

	 MS ISO/IEC 17025 TESTING SAMM No. 0825																						
MOTOROLA PENANG ADV. COMM. LABORATORY Motorola Solutions Malaysia Sdn Bhd, Innoplex Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D, 11900 Bayan Lepas, Penang, Malaysia.	FCC / IC TEST REPORT Report Revision : Rev.B																						
<table><tr><td>Date/s Tested</td><td>: 19-Nov-2017 - 8-Mar-2018</td></tr><tr><td>Manufacturer/Location</td><td>: Motorola Solutions – Penang</td></tr><tr><td>Requestor</td><td>: RONI KOZIEL</td></tr><tr><td>Product Type</td><td>: LEX L11 Mission Critical LTE Device</td></tr><tr><td>Model Number</td><td>: LEX L11n</td></tr><tr><td>Frequency Band</td><td>: Refer to section 1.4</td></tr><tr><td>Applicant Name</td><td>: Motorola Solutions, Inc</td></tr><tr><td>Applicant Address</td><td>: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322</td></tr><tr><td>FCC Registrations</td><td>: 461337</td></tr><tr><td>IC Registrations</td><td>: 109AK</td></tr></table> The equipment was tested accordance to the requirement listed below: <table><tr><td>(LTE Band 14) FCC 47 CFR Part 2 / 90 ISED RSS GEN Issue 4, November 2014 ISED RSS 140 Issue 1, April 2018</td><td>PASS</td></tr></table>		Date/s Tested	: 19-Nov-2017 - 8-Mar-2018	Manufacturer/Location	: Motorola Solutions – Penang	Requestor	: RONI KOZIEL	Product Type	: LEX L11 Mission Critical LTE Device	Model Number	: LEX L11n	Frequency Band	: Refer to section 1.4	Applicant Name	: Motorola Solutions, Inc	Applicant Address	: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322	FCC Registrations	: 461337	IC Registrations	: 109AK	(LTE Band 14) FCC 47 CFR Part 2 / 90 ISED RSS GEN Issue 4, November 2014 ISED RSS 140 Issue 1, April 2018	PASS
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Prepared By:  Maheshvaran Rajagopal Technician	Approved By:  Goh Aik Hong Responsible Engineer																						

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REVISION HISTORY

Revision History	Description	Date	Originator
Rev A.	Initial Report	8-March-2018	Maheshvaran Rajagopal
Rev B.	i. Applicant name and address has been added. ii. The battery model number has been revised. iii. AC adapter accessories devices	30-May-2018	Maheshvaran Rajagopal

	information has been added. iv. The Test report number of page format is corrected. v. RSSs version standard have been added to the cover page. vi. Justification statement of accessory devices is included at section 1.5.		
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1.0. Summary of Test Results

FCC Clause	ISED Clause	Test Item	Result	Remark
2.1046	RSS-140 3.1	Conducted RF Output Power	Pass	Meet the requirement of limit
2.1046	RSS 140 4.3	Peak-to-Average Power Ratio	Pass	Meet the requirement of limit
2.1049	RSS-Gen 6.6	Occupied Bandwidth (26dBc, 99%)	Pass	Meet the requirement of limit
2.1055	RSS-140 4.2	Frequency Stability	Pass	Meet the requirement of limit
2.1051 90.210 90.543(e)	RSS-Gen 6.13 RSS-140 4.4	Band Edge/Emission Mask Conducted Spurious Emission	Pass	Meet the requirement of limit
2.1051 90.543(e)	RSS-Gen 6.13 RSS-140 4.4	Conducted Spurious Emissions	Pass	Meet the requirement of limit
2.1051 90.543(e)	RSS-140 4.4	Radiated Spurious Emission	Pass	Meet the requirement of limit
90.542(a)	RSS-140 4.3	Effective Radiated Power (ERP)	Pass	Meet the requirement of limit

1.1. Measurement Uncertainty

Measurement	Frequency	Expanded Uncertainty (k=1.96) (±)
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	5.01
	200MHz ~ 1000MHz	5.01
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.01
	18GHz ~ 25GHz	5.01

1.2. Equipment List

Description	Model	Serial Number	Calibration Date	Calibration Due Date
Broadband ATE 1				
Wideband Radio Communication Tester	CMW500	154550	14-Feb-17	14-Feb-19
Signal Analyzer	FSV40	101431	13-Jul-17	12-Jul-19
Chamber	SH-641	92002651	6-Mar-17	6-Mar-18
Power Supply	6621A	US37370810	5-Jun-17	5-Jun-18
Radiated Emission				
DRG HORN FREQ.	SAS-571	719	18-Jul-17	18-Jul-19
DRG HORN FREQ.	SAS-571	720	2-Mar-17	2-Mar-19

POWER SUPPLY	6032A	2615A01178	6-Jun-17	6-Jun-18
MICROWAVE SIGNAL GENERATOR	SMP04	100127	19-Jul-17	18-Jul-18
EMI TEST RECEIVER	ESIB26	100336	13-Jul-17	12-Jul-18
SIGNAL ANALYZER	FSV40	101103	18-Jul-17	17-Jul-18
5m Semi-anechoic Chamber	S800-HX	J2308	Not Required	Not Required
BILOG ANTENNA	CBL6112D	30991	10-Apr-17	10-Apr-18
BILOG ANTENNA	CBL6112D	25224	22-Jul-17	22-Jul-18
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	20-Mar-17	10-Apr-18
DATA LOGGER	SDL500	A.016776	18-Mar-17	18-Mar-18
LOOP ANTENNA	6502	208416	27-Jul-17	27-Jul-18
SYSTEM CONTROLLER	SC104V	050806-1	Not Required	Not Required
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	Not Required	Not Required
ANTENNA POSITIONING TOWER	TLT2	NA	Not Required	Not Required
18 - 40GHz PREAMPLIFIER	BBV9721	9721-007	Not Required	Not Required
PREAMPLIFIER	PAM-0118P	361	Not Required	Not Required
Wideband Radio Communication Tester	CMW500	153174	9-Jan-17	9-Jan-19

1.3. General Information

General Description of EUT

Product	LEX L11 Mission Critical LTE Device		
Brand	Motorola Solutions		
Test Model	LEX L11n		
Power Supply Rating	3.7Vdc (Battery), 5Vdc (Adapter)		
Mode of operation	LTE Band 14		
Modulation Type	QPSK, 16QAM		
Operating Frequency	LTE Band 14	Channel Bandwidth 5MHz	790.5MHz~795.5MHz
		Channel Bandwidth 10MHz	793.0MHz
Max. ERP Power	LTE Band 14 QPSK	Channel Bandwidth 5MHz	22.377dBm (0.173W)
		Channel Bandwidth 10MHz	22.249dBm (0.168W)
	LTE Band 14 16QAM	Channel Bandwidth 5MHz	21.621dBm (0.145W)
		Channel Bandwidth 10MHz	21.343dBm (0.136W)
Antenna Type	LTE Band 14	Monopole with 0.78dBi gain	
SW Version	L11_D01.00.28		
HW Version	P3a		

Note:

- The EUT contains following accessory devices and data cable.

Item	Brand	Model or P/N	Specification
Rechargeable Lithium ion battery	Motorola Solutions	PMNN4545A	2500mAH 3.7V LI-ION STD
Rechargeable Lithium ion battery	Motorola Solutions	PMNN4546A	5000mAH 3.7V LI-ION HICAP
Charger Vehicular Adapter VPA	Motorola Solutions	PMLN7779A	18W
Power Supply Adaptor, Power supply	Motorola Solutions	PS000150A31 -	7.5W, 100V-240V

Wall cube, AC, DC (USB type A-C)		US/JPN plug	
Power Supply Adaptor (USB type C-C)	Motorola Solutions	PS000278A01 - US/JPN plug	27W
Detachable Power/Data Cable USB-A to USB-C	Motorola Solutions	CB000756A01	-
Detachable Power/Data Cable USB-C to USB-C	Motorola Solutions	CB000754A01	-

Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	Product	Brand	Model No.	Serial No.	FCC ID
1	Wideband Radio Communication Tester	R&S	CMW500	154550	NA

NO.	Signal Cable Description of The above Support Units
1	NA

Note:

1. All power cords of the above support units are non-shielded.
2. Item 1 acted as a communication partner to transfer data.

EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 90

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

1.4. Channel number and frequency info

Band	Bandwidth supported	Available Channel Number	Test Channel Number			Test Channel Frequency (MHz)		
			Low Channel	Mid Channel	High Channel	Low Channel	Mid Channel	High Channel
LTE Band 14	5 MHz	23305 ~ 23355	23305	23330	23355	790.5	793.0	795.5
	10 MHz	23330	-	23330	-	-	793.0	-

1.5. Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The Radiated Emission worst case was found when positioned on X-Plane for LTE band 14.

