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Report On

FCC and ISED Testing of the
Ericsson Dot 2282 B5B13, KRY 901 466/2 LTE (NB-IoT GB), NR, LTE
+ NR (700 MHz) Base Station in accordance with FCC CFR 47 Part 2,
FCC CFR 47 Part 27, ISED RSS-GEN and ISED RSS-130

COMMERCIAL-IN-CONFIDENCE

FCC ID: TA8AKRY901466-1 & TA8AKRY901466-2
IC ID: 287AB-AS9014661 & 287AB-AS9014662

PREPARED BY

Handwritten signature of Glen Westwell.

Glen Westwell

APPROVED BY

Handwritten signature of Scott Drysdale.

Scott Drysdale
Authorised Signatory

DATED

June 16th 2021

Document 7169009740 Report 03 Issue 1

June 2021



CONTENTS

Section	Page No
1	REPORT INFORMATION 2
1.1	Report Details 3
1.2	Brief Summary of Results 4
1.3	Configuration Description 5
1.4	Declaration of Build Status 6
1.5	Product Information 8
1.6	Test Setup 9
1.7	Test Conditions 10
1.8	Deviation From The Standard 10
1.9	Modification Record 10
1.10	Additional Information 10
2	TEST DETAILS 12
2.1	Maximum Peak Output Power and Peak to Average Ratio - Conducted 13
2.2	Occupied bandwidth 24
2.3	Band Edge 27
2.4	Transmitter Spurious Emissions 32
2.5	Receiver Spurious Emissions 44
3	TEST EQUIPMENT USED 46
3.1	Test Equipment Used 47
3.2	Measurement Uncertainty 48
4	ACCREDITATION, DISCLAIMERS AND COPYRIGHT 49
4.1	Accreditation, Disclaimers and Copyright 50
ANNEX A	Module Lists A.2



SECTION 1

REPORT INFORMATION



1.1 REPORT DETAILS

Manufacturer	Ericsson
Address	Torshamnsgatan 23 Kista SE-16480 Stockholm Sweden
Product Name & Product Number	Dot 2282 B5B13 & KRY 901 466/2
IC Model Name	AS9014661 & AS9014662
Serial Number(s)	TD3W072774
Software Version	R1A
Hardware Version	CXP2030045_17-R9A99
Non-Tested Variant (See Section 1.10 Additional Information)	Dot 2272 B5B13 & KRY 901 466/1
Test Specification/Issue/Date	FCC CFR 47 Part 2: 2019 FCC CFR 47 Part 27: 2019 ISED RSS-GEN: Issue 5: 2019 ISED RSS-130: Issue 2: 2019
Test Plan	Dot 2282 B5B13_RA_testplan_NR_LTE_NBIoT (TUV SUD)
Start of Test	25 March 2021
Finish of Test	26 March 2021
Name of Engineer(s)	Glen Westwell
Related Document(s)	KDB 971168 D01 v03r01 KDB 662911 D01 v02r01 ICES-003:Issue 7 (2020-10) ANSI C63.26-2015

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate compliance with FCC CFR 47 Part 2: 2019, FCC CFR 47 Part 27: 2019, ISED RSS-GEN: Issue 5: 2019, ISED RSS-130: Issue 2: 2019 The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineer(s);

Glen Westwell



1.2 BRIEF SUMMARY OF RESULTS

A brief summary of results for each configuration, in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 27, ISED RSS-GEN and ISED RSS-130 is shown below.

Section	Specification Clause				Test Description	Result
	FCC CFR 47 Part 2	FCC CFR 47 Part 27	RSS-GEN	ISED RSS-130		
2.1	2.1046	27.50	-	4.6	Maximum Peak Output Power and Peak to Average Ratio - Conducted	Pass
2.2	2.1049	27.53	-	-	Occupied Bandwidth	Pass
2.3	2.1051	27.53	-	-	Band edge	Pass
2.4	2.1051	27.53	-	4.7	Transmitter Spurious Emissions	Pass
2.5	2.1051	-	7.4	-	Receiver Spurious Emissions	Pass

This test report only covers testing for B13, test results for B5 can be found in TUV SUD Document 7169009740 Report 01.



1.3 CONFIGURATION DESCRIPTION

Configuration A					
RAT	NO. Of Carriers	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE	1	5 MHz	748.5	-	753.5
		10 MHz	751.0	751.0	751.0
NR	1	5 MHz	748.5	-	753.5
		10 MHz	751.0	751.0	751.0

Configuration B					
RAT	No. of Carriers.	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE NR LTE +NR	2	5 MHz	748.5 + 753.5	748.5 + 753.5	748.5 + 753.5

Note: LTE with 10MHz bandwidth includes a NB-IoT Guardband signal.



Signature:

A handwritten signature in blue ink, appearing to be 'DL', written over a dotted line.

Denis Lalonde

Date: 8 June 2021

Declaration of Build Status Serial Number: TD3W072774

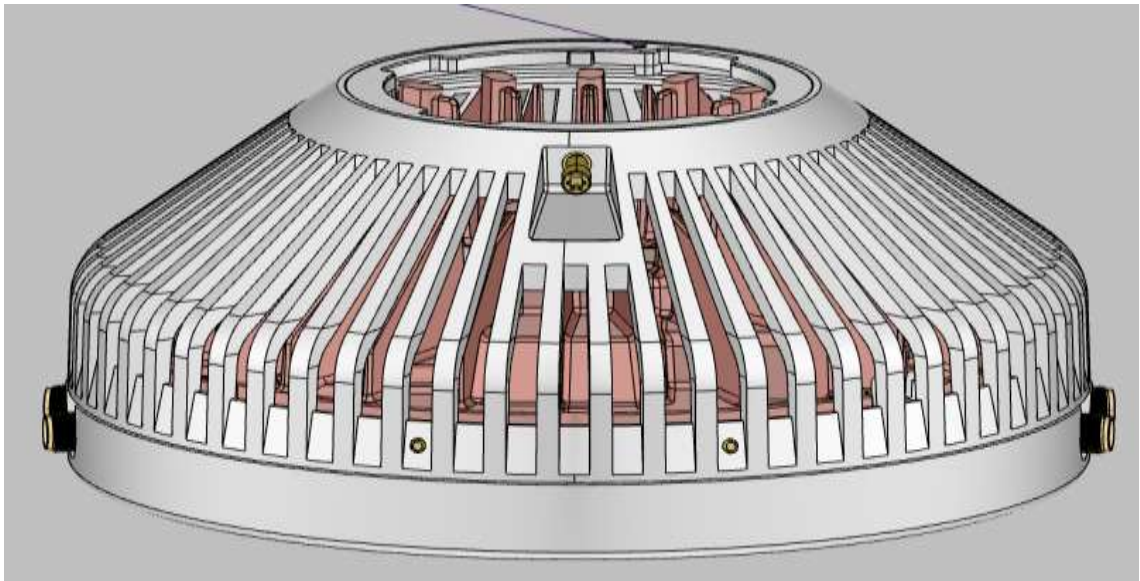
No responsibility will be accepted by TÜV SÜD as to the accuracy of the information declared in this document by the manufacturer.

1.5 PRODUCT INFORMATION

1.5.1 Technical Description

The Equipment Under Test (EUT) Dot 2282 B5B13 is an Ericsson AB Radio Unit working in the public mobile service B5: 869-894 MHz, B13: 746-756MHz band which provides communication connections to B5: 869-894 MHz, B13: 746-756MHz network. The Dot 2282 B5B13 operates from a -48V DC supply.

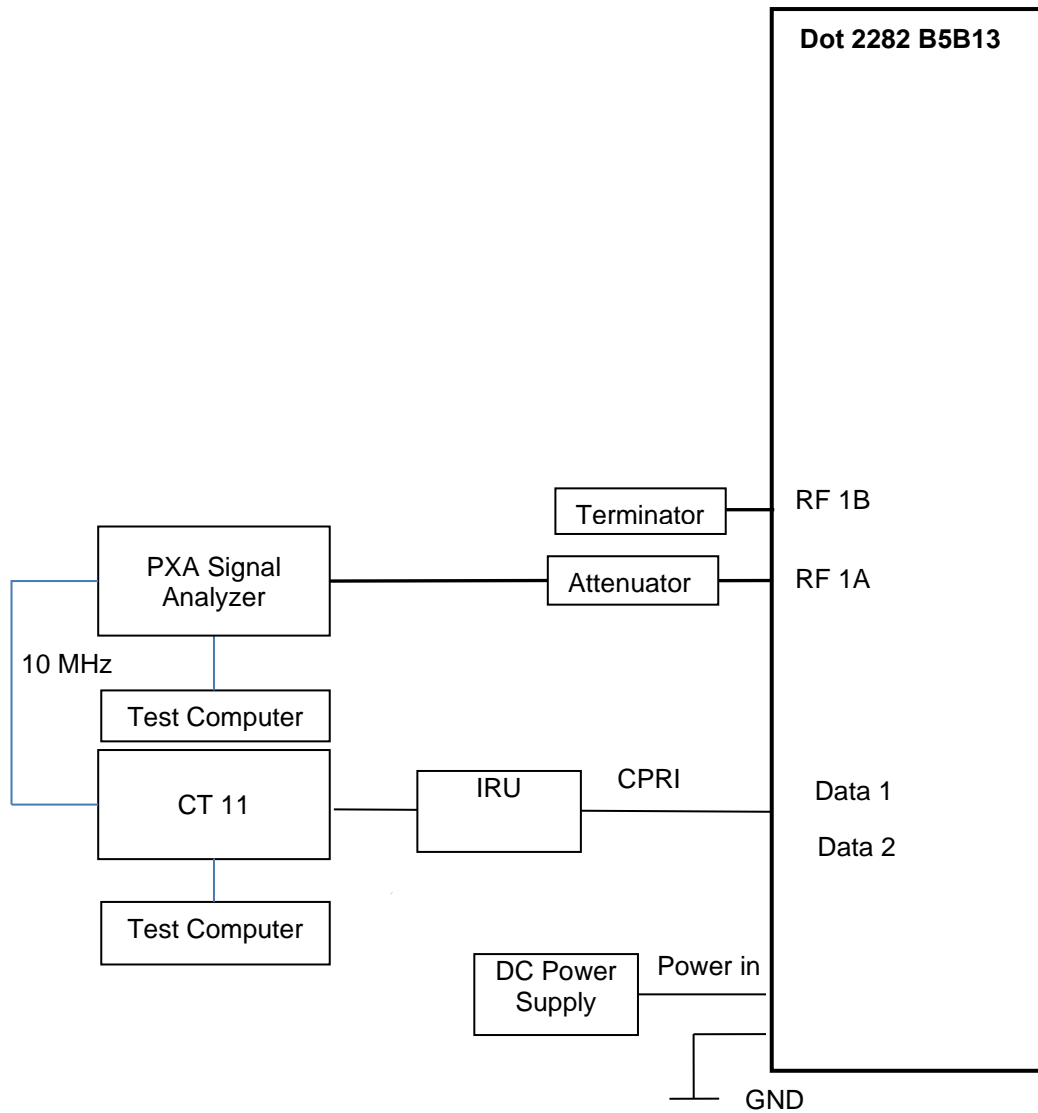
The Equipment Under Test (EUT) is shown in the photograph below. A full technical description can be found in the Manufacturer's documentation.



