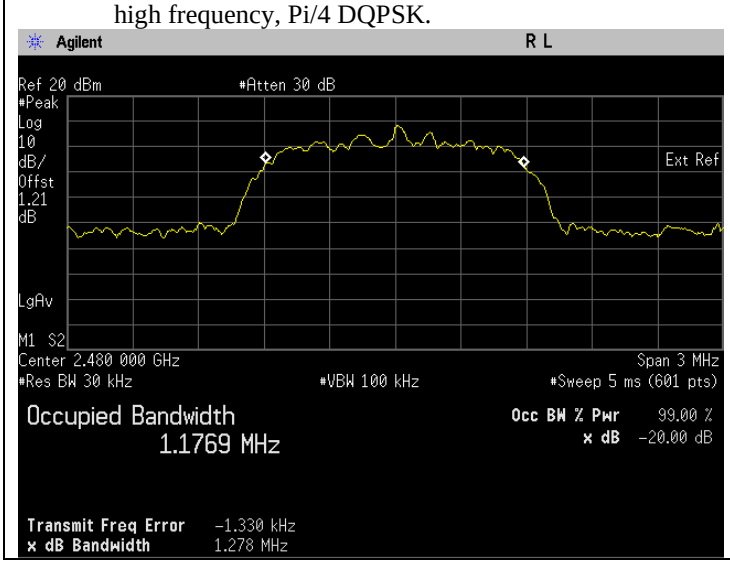
i. The 20 dB BW & occupied bandwidth test with result at low frequency, Pi/4 DQPSK.



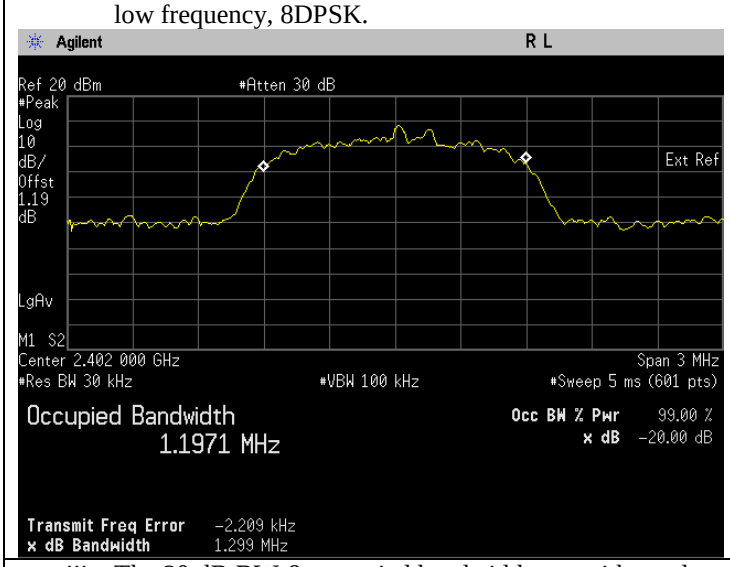
ii. The 20 dB BW & occupied bandwidth test with result at mid frequency, Pi/4 DQPSK.



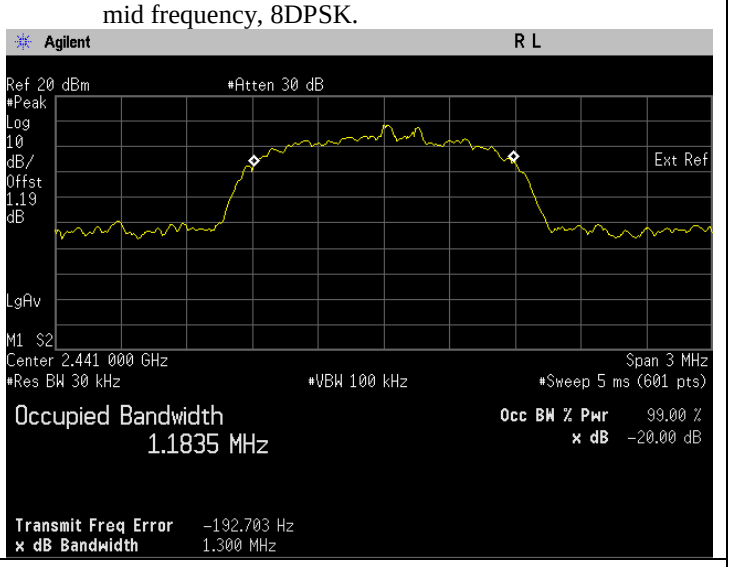
iii. The 20 dB BW & occupied bandwidth test with result at high frequency, Pi/4 DQPSK.



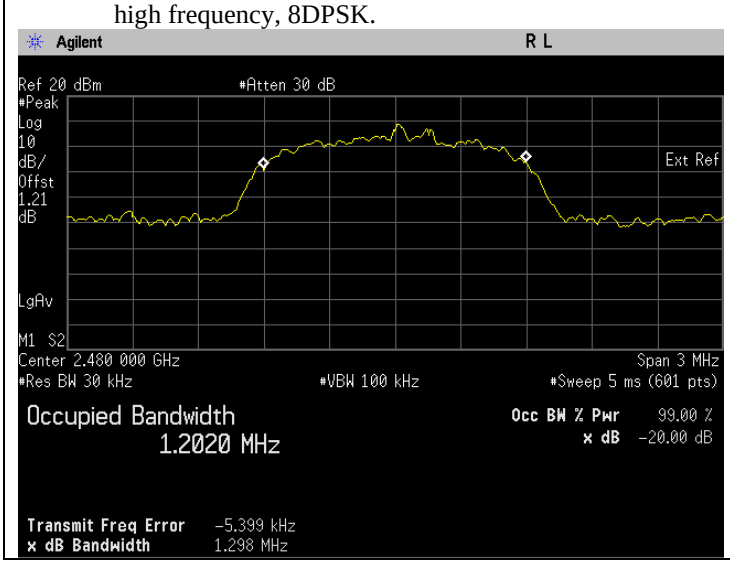
i. The 20 dB BW & occupied bandwidth test with result at low frequency, 8DPSK.



ii. The 20 dB BW & occupied bandwidth test with result at mid frequency, 8DPSK.

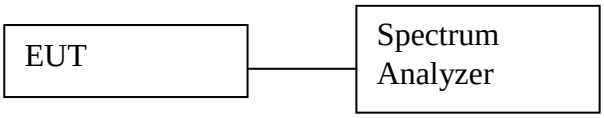


iii. The 20 dB BW & occupied bandwidth test with result at high frequency, 8DPSK.



6.3. Band-edge Conducted Spurious Emission

6.3.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and keep the EUT in hopping mode.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 100 kHz
    b. VBW = 300 kHz
    c. SPAN = 4 MHz (Low channel) or 6MHz(High Channel)
    d. Detector mode = Peak
    e. AMPLITUDE → Scale/Div = 10 dB
    f. Trace = Max hold
    g. Sweep = auto
e) Measure the captured band edge emission result and recording the plot.
f) Repeat above on EUT with hopping disable.
g) Repeat above procedure with other different test frequency.

6.3.2. Test Limits

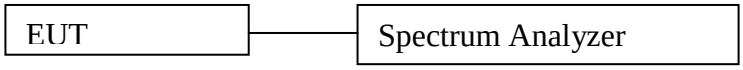
Normal Condition (25 º C)
Shall be at least 20 dB below the peak power.

6.3.3. Test Result

Not Applicable.

6.4. Dwell time on each channel

6.4.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and keep the EUT in hopping mode.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 100 kHz
    b. VBW = 300 kHz
    c. SPAN = Zero SPAN, center on hopping frequency
    d. Detector mode = Peak
    e. Trace = Max hold
    f. Sweep time = 5second
    g. Sweep = Single
e) Measure total numbers of transmissions occur in 5 second and save the plot.
f) Change the setting of spectrum analyzer :
    a. RBW = 100 kHz
    b. VBW = 300 kHz
    c. Sweep time = sufficient to capture dwell time for 1 transmission
    d. Sweep = Single
g) Measure dwell time for 1 transmission and save the plot.
h) Calculate accumulate dwell time in a given period equal to number of hopping frequencies x 0.4
i) Repeat above procedure with other different mode of operation.

6.4.2. Test Limits:

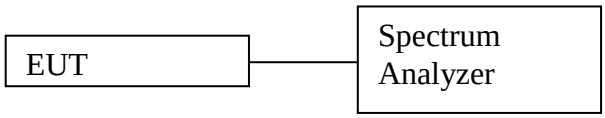
Normal Condition (25 º C)
≤ 400ms

6.4.3. Test Result

Not Applicable.

6.5. Number of hopping Frequency

6.5.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and keep the EUT in hopping mode.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 300 kHz
    b. VBW = 300 kHz
    c. Detector mode = Peak
    d. Trace = Max hold
e) Allow the trace to stabilized & save the plot result from spectrum analyzer screen.
f) Count number of channel frequency in the operating.
g) Repeat above procedure for other test frequency.

6.5.2. Test Limits:

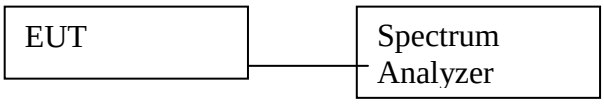
Normal Condition (25 º C)
≥ 15

6.5.3. Test Result

Not Applicable.

6.6. Channel Separation

6.6.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and keep the EUT in hopping mode.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 300 kHz
    b. VBW = 300 kHz
    c. SPAN = 3 MHz, center on test frequency
    d. AMPLITUDE → Scale/Div = 5 dB
    e. Detector mode = Peak
    f. Trace = Max hold
    g. Sweep = auto
e) Measure the frequency different of these two adjacent channels with marker delta function & record the measurement results.
f) Repeat above procedure with other different mode of operation.

6.6.2. Test Limits:

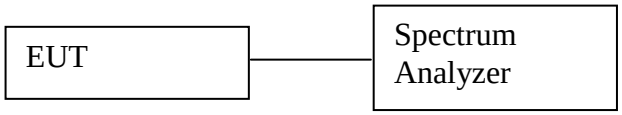
Normal Condition (25 º C)
≥ 2/3 of 20dB Bandwidth

6.6.3. Test Result

Not Applicable.

6.7. Conducted Spurious Emission

6.7.1. Test Setup



a) Check and ensure the spectrum analyzer well calibrate.
b) Turn on the EUT and set EUT to transmit maximum data rate with hopping disable.
c) Connect EUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
    a. RBW = 100 kHz
    b. VBW = 300 kHz
    c. SPAN = Cover until 10^{th} harmonic
    d. Detector mode = Peak
    e. AMPLITUDE → Scale/Div = 10 dB
    f. Trace = Max hold
    g. Sweep = auto
e) Measure the captured spurious emission result and recording the plot.
f) Repeat above procedure with other different mode of operation.

6.7.2. Test Limits:

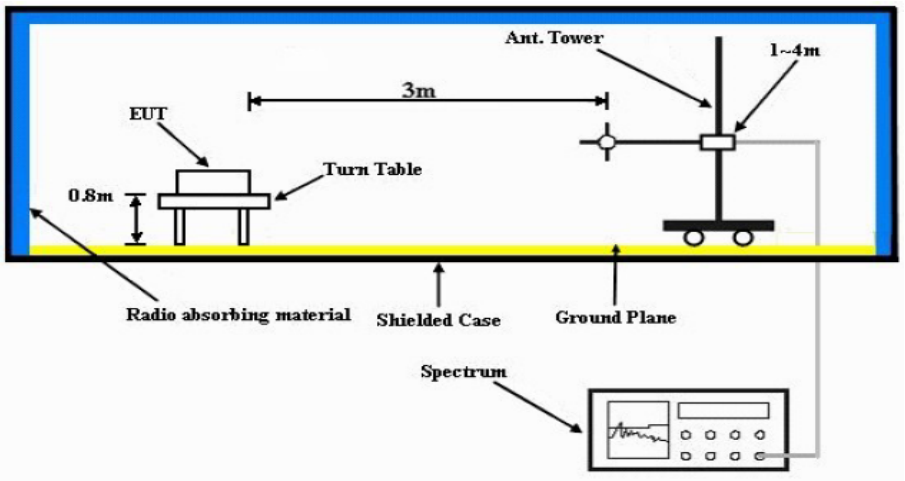
Normal Condition (25 ° C)
Shall be at least 20 dB below for peak power.

6.7.3. Test Data:

Not Applicable.

6.8. Radiated Emission within restricted Bands

6.8.1. Test Setup



a. The EUT is placed on the top of a rotating table 0.8m (<1GHz) or 1.5m (>1GHz) above the ground at a 3m semi-anechoic chamber. The table is rotated 360 degrees to determine the position of the highest radiation.
b. The EUT is set 3m away from the interference-receiving antenna, which is mounted on the top of a variable-height antenna tower.
c. The antenna is Bilog/Horn antenna depend on which frequency range uses, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT is arranged to its worst case and then the antenna is tuned to heights from 1m to 4m and the rotatable table is turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system is set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode is fall within the range of 10dB from the limit specified, the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Otherwise, the testing could be stopped and the peak values of the EUT would be reported.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1 GHz.
c. All modes of operation were investigated and the worst-case emissions are reported.

6.8.2. Test Limits:

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power.

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

NOTE:

a. The lower limit shall apply at the transition frequencies.
b. Emission level (dBuV/m) = 20 log Emission level (uV/m).
c. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

6.8.3. Test Data:

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (GFSK)

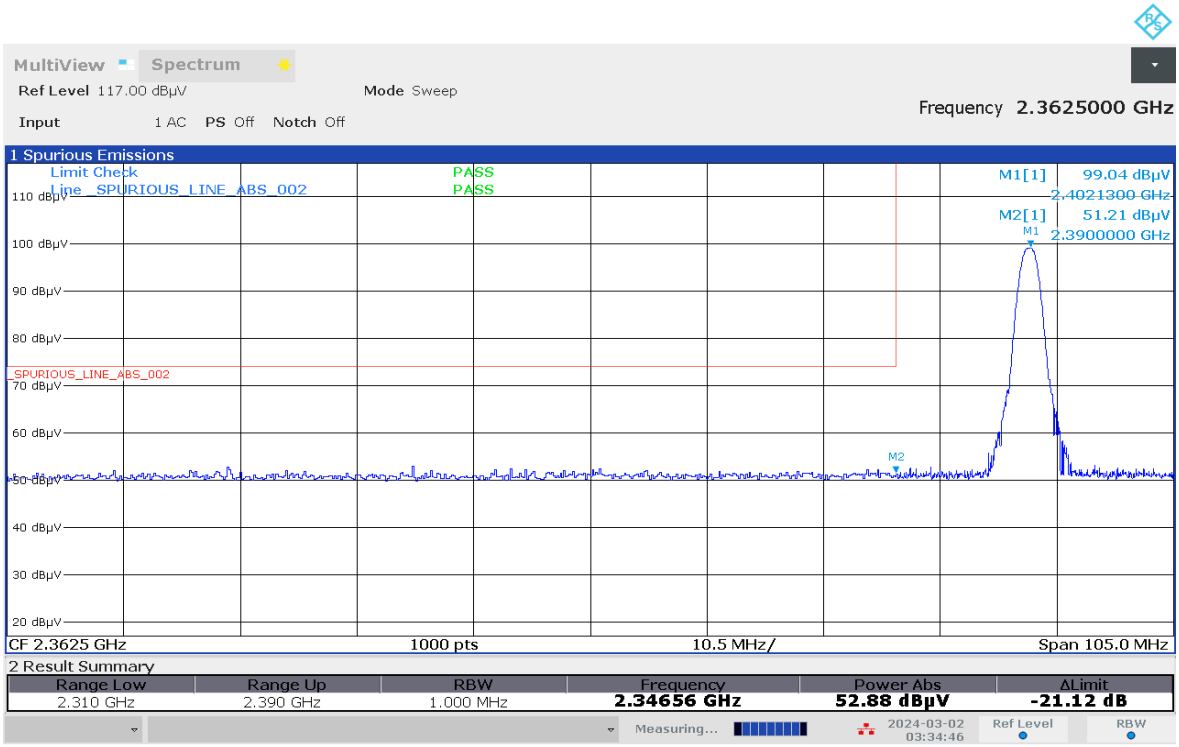
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	51.2123	40.3652	-	74.0000	54.0000	-	22.7877	13.6348	-
Horizontal Radiated Emission Result										
2390.0000	-	51.6459	40.2906	-	74.0000	54.0000	-	22.3541	13.7094	-

Remarks: Pass Result	Marginal Result	Fail Result

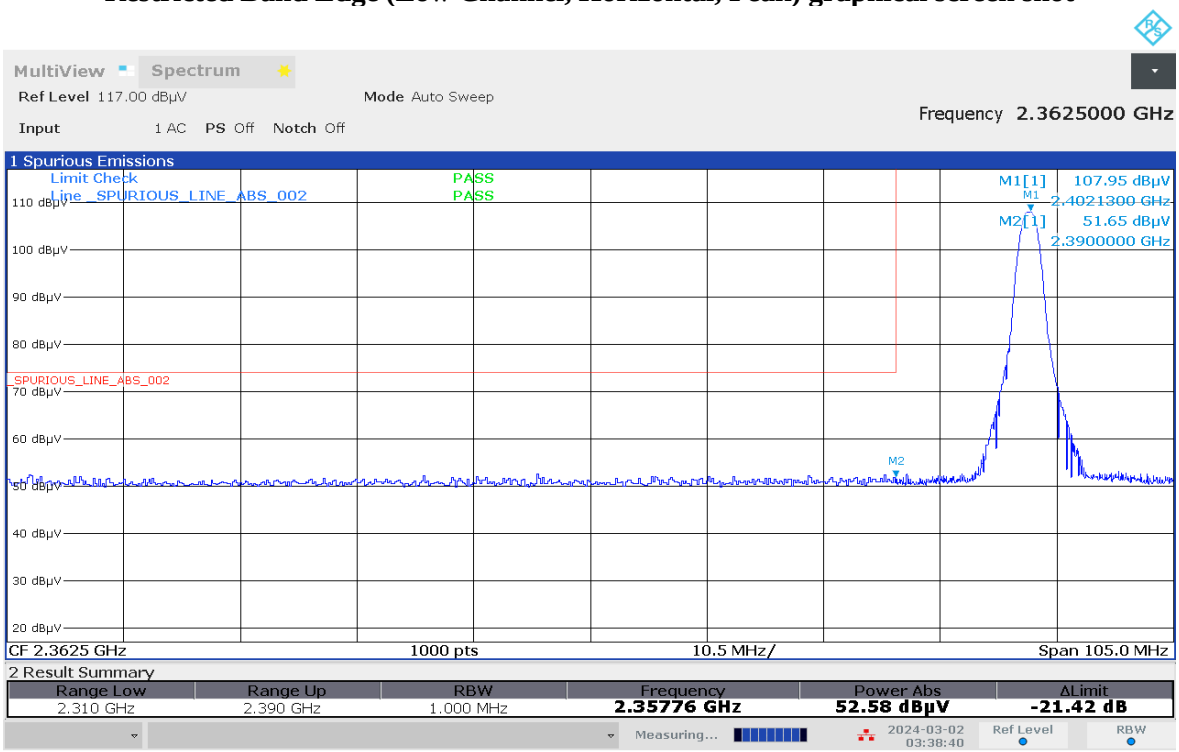
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



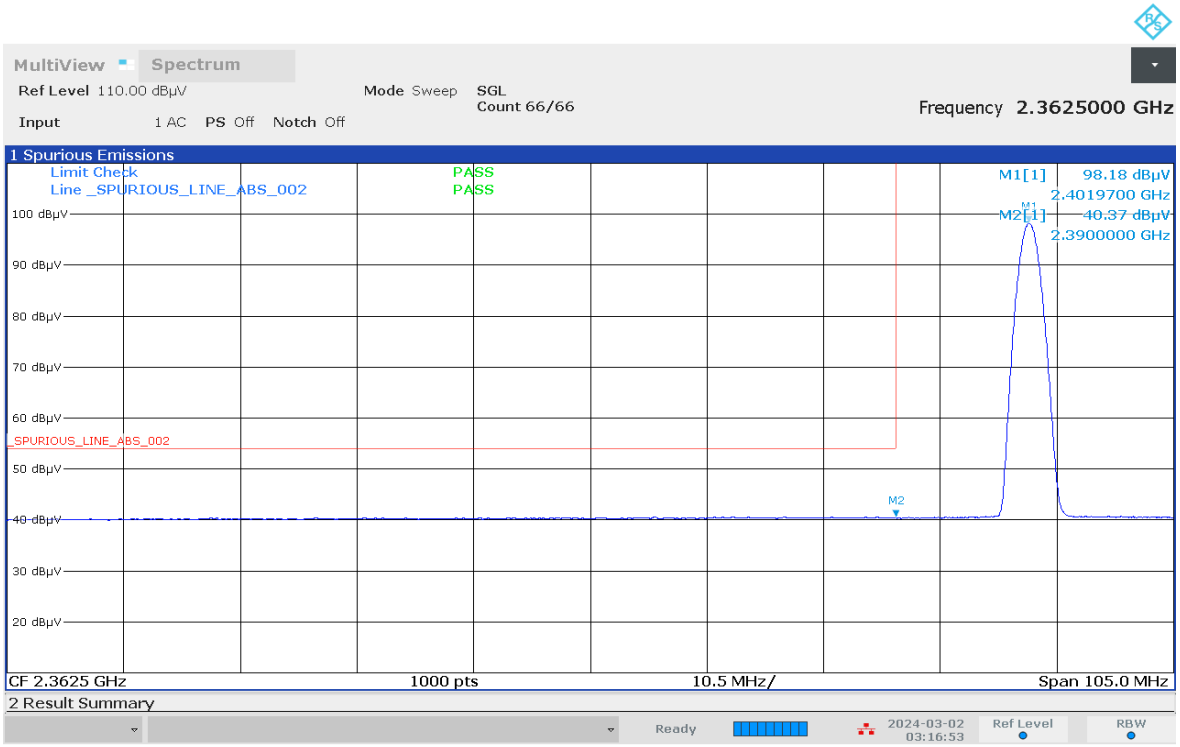
03:34:47 AM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



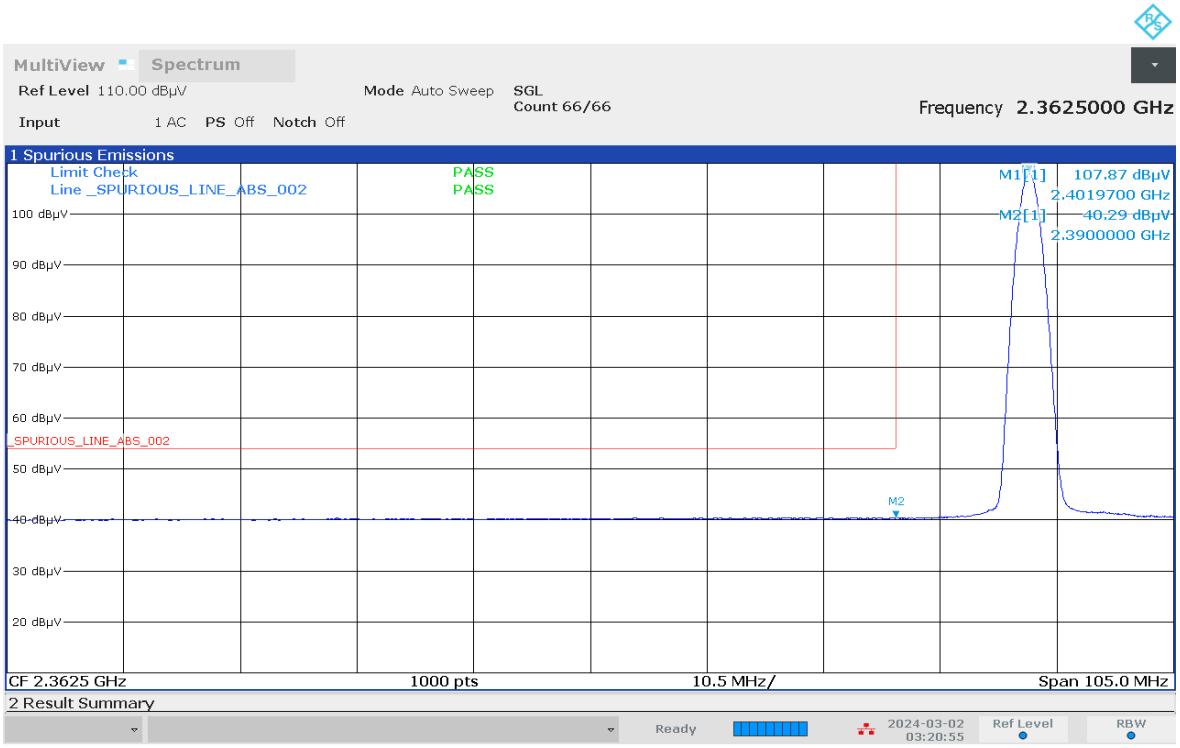
03:38:40 AM 03/02/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



03:16:53 AM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



03:20:55 AM 03/02/2024

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (GFSK)