Pre-scan also have been conducted with the accessory devices listed in section table 1.3, only the worst case radiated emission results of the combination test configuration is reported in this report.

The following channel(s) was (were) selected for the final test as listed below:

LTE Band 14

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Uplink Modulation	Mode
Conducted RF Output Power/ Effective Radiated Power (ERP)	23305~ 23355	23305, 23330, 23355	5 MHz	QPSK, 16QAM	As per table 1.6.2 & 1.6.4
	23330	23330	10 MHz		
Peak to Average Power Ratio	23305~ 23355	23305, 23330, 23355	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	23330	23330	10 MHz		50 RB / 0 RB Offset
Occupied Bandwidth	23305~ 23355	23305, 23330, 23355	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	23330	23330	10 MHz		50 RB / 0 RB Offset
Frequency Stability	23305~ 23355	23305, 23355	5 MHz	QPSK	25 RB / 0 RB Offset
	23330	23330	10 MHz		50 RB / 0 RB Offset
Band Edge Conducted Spurious Emission	23305~ 23355	23305, 23355	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
	23330	23330	10 MHz		1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
Conducted Spurious Emission	23305~ 23355	23305, 23330, 23355	5 MHz	QPSK	1 RB / 13 RB Offset
	23330	23330	10 MHz		1 RB / 25 RB Offset
Radiated Spurious Emission	23305~ 23355	23305, 23330, 23355	5 MHz	QPSK	1 RB / 13 RB Offset
	23330	23330	10 MHz		1 RB / 25 RB Offset

NOTE:

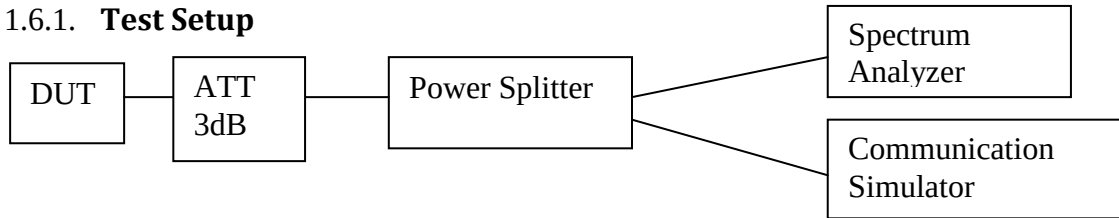
1. The Conducted RF Output Power for QPSK and 16QAM, measured value of QPSK is higher than 16QAM mode. Therefore, only Conducted Spurious Emission and Radiated Emission had been tested under QPSK modes.
2. Band Edge was performed with 1 and full Resource Block at the lowest and highest operating frequency band.
3. The Effective Radiated Power (ERP) was calculated from Conducted RF Output Power results in QPSK and 16QAM modulation.
4. Peak to Average and Occupied Bandwidth were performed with full Resource Block which is the worst case.
5. Frequency stability was performed with full Resource Block in QPSK modulation.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
Conducted RF Output Power/ Effective Radiated Power	25°C, 50% RH	3.7V DC	Maheshvaran
Peak-to-Average Power Ratio	25°C, 50% RH	3.7V DC	Maheshvaran
Occupied Bandwidth	25°C, 50% RH	3.7V DC	Maheshvaran
Frequency Stability	25°C, 50% RH	3.7V DC	Maheshvaran
Band Edge Conducted Spurious Emission	25°C, 50% RH	3.7V DC	Maheshvaran
Conducted Spurious Emission	25°C, 50% RH	3.7V DC	Maheshvaran
Radiated Spurious Emission	25°C, 63.7% RH	3.7V DC	Nazrin/Qawiman

1.6. Conducted RF Output Power

1.6.1. Test Setup



1. The DUT transmitter output port was connected to communication simulator with above setup.
2. Path loss for the measurement included.
3. Set DUT to transmit maximum power through communication simulator
4. All the measurement were done at low, mid, high channel for each band and different modulation.
5. Record the average power into the test report.

1.6.2. Test Limits

FCC: Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

ISED: The e.r.p. for portable equipment including handheld devices shall not exceed 3 W.

1.6.3. Conducted RF Output Power – LTE Band 14 (788-798MHz)

Conducted Output Power (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
			23305	23330	23355	23305	23330	23355
			790.5MHz	793.0MHz	795.5 MHz	790.5 MHz	793.0MHz	795.5 MHz
Band 14 / 5MHz	1	0	23.574	23.668	23.604	22.884	22.739	22.6
	1	13	23.747	23.7	23.539	22.991	22.809	22.508
	1	24	23.67	23.486	23.445	22.88	22.603	22.441
	12	0	22.567	22.692	22.638	21.593	21.598	21.642
	12	6	22.685	22.698	22.582	21.701	21.589	21.582
	12	13	22.649	22.663	22.552	21.657	21.603	21.551
	25	0	22.699	22.647	22.561	21.669	21.628	21.5

Conducted Output Power (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
				23330			23330	
				793.0MHz			793.0MHz	
Band 14 / 10MHz	1	0		23.86			22.563	
	1	25		23.73			22.713	
	1	49		23.75			22.548	
	25	0		22.676			21.747	
	25	13		22.69			21.751	
	25	25		22.549			21.627	

	50	0		22.673			21.665	
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1.6.4. Effective Radiated Power – LTE Band 14 (788-798MHz)

ERP (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
			23305	23330	23355	23305	23330	23355
			790.5MHz	793.0MHz	795.5 MHz	790.5 MHz	793.0MHz	795.5 MHz
Band 14 / 5MHz	1	0	22.204	22.298	22.234	21.514	21.369	21.23
	1	13	22.377	22.33	22.169	21.621	21.439	21.138
	1	24	22.3	22.116	22.075	21.51	21.233	21.071
	12	0	21.197	21.322	21.268	20.223	20.228	20.272
	12	6	21.315	21.328	21.212	20.331	20.219	20.212
	12	13	21.279	21.293	21.182	20.287	20.233	20.181
	25	0	21.329	21.277	21.191	20.299	20.258	20.13

ERP (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
				23330			23330	
				793.0MHz			793.0MHz	
Band 14 / 10MHz	1	0		22.49			21.193	
	1	25		22.36			21.343	
	1	49		22.38			21.178	
	25	0		21.306			20.377	
	25	13		21.32			20.381	
	25	25		21.179			20.257	
	50	0		21.303			20.295	

The maximum ERP/EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = \text{P}_{\text{Meas}} + \text{G}_T$$

$$\text{ERP} = \text{EIRP} - 2.15$$

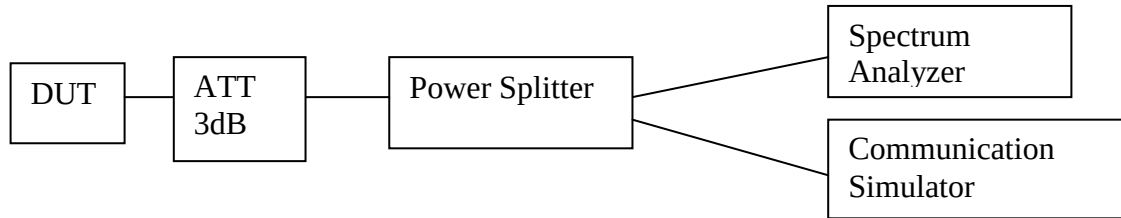
Where, ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively
 (Expressed in the same units as P_{Meas}, e.g., dBm)

P_{Meas} measured transmitter output power, in dBm

G_T gain of the transmitting antenna, in dBi (EIRP)

