

RADIO TEST REPORT
No. 181101313SHA-001

Applicant : Ericsson AB
Isafjordsgatan 10 SE-164 80 Stockholm 16480 Sweden

Manufacturer : Ericsson AB
Isafjordsgatan 10 SE-164 80 Stockholm 16480 Sweden

Product Name : Radio 2205 B46

Product Number : KRC 161 609/2

TEST RESULT : PASS

SUMMARY

The equipment complies with the requirements according to the following standard(s) or specification:

47CFR Part 15 (2017): Radio Frequency Devices (Subpart E)

ANSI C63.10 (2013): American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

RSS-247 Issue 2 (February 2017): Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

RSS-Gen Issue 5 (April 2018): General Requirements for Compliance of Radio Apparatus

Date of issue: November 22, 2018

Prepared by:



Nemo Li (Project engineer)

Reviewed by:



Daniel Zhao (Reviewer)

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Revision History

Issue No.	Version	Description	Date Issued
181101313SHA-001	Rev. 01	Initial issue of report	November 22, 2018

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

EUT	: Remote Radio Unit
Product name	: Radio 2205 B46
Product number	: KRC 161 609/2
Serial Number(s)	: D827375618
Hardware Version	: R1D
Software Version	: CXP9034873%2_R1L01
Description of EUT	: The equipment is the Remote Radio Part designed for use in LTE cellular telephone system and for LAA to extend benefits of LTE on unlicensed spectrum.
Rating	: 36V DC
Sample received date	: October 17, 2018
Date of test	: October 17, 2018 ~ November 2, 2018

1.2 RF Technical Information

Operating Frequency	: 5250 - 5340MHz
Range	: 5480 - 5710MHz (5600-5650MHz is excluded for IC)
Type of Modulation	: LTE: QPSK, 16QAM, 64QAM, 256QAM
ITU Designation of Emission	: LTE: 20M0F9W
Number of Channels	: 5250 - 5340MHz Band: 4 channels 5480 - 5710MHz Band: 11 channels for FCC 5480 - 5710MHz Band: 8 channels for IC
Frequency of Channels	: 5250 - 5340MHz Band: 5260MHz, 5280MHz, 5300MHz, 5320MHz. 5480 - 5710MHz Band for FCC: 5500MHz, 5520MHz, 5540MHz, 5560MHz, 5580MHz, 5600MHz, 5620MHz, 5640MHz, 5660MHz, 5680MHz, 5700MHz. 5480 - 5710MHz Band for IC: 5500MHz, 5520MHz, 5540MHz, 5560MHz, 5580MHz, 5660MHz, 5680MHz, 5700MHz.
Number of Carriers	: Maximum 3 carriers
Channel Bandwidth	: 20MHz

Output Power (RMS) : Configuration A1 – Maximum 18 dBm for ports equipped with directional 6dBi antenna at Band 5250 - 5340MHz for FCC and IC.
Configuration A2 – Maximum 18 dBm for ports equipped with directional 6dBi antenna at Band 5480 - 5710MHz for FCC and IC.
Configuration A3 – Maximum 13 dBm for ports equipped with directional 6dBi antenna at Band 5250 - 5340MHz for IC outdoor fixed use.

Configuration B1 – Maximum 12 dBm for ports equipped with directional 12dBi antenna at Band 5250 - 5340MHz for FCC and IC.
Configuration B2 – Maximum 12dBm for ports equipped with directional 12dBi antenna at Band 5480 - 5710MHz for FCC and IC.
Configuration B3 – Maximum 7 dBm for ports equipped with directional 12dBi antenna at Band 5250 - 5340MHz for IC outdoor fixed use.

Instantaneous : 60MHz
Bandwidth
Number of Antenna : 2 TX ports
Ports
FCC ID : TA8AKRC161609-2
IC : 287AB-AS1616092

1.3 Description of Test Facility

Name : Intertek Testing Service Limited Shanghai
Address : Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone : 86 21 61278200
Telefax : 86 21 54262353

The test facility is : CNAS Accreditation Lab
recognized, certified, or Registration No. CNAS L0139
accredited by these A2LA Accreditation Lab
organizations Certificate Number: 3309.02
FCC Accredited Lab
Designation Number: CN1175
IC Registration Lab
Registration code No.: 2042B-1
VCCI Registration Lab
Registration No.: G-10845, R-14243, C-14723, T-12252

2 TEST SPECIFICATIONS

2.1 Related documents

47CFR Part 2 (2017)
47CFR Part 15 (2017)
ANSI C63.10 (2013)
RSS-247 Issue 2 (February 2017)
RSS-Gen Issue 5 (April 2018)
KDB 789033 D02 v01r04
KDB 662911 D01 v02r01

2.2 Product Information

The Equipment Under Test (EUT) is shown in the photograph below. The Radio 2205 B46 KRC 161 609/2 operates from a 36V DC with PSU AC 10 or PSU 48 05. A full technical description can be found in the Manufacturer's documentation.



2.3 Configuration Description

Configuration A

Configuration A1 – Maximum 18 dBm for ports equipped with directional 6dBi antenna at Band 5250 - 5340MHz for FCC and IC.

Configuration A2 – Maximum 18 dBm for ports equipped with directional 6dBi antenna at Band 5480 - 5710MHz for FCC and IC.

Configuration A3 – Maximum 13 dBm for ports equipped with directional 6dBi antenna at Band 5250 - 5340MHz for IC outdoor fixed use.

Configuration B

Configuration B1 – Maximum 12 dBm for ports equipped with directional 12dBi antenna at Band 5250 - 5340MHz for FCC and IC.

Configuration B2 – Maximum 12dBm for ports equipped with directional 12dBi antenna at Band 5480 - 5710MHz for FCC and IC.

Configuration B3 – Maximum 7 dBm for ports equipped with directional 12dBi antenna at Band 5250 - 5340MHz for IC outdoor fixed use.

Configuration Code	Carrier(s)	Configuration Description
L-MIMO-SC	1C	LTE MIMO, Single Carrier
L-MIMO-MC 1	2C	LTE MIMO, Multi Carrier x2
L-MIMO-MC 2	3C	LTE MIMO, Multi Carrier x3

The settings below were deemed representative for all traffic scenarios when settings with different modulations, channel bandwidths, number for carriers and RF configurations have been tested to find the worst case setting. The settings below were used for all measurements unless otherwise noted:

LTE:

MIMO mode single carrier: E-TM1.1

MIMO mode multi carrier (x2): E-TM1.1

MIMO mode multi carrier (x3): E-TM1.1

MIMO mode single carrier: E-TM3.2

MIMO mode multi carrier (x2): E-TM3.2

MIMO mode multi carrier (x3): E-TM3.2

MIMO mode single carrier: E-TM3.1

MIMO mode multi carrier (x2): E-TM3.1

MIMO mode multi carrier (x3): E-TM3.1

MIMO mode single carrier: E-TM3.1a

MIMO mode multi carrier (x2): E-TM3.1a

MIMO mode multi carrier (x3): E-TM3.1a

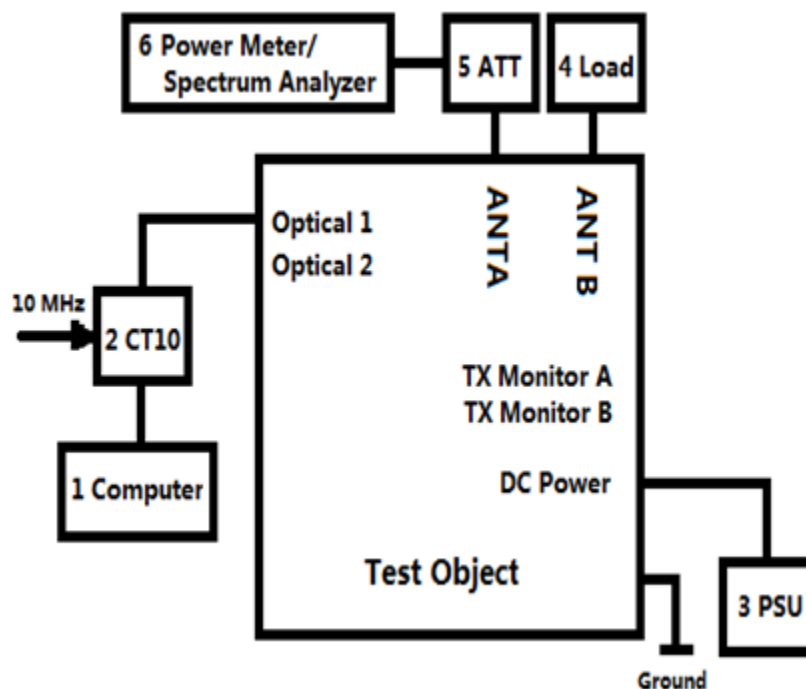
The EUT includes two TX ports and it can be configured to transmit in MIMO mode for LTE carriers, MIMO mode for LTE was used for measurements as the worst configuration.

The complete testing was performed with the EUT transmitting at maximum RF power unless otherwise stated.

For LAA (Radio Access Technology) MIMO mode, all the Maximum Output Power and Maximum Power Spectral Density was tested on all TX output connector RF A and B. All the other TX measurements of LAA MIMO mode, were performed on the combined TX output connector RF A of the EUT as the representative port.

2.4 Test Setup

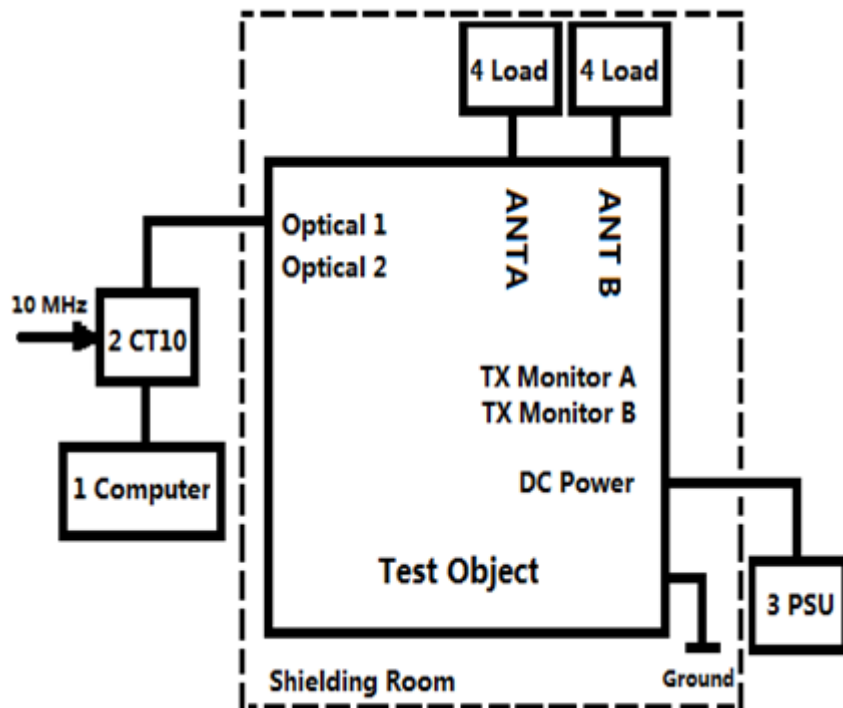
Test Setup, Conducted Measurement:



Product Name	Product Number	Version	Serial Number
Radio 2205 B46	KRC 161 609/2	R1D	D827375618

No.	Auxiliary Equipment	Product Number / Model Type	Version	Serial Number
1	Computer	HP ProBook 430 G3	--	5CD7099QN1
2	CT10	LPC 102 487/1	R1C	T01F437145
3	PSU AC 10	BML 901 350/1	R3B	CD3Q440769
	PSU 48 05	BMR 910 434/1	R3B	CD3P924655
4	Load	53K17R-005	--	--
5	20dB Attenuator	53AS102-K20	--	--

Test Setup, Radiated Measurement:



Product Name	Product Number	Version	Serial Number
Radio 2205 B46	KRC 161 609/2	R1D	D827375618

No.	Auxiliary Equipment	Product Number / Model Type	Version	Serial Number
1	Computer	HP ProBook 430 G3	--	5CD7099QN1
2	CT10	LPC 102 487/1	R1C	T01F437145
3	PSU	PSU AC 08	R1B	BR83767592
4	PSU AC 10	BML 901 350/1	R3B	CD3Q440769
	PSU 48 05	BMR 910 434/1	R3B	CD3P924655
5	Load	53K17R-005	--	--
6	20dB Attenuator	53AS102-K20	--	--

2.5 Test condition:

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 in a shielded enclosure, test laboratories or a chamber as appropriate.

All test cases were tested with the EUT supplied with 36V DC via PSU AC 10 or PSU 48 05.

2.6 Test environment condition:

Temperature:	18-24°C
Humidity:	48-58% RH
Atmospheric Pressure:	100-101kPa

2.7 Duty cycle:

Modulation	Duty cycle (%)	Duty cycle factor (dB)
QPSK	67.86	1.68
16QAM	67.86	1.68
64QAM	67.86	1.68
256QAM	67.86	1.68

Keysight Spectrum Analyzer - Swept SA

RF 50 Ω DC SENSE:INT 10:14:32 AM Oct 18, 2018

Center Freq 5.260000000 GHz

NFE PNO: Fast $\rightarrow$ Trig: Free Run Avg Type: Voltage
IFGain:Low Atten: 28 dB Avg/Hold: 1/1

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W W W
DET P N N N N N

Ref Offset 22.2 dB Δ Mkr2 6.787 ms
Ref 40.00 dBm 7.075 dB

10 dB/div Log

Center 5.260000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 50 MHz Sweep 30.00 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	3.464 ms	11.426 dBm			
2	Δ 1	1	t	(Δ) 6.787 ms	(Δ) 7.075 dBm			
3	Δ 1	1	t	(Δ) 10.00 ms	(Δ) 5.085 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 5.260000000 GHz

Start Freq 5.260000000 GHz

Stop Freq 5.260000000 GHz

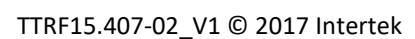
CF Step 8.000000 MHz

Auto Man

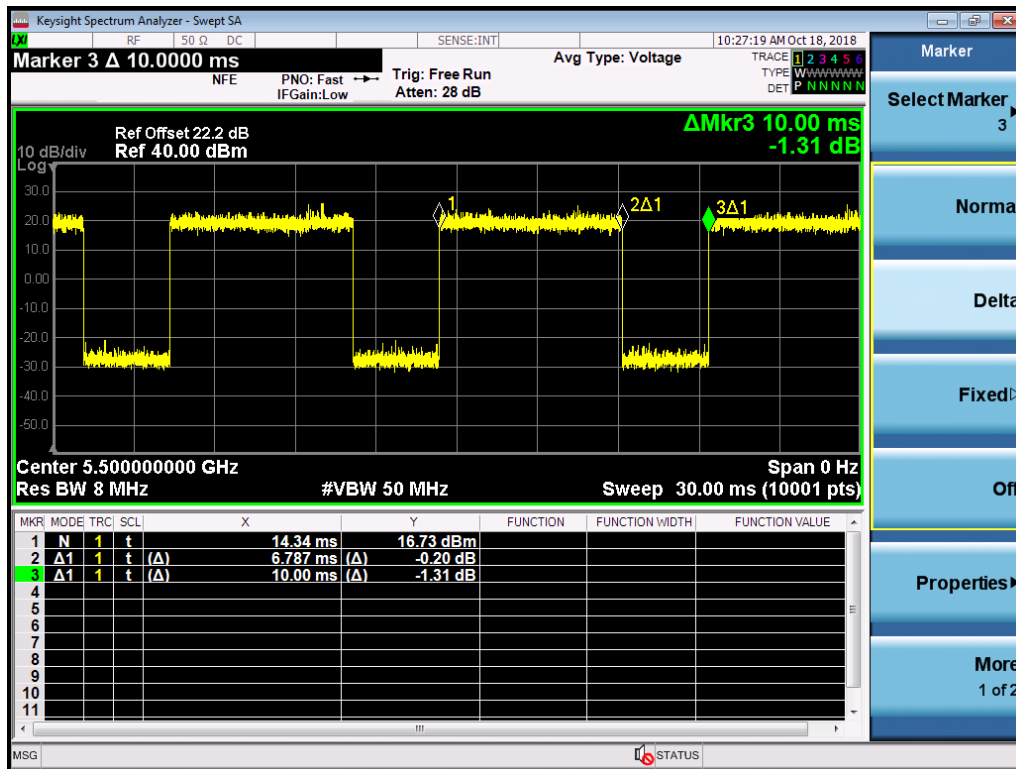
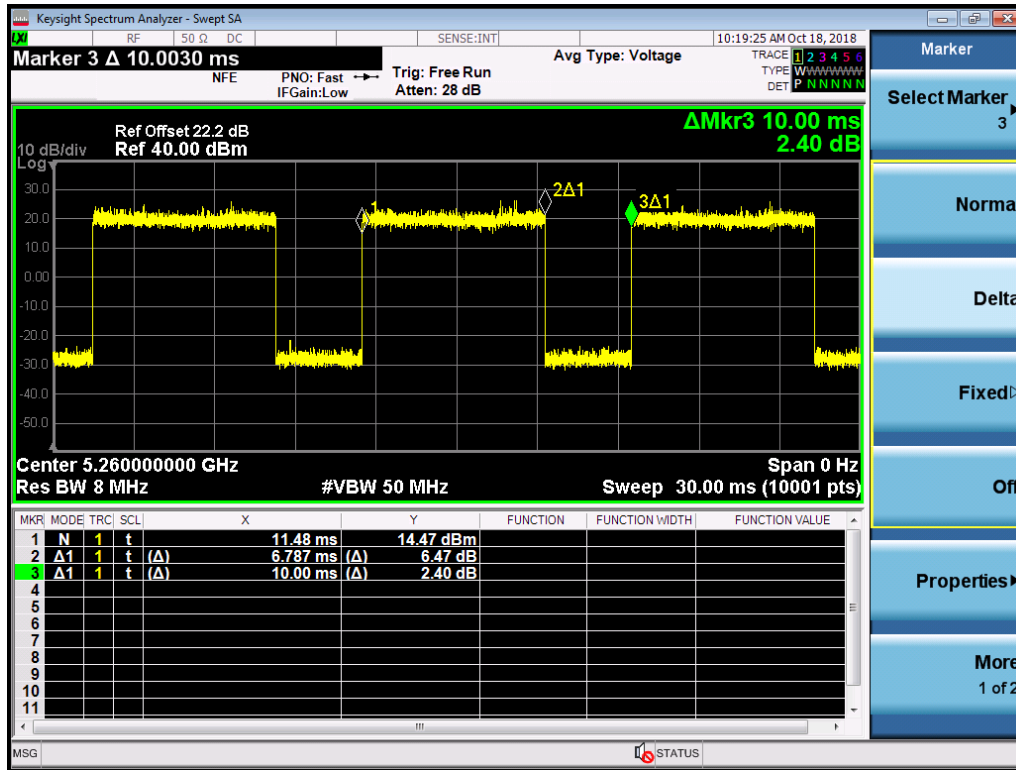
Freq Offset 0 Hz

Scale Type

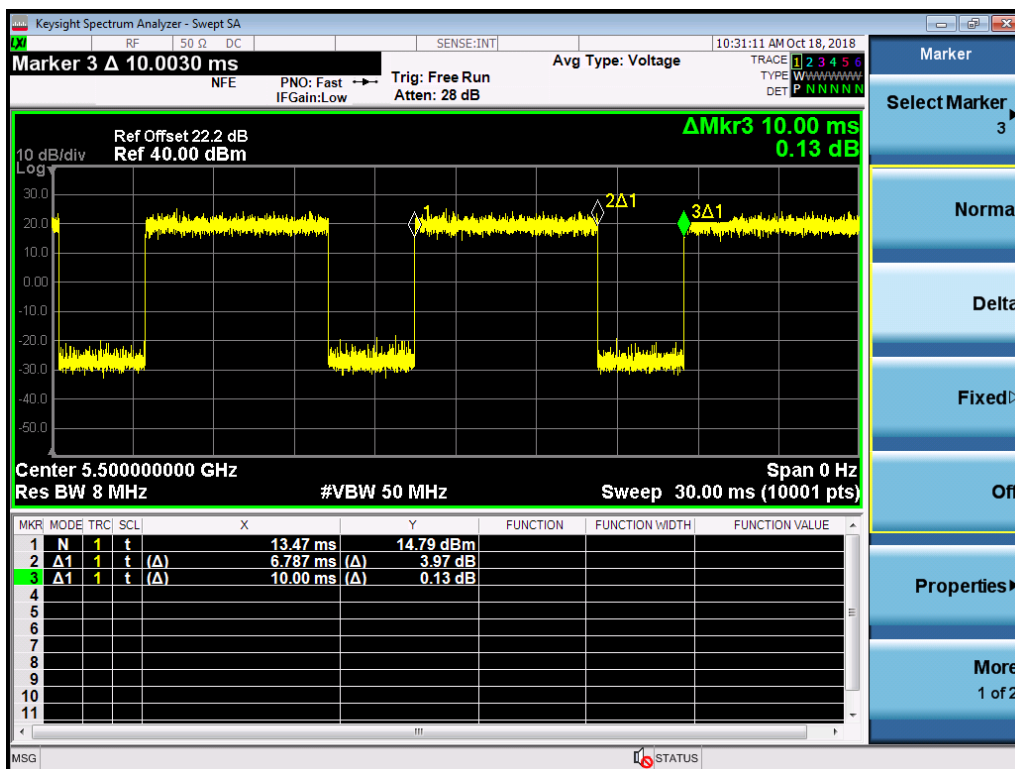
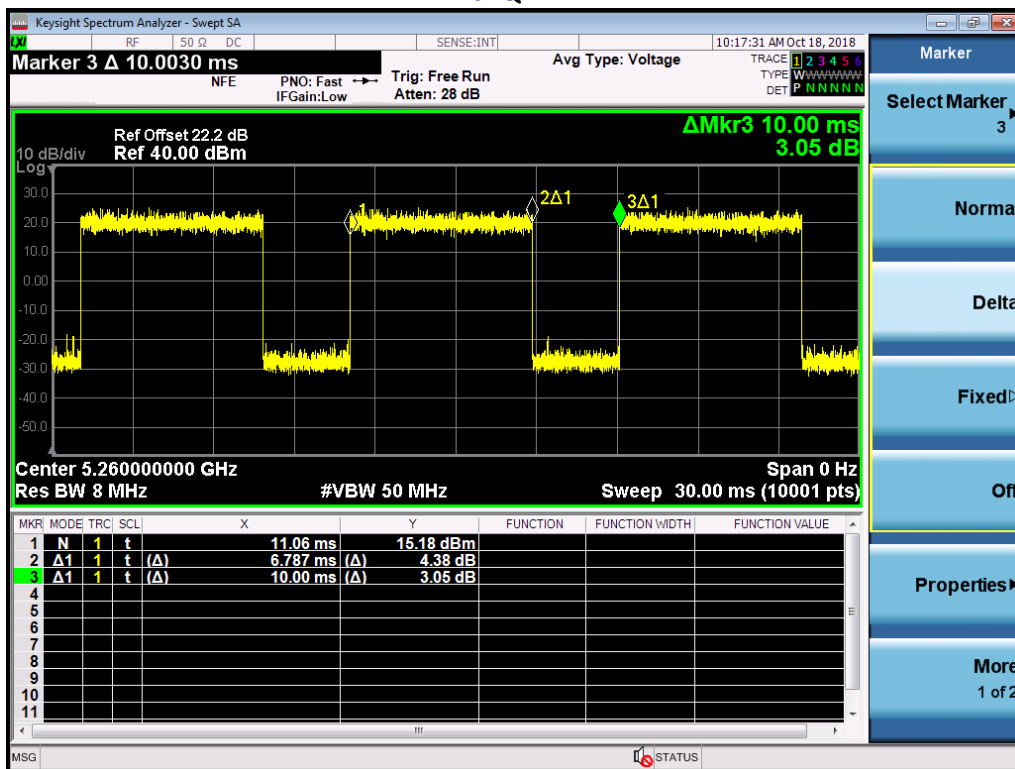
Log Lin



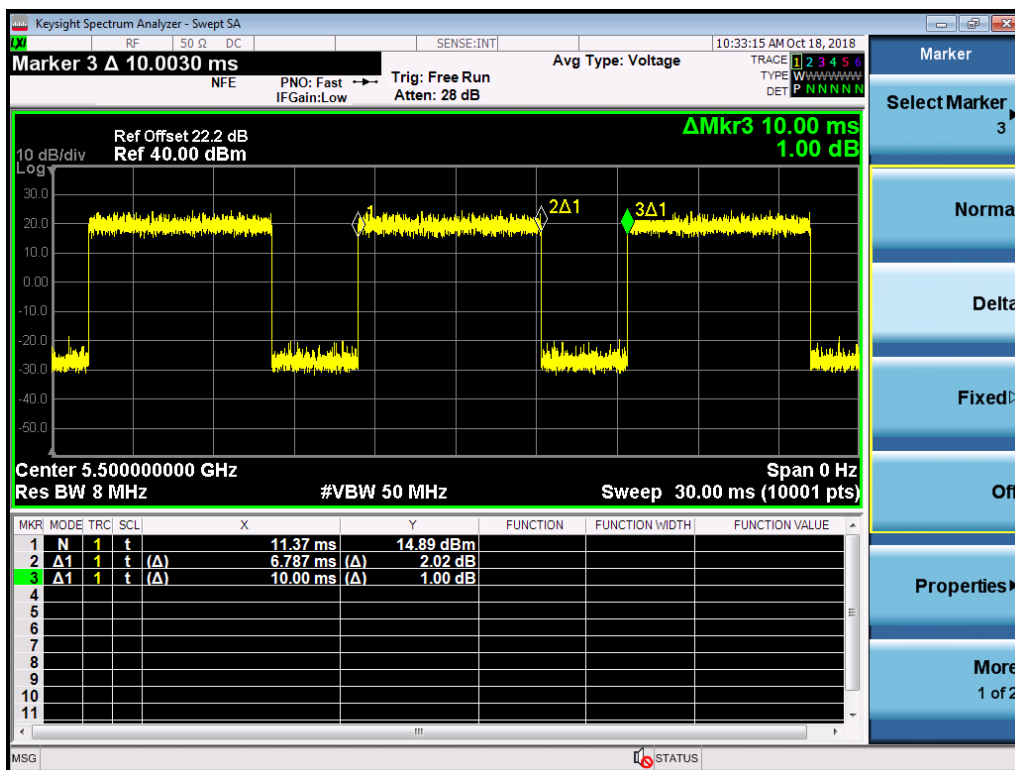
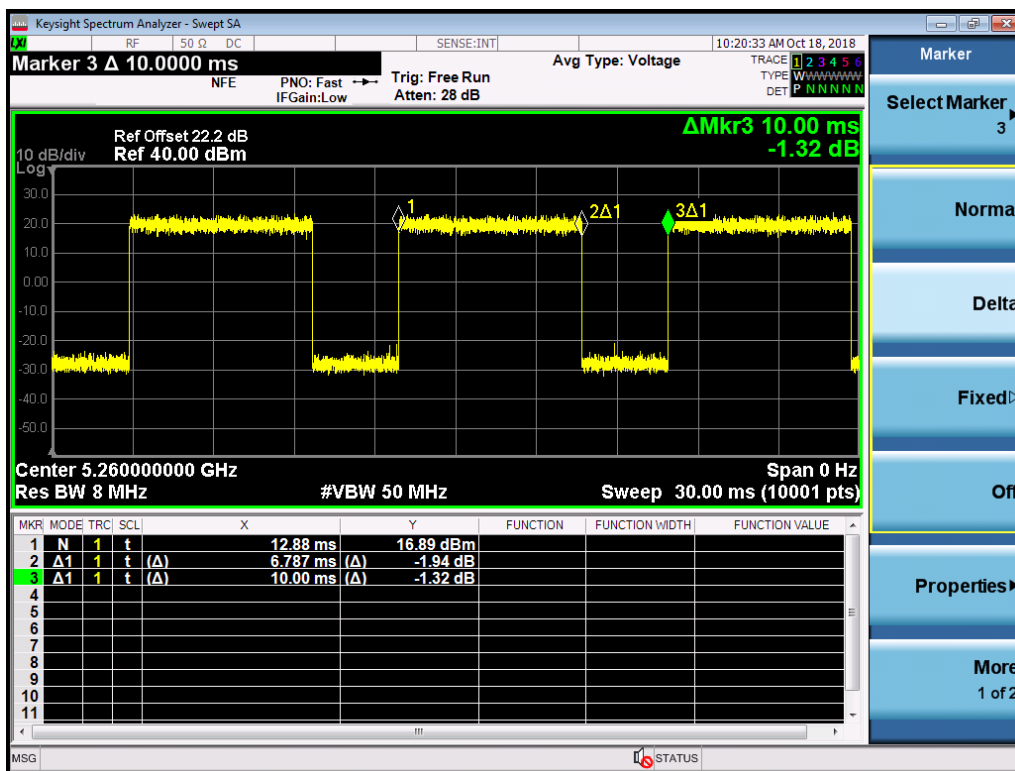
16QAM



64QAM



256QAM



2.8 Test software list:

Test Items	Software	Manufacturer	Version
Conducted emission	ESxS-K1	R&S	V2.1.0
Radiated emission	ES-K1	R&S	V1.71

2.9 Instrument list

Conducted Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Test Receiver	R&S	ESCS 30	EC 2107	2019-07-15
☒	A.M.N.	R&S	ESH2-Z5	EC 3119	2018-12-07
☒	A.M.N.	R&S	ENV 216	EC 3393	2019-07-04
Radiated Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Test Receiver	R&S	ESIB 26	EC 3045	2019-09-12
☒	Bilog Antenna	TESEQ	CBL 6112D	EC 4206	2019-06-10
☒	Horn antenna	R&S	HF 906	EC 3049	2019-09-23
☒	Horn antenna	TOYO	HAP18-26W	EC 4792-3	2020-07-09
☒	Pre-amplifier	R&S	Pre-amp 18	EC 5881	2019-06-19
☒	Horn antenna	ETS-Lindgren	3116C 3116C-PA	-	2018-12-29
☒	Active loop antenna	Schwarzbeck	FMZB1519	EC 5345	2019-03-07
RF test					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	PXA Signal Analyzer	Keysight	N9030A	EC 5338	2019-03-05
☒	Test Receiver	R&S	ESCI 7	EC 4501	2019-09-12
☒	Power sensor/ Power meter	Agilent	N1911A/ N1921A	EC 4318	2019-04-19
Frequency Stability					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Signal Analyzer	Anritsu	MS2691A	ETC/L743	2018-12-17
☒	Climate Test Chamber	GWS	MT3065	EC 6021	2019-07-03
Tet Site					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Shielded room	Zhongyu	-	EC 2838	2019-01-07
☒	Semi-anechoic chamber	Albatross project	-	EC 3048	2019-07-31

2.10 Measurement Uncertainty

Test Items	Expanded Uncertainty (k=2)
Conducted maximum output power	0.74dB
RF conducted emission	2.89dB
Radiated Emissions in restricted frequency bands below 1GHz	4.90dB
Radiated Emissions in restricted frequency bands above 1GHz	5.02dB
Power line conducted emission	3.19dB
Frequency stability	0.84×10^{-7}

2.11 Test Summary

This report applies to tested sample only. The test results have been compared directly with the limits, and the measurement uncertainty is recorded. This report shall not be reproduced in part without written approval of Intertek Testing Service Shanghai.

SECTION	TEST ITEM	FCC REFERENCE	IC REFERENCE	RESULT
3	Maximum Output Power and Equivalent Isotropically Radiated Power (EIRP)	15.407 (a)	RSS-247 Issue 2 Clause 6	Pass
4	Maximum Power Spectral Density	15.407 (a)	RSS-247 Issue 2 Clause 6	Pass
5	26 dB Bandwidth and 99% Occupied Bandwidth	15.407 (a)	RSS-247 Issue 2 Clause 6	Pass
6	Undesirable Emission – Conducted	15.407 (b) 15.209	RSS-247 Issue 2 Clause 6 RSS-Gen Issue 5 Clause 8	Pass
7	Undesirable Emission at Band Edge	15.407 (b) 15.209 15.205	RSS-247 Issue 2 Clause 6 RSS-Gen Issue 5 Clause 8	Pass
8	Undesirable Emission – Radiated	15.407 (b) 15.209 15.205	RSS-247 Issue 2 Clause 6 RSS-Gen Issue 5 Clause 8	Pass
9	Conducted Emission	15.407 (b) 15.207	RSS-Gen Issue 5 Clause 8	Pass
10	Frequency Stability	15.407 (g)	RSS-Gen Issue 5 Clause 6	Pass

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

3: Additions, Deviations and Exclusions from Standards: None.

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3 Maximum Output Power and Equivalent Isotropically Radiated Power (EIRP)

Test result: Pass

3.1 Limit

☒ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. (FCC requirement)

☒ The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. (IC requirement)

☒ The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. (IC requirement)

☒ Outdoor fixed devices with a maximum e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below (IC requirement):

- i. -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$
- ii. $-13 - 0.716 (\theta - 8) \text{ dBW/MHz}$ for $8^\circ \leq \theta < 40^\circ$
- iii. $-35.9 - 1.22 (\theta - 40) \text{ dBW/MHz}$ for $40^\circ \leq \theta \leq 45^\circ$
- iv. -42 dBW/MHz for $\theta > 45^\circ$

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

3.2 Test Method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, Clause 15.407(a) and RSS-247 Clause 6.

Using a power meter, spectrum analyzer and attenuator(s), the output power of the EUT was measured at the antenna terminal in accordance with FCC KDB 789033 D02. The path loss between the EUT and the power sensor was measured and recorded for the test band. The path loss and duty cycle factor was entered as an offset into the power meter and spectrum analyzer.

The EUT was configured to transmit on maximum power on the configurations defined in the tables below. In case of the EUT was configured to MIMO mode, since the EUT transmits on two antennas simultaneously in the same frequency range for MIMO devices, i.e., TX MIMO mode, using the Measure-and-Sum approach, the output power at both antennas were tested, and the total output power were then summed mathematically in linear power units according to FCC KDB 662911 D01.

Outdoor Maximum EIRP was calculated in accordance with FCC CFR 47 Part 15, Clause 15.407 (a).

The RMS power was measured and Maximum EIRP calculated and recorded with the results being compared with the limits.

3.3 Test Results

Configuration A1

L-MIMO-SC

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	18.23	18.12	18.10
B		18.23	18.12	18.21
Total		21.24	21.13	21.17

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	18.20	18.13	18.09
B		18.21	18.13	18.21
Total		21.22	21.14	21.16

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	18.18	18.11	18.07
B		18.20	18.12	18.20
Total		21.20	21.13	21.15

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	18.18	18.11	18.09
B		18.18	18.11	18.21
Total		21.19	21.12	21.16

L-MIMO-MC 1 (2C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	QPSK / 20.0 MHz	18.19	-	18.03
B		18.19	-	18.17
Total		21.20	-	21.11

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	16QAM / 20.0 MHz	18.17	-	18.03
B		18.18	-	18.15
Total		21.19	-	21.10

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	64QAM / 20.0 MHz	18.16	-	18.13
B		18.15	-	18.15
Total		21.17	-	21.15

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	256QAM / 20.0 MHz	18.16	-	18.10
B		18.16	-	18.14
Total		21.17	-	21.13

L-MIMO-MC 2 (3C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	QPSK / 20.0 MHz	18.17	-	18.10
B		18.14	-	18.16
Total		21.17	-	21.14

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	16QAM / 20.0 MHz	18.16	-	18.10
B		18.13	-	18.15
Total		21.16	-	21.14

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	64QAM / 20.0 MHz	18.15	-	18.08
B		18.13	-	18.13
Total		21.15	-	21.12

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	256QAM / 20.0 MHz	18.13	-	18.11
B		18.13	-	18.12
Total		21.14	-	21.13

Configuration A2 for FCC

L-MIMO-SC

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	18.10	17.91	18.01
B		18.19	18.17	18.07
Total		21.16	21.06	21.05

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	18.09	17.93	18.01
B		18.17	18.16	18.05
Total		21.14	21.06	21.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	18.06	17.90	18.00
B		18.25	18.14	18.03
Total		21.17	21.04	21.03

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	18.07	17.90	18.00
B		18.24	18.13	18.03
Total		21.17	21.03	21.03

L-MIMO-MC 1 (2C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	QPSK / 20.0 MHz	18.02	17.89	17.90
B		18.24	18.10	18.06
Total		21.14	21.01	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	16QAM / 20.0 MHz	18.00	17.86	17.90
B		18.24	18.09	18.05
Total		21.14	20.99	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	64QAM / 20.0 MHz	17.96	17.90	17.90
B		18.21	18.19	18.05
Total		21.10	21.06	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	256QAM / 20.0 MHz	17.98	17.87	17.90
B		18.20	18.18	18.03
Total		21.10	21.04	20.98

L-MIMO-MC 2 (3C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	QPSK / 20.0 MHz	17.93	17.91	17.97
B		18.11	18.17	18.08
Total		21.03	21.06	21.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	16QAM / 20.0 MHz	17.93	17.91	17.94
B		18.11	18.16	18.08
Total		21.03	21.05	21.02

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	64QAM / 20.0 MHz	17.92	17.91	17.93
B		18.20	18.15	18.06
Total		21.08	21.05	21.01

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	256QAM / 20.0 MHz	17.90	17.90	17.93
B		18.20	18.14	18.06
Total		21.07	21.04	21.01

Configuration A2 for IC

L-MIMO-SC

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	18.10	17.97	18.01
B		18.19	18.18	18.07
Total		21.16	21.09	21.05

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	18.09	17.95	18.01
B		18.17	18.16	18.05
Total		21.14	21.07	21.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	18.06	17.93	18.00
B		18.25	18.13	18.03
Total		21.17	21.04	21.03

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	18.07	17.93	18.00
B		18.24	18.12	18.03
Total		21.17	21.04	21.03

L-MIMO-MC 1 (2C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	QPSK / 20.0 MHz	18.02	17.97	17.90
B		18.24	18.12	18.06
Total		21.14	21.06	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	16QAM / 20.0 MHz	18.00	17.98	17.90
B		18.24	18.11	18.05
Total		21.14	21.06	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	64QAM / 20.0 MHz	17.96	17.97	17.90
B		18.21	18.11	18.05
Total		21.10	21.05	20.99

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	256QAM / 20.0 MHz	17.98	17.95	17.90
B		18.20	18.09	18.03
Total		21.10	21.03	20.98

L-MIMO-MC 2 (3C)

Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	QPSK / 20.0 MHz	17.93	17.94	17.97
B		18.11	18.17	18.08
Total		21.03	21.07	21.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	16QAM / 20.0 MHz	17.93	17.94	17.94
B		18.11	18.16	18.08
Total		21.03	21.06	21.02

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	64QAM / 20.0 MHz	17.92	17.92	17.93
B		18.20	18.15	18.06
Total		21.08	21.05	21.01

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	256QAM / 20.0 MHz	17.90	17.90	17.93
B		18.20	18.15	18.06
Total		21.07	21.04	21.01

Configuration A3

L-MIMO-SC

Maximum Output Power 13dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	12.97	12.88	12.86
B		12.95	13.00	12.98
Total		15.97	15.95	15.93

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	12.95	12.87	12.86
B		12.94	12.99	12.99
Total		15.96	15.94	15.94

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	12.94	12.85	12.84
B		12.92	13.00	12.96
Total		15.94	15.94	15.91

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	12.95	12.86	12.85
B		13.02	13.00	12.96
Total		16.00	15.94	15.92

L-MIMO-MC 1 (2C)

Maximum Output Power 13dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	QPSK / 20.0 MHz	12.99	-	12.83
B		13.03	-	12.97
Total		16.02	-	15.91

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	16QAM / 20.0 MHz	12.98	-	12.83
B		13.03	-	12.97
Total		16.02	-	15.91

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	64QAM / 20.0 MHz	12.94	-	12.82
B		13.01	-	12.96
Total		15.99	-	15.90

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	256QAM / 20.0 MHz	12.94	-	12.82
B		13.02	-	12.95
Total		15.99	-	15.90

L-MIMO-MC 2 (3C)

Maximum Output Power 13dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	QPSK / 20.0 MHz	12.92	-	12.85
B		12.91	-	12.98
Total		15.93	-	15.93

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	16QAM / 20.0 MHz	12.90	-	12.84
B		12.91	-	12.98
Total		15.92	-	15.92

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	64QAM / 20.0 MHz	12.90	-	12.84
B		12.90	-	12.98
Total		15.91	-	15.92

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	256QAM / 20.0 MHz	12.90	-	12.93
B		12.90	-	12.97
Total		15.91	-	15.96

Configuration B1

L-MIMO-SC

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	12.06	11.99	11.91
B		12.12	12.07	12.14
Total		15.10	15.04	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	12.05	11.99	11.92
B		12.10	12.07	12.13
Total		15.09	15.04	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	12.02	11.98	11.89
B		12.09	12.04	12.12
Total		15.07	15.02	15.02

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	12.02	11.97	11.99
B		12.08	12.04	12.12
Total		15.06	15.02	15.07

L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	QPSK / 20.0 MHz	12.03	-	12.01
B		12.13	-	12.05
Total		15.09	-	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	16QAM / 20.0 MHz	12.00	-	12.00
B		12.12	-	12.05
Total		15.07	-	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	64QAM / 20.0 MHz	11.99	-	11.98
B		12.12	-	12.04
Total		15.07	-	15.02

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	256QAM / 20.0 MHz	12.00	-	11.98
B		12.10	-	12.03
Total		15.06	-	15.02

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	QPSK / 20.0 MHz	12.04	-	12.04
B		12.11	-	12.09
Total		15.09	-	15.08

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	16QAM / 20.0 MHz	12.04	-	12.03
B		12.11	-	12.08
Total		15.09	-	15.07

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	64QAM / 20.0 MHz	12.01	-	12.01
B		12.10	-	12.06
Total		15.07	-	15.05

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5320MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	256QAM / 20.0 MHz	12.02	-	12.02
B		12.11	-	12.07
Total		15.08	-	15.06

Configuration B2 for FCC

L-MIMO-SC

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	12.03	11.88	12.07
B		12.21	12.14	12.05
Total		15.13	15.03	15.07

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	12.02	11.89	12.07
B		12.21	12.13	12.03
Total		15.13	15.03	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	12.00	11.86	12.05
B		12.19	12.12	12.02
Total		15.11	15.01	15.05

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	12.00	11.87	12.04
B		12.19	12.12	12.02
Total		15.11	15.01	15.04

L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	QPSK / 20.0 MHz	12.03	11.94	12.03
B		12.18	12.16	12.07
Total		15.12	15.06	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	16QAM / 20.0 MHz	12.03	11.93	12.03
B		12.20	12.15	12.06
Total		15.13	15.05	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	64QAM / 20.0 MHz	12.03	11.91	12.01
B		12.17	12.15	12.05
Total		15.11	15.05	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5580MHz+5600MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	256QAM / 20.0 MHz	12.02	11.91	12.02
B		12.16	12.14	12.04
Total		15.10	15.04	15.04

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	QPSK / 20.0 MHz	12.11	11.96	12.08
B		12.21	12.16	12.09
Total		15.17	15.07	15.10

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	16QAM / 20.0 MHz	12.11	11.95	12.08
B		12.21	12.16	12.09
Total		15.17	15.07	15.10

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	64QAM / 20.0 MHz	12.09	11.95	12.06
B		12.20	12.14	12.08
Total		15.16	15.06	15.08

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5580MHz+5600MHz+ 5620MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	256QAM / 20.0 MHz	12.07	11.94	12.05
B		12.19	12.13	12.07
Total		15.14	15.05	15.07

Configuration B2 for IC

L-MIMO-SC

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	12.03	12.00	12.07
B		12.21	12.17	12.05
Total		15.13	15.10	15.07

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	12.02	12.01	12.07
B		12.21	12.17	12.03
Total		15.13	15.10	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	12.00	11.99	12.05
B		12.19	12.15	12.02
Total		15.11	15.08	15.05

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	12.00	12.00	12.04
B		12.19	12.15	12.02
Total		15.11	15.09	15.04

L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	QPSK / 20.0 MHz	12.03	12.01	12.03
B		12.18	12.16	12.07
Total		15.12	15.10	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	16QAM / 20.0 MHz	12.03	12.00	12.03
B		12.20	12.16	12.06
Total		15.13	15.09	15.06

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	64QAM / 20.0 MHz	12.03	12.00	12.01
B		12.17	12.14	12.05
Total		15.11	15.08	15.04

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz	Channel Position M _{RFBW} 5560MHz+5580MHz	Channel Position T _{RFBW} 5680MHz+5700MHz
A	256QAM / 20.0 MHz	12.02	11.99	12.02
B		12.16	12.14	12.04
Total		15.10	15.08	15.04

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	QPSK / 20.0 MHz	12.11	12.04	12.08
B		12.21	12.20	12.09
Total		15.17	15.13	15.10

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	16QAM / 20.0 MHz	12.11	12.03	12.08
B		12.21	12.19	12.09
Total		15.17	15.12	15.10

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	64QAM / 20.0 MHz	12.09	12.01	12.06
B		12.20	12.17	12.08
Total		15.16	15.10	15.08

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5500MHz+5520MHz+ 5540MHz	Channel Position M _{RFBW} 5540MHz+5560MHz+ 5580MHz	Channel Position T _{RFBW} 5660MHz+5680MHz+ 5700MHz
A	256QAM / 20.0 MHz	12.07	12.01	12.05
B		12.19	12.16	12.07
Total		15.14	15.10	15.07

Configuration B3

L-MIMO-SC

Maximum Output Power 7dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	6.86	6.83	6.74
B		6.85	6.89	6.94
Total		9.87	9.87	9.85

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	6.86	6.83	6.74
B		6.85	6.88	6.93
Total		9.87	9.87	9.85

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	6.83	6.81	6.74
B		6.84	6.86	6.91
Total		9.85	9.85	9.84

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	6.84	6.80	6.74
B		6.84	6.85	6.89
Total		9.85	9.84	9.83

L-MIMO-MC 1 (2C)

Maximum Output Power 7dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	QPSK / 20.0 MHz	6.88	-	6.80
B		6.92	-	6.87
Total		9.91	-	9.85

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	16QAM / 20.0 MHz	6.86	-	6.79
B		6.91	-	6.87
Total		9.90	-	9.84

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	64QAM / 20.0 MHz	6.84	-	6.76
B		6.90	-	6.86
Total		9.88	-	9.82

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5300MHz+5320MHz
A	256QAM / 20.0 MHz	6.85	-	6.78
B		6.91	-	6.85
Total		9.89	-	9.83

L-MIMO-MC 2 (3C)

Maximum Output Power 7dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	QPSK / 20.0 MHz	6.86	-	6.83
B		6.93	-	6.91
Total		9.91	-	9.88

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	16QAM / 20.0 MHz	6.86	-	6.85
B		6.93	-	6.90
Total		9.91	-	9.89

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	64QAM / 20.0 MHz	6.82	-	6.83
B		6.92	-	6.89
Total		9.88	-	9.87

Antenna	Modulation / Carrier bandwidth (MHz)	Conducted Output Power (dBm)		
		Channel Position B _{RFBW} 5260MHz+5280MHz+ 5300MHz	Channel Position M _{RFBW}	Channel Position T _{RFBW} 5280MHz+5300MHz+ 5320MHz
A	256QAM / 20.0 MHz	6.83	-	6.84
B		6.92	-	6.88
Total		9.89	-	9.87

Maximum Output Power and Maximum EIRP:

	Configuration A1	Configuration A2	Configuration A3	Configuration B1	Configuration B2	Configuration B3
Maximum Total Output Power (dBm)	21.24	21.17	16.02	15.10	15.17	9.91
Maximum E.I.R.P. (dBm)	27.24	27.17	22.02	27.10	27.17	21.91
Outdoor Fixed use for IC Maximum EIRP*	-	-	< 200mW	-	-	< 200mW
* Note: The maximum EIRP is less than 200mW for outdoor fixed use in Canada, so EIRP at different elevations is not needed to test.						

