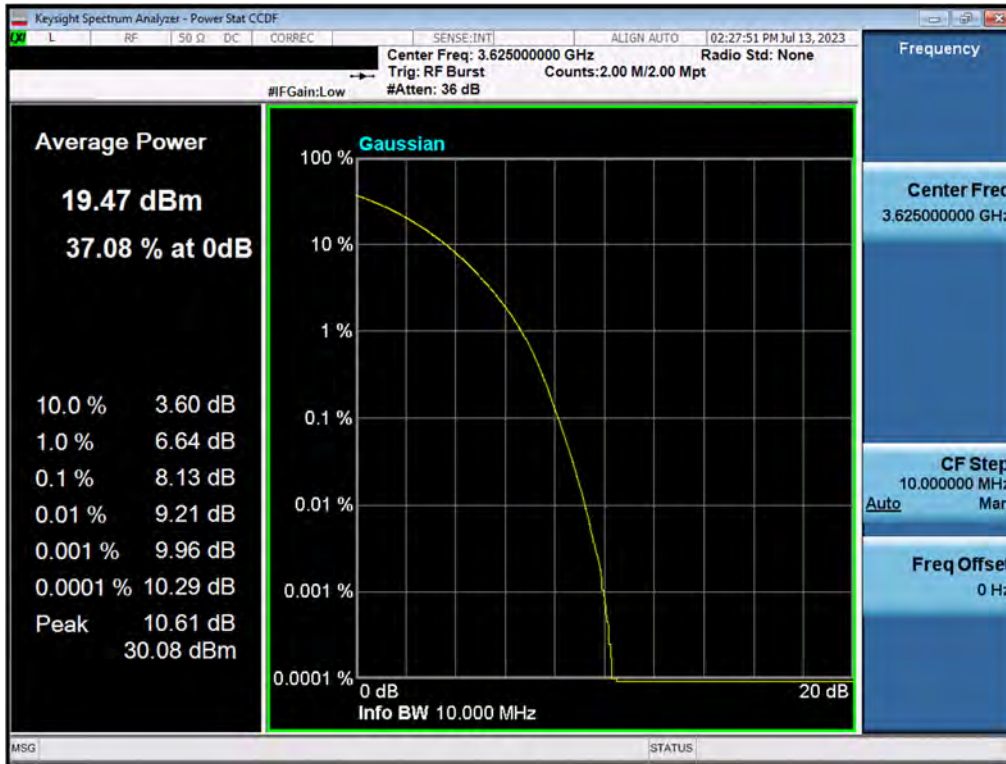
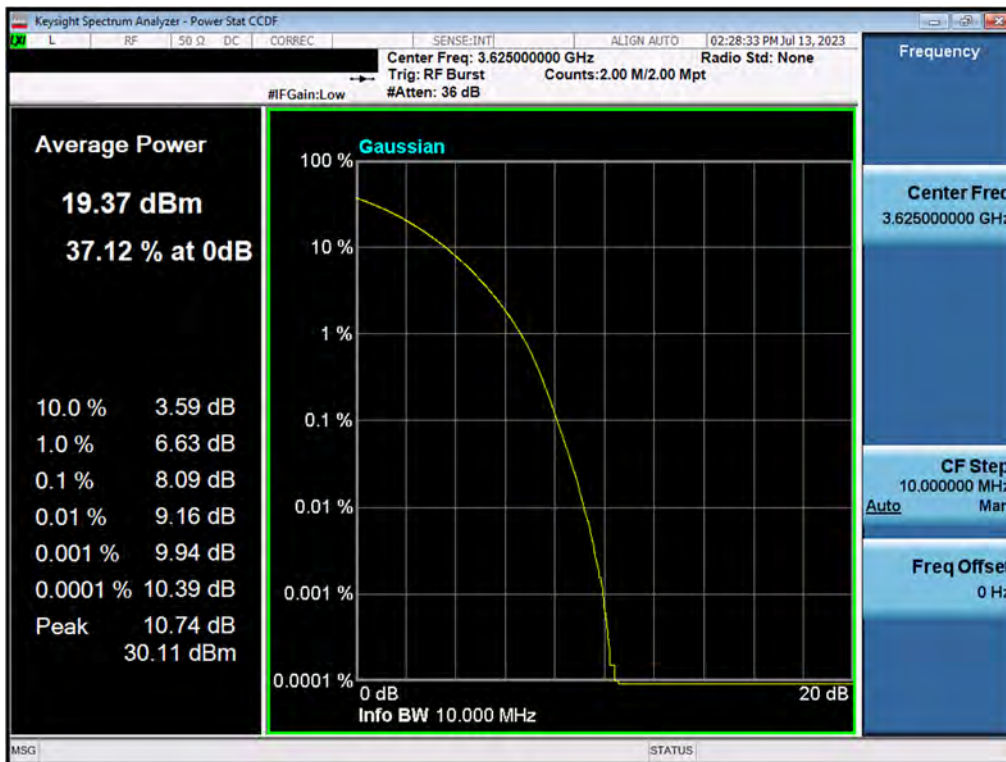


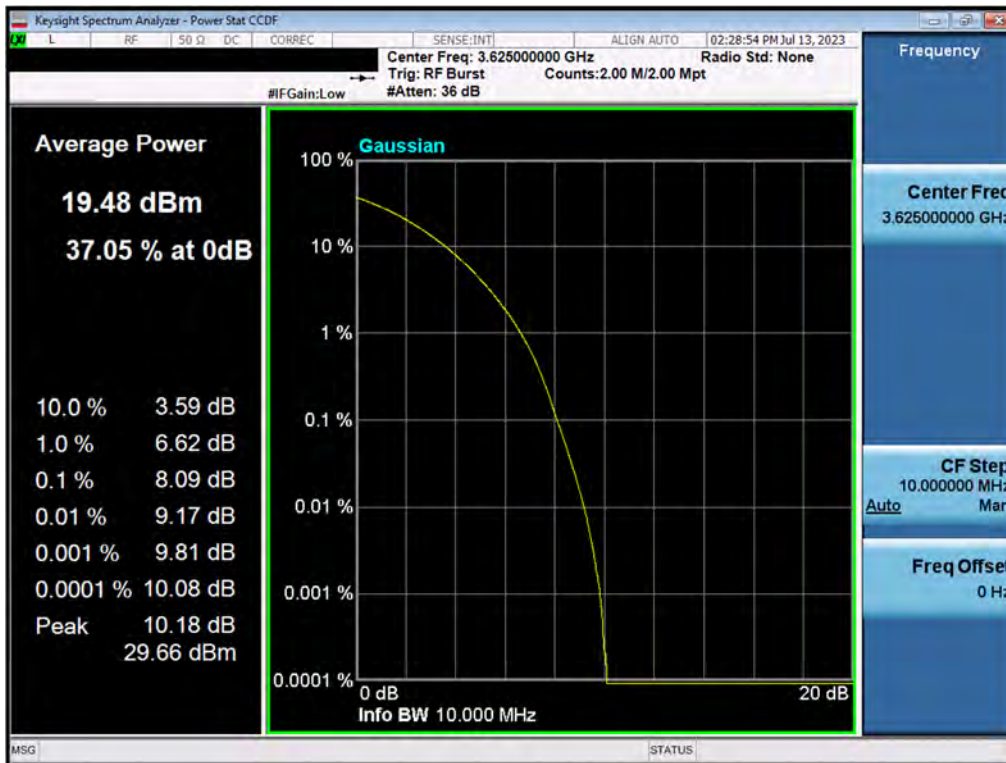


Plot 7.157. Peak to Average Power Ratio Plot (10MHz, QPSK – Mid Channel) – Ch.B

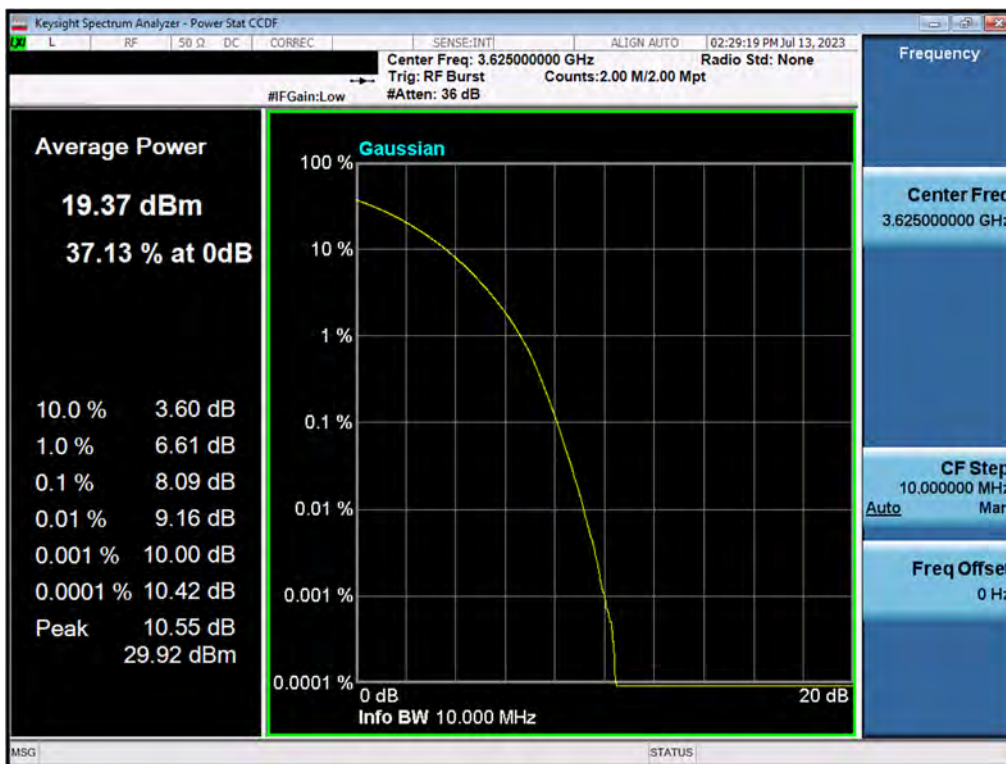


Plot 7.158. Peak to Average Power Ratio Plot (10MHz, 16QAM – Mid Channel) – Ch.B

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7.159. Peak to Average Power Ratio Plot (10MHz, 64QAM – Mid Channel) – Ch.B



Plot 7.160. Peak to Average Power Ratio Plot (10MHz, 256QAM – Mid Channel) – Ch.B

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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7.7 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/Mhz.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.4

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = Max Hold
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



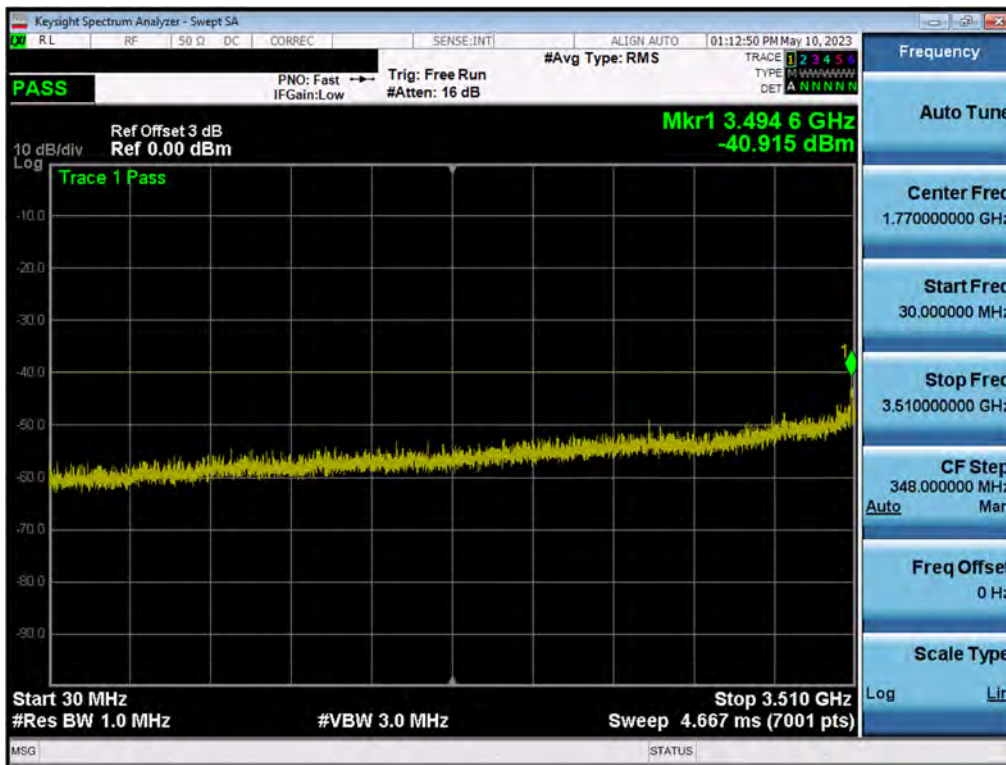
Figure 7-6. Test Instrument & Measurement Setup

Test Notes

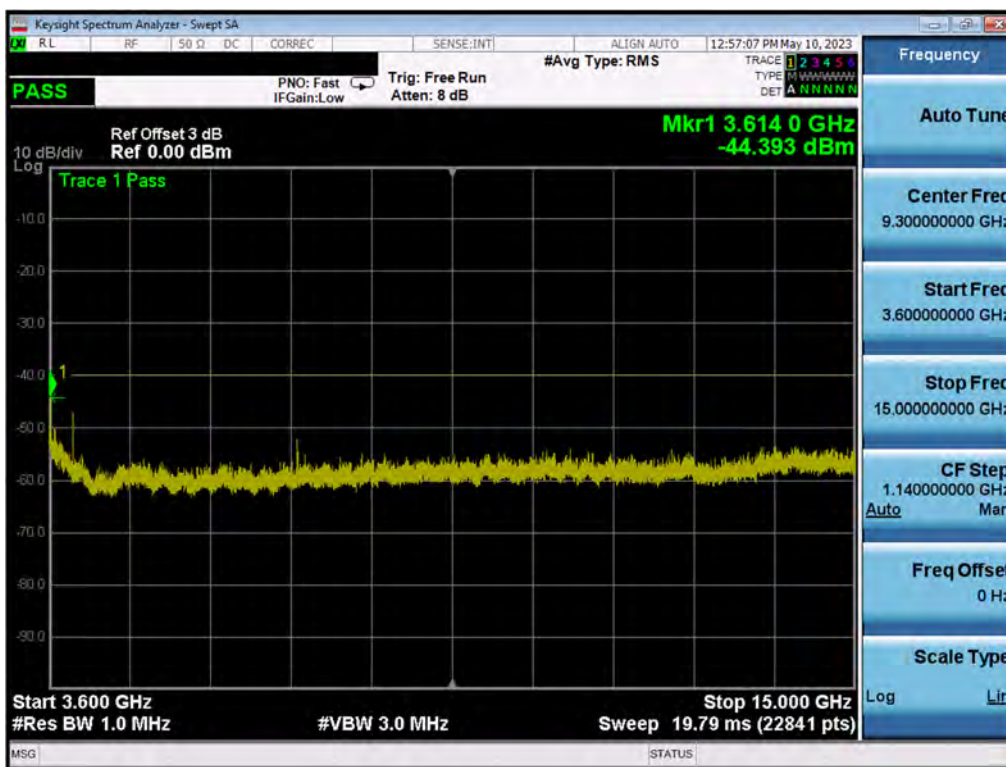
1. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz.
2. The Plots in this section have a 3dB correction applied to the individual plots to address the MIMO requirements in ANSI C63.26
3. Unwanted emissions between 3510MHz and 3530MHz, as well as between 3720 MHz and 3740 MHz, are observed and reported in section 7.8.

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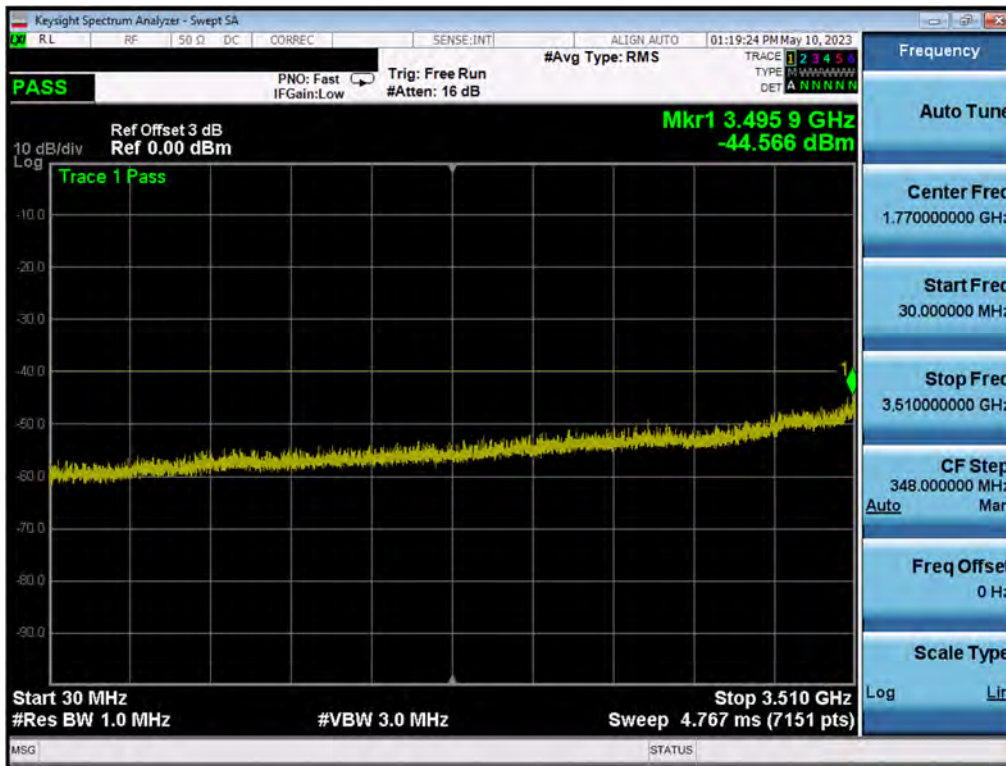


Plot 7.161. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.A)

