



TESTING LABORATORY
CERTIFICATE #4820.01



FCC PART 22H, PART 24E, PART 27, PART 90

MEASUREMENT AND TEST REPORT

For

Hytera Communications Corporation Limited

Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen,
518057 China

FCC ID: YAMVM750D

Report Type: Original Report	Product Type: Body Worn Camera
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:	Body Worn Camera
EUT Model:	VM750D
Antenna Gain[▲]:	GSM850/WCDMA B5/LTE B5/B26: -0.33 dBi PCS1900/WCDMA B2/LTE B2: -0.11 dBi WCDMA B4/LTE B4: -1.14 dBi LTE B7/B38/B41: -0.10 dBi LTE B12/17: 0.30 dBi LTE B13: 0.58 dBi LTE B40: 1.14 dBi
Modulation Type:	GMSK,8PSK, BPSK, QPSK, 16QAM
Rated Input Voltage:	DC 3.85V from battery
Adapter Information	Model: S010WU0500200
	Input: 100-240Vac 50/60Hz 400mA
	Output: 5.0Vdc 2000mA
Serial Number:	DG2210728-31605E-RF-S1
EUT Received Date:	2021.07.29
EUT Received Status:	Good

Objective

This report is prepared on behalf of **Hytera Communications Corporation Limited** in accordance with: Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E, Part 27, Part 90 of the Federal Communications Commission's rules.

The objective is to determine compliance with FCC Rules for output power, modulation characteristic, occupied bandwidth, spurious emissions at antenna terminal, spurious radiated emission, frequency stability and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with:

The Code of federal Regulations Title 47, Part 2, Part 22H, Part 24E, Part 27, Part 90.

ANSI C63.26-2015, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Dongguan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions, radiated	30MHz ~ 1GHz: 5.85 dB 1G~26.5GHz: 5.23 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

Note: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to ANSI C63.26-2015.

The test items were performed with the EUT operating at testing mode. The device operates on GSM Band 850/1900MHz, WCDMA Band 2/4/5, and LTE band 2/4/5/7/12/13/17/26/38/40/41, test was performed with channels as below table:

Frequency Bands	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
GSM/GPRS 850	0.25	824.2	836.6	848.8
GSM/GPRS 1900	0.25	1850.2	1880	1909.8
WCDMA Band 2	4.2	1852.4	1880	1907.6
WCDMA Band 4	4.2	1712.4	1732.6	1752.6
WCDMA Band 5	4.2	826.4	836.6	846.6
LTE Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
	1.4	1710.7	1732.5	1754.3
LTE Band 4	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
	1.4	824.7	836.5	848.3
LTE Band 5	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
	5	2502.5	2535	2567.5
LTE Band 7	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
	1.4	699.7	707.5	715.3
LTE Band 12	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
	5	779.5	782	784.5
LTE Band 13	10	/	782	/
	5	706.5	710	713.5
LTE Band 17	10	709	710	711
	1.4	814.7	831.5	848.3
LTE Band 26	3	815.5	831.5	847.5
	5	816.5	831.5	846.5
	10	819	831.5	844
	15	821.5	831.5	841.5
	5	2572.5	2595	2617.5
LTE Band 38	10	2575	2595	2615
	15	2577.5	2595	2612.5
	20	2580	2595	2610

LTE Band 40 Lower 2305-2315MHz	5 10	2307.5 /	2310 2310	2312.5 /
LTE Band 40 Upper 2350-2360MHz	5 10	2352.5 /	2355 2355	2357.5 /
LTE Band 41	5 10 15 20	2498.5 2501 2503.5 2506	2593 2593 2593 2593	2687.5 2685 2682.5 2680

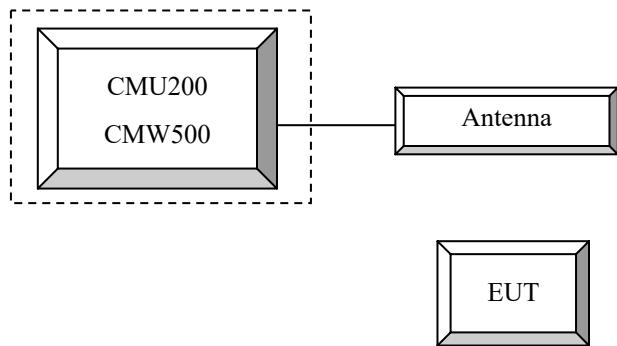
Equipment Modifications

No modification was made to the EUT.

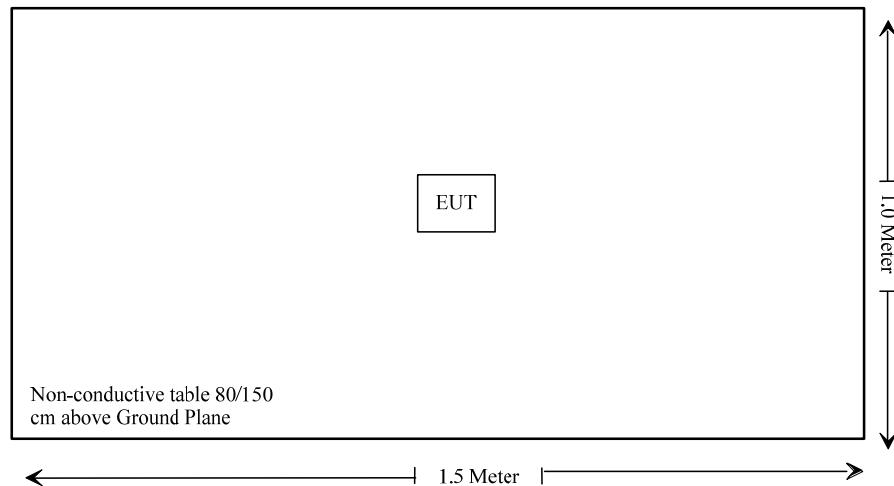
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
R&S	Universal Radio Communication Tester	CMU200	106 891
R&S	Wideband Radio Communication Tester	CMW500	147473
Unknown	ANTENNA	Unknown	/

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC§1.1310, §2.1093	RF Exposure	Compliance
FCC§2.1046; § 22.913 (a); § 24.232 (c); §27.50;§90.635	RF Output Power	Compliance
FCC§ 2.1047	Modulation Characteristics	Not Applicable
FCC§ 2.1049; § 22.905 § 22.917; § 24.238; §27.53 §90.209	Occupied Bandwidth	Compliance
FCC§ 2.1051, § 22.917 (a); § 24.238 (a); §27.53;§90.691	Spurious Emissions at Antenna Terminal	Compliance
FCC§ 2.1053 § 22.917 (a); § 24.238 (a); §27.53 ;§90.691	Field Strength of Spurious Radiation	Compliance
FCC§ 22.917 (a); § 24.238 (a); §27.53;§90.691	Out of band emission, Band Edge	Compliance
FCC§ 2.1055 § 22.355; § 24.235; §27.54 §90.213	Frequency stability vs. temperature Frequency stability vs. voltage	Compliance

FCC §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliance, please refer to the SAR report: DG2210728-31605E-20.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E, part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913 (a) & § 24.232 (c) & § 27.50&§ 90.635 - RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (C), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to §24.232 (d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

According to §27.50

(a)(3) Mobile and portable stations. (i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

(b)(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

(c) (10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

(d), (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

(h),(2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

Test Procedure

GSM/GPRS/EGPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
 Press Connection control to choose the different menus
 Press RESET > choose all the reset all settings
 Connection Press Signal Off to turn off the signal and change settings
 Network Support > GSM + GPRS or GSM + EGSM
 Main Service > Packet Data
 Service selection > Test Mode A – Auto Slot Config. off
 MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
 > Slot configuration > Uplink/Gamma
 > 33 dBm for GPRS 850
 > 30 dBm for GPRS 1900
 > 27 dBm for EGPRS 850
 > 26 dBm for EGPRS 1900
 BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel
 Frequency Offset > + 0 Hz
 Mode > BCCH and TCH
 BCCH Level > -85 dBm (May need to adjust if link is not stable)
 BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]
 Channel Type > Off
 P0 > 4 dB
 Slot Config > Unchanged (if already set under MS signal)
 TCH > choose desired test channel
 Hopping > Off
 Main Timeslot > 3
 Network Coding Scheme > CS4 (GPRS) and MCS5 (EGPRS)
 Bit Stream > 2E9-1 PSR Bit Stream
 AF/RF Connection Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
 Press Signal on to turn on the signal and change settings

WCDMA-Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c / β_d	8/15

WCDMA HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	β_c	2/15	12/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	β_d (SF)	64			
	β_c / β_d	2/15	12/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
HSDPA Specific Settings	MPR(dB)	0	0	0.5	0.5
	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
$A_{hs} = \beta_{hs} / \beta_c$		30/15			

WCDMA HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	β_c	11/15	6/15	15/15	2/15	15/15
	β_d	15/15	15/15	9/15	15/15	0
	β_{ec}	209/225	12/15	30/15	2/15	5/15
	β_c/β_d	11/15	6/15	15/9	2/15	-
HSDPA Specific Settings	β_{hs}	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
HSUPA Specific Settings	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	$A_{hs}=\beta_{hs}/\beta_c$	30/15				
	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
HSUPA Specific Settings	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCl	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	

HSPA+

The following tests were conducted according to the test requirements in Table C.11.1.4 of 3GPP TS 34.121-1

Sub-test	β_c (Note 3)	β_d	β_{hs} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	$\beta_{ed1}: 30/15$ $\beta_{ed2}: 30/15$	$\beta_{ed3}: 24/15$ $\beta_{ed4}: 24/15$	3.5	2.5	14	105	105

Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

DC-HSDPA

The following tests were conducted according to the test requirements in Table C.8.1.12 of 3GPP TS 34.121-1

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.

Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

LTE (FDD):

The following tests were conducted according to the test requirements in 3GPP TS36.101

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N _{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23 ¹	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

LTE(TDD)

3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	2192 $\cdot T_s$	2560 $\cdot T_s$	$7680 \cdot T_s$	2192 $\cdot T_s$	2560 $\cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	4384 $\cdot T_s$	5120 $\cdot T_s$	$20480 \cdot T_s$	4384 $\cdot T_s$	5120 $\cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		-

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	D	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle = Extended cyclic prefix in uplink x (T_s) x # of S + # of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

where

$T_s = 1/(15000 \times 2048)$ seconds

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Wideband Radio Communication Tester	CMW500	147473	2020-09-23	2021-09-22
R&S	Universal Radio Communication Tester	CMU200	106 891	2020-09-12	2021-09-12
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	Each time	N/A
Unknown	Attenuator	UNAT-3+	15529	Each time	N/A
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41010012	Each time	N/A
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.7~29.8 °C
Relative Humidity:	46~62 %
ATM Pressure:	99.3~100.7 kPa
Tester:	Lay Lei
Test Date:	2021-08-03~2021-08-20

Test Result: Compliance

GSM/GPRS/EDGE**Conducted Output Power:**

Band	Channel No.	Conducted Peak Output Power (dBm)							
		GPRS 1 TX Slot	GPRS 2 TX Slots	GPRS 3 TX Slots	GPRS 4 TX Slots	EGPRS 1 TX Slot	EGPRS 2 TX Slots	EGPRS 3 TX Slots	EGPRS 4 TX Slots
Cellular	128	31.56	30.28	28.56	26.49	25.57	24.52	22.68	20.62
	190	31.73	30.22	28.47	26.53	25.51	24.61	22.52	20.57
	251	31.41	30.25	28.51	26.42	25.87	24.48	22.71	20.54
PCS	512	28.63	27.53	25.62	23.51	24.74	23.36	21.42	20.03
	661	28.72	27.42	25.48	23.73	24.68	23.51	21.37	20.11
	810	28.52	27.38	25.43	23.66	24.75	23.33	21.35	20.17

ERP/EIRP:

Band	Mode	Channel	Conducted Power (dBm)	Antenna Gain (dBi/dBd)	Result (dBm)	Limit (dBm)
Cellular	GSM	Low	31.56	-2.48	29.08	38.45
		Middle	31.73	-2.48	29.25	38.45
		High	31.41	-2.48	28.93	38.45
	EDGE	Low	25.57	-2.48	23.09	38.45
		Middle	25.51	-2.48	23.03	38.45
		High	25.87	-2.48	23.39	38.45
PCS	GSM	Low	28.63	-0.11	28.52	33
		Middle	28.72	-0.11	28.61	33
		High	28.52	-0.11	28.41	33
	EDGE	Low	24.74	-0.11	24.63	33
		Middle	24.68	-0.11	24.57	33
		High	24.75	-0.11	24.64	33

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Result = Conducted Power + Antenna Gain
- 3) Antenna gain(dBd)= Antenna gain(dBi)-2.15

WCDMA Band 2**Conducted Output Power and PAR:**

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	22.33	3.36	22.41	3.39	22.56	3.25
HSDPA	1	21.30	4.67	21.56	3.71	21.38	3.83
	2	21.26	3.51	21.47	3.47	21.58	3.47
	3	21.53	3.28	21.38	3.62	21.61	3.51
	4	21.37	3.47	21.84	3.49	21.82	3.61
	1	20.70	4.23	20.84	4.46	21.23	3.77
HSUPA	2	21.12	3.51	20.72	3.69	20.86	3.41
	3	21.24	4.28	20.89	4.12	20.82	3.59
	4	20.83	3.69	20.68	3.87	20.63	3.47
	5	21.36	3.72	21.76	3.53	20.92	3.84
	1	21.53	4.12	21.81	3.84	21.14	3.62
DC-HSDPA	2	21.48	3.56	21.83	3.92	21.08	3.51
	3	21.67	3.74	21.79	3.67	21.27	3.48
	4	21.28	3.86	21.87	3.96	21.31	3.69
HSPA+ (16QAM)	1	20.25	3.15	20.28	3.61	20.47	3.52

EIRP:

Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
Low	22.33	-0.11	22.22	33
Middle	22.41	-0.11	22.30	33
High	22.56	-0.11	22.45	33

WCDMA Band 5**Conducted Output Power and PAR:**

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	22.83	3.51	22.35	3.51	22.68	3.48
HSDPA	1	21.60	3.45	22.16	3.57	21.87	4.35
	2	22.31	3.17	22.54	3.24	21.61	4.12
	3	21.57	3.28	21.87	3.42	21.52	3.89
	4	21.30	3.67	21.42	4.25	21.89	3.82
	1	21.08	4.09	21.64	3.16	21.51	4.14
HSUPA	2	21.43	4.28	21.47	3.22	21.47	4.10
	3	21.78	3.87	21.39	3.81	21.63	3.68
	4	21.37	3.68	21.28	3.42	21.38	3.57
	5	21.39	3.67	21.84	3.59	21.47	3.68
	1	21.31	3.52	21.27	3.27	21.62	3.71
DC-HSDPA	2	21.68	3.46	21.46	3.51	21.51	3.28
	3	21.59	3.82	21.31	3.28	21.57	4.27
	4	21.78	4.15	21.52	3.47	21.82	3.92
HSPA+ (16QAM)	1	20.34	3.07	20.51	3.16	20.28	3.02

ERP:

Channel	Conducted Power (dBm)	Antenna Gain (dBd)	Result (dBm)	Limit (dBm)
Low	22.83	-2.48	20.35	38.45
Middle	22.54	-2.48	20.06	38.45
High	22.68	-2.48	20.20	38.45

WCDMA Band 4

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	22.23	2.90	22.31	2.72	22.28	2.72
HSDPA	1	21.05	3.13	21.27	3.07	21.37	3.74
	2	21.14	2.80	21.22	3.18	21.35	3.68
	3	20.93	3.25	21.08	3.25	21.18	3.82
	4	21.09	3.64	21.14	3.63	21.27	3.71
	1	20.60	3.80	20.73	3.77	21.41	3.30
HSUPA	2	20.58	3.25	20.37	3.42	20.93	3.12
	3	20.82	3.46	20.46	3.61	20.85	3.08
	4	20.74	3.57	20.51	3.89	20.72	2.93
	5	20.79	3.19	20.69	3.27	20.74	2.86
	1	21.28	3.28	21.54	3.18	21.62	3.58
DC-HSDPA	2	21.48	3.56	21.68	3.64	21.57	3.18
	3	21.69	3.47	21.43	3.48	21.27	2.87
	4	21.37	3.18	21.52	3.19	21.36	3.59
HSPA+ (16QAM)	1	20.36	2.81	20.27	2.92	20.48	2.95

EIRP:

Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
Low	22.23	-1.14	21.09	30
Middle	22.31	-1.14	21.17	30
High	22.28	-1.14	21.14	30

LTE Band 2**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	23.83	24.27	24.09
		RB1#3	24.33	24.37	24.21
		RB1#5	24.15	24.38	24.16
		RB3#0	23.98	24.03	24.20
		RB3#3	24.00	24.09	24.19
		RB6#0	23.02	23.16	23.30
	16QAM	RB1#0	23.00	23.38	23.37
		RB1#3	22.92	23.46	23.41
		RB1#5	22.78	23.40	23.31
		RB3#0	23.08	23.25	23.41
		RB3#3	23.23	23.20	23.51
		RB6#0	22.10	21.94	22.35
3MHz	QPSK	RB1#0	24.10	24.40	24.23
		RB1#8	24.29	24.36	24.55
		RB1#14	24.42	24.15	24.29
		RB6#0	23.14	23.23	23.36
		RB6#9	23.13	23.27	23.29
		RB15#0	23.16	23.26	23.37
	16QAM	RB1#0	23.41	23.89	23.30
		RB1#8	23.24	23.94	23.08
		RB1#14	23.10	23.93	22.93
		RB6#0	21.92	22.43	22.23
		RB6#9	21.94	22.33	22.18
		RB15#0	22.05	22.29	22.42
5MHz	QPSK	RB1#0	23.92	24.18	24.12
		RB1#13	24.23	24.23	24.48
		RB1#24	24.09	24.12	24.27
		RB15#0	23.23	23.29	23.42
		RB15#10	23.22	23.30	23.37
		RB25#0	23.16	23.24	23.41
	16QAM	RB1#0	22.77	23.51	23.15
		RB1#13	22.79	23.53	23.27
		RB1#24	22.64	23.47	22.87
		RB15#0	21.94	22.37	22.30
		RB15#10	21.97	22.48	22.24
		RB25#0	22.12	22.17	22.39

10MHz	QPSK	RB1#0	24.09	24.28	24.14
		RB1#25	24.32	24.31	24.71
		RB1#49	24.26	24.23	24.09
		RB25#0	23.22	23.30	23.33
		RB25#25	23.28	23.29	23.37
		RB50#0	23.32	23.30	23.45
	16QAM	RB1#0	23.52	23.64	23.30
		RB1#25	24.06	23.93	23.32
		RB1#49	23.56	23.81	23.06
		RB25#0	22.09	22.33	22.42
		RB25#25	22.20	22.19	22.48
		RB50#0	22.11	22.21	22.29
15MHz	QPSK	RB1#0	24.01	24.18	24.23
		RB1#38	24.17	24.41	24.32
		RB1#74	24.19	24.31	23.75
		RB36#0	23.27	23.33	23.36
		RB36#39	23.26	23.30	23.40
		RB75#0	23.23	23.32	23.32
	16QAM	RB1#0	23.50	23.43	23.46
		RB1#38	24.31	24.28	23.45
		RB1#74	23.64	23.77	22.87
		RB36#0	22.09	22.14	22.16
		RB36#39	22.06	22.20	22.25
		RB75#0	22.04	22.17	22.16
20MHz	QPSK	RB1#0	23.94	24.20	24.31
		RB1#50	24.44	24.55	24.61
		RB1#99	24.26	24.22	23.98
		RB50#0	23.22	23.27	23.41
		RB50#50	23.25	23.35	23.37
		RB100#0	23.24	23.28	23.38
	16QAM	RB1#0	23.60	23.60	23.43
		RB1#50	24.17	24.08	23.36
		RB1#99	23.84	23.66	23.29
		RB50#0	22.06	22.22	22.28
		RB50#50	22.14	22.25	22.37
		RB100#0	22.09	22.06	22.30

PAR:

Test Modulation		Channel Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit (dB)
QPSK	1 RB	20 MHz	3.71	3.77	3.62	13.00
	100 RB		4.99	4.75	4.52	13.00
16QAM	1 RB	20 MHz	4.72	4.72	4.70	13.00
	100 RB		6.00	6.00	5.65	13.00

EIRP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
1.4MHz	QPSK	Low	24.33	-0.11	24.22	33.00
		Middle	24.38	-0.11	24.27	33.00
		High	24.21	-0.11	24.10	33.00
	16QAM	Low	23.23	-0.11	23.12	33.00
		Middle	23.46	-0.11	23.35	33.00
		High	23.51	-0.11	23.40	33.00
3MHz	QPSK	Low	24.42	-0.11	24.31	33.00
		Middle	24.40	-0.11	24.29	33.00
		High	24.55	-0.11	24.44	33.00
	16QAM	Low	23.41	-0.11	23.30	33.00
		Middle	23.94	-0.11	23.83	33.00
		High	23.30	-0.11	23.19	33.00
5MHz	QPSK	Low	24.23	-0.11	24.12	33.00
		Middle	24.23	-0.11	24.12	33.00
		High	24.48	-0.11	24.37	33.00
	16QAM	Low	22.79	-0.11	22.68	33.00
		Middle	23.53	-0.11	23.42	33.00
		High	23.27	-0.11	23.16	33.00
10MHz	QPSK	Low	24.32	-0.11	24.21	33.00
		Middle	24.23	-0.11	24.12	33.00
		High	24.48	-0.11	24.37	33.00
	16QAM	Low	22.79	-0.11	22.68	33.00
		Middle	23.53	-0.11	23.42	33.00
		High	23.27	-0.11	23.16	33.00
15MHz	QPSK	Low	24.19	-0.11	24.08	33.00
		Middle	24.41	-0.11	24.30	33.00
		High	24.32	-0.11	24.21	33.00
	16QAM	Low	24.31	-0.11	24.20	33.00
		Middle	24.28	-0.11	24.17	33.00
		High	23.46	-0.11	23.35	33.00
20MHz	QPSK	Low	24.44	-0.11	24.33	33.00
		Middle	24.55	-0.11	24.44	33.00
		High	24.61	-0.11	24.50	33.00
	16QAM	Low	24.17	-0.11	24.06	33.00
		Middle	24.08	-0.11	23.97	33.00
		High	23.43	-0.11	23.32	33.00

LTE Band 4**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	23.23	23.01	22.97
		RB1#3	23.21	23.03	23.47
		RB1#5	23.22	22.91	23.30
		RB3#0	23.02	23.22	23.24
		RB3#3	22.97	23.21	23.20
		RB6#0	22.11	22.17	22.27
	16QAM	RB1#0	22.24	22.20	22.19
		RB1#3	22.40	22.84	22.25
		RB1#5	22.15	22.75	22.29
		RB3#0	22.13	22.18	22.24
		RB3#3	22.07	22.37	22.26
		RB6#0	21.20	21.38	21.45
3MHz	QPSK	RB1#0	23.12	23.35	22.92
		RB1#8	22.99	23.13	22.91
		RB1#14	22.88	23.17	23.33
		RB6#0	22.09	22.13	22.09
		RB6#9	21.98	22.26	22.22
		RB15#0	22.09	22.30	22.22
	16QAM	RB1#0	22.39	22.64	21.97
		RB1#8	22.18	22.88	21.76
		RB1#14	22.03	22.90	21.94
		RB6#0	21.20	21.46	21.17
		RB6#9	20.99	21.38	21.20
		RB15#0	21.11	21.44	21.41
5MHz	QPSK	RB1#0	22.93	23.01	22.99
		RB1#13	22.90	23.26	23.18
		RB1#24	22.94	23.19	23.30
		RB15#0	22.06	22.14	22.18
		RB15#10	22.08	22.23	22.31
		RB25#0	22.00	22.24	22.20
	16QAM	RB1#0	21.71	22.59	22.14
		RB1#13	21.63	22.72	22.03
		RB1#24	21.19	22.70	22.01
		RB15#0	20.85	21.03	21.06
		RB15#10	21.05	21.09	21.33
		RB25#0	21.10	21.10	21.30
10MHz	QPSK	RB1#0	22.99	23.07	22.96
		RB1#25	23.06	23.23	23.33
		RB1#49	23.02	23.08	23.17
		RB25#0	22.05	22.16	22.29
		RB25#25	22.10	22.32	22.18
		RB50#0	22.09	22.20	22.20
	16QAM	RB1#0	22.45	22.36	21.88
		RB1#25	22.64	22.80	21.93
		RB1#49	22.25	22.85	22.01
		RB25#0	20.92	21.29	21.51
		RB25#25	20.90	21.30	21.44
		RB50#0	21.05	21.32	21.29

15MHz	QPSK	RB1#0	23.01	23.12	23.06
		RB1#38	23.06	23.18	23.10
		RB1#74	23.12	23.12	23.16
		RB36#0	22.06	22.17	22.33
		RB36#39	22.27	22.22	22.34
		RB75#0	22.13	22.24	22.28
	16QAM	RB1#0	22.49	22.63	22.35
		RB1#38	22.46	22.84	22.17
		RB1#74	21.97	22.90	21.35
		RB36#0	21.14	21.15	21.08
		RB36#39	21.17	21.50	21.31
		RB75#0	21.22	21.34	21.36
20MHz	QPSK	RB1#0	22.94	23.23	23.26
		RB1#50	23.08	23.50	23.29
		RB1#99	23.11	23.43	23.05
		RB50#0	22.24	22.25	22.30
		RB50#50	22.35	22.30	22.16
		RB100#0	22.33	22.27	22.23
	16QAM	RB1#0	22.67	22.34	23.01
		RB1#50	23.02	22.42	23.44
		RB1#99	22.80	22.12	22.83
		RB50#0	21.27	21.18	21.33
		RB50#50	21.33	21.34	21.20
		RB100#0	21.33	21.33	21.27

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	4.58	4.06	4.58	13
	100 RB		4.96	4.58	4.70	13
16QAM	1 RB	20 MHz	5.57	4.99	5.59	13
	100 RB		6.00	5.59	5.77	13