1.7. Peak-to-Average Power Ratio

1.7.1. Test Setup



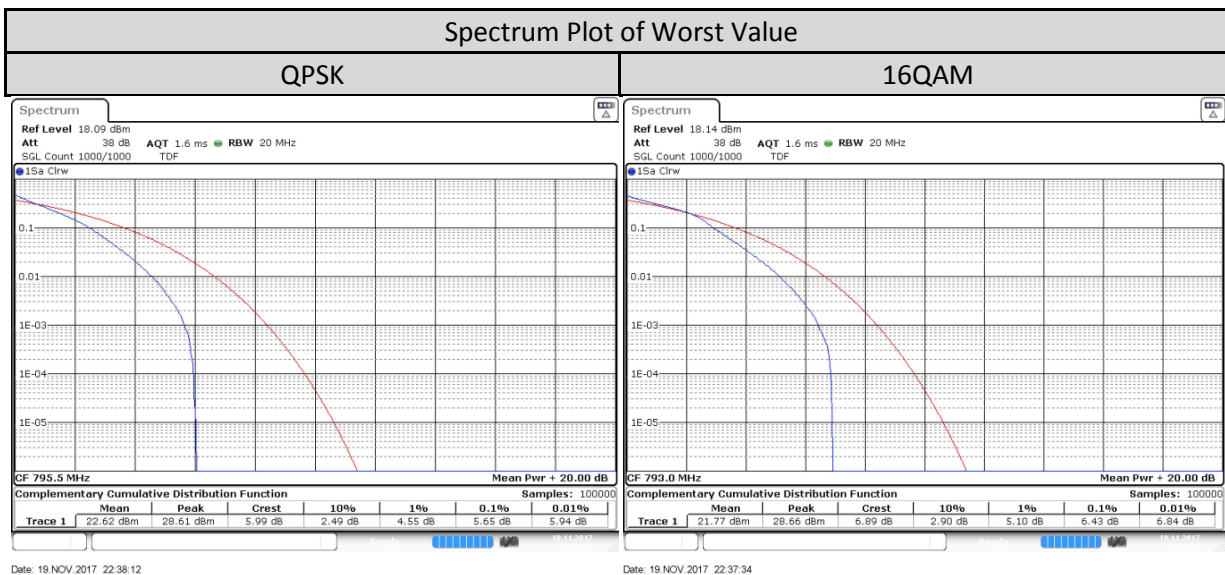
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator
- 4) Set the CCDF (Complementary Cumulative Distribution Function) option in the spectrum analyzer.
- 5) Spectrum Analyzer setting, RBW = 20MHz.
- 6) Recorded the maximum PAR level associated with a probability of 0.1% as Peak to Average Ratio.
- 7) All the measurements were done at low, mid, high channel for each band and different modulation.

1.7.2. Test Limit

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB

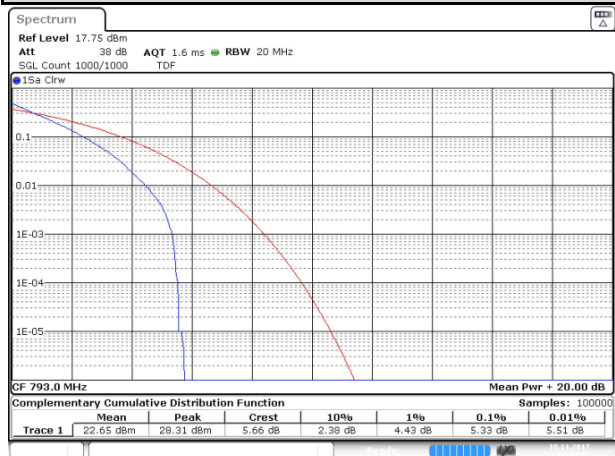
1.7.3. Peak To Average Power Ratio - LTE Band 14 (788-798MHz)

LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 14/5MHz/25/0	Low CH 23305	790.5 MHz	5.362	6.232
	Mid CH 23330	793 MHz	5.565	6.435
	High CH 23355	795.5 MHz	5.652	6.435

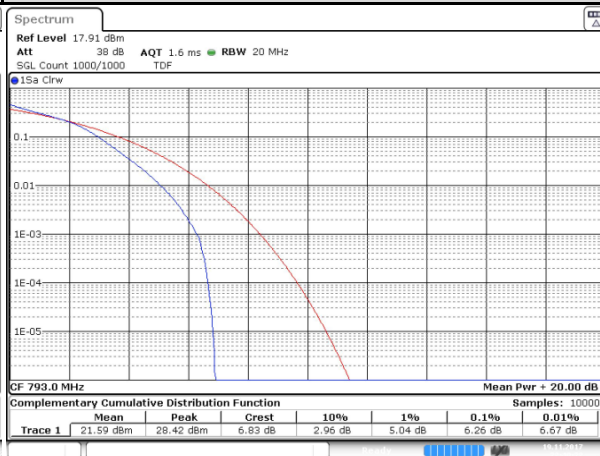


LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 14/10MHz/50/0	Low CH			
	Mid CH 23330	793 MHz	5.333	6.261
	High CH			

Spectrum Plot of Worst Value	
QPSK	16QAM



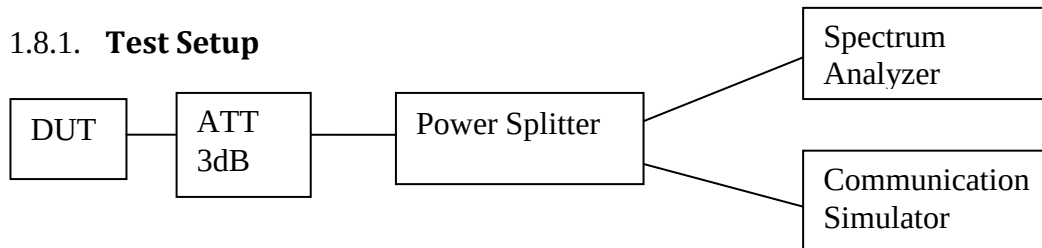
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1.8. Occupied Bandwidth

1.8.1. Test Setup



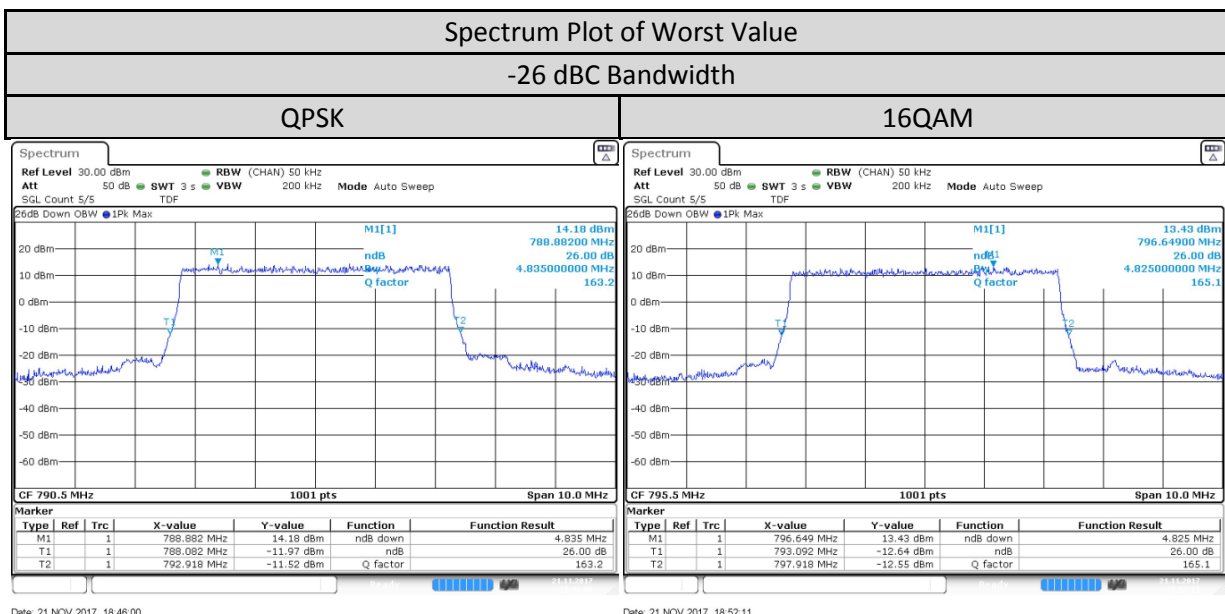
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) For LTE measurement, set DUT to transmit maximum power & full RB size through communication simulator.
- 4) For LTE measurement, set DUT to transmit maximum power through communication simulator.
- 5) Spectrum Analyzer setting, RBW is 1% of OBW and VBW is 3 times of RBW.
- 6) Measure & record -26dBc and 99% occupied bandwidth (BW).
- 7) All the measurement was done at low, mid, high channel for each band and different modulation.

1.8.2. Test Limit

For measurement 99% of occupied bandwidth that is required by FCC 2.1049 and RSS Gen 6.6.

