

TEST REPORT

Report Number: R16213445-E2

Applicant : Garmin International Inc.
1200 East 151St Street
Olathe, KS 66062-3426, USA

Model : A05419

FCC ID : IPH-05419

IC : 1792A-05419

EUT Description : Extremity Worn Digital Transceiver

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 4
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2026-07-07

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2026-06-11	Initial Issue	Lindsay Ryan
V2	2026-07-07	Updated Powers	Chandler Stanley

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Garmin International Inc.
1200 East 151st Street
Olathe, KS 66062-3426, USA

EUT DESCRIPTION: Extremity Worn Digital Transceiver

MODEL: A05419

SERIAL NUMBER: 631723916, 631723841

SAMPLE RECEIPT DATE: 2026-04-24

DATE TESTED: 2026-05-05 to 2026-07-06

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	
ISED RSS-247 Issue 4	Refer to section 2
ISED RSS-GEN Issue 5 + A1 + A2	

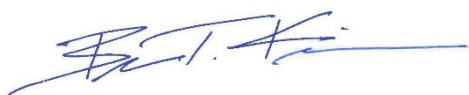
UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

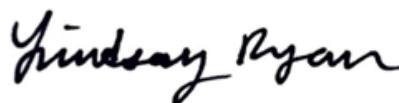
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Approved & Released
For UL LLC By:

Prepared By:



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2. TEST RESULTS SUMMARY

This report contains info provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

Below is a list of the data/info provided by the customer:

- 1) Antenna gain and type (see section 6.3)

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	Per ANSI C63.10, Section 11.6.
See Comment	RSS-GEN 6.7	20dB BW/99% OBW	Reporting purposes only	ANSI C63.10 Sections 6.9.2 and 6.9.3
15.247 (a)(1)	RSS-247 (6.2.3.1) (a)	Hopping Frequency Separation	Compliant	None
15.247 (a)(1)(iii)	RSS-247 (6.2.3.1) (b)	Number of Hopping Channels		
15.247 (a)(1)(iii)	RSS-247 (6.2.3.1) (b)	Average Time of Occupancy		
15.247 (b)(1)	RSS-247 (6.2.3.2) (a)	Output Power		
See Comment		Average Power	Reporting purposes only	Per ANSI C63.10, Section 11.9.2.3.2.
15.247 (d)	RSS-247 (6.6)	Conducted Spurious Emissions	Compliant	None
15.209, 15.205	RSS-GEN 8.9, 8.10	Radiated Emissions		
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions		

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC 47 CFR Part 2, FCC 47 CFR Part 15, FCC ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024, ISED ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, RSS-GEN Issue 5 + A1 + A2, and RSS-247 Issue 4.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building: 12 Laboratory Dr Durham, NC 27713, U.S.A	US0067	2180C	825374
☒	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	1.22%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
Power Spectral Density, conducted	2.47 dB
Unwanted Emissions, conducted	1.94 dB
All emissions, radiated	6.01 dB
Conducted Emissions (0.150-30MHz) - LISN	3.40 dB
Temperature	0.57°C
Humidity	3.39%
DC Supply voltages	1.70%
Time	3.39%

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

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

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is an extremity worn digital transceiver with BT, BLE, ANT, 2.4GHz WLAN, NFC, and Global Navigation Satellite System (GNSS) receiver. This report covers testing on the BT radio.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	Basic GFSK	11.51	14.16
2402 - 2480	Enhanced DQPSK	11.54	14.26
2402 - 2480	Enhanced 8PSK	10.94	12.42

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna gain, as provided by the manufacturer, is as follows:

Frequency Range (MHz)	Maximum Gain (dBi)	Type
2402-2480 MHz	-1.62	Slot

6.4. SOFTWARE AND FIRMWARE

SW Version: 4.16 and 6.13

6.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emissions were performed with the EUT set to transmit at the channel and mode with the highest average output power as the worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The EUT was investigated in three orthogonal orientations: X, Y, and Z. It was determined that the Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in the Z orientation.

Note: Only worst-case plots are included to reduce report size.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Power Supply	PHIHONG	AQ27A-59CFA	N/A	N/A

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Proprietary	1	Proprietary	Shielded	<3m	Charges to USB C

SETUP DIAGRAMS

Please refer to R16213445-EP1 for setup diagrams

7. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Conducted Room 1					
90416	Spectrum Analyzer	Keysight Technologies	N9030A	2025-07-31	2026-07-31
179892	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2026-08-05
SOFTEMI	Antenna Port Software	UL	Version 2024.2.23	NA	NA
Conducted Room 3					
90411	Spectrum Analyzer	Keysight Technologies	N9030A	2025-07-30	2026-07-30
211055	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2025-07-30	2026-07-30
211058	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2025-07-30	2026-07-30
245766	Environmental Meter	Control Company	06-662-4	2026-03-10	2027-03-10
SOFTEMI	Antenna Port Software	UL	Version 2024.2.23	NA	NA
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0	NA	NA
Cables & Attenuators					
CBL093	Micro-Coax UTiFLEX Cable Assembly, Low Loss,40Ghz	Carlisle Interconnect Technologies	UFA147A-2-0360-200200	2025-09-05	2026-09-05
Pad IV	SMA Coaxial 10dB Attenuator	CentricRF	C18S2-10	2025-10-12	2026-10-12

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
1-18 GHz					
135143	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2026-03-02	2028-03-02
18-26.5 GHz					
204704	Horn Antenna, 18-26.5GHz	Com Power	AH-826	2025-07-15	2027-07-15
Receiver & Software					
206459	Spectrum Analyzer	Rohde & Schwarz	FSW50	2025-09-15	2026-09-15
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
241204	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 1)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
0.009-30MHz					
65682	Active Loop Antenna	ETS-Lindgren	6502	2025-10-14	2027-10-14
30-1000 MHz					
90629	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2026-03-16	2028-03-16
Gain-Loss Chains					
91974	Gain-loss string: 0.009-30MHz	Various	Various	2025-05-31	2026-05-31
91976	Gain-loss string: 25-1000MHz	Various	Various	2025-05-31	2026-05-31
Receiver & Software					
206496	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-07-29	2026-07-29
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
241205	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05

Note: All equipment was in calibration at the time of tests.

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2026-05-11	2027-05-11
179892	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2026-08-06
80391	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2025-08-01	2026-08-01
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2025-07-30	2026-07-30
52859	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2026-05-11	2027-05-11
PS214	AC Power Source	Elgar	CW2501M	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Miscellaneous (if needed)					
84681	ANSI C63.4 1m extension cable.	UL	Per Annex B of ANSI C63.4	2026-05-11	2027-05-11

Note: All equipment was in calibration at the time of tests.

8. MEASUREMENT METHODS

On Time and Duty Cycle: ANSI C63.10-2020 Section 11.6

Occupied BW (20dB): ANSI C63.10-2020 Section 6.9.2

Occupied BW (99%): ANSI C63.10-2020 Section 6.9.3

Carrier Frequency Separation: ANSI C63.10-2020 Section 7.8.2

Number of Hopping Frequencies: ANSI C63.10-2020 Section 7.8.3

Time of Occupancy (Dwell Time): ANSI C63.10-2020 Section 7.8.4

Output Power: ANSI C63.10-2020 Section 7.8.5

Conducted Spurious Emissions: ANSI C63.10-2020 Section 7.8.7

Conducted Band-Edge: ANSI C63.10-2020 Section 7.8.7.2 and 6.10.4

Radiated Band-edge: ANSI C63.10-2020 Section 6.10.5

Radiated Spurious Emissions: ANSI C63.10-2020 Sections 6.3 to 6.6 and 7.8.8

AC Power-line conducted emissions: ANSI C63.10-2020, Section 6.2.

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

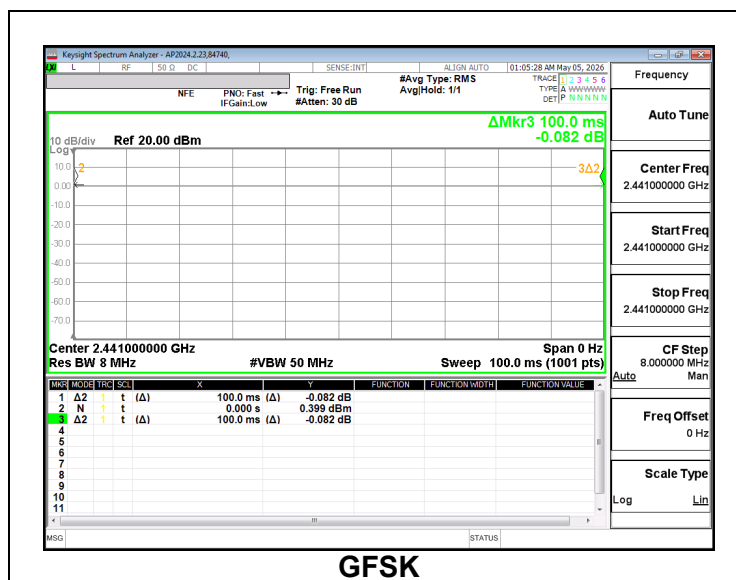
None; for reporting purposes only.

PROCEDURE

ANSI C63.10, Section 11.6: Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
Bluetooth GFSK	100.000	100.000	1.000	100	0.00	0.010
Bluetooth QFSK	100.000	100.000	1.000	100	0.00	0.010
Bluetooth 8PSK	100.000	100.000	1.000	100	0.00	0.010



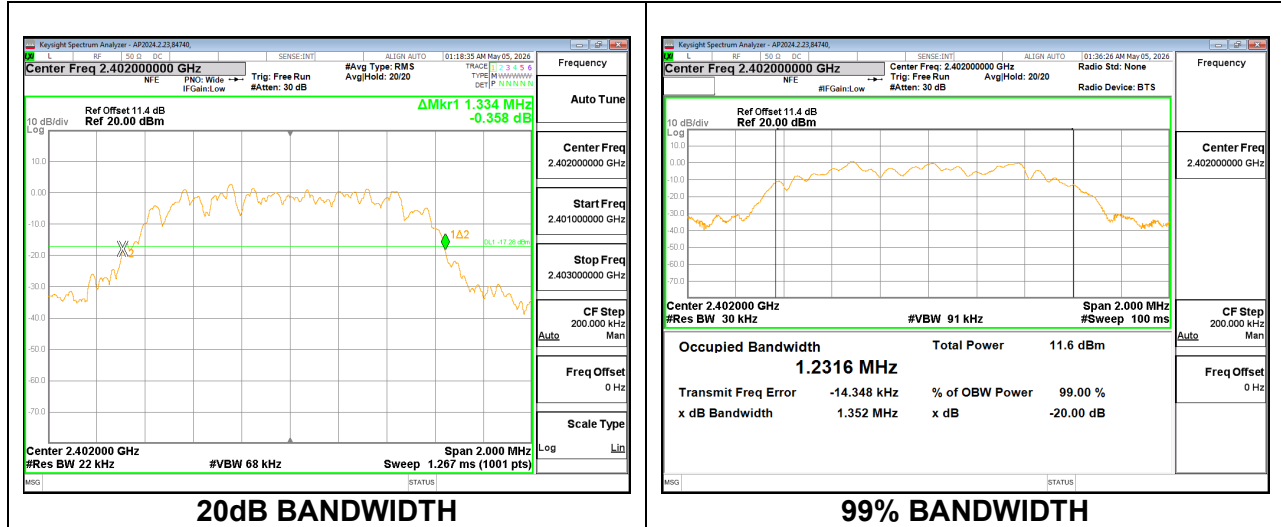
9.2. 20 dB AND 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 1-5% of the 20 dB bandwidth. The VBW is set to ≥ 3 times RBW. The sweep time is coupled.



Mode	Channel	Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)
GFSK	Low	2402	1.030	0.92351
	Mid	2441	1.032	0.91166
	High	2480	1.036	0.93911
8PSK	Low	2402	1.330	1.2316
	Mid	2441	1.322	1.2251
	High	2480	1.322	1.2290
DQPSK	Low	2402	1.334	1.1947
	Mid	2441	1.326	1.1920
	High	2480	1.334	1.1923

9.3. HOPPING FREQUENCY SEPARATION

LIMITS

FCC §15.247 (a) (1)
RSS-247 (6.2.3.1) (a)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively, 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, provided the systems operate with an output power no greater than 125 mW.