Equipment Under Test



1.6 TEST SETUP





1.7 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated as described in the Test Method for each Test.

The EUT was powered from a -48V DC supply.

FCC Measurement Facility Registration Number
CA4810 TUV SUD Ottawa, Canada

ISED Accreditation
IC#24015 TUV SUD Ottawa, Canada

Under our A2LA Accreditation, TÜV SÜD Canada conducted the following tests Ericsson, Ottawa Laboratory.

Test Name	Name of Engineer(s)
Maximum Peak Output Power and Peak to Average Ratio - Conducted	Glen Westwell Glen Westwell
Occupied Bandwidth	Glen Westwell Glen Westwell
Band Edge	Glen Westwell Glen Westwell
Transceiver Spurious Emissions	Glen Westwell Glen Westwell

1.8 DEVIATION FROM THE STANDARD

No deviations from the applicable test standards or test plan were made during testing.

1.9 MODIFICATION RECORD

No modifications were made to the EUT during testing.

1.10 ADDITIONAL INFORMATION

1. This filing is for a Radio Certification for use in the USA and Canada under the following ID's:

FCC ID: TA8AKRY901466-2 and TA8AKRY901466-1
ISED ID287AB-AS9014662 and 287AB-AS9014661

2. Transmitter performance was measured for top, mid & bottom channels, where applicable, across all antenna ports as presented in the average power measurement tables. Typical performance is presented.

3. The LTE 10MHz RAT also contains the NB-IoT Carrier.

4. Dot 2272 B5B13 (KRY 901 466/1) is identical to Dot 2282 B5B13 (KRY 901 466/2) except that it is built with internal antennas instead of external antenna RF ports.





SECTION 2

TEST DETAILS



2.1 MAXIMUM PEAK OUTPUT POWER AND PEAK TO AVERAGE RATIO - CONDUCTED

2.1.1 Specification Reference

FCC CFR 47 Part 2, Clause 2.1046
 FCC CFR 47 Part 27, Clause 27.50
 ISED RSS-130, Clause 4.6

2.1.2 Date of Test and Modification State

25 and 26 March 2021 - Modification State 0

2.1.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.4 Environmental Conditions

Ambient Temperature 24.9 - 25.2°C
 Relative Humidity 29.4 - 29.8%

2.1.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, clause 5.2.1 and summed in accordance with FCC KDB 662911 D01.

2.1.6 Test Results

Configuration A

Maximum Output Power 17 dBm / Port

Antenna Gain (dBd)	Modulation	Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power				
			PAR (dB)	Channel Position B			
dBm				ERP (dBm)	dBm/MHz	ERP dBm/MHz	
-0.45				Average Power			
Antenna Port							
A	LTE: QPSK	5.0 MHz	9.28	16.80	16.35	11.72	11.27
B	LTE: QPSK	5.0 MHz	-	16.48	16.03	11.72	11.27
Total			-	19.65	19.20	14.73	14.28
A	LTE: QPSK	10.0 MHz	9.62	16.51	16.06	7.71	7.26
B	LTE: QPSK	10.0 MHz	-	16.58	16.13	7.71	7.26
Total			-	19.56	19.11	10.72	10.27
A	NR: QPSK	5.0 MHz	9.20	17.10	16.65	11.77	11.32
B	NR: QPSK	5.0 MHz	-	17.38	16.93	11.77	11.32
Total			-	20.25	19.80	14.78	14.33
A	NR: QPSK	10.0 MHz	9.28	16.50	16.05	7.96	7.51
B	NR: QPSK	10.0 MHz	-	16.52	16.07	7.96	7.51
Total			-	19.52	19.07	10.97	10.52



Antenna Gain (dBd)	Modulation	Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power						
			PAR (dB)	Channel Position T					
				dBm	ERP (dBm)	dBm/MHz	ERP dBm/MHz		
-0.45									
Antenna Port									
A	LTE: QPSK	5.0 MHz	9.44	17.02	16.57	11.69	11.24		
B	LTE: QPSK	5.0 MHz	-	16.50	16.05	11.69	11.24		
Total			-	19.78	19.33	14.70	14.25		
A	LTE: QPSK	10.0 MHz	9.61	16.51	16.06	7.58	7.13		
B	LTE: QPSK	10.0 MHz	-	16.58	16.13	7.58	7.13		
Total			-	19.56	19.11	10.59	10.14		
A	NR: QPSK	5.0 MHz	9.20	17.06	16.61	11.77	11.32		
B	NR: QPSK	5.0 MHz	-	17.37	16.92	11.77	11.32		
Total			-	20.23	19.78	14.78	14.33		
A	NR: QPSK	10.0 MHz	9.28	16.50	16.05	7.96	7.51		
B	NR: QPSK	10.0 MHz	-	16.52	16.07	7.96	7.51		
Total			-	19.52	19.07	10.97	10.52		

Remarks

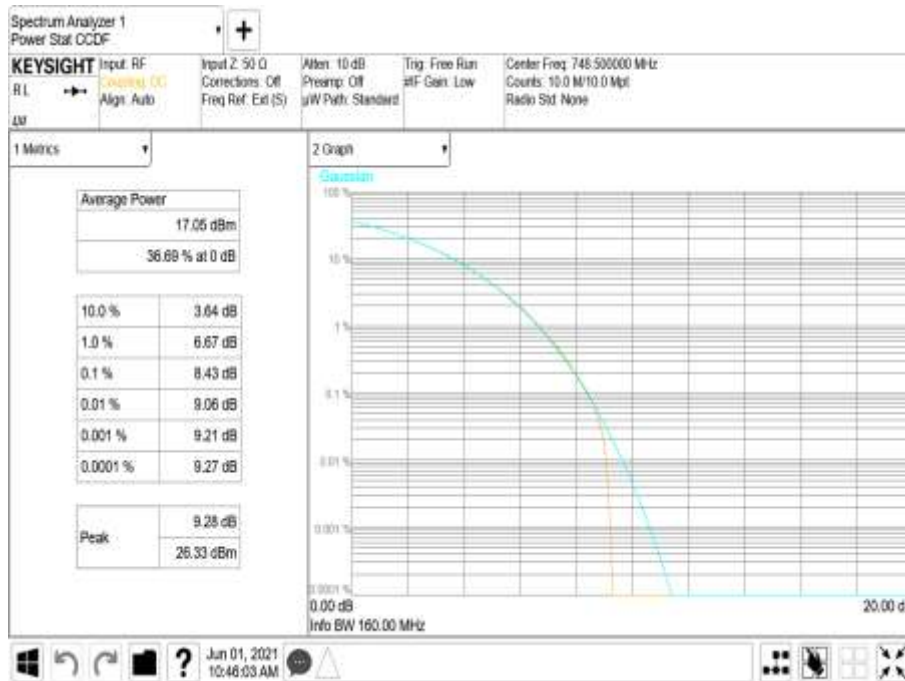
1. Transmitter performance has been presented for top & bottom channels across all antenna ports as represented in the following tables. The Authorized Band Width is 10MHz, therefore 5 and 10 MHz channels cover the full 10 MHz of spectrum.
2. Typical performance and measurement plot data has been presented for reference.
3. All plot data is on file and available upon request.

Antenna Port A Carrier Power - Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B





Antenna Port A Pk-Av Ratio - Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna Port A PSD - Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B

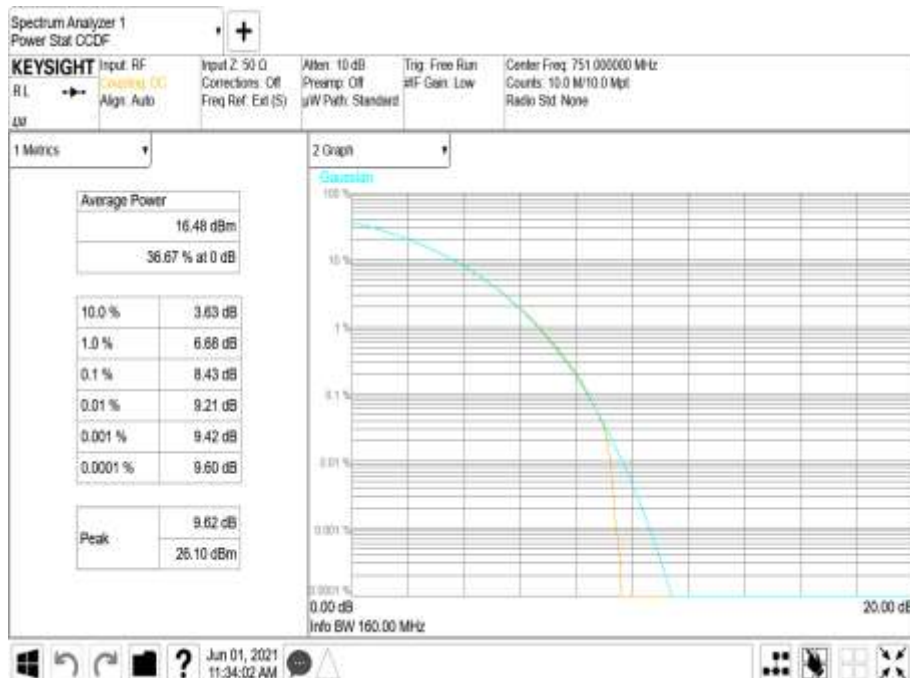




Antenna Port A Carrier Power - Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B



Antenna Port A Pk-Av Ratio - Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B





Antenna Port A PSD - Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B

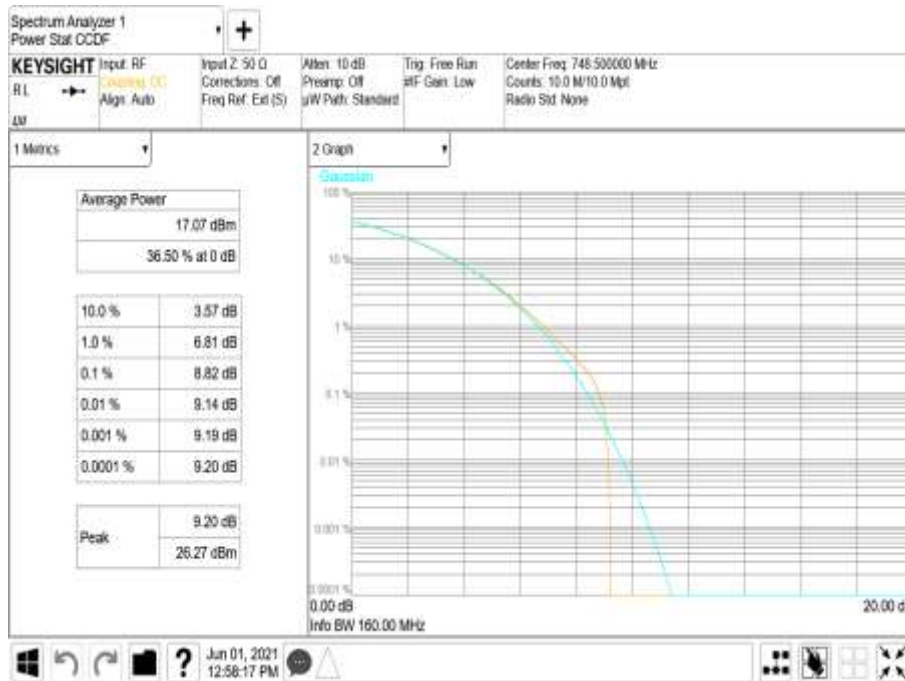


Antenna Port A Carrier Power - Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B