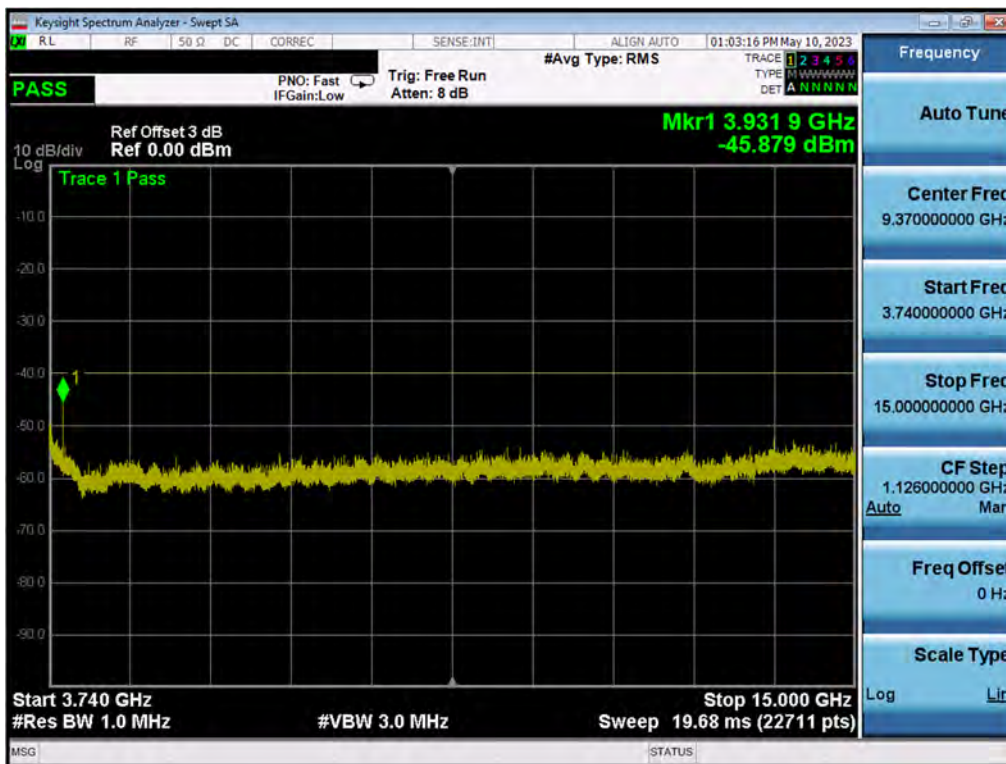


Plot 7.162. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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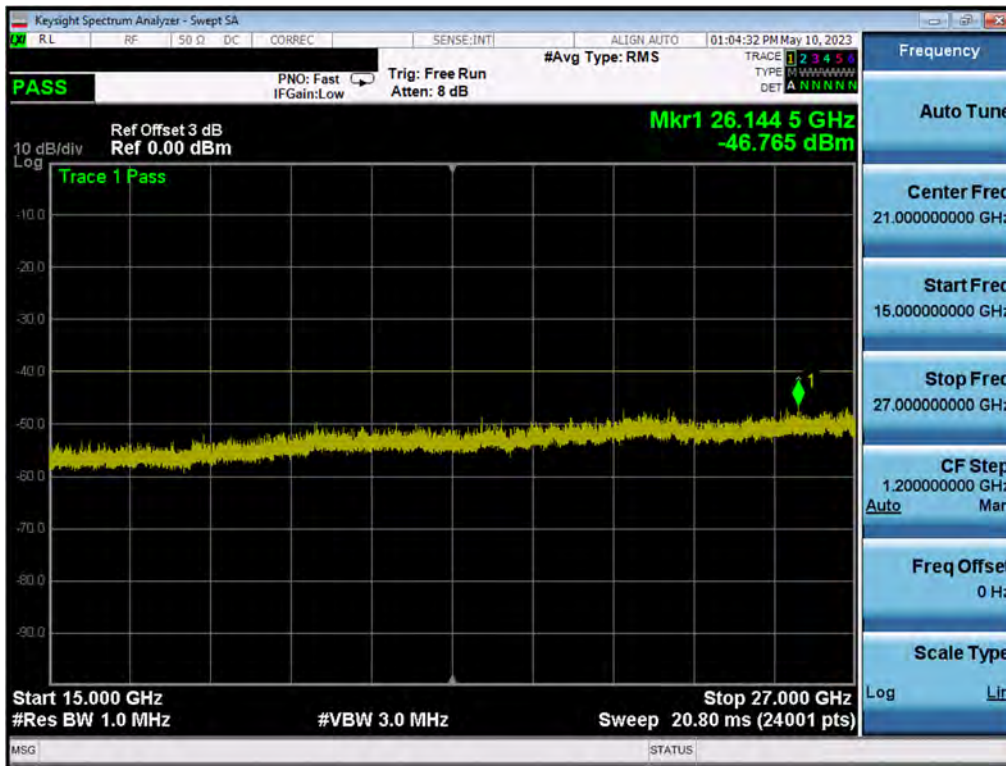


Plot 7.165. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.A)

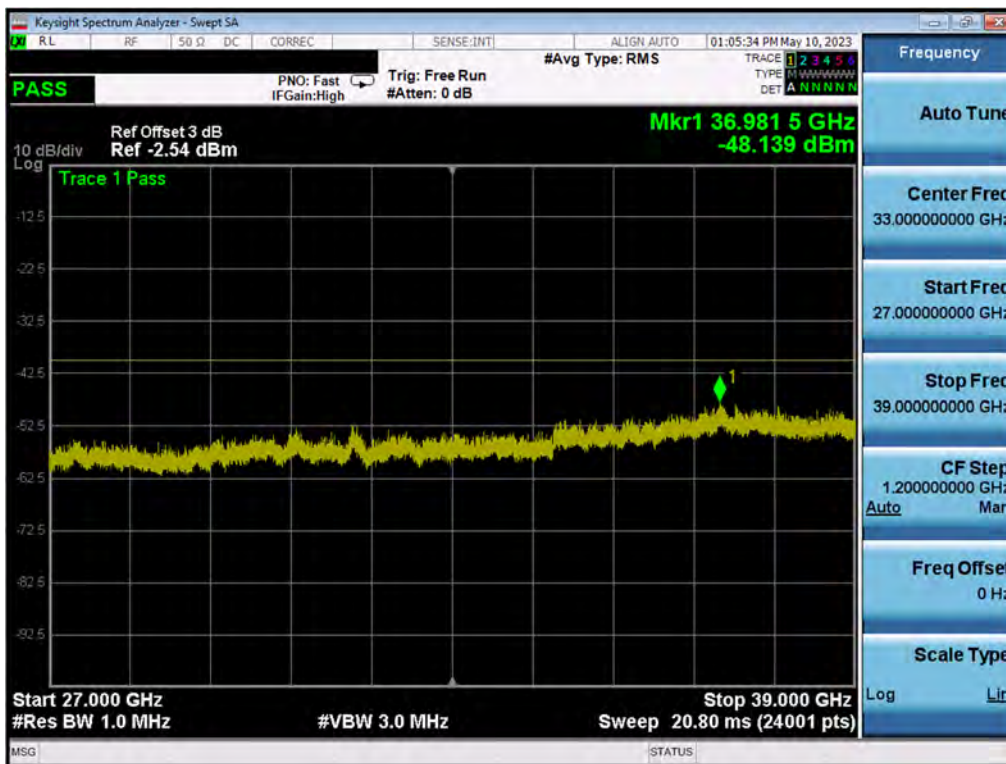


Plot 7.166. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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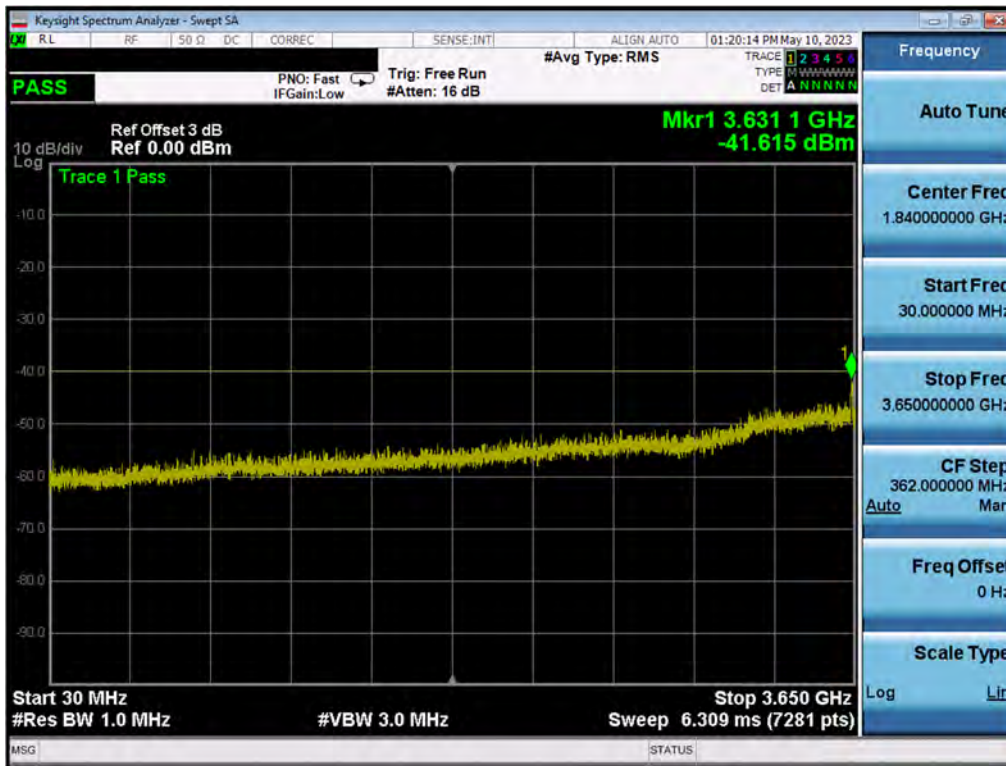


Plot 7.167. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.A)

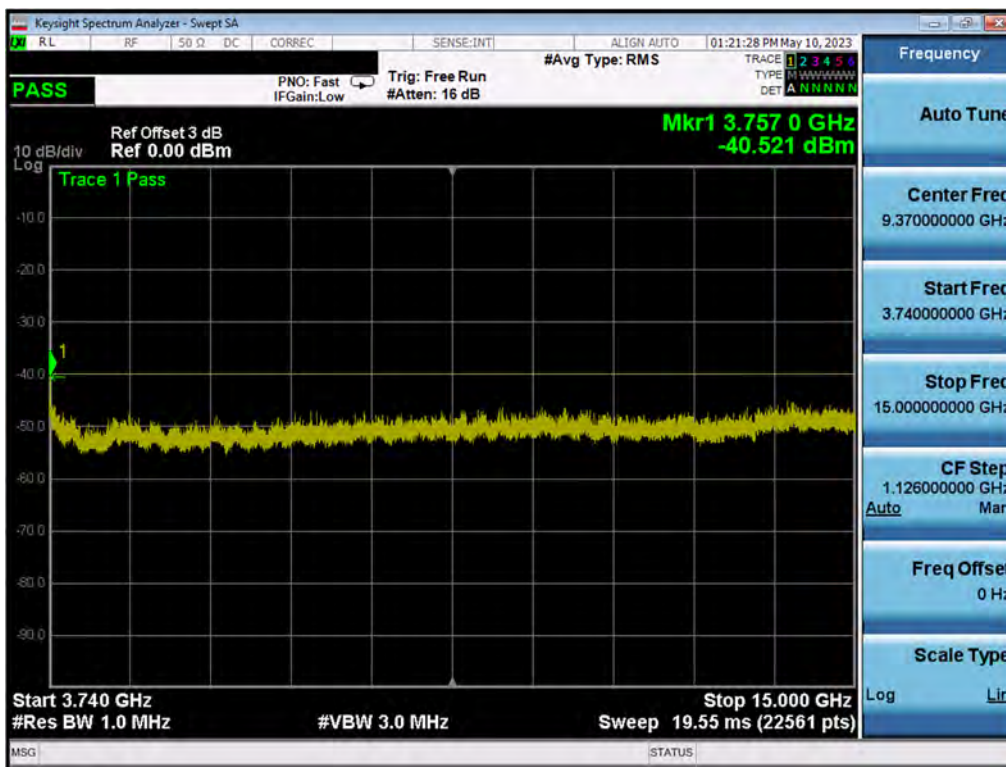


Plot 7.168. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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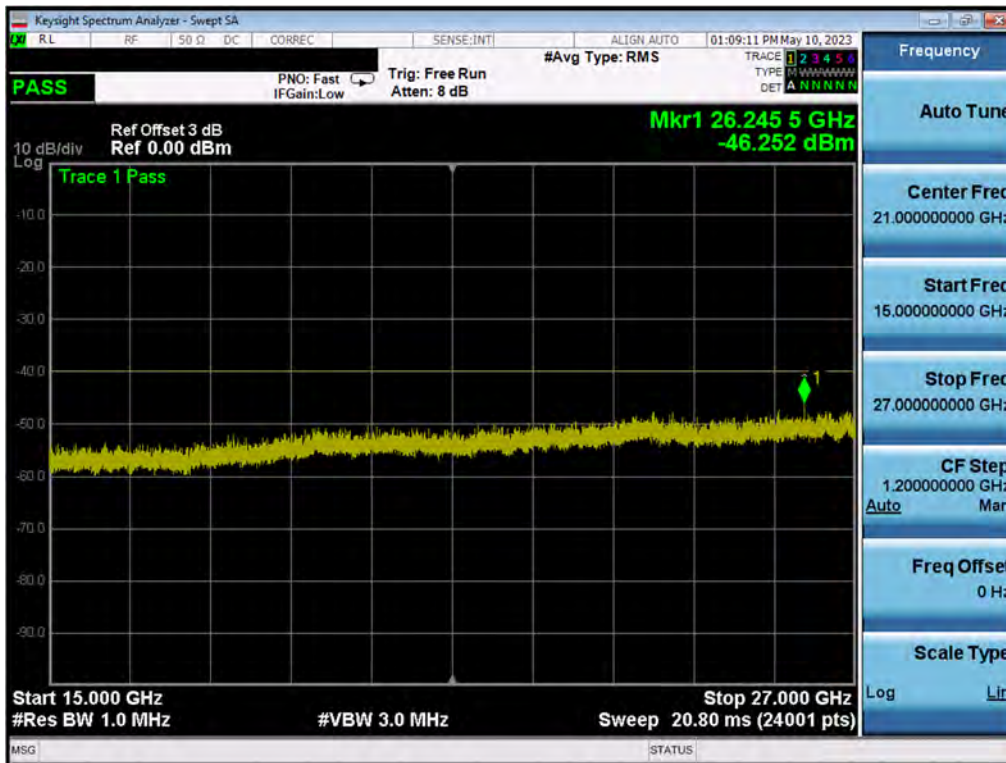


Plot 7.169. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.A)

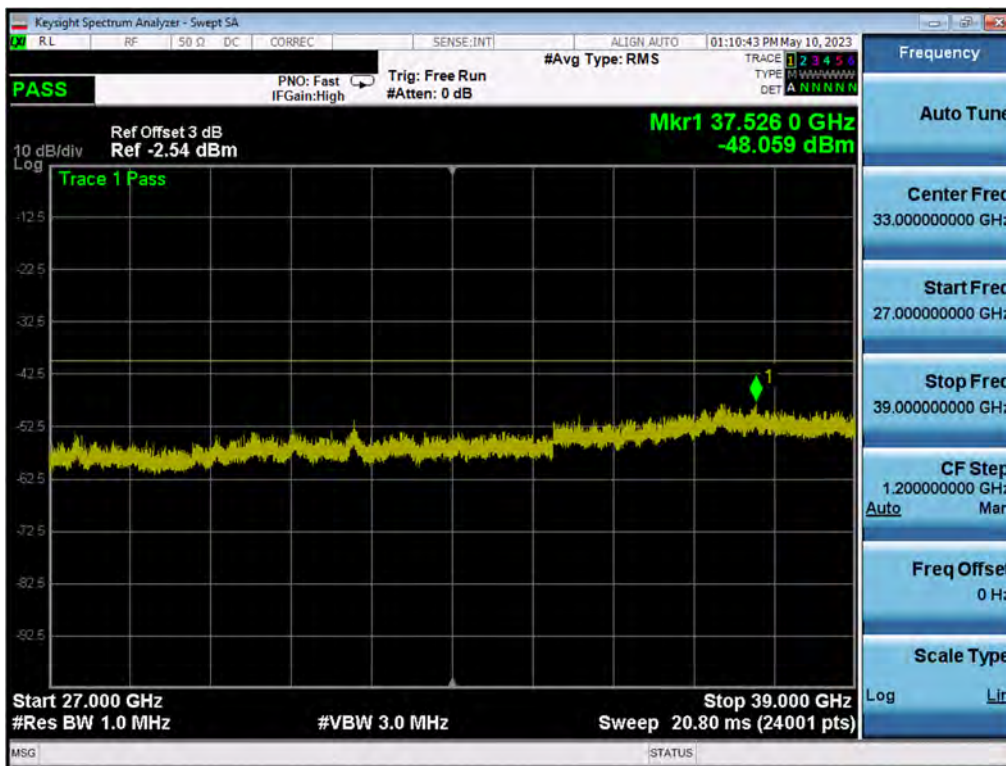


Plot 7.170. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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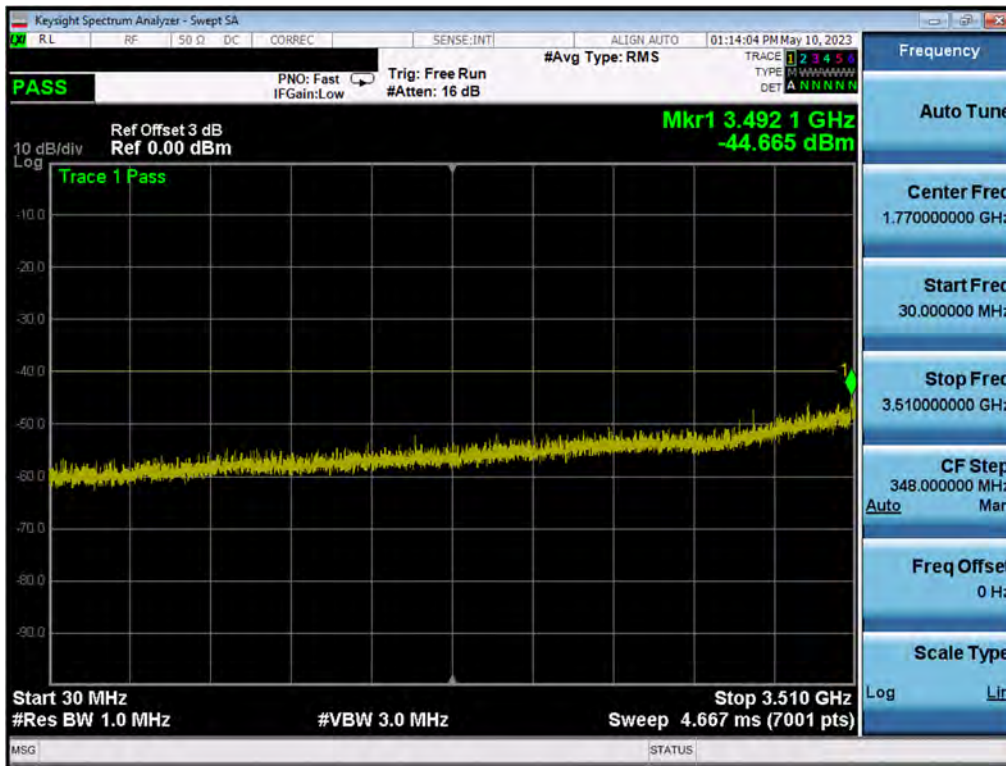