Maximum Output Power and Maximum E.I.R.P. Limit calculation:

Frequency range (MHz)	Configuration	Min 99% emission Bandwidth (MHz)	Min 26dB emission Bandwidth (MHz)	FCC Output Power limit	IC Output Power limit	IC EIRP limit
5250 - 5340	A1	17.826	18.480	23.51	23.67	29.67
	B1	17.828	18.460	23.51	23.66	29.66
5480 - 5710	A2	17.811	18.540	23.51	23.68	29.68
	B2	17.797	18.620	23.50	23.70	29.70
5250 - 5340	A3	17.826	18.480	23.51	23.67	29.67
	B3	17.828	18.460	23.51	23.66	29.66

4 Power Spectrum Density

Test result: Pass

4.1 Limit

☒ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the less of original and original + (6 - antenna gain - beamforming gain).

4.2 Test method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, Clause 15.407(a) and RSS-247 Clause 6.

Using a Spectrum Analyzer and attenuator(s), the Power Spectral Density (PSD) of the EUT was measured at the antenna terminal. The path loss between the EUT and the Spectrum Analyzer was measured and recorded for the test band. The path loss and duty cycle factor were entered as an offset into Spectrum Analyzer.

The EUT was configured to transmit on maximum power on the configurations defined in the tables below. Since the EUT transmits on two antennas simultaneously in the same frequency range for MIMO devices, i.e., TX MIMO mode, using the Measure-and-Sum approach, the PSD at both antennas were tested, and the total PSD were then summed mathematically in linear power units according to FCC KDB 662911 D01.

The PSD was measured and recorded with the results being compared with the limits.

4.3 Test Results

Configuration A1

L-MIMO-SC

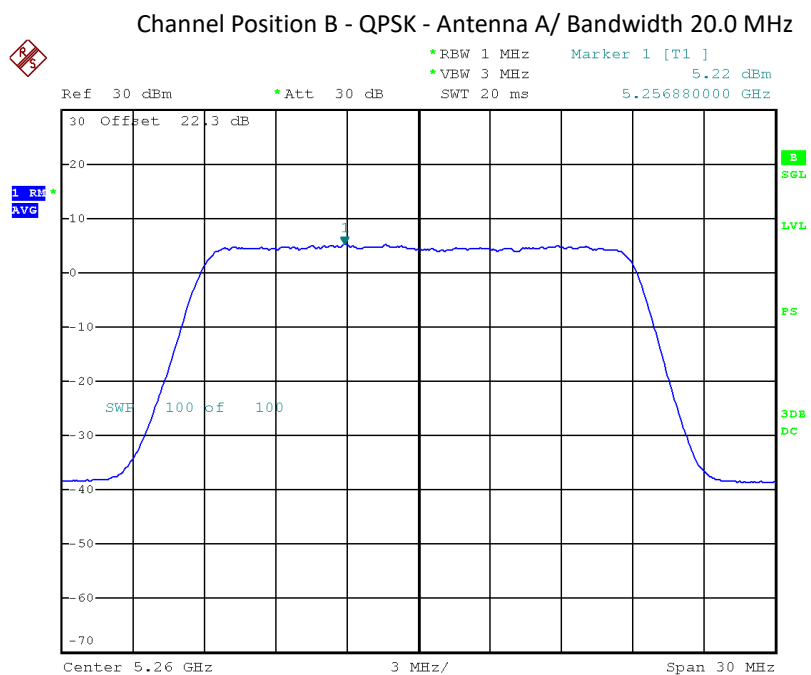
Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	6.903	6.973	7.073
B		6.613	6.413	6.683
Total		9.77	9.71	9.89

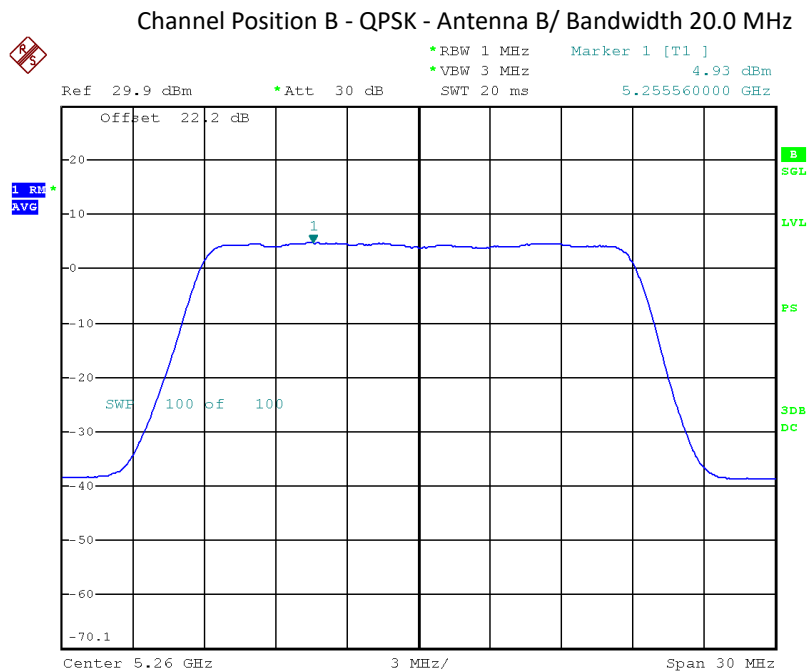
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	7.033	7.233	7.473
B		6.973	6.853	7.003
Total		10.01	10.06	10.25

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	6.893	6.723	6.843
B		6.853	6.323	6.543
Total		9.88	9.54	9.71

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	6.893	6.753	6.883
B		6.583	6.163	6.533
Total		9.75	9.48	9.72

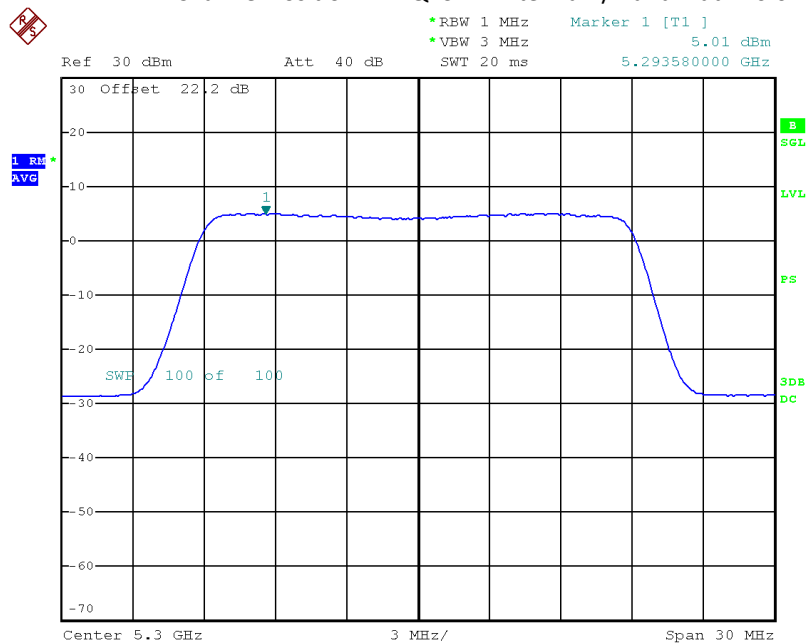


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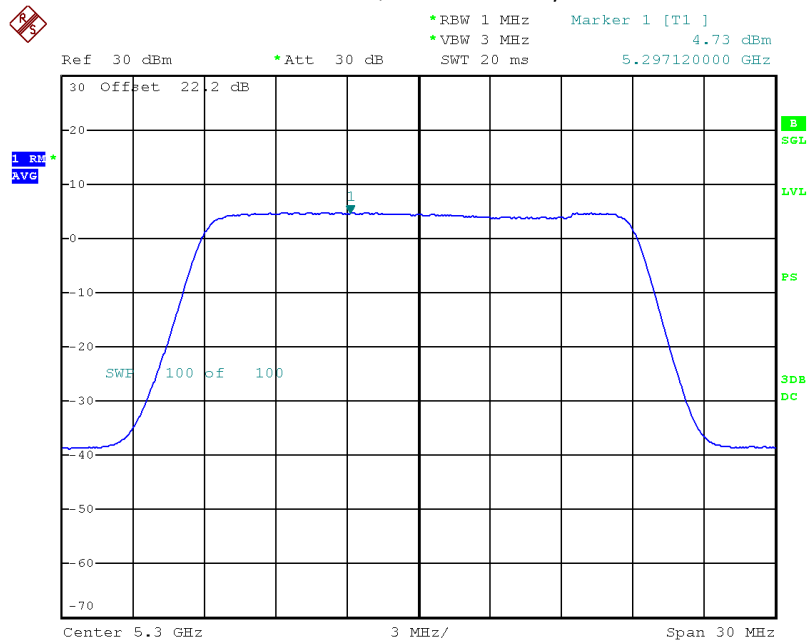
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Channel Position M – QPSK - Antenna A/ Bandwidth 20.0 MHz

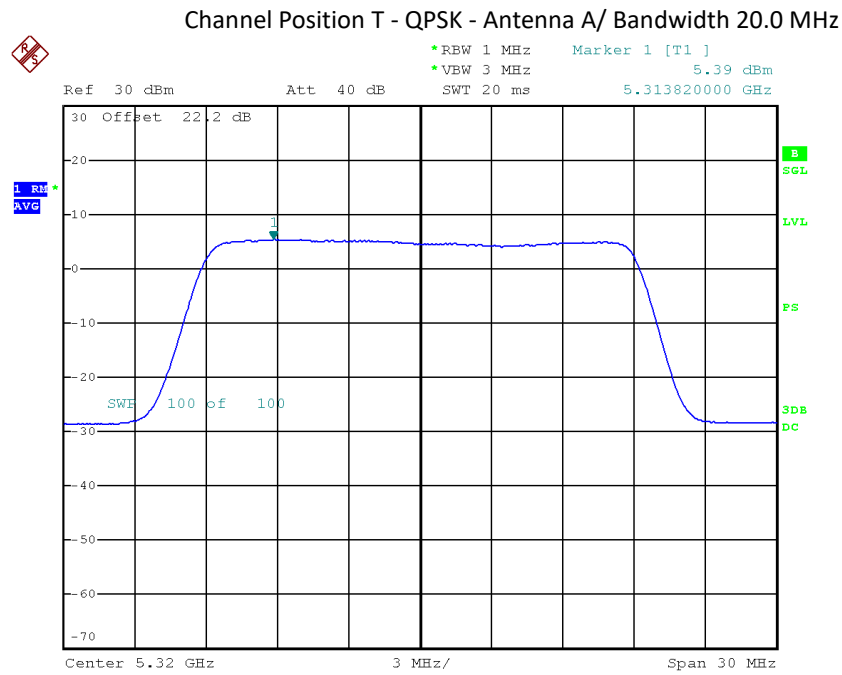


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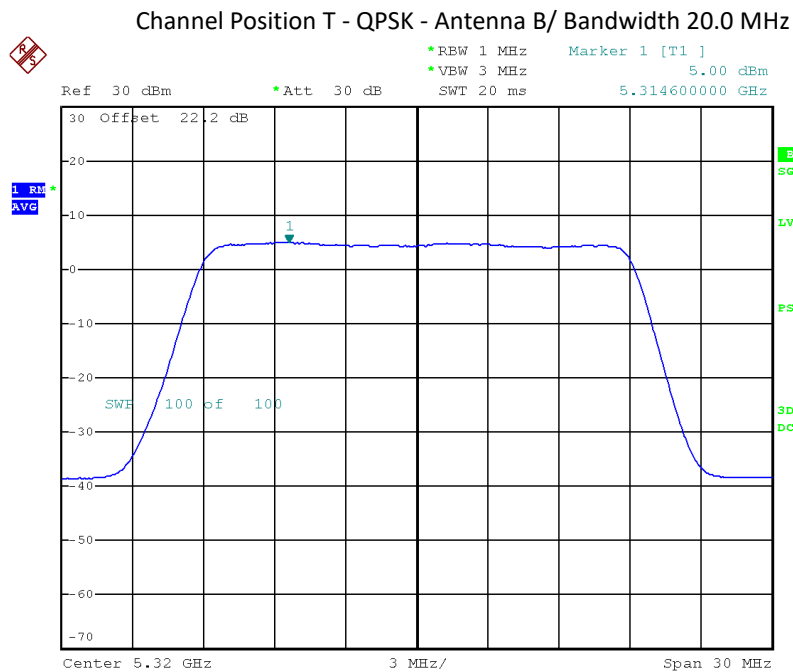
Channel Position M - QPSK - Antenna B/ Bandwidth 20.0 MHz



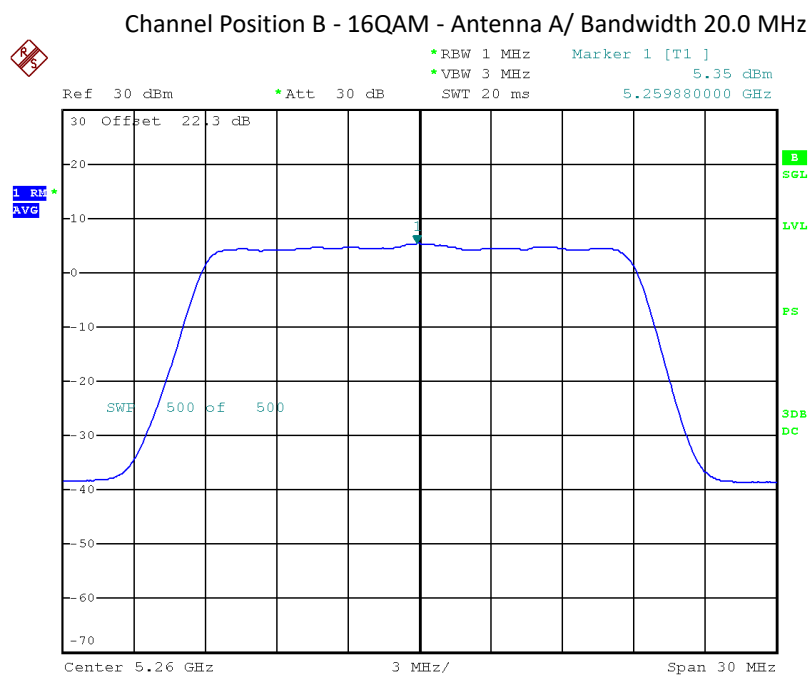
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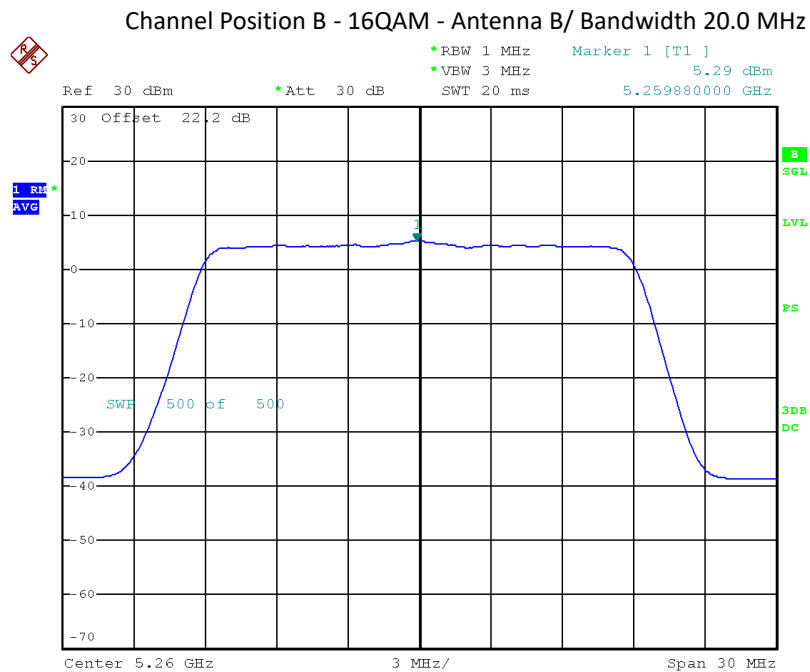
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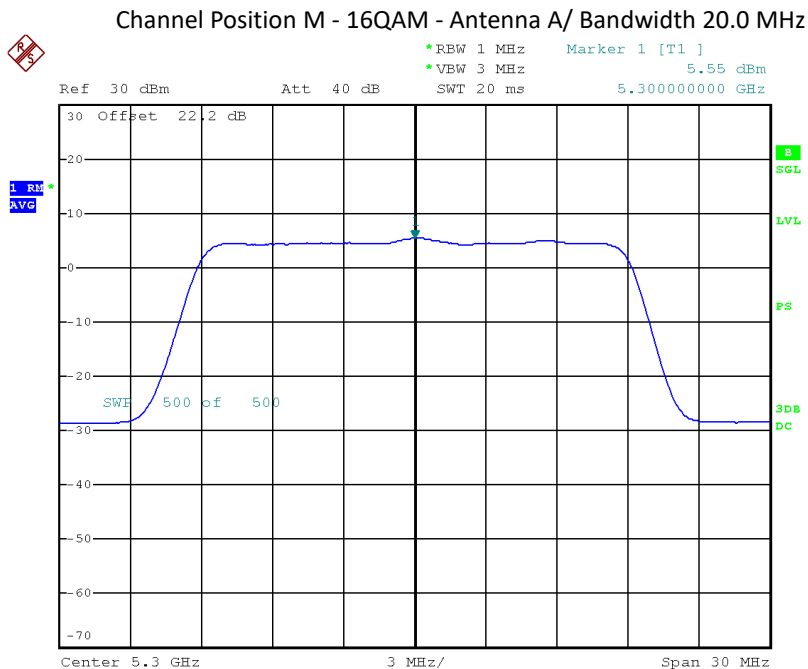
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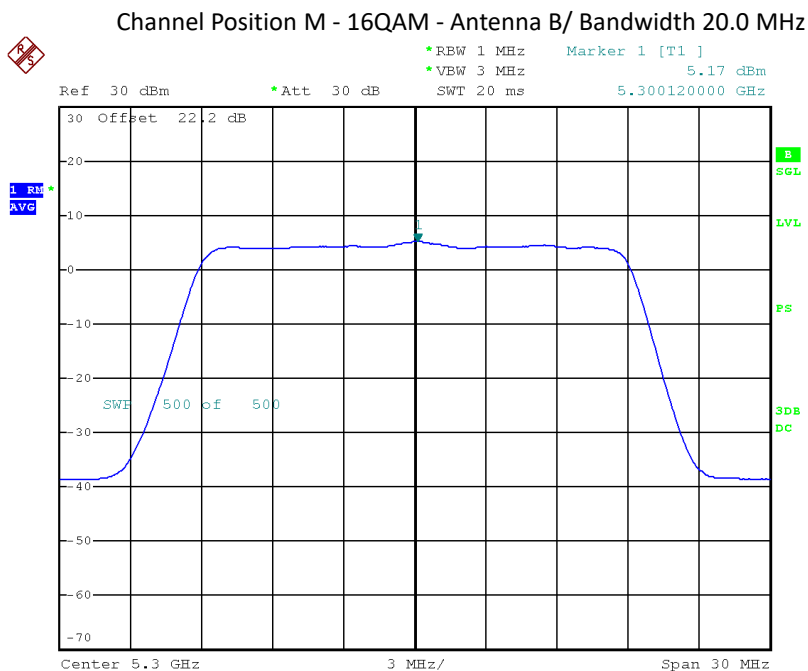
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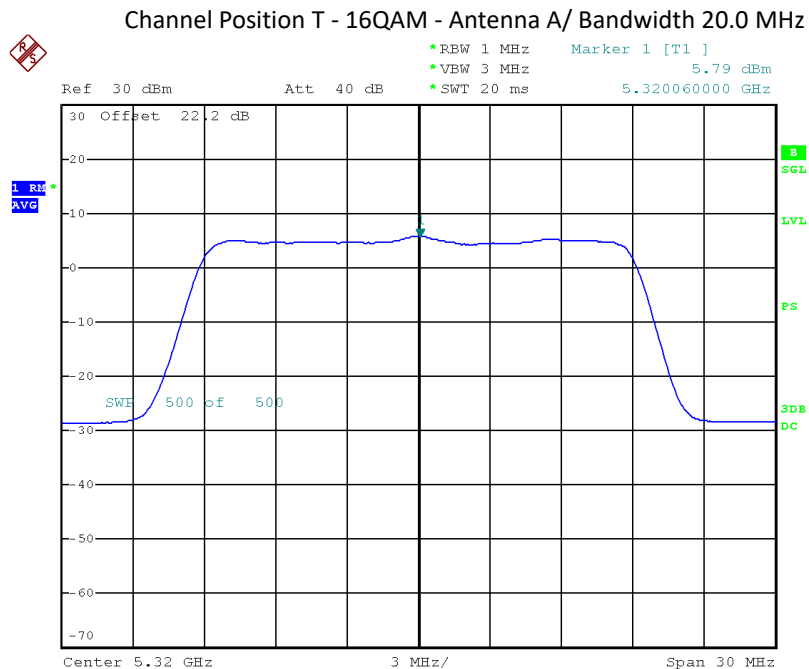
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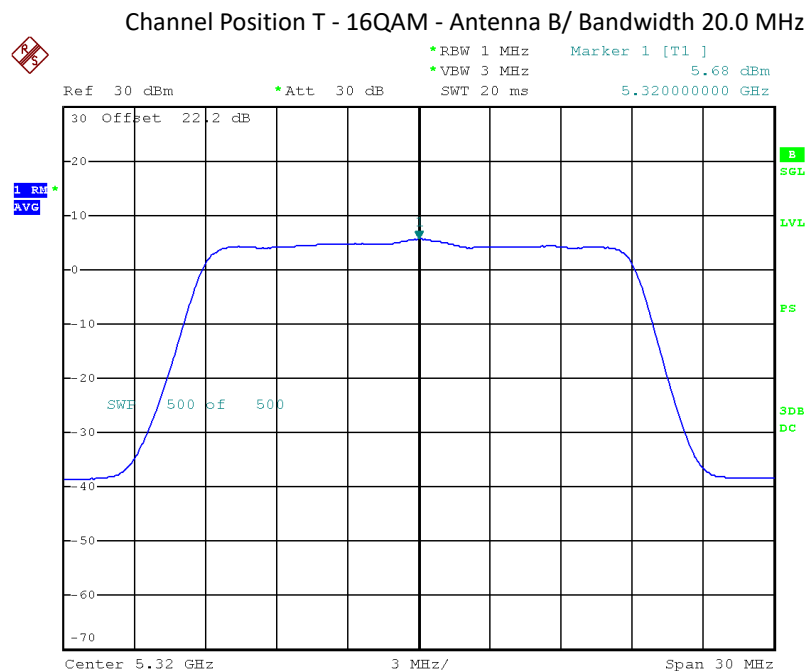
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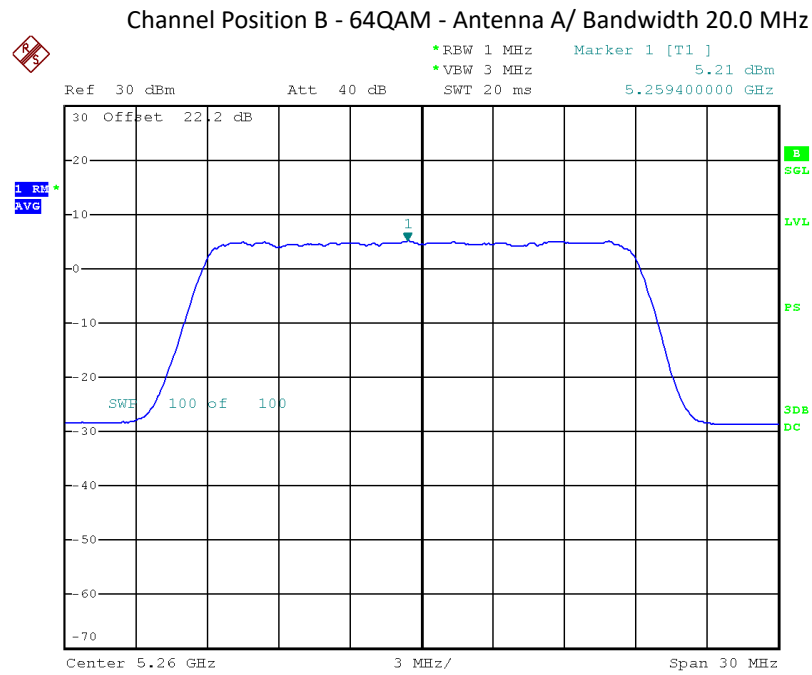
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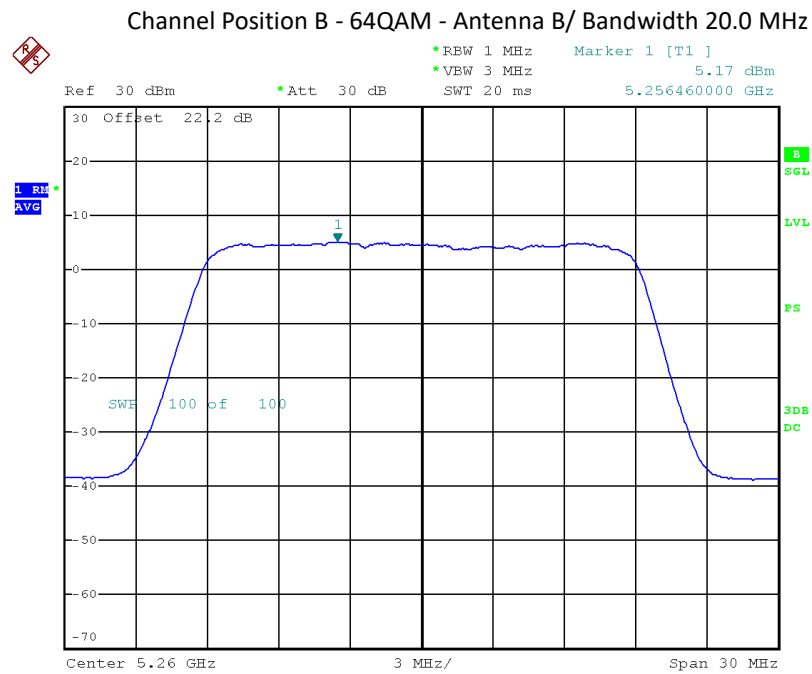
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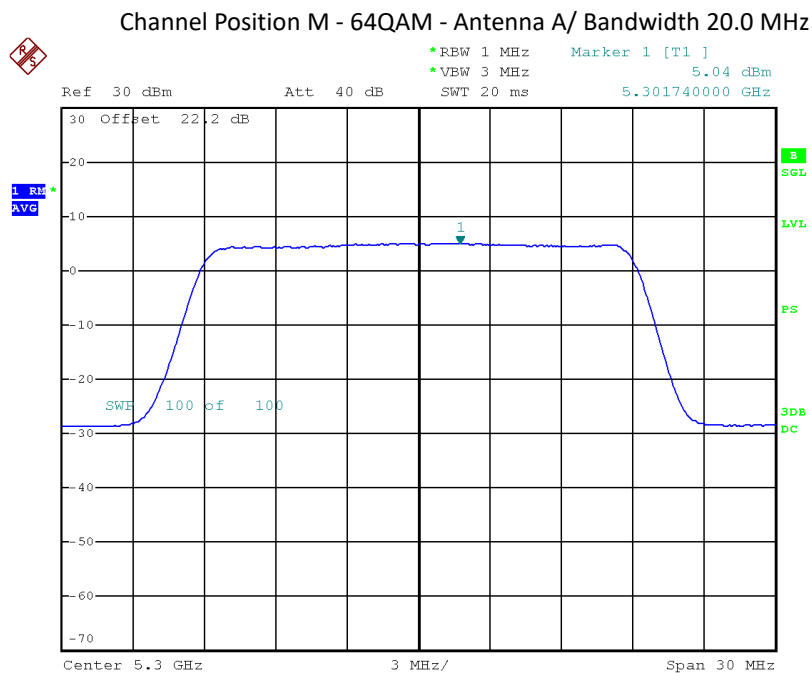
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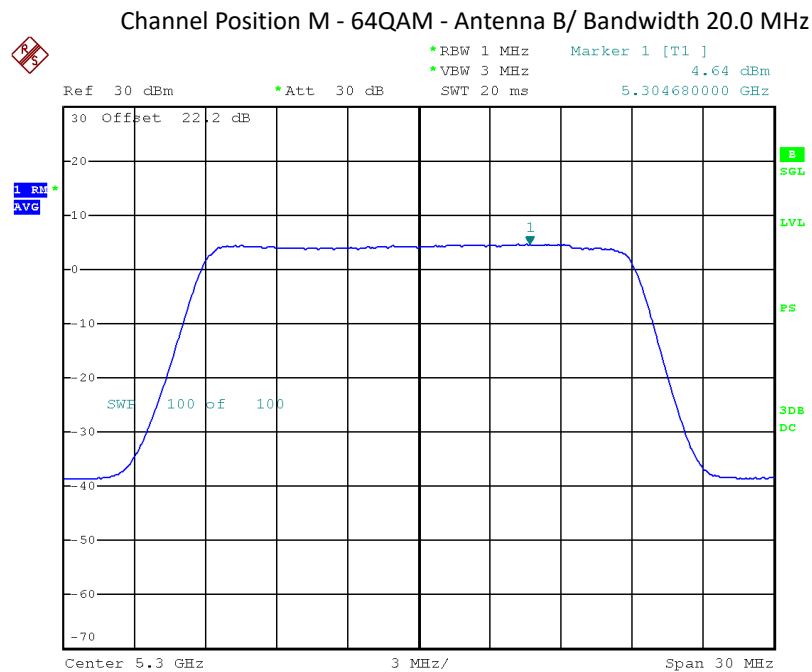
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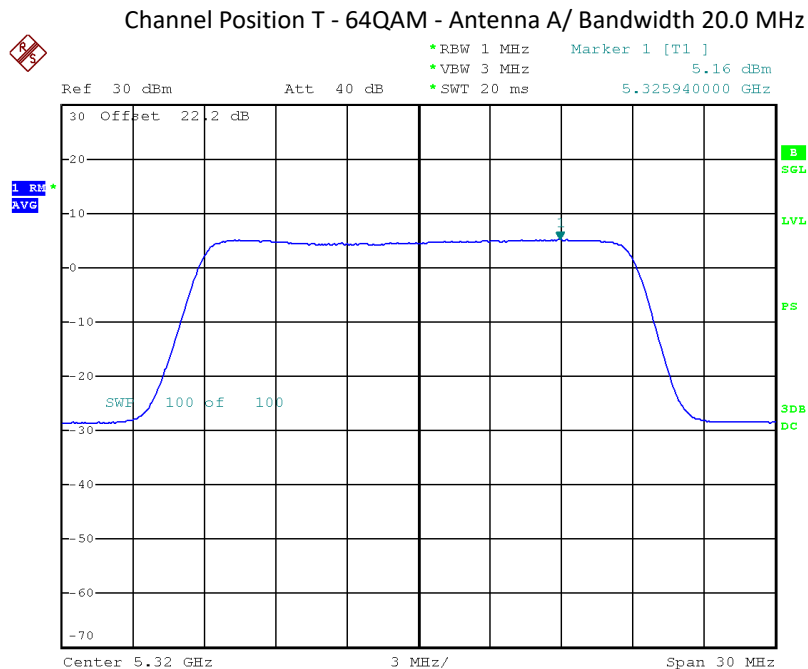
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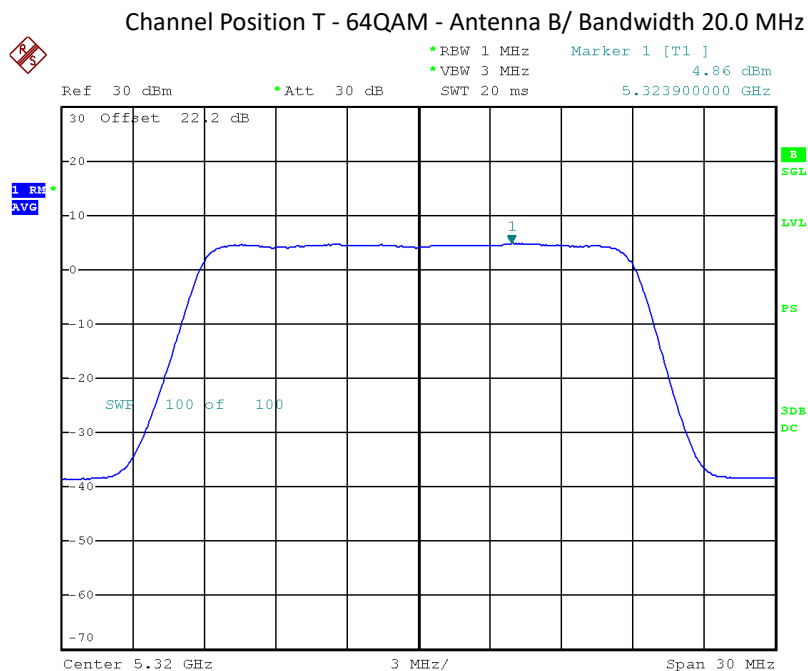
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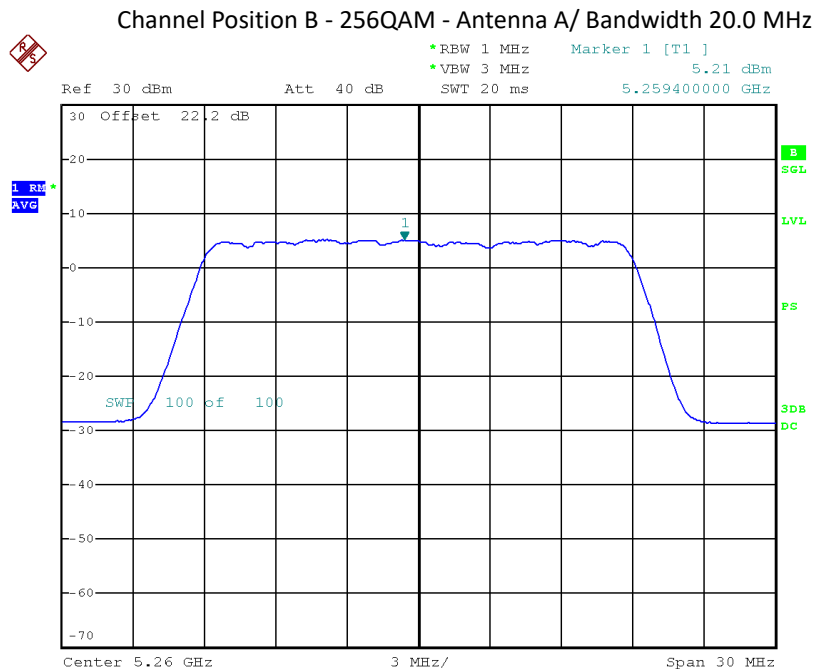
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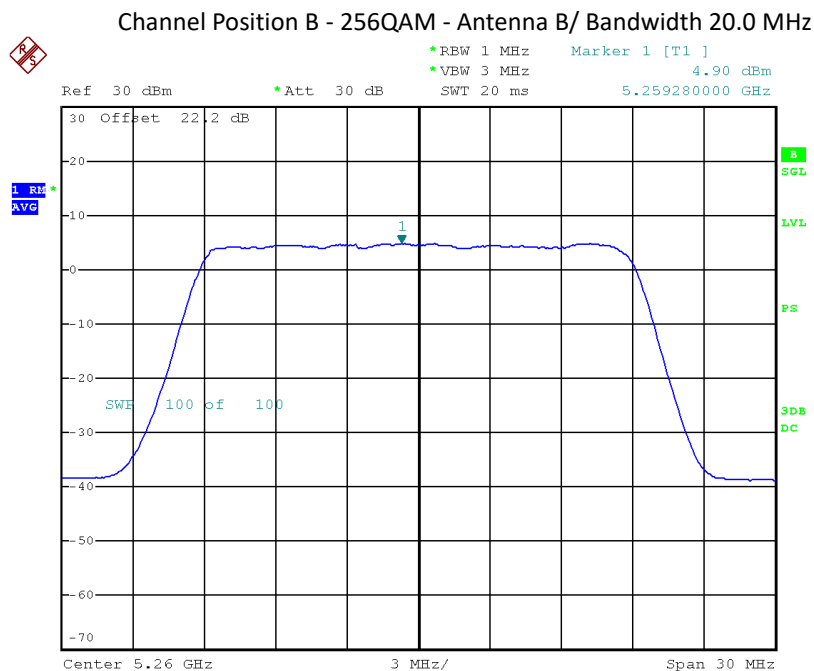
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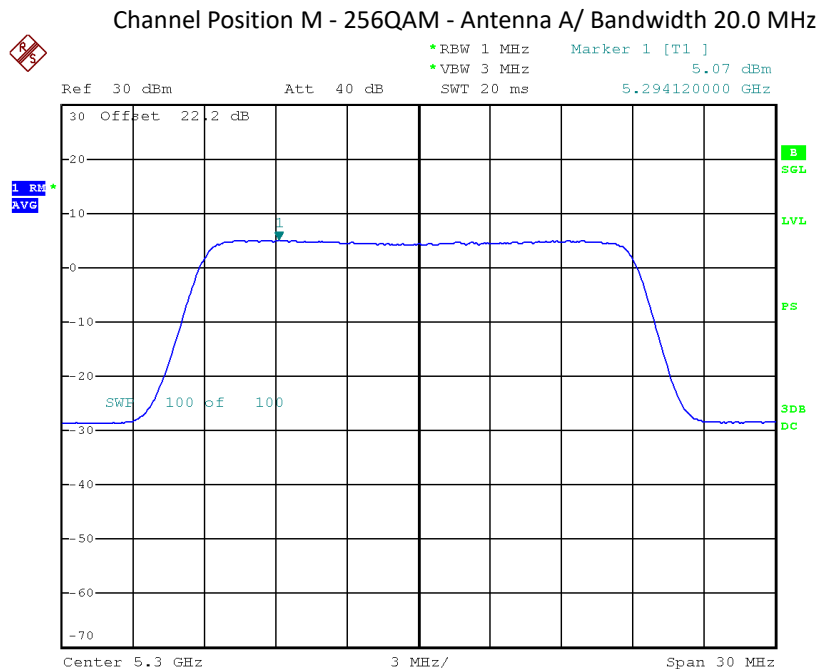
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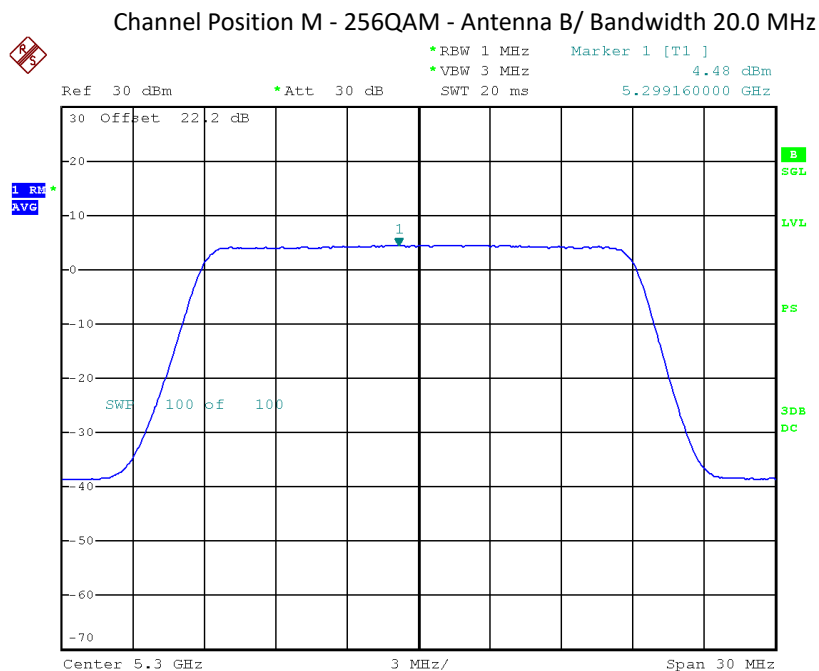
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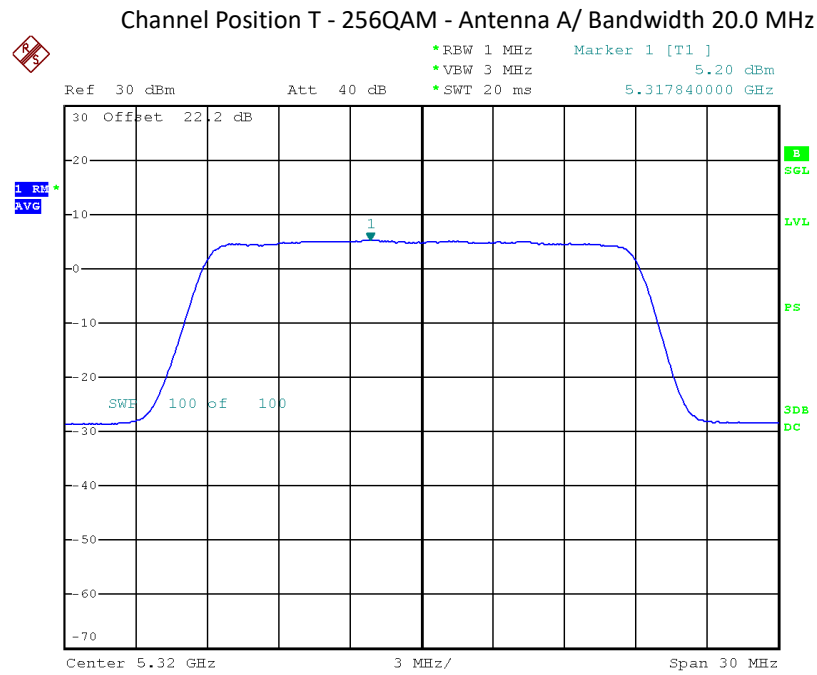
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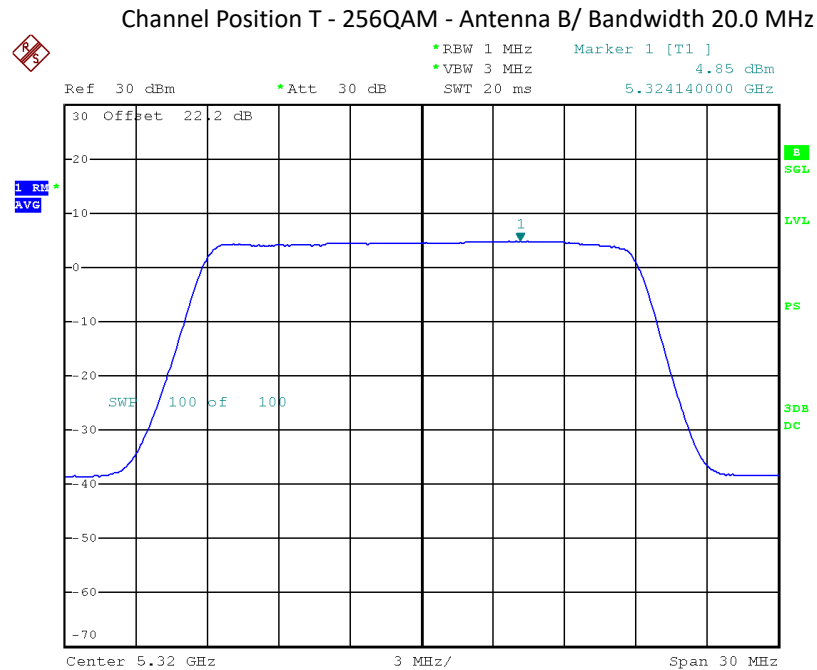
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Configuration A2 for FCC