Antenna Port A Pk-Av Ratio - Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B



Antenna Port A PSD - Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B

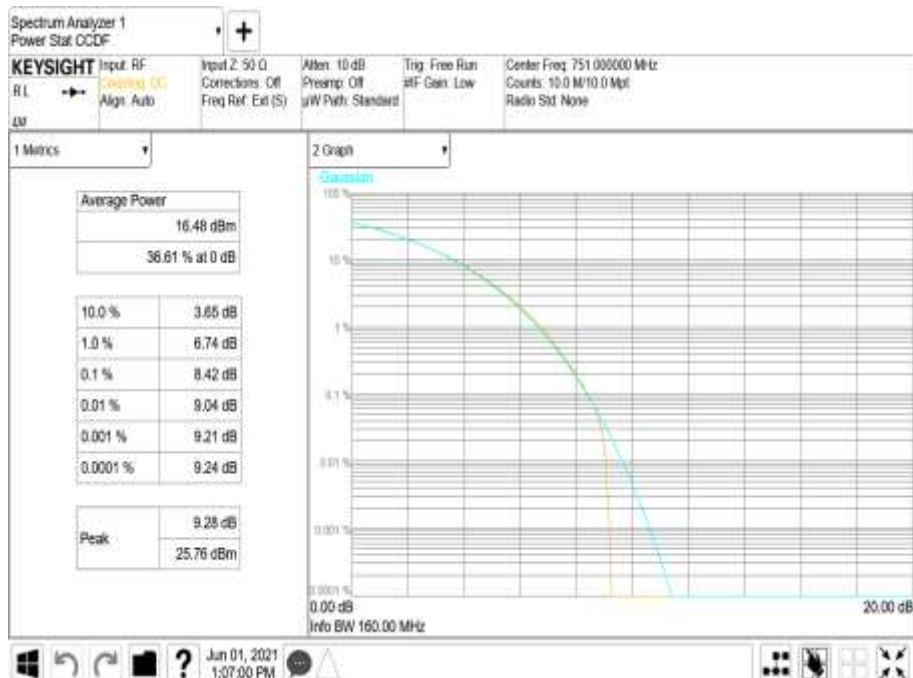




Antenna Port A Carrier Power - Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B

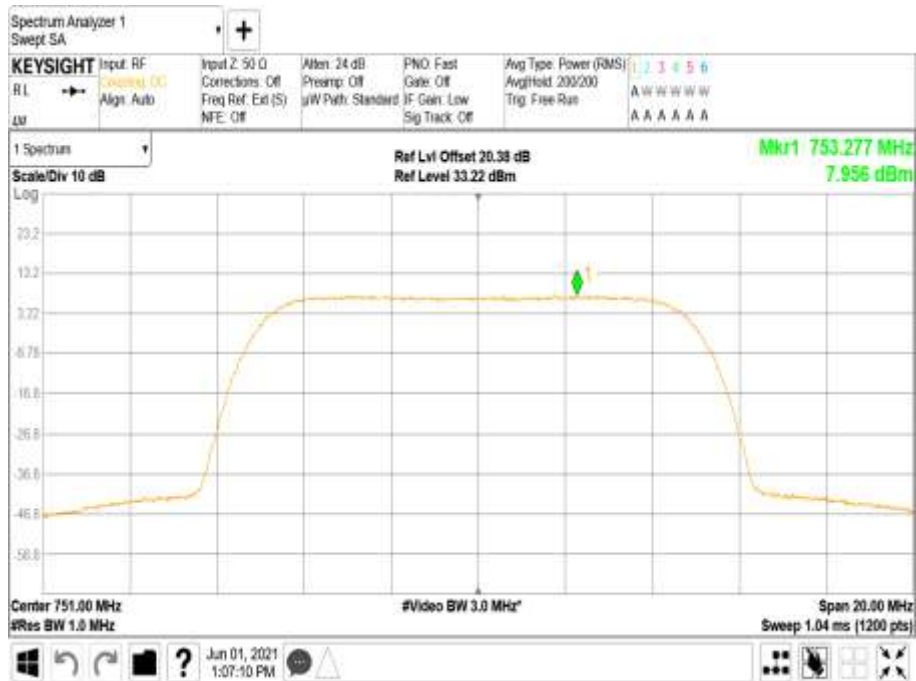


Antenna Port A Pk-Av Ratio - Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B





Antenna Port A PSD - Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B





Configuration B

Maximum Output Power 17 dBm / Port

Antenna	Modulation	Carrier Bandwidth	Output Power		
			PAR (dB)	Channel Position T/M/B	
				Average Power	
dBm	dBm/MHz				
A	LTE : QPSK	5.0+5.0 MHz	-	16.53	-
B	LTE : QPSK	5.0+5.0 MHz	-	16.72	-
Total			-	19.64	-
A	NR : QPSK	5.0+5.0 MHz	-	16.75	-
B	NR : QPSK	5.0+5.0 MHz	-	16.61	-
Total			-	19.69	-
A	LTE + NR : QPSK	5.0+5.0 MHz	-	17.46	-
B	LTE + NR : QPSK	5.0+5.0 MHz	-	16.65	-
Total			-	20.08	-

Remarks

1. The table results are measured at all antenna ports, worst-case.
2. The plot results represent typical radio performance across all channels.
3. Plot data performance for all transmitter ports and channels are available on request.

Antenna A - Modulation LTE : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B





Antenna A - Modulation NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B



Antenna A - Modulation LTE + NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B





FCC Part 27.50(b)(4)

Limit	
Maximum ERP (Urban)	≤ 1000 W/MHz
Peak to Average Ratio	13 dB

RSS-130 Clause 4.6.1

Limit	
Peak to Average Ratio	13 dB



2.2 OCCUPIED BANDWIDTH

2.2.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
 FCC CFR 47 Part 2, Clause 2.1049

2.2.2 Date of Test and Modification State

25 March 2021 - Modification State 0

2.2.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.4 Environmental Conditions

Ambient Temperature 24.9°C
 Relative Humidity 29.8%

2.2.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01.

2.2.6 Test Results

Configuration A

Maximum Output Power 17.00 dBm / Port

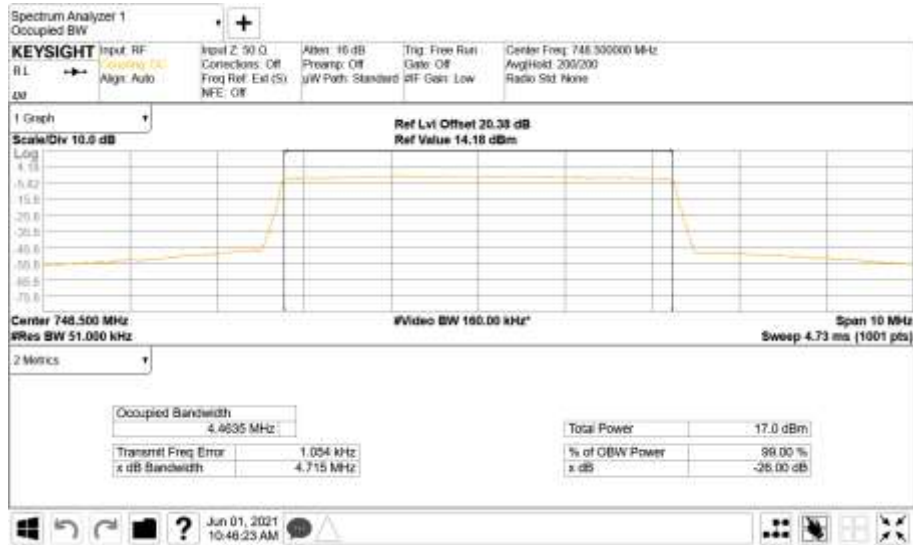
Modulation	Carrier Bandwidth	Result (MHz)	
		Channel Bandwidth	
		99 % Occupied Bandwidth	-26 dB Bandwidth
NR: QPSK	LTE: 5.0 MHz	4.46	4.72
NR: QPSK	LTE: 10.0 MHz	9.39	9.39
NR: QPSK	NR: 5.0 MHz	4.45	4.74
NR: QPSK	NR: 10.0 MHz	9.26	9.84

Remarks

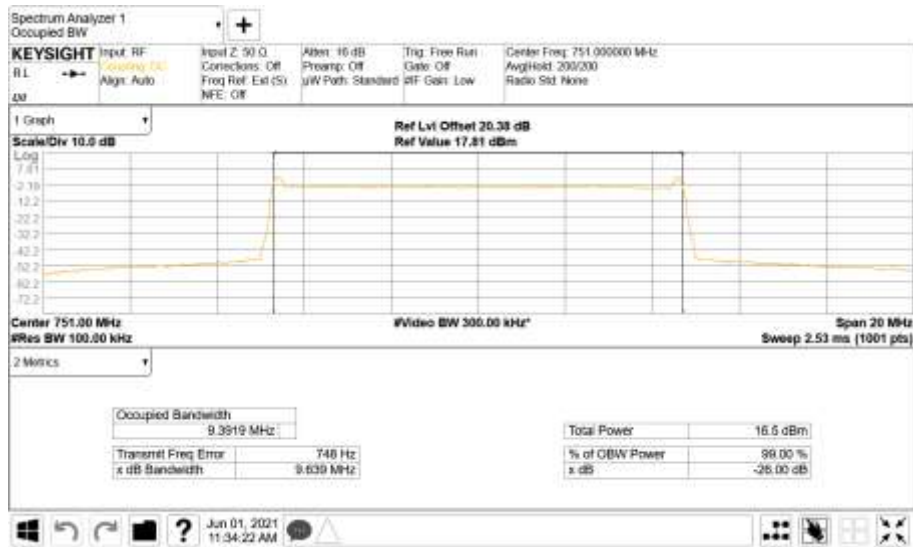
Representative occupied bandwidth performance results presented. Plot data performance for all transmitter ports and channel positions are on file and available on request.



Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B

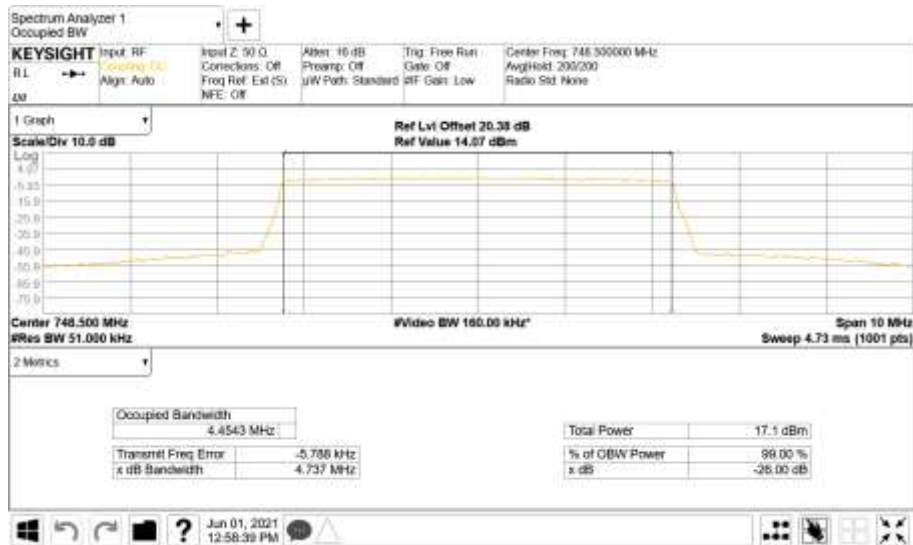


Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B

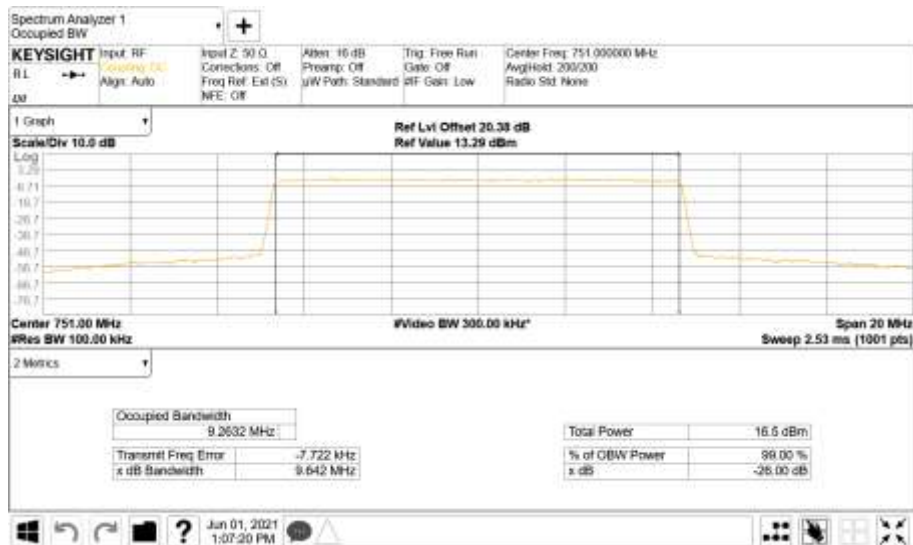




Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B



Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position T





2.3 BAND EDGE

2.3.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
FCC CFR 47 Part 2, Clause 2.1051

2.3.2 Date of Test and Modification State

26 March 2021 - Modification State 0

2.3.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.3.4 Environmental Conditions

Ambient Temperature 25.2 °C
Relative Humidity 29.4%

2.3.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.0.

Band Edge measurements were used an Integration Bandwidth of at least 1% of the measured 26dB Bandwidth.

Each antenna port has been declared as being equivalent, therefore measurements were made on one antenna port only. To account for this, the limit was tightened by $10 * \text{Log}(N)$, where N is equal to the number of MIMO antenna ports.

For dual port, the limit was calculated as being $-13 \text{ dBm} - 10 * \text{Log}(2) = -16 \text{ dBm}$.

2.3.6 Test Results

Configuration A

Maximum Output Power 17.00 dBm / Port

Modulation	Carrier Bandwidth	Band Edge (MHz)	
		Channel Position B	Channel Position T
NR: QPSK	LTE: 5.0 MHz	748.5	753.5
NR: QPSK	LTE: 10.0 MHz	751.0	751.0
NR: QPSK	NR: 5.0 MHz	748.5	753.5
NR: QPSK	NR: 10.0 MHz	751.0	751.0



Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B

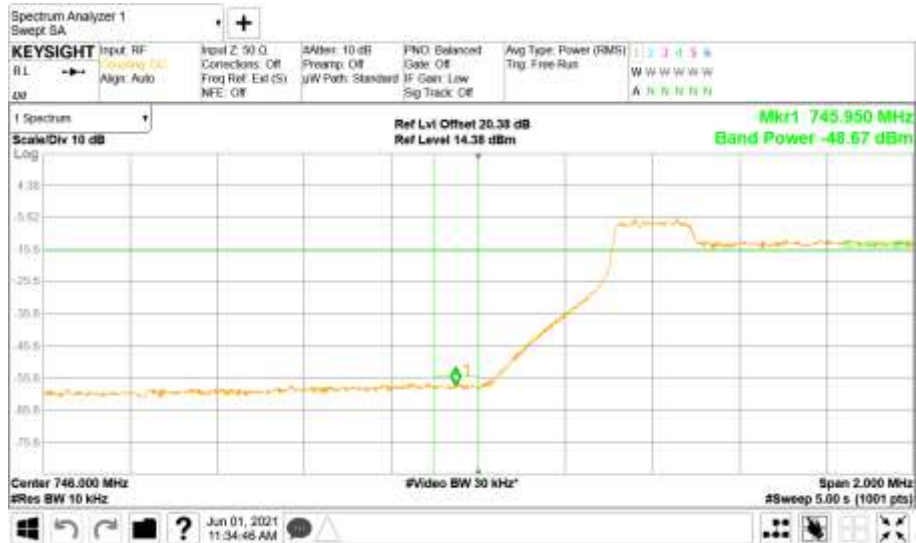


Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position T





Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B

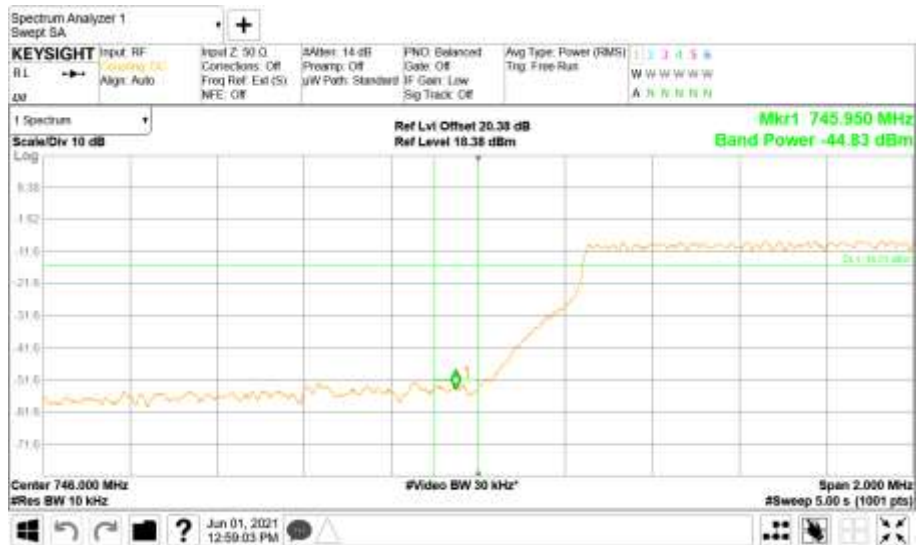


Modulation LTE: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position T

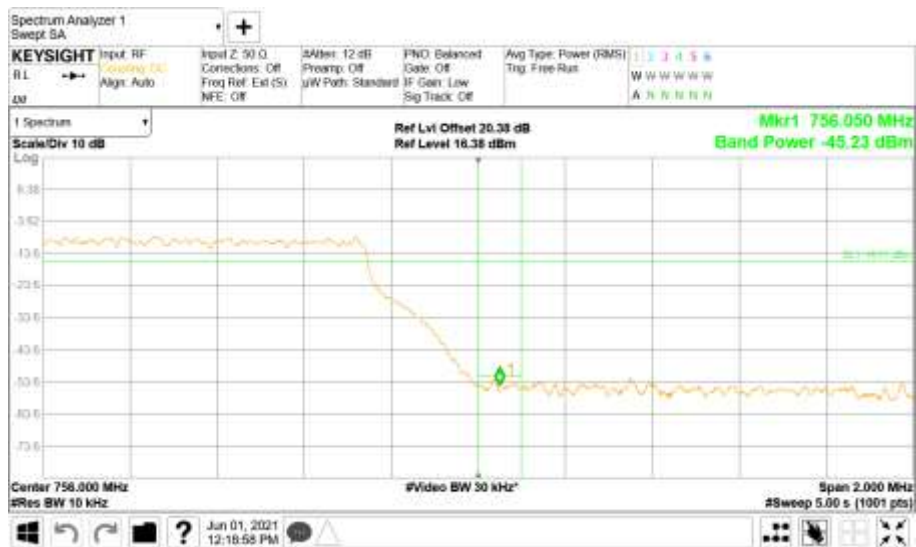




Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position B

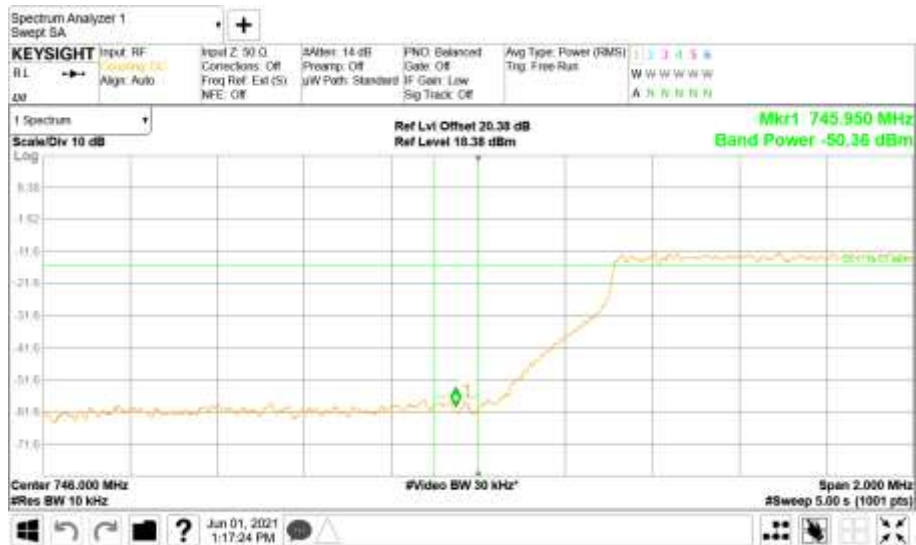


Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position T





Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position B



Modulation NR: QPSK - Carrier Bandwidth 10.0 MHz - Channel Position T





2.4 TRANCEIVER SPURIOUS EMISSIONS

2.4.1 Specification Reference

FCC CFR 47 Part 2, Clause 2.1051
FCC CFR 47 Part 27, Clause 27.53
ISED RSS-130, Clause 4.7

2.4.2 Date of Test and Modification State

26 March 2021 - Modification State 0

2.4.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.4.4 Environmental Conditions

Ambient Temperature	25.2°C
Relative Humidity	29.4%

2.4.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.1.

Each antenna port has been declared as being equivalent, therefore measurements were made on one antenna port only. To account for this, the limit was tightened by $10 * \text{Log}(N)$, where N is equal to the number of MIMO antenna ports.

For dual port, the limit was calculated as being $-13 \text{ dBm} - 10 * \text{Log}(2) = -16 \text{ dBm}$.

