

Band Edge

LTE Band 66

CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =6, RB Offset = 0

LOWER BAND EDGE

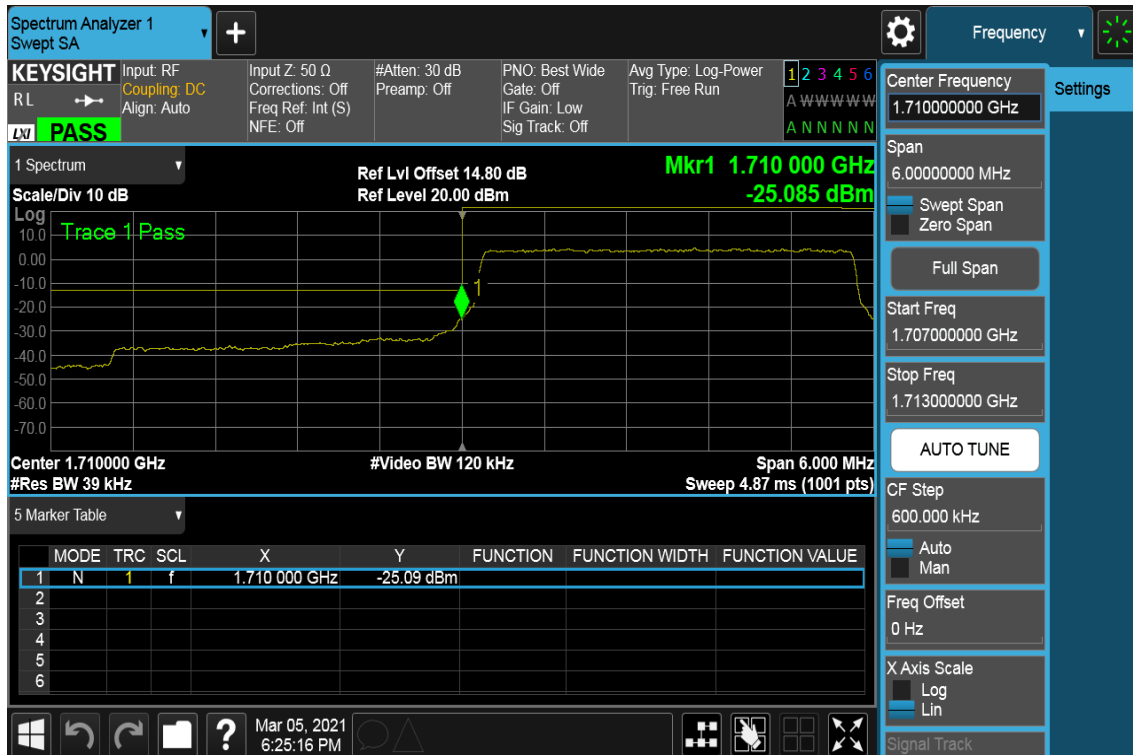


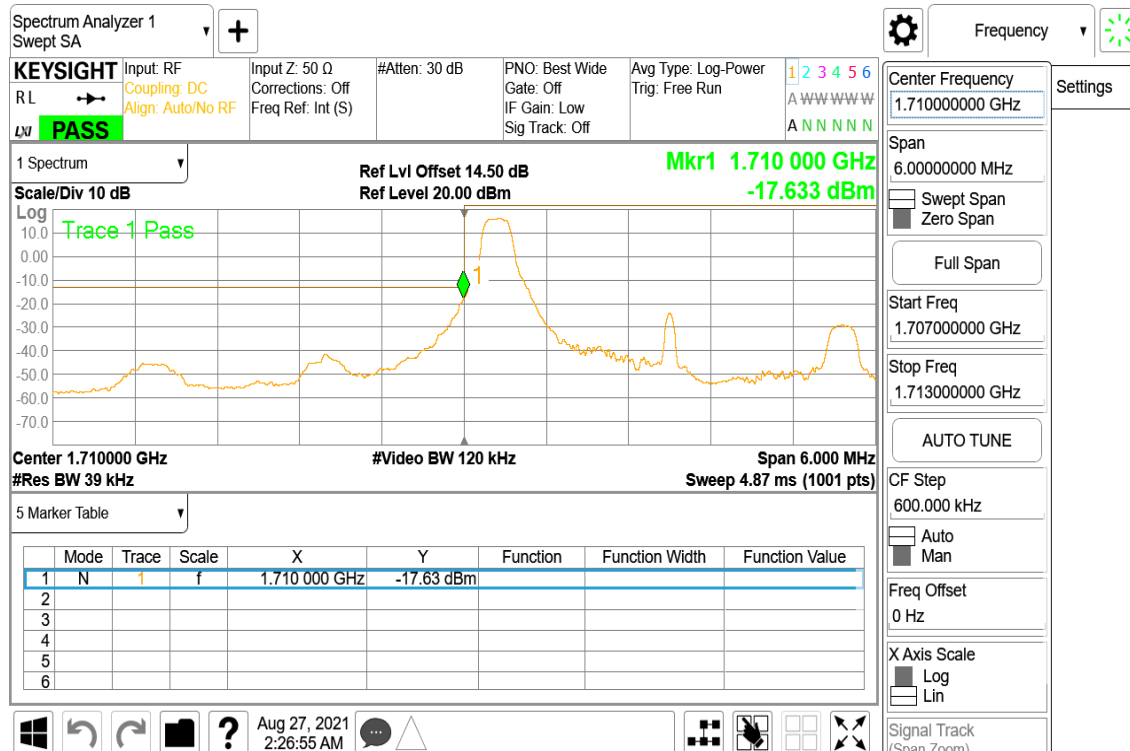
HIGHER BAND EDGE

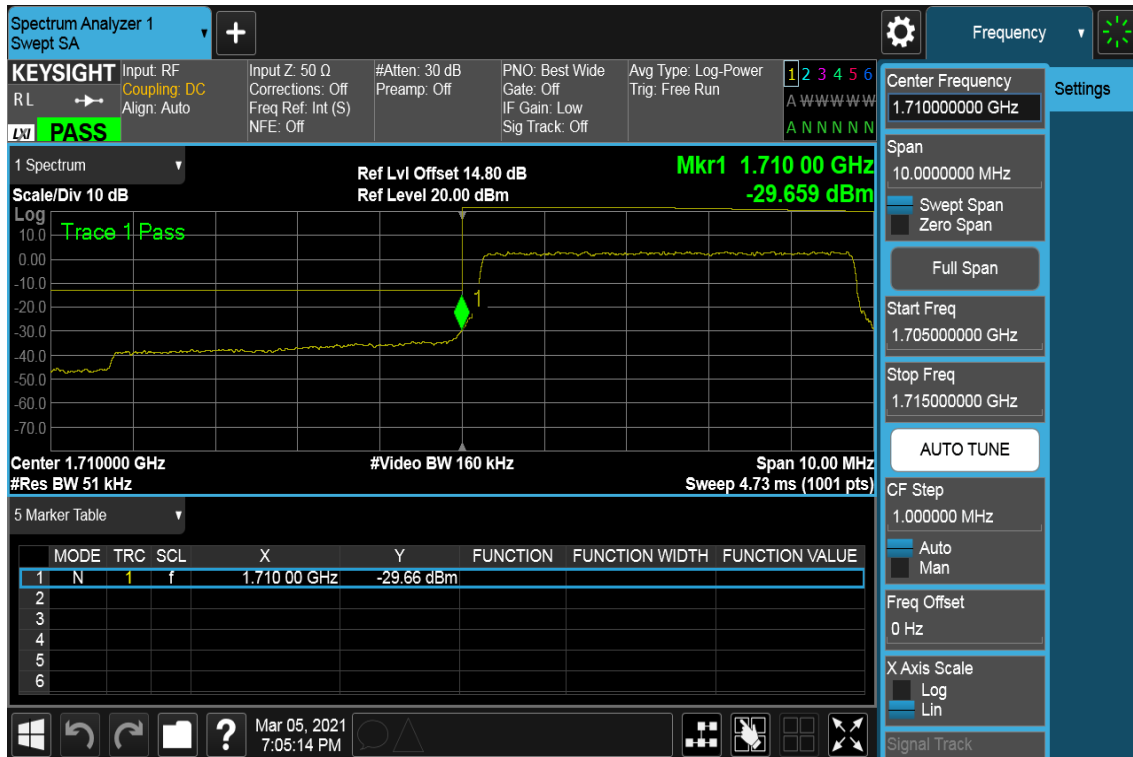


CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE**CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =1, RB Offset = 5**
HIGHER BAND EDGE

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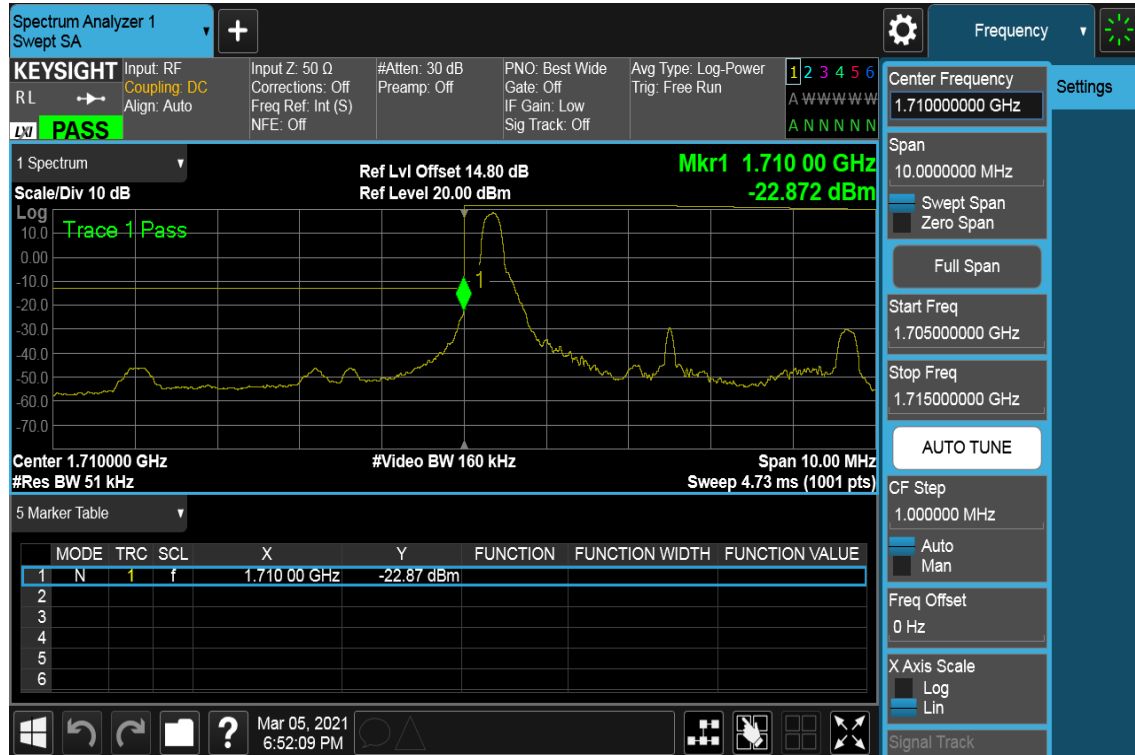
CHANNEL BANDWIDTH: 3MHz / QPSK / RB =15, RB Offset = 0
LOWER BAND EDGE**HIGHER BAND EDGE**

CHANNEL BANDWIDTH: 3MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE**CHANNEL BANDWIDTH: 3MHz / QPSK / RB =1, RB Offset = 14**
HIGHER BAND EDGE