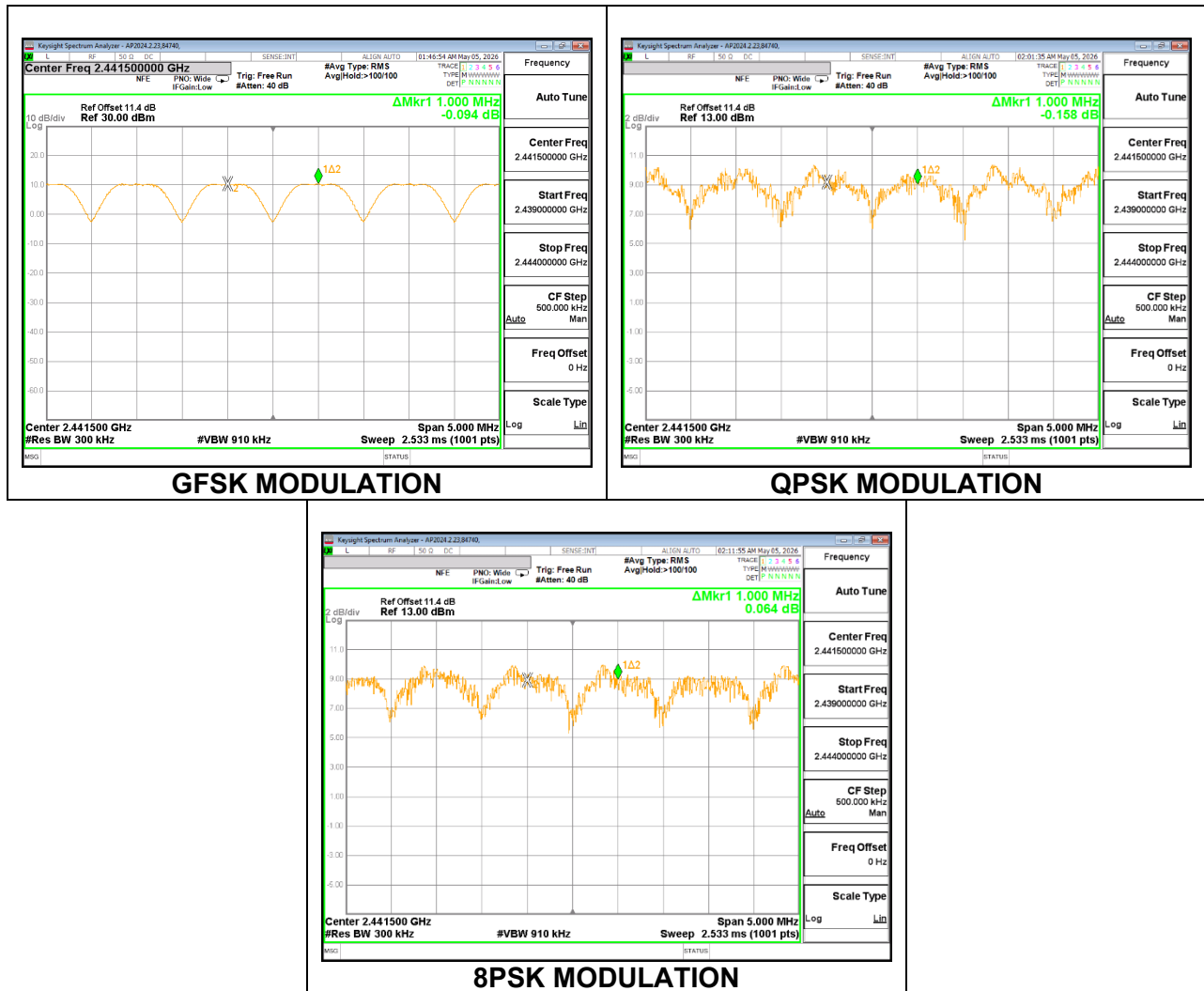
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to $VBW \geq 3 \text{ times RBW}$. The sweep time is coupled.

RESULTS

The largest 20 dB BW among all modes was 1.334 MHz and highest power (DQPSK/8PSK) was 14.39 dBm. Two-thirds of the highest BW is $1.334 \text{ MHz} \times (2/3) = 0.889 \text{ MHz}$. Since power < 21 dBm and the separation of 1.000 MHz > 0.889 MHz, the channel separation is compliant.

9.3.1. 1TX



9.4. NUMBER OF HOPPING CHANNELS

LIMITS

FCC §15.247 (a) (1) (iii)
RSS-247 (6.2.3.1) (b)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

TEST PROCEDURE

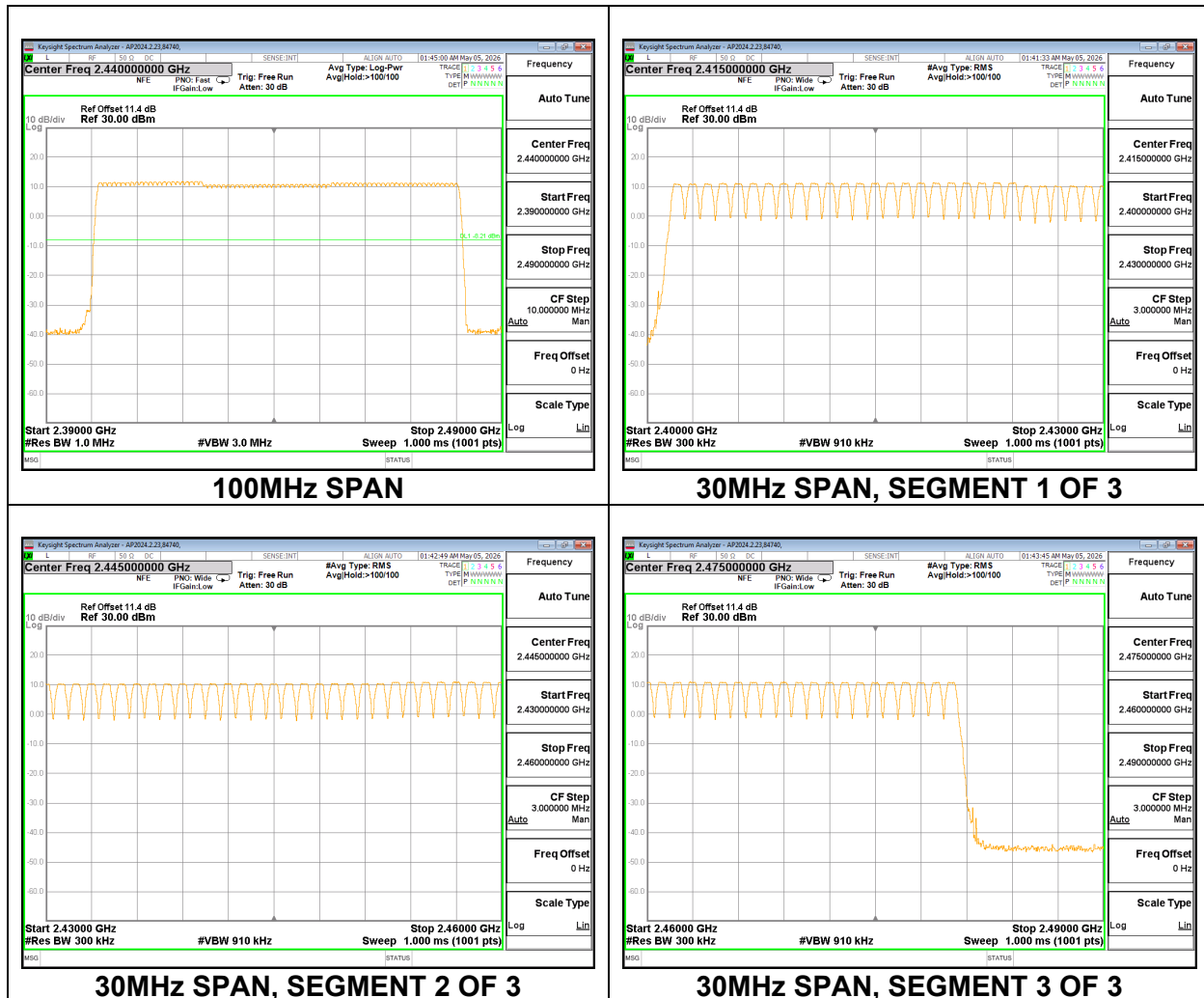
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