Plot 7.171. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.A)

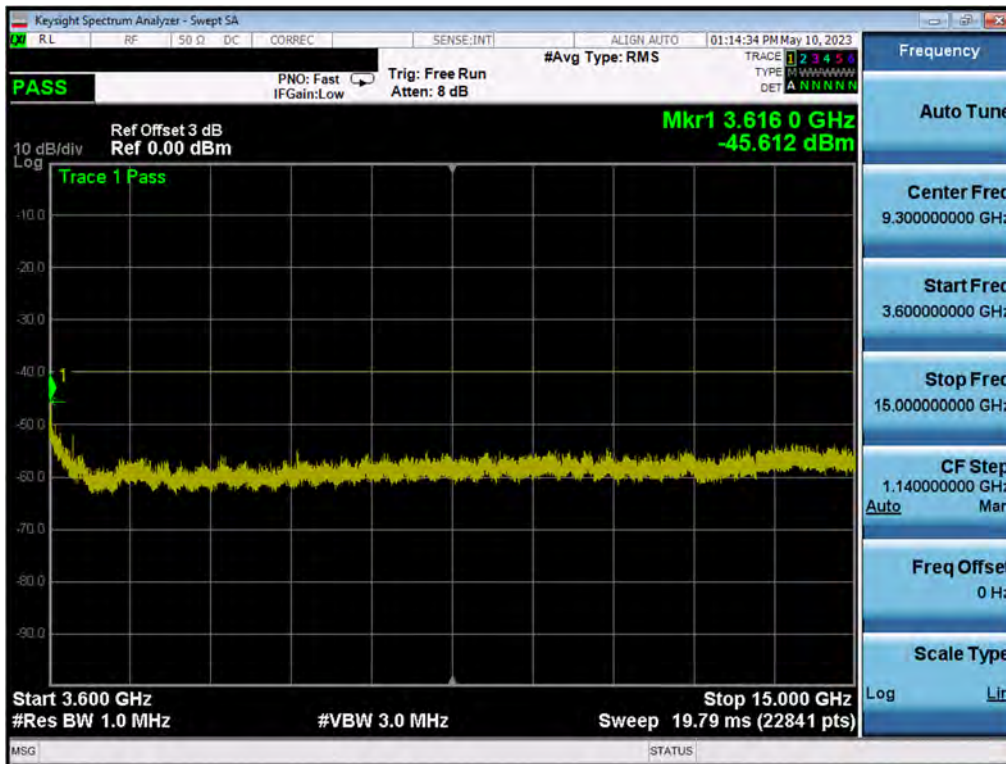


Plot 7.172. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2305080068-01.2AS22	Test Dates: 05/08/2023 – 7/13/2023	EUT Type: CBRS Radio Module	Page 113 of 144

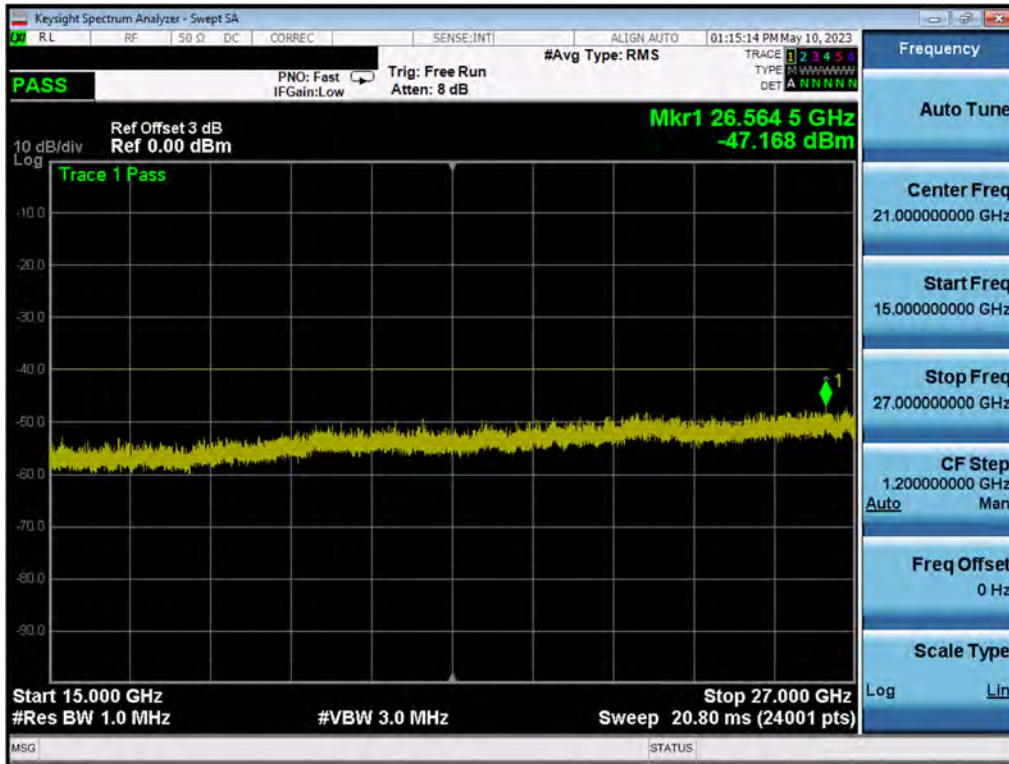


Plot 7.173. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.B)

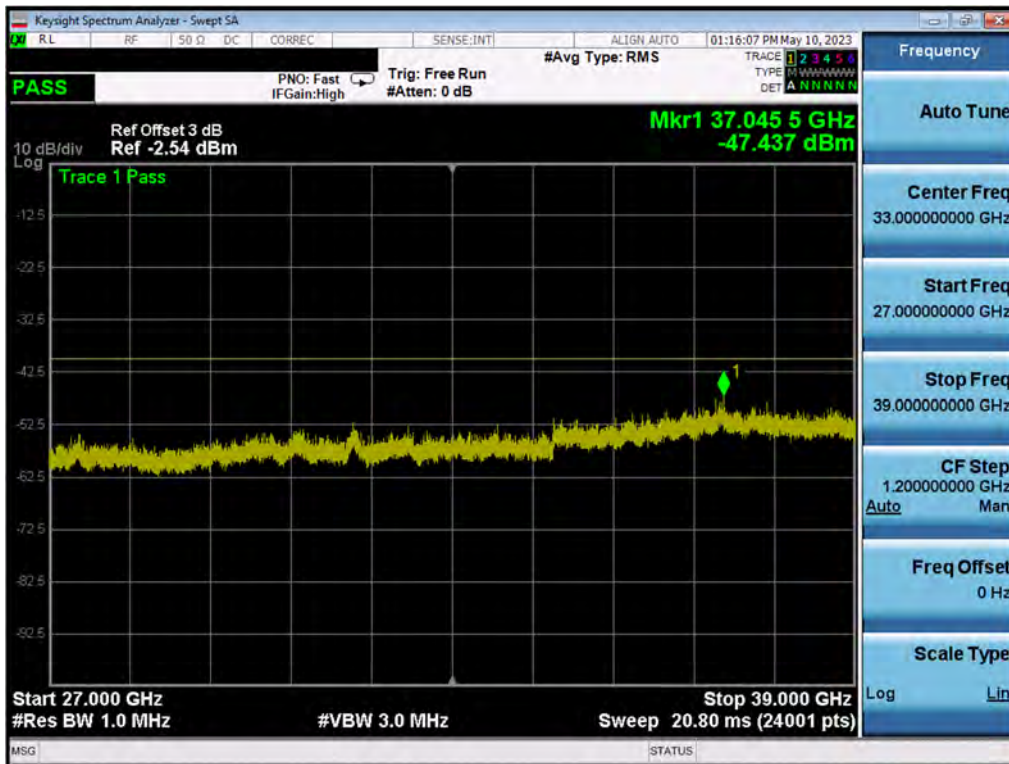


Plot 7.174. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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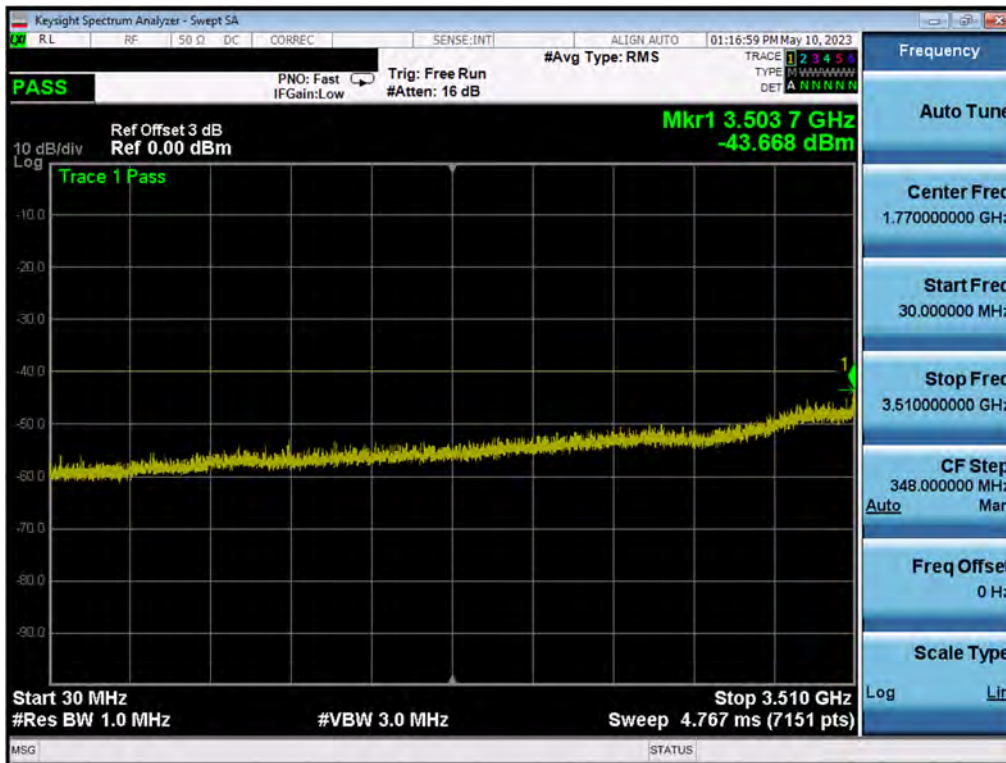


Plot 7.175. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.B)

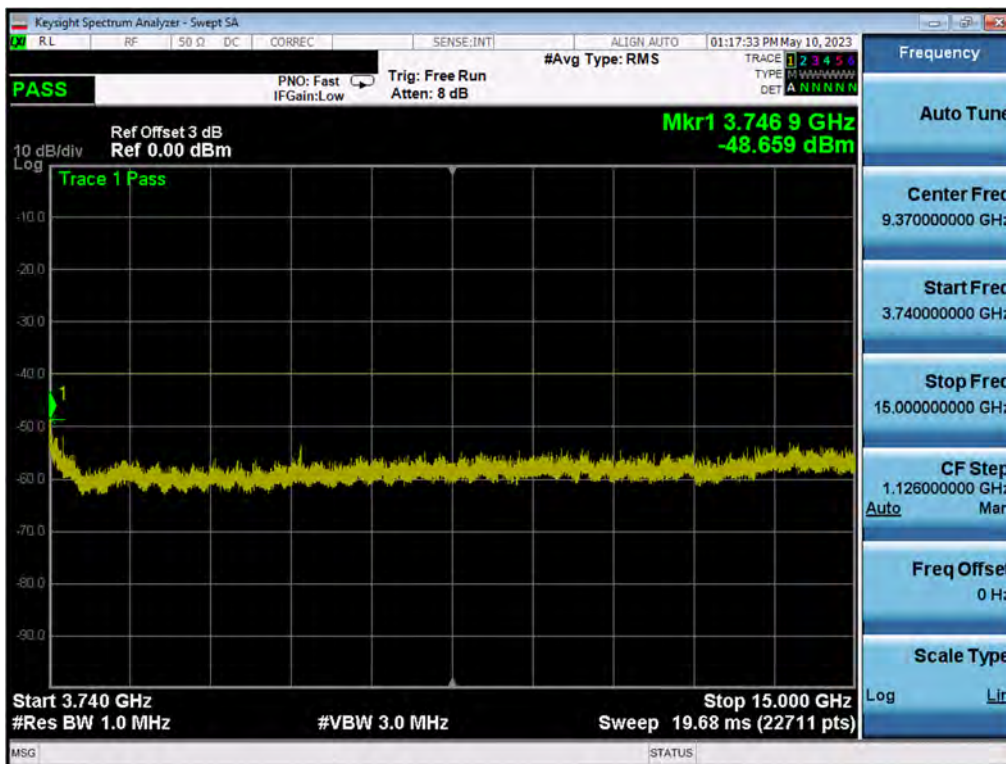


Plot 7.176. Conducted Spurious Plot (10MHz QPSK, Low Channel – Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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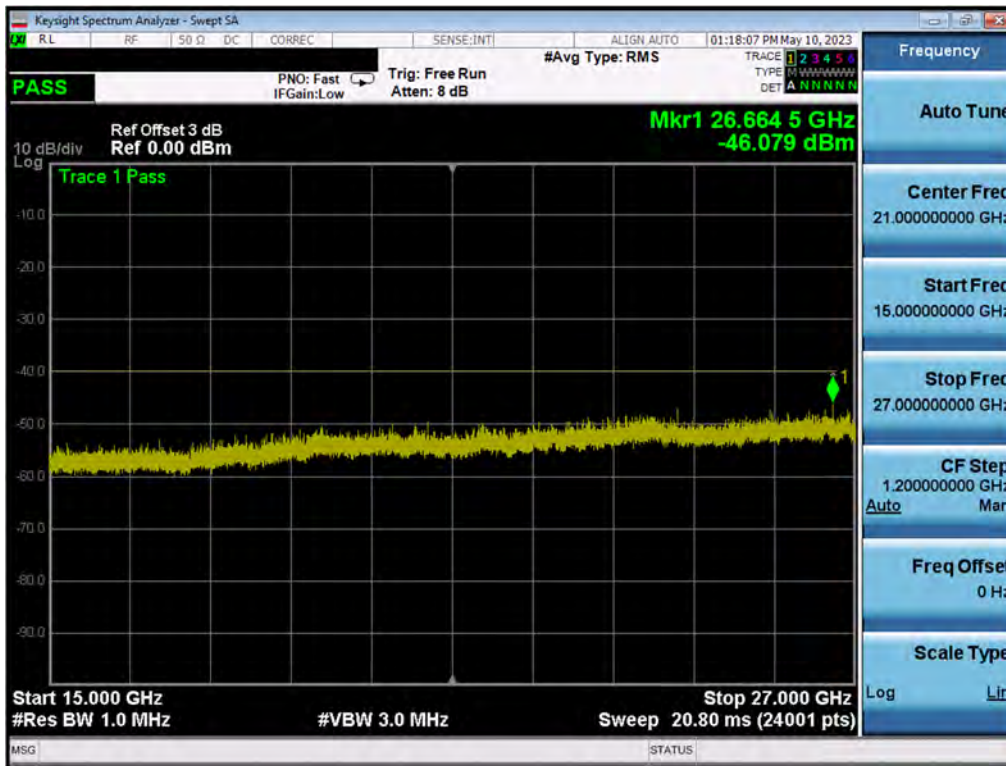


Plot 7.177. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.B)

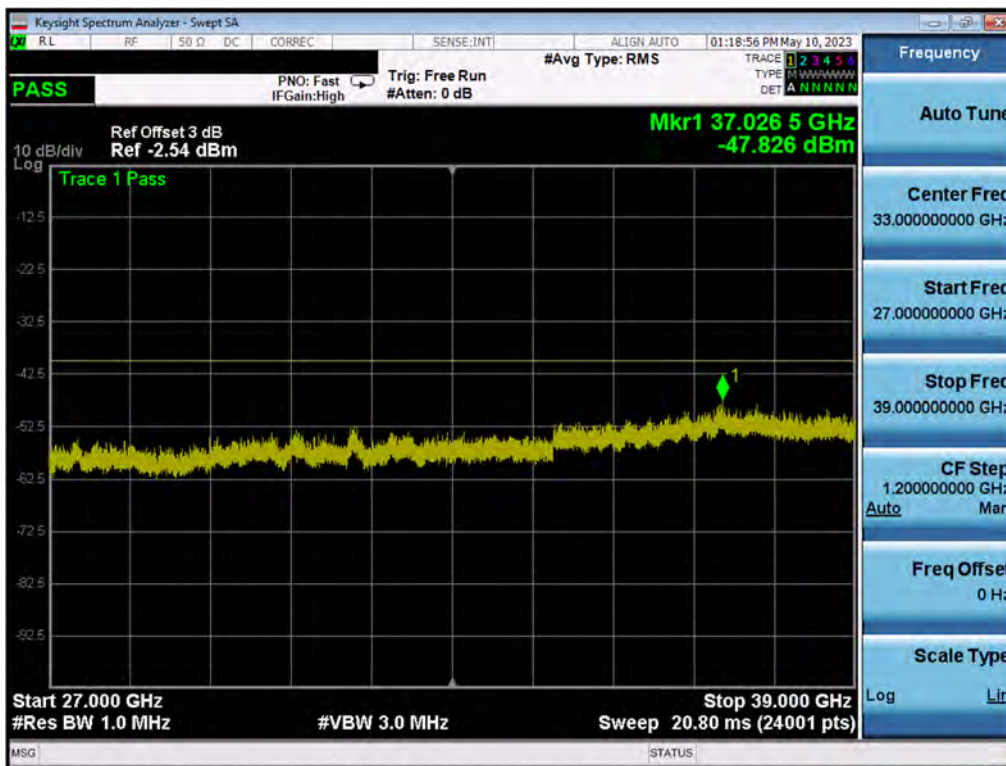


Plot 7.178. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2305080068-01.2AS22	Test Dates: 05/08/2023 – 7/13/2023	EUT Type: CBRS Radio Module	Page 116 of 144