L-MIMO-SC

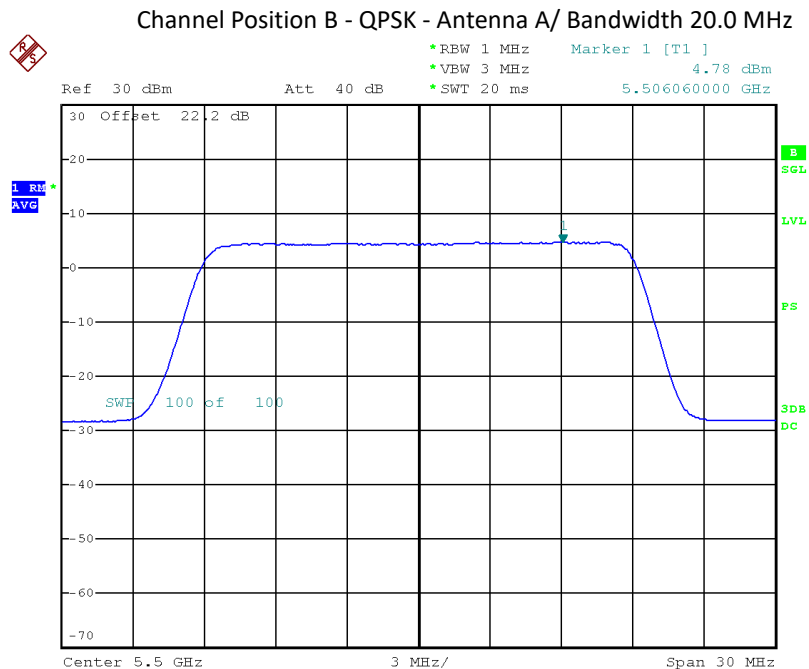
Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	6.463	6.213	6.083
B		6.463	6.293	5.883
Total		9.47	9.26	8.99

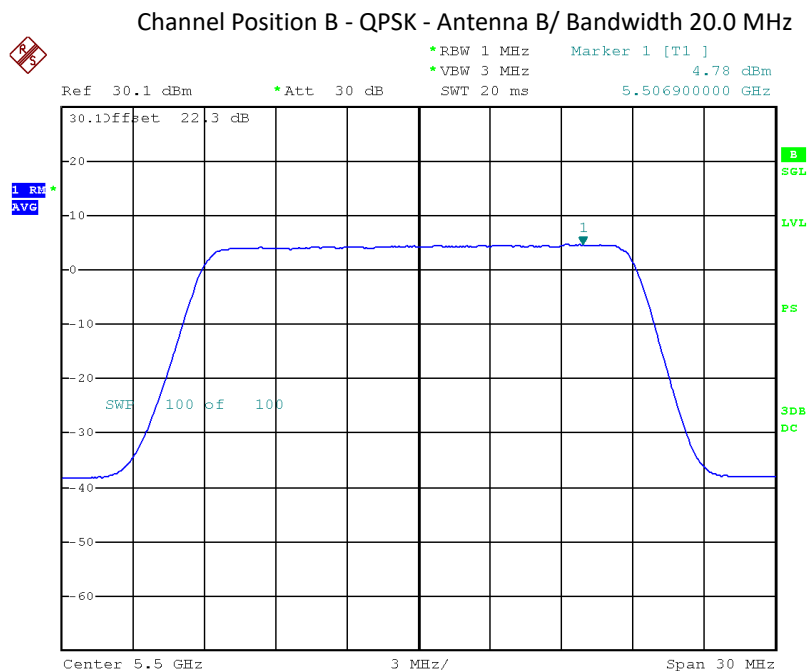
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	7.063	6.763	6.763
B		7.103	7.133	7.003
Total		10.09	9.96	9.90

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	6.443	6.153	6.053
B		6.553	6.573	6.253
Total		9.51	9.38	9.16

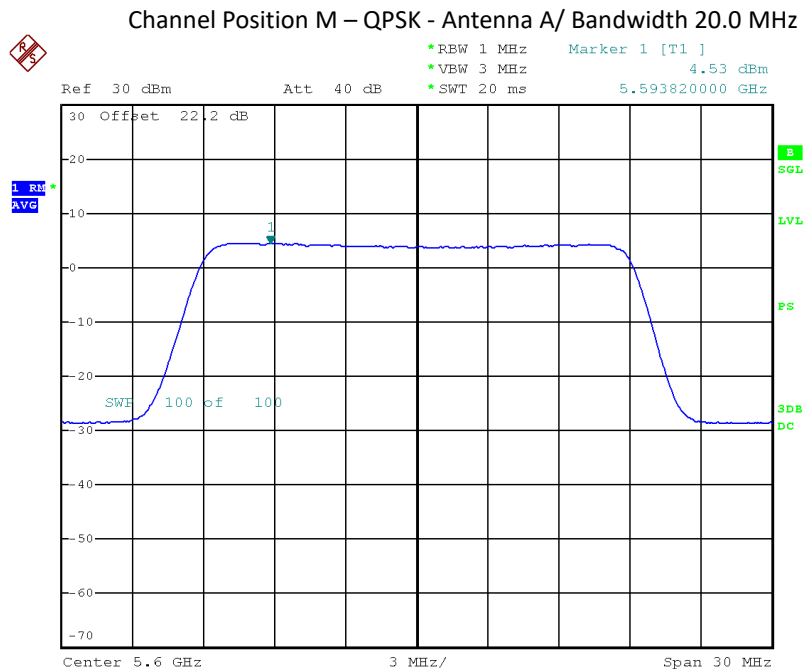
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	6.493	6.243	6.023
B		6.543	6.493	6.273
Total		9.53	9.38	9.16



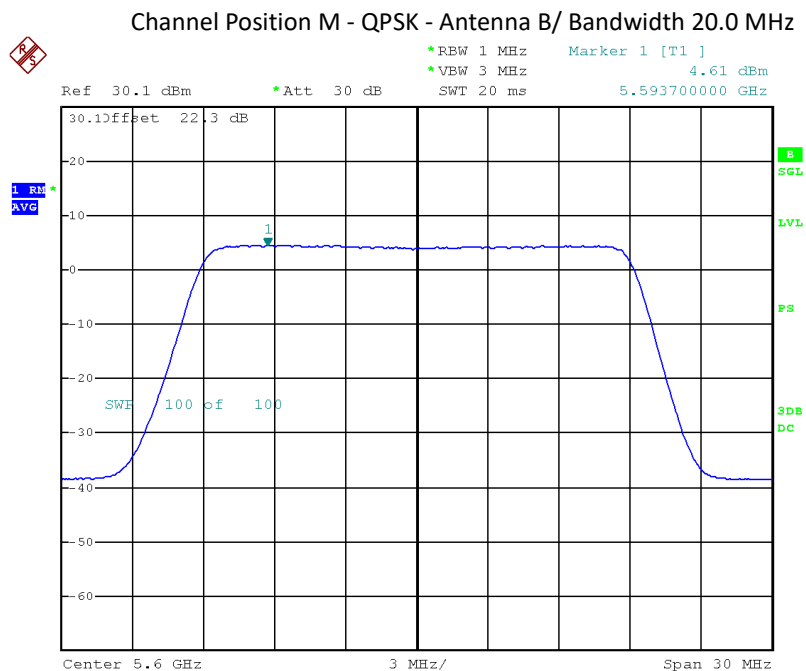
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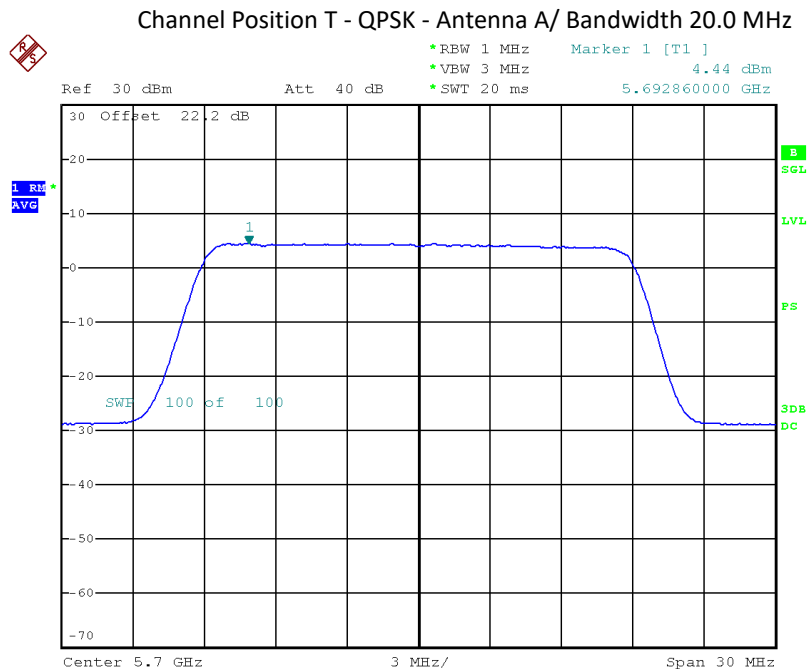
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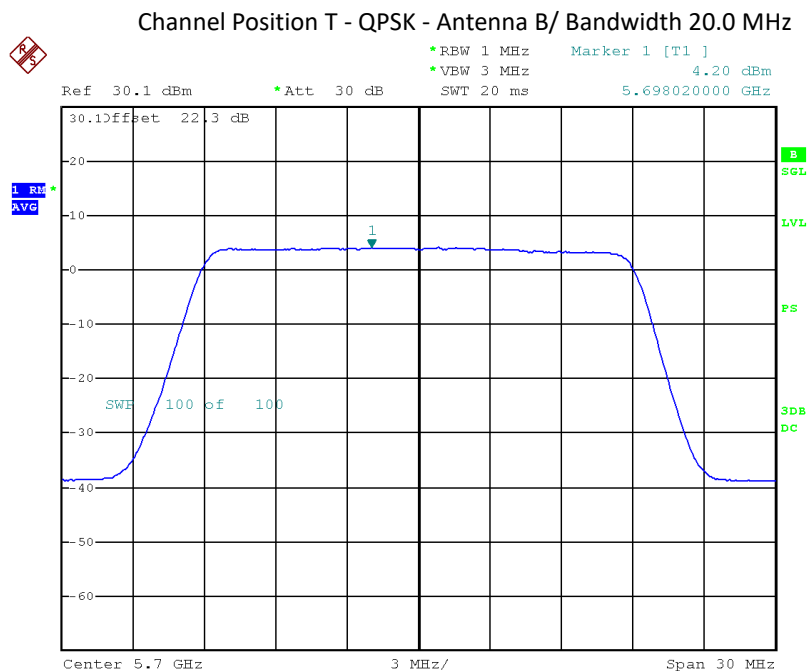
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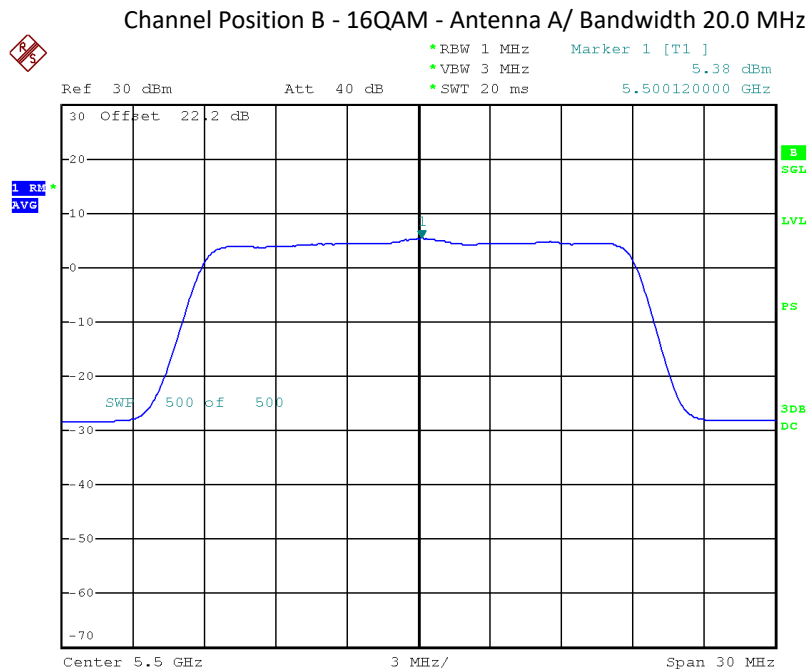
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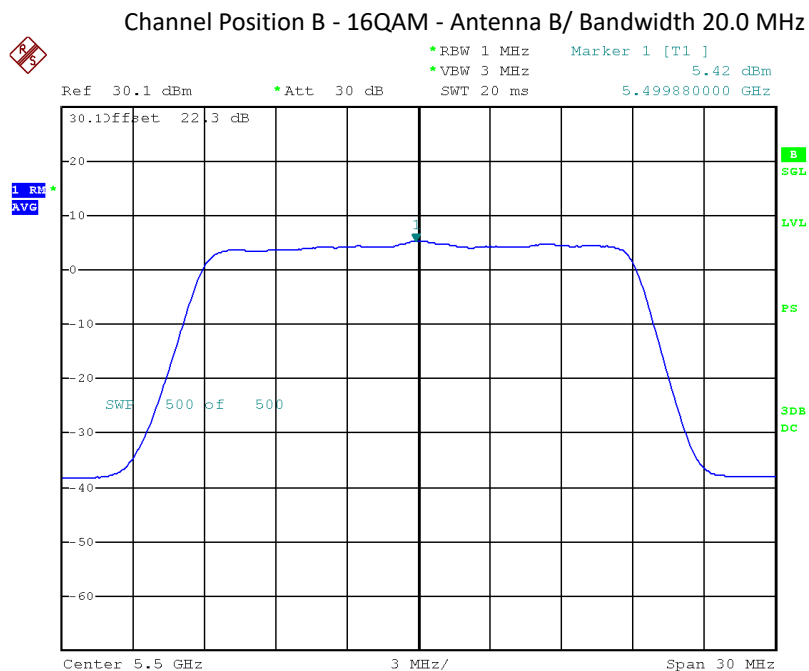
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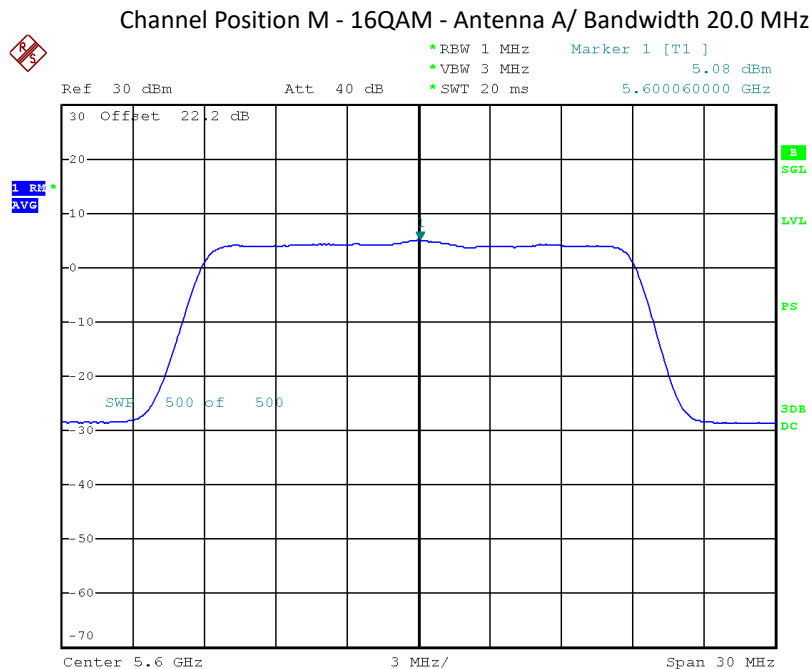
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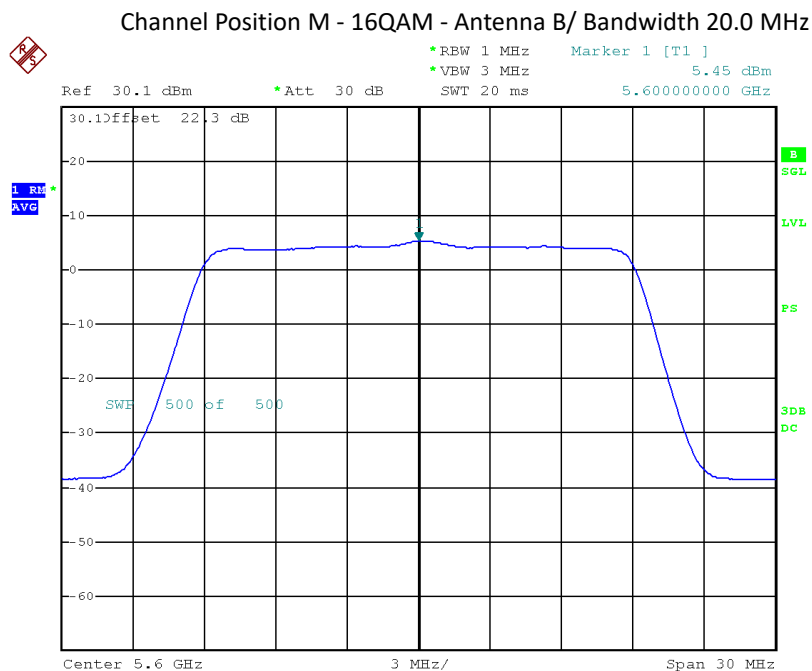
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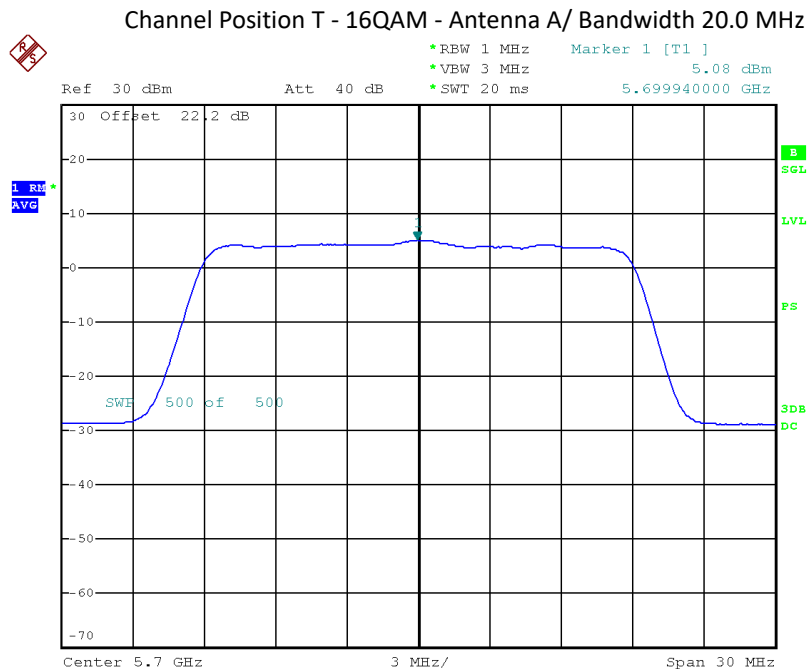
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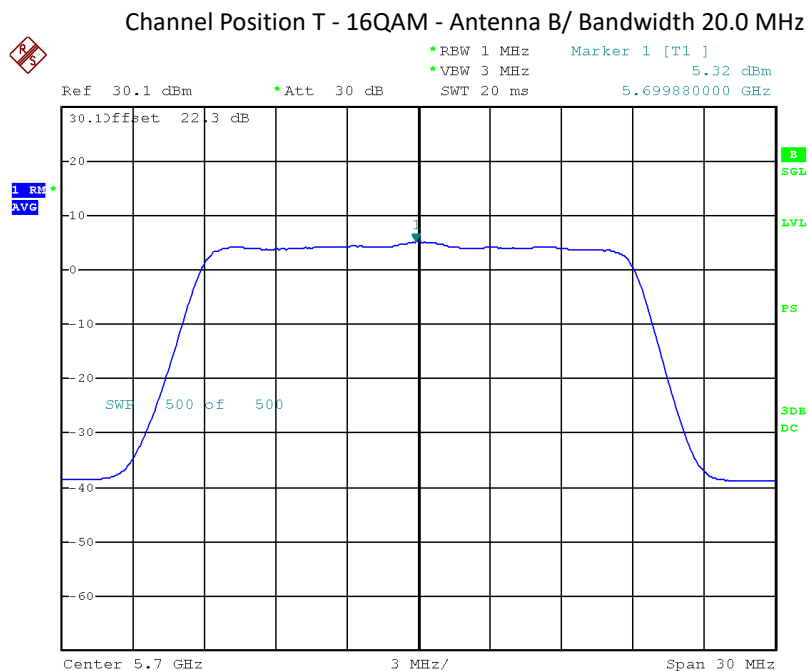
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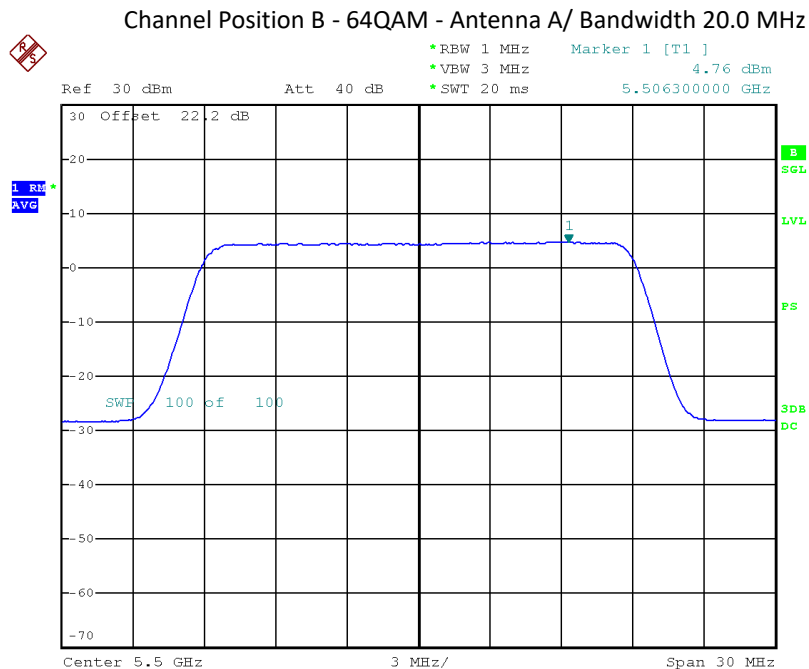
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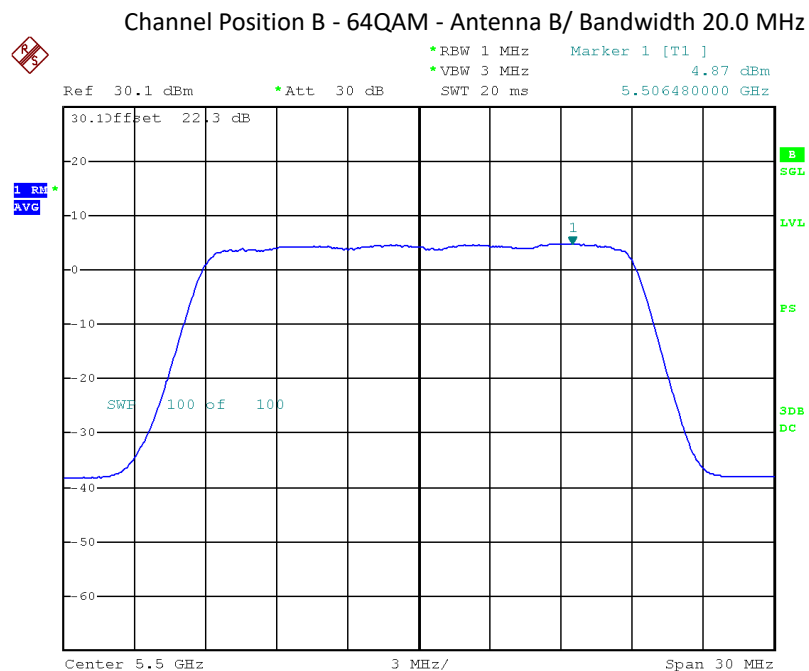
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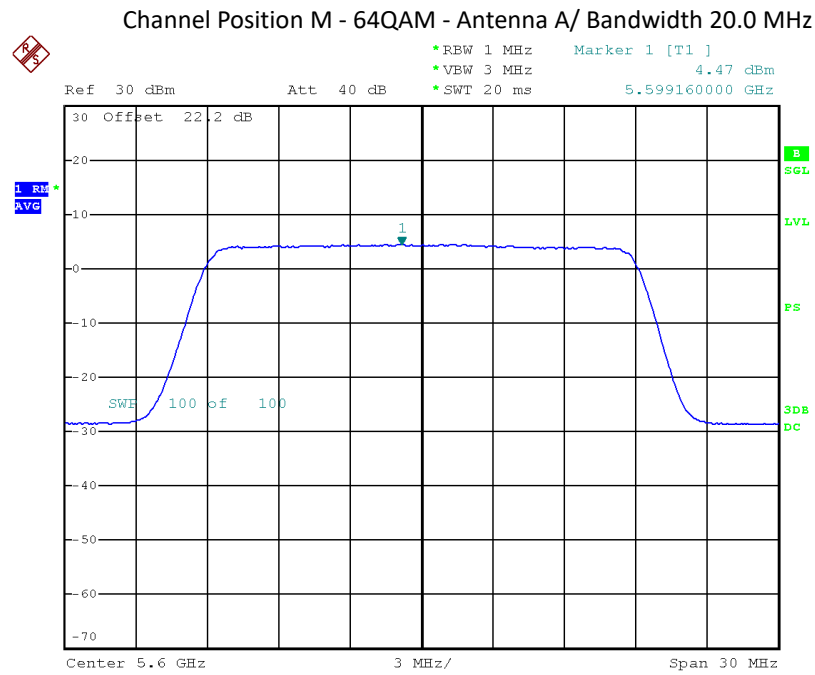
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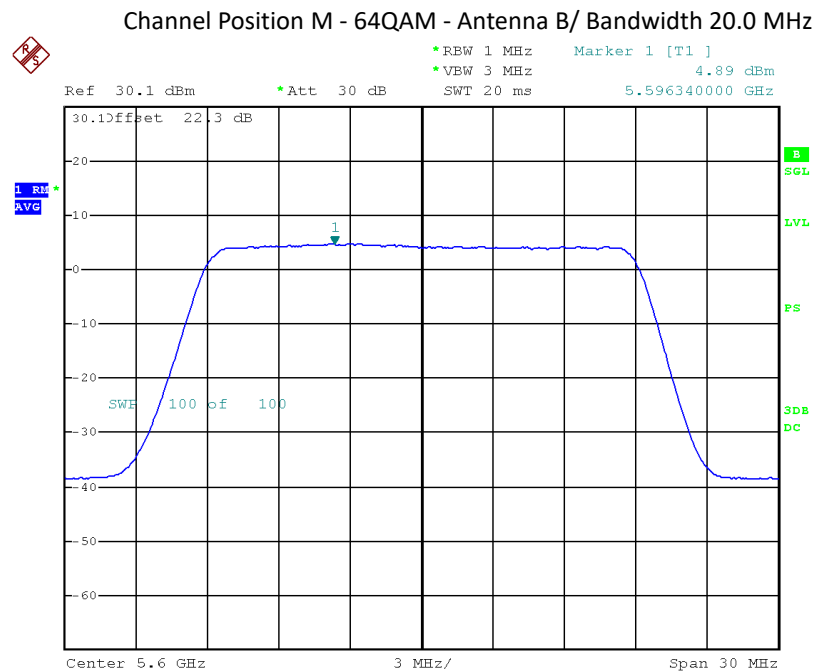
Date: 18.OCT.2018 06:39:58



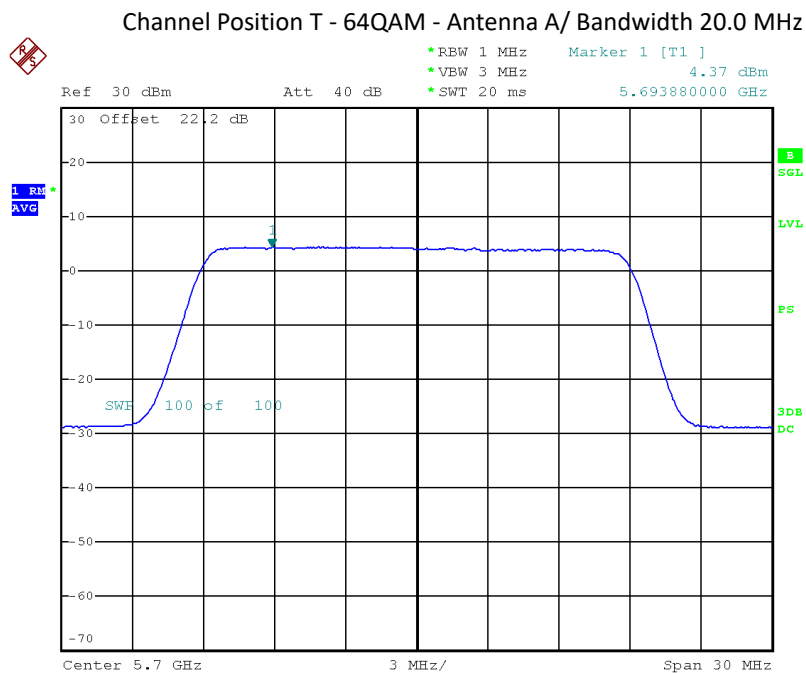
Date: 18.OCT.2018 09:50:57



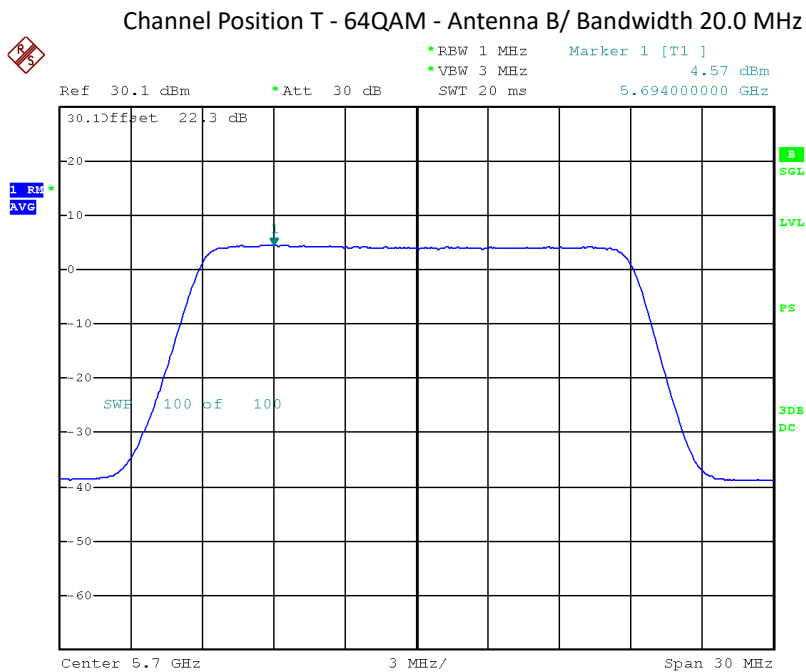
Date: 18.OCT.2018 06:52:25



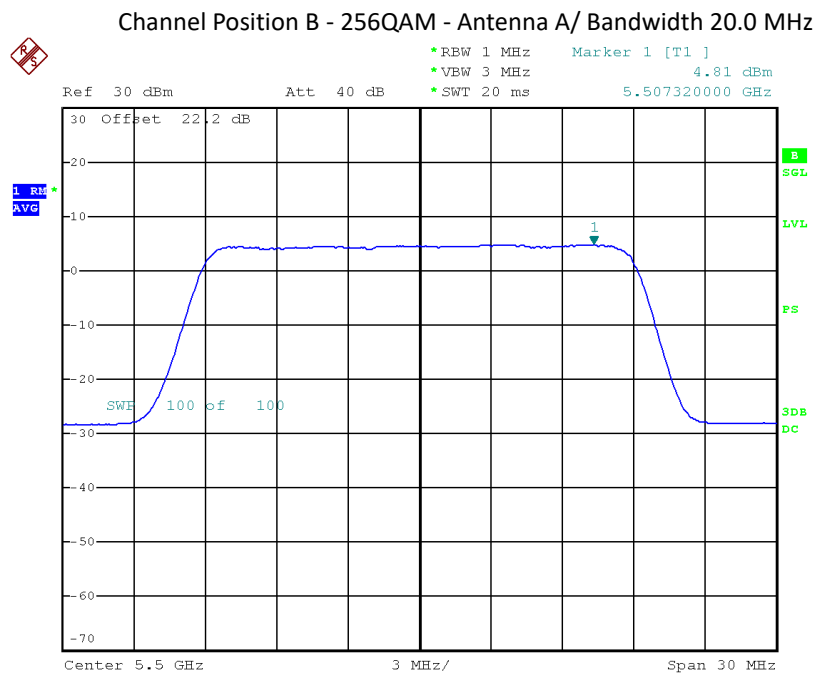
Date: 18.OCT.2018 09:58:28



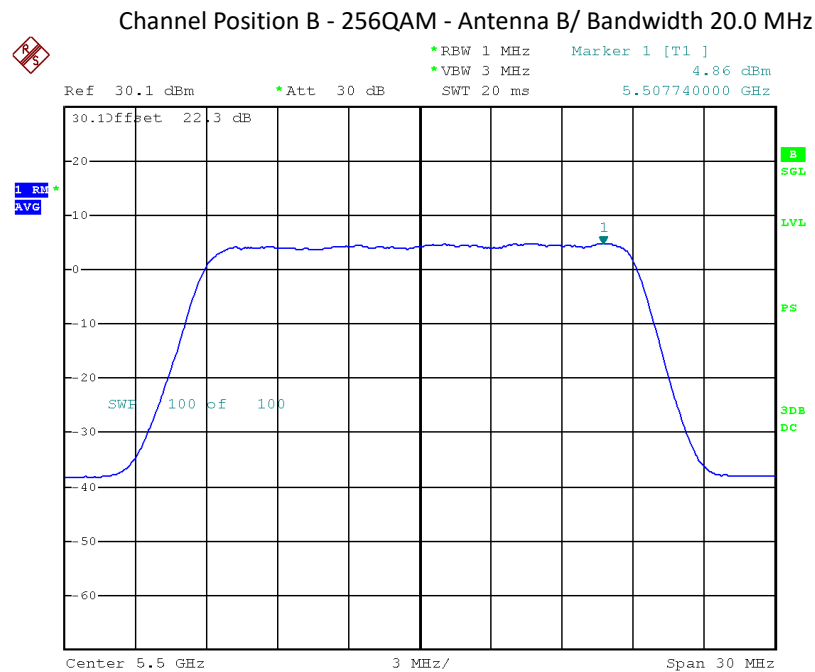
Date: 18.OCT.2018 06:56:34



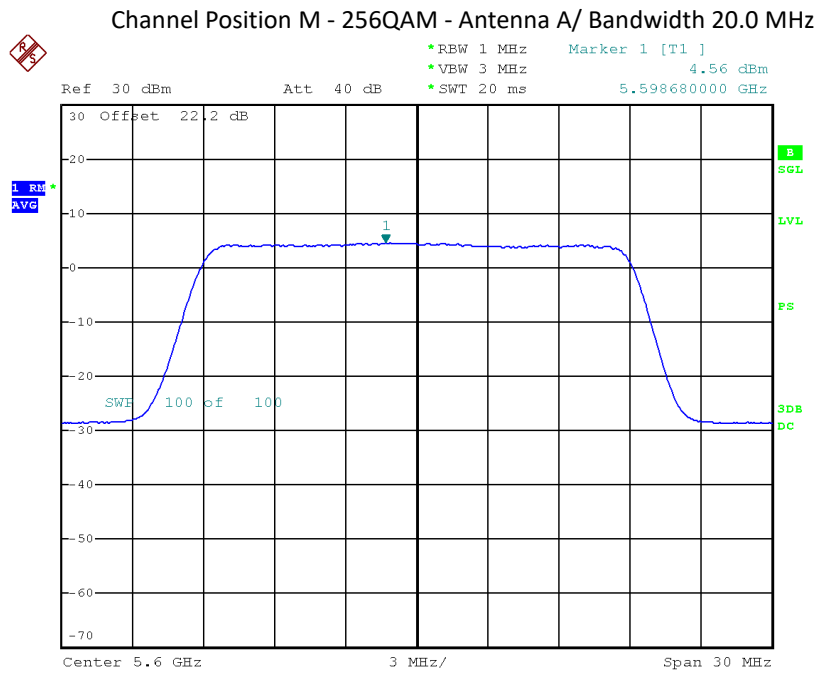
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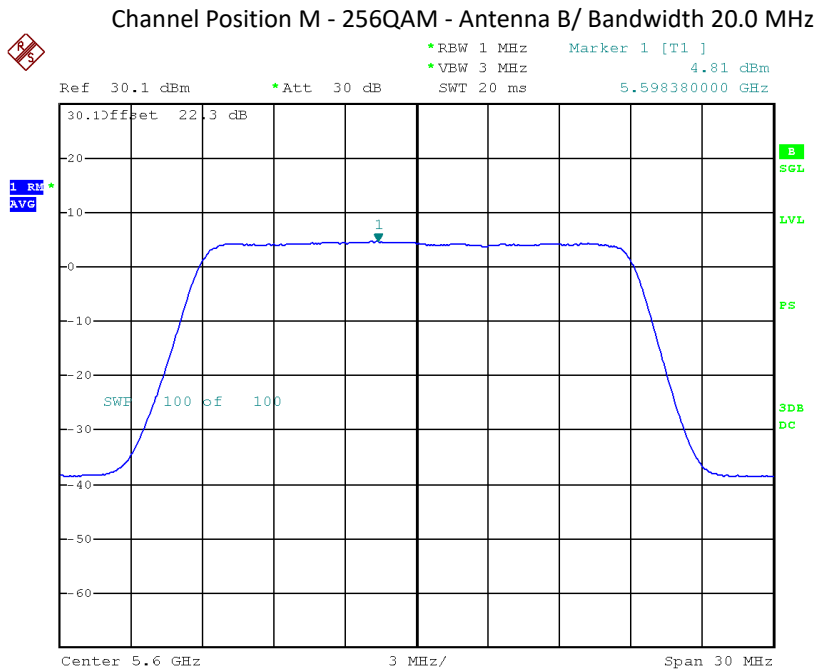
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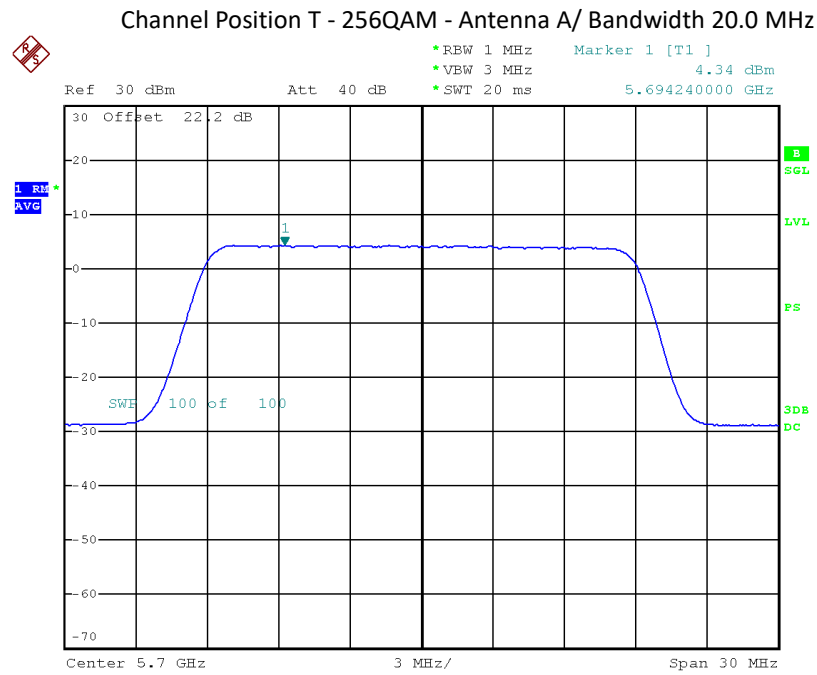
Date: 18.OCT.2018 09:51:26