CHANNEL BANDWIDTH: 5MHz / QPSK / RB =25, RB Offset = 0
LOWER BAND EDGE**HIGHER BAND EDGE**

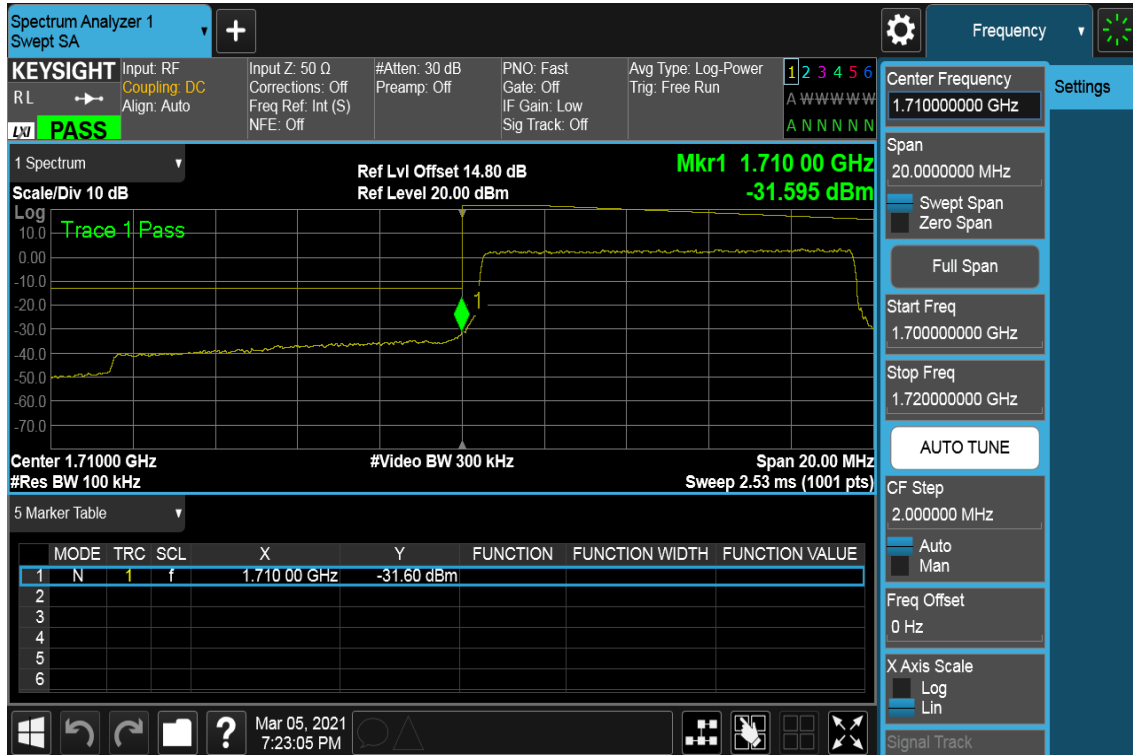
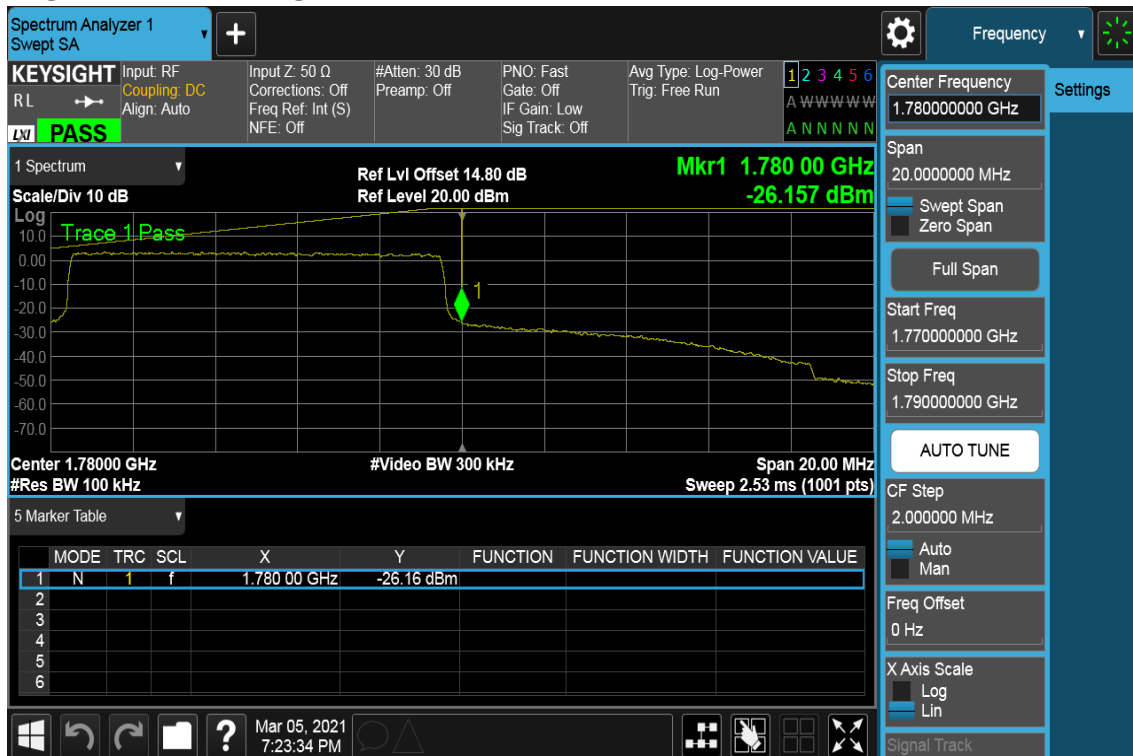
Report No.: T201102D09-RP17

CHANNEL BANDWIDTH: 5MHz / QPSK / RB =1, RB Offset = 0 LOWER BAND EDGE

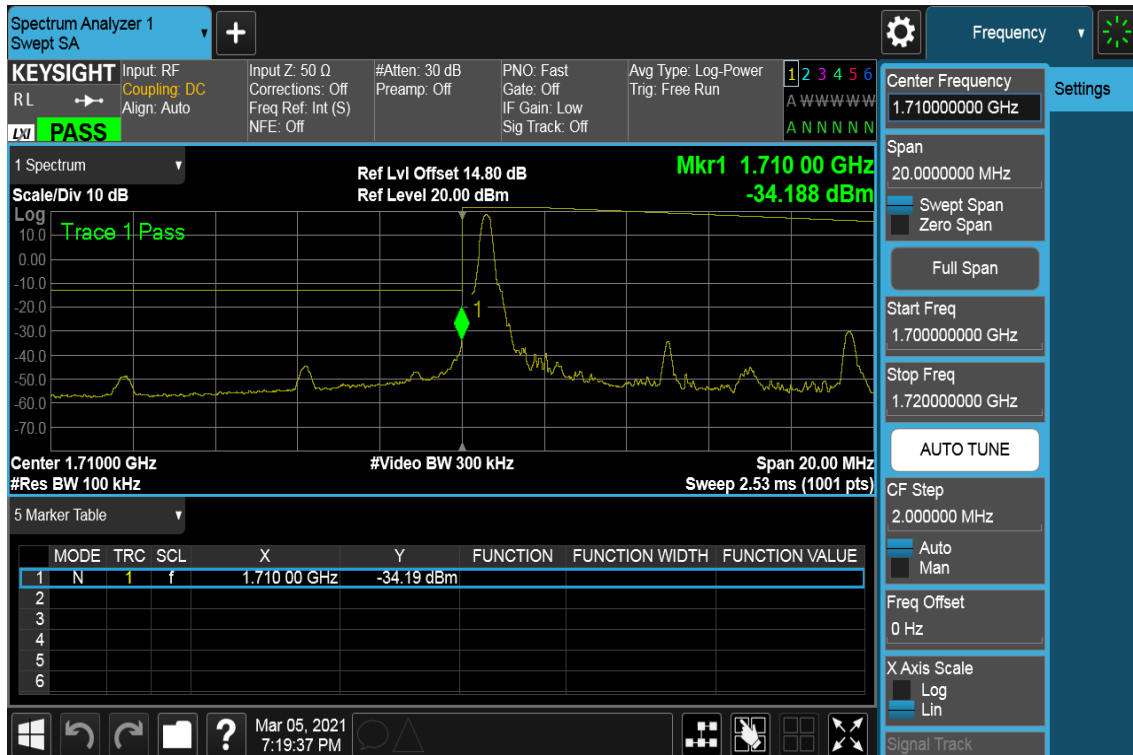
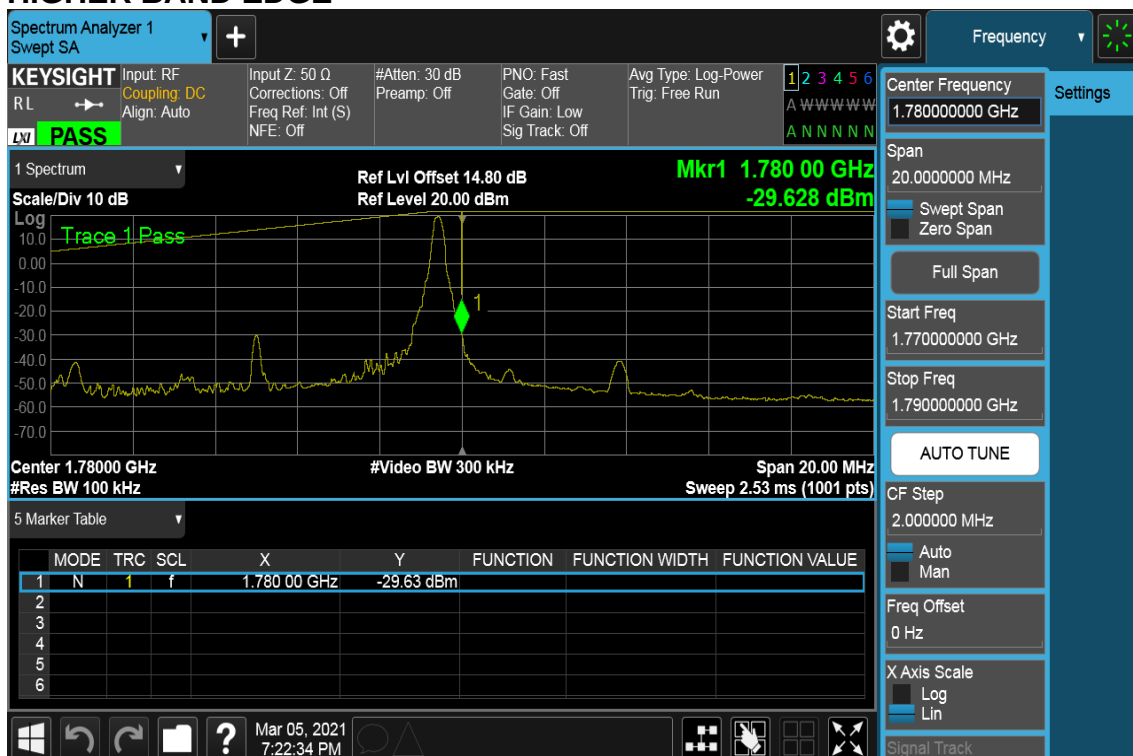


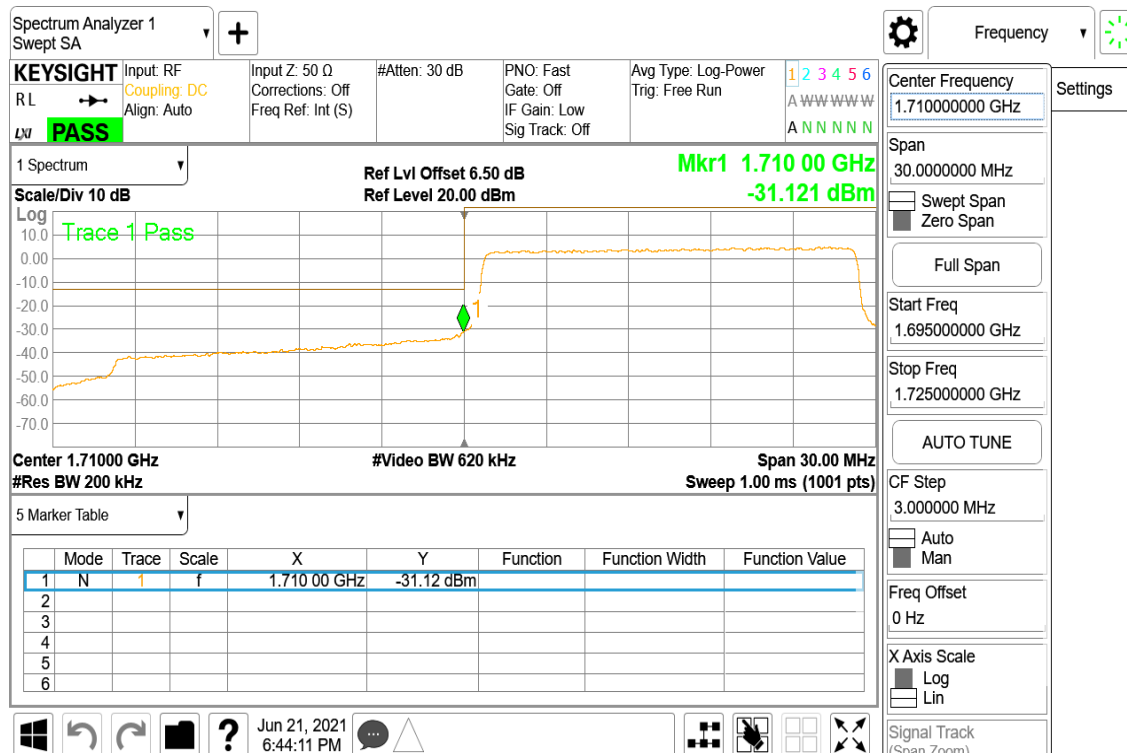
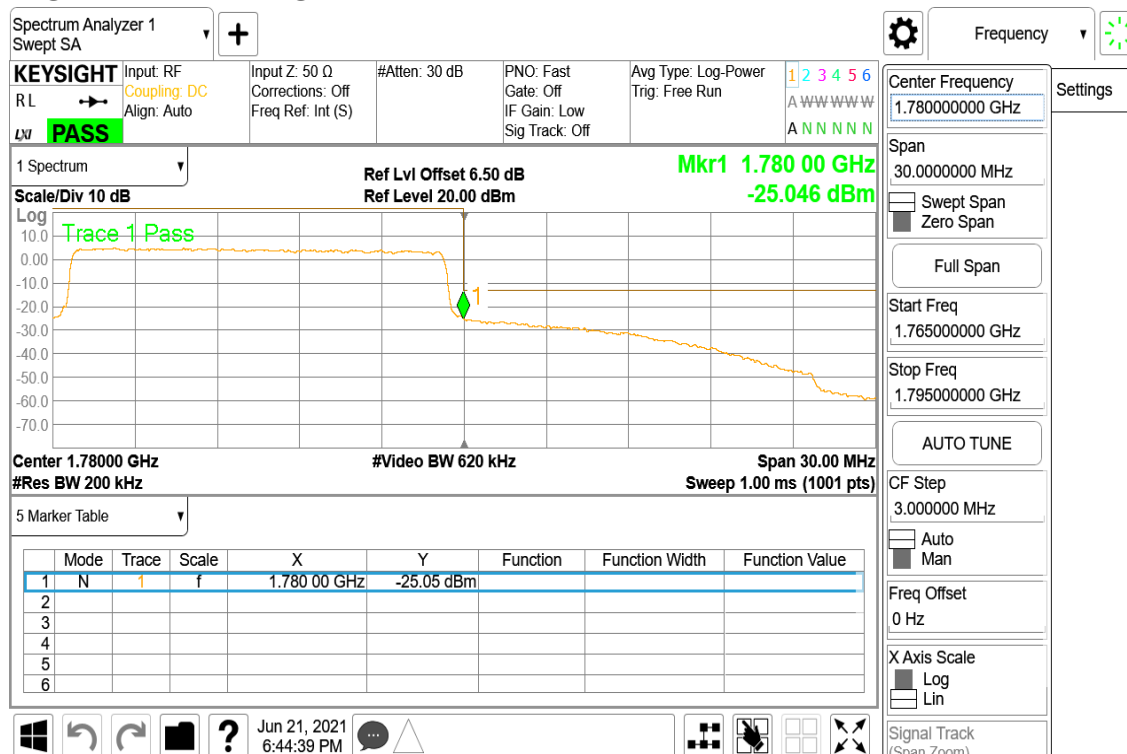
CHANNEL BANDWIDTH: 5MHz / QPSK / RB =1, RB Offset = 24 HIGHER BAND EDGE