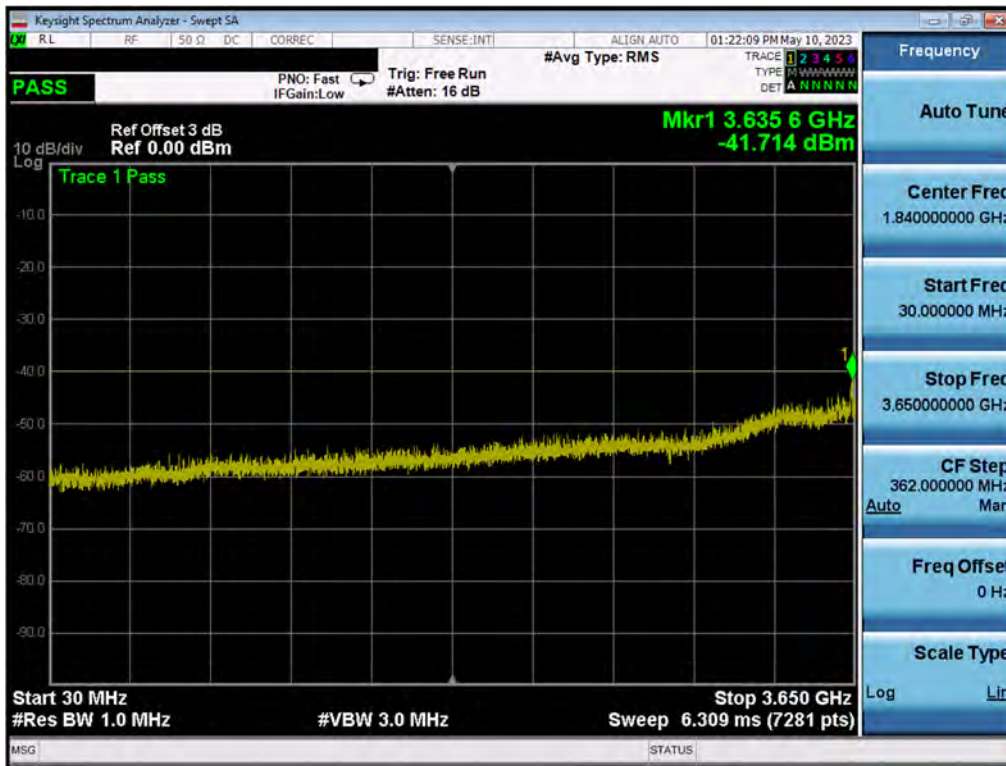


Plot 7.179. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.B)

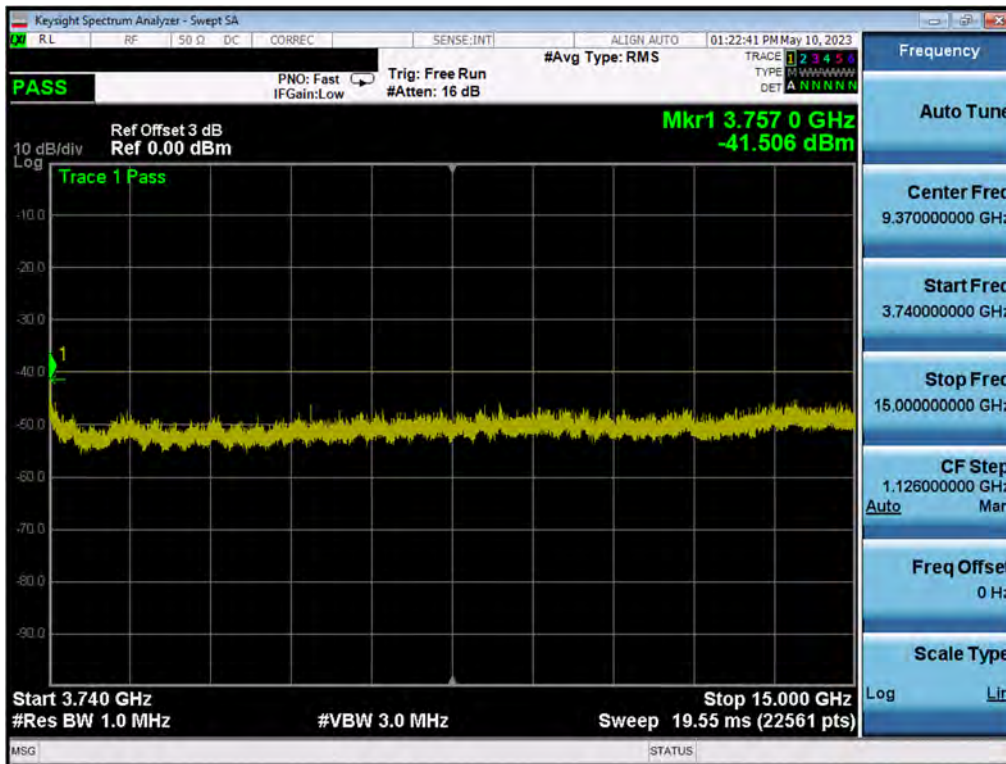


Plot 7.180. Conducted Spurious Plot (10MHz QPSK, Mid Channel – Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2305080068-01.2AS22	Test Dates: 05/08/2023 – 7/13/2023	EUT Type: CBRS Radio Module	Page 117 of 144

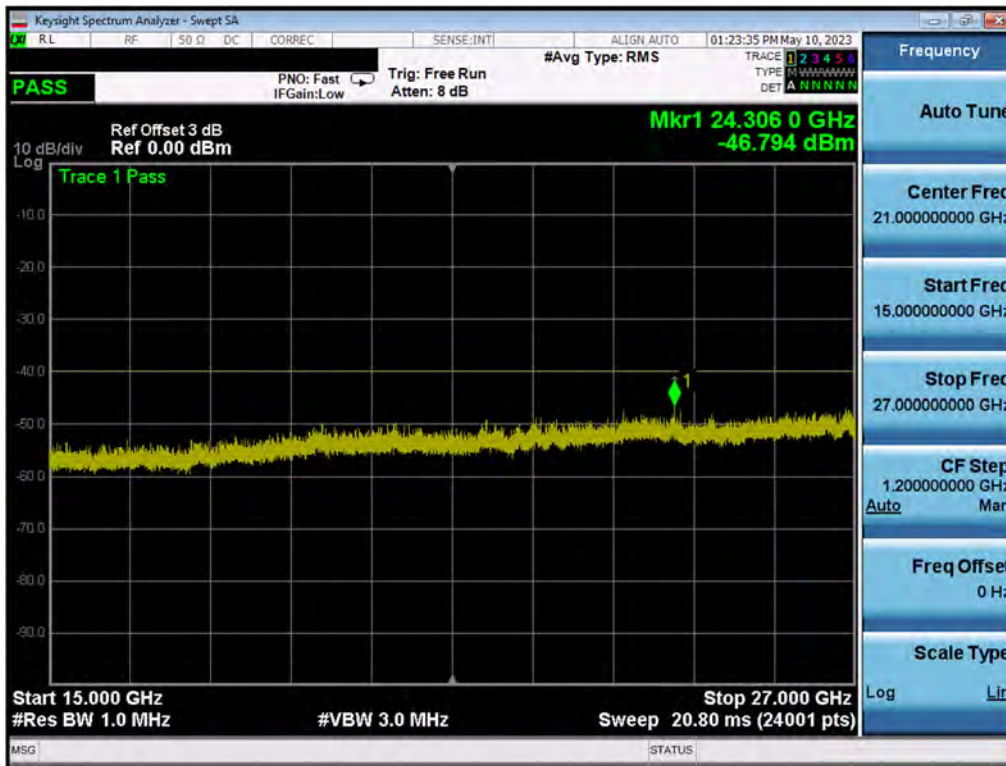


Plot 7.181. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.B)

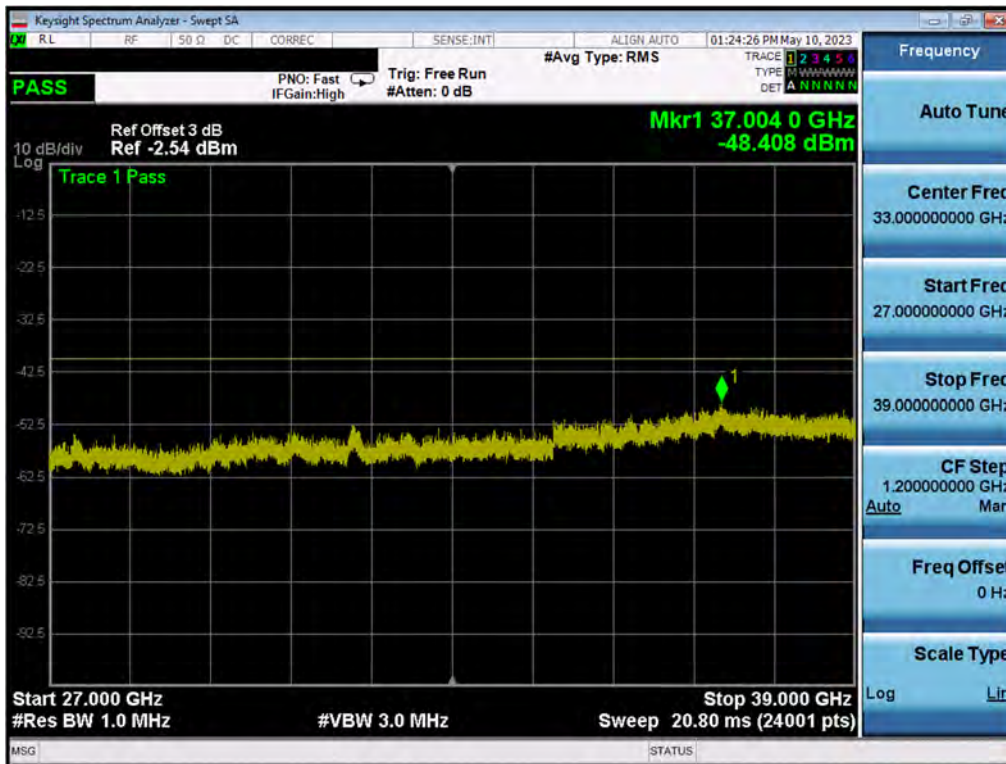


Plot 7.182. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7.183. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.B)



Plot 7.184. Conducted Spurious Plot (10MHz QPSK, High Channel – Ch.B)

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7.8 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

For an End User Device, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed -25 dBm/MHz. The conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.3

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. $RBW \geq 1\%$ of the emission bandwidth
4. $VBW \geq 3 \times RBW$
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span}/RBW$
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-7. Test Instrument & Measurement Setup

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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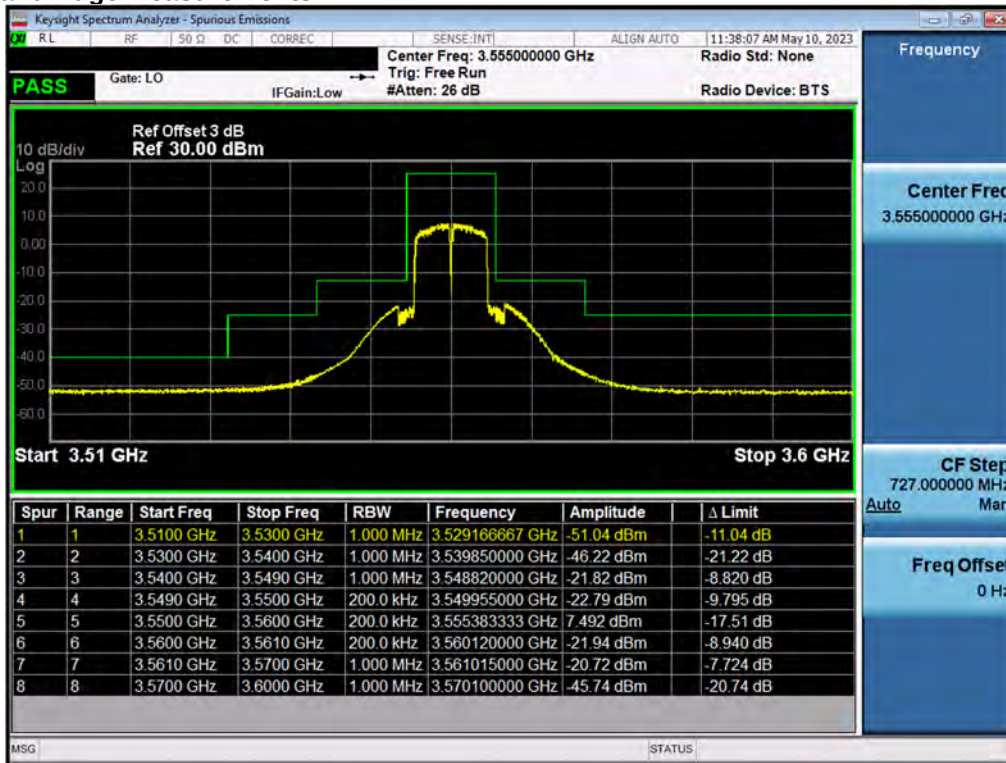
Test Notes

1. Per 96.41(e)(3)(i), compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
2. The Plots in this section have a 3dB correction applied to the individual plots to address the MIMO requirements in ANSI C63.26

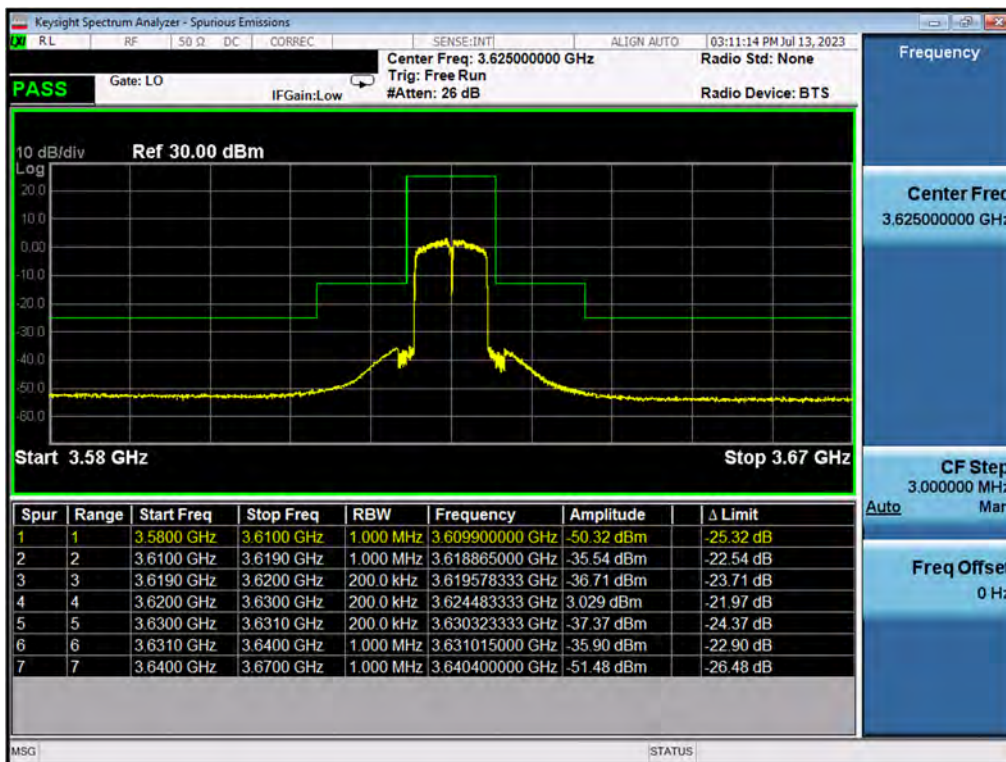
FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2305080068-01.2AS22	Test Dates: 05/08/2023 – 7/13/2023	EUT Type: CBRS Radio Module	Page 121 of 144

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Channel A Band Edge Measurements

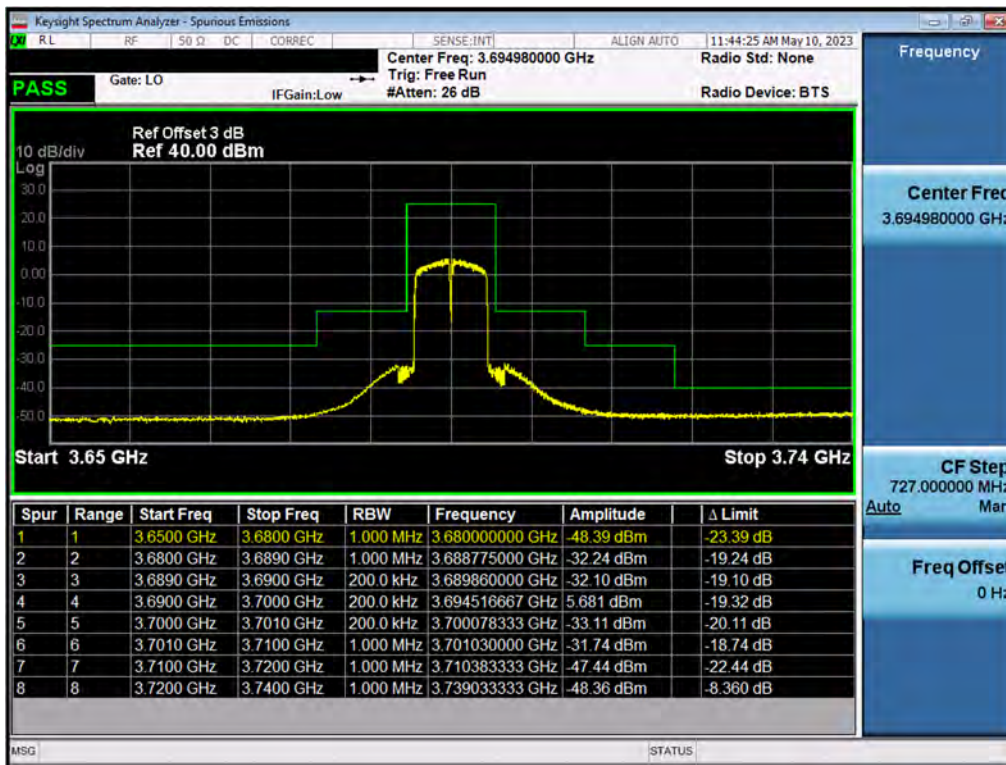


Plot 7.185. Conducted Band Edge Plot (10MHz, QPSK, Low Channel, Ch.A)

