FCC Test Report

Application Purpose	:	Original grant
Applicant Name:	:	Sun Cupid Technology (HK) Ltd.
FCC ID	:	2ADINN5001L
Equipment Type	:	LTE mobile phone
Model Name	:	N5001L
Report Number	:	FCC17040291A-5
Standard(S)	:	FCC Part 22H&24E&27 Rules
Date Of Receipt	:	April 24, 2017
Date Of Issue	:	June 14, 2017

Test By :

(Dekun Liu)

Reviewed By :

(Sol Qin)

Authorized by :

(Michal Ling)

Prepared by : **QTC Certification & Testing Co., Ltd.**
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Registration Number: 588523

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 14, 2017	Valid	Original Report

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1 CERTIFICATION

Applicant	Sun Cupid Technology (HK) Ltd.
Address	16/F,CEO Tower,77 Wing Hong Street,Cheung Sha Wan,Hong Kong
Manufacturer	Sun cupid (Shen Zhen) Electronic Ltd
Address	Baolong Industrial City, Longgang District, Shenzhen Hi-Tech Road, Building 1, A 7
Equipment Type	LTE mobile phone
Brand Name	**NUU**
Test Model	N5001L
Hardware version:	110SFM788P0A2V0
Software version:	N5001L-AM-01
Series Model	N/A
Difference description	N/A
Deviation	None
Condition of Test Sample	Normal

We hereby certify that:

All measurement facilities used to collect the measurement data are located at QTC Certification & Testing Co., Ltd.
Registration Number: 588523

The data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C 63.4:2014 and TIA/EIA 603(2010). The sample tested as described in this report is in compliance with the FCC Rules Part 22H and 24E and 27.
The test results of this report relate only to the tested sample identified in this report.

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2. EUT INFORMATION

Table 2.1.1 General Information

Equipment Type:	LTE mobile phone
Hardware version:	110SFM788P0A2V0
Software version:	N5001L-AM-01
Frequency Bands:	☒GSM 850 ☒PCS 1900 (U.S. Bands) UTRA Bands: ☒UTRA Band 2 ☒UTRA Band 4 ☒UTRA Band 5 E-UTRA Bands: ☒ E-UTRA Band 2 ☒ E-UTRA Band 4 ☒ E-UTRA Band 5 ☒ E-UTRA Band 7
Antenna Type:	Internal Antenna
Antenna gain:	PCS 1900: 0.46dBi GSM850: -0.52dBi UTRA Band 2: 0.46dBi UTRA Band 4: 0.45dBi UTRA Band 5: -0.52dBi E-UTRA Band 2: 0.49dBi E-UTRA Band 4: 0.48dBi E-UTRA Band 5: -0.52dBi E-UTRA Band 7: 0.50dBi
Battery information:	Li-Polymer Battery : NUBA3 Voltage: 3.8V Capacity: 2000mAh Limited Charge Voltage: 4.35V
Adapter Information:	Adapter: HJ-0501000E1-US Input: AC 100-240V 50/60Hz 0.2A Output: DC 5.0V⎓1000mA
Card(S):	Card 1: E-UTRA Card Slot Card 2: GSM Card Slot
Max power:	See Table 2.1.2
Extreme Vol. Limits:	DC 3.45V to 4.35V (Normal: DC 3.8V)
Extreme Temp. Tolerance	-10℃ to +55℃

Note 1: The High Voltage DC 4.35V and Low Voltage DC 3.45V were declared by manufacturer, The EUT couldn't be operating normally with higher or lower voltage.

Table 2.1.2 The Basic Technical Specification for Working BAND(S).

OPERATION BAND(S)	Power Class	Mod.	Max Average (dBm)	Max Peak Power (dBm)
GSM850	Class 4	GMSK	32.92	33.18
DCS1900	Class 1	GMSK	30.21	30.52
UTRA BAND 2	Class 3	QPSK	21.58	22.24
UTRA BAND 4	Class 3	QPSK	22.16	23.15
UTRA BAND 5	Class 3	QPSK	22.42	23.38
E-UTRA Band 2	Class 3	QPSK	21.60	22.61
E-UTRA Band 2	Class 3	16QAM	21.58	22.60
E-UTRA Band 4	Class 3	QPSK	21.27	22.31
E-UTRA Band 4	Class 3	16QAM	21.27	22.32
E-UTRA Band 5	Class 3	QPSK	21.78	22.80
E-UTRA Band 5	Class 3	16QAM	21.80	22.81
E-UTRA Band 7	Class 3	QPSK	21.54	22.57
E-UTRA Band 7	Class 3	16QAM	21.52	22.57

2 TEST DESCRIPTION

2.1 Test Facility

The test site used to collect the radiated data is located at:

QTC Certification & Testing Co., Ltd.

Registration Number: 588523

2.2 EUT System Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

Fig. 3.2-1 Configuration of EUT System

EUT
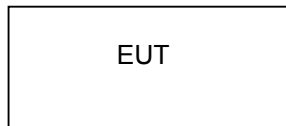
Table 3.2-1 Equipment Used in EUT System

Item	Equipment	Model No.	ID or Specification	Note
1	Mobile phone	N5001L	2ADINN5001L	EUT

***Note: All the accessories have been used during the test. The following "EUT" in setup diagram means EUT system.

2.3 Description Of Test Channels And Test Modes

Test channels:

GSM 850			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	0.2	128	824.2
Mid Range	0.2	190	836.6
High Range	0.2	251	848.8

PCS 1900			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	0.2	512	1850.2
Mid Range	0.2	661	1880
High Range	0.2	810	1909.8

URTA BAND 2			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	5	9262	1852.4
Mid Range	5	9400	1880
High Range	5	9538	1907.6

URTA BAND 4			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	5	1312	1712.4
Mid Range	5	1413	1732.6
High Range	5	1513	1752.6

URTA BAND 5			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	5	4132	826.4
Mid Range	5	4182	836.4
High Range	5	4233	846.6

LTE BAND 2			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	1.4	18607	1850.7
	3	18615	1851.5
	5	18625	1852.5
	10	18650	1855
	15	18675	1857.5
	20	18700	1860
Mid Range	1.4/3/5/10 15 /20	18900	1880
High Range	1.4	19193	1909.3
	3	19185	1908.5
	5	19175	1907.5
	10	19150	1905
	15	19125	1902.5
	20	19100	1900

LTE BAND 4			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	1.4	19957	1710.7
	3	19965	1711.5
	5	19975	1712.5
	10	20000	1715
	15	20025	1717.5
	20	20050	1720
Mid Range	1.4/3/5/10/15/20	20175	1732.5
High Range	1.4	20393	1754.3
	3	20385	1753.5
	5	20375	1752.5
	10	20350	1750
	15	20325	1747.5
	20	20300	1745

LTE BAND 5			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	1.4	20470	824.7
	3	20415	825.5
	5	20425	826.5
	10	20450	829
Mid Range	1.4/3/5/10	20525	836.5
High Range	1.4	20643	848.3
	3	20635	847.5
	5	20625	846.5
	10	20600	844

LTE BAND 7			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	5	20775	2502.5
	10	20800	2505
	15	20825	2507.5
	20	20850	2510
Mid Range	5/10/15/20	21100	2535
High Range	5	21425	2567.5
	10	21400	2565
	15	21375	2562.5
	20	21350	2560

Note 1: both QPSK&16QAM modulation has been measured;

Note 2: The worst condition was recorded in the test report if no other modes test data.

2.4 Equipment Modifications

Not available for this EUT intended for grant.

3 SUMMARY OF TEST REQUIREMENTS AND RESULTS

BAND 2(PCS 1900/ E-UTRA Band 2/ UTRA Band 2):

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §24.232(c)	EIRP ≤ 2W(33dBm)	Pass
Bandwidth	§2.1049 §24.238(a)	OBW: No limit. EBW: No limit.	Pass
Band Edges	§2.1051, §24.238(a)	-13dBm	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	-13dBm	Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	-13dBm	Pass
Frequency Stability	§2.1055, §24.235	the fundamental emission stays within the authorized frequency block.	Pass
Peak to average ratio	§24.232(d)	<13dB	Pass

BAND 4(UTRA Band 4/E-UTRA Band 4):

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §27.50(d)	EIRP ≤ 1W(30dBm)	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges	§2.1051, §27.53(h)	-13dBm	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	-13dBm	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	-13dBm	Pass
Frequency Stability	§2.1055, §27.54	the fundamental emissions stay within the authorized bands of operation. (2.5ppm)	Pass
Peak to average ratio	§27.50(d)	<13dB	Pass

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BAND 5(GSM850/ UTRA Band 5/ E-UTRA Band 5):

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §2.913(a)	EIRP ≤ 7W(38.5dBm)	Pass
Occupied Bandwidth	§2.1049	OBW: No limit.	Pass
Emission Bandwidth	22.917(b)	EBW: No limit.	Pass
Band Edges Compliance	§2.1051, §22.917(a)(b)	KDB 971 168 D02 971168 D02 Misc OOBE License Digital Systems v01 &27.53(m) for detail the limit is upon different OBW	Pass
Spurious Emission at Antenna Terminals	§2.1051, §22.917	-13dBm	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917	-13dBm	Pass
Frequency Stability	§2.1055, §22.355	the fundamental emissions stay within the authorized bands of operation. (2.5ppm)	Pass

BAND 7(E-UTRA Band 7):

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §27.50(h)	EIRP ≤ 2W(33dBm)	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges	§2.1051, §27.53(m)	KDB 971 168 D02 971168 D02 Misc OOBE License Digital Systems v01 &27.53(m) for detail the limit is upon different OBW	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)	-25dBm	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(m)	-25dBm	Pass
Frequency Stability	§2.1055, §27.54	the fundamental emissions stay within the authorized bands of operation. (2.5ppm)	Pass

MEASUREMENT INSTRUMENTS

NAME OF EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	Calibration Date	Calibration Due.
EMI Test Receiver	R&S	ESCI	100005	08/19/2016	08/18/2017
LISN	AFJ	LS16	16010222119	08/19/2016	08/18/2017
LISN(EUT)	Mestec	AN3016	04/10040	08/19/2016	08/18/2017
Universal Radio Communication Tester	R&S	CMU 200	1100.0008.02	08/19/2016	08/18/2017
Coaxial cable	Megalon	LMR400	N/A	08/12/2016	08/11/2017
GPIB cable	Megalon	GPIB	N/A	08/12/2016	08/11/2017
Spectrum Analyzer	R&S	FSU	100114	08/19/2016	08/18/2017
Pre Amplifier	H.P.	HP8447E	2945A02715	10/13/2016	10/12/2017
Pre-Amplifier	CDSI	PAP-1G18-38	--	10/13/2016	10/12/2017
Loop Antenna	R&S	HFH2-Z2	100296	10/13/2016	10/12/2017
Bi-log Antenna	SUNOL Sciences	JB3	A021907	09/13/2016	09/12/2017
9*6*6 Anechoic	--	--	--	08/21/2016	08/20/2017
Horn Antenna	COMPLIANCE ENGINEERING	CE18000	--	09/13/2016	09/12/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-631	08/23/2016	08/22/2017
Power meter	Anritsu	ML2487A	6K00003613	08/23/2016	08/22/2017
Power meter	Anritsu	MA2491A	32263	08/23/2016	08/22/2017
Cable	TIME MICROWAVE	LMR-400	N-TYPE04	04/24/2017	04/23/2018
System-Controller	CCS	N/A	N/A	N.C.R	N.C.R
Turn Table	CCS	N/A	N/A	N.C.R	N.C.R
Antenna Tower	CCS	N/A	N/A	N.C.R	N.C.R
RF cable	Murata	MXHQ87WA3000	-	08/21/2016	08/20/2017
Loop Antenna	EMCO	6502	00042960	08/22/2016	08/21/2017
Wideband Radio Communication Tester	R&S	CMW 500	103974	08/19/2016	08/18/2017
Horn Antenna	SCHWARZBECK	BBHA 9170	1123	08/19/2016	08/18/2017
H & T Chamber	Guangzhou gongwen	GDJS-500-40	0329	08/19/2016	08/18/2017

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4 EFFECTIVE (ISOTROPIC) RADIATED POWER

Test limit:

According to §22.913, The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

According to §24.232, 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 §27.50 (d), 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.

According to §27.50 (h), Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

See section 4.

Test procedure:

1. The setup of EUT is according with per TIA/EIA Standard 603 D:2010 or KDB971168 D01 v02r02.

2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.

4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

5. ERP/EIRP = PMeas + GT − LC

where:

ERP/EIRP = effective or equivalent radiated power

PMeas = measured transmitter output power from SG

GT = gain of the substitution antenna

LC = cable loss between SG and substitution antenna.

GSM850 BAND:							
Mode		Frequency (MHz)	Peak Power	Avg.Burst Power	PAR	Duty cycle Factor(dB)	Frame Power(dBm)
GSM850		824.2	**33.18**	**32.92**	0.26	-9	23.92
		836.6	33.12	32.88	0.24	-9	23.88
		848.8	33.10	32.86	0.24	-9	23.86
GPRS850	1 Tx Slots	824.2	33.10	32.21	0.89	-9.03	23.18
		836.6	32.89	32.13	0.76	-9.03	23.10
		848.8	33.11	32.15	0.96	-9.03	23.12
	2 Tx Slots	824.2	32.28	31.57	0.71	-6.02	25.55
		836.6	32.23	31.59	0.64	-6.02	25.57
		848.8	32.44	31.58	0.86	-6.02	25.56
	3 Tx Slots	824.2	31.18	30.38	0.80	-4.26	26.12
		836.6	31.16	30.36	0.80	-4.26	26.10
		848.8	31.12	30.35	0.77	-4.26	26.09
	4 Tx Slots	824.2	30.18	29.89	0.29	-3.01	26.88
		836.6	30.24	29.86	0.38	-3.01	26.85
		848.8	30.29	29.88	0.41	-3.01	26.87
EPRS850	1 Tx Slots	824.2	29.62	29.05	0.57	-9.03	20.02
		836.6	29.55	29.02	0.53	-9.03	19.99
		848.8	29.30	29.03	0.27	-9.03	20.00
	2 Tx Slots	824.2	28.61	28.33	0.28	-6.02	22.31
		836.6	28.82	28.36	0.46	-6.02	22.34
		848.8	28.88	28.31	0.57	-6.02	22.29
	3 Tx Slots	824.2	27.73	27.26	0.47	-4.26	23.00
		836.6	27.82	27.22	0.60	-4.26	22.96
		848.8	27.95	27.23	0.72	-4.26	22.97
	4 Tx Slots	824.2	27.11	26.68	0.43	-3.01	23.67
		836.6	27.16	26.53	0.63	-3.01	23.52
		848.8	27.24	26.55	0.69	-3.01	23.54

Tine average factor = 1 uplink, $10*\log(1/8)$= -9.03dB, 2 uolink, $10*\log(2/8)$= -6.02dB, 3 uolink, $10*\log(3/8)$= -4.26dB, 4 uolink, $10*\log(4/8)$= -3.01dB

PCS1900 BAND:

Mode		Frequency (MHz)	Peak Power	Avg.Burst Power	PAR	Duty cycle Factor(dB)	Frame Power(dBm)
GSM1900		1850.2	30.38	30.15	0.23	-9	21.15
		1880	**30.52**	**30.21**	0.31	-9	21.21
		1909.8	30.42	30.13	0.29	-9	21.13
GPRS1900	1 Tx Slots	1850.2	30.16	29.65	0.51	-9.03	20.62
		1880	30.10	29.62	0.48	-9.03	20.59
		1909.8	30.18	29.66	0.52	-9.03	20.63
	2 Tx Slots	1850.2	29.16	27.86	1.30	-6.02	21.84
		1880	29.22	28.92	0.30	-6.02	22.90
		1909.8	29.18	28.88	0.30	-6.02	22.86
	3 Tx Slots	1850.2	28.12	27.28	0.84	-4.26	23.02
		1880	28.11	27.36	0.75	-4.26	23.10
		1909.8	28.14	27.32	0.82	-4.26	23.06
	4 Tx Slots	1850.2	27.13	26.88	0.25	-3.01	23.87
		1880	27.18	26.96	0.22	-3.01	23.95
		1909.8	27.16	26.93	0.23	-3.01	23.92
EGPRS1900	1 Tx Slots	1850.2	28.27	27.95	0.32	-9.03	18.92
		1880	28.32	27.98	0.34	-9.03	18.95
		1909.8	28.09	27.96	0.13	-9.03	18.93
	2 Tx Slots	1850.2	27.12	27.05	0.07	-6.02	21.03
		1880	27.22	27.08	0.14	-6.02	21.06
		1909.8	27.21	27.07	0.14	-6.02	21.05
	3 Tx Slots	1850.2	26.22	26.10	0.12	-4.26	21.84
		1880	26.17	26.12	0.05	-4.26	21.86
		1909.8	26.12	26.11	0.01	-4.26	21.85
	4 Tx Slots	1850.2	26.08	25.35	0.73	-3.01	22.34
		1880	26.21	25.32	0.89	-3.01	22.31
		1909.8	26.07	25.33	0.74	-3.01	22.32