CHANNEL BANDWIDTH: 10MHz / QPSK / RB =50, RB Offset = 0
LOWER BAND EDGE**HIGHER BAND EDGE**

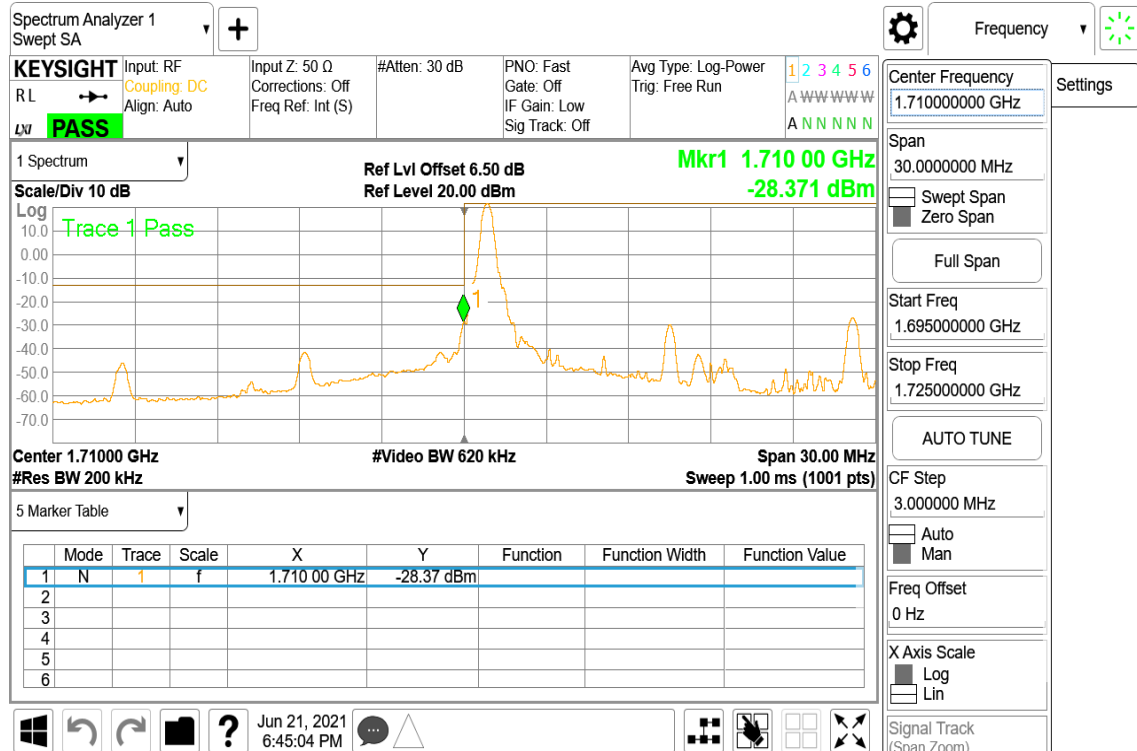
Report No.: T201102D09-RP17

**CHANNEL BANDWIDTH: 10MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE****CHANNEL BANDWIDTH: 10MHz / QPSK / RB =1, RB Offset = 49
HIGHER BAND EDGE**

CHANNEL BANDWIDTH: 15MHz / QPSK / RB =75, RB Offset = 0
LOWER BAND EDGE**HIGHER BAND EDGE**

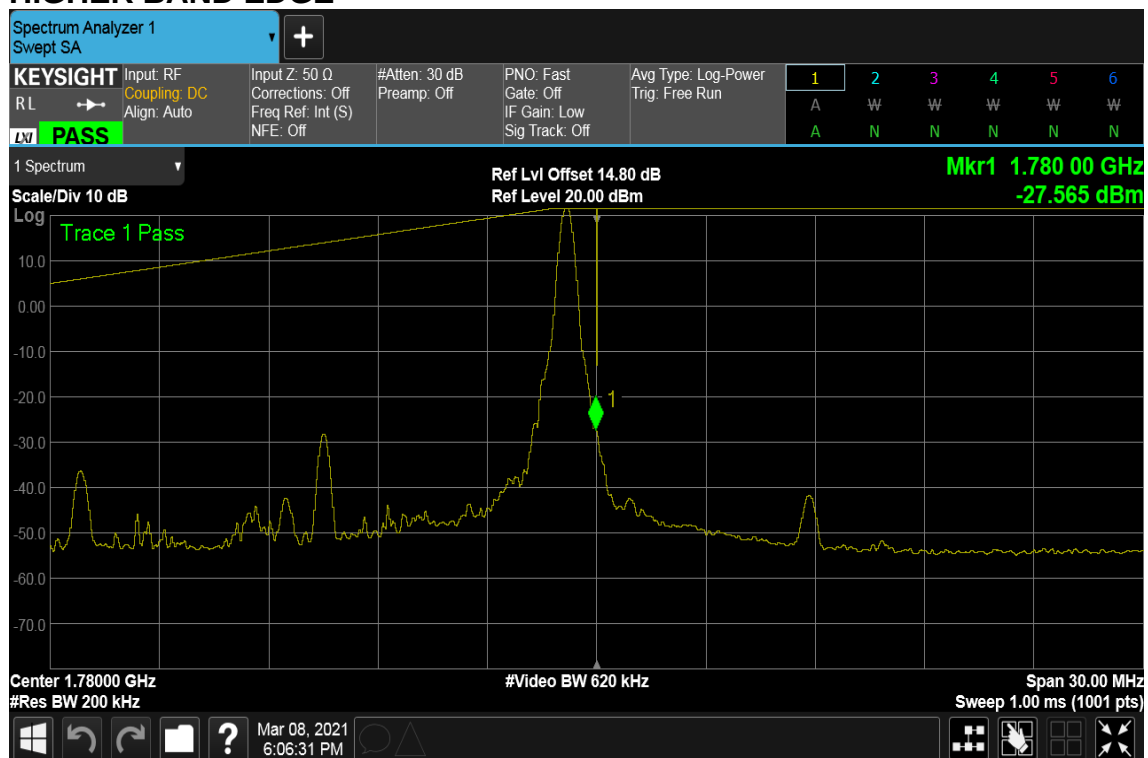
CHANNEL BANDWIDTH: 15MHz / QPSK / RB =1, RB Offset = 0

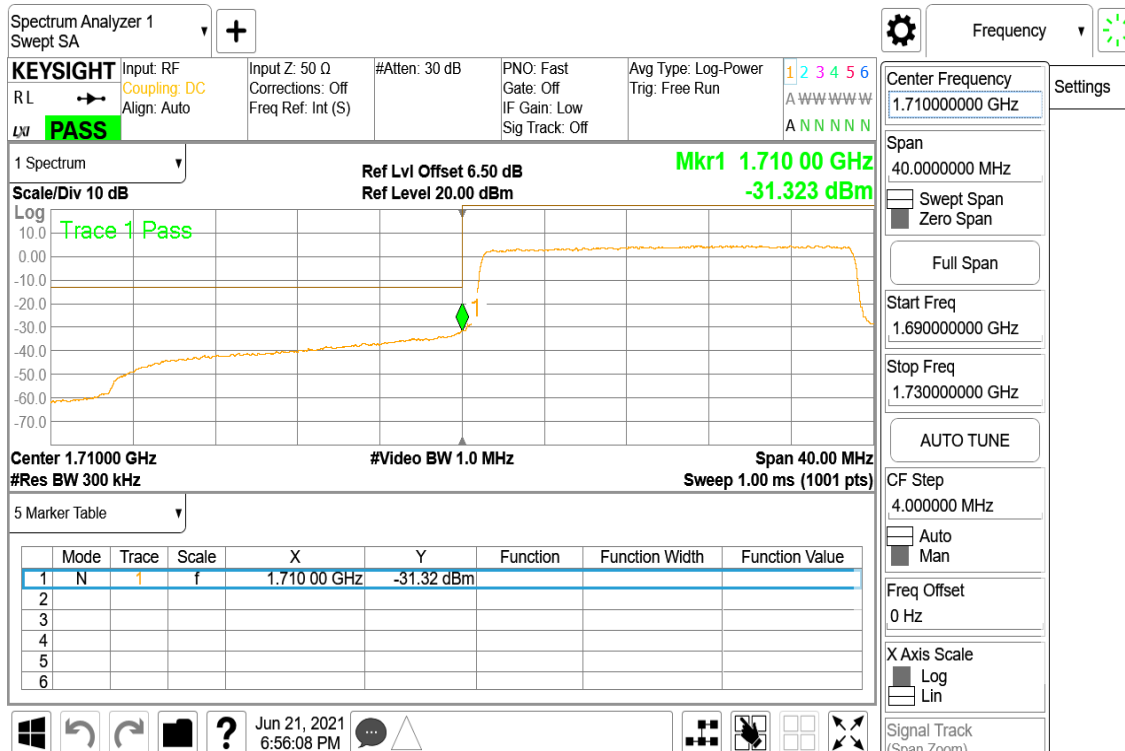
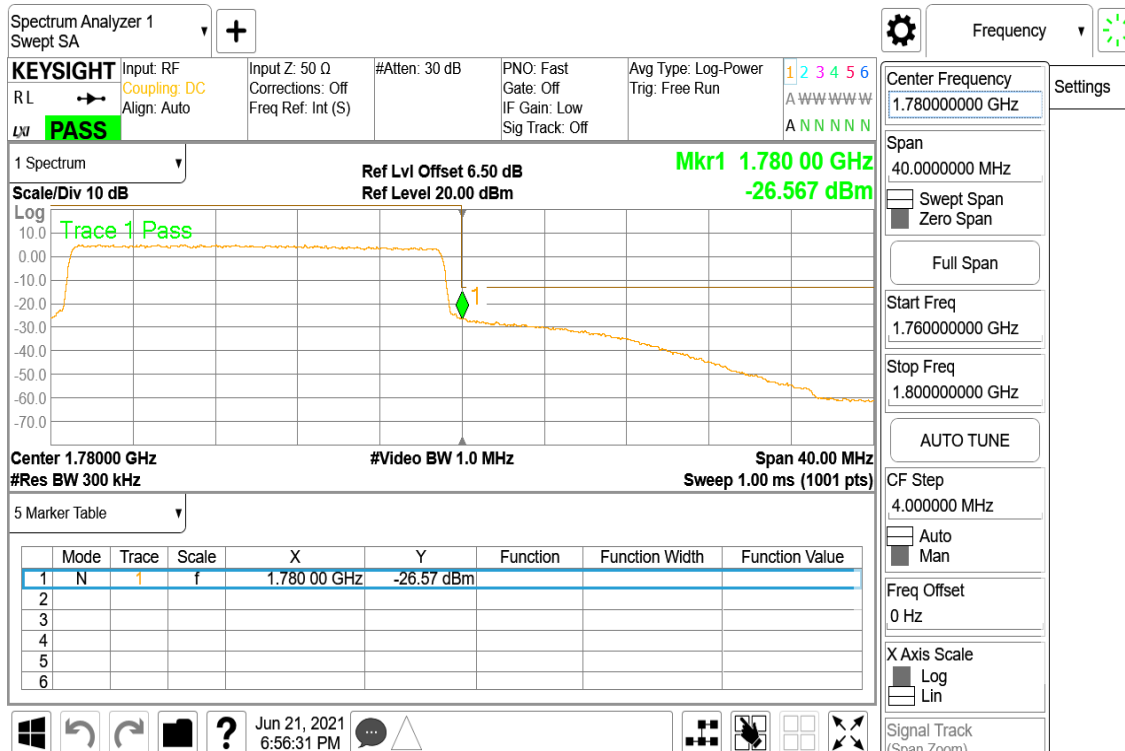
LOWER BAND EDGE