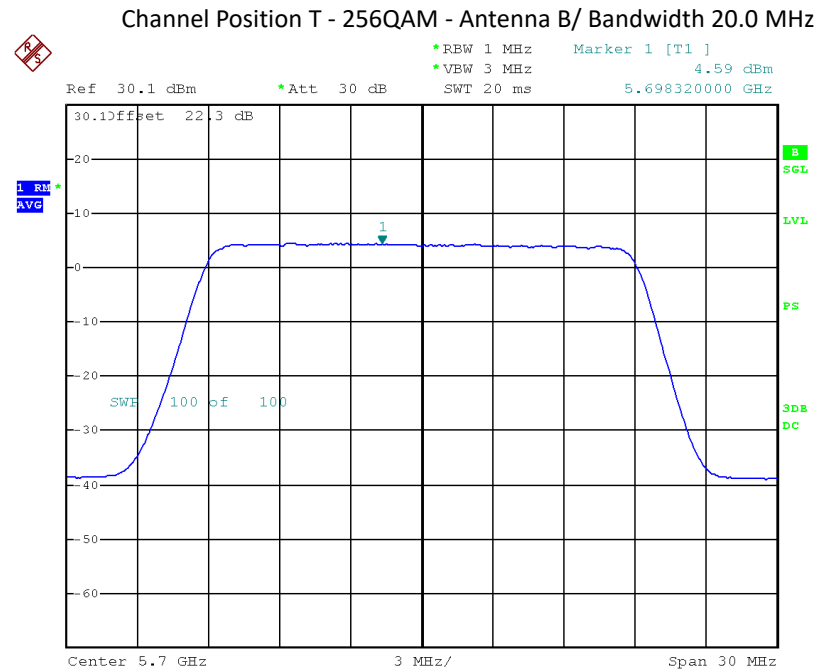
Date: 18.OCT.2018 06:52:54



Date: 18.OCT.2018 09:58:57



Date: 18.OCT.2018 06:57:04



Date: 18.OCT.2018 10:04:43

Configuration A2 for IC

L-MIMO-SC

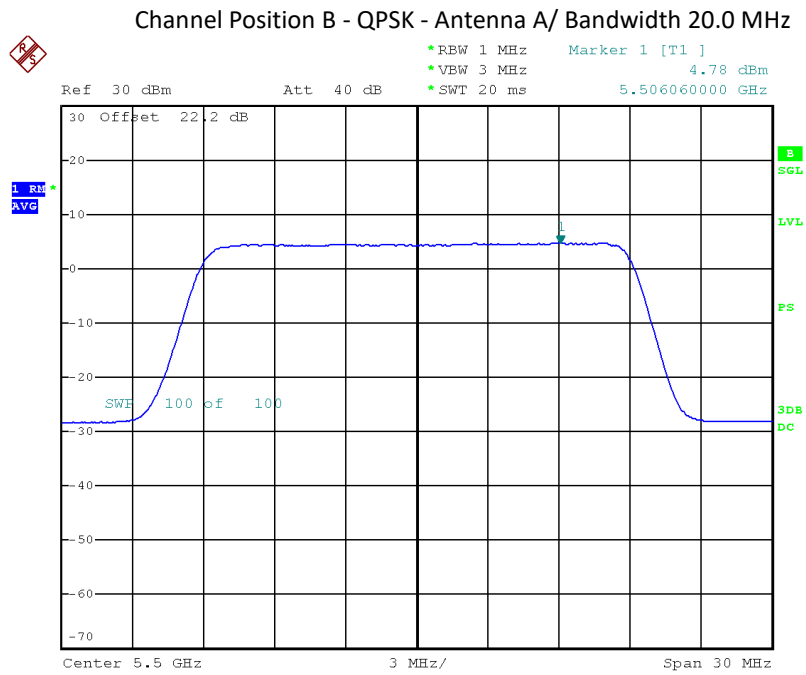
Maximum Output Power 18dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	6.463	6.233	6.083
B		6.463	6.123	5.883
Total		9.47	9.19	8.99

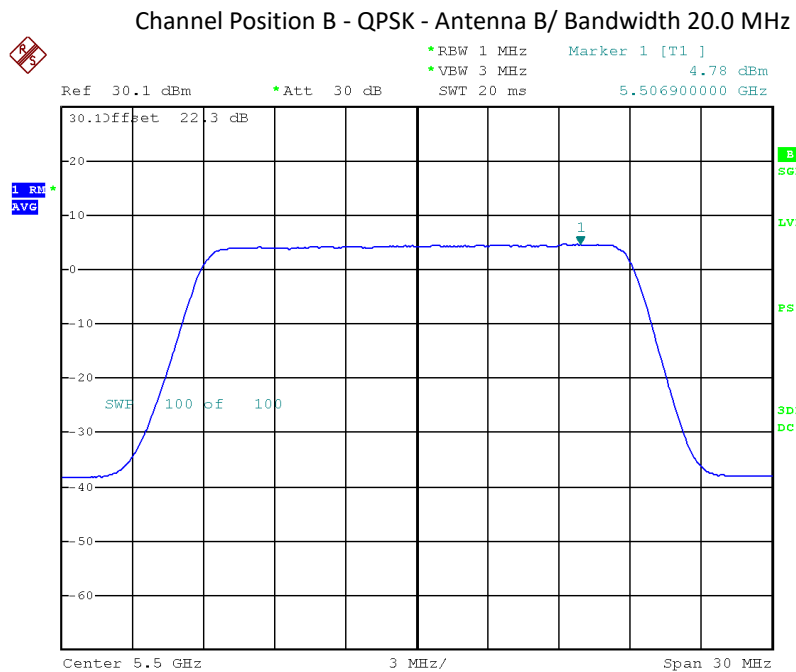
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	7.063	6.883	6.763
B		7.103	7.043	7.003
Total		10.09	9.97	9.90

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	6.443	6.243	6.053
B		6.553	6.203	6.253
Total		9.51	9.23	9.16

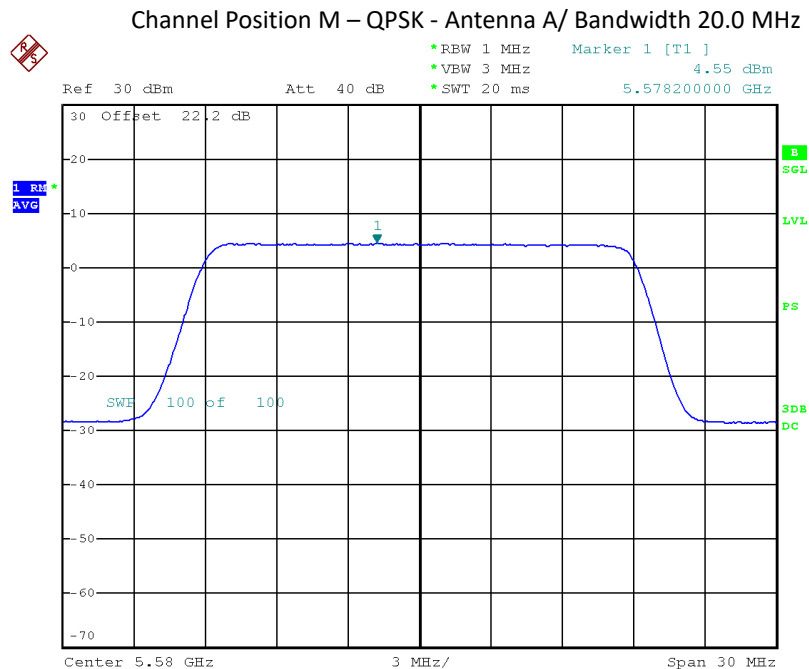
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	6.493	6.133	6.023
B		6.543	6.363	6.273
Total		9.53	9.26	9.16



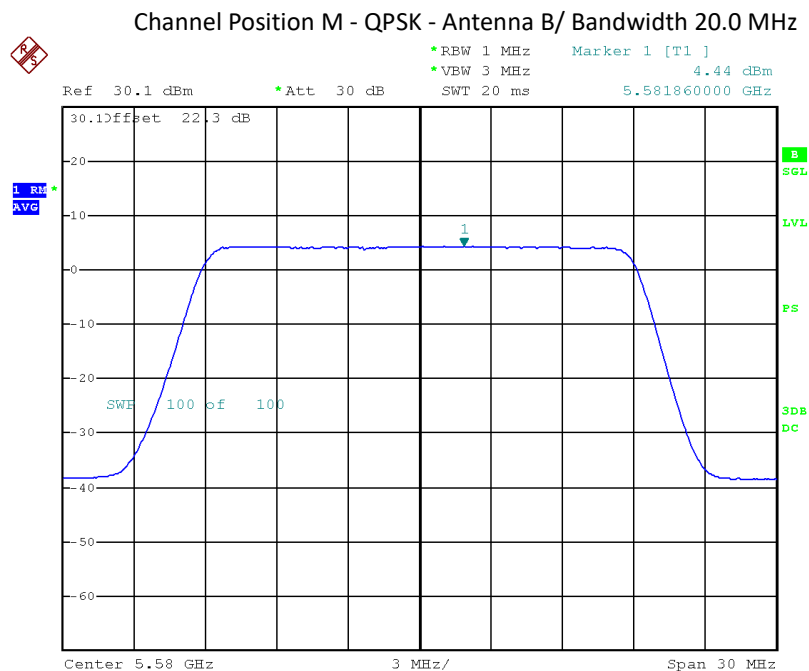
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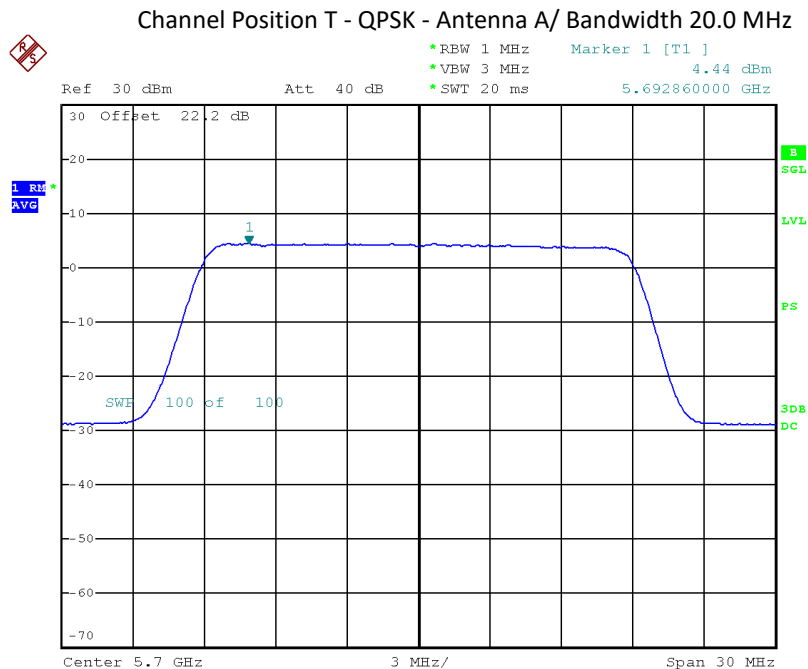
Date: 18.OCT.2018 09:48:35



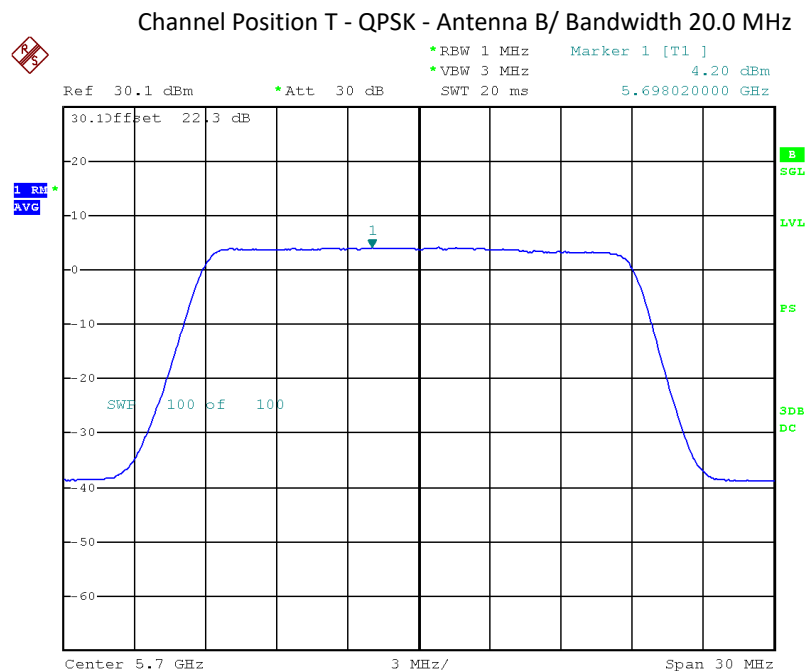
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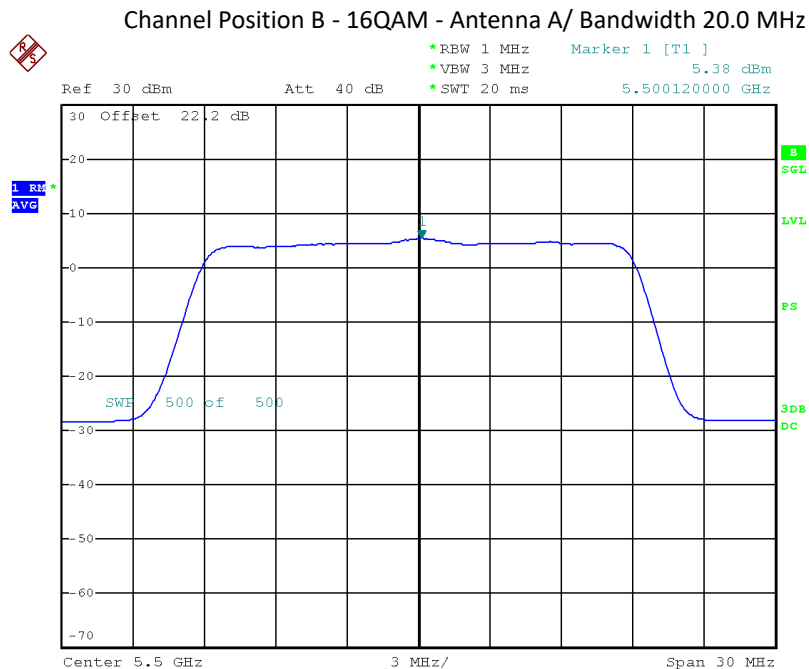
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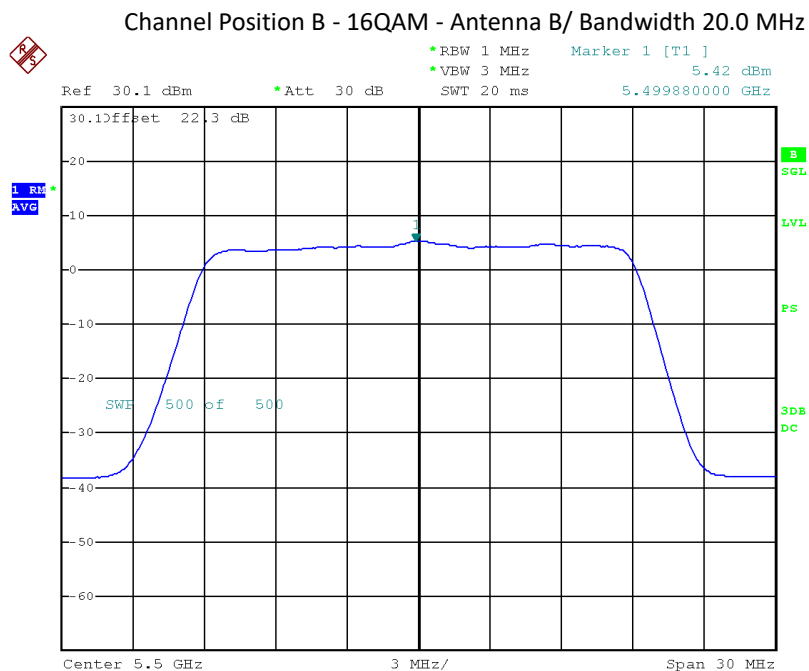
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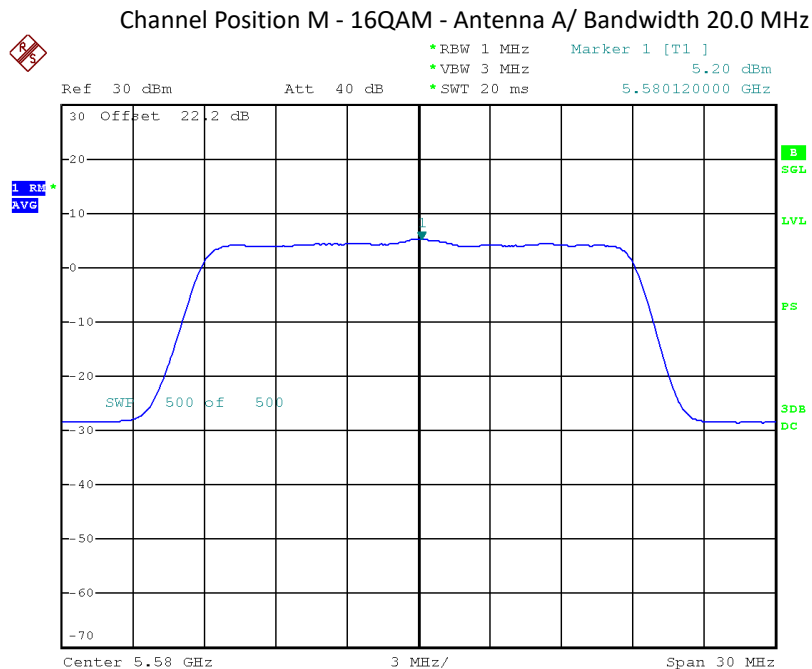
Date: 18.OCT.2018 10:00:05



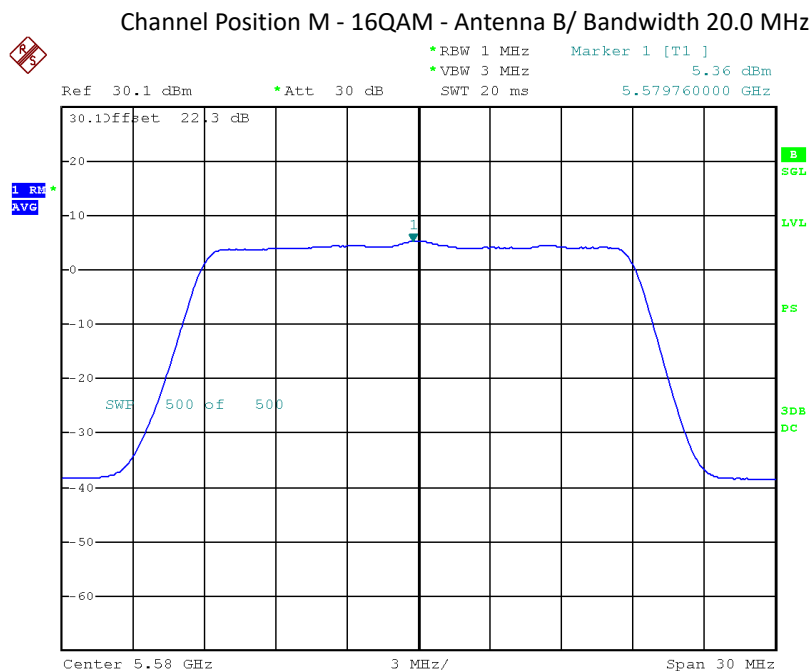
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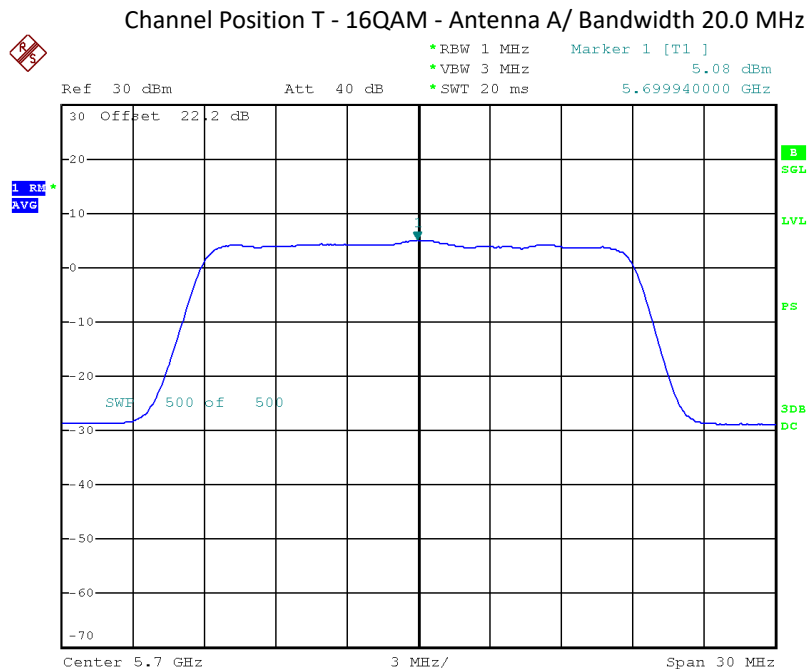
Date: 18.OCT.2018 09:49:58



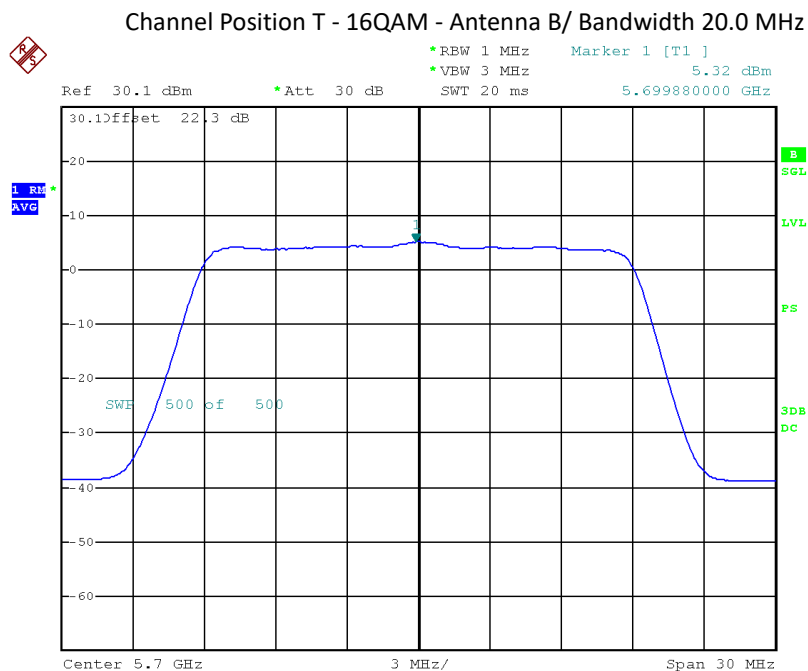
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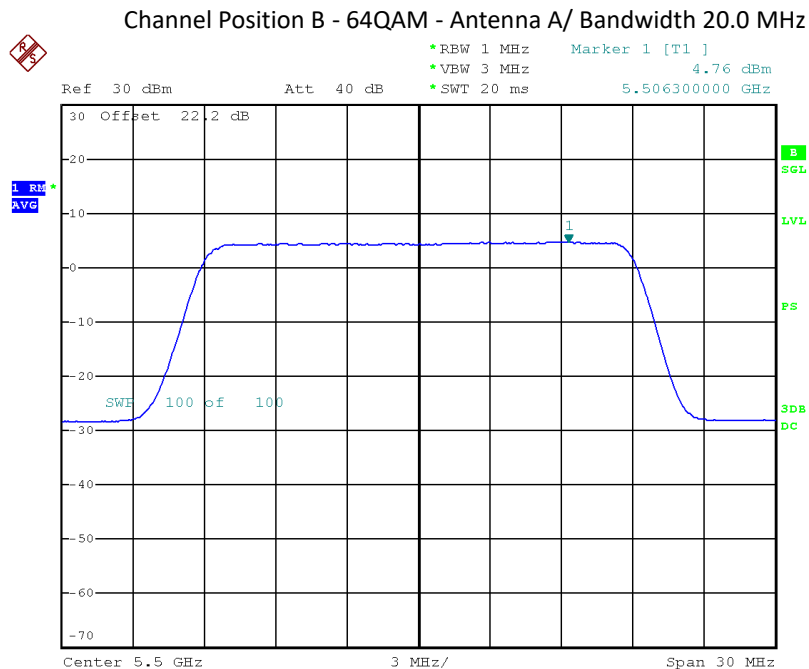
Date: 18.OCT.2018 09:54:08



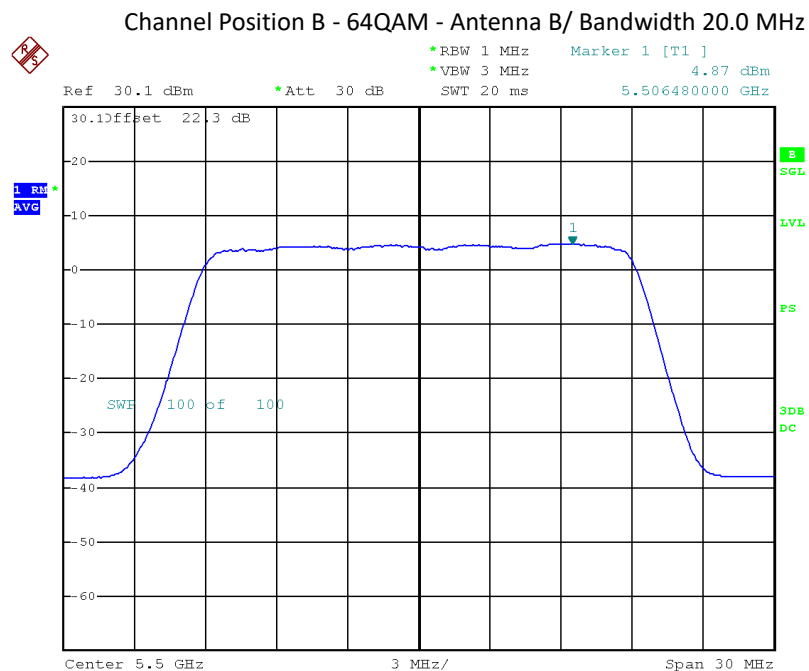
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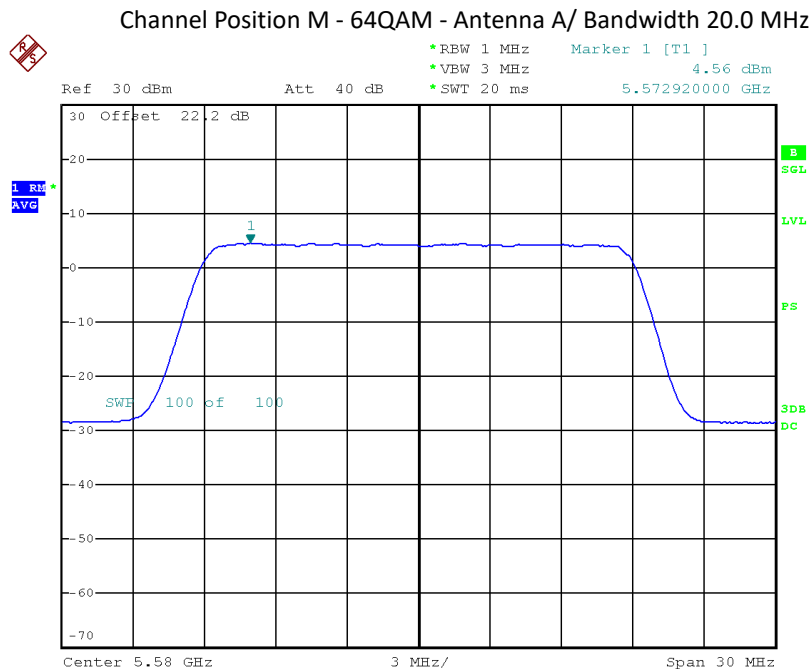
Date: 18.OCT.2018 10:03:21



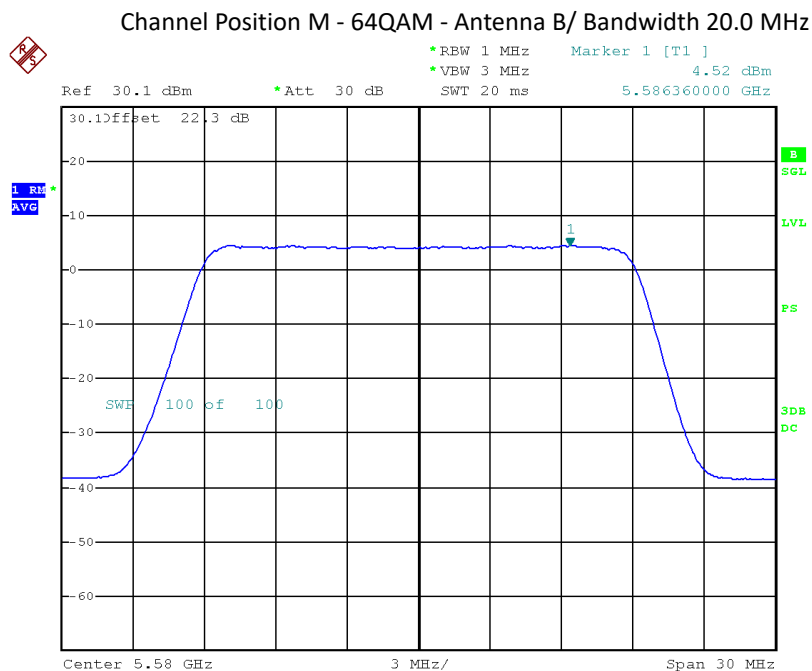
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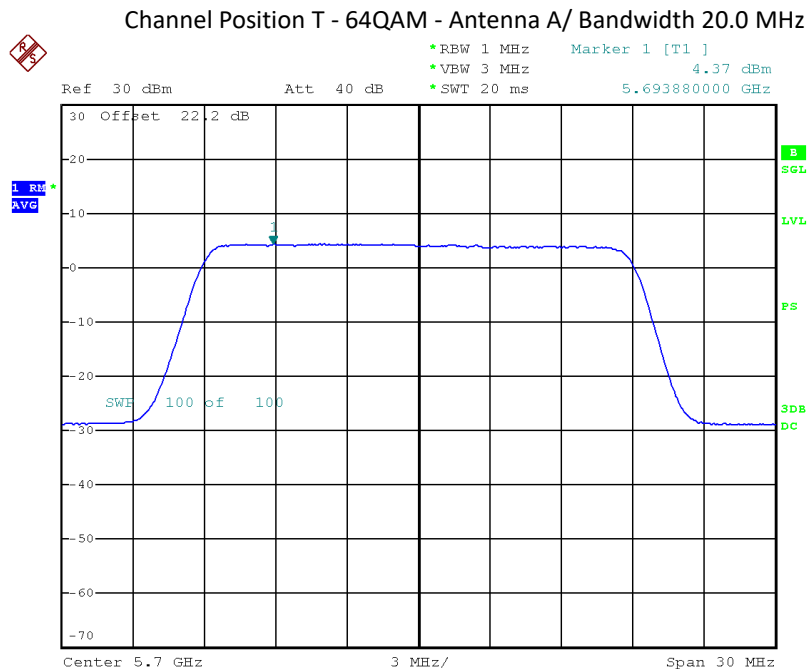
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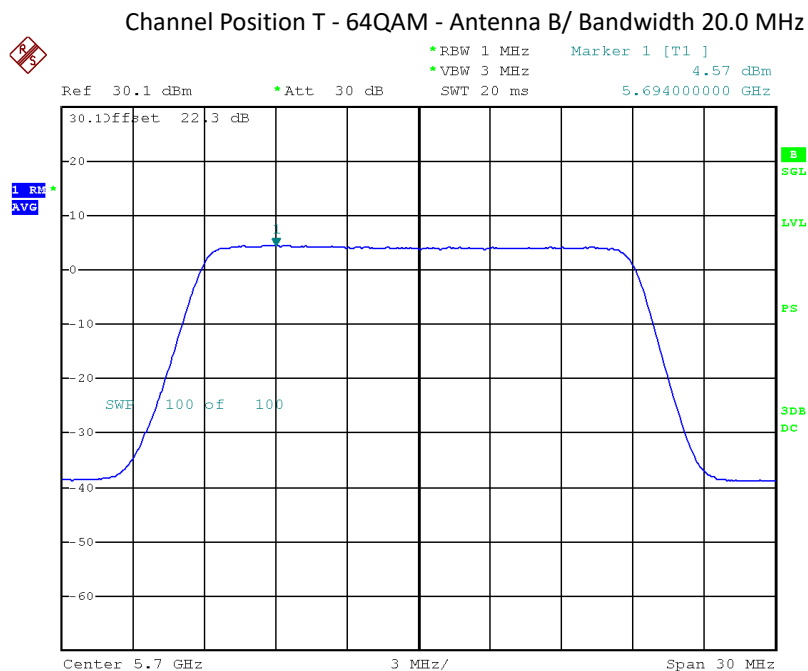
Date: 18.OCT.2018 06:49:43



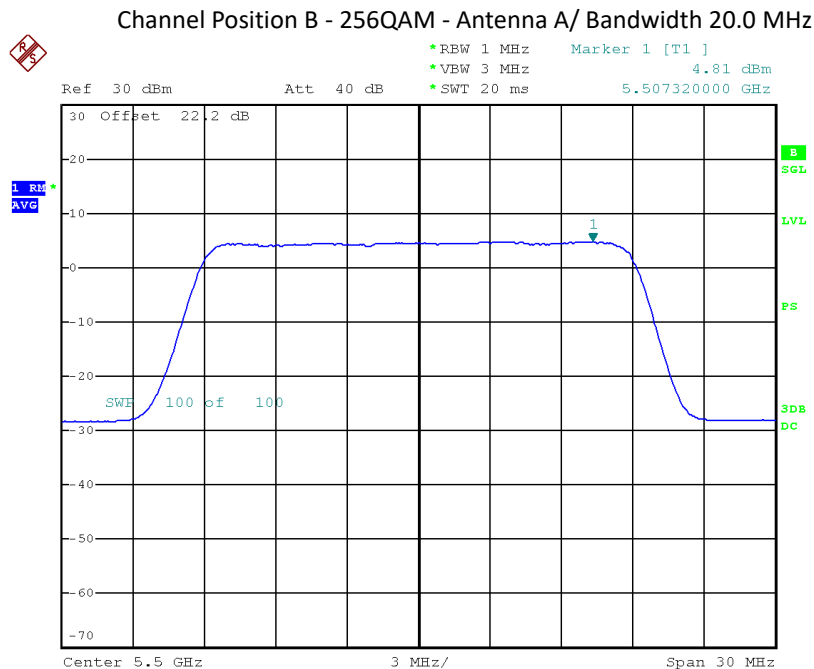
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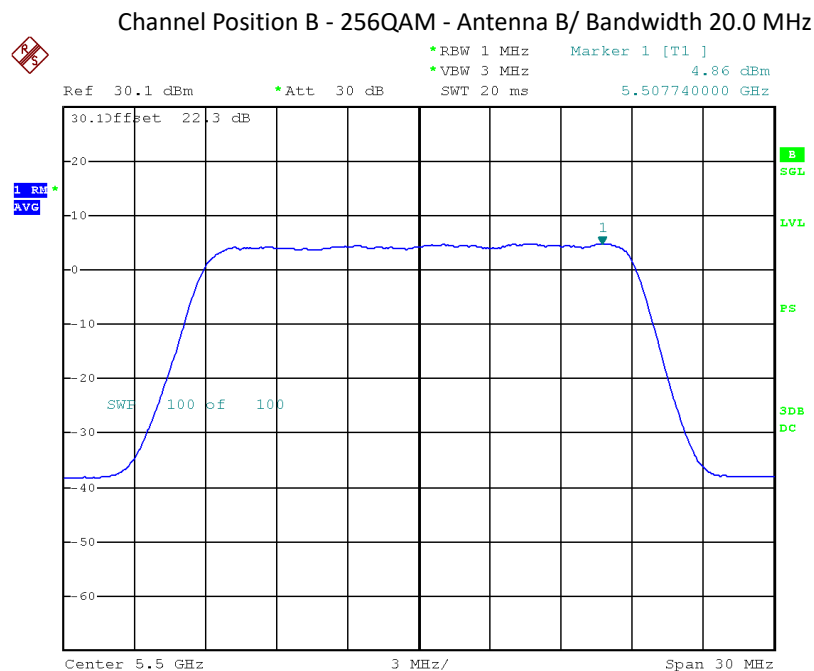
Date: 18.OCT.2018 06:56:34



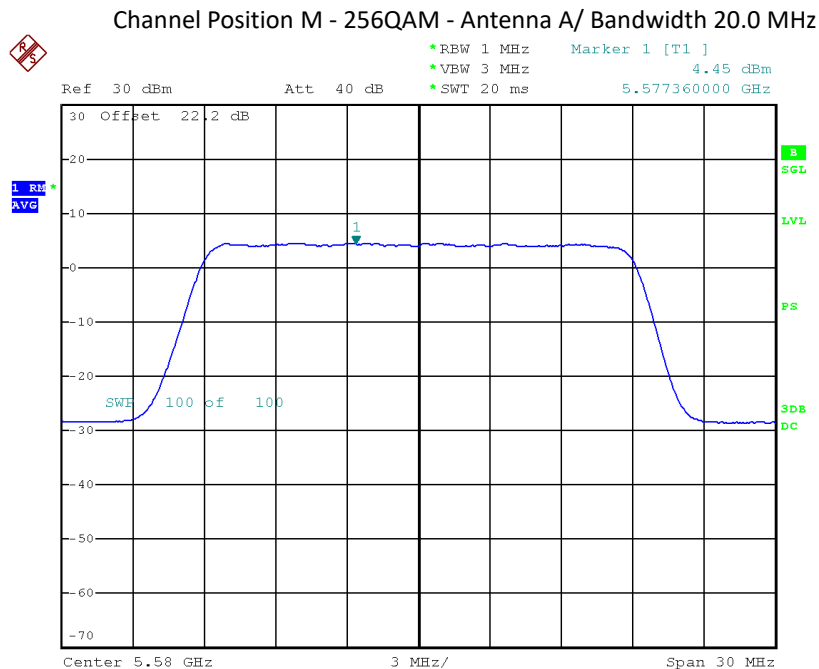
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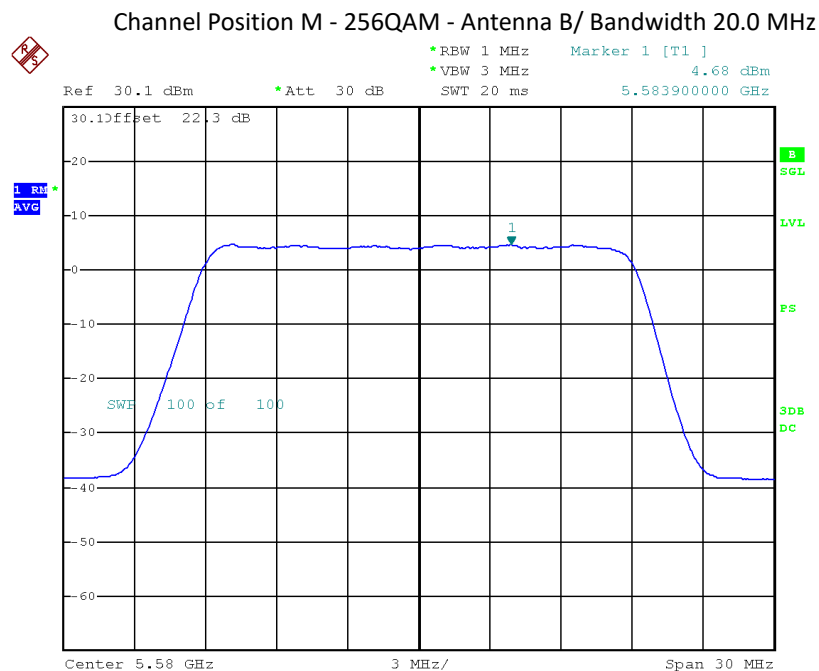
Date: 18.OCT.2018 06:40:21



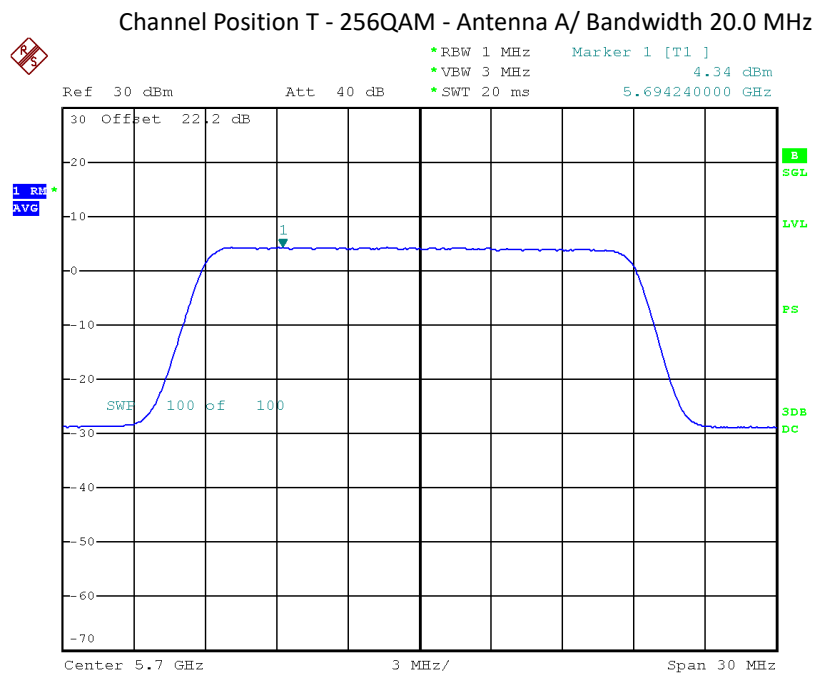
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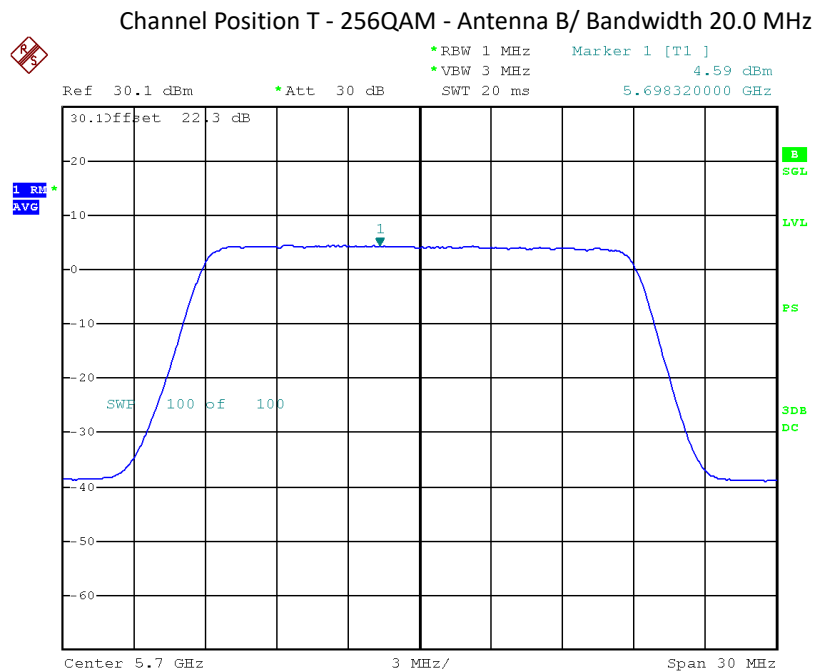
Date: 18.OCT.2018 06:50:13