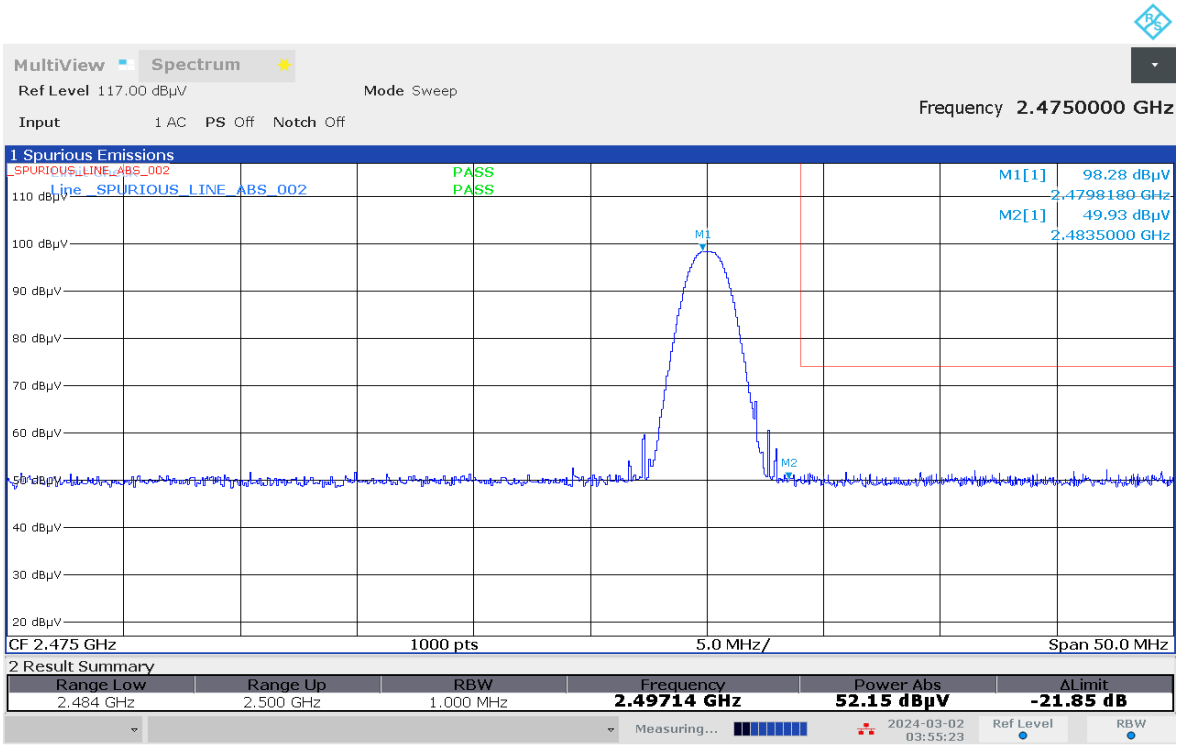
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	48.9406	40.5584	-	74.0000	54.0000	-	25.0594	13.4416	-
Horizontal Radiated Emission Result										
2483.5000	-	49.4432	41.0797	-	74.0000	54.0000	-	24.5568	12.9203	-

Remarks: Pass Result	Marginal Result	Fail Result

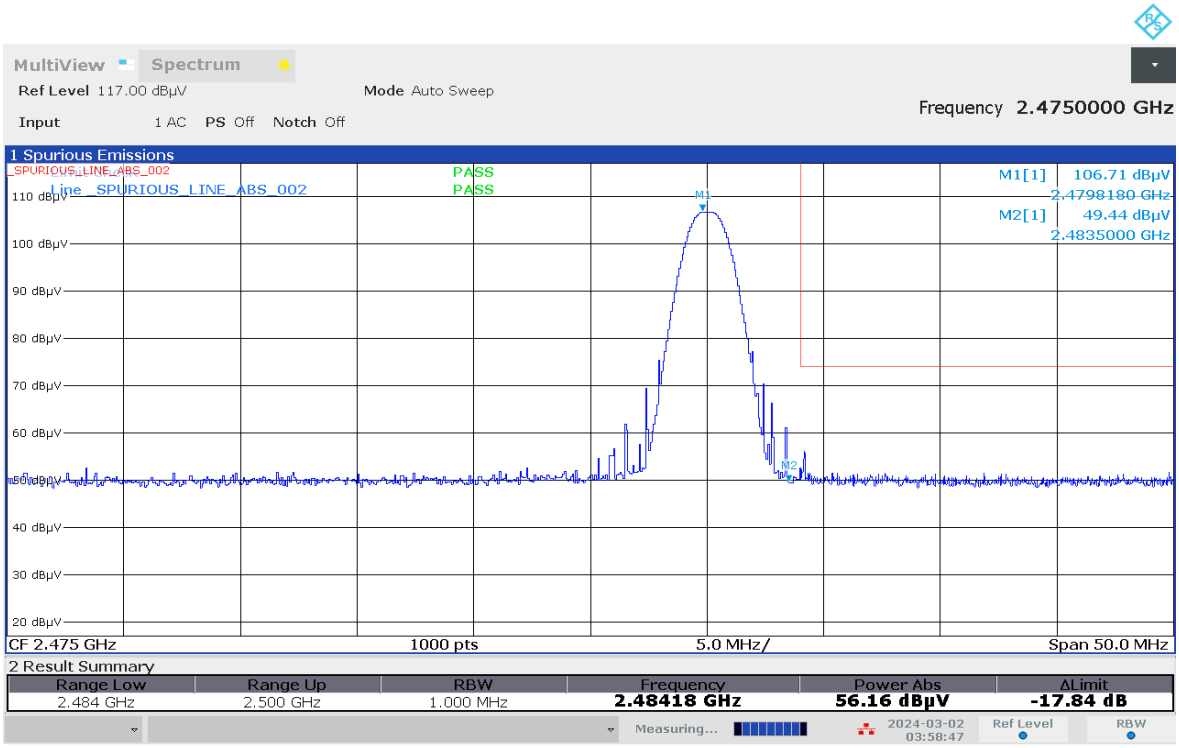
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



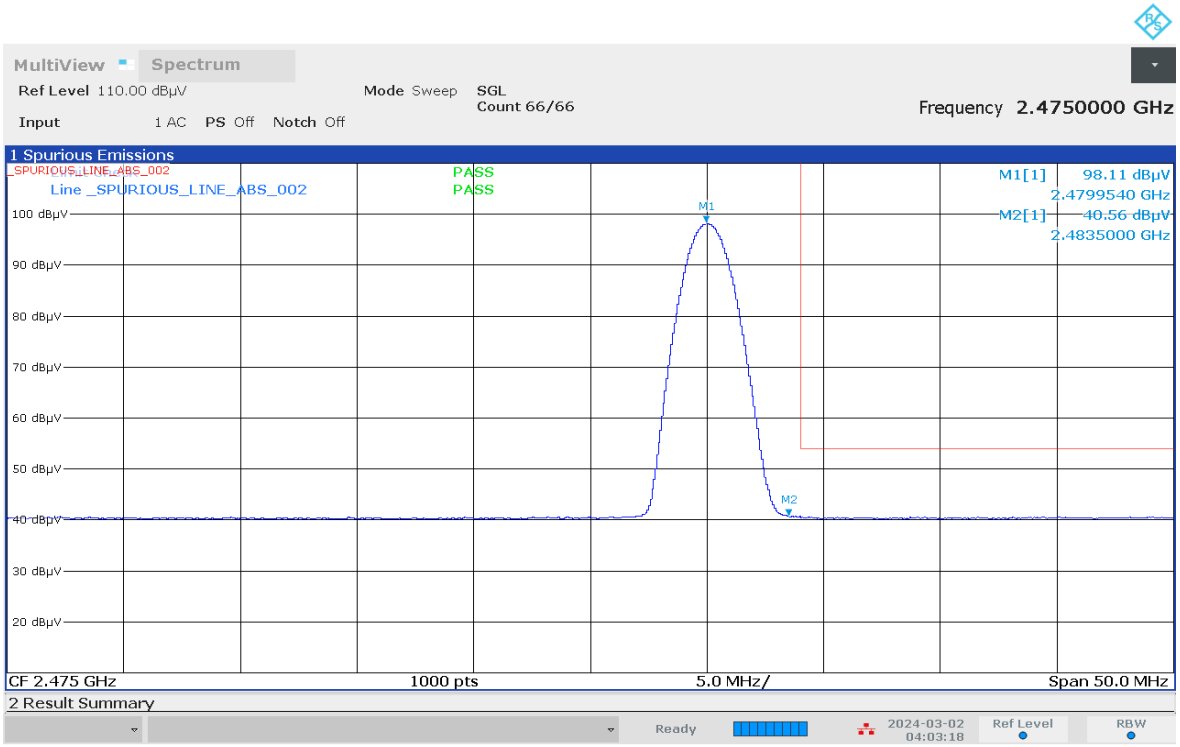
03:55:23 AM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



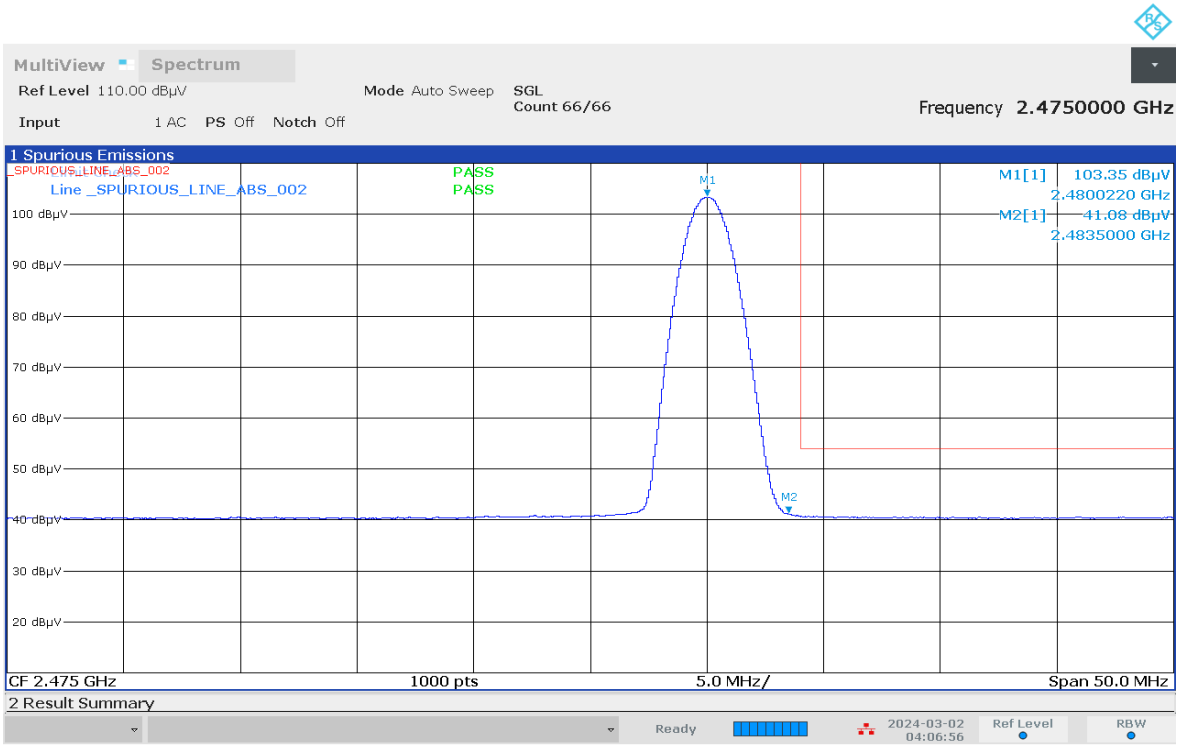
03:58:48 AM 03/02/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



04:03:19 AM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



04:06:57 AM 03/02/2024

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (Pi/4 DQPSK)

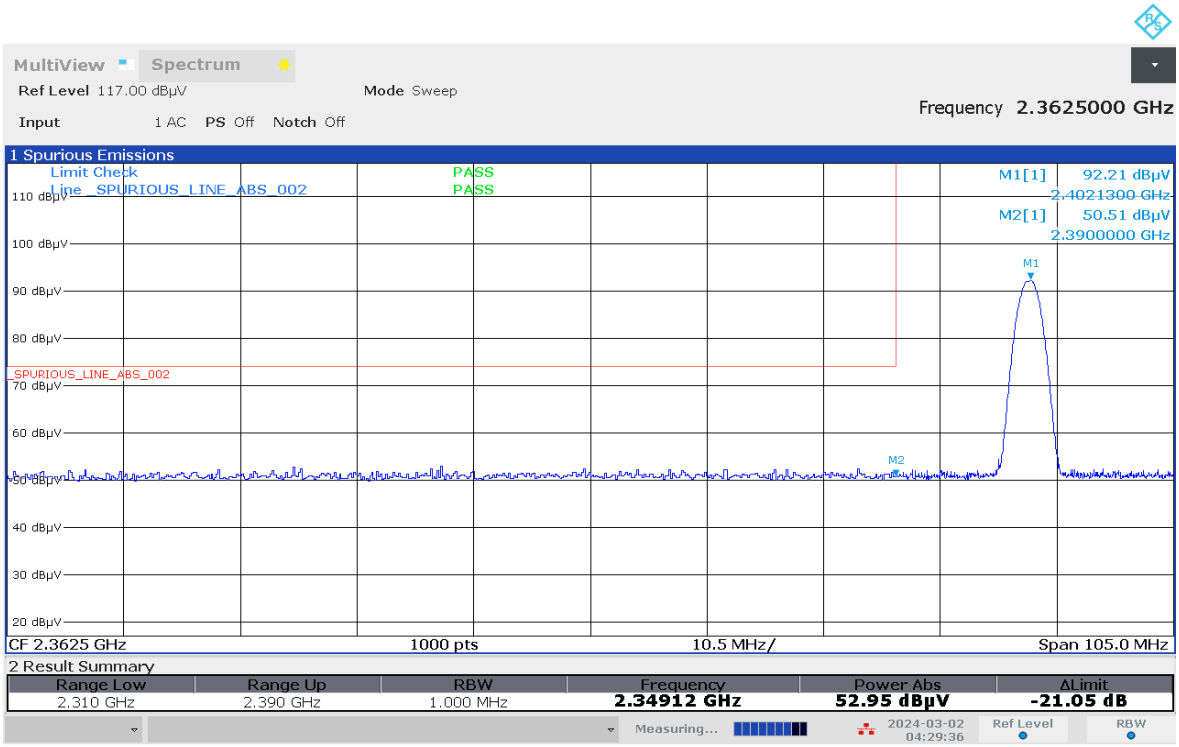
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	50.5102	40.2906	-	74.0000	54.0000	-	23.4898	13.7094	-
Horizontal Radiated Emission Result										
2390.0000	-	50.4153	40.2154	-	74.0000	54.0000	-	23.5847	13.7846	-

Remarks: Pass Result	Marginal Result	Fail Result

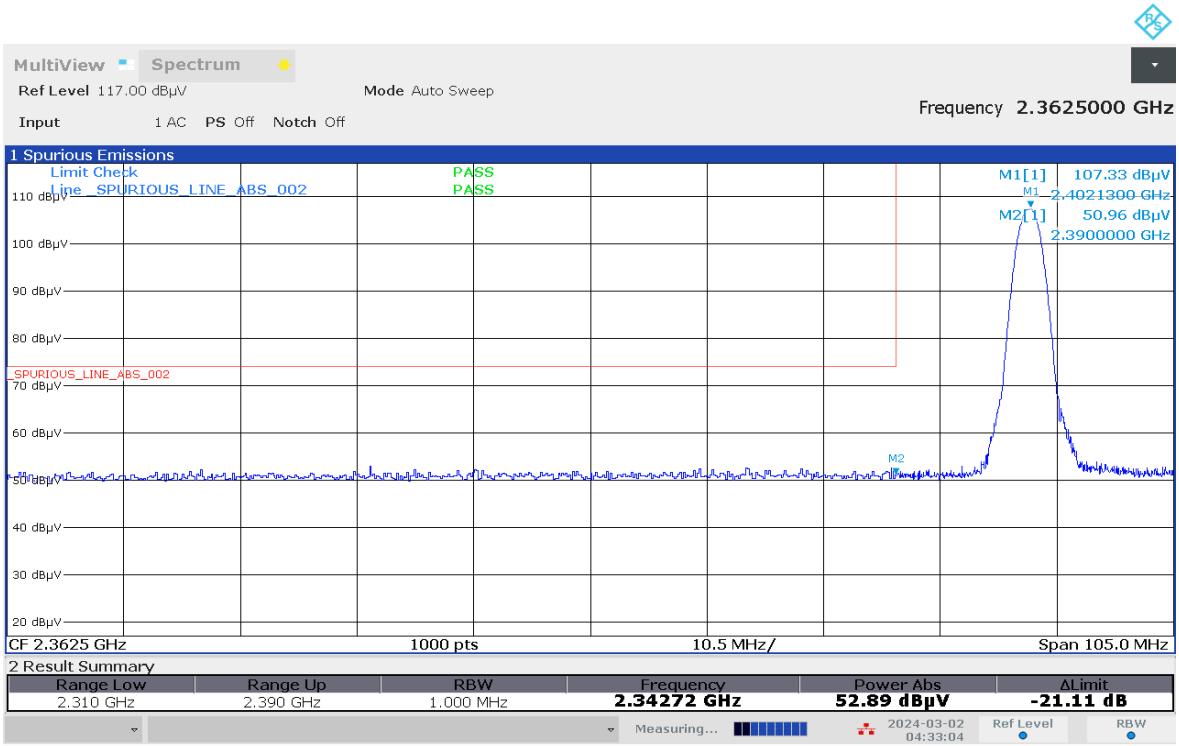
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



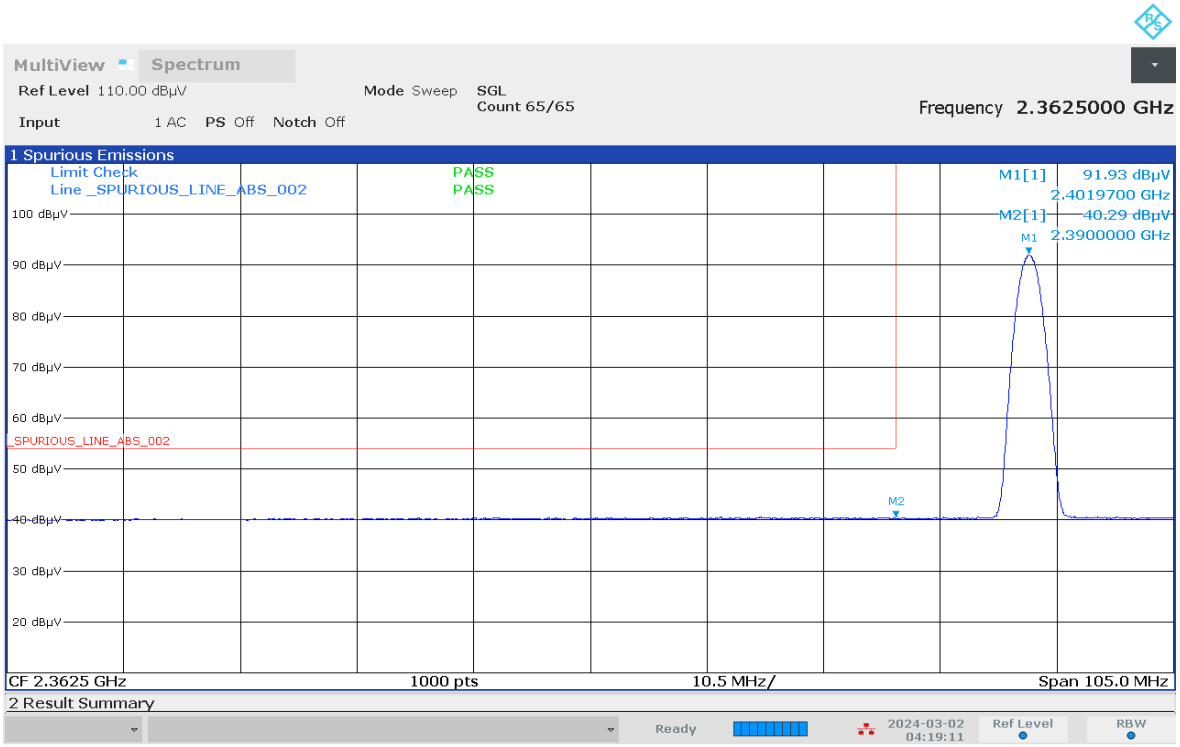
04:29:37 AM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



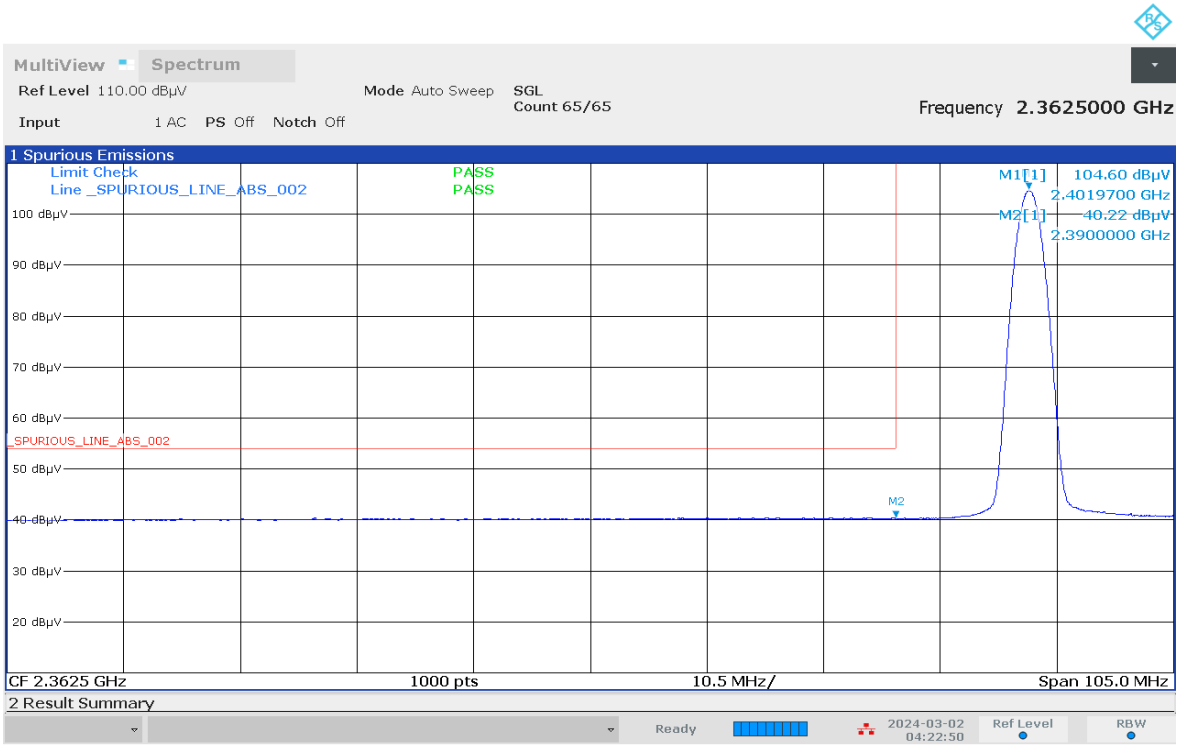
04:33:04 AM 03/02/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



04:19:12 AM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



04:22:51 AM 03/02/2024

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (Pi/4 DQPSK)

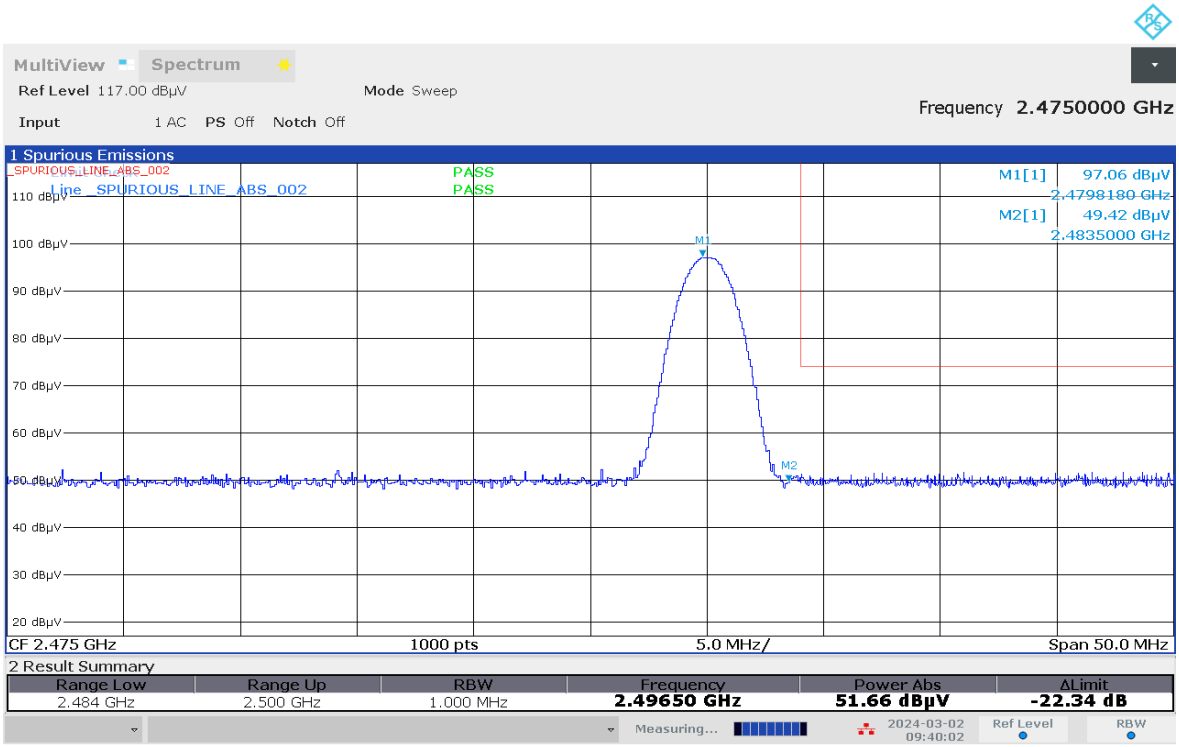
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	49.3942	40.5882	-	74.0000	54.0000	-	24.6058	13.4118	-
Horizontal Radiated Emission Result										
2483.5000	-	52.1584	42.6446	-	74.0000	54.0000	-	21.8416	11.3554	-