Tine average factor = 1 uplink, 10*log(1/8)= -9.03dB, 2 uolink, 10*log(2/8)= -6.02dB, 3 uolink, 10*log(3/8)= -4.26dB, 4 uolink, 10*log(4/8)= -3.01dB

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UTRA BANDS:
BAND 2:

Mode		Frequency (MHz)	Peak Power	Avg.Burst Power	PAPR (dB)
RMC 12.2K		1852.4	22.23	21.58	0.65
		1880	**22.24**	21.52	0.72
		1907.6	22.12	21.56	0.56
HSDPA	Sub-test 1	1852.4	22.12	21.21	0.91
		1880	22.21	21.41	0.80
		1907.6	22.28	21.30	0.98
	Sub-test 2	1852.4	22.19	21.19	1.00
		1880	21.14	20.52	0.62
		1907.6	21.21	20.62	0.59
	Sub-test 3	1852.4	21.88	21.10	0.78
		1880	21.84	20.25	1.59
		1907.6	21.79	20.11	1.68
	Sub-test 4	1852.4	21.46	20.02	1.44
		1880	21.38	20.02	1.36
		1907.6	21.51	20.32	1.19
HSUPA	Sub-test 1	1852.4	21.94	21.32	0.62
		1880	21.74	20.75	0.99
		1907.6	21.54	20.42	1.12
	Sub-test 2	1852.4	21.87	21.02	0.85
		1880	21.68	20.45	1.23
		1907.6	21.74	20.10	1.64
	Sub-test 3	1852.4	21.59	21.15	0.44
		1880	21.41	20.23	1.18
		1907.6	21.28	20.20	1.08
	Sub-test 4	1852.4	21.11	20.52	0.59
		1880	21.13	20.15	0.98
		1907.6	21.26	20.11	1.15
	Sub-test 5	1852.4	21.22	20.95	0.27
		1880	21.37	20.15	1.22
		1907.6	21.66	20.11	1.55

BAND 4：

Mode		Frequency (MHz)	Peak Power	Avg.Burst Power	PAPR (dB)
RMC 12.2K		1712.4	23.12	22.02	1.10
		1732.6	**23.15**	22.12	1.03
		1752.6	23.13	**22.16**	0.97
HSDPA	Sub-test 1	1712.4	22.21	21.51	0.70
		1732.6	22.17	21.52	0.65
		1752.6	22.20	21.55	0.65
	Sub-test 2	1712.4	22.23	21.82	0.41
		1732.6	22.22	21.71	0.51
		1752.6	22.31	21.43	0.88
	Sub-test 3	1712.4	22.50	21.72	0.78
		1732.6	22.46	21.51	0.95
		1752.6	22.51	21.43	1.08
	Sub-test 4	1712.4	22.05	21.61	0.44
		1732.6	22.06	21.72	0.34
		1752.6	22.14	21.58	0.56
HSUPA	Sub-test 1	1712.4	22.26	21.46	0.80
		1732.6	22.44	21.38	1.06
		1752.6	22.38	21.31	1.07
	Sub-test 2	1712.4	22.15	21.51	0.64
		1732.6	22.14	21.61	0.53
		1752.6	22.16	21.42	0.74
	Sub-test 3	1712.4	22.39	21.48	0.91
		1732.6	22.21	21.32	0.89
		1752.6	22.34	21.33	1.01
	Sub-test 4	1712.4	22.21	21.32	0.89
		1732.6	22.18	21.44	0.74
		1752.6	22.42	22.38	0.04
	Sub-test 5	1712.4	22.21	21.36	0.85
		1732.6	22.12	21.43	0.69
		1752.6	22.03	21.31	0.72

BAND 5:

Mode		Frequency (MHz)	Peak Power	Avg. Burst Power	PAPR (dB)
RMC 12.2K		826.4	**23.38**	22.40	0.98
		836.4	23.26	**22.42**	0.84
		846.6	23.15	22.35	0.80
HSDPA	Sub-test 1	826.4	23.12	22.12	1.00
		836.4	23.01	22.23	0.78
		846.6	23.21	22.28	0.93
	Sub-test 2	826.4	22.28	21.52	0.76
		836.4	22.28	21.51	0.77
		846.6	22.22	21.32	0.90
	Sub-test 3	826.4	22.23	21.32	0.91
		836.4	22.34	21.35	0.99
		846.6	22.22	21.48	0.74
	Sub-test 4	826.4	21.24	20.54	0.70
		836.4	21.42	20.55	0.87
		846.6	21.15	20.62	0.53
HSUPA	Sub-test 1	826.4	21.83	20.72	1.11
		836.4	21.66	20.60	1.06
		846.6	21.41	20.83	0.58
	Sub-test 2	826.4	22.63	21.58	1.05
		836.4	22.45	21.82	0.63
		846.6	22.42	21.32	1.10
	Sub-test 3	826.4	22.24	21.31	0.93
		836.4	22.18	21.33	0.85
		846.6	22.42	21.22	1.20
	Sub-test 4	826.4	22.23	21.53	0.70
		836.4	22.24	21.26	0.98
		846.6	22.35	21.82	0.53
	Sub-test 5	826.4	22.14	21.28	0.86
		836.4	22.18	21.16	1.02
		846.6	22.38	21.28	1.10

E-UTRA BANDS:
BAND 2:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	18607	1850.7	QPSK	1	LOW	20.67	21.9	1.23
1.4	18607	1850.7	QPSK	1	MID	20.94	21.96	1.02
1.4	18607	1850.7	QPSK	1	HIGH	20.86	22.07	1.21
1.4	18607	1850.7	QPSK	3	LOW	21.2	22.35	1.15
1.4	18607	1850.7	QPSK	3	MID	20.99	21.97	0.98
1.4	18607	1850.7	QPSK	3	HIGH	21.29	21.85	0.56
1.4	18607	1850.7	QPSK	6	LOW	21.19	22.52	1.33
1.4	18607	1850.7	Q16	1	LOW	21.57	21.66	0.09
1.4	18607	1850.7	Q16	1	MID	21.07	22.39	1.32
1.4	18607	1850.7	Q16	1	HIGH	21.18	22.35	1.17
1.4	18607	1850.7	Q16	3	LOW	21.38	22.57	1.19
1.4	18607	1850.7	Q16	3	MID	20.61	21.71	1.1
1.4	18607	1850.7	Q16	3	HIGH	20.99	22.31	1.32
1.4	18607	1850.7	Q16	6	LOW	21.3	21.74	0.44
1.4	18900	1880	QPSK	1	LOW	21.4	21.63	0.23
1.4	18900	1880	QPSK	1	MID	20.81	22.02	1.21
1.4	18900	1880	QPSK	1	HIGH	21.56	22.59	1.03
1.4	18900	1880	QPSK	3	LOW	21.47	21.86	0.39
1.4	18900	1880	QPSK	3	MID	21.28	22.18	0.9
1.4	18900	1880	QPSK	3	HIGH	20.94	21.96	1.02
1.4	18900	1880	QPSK	6	LOW	21.28	21.8	0.52
1.4	18900	1880	Q16	1	LOW	21.17	22.34	1.17
1.4	18900	1880	Q16	1	MID	21.29	21.97	0.68
1.4	18900	1880	Q16	1	HIGH	20.74	21.86	1.12
1.4	18900	1880	Q16	3	LOW	20.73	21.61	0.88
1.4	18900	1880	Q16	3	MID	21.32	21.98	0.66
1.4	18900	1880	Q16	3	HIGH	20.79	22.48	1.69
1.4	18900	1880	Q16	6	LOW	21.14	21.9	0.76
1.4	19193	1909.3	QPSK	1	LOW	21.09	22.47	1.38
1.4	19193	1909.3	QPSK	1	MID	20.68	21.97	1.29
1.4	19193	1909.3	QPSK	1	HIGH	21.6	22.13	0.53
1.4	19193	1909.3	QPSK	3	LOW	21.34	22.07	0.73
1.4	19193	1909.3	QPSK	3	MID	20.73	22.58	1.85
1.4	19193	1909.3	QPSK	3	HIGH	21.38	22.35	0.97
1.4	19193	1909.3	QPSK	6	LOW	21.3	22.02	0.72

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	19193	1909.3	Q16	1	LOW	21.08	22.05	0.97
1.4	19193	1909.3	Q16	1	MID	21.41	22.56	1.15
1.4	19193	1909.3	Q16	1	HIGH	21.55	22.51	0.96
1.4	19193	1909.3	Q16	3	LOW	20.77	21.72	0.95
1.4	19193	1909.3	Q16	3	MID	21.1	21.68	0.58
1.4	19193	1909.3	Q16	3	HIGH	21.47	22.54	1.07
1.4	19193	1909.3	Q16	6	LOW	21.25	22.07	0.82
3	18615	1851.5	QPSK	1	LOW	20.84	21.82	0.98
3	18615	1851.5	QPSK	1	MID	21.44	22.05	0.61
3	18615	1851.5	QPSK	1	HIGH	21.45	22.27	0.82
3	18615	1851.5	QPSK	8	LOW	21.12	22.35	1.23
3	18615	1851.5	QPSK	8	MID	20.77	22.45	1.68
3	18615	1851.5	QPSK	8	HIGH	20.79	21.99	1.2
3	18615	1851.5	QPSK	15	LOW	21.16	22.57	1.41
3	18615	1851.5	Q16	1	LOW	21.41	22.44	1.03
3	18615	1851.5	Q16	1	MID	21.47	22.13	0.66
3	18615	1851.5	Q16	1	HIGH	21.47	22.07	0.6
3	18615	1851.5	Q16	8	LOW	21.38	22.1	0.72
3	18615	1851.5	Q16	8	MID	21.45	22.3	0.85
3	18615	1851.5	Q16	8	HIGH	20.86	21.93	1.07
3	18615	1851.5	Q16	15	LOW	21.1	21.68	0.58
3	18900	1880	QPSK	1	LOW	21.08	21.63	0.55
3	18900	1880	QPSK	1	MID	21.54	22.07	0.53
3	18900	1880	QPSK	1	HIGH	21.09	21.75	0.66
3	18900	1880	QPSK	8	LOW	20.89	21.95	1.06
3	18900	1880	QPSK	8	MID	21.34	22.61	1.27
3	18900	1880	QPSK	8	HIGH	21.19	21.8	0.61
3	18900	1880	QPSK	15	LOW	20.75	21.96	1.21
3	18900	1880	Q16	1	LOW	21.3	22.29	0.99
3	18900	1880	Q16	1	MID	21.53	21.99	0.46
3	18900	1880	Q16	1	HIGH	21.17	22.54	1.37
3	18900	1880	Q16	8	LOW	20.76	22.15	1.39
3	18900	1880	Q16	8	MID	20.62	22.3	1.68
3	18900	1880	Q16	8	HIGH	21.28	21.64	0.36
3	18900	1880	Q16	15	LOW	21.39	22.57	1.18
3	19185	1908.5	QPSK	1	LOW	21.45	22.34	0.89
3	19185	1908.5	QPSK	1	MID	20.73	21.81	1.08

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
3	19185	1908.5	QPSK	1	HIGH	21	22.26	1.26
3	19185	1908.5	QPSK	8	LOW	21.49	22.4	0.91
3	19185	1908.5	QPSK	8	MID	21.2	21.74	0.54
3	19185	1908.5	QPSK	8	HIGH	20.86	22.1	1.24
3	19185	1908.5	QPSK	15	LOW	20.87	22.06	1.19
3	19185	1908.5	Q16	1	LOW	21.58	21.81	0.23
3	19185	1908.5	Q16	1	MID	20.62	21.92	1.3
3	19185	1908.5	Q16	1	HIGH	20.93	22.56	1.63
3	19185	1908.5	Q16	8	LOW	21.26	22.41	1.15
3	19185	1908.5	Q16	8	MID	21.33	21.97	0.64
3	19185	1908.5	Q16	8	HIGH	21.26	22.13	0.87
3	19185	1908.5	Q16	15	LOW	21.02	22.06	1.04
5	18625	1852.5	QPSK	1	LOW	20.85	22.24	1.39
5	18625	1852.5	QPSK	1	MID	21	21.79	0.79
5	18625	1852.5	QPSK	1	HIGH	21.25	22.2	0.95
5	18625	1852.5	QPSK	12	LOW	20.99	22.46	1.47
5	18625	1852.5	QPSK	12	MID	21.28	22.47	1.19
5	18625	1852.5	QPSK	12	HIGH	20.76	22.58	1.82
5	18625	1852.5	QPSK	25	LOW	20.91	22.2	1.29
5	18625	1852.5	Q16	1	LOW	21.32	22.14	0.82
5	18625	1852.5	Q16	1	MID	20.84	22.07	1.23
5	18625	1852.5	Q16	1	HIGH	21.31	22.17	0.86
5	18625	1852.5	Q16	12	LOW	21.42	22.28	0.86
5	18625	1852.5	Q16	12	MID	21.55	22.08	0.53
5	18625	1852.5	Q16	12	HIGH	20.68	22.19	1.51
5	18625	1852.5	Q16	25	LOW	21.24	22.26	1.02
5	18900	1880	QPSK	1	LOW	21.18	22.03	0.85
5	18900	1880	QPSK	1	MID	20.72	21.91	1.19
5	18900	1880	QPSK	1	HIGH	20.88	22.37	1.49
5	18900	1880	QPSK	12	LOW	20.92	22.11	1.19
5	18900	1880	QPSK	12	MID	21.17	21.91	0.74
5	18900	1880	QPSK	12	HIGH	21.58	22.41	0.83
5	18900	1880	QPSK	25	LOW	20.99	21.68	0.69
5	18900	1880	Q16	1	LOW	21.17	21.78	0.61
5	18900	1880	Q16	1	MID	21.18	22.35	1.17
5	18900	1880	Q16	1	HIGH	20.68	21.64	0.96
5	18900	1880	Q16	12	LOW	21.02	22.26	1.24

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
5	18900	1880	Q16	12	MID	21.43	22.38	0.95
5	18900	1880	Q16	12	HIGH	21.45	22.11	0.66
5	18900	1880	Q16	25	LOW	20.7	21.7	1
5	19175	1907.5	QPSK	1	LOW	20.61	21.87	1.26
5	19175	1907.5	QPSK	1	MID	21.49	22.4	0.91
5	19175	1907.5	QPSK	1	HIGH	20.64	22.6	1.96
5	19175	1907.5	QPSK	12	LOW	21.42	22.21	0.79
5	19175	1907.5	QPSK	12	MID	21.57	21.96	0.39
5	19175	1907.5	QPSK	12	HIGH	20.81	21.93	1.12
5	19175	1907.5	QPSK	25	LOW	21.55	21.74	0.19
5	19175	1907.5	Q16	1	LOW	20.68	22.19	1.51
5	19175	1907.5	Q16	1	MID	21.48	21.78	0.3
5	19175	1907.5	Q16	1	HIGH	21.5	22.49	0.99
5	19175	1907.5	Q16	12	LOW	20.94	21.92	0.98
5	19175	1907.5	Q16	12	MID	21.09	21.71	0.62
5	19175	1907.5	Q16	12	HIGH	20.73	22.6	1.87
5	19175	1907.5	Q16	25	LOW	21.21	21.84	0.63
10	18650	1855	QPSK	1	LOW	20.79	21.66	0.87
10	18650	1855	QPSK	1	MID	21.44	21.88	0.44
10	18650	1855	QPSK	1	HIGH	21.24	22.2	0.96
10	18650	1855	QPSK	25	LOW	20.75	21.62	0.87
10	18650	1855	QPSK	25	MID	20.99	21.94	0.95
10	18650	1855	QPSK	25	HIGH	20.74	21.77	1.03
10	18650	1855	QPSK	50	LOW	20.93	22.24	1.31
10	18650	1855	Q16	1	LOW	21.24	21.81	0.57
10	18650	1855	Q16	1	MID	21.17	21.98	0.81
10	18650	1855	Q16	1	HIGH	21.09	21.65	0.56
10	18650	1855	Q16	25	LOW	20.68	21.72	1.04
10	18650	1855	Q16	25	MID	20.87	22.04	1.17
10	18650	1855	Q16	25	HIGH	20.74	22.16	1.42
10	18650	1855	Q16	50	LOW	21.14	21.92	0.78
10	18900	1880	QPSK	1	LOW	20.7	21.67	0.97
10	18900	1880	QPSK	1	MID	20.65	21.69	1.04
10	18900	1880	QPSK	1	HIGH	21.26	21.96	0.7
10	18900	1880	QPSK	25	LOW	20.86	22.13	1.27
10	18900	1880	QPSK	25	MID	20.73	22.23	1.5
10	18900	1880	QPSK	25	HIGH	21.35	21.86	0.51