Date: 18.OCT.2018 09:55:38



Date: 18.OCT.2018 06:57:04



Date: 18.OCT.2018 10:04:43

Configuration B1

L-MIMO-SC

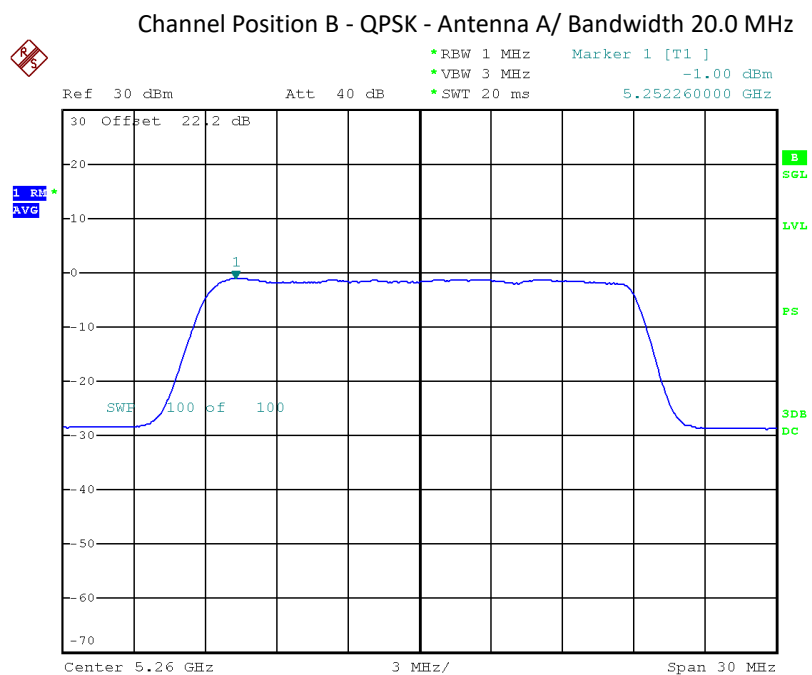
Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	QPSK / 20.0 MHz	0.683	0.593	1.033
B		0.633	0.223	0.573
Total		3.67	3.42	3.82

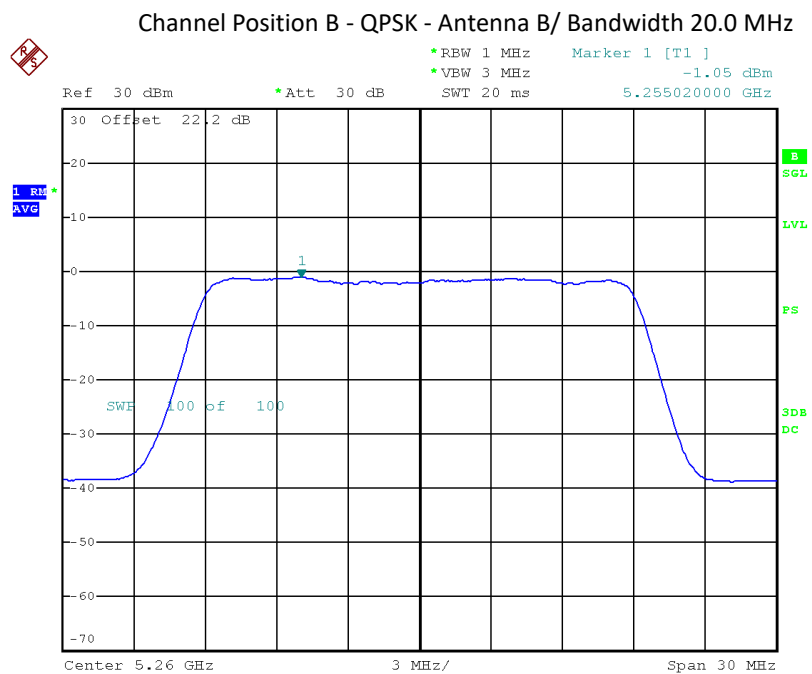
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	16QAM / 20.0 MHz	1.243	1.013	1.453
B		0.973	0.853	0.973
Total		4.12	3.94	4.23

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	64QAM / 20.0 MHz	0.773	0.643	0.763
B		0.483	0.423	0.663
Total		3.64	3.54	3.72

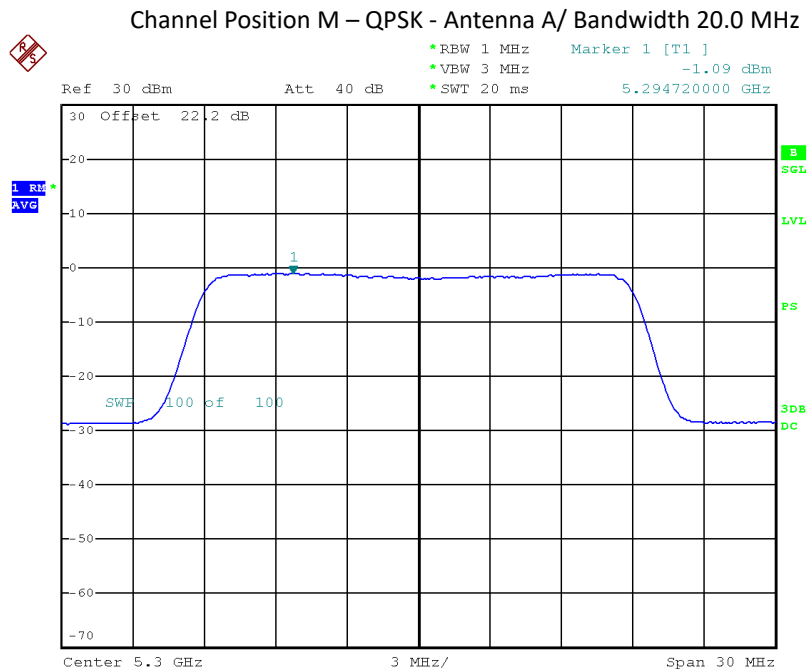
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5260MHz	Channel Position M 5300MHz	Channel Position T 5320MHz
A	256QAM / 20.0 MHz	0.683	0.703	0.563
B		0.303	0.163	0.573
Total		3.51	3.45	3.58



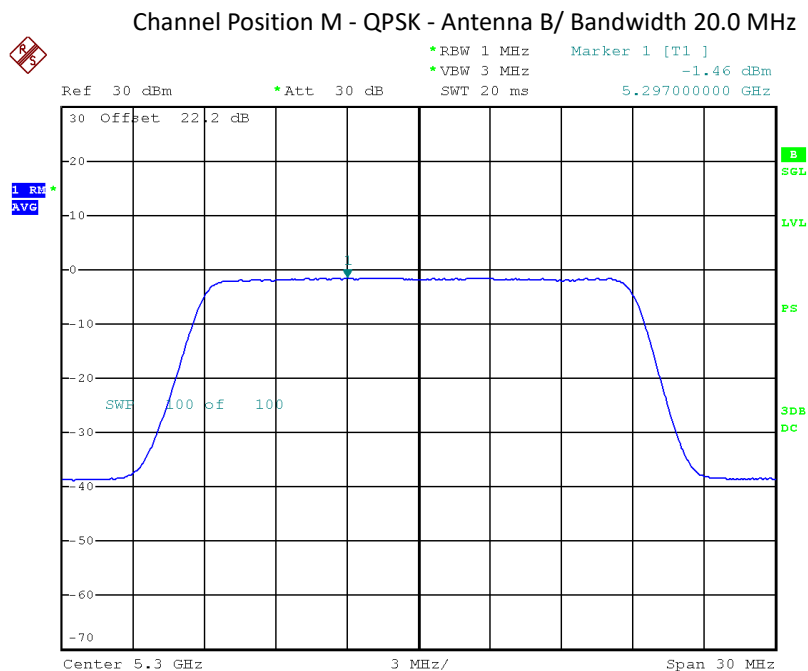
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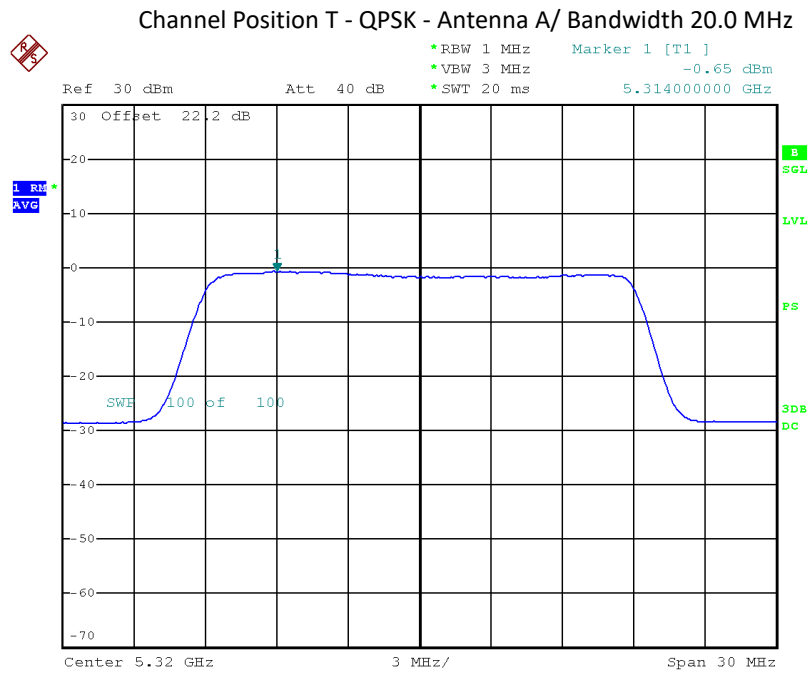
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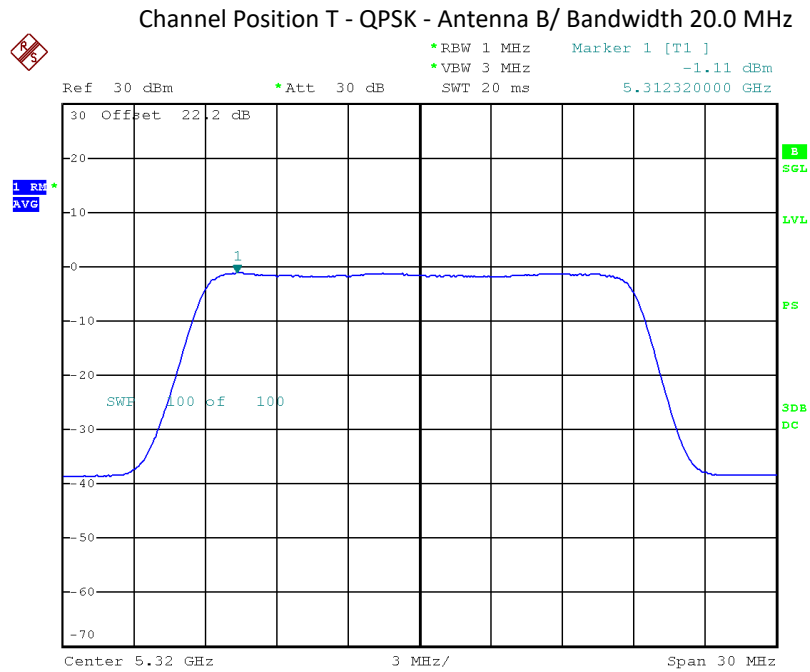
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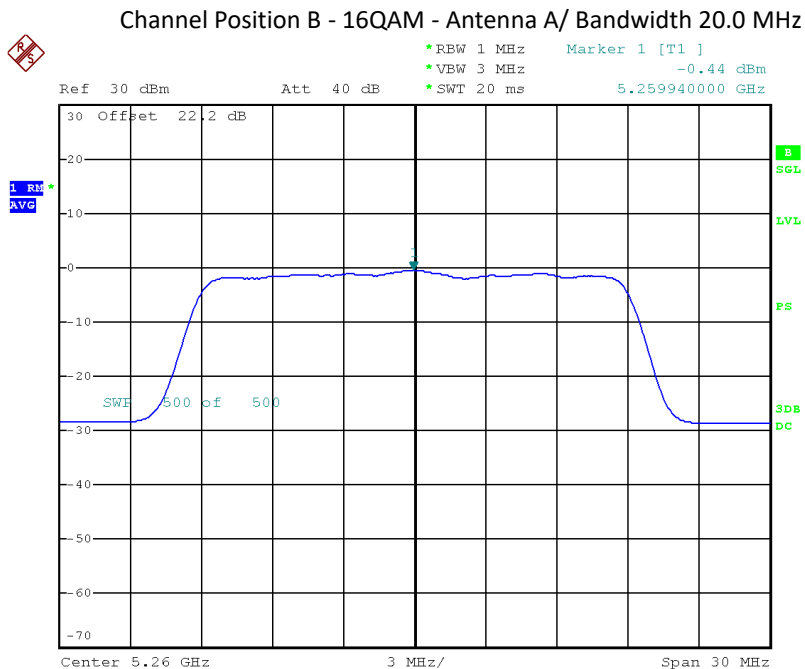
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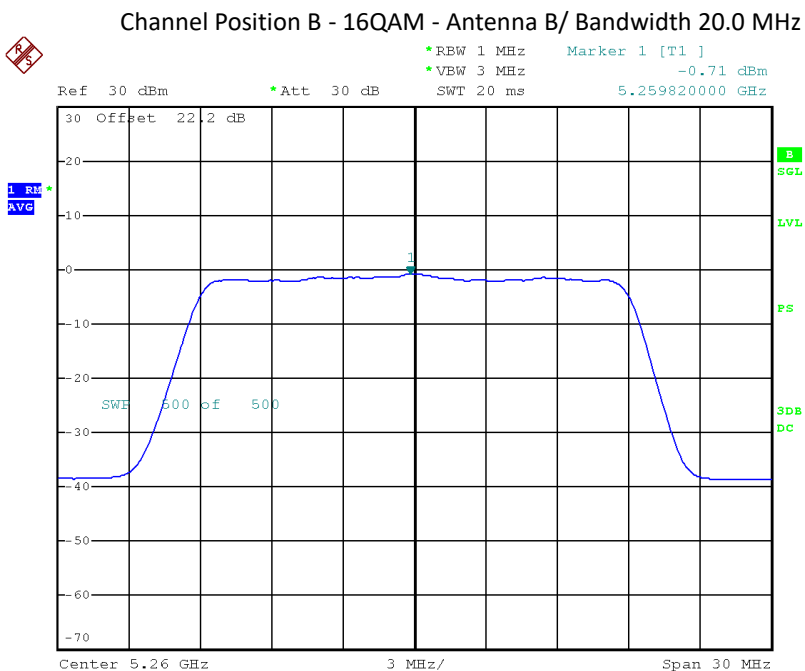
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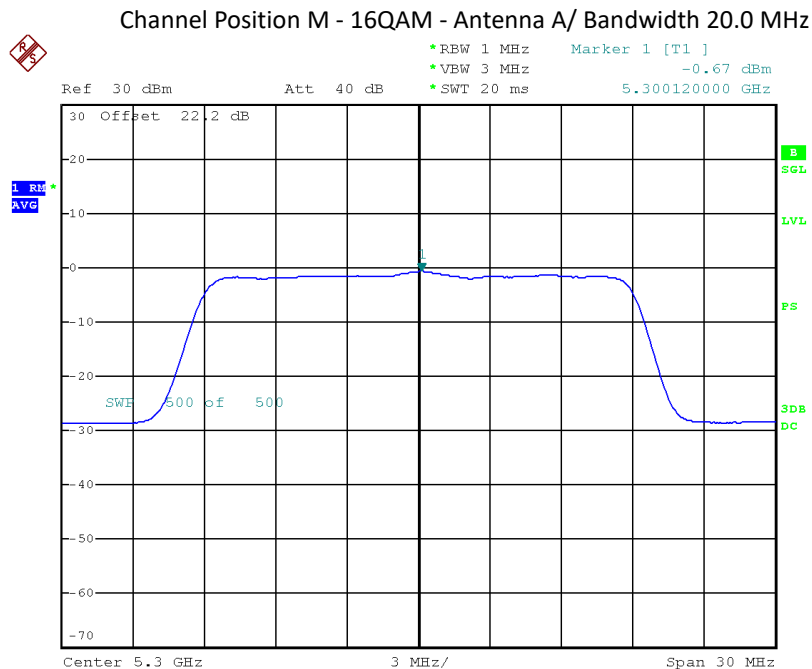
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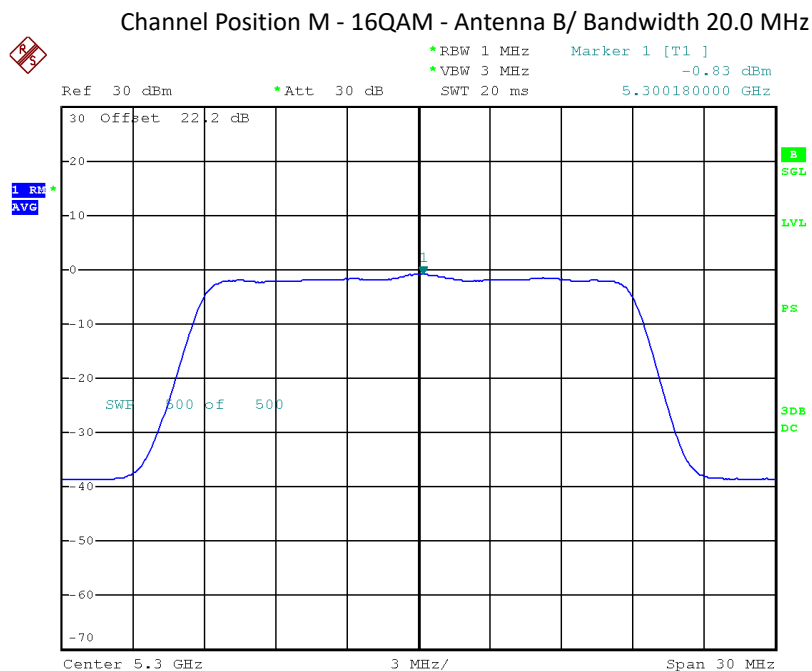
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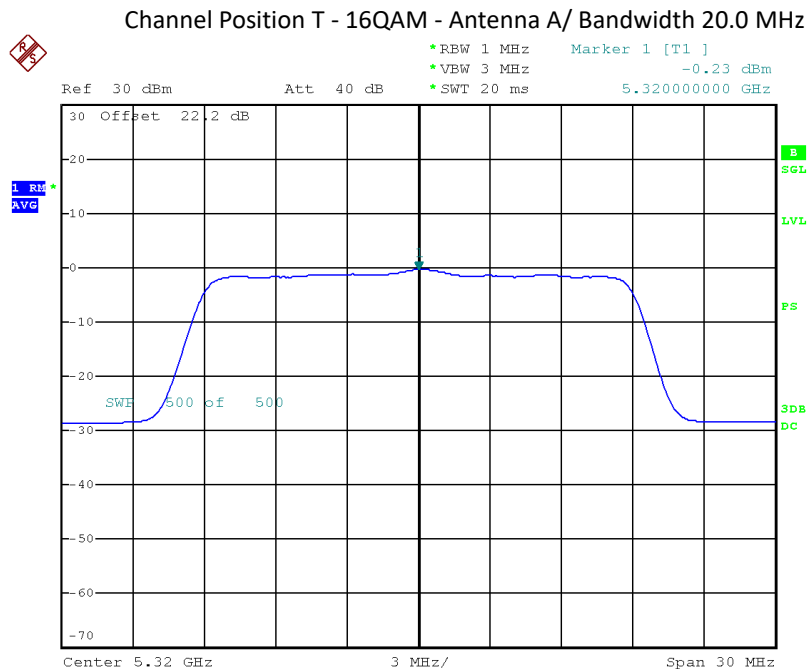
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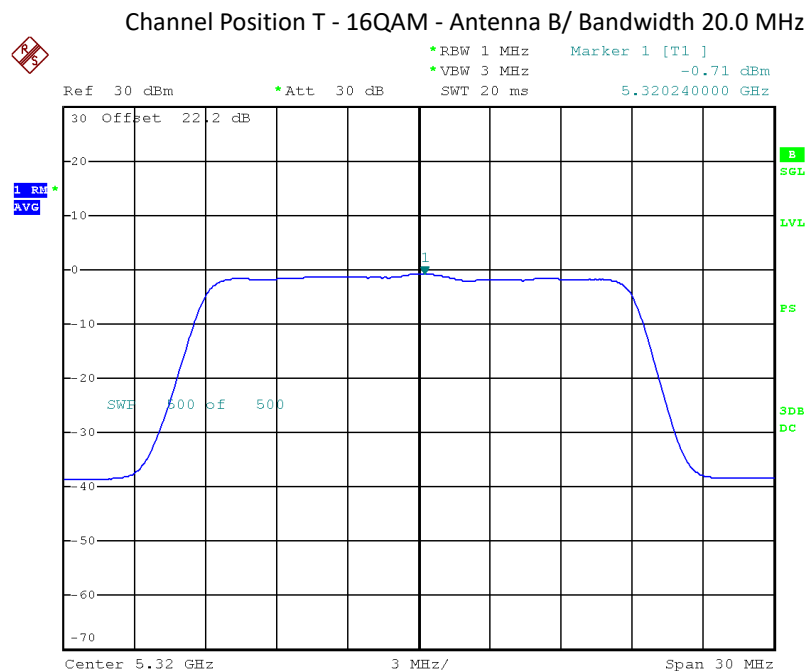
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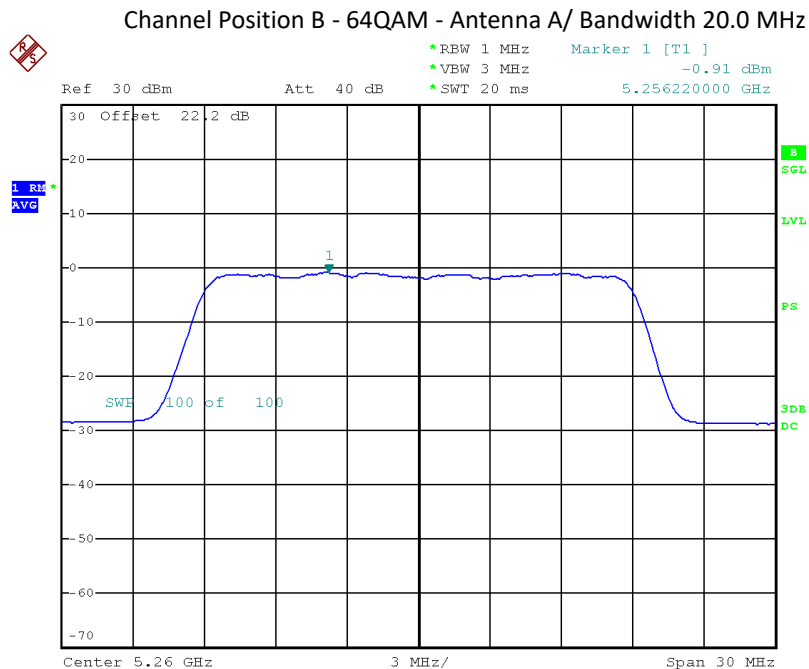
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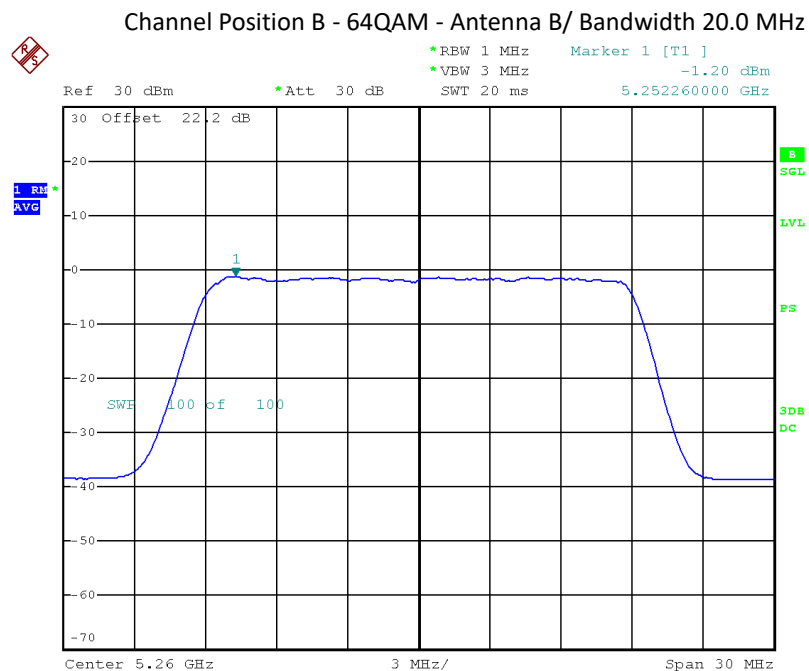
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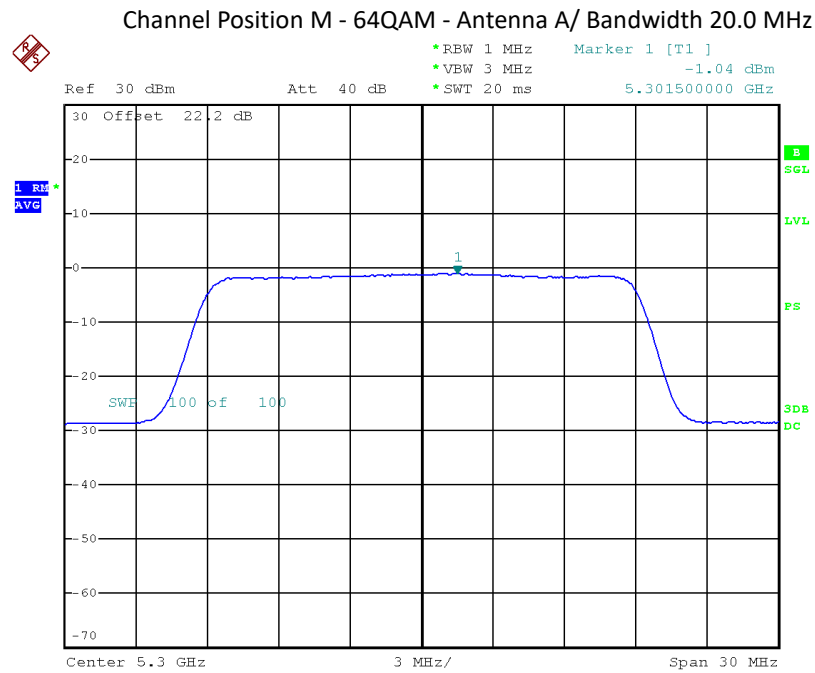
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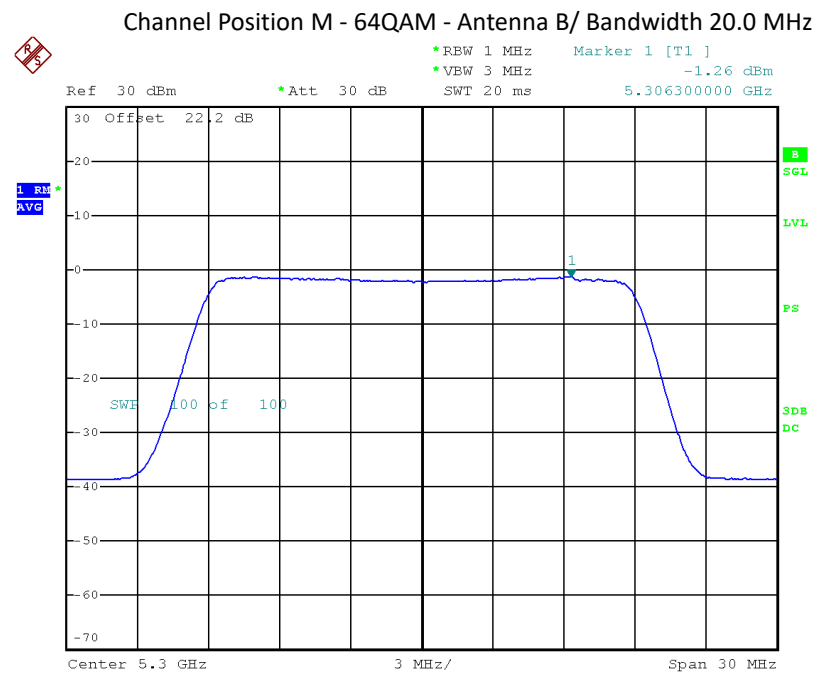
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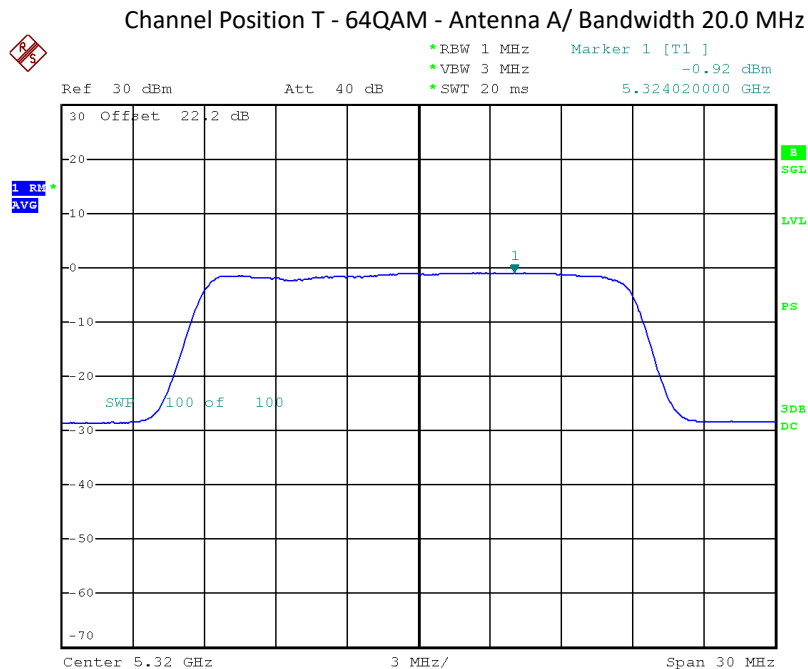
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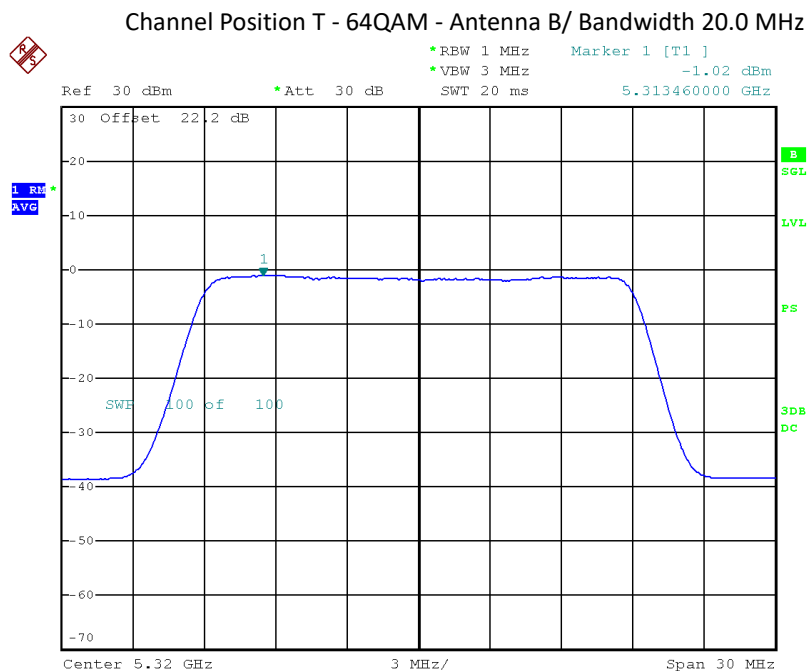
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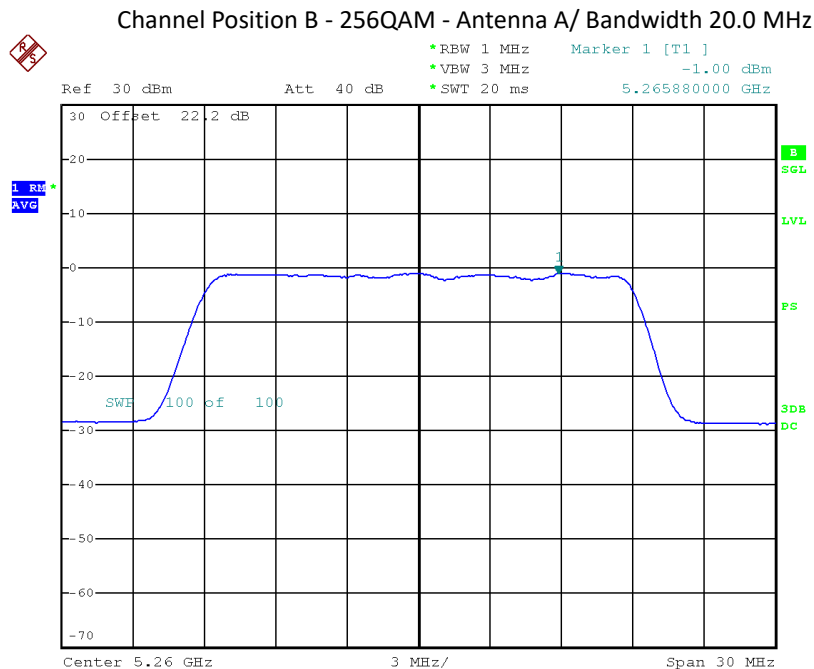
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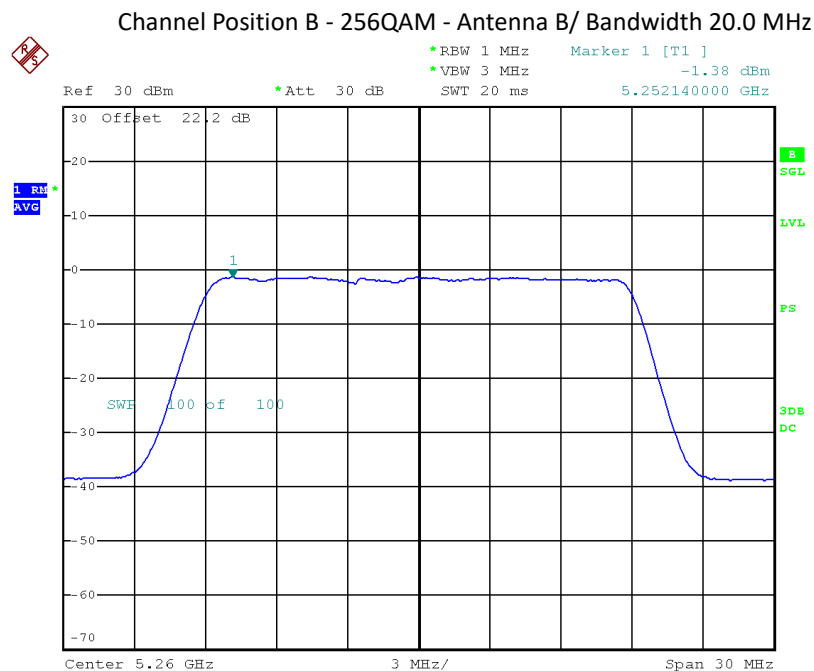
Date: 18.OCT.2018 06:33:34



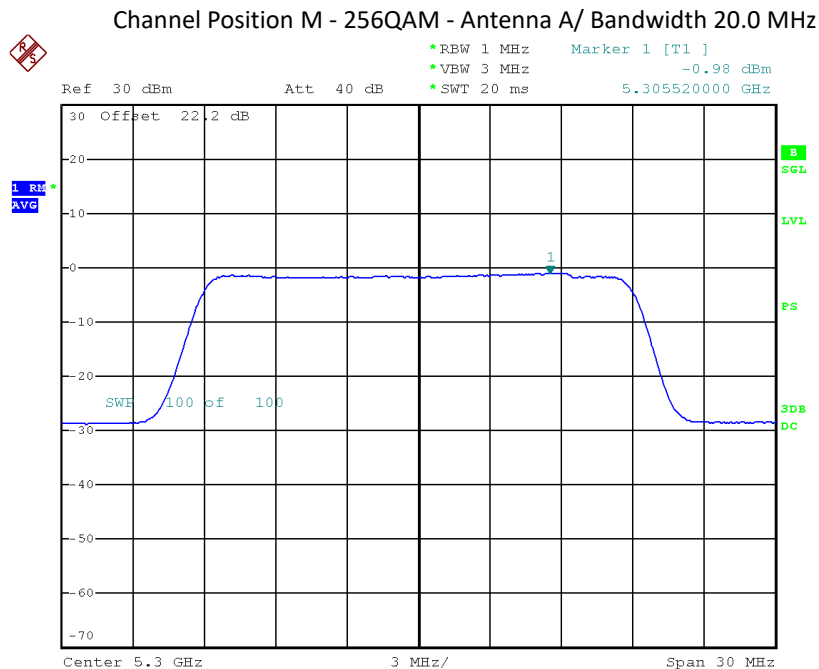
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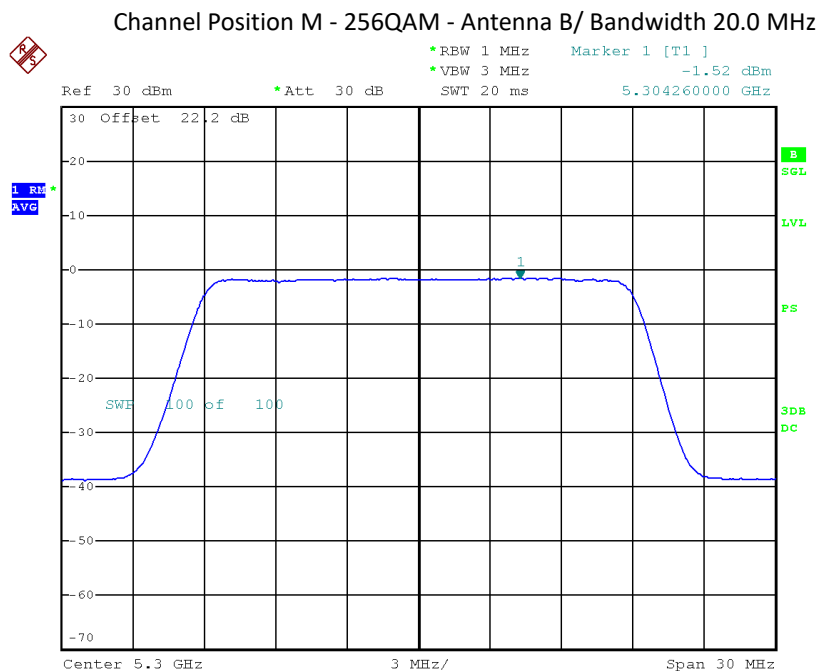
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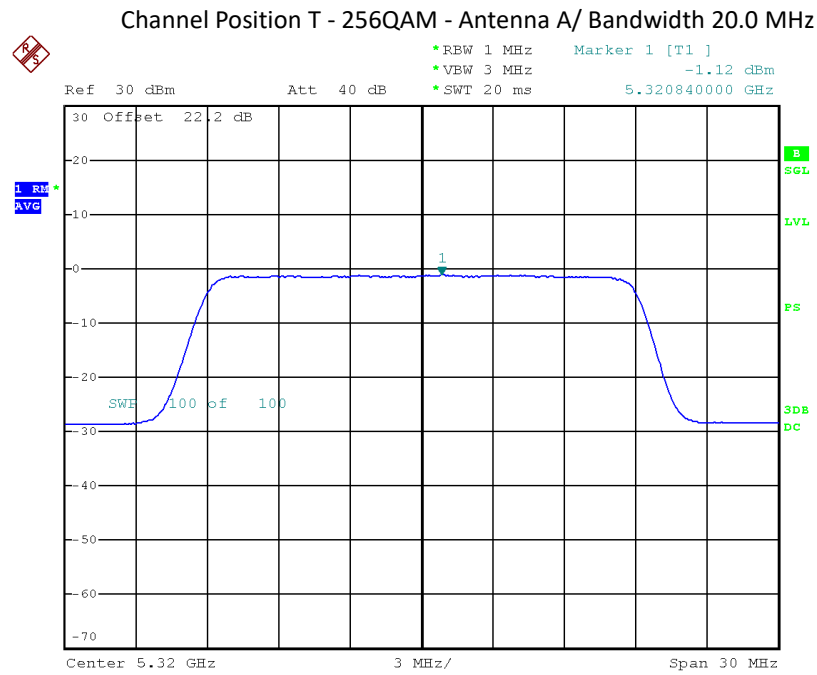
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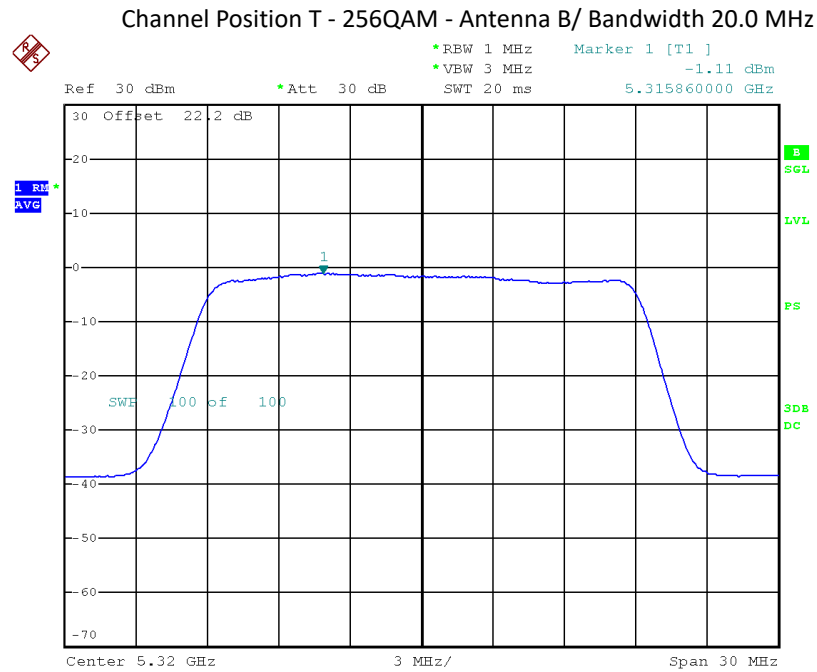
Date: 18.OCT.2018 06:29:04