EIRP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
1.4MHz	QPSK	Low	23.23	-1.14	22.09	30.00
		Middle	23.22	-1.14	22.08	30.00
		High	23.47	-1.14	22.33	30.00
	16QAM	Low	22.40	-1.14	21.26	30.00
		Middle	22.84	-1.14	21.70	30.00
		High	22.29	-1.14	21.15	30.00
3MHz	QPSK	Low	23.12	-1.14	21.98	30.00
		Middle	23.35	-1.14	22.21	30.00
		High	23.33	-1.14	22.19	30.00
	16QAM	Low	22.39	-1.14	21.25	30.00
		Middle	22.90	-1.14	21.76	30.00
		High	21.97	-1.14	20.83	30.00
5MHz	QPSK	Low	22.94	-1.14	21.80	30.00
		Middle	23.26	-1.14	22.12	30.00
		High	23.30	-1.14	22.16	30.00
	16QAM	Low	21.71	-1.14	20.57	30.00
		Middle	22.72	-1.14	21.58	30.00
		High	22.14	-1.14	21.00	30.00
10MHz	QPSK	Low	23.06	-1.14	21.92	30.00
		Middle	23.26	-1.14	22.12	30.00
		High	23.30	-1.14	22.16	30.00
	16QAM	Low	21.71	-1.14	20.57	30.00
		Middle	22.72	-1.14	21.58	30.00
		High	22.14	-1.14	21.00	30.00
15MHz	QPSK	Low	23.12	-1.14	21.98	30.00
		Middle	23.18	-1.14	22.04	30.00
		High	23.16	-1.14	22.02	30.00
	16QAM	Low	22.49	-1.14	21.35	30.00
		Middle	22.90	-1.14	21.76	30.00
		High	22.35	-1.14	21.21	30.00
20MHz	QPSK	Low	23.11	-1.14	21.97	30.00
		Middle	23.50	-1.14	22.36	30.00
		High	23.29	-1.14	22.15	30.00
	16QAM	Low	23.02	-1.14	21.88	30.00
		Middle	22.42	-1.14	21.28	30.00
		High	23.44	-1.14	22.30	30.00

LTE Band 5**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	24.10	23.82	24.03
		RB1#3	24.24	23.91	24.16
		RB1#5	24.17	23.89	23.98
		RB3#0	24.01	23.85	24.06
		RB3#3	24.06	24.09	23.90
		RB6#0	23.01	22.88	23.04
	16QAM	RB1#0	23.15	23.45	23.05
		RB1#3	23.41	23.36	23.40
		RB1#5	23.09	23.32	22.62
		RB3#0	23.11	23.23	22.74
		RB3#3	23.01	23.32	22.86
		RB6#0	21.72	22.23	21.82
3MHz	QPSK	RB1#0	23.84	24.00	23.52
		RB1#8	23.69	23.85	23.78
		RB1#14	23.85	23.91	23.80
		RB6#0	22.92	22.98	22.73
		RB6#9	22.96	22.86	22.82
		RB15#0	23.03	22.87	22.87
	16QAM	RB1#0	23.17	23.43	22.60
		RB1#8	23.09	23.64	22.76
		RB1#14	23.10	23.45	22.36
		RB6#0	21.77	22.31	21.65
		RB6#9	21.82	22.36	21.73
		RB15#0	21.89	22.12	21.89
5MHz	QPSK	RB1#0	23.79	23.76	23.75
		RB1#13	23.82	23.96	23.85
		RB1#24	23.78	23.83	23.82
		RB15#0	23.03	22.95	22.64
		RB15#10	23.01	22.93	22.90
		RB25#0	22.94	22.89	22.91
	16QAM	RB1#0	22.54	22.94	22.44
		RB1#13	22.46	23.47	22.42
		RB1#24	22.08	23.20	22.27
		RB15#0	21.73	21.89	21.62
		RB15#10	21.69	21.91	21.81
		RB25#0	21.88	21.79	21.80
10MHz	QPSK	RB1#0	23.92	23.86	23.81
		RB1#25	24.24	24.06	24.09
		RB1#49	23.89	23.96	23.93
		RB25#0	22.97	22.95	22.84
		RB25#25	22.86	23.02	22.75
		RB50#0	22.98	23.00	22.84
	16QAM	RB1#0	23.39	23.17	22.93
		RB1#25	23.55	23.74	23.14
		RB1#49	22.92	24.02	22.75
		RB25#0	22.08	21.98	22.04
		RB25#25	21.86	21.96	21.72
		RB50#0	21.98	22.00	21.72

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	4.26	4.09	4.23	13
	50 RB		5.25	5.36	5.28	13
16QAM	1 RB	10 MHz	5.30	5.01	5.30	13
	50 RB		6.17	6.38	6.20	13

ERP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
1.4MHz	QPSK	Low	24.24	-2.48	21.76	38.45
		Middle	24.09	-2.48	21.61	38.45
		High	24.16	-2.48	21.68	38.45
	16QAM	Low	23.41	-2.48	20.93	38.45
		Middle	23.45	-2.48	20.97	38.45
		High	23.40	-2.48	20.92	38.45
3MHz	QPSK	Low	23.85	-2.48	21.37	38.45
		Middle	24.00	-2.48	21.52	38.45
		High	23.80	-2.48	21.32	38.45
	16QAM	Low	23.17	-2.48	20.69	38.45
		Middle	23.64	-2.48	21.16	38.45
		High	22.76	-2.48	20.28	38.45
5MHz	QPSK	Low	23.82	-2.48	21.34	38.45
		Middle	23.96	-2.48	21.48	38.45
		High	23.85	-2.48	21.37	38.45
	16QAM	Low	22.54	-2.48	20.06	38.45
		Middle	23.47	-2.48	20.99	38.45
		High	22.44	-2.48	19.96	38.45
10MHz	QPSK	Low	24.24	-2.48	21.76	38.45
		Middle	23.96	-2.48	21.48	38.45
		High	23.85	-2.48	21.37	38.45
	16QAM	Low	22.54	-2.48	20.06	38.45
		Middle	23.47	-2.48	20.99	38.45
		High	22.44	-2.48	19.96	38.45

LTE Band 7**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	23.78	24.00	24.03
		RB1#13	23.79	24.17	24.09
		RB1#24	23.89	24.10	23.98
		RB15#0	23.00	22.98	23.10
		RB15#10	23.00	23.01	23.21
		RB25#0	23.03	23.08	23.13
	16QAM	RB1#0	22.59	23.32	22.87
		RB1#13	22.41	23.31	22.98
		RB1#24	22.36	23.20	23.22
		RB15#0	22.00	21.86	22.22
		RB15#10	21.94	21.92	22.00
		RB25#0	22.04	22.14	22.30
10 MHz	QPSK	RB1#0	23.96	24.25	24.14
		RB1#25	24.04	24.16	24.13
		RB1#49	24.14	24.11	23.77
		RB25#0	23.10	23.11	23.45
		RB25#25	23.14	23.14	23.27
		RB50#0	23.15	23.13	23.42
	16QAM	RB1#0	23.33	23.46	23.27
		RB1#25	23.23	23.80	23.05
		RB1#49	23.31	23.53	23.00
		RB25#0	22.18	22.10	22.61
		RB25#25	22.22	22.13	22.28
		RB50#0	22.18	22.32	22.50
15 MHz	QPSK	RB1#0	24.15	24.26	24.03
		RB1#38	23.94	24.19	24.15
		RB1#74	24.06	24.02	23.58
		RB36#0	23.19	23.05	23.39
		RB36#39	23.19	23.13	23.32
		RB75#0	23.16	23.13	23.39
	16QAM	RB1#0	23.14	23.57	23.28
		RB1#38	23.15	23.56	23.34
		RB1#74	23.00	23.45	23.22
		RB36#0	22.23	22.01	22.49
		RB36#39	22.18	22.14	22.15
		RB75#0	22.18	22.16	22.36
20MHz	QPSK	RB1#0	23.82	24.21	23.89
		RB1#50	24.38	24.27	24.40
		RB1#99	24.01	24.35	23.26
		RB50#0	23.28	23.27	23.37
		RB50#50	23.17	23.19	23.35
		RB100#0	23.26	23.22	23.40
	16QAM	RB1#0	22.91	22.79	23.50
		RB1#50	23.82	22.65	24.06
		RB1#99	23.48	23.22	23.16
		RB50#0	22.26	22.40	22.40
		RB50#50	22.21	22.18	22.39
		RB100#0	22.34	22.17	22.42

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1RB	20 MHz	3.74	3.25	2.93	13
	100RB		4.49	4.17	3.80	13
16QAM	1RB	20 MHz	4.93	4.09	3.77	13
	100RB		5.51	5.22	4.96	13

EIRP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
5MHz	QPSK	Low	23.89	-0.10	23.79	33.00
		Middle	24.17	-0.10	24.07	33.00
		High	24.09	-0.10	23.99	33.00
	16QAM	Low	22.59	-0.10	22.49	33.00
		Middle	23.32	-0.10	23.22	33.00
		High	23.22	-0.10	23.12	33.00
10MHz	QPSK	Low	24.14	-0.10	24.04	33.00
		Middle	24.17	-0.10	24.07	33.00
		High	24.09	-0.10	23.99	33.00
	16QAM	Low	22.59	-0.10	22.49	33.00
		Middle	23.32	-0.10	23.22	33.00
		High	23.22	-0.10	23.12	33.00
15MHz	QPSK	Low	24.15	-0.10	24.05	33.00
		Middle	24.26	-0.10	24.16	33.00
		High	24.15	-0.10	24.05	33.00
	16QAM	Low	23.15	-0.10	23.05	33.00
		Middle	23.57	-0.10	23.47	33.00
		High	23.34	-0.10	23.24	33.00
20MHz	QPSK	Low	24.38	-0.10	24.28	33.00
		Middle	24.35	-0.10	24.25	33.00
		High	24.40	-0.10	24.30	33.00
	16QAM	Low	23.82	-0.10	23.72	33.00
		Middle	23.22	-0.10	23.12	33.00
		High	24.06	-0.10	23.96	33.00

LTE Band 12**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	24.26	24.46	24.05
		RB1#3	24.46	24.50	24.46
		RB1#5	24.38	24.34	24.15
		RB3#0	24.18	24.37	24.19
		RB3#3	24.12	24.38	24.14
		RB6#0	23.21	23.33	23.20
	16QAM	RB1#0	23.33	23.89	23.31
		RB1#3	23.61	23.70	23.77
		RB1#5	23.44	23.63	23.47
		RB3#0	23.40	23.32	23.23
		RB3#3	23.43	23.40	23.27
		RB6#0	22.33	22.31	22.23
3MHz	QPSK	RB1#0	24.07	24.29	24.13
		RB1#8	24.14	24.55	24.45
		RB1#14	24.21	24.24	24.09
		RB6#0	23.23	23.23	23.30
		RB6#9	23.32	23.23	23.27
		RB15#0	23.16	23.27	23.30
	16QAM	RB1#0	23.42	23.45	23.31
		RB1#8	23.46	23.72	23.09
		RB1#14	23.08	23.61	22.98
		RB6#0	22.01	22.55	22.07
		RB6#9	22.25	22.61	21.99
		RB15#0	22.17	22.45	22.33
5MHz	QPSK	RB1#0	23.98	24.05	24.06
		RB1#13	24.18	24.39	24.30
		RB1#24	23.86	23.99	24.09
		RB15#0	23.12	23.28	23.24
		RB15#10	23.24	23.20	23.25
		RB25#0	23.24	23.25	23.23
	16QAM	RB1#0	22.61	23.47	23.00
		RB1#13	23.13	23.70	22.95
		RB1#24	22.36	23.51	22.68
		RB15#0	22.38	22.04	22.20
		RB15#10	22.19	22.09	22.18
		RB25#0	22.20	21.99	22.10
10MHz	QPSK	RB1#0	23.95	23.90	23.90
		RB1#25	24.24	24.34	24.42
		RB1#49	24.12	24.04	23.88
		RB25#0	23.10	23.24	23.18
		RB25#25	23.23	23.24	23.30
		RB50#0	23.16	23.25	23.25
	16QAM	RB1#0	23.39	23.55	22.76
		RB1#25	24.03	24.36	23.83
		RB1#49	22.96	23.65	22.75
		RB25#0	22.13	22.31	22.28
		RB25#25	22.18	22.33	22.28
		RB50#0	22.19	22.06	22.20

PAR, Band 12

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	5.13	4.78	4.78	13
	50 RB		5.19	5.42	5.33	13
16QAM	1 RB	10 MHz	6.23	5.74	5.97	13
	50 RB		6.29	6.43	6.46	13

ERP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
1.4MHz	QPSK	Low	24.46	-1.85	22.61	34.77
		Middle	24.50	-1.85	22.65	34.77
		High	24.46	-1.85	22.61	34.77
	16QAM	Low	23.61	-1.85	21.76	34.77
		Middle	23.89	-1.85	22.04	34.77
		High	23.77	-1.85	21.92	34.77
3MHz	QPSK	Low	24.21	-1.85	22.36	34.77
		Middle	24.55	-1.85	22.70	34.77
		High	24.45	-1.85	22.60	34.77
	16QAM	Low	23.46	-1.85	21.61	34.77
		Middle	23.72	-1.85	21.87	34.77
		High	23.31	-1.85	21.46	34.77
5MHz	QPSK	Low	24.18	-1.85	22.33	34.77
		Middle	24.39	-1.85	22.54	34.77
		High	24.30	-1.85	22.45	34.77
	16QAM	Low	23.13	-1.85	21.28	34.77
		Middle	23.70	-1.85	21.85	34.77
		High	23.00	-1.85	21.15	34.77
10MHz	QPSK	Low	24.24	-1.85	22.39	34.77
		Middle	24.39	-1.85	22.54	34.77
		High	24.30	-1.85	22.45	34.77
	16QAM	Low	23.13	-1.85	21.28	34.77
		Middle	23.70	-1.85	21.85	34.77
		High	23.00	-1.85	21.15	34.77

LTE Band 13**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	24.72	24.69	24.46
		RB1#13	24.54	24.48	24.63
		RB1#24	24.47	24.36	24.26
		RB15#0	23.63	23.57	23.56
		RB15#10	23.66	23.56	23.62
		RB25#0	23.58	23.56	23.57
	16QAM	RB1#0	23.34	23.84	23.40
		RB1#13	23.25	24.20	23.42
		RB1#24	22.80	23.76	22.99
		RB15#0	22.45	22.38	22.33
		RB15#10	22.45	22.51	22.45
		RB25#0	22.58	22.41	22.48
10 MHz	QPSK	RB1#0	/	24.58	/
		RB1#25	/	24.55	/
		RB1#49	/	24.26	/
		RB25#0	/	23.64	/
		RB25#25	/	23.58	/
		RB50#0	/	23.55	/
	16QAM	RB1#0	/	23.99	/
		RB1#25	/	24.19	/
		RB1#49	/	23.78	/
		RB25#0	/	22.53	/
		RB25#25	/	22.61	/
		RB50#0	/	22.38	/

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	/	4.14	/	13
	50RB		/	5.25	/	13
16QAM	1 RB	10 MHz	/	4.96	/	13
	50 RB		/	6.38	/	13

ERP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
5MHz	QPSK	Low	24.72	-1.57	23.15	34.77
		Middle	24.69	-1.57	23.12	34.77
		High	24.63	-1.57	23.06	34.77
	16QAM	Low	23.34	-1.57	21.77	34.77
		Middle	24.20	-1.57	22.63	34.77
		High	23.42	-1.57	21.85	34.77
10MHz	QPSK	Middle	24.58	-1.57	23.01	34.77
	16QAM	Middle	24.19	-1.57	22.62	34.77

LTE Band 17**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5MHz	QPSK	RB1#0	23.38	23.40	23.43
		RB1#13	23.57	23.61	23.60
		RB1#24	23.42	23.45	23.38
		RB15#0	22.52	22.53	22.54
		RB15#10	22.58	22.55	22.54
		RB25#0	22.48	22.53	22.54
	16QAM	RB1#0	22.05	22.85	22.28
		RB1#13	22.37	23.08	22.36
		RB1#24	21.77	22.81	22.05
		RB15#0	21.63	21.46	21.46
		RB15#10	21.32	21.47	21.53
		RB25#0	21.62	21.44	21.43
10MHz	QPSK	RB1#0	23.52	23.53	23.27
		RB1#25	23.66	23.55	23.68
		RB1#49	23.51	23.34	23.27
		RB25#0	22.58	22.54	22.58
		RB25#25	22.61	22.56	22.57
		RB50#0	22.61	22.57	22.54
	16QAM	RB1#0	22.89	23.02	22.49
		RB1#25	23.19	23.01	22.56
		RB1#49	22.80	22.94	21.96
		RB25#0	21.43	21.73	21.74
		RB25#25	21.65	21.74	21.75
		RB50#0	21.54	21.54	21.53

PAR_LTE Band 17

Modulation	RB	Channel Bandwidth	Low channel (dB)	Middle channel (dB)	High channel (dB)	Limit (dB)
QPSK	1RB	10MHz	4.87	4.93	5.04	13
	50RB		5.57	5.51	5.45	
16QAM	1RB	10MHz	5.88	5.91	6.03	13
	50RB		6.58	6.61	6.45	

ERP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBd)	Result (dBm)	Limit (dBm)
5MHz	QPSK	Low	23.57	-1.85	21.72	34.77
		Middle	23.61	-1.85	21.76	34.77
		High	23.60	-1.85	21.75	34.77
	16QAM	Low	22.37	-1.85	20.52	34.77
		Middle	23.08	-1.85	21.23	34.77
		High	22.36	-1.85	20.51	34.77
10MHz	QPSK	Low	23.66	-1.85	21.81	34.77
		Middle	23.61	-1.85	21.76	34.77
		High	23.60	-1.85	21.75	34.77
	16QAM	Low	23.19	-1.85	21.34	34.77
		Middle	23.02	-1.85	21.17	34.77
		High	22.56	-1.85	20.71	34.77

LTE Band 26**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	23.69	23.61	23.44
		RB1#3	23.96	23.65	23.48
		RB1#5	23.88	23.62	23.33
		RB3#0	23.76	23.77	23.54
		RB3#3	23.75	23.55	23.52
		RB6#0	22.66	22.64	22.51
	16QAM	RB1#0	22.94	22.96	22.69
		RB1#3	22.93	23.08	22.44
		RB1#5	22.78	23.00	22.33
		RB3#0	22.81	22.96	22.82
		RB3#3	22.87	22.97	22.76
		RB6#0	21.55	22.02	21.66
3MHz	QPSK	RB1#0	23.79	23.69	23.55
		RB1#8	23.63	23.62	23.29
		RB1#14	23.67	23.68	23.93
		RB6#0	22.66	22.64	22.62
		RB6#9	22.64	22.58	22.48
		RB15#0	22.68	22.61	22.57
	16QAM	RB1#0	22.85	23.19	22.38
		RB1#8	22.87	23.18	22.03
		RB1#14	22.88	23.21	22.12
		RB6#0	21.64	21.59	21.76
		RB6#9	21.62	21.52	21.57
		RB15#0	21.77	21.57	21.84
5MHz	QPSK	RB1#0	23.51	23.70	23.66
		RB1#13	23.52	23.50	23.60
		RB1#24	23.66	23.46	23.71
		RB15#0	22.66	22.63	22.65
		RB15#10	22.59	22.66	22.57
		RB25#0	22.62	22.68	22.53
	16QAM	RB1#0	22.21	22.89	22.41
		RB1#13	22.25	23.05	22.21
		RB1#24	21.99	22.82	22.30
		RB15#0	21.51	21.60	21.72
		RB15#10	21.61	21.54	21.51
		RB25#0	21.72	21.77	21.54
10MHz	QPSK	RB1#0	23.64	23.65	23.49
		RB1#25	23.62	23.61	23.77
		RB1#49	23.62	23.61	23.68
		RB25#0	22.61	22.62	22.78
		RB25#25	22.64	22.68	22.59
		RB50#0	22.58	22.68	22.67
	16QAM	RB1#0	22.94	23.08	22.68
		RB1#25	23.15	23.28	22.28
		RB1#49	22.93	23.37	22.62
		RB25#0	21.68	21.94	21.85
		RB25#25	21.88	21.63	21.68
		RB50#0	21.60	21.80	21.68

15MHz	QPSK	RB1#0	23.61	23.55	23.48
		RB1#38	23.79	23.61	23.75
		RB1#74	23.94	23.77	23.55
		RB36#0	22.67	22.64	22.65
		RB36#39	22.71	22.65	22.67
		RB75#0	22.70	22.65	22.63
	16QAM	RB1#0	22.80	23.35	22.67
		RB1#38	22.90	23.09	22.71
		RB1#74	23.11	23.75	21.97
		RB36#0	21.58	21.74	21.62
		RB36#39	21.70	21.57	21.65
		RB75#0	21.73	21.70	21.66

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	15 MHz	4.00	4.14	4.23	13
	75 RB		5.48	5.25	5.22	13
16QAM	1 RB	15 MHz	5.30	5.16	5.25	13
	75 RB		6.41	6.14	6.23	13

ERP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
1.4MHz	QPSK	Low	23.96	-2.48	21.48	38.45
		Middle	23.77	-2.48	21.29	38.45
		High	23.54	-2.48	21.06	38.45
	16QAM	Low	22.94	-2.48	20.46	38.45
		Middle	23.08	-2.48	20.60	38.45
		High	22.82	-2.48	20.34	38.45
3MHz	QPSK	Low	23.79	-2.48	21.31	38.45
		Middle	23.69	-2.48	21.21	38.45
		High	23.93	-2.48	21.45	38.45
	16QAM	Low	22.88	-2.48	20.40	38.45
		Middle	23.21	-2.48	20.73	38.45
		High	22.38	-2.48	19.90	38.45
5MHz	QPSK	Low	23.66	-2.48	21.18	38.45
		Middle	23.70	-2.48	21.22	38.45
		High	23.71	-2.48	21.23	38.45
	16QAM	Low	22.25	-2.48	19.77	38.45
		Middle	23.05	-2.48	20.57	38.45
		High	22.41	-2.48	19.93	38.45
10MHz	QPSK	Low	23.64	-2.48	21.16	38.45
		Middle	23.70	-2.48	21.22	38.45
		High	23.71	-2.48	21.23	38.45
	16QAM	Low	23.15	-2.48	20.67	38.45
		Middle	23.37	-2.48	20.89	38.45
		High	22.68	-2.48	20.20	38.45
15MHz	QPSK	Low	23.94	-2.48	21.46	38.45
		Middle	23.77	-2.48	21.29	38.45
		High	23.75	-2.48	21.27	38.45
	16QAM	Low	23.11	-2.48	20.63	38.45
		Middle	23.75	-2.48	21.27	38.45
		High	22.71	-2.48	20.23	38.45

LTE Band 38**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5MHz	QPSK	RB1#0	22.54	22.72	22.94
		RB1#13	22.53	22.75	23.02
		RB1#24	22.44	22.49	23.00
		RB15#0	21.68	21.90	21.93
		RB15#10	21.65	21.86	22.28
		RB25#0	21.65	21.86	22.27
	16QAM	RB1#0	21.30	21.96	22.10
		RB1#13	21.07	22.23	22.25
		RB1#24	20.97	21.92	22.28
		RB15#0	20.39	20.69	20.91
		RB15#10	20.45	20.63	20.84
		RB25#0	20.65	20.70	20.90
10MHz	QPSK	RB1#0	22.79	22.89	23.24
		RB1#25	22.81	23.13	23.09
		RB1#49	22.76	23.05	23.12
		RB25#0	21.75	22.00	22.04
		RB25#25	21.82	21.91	22.12
		RB50#0	21.82	21.97	22.13
	16QAM	RB1#0	21.94	21.80	22.42
		RB1#25	22.58	22.30	22.71
		RB1#49	21.55	21.99	22.41
		RB25#0	20.55	20.83	21.21
		RB25#25	20.51	20.93	21.05
		RB50#0	20.79	20.91	21.01
15MHz	QPSK	RB1#0	22.85	22.95	22.94
		RB1#38	22.81	22.93	23.00
		RB1#74	22.95	23.11	22.92
		RB36#0	21.80	21.96	22.11
		RB36#39	21.84	22.27	22.11
		RB75#0	21.92	22.01	22.03
	16QAM	RB1#0	21.64	22.38	22.08
		RB1#38	21.60	22.37	22.02
		RB1#74	21.75	22.47	22.10
		RB36#0	20.66	20.92	21.09
		RB36#39	20.56	20.98	20.94
		RB75#0	20.77	20.96	21.07
20MHz	QPSK	RB1#0	22.60	22.93	23.11
		RB1#50	22.95	23.33	23.40
		RB1#99	22.48	22.99	23.00
		RB50#0	21.84	22.01	22.07
		RB50#50	21.83	21.98	22.10
		RB100#0	21.76	21.99	22.11
	16QAM	RB1#0	22.05	21.58	22.36
		RB1#50	22.21	21.77	22.98
		RB1#99	21.87	21.69	22.72
		RB50#0	20.79	20.98	21.07
		RB50#50	20.76	20.96	21.07
		RB100#0	20.74	20.93	20.99

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1RB	20MHz	7.36	5.94	7.91	13
	100RB		5.88	4.99	5.77	13
16QAM	1RB	20MHz	5.88	4.90	7.25	13
	100RB		8.55	8.17	7.54	13

EIRP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
5MHz	QPSK	Low	22.54	-0.10	22.44	33.00
		Middle	22.75	-0.10	22.65	33.00
		High	23.02	-0.10	22.92	33.00
	16QAM	Low	21.30	-0.10	21.20	33.00
		Middle	22.23	-0.10	22.13	33.00
		High	22.28	-0.10	22.18	33.00
10MHz	QPSK	Low	22.81	-0.10	22.71	33.00
		Middle	22.75	-0.10	22.65	33.00
		High	23.02	-0.10	22.92	33.00
	16QAM	Low	21.30	-0.10	21.20	33.00
		Middle	22.23	-0.10	22.13	33.00
		High	22.28	-0.10	22.18	33.00
15MHz	QPSK	Low	22.95	-0.10	22.85	33.00
		Middle	23.11	-0.10	23.01	33.00
		High	23.00	-0.10	22.90	33.00
	16QAM	Low	21.75	-0.10	21.65	33.00
		Middle	22.47	-0.10	22.37	33.00
		High	22.10	-0.10	22.00	33.00
20MHz	QPSK	Low	22.95	-0.10	22.85	33.00
		Middle	23.33	-0.10	23.23	33.00
		High	23.40	-0.10	23.30	33.00
	16QAM	Low	22.21	-0.10	22.11	33.00
		Middle	21.77	-0.10	21.67	33.00
		High	22.98	-0.10	22.88	33.00