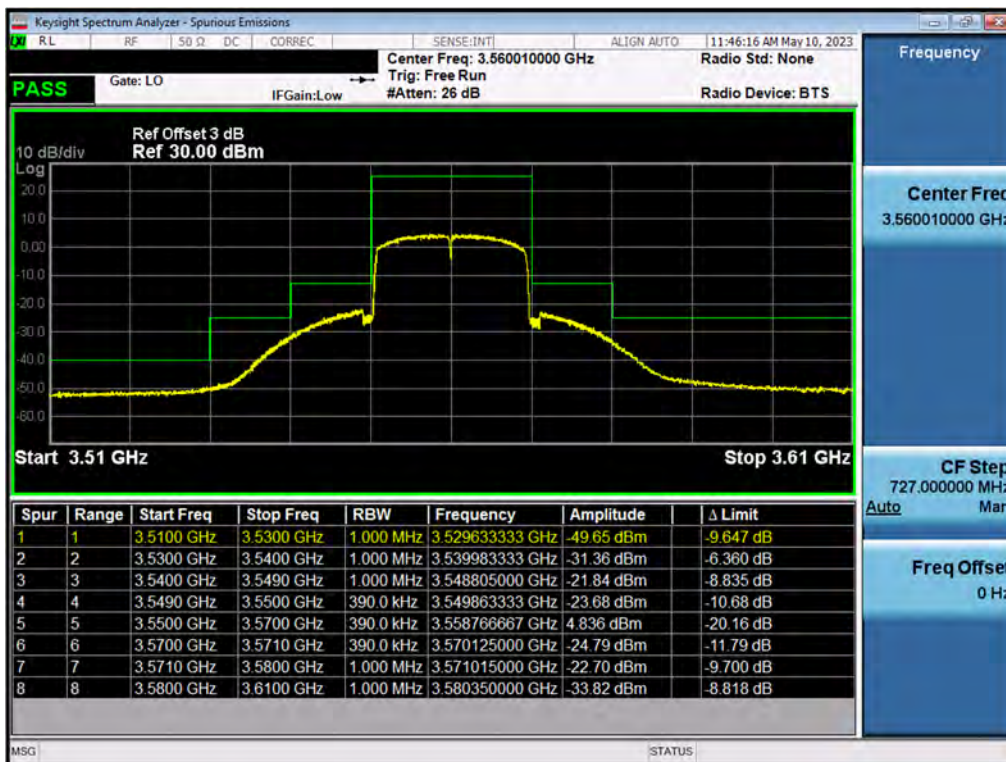


Plot 7.186. Conducted Band Edge Plot (10MHz, QPSK, Mid Channel, Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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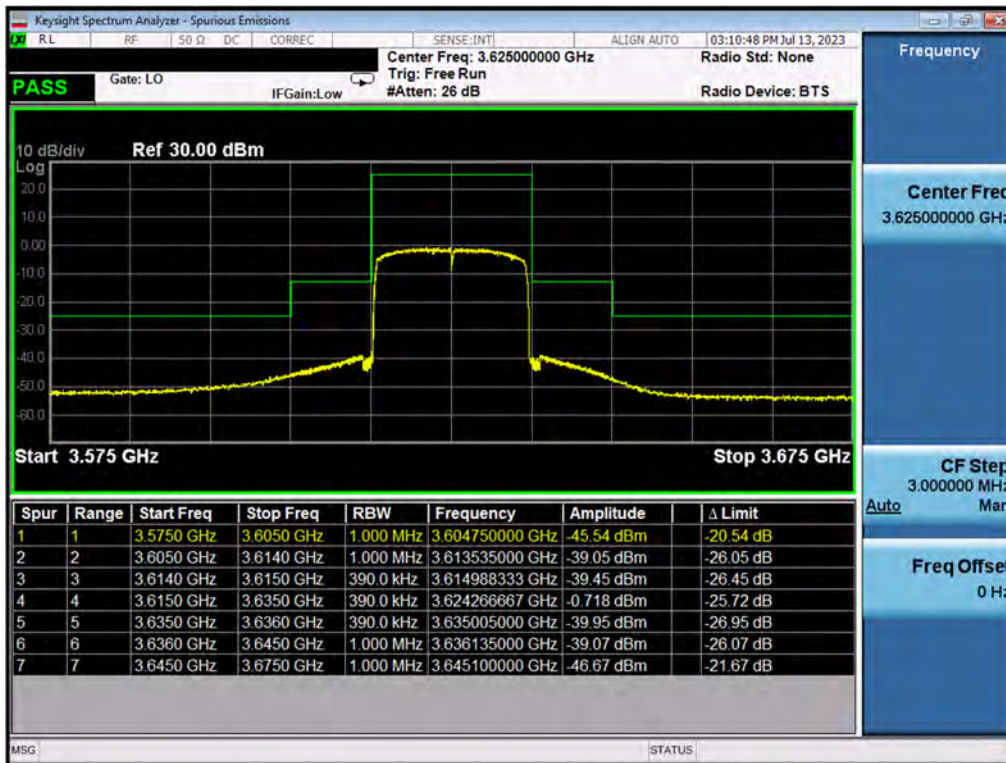


Plot 7.187. Conducted Band Edge Plot (10MHz, QPSK, High Channel, Ch.A)

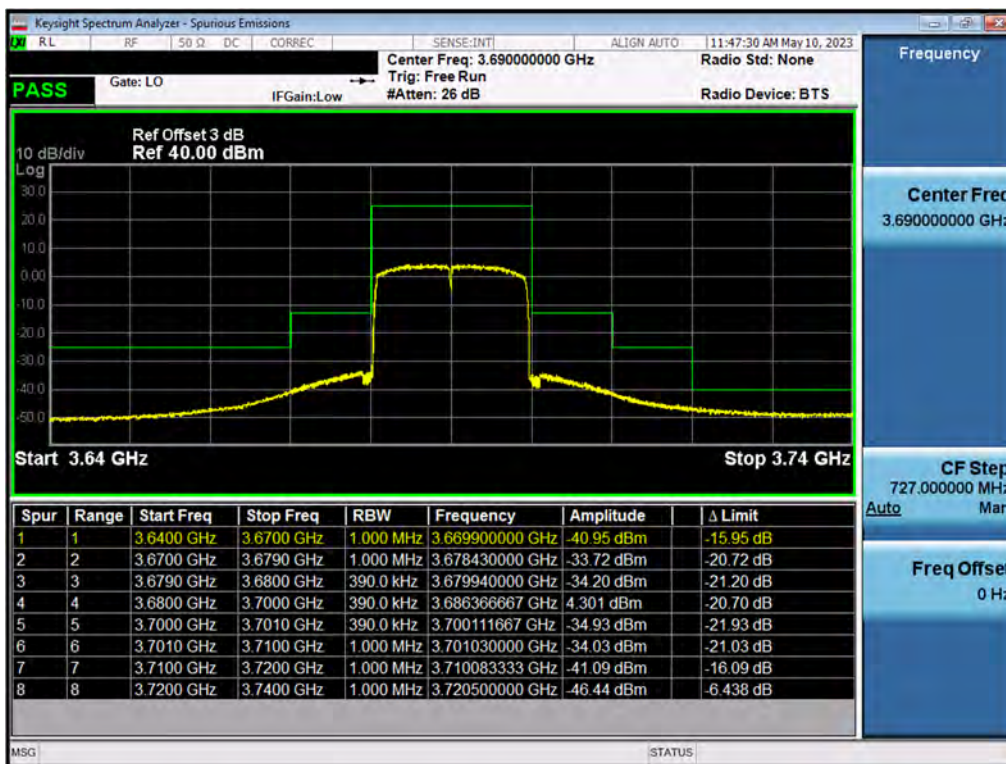


Plot 7.188. Conducted Band Edge Plot (20MHz, QPSK, Low Channel, Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7.189. Conducted Band Edge Plot (20MHz, QPSK, Mid Channel, Ch.A)

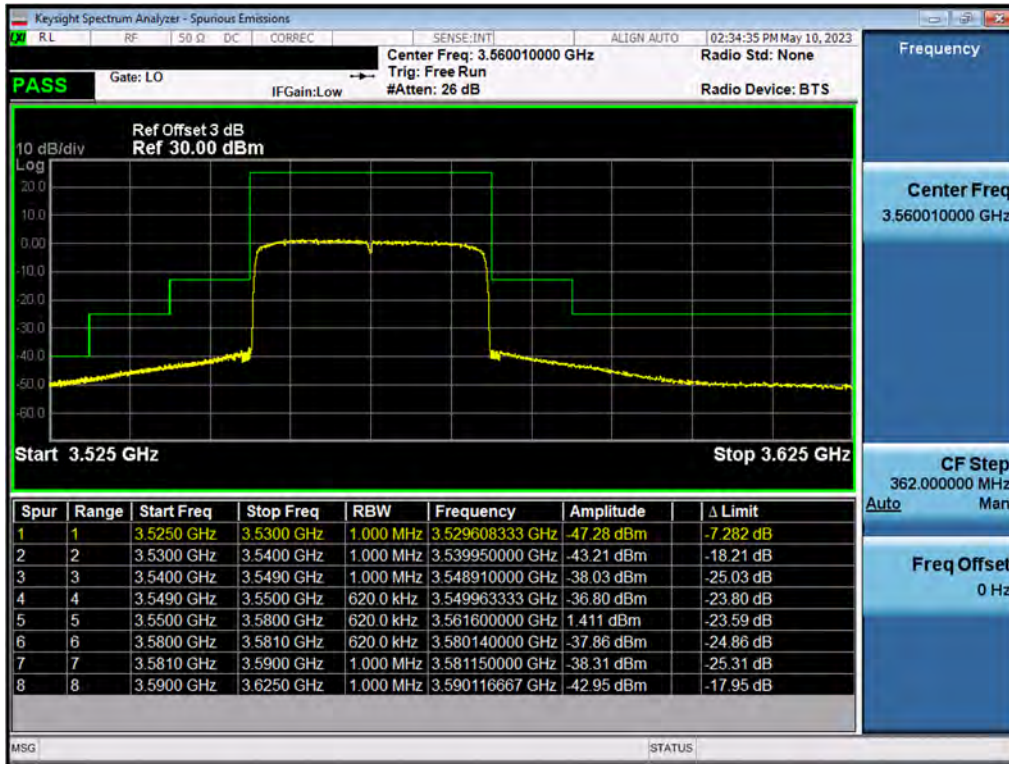


Plot 7.190. Conducted Band Edge Plot (20MHz, QPSK, High Channel, Ch.A)

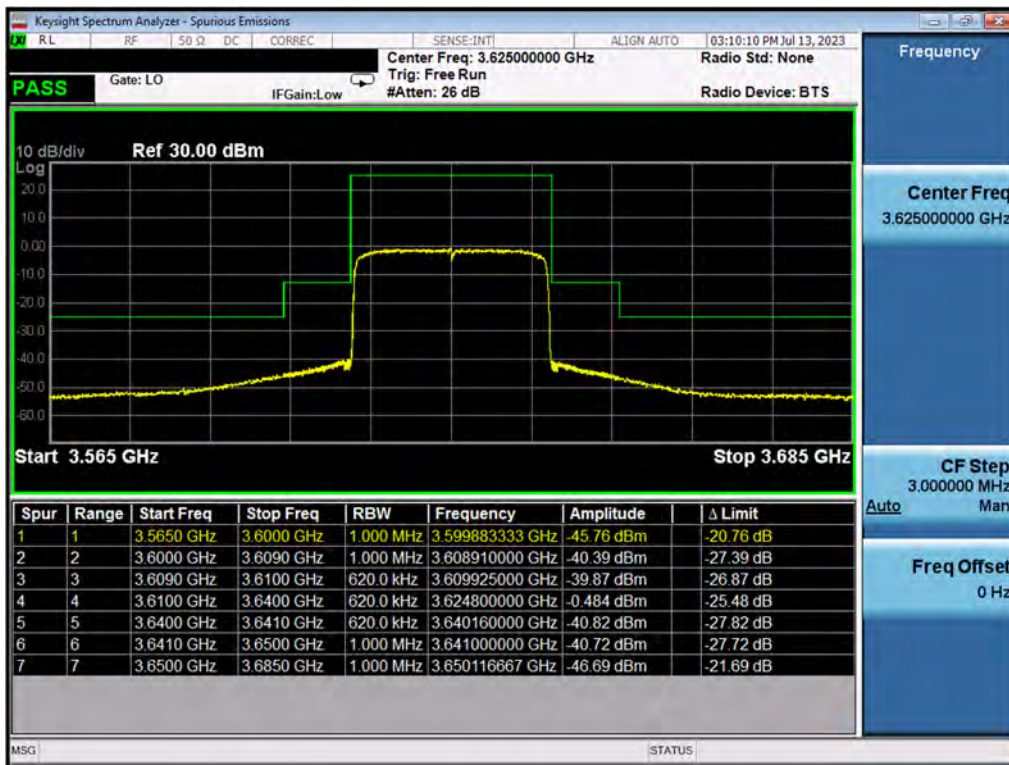
FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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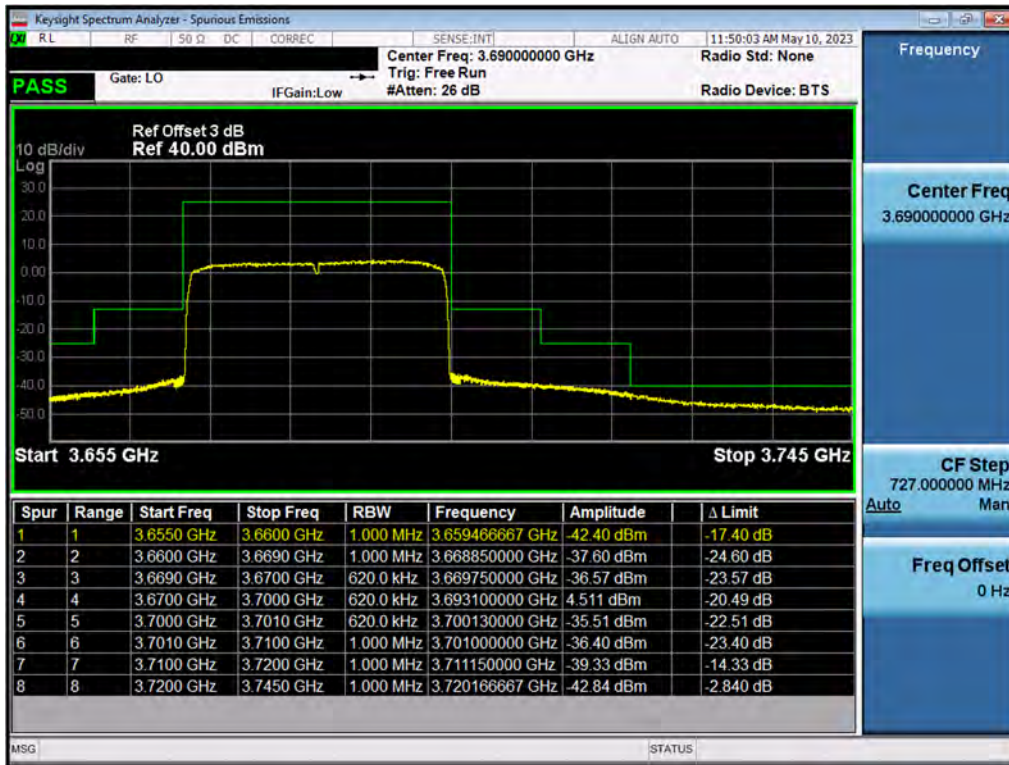


Plot 7.191. Conducted Band Edge Plot (30MHz, QPSK, Low Channel, Ch.A)

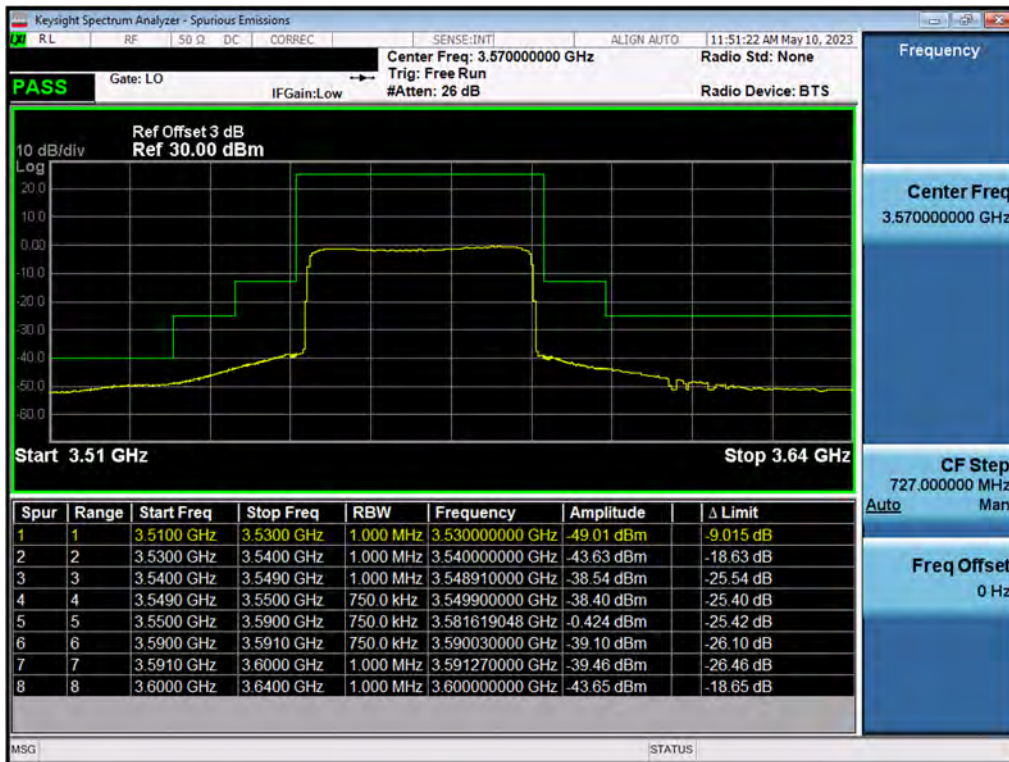


Plot 7.192. Conducted Band Edge Plot (30MHz, QPSK, Mid Channel, Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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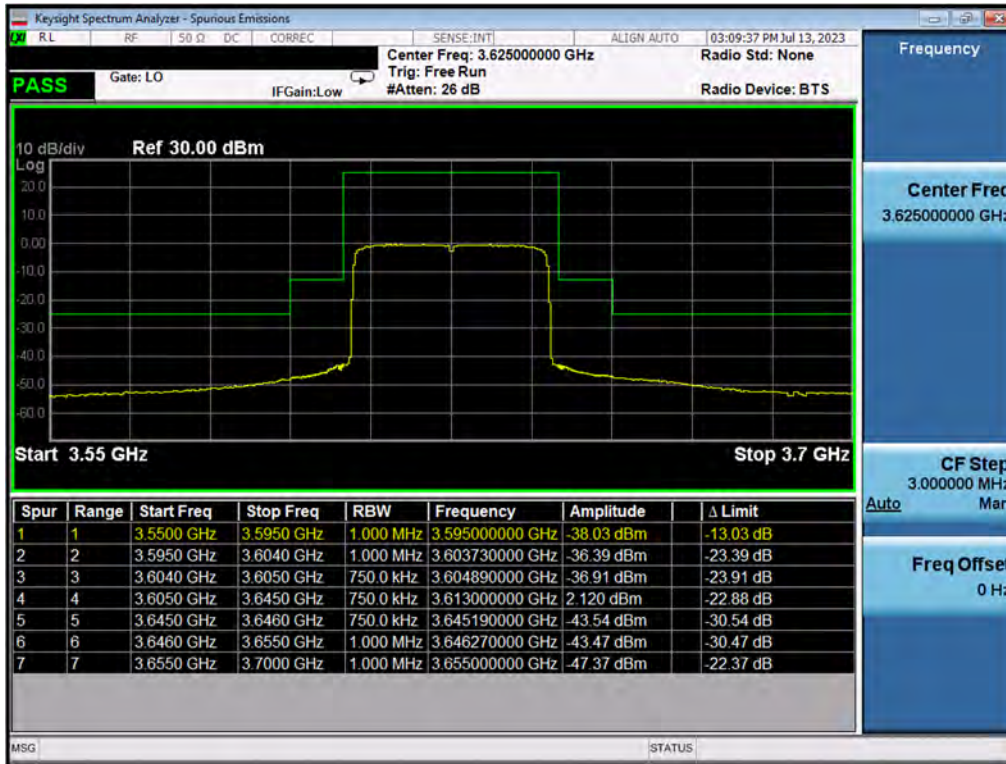