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
10	18900	1880	QPSK	50	LOW	20.84	21.67	0.83
10	18900	1880	Q16	1	LOW	21.03	21.9	0.87
10	18900	1880	Q16	1	MID	20.83	21.71	0.88
10	18900	1880	Q16	1	HIGH	21.36	22.36	1
10	18900	1880	Q16	25	LOW	21.56	21.77	0.21
10	18900	1880	Q16	25	MID	21.58	22.33	0.75
10	18900	1880	Q16	25	HIGH	20.72	21.63	0.91
10	18900	1880	Q16	50	LOW	20.68	22.02	1.34
10	19150	1905	QPSK	1	LOW	20.87	22.2	1.33
10	19150	1905	QPSK	1	MID	21.1	21.9	0.8
10	19150	1905	QPSK	1	HIGH	21.04	22.47	1.43
10	19150	1905	QPSK	25	LOW	21.48	22.46	0.98
10	19150	1905	QPSK	25	MID	20.75	22.37	1.62
10	19150	1905	QPSK	25	HIGH	21.35	22.23	0.88
10	19150	1905	QPSK	50	LOW	20.75	21.62	0.87
10	19150	1905	Q16	1	LOW	21.58	22.53	0.95
10	19150	1905	Q16	1	MID	21.06	21.89	0.83
10	19150	1905	Q16	1	HIGH	20.73	21.86	1.13
10	19150	1905	Q16	25	LOW	21.41	22.54	1.13
10	19150	1905	Q16	25	MID	20.84	21.95	1.11
10	19150	1905	Q16	25	HIGH	21.06	22.25	1.19
10	19150	1905	Q16	50	LOW	21.12	22.59	1.47
15	18675	1857.5	QPSK	1	LOW	20.82	22.57	1.75
15	18675	1857.5	QPSK	1	MID	20.82	21.62	0.8
15	18675	1857.5	QPSK	1	HIGH	20.72	21.96	1.24
15	18675	1857.5	QPSK	36	LOW	20.87	21.82	0.95
15	18675	1857.5	QPSK	36	MID	21.27	22.54	1.27
15	18675	1857.5	QPSK	36	HIGH	21.12	22.38	1.26
15	18675	1857.5	QPSK	75	LOW	20.92	22.19	1.27
15	18675	1857.5	Q16	1	LOW	21.31	22.2	0.89
15	18675	1857.5	Q16	1	MID	20.91	22.44	1.53
15	18675	1857.5	Q16	1	HIGH	20.83	22.01	1.18
15	18675	1857.5	Q16	36	LOW	21.01	22.38	1.37
15	18675	1857.5	Q16	36	MID	21.54	22.16	0.62
15	18675	1857.5	Q16	36	HIGH	21.24	21.9	0.66
15	18675	1857.5	Q16	75	LOW	20.89	22.41	1.52
15	18900	1880	QPSK	1	LOW	21.29	22.14	0.85

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
15	18900	1880	QPSK	1	MID	21.52	22.22	0.7
15	18900	1880	QPSK	1	HIGH	20.88	21.92	1.04
15	18900	1880	QPSK	36	LOW	21.17	22.45	1.28
15	18900	1880	QPSK	36	MID	20.62	22.44	1.82
15	18900	1880	QPSK	36	HIGH	21.11	22.57	1.46
15	18900	1880	QPSK	75	LOW	20.94	21.61	0.67
15	18900	1880	Q16	1	LOW	20.64	22.16	1.52
15	18900	1880	Q16	1	MID	21.36	21.86	0.5
15	18900	1880	Q16	1	HIGH	20.98	21.98	1
15	18900	1880	Q16	36	LOW	20.75	21.82	1.07
15	18900	1880	Q16	36	MID	21.31	21.73	0.42
15	18900	1880	Q16	36	HIGH	20.66	22.34	1.68
15	18900	1880	Q16	75	LOW	20.66	21.88	1.22
15	19125	1902.5	QPSK	1	LOW	20.81	22.08	1.27
15	19125	1902.5	QPSK	1	MID	21.55	22.26	0.71
15	19125	1902.5	QPSK	1	HIGH	21.37	21.8	0.43
15	19125	1902.5	QPSK	36	LOW	20.74	21.72	0.98
15	19125	1902.5	QPSK	36	MID	21.13	21.84	0.71
15	19125	1902.5	QPSK	36	HIGH	21.34	22.17	0.83
15	19125	1902.5	QPSK	75	LOW	21.53	22.04	0.51
15	19125	1902.5	Q16	1	LOW	21.29	22.46	1.17
15	19125	1902.5	Q16	1	MID	20.69	22.1	1.41
15	19125	1902.5	Q16	1	HIGH	21.57	21.67	0.1
15	19125	1902.5	Q16	36	LOW	21.24	22.54	1.3
15	19125	1902.5	Q16	36	MID	21.53	22.22	0.69
15	19125	1902.5	Q16	36	HIGH	21.28	22	0.72
15	19125	1902.5	Q16	75	LOW	20.9	22.01	1.11
20	18700	1860	QPSK	1	LOW	21.29	21.7	0.41
20	18700	1860	QPSK	1	MID	20.84	21.8	0.96
20	18700	1860	QPSK	1	HIGH	21.05	21.97	0.92
20	18700	1860	QPSK	50	LOW	21.35	21.74	0.39
20	18700	1860	QPSK	50	MID	21.51	21.64	0.13
20	18700	1860	QPSK	50	HIGH	20.94	22.51	1.57
20	18700	1860	QPSK	100	LOW	21.07	22.17	1.1
20	18700	1860	Q16	1	LOW	20.7	22.37	1.67
20	18700	1860	Q16	1	MID	21.18	22.36	1.18
20	18700	1860	Q16	1	HIGH	21.43	21.71	0.28

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
20	18700	1860	Q16	50	LOW	21.05	22.5	1.45
20	18700	1860	Q16	50	MID	21.02	21.71	0.69
20	18700	1860	Q16	50	HIGH	20.66	21.97	1.31
20	18700	1860	Q16	100	LOW	21.46	21.82	0.36
20	18900	1880	QPSK	1	LOW	21.57	21.64	0.07
20	18900	1880	QPSK	1	MID	20.86	22.41	1.55
20	18900	1880	QPSK	1	HIGH	21.58	22.04	0.46
20	18900	1880	QPSK	50	LOW	20.61	22.55	1.94
20	18900	1880	QPSK	50	MID	21.56	21.65	0.09
20	18900	1880	QPSK	50	HIGH	21.31	22.26	0.95
20	18900	1880	QPSK	100	LOW	21.08	22.05	0.97
20	18900	1880	Q16	1	LOW	21.26	21.95	0.69
20	18900	1880	Q16	1	MID	21.36	21.97	0.61
20	18900	1880	Q16	1	HIGH	20.73	22.4	1.67
20	18900	1880	Q16	50	LOW	20.95	21.81	0.86
20	18900	1880	Q16	50	MID	21.04	21.87	0.83
20	18900	1880	Q16	50	HIGH	21	21.87	0.87
20	18900	1880	Q16	100	LOW	21.5	22.31	0.81
20	19100	1900	QPSK	1	LOW	20.85	22	1.15
20	19100	1900	QPSK	1	MID	21.19	22.13	0.94
20	19100	1900	QPSK	1	HIGH	21.16	22.6	1.44
20	19100	1900	QPSK	50	LOW	20.76	22.36	1.6
20	19100	1900	QPSK	50	MID	21.53	21.74	0.21
20	19100	1900	QPSK	50	HIGH	20.82	22.54	1.72
20	19100	1900	QPSK	100	LOW	20.72	21.74	1.02
20	19100	1900	Q16	1	LOW	21.23	22.12	0.89
20	19100	1900	Q16	1	MID	20.82	21.83	1.01
20	19100	1900	Q16	1	HIGH	21.13	22.31	1.18
20	19100	1900	Q16	50	LOW	20.66	22.01	1.35
20	19100	1900	Q16	50	MID	21.53	21.96	0.43
20	19100	1900	Q16	50	HIGH	21.04	22.55	1.51
20	19100	1900	Q16	100	LOW	20.97	22.27	1.3

BAND 4:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	19957	1710.7	QPSK	1	LOW	20.66	22.21	1.55
1.4	19957	1710.7	QPSK	1	MID	20.95	21.82	0.87
1.4	19957	1710.7	QPSK	1	HIGH	20.47	22.16	1.69
1.4	19957	1710.7	QPSK	3	LOW	20.66	21.97	1.31
1.4	19957	1710.7	QPSK	3	MID	20.8	21.57	0.77
1.4	19957	1710.7	QPSK	3	HIGH	21.19	22.04	0.85
1.4	19957	1710.7	QPSK	6	LOW	20.52	21.33	0.81
1.4	19957	1710.7	Q16	1	LOW	20.42	21.71	1.29
1.4	19957	1710.7	Q16	1	MID	20.38	22.1	1.72
1.4	19957	1710.7	Q16	1	HIGH	20.82	21.47	0.65
1.4	19957	1710.7	Q16	3	LOW	20.47	22.19	1.72
1.4	19957	1710.7	Q16	3	MID	20.47	21.98	1.51
1.4	19957	1710.7	Q16	3	HIGH	20.42	22.21	1.79
1.4	19957	1710.7	Q16	6	LOW	20.84	22.07	1.23
1.4	20393	1754.3	QPSK	1	LOW	20.76	22.23	1.47
1.4	20393	1754.3	QPSK	1	MID	21.23	21.94	0.71
1.4	20393	1754.3	QPSK	1	HIGH	21.12	21.74	0.62
1.4	20393	1754.3	QPSK	3	LOW	20.56	21.47	0.91
1.4	20393	1754.3	QPSK	3	MID	21.12	21.56	0.44
1.4	20393	1754.3	QPSK	3	HIGH	20.94	22.2	1.26
1.4	20393	1754.3	QPSK	6	LOW	20.65	21.52	0.87
1.4	20393	1754.3	Q16	1	LOW	21.15	21.49	0.34
1.4	20393	1754.3	Q16	1	MID	20.85	21.66	0.81
1.4	20393	1754.3	Q16	1	HIGH	20.44	22.14	1.7
1.4	20393	1754.3	Q16	3	LOW	20.68	22.17	1.49
1.4	20393	1754.3	Q16	3	MID	20.98	22.19	1.21
1.4	20393	1754.3	Q16	3	HIGH	21.07	21.53	0.46
1.4	20393	1754.3	Q16	6	LOW	21.26	22.06	0.8
1.4	20175	1732.5	QPSK	1	LOW	20.8	21.93	1.13
1.4	20175	1732.5	QPSK	1	MID	21.03	21.47	0.44
1.4	20175	1732.5	QPSK	1	HIGH	20.55	22.03	1.48
1.4	20175	1732.5	QPSK	3	LOW	21.13	21.59	0.46
1.4	20175	1732.5	QPSK	3	MID	20.82	22.01	1.19
1.4	20175	1732.5	QPSK	3	HIGH	20.66	21.61	0.95
1.4	20175	1732.5	QPSK	6	LOW	20.8	21.7	0.9
1.4	20175	1732.5	Q16	1	LOW	20.65	22.26	1.61

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	20175	1732.5	Q16	1	MID	20.66	22.14	1.48
1.4	20175	1732.5	Q16	1	HIGH	20.62	21.9	1.28
1.4	20175	1732.5	Q16	3	LOW	21.25	21.88	0.63
1.4	20175	1732.5	Q16	3	MID	21.21	21.96	0.75
1.4	20175	1732.5	Q16	3	HIGH	20.51	21.99	1.48
1.4	20175	1732.5	Q16	6	LOW	21.14	21.38	0.24
3	19965	1711.5	QPSK	1	LOW	20.35	22.12	1.77
3	19965	1711.5	QPSK	1	MID	20.65	21.96	1.31
3	19965	1711.5	QPSK	1	HIGH	20.95	21.36	0.41
3	19965	1711.5	QPSK	8	LOW	21.18	22	0.82
3	19965	1711.5	QPSK	8	MID	21.21	21.67	0.46
3	19965	1711.5	QPSK	8	HIGH	20.3	22.11	1.81
3	19965	1711.5	QPSK	15	LOW	20.85	21.94	1.09
3	19965	1711.5	Q16	1	LOW	21.19	21.9	0.71
3	19965	1711.5	Q16	1	MID	20.95	21.5	0.55
3	19965	1711.5	Q16	1	HIGH	20.45	22.23	1.78
3	19965	1711.5	Q16	8	LOW	20.79	22.02	1.23
3	19965	1711.5	Q16	8	MID	21.16	22.08	0.92
3	19965	1711.5	Q16	8	HIGH	20.54	21.99	1.45
3	19965	1711.5	Q16	15	LOW	20.49	22.07	1.58
3	20385	1753.5	QPSK	1	LOW	21.12	21.38	0.26
3	20385	1753.5	QPSK	1	MID	20.35	21.71	1.36
3	20385	1753.5	QPSK	1	HIGH	20.66	22.18	1.52
3	20385	1753.5	QPSK	8	LOW	20.3	21.36	1.06
3	20385	1753.5	QPSK	8	MID	20.83	22.23	1.4
3	20385	1753.5	QPSK	8	HIGH	20.83	22.3	1.47
3	20385	1753.5	QPSK	15	LOW	21.26	22.24	0.98
3	20385	1753.5	Q16	1	LOW	20.44	21.43	0.99
3	20385	1753.5	Q16	1	MID	21.15	21.75	0.6
3	20385	1753.5	Q16	1	HIGH	20.69	22.16	1.47
3	20385	1753.5	Q16	8	LOW	20.79	21.96	1.17
3	20385	1753.5	Q16	8	MID	20.46	21.94	1.48
3	20385	1753.5	Q16	8	HIGH	20.31	21.78	1.47
3	20385	1753.5	Q16	15	LOW	20.81	21.74	0.93
3	20175	1732.5	QPSK	1	LOW	21.24	22.02	0.78
3	20175	1732.5	QPSK	1	MID	20.69	22.07	1.38
3	20175	1732.5	QPSK	1	HIGH	20.34	21.93	1.59