1.8.3. Occupied Bandwidth - LTE Band 14 (788-798MHz)

LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 14/5MHz/25/0	Low CH 23305	790.5 MHz	4.835	4.795
	Mid CH 23330	793 MHz	4.825	4.805
	High CH 23355	795.5 MHz	4.815	4.825

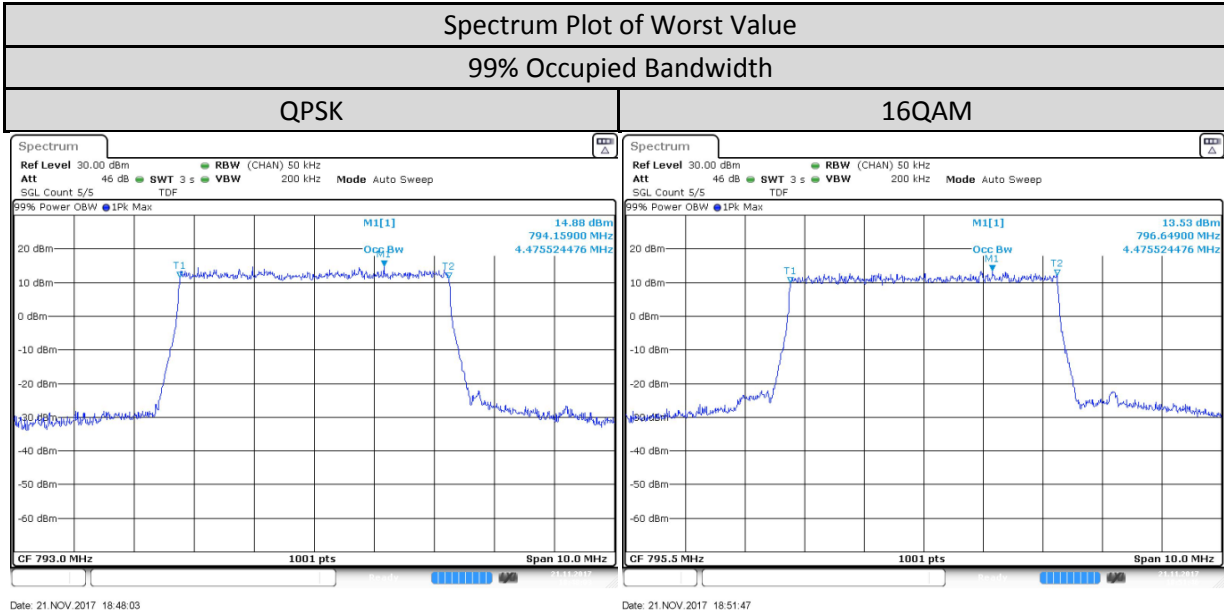


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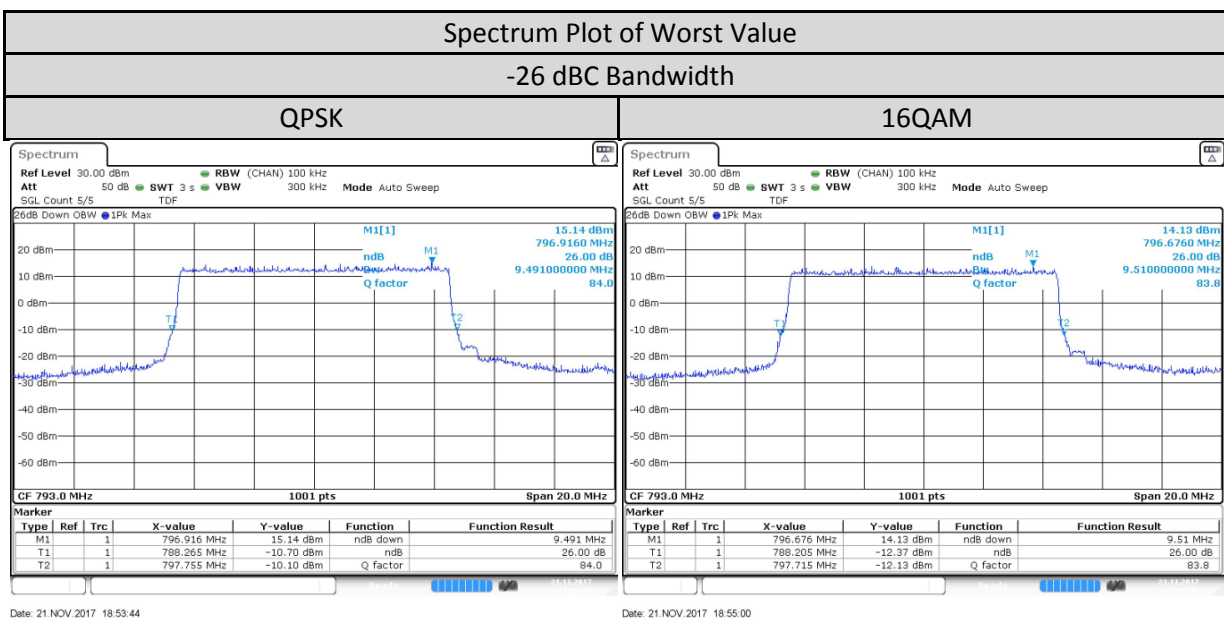
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LTE Band/BW/RB	Channel Number	Tx	99% Occupied Bandwidth (MHz)
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Size/RB Offset		Frequency	QPSK Modulation	16QAM Modulation
Band 14/5MHz/25/0	Low CH 23305	790.5 MHz	4.466	4.466
	Mid CH 23330	793 MHz	4.476	4.466
	High CH 23355	795.5 MHz	4.476	4.476



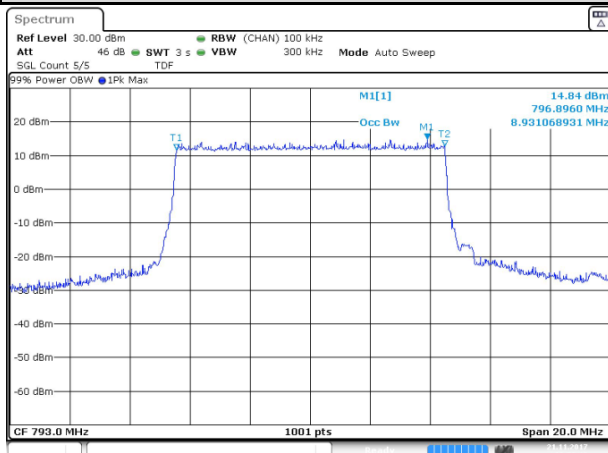
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 14/10MHz/50/0	Low CH			
	Mid CH 23330	793 MHz	9.491	9.51
	High CH			



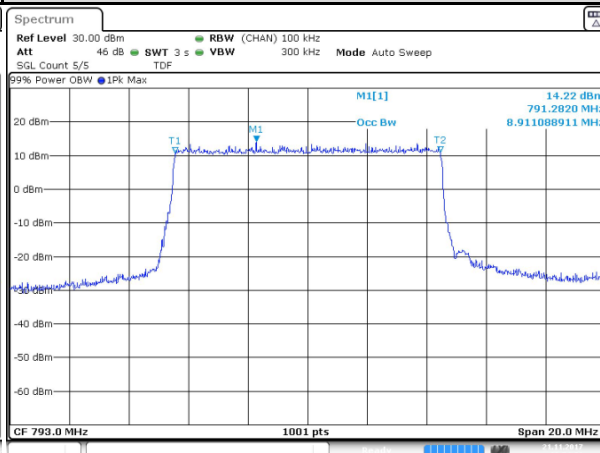
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation

Band 14/10MHz/50/0	Low CH			
	Mid CH 23330	793 MHz	8.931	8.911
	High CH			

Spectrum Plot of Worst Value	
99% Occupied Bandwidth	
QPSK	16QAM



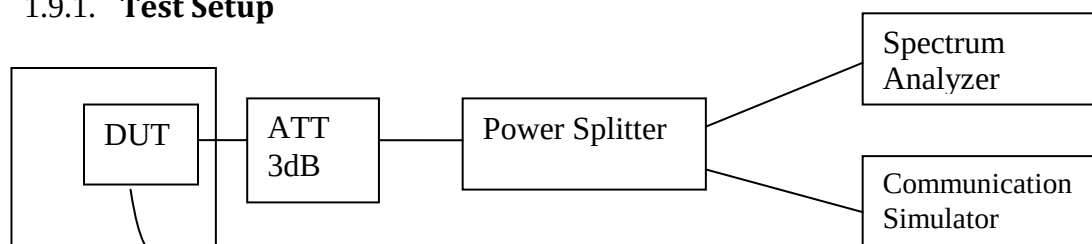
Date: 21 NOV 2017 18:53:19



Date: 21 NOV 2017 18:54:33

1.9. Frequency Stability

1.9.1. Test Setup



- 1) The DUT is placed in the temperature chamber and DUT is power up by external power supply to control the DC input voltage.
- 2) The temperature chamber could control the temperature and humidity and external power supply could control the test voltage range from minimum to maximum operating voltage.
- 3) Measured frequency error from the communication simulator by vary below step :
 - i. Vary temperature of the temperature chamber from -30 ~ 50 deg C (10 deg C / Step) and set external supply voltage constant at nominal voltage.
 - ii. Vary external supply voltage from minimum to maximum operation voltage support by DUT and set temperature chamber constant at room temp.
- 4) All the measurement was done at mid channel for each band.