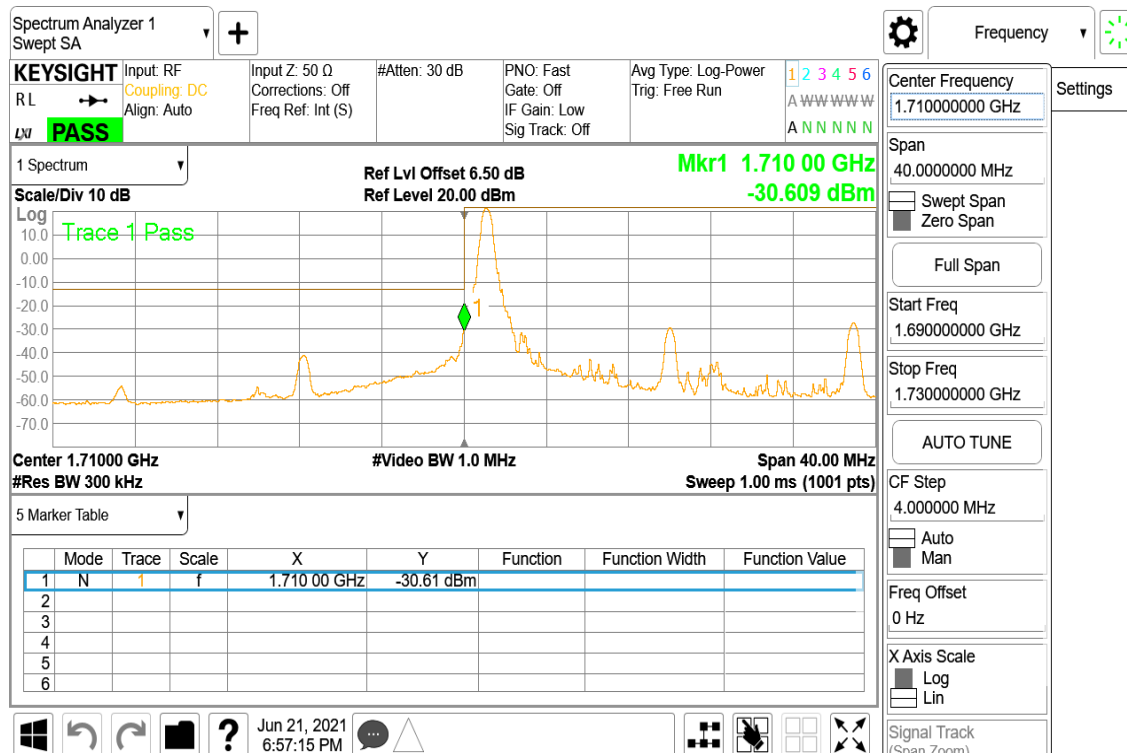
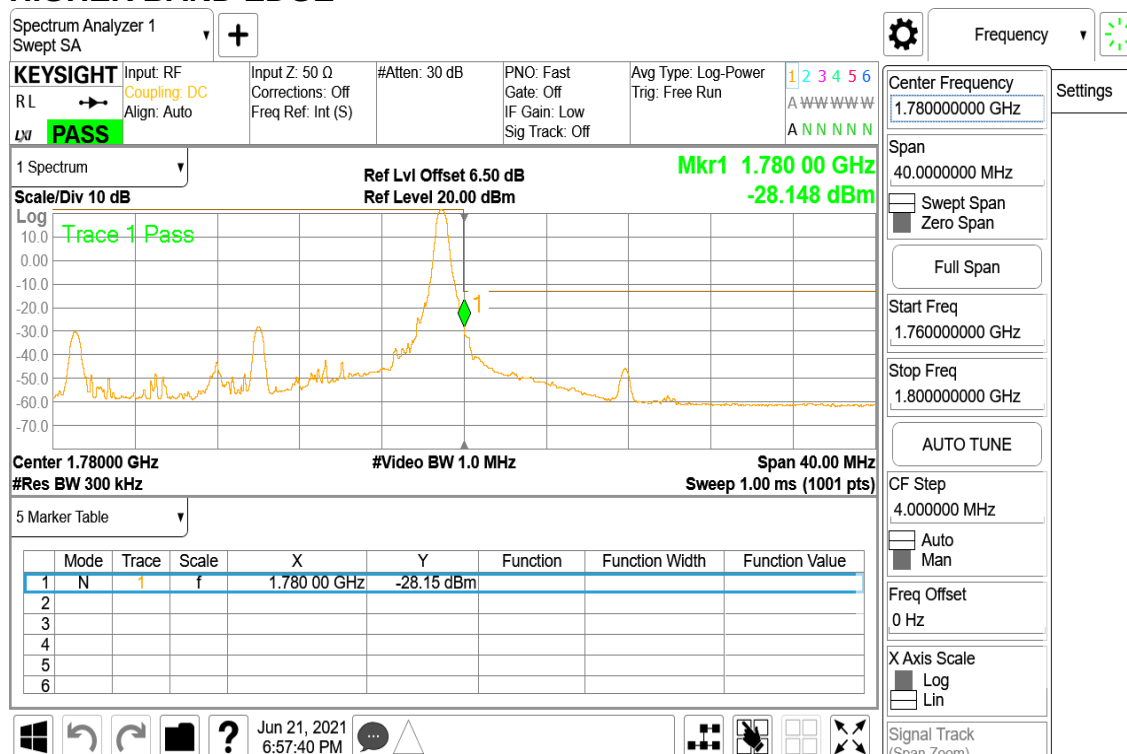


CHANNEL BANDWIDTH: 15MHz / QPSK / RB =1, RB Offset = 74

HIGHER BAND EDGE



CHANNEL BANDWIDTH: 20MHz / QPSK / RB =100, RB Offset = 0
LOWER BAND EDGE**HIGHER BAND EDGE**

CHANNEL BANDWIDTH: 20MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE**CHANNEL BANDWIDTH: 20MHz / QPSK / RB =1, RB Offset = 99**
HIGHER BAND EDGE

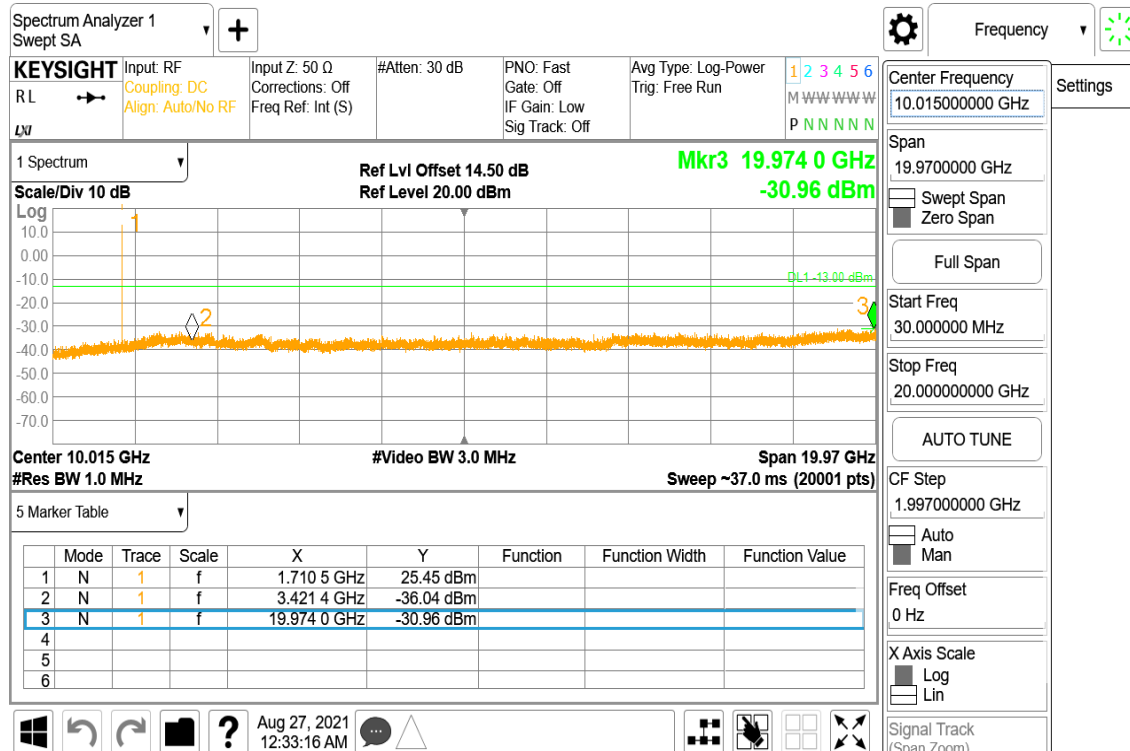
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Spurious Emission

LTE Band 66

CHANNEL BANDWIDTH: 1.4MHz /QPSK / RB =1, RB Offset = 0

CH Low



CH Mid



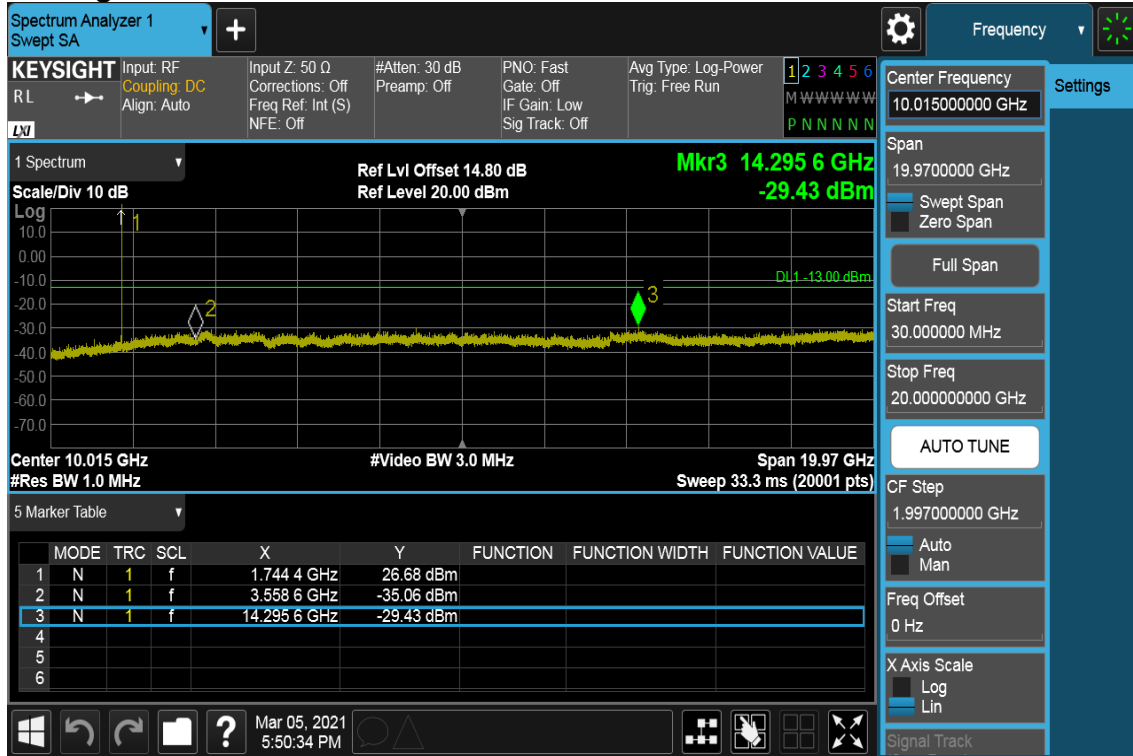


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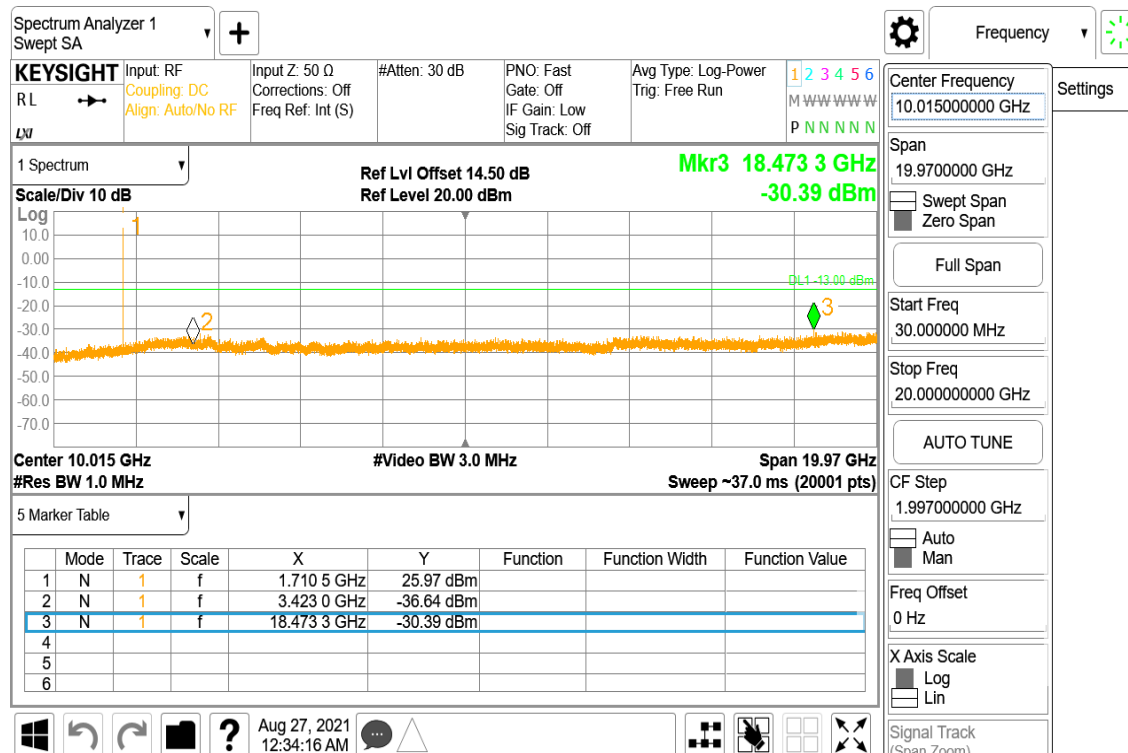
CH High



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CHANNEL BANDWIDTH: 3MHz /QPSK / RB =1, RB Offset = 0