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
3	20175	1732.5	QPSK	8	LOW	20.8	21.75	0.95
3	20175	1732.5	QPSK	8	MID	20.94	22.15	1.21
3	20175	1732.5	QPSK	8	HIGH	20.45	22.3	1.85
3	20175	1732.5	QPSK	15	LOW	20.83	21.5	0.67
3	20175	1732.5	Q16	1	LOW	21.25	21.72	0.47
3	20175	1732.5	Q16	1	MID	21.07	21.64	0.57
3	20175	1732.5	Q16	1	HIGH	21.25	22.1	0.85
3	20175	1732.5	Q16	8	LOW	21.16	22.16	1
3	20175	1732.5	Q16	8	MID	20.33	21.48	1.15
3	20175	1732.5	Q16	8	HIGH	20.67	22.21	1.54
3	20175	1732.5	Q16	15	LOW	20.83	21.65	0.82
5	19975	1712.5	QPSK	1	LOW	21.08	22.04	0.96
5	19975	1712.5	QPSK	1	MID	21.1	21.85	0.75
5	19975	1712.5	QPSK	1	HIGH	21.16	21.8	0.64
5	19975	1712.5	QPSK	12	LOW	20.5	22.31	1.81
5	19975	1712.5	QPSK	12	MID	21.2	21.84	0.64
5	19975	1712.5	QPSK	12	HIGH	20.36	21.86	1.5
5	19975	1712.5	QPSK	25	LOW	21.13	21.92	0.79
5	19975	1712.5	Q16	1	LOW	21.08	21.5	0.42
5	19975	1712.5	Q16	1	MID	20.89	21.91	1.02
5	19975	1712.5	Q16	1	HIGH	20.8	21.66	0.86
5	19975	1712.5	Q16	12	LOW	20.36	21.89	1.53
5	19975	1712.5	Q16	12	MID	20.44	21.53	1.09
5	19975	1712.5	Q16	12	HIGH	20.35	21.75	1.4
5	19975	1712.5	Q16	25	LOW	20.58	22.14	1.56
5	20375	1752.5	QPSK	1	LOW	20.92	22.15	1.23
5	20375	1752.5	QPSK	1	MID	20.58	21.5	0.92
5	20375	1752.5	QPSK	1	HIGH	20.58	21.36	0.78
5	20375	1752.5	QPSK	12	LOW	21.02	22.15	1.13
5	20375	1752.5	QPSK	12	MID	20.55	22.11	1.56
5	20375	1752.5	QPSK	12	HIGH	20.79	21.4	0.61
5	20375	1752.5	QPSK	25	LOW	20.55	22.18	1.63
5	20375	1752.5	Q16	1	LOW	21.07	21.82	0.75
5	20375	1752.5	Q16	1	MID	20.83	21.95	1.12
5	20375	1752.5	Q16	1	HIGH	20.89	21.44	0.55
5	20375	1752.5	Q16	12	LOW	20.46	21.36	0.9
5	20375	1752.5	Q16	12	MID	21.08	22.3	1.22

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
5	20375	1752.5	Q16	12	HIGH	20.64	21.84	1.2
5	20375	1752.5	Q16	25	LOW	21.15	21.37	0.22
5	20175	1732.5	QPSK	1	LOW	20.48	21.89	1.41
5	20175	1732.5	QPSK	1	MID	20.7	22.16	1.46
5	20175	1732.5	QPSK	1	HIGH	20.89	21.64	0.75
5	20175	1732.5	QPSK	12	LOW	20.5	21.55	1.05
5	20175	1732.5	QPSK	12	MID	21.23	21.87	0.64
5	20175	1732.5	QPSK	12	HIGH	21.19	21.94	0.75
5	20175	1732.5	QPSK	25	LOW	21.19	21.81	0.62
5	20175	1732.5	Q16	1	LOW	20.59	21.67	1.08
5	20175	1732.5	Q16	1	MID	20.58	22	1.42
5	20175	1732.5	Q16	1	HIGH	20.6	21.92	1.32
5	20175	1732.5	Q16	12	LOW	20.46	22.05	1.59
5	20175	1732.5	Q16	12	MID	20.36	21.35	0.99
5	20175	1732.5	Q16	12	HIGH	21.17	21.59	0.42
5	20175	1732.5	Q16	25	LOW	20.67	22.01	1.34
10	20000	1715	QPSK	1	LOW	20.31	22.21	1.9
10	20000	1715	QPSK	1	MID	20.45	22.25	1.8
10	20000	1715	QPSK	1	HIGH	21.11	21.76	0.65
10	20000	1715	QPSK	25	LOW	20.59	21.38	0.79
10	20000	1715	QPSK	25	MID	20.34	21.74	1.4
10	20000	1715	QPSK	25	HIGH	21.26	21.73	0.47
10	20000	1715	QPSK	50	LOW	20.52	22.02	1.5
10	20000	1715	Q16	1	LOW	20.87	21.62	0.75
10	20000	1715	Q16	1	MID	20.74	21.6	0.86
10	20000	1715	Q16	1	HIGH	21.16	21.99	0.83
10	20000	1715	Q16	25	LOW	20.7	21.33	0.63
10	20000	1715	Q16	25	MID	20.7	22.3	1.6
10	20000	1715	Q16	25	HIGH	21.03	21.76	0.73
10	20000	1715	Q16	50	LOW	20.69	21.75	1.06
10	20350	1750	QPSK	1	LOW	21.27	22.14	0.87
10	20350	1750	QPSK	1	MID	20.33	21.67	1.34
10	20350	1750	QPSK	1	HIGH	20.99	21.57	0.58
10	20350	1750	QPSK	25	LOW	20.41	21.41	1
10	20350	1750	QPSK	25	MID	20.45	21.81	1.36
10	20350	1750	QPSK	25	HIGH	20.56	21.73	1.17
10	20350	1750	QPSK	50	LOW	20.32	21.77	1.45

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
10	20350	1750	Q16	1	LOW	20.32	21.78	1.46
10	20350	1750	Q16	1	MID	21.05	21.98	0.93
10	20350	1750	Q16	1	HIGH	21.14	21.38	0.24
10	20350	1750	Q16	25	LOW	21.24	21.64	0.4
10	20350	1750	Q16	25	MID	20.38	21.77	1.39
10	20350	1750	Q16	25	HIGH	20.51	21.37	0.86
10	20350	1750	Q16	50	LOW	20.36	22.28	1.92
10	20175	1732.5	QPSK	1	LOW	20.32	22.18	1.86
10	20175	1732.5	QPSK	1	MID	20.92	21.92	1
10	20175	1732.5	QPSK	1	HIGH	20.33	21.7	1.37
10	20175	1732.5	QPSK	25	LOW	21.03	22.29	1.26
10	20175	1732.5	QPSK	25	MID	21.08	21.47	0.39
10	20175	1732.5	QPSK	25	HIGH	20.91	21.76	0.85
10	20175	1732.5	QPSK	50	LOW	21.09	21.63	0.54
10	20175	1732.5	Q16	1	LOW	21.18	21.77	0.59
10	20175	1732.5	Q16	1	MID	20.96	21.35	0.39
10	20175	1732.5	Q16	1	HIGH	21.19	21.46	0.27
10	20175	1732.5	Q16	25	LOW	20.89	22.26	1.37
10	20175	1732.5	Q16	25	MID	20.6	21.94	1.34
10	20175	1732.5	Q16	25	HIGH	20.58	22.27	1.69
10	20175	1732.5	Q16	50	LOW	20.6	22.32	1.72
15	20025	1717.5	QPSK	1	LOW	20.93	21.79	0.86
15	20025	1717.5	QPSK	1	MID	20.84	21.79	0.95
15	20025	1717.5	QPSK	1	HIGH	21.17	21.42	0.25
15	20025	1717.5	QPSK	36	LOW	21.13	21.74	0.61
15	20025	1717.5	QPSK	36	MID	21.14	22.12	0.98
15	20025	1717.5	QPSK	36	HIGH	21.1	21.55	0.45
15	20025	1717.5	QPSK	75	LOW	20.46	22.15	1.69
15	20025	1717.5	Q16	1	LOW	20.87	22.01	1.14
15	20025	1717.5	Q16	1	MID	20.31	22	1.69
15	20025	1717.5	Q16	1	HIGH	20.37	21.35	0.98
15	20025	1717.5	Q16	36	LOW	21.11	21.51	0.4
15	20025	1717.5	Q16	36	MID	20.63	21.59	0.96
15	20025	1717.5	Q16	36	HIGH	20.83	21.95	1.12
15	20025	1717.5	Q16	75	LOW	20.74	22.11	1.37
15	20325	1747.5	QPSK	1	LOW	20.3	21.98	1.68
15	20325	1747.5	QPSK	1	MID	20.32	21.5	1.18

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
15	20325	1747.5	QPSK	1	HIGH	21.12	21.85	0.73
15	20325	1747.5	QPSK	36	LOW	20.58	22.24	1.66
15	20325	1747.5	QPSK	36	MID	21.07	22.26	1.19
15	20325	1747.5	QPSK	36	HIGH	20.89	21.36	0.47
15	20325	1747.5	QPSK	75	LOW	21.13	22.04	0.91
15	20325	1747.5	Q16	1	LOW	20.55	22.3	1.75
15	20325	1747.5	Q16	1	MID	20.38	21.37	0.99
15	20325	1747.5	Q16	1	HIGH	21.19	21.93	0.74
15	20325	1747.5	Q16	36	LOW	20.87	21.36	0.49
15	20325	1747.5	Q16	36	MID	20.73	21.61	0.88
15	20325	1747.5	Q16	36	HIGH	21.2	21.93	0.73
15	20325	1747.5	Q16	75	LOW	21.05	21.93	0.88
15	20175	1732.5	QPSK	1	LOW	20.82	21.44	0.62
15	20175	1732.5	QPSK	1	MID	20.61	21.75	1.14
15	20175	1732.5	QPSK	1	HIGH	21.24	21.58	0.34
15	20175	1732.5	QPSK	36	LOW	21.14	22.21	1.07
15	20175	1732.5	QPSK	36	MID	20.5	22.17	1.67
15	20175	1732.5	QPSK	36	HIGH	20.43	21.42	0.99
15	20175	1732.5	QPSK	75	LOW	20.43	22.15	1.72
15	20175	1732.5	Q16	1	LOW	21.13	21.32	0.19
15	20175	1732.5	Q16	1	MID	20.58	22.04	1.46
15	20175	1732.5	Q16	1	HIGH	21.23	21.44	0.21
15	20175	1732.5	Q16	36	LOW	21.05	21.99	0.94
15	20175	1732.5	Q16	36	MID	20.44	21.49	1.05
15	20175	1732.5	Q16	36	HIGH	20.78	21.78	1
15	20175	1732.5	Q16	75	LOW	20.63	21.71	1.08
20	20050	1720	QPSK	1	LOW	20.83	22.2	1.37
20	20050	1720	QPSK	1	MID	20.82	21.6	0.78
20	20050	1720	QPSK	1	HIGH	21.34	22.22	0.88
20	20050	1720	QPSK	50	LOW	21.23	22.12	0.89
20	20050	1720	QPSK	50	MID	21.25	21.4	0.15
20	20050	1720	QPSK	50	HIGH	21.22	22.19	0.97
20	20050	1720	QPSK	100	LOW	20.52	21.58	1.06
20	20050	1720	Q16	1	LOW	21.17	21.57	0.4
20	20050	1720	Q16	1	MID	20.38	21.88	1.5
20	20050	1720	Q16	1	HIGH	20.42	21.4	0.98
20	20050	1720	Q16	50	LOW	20.6	21.9	1.3

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
20	20050	1720	Q16	50	MID	21.02	21.72	0.7
20	20050	1720	Q16	50	HIGH	21.23	21.57	0.34
20	20050	1720	Q16	100	LOW	20.75	22.21	1.46
20	20300	1745	QPSK	1	LOW	21.22	22.05	0.83
20	20300	1745	QPSK	1	MID	20.9	21.78	0.88
20	20300	1745	QPSK	1	HIGH	21.37	21.33	-0.04
20	20300	1745	QPSK	50	LOW	20.31	22.04	1.73
20	20300	1745	QPSK	50	MID	21.26	22.2	0.94
20	20300	1745	QPSK	50	HIGH	20.72	21.54	0.82
20	20300	1745	QPSK	100	LOW	20.92	21.39	0.47
20	20300	1745	Q16	1	LOW	20.66	21.56	0.9
20	20300	1745	Q16	1	MID	20.45	21.57	1.12
20	20300	1745	Q16	1	HIGH	20.41	21.77	1.36
20	20300	1745	Q16	50	LOW	21.15	21.65	0.5
20	20300	1745	Q16	50	MID	20.42	21.91	1.49
20	20300	1745	Q16	50	HIGH	21.1	22.2	1.1
20	20300	1745	Q16	100	LOW	20.88	21.94	1.06
20	20175	1732.5	QPSK	1	LOW	21.2	21.4	0.2
20	20175	1732.5	QPSK	1	MID	21.22	22.22	1
20	20175	1732.5	QPSK	1	HIGH	21.35	21.65	0.3
20	20175	1732.5	QPSK	50	LOW	20.8	21.64	0.84
20	20175	1732.5	QPSK	50	MID	21.17	22.04	0.87
20	20175	1732.5	QPSK	50	HIGH	20.93	22.24	1.31
20	20175	1732.5	QPSK	100	LOW	20.51	21.68	1.17
20	20175	1732.5	Q16	1	LOW	20.81	21.71	0.9
20	20175	1732.5	Q16	1	MID	20.35	22	1.65
20	20175	1732.5	Q16	1	HIGH	20.83	21.86	1.03
20	20175	1732.5	Q16	50	LOW	20.96	21.57	0.61
20	20175	1732.5	Q16	50	MID	21.27	22	0.73
20	20175	1732.5	Q16	50	HIGH	20.43	22.16	1.73
20	20175	1732.5	Q16	100	LOW	20.54	22.29	1.75

BAND 5:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	20470	824.7	QPSK	1	LOW	20.85	22.62	1.77
1.4	20470	824.7	QPSK	1	MID	21.65	22.39	0.74
1.4	20470	824.7	QPSK	1	HIGH	21.53	22.74	1.21
1.4	20470	824.7	QPSK	3	LOW	21.62	22.5	0.88
1.4	20470	824.7	QPSK	3	MID	21.46	22.58	1.12
1.4	20470	824.7	QPSK	3	HIGH	21.77	22.25	0.48
1.4	20470	824.7	QPSK	6	LOW	21.43	22.11	0.68
1.4	20470	824.7	Q16	1	LOW	20.85	22.43	1.58
1.4	20470	824.7	Q16	1	MID	21.55	21.99	0.44
1.4	20470	824.7	Q16	1	HIGH	20.92	22.24	1.32
1.4	20470	824.7	Q16	3	LOW	21.63	21.99	0.36
1.4	20470	824.7	Q16	3	MID	20.84	22.23	1.39
1.4	20470	824.7	Q16	3	HIGH	20.94	22.54	1.6
1.4	20470	824.7	Q16	6	LOW	21.22	22.67	1.45
1.4	20525	836.5	QPSK	1	LOW	21.32	21.95	0.63
1.4	20525	836.5	QPSK	1	MID	21.59	22.45	0.86
1.4	20525	836.5	QPSK	1	HIGH	20.92	22.27	1.35
1.4	20525	836.5	QPSK	3	LOW	21.37	22.62	1.25
1.4	20525	836.5	QPSK	3	MID	21.54	22.21	0.67
1.4	20525	836.5	QPSK	3	HIGH	21.54	22.53	0.99
1.4	20525	836.5	QPSK	6	LOW	20.81	21.95	1.14
1.4	20525	836.5	Q16	1	LOW	21.38	22.55	1.17
1.4	20525	836.5	Q16	1	MID	21.71	22.02	0.31
1.4	20525	836.5	Q16	1	HIGH	21.56	22.21	0.65
1.4	20525	836.5	Q16	3	LOW	21.28	22.62	1.34
1.4	20525	836.5	Q16	3	MID	21.52	22.51	0.99
1.4	20525	836.5	Q16	3	HIGH	21.78	22.39	0.61
1.4	20525	836.5	Q16	6	LOW	21.09	22.79	1.7
1.4	20643	848.3	QPSK	1	LOW	21.31	22.5	1.19
1.4	20643	848.3	QPSK	1	MID	21.51	22.06	0.55
1.4	20643	848.3	QPSK	1	HIGH	21.43	22.1	0.67
1.4	20643	848.3	QPSK	3	LOW	21.35	22.61	1.26
1.4	20643	848.3	QPSK	3	MID	21.77	22.73	0.96
1.4	20643	848.3	QPSK	3	HIGH	21.59	22.25	0.66
1.4	20643	848.3	QPSK	6	LOW	21.17	22.03	0.86
1.4	20643	848.3	Q16	1	LOW	20.93	22.22	1.29