1.9.2. Test Limit

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

1.9.3. Frequency Stability - LTE Band 14 (788-798MHz)

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		790.5MHz		795.5MHz	
LTE Band 14		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	50	790.500007	0.008234	795.500008	0.010034
	40	790.499993	-0.008523	795.500008	0.01007
	30	790.500008	0.010478	795.50001	0.012336
	20	790.500008	0.009772	795.500009	0.011886
	10	790.500007	0.009247	795.50001	0.012102
	0	790.500008	0.010496	795.500011	0.014134
	-10	790.500009	0.011509	795.500009	0.011815
	-20	790.50001	0.01245	795.500013	0.015771
	-30	790.499994	-0.007781	795.500013	0.016256

Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		790.5MHz		795.5MHz	
LTE		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error

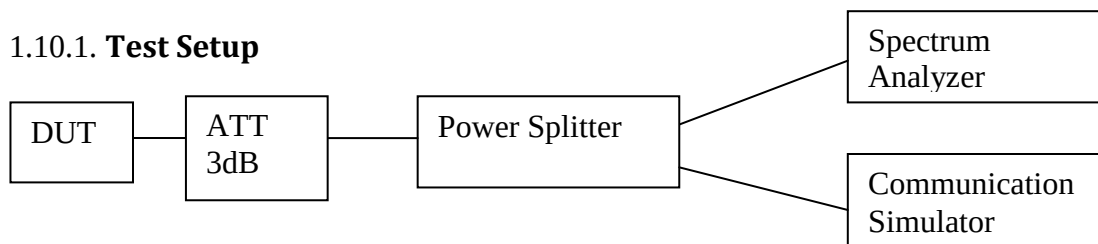
Band 14					(ppm)
	4.35	790.500008	0.0097	795.500011	0.013811
	3.7	790.500007	0.008505	795.50001	0.01266
	3.2	790.500006	0.007872	795.500007	0.008668

Band	Temp (Deg C)	Frequency Error VS Temperature	
		Channel Bandwidth: 10 MHz	
		Mid Channel	
		793MHz	
LTE Band 14		Frequency (MHz)	Frequency Error (ppm)
	50	792.999991	-0.011166
	40	792.999992	-0.009922
	30	792.999994	-0.007432
	20	792.999993	-0.009218
	10	792.999992	-0.009525
	0	792.999993	-0.008388
	-10	792.999991	-0.011238
	-20	792.999993	-0.008677
	-30	792.999989	-0.013331

Band	Voltage (V)	Frequency Error VS Voltage	
		Channel Bandwidth: 10 MHz	
		Mid Channel	
		793MHz	
LTE Band 14		Frequency (MHz)	Frequency Error (ppm)
	4.35	792.999992	-0.010192
	3.7	792.999993	-0.008334
	3.2	792.999994	-0.007703

1.10. Band Edge/Emission Mask Conducted Spurious Emission

1.10.1. Test Setup



- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) The band edges of lowest and highest channels with the highest RF powers were measured.
- 5) The center frequency of spectrum is the band edge frequency, RBW is 1~3% of EBW and VBW is 3 times of RBW.
- 6) Record the maximum trace plot into the test report.

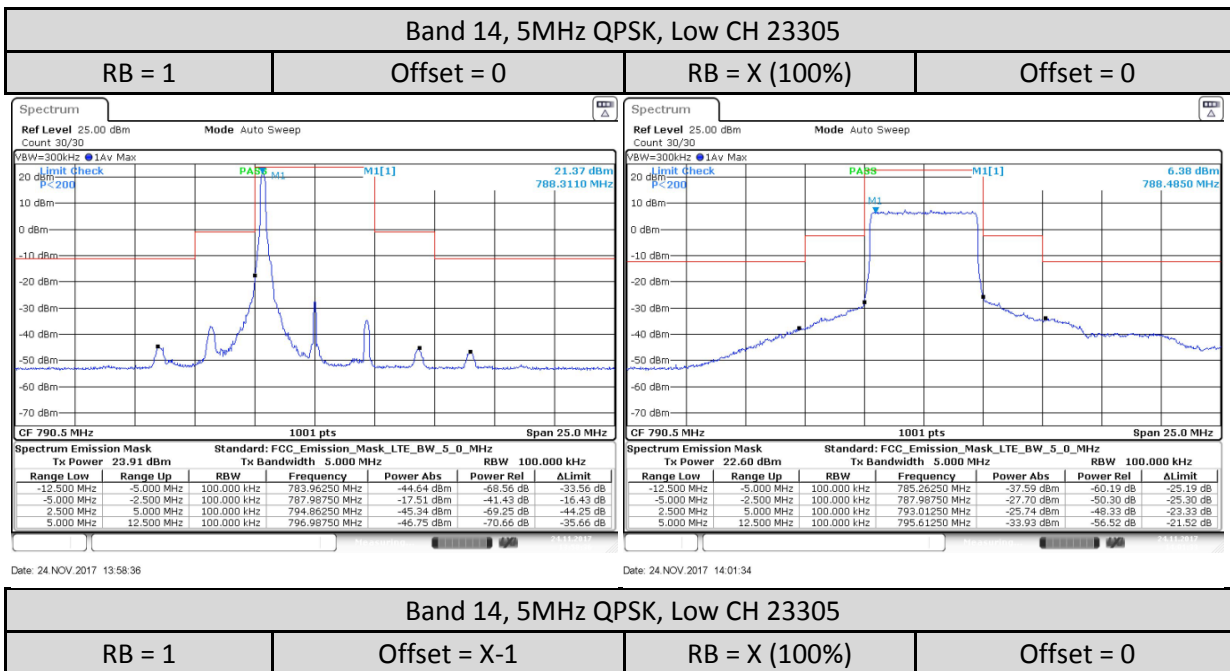
1.10.2. Test Limit

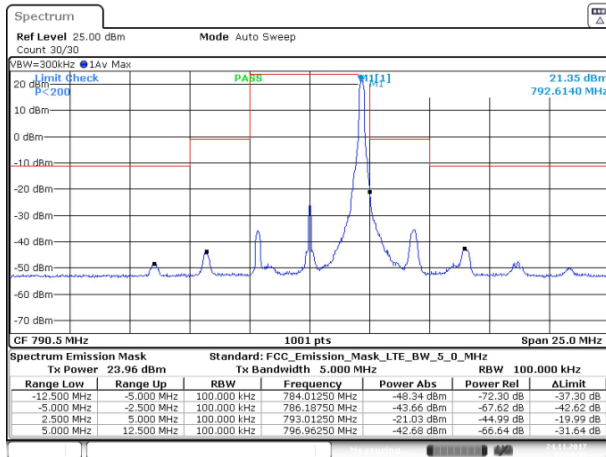
(b) *Emission Mask B*. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

- (1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.
- (2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.
- (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.

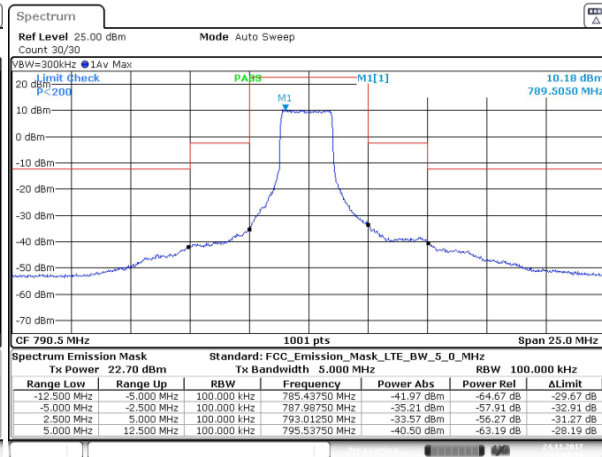
1.10.3. Band Edge/Emission Mask Conducted Spurious Emission - LTE Band 14 (788-798MHz)