2.4.6 Test Results

Configuration A

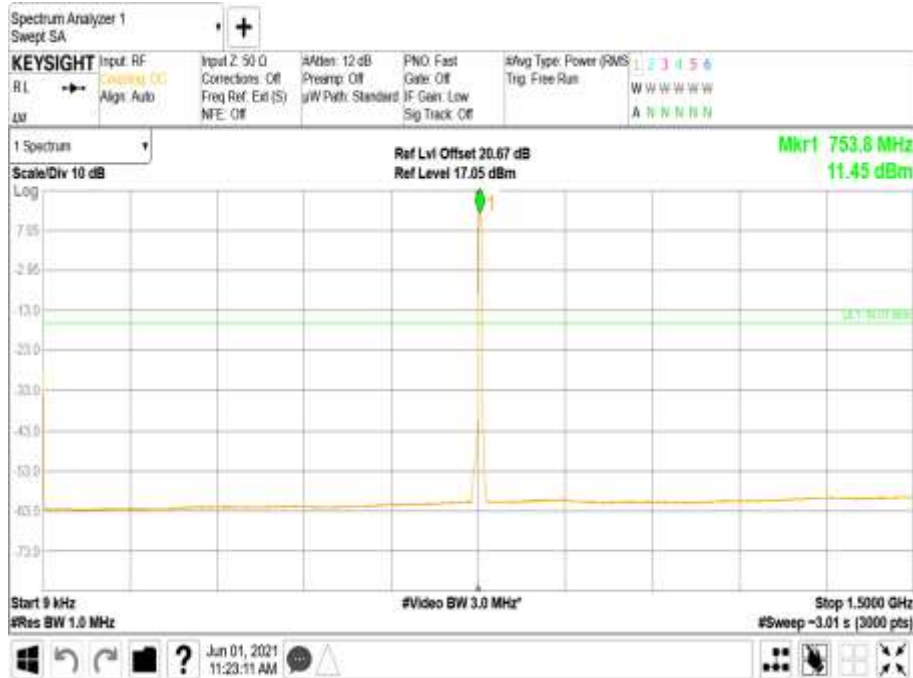
Maximum Output Power 17 dBm / Port

Remarks

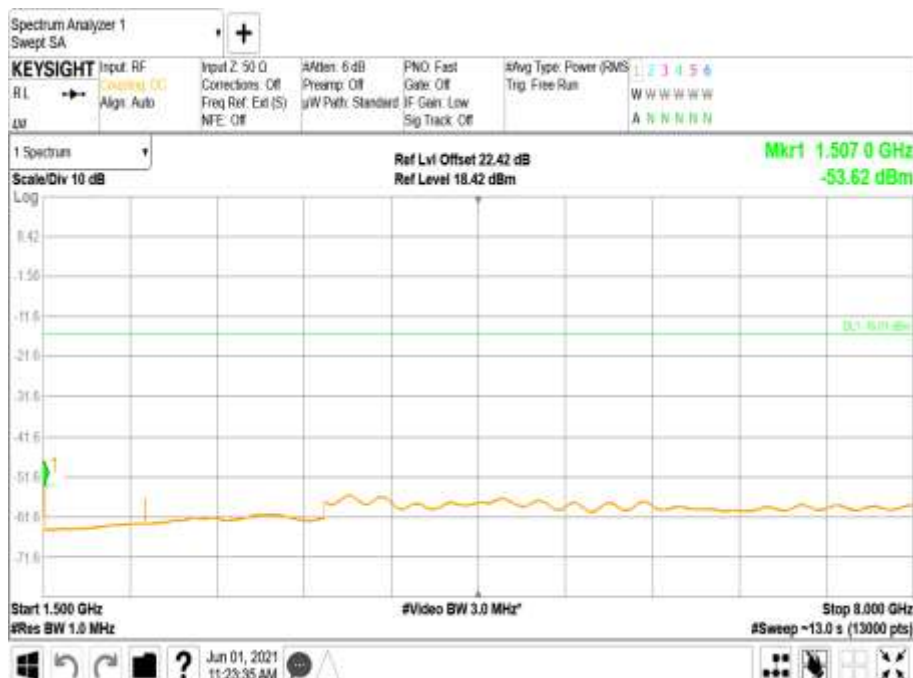
1. Transceiver spurious emissions have been searched for all channel bandwidths and antenna ports.
2. Representative spurious emissions performance has been presented for all modulations.
3. Plot data performance for all transmitter ports, channel bandwidths, and channel positions are on file and available on request.



Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 1 - Range 0.009 to 1500 MHz

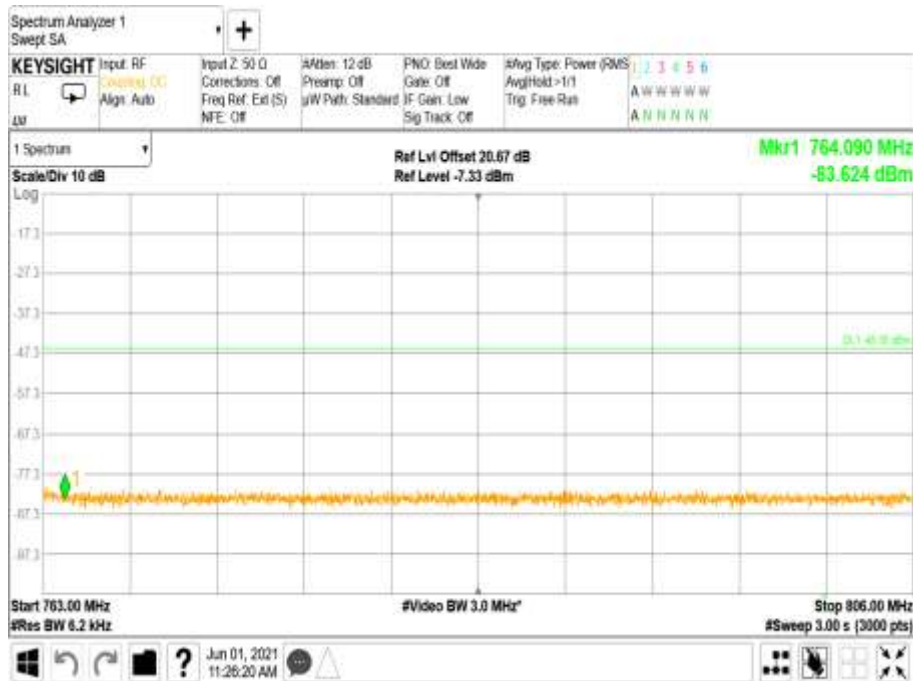


Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 2 - Range 1500 to 8000 MHz

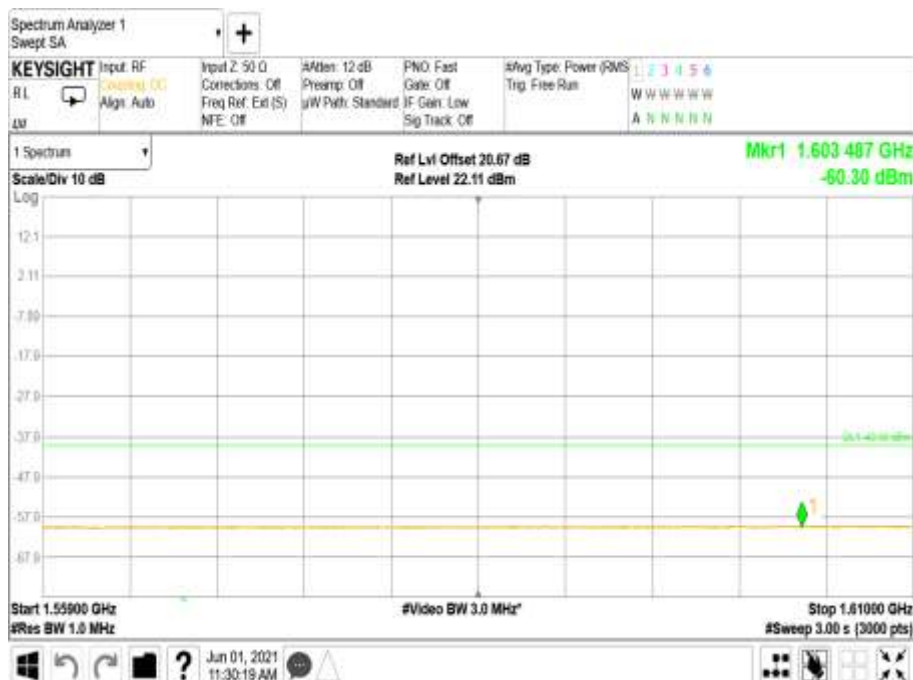




Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 3 - Range 763 to 806 MHz

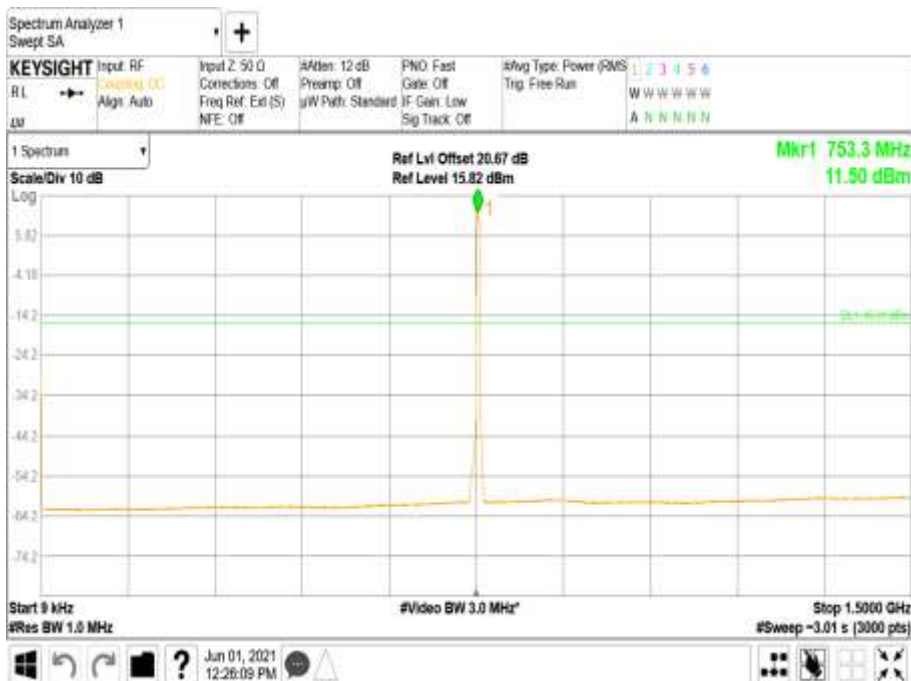


Modulation LTE: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 4 - Range 1599 to 1610 MHz