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
1.4	20643	848.3	Q16	1	MID	21.17	22.61	1.44
1.4	20643	848.3	Q16	1	HIGH	20.99	22.64	1.65
1.4	20643	848.3	Q16	3	LOW	20.86	21.83	0.97
1.4	20643	848.3	Q16	3	MID	21.68	22.78	1.1
1.4	20643	848.3	Q16	3	HIGH	21.38	22.2	0.82
1.4	20643	848.3	Q16	6	LOW	21.03	22.79	1.76
3	20415	825.5	QPSK	1	LOW	21.29	22.25	0.96
3	20415	825.5	QPSK	1	MID	20.93	22.3	1.37
3	20415	825.5	QPSK	1	HIGH	21.08	21.87	0.79
3	20415	825.5	QPSK	8	LOW	21.46	22.17	0.71
3	20415	825.5	QPSK	8	MID	21.63	21.93	0.3
3	20415	825.5	QPSK	8	HIGH	20.94	21.99	1.05
3	20415	825.5	QPSK	15	LOW	20.84	22.44	1.6
3	20415	825.5	Q16	1	LOW	21.14	22.17	1.03
3	20415	825.5	Q16	1	MID	21.52	22.23	0.71
3	20415	825.5	Q16	1	HIGH	21.2	22.6	1.4
3	20415	825.5	Q16	8	LOW	21.44	22.63	1.19
3	20415	825.5	Q16	8	MID	21.34	21.87	0.53
3	20415	825.5	Q16	8	HIGH	20.84	21.95	1.11
3	20415	825.5	Q16	15	LOW	20.97	22.05	1.08
3	20525	836.5	QPSK	1	LOW	21.42	22.08	0.66
3	20525	836.5	QPSK	1	MID	21.65	21.97	0.32
3	20525	836.5	QPSK	1	HIGH	21.09	22.3	1.21
3	20525	836.5	QPSK	8	LOW	21.78	22.15	0.37
3	20525	836.5	QPSK	8	MID	21.5	22.75	1.25
3	20525	836.5	QPSK	8	HIGH	21.64	22.29	0.65
3	20525	836.5	QPSK	15	LOW	21.33	21.98	0.65
3	20525	836.5	Q16	1	LOW	21.74	22.39	0.65
3	20525	836.5	Q16	1	MID	21.51	21.92	0.41
3	20525	836.5	Q16	1	HIGH	21.17	22.31	1.14
3	20525	836.5	Q16	8	LOW	20.96	21.86	0.9
3	20525	836.5	Q16	8	MID	21.19	22.27	1.08
3	20525	836.5	Q16	8	HIGH	21.69	21.94	0.25
3	20525	836.5	Q16	15	LOW	21.05	22.73	1.68
3	20635	847.5	QPSK	1	LOW	21.77	22.66	0.89
3	20635	847.5	QPSK	1	MID	21.69	22.4	0.71
3	20635	847.5	QPSK	1	HIGH	21.32	21.91	0.59

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
3	20635	847.5	QPSK	8	LOW	21.26	22.24	0.98
3	20635	847.5	QPSK	8	MID	20.91	22.4	1.49
3	20635	847.5	QPSK	8	HIGH	21.03	22.8	1.77
3	20635	847.5	QPSK	15	LOW	20.87	22.51	1.64
3	20635	847.5	Q16	1	LOW	21.27	22.64	1.37
3	20635	847.5	Q16	1	MID	21.56	22.59	1.03
3	20635	847.5	Q16	1	HIGH	21.75	22.29	0.54
3	20635	847.5	Q16	8	LOW	21.36	22.77	1.41
3	20635	847.5	Q16	8	MID	21.74	22.59	0.85
3	20635	847.5	Q16	8	HIGH	20.95	22.23	1.28
3	20635	847.5	Q16	15	LOW	21.4	22.62	1.22
5	20425	826.5	QPSK	1	LOW	21.74	21.83	0.09
5	20425	826.5	QPSK	1	MID	21.12	22.05	0.93
5	20425	826.5	QPSK	1	HIGH	20.95	22.08	1.13
5	20425	826.5	QPSK	12	LOW	21.49	22.12	0.63
5	20425	826.5	QPSK	12	MID	21.27	22.48	1.21
5	20425	826.5	QPSK	12	HIGH	20.81	22.52	1.71
5	20425	826.5	QPSK	25	LOW	21.31	22.66	1.35
5	20425	826.5	Q16	1	LOW	21.05	22.13	1.08
5	20425	826.5	Q16	1	MID	20.81	22.27	1.46
5	20425	826.5	Q16	1	HIGH	20.96	22.23	1.27
5	20425	826.5	Q16	12	LOW	20.9	21.96	1.06
5	20425	826.5	Q16	12	MID	21.48	22.38	0.9
5	20425	826.5	Q16	12	HIGH	21.71	22.72	1.01
5	20425	826.5	Q16	25	LOW	21.05	21.99	0.94
5	20525	836.5	QPSK	1	LOW	21.23	22.71	1.48
5	20525	836.5	QPSK	1	MID	21.75	22.57	0.82
5	20525	836.5	QPSK	1	HIGH	21.16	22.73	1.57
5	20525	836.5	QPSK	12	LOW	21.71	21.88	0.17
5	20525	836.5	QPSK	12	MID	21.32	22.38	1.06
5	20525	836.5	QPSK	12	HIGH	21	21.84	0.84
5	20525	836.5	QPSK	25	LOW	20.9	22.19	1.29
5	20525	836.5	Q16	1	LOW	21.32	21.9	0.58
5	20525	836.5	Q16	1	MID	21.04	22.33	1.29
5	20525	836.5	Q16	1	HIGH	21.27	22.39	1.12
5	20525	836.5	Q16	12	LOW	21.35	22.75	1.4
5	20525	836.5	Q16	12	MID	21.53	22.69	1.16

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
5	20525	836.5	Q16	12	HIGH	21.31	22.59	1.28
5	20525	836.5	Q16	25	LOW	21.48	22.72	1.24
5	20625	846.5	QPSK	1	LOW	21.36	21.96	0.6
5	20625	846.5	QPSK	1	MID	21.02	22.59	1.57
5	20625	846.5	QPSK	1	HIGH	21.78	21.89	0.11
5	20625	846.5	QPSK	12	LOW	21.02	21.83	0.81
5	20625	846.5	QPSK	12	MID	21.56	21.89	0.33
5	20625	846.5	QPSK	12	HIGH	21.25	22.32	1.07
5	20625	846.5	QPSK	25	LOW	20.95	22.23	1.28
5	20625	846.5	Q16	1	LOW	21.28	22.22	0.94
5	20625	846.5	Q16	1	MID	20.97	22.05	1.08
5	20625	846.5	Q16	1	HIGH	21.36	22.32	0.96
5	20625	846.5	Q16	12	LOW	20.98	22.67	1.69
5	20625	846.5	Q16	12	MID	21.18	22.67	1.49
5	20625	846.5	Q16	12	HIGH	21.51	22.64	1.13
5	20625	846.5	Q16	25	LOW	21.71	22.63	0.92
10	20450	829	QPSK	1	LOW	21.08	22.1	1.02
10	20450	829	QPSK	1	MID	21.43	22.4	0.97
10	20450	829	QPSK	1	HIGH	21.06	22.28	1.22
10	20450	829	QPSK	25	LOW	21.03	22.72	1.69
10	20450	829	QPSK	25	MID	21.36	22.03	0.67
10	20450	829	QPSK	25	HIGH	21.59	22.26	0.67
10	20450	829	QPSK	50	LOW	20.9	22.08	1.18
10	20450	829	Q16	1	LOW	20.88	22.55	1.67
10	20450	829	Q16	1	MID	21.38	22.7	1.32
10	20450	829	Q16	1	HIGH	21.61	22.5	0.89
10	20450	829	Q16	25	LOW	21.56	22.59	1.03
10	20450	829	Q16	25	MID	21.78	22.47	0.69
10	20450	829	Q16	25	HIGH	21.02	21.97	0.95
10	20450	829	Q16	50	LOW	20.85	22.67	1.82
10	20525	836.5	QPSK	1	LOW	20.98	22.54	1.56
10	20525	836.5	QPSK	1	MID	21.58	21.92	0.34
10	20525	836.5	QPSK	1	HIGH	21.41	22.47	1.06
10	20525	836.5	QPSK	25	LOW	21.56	22.17	0.61
10	20525	836.5	QPSK	25	MID	20.82	22.46	1.64
10	20525	836.5	QPSK	25	HIGH	21.66	22.07	0.41
10	20525	836.5	QPSK	50	LOW	21.65	22.69	1.04

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
10	20525	836.5	Q16	1	LOW	21.68	22.15	0.47
10	20525	836.5	Q16	1	MID	20.9	22.47	1.57
10	20525	836.5	Q16	1	HIGH	21.78	22.33	0.55
10	20525	836.5	Q16	25	LOW	21.01	21.86	0.85
10	20525	836.5	Q16	25	MID	21.64	22.4	0.76
10	20525	836.5	Q16	25	HIGH	21.8	22.37	0.57
10	20525	836.5	Q16	50	LOW	21.63	22.13	0.5
10	20600	844	QPSK	1	LOW	21.56	22.17	0.61
10	20600	844	QPSK	1	MID	20.84	22.59	1.75
10	20600	844	QPSK	1	HIGH	20.87	21.92	1.05
10	20600	844	QPSK	25	LOW	21.29	22.56	1.27
10	20600	844	QPSK	25	MID	21.23	22.13	0.9
10	20600	844	QPSK	25	HIGH	21.56	22.69	1.13
10	20600	844	QPSK	50	LOW	20.94	22.43	1.49
10	20600	844	Q16	1	LOW	21.66	22.42	0.76
10	20600	844	Q16	1	MID	21.09	21.94	0.85
10	20600	844	Q16	1	HIGH	21.42	22.81	1.39
10	20600	844	Q16	25	LOW	21.61	22.36	0.75
10	20600	844	Q16	25	MID	20.87	22.47	1.6
10	20600	844	Q16	25	HIGH	21.35	22.62	1.27
10	20600	844	Q16	50	LOW	21.67	22.6	0.93

BAND 7:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
5	20775	2502.5	QPSK	1	LOW	21.36	22.28	0.92
5	20775	2502.5	QPSK	1	MID	21.53	22.17	0.64
5	20775	2502.5	QPSK	1	HIGH	21.25	22.35	1.1
5	20775	2502.5	QPSK	12	LOW	21.32	21.99	0.67
5	20775	2502.5	QPSK	12	MID	21.38	21.88	0.5
5	20775	2502.5	QPSK	12	HIGH	20.79	21.74	0.95
5	20775	2502.5	QPSK	25	LOW	20.77	21.92	1.15
5	20775	2502.5	Q16	1	LOW	21.48	22.57	1.09
5	20775	2502.5	Q16	1	MID	21.09	22.38	1.29
5	20775	2502.5	Q16	1	HIGH	20.73	22.27	1.54
5	20775	2502.5	Q16	12	LOW	20.87	22.28	1.41
5	20775	2502.5	Q16	12	MID	20.93	21.87	0.94
5	20775	2502.5	Q16	12	HIGH	21.1	21.59	0.49
5	20775	2502.5	Q16	25	LOW	21.02	22.39	1.37
5	21100	2535	QPSK	1	LOW	21	22.1	1.1
5	21100	2535	QPSK	1	MID	21.03	22.36	1.33
5	21100	2535	QPSK	1	HIGH	21.53	21.99	0.46
5	21100	2535	QPSK	12	LOW	21.06	21.96	0.9
5	21100	2535	QPSK	12	MID	20.9	22.37	1.47
5	21100	2535	QPSK	12	HIGH	20.62	22.51	1.89
5	21100	2535	QPSK	25	LOW	21.02	21.87	0.85
5	21100	2535	Q16	1	LOW	21.48	22.57	1.09
5	21100	2535	Q16	1	MID	21.09	22.38	1.29
5	21100	2535	Q16	1	HIGH	20.73	22.27	1.54
5	21100	2535	Q16	12	LOW	20.87	22.28	1.41
5	21100	2535	Q16	12	MID	20.93	21.87	0.94
5	21100	2535	Q16	12	HIGH	21.1	21.59	0.49
5	21100	2535	Q16	25	LOW	21.02	22.39	1.37
5	21425	2567.5	QPSK	1	LOW	20.97	22.23	1.26
5	21425	2567.5	QPSK	1	MID	20.92	22.12	1.2
5	21425	2567.5	QPSK	1	HIGH	20.93	22.57	1.64
5	21425	2567.5	QPSK	12	LOW	20.68	21.88	1.2
5	21425	2567.5	QPSK	12	MID	20.57	21.84	1.27
5	21425	2567.5	QPSK	12	HIGH	20.87	21.85	0.98
5	21425	2567.5	QPSK	25	LOW	21.4	21.6	0.2
5	21425	2567.5	Q16	1	LOW	21.48	22.57	1.09
5	21425	2567.5	Q16	1	MID	21.09	22.38	1.29

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
5	21425	2567.5	Q16	1	HIGH	20.73	22.27	1.54
5	21425	2567.5	Q16	12	LOW	20.87	22.28	1.41
5	21425	2567.5	Q16	12	MID	20.93	21.87	0.94
5	21425	2567.5	Q16	12	HIGH	21.1	21.59	0.49
5	21425	2567.5	Q16	25	LOW	21.02	22.39	1.37
10	20800	2505	QPSK	1	LOW	21.41	21.93	0.52
10	20800	2505	QPSK	1	MID	20.79	22.57	1.78
10	20800	2505	QPSK	1	HIGH	20.69	21.85	1.16
10	20800	2505	QPSK	25	LOW	21.35	22.36	1.01
10	20800	2505	QPSK	25	MID	21.5	22.22	0.72
10	20800	2505	QPSK	25	HIGH	21.4	21.78	0.38
10	20800	2505	QPSK	50	LOW	20.65	22.21	1.56
10	20800	2505	Q16	1	LOW	20.77	21.91	1.14
10	20800	2505	Q16	1	MID	20.95	21.67	0.72
10	20800	2505	Q16	1	HIGH	20.92	21.63	0.71
10	20800	2505	Q16	25	LOW	21.35	22.07	0.72
10	20800	2505	Q16	25	MID	20.57	21.63	1.06
10	20800	2505	Q16	25	HIGH	21.52	22.2	0.68
10	20800	2505	Q16	50	LOW	20.79	22.11	1.32
10	21100	2535	QPSK	1	LOW	21.42	22.02	0.6
10	21100	2535	QPSK	1	MID	20.81	22.56	1.75
10	21100	2535	QPSK	1	HIGH	21.42	21.9	0.48
10	21100	2535	QPSK	25	LOW	21.18	21.79	0.61
10	21100	2535	QPSK	25	MID	20.56	22.09	1.53
10	21100	2535	QPSK	25	HIGH	20.74	21.86	1.12
10	21100	2535	QPSK	50	LOW	21.37	22.27	0.9
10	21100	2535	Q16	1	LOW	20.62	22.53	1.91
10	21100	2535	Q16	1	MID	21.19	22.39	1.2
10	21100	2535	Q16	1	HIGH	20.94	21.61	0.67
10	21100	2535	Q16	25	LOW	20.92	21.75	0.83
10	21100	2535	Q16	25	MID	20.57	22.06	1.49
10	21100	2535	Q16	25	HIGH	20.73	21.86	1.13
10	21100	2535	Q16	50	LOW	20.96	21.94	0.98
10	21400	2565	QPSK	1	LOW	21.24	22.1	0.86
10	21400	2565	QPSK	1	MID	20.72	22.47	1.75
10	21400	2565	QPSK	1	HIGH	20.92	22.43	1.51
10	21400	2565	QPSK	25	LOW	20.93	21.94	1.01
10	21400	2565	QPSK	25	MID	21.11	22.57	1.46

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
10	21400	2565	QPSK	25	HIGH	20.85	22.09	1.24
10	21400	2565	QPSK	50	LOW	20.99	22.3	1.31
10	21400	2565	Q16	1	LOW	21.14	21.91	0.77
10	21400	2565	Q16	1	MID	21.46	22.51	1.05
10	21400	2565	Q16	1	HIGH	21.25	21.99	0.74
10	21400	2565	Q16	25	LOW	20.56	21.95	1.39
10	21400	2565	Q16	25	MID	21.17	21.88	0.71
10	21400	2565	Q16	25	HIGH	21.22	22.41	1.19
10	21400	2565	Q16	50	LOW	21.1	21.86	0.76
15	20825	2507.5	QPSK	1	LOW	21.43	21.72	0.29
15	20825	2507.5	QPSK	1	MID	21.02	21.98	0.96
15	20825	2507.5	QPSK	1	HIGH	20.69	22.13	1.44
15	20825	2507.5	QPSK	36	LOW	21.15	22.37	1.22
15	20825	2507.5	QPSK	36	MID	21.09	21.97	0.88
15	20825	2507.5	QPSK	36	HIGH	20.67	22.33	1.66
15	20825	2507.5	QPSK	75	LOW	20.9	21.88	0.98
15	20825	2507.5	Q16	1	LOW	21.01	22.22	1.21
15	20825	2507.5	Q16	1	MID	20.97	22.45	1.48
15	20825	2507.5	Q16	1	HIGH	20.93	21.6	0.67
15	20825	2507.5	Q16	36	LOW	20.57	22.43	1.86
15	20825	2507.5	Q16	36	MID	20.57	22.34	1.77
15	20825	2507.5	Q16	36	HIGH	20.58	22.54	1.96
15	20825	2507.5	Q16	75	LOW	20.92	21.96	1.04
15	21100	2535	QPSK	1	LOW	20.57	21.74	1.17
15	21100	2535	QPSK	1	MID	21.34	21.82	0.48
15	21100	2535	QPSK	1	HIGH	20.97	22.28	1.31
15	21100	2535	QPSK	36	LOW	21.48	21.94	0.46
15	21100	2535	QPSK	36	MID	21.28	21.67	0.39
15	21100	2535	QPSK	36	HIGH	21.42	21.79	0.37
15	21100	2535	QPSK	75	LOW	20.98	21.7	0.72
15	21100	2535	Q16	1	LOW	20.99	22.32	1.33
15	21100	2535	Q16	1	MID	20.71	21.58	0.87
15	21100	2535	Q16	1	HIGH	21.5	21.6	0.1
15	21100	2535	Q16	36	LOW	20.7	21.95	1.25
15	21100	2535	Q16	36	MID	20.8	22.31	1.51
15	21100	2535	Q16	36	HIGH	21.06	21.63	0.57
15	21100	2535	Q16	75	LOW	21.39	22.08	0.69
15	21375	2562.5	QPSK	1	LOW	20.6	22.11	1.51