Emission Mask Conducted Spurious Emission



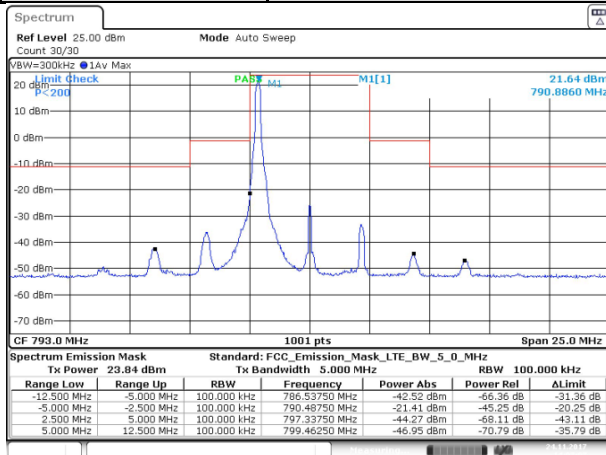


Date: 24.NOV.2017 13:59:35

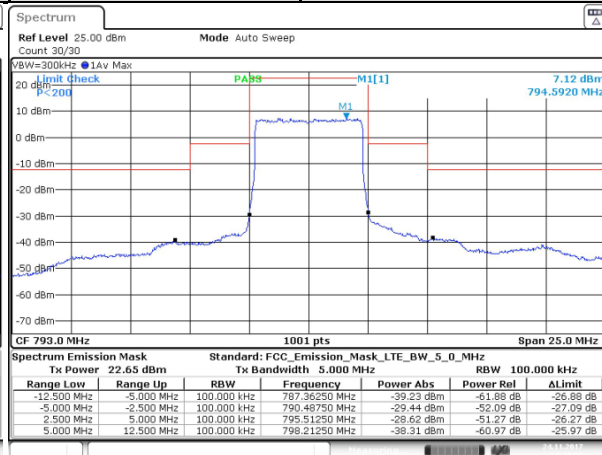


Date: 24.NOV.2017 14:00:34

Band 14, 5MHz QPSK, Mid CH 23330			
RB = 1	Offset = 0	RB = X (100%)	Offset = 0

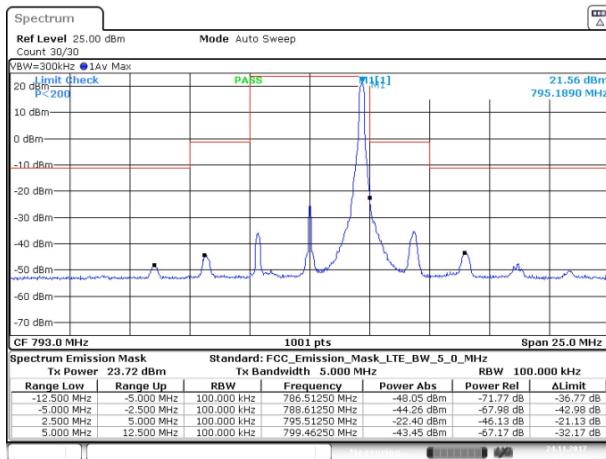


Date: 24.NOV.2017 14:07:07

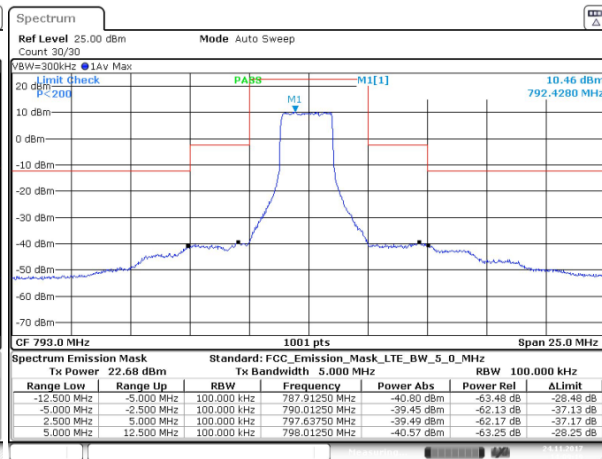


Date: 24.NOV.2017 14:10:27

Band 14, 5MHz QPSK, Mid CH 23330			
RB = 1	Offset = X-1	RB = X (100%)	Offset = 0

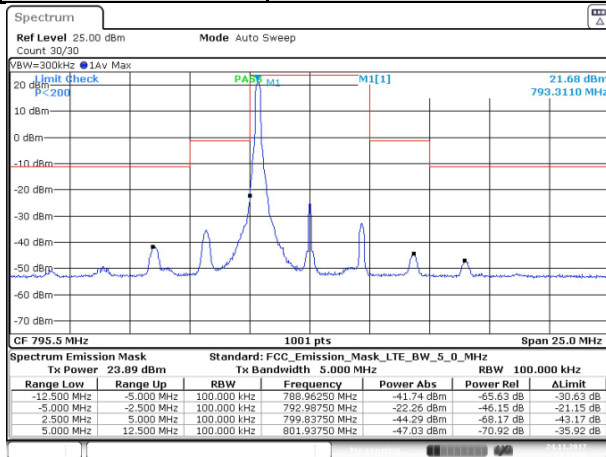


Date: 24.NOV.2017 14:08:13

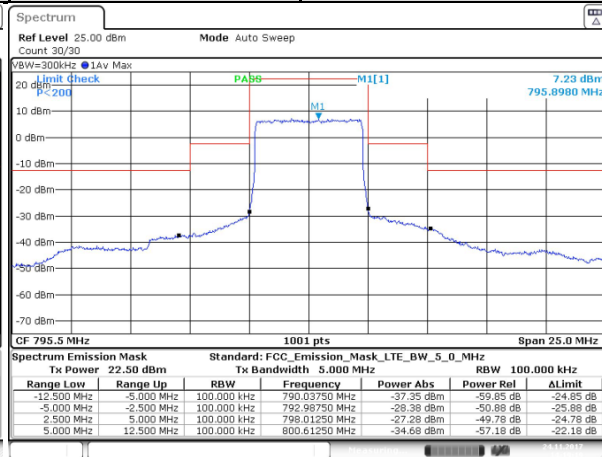


Date: 24.NOV.2017 14:09:19

Band 14, 5MHz QPSK, High CH 23355			
RB = 1	Offset = 0	RB = X (100%)	Offset = 0

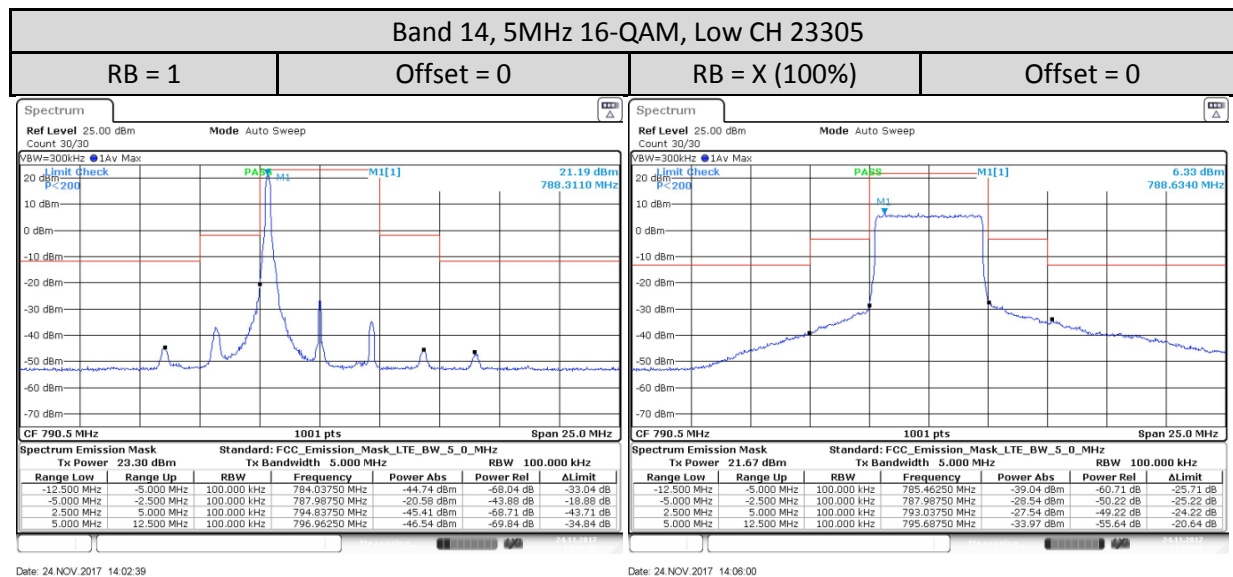
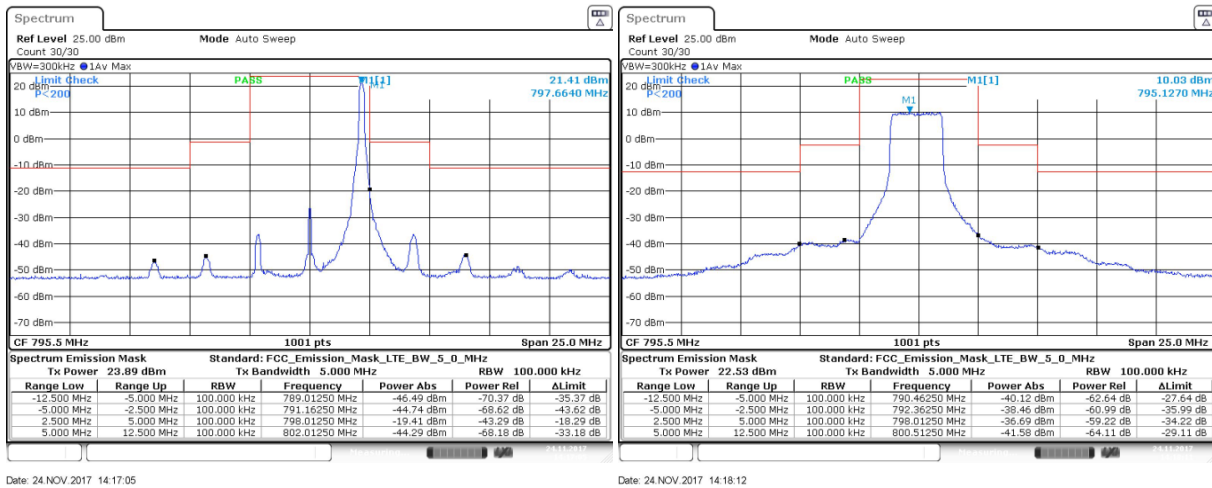