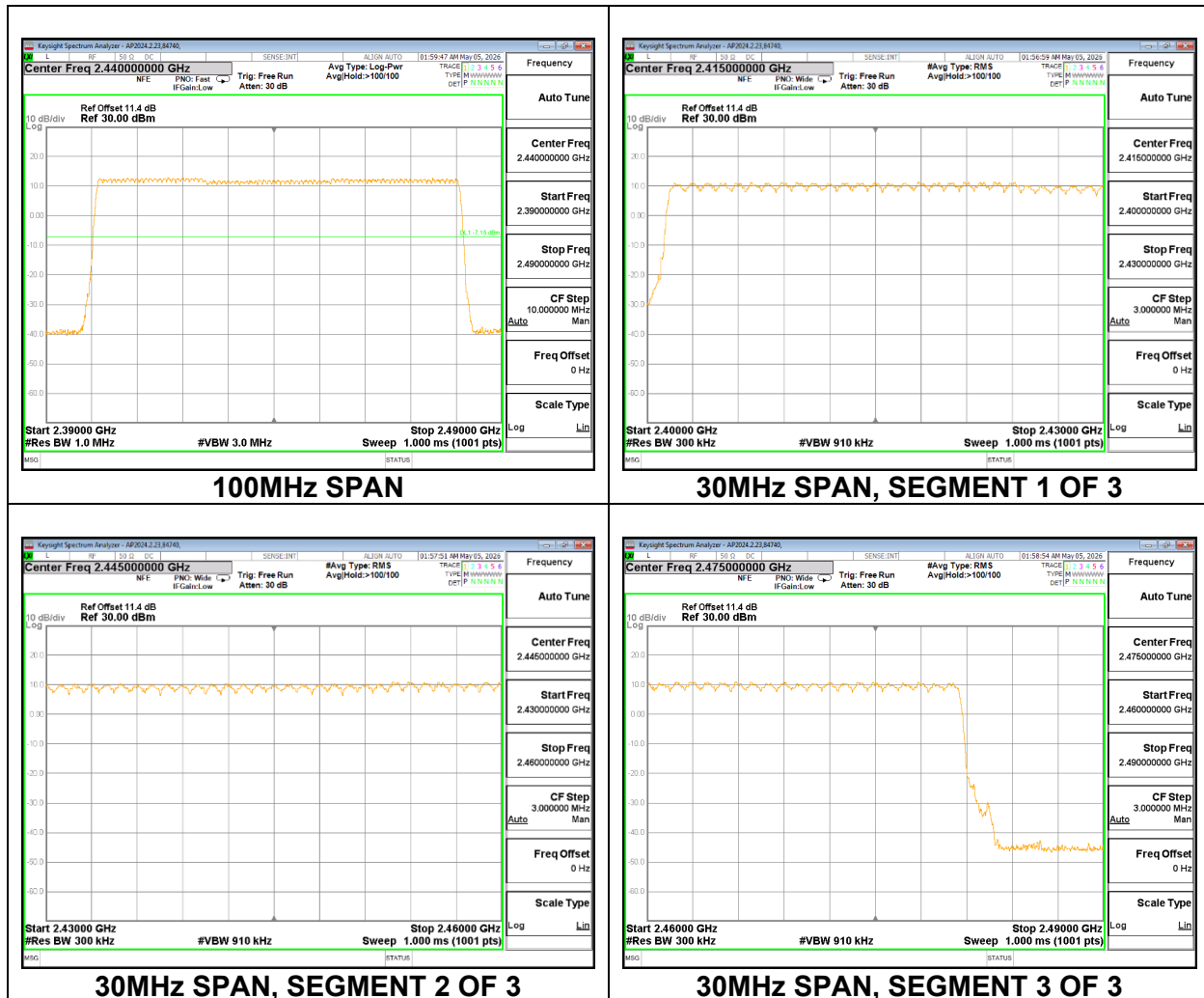
Normal Mode: 79 Channels Observed

9.4.1. 1TX

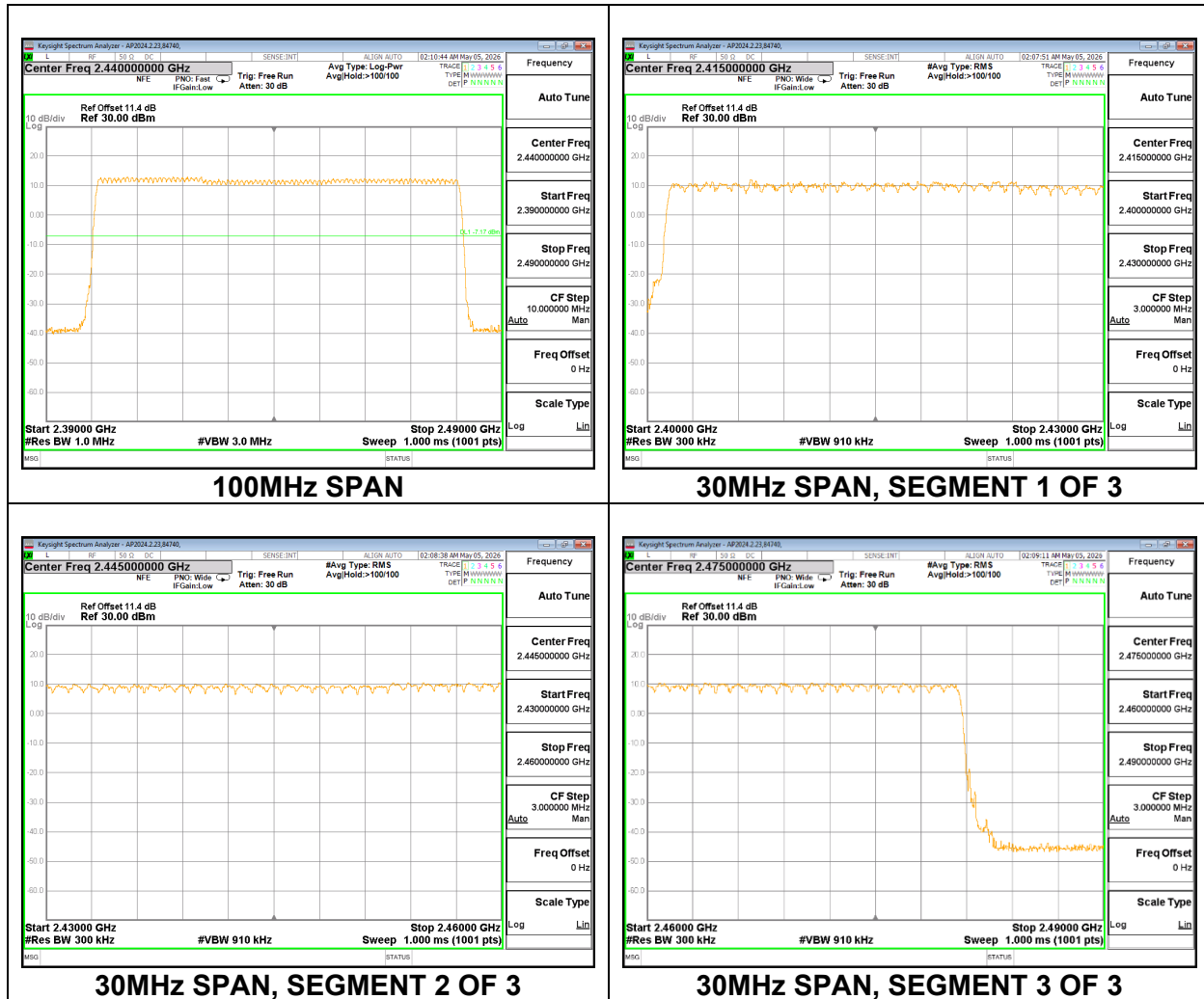
BLUETOOTH BASIC DATA RATE GFSK MODULATION



BLUETOOTH BASIC DATA RATE QPSK MODULATION



BLUETOOTH ENHANCED DATA RATE 8PSK MODULATION



9.5. AVERAGE TIME OF OCCUPANCY

LIMITS

FCC §15.247 (a) (1) (iii)
RSS-247 (6.2.3.1) (b)

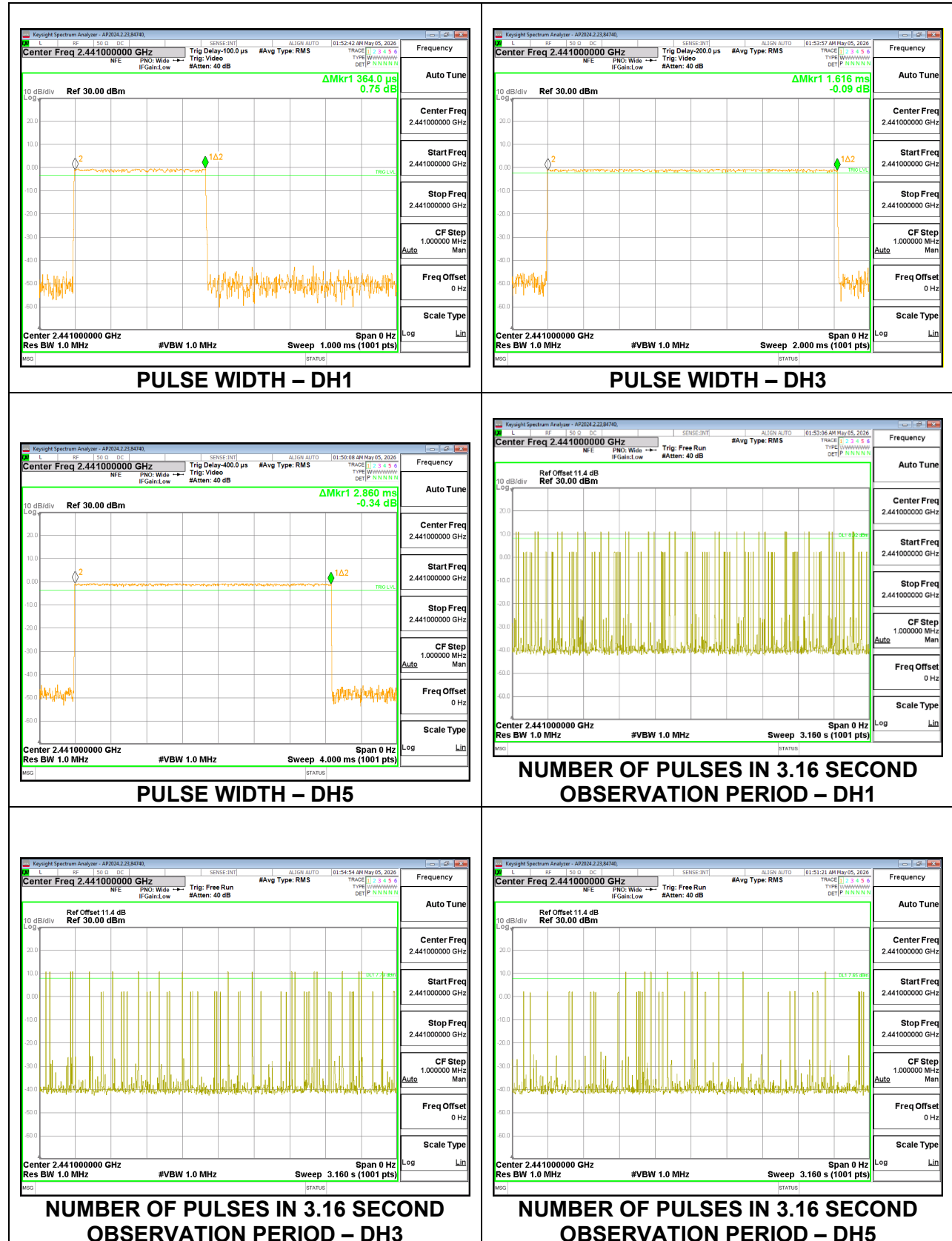
The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16-second window, to enable resolution of each occurrence.

The average time of occupancy in the specified 3.16 second period (79 channels * 0.4 s) is equal to $10 * (\# \text{ of pulses in } 3.16 \text{ s}) * \text{pulse width}$.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to $10 * (\# \text{ of pulses in } 0.8 \text{ s}) * \text{pulse width}$.



9.5.1. 1TX

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.364	31	0.1128	0.4	-0.2872
DH3	1.616	19	0.3070	0.4	-0.0930
DH5	2.86	9	0.2574	0.4	-0.1426
QPSK Normal Mode					
2DH1	0.373	31	0.11563	0.4	-0.28437
2DH3	1.630	15	0.2445	0.4	-0.1555
2DH5	2.864	8	0.22912	0.4	-0.17088
8PSK Normal Mode					
3DH1	0.372	31	0.11532	0.4	-0.28468
3DH3	1.622	18	0.29196	0.4	-0.10804
3DH5	2.864	15	0.4296	0.4	0.0296
DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.364	8	0.02912	0.4	-0.3709
DH3	1.616	5	0.08080	0.4	-0.3192
DH5	2.86	3	0.08580	0.4	-0.3142

Note: for AFH(8PSK/QPSK) mode, please refer to the results of AFH(GFSK) mode; the channel selection and hopping rate are the same for both EDR and Basic Rate operation, data for Basic Rate demonstrates compliance with channel occupancy when AFH is employed.

9.6. OUTPUT POWER

LIMITS

§15.247 (b) (1)
RSS-247 (6.2.3.2) (a)

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm. Alternatively, 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, provided the systems operate with an output power no greater than 125 mW.

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.40 dB (including 10.09 dB pad and 1.31 dB cable) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using an EUT cable and attenuator connected to a power meter via a wideband power sensor. Peak output power was read directly from power meter.

Tested By:	105900/84740
Test Date:	2026-07-06

9.6.1. 1 TX

Mode	Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
GFSK	Low	2402	10.37	21	-10.63
	Middle	2441	11.51	21	-9.49
	High	2480	11.46	21	-9.54
8PSK	Low	2402	9.80	21	-10.53
	Middle	2441	10.03	21	-10.40
	High	2480	10.94	21	-9.46
DQPSK	Low	2402	10.47	21	-11.20
	Middle	2441	10.60	21	-10.97
	High	2480	11.54	21	-10.06

9.7. AVERAGE POWER

LIMITS

None; for reporting purposes only

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.40 dB (including 10.09 dB pad and 1.31 dB cable) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using an EUT cable and attenuator connected to a power meter via a wideband power sensor. Peak output power was read directly from power meter.

Tested By:	105900/84740
Test Date:	2026-07-06

9.7.1. 1 TX

Mode	Channel	Frequency (MHz)	Average Power (dBm)
GFSK	Low	2402	9.32
	Middle	2441	10.72
	High	2480	10.59
8PSK	Low	2402	8.87
	Middle	2441	9.34
	High	2480	10.02
DQPSK	Low	2402	9.35
	Middle	2441	9.48
	High	2480	10.67

9.8. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)
RSS-247 6.6

Output power was measured based on the use of a peak measurement; therefore, the required attenuation is -20 dBc.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

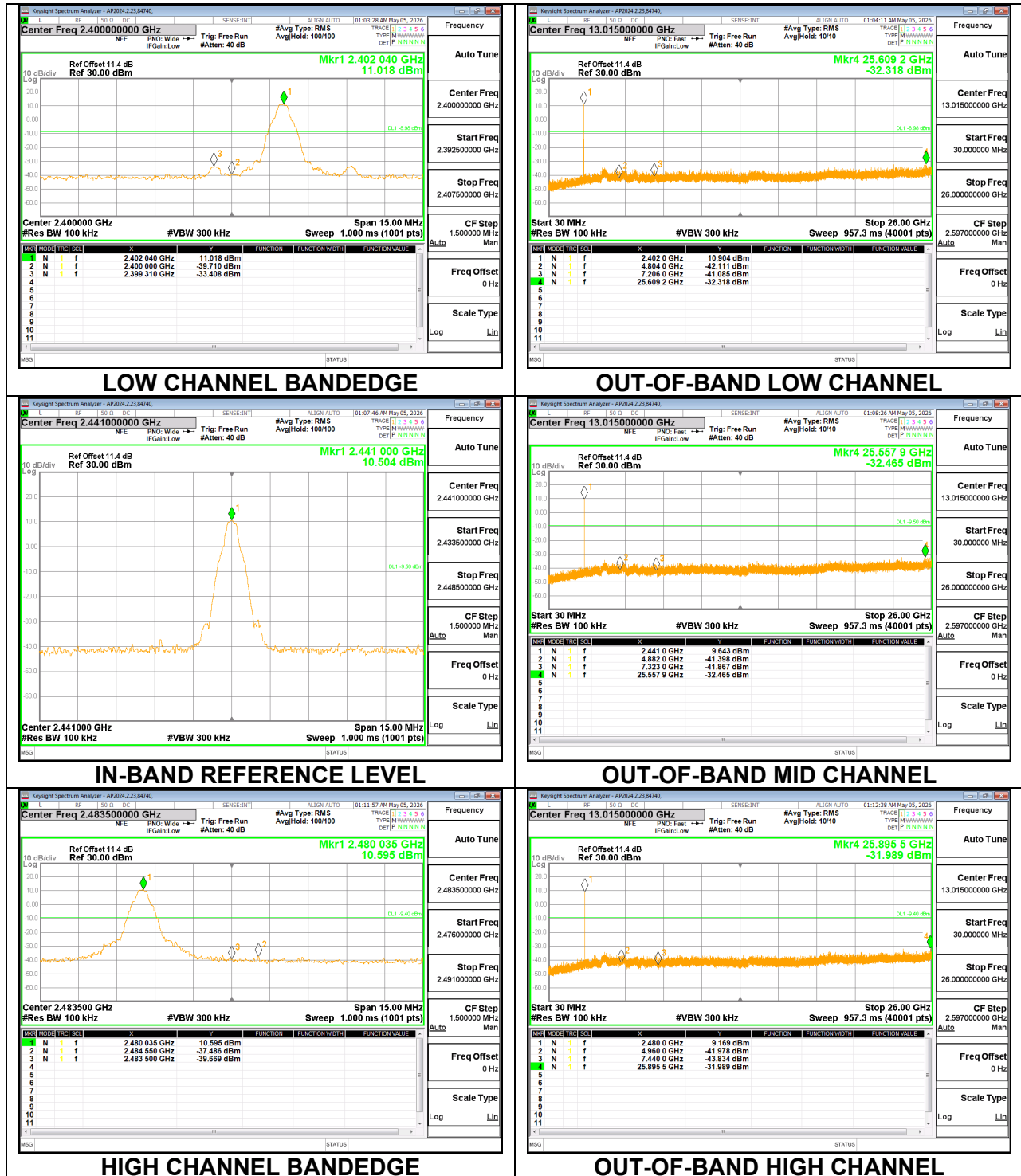
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The bandedges at 2.4 and 2.4835 GHz are additionally investigated with the transmitter set to the normal hopping mode.