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
15	21375	2562.5	QPSK	1	MID	21.04	22.42	1.38
15	21375	2562.5	QPSK	1	HIGH	20.8	21.68	0.88
15	21375	2562.5	QPSK	36	LOW	21.09	22.23	1.14
15	21375	2562.5	QPSK	36	MID	21.31	22.09	0.78
15	21375	2562.5	QPSK	36	HIGH	21.25	21.59	0.34
15	21375	2562.5	QPSK	75	LOW	21.41	22.22	0.81
15	21375	2562.5	Q16	1	LOW	20.75	22.48	1.73
15	21375	2562.5	Q16	1	MID	20.83	22.46	1.63
15	21375	2562.5	Q16	1	HIGH	20.84	22.34	1.5
15	21375	2562.5	Q16	36	LOW	21.39	22.52	1.13
15	21375	2562.5	Q16	36	MID	20.92	22.45	1.53
15	21375	2562.5	Q16	36	HIGH	20.93	21.64	0.71
15	21375	2562.5	Q16	75	LOW	21.22	21.77	0.55
20	20850	2510	QPSK	1	LOW	21.36	22.01	0.65
20	20850	2510	QPSK	1	MID	21.41	22.57	1.16
20	20850	2510	QPSK	1	HIGH	21.15	22.53	1.38
20	20850	2510	QPSK	50	LOW	20.78	22.1	1.32
20	20850	2510	QPSK	50	MID	20.85	21.7	0.85
20	20850	2510	QPSK	50	HIGH	20.92	22.31	1.39
20	20850	2510	QPSK	100	LOW	20.8	22.47	1.67
20	20850	2510	Q16	1	LOW	20.98	21.75	0.77
20	20850	2510	Q16	1	MID	20.59	22.45	1.86
20	20850	2510	Q16	1	HIGH	21.39	21.7	0.31
20	20850	2510	Q16	50	LOW	20.91	22.18	1.27
20	20850	2510	Q16	50	MID	21.25	22.06	0.81
20	20850	2510	Q16	50	HIGH	20.93	22.12	1.19
20	20850	2510	Q16	100	LOW	21.05	21.63	0.58
20	21100	2535	QPSK	1	LOW	21.08	22.42	1.34
20	21100	2535	QPSK	1	MID	20.78	22.28	1.5
20	21100	2535	QPSK	1	HIGH	21.49	22.08	0.59
20	21100	2535	QPSK	50	LOW	20.65	22.19	1.54
20	21100	2535	QPSK	50	MID	21.29	22.35	1.06
20	21100	2535	QPSK	50	HIGH	20.91	22.38	1.47
20	21100	2535	QPSK	100	LOW	21.02	22.45	1.43
20	21100	2535	Q16	1	LOW	21.52	22.02	0.5
20	21100	2535	Q16	1	MID	20.63	21.9	1.27
20	21100	2535	Q16	1	HIGH	20.78	22.09	1.31
20	21100	2535	Q16	50	LOW	20.72	21.76	1.04

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Average (dBm)	Peak (dBm)	PAPR (dB)
20	21100	2535	Q16	50	MID	20.64	21.75	1.11
20	21100	2535	Q16	50	HIGH	20.56	21.98	1.42
20	21100	2535	Q16	100	LOW	20.57	22.55	1.98
20	21350	2560	QPSK	1	LOW	20.94	22.12	1.18
20	21350	2560	QPSK	1	MID	21.42	22.22	0.8
20	21350	2560	QPSK	1	HIGH	21.1	21.89	0.79
20	21350	2560	QPSK	50	LOW	21.22	22.26	1.04
20	21350	2560	QPSK	50	MID	20.81	22.39	1.58
20	21350	2560	QPSK	50	HIGH	20.89	21.96	1.07
20	21350	2560	QPSK	100	LOW	21.22	21.86	0.64
20	21350	2560	Q16	1	LOW	21.14	22.41	1.27
20	21350	2560	Q16	1	MID	20.78	22.4	1.62
20	21350	2560	Q16	1	HIGH	21.26	21.98	0.72
20	21350	2560	Q16	50	LOW	20.65	22.32	1.67
20	21350	2560	Q16	50	MID	20.86	21.8	0.94
20	21350	2560	Q16	50	HIGH	20.68	22.42	1.74
20	21350	2560	Q16	100	LOW	21.03	21.72	0.69

Radiation power test

Note: Record the condition when max power has been detector for radiated method.(X axis)

Radiated Power (ERP) for GSM 850 MHZ				
Mode	Frequency	Result		Conclusion
		Max. Peak ERP (dBm)	Polarization Of Max. ERP	
GSM850	824.2	32.34	Horizontal	Pass
	836.6	32.84	Horizontal	Pass
	848.8	32.45	Horizontal	Pass

Radiated Power (ERP) for EGPRS 850 MHZ				
Mode	Frequency	Result		Conclusion
		Max. Peak ERP (dBm)	Polarization Of Max. ERP	
EGPRS850	824.2	27.80	Horizontal	Pass
	836.6	27.87	Horizontal	Pass
	848.8	27.02	Horizontal	Pass

Radiated Power (E.I.R.P) for PCS 1900 MHZ				
Mode	Frequency	Result		Conclusion
		Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	
GSM 1900	1850.2	28.59	Horizontal	Pass
	1880.0	28.88	Horizontal	Pass
	1909.8	28.96	Horizontal	Pass

Radiated Power (E.I.R.P) for PCS 1900 MHZ				
Mode	Frequency	Result		Conclusion
		Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	
EGPRS 1900	1850.2	25.42	Horizontal	Pass
	1880.0	25.36	Horizontal	Pass
	1909.8	25.33	Horizontal	Pass

Radiated Power (E.I.R.P) for UTRA Band 2				
Mode	Frequency	Result		Conclusion
		Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	
UTRA Band 2	1852.4	22.47	Horizontal	Pass
	1880	22.45	Horizontal	Pass
	1907.6	22.39	Horizontal	Pass

Radiated Power (E.I.R.P) for UTRA Band 4				
Mode	Frequency	Result		Conclusion
		Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	
UTRA Band 4	1712.4	22.44	Horizontal	Pass
	1732.6	22.56	Horizontal	Pass
	1752.6	22.64	Horizontal	Pass

Radiated Power (ERP) for UTRA Band 5				
Mode	Frequency	Result		Conclusion
		Max. Peak ERP (dBm)	Polarization Of Max.ERP	
UTRA Band 5	826.4	22.73	Horizontal	Pass
	836.4	22.49	Horizontal	Pass
	846.6	22.38	Horizontal	Pass

LTE power is filtered as the worst mode data

				Result		
Mode	band width	Modulation	Mid Range Frequency(MHz)	Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	Conclusion
			Radiated Power (E.I.R.P) for E-UTRA Band 2			
E-UTRA Band 2	1.4	QPSK	1880	21.42	Horizontal	Pass
		Q16	1880	21.59	Horizontal	Pass
	3	QPSK	1880	21.70	Horizontal	Pass
		Q16	1880	21.85	Horizontal	Pass
	5	QPSK	1880	21.29	Horizontal	Pass
		Q16	1880	21.38	Horizontal	Pass
	10	QPSK	1880	21.94	Horizontal	Pass
		Q16	1880	21.43	Horizontal	Pass
	15	QPSK	1880	21.31	Horizontal	Pass
		Q16	1880	21.83	Horizontal	Pass
	20	QPSK	1880	21.32	Horizontal	Pass
		Q16	1880	21.80	Horizontal	Pass

				Result		
Mode	band width	Modulation	Mid Range Frequency(MHz)	Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	Conclusion
			Radiated Power (E.I.R.P) for E-UTRA Band 4			
E-UTRA Band 4	1.4	QPSK	1732.5	21.92	Horizontal	Pass
		Q16	1732.5	21.72	Horizontal	Pass
	3	QPSK	1732.5	21.20	Horizontal	Pass
		Q16	1732.5	21.83	Horizontal	Pass
	5	QPSK	1732.5	21.18	Horizontal	Pass
		Q16	1732.5	21.74	Horizontal	Pass
	10	QPSK	1732.5	21.29	Horizontal	Pass
		Q16	1732.5	21.34	Horizontal	Pass
	15	QPSK	1732.5	21.71	Horizontal	Pass
		Q16	1732.5	21.38	Horizontal	Pass
	20	QPSK	1732.5	21.80	Horizontal	Pass
		Q16	1732.5	21.29	Horizontal	Pass

Radiated Power (ERP) for E-UTRA Band 5						
Mode	band width	Modulation	Mid Range Frequency(MHz)	Result		Conclusion
				Max. Peak (ERP) (dBm)	Polarization Of Max(ERP)	
E-UTRA Band 5	1.4	QPSK	836.5	21.33	Horizontal	Pass
		Q16	836.5	21.59	Horizontal	Pass
	3	QPSK	836.5	21.88	Horizontal	Pass
		Q16	836.5	21.45	Horizontal	Pass
	5	QPSK	836.5	21.61	Horizontal	Pass
		Q16	836.5	21.20	Horizontal	Pass
	10	QPSK	836.5	21.68	Horizontal	Pass
		Q16	836.5	21.57	Horizontal	Pass

Radiated Power (E.I.R.P) for E-UTRA Band 7						
Mode	band width	Modulation	Mid Range Frequency(MHz)	Result		Conclusion
				Max. Peak E.I.R.P.(dBm)	Polarization Of Max. E.I.R.P.	
E-UTRA Band 7	5	QPSK	2535	22.16	Horizontal	Pass
		Q16	2535	21.70	Horizontal	Pass
	10	QPSK	2535	22.09	Horizontal	Pass
		Q16	2535	21.69	Horizontal	Pass
	15	QPSK	2535	21.41	Horizontal	Pass
		Q16	2535	21.50	Horizontal	Pass
	20	QPSK	2535	21.82	Horizontal	Pass
		Q16	2535	21.81	Horizontal	Pass

5 SPURIOUS EMISSION (Conducted and Radiated)

5.1 Measurement Result (Pre-measurement)

GSM850:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	0.2	128	824.2	Pass
Middle Range	0.2	190	836.6	Pass
High Range	0.2	251	848.8	Pass

PCS 1900：

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	0.2	512	1850.2	Pass
Middle Range	0.2	661	1880.0	Pass
High Range	0.2	810	1909.8	Pass

UTRA BANDS

BAND 2:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	5	9262	1852.4	Pass
Middle Range	5	9400	1880.0	Pass
High Range	5	9538	1907.6	Pass

BAND 4:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	5	1312	1712.4	Pass
Middle Range	5	1413	1732.6	Pass
High Range	5	1513	1752.6	Pass

BAND 5:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	5	4132	826.4	Pass
Middle Range	5	4182	836.4	Pass
High Range	5	4233	846.6	Pass

E-UTRA BANDS

BAND 2:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	18607	1850.7	QPSK	6	LOW	Pass
1.4	18607	1850.7	Q16	6	LOW	Pass
1.4	18900	1880	QPSK	6	LOW	Pass
1.4	18900	1880	Q16	6	LOW	Pass
1.4	19193	1909.3	QPSK	6	LOW	Pass
1.4	19193	1909.3	Q16	6	LOW	Pass
3	18615	1851.5	QPSK	15	LOW	Pass
3	18615	1851.5	Q16	15	LOW	Pass
3	18900	1880	QPSK	15	LOW	Pass
3	18900	1880	Q16	15	LOW	Pass
3	19185	1908.5	QPSK	15	LOW	Pass
3	19185	1908.5	Q16	15	LOW	Pass
5	18625	1852.5	QPSK	25	LOW	Pass
5	18625	1852.5	Q16	25	LOW	Pass
5	18900	1880	QPSK	25	LOW	Pass
5	18900	1880	Q16	25	LOW	Pass
5	19175	1907.5	QPSK	25	LOW	Pass
5	19175	1907.5	Q16	25	LOW	Pass
10	18650	1855	QPSK	50	LOW	Pass
10	18650	1855	Q16	50	LOW	Pass
10	18900	1880	QPSK	50	LOW	Pass
10	18900	1880	Q16	50	LOW	Pass
10	19150	1905	QPSK	50	LOW	Pass
10	19150	1905	Q16	50	LOW	Pass
15	18675	1857.5	QPSK	75	LOW	Pass
15	18675	1857.5	Q16	75	LOW	Pass
15	18900	1880	QPSK	75	LOW	Pass
15	18900	1880	Q16	75	LOW	Pass
15	19125	1902.5	QPSK	75	LOW	Pass
15	19125	1902.5	Q16	75	LOW	Pass
20	18700	1860	QPSK	100	LOW	Pass
20	18700	1860	Q16	100	LOW	Pass
20	18900	1880	QPSK	100	LOW	Pass
20	18900	1880	Q16	100	LOW	Pass
20	19100	1900	QPSK	100	LOW	Pass

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
20	19100	1900	Q16	100	LOW	Pass

BAND 4:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	19957	1710.7	QPSK	6	LOW	Pass
1.4	19957	1710.7	Q16	6	LOW	Pass
1.4	20393	1754.3	QPSK	6	LOW	Pass
1.4	20393	1754.3	Q16	6	LOW	Pass
1.4	20175	1732.5	QPSK	6	LOW	Pass
1.4	20175	1732.5	Q16	6	LOW	Pass
3	19965	1711.5	QPSK	15	LOW	Pass
3	19965	1711.5	Q16	15	LOW	Pass
3	20385	1753.5	QPSK	15	LOW	Pass
3	20385	1753.5	Q16	15	LOW	Pass
3	20175	1732.5	QPSK	15	LOW	Pass
3	20175	1732.5	Q16	15	LOW	Pass
5	19975	1712.5	QPSK	25	LOW	Pass
5	19975	1712.5	Q16	25	LOW	Pass
5	20375	1752.5	QPSK	25	LOW	Pass
5	20375	1752.5	Q16	25	LOW	Pass
5	20175	1732.5	QPSK	25	LOW	Pass
5	20175	1732.5	Q16	25	LOW	Pass
10	20000	1715	QPSK	50	LOW	Pass
10	20000	1715	Q16	50	LOW	Pass
10	20350	1750	QPSK	50	LOW	Pass
10	20350	1750	Q16	50	LOW	Pass
10	20175	1732.5	QPSK	50	LOW	Pass
10	20175	1732.5	Q16	50	LOW	Pass
15	20025	1717.5	QPSK	75	LOW	Pass
15	20025	1717.5	Q16	75	LOW	Pass
15	20325	1747.5	QPSK	75	LOW	Pass
15	20325	1747.5	Q16	75	LOW	Pass
15	20175	1732.5	QPSK	75	LOW	Pass
15	20175	1732.5	Q16	75	LOW	Pass
20	20050	1720	QPSK	100	LOW	Pass
20	20050	1720	Q16	100	LOW	Pass
20	20300	1745	QPSK	100	LOW	Pass

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
20	20300	1745	Q16	100	LOW	Pass
20	20175	1732.5	QPSK	100	LOW	Pass
20	20175	1732.5	Q16	100	LOW	Pass