Date: 24.NOV.2017 14:15:58

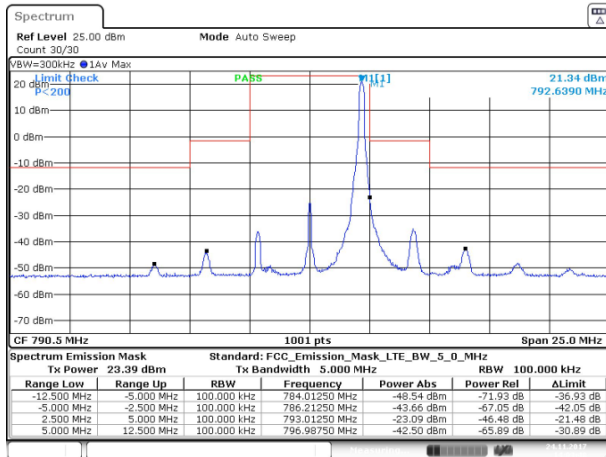


Date: 24.NOV.2017 14:19:19

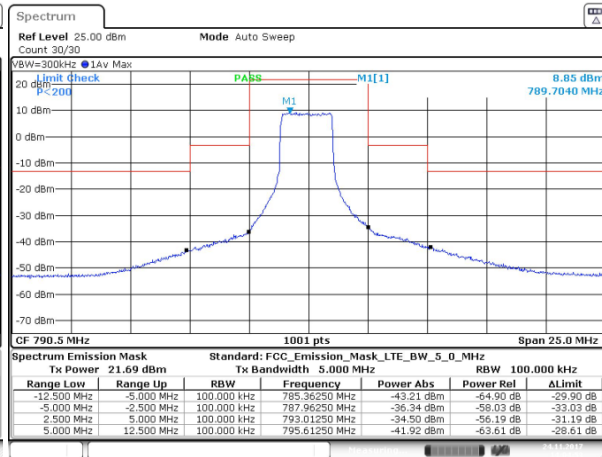
Band 14, 5MHz QPSK, High CH 23355			
RB = 1	Offset = X-1	RB = X (100%)	Offset = 0



Band 14, 5MHz 16-QAM, Low CH 23305			
RB = 1	Offset = X-1	RB = X (100%)	Offset = 0