Plot 7.193. Conducted Band Edge Plot (30MHz, QPSK, High Channel, Ch.A)

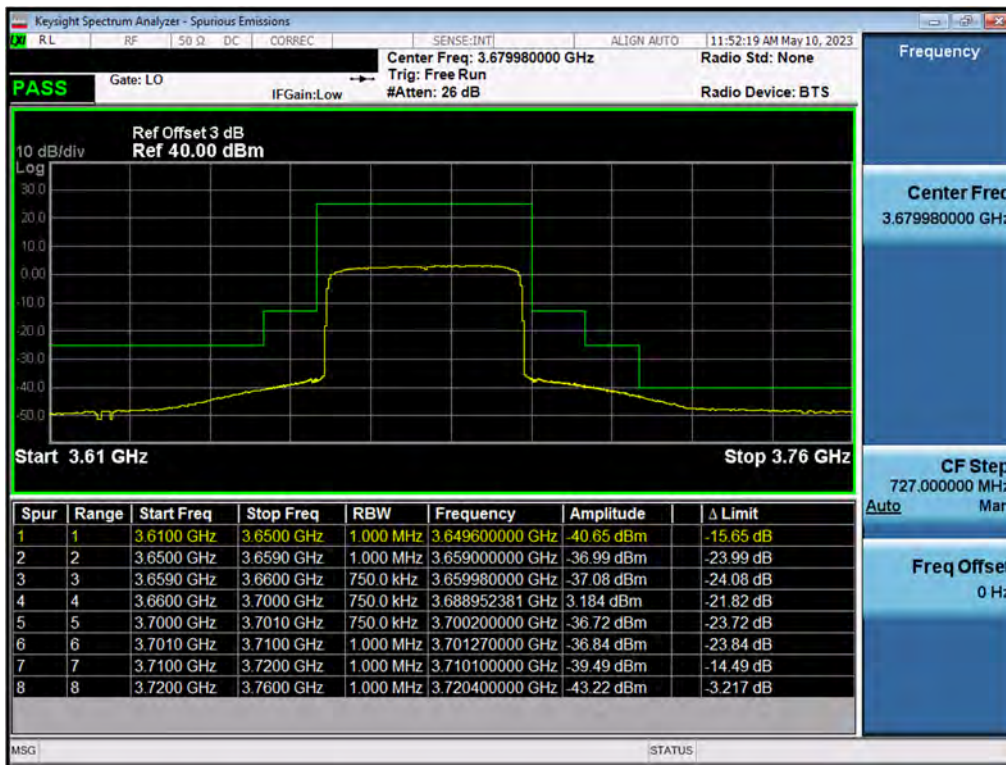


Plot 7.194. Conducted Band Edge Plot (40MHz, QPSK, Low Channel, Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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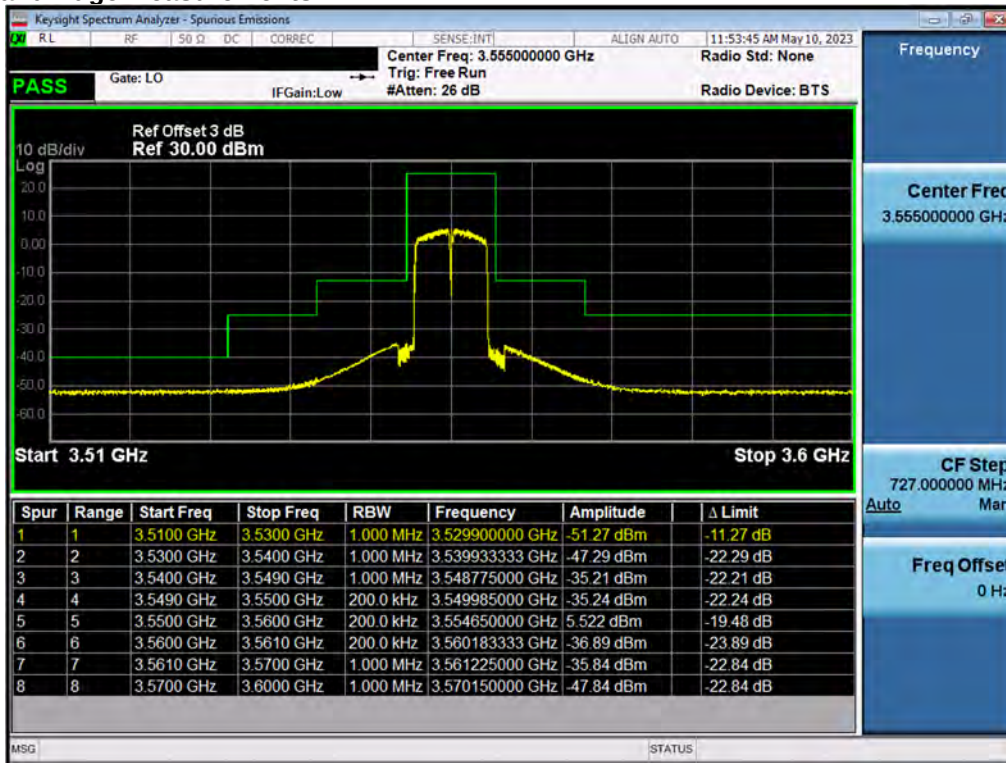
Plot 7.195. Conducted Band Edge Plot (40MHz, QPSK, Mid Channel, Ch.A)



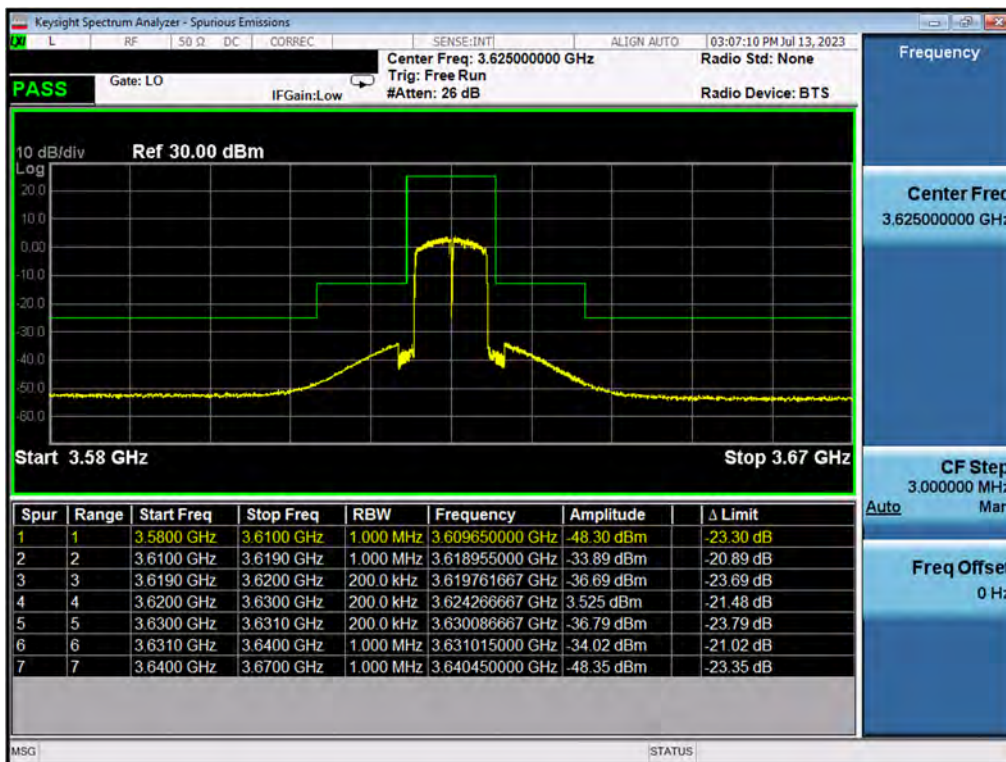
Plot 7.196. Conducted Band Edge Plot (40MHz, QPSK, High Channel, Ch.A)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Channel B Band Edge Measurements

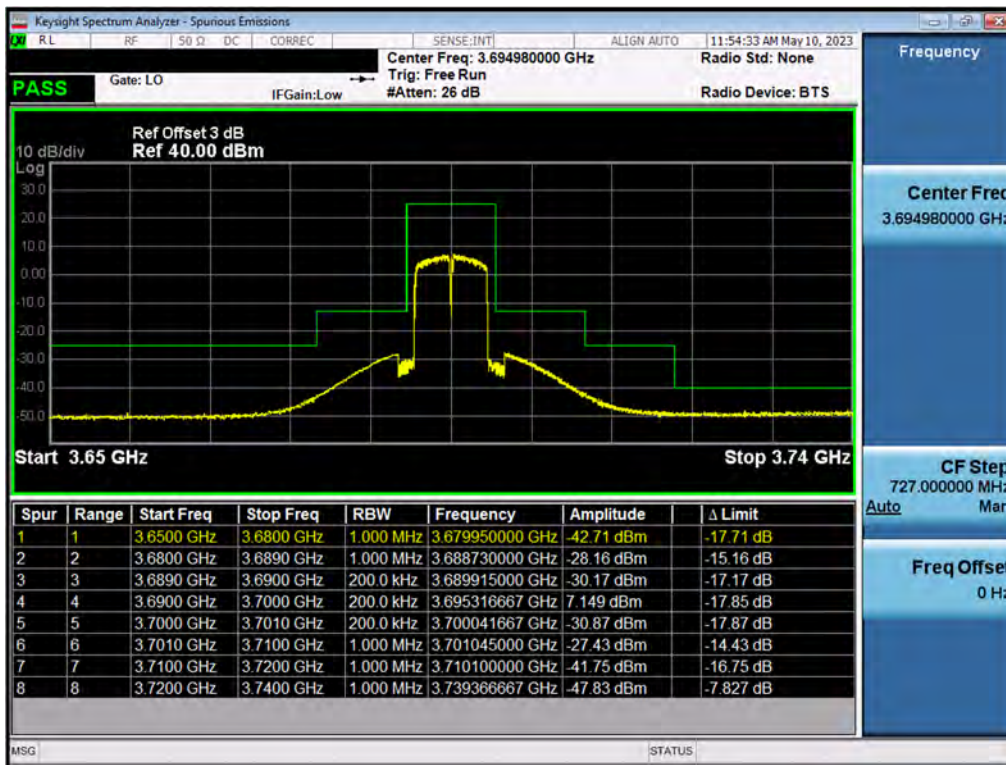


Plot 7.197. Conducted Band Edge Plot (10MHz, QPSK, Low Channel, Ch.B)

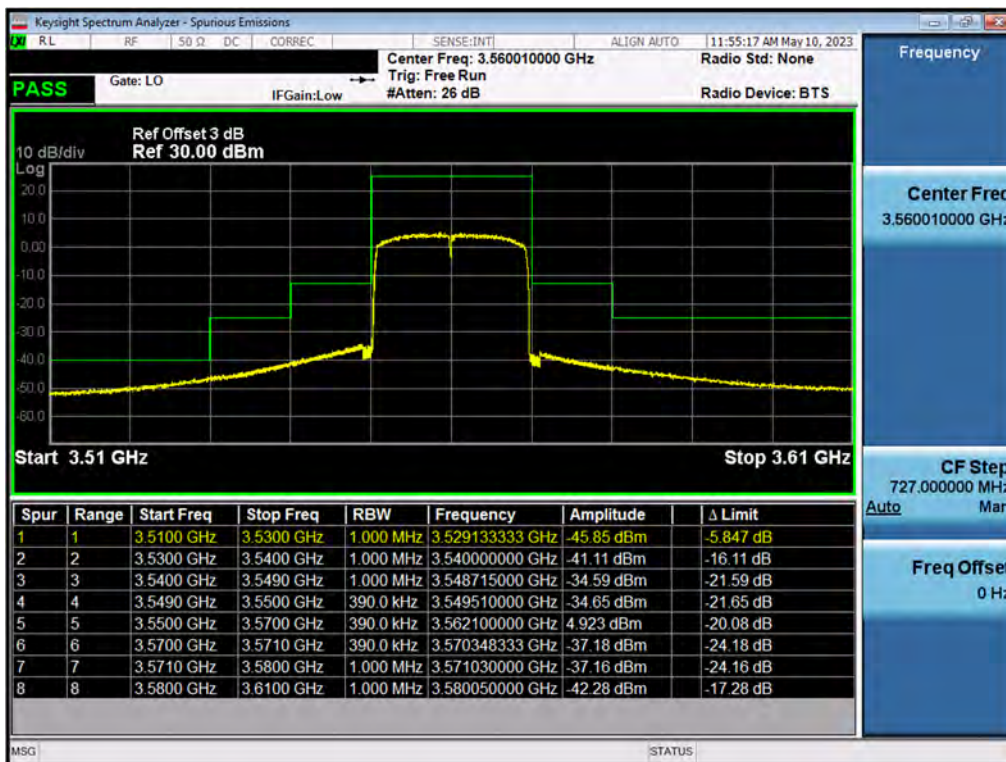


Plot 7.198. Conducted Band Edge Plot (10MHz, QPSK, Mid Channel, Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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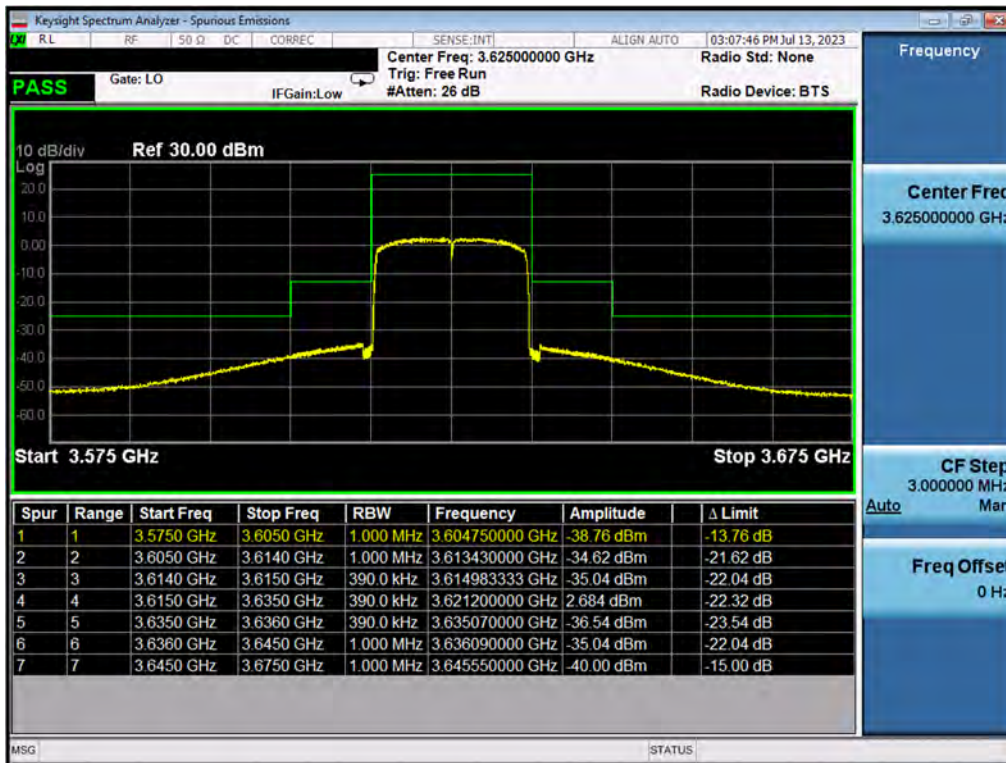


Plot 7.199. Conducted Band Edge Plot (10MHz, QPSK, High Channel, Ch.B)

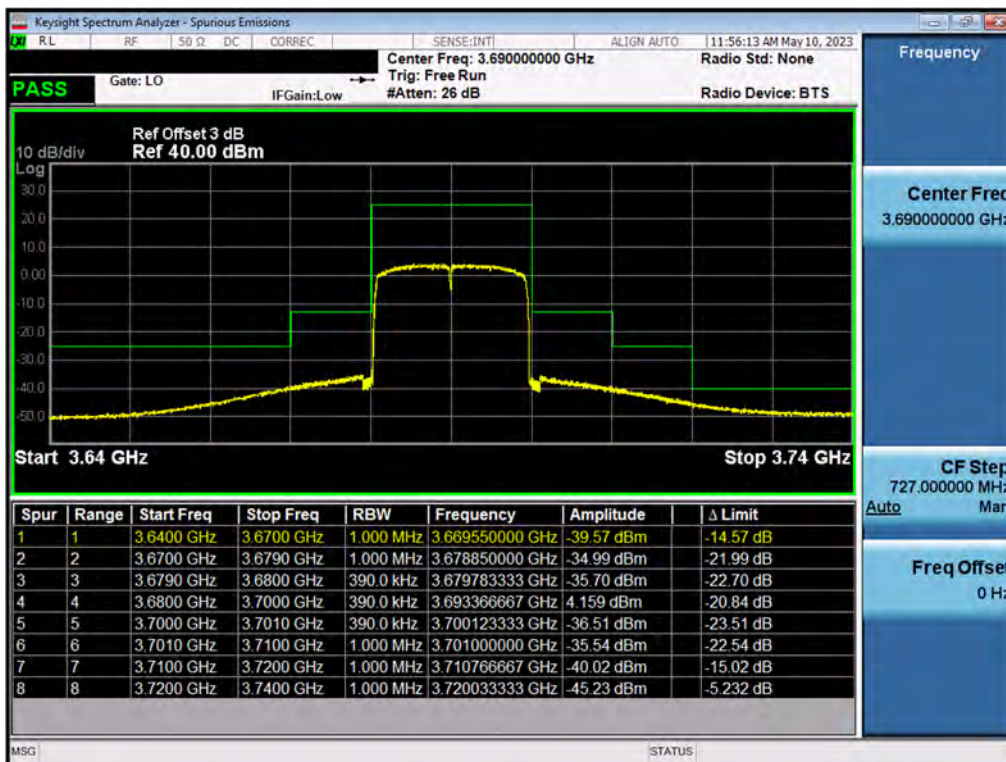


Plot 7.200. Conducted Band Edge Plot (20MHz, QPSK, Low Channel, Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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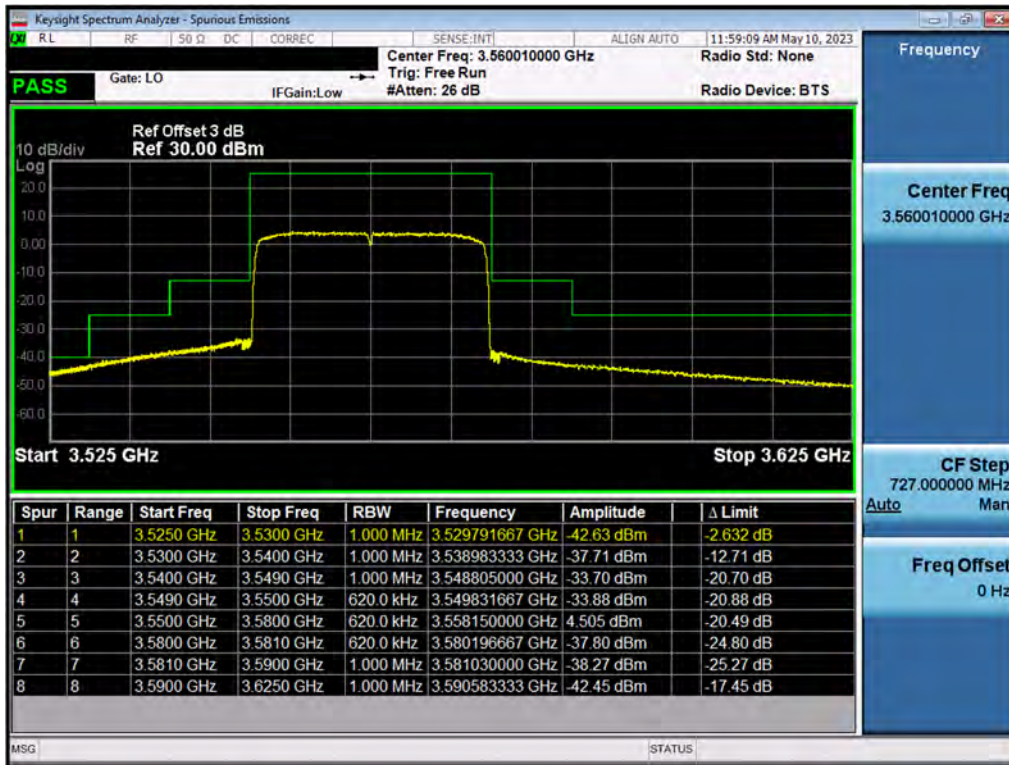