BAND 5:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	20470	824.7	QPSK	6	LOW	Pass
1.4	20470	824.7	Q16	6	LOW	Pass
1.4	20525	836.5	QPSK	6	LOW	Pass
1.4	20525	836.5	Q16	6	LOW	Pass
1.4	20643	848.3	QPSK	6	LOW	Pass
1.4	20643	848.3	Q16	6	LOW	Pass
3	20415	825.5	QPSK	15	LOW	Pass
3	20415	825.5	Q16	15	LOW	Pass
3	20525	836.5	QPSK	15	LOW	Pass
3	20525	836.5	Q16	15	LOW	Pass
3	20635	847.5	QPSK	15	LOW	Pass
3	20635	847.5	Q16	15	LOW	Pass
5	20425	826.5	QPSK	25	LOW	Pass
5	20425	826.5	Q16	25	LOW	Pass
5	20525	836.5	QPSK	25	LOW	Pass
5	20525	836.5	Q16	25	LOW	Pass
5	20625	846.5	QPSK	25	LOW	Pass
5	20625	846.5	Q16	25	LOW	Pass
10	20450	829	QPSK	50	LOW	Pass
10	20450	829	Q16	50	LOW	Pass
10	20525	836.5	QPSK	50	LOW	Pass
10	20525	836.5	Q16	50	LOW	Pass
10	20600	844	QPSK	50	LOW	Pass
10	20600	844	Q16	50	LOW	Pass

BAND 7:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
5	20775	2502.5	QPSK	25	LOW	Pass
5	20775	2502.5	Q16	25	LOW	Pass
5	21425	2567.5	QPSK	25	LOW	Pass
5	21425	2567.5	Q16	25	LOW	Pass
5	21100	2535	QPSK	25	LOW	Pass
5	21100	2535	QPSK	25	LOW	Pass
10	20800	2505	QPSK	50	LOW	Pass
10	20800	2505	Q16	50	LOW	Pass
10	21400	2565	QPSK	50	LOW	Pass
10	21400	2565	Q16	50	LOW	Pass
10	21100	2535	QPSK	50	LOW	Pass
10	21100	2535	Q16	50	LOW	Pass
15	20825	2507.5	QPSK	75	LOW	Pass
15	20825	2507.5	Q16	75	LOW	Pass
15	21375	2562.5	QPSK	75	LOW	Pass
15	21375	2562.5	Q16	75	LOW	Pass
15	21100	2535	QPSK	75	LOW	Pass
15	21100	2535	Q16	75	LOW	Pass
20	20850	2510	QPSK	100	LOW	Pass
20	20850	2510	Q16	100	LOW	Pass
20	21350	2560	QPSK	100	LOW	Pass
20	21350	2560	Q16	100	LOW	Pass
20	21100	2535	QPSK	100	LOW	Pass
20	21100	2535	Q16	100	LOW	Pass

Test Plot(s)

5.1.1 Conducted method

Test limit:

The spurious (unwanted) emission limits specified in the individual FCC rule parts applicable to licensed digital transmitters (typically referred to under the heading 'emission limits') normally apply to any and all emissions that are present outside of the authorized frequency band/block and apply to emissions in both the out-of-band and spurious domains. In some rule parts, the unwanted emission limits are specified by an emission mask that defines the applicable limit as a function of the frequency range relative to the authorized frequency block.

Typically, unwanted emissions are required by the licensed rule parts to be attenuated below the transmitter power by a factor of at least $X + 10\log(P)$ dB, where P represents the transmitter power expressed in watts and X is a specified scalar value (e.g., 43). This specification can be interpreted in one of two equivalent ways. First, the required attenuation can be construed to be relative to the mean carrier power, with the resultant of the equation $X + 10\log(P)$ being expressed in dBc (dB relative to the maximum carrier power). Alternatively, the specification can be interpreted as an absolute limit when the specified attenuation is actually subtracted from the maximum permissible transmitter power [i.e., $10\log(P) - \{X + 10\log(P)\}$], resulting in an absolute level of -X dBW [or (-X + 30) dBm]. See section 4.

Test procedure:

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz below 1 GHz and 1 MHz above 1 GHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonics.

Conducted Emission Test-Up:
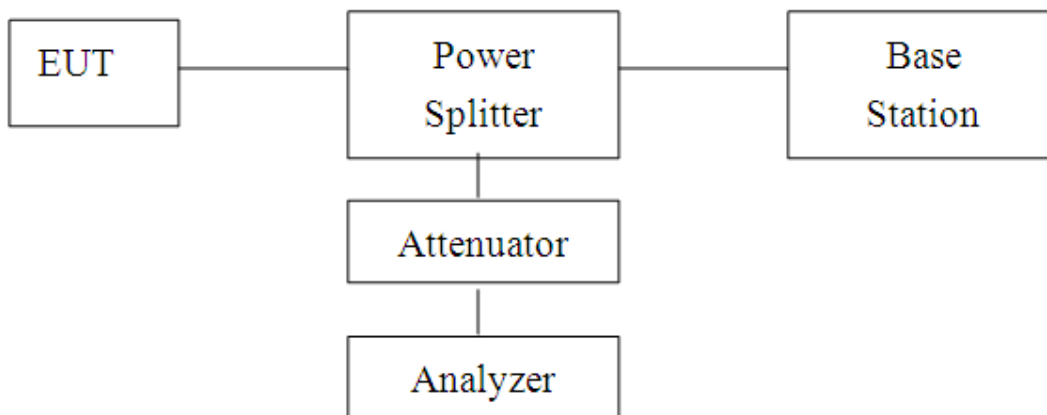
CONDUCTED EMISSION IN GSM850 BAND
Conducted Emission Transmitting Mode CH 128 30MHz – 1GHz

```
                                          *RBW  100 kHz      Marker 2 [T1 ]
                                          *VBW  300 kHz                -43.19 dBm
         Ref   30 dBm        *Att  30 dB  *SWT  100 ms        777.708333333 MHz
```

```
   30                                                  Marker 1 [T1 ]
                                                               26.83 dBm
  -20                                                   825.897435897 MHz    A

1 PK
VIEW
  -10

   0                                                                        TDF

 -10   D1 -13 dBm

 -20                                                                        3DB

 -30

 -40

 -50

 -60

 -70
      Start  30 MHz              97 MHz/              Stop  1 GHz
```
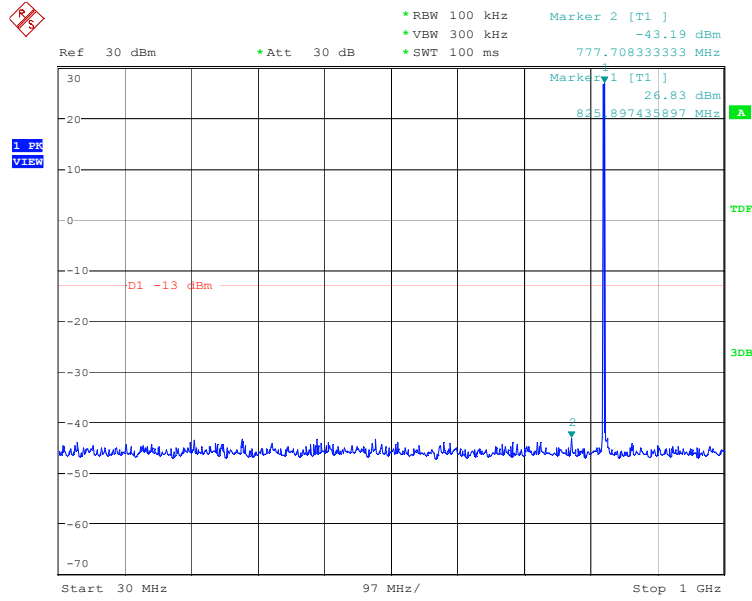
Date: 15.JUN.2017 18:34:17

Conducted Emission Transmitting Mode CH 128 1GHz – 9GHz

```
                                    * RBW  1 MHz      Marker 1 [T1 ]
                                    * VBW  3 MHz              -40.74 dBm
        Ref  30 dBm    * Att  30 dB * SWT  50 ms       1.641025641 GHz
```
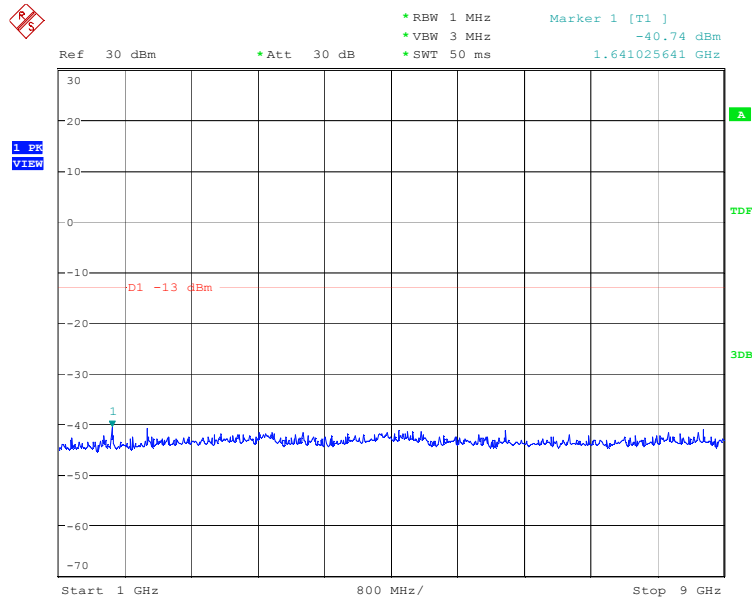
Date: 16.MAY.2017 14:40:28

Conducted Emission Transmitting Mode CH 190 30MHz – 1GHz

```
                                    * RBW  100 kHz    Marker 2 [T1 ]
                                    * VBW  300 kHz            -43.19 dBm
        Ref  30 dBm    * Att  30 dB * SWT  100 ms     944.038461538 MHz
                                                     Marker [T1 ]
                                                            27.09 dBm
                                                     836.778846154 MHz
```

Date: 15.JUN.2017 18:36:04

Report No.: FCC17040291A-5
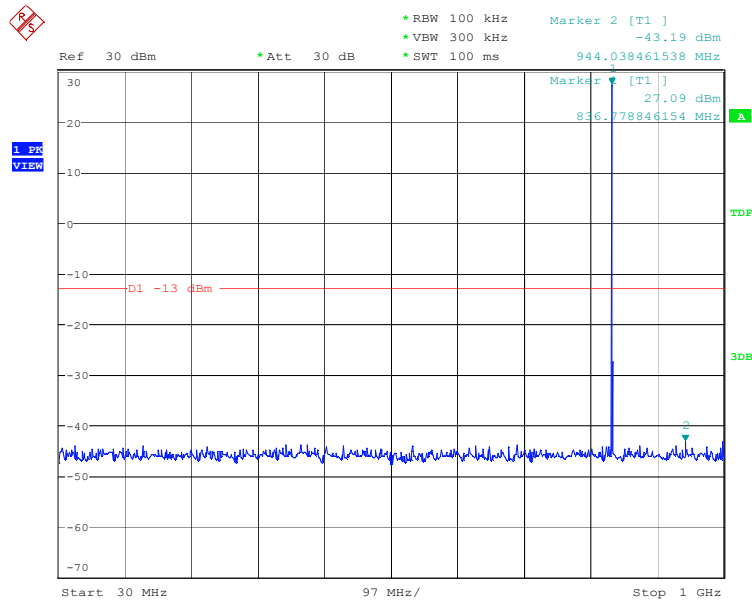
Conducted Emission Transmitting Mode CH 190 1GHz – 9GHz

```
                                    *RBW  1 MHz      Marker 1 [T1 ]
                                    *VBW  3 MHz              -40.47 dBm
          Ref  30 dBm      *Att  30 dB    *SWT  50 ms       4.576923077 GHz
   30                                                                          A
   -20
1 PK
VIEW
   -10
                                                                              TDF
    0

   -10   D1 -13 dBm
   -20
                                                                              3DB
   -30
                                      1
   -40
   -50

   -60

   -70
   Start  1 GHz              800 MHz/                      Stop  9 GHz
```
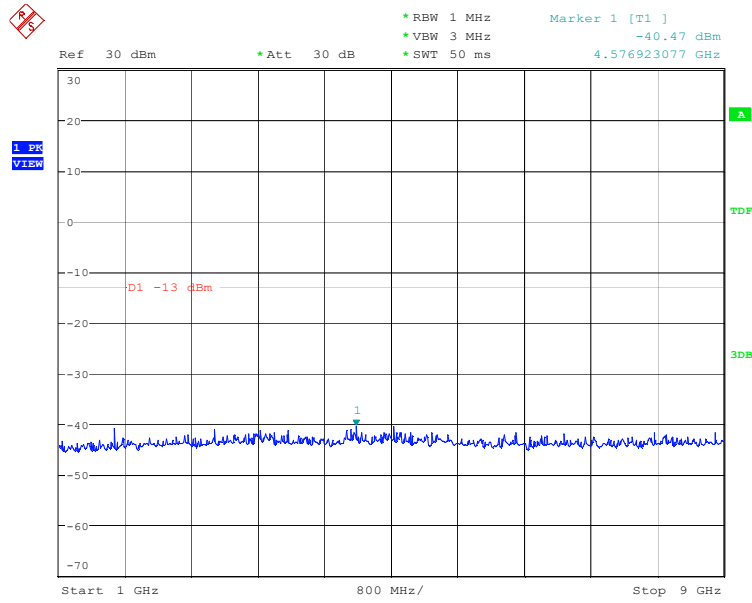
Date: 16.MAY.2017 14:41:33

Conducted Emission Transmitting Mode CH 251 30MHz – 1GHz

```
                                    *RBW  100 kHz    Marker 2 [T1 ]
                                    *VBW  300 kHz            -43.06 dBm
          Ref  30 dBm      *Att  30 dB    *SWT  100 ms      737.291666667 MHz
   30                                            Marker 1 [T1 ]
                                                            27.04 dBm
   -20                                           849.214743590 MHz    A
1 PK
VIEW
   -10
                                                                              TDF
    0

   -10   D1 -13 dBm
   -20
                                                                              3DB
   -30

   -40            2
   -50

   -60

   -70
   Start  30 MHz             97 MHz/                       Stop  1 GHz
```