LTE Band 40 Lower**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	22.32	22.34	22.24
		RB1#13	22.45	22.29	22.42
		RB1#24	22.32	22.15	22.4
		RB15#0	21.56	21.65	21.45
		RB15#10	21.59	21.6	21.5
		RB25#0	21.57	21.55	21.49
	16QAM	RB1#0	20.83	21.68	21.38
		RB1#13	20.87	21.99	21.37
		RB1#24	21.03	21.65	21.57
		RB15#0	20.31	20.56	20.3
		RB15#10	20.41	20.54	20.39
		RB25#0	20.48	20.52	20.48
10 MHz	QPSK	RB1#0	/	22.44	/
		RB1#25	/	22.48	/
		RB1#49	/	22.41	/
		RB25#0	/	21.5	/
		RB25#25	/	21.55	/
		RB50#0	/	21.51	/
	16QAM	RB1#0	/	21.08	/
		RB1#25	/	21.2	/
		RB1#49	/	20.94	/
		RB25#0	/	20.46	/
		RB25#25	/	20.44	/
		RB50#0	/	20.39	/

Note: the device is a mobile station. For 5MHz mode, the channel power is equal to the test result in dBm/5MHz. For 10MHz mode, the PSD as below:

Channel Bandwidth	Modulation	Resource Block & RB offset	Middle Channel (dBm/5MHz)
10MHz	QPSK	RB1#0	22.29
		RB1#25	22.27
		RB1#49	22.22
		RB25#0	21.29
		RB25#25	21.34
		RB50#0	19.35
	16QAM	RB1#0	20.93
		RB1#25	21.00
		RB1#49	20.74
		RB25#0	20.28
		RB25#25	20.28
		RB50#0	18.15

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1RB	10MHz	/	7.33	/	13
	50RB		/	6.23	/	13
16QAM	1RB	10MHz	/	8.52	/	13
	50RB		/	4.90	/	13

EIRP:

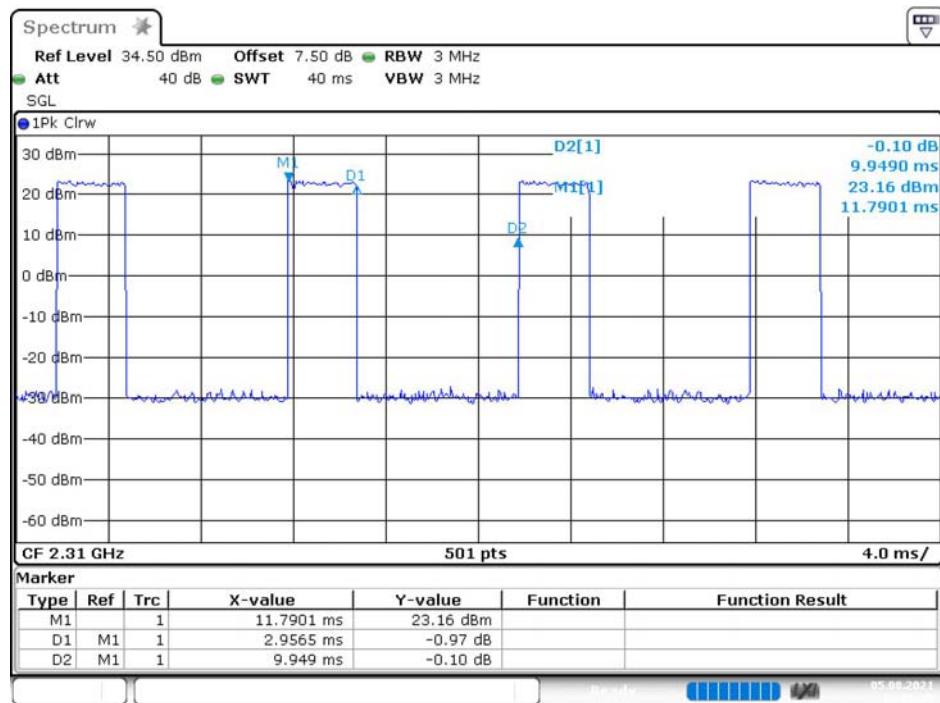
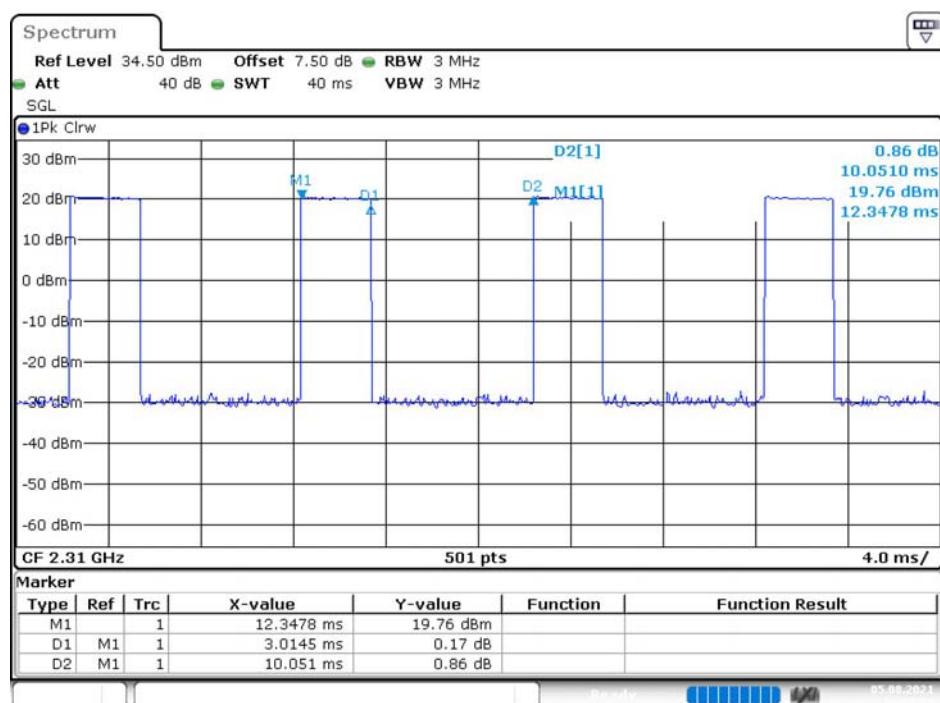
Channel Bandwidth	Modulation	Channel	Conducted Power (dBm/5MHz)	Antenna Gain (dBi)	Cable Loss (dB)	Result (dBm/5MHz)	Limit (dBm/5MHz)
5MHz	QPSK	Low	22.45	1.14	0.00	23.59	24.00
		Middle	22.34	1.14	0.00	23.48	24.00
		High	22.42	1.14	0.00	23.56	24.00
	16QAM	Low	21.03	1.14	0.00	22.17	24.00
		Middle	21.99	1.14	0.00	23.13	24.00
		High	21.57	1.14	0.00	22.71	24.00
10MHz	QPSK	Middle	22.48	1.14	0.00	23.62	24.00
	16QAM	Middle	21.20	1.14	0.00	22.34	24.00

Duty Cycle

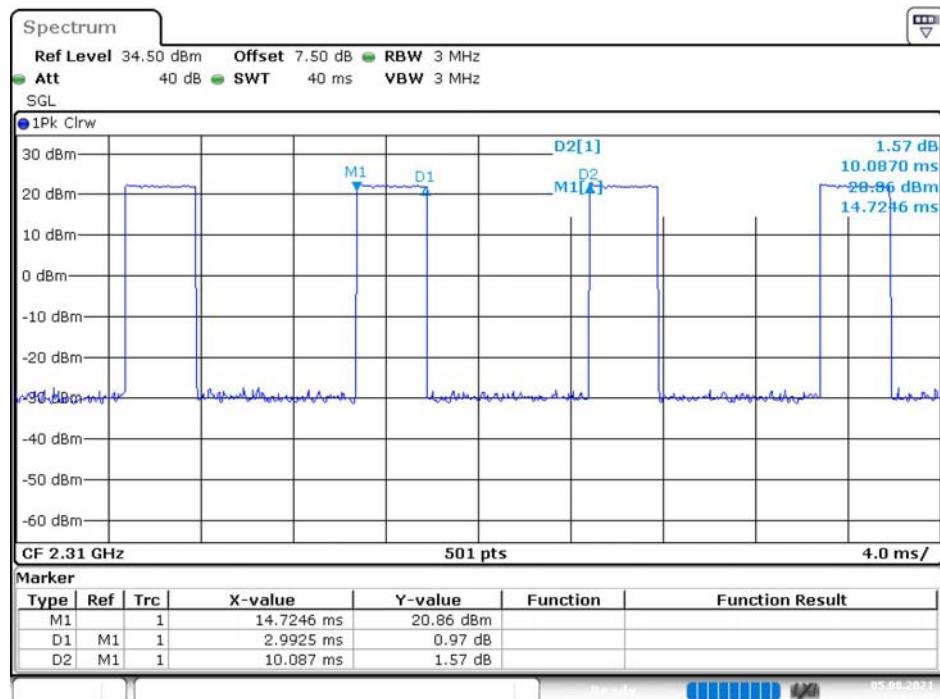
Test Modulation	Test Bandwidth	Ton (ms)	Total (ms)	Duty Cycle (%)	Limit (%)
QPSK	5M	2.9565	9.949	29.72	38
	10M	3.0145	10.51	28.68	
16-QAM	5M	2.9925	10.087	29.67	
	10M	2.9565	10.29	28.73	

Note: EUT setup is as following:

Uplink Downlink configuration	Subframe number									
	0	1	2	3	4	5	6	7	8	9
3	D	S	U	U	U	D	D	D	D	D

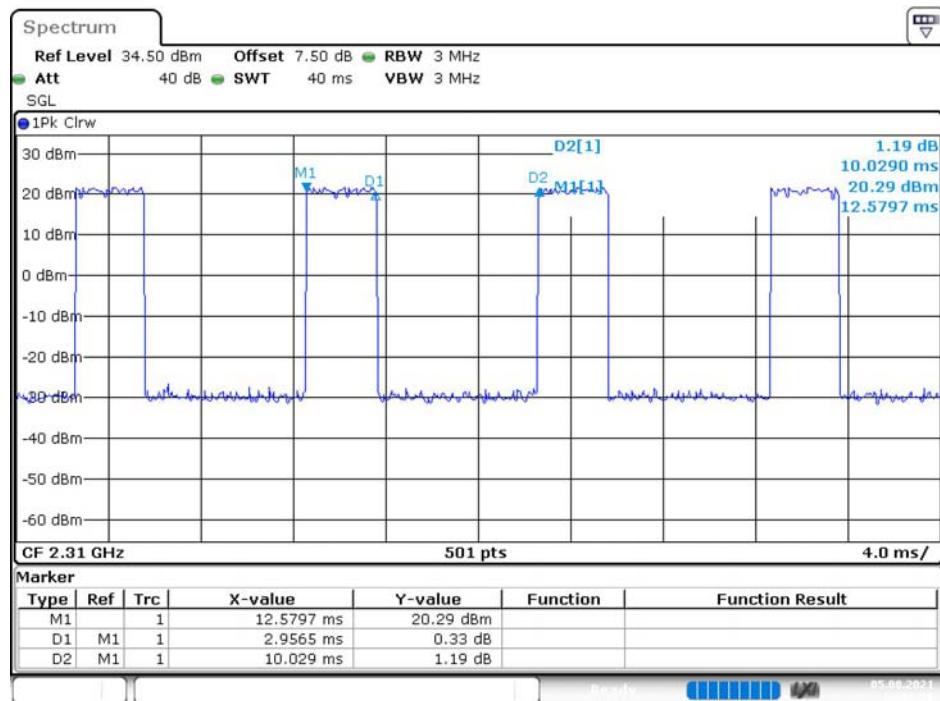
Duty Cycle:**QPSK, 5MHz****QPSK, 10MHz**

16-QAM, 5MHz



Date: 5.AUG.2021 16:28:25

16-QAM, 10MHz



Date: 5.AUG.2021 16:31:28

LTE Band 40 Upper**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	22.41	22.12	22.08
		RB1#13	22.51	22.35	22.34
		RB1#24	22.48	22.41	22.26
		RB15#0	21.57	21.51	21.47
		RB15#10	21.63	21.52	21.72
		RB25#0	21.55	21.54	21.44
	16QAM	RB1#0	21.81	20.84	21.53
		RB1#13	21.52	20.88	21.71
		RB1#24	21.6	20.86	21.6
		RB15#0	20.42	20.22	20.39
		RB15#10	20.45	20.4	20.46
		RB25#0	20.52	20.37	20.39
10 MHz	QPSK	RB1#0	/	22.45	/
		RB1#25	/	22.41	/
		RB1#49	/	22.45	/
		RB25#0	/	21.53	/
		RB25#25	/	21.43	/
		RB50#0	/	21.49	/
	16QAM	RB1#0	/	21.6	/
		RB1#25	/	21.76	/
		RB1#49	/	21.64	/
		RB25#0	/	20.34	/
		RB25#25	/	20.28	/
		RB50#0	/	20.38	/

Note: the device is a mobile station. For 5MHz mode, the channel power is equal to the test result in dBm/5MHz. For 10MHz mode, the PSD as below:

Channel Bandwidth	Modulation	Resource Block & RB offset	Middle Channel (dBm/5MHz)
10MHz	QPSK	RB1#0	22.24
		RB1#25	22.25
		RB1#49	22.32
		RB25#0	21.36
		RB25#25	21.22
		RB50#0	19.29
	16QAM	RB1#0	21.33
		RB1#25	21.55
		RB1#49	21.37
		RB25#0	20.21
		RB25#25	20.02
		RB50#0	18.09

PAR:

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1RB	10MHz	/	4.90	/	13
	50RB		/	5.39	/	13
16QAM	1RB	10MHz	/	8.23	/	13
	50RB		/	7.51	/	13

EIRP:

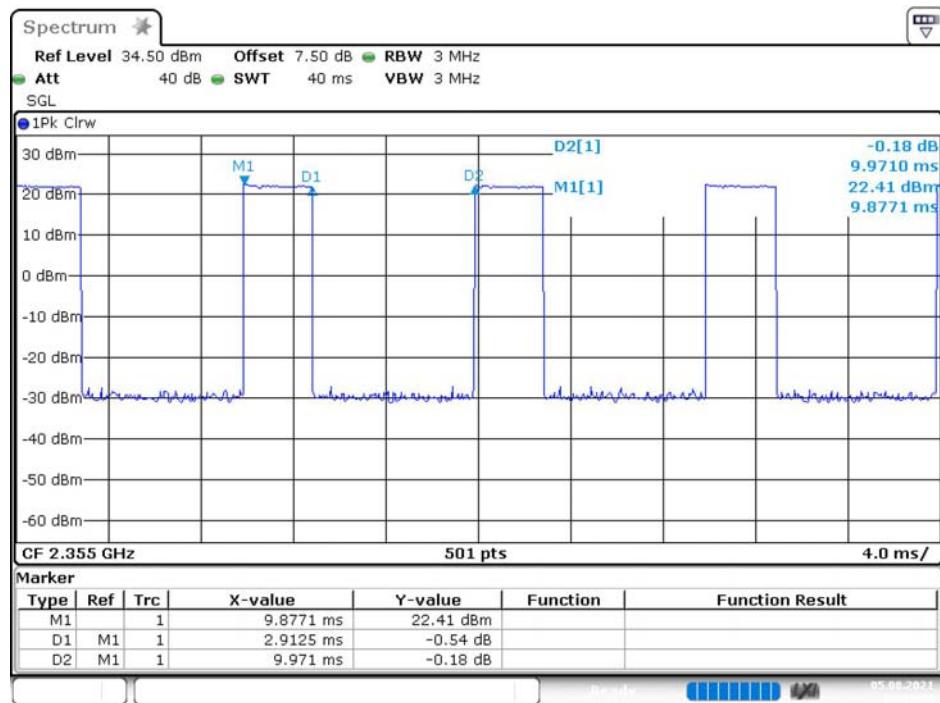
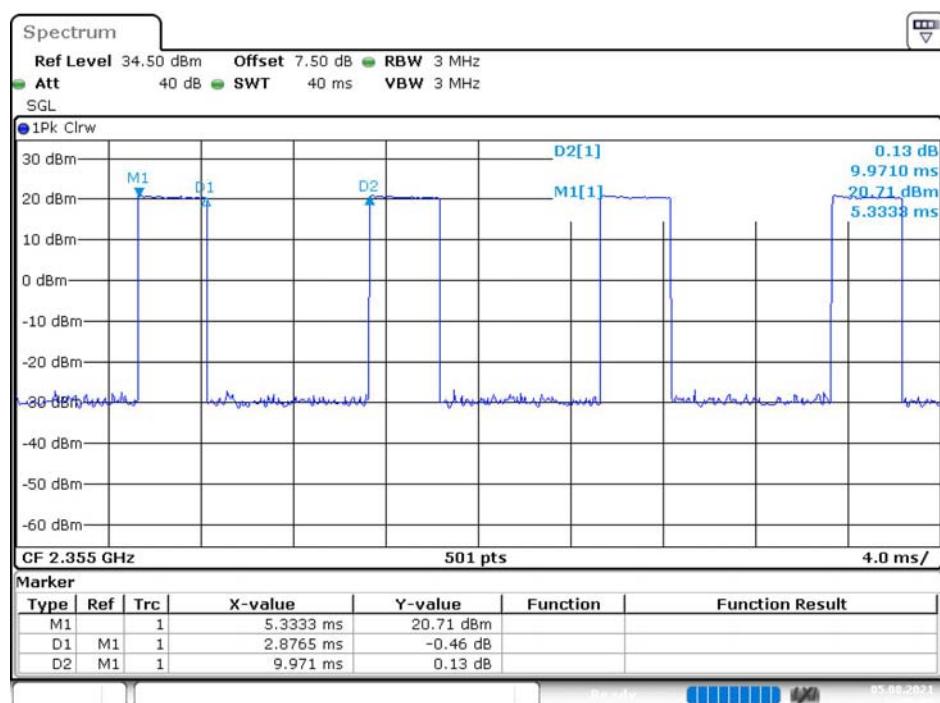
Channel Bandwidth	Modulation	Channel	Conducted Power (dBm/5MHz)	Antenna Gain (dBd)	Result (dBm/5MHz)	Limit (dBm/5MHz)
5MHz	QPSK	Low	22.51	1.14	23.65	24.00
		Middle	22.41	1.14	23.55	24.00
		High	22.34	1.14	23.48	24.00
	16QAM	Low	21.81	1.14	22.95	24.00
		Middle	20.88	1.14	22.02	24.00
		High	21.71	1.14	22.85	24.00
10MHz	QPSK	Middle	22.45	1.14	23.59	24.00
	16QAM	Middle	21.76	1.14	22.90	24.00

Duty Cycle

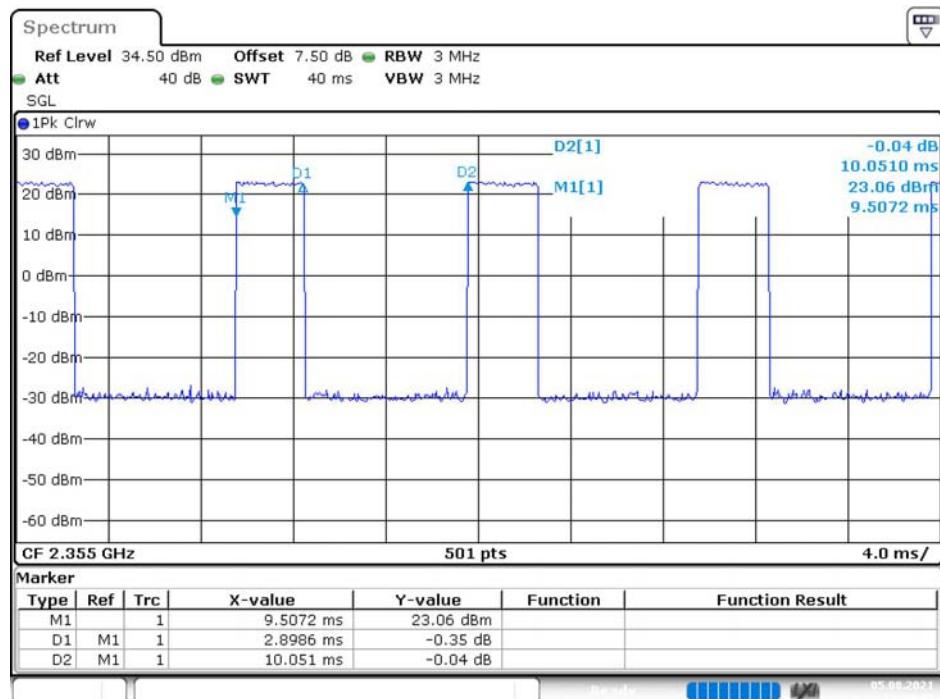
Test Modulation	Test Bandwidth	Ton (ms)	Total (ms)	Duty Cycle (%)	Limit (%)
QPSK	5M	2.9125	9.971	29.21	38
	10M	2.8765	9.971	28.85	
16-QAM	5M	2.8986	10.051	28.84	
	10M	3.0725	10.109	30.39	

Note: EUT setup is as following:

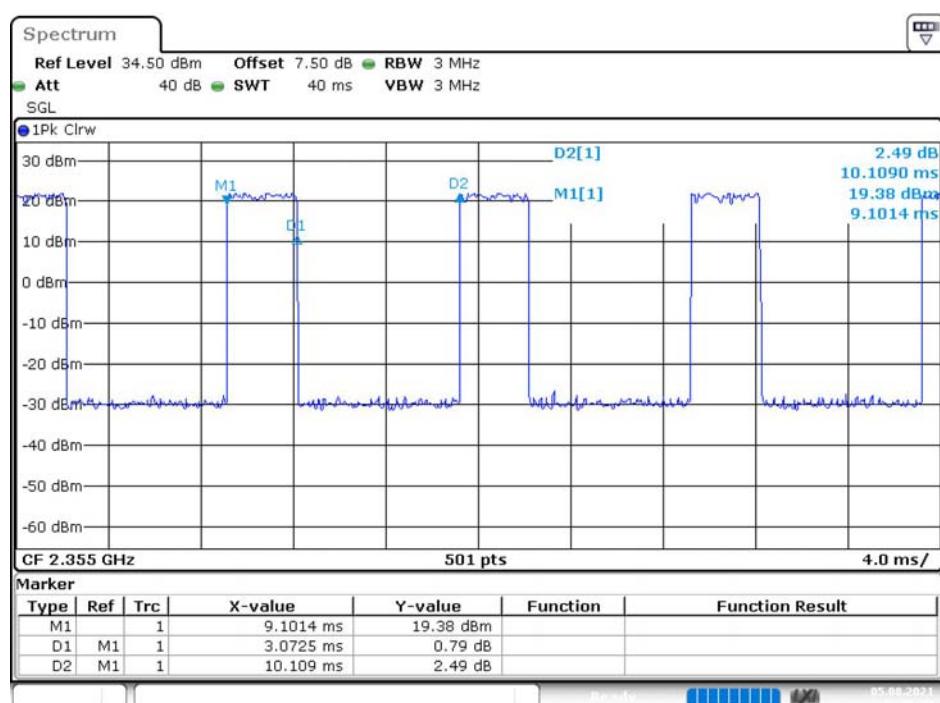
Uplink Downlink configuration	Subframe number									
	0	1	2	3	4	5	6	7	8	9
3	D	S	U	U	U	D	D	D	D	D

Duty Cycle:**QPSK, 5MHz****QPSK, 10MHz**

16-QAM, 5MHz



16-QAM, 10MHz



LTE Band 41**Conducted Output Power:**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	22.42	22.80	23.55
		RB1#13	22.51	22.93	23.56
		RB1#24	22.53	22.88	23.58
		RB15#0	21.69	21.98	22.53
		RB15#10	21.66	22.05	22.70
		RB25#0	21.70	21.95	22.66
	16QAM	RB1#0	21.23	22.09	22.91
		RB1#13	21.29	22.40	22.93
		RB1#24	21.07	22.33	22.96
		RB15#0	20.57	20.96	21.58
		RB15#10	20.54	20.94	21.54
		RB25#0	20.66	20.88	21.63
10 MHz	QPSK	RB1#0	22.70	23.01	23.62
		RB1#25	22.72	23.25	23.68
		RB1#49	22.73	23.17	23.71
		RB25#0	21.81	22.05	22.82
		RB25#25	21.78	22.09	22.65
		RB50#0	21.82	22.27	22.79
	16QAM	RB1#0	21.86	22.46	23.07
		RB1#25	22.28	22.78	23.42
		RB1#49	21.85	22.50	23.01
		RB25#0	20.70	21.04	21.80
		RB25#25	20.71	21.15	21.78
		RB50#0	20.83	21.03	21.80
15 MHz	QPSK	RB1#0	22.62	22.93	23.61
		RB1#38	22.65	23.00	23.53
		RB1#74	22.62	23.06	23.47
		RB36#0	21.62	22.25	22.82
		RB36#39	21.91	22.45	22.78
		RB75#0	21.68	22.37	22.70
	16QAM	RB1#0	21.40	22.05	22.82
		RB1#38	21.36	22.09	22.70
		RB1#74	21.34	22.13	23.05
		RB36#0	20.56	21.09	21.80
		RB36#39	20.54	21.45	21.84
		RB75#0	20.58	21.49	21.83
20MHz	QPSK	RB1#0	22.35	23.18	23.82
		RB1#50	22.74	23.21	23.78
		RB1#99	22.41	23.05	23.79
		RB50#0	21.69	22.01	22.77
		RB50#50	21.69	22.11	22.69
		RB100#0	21.63	22.08	22.72
	16QAM	RB1#0	21.81	21.55	23.07
		RB1#50	21.90	21.88	23.58
		RB1#99	21.81	21.66	23.12
		RB50#0	20.63	21.06	21.86
		RB50#50	20.68	21.15	21.87
		RB100#0	20.66	21.01	21.82

PAR:

Modulation	RB	Channel Bandwidth	Low channel (dB)	Middle channel (dB)	High channel (dB)	Limit (dB)
QPSK	1RB	20MHz	8.58	3.59	5.28	13
	100RB		8.41	6.75	8.14	
16QAM	1RB	20MHz	8.52	7.22	5.10	13
	100RB		8.61	5.88	8.26	

EIRP:

Channel Bandwidth	Modulation	Channel	Conducted Power (dBm)	Antenna Gain (dBi)	Result (dBm)	Limit (dBm)
5MHz	QPSK	Low	22.53	-0.10	22.43	33.00
		Middle	22.93	-0.10	22.83	33.00
		High	23.58	-0.10	23.48	33.00
	16QAM	Low	21.29	-0.10	21.19	33.00
		Middle	22.40	-0.10	22.30	33.00
		High	22.96	-0.10	22.86	33.00
10MHz	QPSK	Low	22.73	-0.10	22.63	33.00
		Middle	22.93	-0.10	22.83	33.00
		High	23.58	-0.10	23.48	33.00
	16QAM	Low	21.29	-0.10	21.19	33.00
		Middle	22.40	-0.10	22.30	33.00
		High	22.96	-0.10	22.86	33.00
15MHz	QPSK	Low	22.65	-0.10	22.55	33.00
		Middle	23.06	-0.10	22.96	33.00
		High	23.61	-0.10	23.51	33.00
	16QAM	Low	21.40	-0.10	21.30	33.00
		Middle	22.13	-0.10	22.03	33.00
		High	23.05	-0.10	22.95	33.00
20MHz	QPSK	Low	22.74	-0.10	22.64	33.00
		Middle	23.21	-0.10	23.11	33.00
		High	23.82	-0.10	23.72	33.00
	16QAM	Low	21.90	-0.10	21.80	33.00
		Middle	21.88	-0.10	21.78	33.00
		High	23.58	-0.10	23.48	33.00

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Result = Conducted Power + Antenna Gain
- 3) Antenna gain(dBd)= Antenna gain(dBi)-2.15

FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53&§90.209- OCCUPIED BANDWIDTH

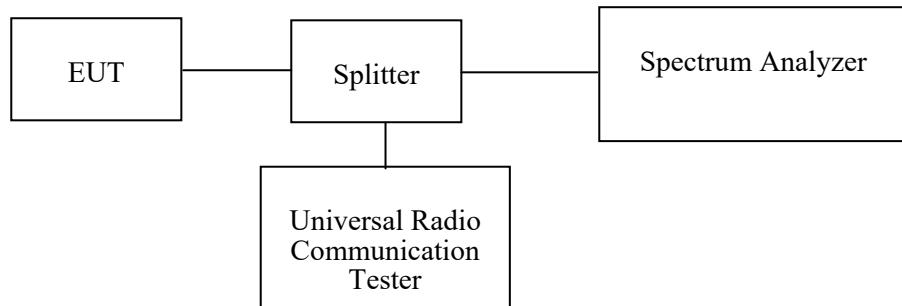
Applicable Standard

FCC §2.1049, §22.917, §22.905, §24.238, §27.53&,90.209

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The 26 dB & 99% bandwidth was recorded.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2021-07-07	2022-07-07
R&S	Spectrum Analyzer	FSV40	101474	2021-01-09	2022-01-09
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41010012	Each time	N/A
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Two-way Spliter	ODP-1-6-2S	OE0120142	Each Time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	Each time	N/A
Unknown	Attenuator	UNAT-3+	15529	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.7~29.8 °C
Relative Humidity:	46~62 %
ATM Pressure:	99.3~100.7 kPa
Tester:	Lay Lei
Test Date:	2021-08-03~2021-08-20

Test Mode: Transmitting

Test Result: Compliance. Please refer to the following table and plots.