Remarks: Pass Result	Marginal Result	Fail Result

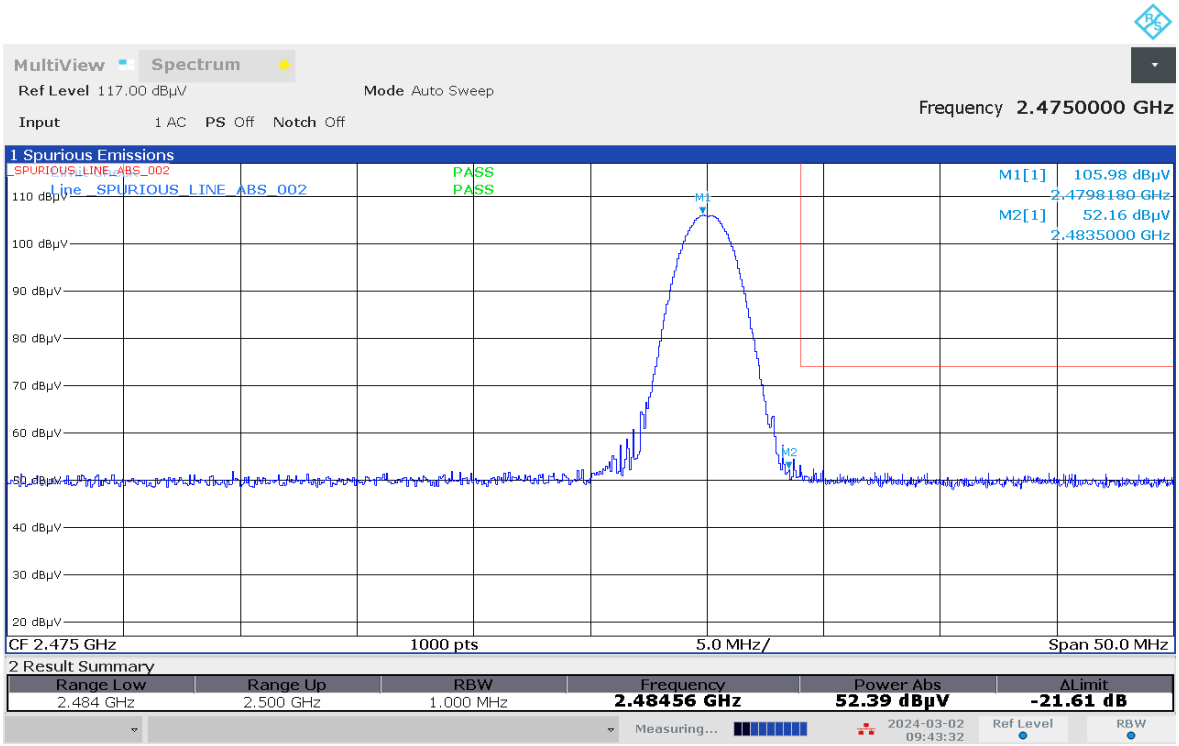
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



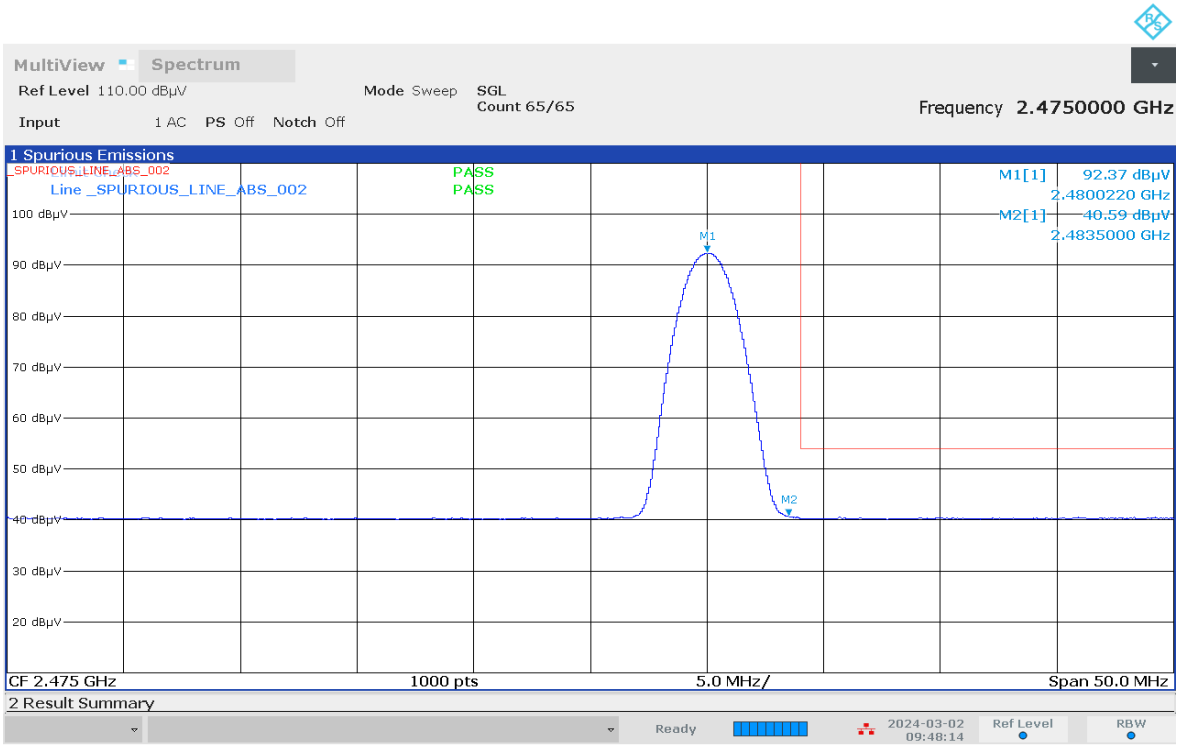
09:40:03 AM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



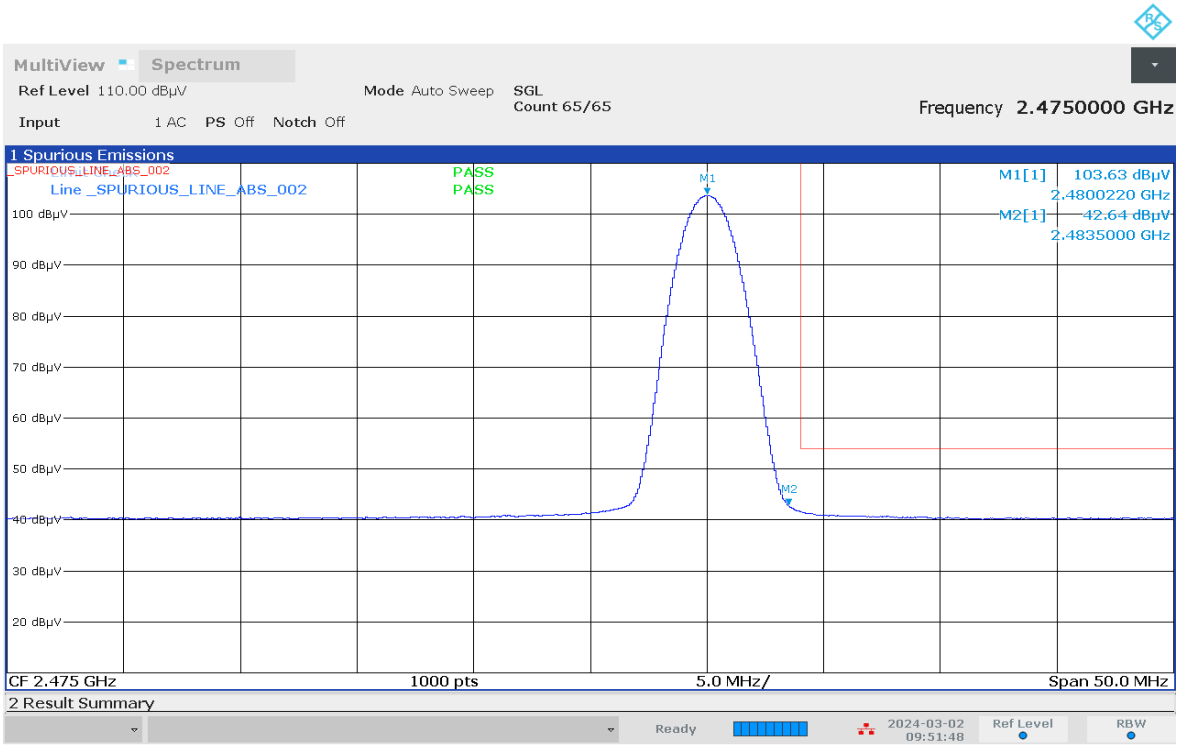
09:43:32 AM 03/02/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



09:48:14 AM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



09:51:49 AM 03/02/2024

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (8DPSK)

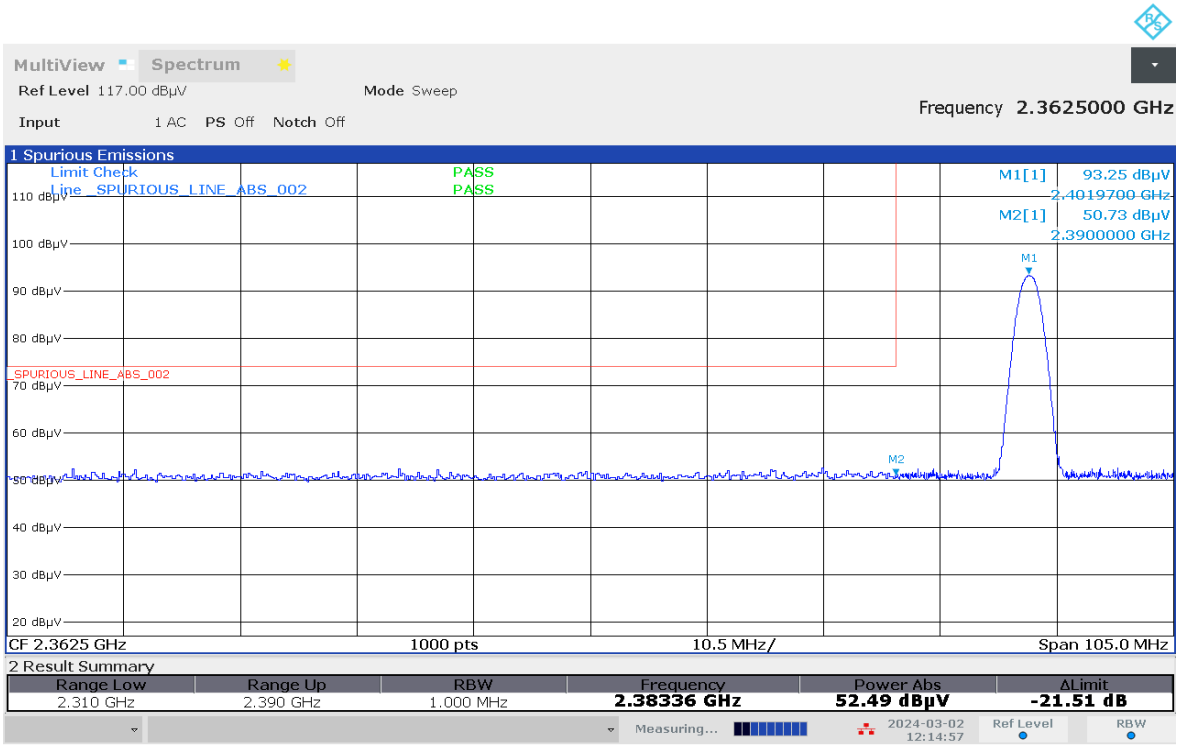
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	50.7256	40.1014	-	74.0000	54.0000	-	23.2744	13.8986	-
Horizontal Radiated Emission Result										
2390.0000	-	50.6558	40.1014	-	74.0000	54.0000	-	23.3442	13.8986	-

Remarks: Pass Result	Marginal Result	Fail Result

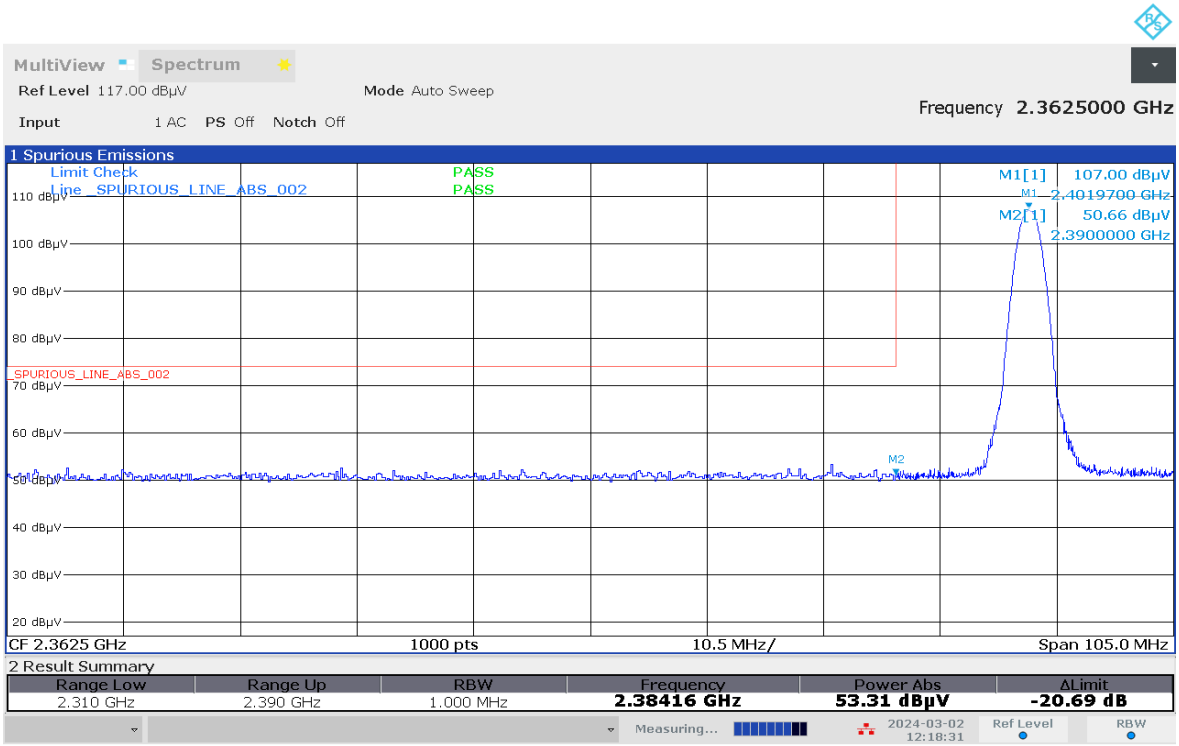
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



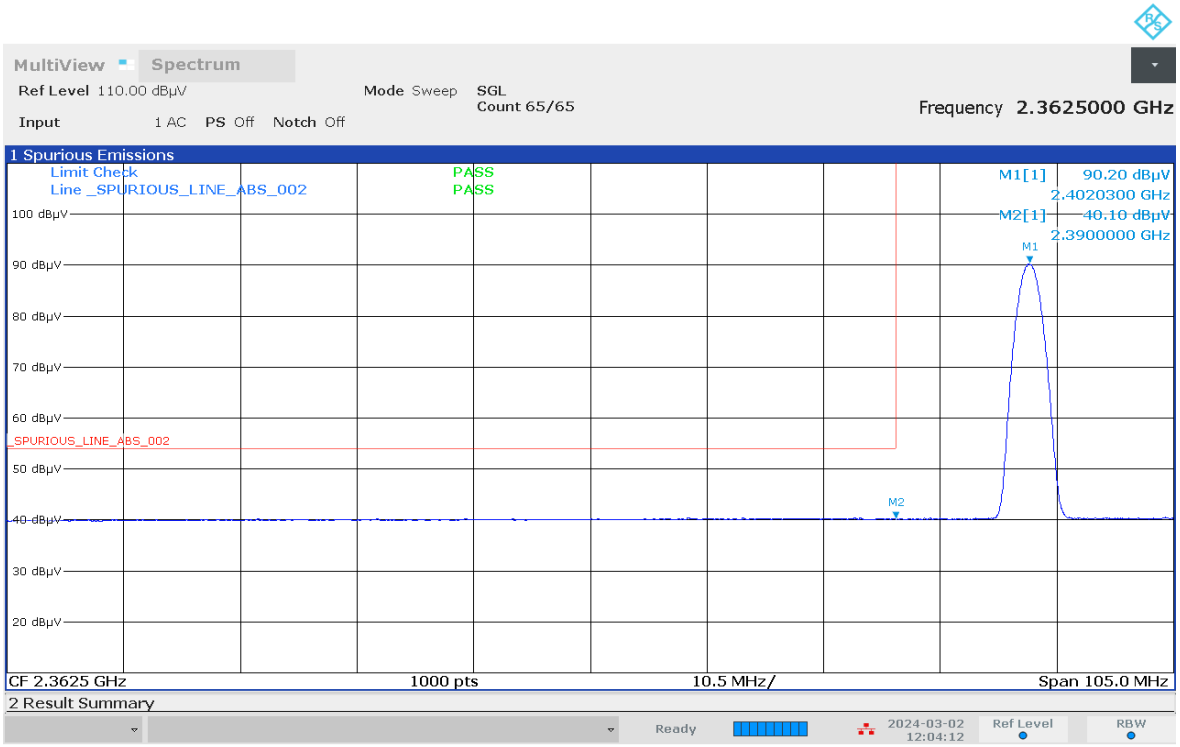
12:14:58 PM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



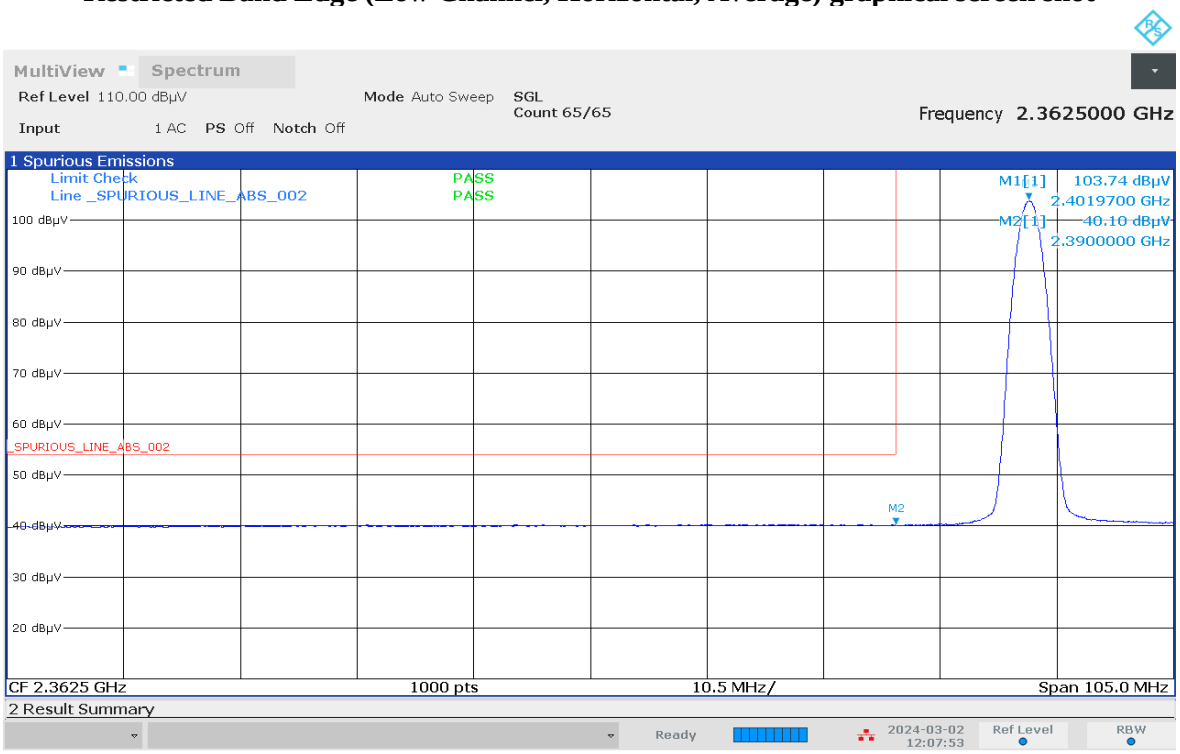
12:18:31 PM 03/02/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



12:04:12 PM 03/02/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



12:07:54 PM 03/02/2024

Test: Bluetooth SAC Restricted Band Edge
Model Number: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (8DPSK)

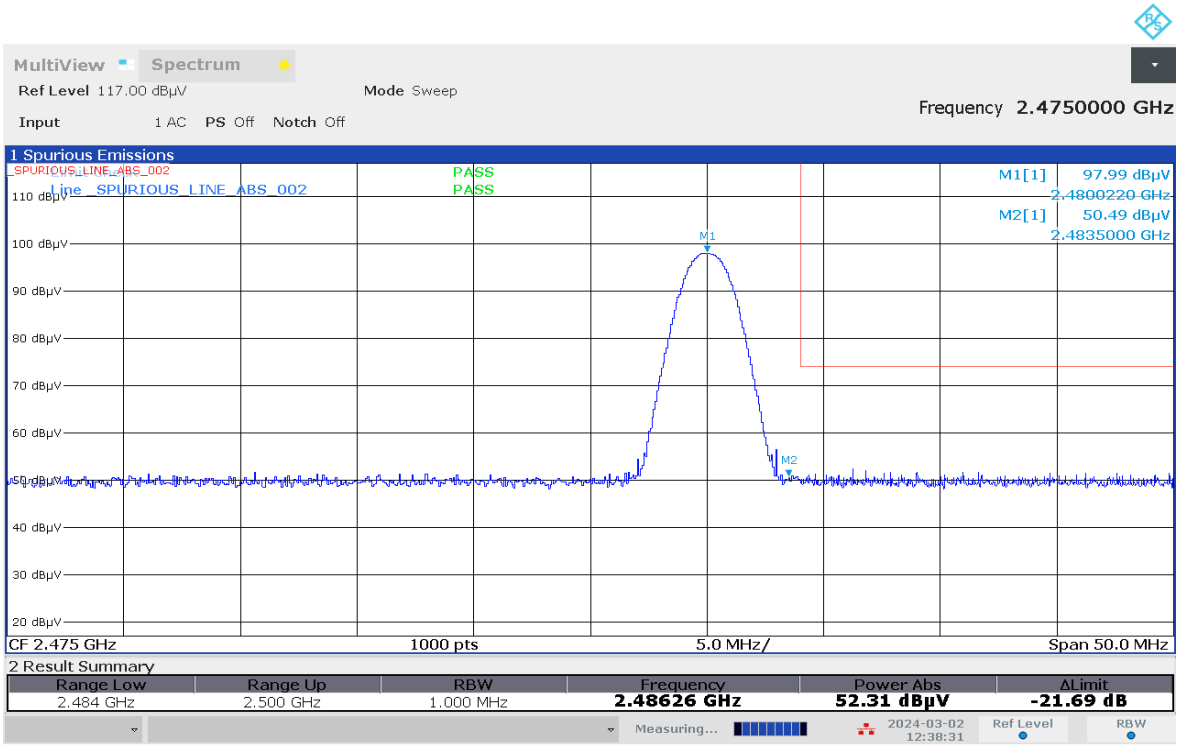
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	50.4870	40.9950	-	74.0000	54.0000	-	23.5130	13.0050	-
Horizontal Radiated Emission Result										
2483.5000	-	52.3455	42.9672	-	74.0000	54.0000	-	21.6545	11.0328	-

Remarks: Pass Result	Marginal Result	Fail Result

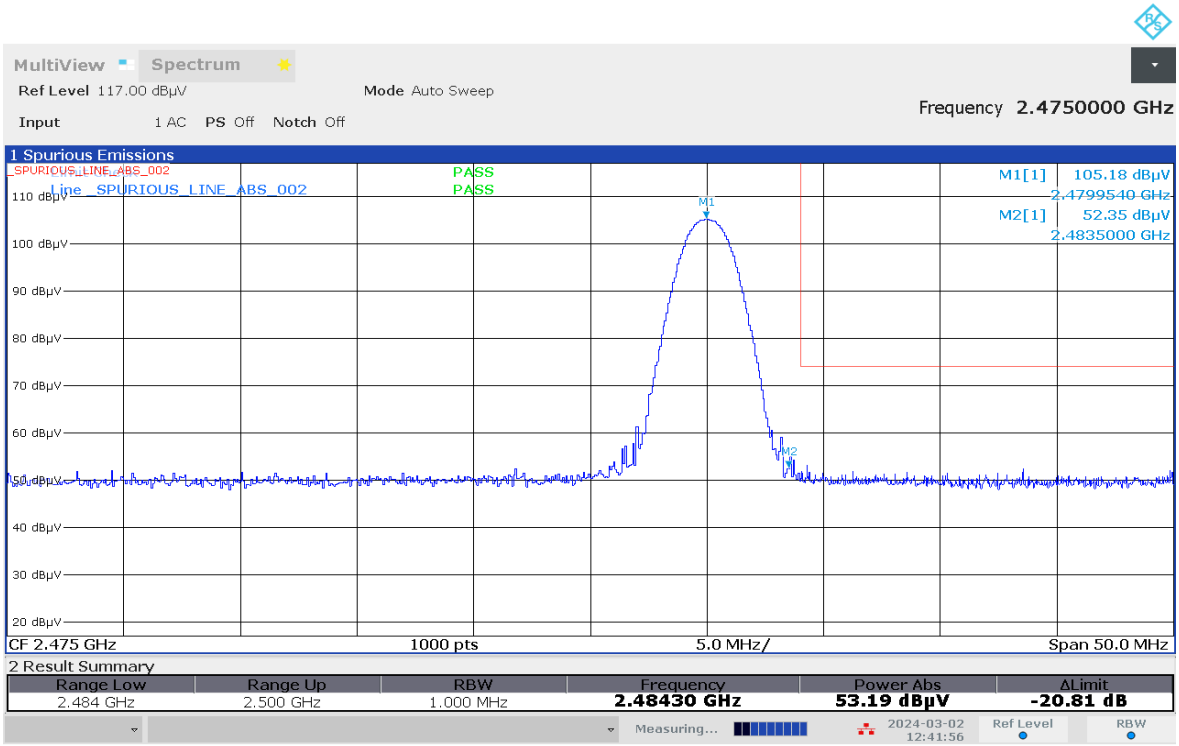
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 2 Mar, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