Date: 18.OCT.2018 09:42:41



Date: 18.OCT.2018 06:34:44



Date: 18.OCT.2018 09:46:31

Configuration B2 for FCC

L-MIMO-SC

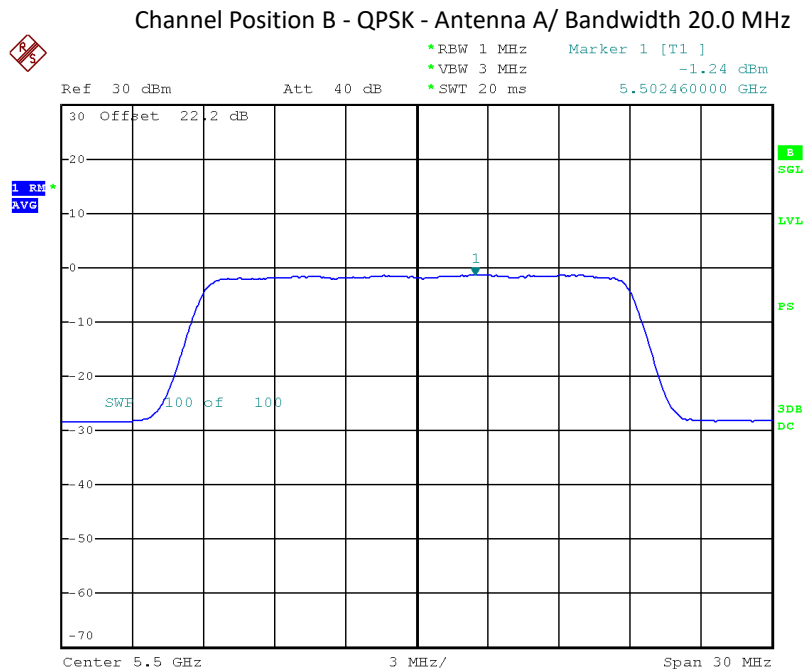
Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	0.443	0.343	0.383
B		0.643	0.233	0.153
Total		3.55	3.30	3.28

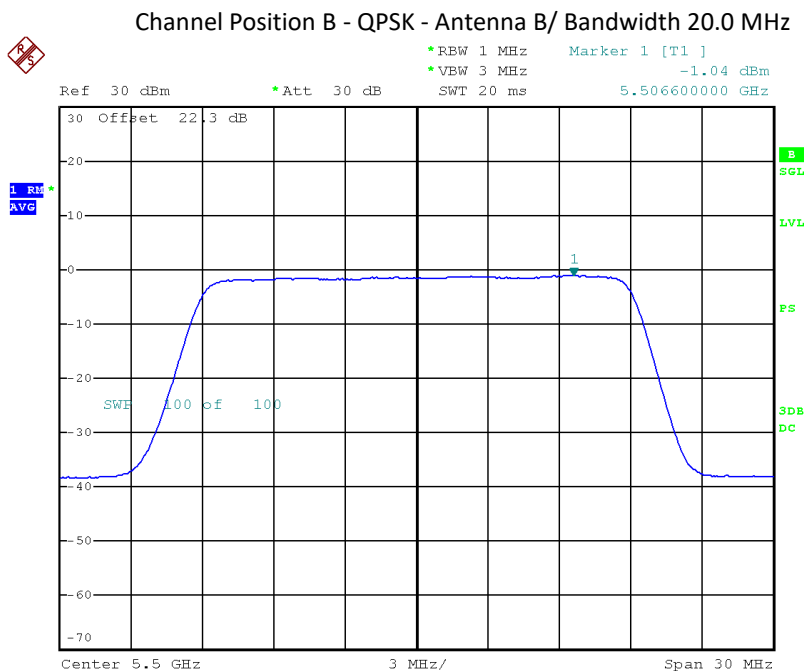
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	1.193	0.773	0.883
B		1.223	1.003	0.843
Total		4.22	3.90	3.87

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	0.593	0.343	0.303
B		0.643	0.423	0.123
Total		3.63	3.39	3.22

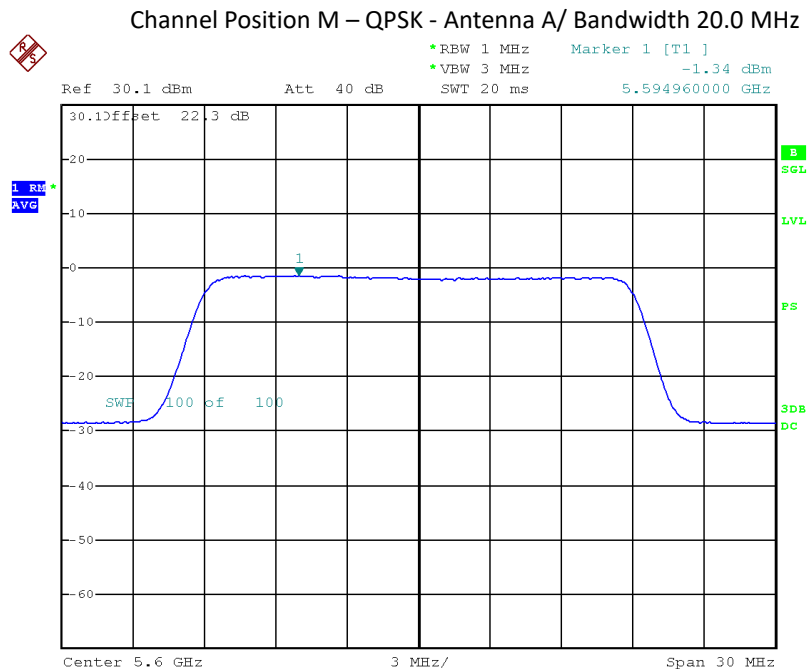
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5600MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	0.413	0.323	0.183
B		0.783	0.333	0.133
Total		3.61	3.34	3.17



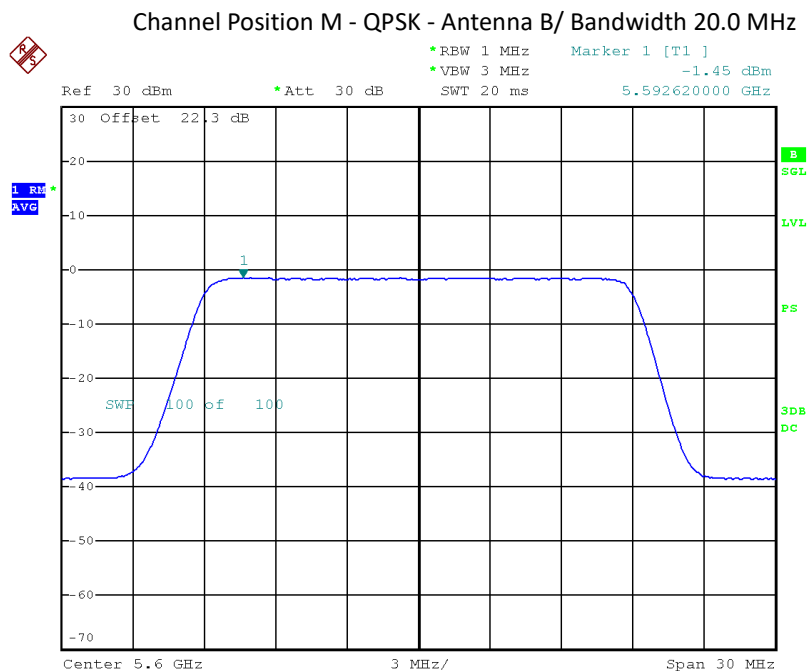
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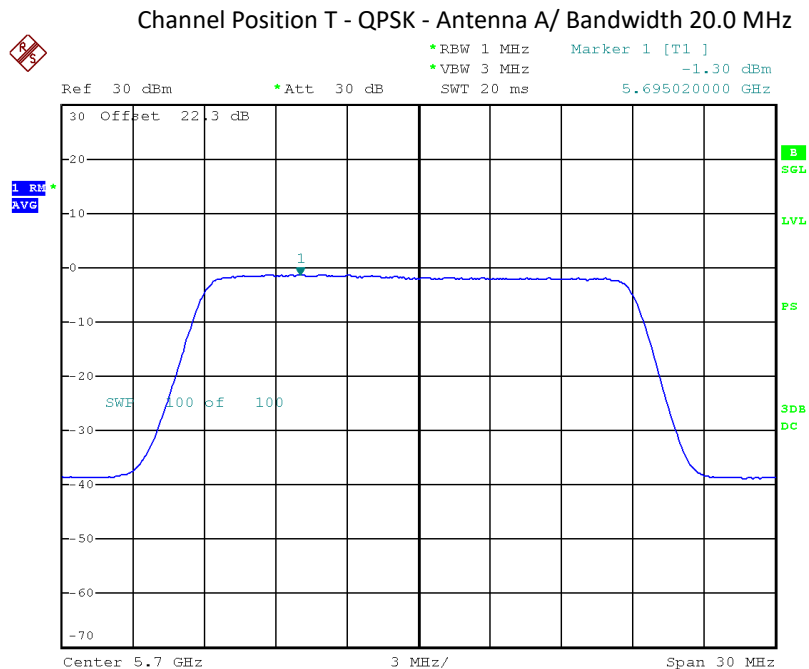
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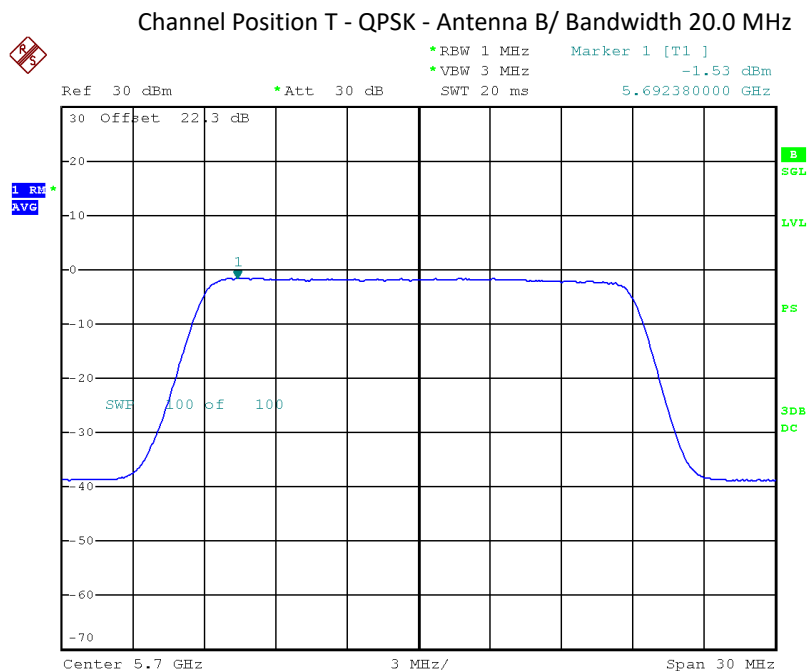
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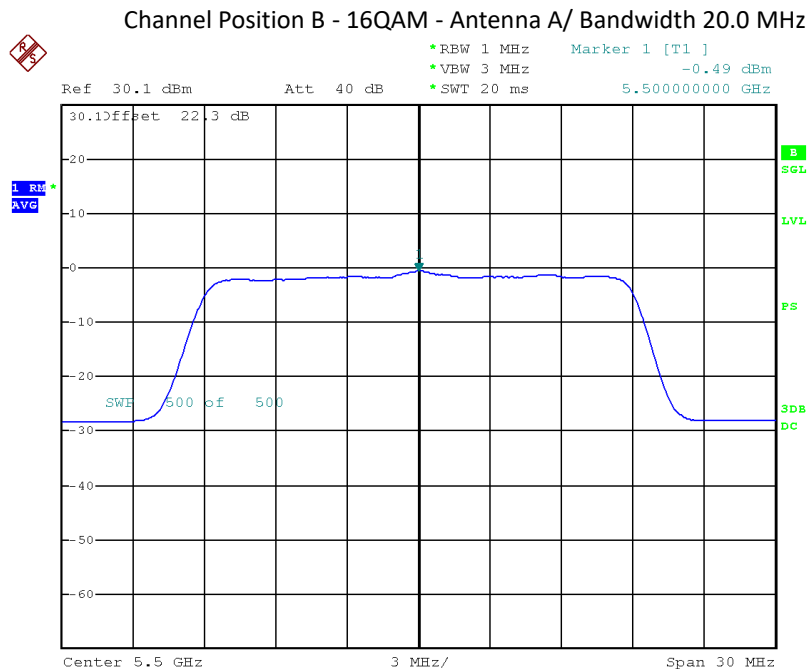
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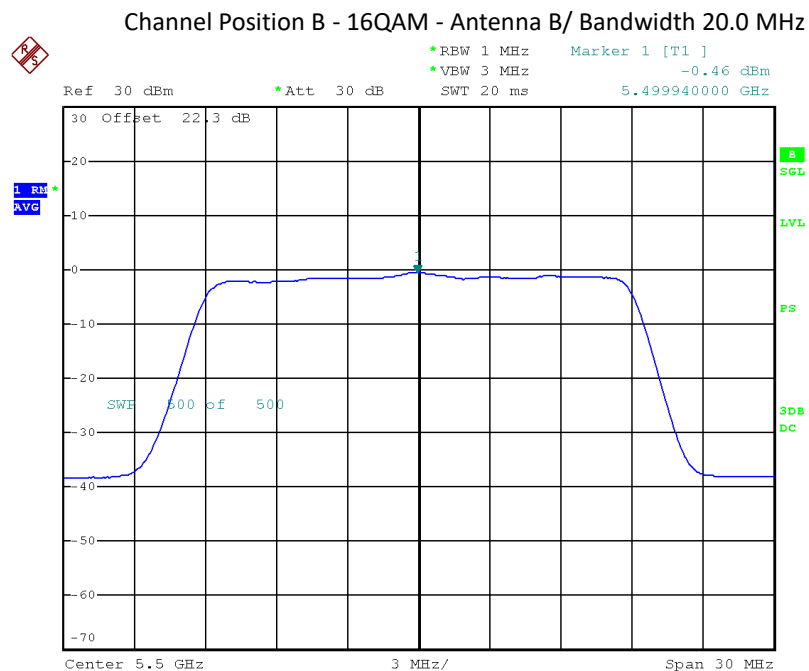
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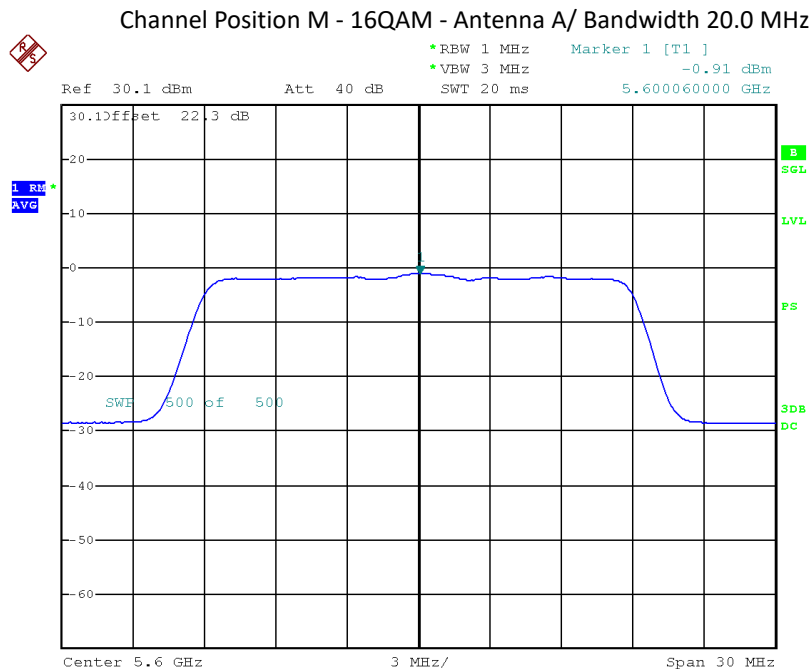
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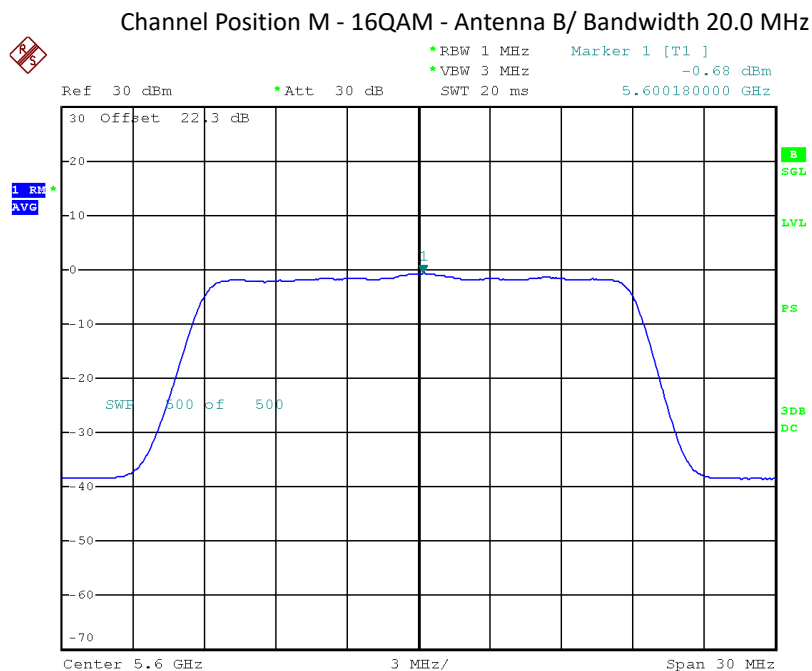
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Date: 18.OCT.2018 10:07:19

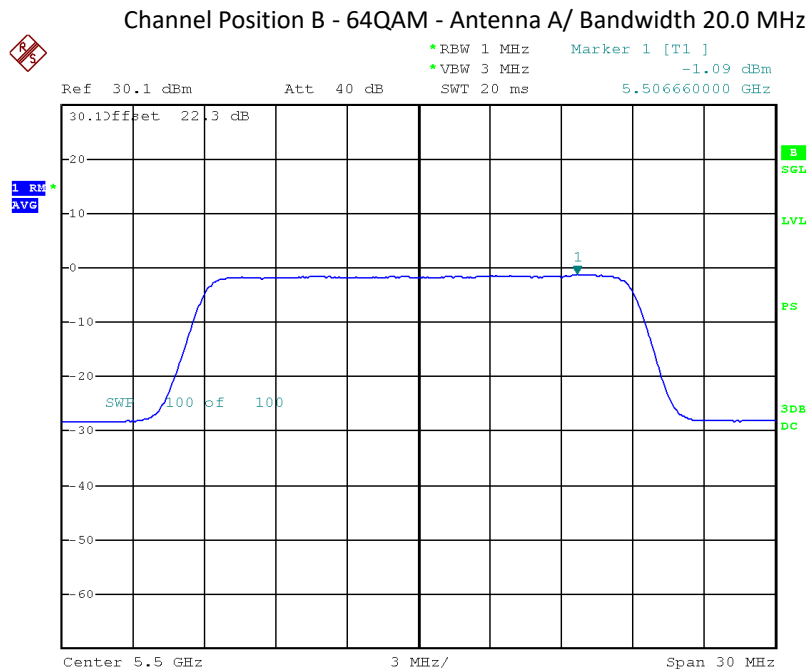


Date: 18.OCT.2018 07:14:52

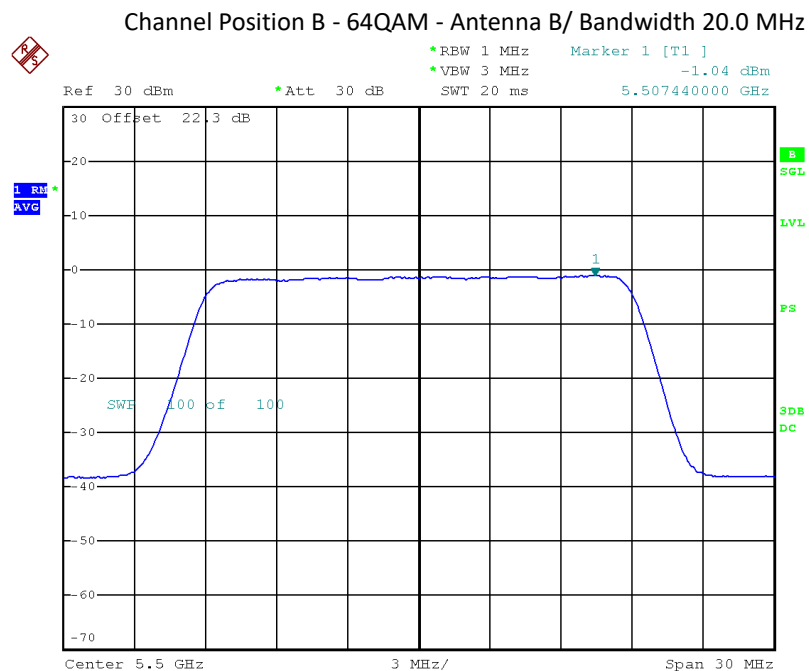


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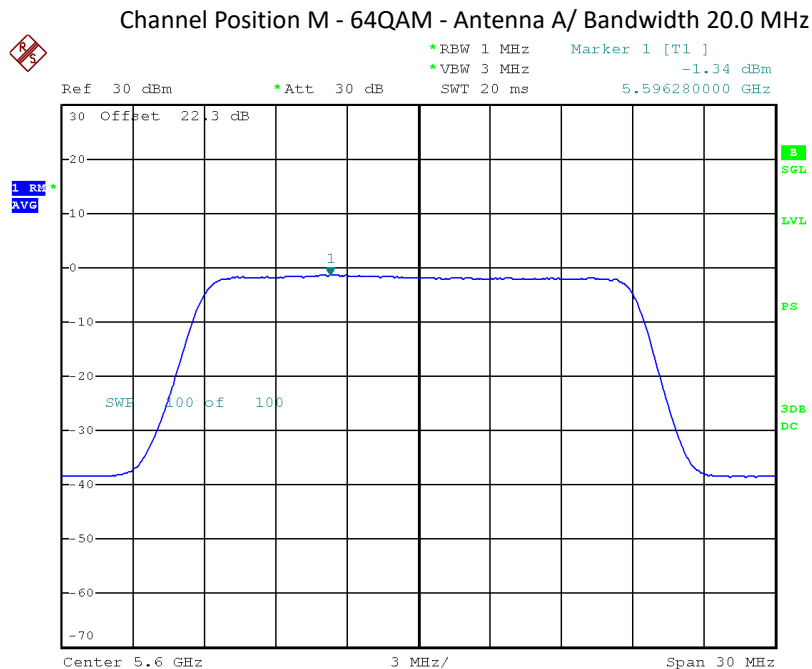




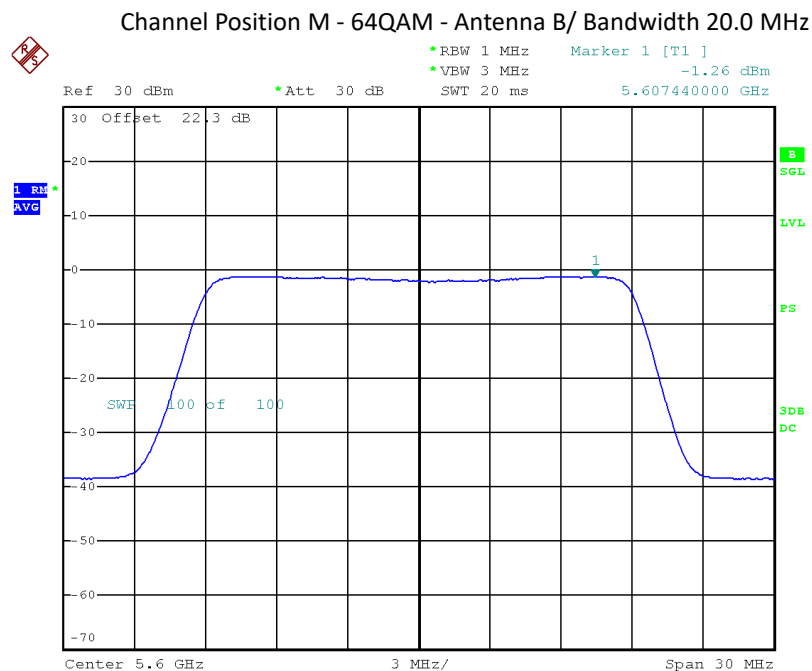
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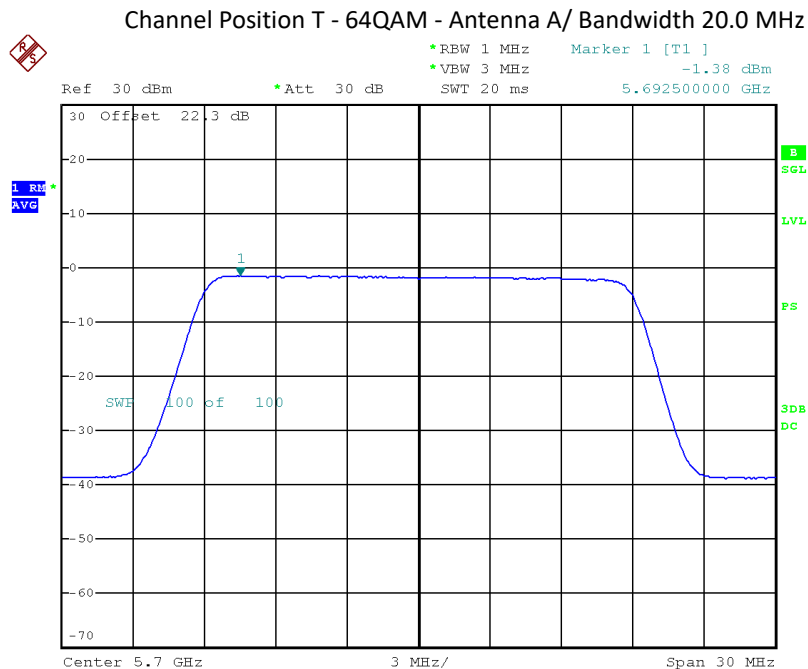
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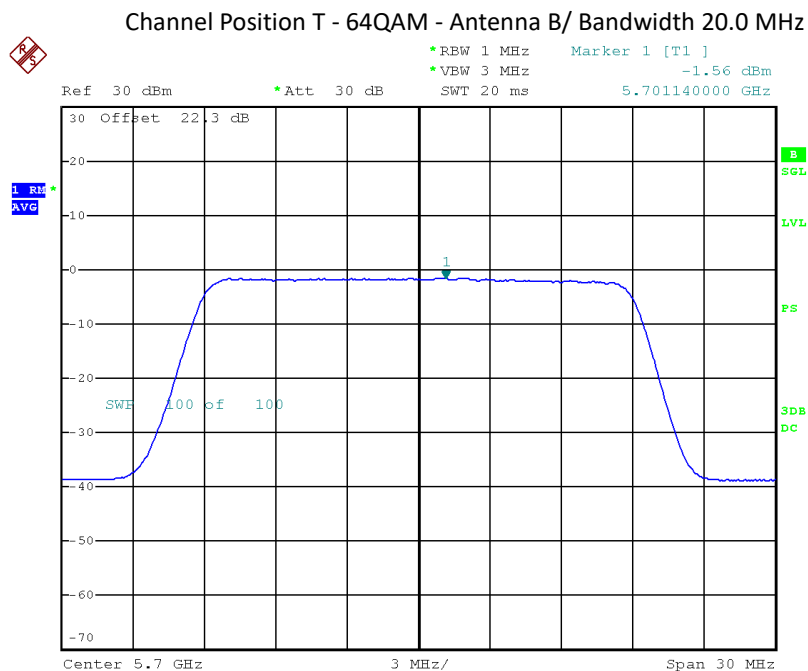
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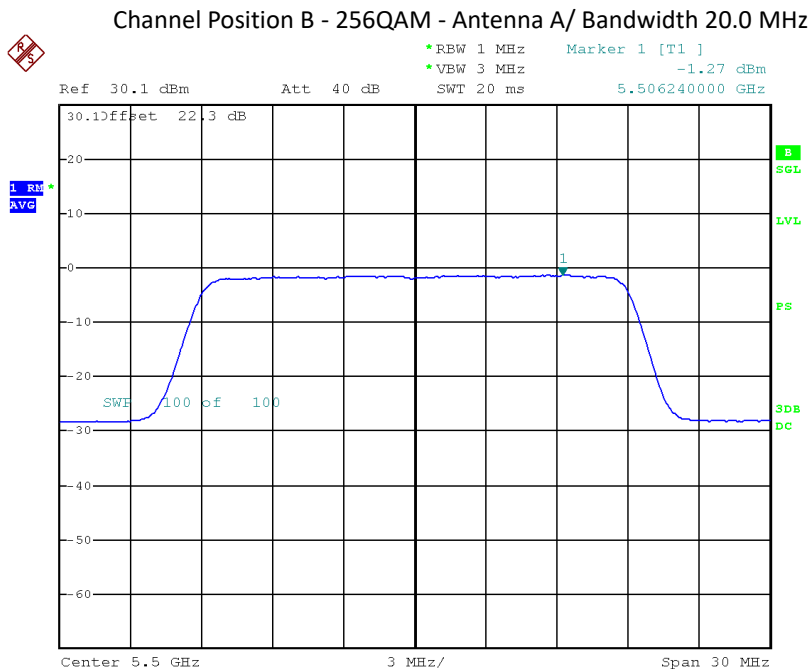
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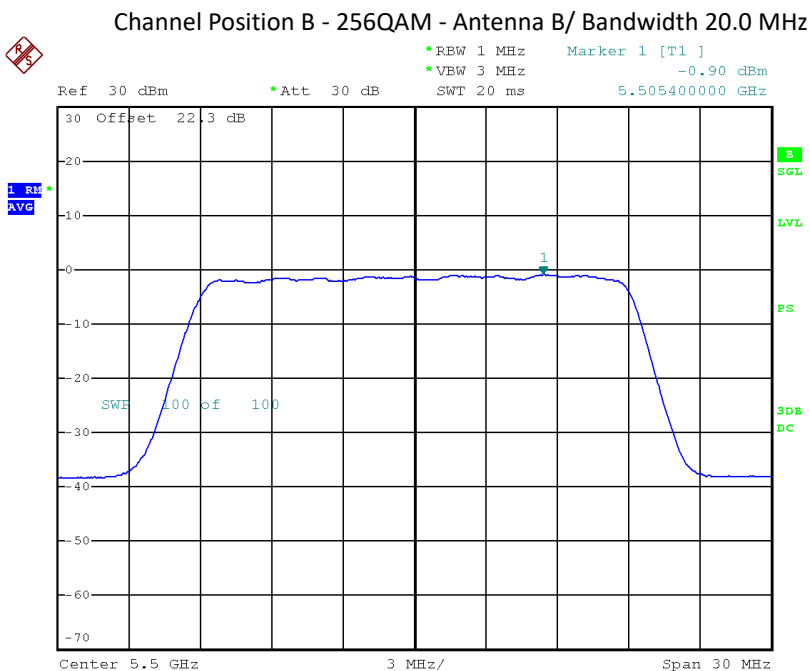
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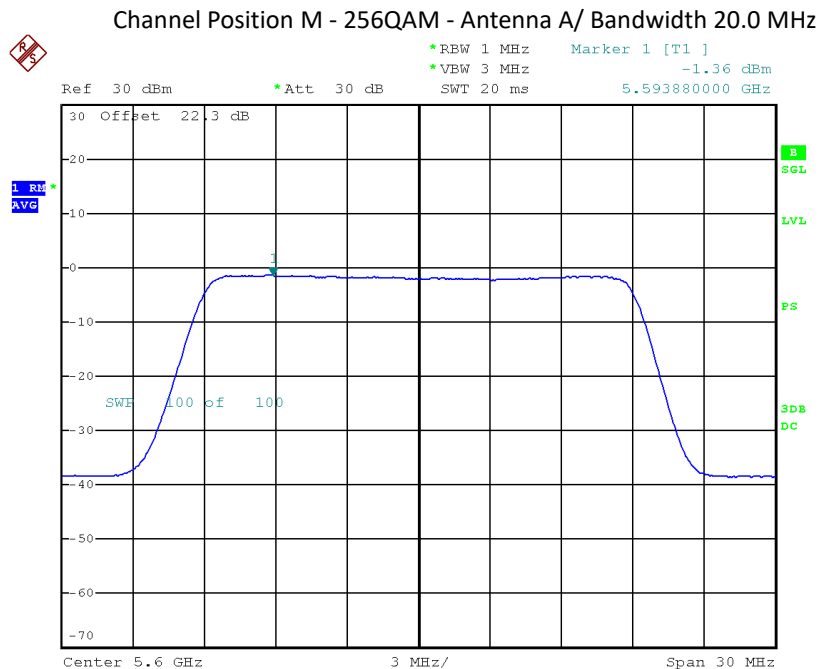
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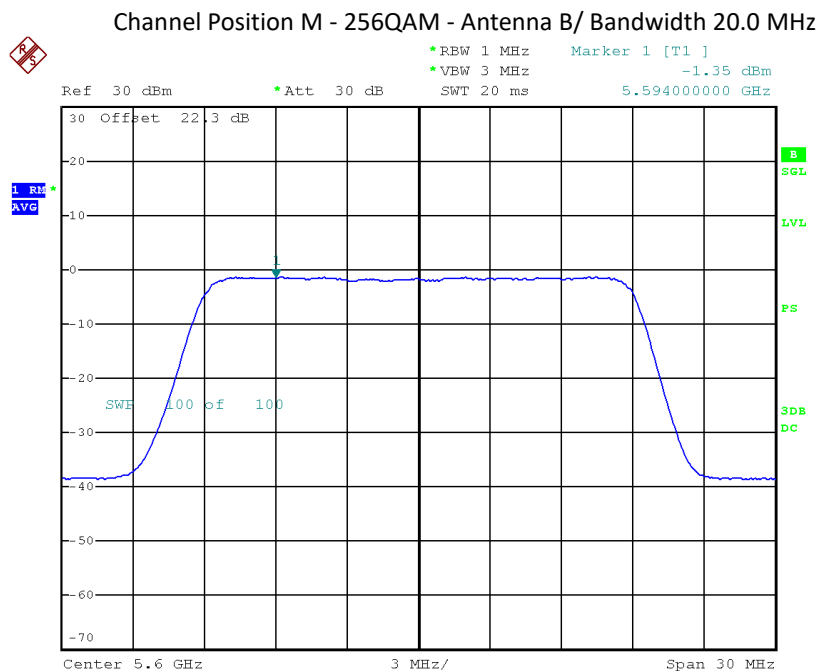
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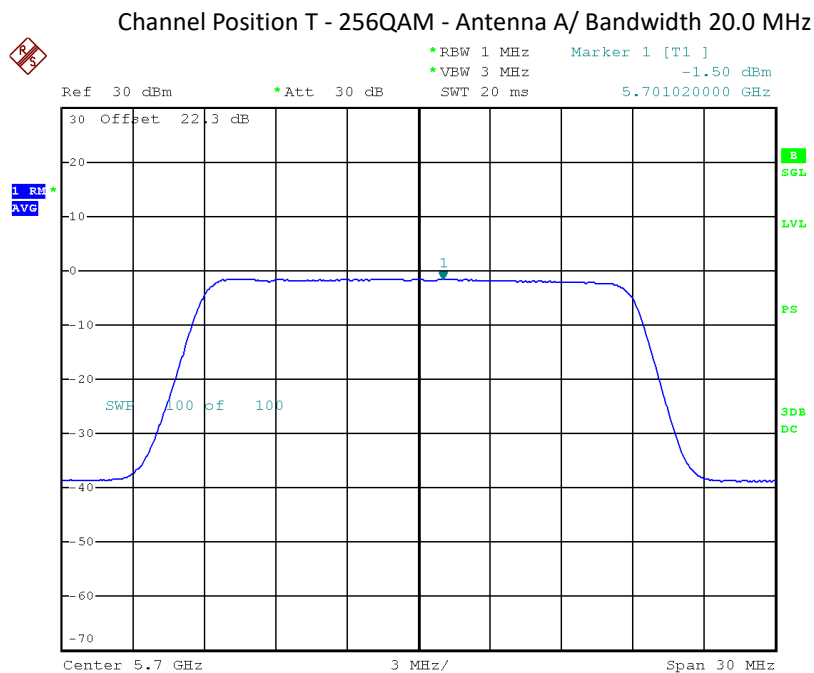
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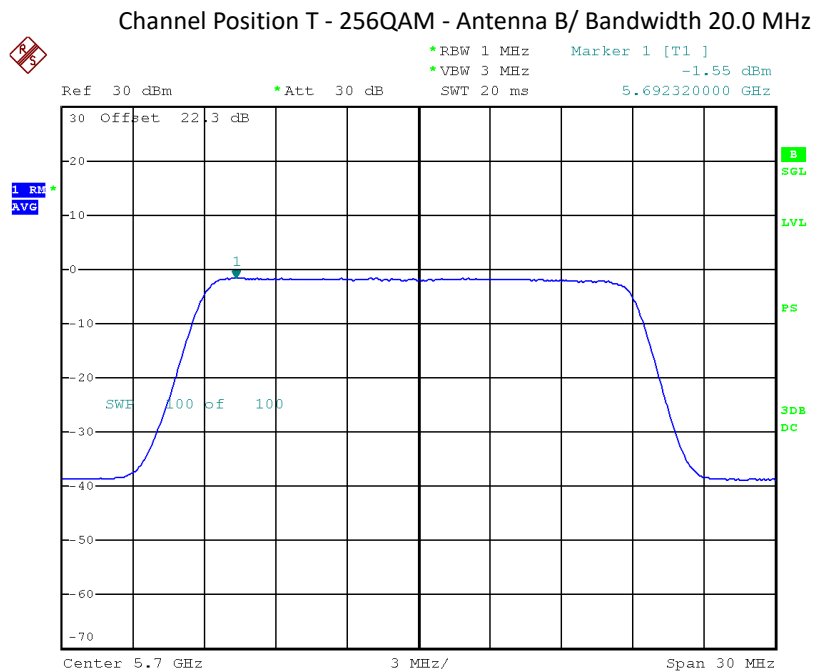
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Date: 18.OCT.2018 10:19:07



Date: 18.OCT.2018 07:32:32



Date: 18.OCT.2018 10:24:14

Configuration B2 for IC

L-MIMO-SC

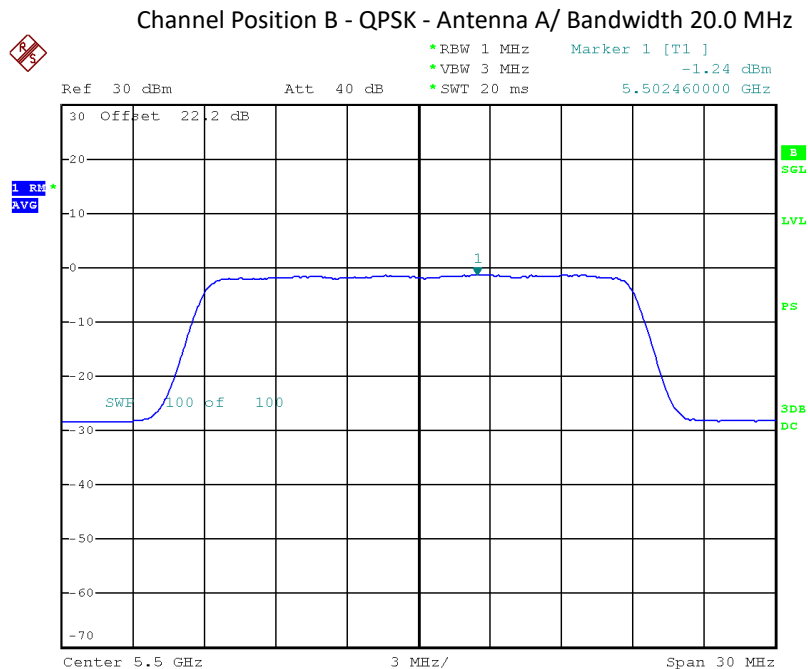
Maximum Output Power 12dBm per port:

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	QPSK / 20.0 MHz	0.443	0.243	0.383
B		0.643	0.393	0.153
Total		3.55	3.33	3.28

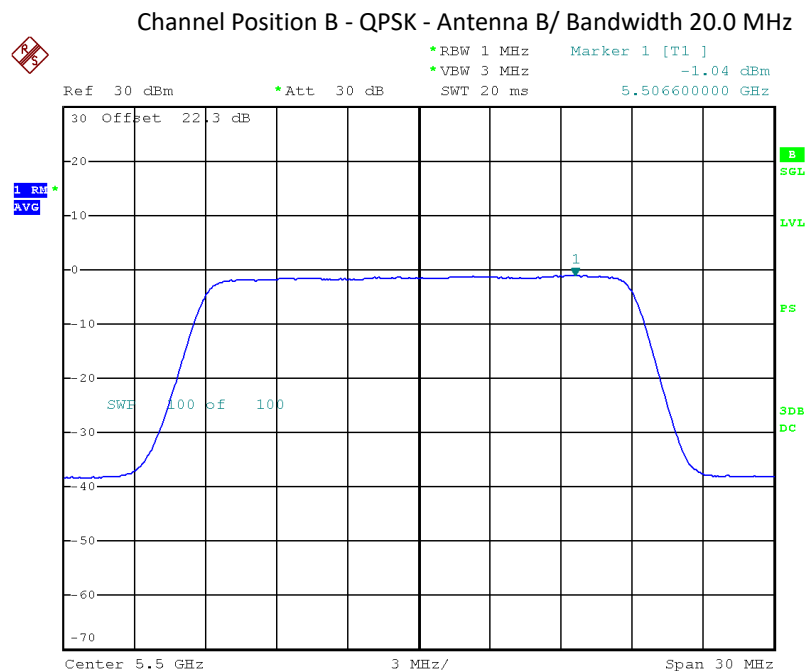
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	16QAM / 20.0 MHz	1.193	0.973	0.883
B		1.223	1.143	0.843
Total		4.22	4.07	3.87

Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	64QAM / 20.0 MHz	0.593	0.293	0.303
B		0.643	0.573	0.123
Total		3.63	3.45	3.22