GSM:

Band	Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
		Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Cellular	GPRS	0.243	0.243	0.243	0.321	0.314	0.326
	EDGE	0.250	0.245	0.247	0.316	0.321	0.315
PCS	GPRS	0.245	0.242	0.245	0.314	0.318	0.318
	EDGE	0.246	0.245	0.245	0.313	0.311	0.317

WCDMA:

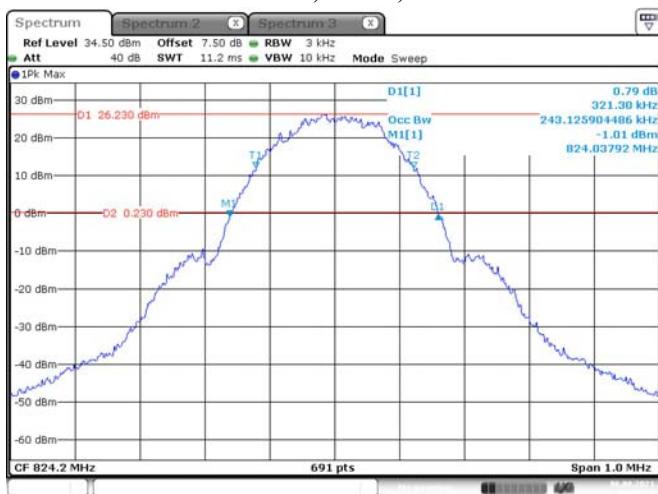
Band	Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
		Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
WCDMA Band 2	Rel 99	4.124	4.124	4.124	4.718	4.718	4.718
	HSDPA	4.139	4.139	4.139	4.747	4.718	4.732
	HSUPA	4.139	4.139	4.139	4.718	4.718	4.718
WCDMA Band 4	Rel 99	4.124	4.139	4.124	4.747	4.747	4.761
	HSDPA	4.139	4.139	4.139	4.747	4.761	4.718
	HSUPA	4.124	4.139	4.139	4.732	4.747	4.747
WCDMA Band 5	Rel 99	4.110	4.124	4.124	4.732	4.718	4.732
	HSDPA	4.124	4.139	4.139	4.732	4.732	4.732
	HSUPA	4.124	4.139	4.139	4.732	4.747	4.732

LTE Bands:

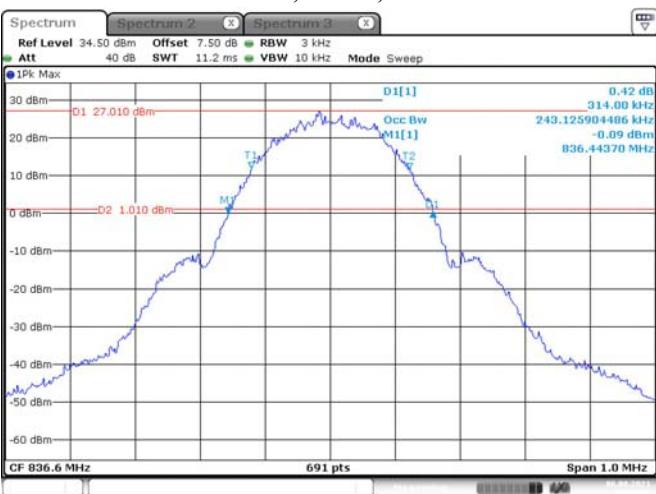
Band	Bandwidth (MHz)	Modulation mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
			Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
LTE Band 2	1.4 MHz	QPSK	1.108	1.302	1.108	1.314	1.102	1.326
		16QAM	1.102	1.314	1.102	1.314	1.108	1.338
	3 MHz	QPSK	2.695	2.940	2.695	2.952	2.683	2.964
		16QAM	2.695	2.952	2.683	2.976	2.683	2.952
	5 MHz	QPSK	4.531	5.040	4.511	5.020	4.491	5.000
		16QAM	4.511	5.020	4.531	5.060	4.511	5.040
	10 MHz	QPSK	8.942	9.760	8.942	9.720	8.942	9.720
		16QAM	8.942	9.640	8.942	9.720	8.942	9.680
	15 MHz	QPSK	13.473	14.880	13.413	14.820	13.413	14.880
		16QAM	13.473	14.760	13.473	14.760	13.413	14.820
	20 MHz	QPSK	17.964	19.280	17.884	19.280	17.884	19.520
		16QAM	17.964	19.440	17.884	19.440	17.884	19.440
LTE Band 4	1.4 MHz	QPSK	1.102	1.320	1.102	1.302	1.102	1.338
		16QAM	1.102	1.332	1.102	1.320	1.102	1.332
	3 MHz	QPSK	2.695	2.952	2.695	2.952	2.683	2.964
		16QAM	2.695	2.964	2.683	2.964	2.683	2.952
	5 MHz	QPSK	4.531	5.020	4.511	5.020	4.491	5.000
		16QAM	4.511	4.980	4.511	5.040	4.511	5.020
	10 MHz	QPSK	8.942	9.840	8.942	9.760	8.942	9.680
		16QAM	8.942	9.640	8.942	9.720	8.942	9.680
	15 MHz	QPSK	13.473	14.820	13.413	14.820	13.473	14.880
		16QAM	13.473	14.820	13.473	14.760	13.473	14.820
	20 MHz	QPSK	17.964	17.964	19.280	17.884	19.360	17.884
		16QAM	17.884	17.884	19.520	17.884	19.440	17.964

Band	Bandwidth (MHz)	Modulation mode	99% Occupied Bandwidth(MHz)			26 dB Occupied Bandwidth(MHz)		
			Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
LTE Band 5	1.4 MHz	QPSK	1.102	1.108	1.108	1.308	1.326	1.296
		16QAM	1.108	1.096	1.102	1.314	1.302	1.320
	3 MHz	QPSK	2.683	2.695	2.695	2.964	2.940	2.952
		16QAM	2.683	2.695	2.695	2.940	2.976	2.964
	5 MHz	QPSK	4.491	4.531	4.511	5.000	5.040	5.020
		16QAM	4.511	4.511	4.511	5.040	5.000	5.040
	10 MHz	QPSK	8.901	8.942	8.942	9.680	9.800	9.800
		16QAM	8.942	8.942	8.942	9.760	9.800	9.720
LTE Band 7	5 MHz	QPSK	4.531	4.511	4.511	5.020	5.020	5.060
		16QAM	4.511	4.531	4.511	5.020	5.040	5.040
	10 MHz	QPSK	8.942	8.942	8.942	9.840	9.720	9.680
		16QAM	8.942	8.942	8.981	9.680	9.760	9.800
	15 MHz	QPSK	13.533	13.413	13.473	14.940	14.940	14.940
		16QAM	13.473	13.473	13.473	14.880	14.760	14.940
	20 MHz	QPSK	17.964	17.964	17.964	20.160	19.440	19.680
		16QAM	18.044	17.964	17.884	20.240	19.600	19.440
LTE Band 12	1.4 MHz	QPSK	1.102	1.102	1.108	1.302	1.314	1.296
		16QAM	1.102	1.096	1.102	1.338	1.296	1.308
	3 MHz	QPSK	2.695	2.695	2.683	2.952	2.940	2.940
		16QAM	2.695	2.683	2.683	2.964	2.964	2.940
	5 MHz	QPSK	4.511	4.511	4.491	5.040	5.020	4.960
		16QAM	4.491	4.511	4.511	4.980	5.040	5.020
	10 MHz	QPSK	8.901	8.942	8.942	9.680	9.720	9.840
		16QAM	8.901	8.942	8.942	9.640	9.640	9.720
LTE Band 13	5 MHz	QPSK	4.531	4.511	4.491	5.040	4.980	4.960
		16QAM	4.511	4.531	4.511	5.000	5.040	5.020
	10 MHz	QPSK	/	8.942	/	/	9.880	/
		16QAM	/	8.942	/	/	9.760	/
LTE Band 17	5 MHz	QPSK	4.511	4.511	4.491	5.040	5.020	4.980
		16QAM	4.491	4.531	4.511	4.960	5.020	5.040
	10 MHz	QPSK	8.942	8.942	8.942	9.840	9.760	9.720
		16QAM	8.942	8.942	8.942	9.680	9.680	9.760
LTE Band 26	1.4 MHz	QPSK	1.102	1.108	1.108	1.308	1.320	1.296
		16QAM	1.108	1.096	1.102	1.320	1.302	1.314
	3 MHz	QPSK	2.695	2.695	2.683	2.940	2.952	2.964
		16QAM	2.683	2.683	2.683	2.964	2.952	2.940
	5 MHz	QPSK	4.531	4.511	4.511	5.040	5.000	4.980
		16QAM	4.511	4.531	4.511	4.980	5.020	5.040
	10 MHz	QPSK	8.942	8.942	8.901	9.840	9.760	9.720
		16QAM	8.942	8.942	8.942	9.680	9.760	9.760
	15 MHz	QPSK	13.473	13.353	13.413	14.940	14.820	14.760
		16QAM	13.473	13.473	13.473	14.820	14.760	14.820
LTE Band 38	5 MHz	QPSK	4.511	4.491	4.491	5.020	4.940	4.960
		16QAM	4.511	4.511	4.491	5.040	5.020	4.980
	10 MHz	QPSK	8.942	8.942	8.942	9.960	9.800	9.720
		16QAM	8.942	8.942	8.942	9.600	9.560	9.840
	15 MHz	QPSK	13.533	13.473	13.473	15.840	15.120	16.140
		16QAM	13.473	13.473	13.533	16.320	15.180	15.300
	20 MHz	QPSK	17.964	17.964	17.884	19.280	19.360	19.360
		16QAM	17.884	17.884	17.884	19.680	20.480	19.520

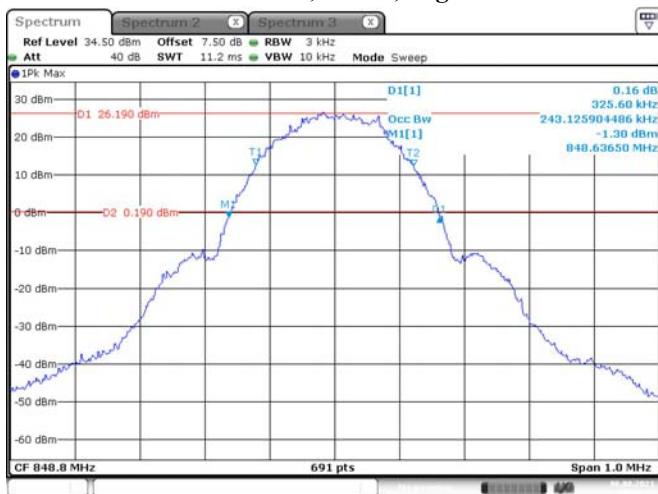
Band	Bandwidth (MHz)	Modulation mode	99% Occupied Bandwidth(MHz)			26 dB Occupied Bandwidth(MHz)		
			Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
LTE Band 40 Lower	5 MHz	QPSK	4.511	4.511	4.491	5.040	4.960	5.020
		16QAM	4.511	4.511	4.531	5.100	5.000	5.020
	10 MHz	QPSK	/	8.942	/	/	9.840	/
		16QAM	/	8.942	/	/	9.720	/
LTE Band 40 Upper	5 MHz	QPSK	4.511	4.491	4.511	4.940	4.960	5.020
		16QAM	4.511	4.511	4.511	5.040	5.020	5.080
	10 MHz	QPSK	/	8.942	/	/	10.040	/
		16QAM	/	8.942	/	/	9.600	/
LTE Band 41	5 MHz	QPSK	4.491	4.511	4.511	4.960	5.020	4.940
		16QAM	4.511	4.511	4.511	5.000	5.140	5.060
	10 MHz	QPSK	8.942	8.942	8.942	9.960	9.800	9.680
		16QAM	8.942	8.942	8.942	9.640	9.640	9.720
	15 MHz	QPSK	13.473	13.473	13.413	15.600	14.940	15.780
		16QAM	13.533	13.473	13.533	15.780	15.060	14.940
	20 MHz	QPSK	17.884	17.964	17.884	19.280	19.760	19.840
		16QAM	17.884	17.884	17.884	20.000	20.960	19.680

Cellular 850 Band, GPRS, Low Channel

Date: 6.AUG.2021 08:54:21

Cellular 850 Band, GPRS, Middle Channel

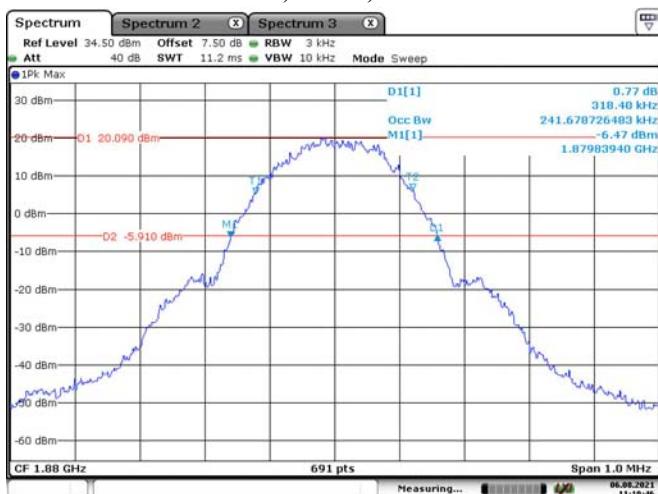
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Cellular 850 Band, GPRS, High Channel

Date: 6.AUG.2021 09:31:18

PCS 1900 Band, GPRS, Low Channel

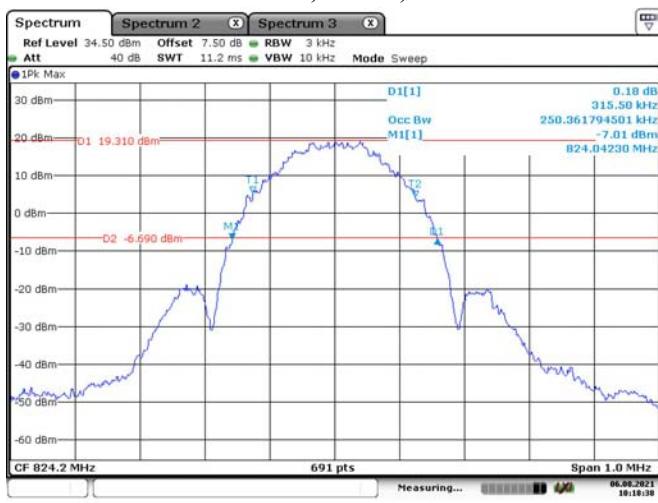
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PCS 1900 Band, GPRS, Middle Channel

Date: 6.AUG.2021 11:10:46

PCS 1900 Band, GPRS, High Channel

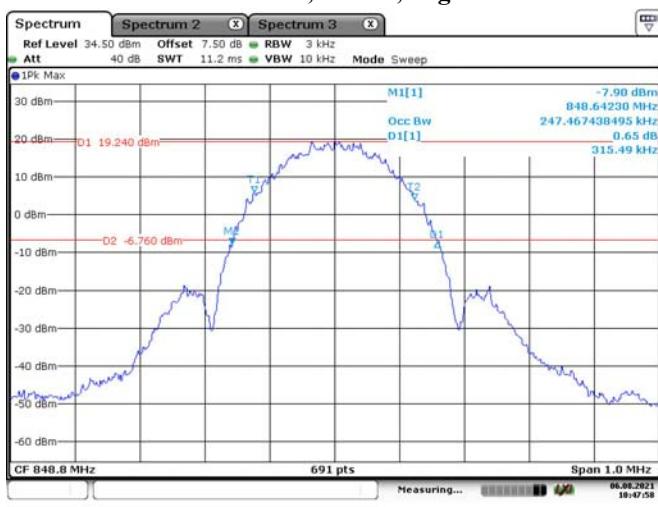
Date: 6.AUG.2021 11:15:42

Cellular 850 Band, EDGE, Low Channel

Date: 6.AUG.2021 10:18:38

Cellular 850 Band, EDGE, Middle Channel

Date: 6.AUG.2021 10:40:41

Cellular 850 Band, EDGE, High Channel

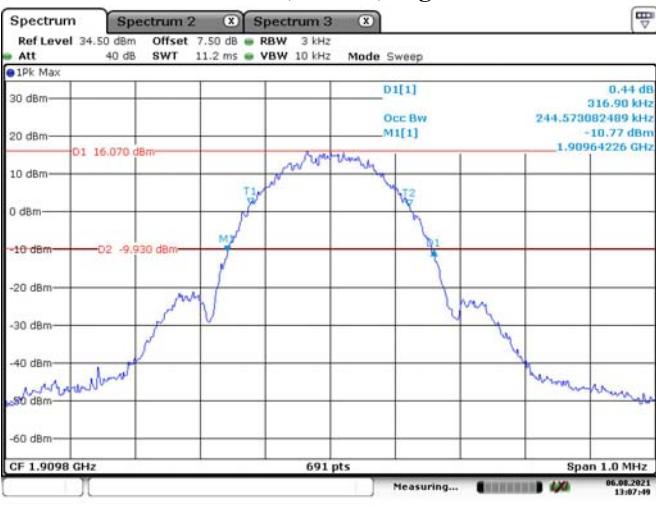
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PCS 1900 Band, EDGE, Low Channel

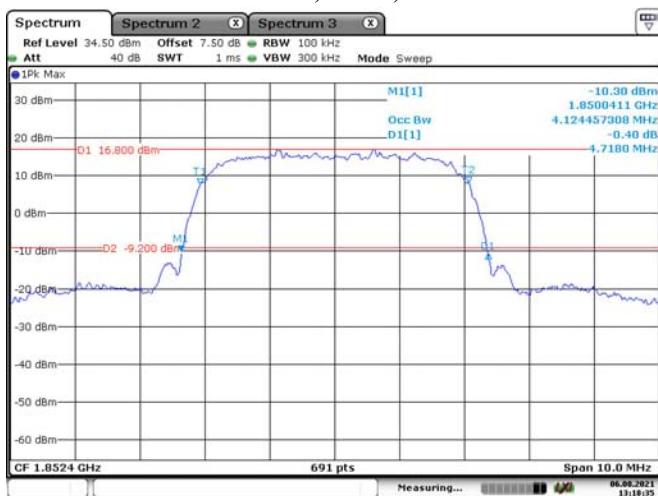
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PCS 1900 Band, EDGE, Middle Channel

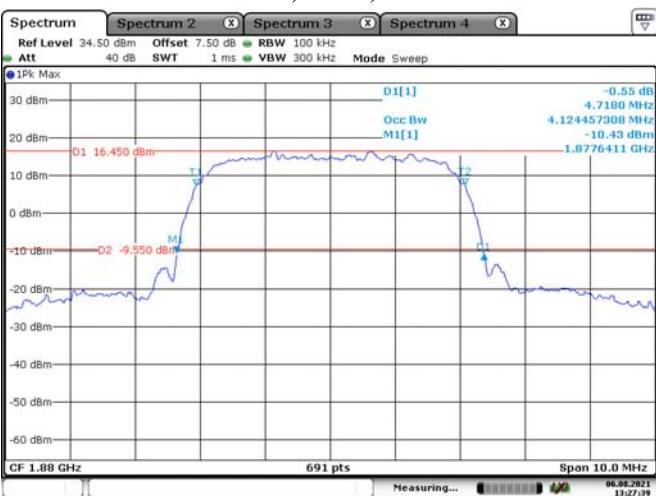
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PCS 1900 Band, EDGE, High Channel

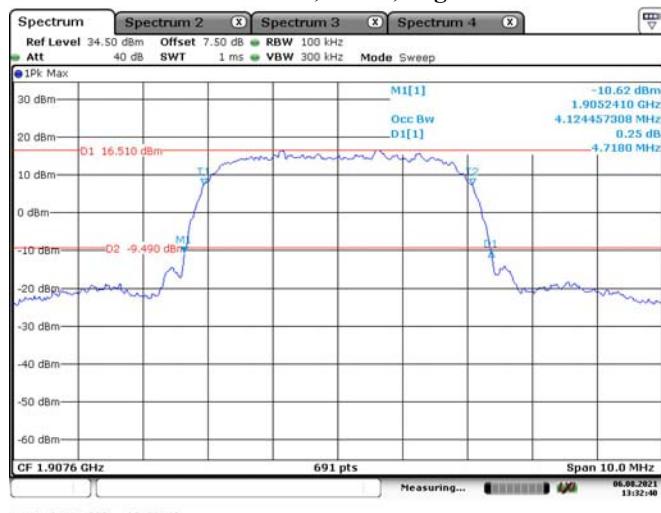
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WCDMA Band II, Rel99, Low Channel

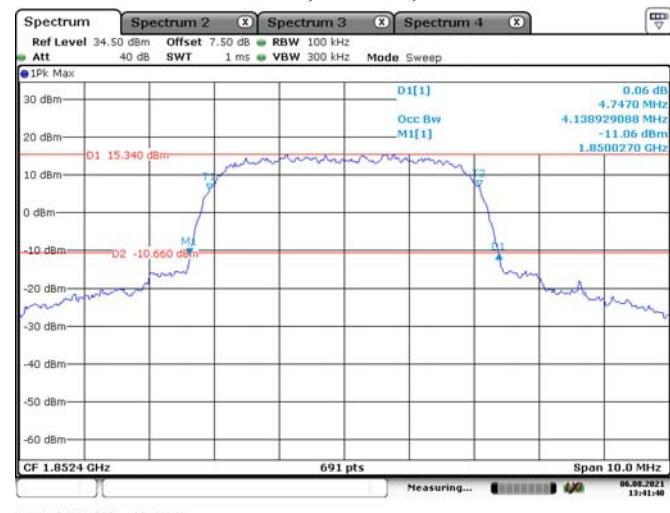
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WCDMA Band II, Rel99, Middle Channel

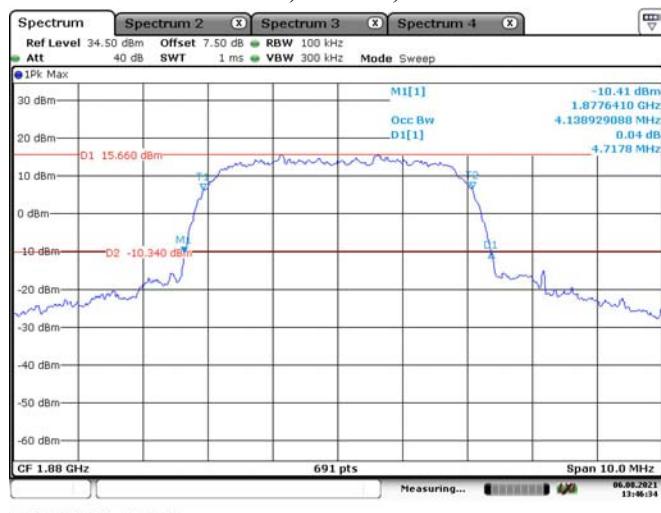
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WCDMA Band II, Rel99, High Channel