Date: 24.NOV.2017 14:03:48



Date: 24.NOV.2017 14:04:53

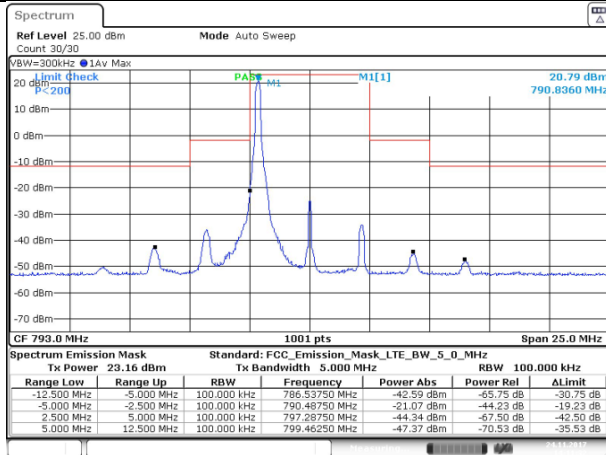
Band 14, 5MHz 16-QAM, Mid CH 23330

RB = 1

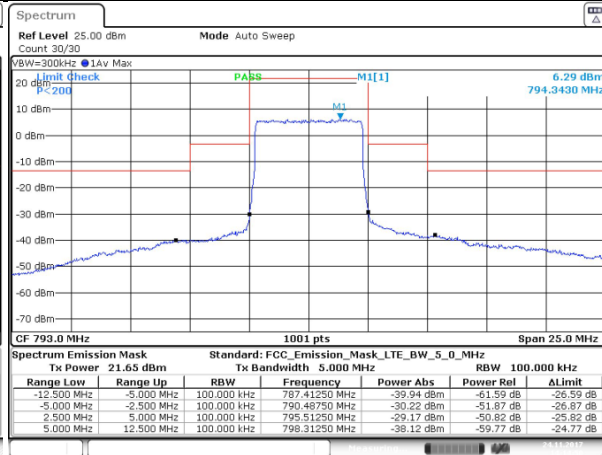
Offset = 0

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:11:33



Date: 24.NOV.2017 14:14:51

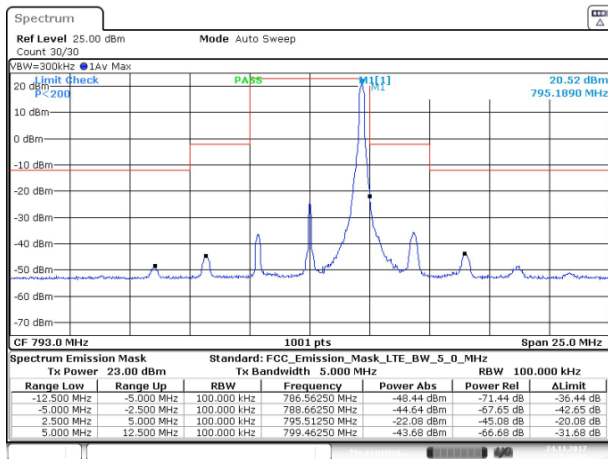
Band 14, 5MHz 16-QAM, Mid CH 23330

RB = 1

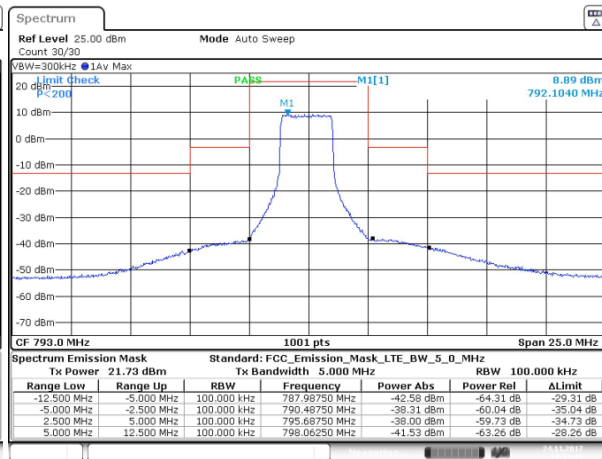
Offset = X-1

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:12:39



Date: 24.NOV.2017 14:13:45

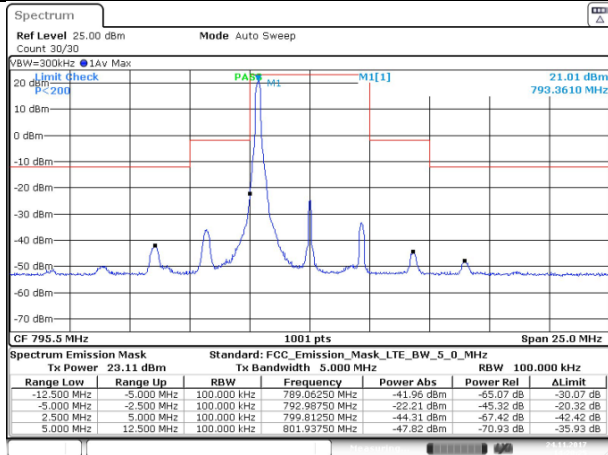
Band 14, 5MHz 16-QAM, High CH 23355

RB = 1

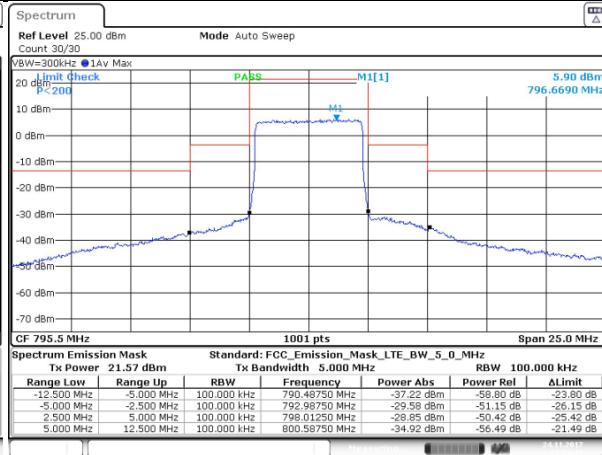
Offset = 0

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:20:25



Date: 24.NOV.2017 14:23:49

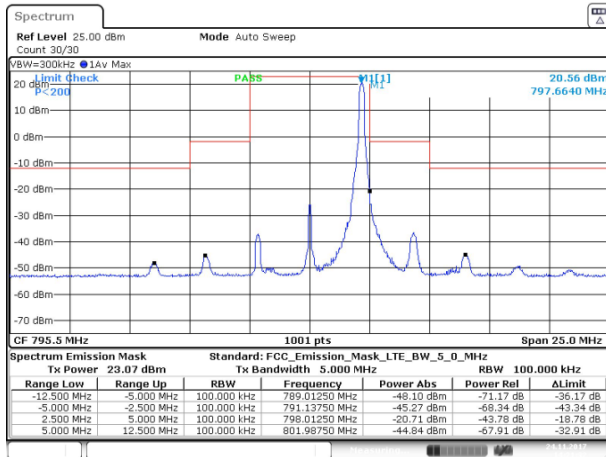
Band 14, 5MHz 16-QAM, High CH 23355

RB = 1

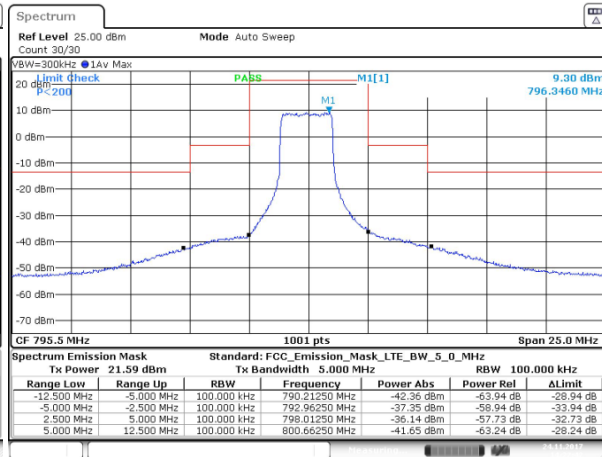
Offset = X-1

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:21:32



Date: 24.NOV.2017 14:22:42

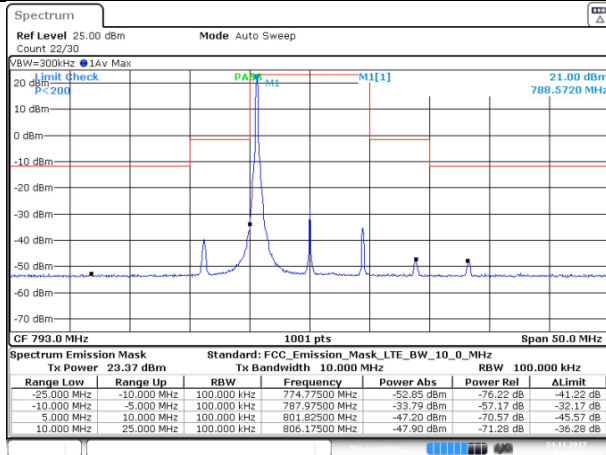
Band 14, 10MHz QPSK, Mid CH 23330

RB = 1

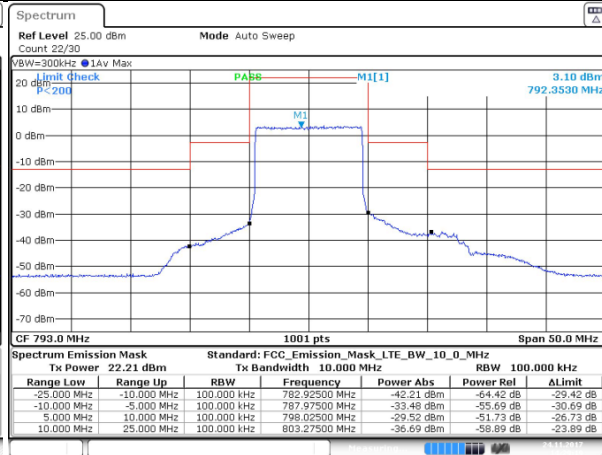
Offset = 0

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:25:15



Date: 24.NOV.2017 14:29:19

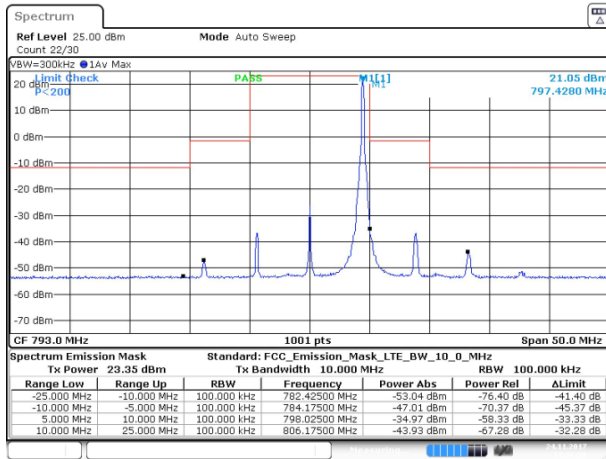
Band 14, 10MHz QPSK, Mid CH 23330

RB = 1

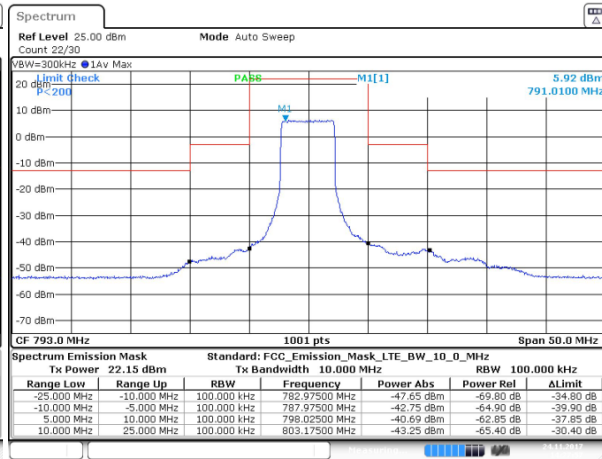
Offset = X-1

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:26:36



Date: 24.NOV.2017 14:27:57

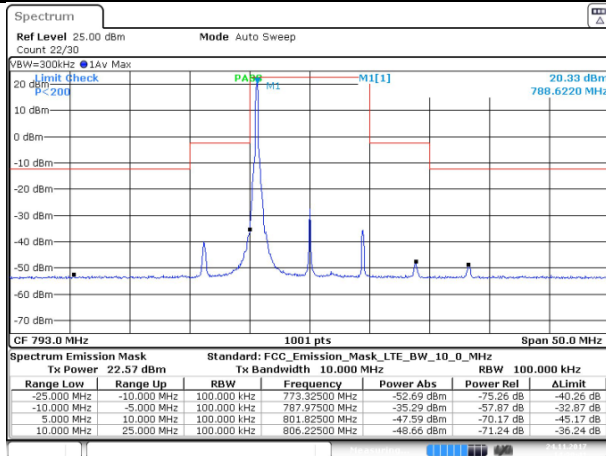
Band 14, 10MHz 16-QAM, Mid CH 23330

RB = 1

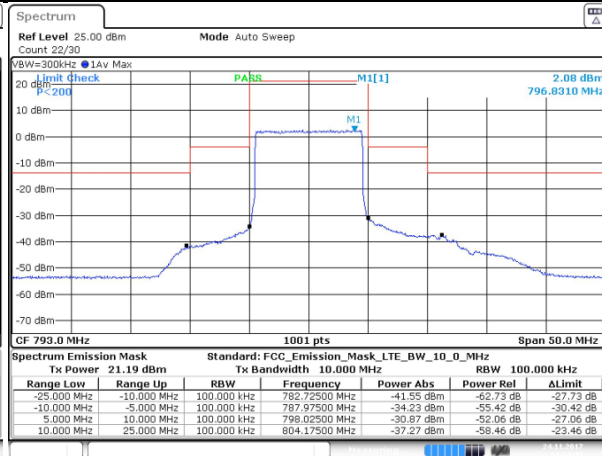
Offset = 0

RB = X (100%)

Offset = 0



Date: 24.NOV.2017 14:30:41



Date: 24.NOV.2017 14:34:47

Band 14, 10MHz 16-QAM, High CH 23330

RB = 1

Offset = X-1

RB = X (100%)

Offset = 0