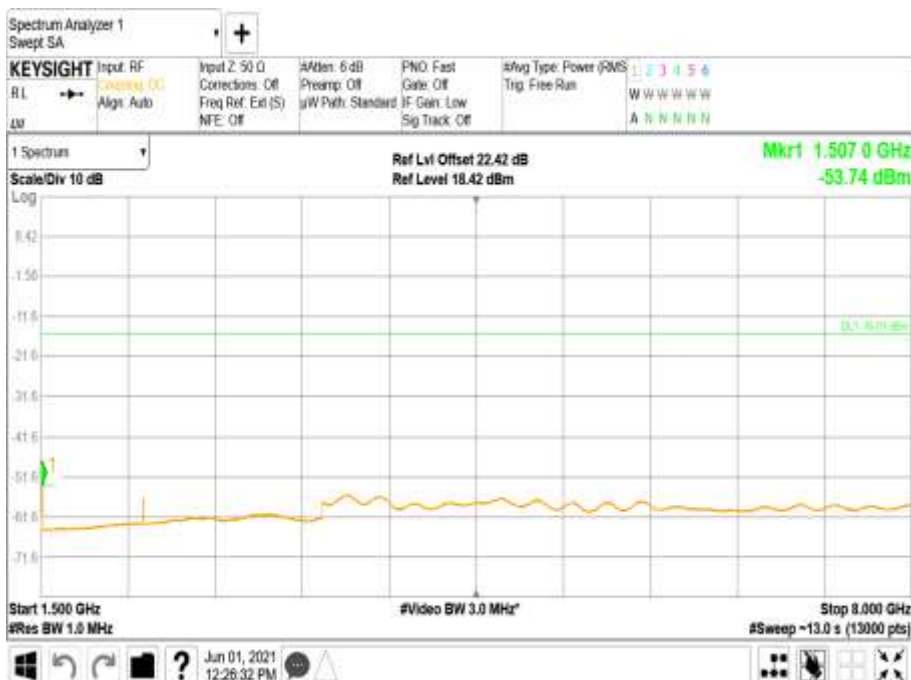




Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 1 - Range 0.009 to 1500 MHz

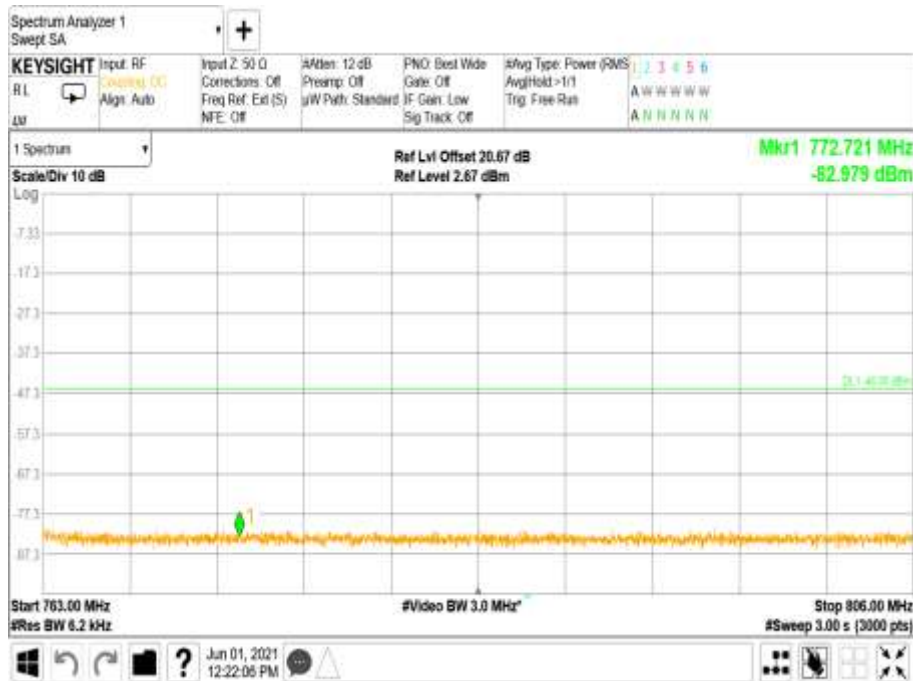


Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 2 - Range 1500 to 8000 MHz





Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 3 - Range 763 to 806 MHz



Modulation NR: QPSK - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 4 - Range 1599 to 1610 MHz





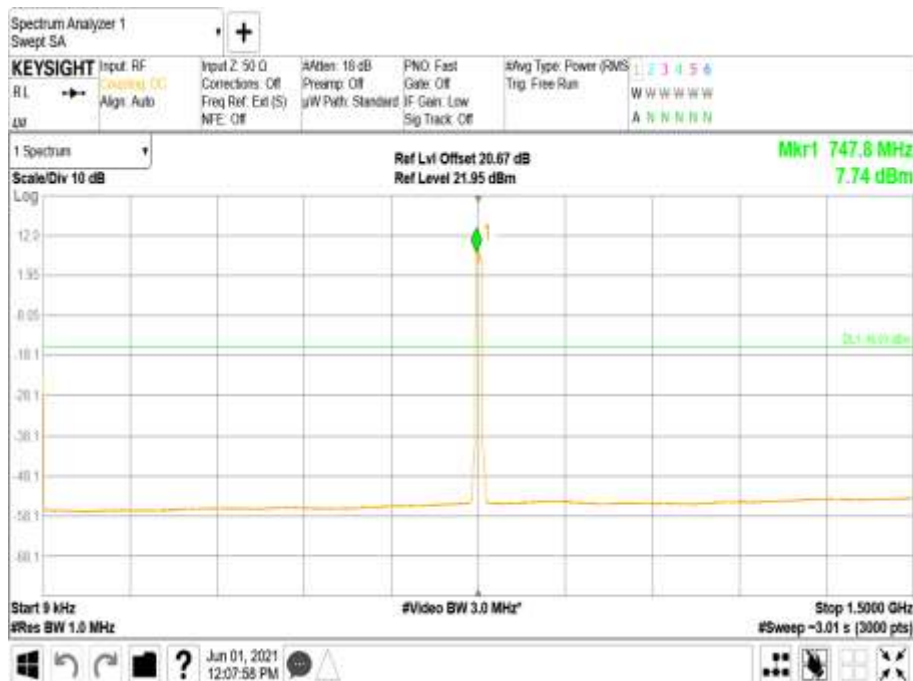
Configuration B

Maximum Output Power 17 dBm / Port

Remarks

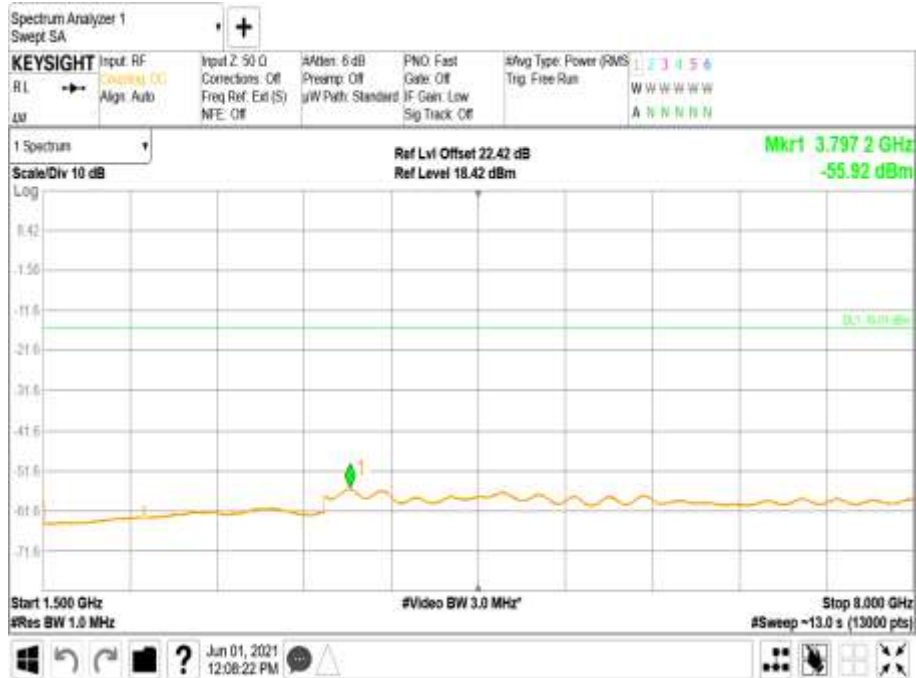
1. Representative spurious emissions performance has been presented for all modulations.
2. Typical worst-case performance presented.

Modulation LTE : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 1 - Range 0.009 to 1500 MHz

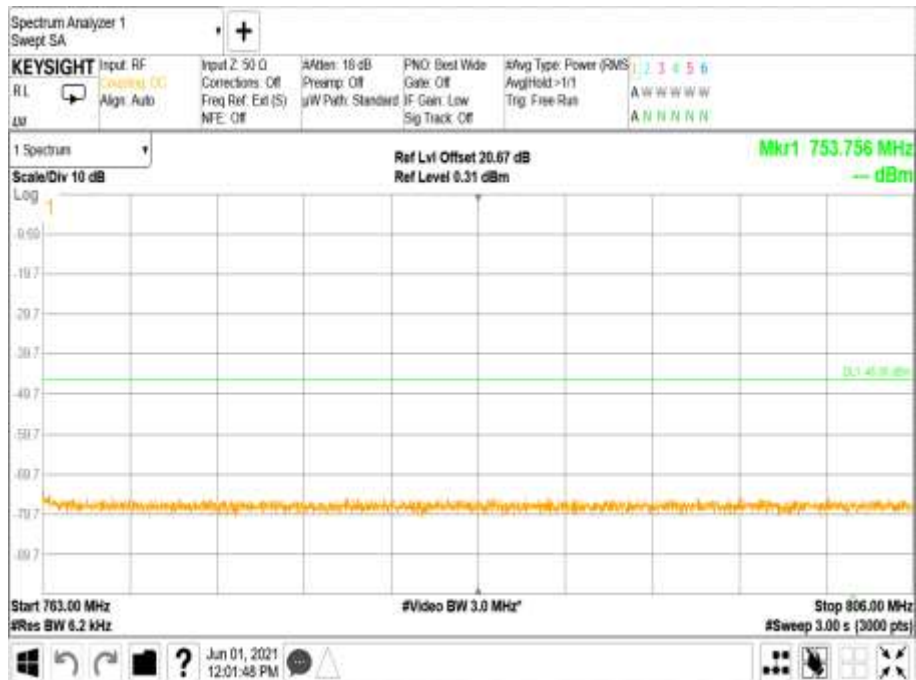




Modulation LTE : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 2 - Range 1500 to 8000 MHz

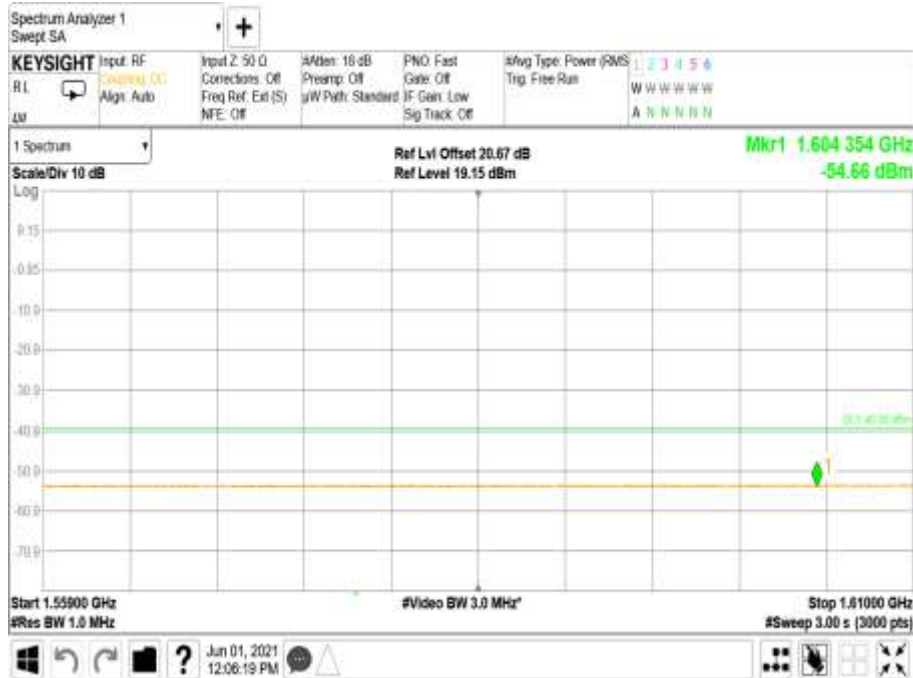


Modulation LTE : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 3 - Range 763 to 806 MHz