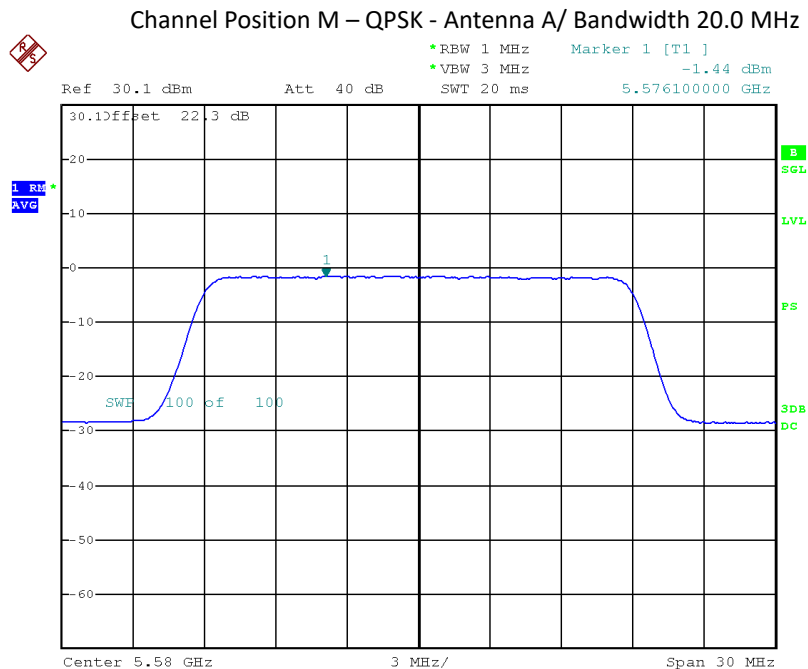
Antenna	Modulation / Carrier bandwidth (MHz)	Power Spectrum Density (dBm)		
		Channel Position B 5500MHz	Channel Position M 5580MHz	Channel Position T 5700MHz
A	256QAM / 20.0 MHz	0.413	0.443	0.183
B		0.783	0.533	0.133
Total		3.61	3.50	3.17



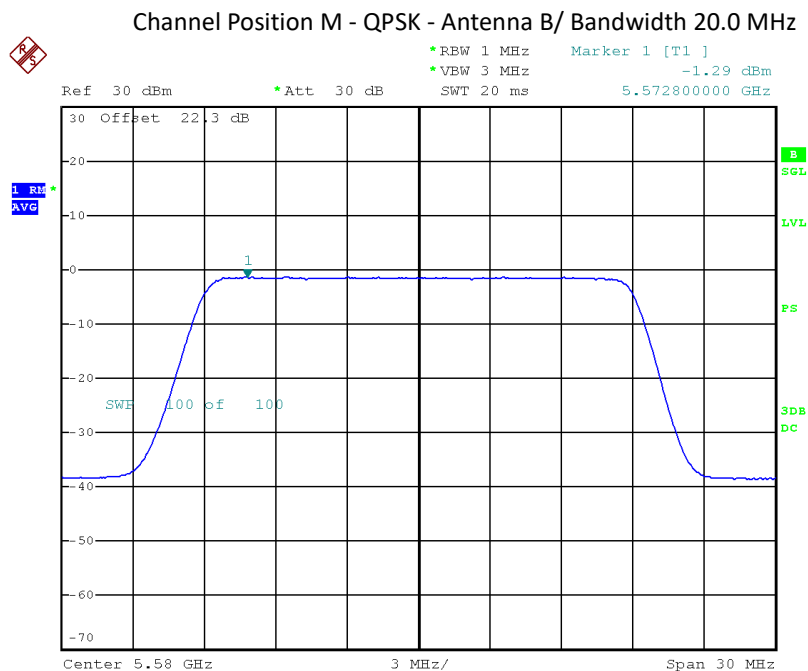
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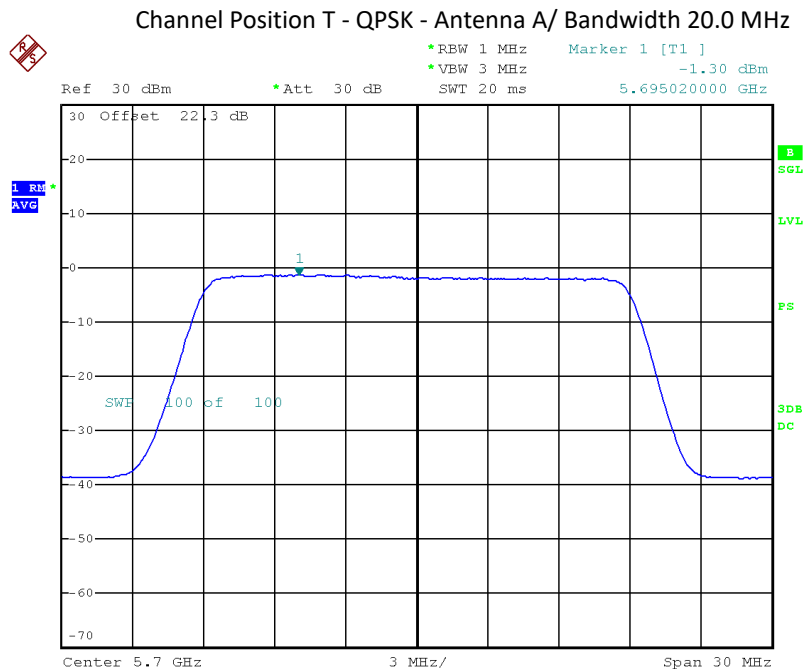
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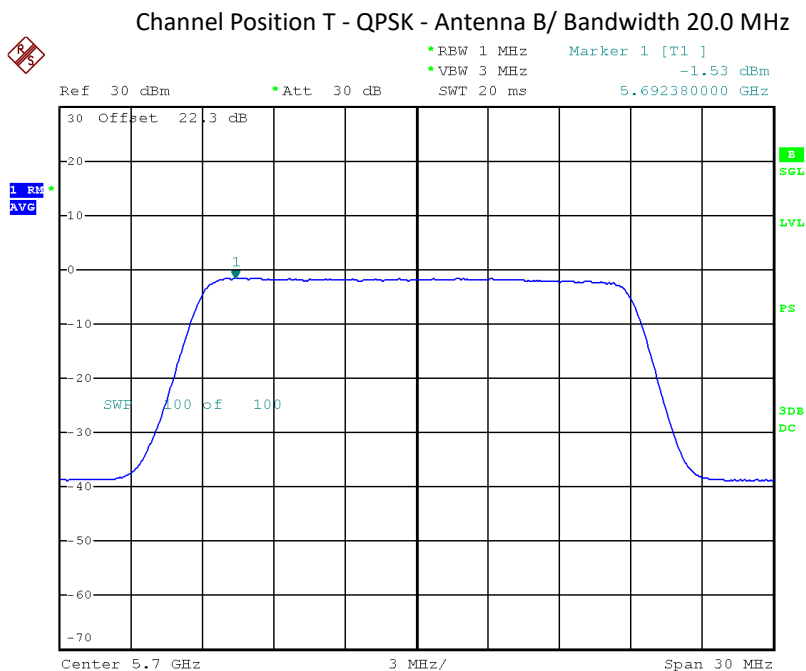
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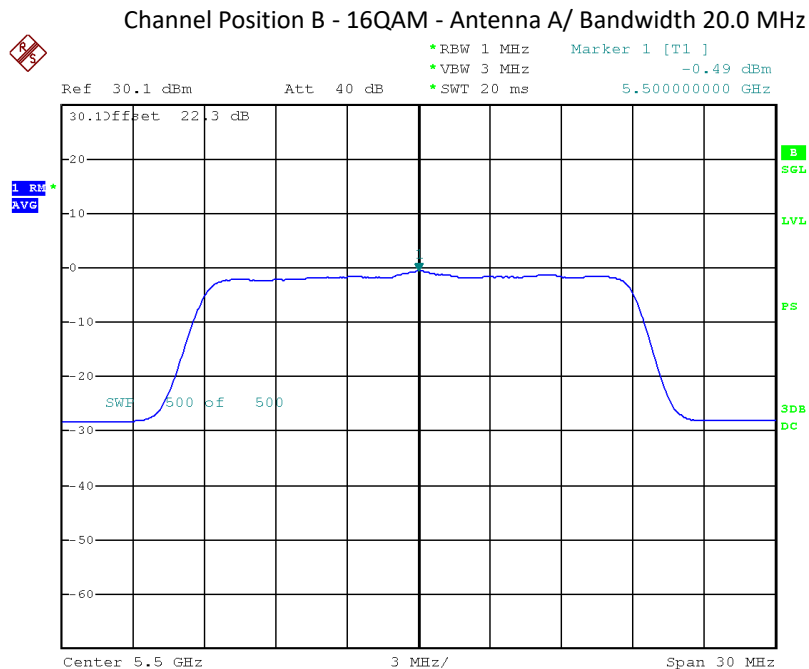
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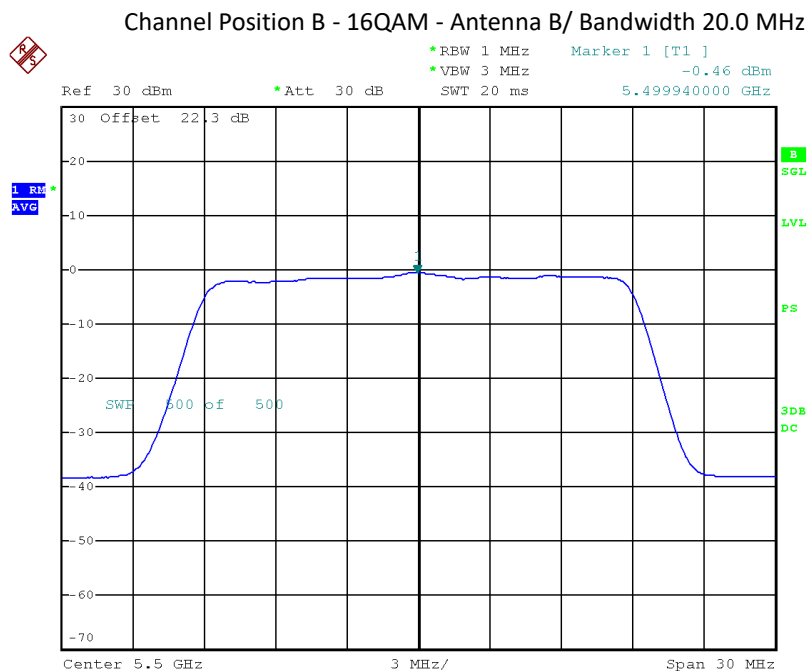
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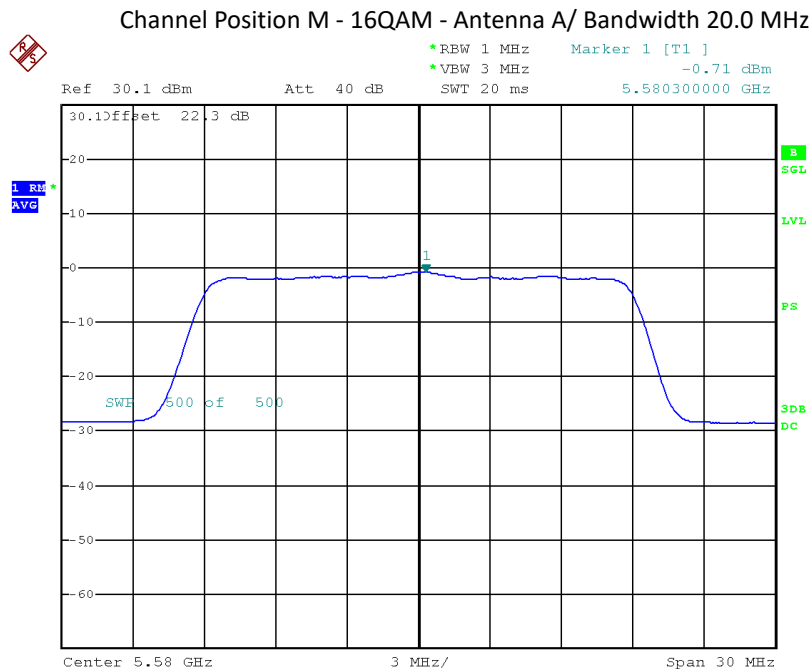
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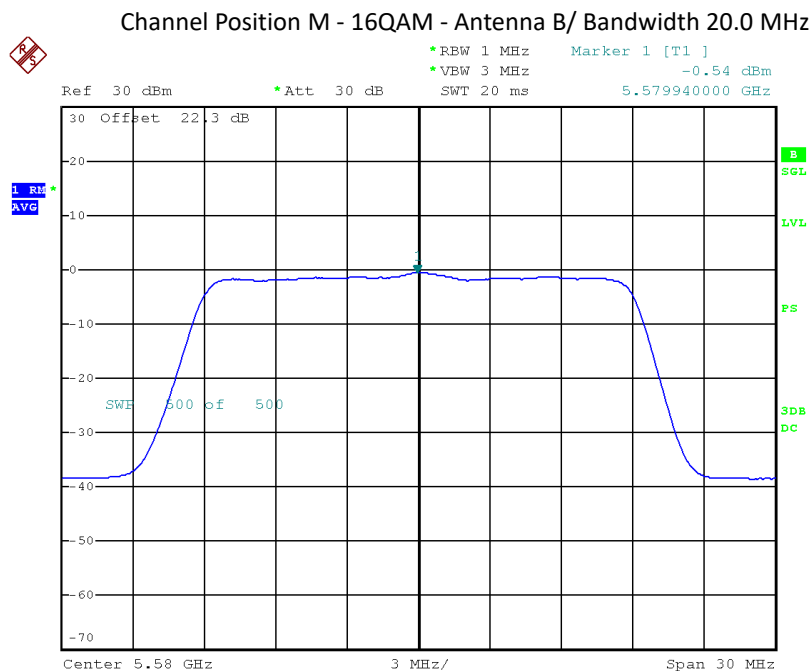
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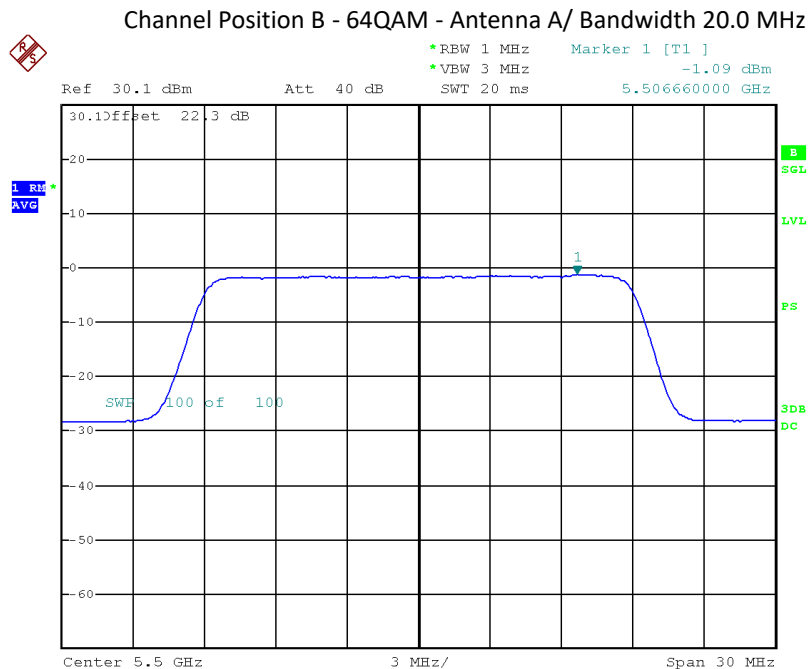


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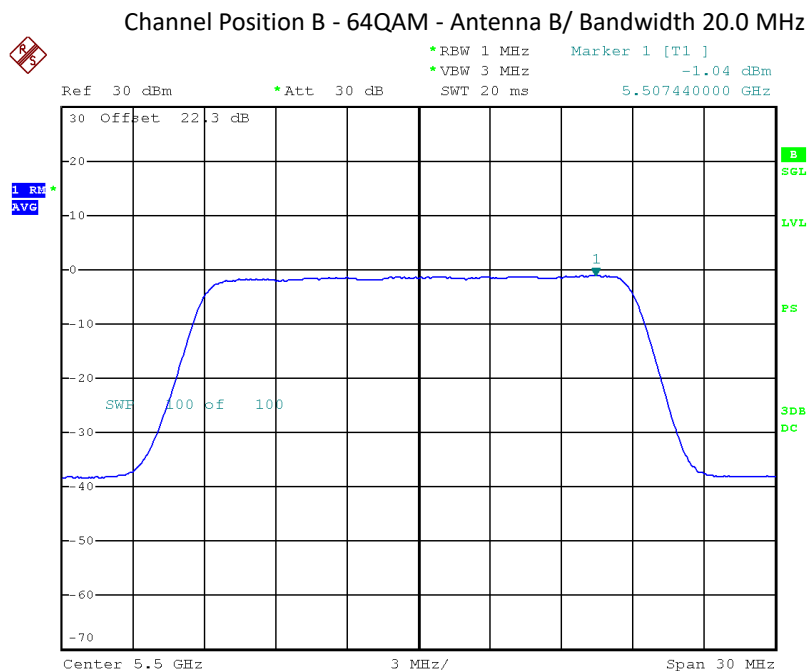


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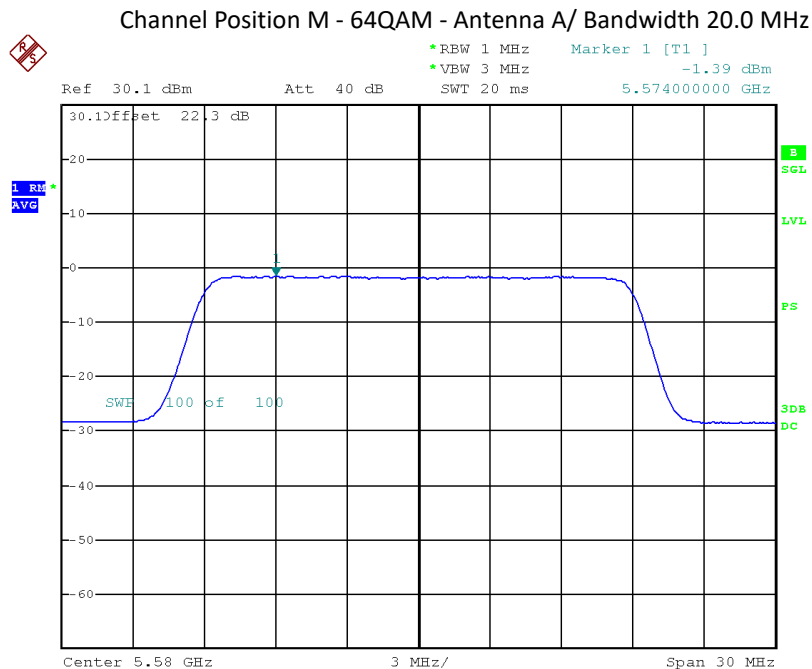




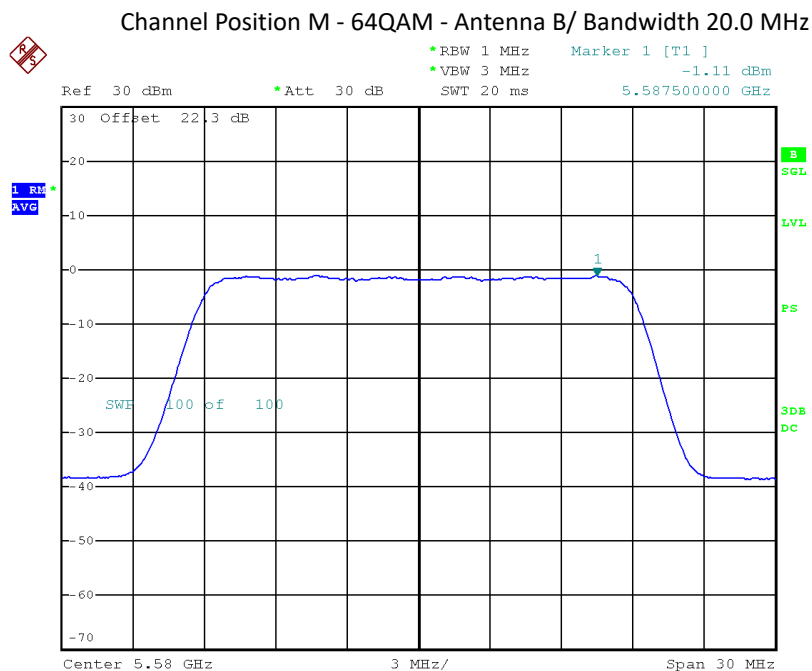
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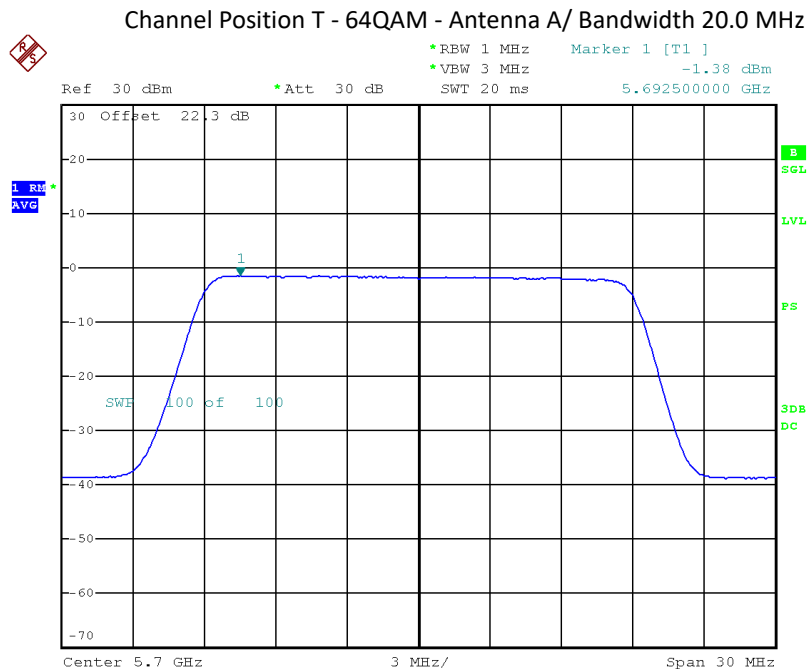
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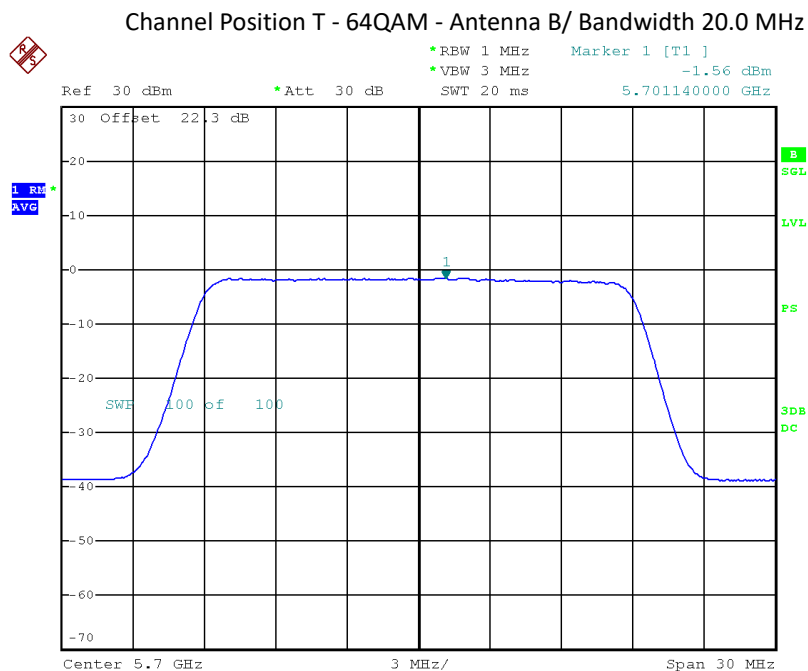
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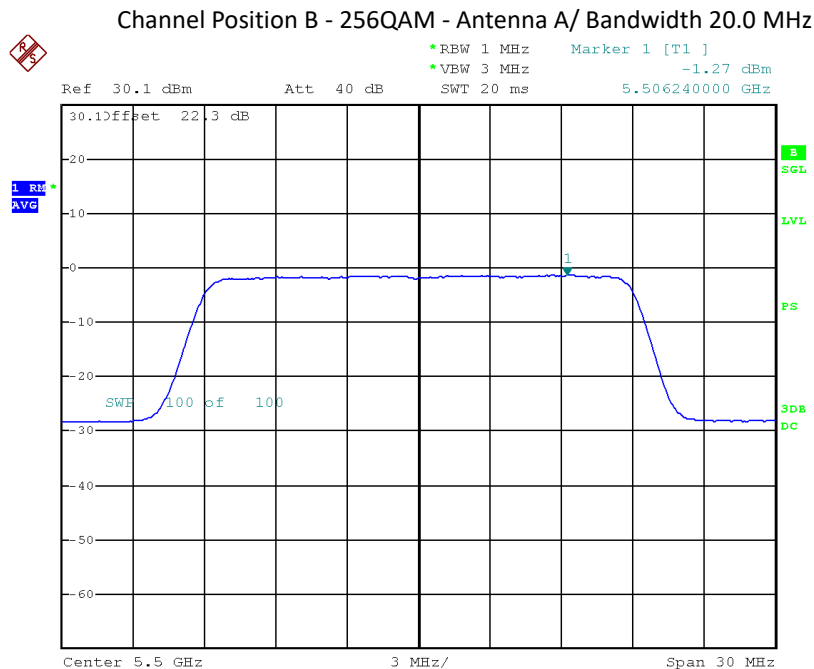
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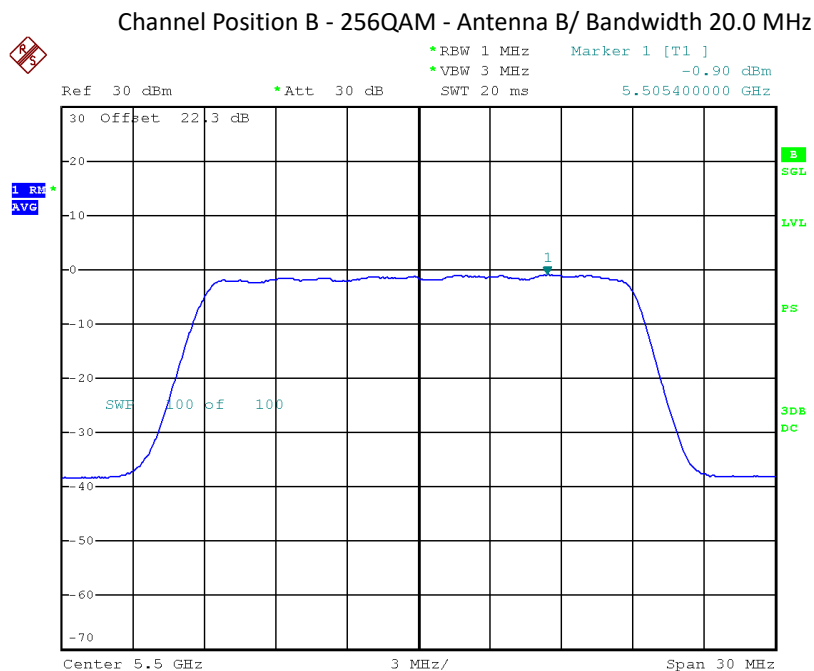
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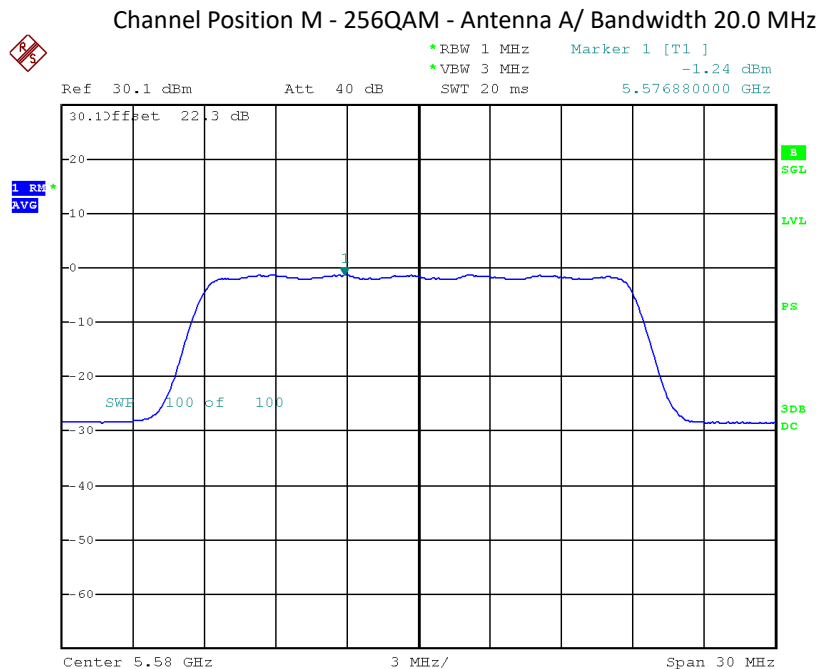
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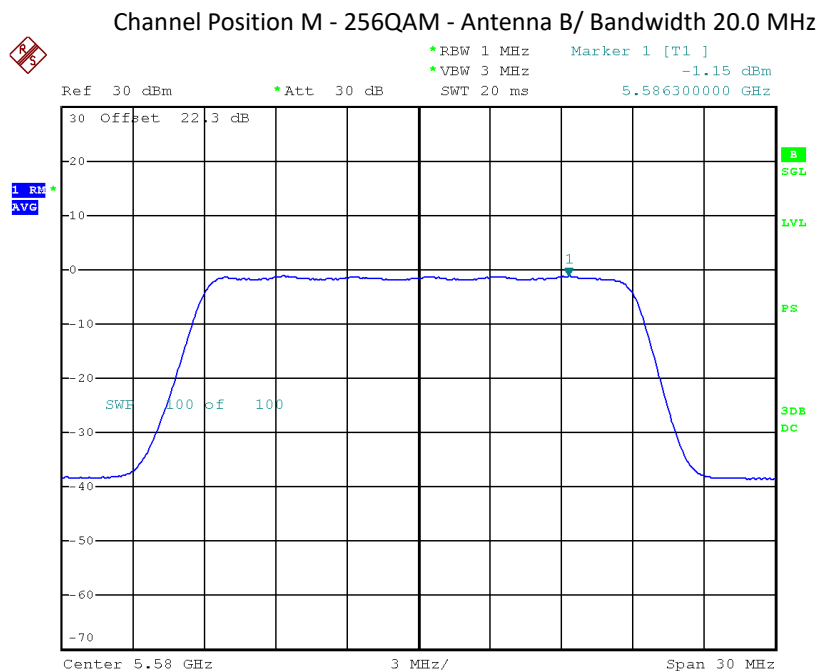
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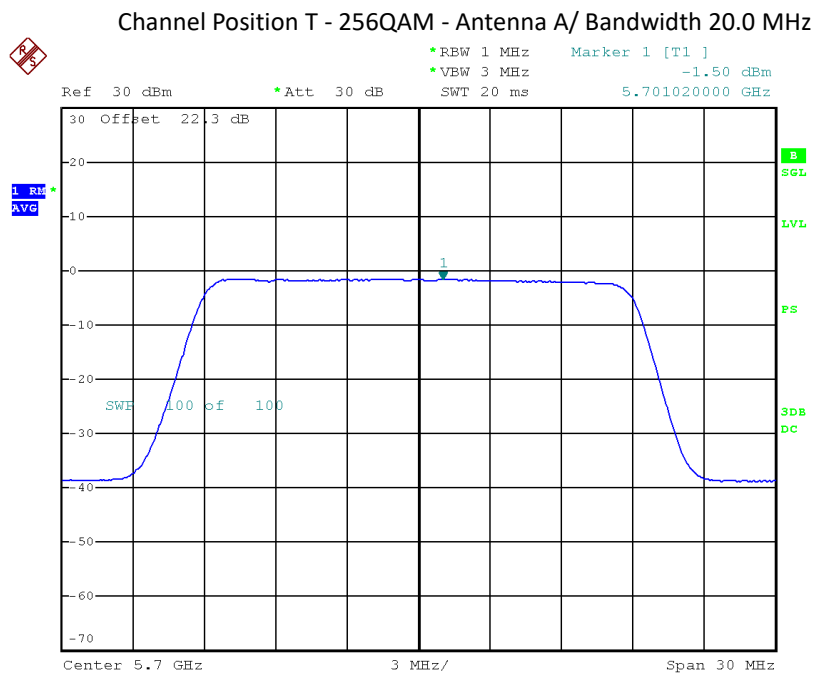
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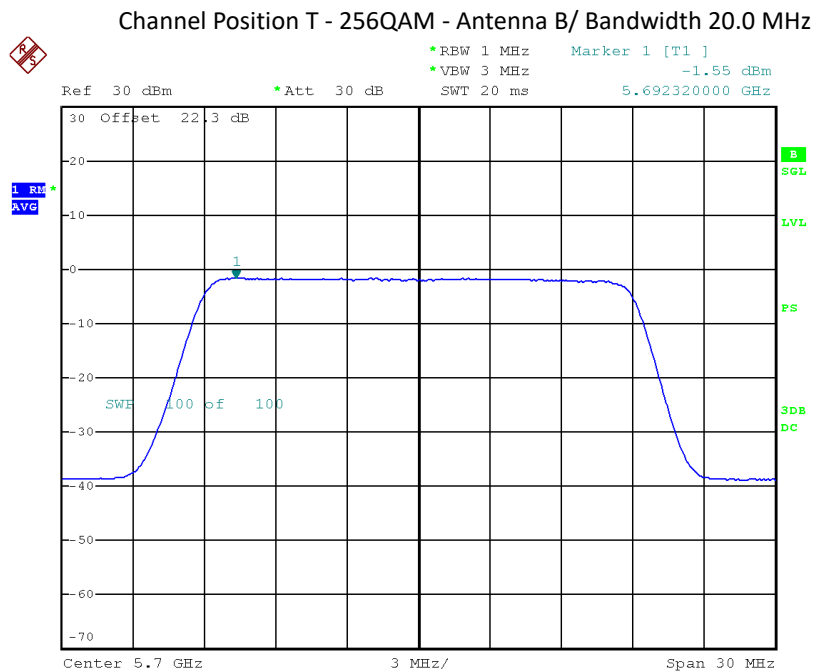
Date: 18.OCT.2018 07:12:14



Date: 18.OCT.2018 10:14:06



Date: 18.OCT.2018 07:32:32



Date: 18.OCT.2018 10:24:14

5 26 dB Bandwidth and Emission Bandwidth (99%)

Test result: Pass

5.1 Test Method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, Clause 15.407(a)(e) and RSS-247 Clause 6.

The EUT was set to transmit at maximum power and testing was carried out on bottom, middle and top channels. Using the Occupied Bandwidth measurement function in the spectrum analyzer, the 26dB bandwidth and 6dB bandwidth was measured in accordance with FCC KDB 789033 D02 General U-NII Test Procedures New Rules v01r04 Clause II.C. In addition, measurements of 99% occupied bandwidths were made in accordance with Clause II.D. The RBW was configured to 1% of the theoretical channel bandwidth, meeting the requirement of being between 1 to 5% of the Occupied Bandwidth described in the KDB above mentioned.

The results are shown in the plots below.

5.2 Test Results

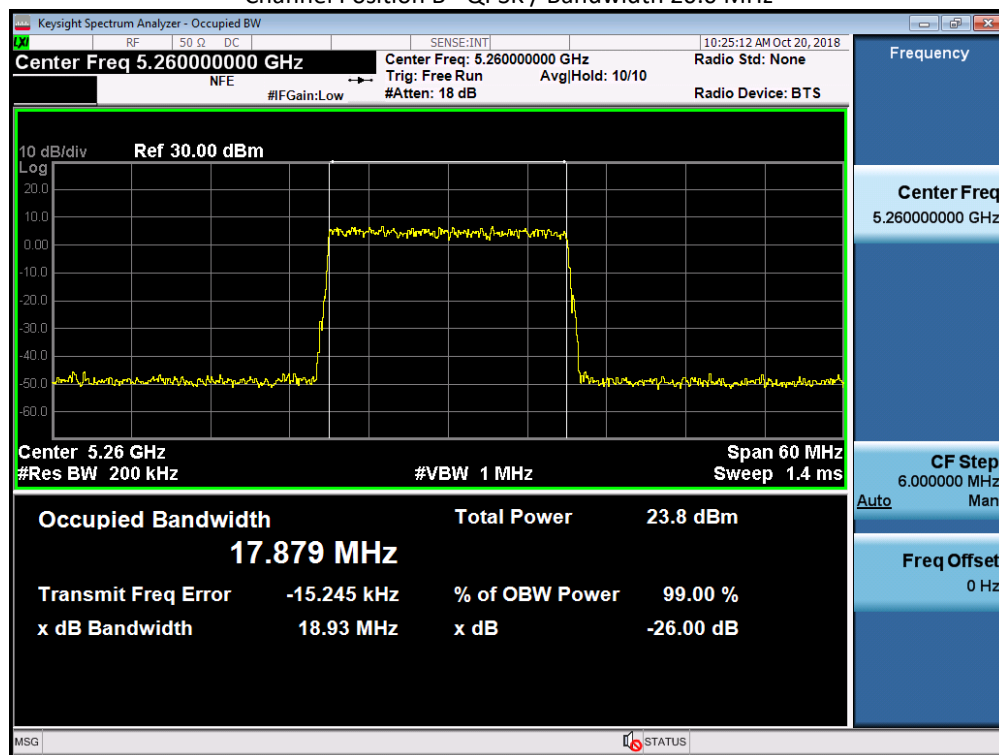
Configuration A1

L-MIMO-SC

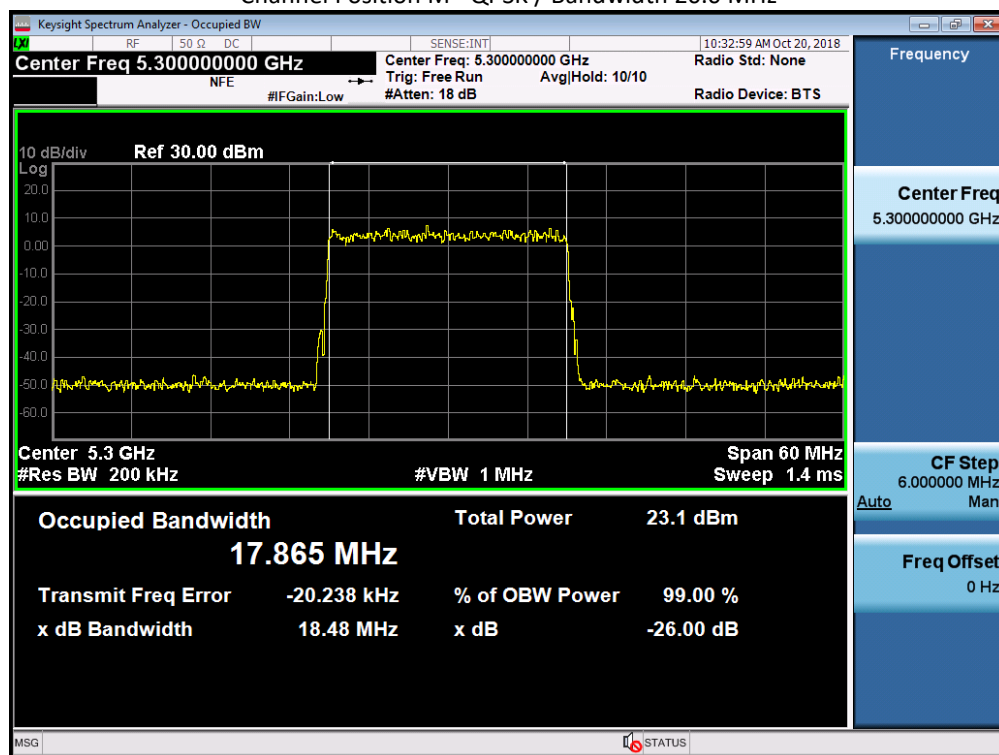
Maximum Output Power 18dBm per port:

Modulation / Bandwidth	Occupied Bandwidth (MHz)					
	Channel Position B 5260MHz		Channel Position M 5300MHz		Channel Position T 5320MHz	
	99% Bandwidth	-26dB Bandwidth	99% Bandwidth	-26dB Bandwidth	99% Bandwidth	-26dB Bandwidth
QPSK / 20.0MHz	17.879	18.930	17.865	18.480	17.901	18.790
16QAM / 20.0MHz	17.920	18.800	17.841	18.900	17.944	18.960
64QAM / 20.0MHz	17.875	18.730	17.860	18.680	17.915	18.820
256QAM / 20.0MHz	17.856	19.060	17.826	18.940	17.859	18.540

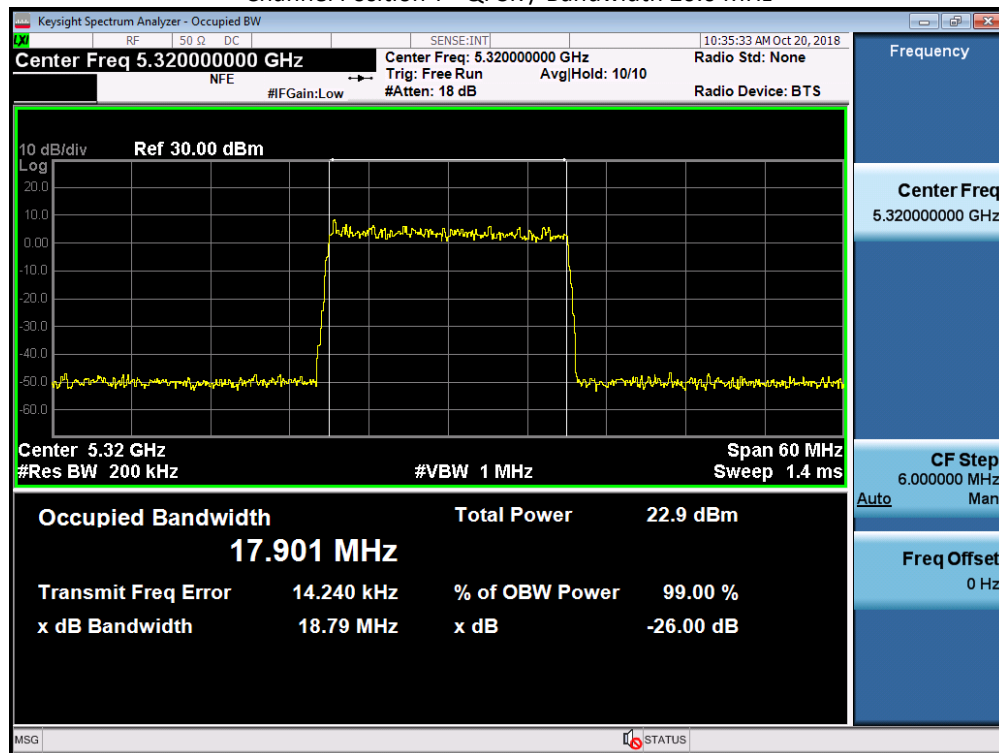
Channel Position B - QPSK / Bandwidth 20.0 MHz