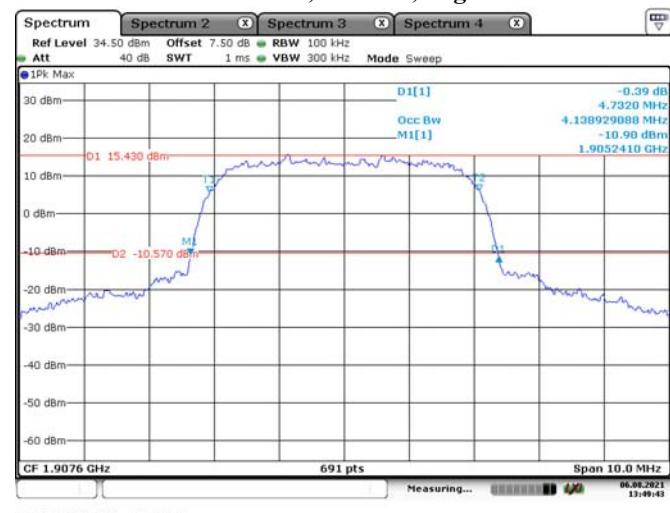
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WCDMA Band II, HSDPA, Low Channel

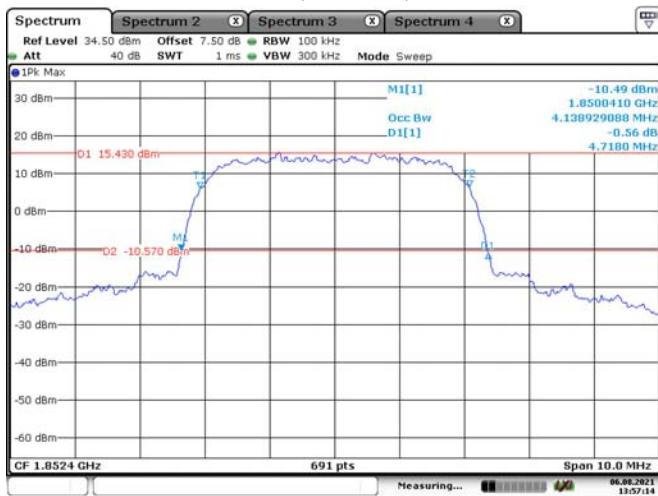
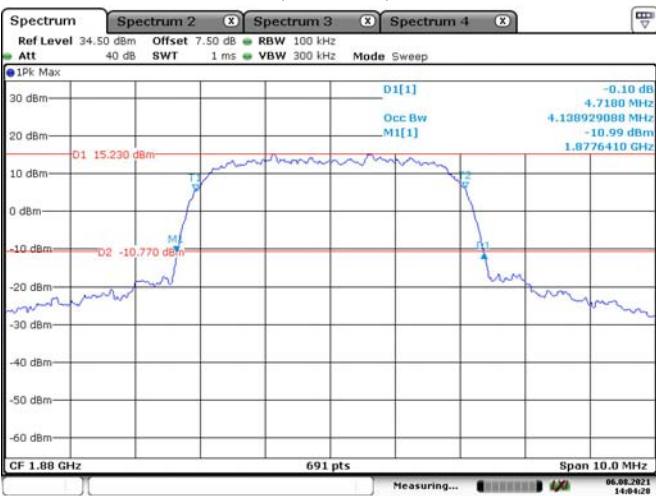
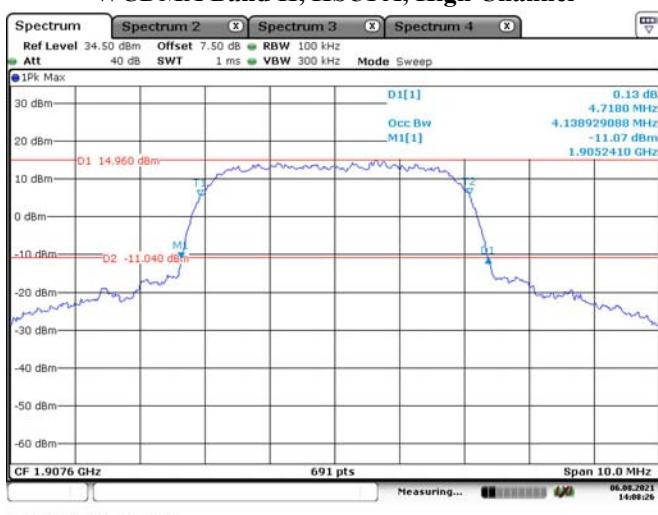
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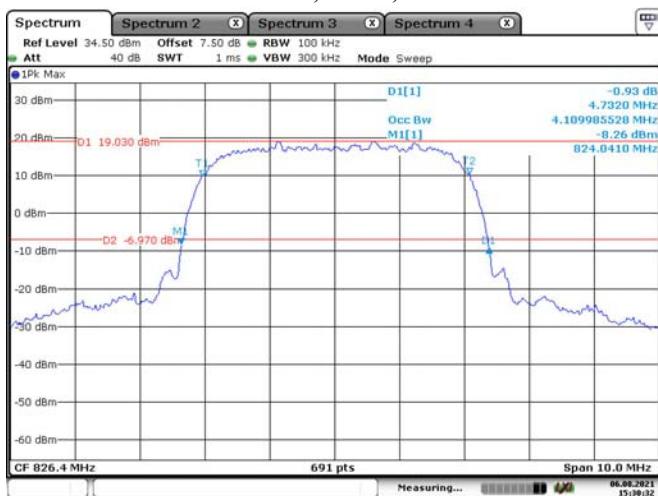
WCDMA Band II, HSDPA, Middle Channel

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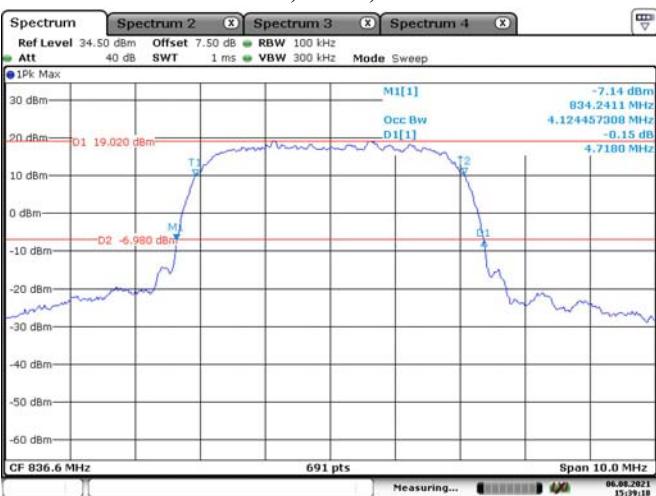
WCDMA Band II, HSDPA, High Channel

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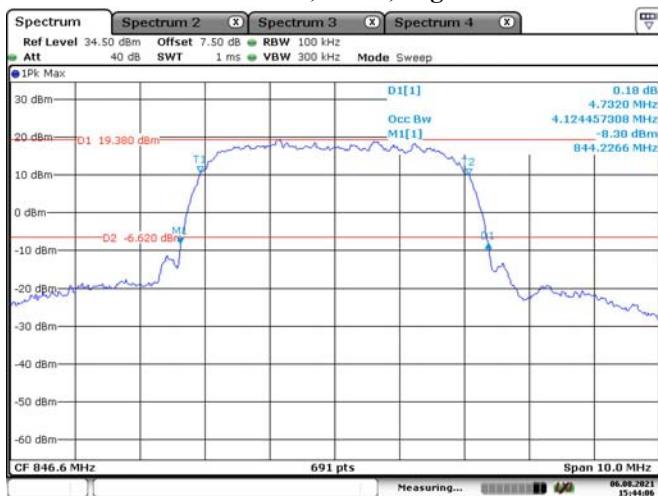
WCDMA Band II, HSUPA, Low Channel**WCDMA Band II, HSUPA, Middle Channel****WCDMA Band II, HSUPA, High Channel**

WCDMA Band V, Rel99, Low Channel

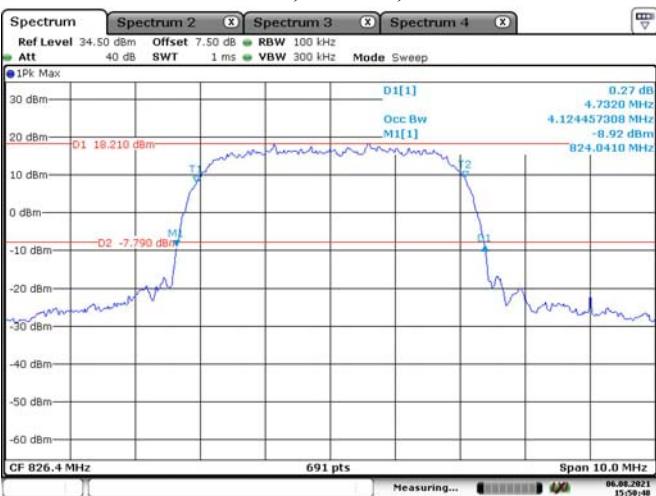
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WCDMA Band V, Rel99, Middle Channel

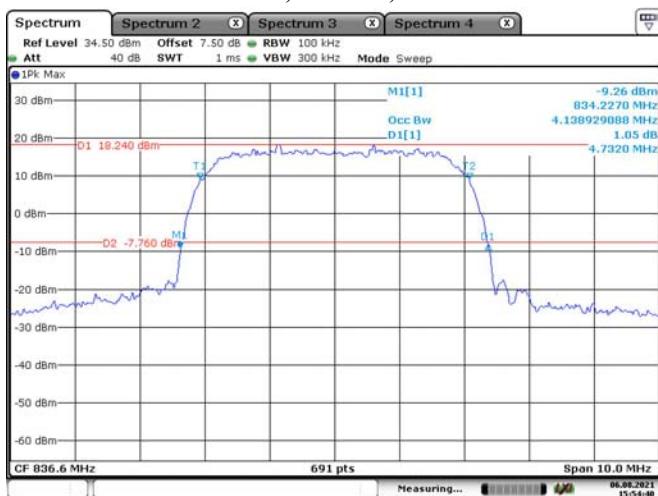
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WCDMA Band V, Rel99, High Channel

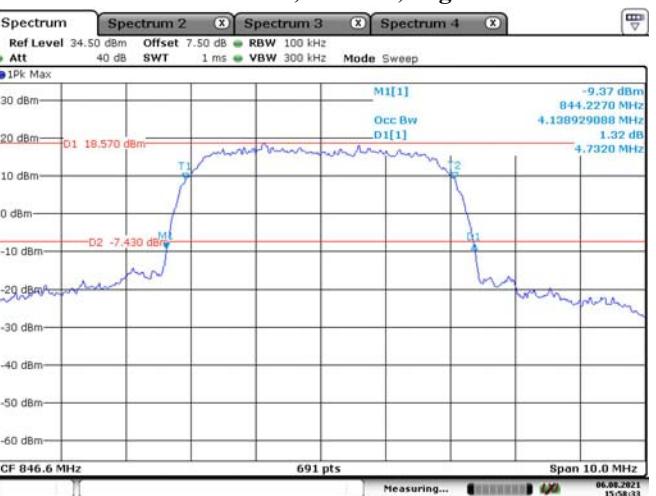
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WCDMA Band V, HSDPA, Low Channel

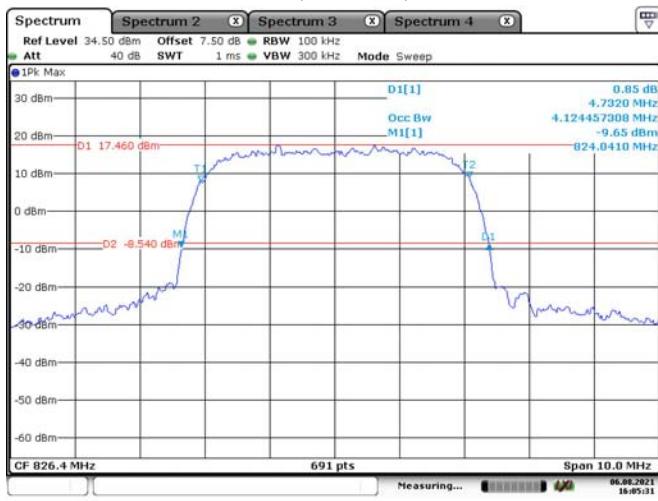
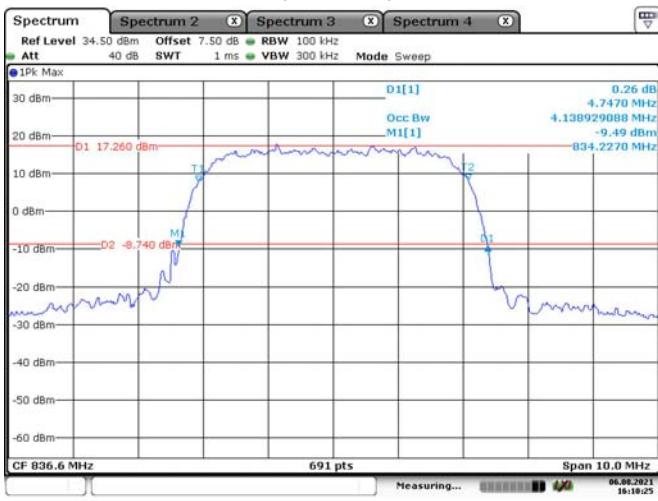
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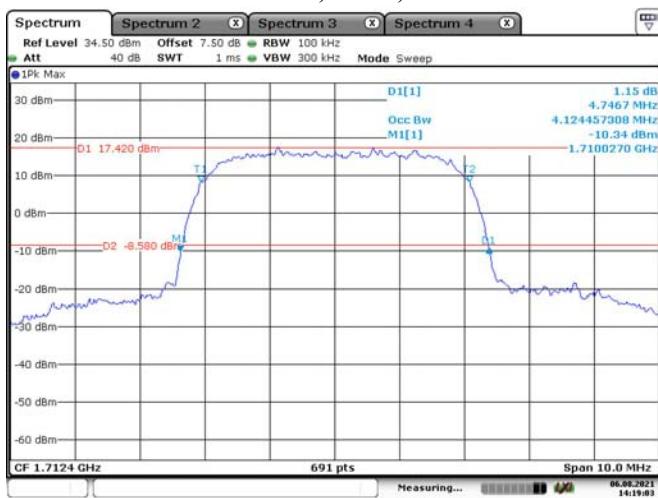
WCDMA Band V, HSDPA, Middle Channel

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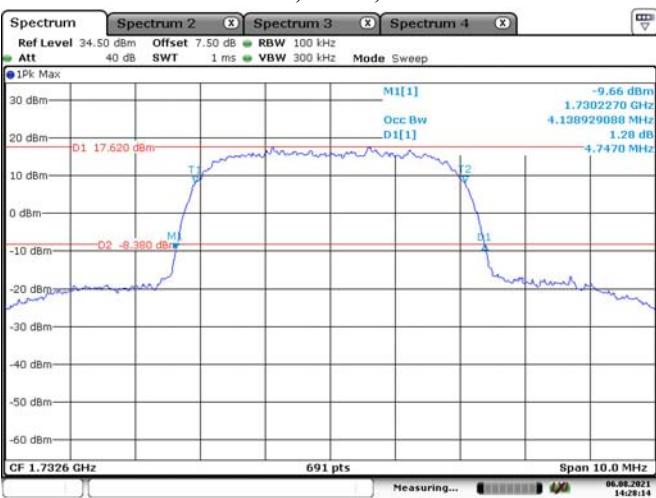
WCDMA Band V, HSDPA, High Channel

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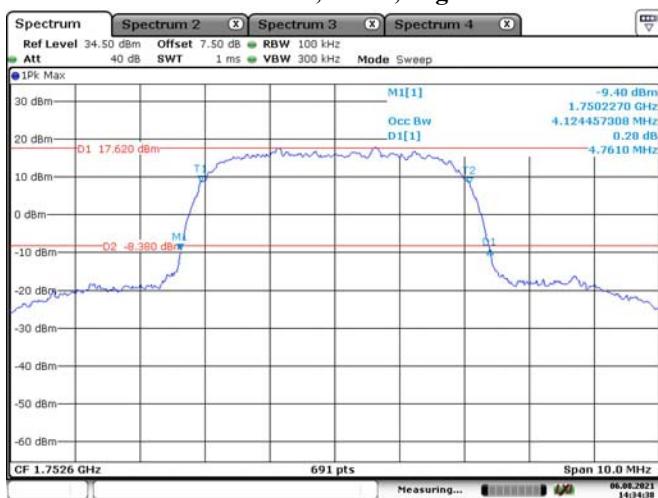
WCDMA Band V, HSUPA, Low Channel**WCDMA Band V, HSUPA, Middle Channel****WCDMA Band V, HSUPA, High Channel**

WCDMA Band IV, Rel99, Low Channel

Date: 6.AUG.2021 14:19:03

WCDMA Band IV, Rel99, Middle Channel

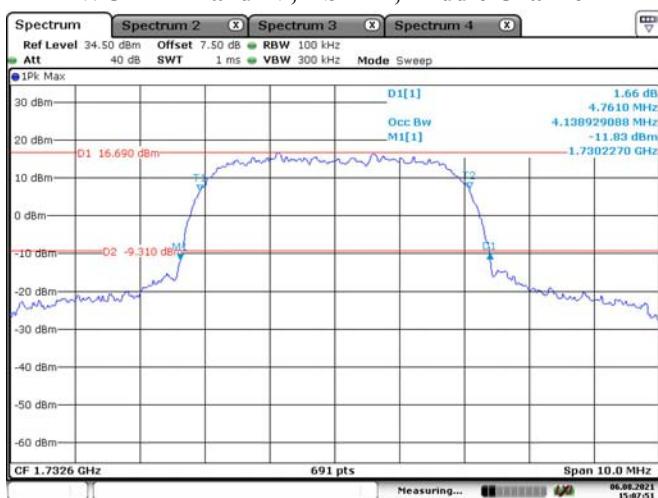
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WCDMA Band IV, Rel99, High Channel

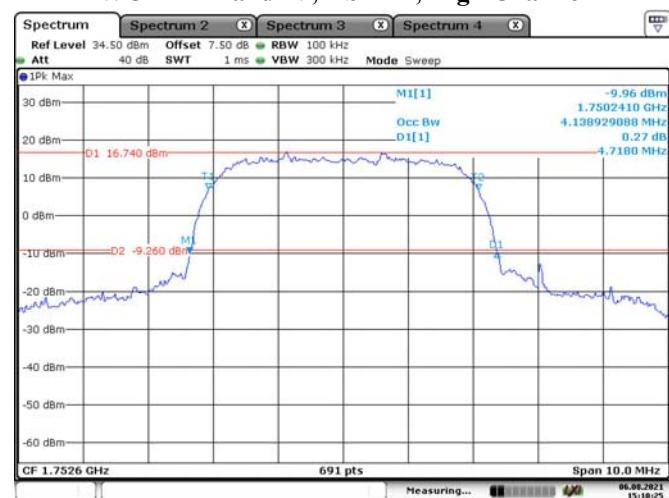
Date: 6.AUG.2021 14:34:39

WCDMA Band IV, HSDPA, Low Channel

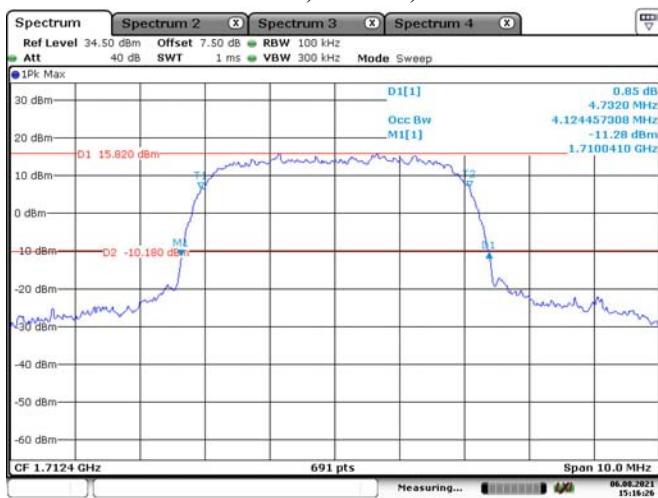
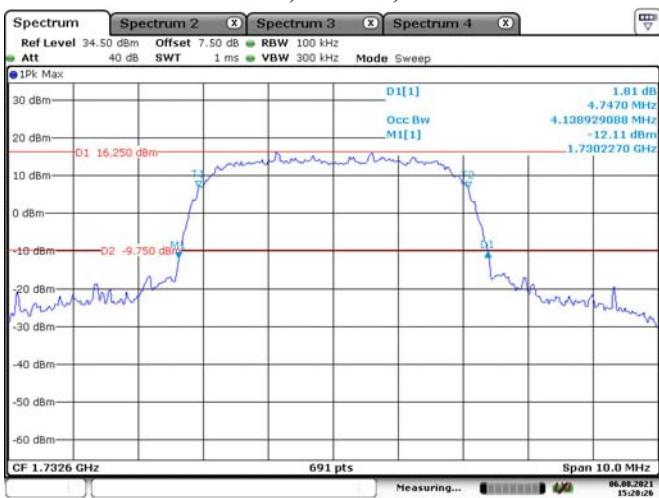
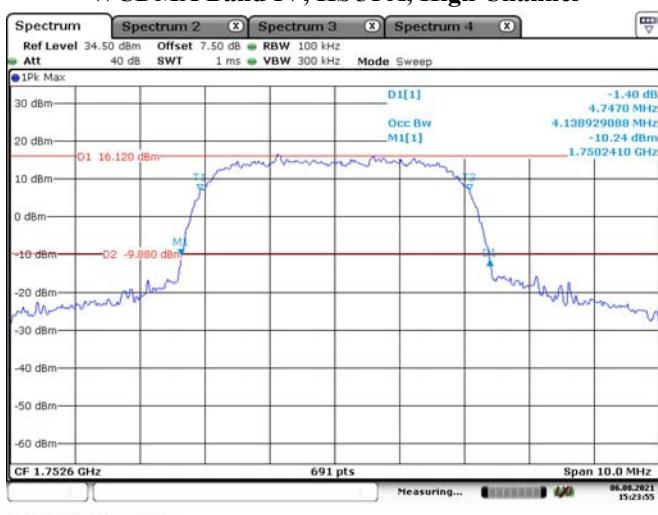
Date: 6.AUG.2021 14:45:13

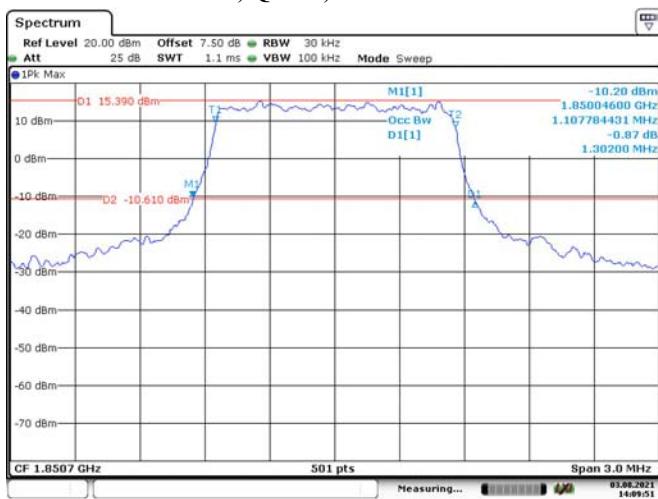
WCDMA Band IV, HSDPA, Middle Channel

Date: 6.AUG.2021 15:07:52

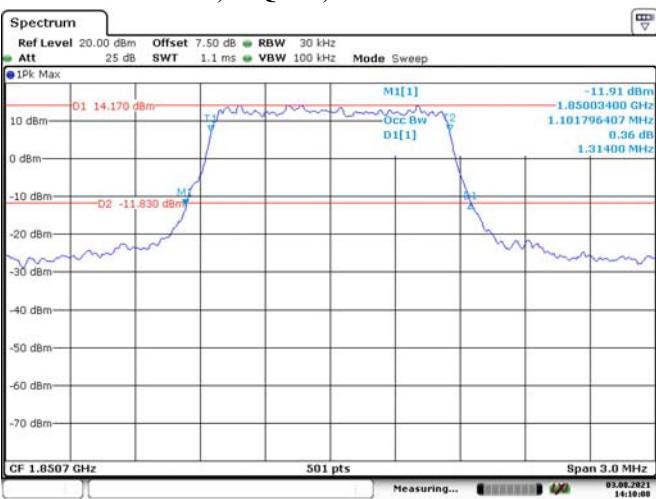
WCDMA Band IV, HSDPA, High Channel

Date: 6.AUG.2021 15:10:25

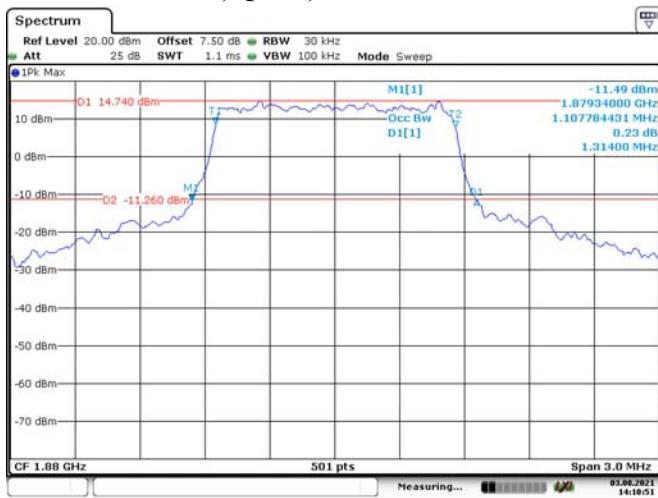
WCDMA Band IV, HSUPA, Low Channel**WCDMA Band IV, HSUPA, Middle Channel****WCDMA Band IV, HSUPA, High Channel**