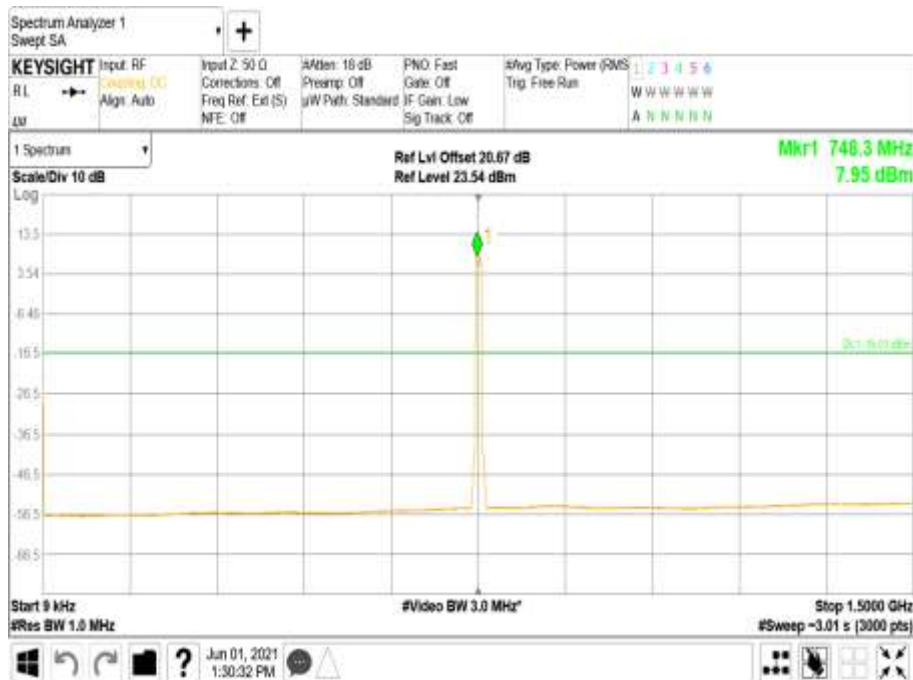




Modulation LTE : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 4 - Range 1599 to 1610 MHz

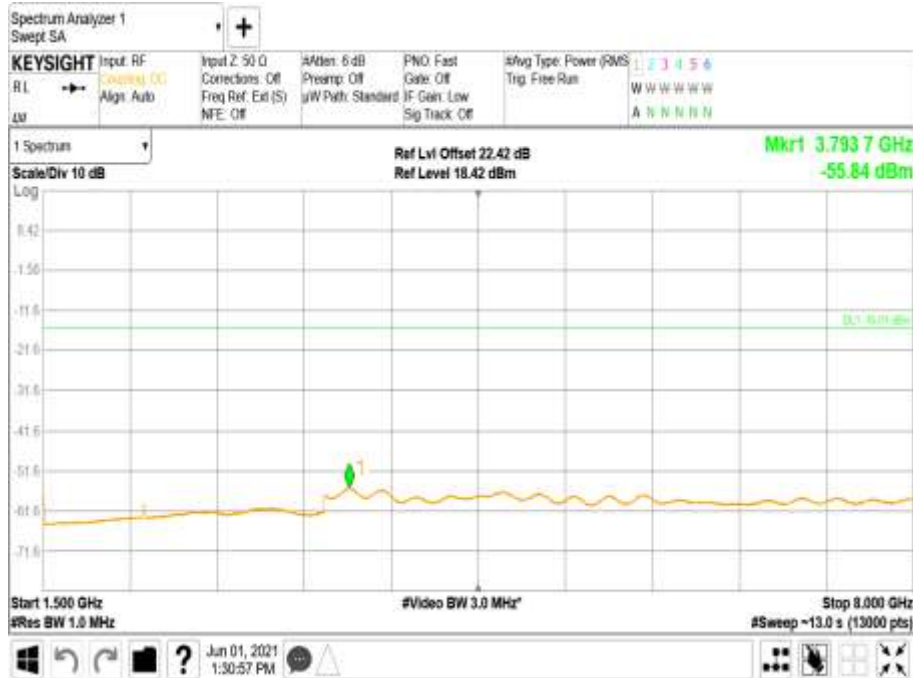


Modulation NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 1 - Range 0.009 to 1500 MHz

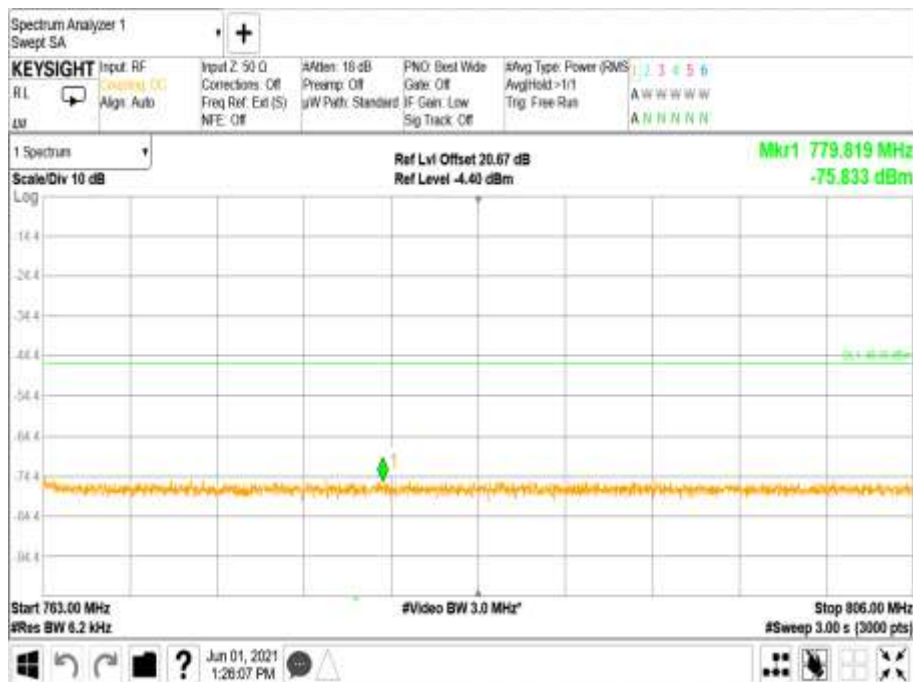




Modulation NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 2 - Range 1500 to 8000 MHz

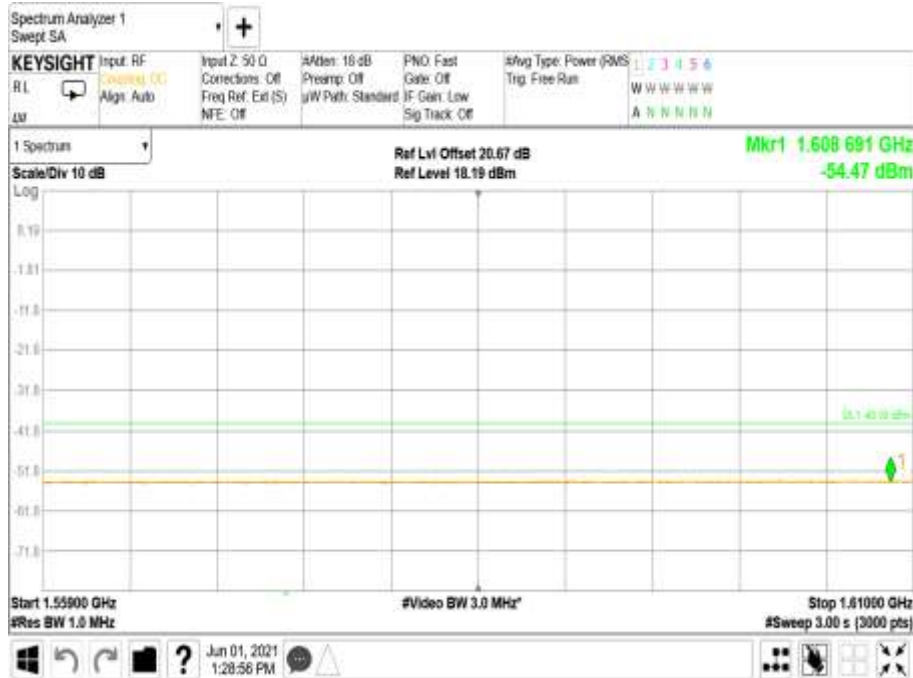


Modulation NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 3 - Range 763 to 806 MHz

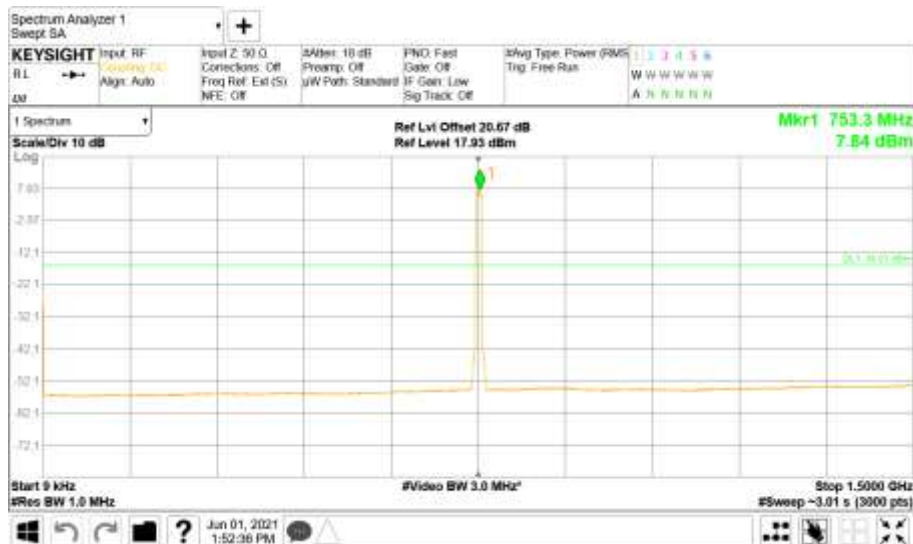




Modulation NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 4 - Range 1599 to 1610 MHz