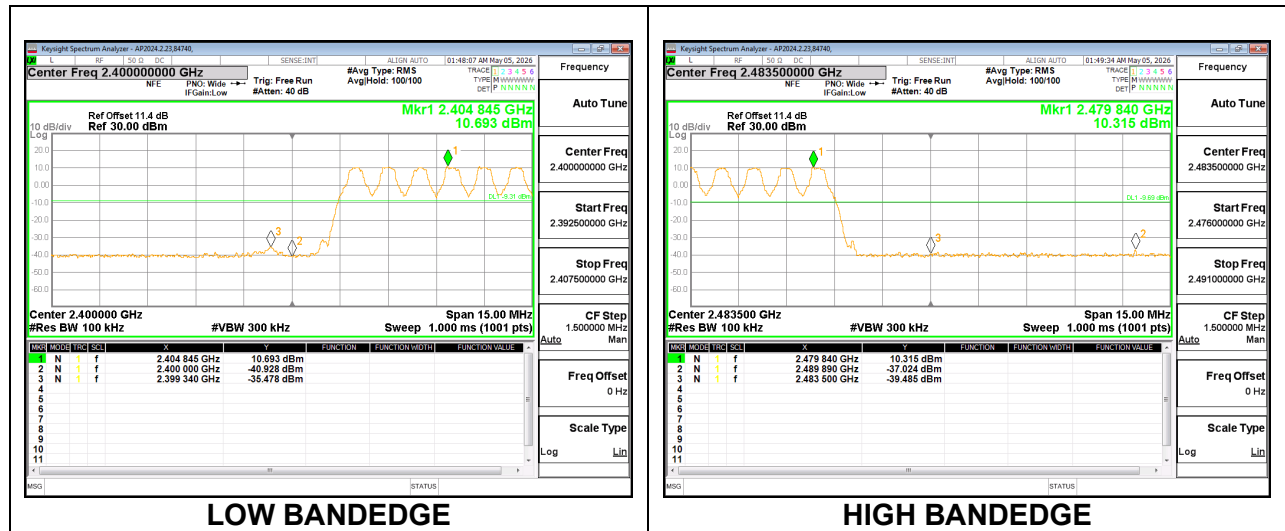
9.8.1. 1TX

BLUETOOTH BASIC DATA RATE GFSK MODULATION

SPURIOUS EMISSIONS, NON-HOPPING

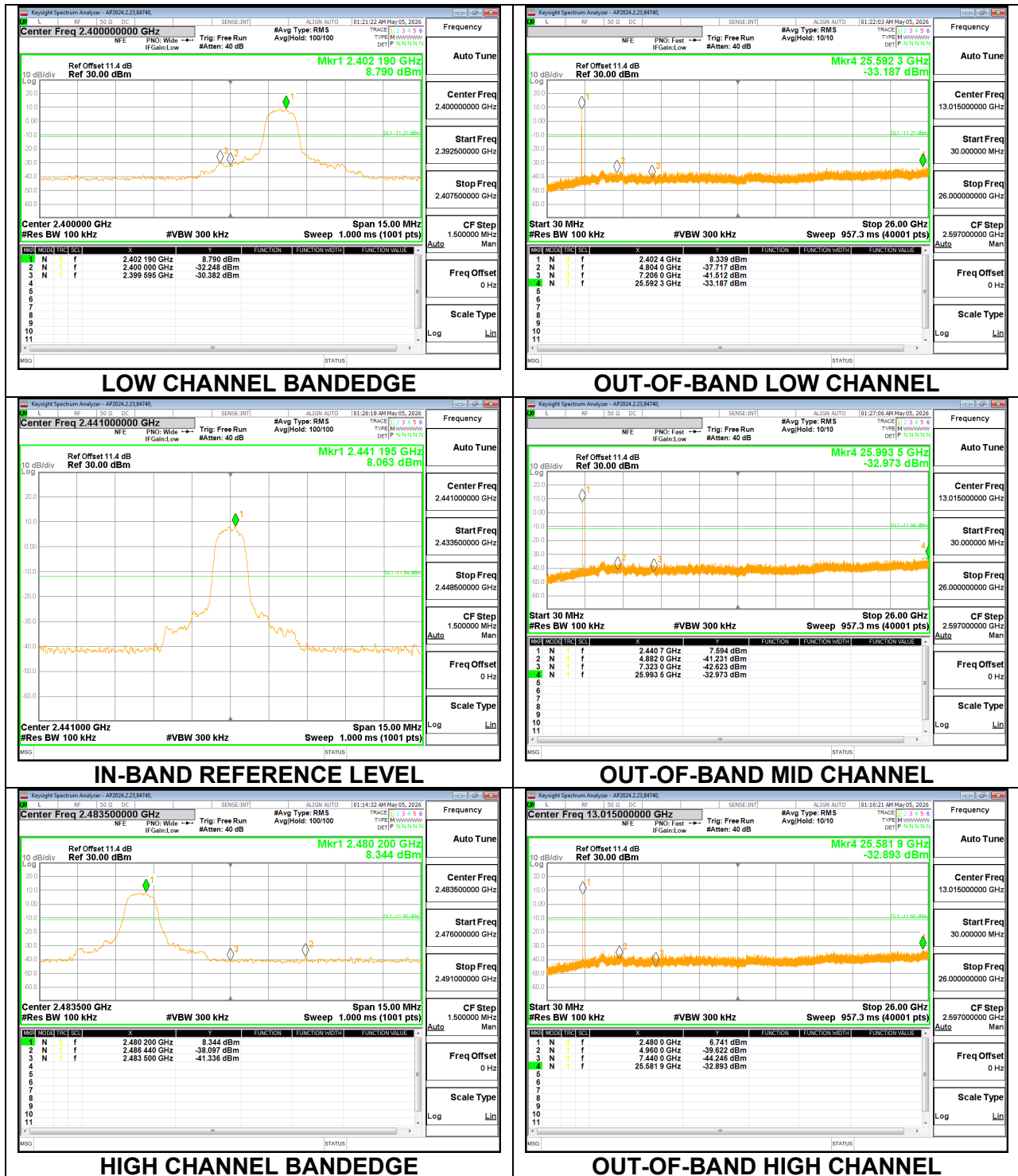


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

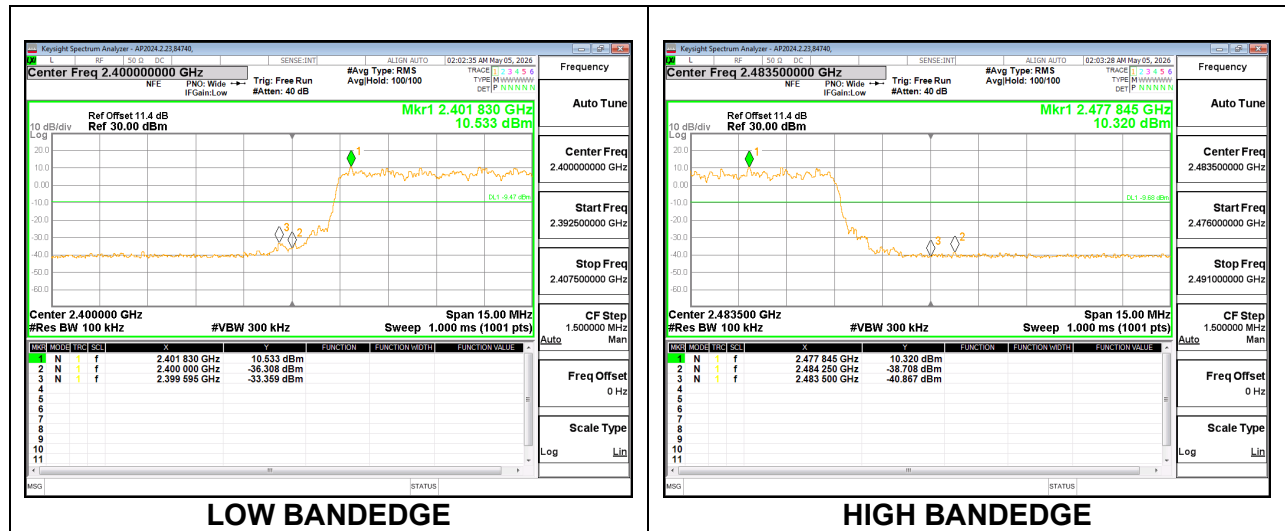


BLUETOOTH BASIC DATA RATE QPSK MODULATION

SPURIOUS EMISSIONS, NON-HOPPING

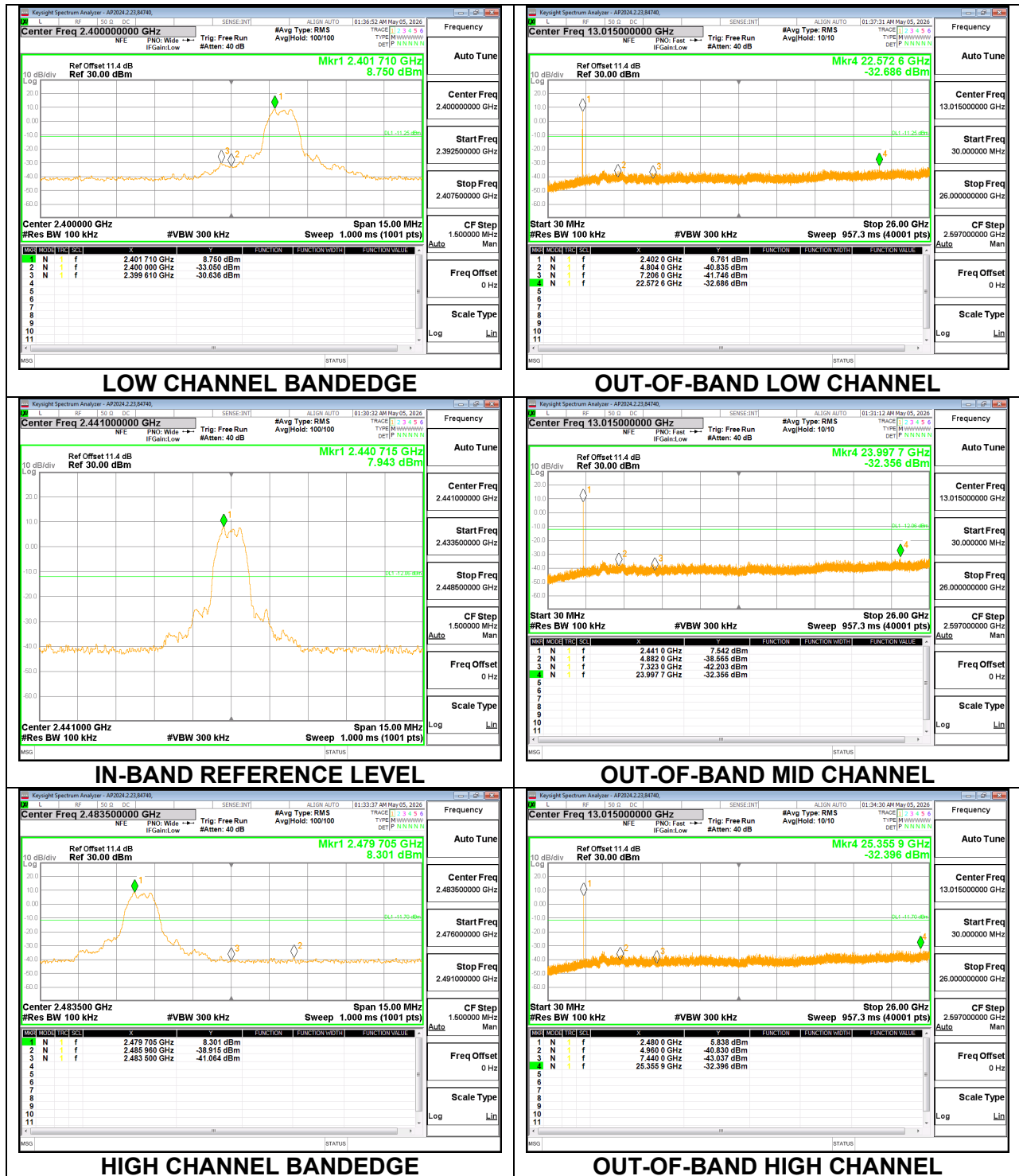


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

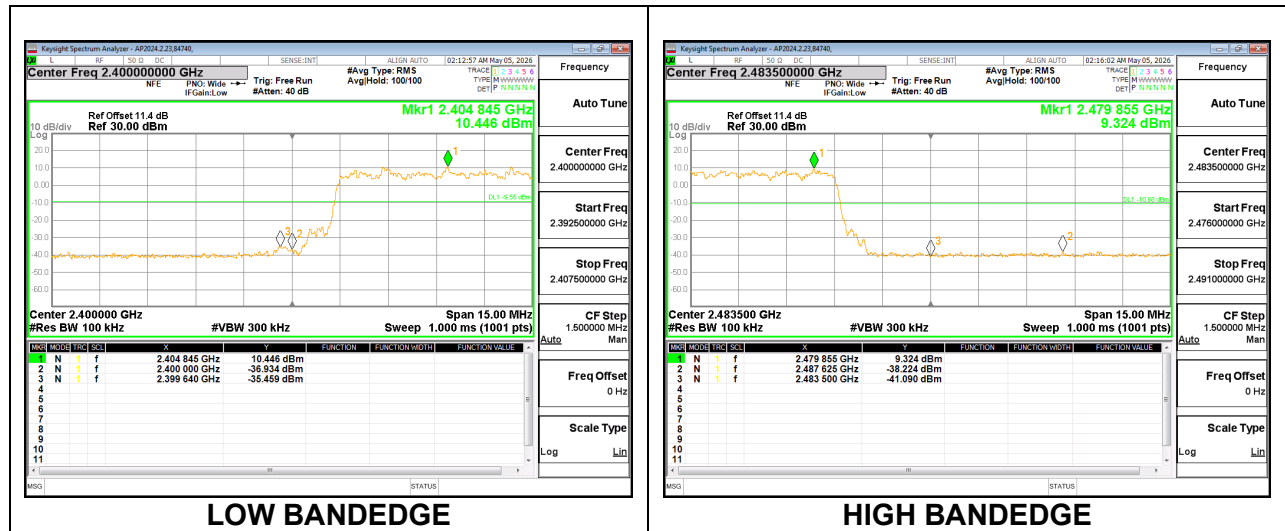


BLUETOOTH ENHANCED DATA RATE 8PSK MODULATION

SPURIOUS EMISSIONS, NON-HOPPING



SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON



10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

IC RSS-GEN Clause 8.9 and 8.10

Frequency Range (kHz)	Field Strength Limit (uA/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	6.37/F(kHz) @ 300 m	-
0.490-1.705	63.7/F(kHz) @ 30 m	-
1.705 - 30	0.08 @ 30m	-
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3MHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements. Average measurements is taken using VBW=1/Ton for SISO mode.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

3D antenna use - For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel).

Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

KDB 414788 Open Field Site (OFS) and Chamber Correlation Justification

OFS and chamber correlation testing had been performed and chamber measured test result is the worst-case test result.

KDB 558074 D01 15.247 Meas Guidance v05r02

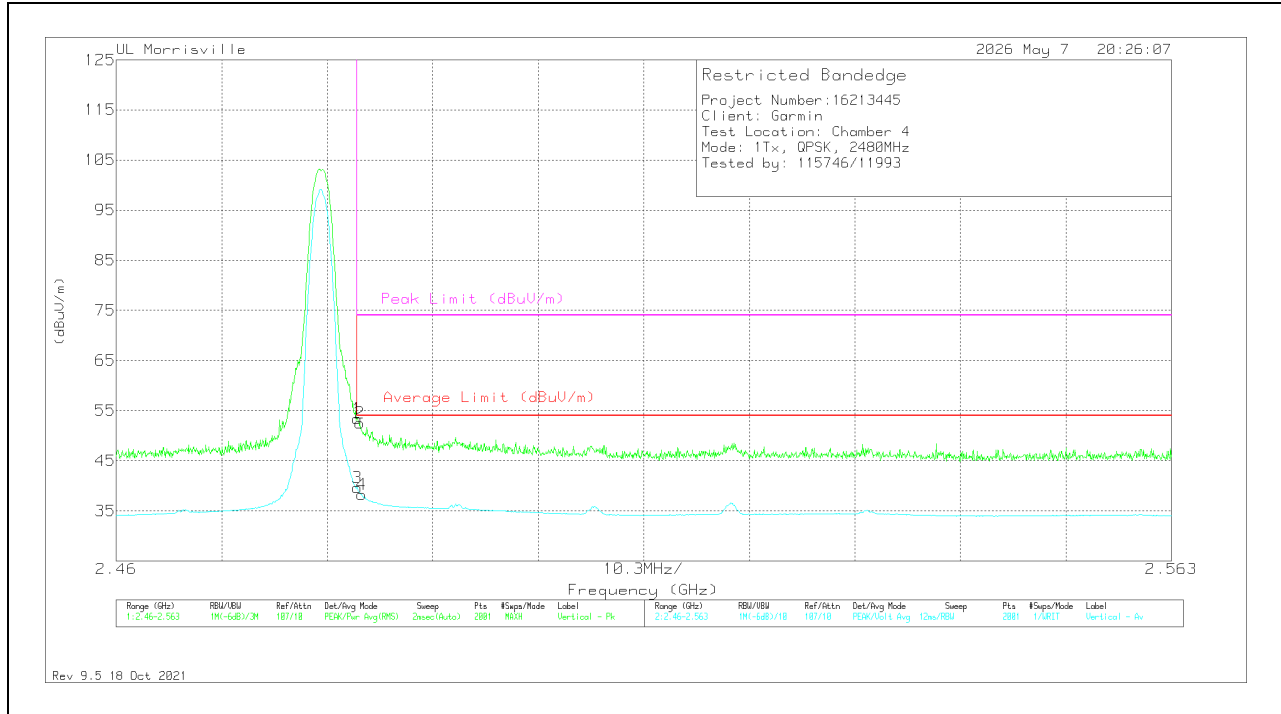
Use of a duty cycle correction factor (DCCF) is permitted for calculating average radiated field strength emission levels for an FHSS device in 15.247. This DCCF can be applied when the field strength limit (e.g., within a Government Restricted band) and the conditions specified in Section 15.35(c) can be satisfied. The average radiated field strength is calculated by subtracting the DCCF from the maximum radiated field strength level as determined through measurement. The maximum radiated field strength level represents the worst-case (maximum amplitude) RMS measurement of the emission(s) during continuous transmission (i.e., not including any time intervals during which the transmitter is off or is transmitting at a reduced power level). It is also acceptable to apply the DCCF to a measurement performed with a peak detector instead of the specified RMS power averaging detector.

Note that Section 15.35(c) specifies that the DCCF shall represent the worst case (greatest duty cycle) over any 100 msec transmission period.

10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. BANDEDGE (WORST-CASE: QPSK)

HORIZONTAL RESULT



BANDEDGE TEST DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	135143 ACF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	43.34	Pk	32.4	-22.3	53.44	-	-	74	-20.56	310	145	V
2	* ** 2.48379	42.45	Pk	32.4	-22.3	52.55	-	-	74	-21.45	310	145	V
3	* ** 2.48354	29.5	VA1T	32.4	-22.3	39.6	54	-14.4	-	-	310	145	V
4	* ** 2.48395	28.21	VA1T	32.4	-22.3	38.31	54	-15.69	-	-	310	145	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

BANDEDGE TEST DATA

Mode	Frequency (MHz)	Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	135143 ACF (dB)	Gain/Loss (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