LTE Band 2**1.4M, QPSK, Low Channel**

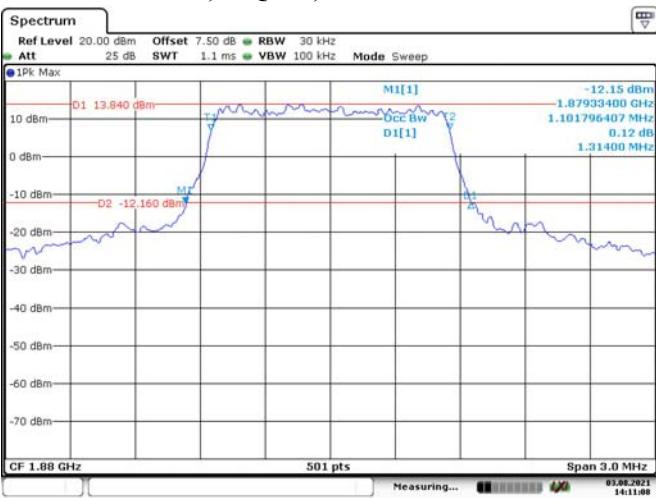
Date: 3.AUG.2021 14:09:51

1.4M, 16QAM, Low Channel

Date: 3.AUG.2021 14:10:08

1.4M, QPSK, Middle Channel

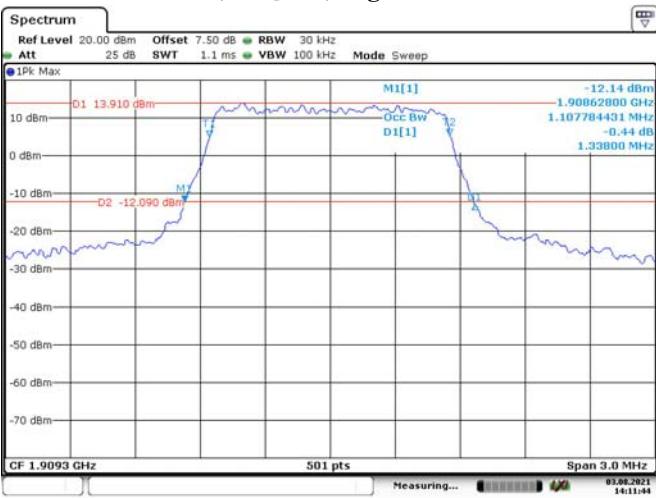
Date: 3.AUG.2021 14:10:51

1.4M, 16QAM, Middle Channel

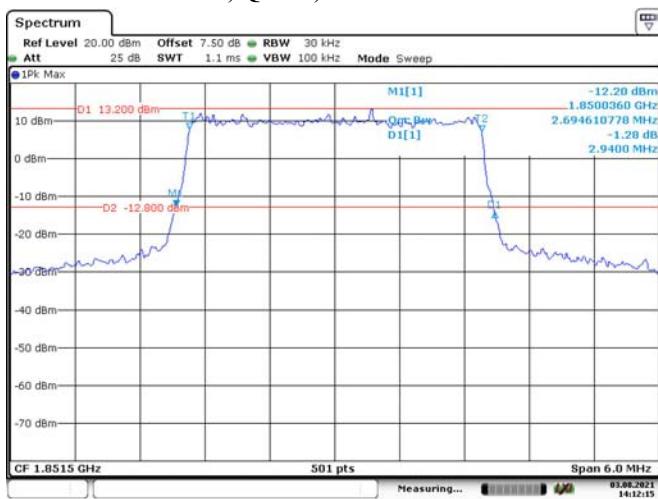
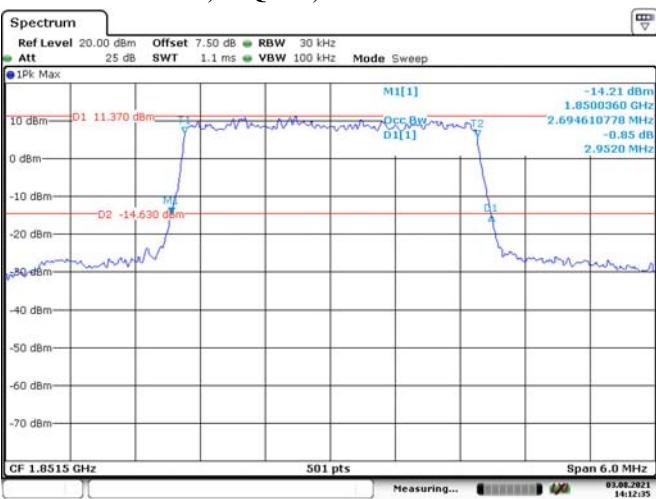
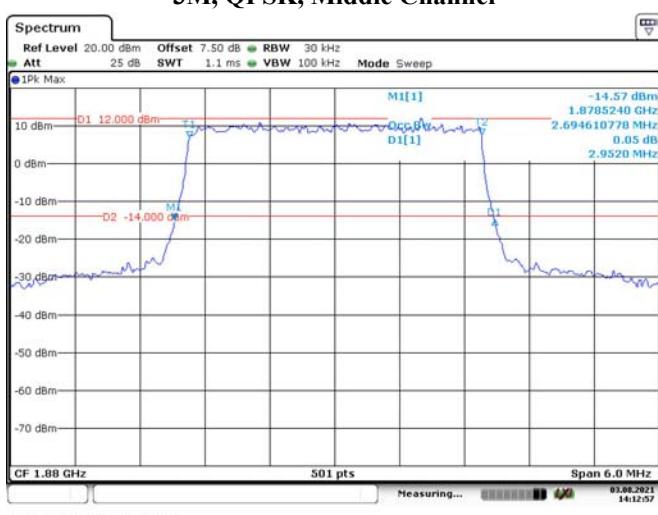
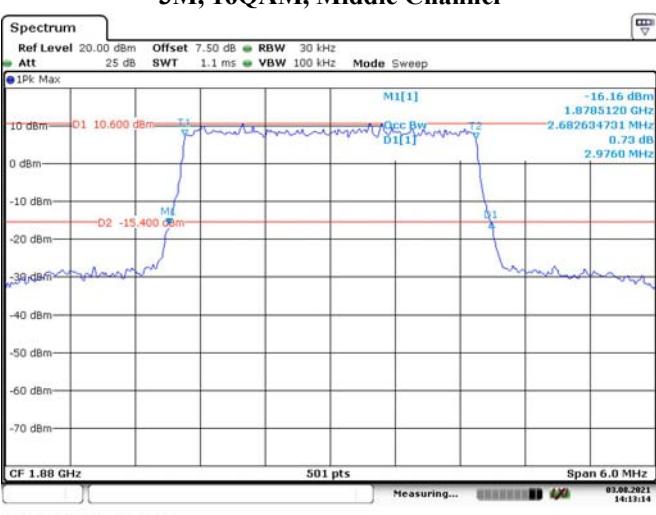
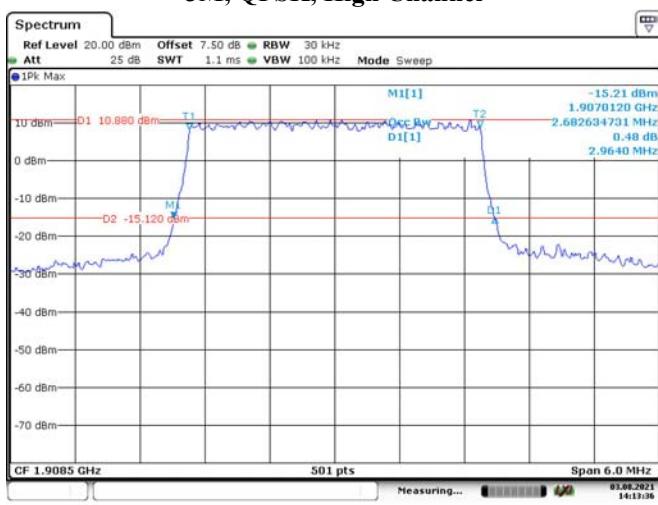
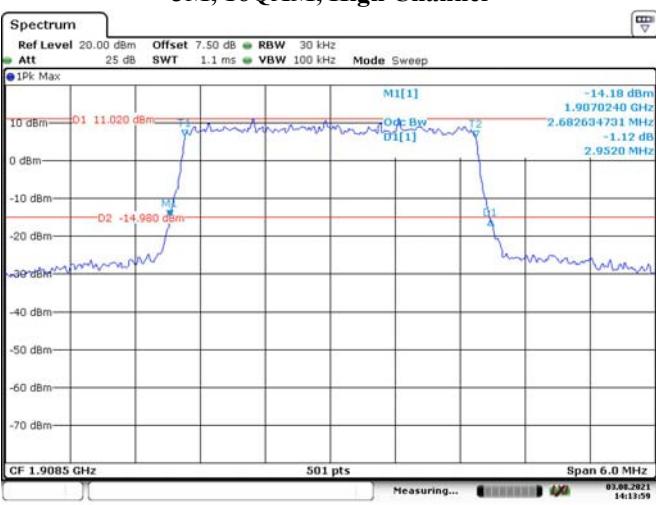
Date: 3.AUG.2021 14:11:08

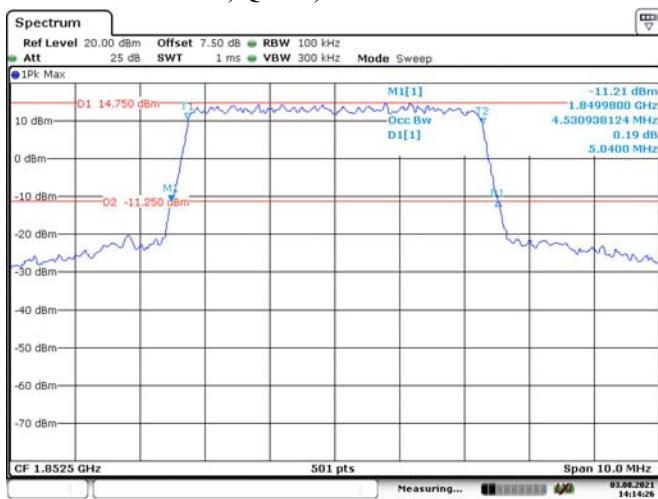
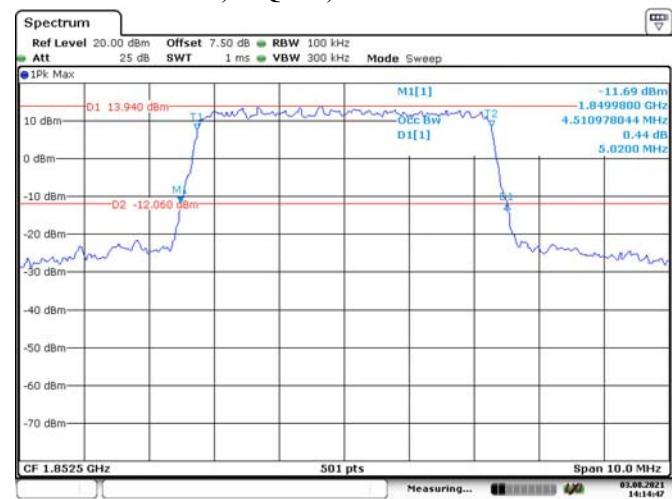
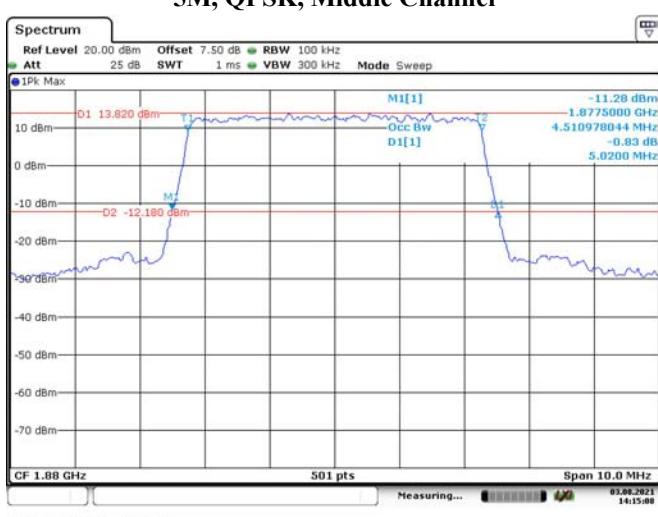
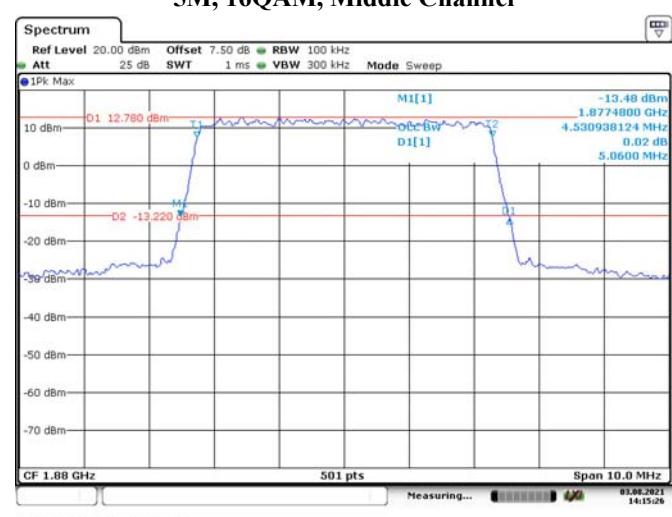
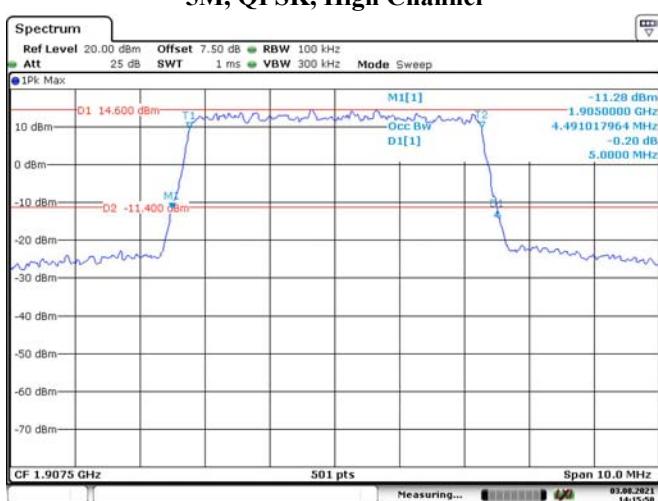
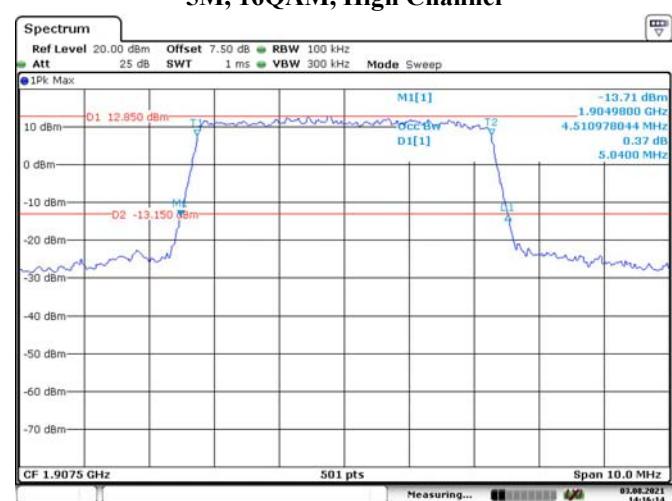
1.4M, QPSK, High Channel

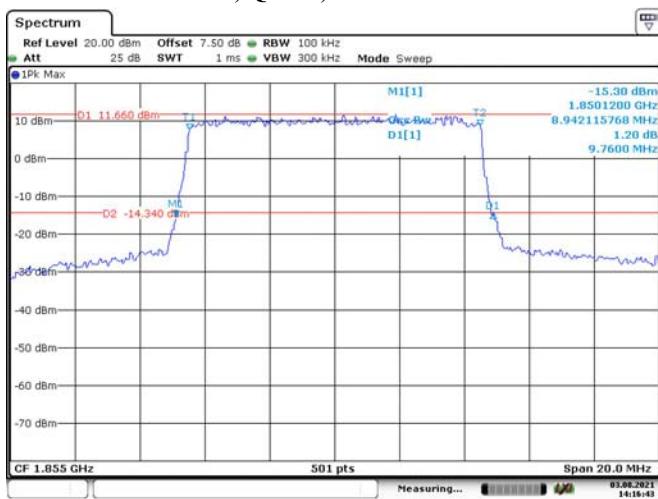
Date: 3.AUG.2021 14:11:26

1.4M, 16QAM, High Channel

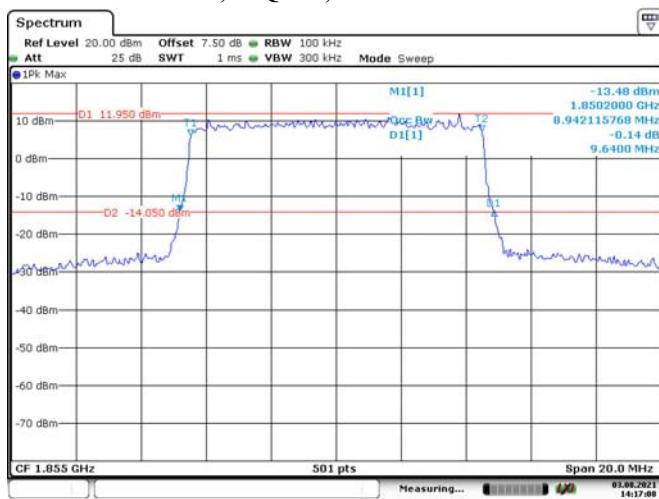
Date: 3.AUG.2021 14:11:44

3M, QPSK, Low Channel**3M, 16QAM, Low Channel****3M, QPSK, Middle Channel****3M, 16QAM, Middle Channel****3M, QPSK, High Channel****3M, 16QAM, High Channel**

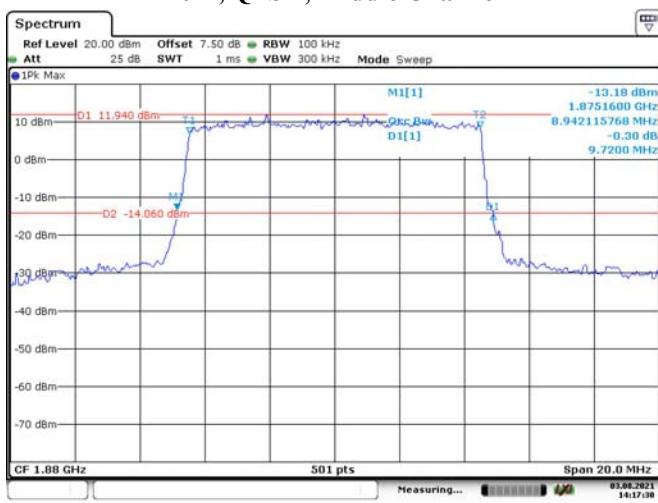
5M, QPSK, Low Channel**5M, 16QAM, Low Channel****5M, QPSK, Middle Channel****5M, 16QAM, Middle Channel****5M, QPSK, High Channel****5M, 16QAM, High Channel**