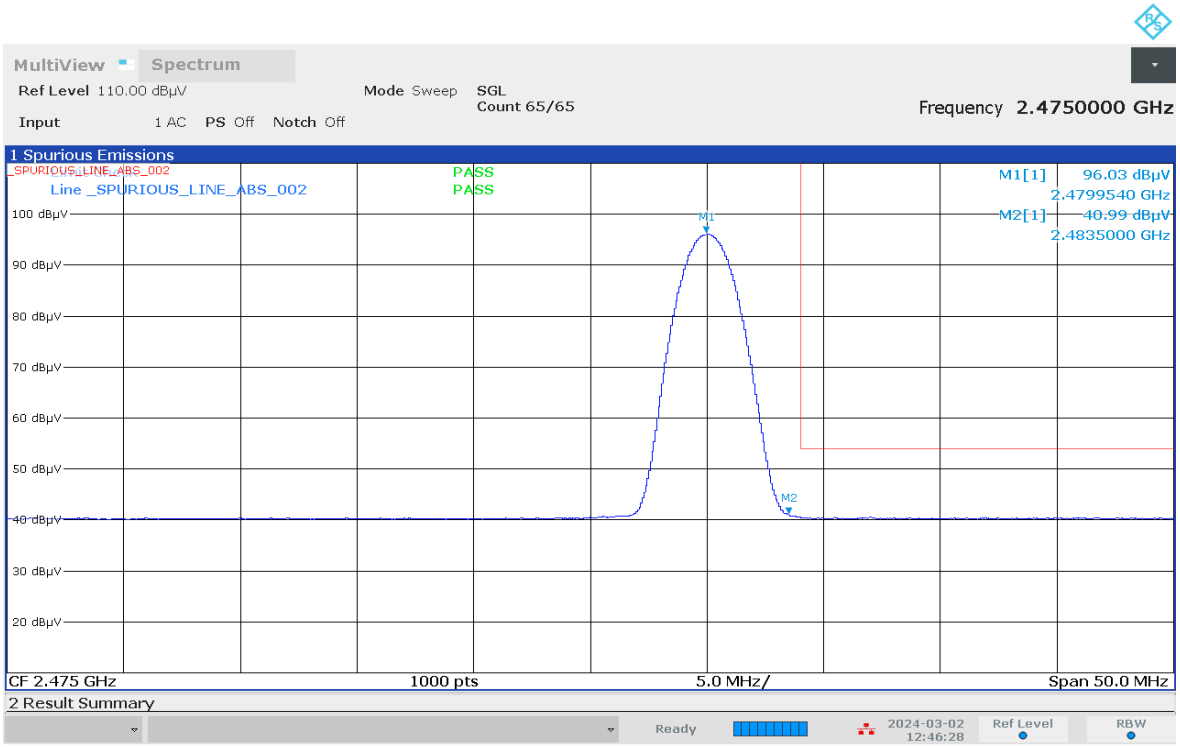
12:38:32 PM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



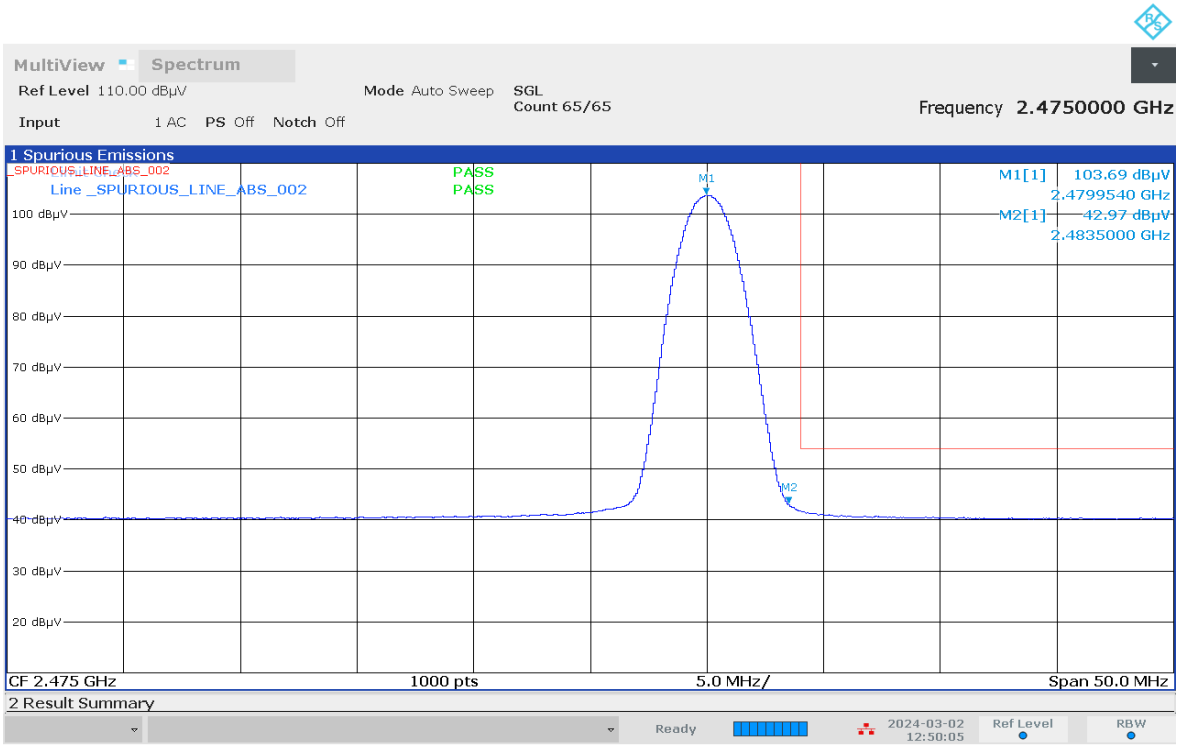
12:41:57 PM 03/02/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



12:46:28 PM 03/02/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



12:50:05 PM 03/02/2024

Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (GFSK)

Radiated Emission (Low Channel) tabular data

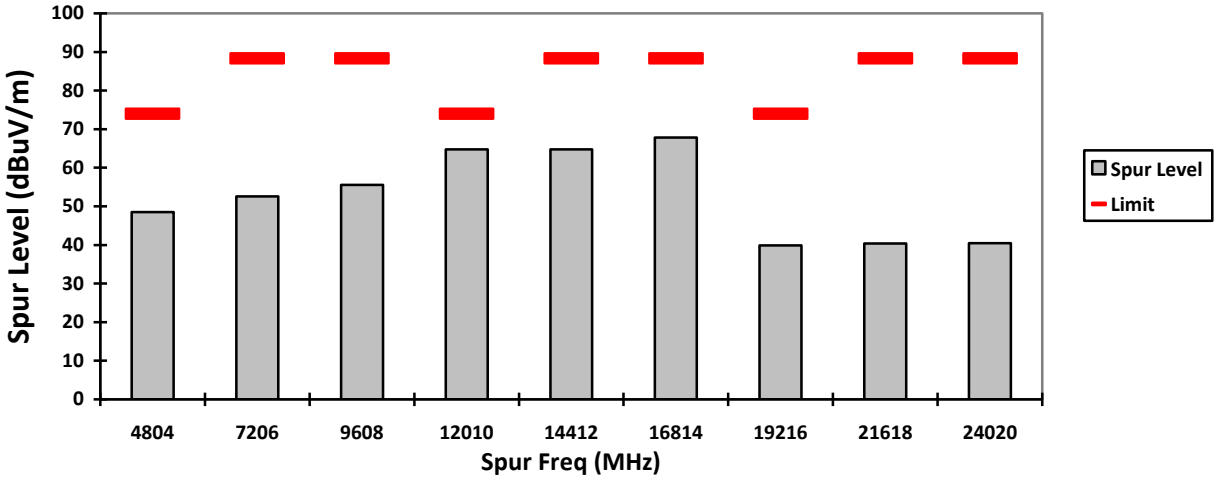
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4804	-	48.5407**	-	-	74.0000	-	-	25.4593	-	-
7206	-	52.6054**	-	-	88.3012	-	-	35.6958	-	108.3012
9608	-	55.5671**	-	-	88.3012	-	-	32.7341	-	108.3012
12010	-	64.7864**	42.2864**	-	74.0000	54.0000	-	9.2136	11.7136	-
14412	-	64.7835**	-	-	88.3012	-	-	23.5177	-	108.3012
16814	-	67.8472**	-	-	88.3012	-	-	20.4540	-	108.3012
19216	-	39.9006**	-	-	74.0000	-	-	34.0994	-	-
21618	-	40.3523**	-	-	88.3012	-	-	47.9489	-	108.3012
24020	-	40.4711**	-	-	88.3012	-	-	47.8301	-	108.3012
Horizontal Radiated Emission Result										
4804	-	47.2169**	-	-	74.0000	-	-	26.7831	-	-
7206	-	52.8451**	-	-	88.3012	-	-	35.4561	-	108.3012
9608	-	55.7019**	-	-	88.3012	-	-	32.5993	-	108.3012
12010	-	64.9090**	42.4090**	-	74.0000	54.0000	-	9.0910	11.5910	-
14412	-	64.0300**	-	-	88.3012	-	-	24.2712	-	108.3012
16814	-	67.7278**	-	-	88.3012	-	-	20.5734	-	108.3012
19216	-	39.9395**	-	-	74.0000	-	-	34.0605	-	-
21618	-	41.2203**	-	-	88.3012	-	-	47.0809	-	108.3012
24020	-	40.7784**	-	-	88.3012	-	-	47.5228	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

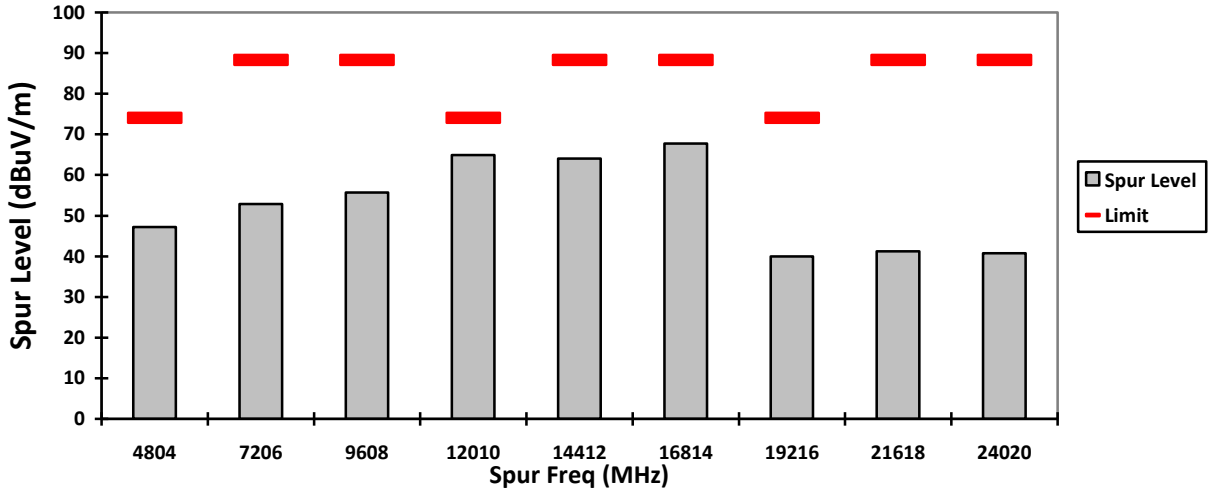
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

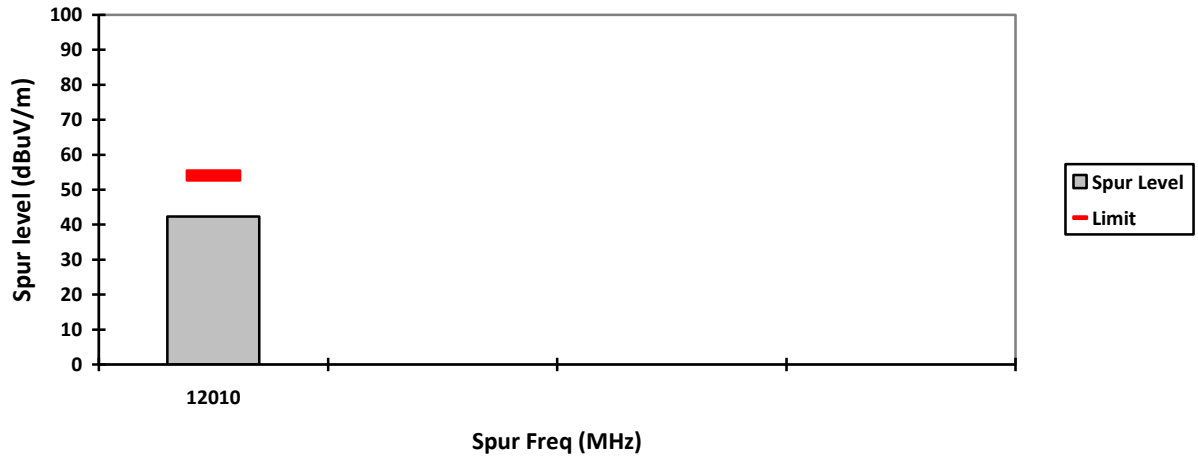
VERTICAL, PK



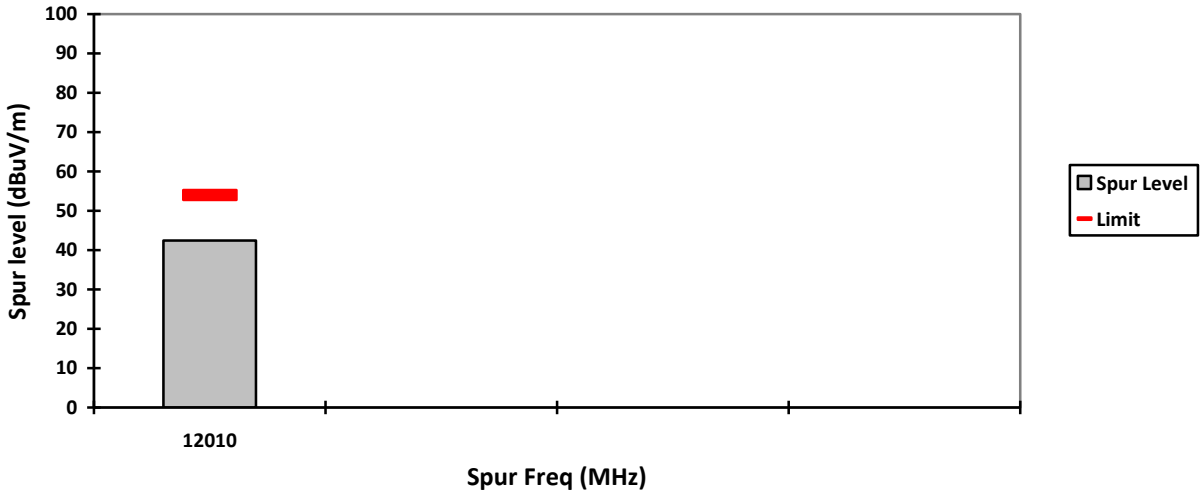
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Mid Test Frequency: 2441.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (GFSK)

Radiated Emission (Mid Channel) tabular data

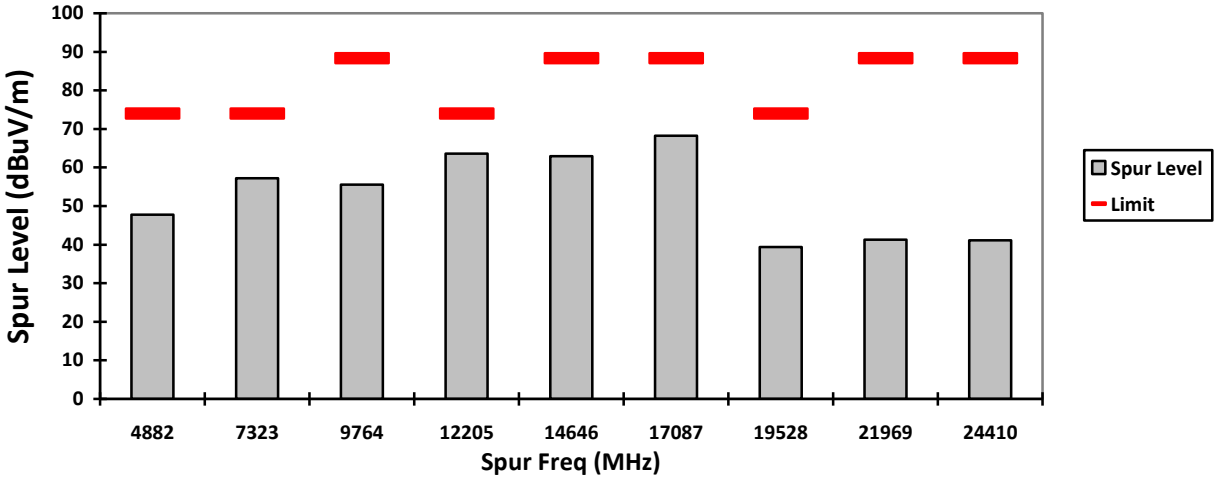
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4882	-	47.7894**	-	-	74.0000	-	-	26.2106	-	-
7323	-	57.2035**	34.7035**	-	74.0000	54.0000	-	16.7965	19.2965	-
9764	-	55.5435**	-	-	88.3012	-	-	32.7577	-	108.3012
12205	-	63.5650**	41.0650**	-	74.0000	54.0000	-	10.4350	12.9350	-
14646	-	62.9323**	-	-	88.3012	-	-	25.3689	-	108.3012
17087	-	68.2667**	-	-	88.3012	-	-	20.0345	-	108.3012
19528	-	39.3899**	-	-	74.0000	-	-	34.6101	-	-
21969	-	41.2860**	-	-	88.3012	-	-	47.0152	-	108.3012
24410	-	41.1513**	-	-	88.3012	-	-	47.1499	-	108.3012
Horizontal Radiated Emission Result										
4882	-	47.5848**	-	-	74.0000	-	-	26.4152	-	-
7323	-	57.0113**	34.5113**	-	74.0000	54.0000	-	16.9887	19.4887	-
9764	-	55.7761**	-	-	88.3012	-	-	32.5251	-	108.3012
12205	-	63.6386**	41.1386**	-	74.0000	54.0000	-	10.3614	12.8614	-
14646	-	62.6937**	-	-	88.3012	-	-	25.6075	-	108.3012
17087	-	67.6146**	-	-	88.3012	-	-	20.6866	-	108.3012
19528	-	39.7260**	-	-	74.0000	-	-	34.2740	-	-
21969	-	40.9851**	-	-	88.3012	-	-	47.3161	-	108.3012
24410	-	39.3108**	-	-	88.3012	-	-	48.9904	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

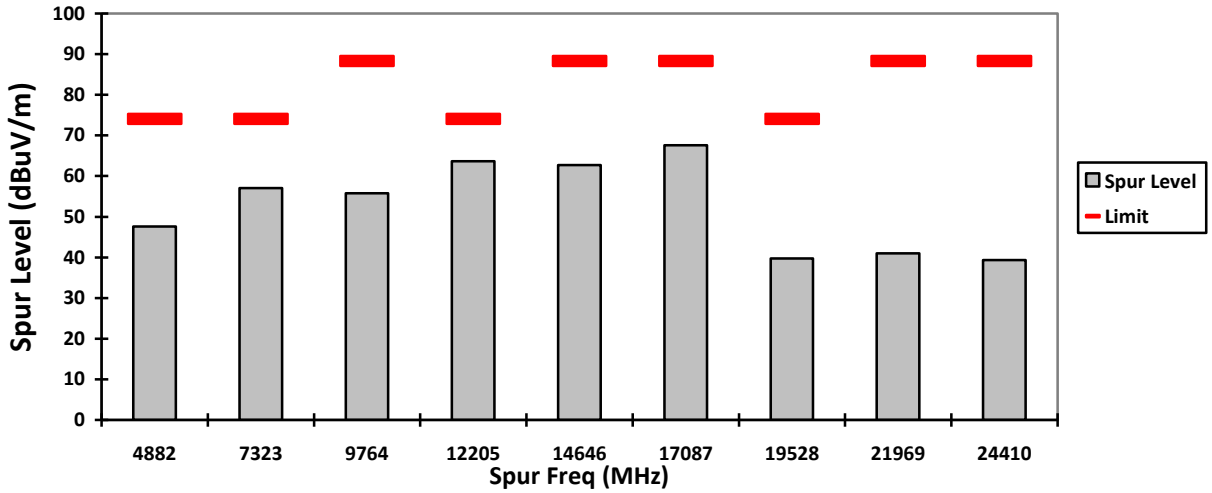
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

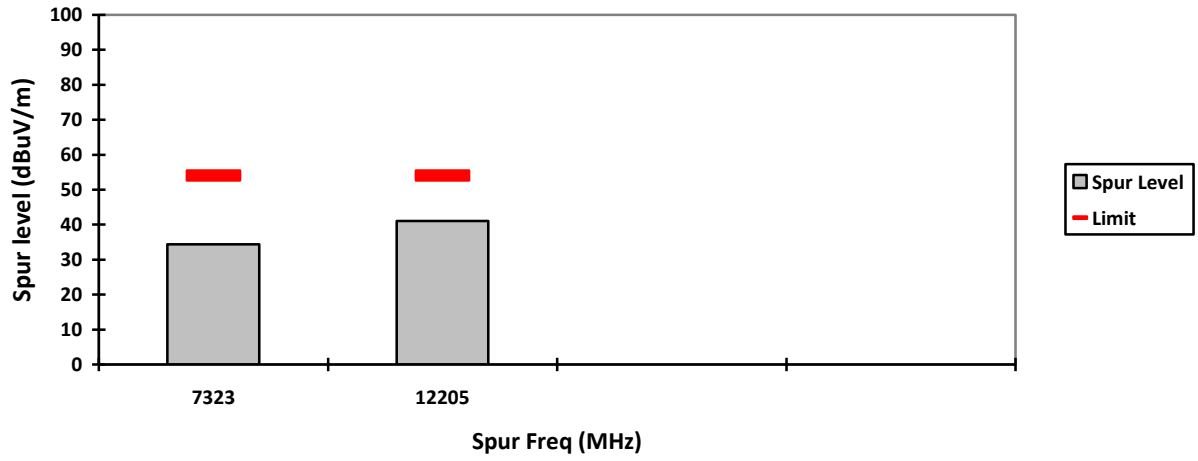
VERTICAL, PK



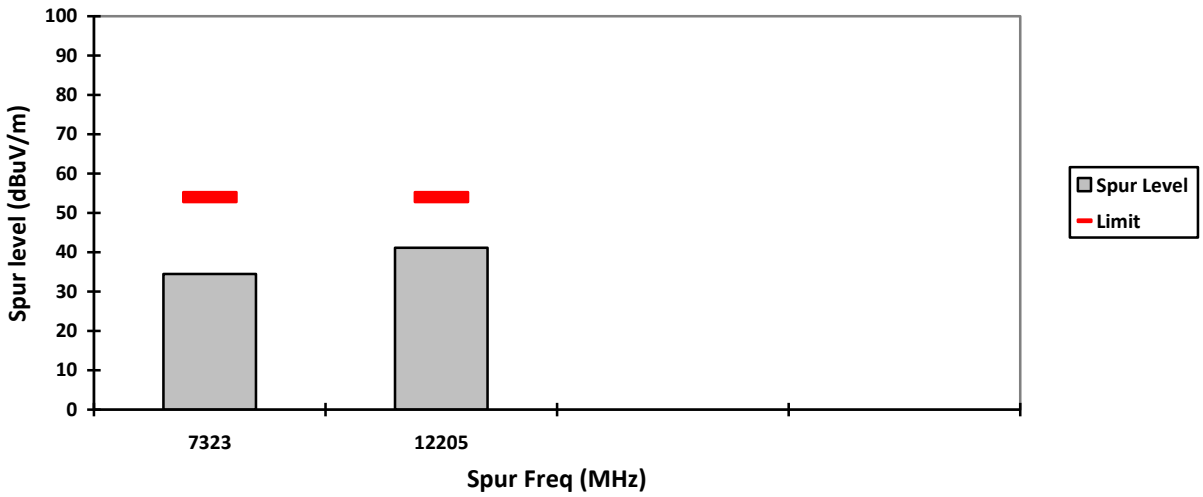
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (GFSK)