GFSK	2402	1	*** 2.38996	35.47	Pk	31.9	-22.4	0	44.97	-	-	74	-29.03	350	116	H
		2	*** 2.35106	37.75	Pk	31.9	-22.6	0	47.05	-	-	74	-26.95	350	116	H
		3	*** 2.38996	22.51	VA1T	31.9	-22.4	0	32.01	54	-21.99	-	-	350	116	H
		4	*** 2.36187	22.76	VA1T	31.9	-22.4	0	32.26	54	-21.74	-	-	350	116	H
		1	*** 2.38996	36.47	Pk	31.9	-22.4	0	45.97	-	-	74	-28.03	355	123	V
		2	*** 2.36171	37.31	Pk	31.9	-22.4	0	46.81	-	-	74	-27.19	355	123	V
		3	*** 2.38996	22.93	VA1T	31.9	-22.4	0	32.43	54	-21.57	-	-	355	123	V
		4	*** 2.3898	22.96	VA1T	31.9	-22.4	0	32.46	54	-21.54	-	-	355	123	V
	2480	1	*** 2.48354	39.26	Pk	32.4	-22.3	0	49.36	-	-	74	-24.64	346	107	H
		2	*** 2.48415	38.56	Pk	32.4	-22.3	0	48.66	-	-	74	-25.34	346	107	H
		3	*** 2.48354	25.96	VA1T	32.4	-22.3	0	36.06	54	-17.94	-	-	346	107	H
		4	*** 2.48379	25.73	VA1T	32.4	-22.3	0	35.83	54	-18.17	-	-	346	107	H
		1	*** 2.48354	41.87	Pk	32.4	-22.3	0	51.97	-	-	74	-22.03	357	156	V
		2	*** 2.4839	42.69	Pk	32.4	-22.3	0	52.79	-	-	74	-21.21	357	156	V
		3	*** 2.48354	29.09	VA1T	32.4	-22.3	0	39.19	54	-14.81	-	-	357	156	V
		4	*** 2.48369	28.95	VA1T	32.4	-22.3	0	39.05	54	-14.95	-	-	357	156	V
QPSK	2402	1	*** 2.38996	35.01	Pk	31.9	-22.4	0	44.51	-	-	74	-29.49	218	103	H
		2	*** 2.36534	37.72	Pk	31.9	-22.4	0	47.22	-	-	74	-26.78	218	103	H
		3	*** 2.38996	22.63	VA1T	31.9	-22.4	0	32.13	54	-21.87	-	-	218	103	H
		4	*** 2.36402	23.11	VA1T	31.9	-22.4	0	32.61	54	-21.39	-	-	218	103	H
		1	*** 2.38996	34.76	Pk	31.9	-22.4	0	44.26	-	-	74	-29.74	312	139	V
		2	*** 2.36885	37.33	Pk	31.9	-22.5	0	46.73	-	-	74	-27.27	312	139	V
		3	*** 2.38996	22.51	VA1T	31.9	-22.4	0	32.01	54	-21.99	-	-	312	139	V
		4	*** 2.38991	22.52	VA1T	31.9	-22.4	0	32.02	54	-21.98	-	-	312	139	V
	2480	1	*** 2.48354	38.66	Pk	32.4	-22.3	0	48.76	-	-	74	-25.24	355	106	H
		2	*** 2.48379	38.82	Pk	32.4	-22.3	0	48.92	-	-	74	-25.08	355	106	H
		3	*** 2.48354	25.56	VA1T	32.4	-22.3	0	35.66	54	-18.34	-	-	355	106	H
		4	*** 2.48359	25.61	VA1T	32.4	-22.3	0	35.71	54	-18.29	-	-	355	106	H
		1	*** 2.48354	43.34	Pk	32.4	-22.3	0	53.44	-	-	74	-20.56	310	145	V
		2	*** 2.48379	42.45	Pk	32.4	-22.3	0	52.55	-	-	74	-21.45	310	145	V
		3	*** 2.48354	29.5	VA1T	32.4	-22.3	0	39.6	54	-14.4	-	-	310	145	V
		4	*** 2.48395	28.21	VA1T	32.4	-22.3	0	38.31	54	-15.69	-	-	310	145	V
8PSK	2402	1	*** 2.38996	35.03	Pk	31.9	-22.4	0	44.53	-	-	74	-29.47	221	113	H
		2	*** 2.36444	36.76	Pk	31.9	-22.4	0	46.26	-	-	74	-27.74	221	113	H
		3	*** 2.38996	22.46	VA1T	31.9	-22.4	0	31.96	54	-22.04	-	-	221	113	H
		4	*** 2.38912	22.5	VA1T	31.9	-22.4	0	32	54	-22	-	-	221	113	H
		1	*** 2.38996	37.24	Pk	31.9	-22.4	0	46.74	-	-	74	-27.26	2	138	V
		2	*** 2.3866	37.34	Pk	31.9	-22.4	0	46.84	-	-	74	-27.16	2	138	V
		3	*** 2.38996	22.87	VA1T	31.9	-22.4	0	32.37	54	-21.63	-	-	2	138	V
		4	*** 2.38991	22.85	VA1T	31.9	-22.4	0	32.35	54	-21.65	-	-	2	138	V
	2480	1	*** 2.48354	38.06	Pk	32.4	-22.3	0	48.16	-	-	74	-25.84	351	109	H
		2	*** 2.48374	38.3	Pk	32.4	-22.3	0	48.4	-	-	74	-25.6	351	109	H
		3	*** 2.48354	25.84	VA1T	32.4	-22.3	0	35.94	54	-18.06	-	-	351	109	H
		4	*** 2.48415	24.88	VA1T	32.4	-22.3	0	34.98	54	-19.02	-	-	351	109	H
		1	*** 2.48354	42.79	Pk	32.4	-22.3	0	52.89	-	-	74	-21.11	6	123	V
		2	*** 2.48374	42.79	Pk	32.4	-22.3	0	52.89	-	-	74	-21.11	6	123	V
		3	*** 2.48354	29.28	VA1T	32.4	-22.3	0	39.38	54	-14.62	-	-	6	123	V
		4	*** 2.48359	29.32	VA1T	32.4	-22.3	0	39.42	54	-14.58	-	-	6	123	V