Plot 7.201. Conducted Band Edge Plot (20MHz, QPSK, Mid Channel, Ch.B)

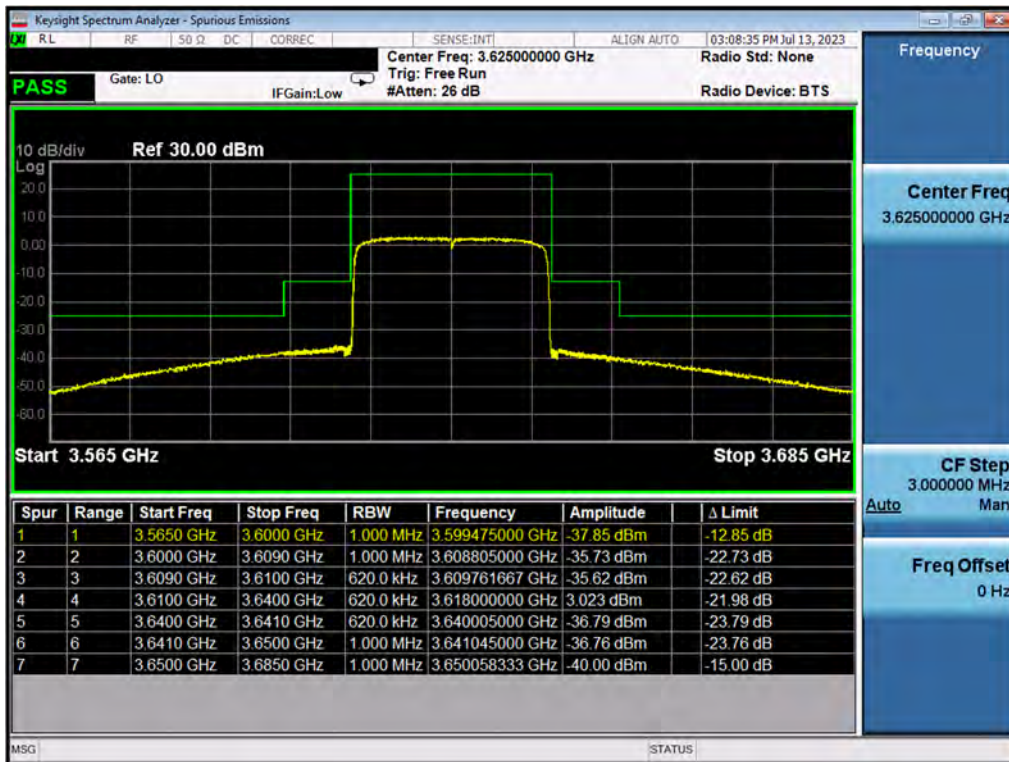


Plot 7.202. Conducted Band Edge Plot (20MHz, QPSK, High Channel, Ch.B)

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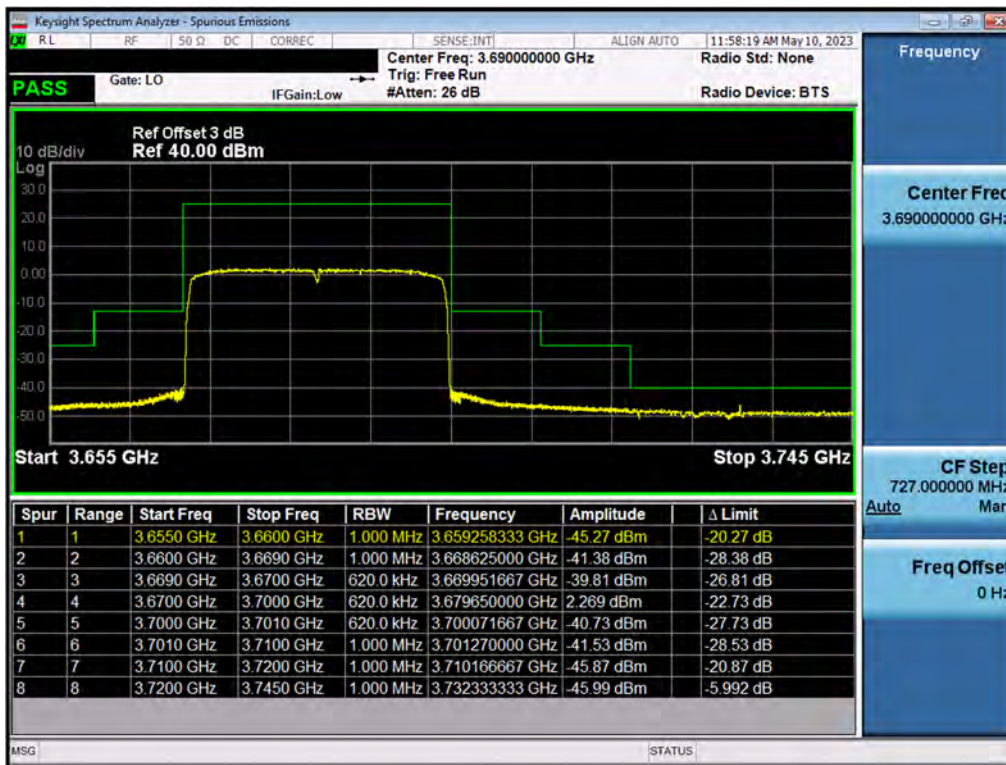


Plot 7.203. Conducted Band Edge Plot (30MHz, QPSK, Low Channel, Ch.B)

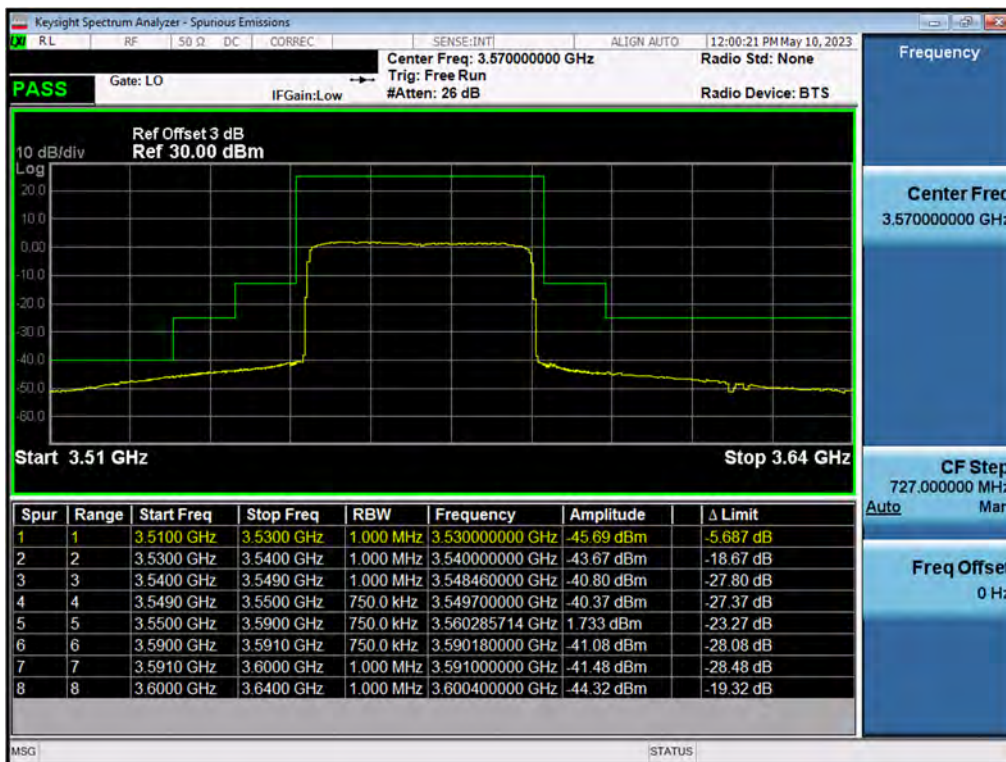


Plot 7.204. Conducted Band Edge Plot (30MHz, QPSK, Mid Channel, Ch.B)

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7.205. Conducted Band Edge Plot (30MHz, QPSK, High Channel, Ch.B)

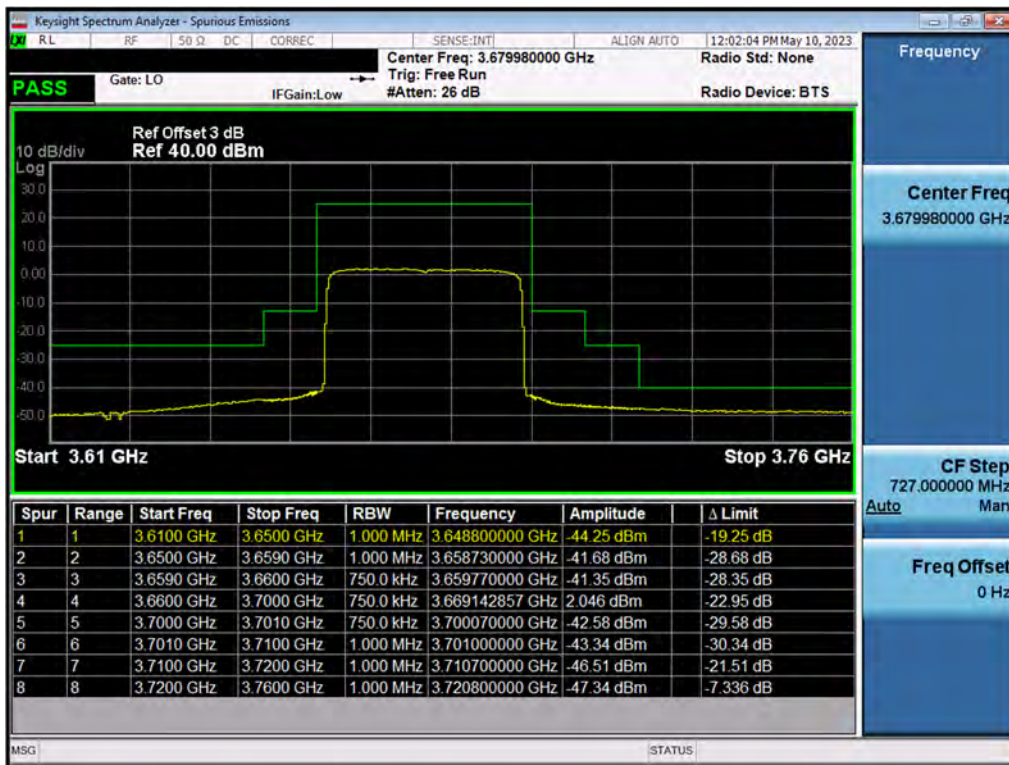


Plot 7.206. Conducted Band Edge Plot (40MHz, QPSK, Low Channel, Ch.B)

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Plot 7.207. Conducted Band Edge Plot (40MHz, QPSK, Mid Channel, Ch.B)



Plot 7.208. Conducted Band Edge Plot (40MHz, QPSK, High Channel, Ch.B)

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7.9 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into a 50 ohm load. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Max Hold (In cases where the level is within 2dB of the limit, the final measurement is taken using triggering/gating and trace averaging.)
7. The trace was allowed to stabilize

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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

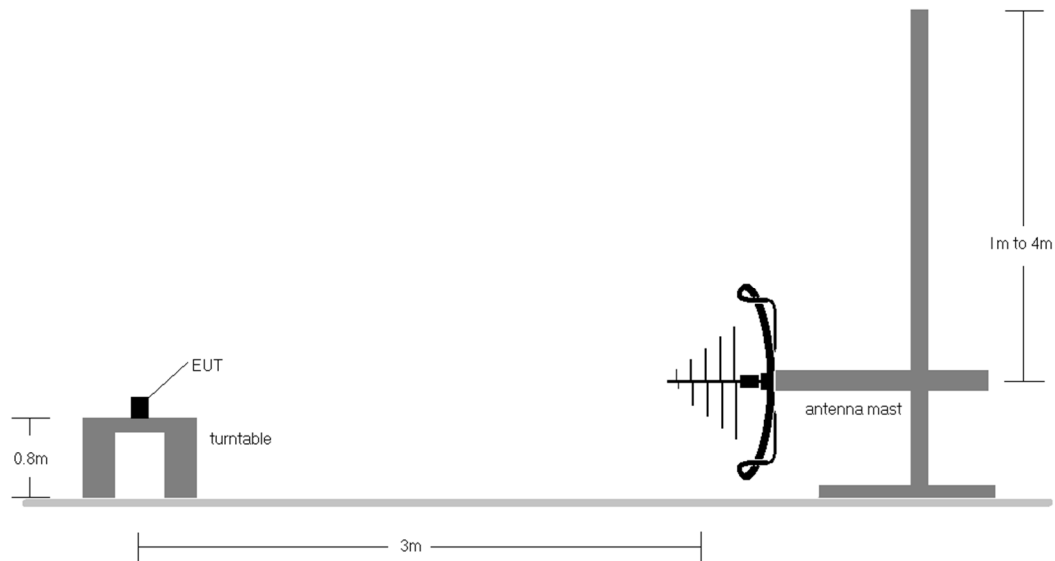


Figure 7-8. Test Instrument & Measurement Setup < 1GHz

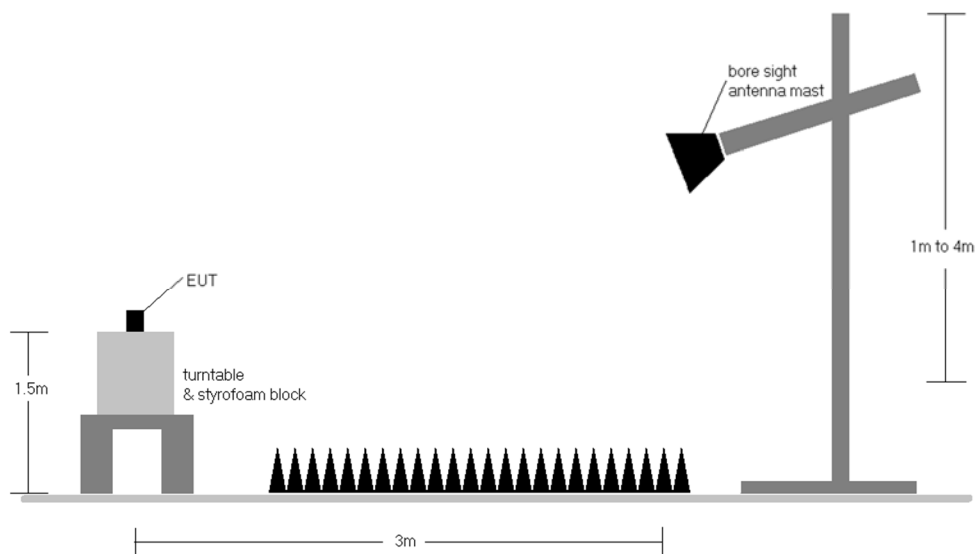


Figure 7-9. Test Instrument & Measurement Setup >1 GHz

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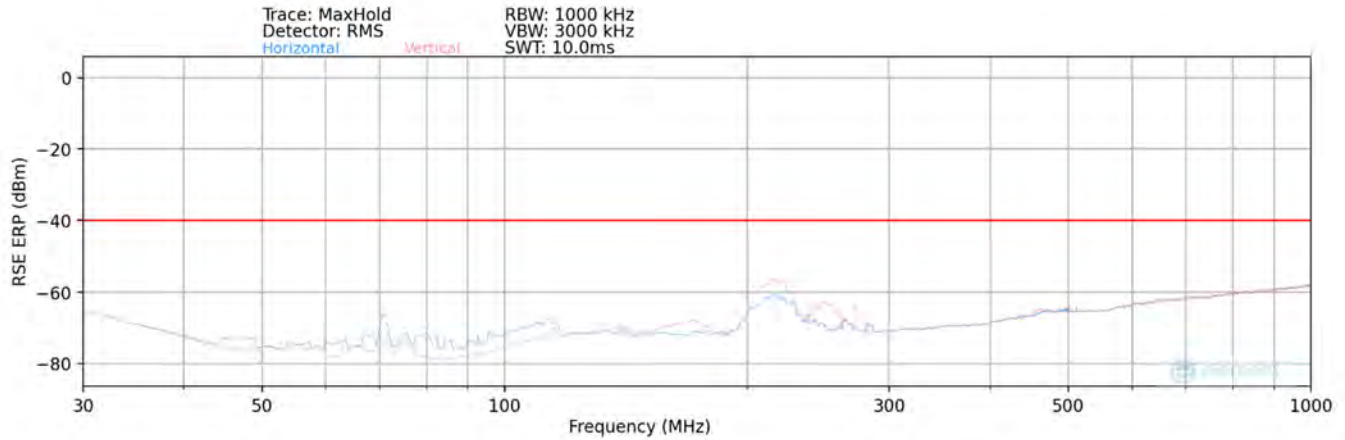
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Test Notes

- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - a) $E(\text{dB}\mu\text{V/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - b) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V/m}) + 20\log D - 104.8$; where D is the measurement distance in meters.
- 2) The worst case emissions are reported with the EUT modulations and channel bandwidth configurations shown in the tables below.
- 3) The spectrum is measured from 30MHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 4) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 5) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