Radiated Emission (High Channel) tabular data

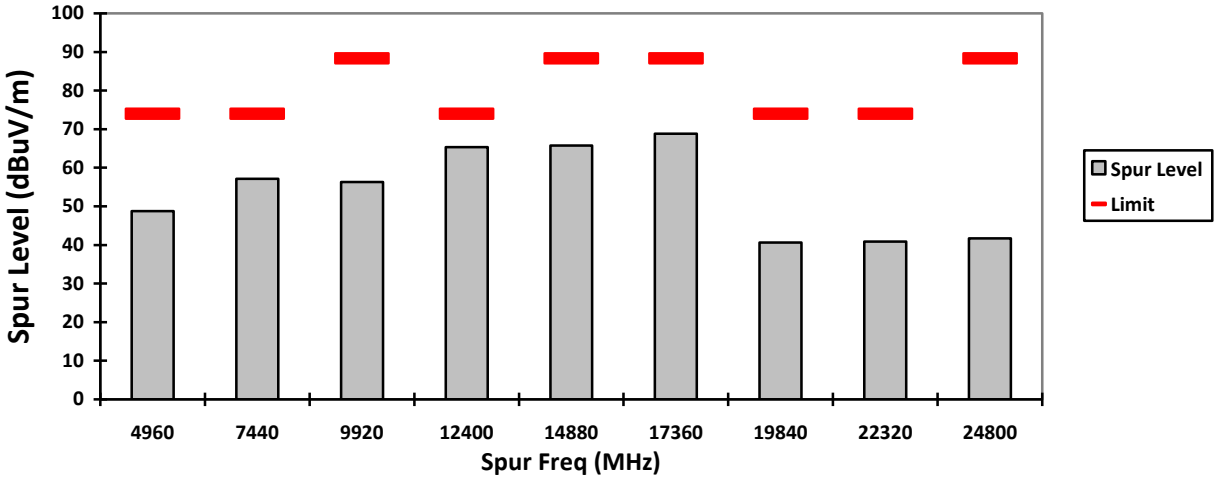
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4960	-	48.7545**	-	-	74.0000	-	-	25.2455	-	-
7440	-	57.1101**	34.6101**	-	74.0000	54.0000	-	16.8899	19.3899	-
9920	-	56.2936**	-	-	88.3012	-	-	32.0076	-	108.3012
12400	-	65.3337**	42.8337**	-	74.0000	54.0000	-	8.6663	11.1663	-
14880	-	65.7528**	-	-	88.3012	-	-	22.5484	-	108.3012
17360	-	68.7893**	-	-	88.3012	-	-	19.5119	-	108.3012
19840	-	40.6639**	-	-	74.0000	-	-	33.3361	-	-
22320	-	40.8926**	-	-	74.0000	-	-	33.1074	-	-
24800	-	41.6773**	-	-	88.3012	-	-	46.6239	-	108.3012
Horizontal Radiated Emission Result										
4960	-	47.3878**	-	-	74.0000	-	-	26.6122	-	-
7440	-	57.0464**	34.5464**	-	74.0000	54.0000	-	16.9536	19.4536	-
9920	-	56.1598**	-	-	88.3012	-	-	32.1414	-	108.3012
12400	-	64.9285**	42.4285**	-	74.0000	54.0000	-	9.0715	11.5715	-
14880	-	66.3405**	-	-	88.3012	-	-	21.9607	-	108.3012
17360	-	69.8635**	-	-	88.3012	-	-	18.4377	-	108.3012
19840	-	39.7783**	-	-	74.0000	-	-	34.2217	-	-
22320	-	40.7081**	-	-	74.0000	-	-	33.2919	-	-
24800	-	41.5999**	-	-	88.3012	-	-	46.7013	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

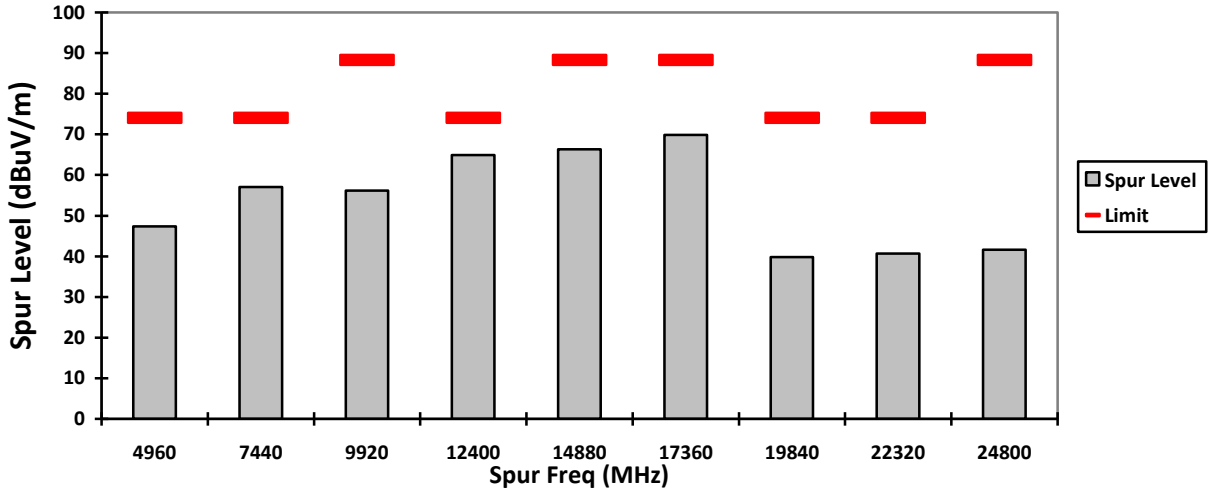
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

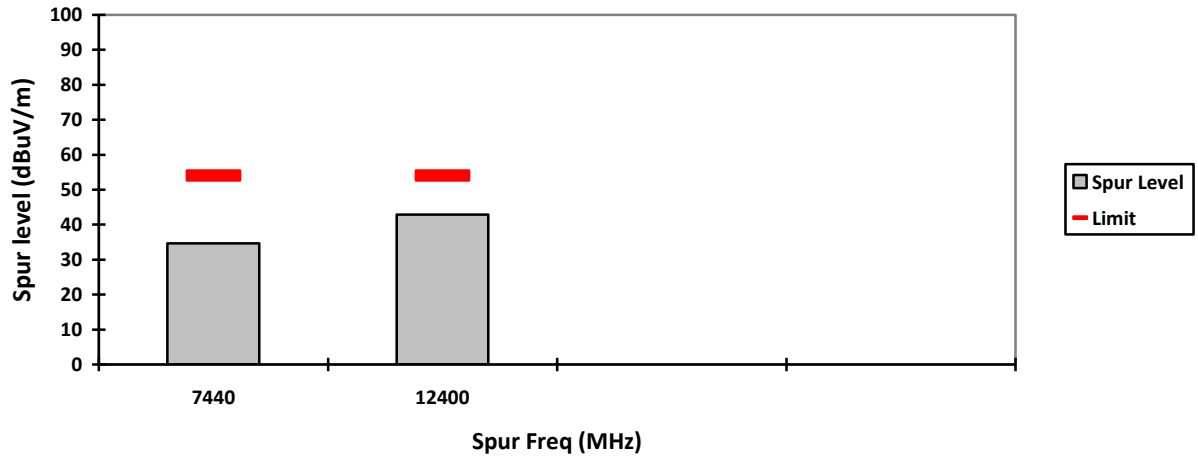
VERTICAL, PK



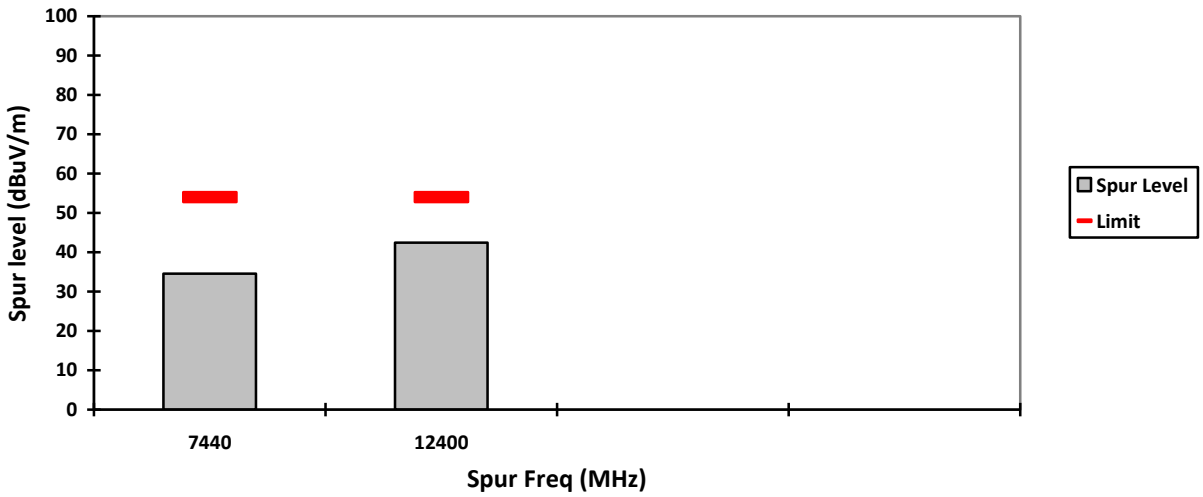
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



NOTE:
Transmitter Duty Cycle Calculation, FCC Rule 15.35 (b,c)

Based on the Bluetooth Specification Version 2.1+EDR, and worst case AFH mode, transmitter ON time is independent of packet type (DH1, DH3 and DH5) and packet length, the AFH mode Duty cycle connection factor as below:

Channel hop rate = 800 hops/second (AFH Mode)
Adjusted channel hop rate for DH5 mode = 133.33 hops/second
Time per channel hop = 1 / 133.33 hops/second = 7.5 ms
Time to cycle through all channels = 7.5 x 20 channels = 150 ms
Number of times transmitter hits on one channel = 100 ms / 150 ms = 1 time(s)
Worst case dwell time = 7.5 ms
Duty cycle connection factor = $20\log_{10}$ (7.5ms / 100ms) = **-22.5 dB**

Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (Pi/4 DQPSK)

Radiated Emission (Low Channel) tabular data

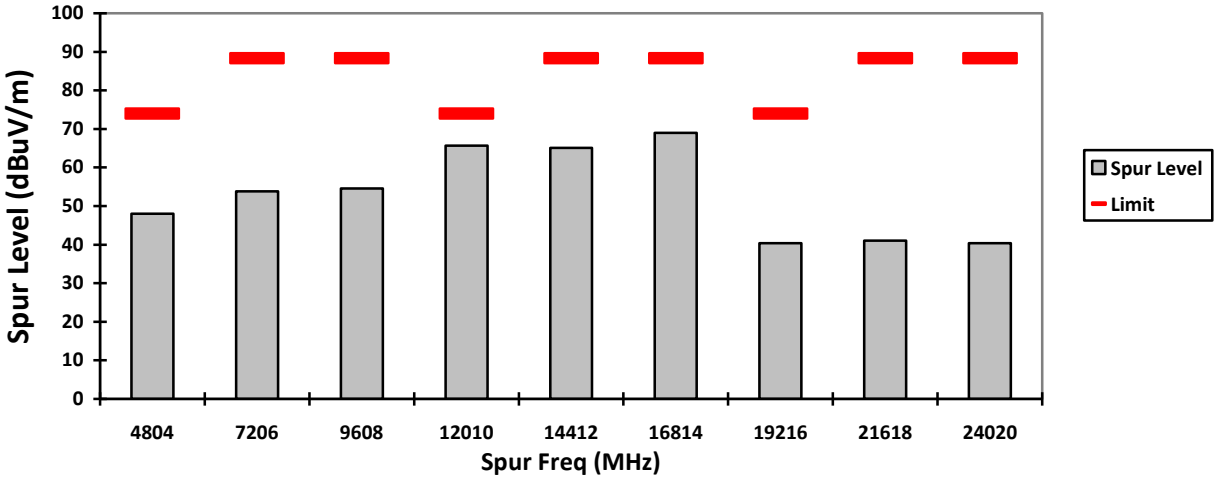
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4804	-	47.9824**	-	-	74.0000	-	-	26.0176	-	-
7206	-	53.8088**	-	-	88.3012	-	-	34.4924	-	108.3012
9608	-	54.5416**	-	-	88.3012	-	-	33.7596	-	108.3012
12010	-	65.7125**	43.2125**	-	74.0000	54.0000	-	8.2875	10.7875	-
14412	-	65.0504**	-	-	88.3012	-	-	23.2508	-	108.3012
16814	-	68.9778**	-	-	88.3012	-	-	19.3234	-	108.3012
19216	-	40.3764**	-	-	74.0000	-	-	33.6236	-	-
21618	-	41.0352**	-	-	88.3012	-	-	47.2660	-	108.3012
24020	-	40.4143**	-	-	88.3012	-	-	47.8869	-	108.3012
Horizontal Radiated Emission Result										
4804	-	46.9602**	-	-	74.0000	-	-	27.0398	-	-
7206	-	53.2488**	-	-	88.3012	-	-	35.0524	-	108.3012
9608	-	55.6383**	-	-	88.3012	-	-	32.6629	-	108.3012
12010	-	65.2314**	42.7314**	-	74.0000	54.0000	-	8.7686	11.2686	-
14412	-	64.0611**	-	-	88.3012	-	-	24.2401	-	108.3012
16814	-	67.2946**	-	-	88.3012	-	-	21.0066	-	108.3012
19216	-	40.6795**	-	-	74.0000	-	-	33.3205	-	-
21618	-	40.2669**	-	-	88.3012	-	-	48.0343	-	108.3012
24020	-	40.0014**	-	-	88.3012	-	-	48.2998	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

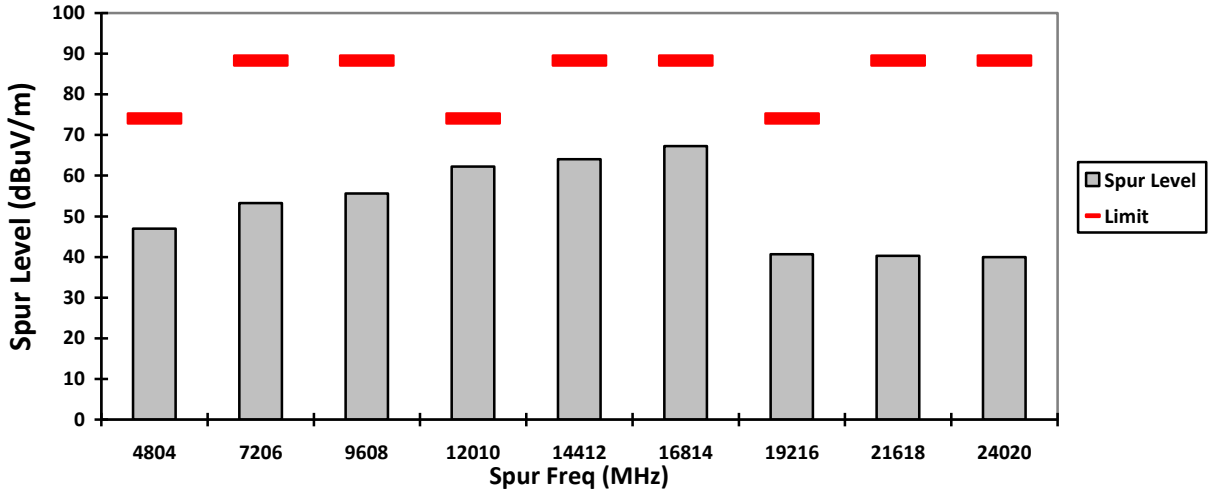
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

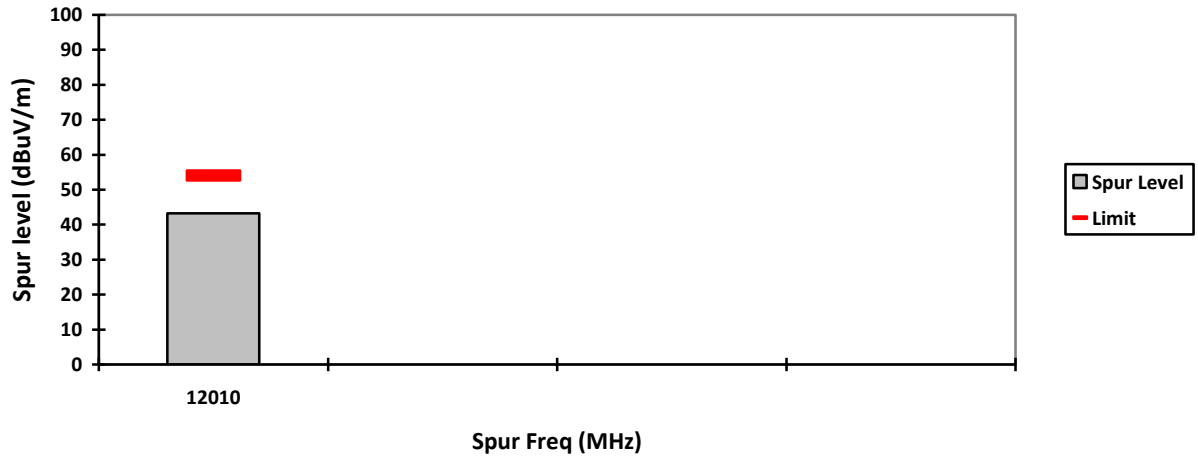
VERTICAL, PK



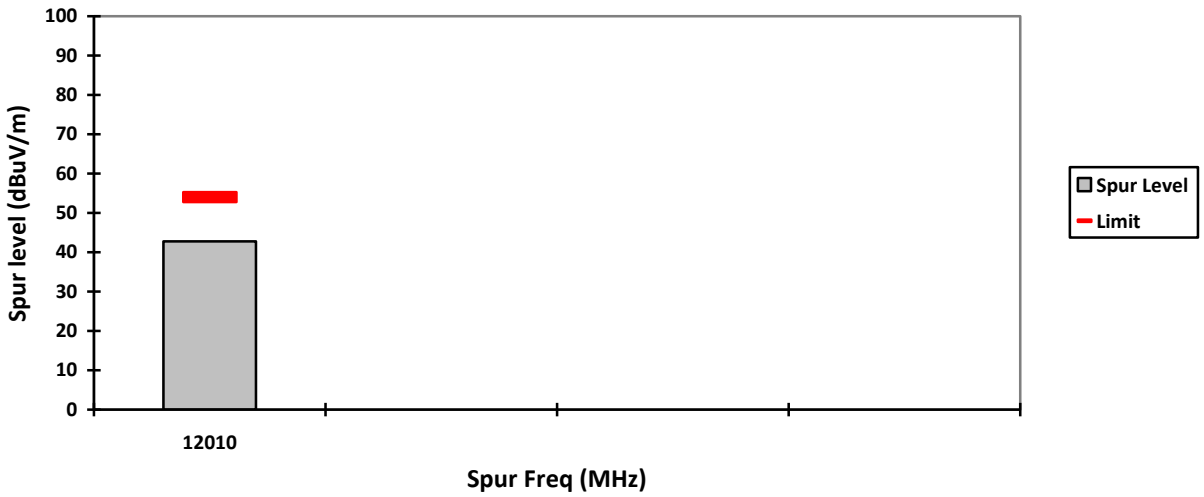
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Mid Test Frequency: 2441.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (Pi/4 DQPSK)

Radiated Emission (Mid Channel) tabular data

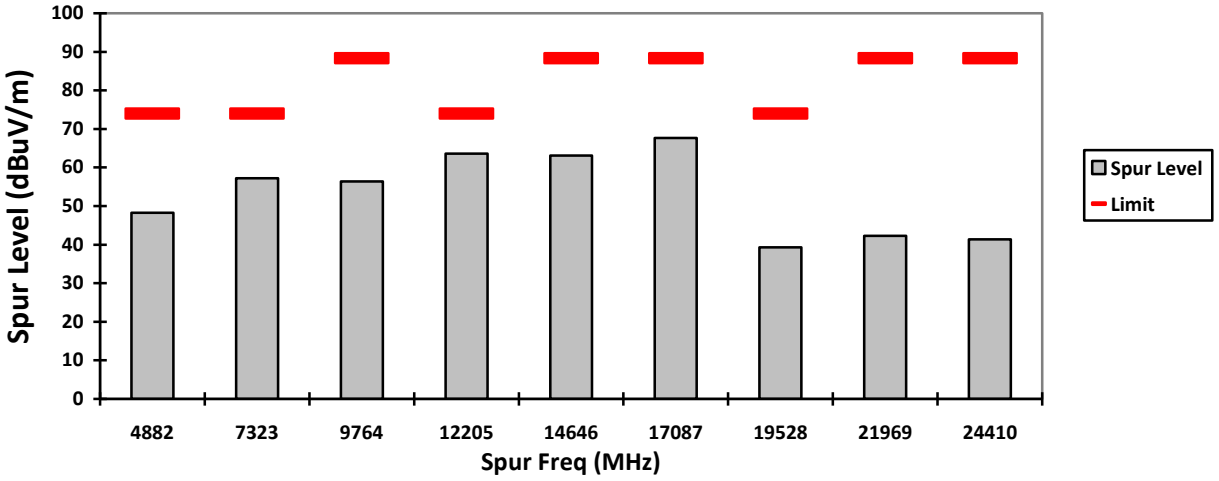
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4882	-	48.2895**	-	-	74.0000	-	-	25.7105	-	-
7323	-	57.2476**	34.7476**	-	74.0000	54.0000	-	16.7524	19.2524	-
9764	-	56.3485**	-	-	88.3012	-	-	31.9527	-	108.3012
12205	-	63.5751**	41.0751**	-	74.0000	54.0000	-	10.4249	12.9249	-
14646	-	63.0628**	-	-	88.3012	-	-	25.2384	-	108.3012
17087	-	67.6640**	-	-	88.3012	-	-	20.6372	-	108.3012
19528	-	39.3162**	-	-	74.0000	-	-	34.6838	-	-
21969	-	42.2626**	-	-	88.3012	-	-	46.0386	-	108.3012
24410	-	41.3521**	-	-	88.3012	-	-	46.9491	-	108.3012
Horizontal Radiated Emission Result										
4882	-	48.8736**	-	-	74.0000	-	-	25.1264	-	-
7323	-	56.6694**	34.1694**	-	74.0000	54.0000	-	17.3306	19.8306	-
9764	-	56.9201**	-	-	88.3012	-	-	31.3811	-	108.3012
12205	-	63.5734**	41.0734**	-	74.0000	54.0000	-	10.4266	12.9266	-
14646	-	63.7958**	-	-	88.3012	-	-	24.5054	-	108.3012
17087	-	68.1686**	-	-	88.3012	-	-	20.1326	-	108.3012
19528	-	40.1023**	-	-	74.0000	-	-	33.8977	-	-
21969	-	41.0928**	-	-	88.3012	-	-	47.2084	-	108.3012
24410	-	40.4524**	-	-	88.3012	-	-	47.8488	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

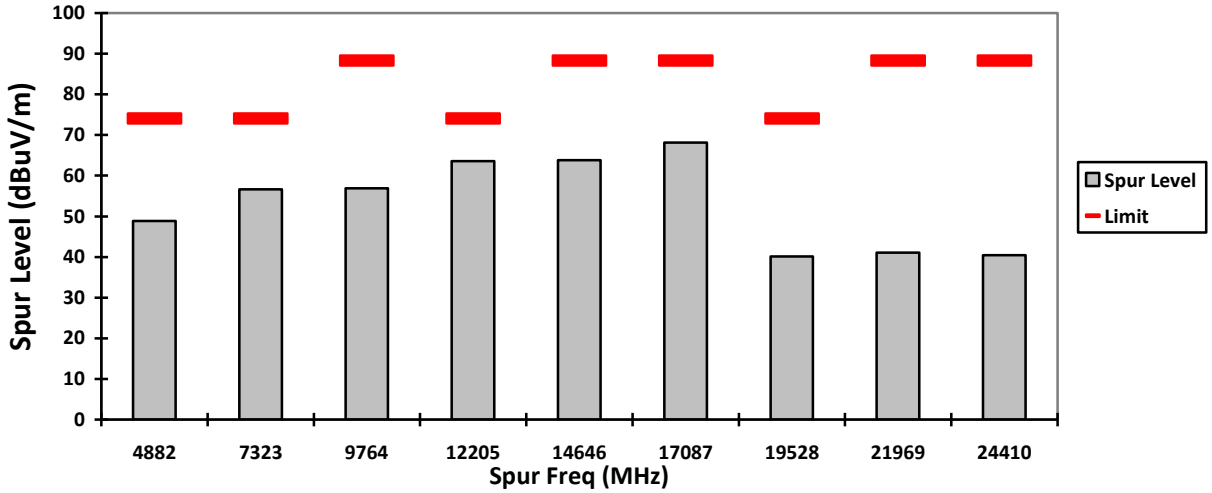
Temperature (degC): 23.3 Humidity (%): 69.4
Test Performed by: Nazrin & Rezza Test Date: Sun, 3 Mar, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