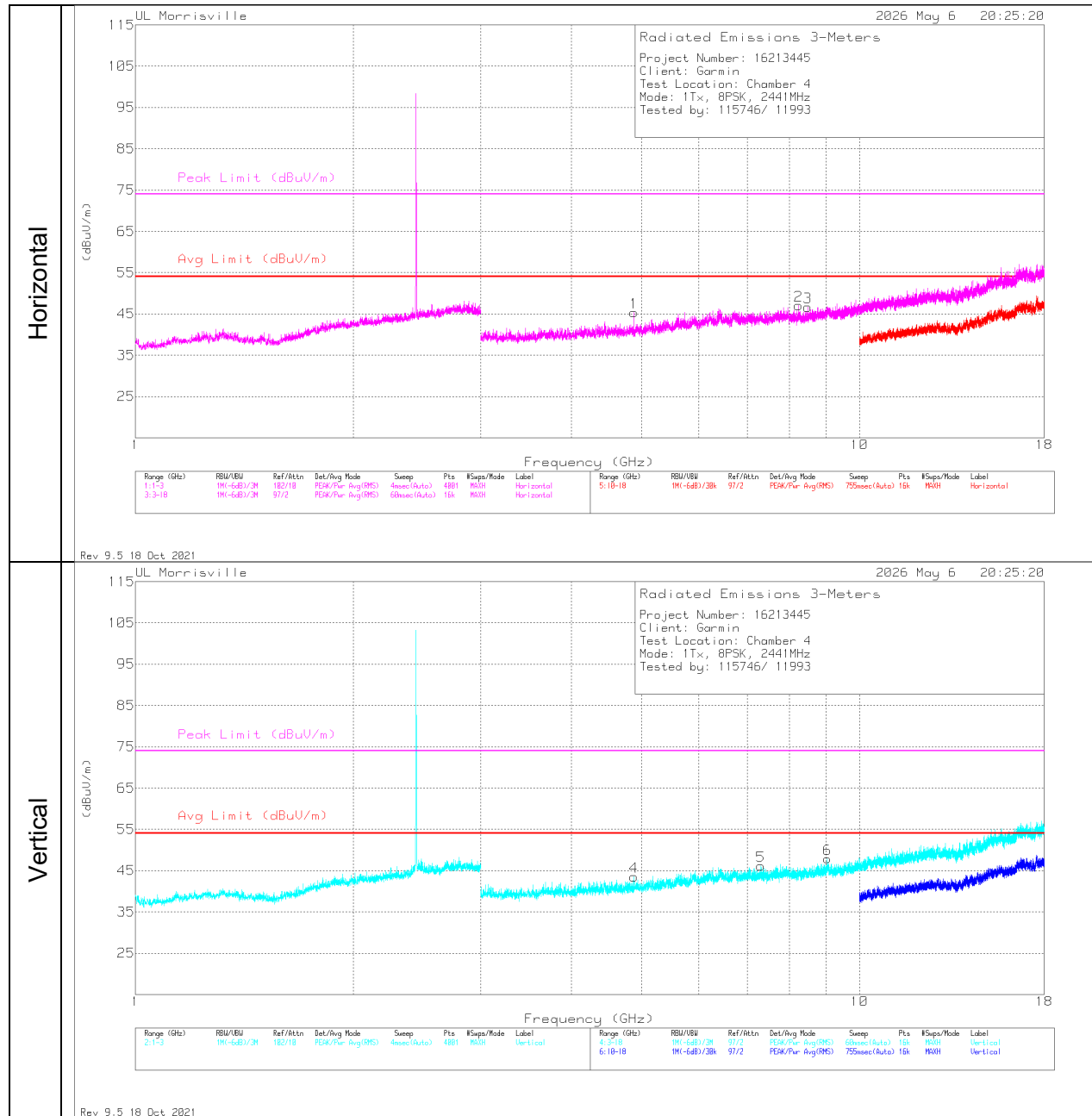
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

VA1T - Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.2. HARMONICS AND SPURIOUS (WORST-CASE: 8PSK)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	135143 ACF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 4.88156	42.61	Pk	33.9	-31.1	45.41	54	-8.59	74	-28.59	0-360	100	H
2	*** 8.24625	37.09	Pk	35.8	-25.8	47.09	54	-6.91	74	-26.91	0-360	100	H
3	*** 8.48063	36.32	Pk	35.8	-25.4	46.72	54	-7.28	74	-27.28	0-360	100	H
4	*** 4.88156	40.74	Pk	33.9	-31.1	43.54	54	-10.46	74	-30.46	0-360	200	V
5	*** 7.31156	37	Pk	35.7	-26.6	46.1	54	-7.9	74	-27.9	0-360	200	V
6	*** 9.03469	35.01	Pk	36.2	-23.3	47.91	54	-6.09	74	-26.09	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

HARMONICS AND SPURIOUS TEST DATA

Mode	Frequency (MHz)	Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	135143 ACB (dB)	Gain/Loss (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
GFSK	2402	1	*** 8.04188	36.05	Pk	35.8	-26.3	0	45.55	-	-	74	-28.45	0-360	100	H
		2	*** 9.06563	34.34	Pk	36.2	-23.5	0	47.04	-	-	74	-26.96	0-360	100	H
		3	*** 9.35438	34.54	Pk	36.4	-23.5	0	47.44	-	-	74	-26.56	0-360	100	H
		4	*** 8.29031	36.21	Pk	35.8	-25.9	0	46.11	-	-	74	-27.89	0-360	200	V
		5	*** 9.05344	34.38	Pk	36.2	-23.2	0	47.38	-	-	74	-26.62	0-360	200	V
		6	*** 9.40313	35.03	Pk	36.4	-24.3	0	47.13	-	-	74	-26.87	0-360	200	V
	2441	1	*** 4.88156	43.87	Pk	33.9	-31.1	0	46.67	-	-	74	-27.33	0-360	100	H
		2	*** 9.15094	35.38	Pk	36.3	-24.5	0	47.18	-	-	74	-26.82	0-360	100	H
		3	*** 9.39563	34.84	Pk	36.4	-24.4	0	46.84	-	-	74	-27.16	0-360	100	H
		5	*** 9.11906	34.24	Pk	36.3	-24.2	0	46.34	-	-	74	-27.66	0-360	200	V
		6	*** 9.37916	34.75	PK2	36.4	-23.9	0	47.25	-	-	74	-26.75	215	260	V
			*** 9.38105	20.49	V1TV	36.4	-24	0	32.89	54	-21.11	-	-	215	260	V
		4	2.4815	37.75	Pk	32.4	-22.3	0	47.85	-	-	74	-26.15	0-360	200	V
	2480	1	*** 8.17969	36.35	Pk	35.8	-26.1	0	46.05	-	-	74	-27.95	0-360	100	H
		2	*** 9.12	34.58	Pk	36.3	-24.2	0	46.68	-	-	74	-27.32	0-360	100	H
		3	*** 9.40594	34.43	Pk	36.4	-24.3	0	46.53	-	-	74	-27.47	0-360	100	H
		4	*** 8.20219	35.88	Pk	35.8	-25.9	0	45.78	-	-	74	-28.22	0-360	200	V
		5	*** 9.06094	34.21	Pk	36.2	-23.4	0	47.01	-	-	74	-26.99	0-360	200	V
		6	*** 9.34688	34.38	Pk	36.4	-23.6	0	47.18	-	-	74	-26.82	0-360	200	V
QPSK	2402	1	*** 4.80375	43.01	Pk	33.8	-30.8	0	46.01	-	-	74	-27.99	0-360	100	H
		2	*** 7.32469	37.76	Pk	35.7	-26.9	0	46.56	-	-	74	-27.44	0-360	100	H
		3	*** 9.41719	34.88	Pk	36.4	-24.4	0	46.88	-	-	74	-27.12	0-360	100	H
		4	*** 4.80375	41.25	Pk	33.8	-30.8	0	44.25	-	-	74	-29.75	0-360	200	V
		5	*** 7.64063	37.77	Pk	35.6	-26.6	0	46.77	-	-	74	-27.23	0-360	200	V
		6	*** 9.30563	35.27	Pk	36.4	-24.4	0	47.27	-	-	74	-26.73	0-360	200	V
	2441	1	*** 4.88156	44.26	Pk	33.9	-31.1	0	47.06	-	-	74	-26.94	0-360	100	H
		2	*** 7.33406	37.35	Pk	35.6	-26.8	0	46.15	-	-	74	-27.85	0-360	100	H
		3	*** 8.4825	36.76	Pk	35.8	-25.5	0	47.06	-	-	74	-26.94	0-360	100	H
		4	*** 4.88156	41.47	Pk	33.9	-31.1	0	44.27	-	-	74	-29.73	0-360	200	V
		5	*** 5.11688	40.33	Pk	34.3	-30.3	0	44.33	-	-	74	-29.67	0-360	200	V
		6	*** 8.30813	35.88	Pk	35.8	-25.9	0	45.78	-	-	74	-28.22	0-360	200	V
	2480	1	*** 4.95938	42.78	Pk	34	-30.5	0	46.28	-	-	74	-27.72	0-360	100	H
		2	*** 9.13594	35.42	Pk	36.3	-24.5	0	47.22	-	-	74	-26.78	0-360	100	H
		3	*** 9.49313	35.73	Pk	36.5	-25.1	0	47.13	-	-	74	-26.87	0-360	100	H
		4	*** 4.63688	39.97	Pk	33.7	-31.1	0	42.57	-	-	74	-31.43	0-360	200	V
		5	*** 7.31344	37.27	Pk	35.7	-26.6	0	46.37	-	-	74	-27.63	0-360	200	V
		6	*** 9.12	35.72	Pk	36.3	-24.2	0	47.82	-	-	74	-26.18	0-360	200	V
8PSK	2402	1	*** 3.62438	43.64	Pk	33.1	-33.3	0	43.44	-	-	74	-30.56	0-360	100	H
		2	*** 4.80844	41.86	Pk	33.8	-30.7	0	44.96	-	-	74	-29.04	0-360	100	H
		3	*** 8.07188	36.94	Pk	35.8	-26.7	0	46.04	-	-	74	-27.96	0-360	100	H
		4	*** 4.61344	41.14	Pk	33.8	-31.1	0	43.84	-	-	74	-30.16	0-360	200	V
		5	*** 4.80844	40.95	Pk	33.8	-30.7	0	44.05	-	-	74	-29.95	0-360	200	V
		6	*** 8.09719	36.78	Pk	35.8	-26.5	0	46.08	-	-	74	-27.92	0-360	200	V
	2441	1	*** 4.88156	42.61	Pk	33.9	-31.1	0	45.41	-	-	74	-28.59	0-360	100	H
		2	*** 8.24625	37.09	Pk	35.8	-25.8	0	47.09	-	-	74	-26.91	0-360	100	H
		3	*** 8.48063	36.32	Pk	35.8	-25.4	0	46.72	-	-	74	-27.28	0-360	100	H
		4	*** 4.88156	40.74	Pk	33.9	-31.1	0	43.54	-	-	74	-30.46	0-360	200	V
		5	*** 7.31156	37	Pk	35.7	-26.6	0	46.1	-	-	74	-27.9	0-360	200	V
		6	*** 9.03469	35.01	Pk	36.2	-23.3	0	47.91	-	-	74	-26.09	0-360	200	V
	2480	1	*** 4.95938	40.84	Pk	34	-30.5	0	44.34	-	-	74	-29.66	0-360	100	H
		2	*** 8.03719	36.78	Pk	35.8	-26.2	0	46.38	-	-	74	-27.62	0-360	100	H
		3	*** 9.15938	35.17	Pk	36.3	-24.4	0	47.07	-	-	74	-26.93	0-360	100	H
		4	*** 4.93594	40.02	Pk	34	-30.4	0	43.62	-	-	74	-30.38	0-360	200	V
		5	*** 7.4325	37.06	Pk	35.6	-26.9	0	45.76	-	-	74	-28.24	0-360	200	V
		6	*** 8.49375	36.09	Pk	35.8	-25.5	0	46.39	-	-	74	-27.61	0-360	200	V