CH Low



CH Mid



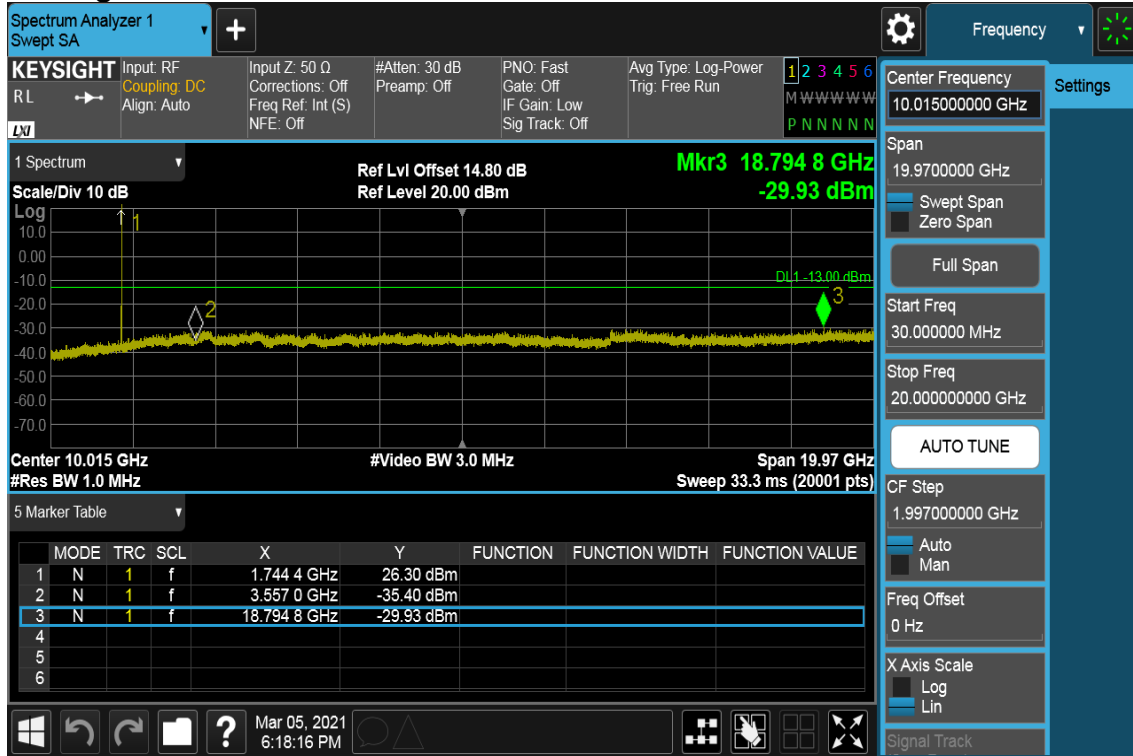


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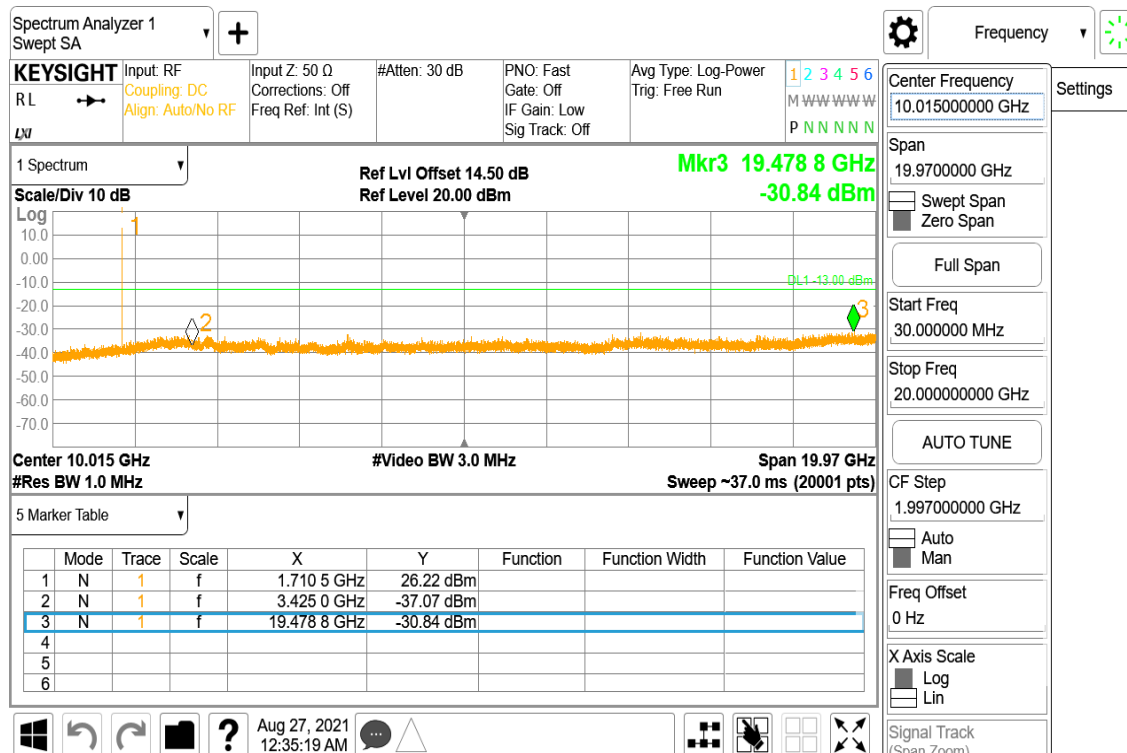
Rev.: 00

CH High

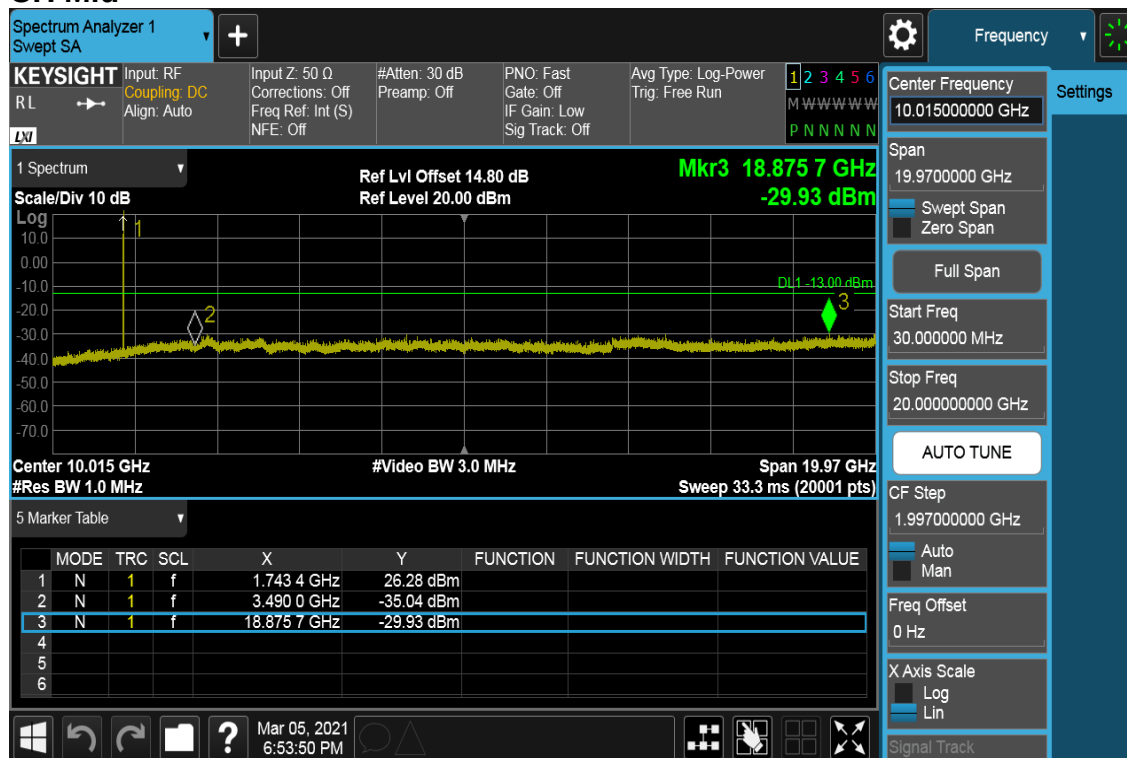


CHANNEL BANDWIDTH: 5MHz /QPSK / RB =1, RB Offset = 0

CH Low



CH Mid



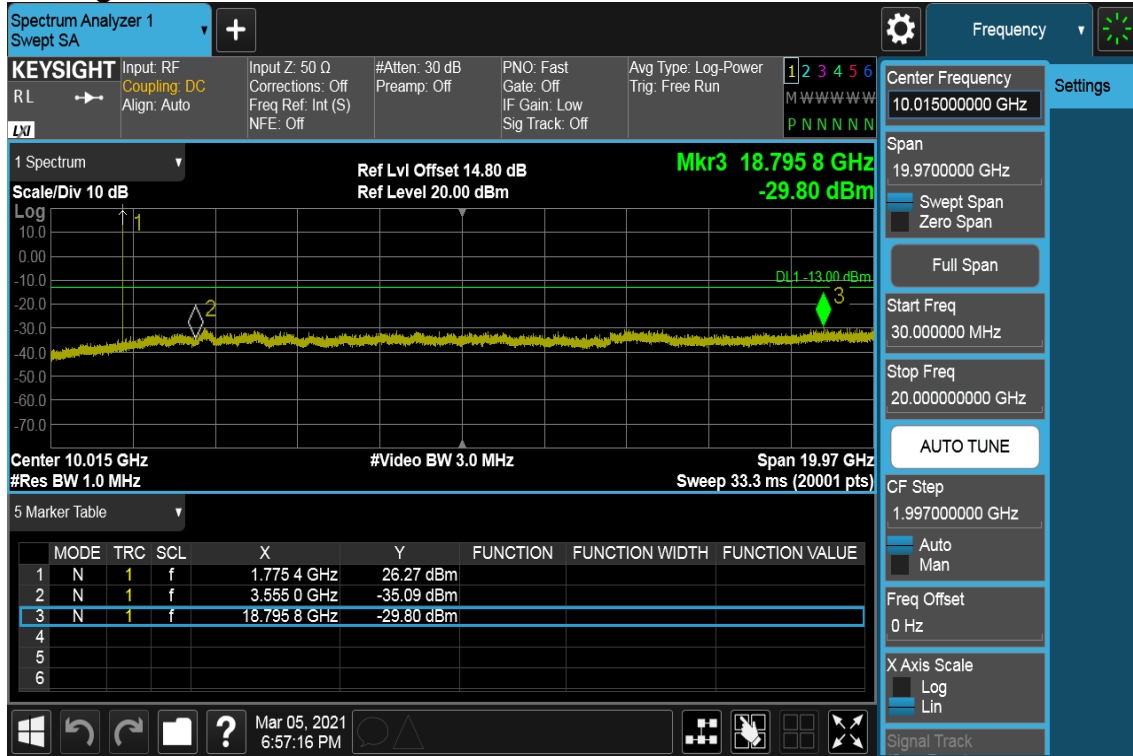


Report No.: T201102D09-RP17

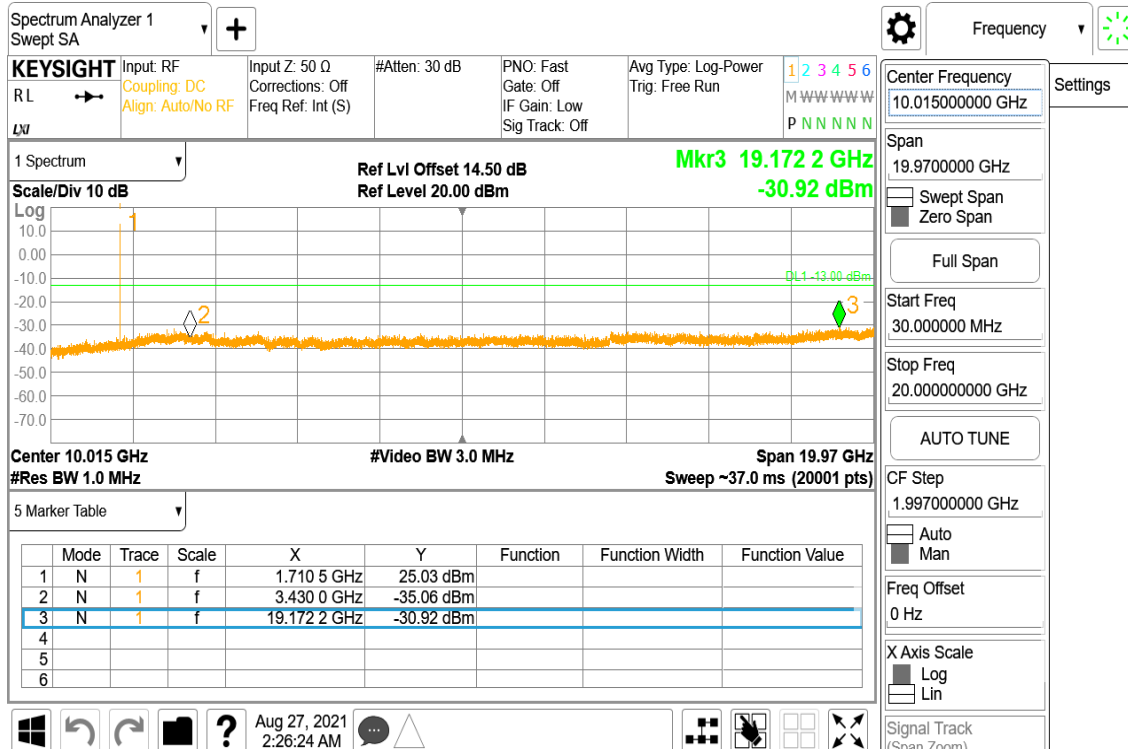
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CH High