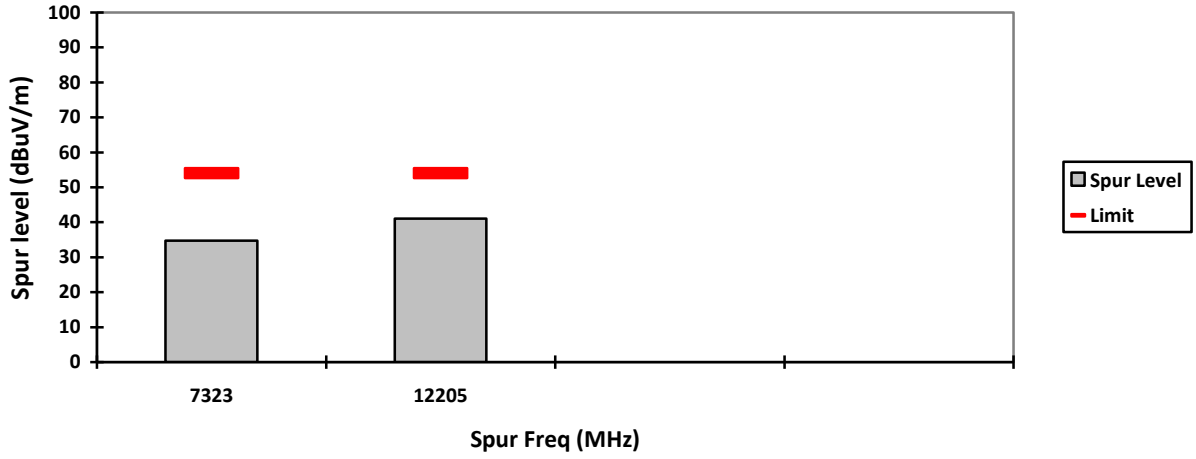
VERTICAL, PK



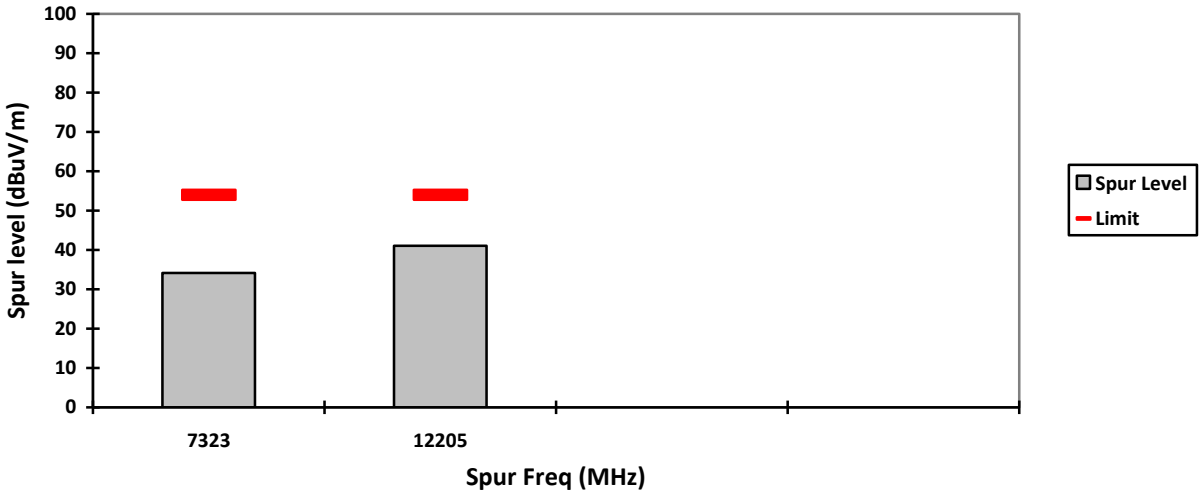
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (Pi/4 DQPSK)

Radiated Emission (High Channel) tabular data

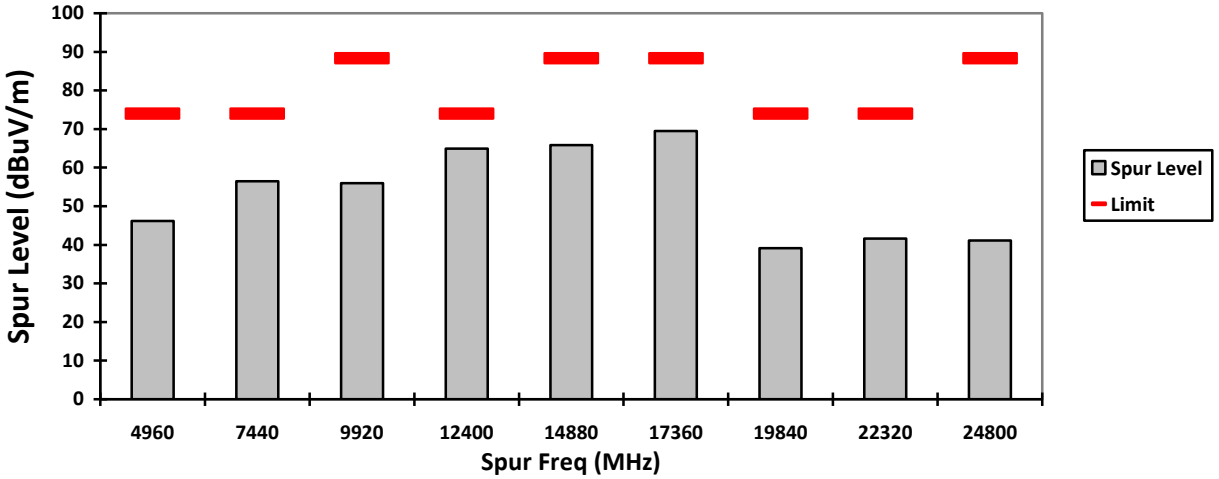
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4960	-	46.1756**	-	-	74.0000	-	-	27.8244	-	-
7440	-	56.4567**	33.9567**	-	74.0000	54.0000	-	17.5433	20.0433	-
9920	-	55.9348**	-	-	88.3012	-	-	32.3664	-	108.3012
12400	-	64.9265**	42.4265**	-	74.0000	54.0000	-	9.0735	11.5735	-
14880	-	65.8283**	-	-	88.3012	-	-	22.4729	-	108.3012
17360	-	69.4792**	-	-	88.3012	-	-	18.8220	-	108.3012
19840	-	39.1496**	-	-	74.0000	-	-	34.8504	-	-
22320	-	41.6116**	-	-	74.0000	-	-	32.3884	-	-
24800	-	41.1629**	-	-	88.3012	-	-	47.1383	-	108.3012
Horizontal Radiated Emission Result										
4960	-	47.2462**	-	-	74.0000	-	-	26.7538	-	-
7440	-	56.7738**	34.2738	-	74.0000	54.0000	-	17.2262	19.7262	-
9920	-	56.0259**	-	-	88.3012	-	-	32.2753	-	108.3012
12400	-	64.6306**	42.1306	-	74.0000	54.0000	-	9.3694	11.8694	-
14880	-	66.0252**	-	-	88.3012	-	-	22.2760	-	108.3012
17360	-	69.7328**	-	-	88.3012	-	-	18.5684	-	108.3012
19840	-	39.8278**	-	-	74.0000	-	-	34.1722	-	-
22320	-	42.0196**	-	-	74.0000	-	-	31.9804	-	-
24800	-	40.8366**	-	-	88.3012	-	-	47.4646	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

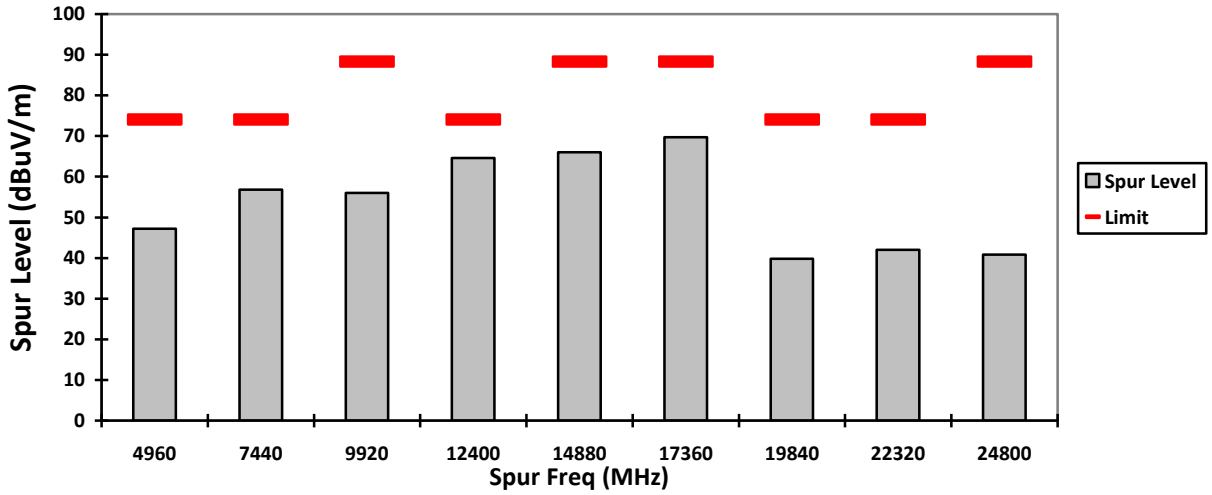
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

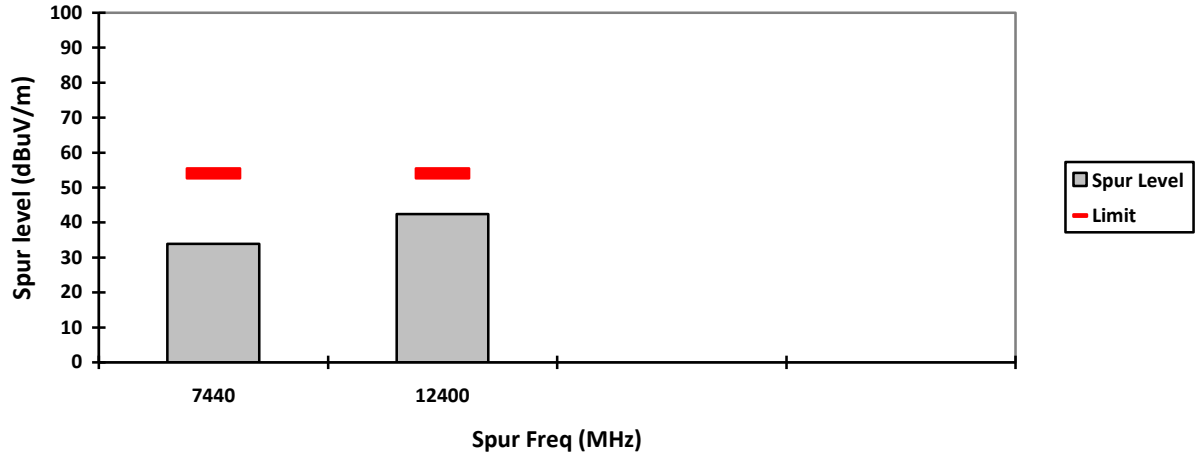
VERTICAL, PK



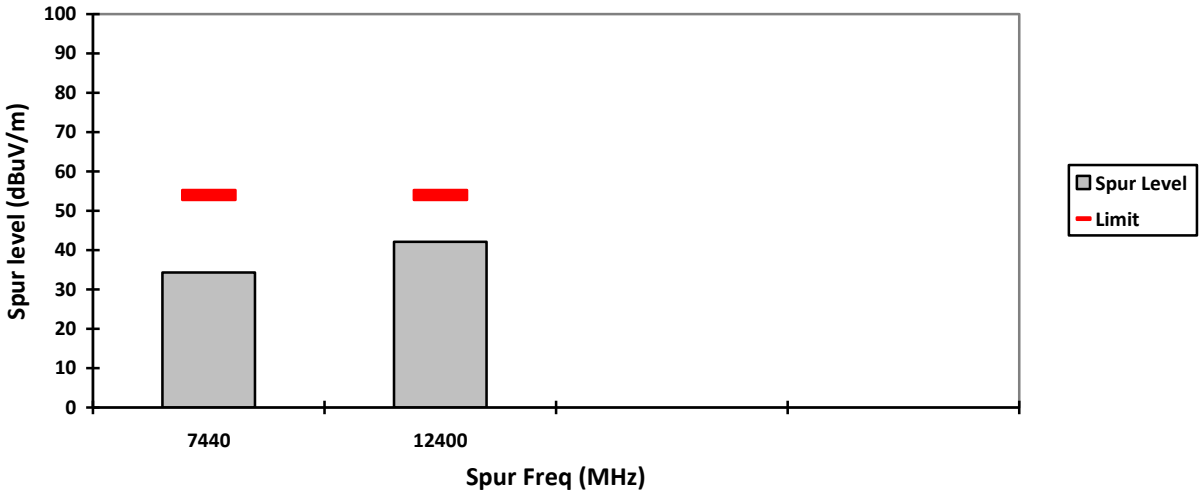
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



NOTE:
Transmitter Duty Cycle Calculation, FCC Rule 15.35 (b,c)

Based on the Bluetooth Specification Version 2.1+EDR, and worst case AFH mode, transmitter ON time is independent of packet type (DH1, DH3 and DH5) and packet length, the AFH mode Duty cycle connection factor as below:

Channel hop rate = 800 hops/second (AFH Mode)
Adjusted channel hop rate for DH5 mode = 133.33 hops/second
Time per channel hop = 1 / 133.33 hops/second = 7.5 ms
Time to cycle through all channels = 7.5 x 20 channels = 150 ms
Number of times transmitter hits on one channel = 100 ms / 150 ms = 1 time(s)
Worst case dwell time = 7.5 ms
Duty cycle connection factor = $20\log_{10}$ (7.5ms / 100ms) = **-22.5 dB**

Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Low Test Frequency: 2402.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (8DPSK)

Radiated Emission (Low Channel) tabular data

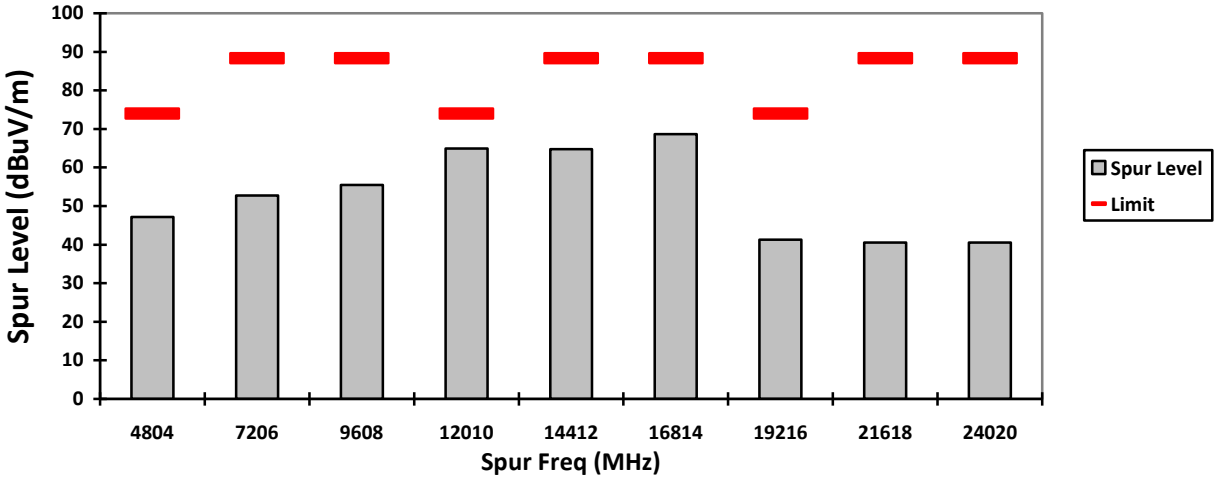
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4804	-	47.1895**	-	-	74.0000	-	-	26.8105	-	-
7206	-	52.7445**	-	-	88.3012	-	-	35.5567	-	108.3012
9608	-	55.5044**	-	-	88.3012	-	-	32.7968	-	108.3012
12010	-	64.9033**	42.4033**	-	74.0000	54.0000	-	9.0967	11.5967	-
14412	-	64.7946**	-	-	88.3012	-	-	23.5066	-	108.3012
16814	-	68.6599**	-	-	88.3012	-	-	19.6413	-	108.3012
19216	-	41.3005**	-	-	74.0000	-	-	32.6995	-	-
21618	-	40.5721**	-	-	88.3012	-	-	47.7291	-	108.3012
24020	-	40.5316**	-	-	88.3012	-	-	47.7696	-	108.3012
Horizontal Radiated Emission Result										
4804	-	47.1971**	-	-	74.0000	-	-	26.8029	-	-
7206	-	54.6562**	-	-	88.3012	-	-	33.6450	-	108.3012
9608	-	54.1952**	-	-	88.3012	-	-	34.1060	-	108.3012
12010	-	65.3366**	42.8366**	-	74.0000	54.0000	-	8.6634	11.1634	-
14412	-	64.4889**	-	-	88.3012	-	-	23.8123	-	108.3012
16814	-	67.6692**	-	-	88.3012	-	-	20.6320	-	108.3012
19216	-	40.9279**	-	-	74.0000	-	-	33.0721	-	-
21618	-	40.8092**	-	-	88.3012	-	-	47.4920	-	108.3012
24020	-	40.6607**	-	-	88.3012	-	-	47.6405	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

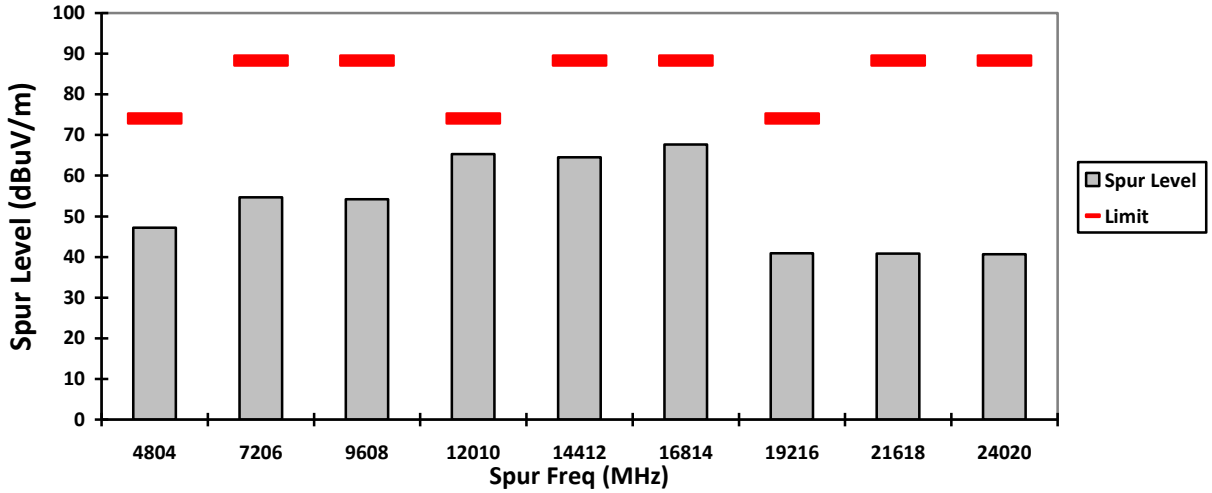
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

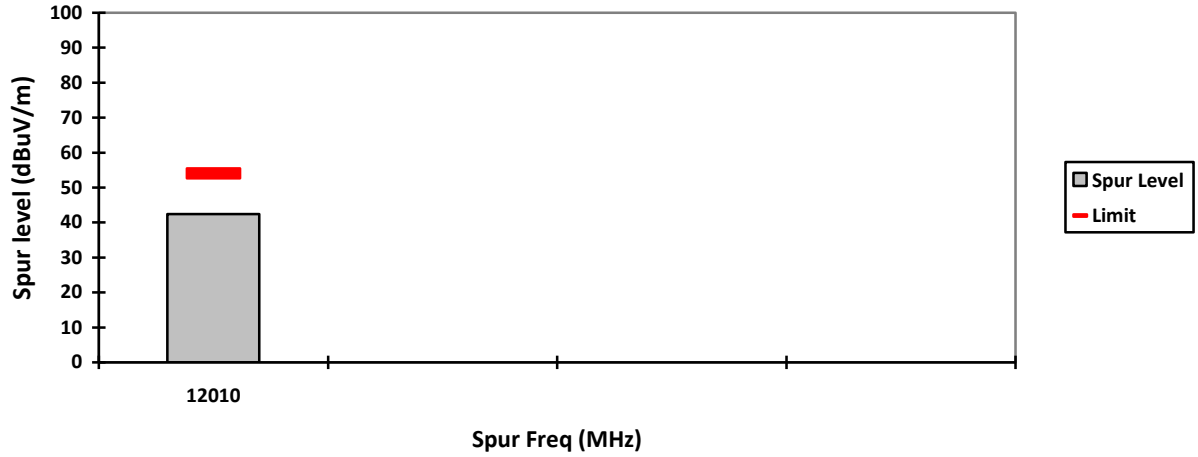
VERTICAL, PK



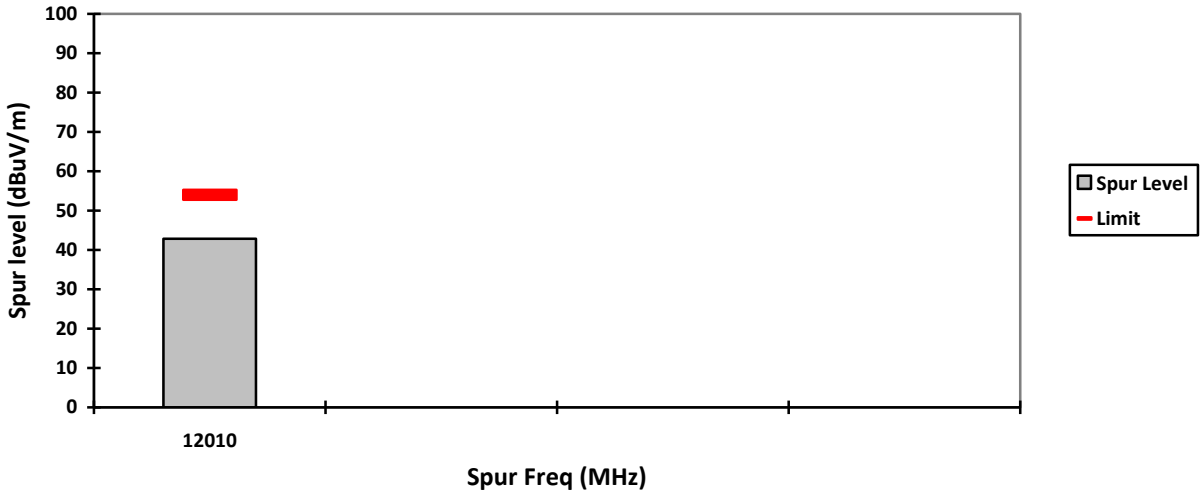
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: Mid Test Frequency: 2441.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (8DPSK)

Radiated Emission (Mid Channel) tabular data

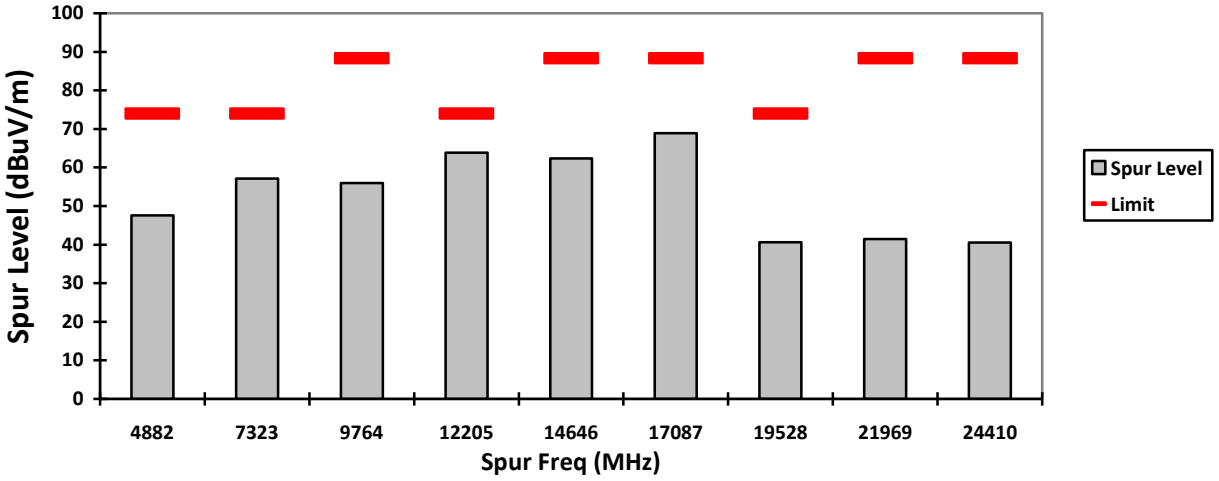
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4882	-	47.6247**	-	-	74.0000	-	-	26.3753	-	-
7323	-	57.1186**	34.6186**	-	74.0000	54.0000	-	16.8814	19.3814	-
9764	-	55.9943**	-	-	88.3012	-	-	32.3069	-	108.3012
12205	-	63.8163**	41.3163**	-	74.0000	54.0000	-	10.1837	12.6837	-
14646	-	62.3144**	-	-	88.3012	-	-	25.9868	-	108.3012
17087	-	68.9282**	-	-	88.3012	-	-	19.3730	-	108.3012
19528	-	40.6242**	-	-	74.0000	-	-	33.3758	-	-
21969	-	41.4477**	-	-	88.3012	-	-	46.8535	-	108.3012
24410	-	40.5800**	-	-	88.3012	-	-	47.7212	-	108.3012
Horizontal Radiated Emission Result										
4882	-	47.5991**	-	-	74.0000	-	-	26.4009	-	-
7323	-	56.6447**	34.1447**	-	74.0000	54.0000	-	17.3553	19.8553	-
9764	-	57.6756**	-	-	88.3012	-	-	30.6256	-	108.3012
12205	-	63.5410**	41.0410**	-	74.0000	54.0000	-	10.4590	12.9590	-
14646	-	62.8090**	-	-	88.3012	-	-	25.4922	-	108.3012
17087	-	68.9268**	-	-	88.3012	-	-	19.3744	-	108.3012
19528	-	40.1502**	-	-	74.0000	-	-	33.8498	-	-
21969	-	41.8857**	-	-	88.3012	-	-	46.4155	-	108.3012
24410	-	42.7194**	-	-	88.3012	-	-	45.5818	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