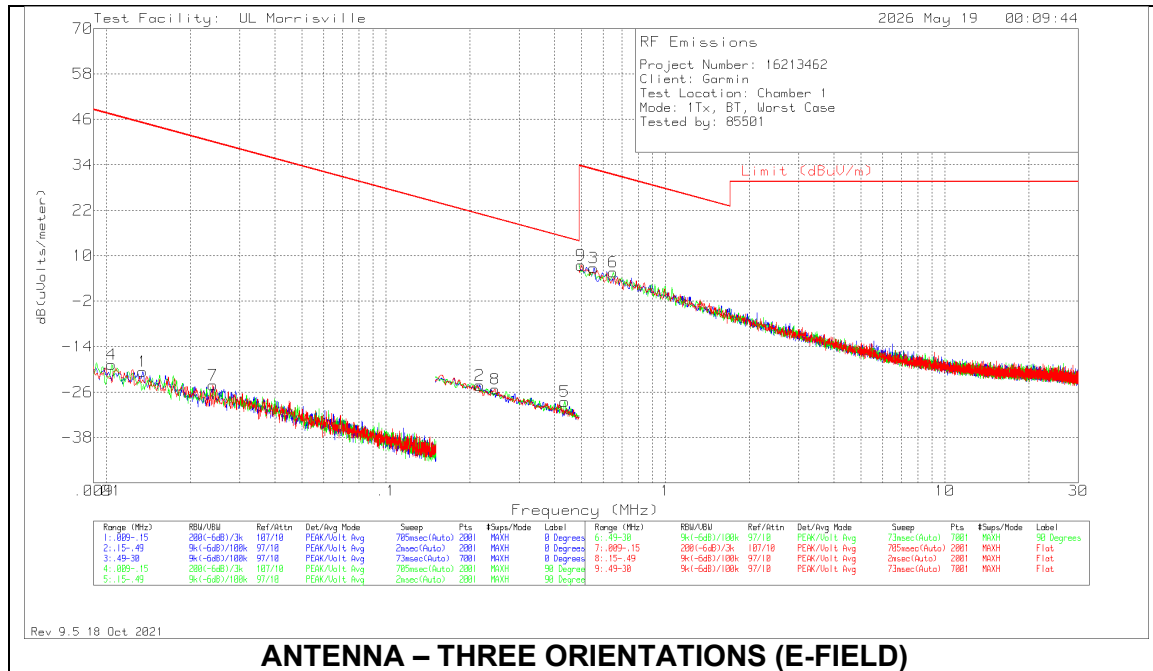
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

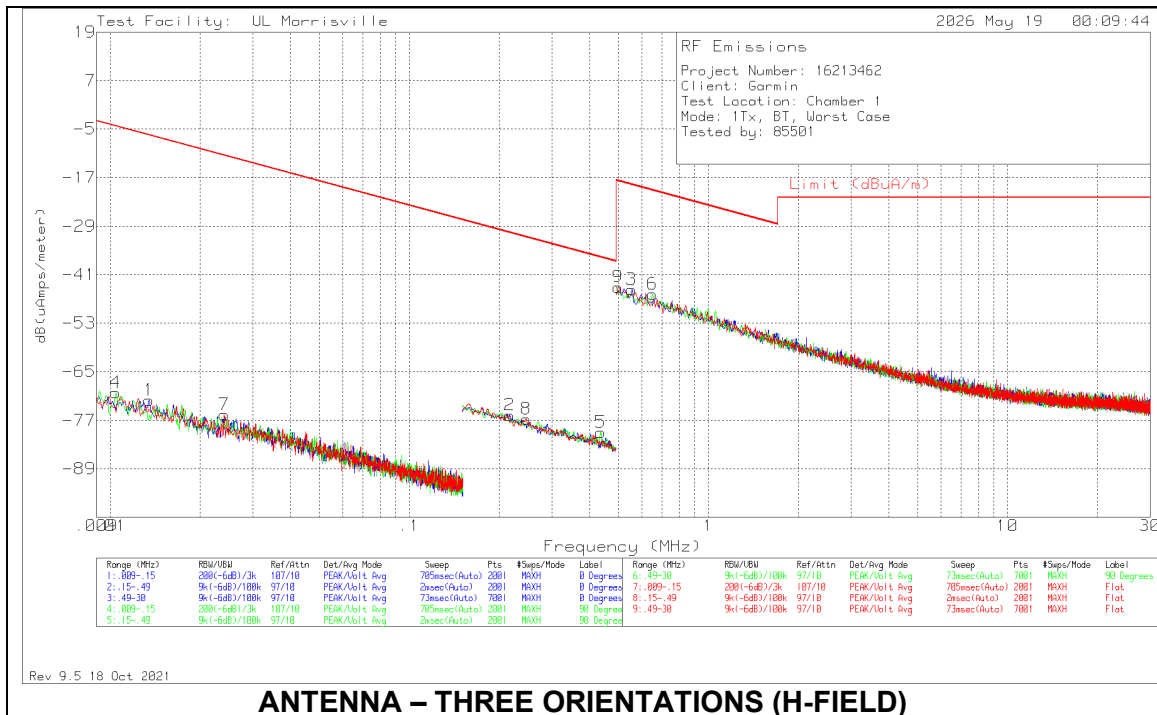
Pk - Peak detector

VA1T – Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1. WORST CASE SPURIOUS 9kHz - 30MHZ

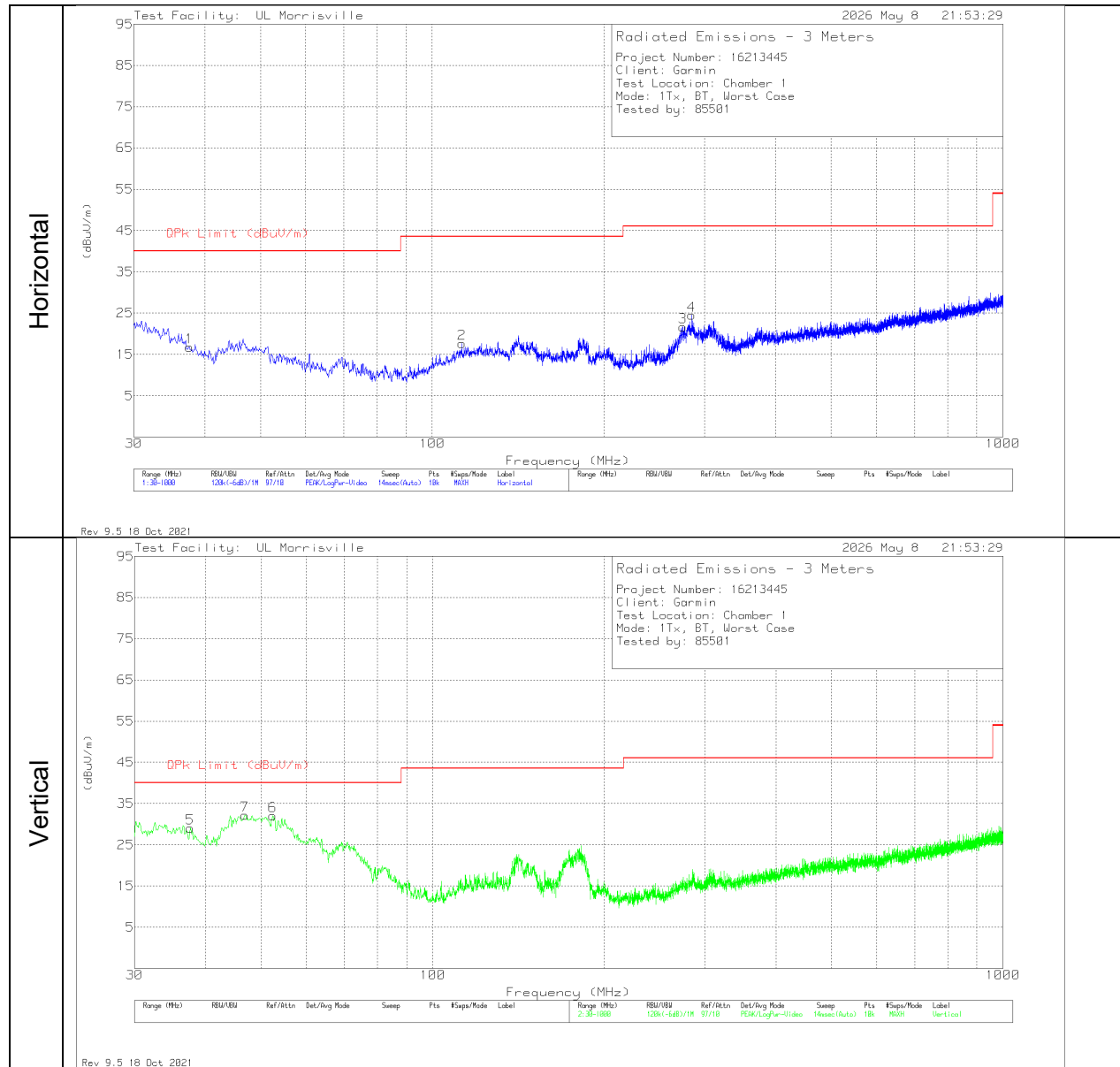


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ANT (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading (dBuV/m)	QP/AV Limit (dBuV/m)	PK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
4	.01042	42.48	Pk	18.7	.1	-80	-18.72	47.25	67.25	-65.97	0-360	90 degs
1	.01347	42.13	Pk	17.2	.1	-80	-20.57	45.02	65.02	-65.59	0-360	0 degs
7	.02405	42.14	Pk	13.6	.1	-80	-24.16	39.98	59.98	-64.14	0-360	Flat
2	.21622	44.74	Pk	10.9	.1	-80	-24.26	20.91	40.91	-45.17	0-360	0 degs
8	.24563	43.78	Pk	10.9	.1	-80	-25.22	19.80	39.80	-45.02	0-360	Flat
5	.43645	40.4	Pk	11	.1	-80	-28.5	14.81	34.81	-43.31	0-360	90 degs
9	.49843	36.34	Pk	11	.1	-40	7.44	33.65	-	-26.21	0-360	Flat
3	.55324	35.68	Pk	11	.1	-40	6.78	32.75	-	-25.97	0-360	0 degs
6	.65021	34.59	Pk	11	.1	-40	5.69	31.34	-	-25.65	0-360	90 degs



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ANT (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading (dBuA/m)	QP/AV Limit (dBuA/m)	PK Limit (dBuA/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
4	.01042	42.48	Pk	-32.8	.1	-80	-70.22	-4.25	15.75	-65.97	0-360	90 degs
1	.01347	42.13	Pk	-34.3	.1	-80	-72.07	-6.48	13.52	-65.59	0-360	0 degs
7	.02405	42.14	Pk	-37.9	.1	-80	-75.66	-11.52	8.48	-64.14	0-360	Flat
2	.21622	44.74	Pk	-40.6	.1	-80	-75.76	-30.59	-10.59	-45.17	0-360	0 degs
8	.24563	43.78	Pk	-40.6	.1	-80	-76.72	-31.70	-11.70	-45.02	0-360	Flat
5	.43645	40.4	Pk	-40.5	.1	-80	-80	-36.69	-16.69	-43.31	0-360	90 degs
9	.49843	36.34	Pk	-40.5	.1	-40	-44.06	-17.85	-	-26.21	0-360	Flat
3	.55324	35.68	Pk	-40.5	.1	-40	-44.72	-18.75	-	-25.97	0-360	0 degs
6	.65021	34.59	Pk	-40.5	.1	-40	-45.81	-20.16	-	-25.65	0-360	90 degs