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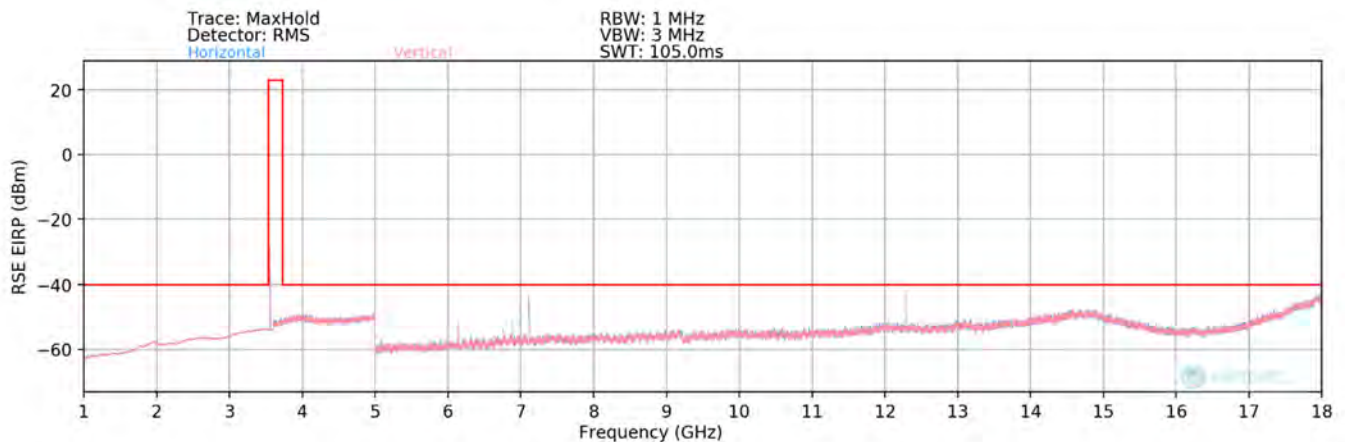


Plot 7.209. Radiated Spurious Plot 30MHz-1GHz

Bandwidth (MHz):	10
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
Detector / Trace Mode:	RMS / Max Hold
RBW / VBW:	1MHz / 3MHz

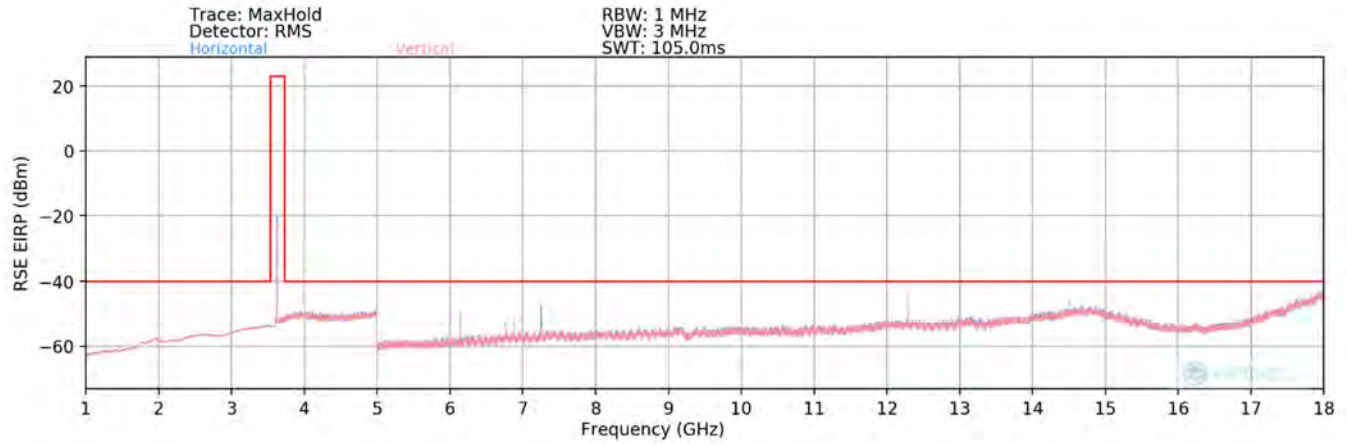
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
51.10	H	101	251	-95.65	14.34	25.69	-69.57	-40.00	-29.57
59.20	H	100	169	-96.46	13.93	24.47	-70.78	-40.00	-30.78
71.00	H	101	309	-91.33	14.45	30.12	-65.14	-40.00	-25.14
75.60	H	110	12	-93.92	14.38	27.46	-67.80	-40.00	-27.80
93.20	H	112	222	-96.20	15.44	26.24	-69.01	-40.00	-29.01
109.60	H	100	290	-97.07	19.33	29.26	-66.00	-40.00	-26.00
139.50	V	158	288	-99.52	20.05	27.53	-67.73	-40.00	-27.73
173.00	V	139	273	-95.44	18.99	30.55	-64.71	-40.00	-24.71
218.00	V	129	91	-80.73	17.82	44.09	-51.16	-40.00	-11.16
253.80	V	101	82	-81.01	18.74	44.73	-50.53	-40.00	-10.53
265.40	V	129	84	-86.11	20.13	41.02	-54.24	-40.00	-14.24

Table 7-9. Radiated Spurious Data 30MHz-1GHz - Mid Channel

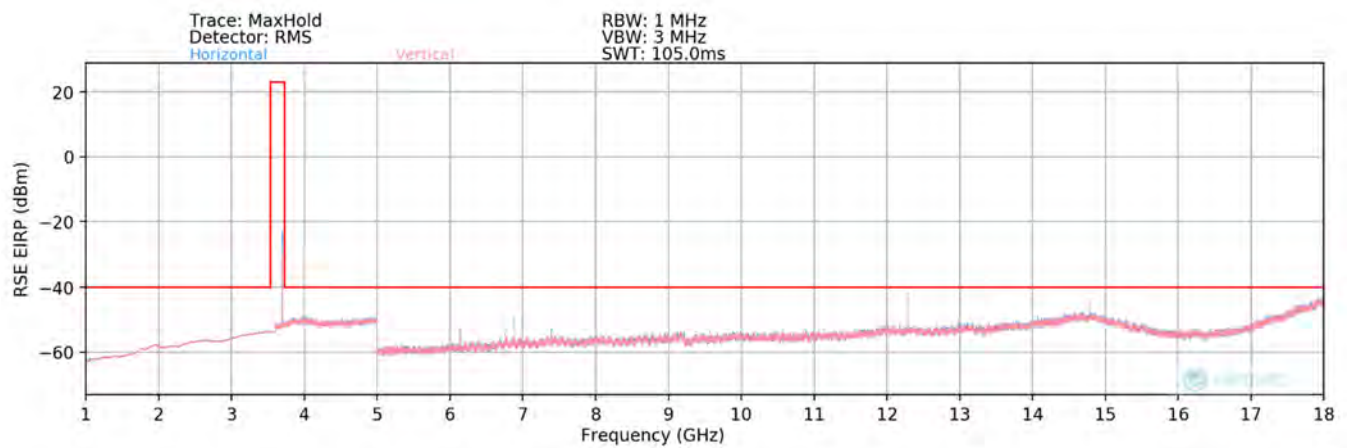


Plot 7.210. Radiated Spurious Plot 1-18GHz - Low Channel

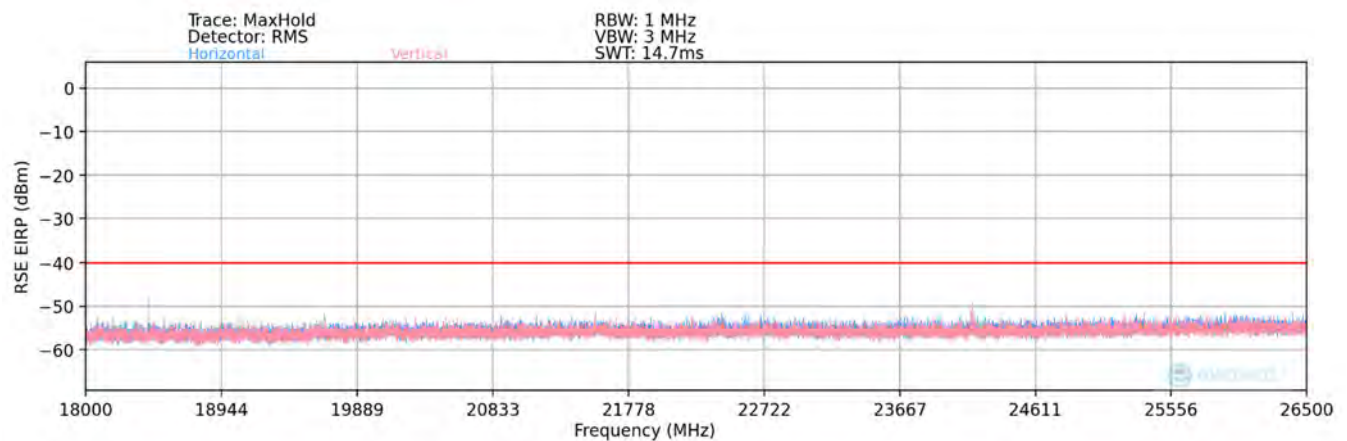
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Plot 7.211. Radiated Spurious Plot 1-18GHz – Mid Channel

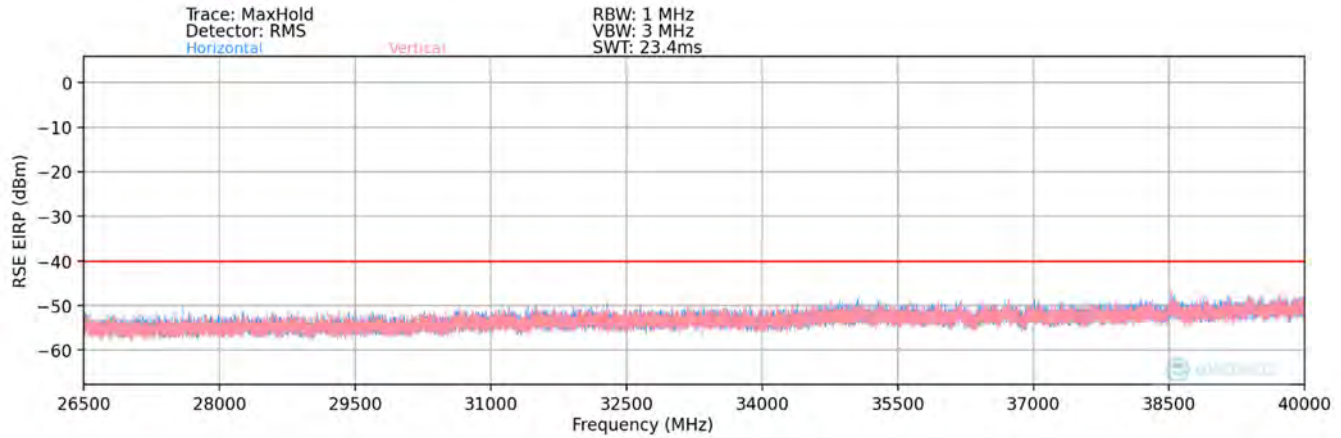


Plot 7.212. Radiated Spurious Plot 1-18GHz – High Channel



Plot 7.213. Radiated Spurious Plot 18-26.5GHz

FCC ID: 2AS22-LUMACH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7.214. Radiated Spurious Plot 26.5-40GHz

Bandwidth (MHz):	10
Frequency (MHz):	3555.0
Modulation Signal:	QPSK
Detector / Trace Mode:	RMS / Max Hold
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
6144.00	H	136	196	-57.02	1.34	51.32	-43.94	-40.00	-3.94
6758.50	H	122	180	-67.81	3.20	42.39	-52.87	-40.00	-12.87
6811.00	H	-	-	-75.60	2.98	34.38	-60.88	-40.00	-20.88
7110.00	H	155	239	-56.07	3.80	54.73	-40.53	-40.00	-0.53
10665.00	H	137	258	-78.42	7.81	36.39	-58.87	-40.00	-18.87
12288.00	V	167	191	-65.97	9.47	50.50	-44.76	-40.00	-4.76
14220.00	H	187	179	-73.26	12.22	45.96	-49.30	-40.00	-9.30
17775.00	H	-	-	-77.26	15.47	45.21	-50.05	-40.00	-10.05
21330.00	H	-	-	-57.89	4.04	53.15	-51.65	-40.00	-11.65
24885.00	H	-	-	-58.07	4.19	53.13	-51.67	-40.00	-11.67
28440.00	H	-	-	-58.04	5.26	54.21	-50.59	-40.00	-10.59

Table 7-10. Radiated Spurious Data – Low Channel

Bandwidth (MHz):	10
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
Detector / Trace Mode:	RMS / Max Hold
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
6144.00	V	185	196	-62.69	1.34	45.65	-49.61	-40.00	-9.61
6758.50	H	250	240	-64.81	2.98	45.17	-50.09	-40.00	-10.09
6811.00	H	131	235	-65.24	3.20	44.96	-50.30	-40.00	-10.30
7250.00	H	176	224	-58.25	3.66	52.41	-42.85	-40.00	-2.85
10875.00	H	-	-	-78.22	8.05	36.83	-58.43	-40.00	-18.43
12288.00	V	210	216	-61.23	9.47	55.24	-40.02	-40.00	-0.02
14500.00	H	122	232	-75.94	13.04	44.10	-51.16	-40.00	-11.16
18125.00	H	-	-	-55.39	1.60	53.21	-51.59	-40.00	-11.59
18432.00	H	150	193	-52.44	1.66	56.22	-48.58	-40.00	-8.58
21750.00	H	-	-	-55.59	3.86	55.27	-49.53	-40.00	-9.53
24162.00	V	150	63	-54.17	4.27	57.10	-47.70	-40.00	-7.70
25375.00	H	-	-	-58.12	4.26	53.15	-51.66	-40.00	-11.66
29000.00	H	-	-	-58.32	5.40	54.08	-50.72	-40.00	-10.72
32625.00	H	-	-	-57.67	7.10	56.43	-48.37	-40.00	-8.37

Table 7-11. Radiated Spurious Data – Mid Channel

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Bandwidth (MHz):	10
Frequency (MHz):	3695.0
Modulation Signal:	QPSK
Detector / Trace Mode:	RMS / Max Hold
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
6144.00	V	157	210	-57.89	1.34	50.45	-44.81	-40.00	-4.81
6758.50	V	110	182	-67.83	2.98	42.15	-53.11	-40.00	-13.11
6811.00	H	-	-	-75.67	3.20	34.53	-60.73	-40.00	-20.73
7390.00	H	197	243	-59.73	4.26	51.53	-43.73	-40.00	-3.73
11085.00	V	-	-	-78.69	8.18	36.49	-58.77	-40.00	-18.77
12288.00	V	179	191	-66.22	9.47	50.25	-45.01	-40.00	-5.01
14780.00	V	199	167	-71.10	13.43	49.33	-45.93	-40.00	-5.93
18475.00	V	-	-	-57.54	1.86	51.32	-53.48	-40.00	-13.48
22170.00	V	-	-	-58.54	3.80	52.27	-52.54	-40.00	-12.54
25865.00	V	-	-	-56.80	4.65	54.85	-49.95	-40.00	-9.95

Table 7-12. Radiated Spurious Data – High Channel

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7.10 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 96, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI C63.26-2015 – Section 5.6

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

Test Notes

None

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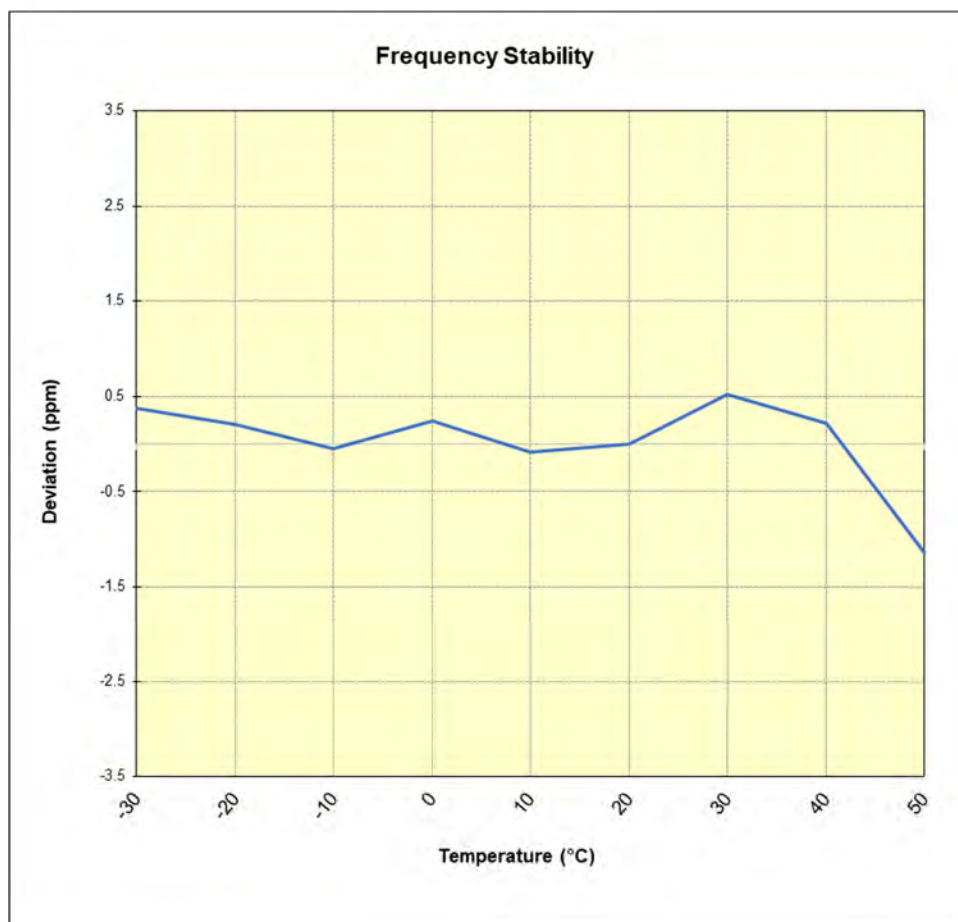
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Band 48					
Operating Frequency (Hz):			3,625,000,000		
Voltage (%)	Power (VAC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	120.00	- 30	3,625,051,798	1,362	0.0000376
		- 20	3,625,051,185	749	0.0000207
		- 10	3,625,050,261	-175	-0.0000048
		0	3,625,051,332	896	0.0000247
		+ 10	3,625,050,150	-286	-0.0000079
		+ 20 (Ref)	3,625,050,436	0	0.0000000
		+ 30	3,625,052,313	1,878	0.0000518
		+ 40	3,625,051,221	785	0.0000217
		+ 50	3,625,046,301	-4,135	-0.0001141
85 %	102.00	+ 20	3,625,053,657	3,221	0.0000889
115 %	138.00	+ 20	3,625,049,397	-1,039	-0.0000287

Table 7-13. Frequency Stability Data

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Plot 7.215. Frequency Stability Chart

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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Skylark Wireless, LLC CBRS Radio Module FCC ID: 2AS22-LUMACH2** complies with all of the End User Device requirements of Part 96 of the FCC Rules for Band operation only.

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