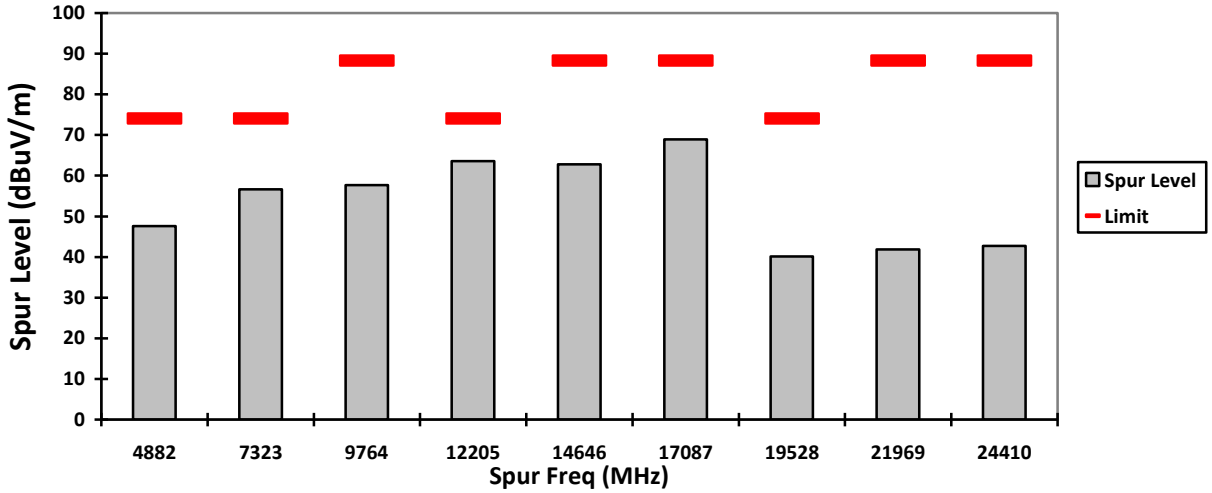
Temperature (degC): 23.3 Humidity (%): 69.4
Test Performed by: Nazrin & Rezza Test Date: Sun, 3 Mar, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

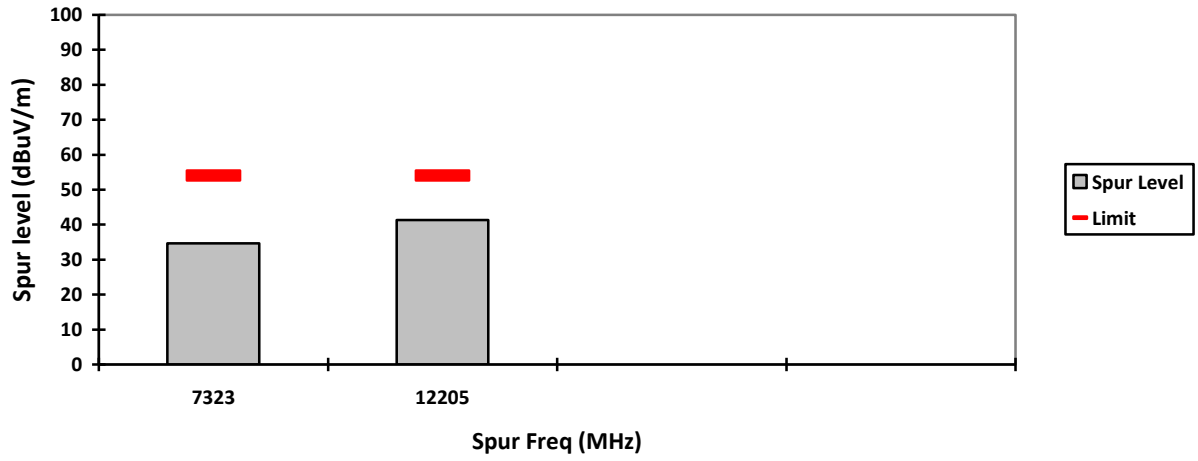
VERTICAL, PK



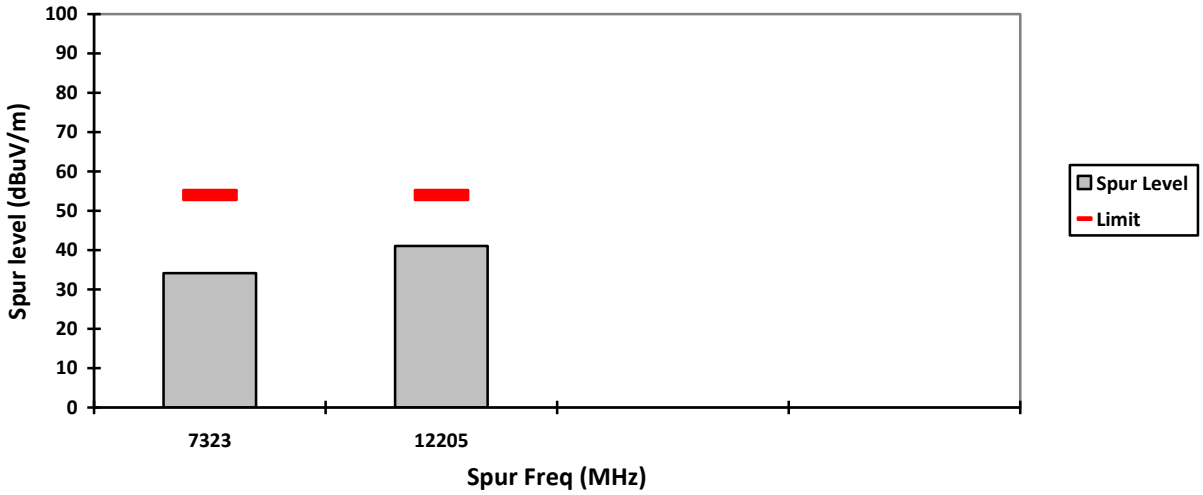
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: Bluetooth SAC Transmitter Radiated Emission
Model#: H35XDT9PW8AN-H S/N: 022TAB0346 EMC SR ID#: 40793-EMC-00064
Battery: PMNN4818A Accessory: AN000452A01
Test Channel: High Test Frequency: 2480.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (8DPSK)

Radiated Emission (High Channel) tabular data

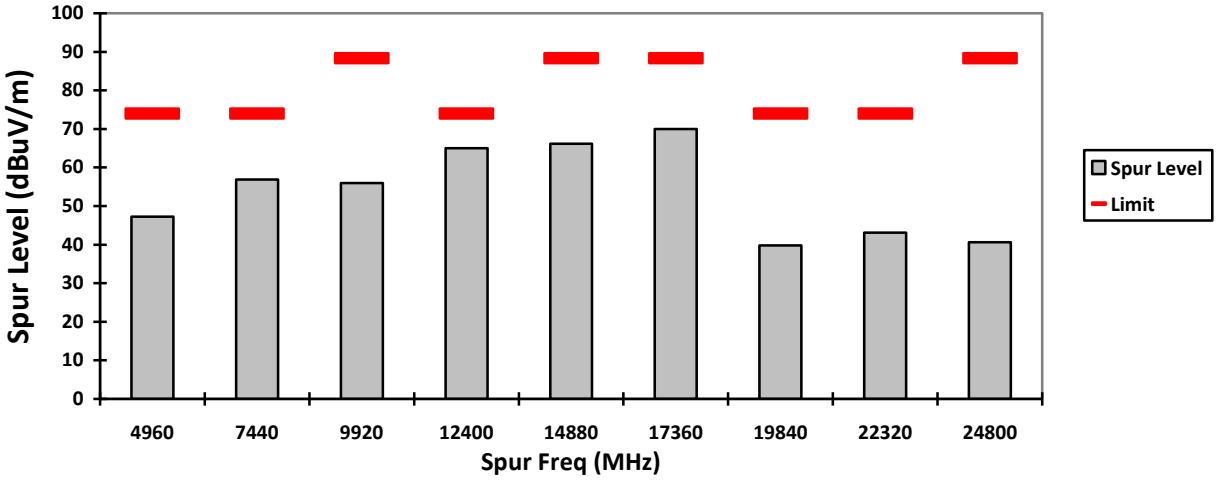
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4960	-	47.2272**	-	-	74.0000	-	-	26.7728	-	-
7440	-	56.8938**	34.3938**	-	74.0000	54.0000	-	17.1062	19.6062	-
9920	-	56.0029**	-	-	88.3012	-	-	32.2983	-	108.3012
12400	-	64.9828**	42.4828**	-	74.0000	54.0000	-	9.0172	11.5172	-
14880	-	66.1350**	-	-	88.3012	-	-	22.1662	-	108.3012
17360	-	69.9684**	-	-	88.3012	-	-	18.3328	-	108.3012
19840	-	39.7974**	-	-	74.0000	-	-	34.2026	-	-
22320	-	43.1403**	-	-	74.0000	-	-	30.8597	-	-
24800	-	40.6211**	-	-	88.3012	-	-	47.6801	-	108.3012
Horizontal Radiated Emission Result										
4960	-	47.9847**	-	-	74.0000	-	-	26.0153	-	-
7440	-	58.1124**	35.6124**	-	74.0000	54.0000	-	15.8876	18.3876	-
9920	-	55.6056**	-	-	88.3012	-	-	32.6956	-	108.3012
12400	-	64.8879**	42.3879**	-	74.0000	54.0000	-	9.1121	11.6121	-
14880	-	65.7110**	-	-	88.3012	-	-	22.5902	-	108.3012
17360	-	68.8211**	-	-	88.3012	-	-	19.4801	-	108.3012
19840	-	39.6246**	-	-	74.0000	-	-	34.3754	-	-
22320	-	41.1931**	-	-	74.0000	-	-	32.8069	-	-
24800	-	42.0077**	-	-	88.3012	-	-	46.2935	-	108.3012

Remarks: Pass Result	Marginal Result	Fail Result

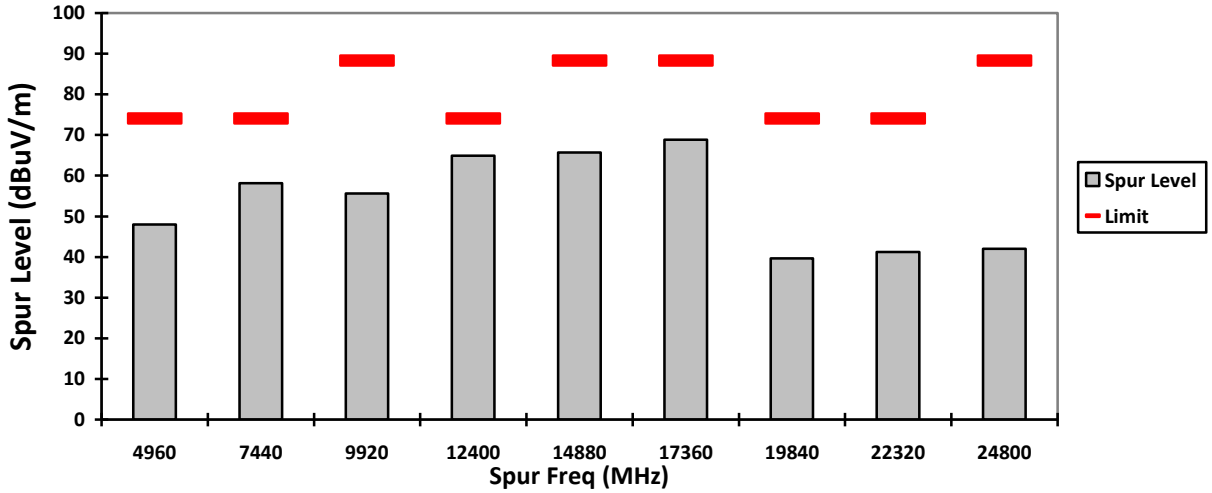
Temperature (degC): 23.3 **Humidity (%): 69.4**
Test Performed by: Nazrin & Rezza **Test Date: Sun, 3 Mar, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

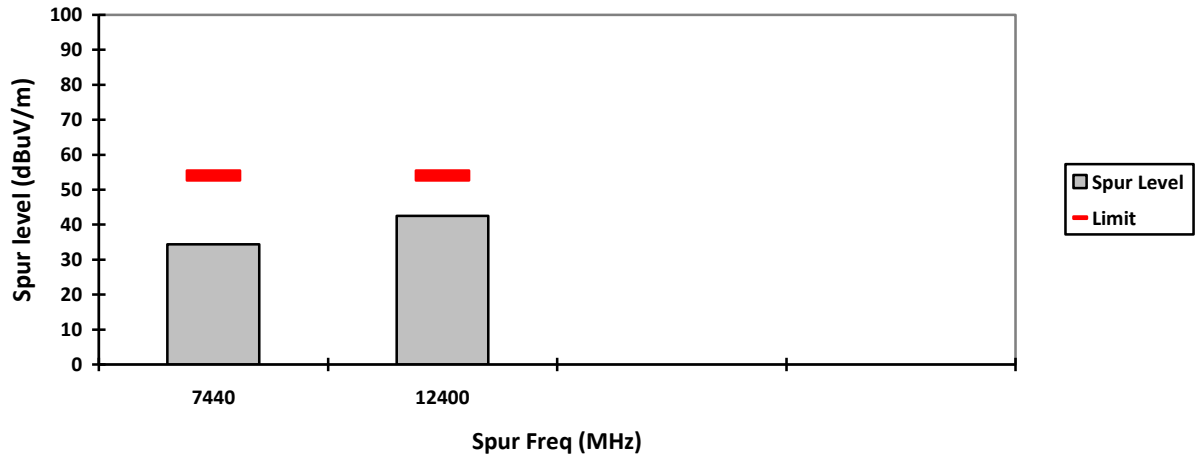
VERTICAL, PK



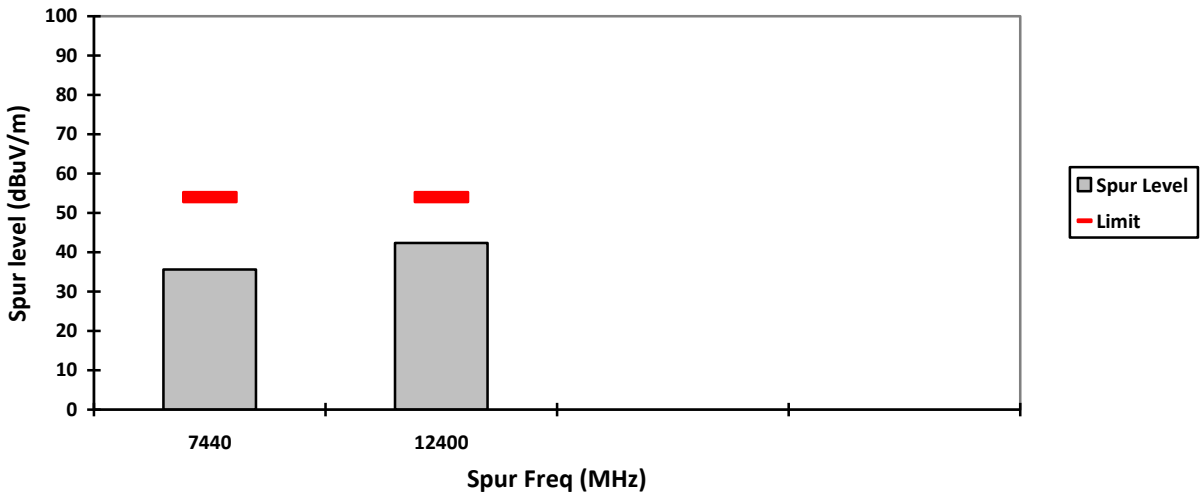
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



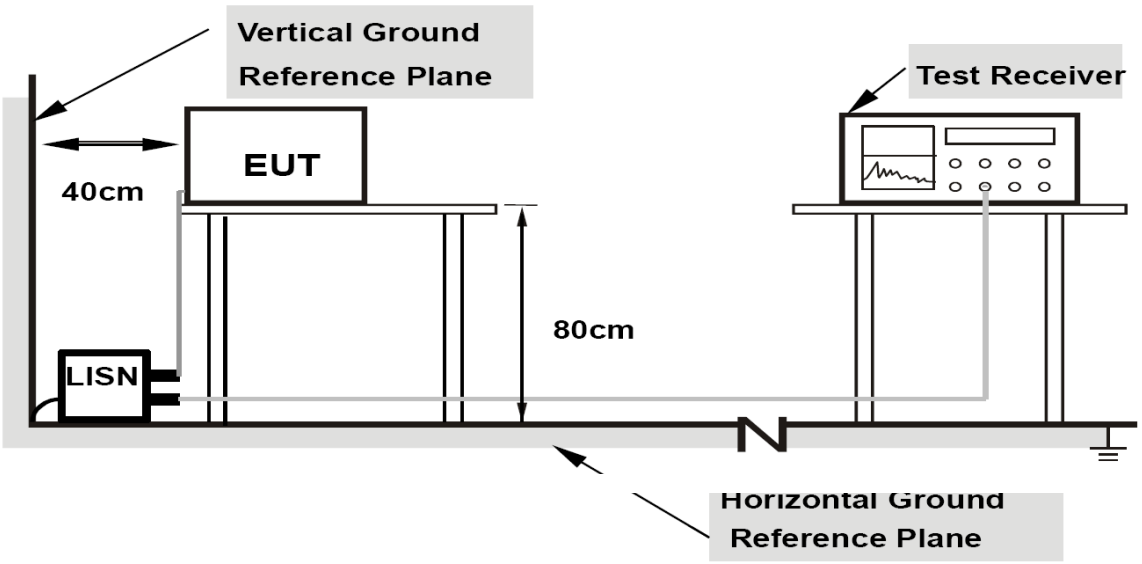
NOTE:
Transmitter Duty Cycle Calculation, FCC Rule 15.35 (b,c)

Based on the Bluetooth Specification Version 2.1+EDR, and worst case AFH mode, transmitter ON time is independent of packet type (DH1, DH3 and DH5) and packet length, the AFH mode Duty cycle connection factor as below:

Channel hop rate = 800 hops/second (AFH Mode)
Adjusted channel hop rate for DH5 mode = 133.33 hops/second
Time per channel hop = 1 / 133.33 hops/second = 7.5 ms
Time to cycle through all channels = 7.5 x 20 channels = 150 ms
Number of times transmitter hits on one channel = 100 ms / 150 ms = 1 time(s)
Worst case dwell time = 7.5 ms
Duty cycle connection factor = $20\log_{10}$ (7.5ms / 100ms) = **-22.5 dB**

6.9. AC Powerline Conducted Emission

6.9.1. Test Setup



1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50uH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

6.9.2. Test Limits:

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

Table 1: Limits for Conducted Disturbance at the Mains Ports of Class A ITE.

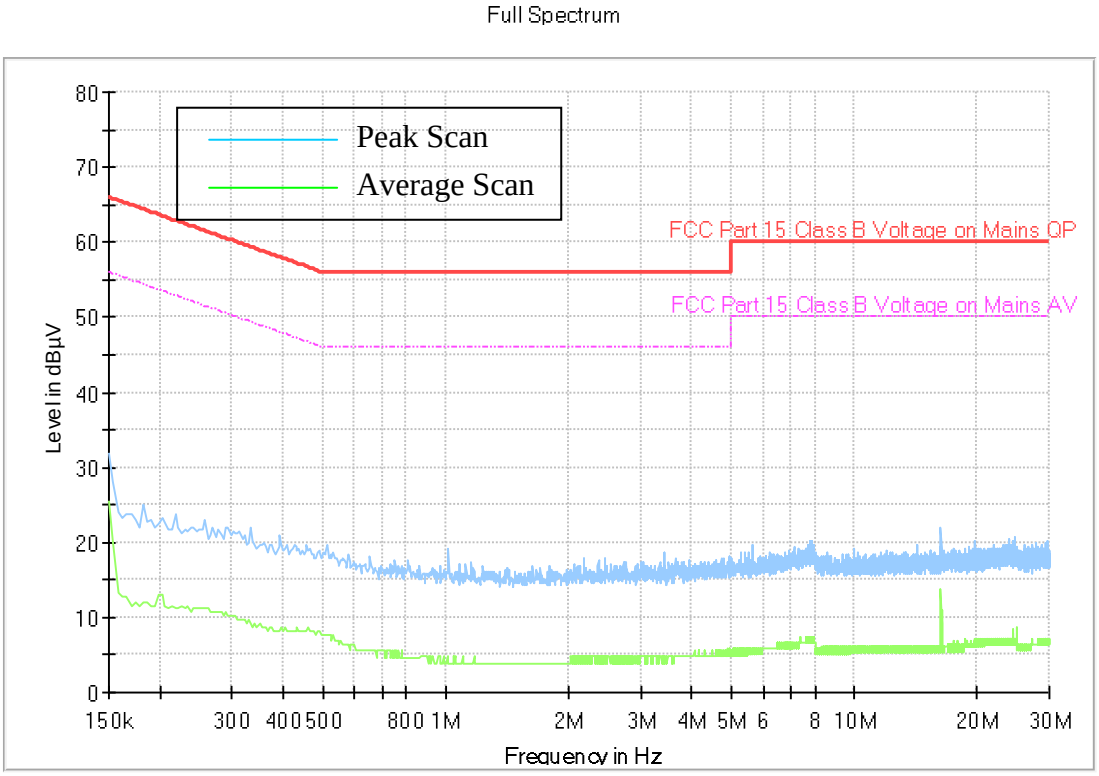
Limits for conducted disturbance at the mains ports of class B ITE

Frequency range MHz	Limits dB(µV)	
	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
NOTE 1 The lower limit shall apply at the transition frequencies. NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.		

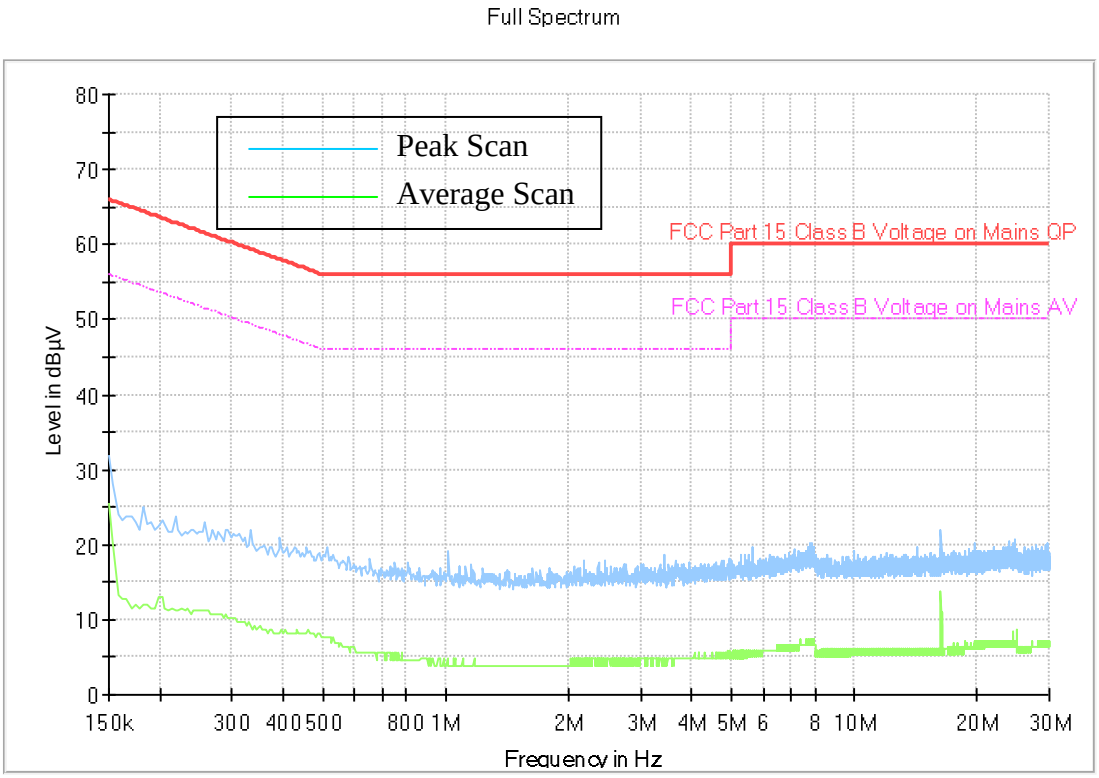
Table 2: Limits for Conducted Disturbance at the Mains Ports of Class B ITE