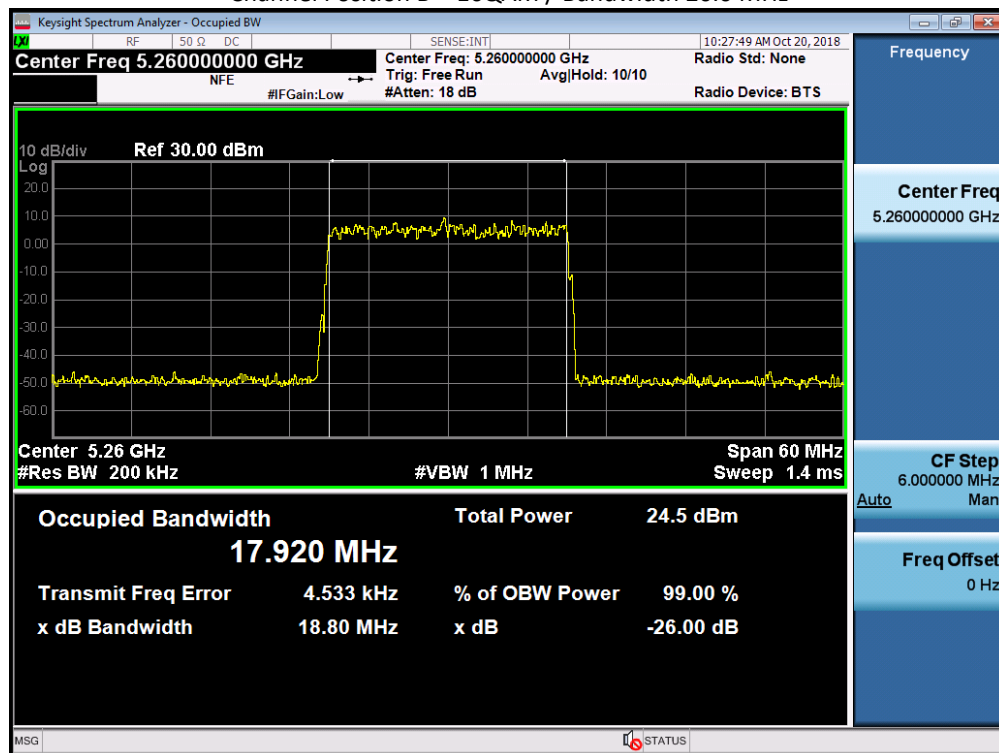
Channel Position M - QPSK / Bandwidth 20.0 MHz



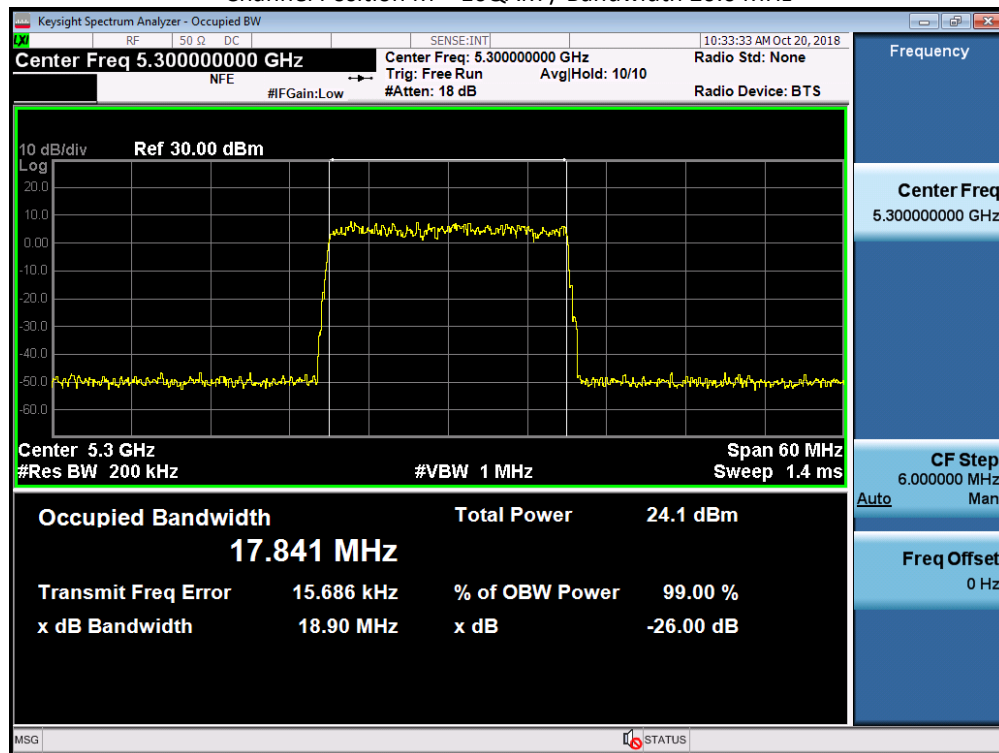
Channel Position T - QPSK / Bandwidth 20.0 MHz



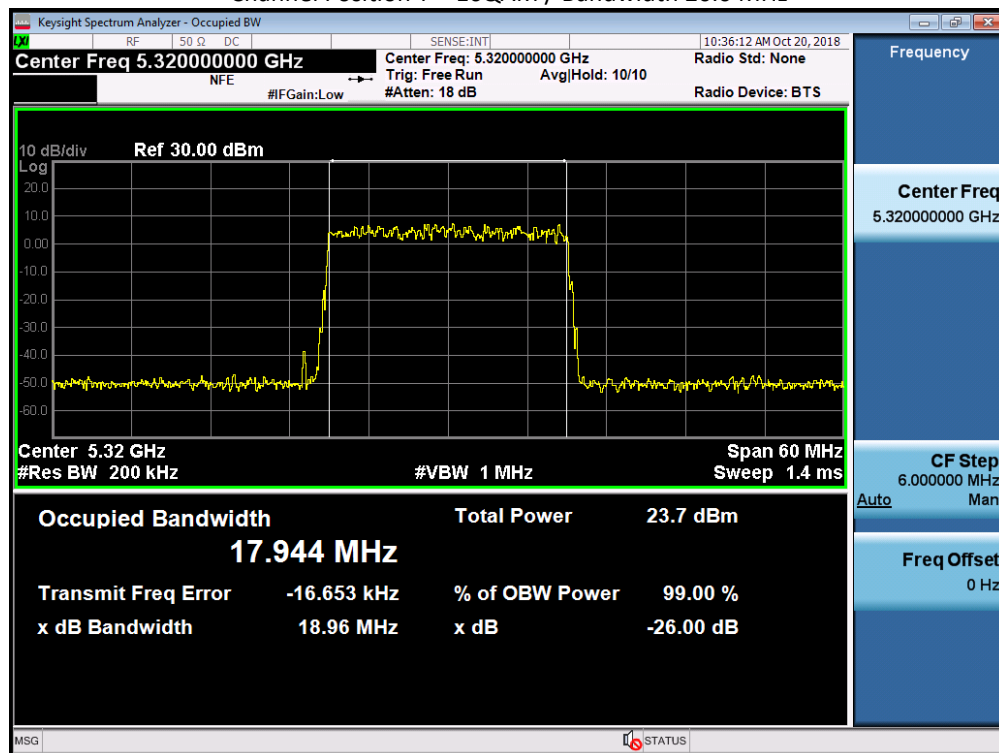
Channel Position B - 16QAM / Bandwidth 20.0 MHz



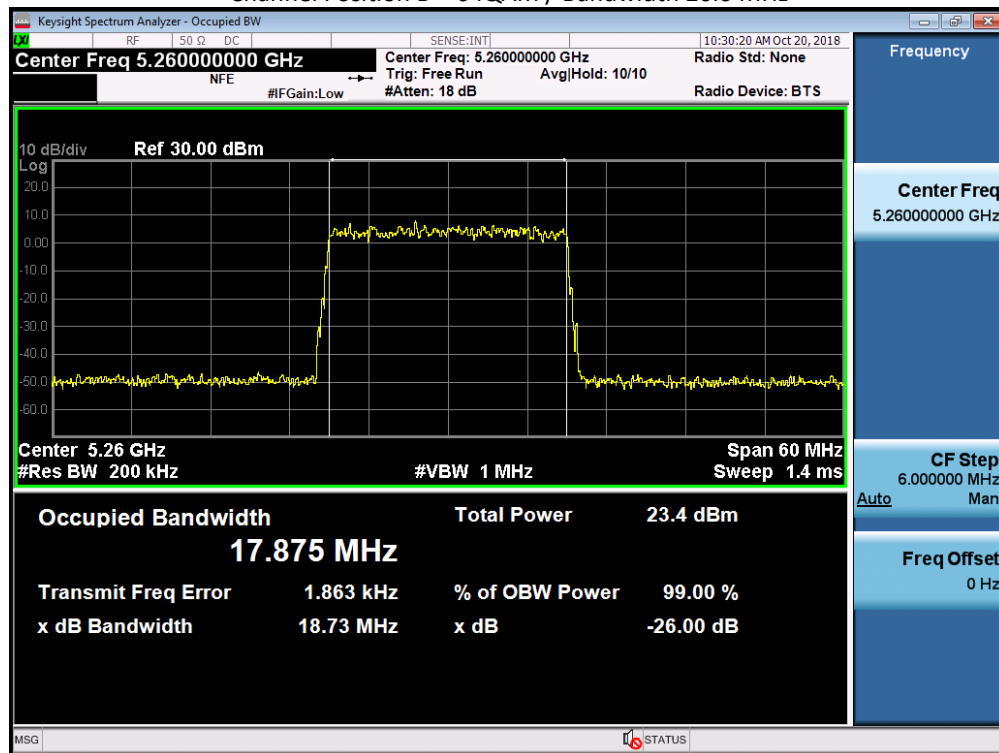
Channel Position M – 16QAM / Bandwidth 20.0 MHz



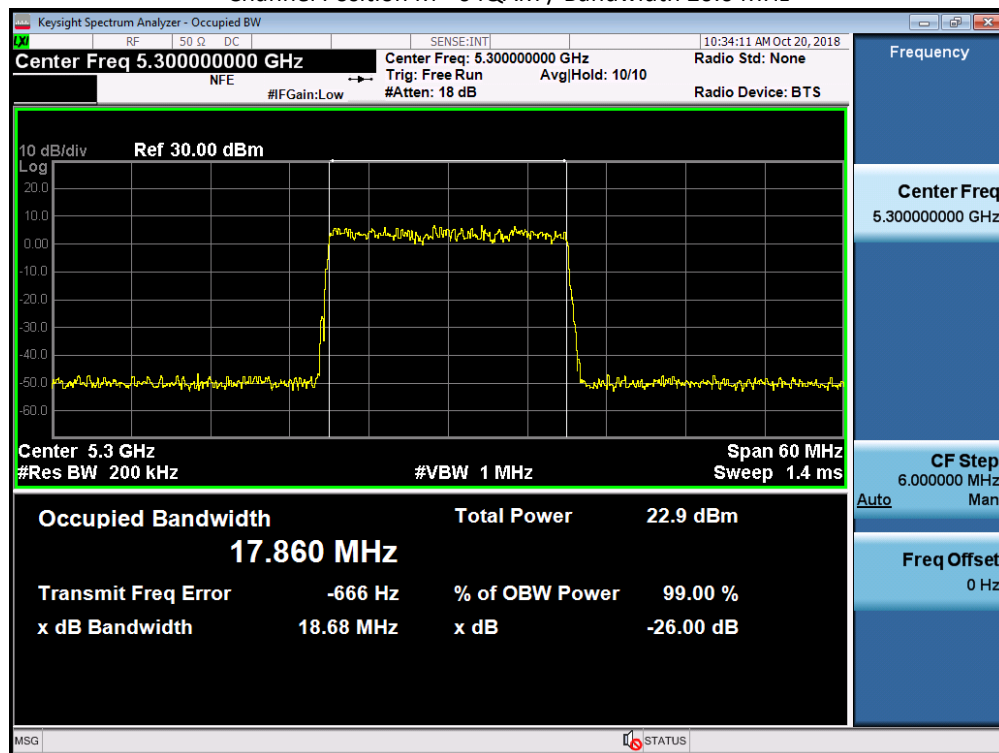
Channel Position T – 16QAM / Bandwidth 20.0 MHz



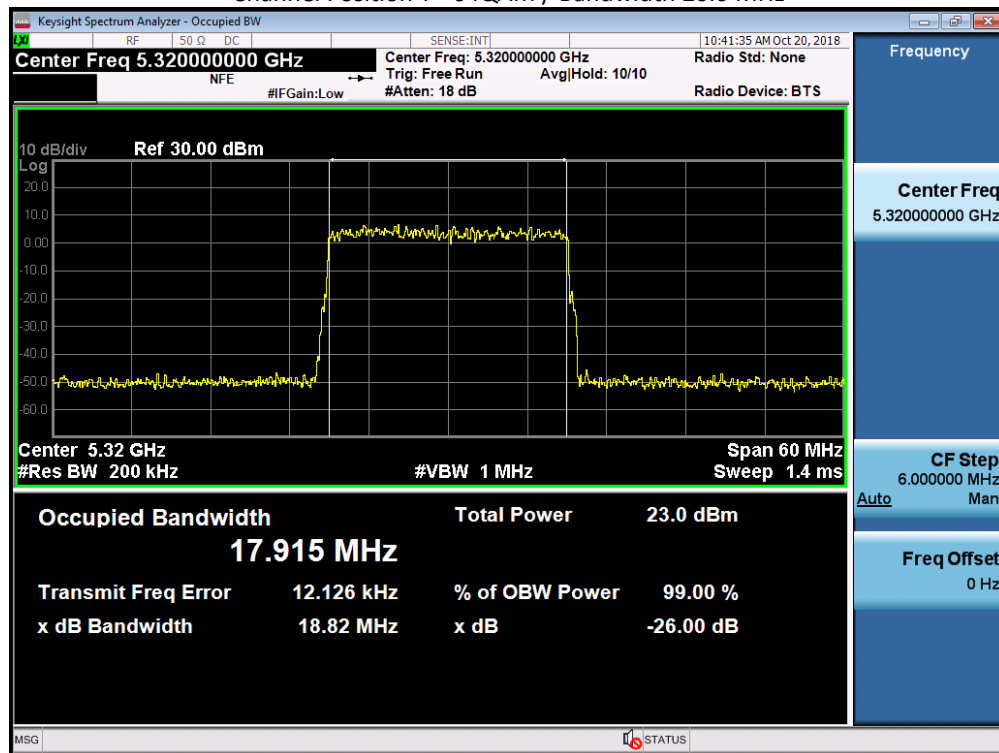
Channel Position B – 64QAM / Bandwidth 20.0 MHz



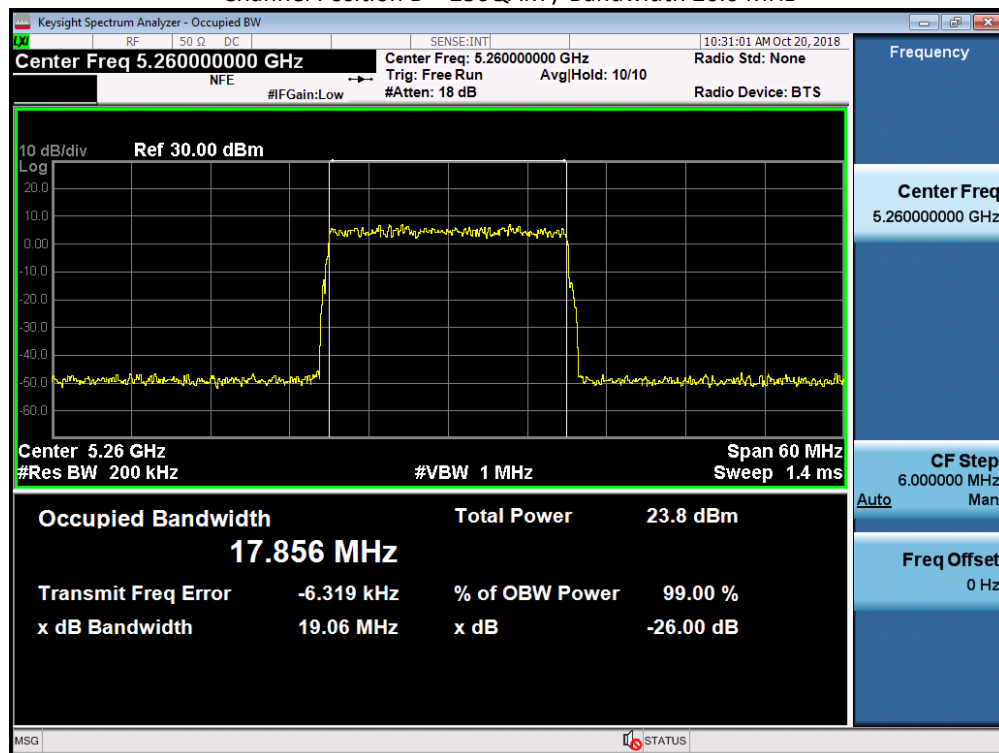
Channel Position M - 64QAM / Bandwidth 20.0 MHz



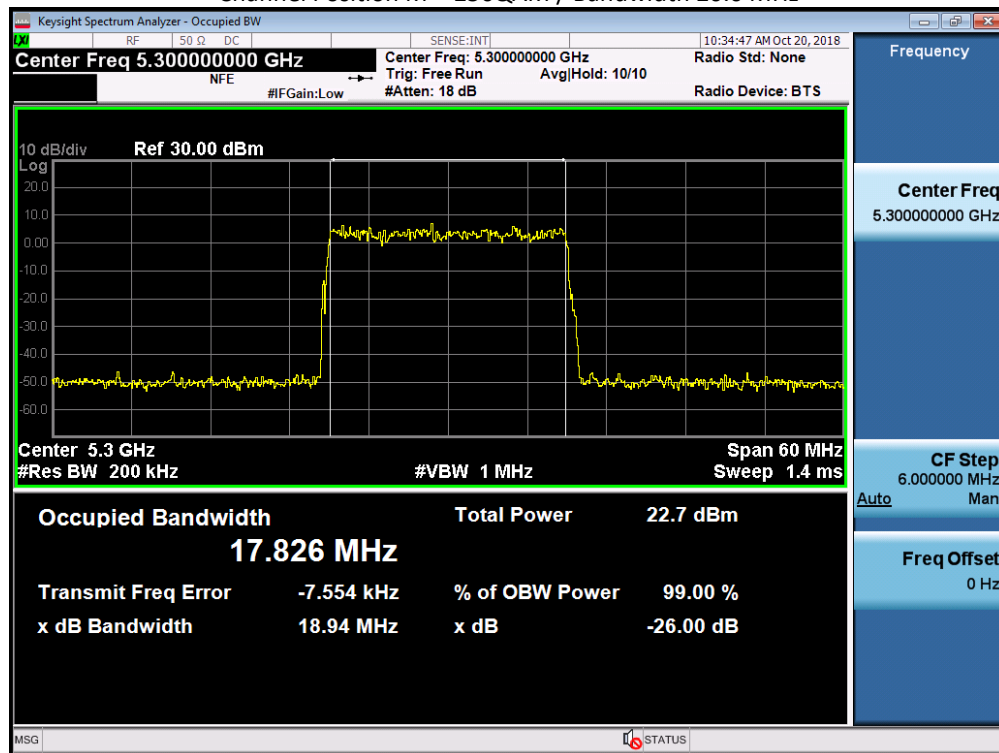
Channel Position T - 64QAM / Bandwidth 20.0 MHz



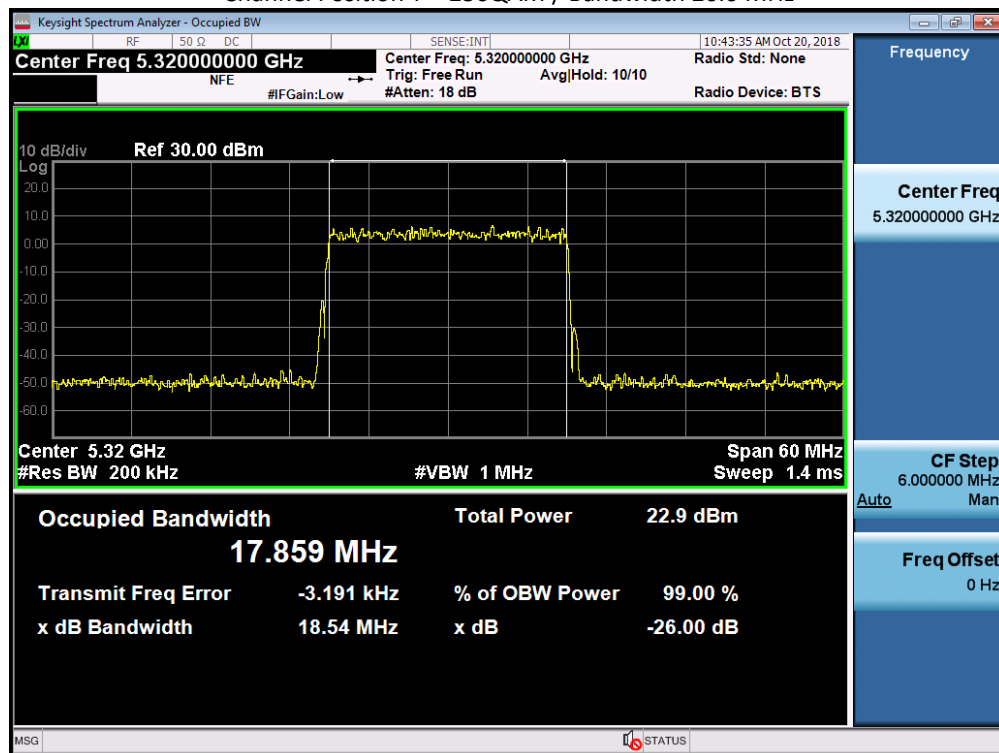
Channel Position B - 256QAM / Bandwidth 20.0 MHz



Channel Position M – 256QAM / Bandwidth 20.0 MHz



Channel Position T – 256QAM / Bandwidth 20.0 MHz



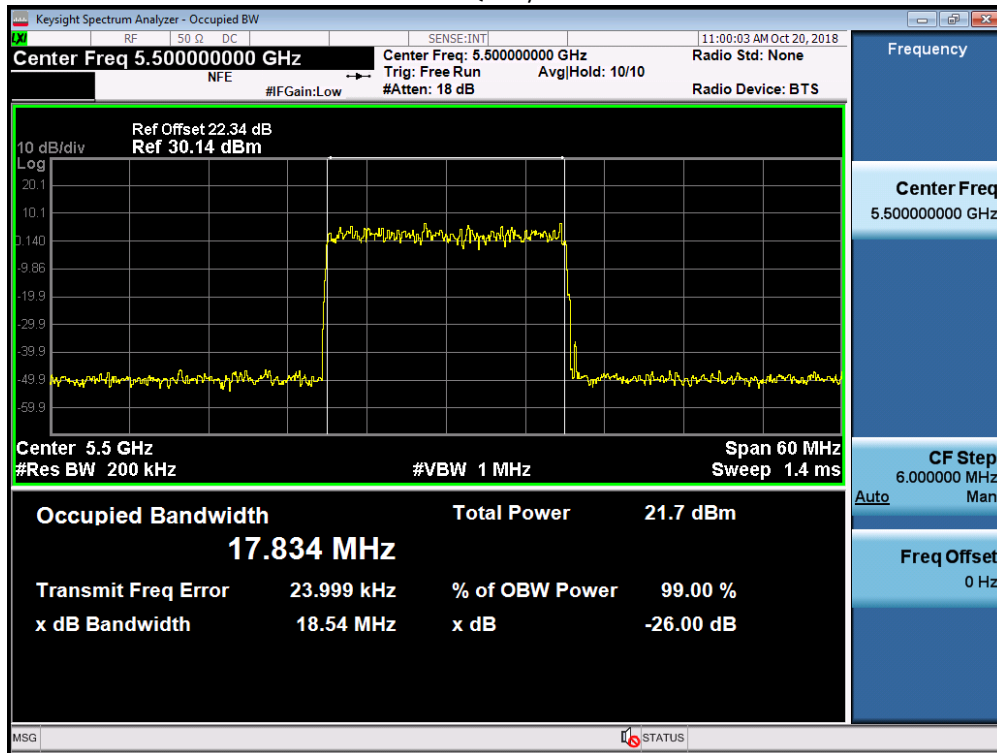
Configuration A2 for FCC

L-MIMO-SC

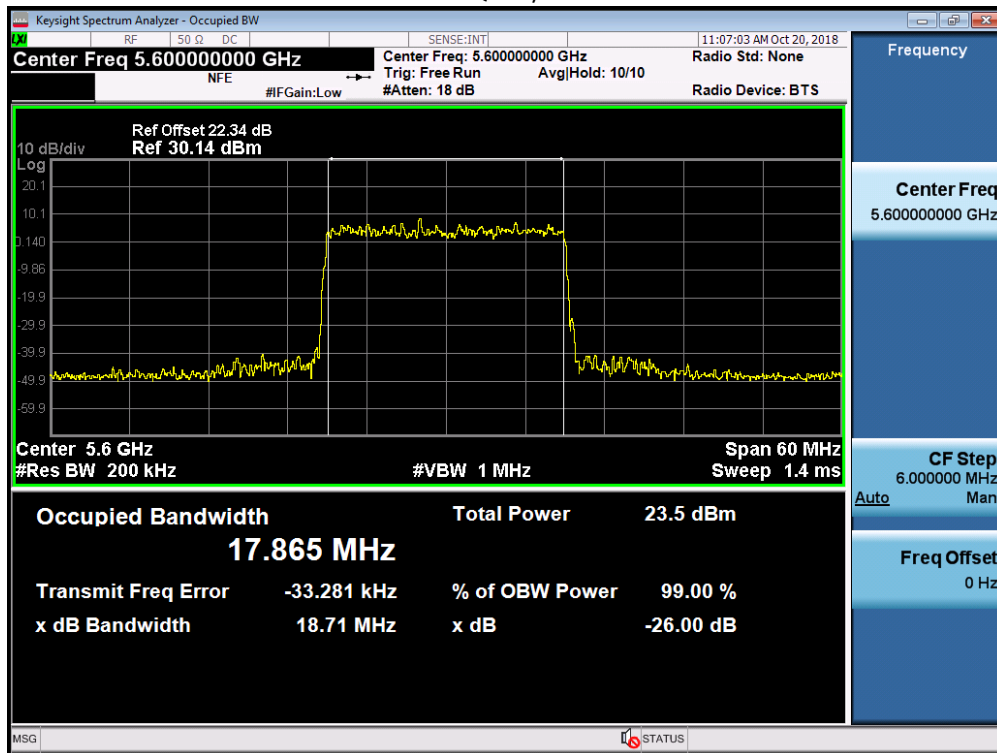
Maximum Output Power 18dBm per port:

Modulation / Bandwidth	Occupied Bandwidth (MHz)					
	Channel Position B 5500MHz		Channel Position M 5600MHz		Channel Position T 5700MHz	
	99% Bandwidth	-26dB Bandwidth	99% Bandwidth	-26dB Bandwidth	99% Bandwidth	-26dB Bandwidth
QPSK / 20.0MHz	17.834	18.540	17.865	18.710	17.844	18.760
16QAM / 20.0MHz	17.845	18.690	17.811	18.720	17.866	18.910
64QAM / 20.0MHz	17.855	18.670	17.948	18.740	17.872	18.850
256QAM / 20.0MHz	17.842	18.690	17.861	18.880	17.866	18.760

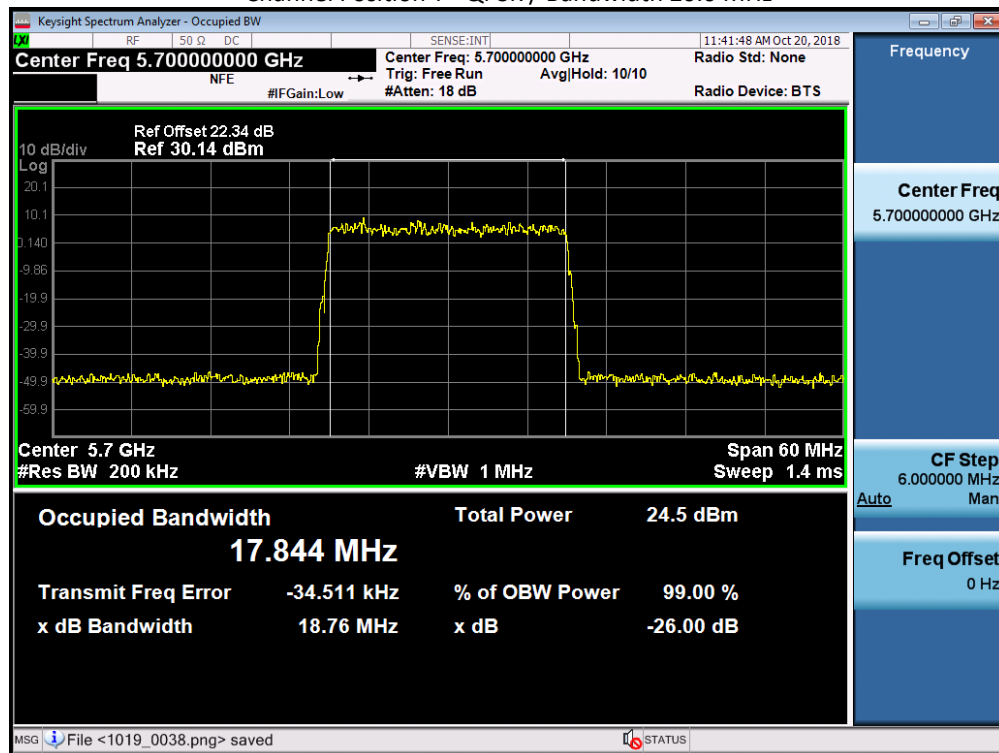
Channel Position B - QPSK / Bandwidth 20.0 MHz



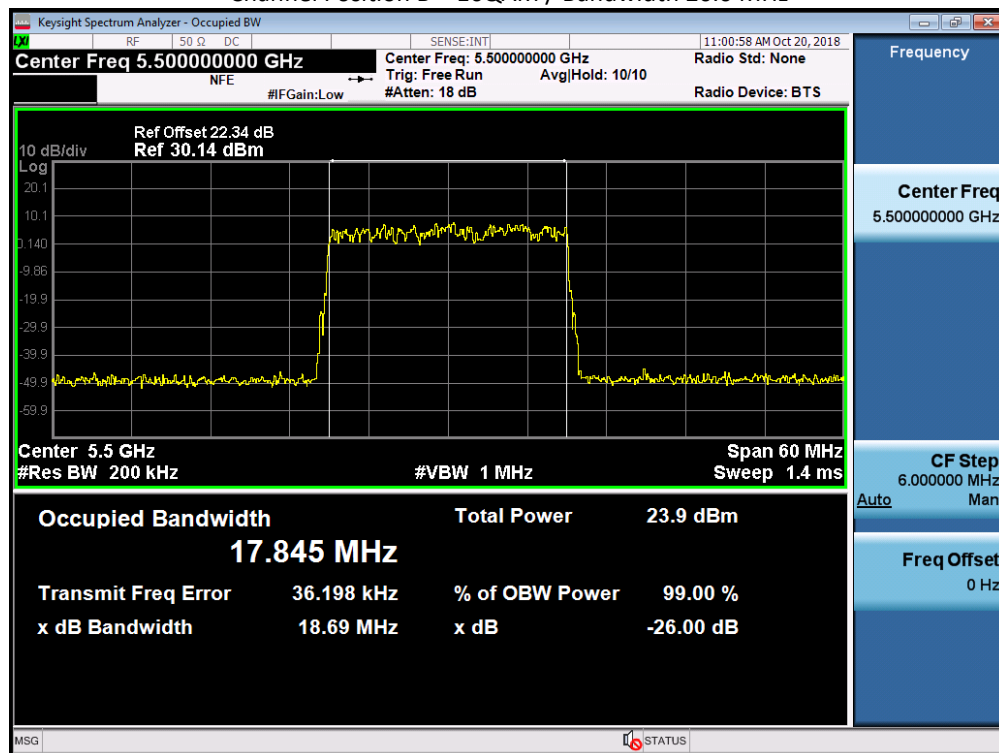
Channel Position M - QPSK / Bandwidth 20.0 MHz



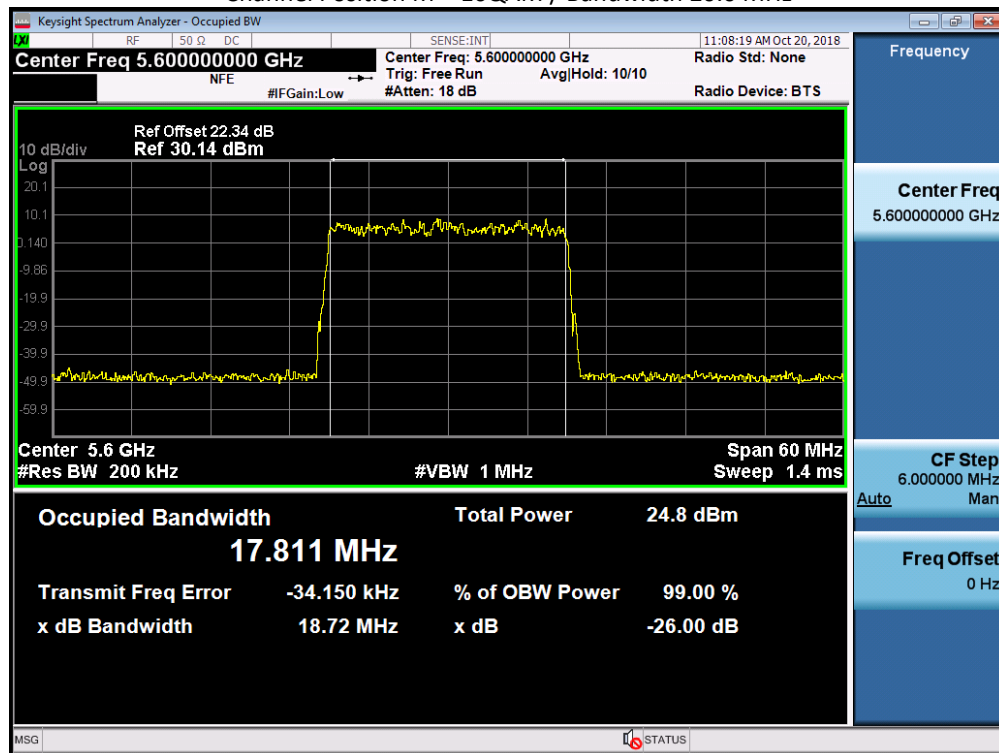
Channel Position T - QPSK / Bandwidth 20.0 MHz



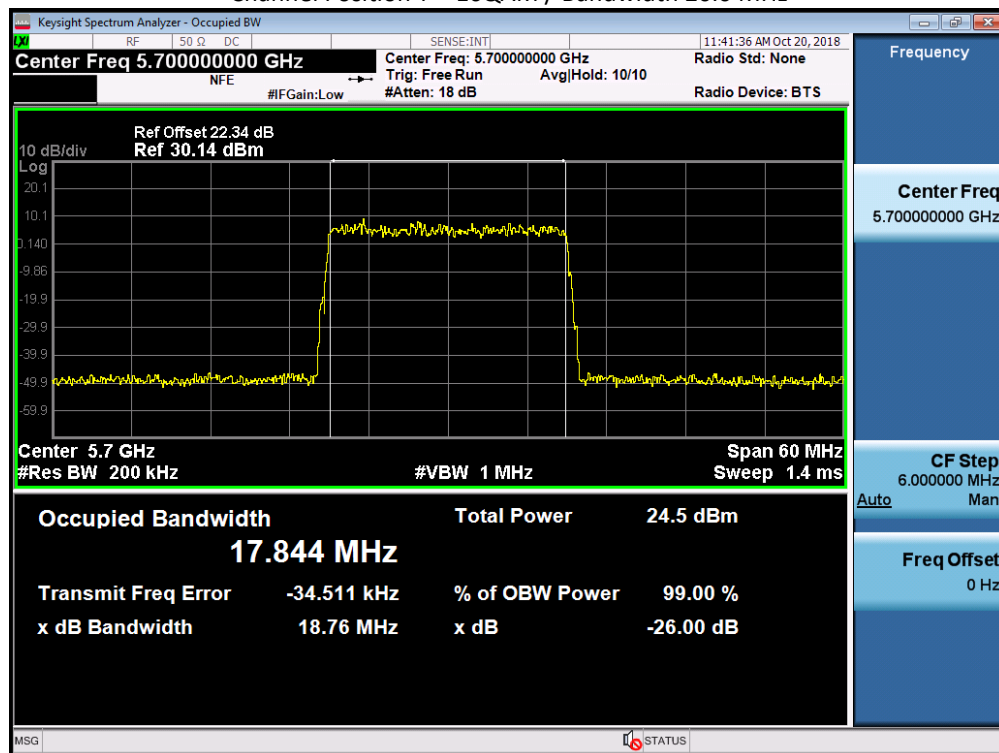
Channel Position B - 16QAM / Bandwidth 20.0 MHz



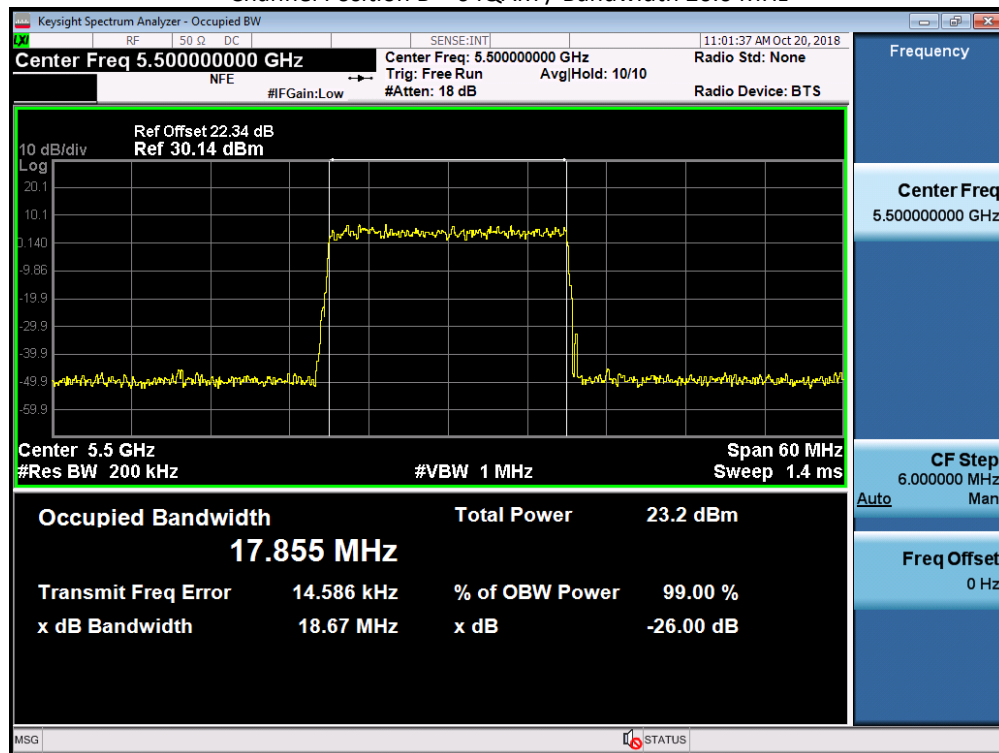
Channel Position M – 16QAM / Bandwidth 20.0 MHz



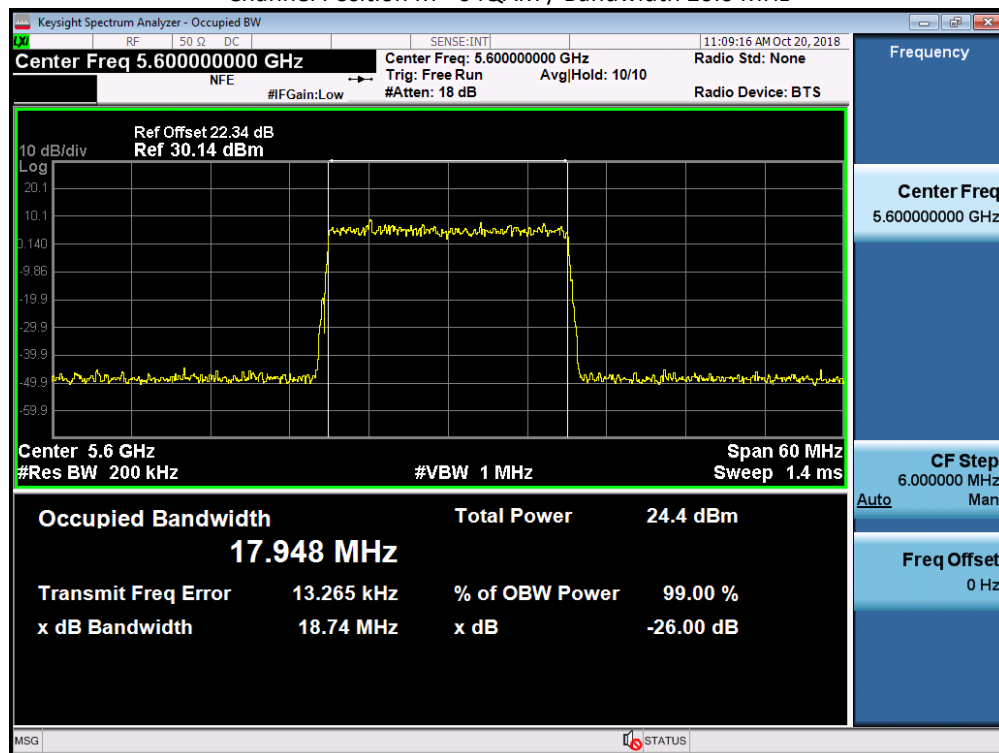
Channel Position T – 16QAM / Bandwidth 20.0 MHz



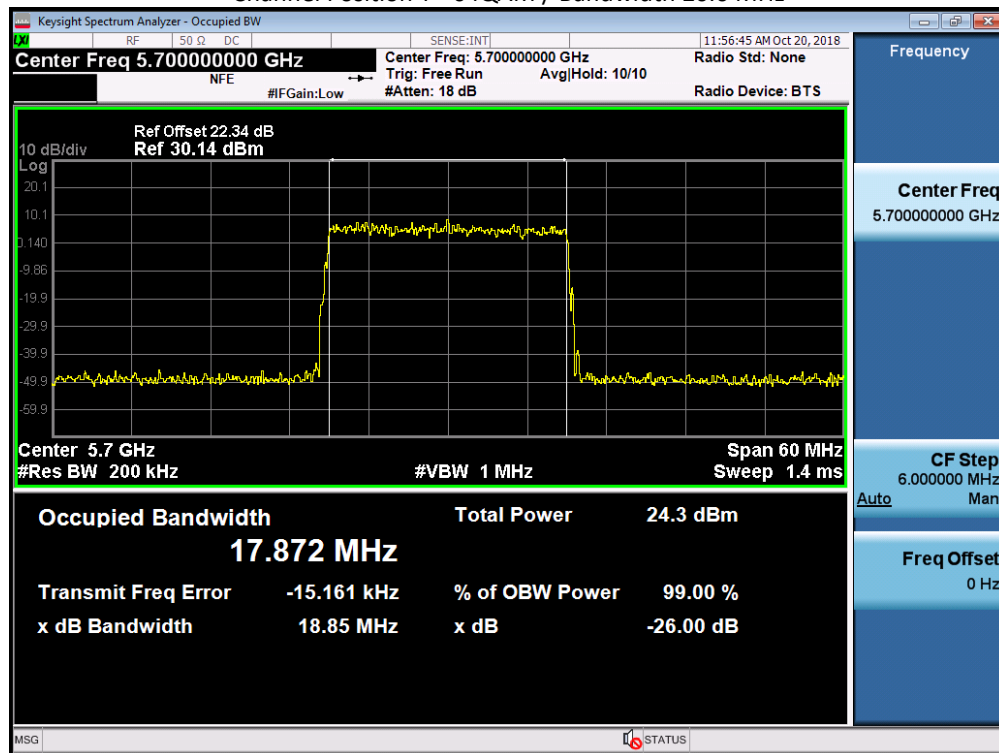
Channel Position B – 64QAM / Bandwidth 20.0 MHz



Channel Position M - 64QAM / Bandwidth 20.0 MHz



Channel Position T - 64QAM / Bandwidth 20.0 MHz



Channel Position B - 256QAM / Bandwidth 20.0 MHz