Report No.: T201102D09-RP17

CHANNEL BANDWIDTH: 10MHz /QPSK / RB =1, RB Offset = 0
CH Low**CH Mid**



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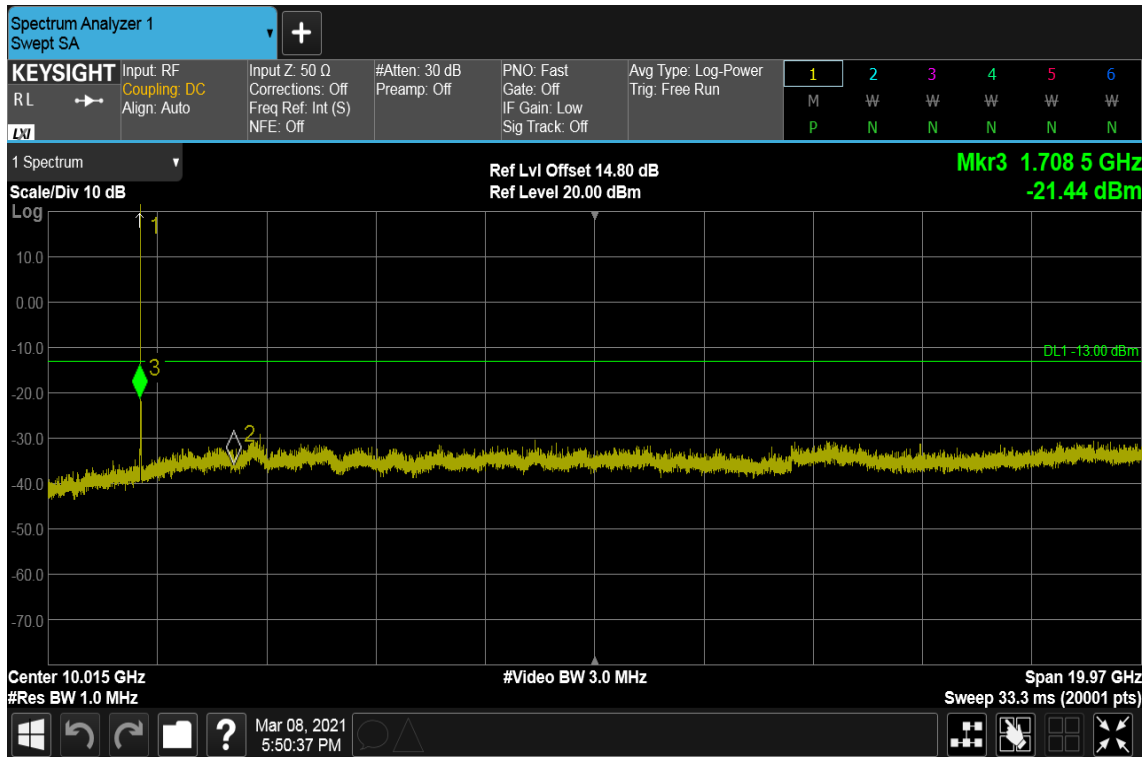
CH High



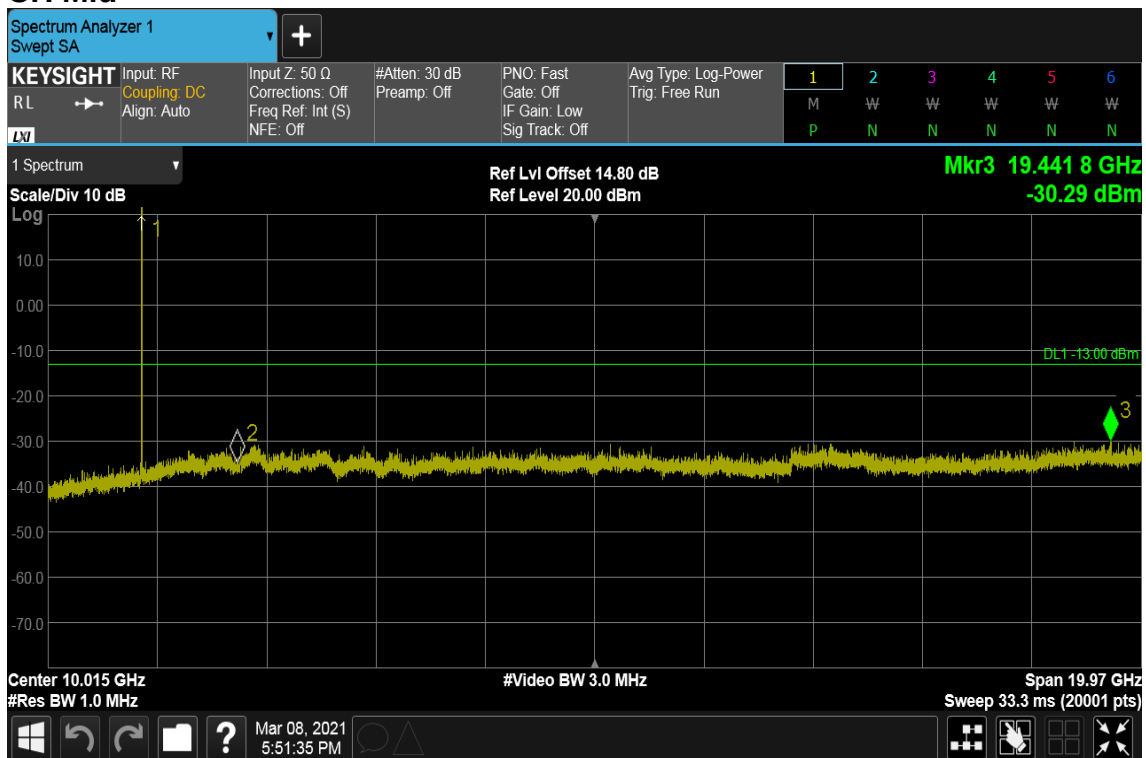
Report No.: T201102D09-RP17

CHANNEL BANDWIDTH: 15MHz /QPSK / RB =1, RB Offset = 0

CH Low



CH Mid



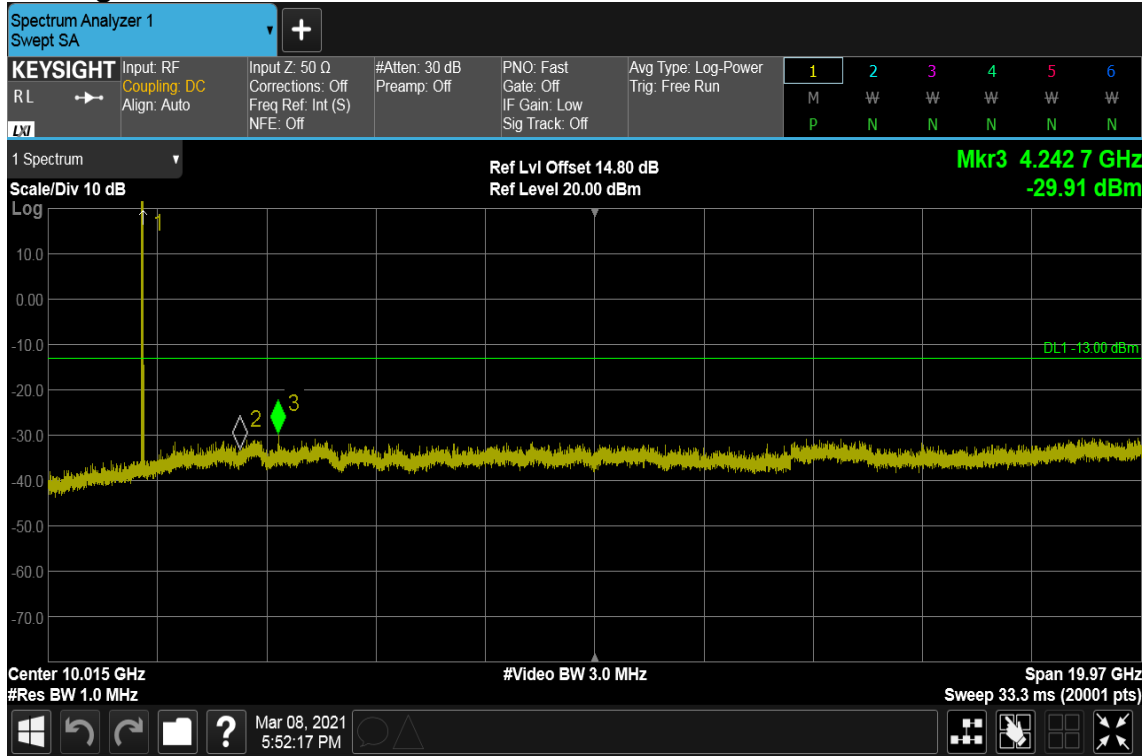


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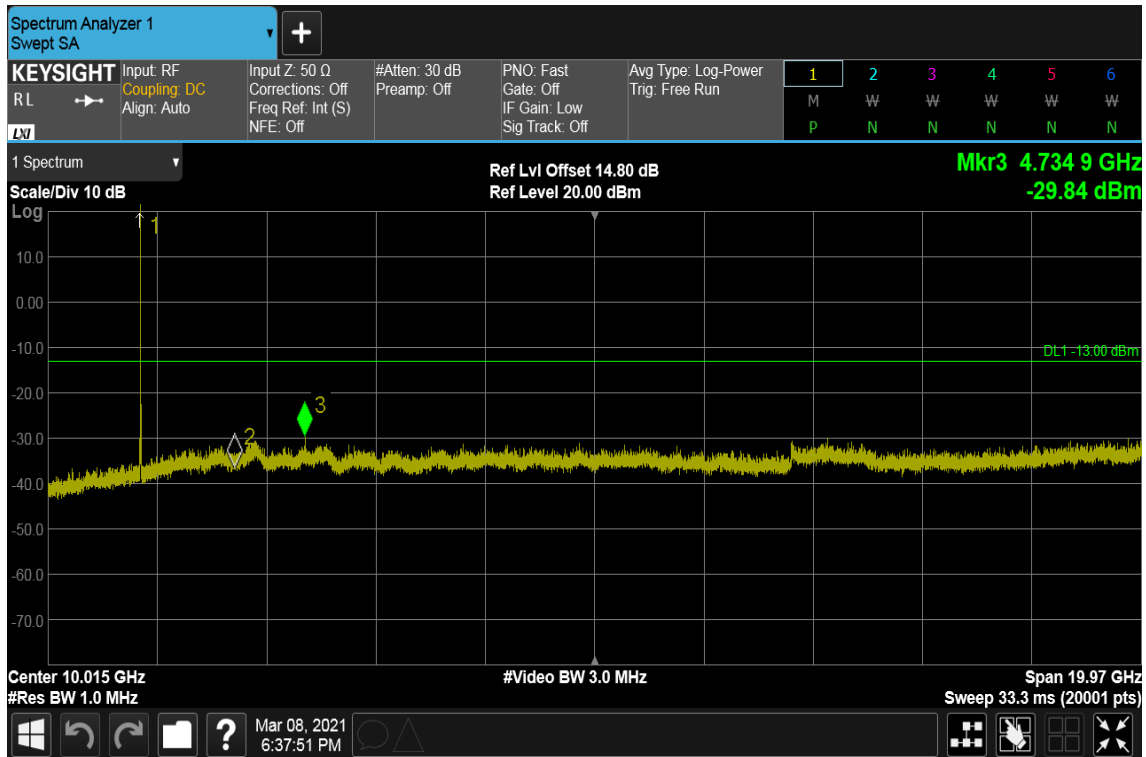
CH High