6.9.3. Test Result

1) Ambient SUC



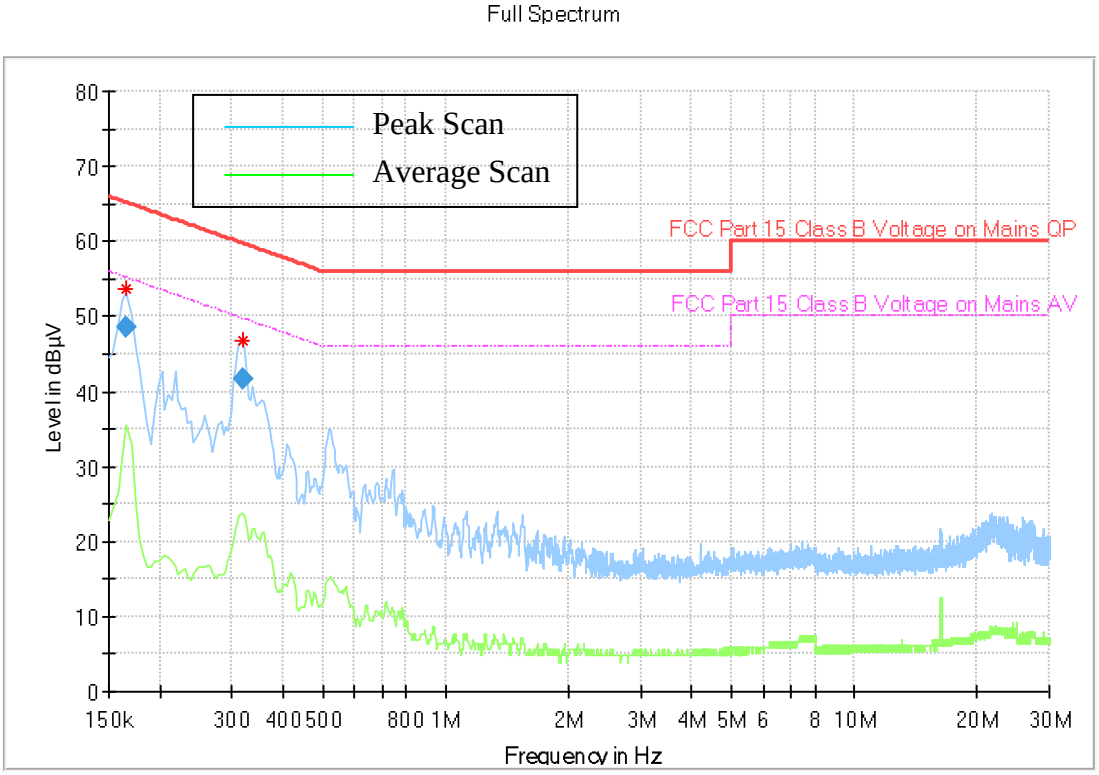
2) Ambient MUC



SUC

120 Vac, 60Hz

1) Charger Alone

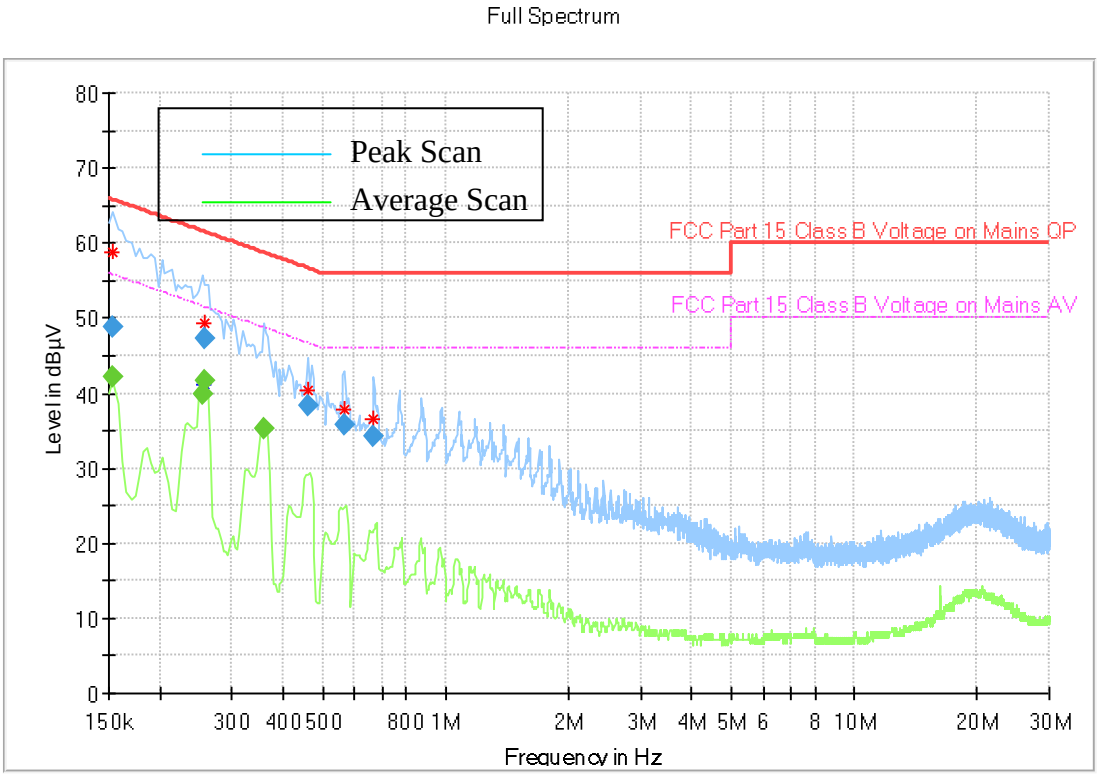


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.166000	48.46	---	65.16	16.70	1000.0	9.000	N	ON	10.7	Pass
0.318000	41.61	---	59.76	18.15	1000.0	9.000	N	ON	10.6	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

2) Charger + Radio Off

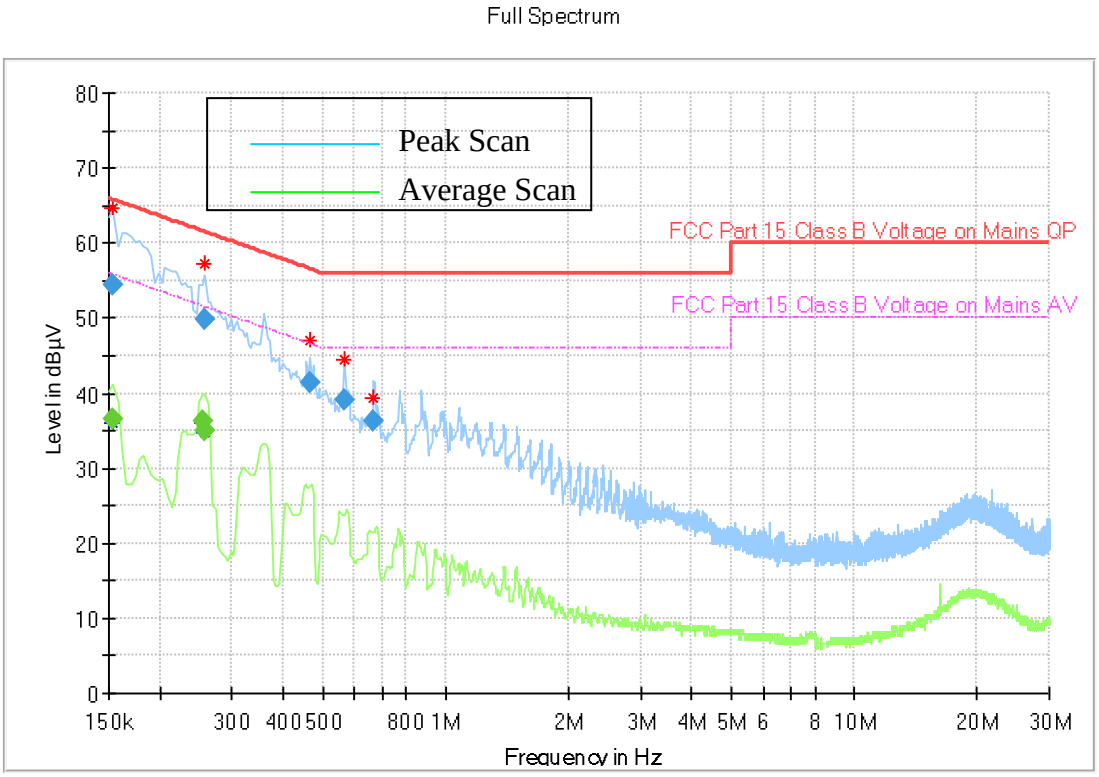


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.154000	48.79	---	65.78	16.99	1000.0	9.000	N	ON	10.5	Pass
0.154000	---	42.22	55.78	13.56	1000.0	9.000	N	ON	10.5	Pass
0.254000	---	39.96	51.63	11.67	1000.0	9.000	L1	ON	10.3	Pass
0.258000	---	41.65	51.50	9.85	1000.0	9.000	L1	ON	10.4	Pass
0.258000	47.34	---	61.50	14.16	1000.0	9.000	L1	ON	10.4	Pass
0.358000	---	35.17	48.78	13.60	1000.0	9.000	L1	ON	10.7	Pass
0.462000	38.27	---	56.66	18.38	1000.0	9.000	L1	ON	10.8	Pass
0.566000	35.79	---	56.00	20.21	1000.0	9.000	L1	ON	10.7	Pass
0.666000	34.29	---	56.00	21.71	1000.0	9.000	L1	ON	10.7	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

3) Charger + Radio Standby

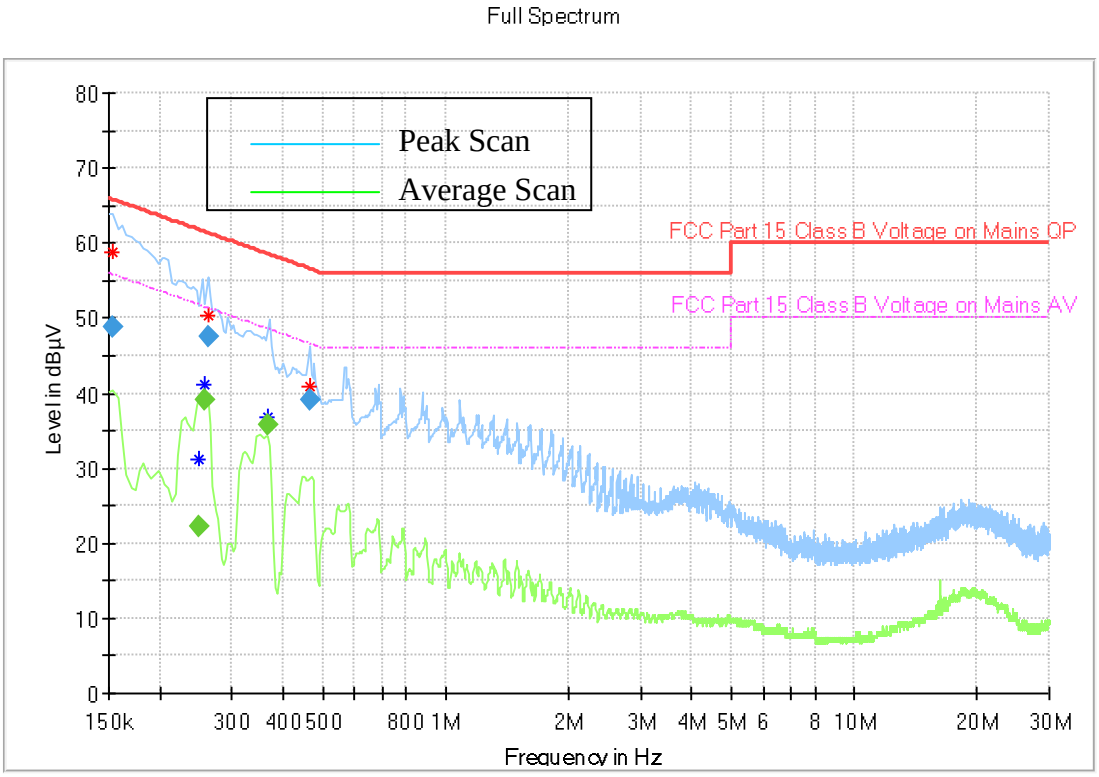


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.154000	---	36.53	55.78	19.26	1000.0	9.000	L1	ON	10.5	Pass
0.154000	54.55	---	65.78	11.23	1000.0	9.000	L1	ON	10.5	Pass
0.254000	---	36.21	51.63	15.41	1000.0	9.000	L1	ON	10.3	Pass
0.258000	---	34.98	51.50	16.52	1000.0	9.000	L1	ON	10.4	Pass
0.258000	49.81	---	61.50	11.69	1000.0	9.000	N	ON	10.4	Pass
0.466000	41.29	---	56.59	15.29	1000.0	9.000	N	ON	10.8	Pass
0.566000	39.12	---	56.00	16.88	1000.0	9.000	L1	ON	10.7	Pass
0.666000	36.36	---	56.00	19.64	1000.0	9.000	N	ON	10.7	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

4) Charger + Radio Standby with BT EDR



Quasipeak and Average Measurement

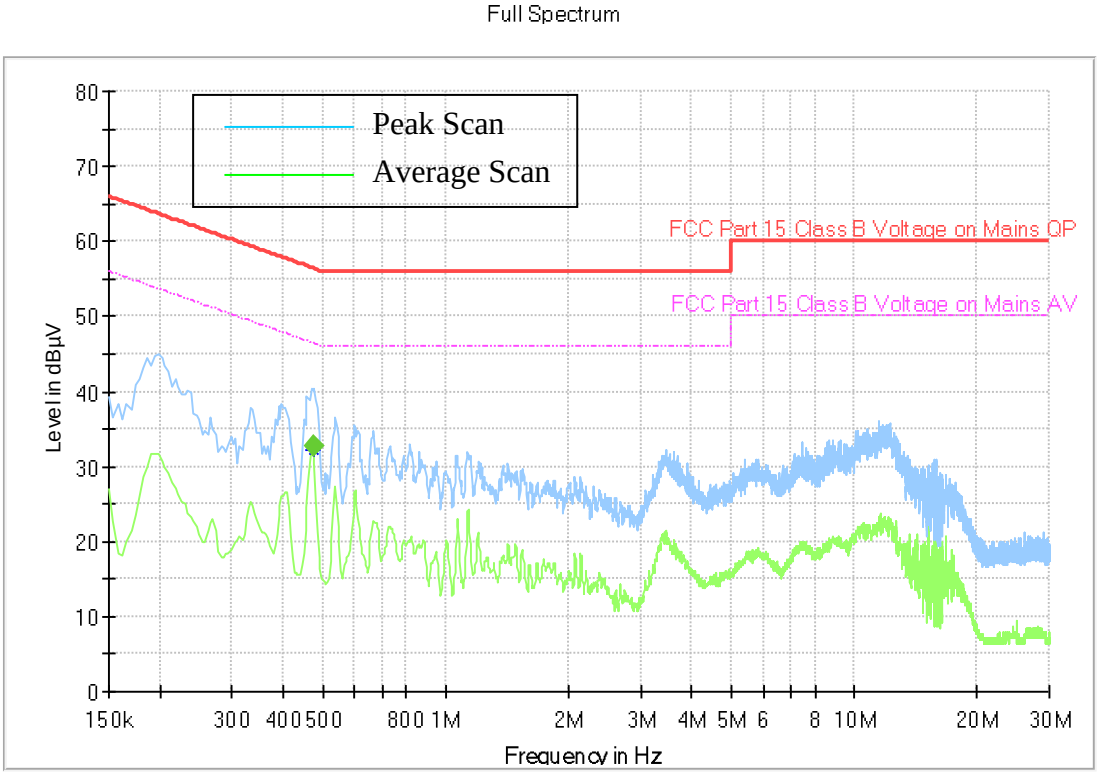
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.154000	48.80	---	65.78	16.98	1000.0	9.000	N	ON	10.5	Pass
0.250000	---	22.16	51.76	29.60	1000.0	9.000	N	ON	10.3	Pass
0.258000	---	39.01	51.50	12.49	1000.0	9.000	N	ON	10.4	Pass
0.262000	47.62	---	61.37	13.75	1000.0	9.000	N	ON	10.4	Pass
0.366000	---	35.82	48.59	12.78	1000.0	9.000	L1	ON	10.7	Pass
0.466000	39.17	---	56.59	17.42	1000.0	9.000	L1	ON	10.8	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

MUC

120 Vac, 60Hz

5) Charger Alone

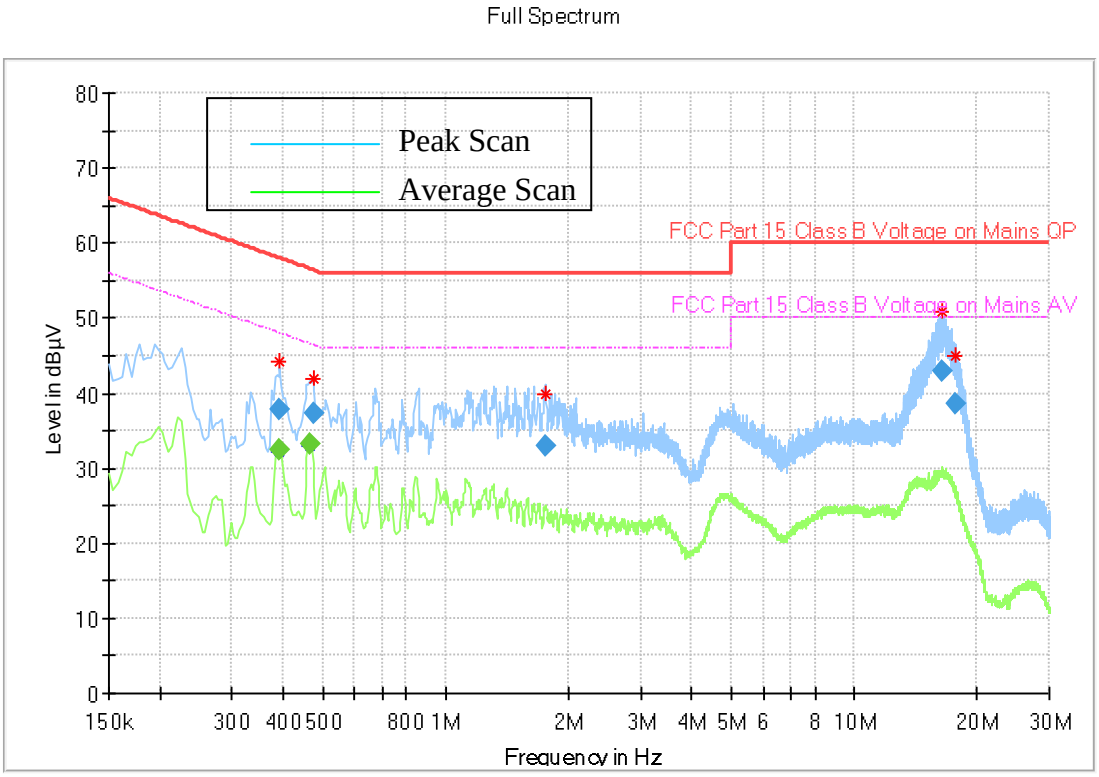


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.474000	---	32.62	46.44	13.82	1000.0	9.000	N	ON	10.8	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

6) Charger + Radio Off

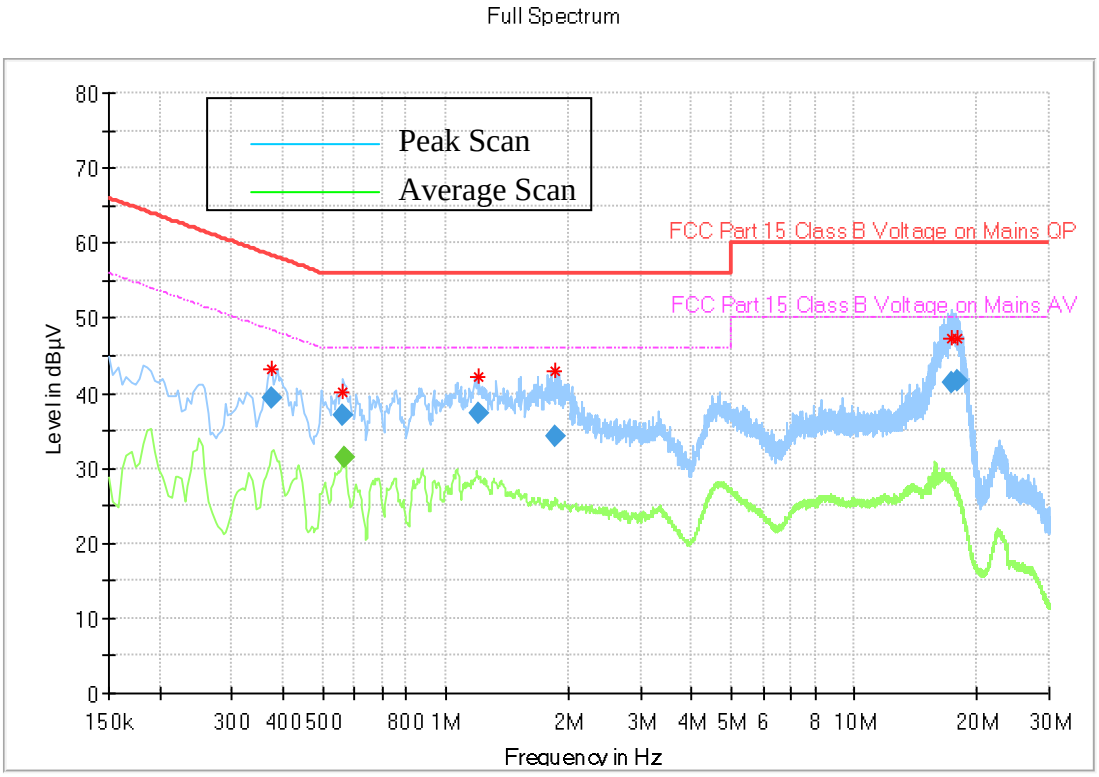


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.394000	37.77	---	57.98	20.21	1000.0	9.000	N	ON	10.7	Pass
0.394000	---	32.56	47.98	15.42	1000.0	9.000	L1	ON	10.7	Pass
0.466000	---	33.12	46.59	13.46	1000.0	9.000	N	ON	10.8	Pass
0.474000	37.22	---	56.44	19.22	1000.0	9.000	N	ON	10.8	Pass
1.758000	32.92	---	56.00	23.08	1000.0	9.000	N	ON	10.5	Pass
16.462000	42.91	---	60.00	17.09	1000.0	9.000	L1	ON	10.8	Pass
17.670000	38.70	---	60.00	21.30	1000.0	9.000	L1	ON	10.8	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

7) Charger + Radio Standby

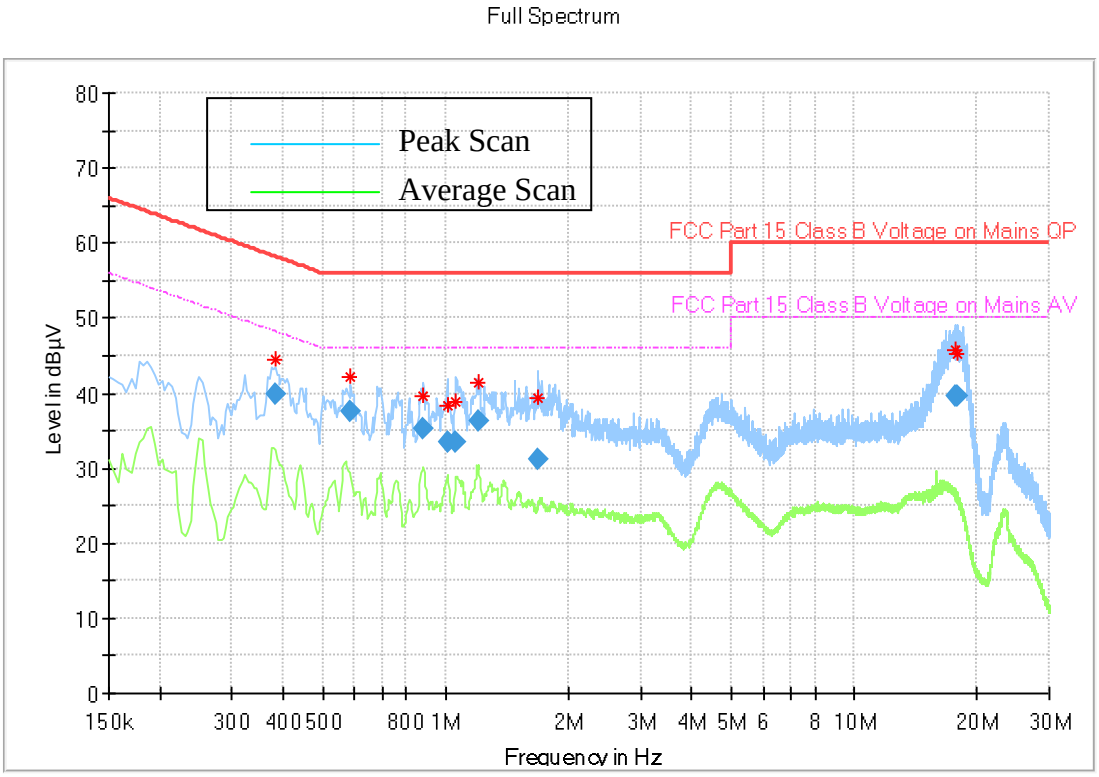


Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.374000	39.42	---	58.41	19.00	1000.0	9.000	L1	ON	10.7	Pass
0.562000	37.07	---	56.00	18.93	1000.0	9.000	L1	ON	10.7	Pass
0.566000	---	31.39	46.00	14.61	1000.0	9.000	L1	ON	10.7	Pass
1.202000	37.31	---	56.00	18.69	1000.0	9.000	L1	ON	10.5	Pass
1.858000	34.22	---	56.00	21.78	1000.0	9.000	N	ON	10.4	Pass
17.222000	41.45	---	60.00	18.55	1000.0	9.000	L1	ON	10.8	Pass
17.782000	41.75	---	60.00	18.25	1000.0	9.000	L1	ON	10.8	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

8) Charger + Radio Standby with BT EDR



Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.382000	39.90	---	58.24	18.33	1000.0	9.000	L1	ON	10.7	Pass
0.586000	37.57	---	56.00	18.43	1000.0	9.000	L1	ON	10.7	Pass
0.882000	35.33	---	56.00	20.67	1000.0	9.000	L1	ON	10.6	Pass
1.010000	33.49	---	56.00	22.51	1000.0	9.000	N	ON	10.6	Pass
1.062000	33.60	---	56.00	22.40	1000.0	9.000	L1	ON	10.5	Pass
1.210000	36.24	---	56.00	19.76	1000.0	9.000	L1	ON	10.5	Pass
1.682000	31.30	---	56.00	24.70	1000.0	9.000	N	ON	10.5	Pass
17.634000	39.55	---	60.00	20.45	1000.0	9.000	L1	ON	10.8	Pass
17.886000	39.73	---	60.00	20.27	1000.0	9.000	L1	ON	10.8	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

END OF TEST REPORT