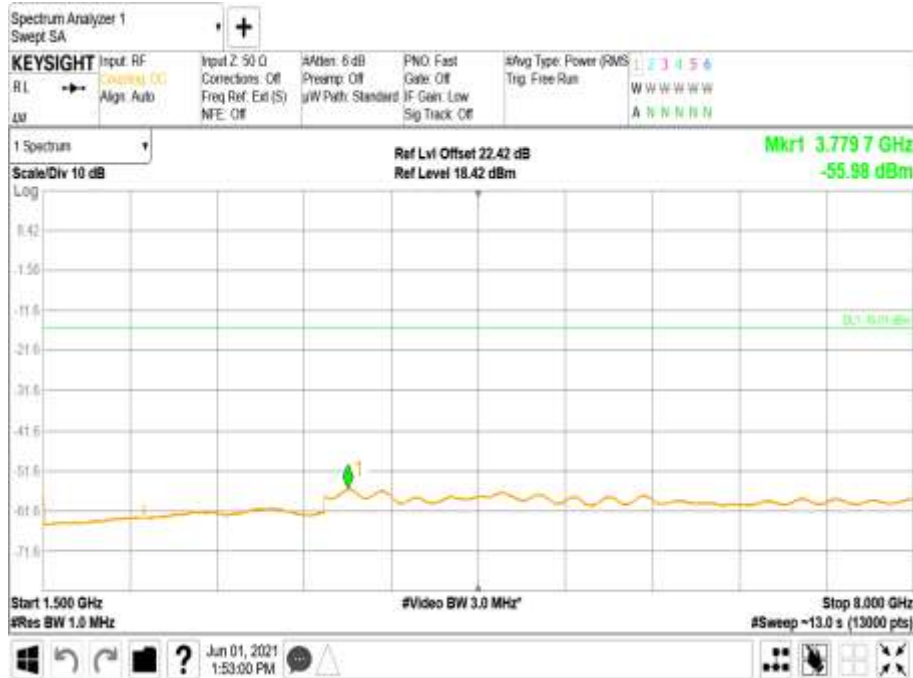


Modulation LTE + NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 1 - Range 0.009 to 1500 MHz

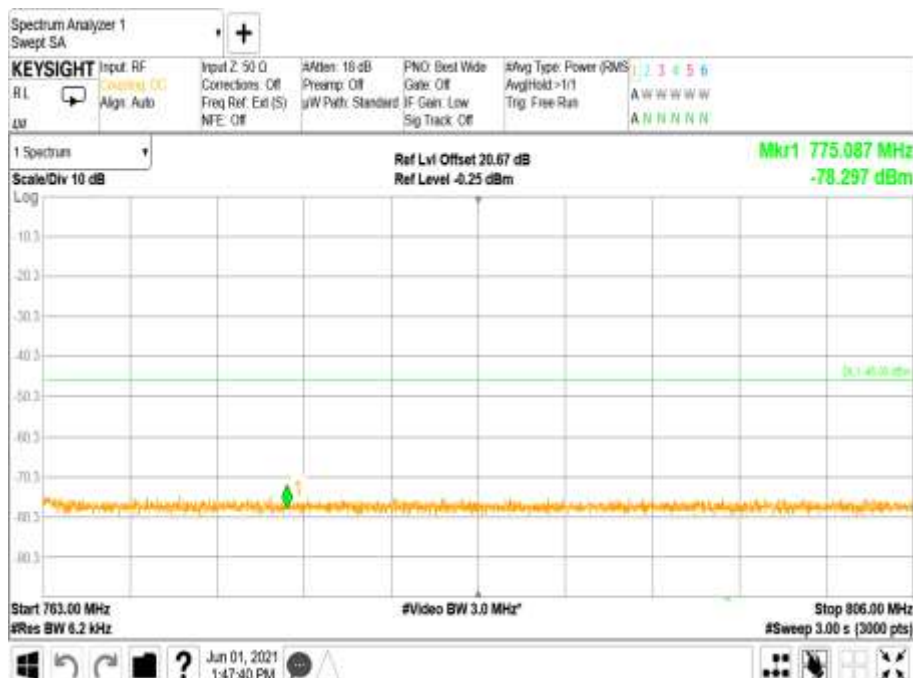




Modulation LTE + NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 2 - Range 1500 to 8000 MHz



Modulation LTE + NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 3 - Range 763 to 806 MHz





Modulation LTE + NR : QPSK - Carrier Bandwidth 5.0+5.0 MHz - Channel Position B - Band 4 - Range 1599 to 1610 MHz



FCC Part 27.53 (c)

Limit	-16dBm The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ db.
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FCC Part 27.53 (c)
FCC Part 27.53 (f)

Limits	The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least: $76 + 10 \log_{10} p$ (watts), dB, for base and fixed equipment The e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz
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2.5 RECEIVER SPURIOUS EMISSIONS

2.5.1 Specification Reference

FCC CFR 47 Part 2, Clause 2.1051
ISED RSS-GEN, Clause 7.4

2.5.2 Date of Test and Modification State

27 March 2021 - Modification State 0

2.5.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.5.4 Environmental Conditions

Ambient Temperature 25.2°C
Relative Humidity 29.4%

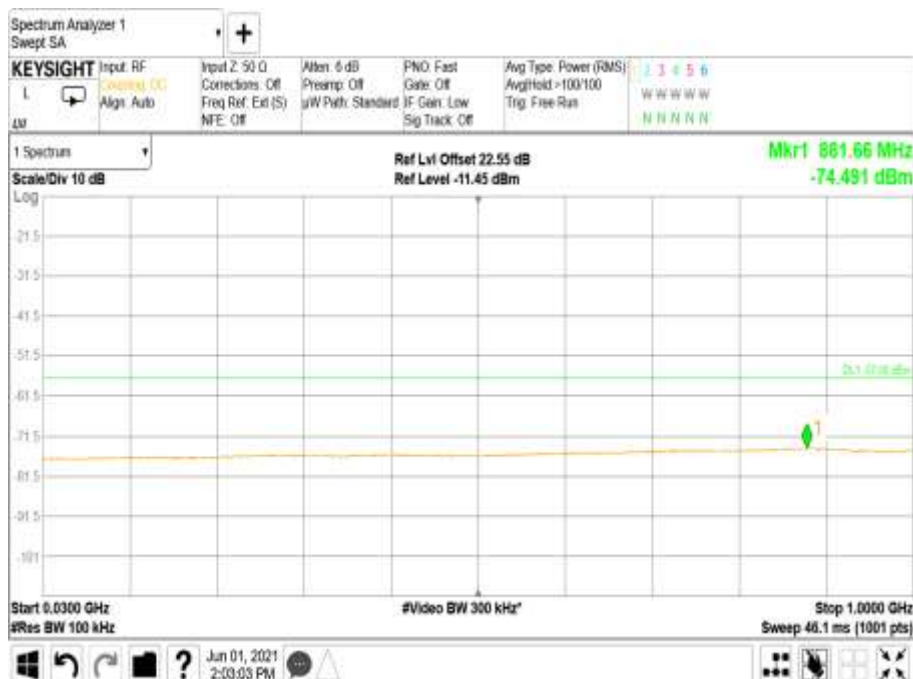
2.5.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.1.

2.5.6 Test Results

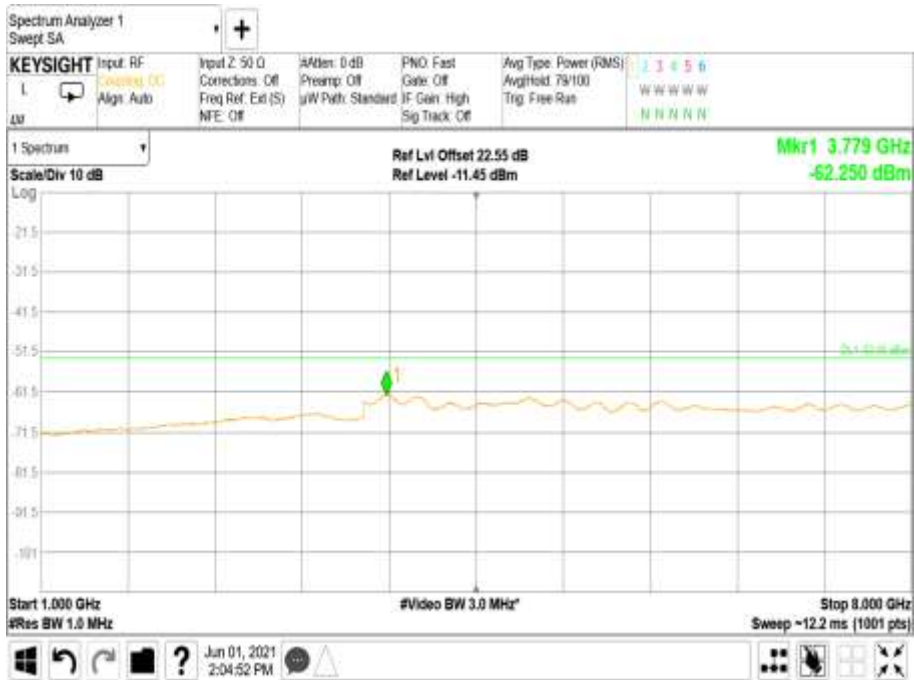
Configuration A

Modulation RX Spur - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 1 - Range 30.0 to 1000 MHz





Modulation RX Spur - Carrier Bandwidth 5.0 MHz - Channel Position M - Band 2 - Range 1000 to 10000 MHz



Limit	-57dBm ,<1GHz -53 dBm >1GHz
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SECTION 3

TEST EQUIPMENT USED



3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Due
Spectrum Analyzer	Keysight	PXA N9030B	MY57144347	24	24/04/2022
Thermometer	VWR	61161-364	192595396	24	25-10-2021
PSU	Xantrex	XKW60-50	E00109862	-	O/P Mon
Attenuator (20dB)	Mini-Circuits	BW-K10-2W44+	-	-	O/P Mon
Climate Chamber	Burnsco	RTC-37P-3-3	-07-07	-	O/P Mon

N/A – Not Applicable

O/P Mon – Output Monitored with Calibrated Equipment



3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:-

Test Discipline	Frequency / Parameter	MU	
Conducted Maximum Peak Output Power	30 MHz to 20 GHz Amplitude	± 0.7 dB	
Conducted Emissions	30 MHz to 20 GHz Amplitude	± 2.1 dB	
Frequency Stability	30 MHz to 2 GHz	± 5.0 Hz	
Occupied Bandwidth	Up to 20 MHz Bandwidth	5 MHz Bandwidth	± 11547 Hz
		10 MHz Bandwidth	± 23094 Hz
		15 MHz Bandwidth	± 34641 Hz
		20 MHz Bandwidth	± 46188 Hz
Band Edge	30 MHz to 20 GHz Amplitude	±0.8 dB	
Radiated Spurious Emissions	30 MHz to 1 GHz	± 5.2 dB	
	1 GHz to 40GHz	± 6.3 dB	

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2007, clause 4.4.3 and 4.5.1.



SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT



4.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT



Testing Laboratory
Certificate #2955.19

This report relates only to the actual item/items tested.

This report does not imply product endorsement by any government, accreditation agency, or TÜV SÜD Canada Inc.

Opinions or interpretations expressed in this report, if any, are outside the scope of TÜV SÜD Canada Inc. accreditations. Any opinions expressed do not necessarily reflect the opinions of TÜV SÜD Canada Inc., unless otherwise stated.

This report relates only to the actual item/items tested

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ANNEX A

MODULE LIST

Configurations A & B			
Product	Product No	R-State	Serial No
CT11	LPC 102 494/1	R2A	T01G495060
IRU 8844	KRC 161 754/3	R1D	D828666185
Dot 2282 B5B13 (DUT)	KRY 901 466/2	R1A	TD3W072774
Software Version:	CXP2030045_17	Revision:	R9A99