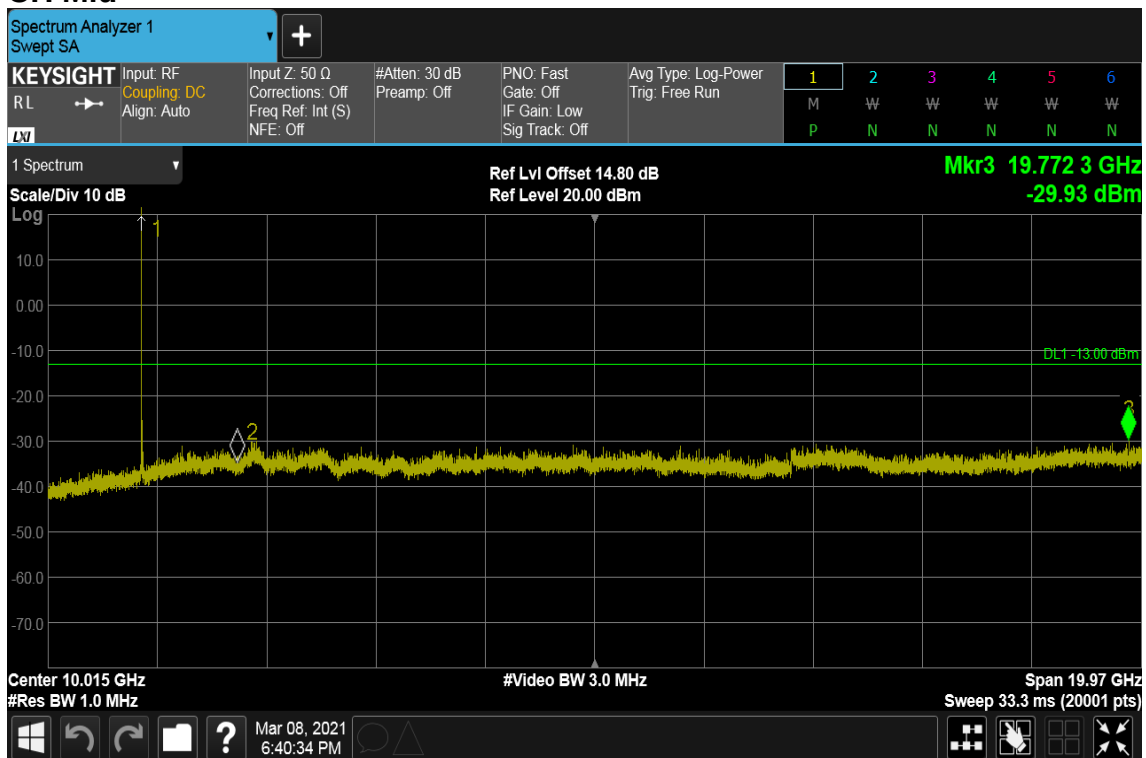
Report No.: T201102D09-RP17

CHANNEL BANDWIDTH: 20MHz /QPSK / RB =1, RB Offset = 0

CH Low



CH Mid



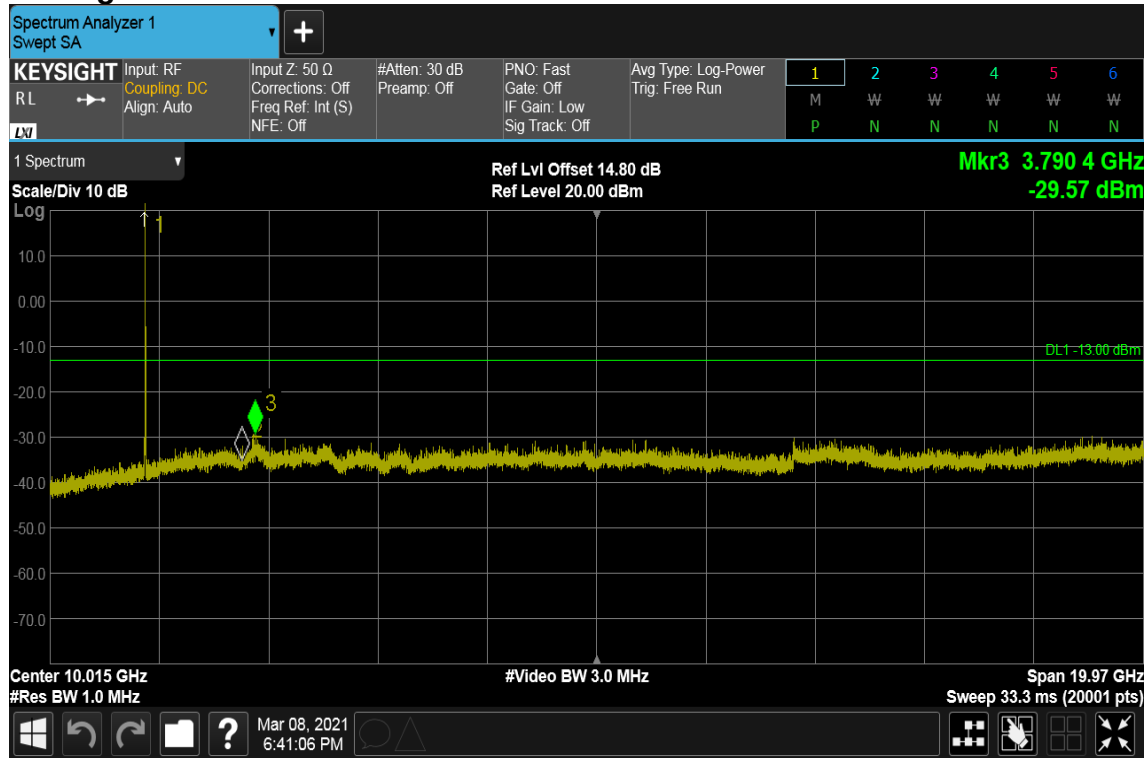


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CH High



8.6 RADIATED EMISSION MEASUREMENT

LIMITS

FCC §27.53(h), Band 66

General protection levels. Except as otherwise specified below, for operations in the 1710-1755MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

According to RSS-139, Band 66

For mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

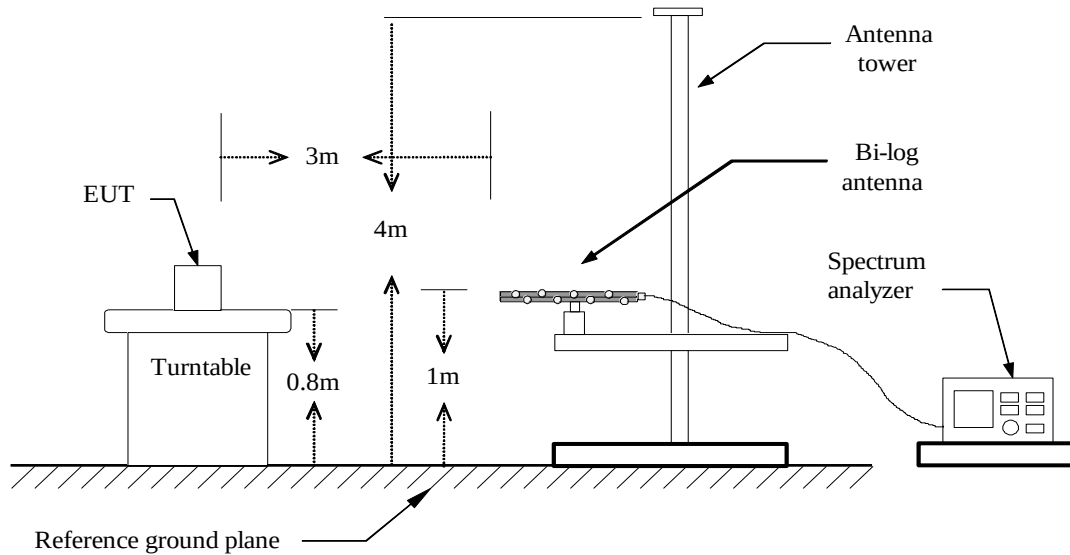
- (i) $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away
- (ii) $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and
- (iii) $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz, and $55 + 10 \log_{10} p$ at or below 2490.5 MHz.

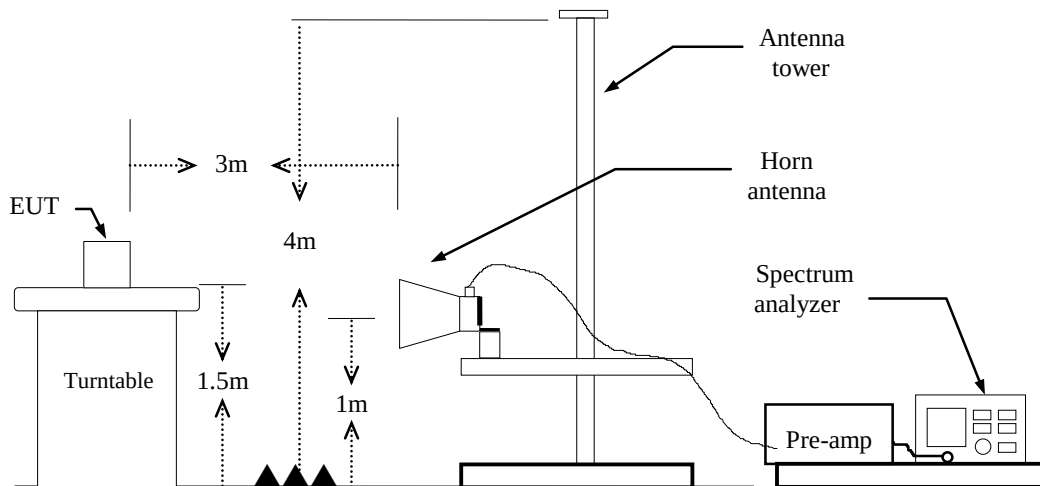
p is the transmitter power measured in watts and **X** is 6 MHz or the equipment occupied bandwidth, whichever is greater.

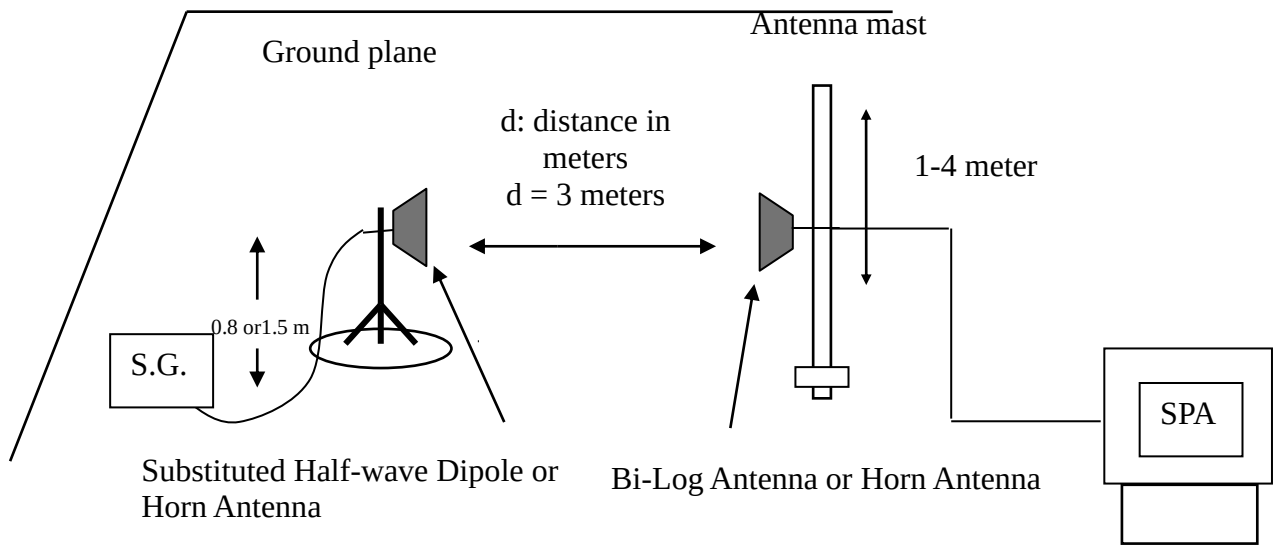
Test Configuration

Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up**TEST PROCEDURES**

1. According to KDB 971168 D01 and ANSI C63.26.
2. The EUT was placed on a turntable
 - (1) Below 1G : 0.8m
 - (2) Above 1G : 1.5m
 - (3) EUT set 3m from the receiving antenna
 - (4) The table was rotated 360 degrees of the highest spurious emission to determine the position.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. A horn antenna was driven by a signal generator.
5. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.



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Test Results

LTE Band 66 / BW: 20MHz / QPSK / RB =1, RB Offset = 0

Operation Mode: Tx / Low CH

Test Date:

December 14, 2020

Temperature: 20.6°C

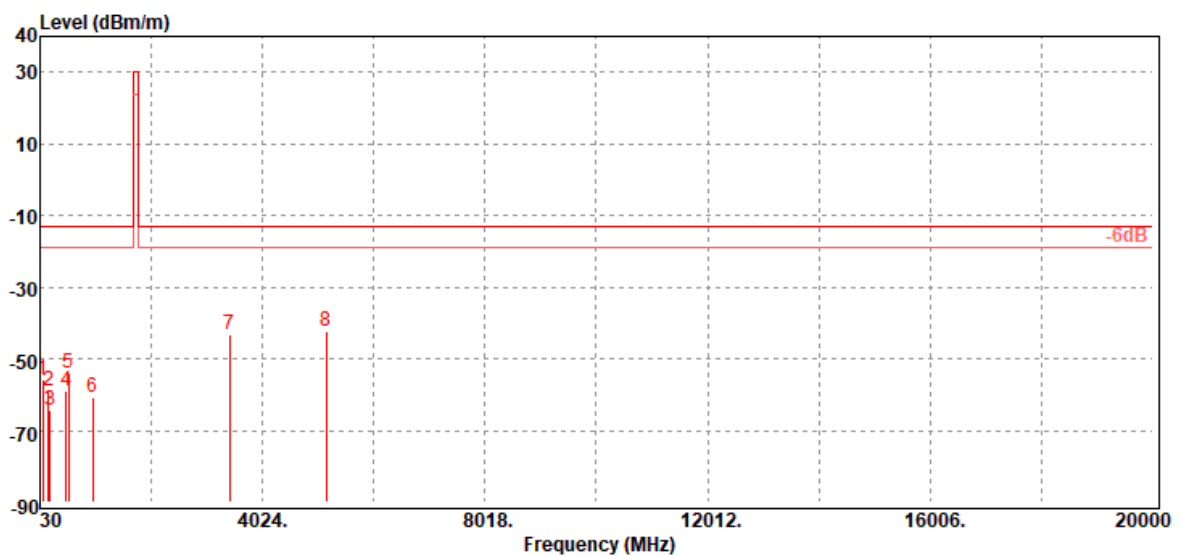
Tested by:

Ray Li

Humidity: 65% RH

Polarity:

Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
86.26	-55.65	-47.34	-7.55	-0.76	-13.00	-42.65	V
180.35	-58.88	-53.42	-4.36	-1.10	-13.00	-45.88	V
209.45	-64.36	-60.99	-2.18	-1.19	-13.00	-51.36	V
500.45	-59.13	-55.27	-1.99	-1.87	-13.00	-46.13	V
541.19	-53.99	-50.77	-1.28	-1.94	-13.00	-40.99	V
980.60	-60.82	-56.86	-1.31	-2.65	-13.00	-47.82	V
3440.00	-43.33	-50.54	12.72	-5.51	-13.00	-30.33	V
5160.00	-42.19	-48.24	12.76	-6.71	-13.00	-29.19	V



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Operation Mode: Tx / Low CH

Test Date:

December 14, 2020

Temperature: 20.6°C

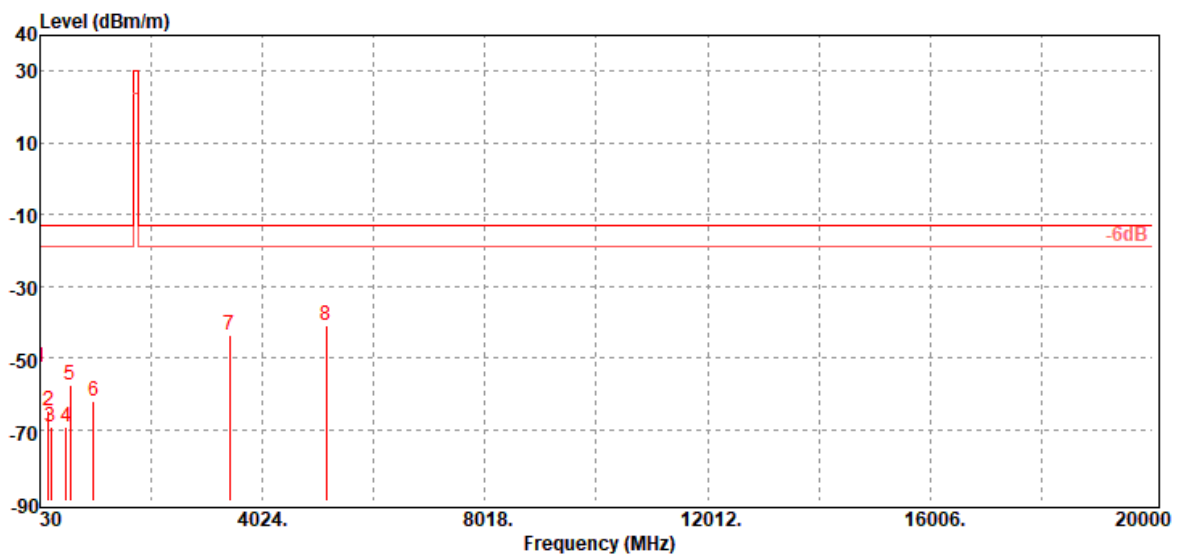
Tested by:

Ray Li

Humidity: 65% RH

Polarity:

Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
39.70	-52.73	-31.79	-20.43	-0.51	-13.00	-39.73	H
180.35	-64.97	-59.51	-4.36	-1.10	-13.00	-51.97	H
219.15	-69.14	-65.90	-2.02	-1.22	-13.00	-56.14	H
492.69	-69.24	-65.30	-2.09	-1.85	-13.00	-56.24	H
575.14	-57.51	-54.10	-1.40	-2.01	-13.00	-44.51	H
988.36	-62.09	-58.03	-1.40	-2.66	-13.00	-49.09	H
3440.00	-43.77	-50.98	12.72	-5.51	-13.00	-30.77	H
5160.00	-41.06	-47.11	12.76	-6.71	-13.00	-28.06	H



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Operation Mode: Tx / Mid CH

Test Date:

December 14, 2020

Temperature: 20.6°C

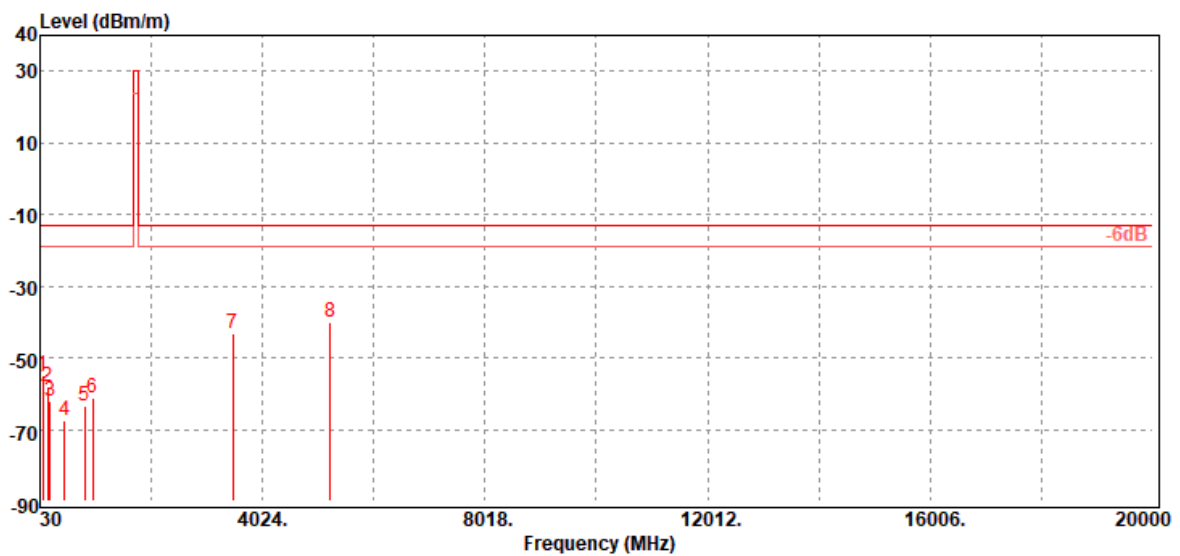
Tested by:

Ray Li

Humidity: 65% RH

Polarity:

Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
86.26	-54.88	-46.57	-7.55	-0.76	-13.00	-41.88	V
165.80	-58.19	-51.39	-5.74	-1.06	-13.00	-45.19	V
209.45	-62.03	-58.66	-2.18	-1.19	-13.00	-49.03	V
463.59	-67.67	-63.64	-2.24	-1.79	-13.00	-54.67	V
827.34	-63.51	-59.59	-1.50	-2.42	-13.00	-50.51	V
982.54	-61.29	-57.29	-1.35	-2.65	-13.00	-48.29	V
3490.00	-43.30	-50.29	12.54	-5.55	-13.00	-30.30	V
5235.00	-40.18	-46.53	13.14	-6.79	-13.00	-27.18	V



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Operation Mode: Tx / Mid CH

Test Date:

December 14, 2020

Temperature: 20.6°C

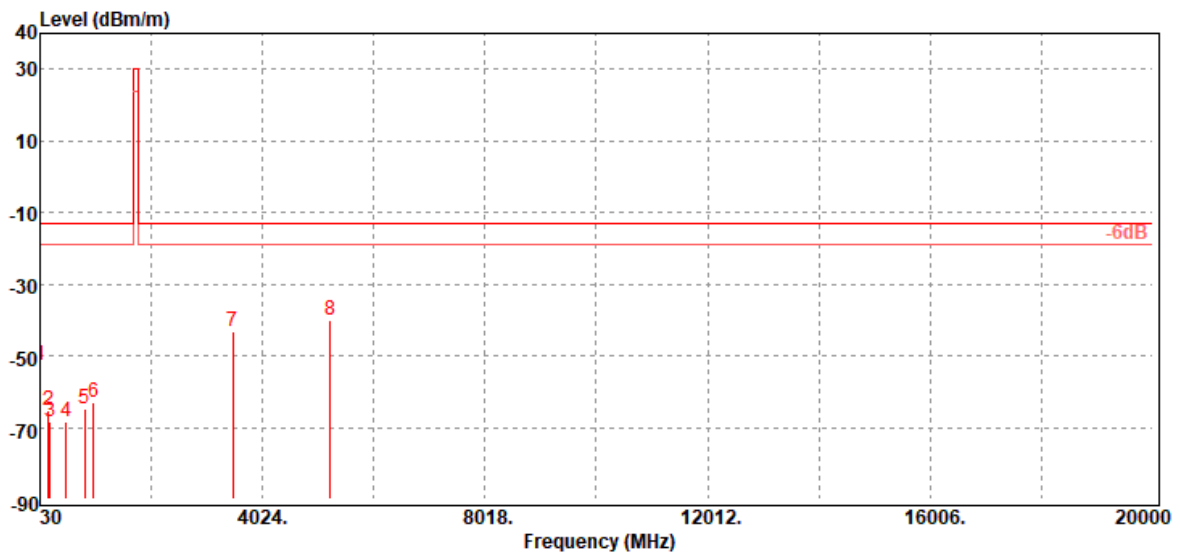
Tested by:

Ray Li

Humidity: 65% RH

Polarity:

Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
41.64	-52.46	-33.32	-18.62	-0.52	-13.00	-39.46	H
180.35	-65.21	-59.75	-4.36	-1.10	-13.00	-52.21	H
211.39	-68.62	-65.33	-2.10	-1.19	-13.00	-55.62	H
500.45	-68.42	-64.56	-1.99	-1.87	-13.00	-55.42	H
830.25	-64.59	-60.67	-1.50	-2.42	-13.00	-51.59	H
988.36	-62.87	-58.81	-1.40	-2.66	-13.00	-49.87	H
3490.00	-43.13	-50.12	12.54	-5.55	-13.00	-30.13	H
5235.00	-39.94	-46.29	13.14	-6.79	-13.00	-26.94	H



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Operation Mode: Tx / High CH

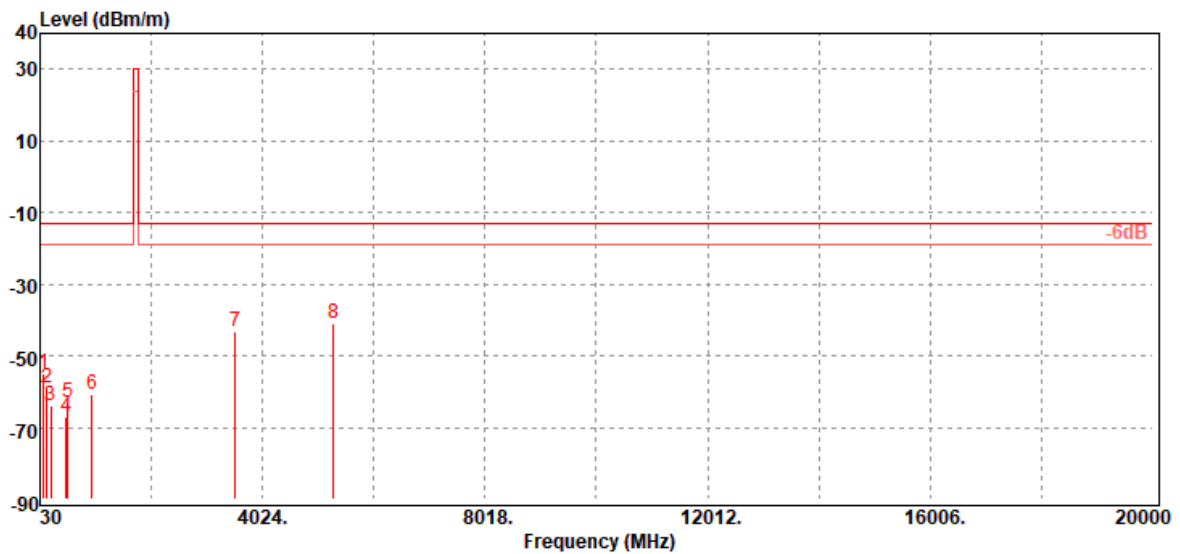
Test Date: December 14, 2020

Temperature: 20.6°C

Tested by: Ray Li

Humidity: 65% RH

Polarity: Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
88.20	-55.02	-47.09	-7.16	-0.77	-13.00	-42.02	V
152.22	-58.95	-51.08	-6.86	-1.01	-13.00	-45.95	V
219.15	-63.90	-60.66	-2.02	-1.22	-13.00	-50.90	V
500.45	-67.15	-63.29	-1.99	-1.87	-13.00	-54.15	V
529.55	-62.96	-59.74	-1.30	-1.92	-13.00	-49.96	V
956.35	-60.88	-57.03	-1.23	-2.62	-13.00	-47.88	V
3530.00	-43.10	-49.96	12.44	-5.58	-13.00	-30.10	V
5295.00	-40.97	-47.32	13.20	-6.85	-13.00	-27.97	V



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Operation Mode: Tx / High CH

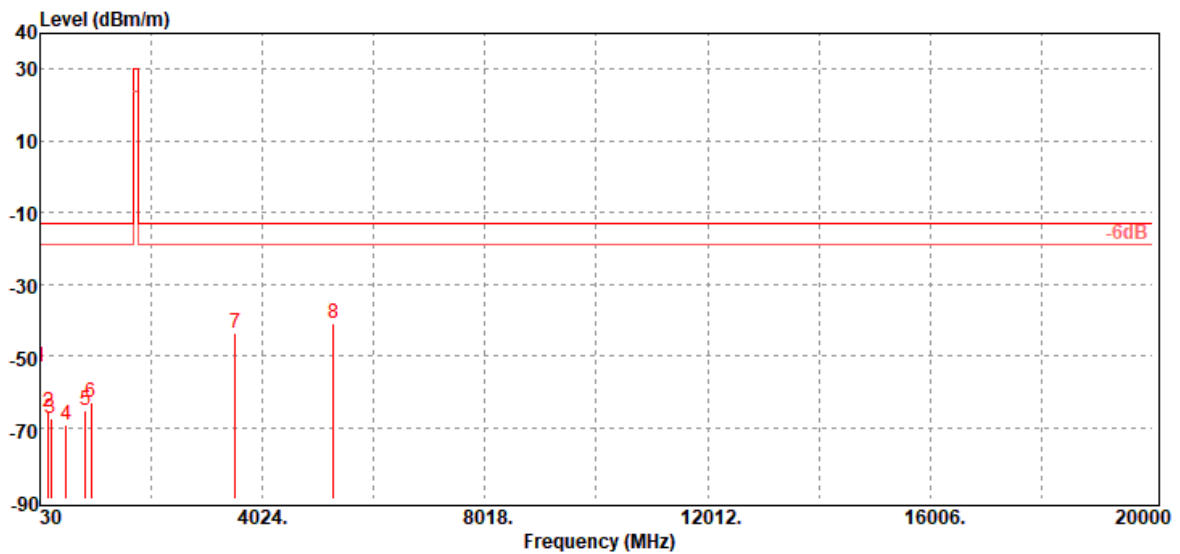
Test Date: December 14, 2020

Temperature: 20.6°C

Tested by: Ray Li

Humidity: 65% RH

Polarity: Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
42.61	-53.26	-34.98	-17.75	-0.53	-13.00	-40.26	H
180.35	-65.81	-60.35	-4.36	-1.10	-13.00	-52.81	H
221.09	-67.29	-64.09	-1.98	-1.22	-13.00	-54.29	H
497.54	-69.37	-65.51	-2.00	-1.86	-13.00	-56.37	H
847.71	-65.36	-61.56	-1.35	-2.45	-13.00	-52.36	H
949.56	-63.00	-59.19	-1.20	-2.61	-13.00	-50.00	H
3530.00	-43.89	-50.75	12.44	-5.58	-13.00	-30.89	H
5295.00	-40.79	-47.14	13.20	-6.85	-13.00	-27.79	H

- End of Test Report -