10M, QPSK, Low Channel

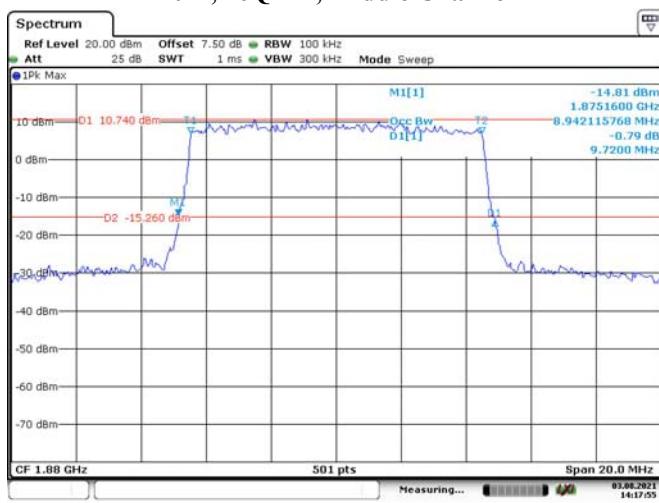
Date: 3.AUG.2021 14:16:43

10M, 16QAM, Low Channel

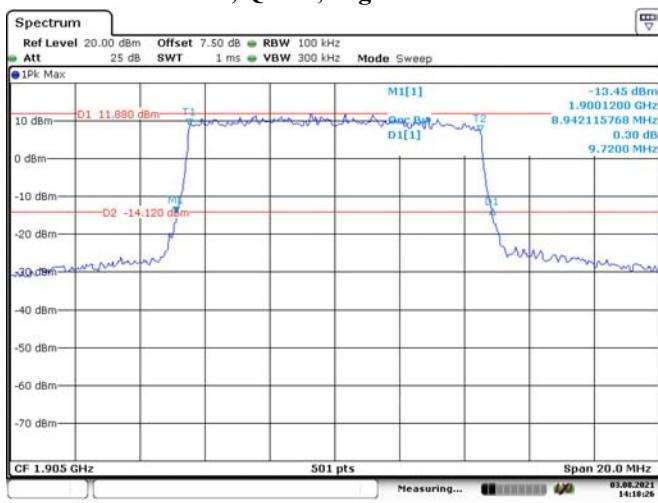
Date: 3.AUG.2021 14:17:08

10M, QPSK, Middle Channel

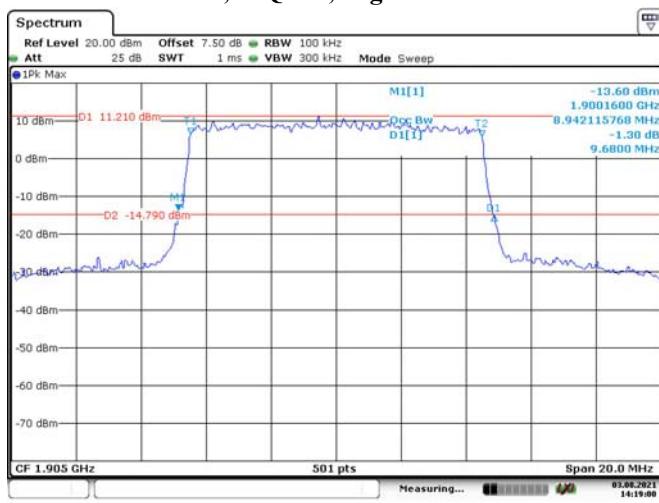
Date: 3.AUG.2021 14:17:38

10M, 16QAM, Middle Channel

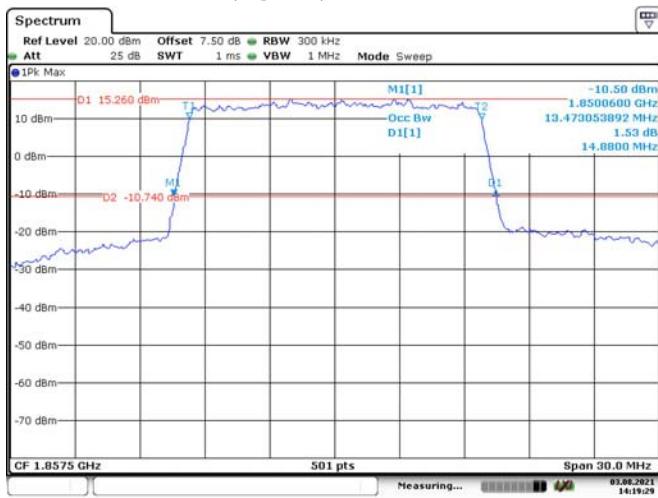
Date: 3.AUG.2021 14:17:55

10M, QPSK, High Channel

Date: 3.AUG.2021 14:18:26

10M, 16QAM, High Channel

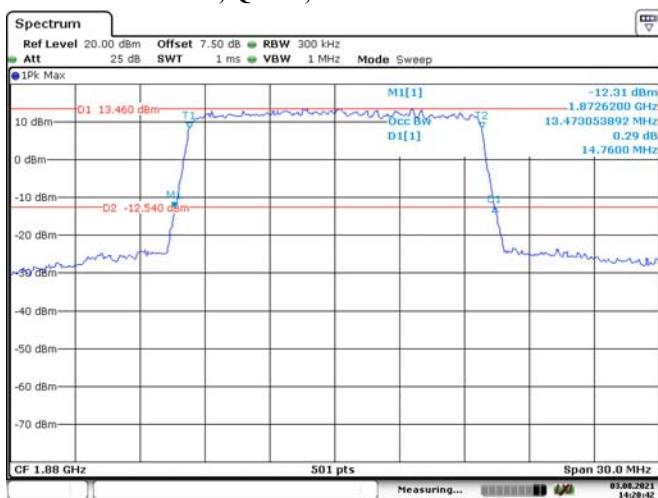
Date: 3.AUG.2021 14:19:08

15M, QPSK, Low Channel

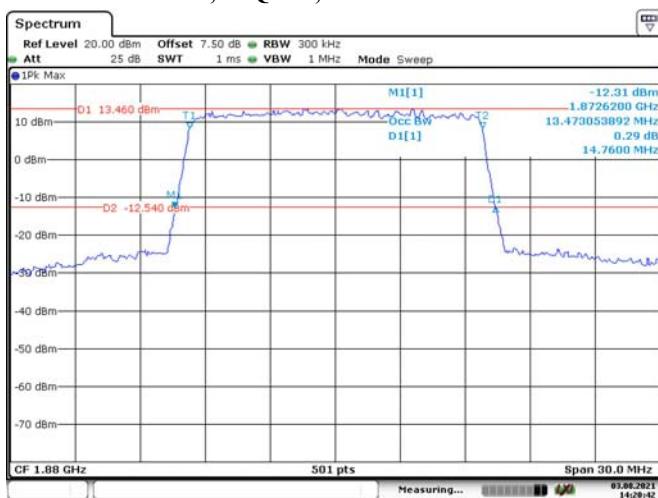
Date: 3.AUG.2021 14:19:29

15M, 16QAM, Low Channel

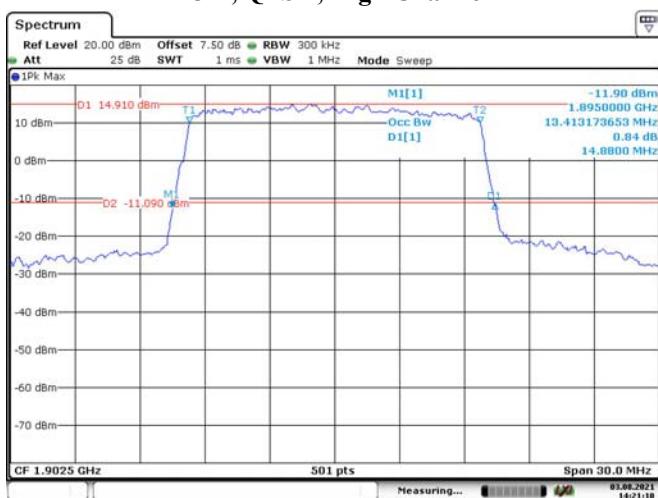
Date: 3.AUG.2021 14:19:50

15M, QPSK, Middle Channel

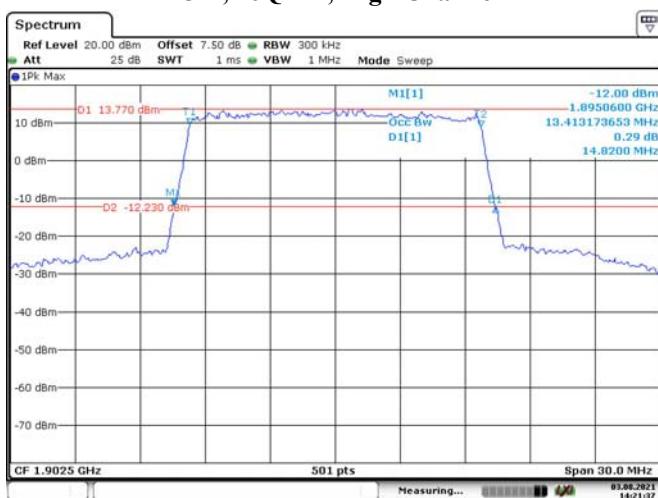
Date: 3.AUG.2021 14:20:42

15M, 16QAM, Middle Channel

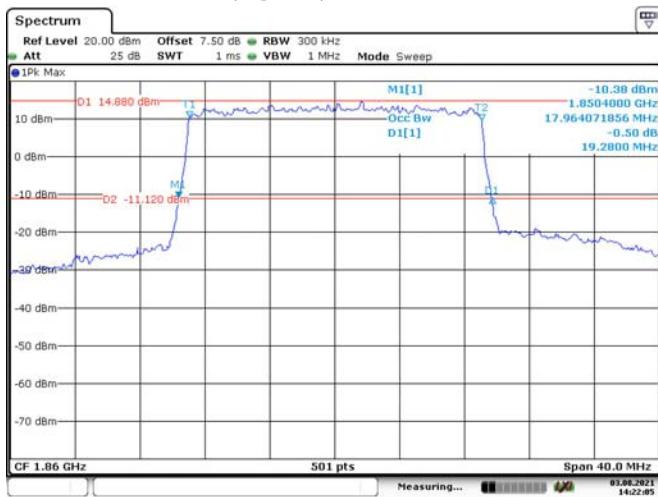
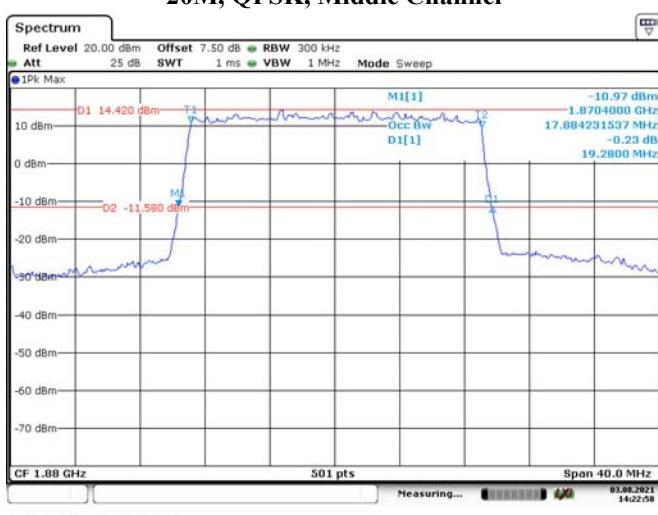
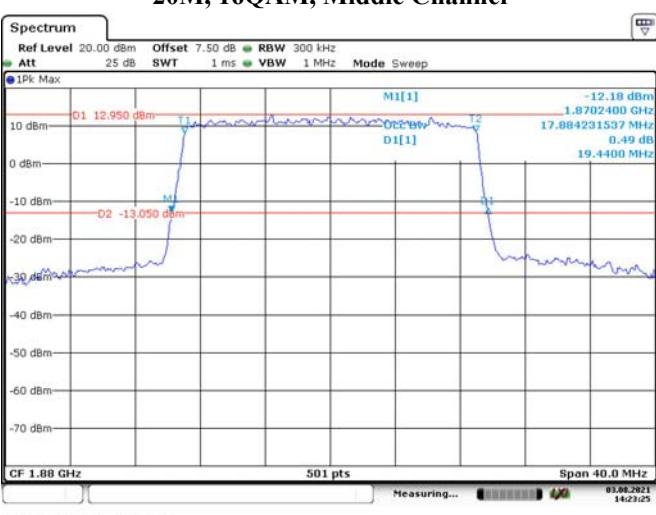
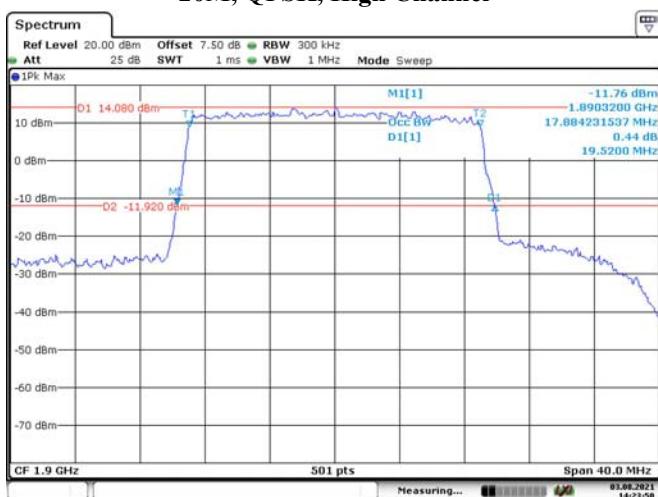
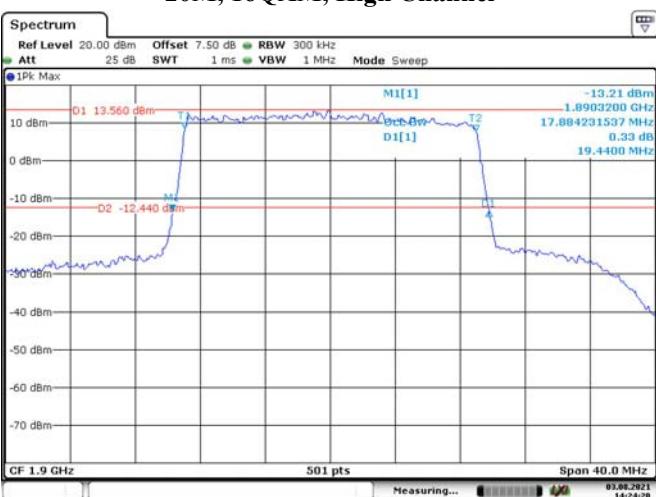
Date: 3.AUG.2021 14:20:42

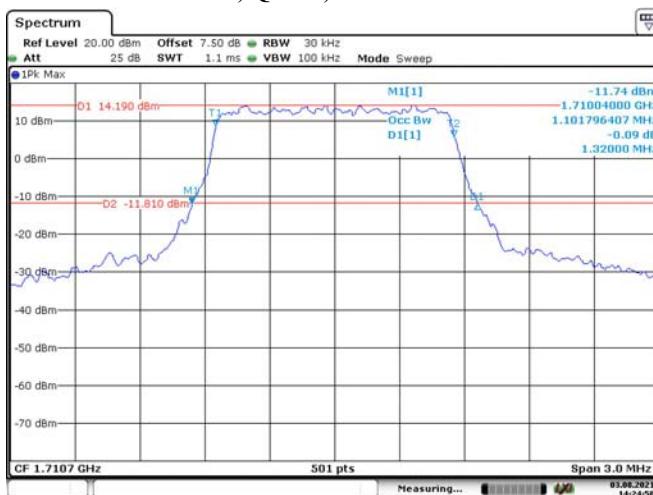
15M, QPSK, High Channel

Date: 3.AUG.2021 14:21:10

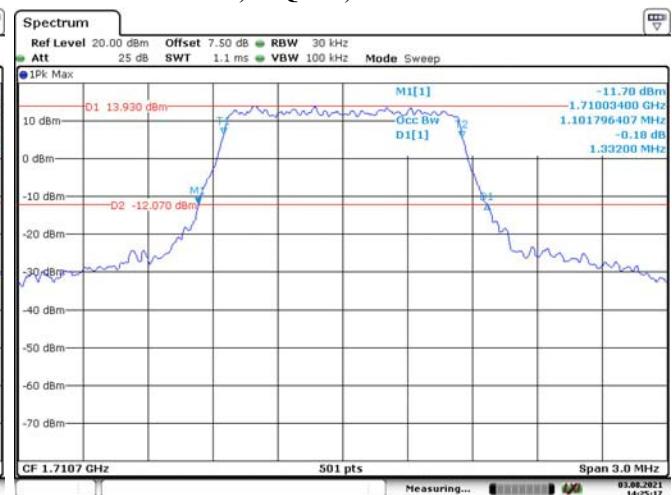
15M, 16QAM, High Channel

Date: 3.AUG.2021 14:21:37

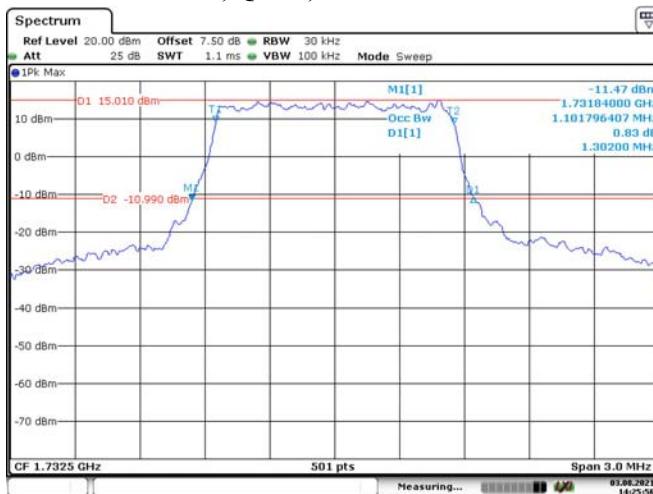
20M, QPSK, Low Channel**20M, 16QAM, Low Channel****20M, QPSK, Middle Channel****20M, 16QAM, Middle Channel****20M, QPSK, High Channel****20M, 16QAM, High Channel**

LTE Band 4:**1.4M, QPSK, Low Channel**

Date: 3.AUG.2021 14:24:50

1.4M, 16QAM, Low Channel

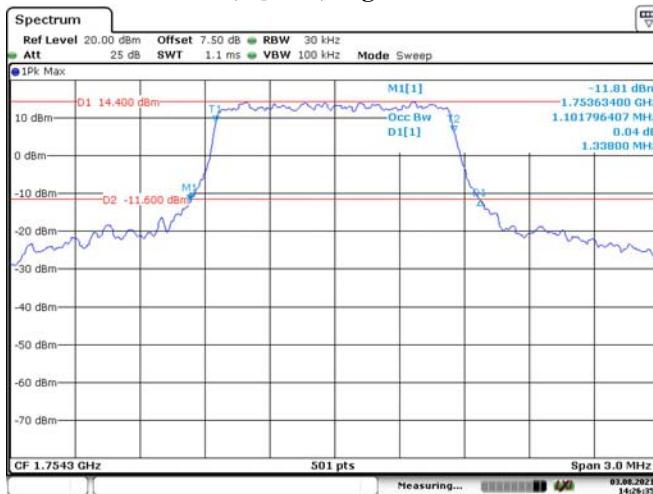
Date: 3.AUG.2021 14:25:17

1.4M, QPSK, Middle Channel

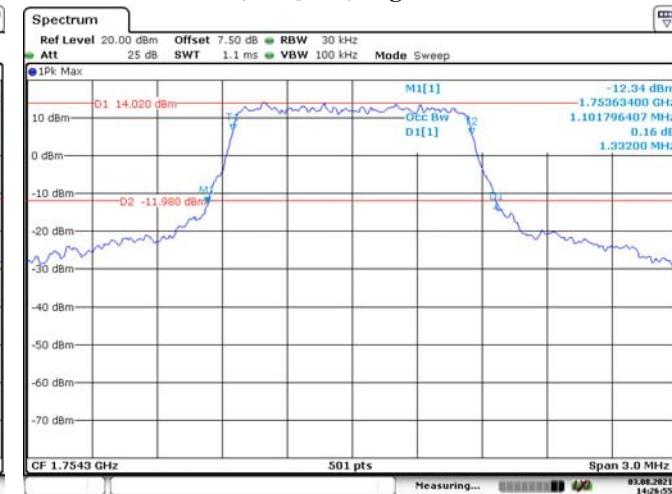
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1.4M, 16QAM, Middle Channel

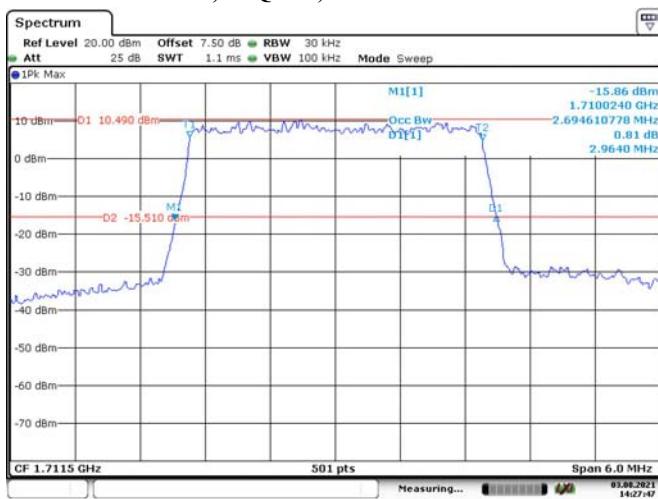
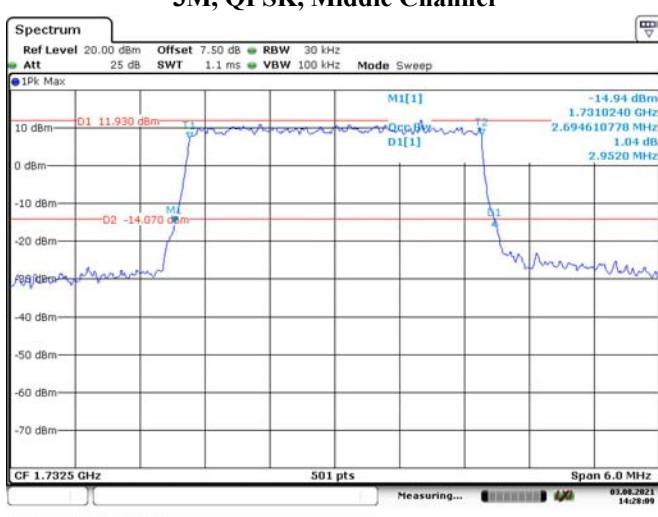
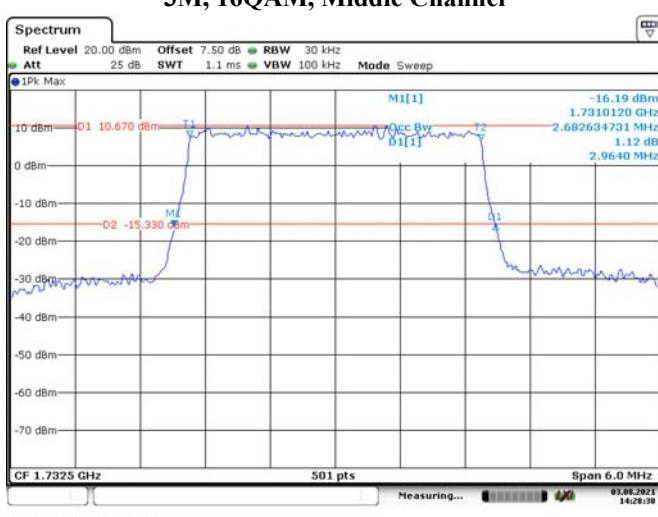
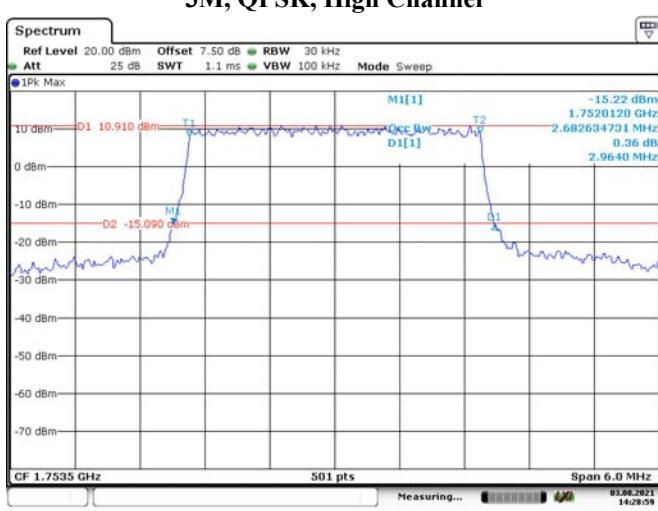
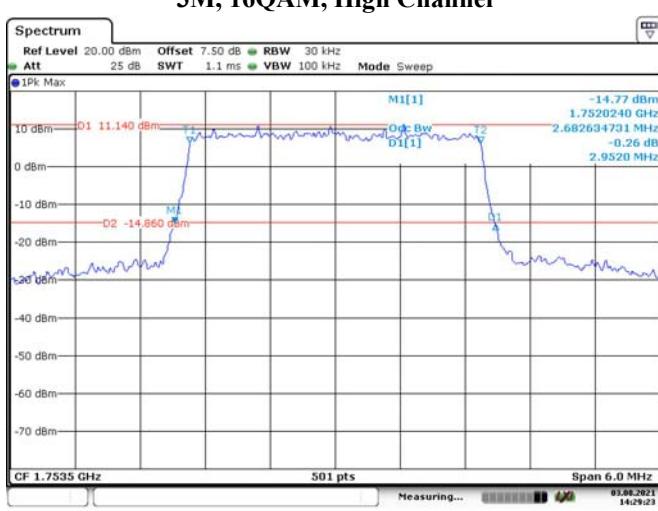
Date: 3.AUG.2021 14:26:14

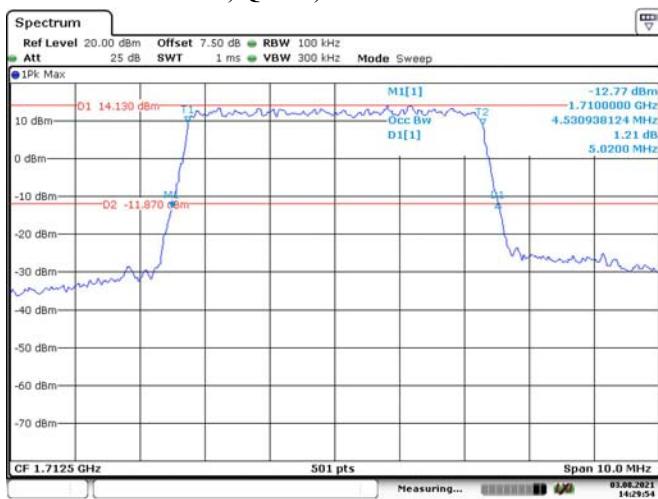
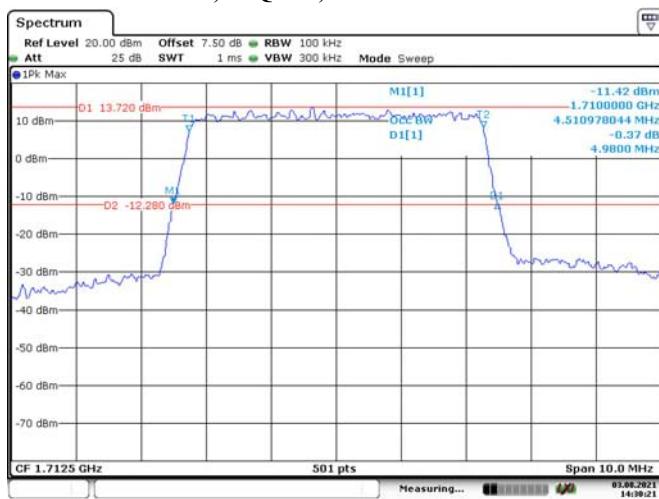
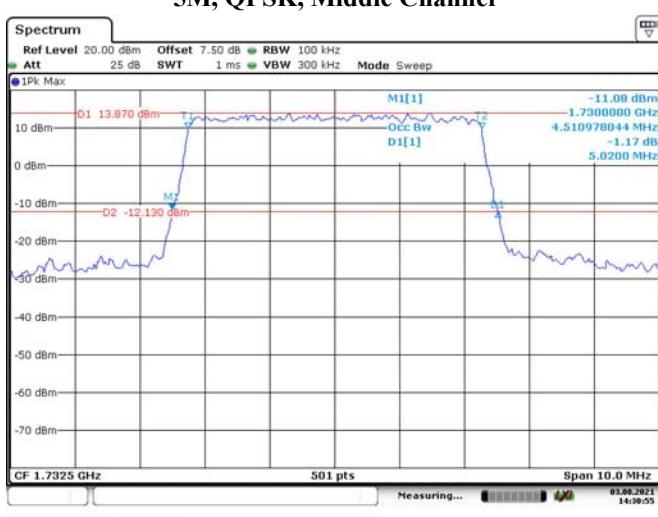
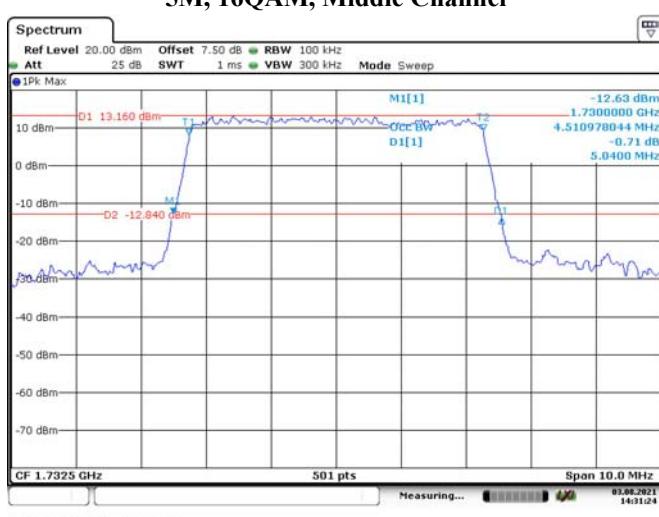
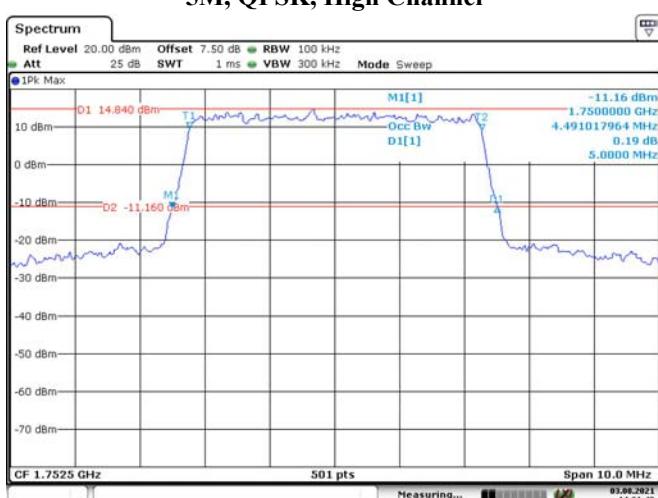
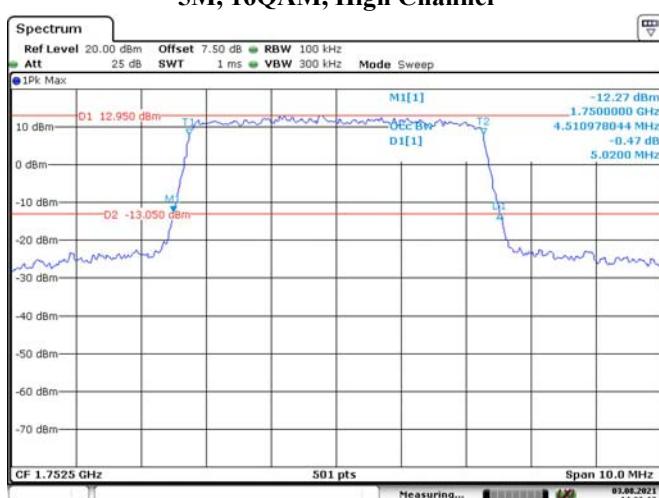
1.4M, QPSK, High Channel