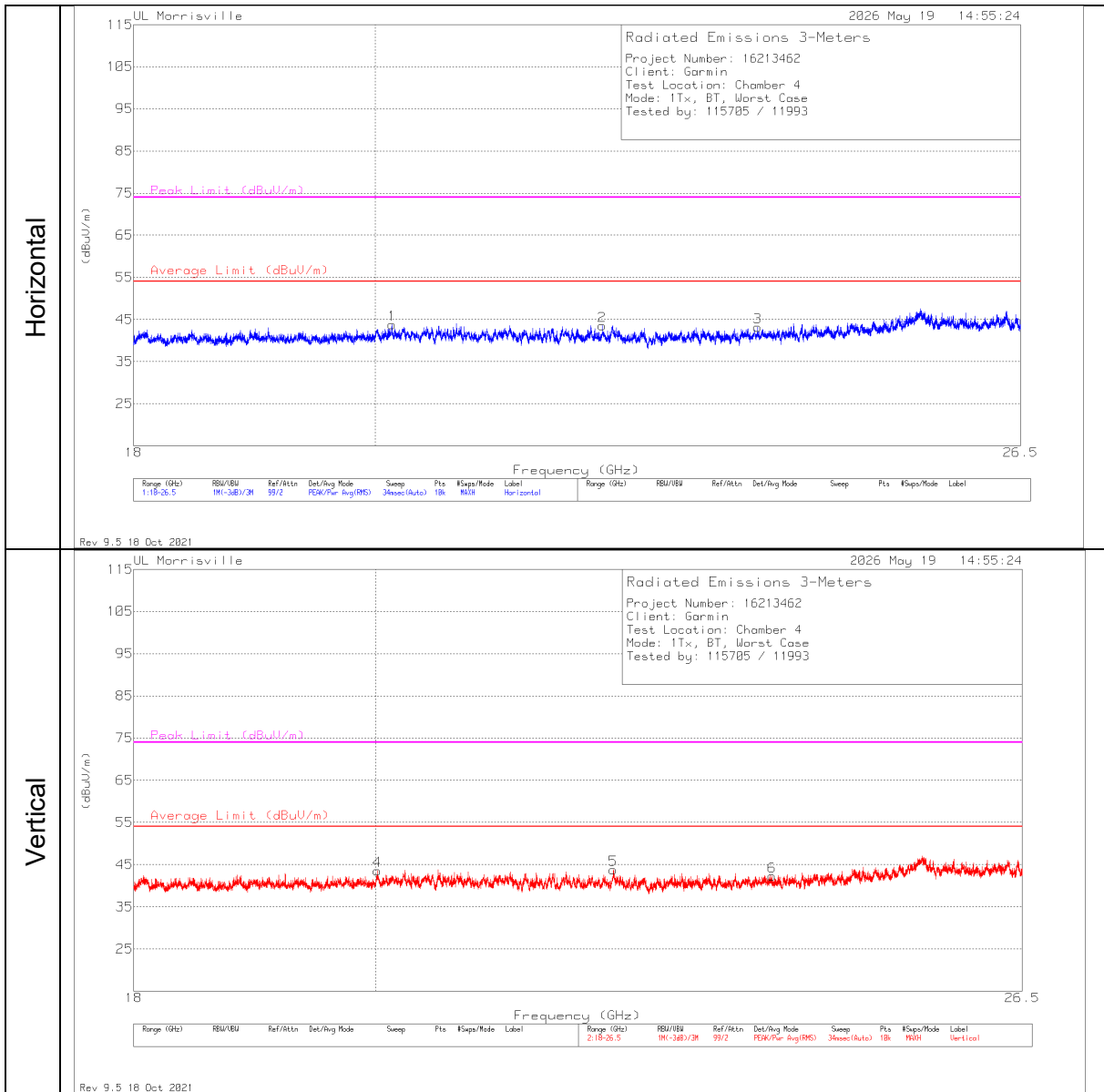
10.2. WORST CASE SPURIOUS BELOW 30-1000MHZ



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	90629 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 37.566	27.04	Pk	21.7	-32	16.74	40	-23.26	0-360	299	H
2	*** 112.644	29.1	Pk	19.3	-30.7	17.7	43.52	-25.82	0-360	299	H
3	*** 274.925	31.53	Pk	19.4	-29.3	21.63	46.02	-24.39	0-360	99	H
5	*** 37.566	39.35	Pk	21.7	-32	29.05	40	-10.95	0-360	100	V
7	46.781	47.68	Pk	15.5	-31	32.18	-	-	0-360	100	V
6	52.407	49.2	Pk	13.8	-31	32	-	-	0-360	100	V
4	285.013	33.97	Pk	19.4	-28.9	24.47	-	-	0-360	99	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector

1.1. WORST CASE SPURIOUS 18-26GHz (WORST CASE: GFSK)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204704 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 20.14646	48.94	Pk	33.3	-38.5	43.74	54	-10.26	74	-30.26	0-360	100	H
2	** 22.08296	48.48	Pk	33.8	-38.8	43.48	54	-10.52	74	-30.52	0-360	100	H
3	*** 23.62841	47.16	Pk	34.3	-38.3	43.16	54	-10.84	74	-30.84	0-360	100	H
4	*** 20.0147	48.67	Pk	33.2	-38.3	43.57	54	-10.43	74	-30.43	0-360	300	V
5	*** 22.17902	47.56	Pk	33.9	-37.7	43.76	54	-10.24	74	-30.24	0-360	300	V
6	** 23.76783	46.22	Pk	34.3	-38.3	42.22	54	-11.78	74	-31.78	0-360	300	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)
RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

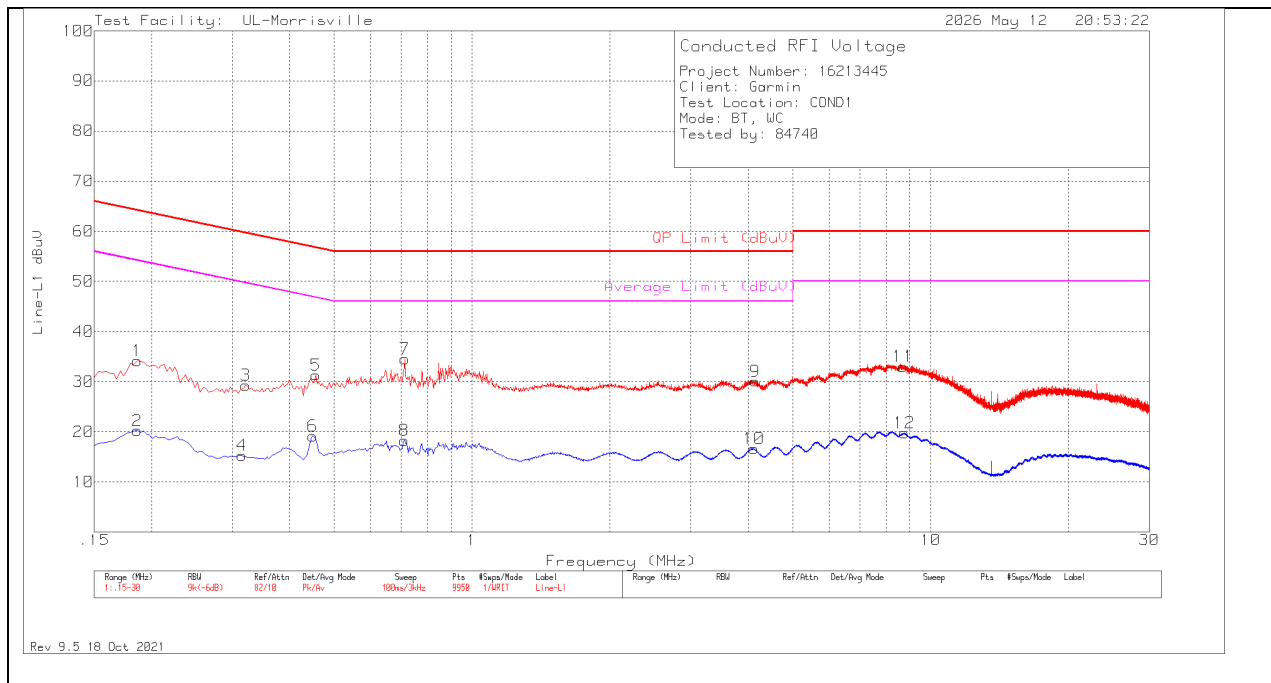
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

11.1. AC POWER LINE

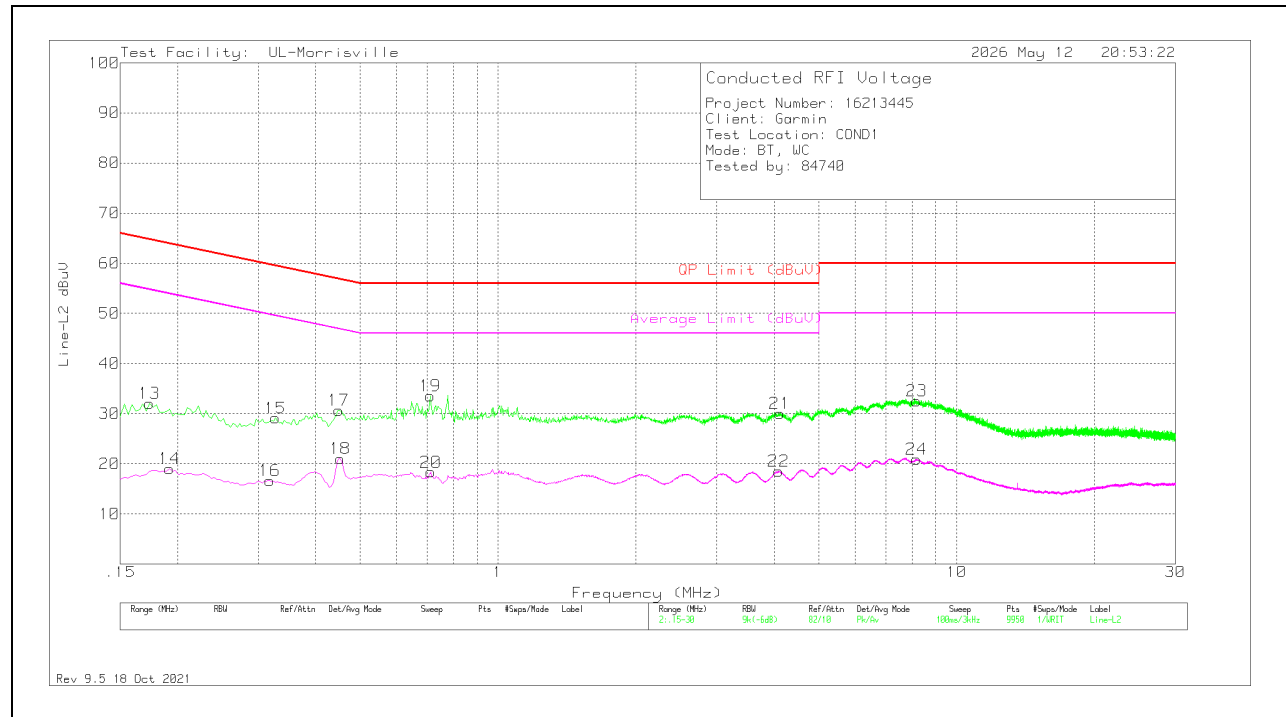
LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VDF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.186	24.2	Pk	.2	9.8	34.2	64.21	-30.01	-	-
2	.186	10.21	Av	.2	9.8	20.21	-	-	54.21	-34
3	.321	19.42	Pk	.1	9.8	29.32	59.68	-30.36	-	-
4	.315	5.4	Av	.1	9.8	15.3	-	-	49.84	-34.54
5	.456	21.54	Pk	0	9.8	31.34	56.77	-25.43	-	-
6	.45	9.33	Av	0	9.8	19.13	-	-	46.88	-27.75
7	.714	24.74	Pk	0	9.8	34.54	56	-21.46	-	-
8	.711	8.48	Av	0	9.8	18.28	-	-	46	-27.72
9	4.146	20.19	Pk	0	9.9	30.09	56	-25.91	-	-
10	4.119	6.71	Av	0	9.9	16.61	-	-	46	-29.39
11	8.718	22.93	Pk	.1	10	33.03	60	-26.97	-	-
12	8.754	9.71	Av	.1	10	19.81	-	-	50	-30.19

Pk - Peak detector
Av - Average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VDF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.174	22.02	Pk	.2	9.8	32.02	64.77	-32.75	-	-
14	.192	9.02	Av	.2	9.8	19.02	-	-	53.95	-34.93
15	.327	19.2	Pk	.1	9.8	29.1	59.53	-30.43	-	-
16	.318	6.73	Av	.1	9.8	16.63	-	-	49.76	-33.13
17	.45	20.86	Pk	0	9.8	30.66	56.88	-26.22	-	-
18	.453	11.23	Av	0	9.8	21.03	-	-	46.82	-25.79
19	.711	23.76	Pk	0	9.8	33.56	56	-22.44	-	-
20	.714	8.53	Av	0	9.8	18.33	-	-	46	-27.67
21	4.116	20.11	Pk	0	9.9	30.01	56	-25.99	-	-
22	4.095	8.65	Av	0	9.9	18.55	-	-	46	-27.45
23	8.19	22.4	Pk	.1	10	32.5	60	-27.5	-	-
24	8.172	10.8	Av	.1	10	20.9	-	-	50	-29.1

Pk - Peak detector
Av - Average detection

12. SETUP PHOTOS

Please refer to R16213445-EP1 for setup photos

END OF TEST REPORT