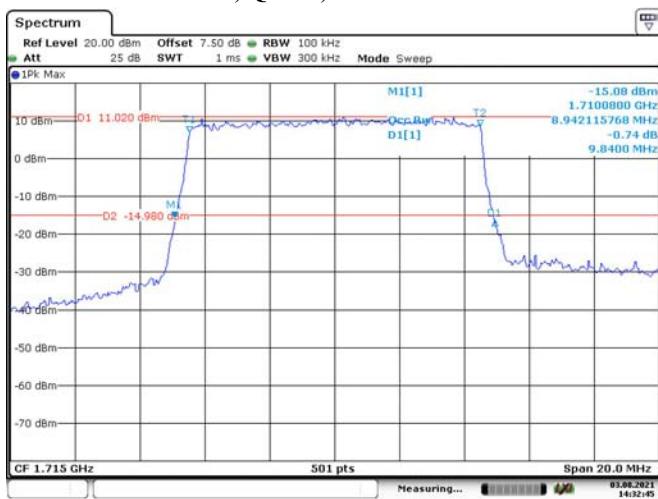
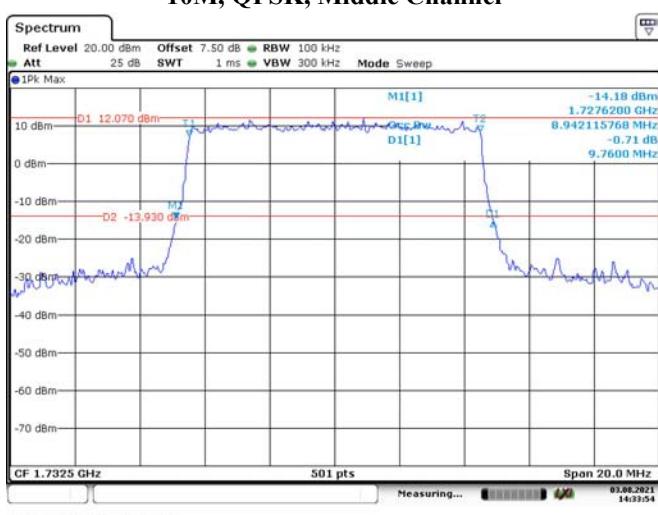
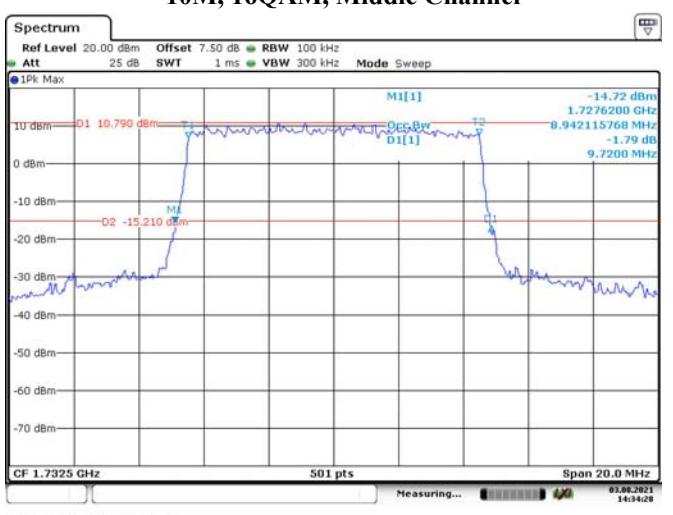
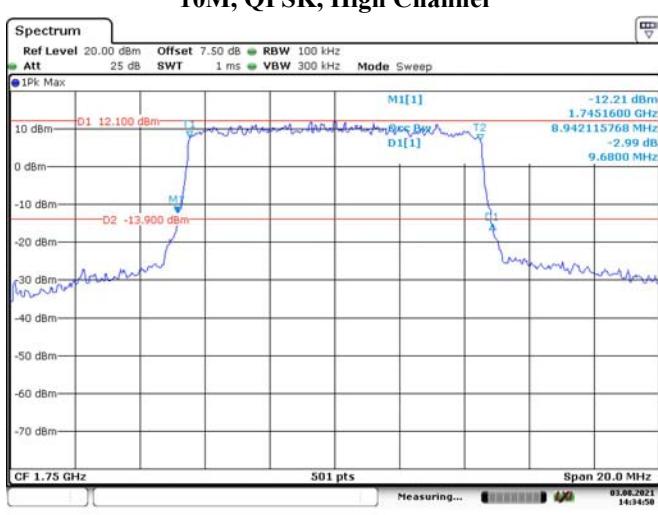
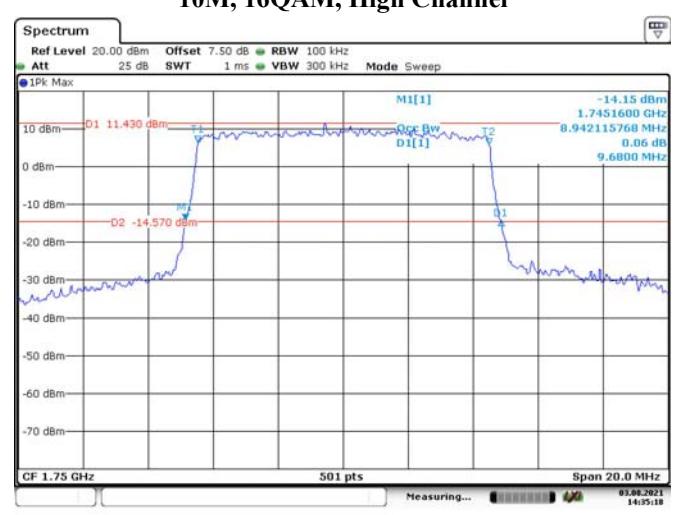
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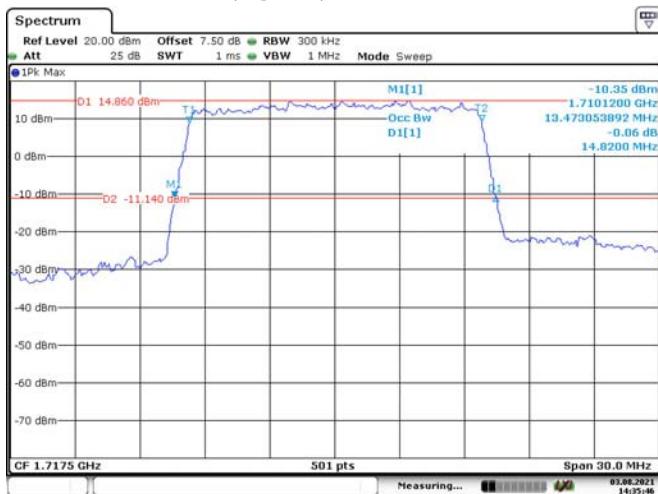
1.4M, 16QAM, High Channel

Date: 3.AUG.2021 14:26:55

3M, QPSK, Low Channel**3M, 16QAM, Low Channel****3M, QPSK, Middle Channel****3M, 16QAM, Middle Channel****3M, QPSK, High Channel****3M, 16QAM, High Channel**

5M, QPSK, Low Channel**5M, 16QAM, Low Channel****5M, QPSK, Middle Channel****5M, 16QAM, Middle Channel****5M, QPSK, High Channel****5M, 16QAM, High Channel**

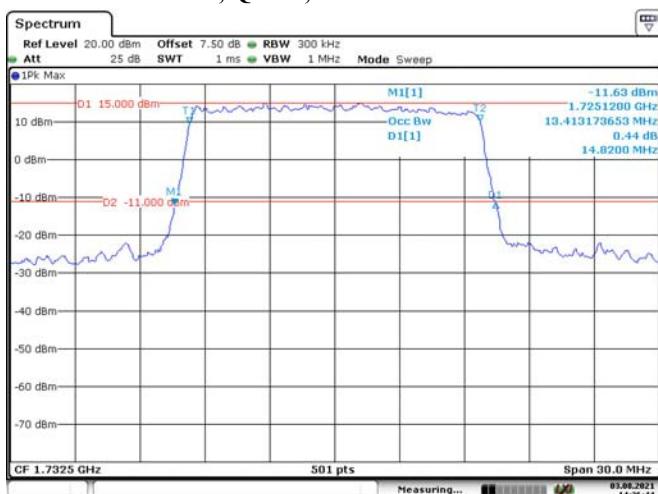
10M, QPSK, Low Channel**10M, 16QAM, Low Channel****10M, QPSK, Middle Channel****10M, 16QAM, Middle Channel****10M, QPSK, High Channel****10M, 16QAM, High Channel**

15M, QPSK, Low Channel

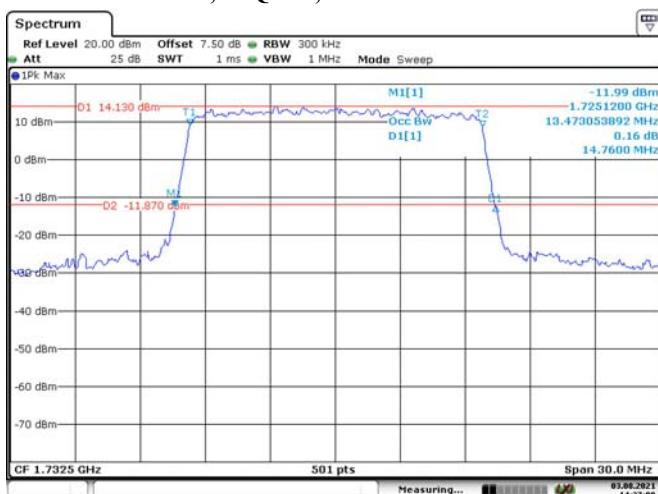
Date: 3.AUG.2021 14:35:47

15M, 16QAM, Low Channel

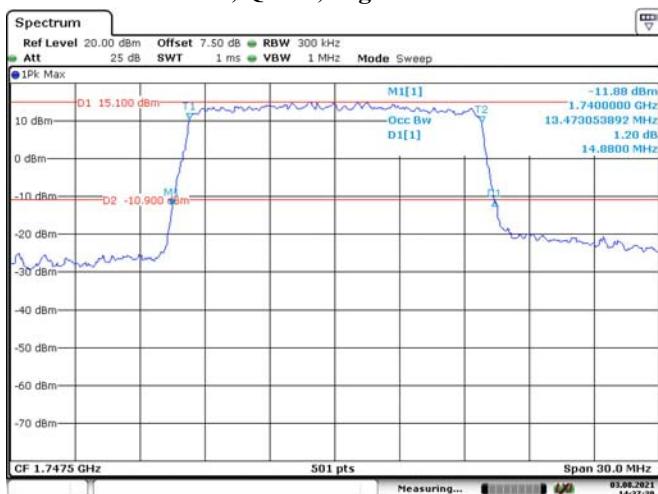
Date: 3.AUG.2021 14:36:14

15M, QPSK, Middle Channel

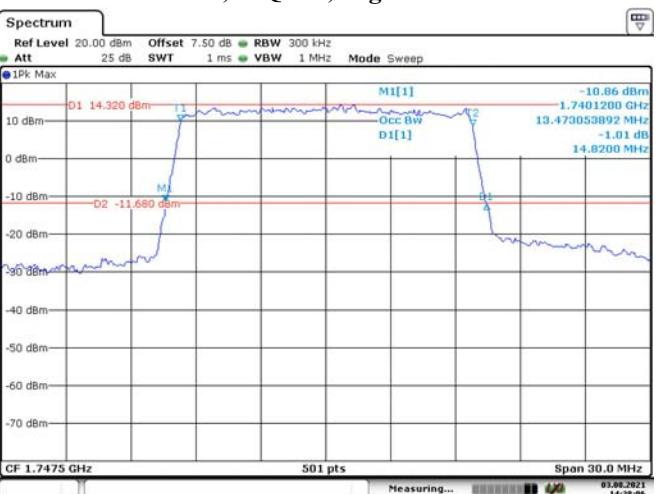
Date: 3.AUG.2021 14:36:45

15M, 16QAM, Middle Channel

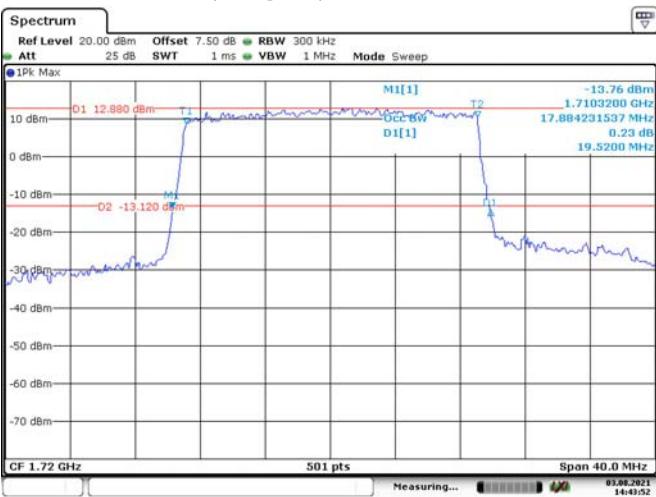
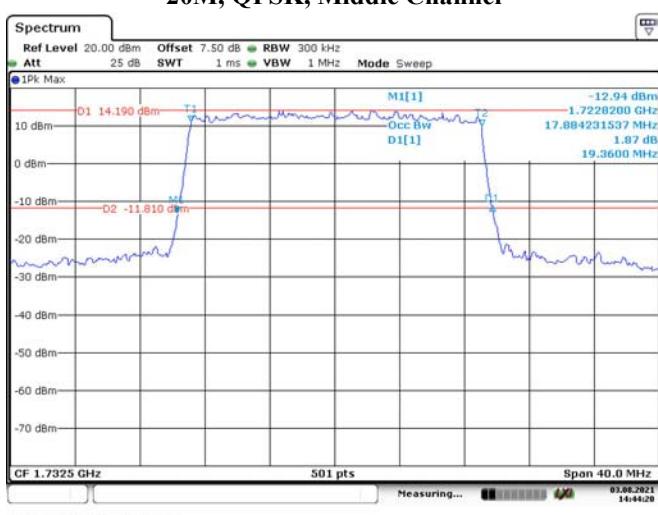
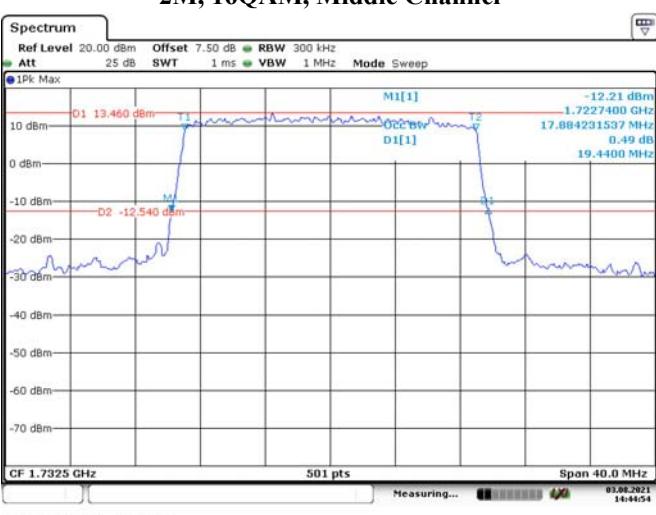
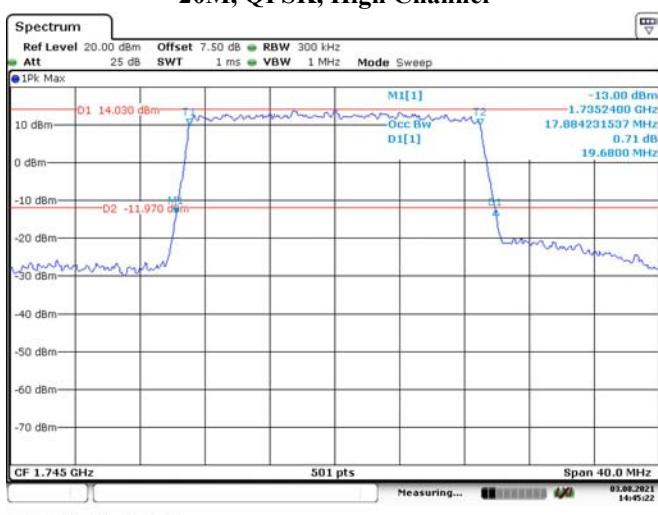
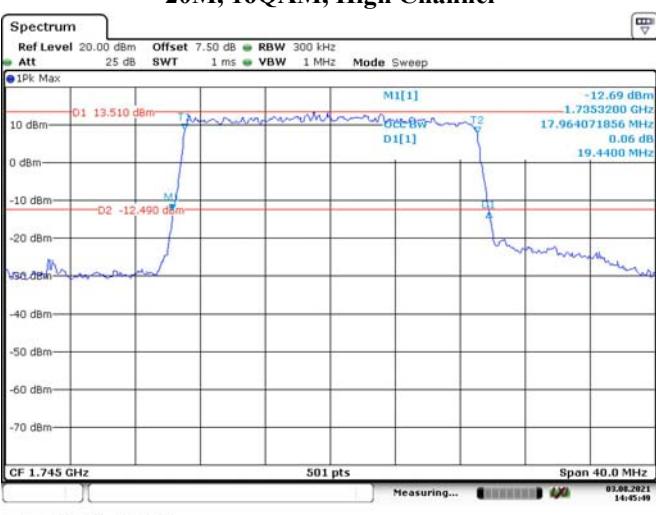
Date: 3.AUG.2021 14:37:09

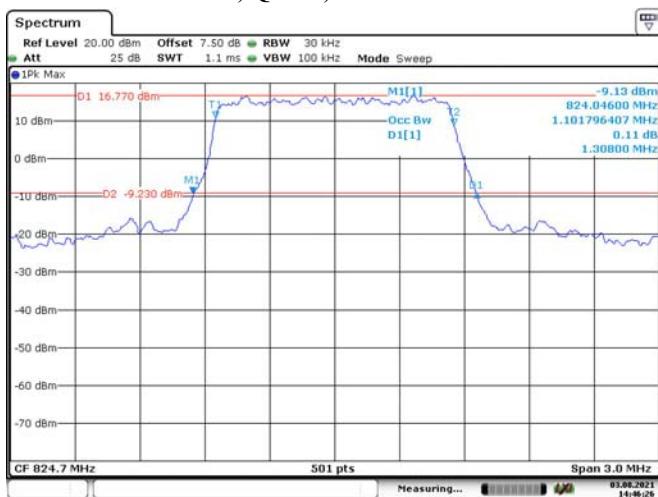
15M, QPSK, High Channel

Date: 3.AUG.2021 14:37:39

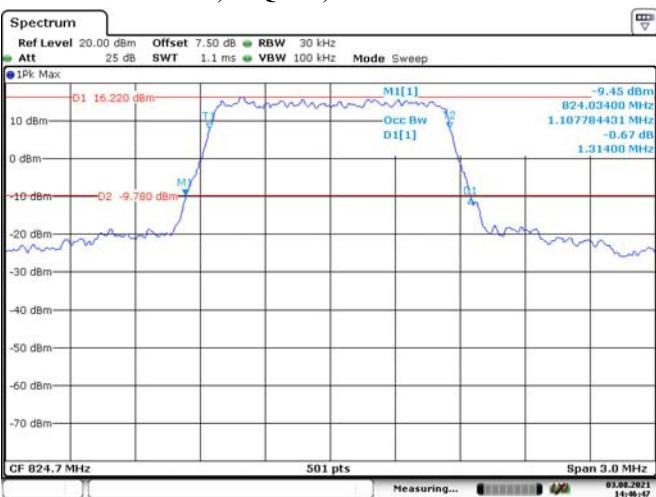
15M, 16QAM, High Channel

Date: 3.AUG.2021 14:38:06

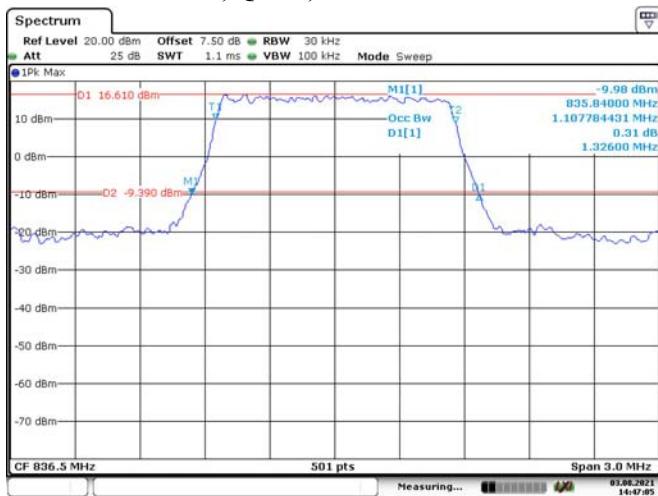
20M, QPSK, Low Channel**20M, 16QAM, Low Channel****20M, QPSK, Middle Channel****2M, 16QAM, Middle Channel****20M, QPSK, High Channel****20M, 16QAM, High Channel**

LTE Band 5:**1.4M, QPSK, Low Channel**

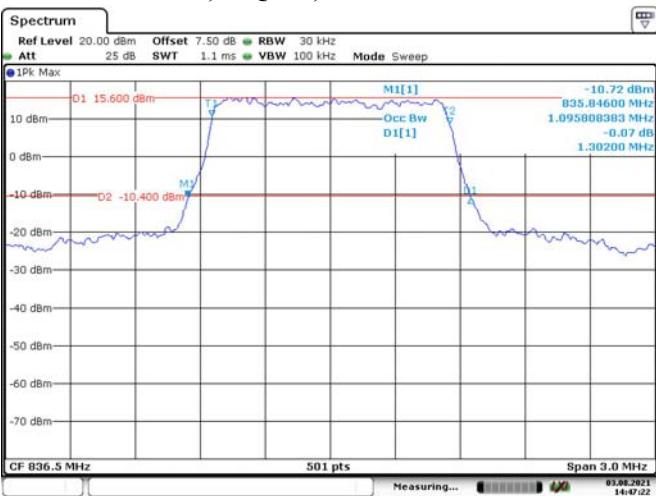
Date: 3.AUG.2021 14:46:27

1.4M, 16QAM, Low Channel

Date: 3.AUG.2021 14:46:47

1.4M, QPSK, Middle Channel

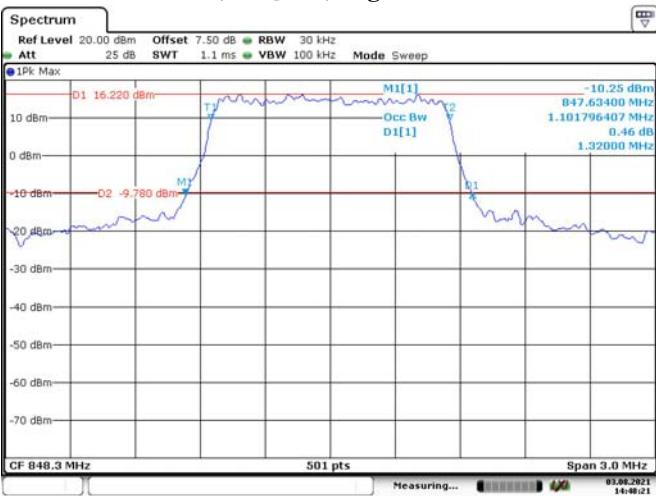
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1.4M, 16QAM, Middle Channel

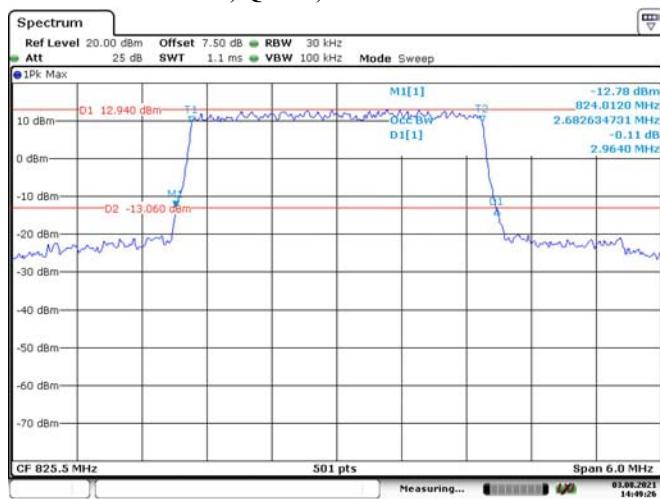
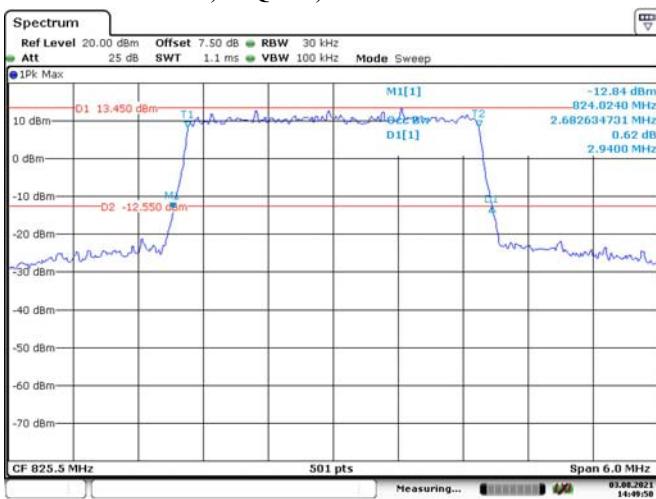
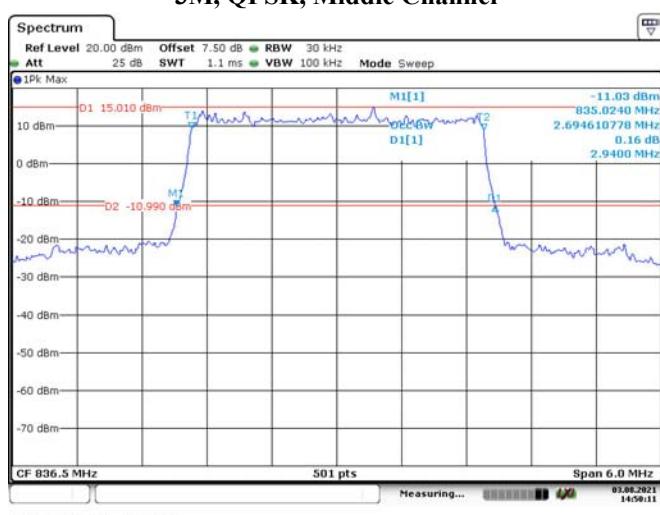
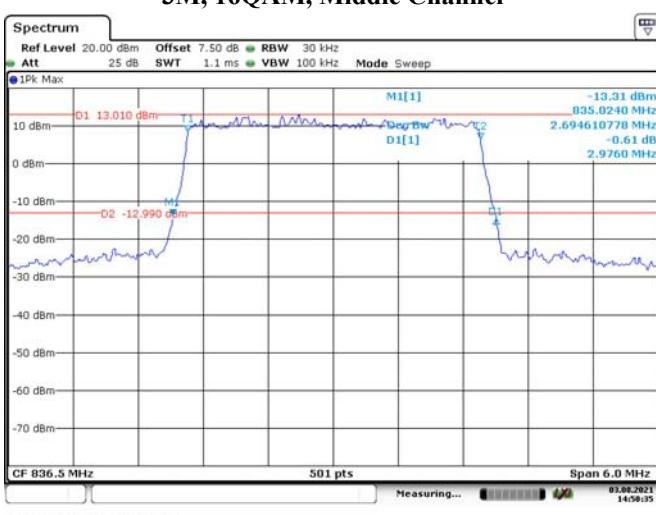
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1.4M, QPSK, High Channel

Date: 3.AUG.2021 14:48:01

1.4M, 16QAM, High Channel

Date: 3.AUG.2021 14:48:22

3M, QPSK, Low Channel**3M, 16QAM, Low Channel****3M, QPSK, Middle Channel****3M, 16QAM, Middle Channel****3M, QPSK, High Channel****3M, 16QAM, High Channel**