Date: 15.JUN.2017 18:37:00

Report No.: FCC17040291A-5
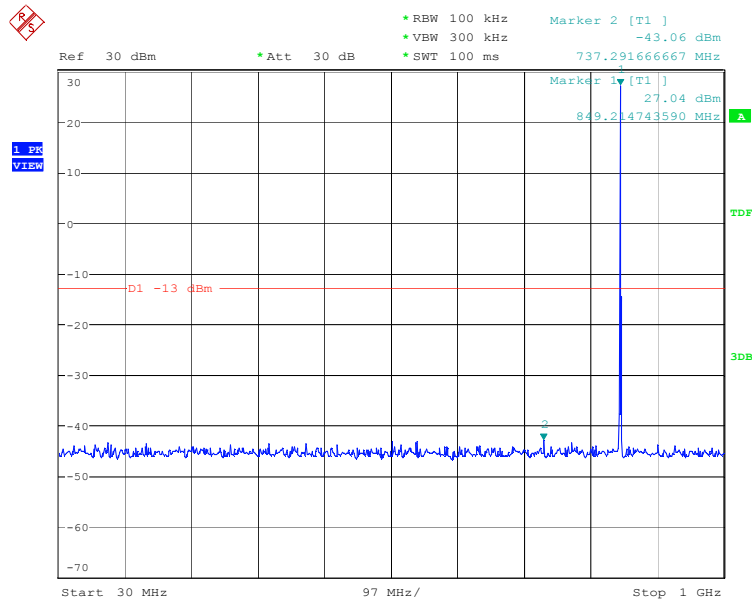
Conducted Emission Transmitting Mode CH 251 1GHz – 9GHz

```
                                      *RBW 1 MHz      Marker 1 [T1 ]
                                      *VBW 3 MHz              -35.40 dBm
Ref  30 dBm          *Att  30 dB      *SWT 50 ms       1.692307692 GHz
```
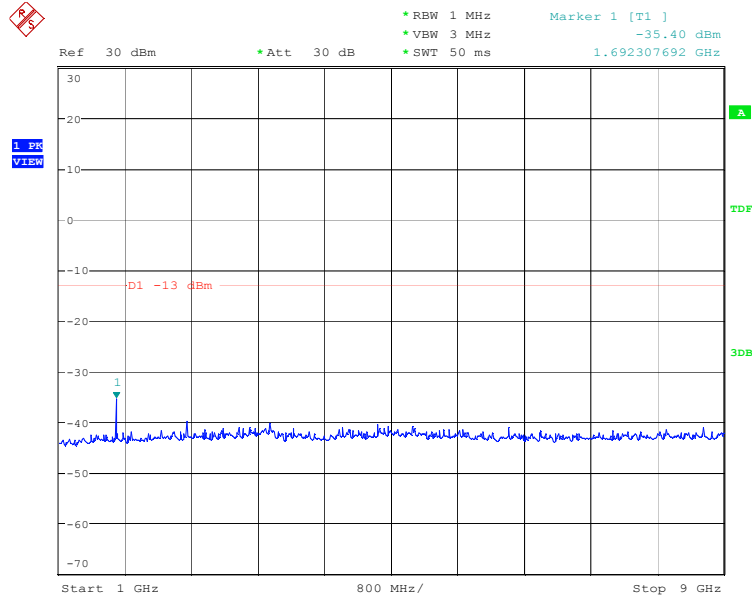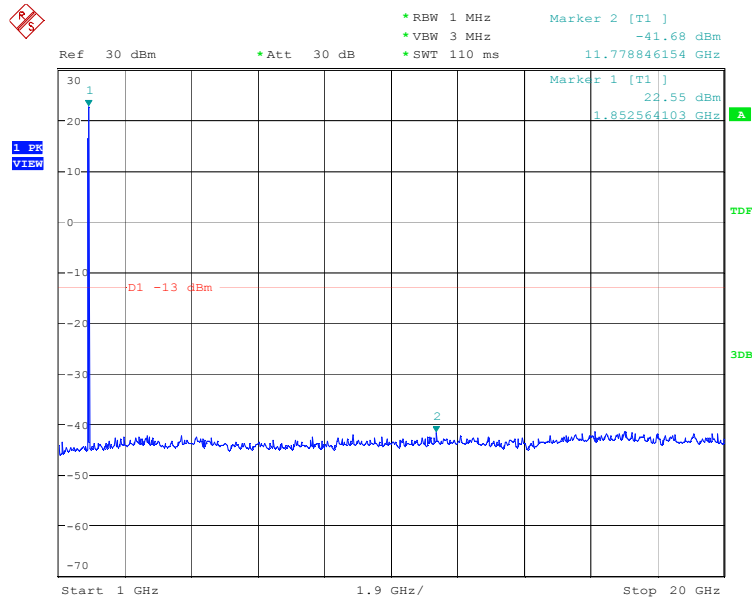
Date: 15.JUN.2017 18:40:15

CONDUCTED EMISSION IN PCS1900 BAND
Conducted Emission Transmitting Mode CH 512 30MHz – 1GHz

```
                                      *RBW 100 kHz     Marker 1 [T1 ]
                                      *VBW 300 kHz            -42.72 dBm
Ref  30 dBm          *Att  30 dB      *SWT 100 ms      818.125000000 MHz
```

Date: 15.JUN.2017 18:42:00

Report No.: FCC17040291A-5
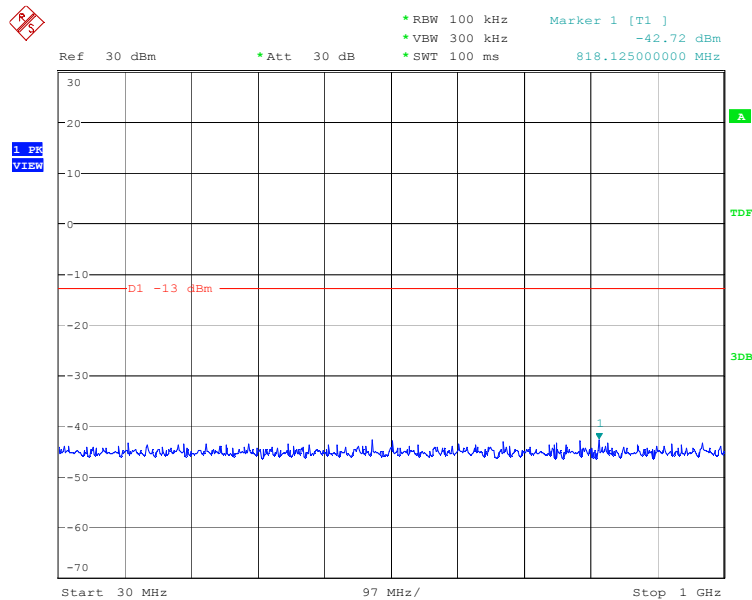
Conducted Emission Transmitting Mode CH 512 1GHz – 20GHz

```
                                        *RBW  1 MHz        Marker 2 [T1 ]
                                        *VBW  3 MHz                -41.68 dBm
          Ref   30 dBm      *Att  30 dB  *SWT 110 ms        11.778846154 GHz
```

```
                                                           Marker 1 [T1 ]
                                                                22.55 dBm
                                                           1.852564103 GHz   A
```

```
  1 PK
  VIEW
```

```
  D1 -13 dBm
```

```
  Start  1 GHz              1.9 GHz/               Stop  20 GHz
```

Date: 15.JUN.2017 18:44:54

Conducted Emission Transmitting Mode CH 661 30MHz – 1GHz

```
                                        *RBW  100 kHz      Marker 1 [T1 ]
                                        *VBW  300 kHz              -45.72 dBm
          Ref   30 dBm      *Att  30 dB  *SWT 100 ms        863.205128205 MHz
```

```
  1 PK
  VIEW
```

```
  D1 -13 dBm
```

```
  Start  30 MHz             97 MHz/                Stop  1 GHz
```

Date: 15.JUN.2017 18:48:41

Report No.: FCC17040291A-5
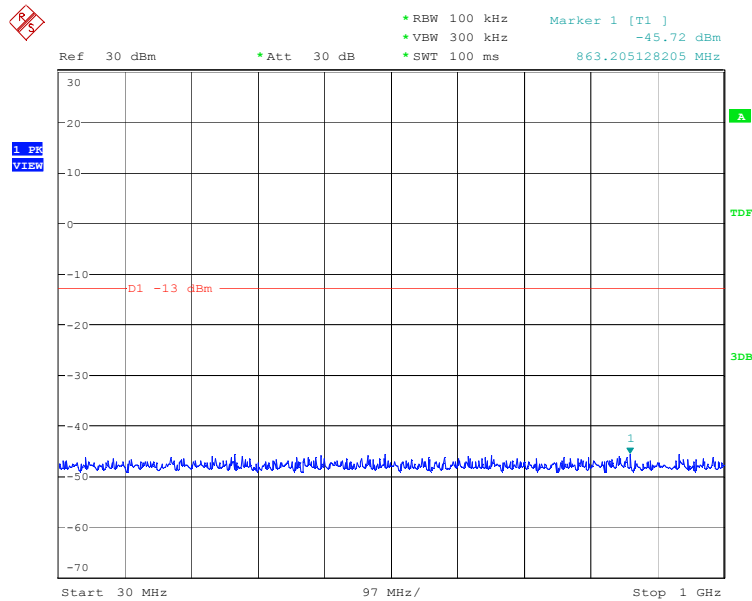
Conducted Emission Transmitting Mode CH 661 1GHz – 20GHz

```
                                    * RBW  1 MHz      Marker 2 [T1 ]
                                    * VBW  3 MHz            -36.92 dBm
   Ref  30 dBm        * Att  30 dB  * SWT 110 ms       5.049679487 GHz
                                                  Marker 1 [T1 ]
    30                                                  22.26 dBm
  1                                                  1.883012821 GHz    A
  20

  1 PK
  VIEW
   10                                                              TDF

    0

  -10
      D1 -13 dBm

  -20                                                              3DB

  -30
               2

  -40

  -50

  -60

  -70
   Start 1 GHz              1.9 GHz/             Stop 20 GHz
```
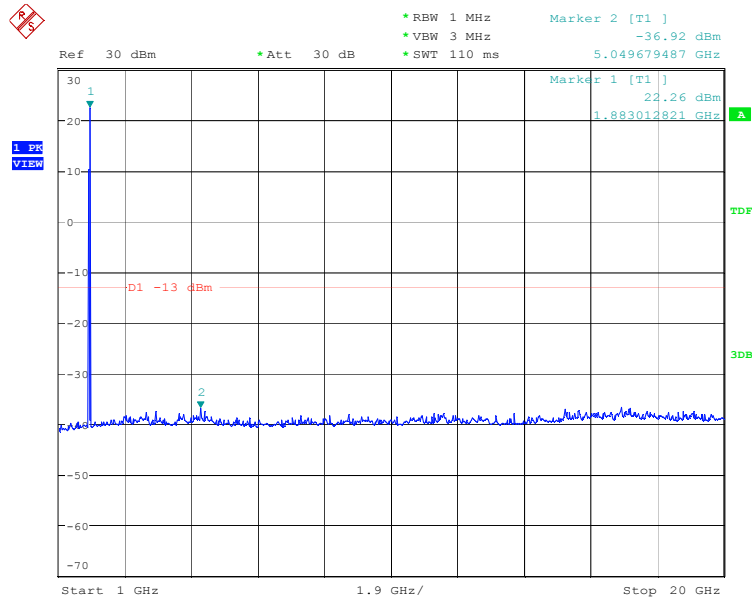
Date: 16.MAY.2017 14:53:53

Conducted Emission Transmitting Mode CH 810 30MHz – 1GHz

```
                                    * RBW  100 kHz    Marker 1 [T1 ]
                                    * VBW  300 kHz          -43.13 dBm
   Ref  30 dBm        * Att  30 dB  * SWT 100 ms      948.701923077 MHz
    30
                                                                     A
  20

  1 PK
  VIEW
   10                                                              TDF

    0

  -10
      D1 -13 dBm

  -20

  -30                                                              3DB

  -40
                                                         1

  -50

  -60

  -70
   Start 30 MHz             97 MHz/              Stop 1 GHz
```

Date: 16.MAY.2017 14:48:10

Report No.: FCC17040291A-5
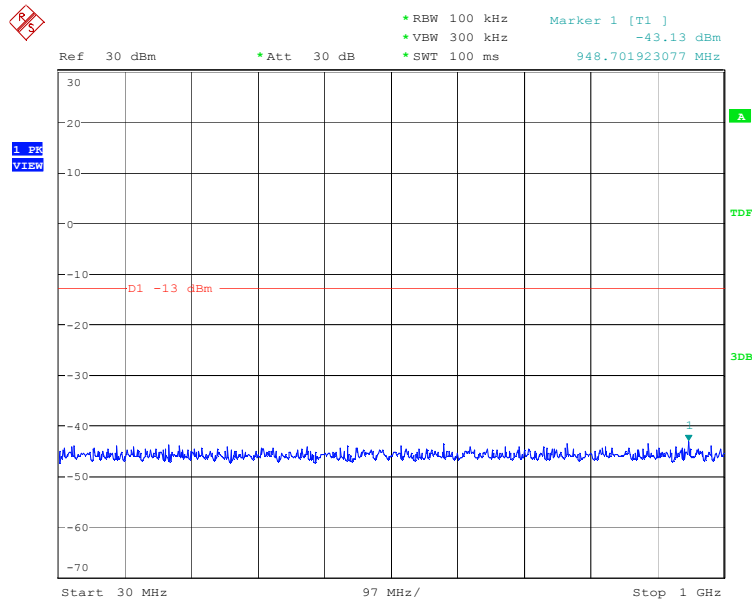
Conducted Emission Transmitting Mode CH 810 1GHz – 20GHz

```
                                    * RBW  1 MHz      Marker 2 [T1 ]
                                    * VBW  3 MHz                  -42.83 dBm
         Ref   30 dBm      * Att  30 dB   * SWT 110 ms      12.966346154 GHz
                                                    Marker 1 [T1 ]
          30                                                     22.07 dBm
           1                                           1.883012821 GHz    A
         -20
1 PK
VIEW     -10
                                                                          TDF
           0

         --10
         D1 -13 dBm
                                                                          3DB
         --20

         --30

         --40            2

         --50

         --60

         --70
         Start 1 GHz              1.9 GHz/              Stop 20 GHz
```
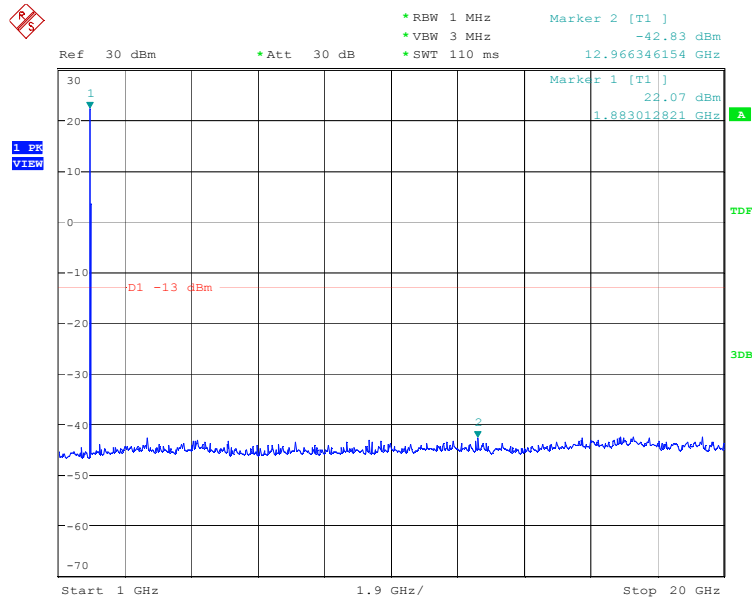
Date: 15.JUN.2017 18:46:23

CONDUCTED EMISSION IN WCDMA Band II
Conducted Emission Transmitting Mode CH 9262 30MHz – 1GHz

```
                                    * RBW  100 kHz    Marker 1 [T1 ]
                                    * VBW  300 kHz               -40.17 dBm
         Ref   30 dBm      * Att  30 dB   * SWT 100 ms      528.990384615 MHz
          30

         -20                                                               A

1 PK
VIEW     -10
                                                                          TDF
           0

         --10
         D1 -13 dBm
                                                                          3DB
         --20

         --30

         --40            1

         --50

         --60

         --70
         Start 30 MHz             97 MHz/               Stop 1 GHz
```

Date: 16.MAY.2017 15:17:12

Report No.: FCC17040291A-5
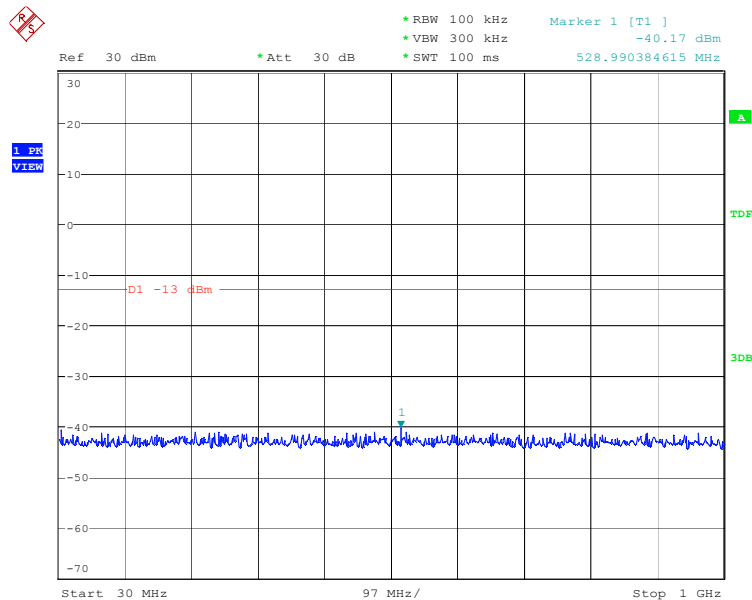
Conducted Emission Transmitting Mode CH 9262 1GHz – 20GHz

```
                                          * RBW  1 MHz       Marker 2 [T1 ]
                                          * VBW  3 MHz               -35.32 dBm
  Ref  30 dBm          * Att  30 dB       * SWT  110 ms      16.650641026 GHz
   30                                               Marker 1 [T1 ]
                                                            15.78 dBm
  -20 1                                              1.852564103 GHz    A
  -10
    0                                                                  TDF
  -10
      D1 -13 dBm
  -20
                                                                      3DB
  -30                                                    2
  -40
  -50
  -60
  -70
  Start  1 GHz                 1.9 GHz/              Stop  20 GHz
```

1 PK VIEW
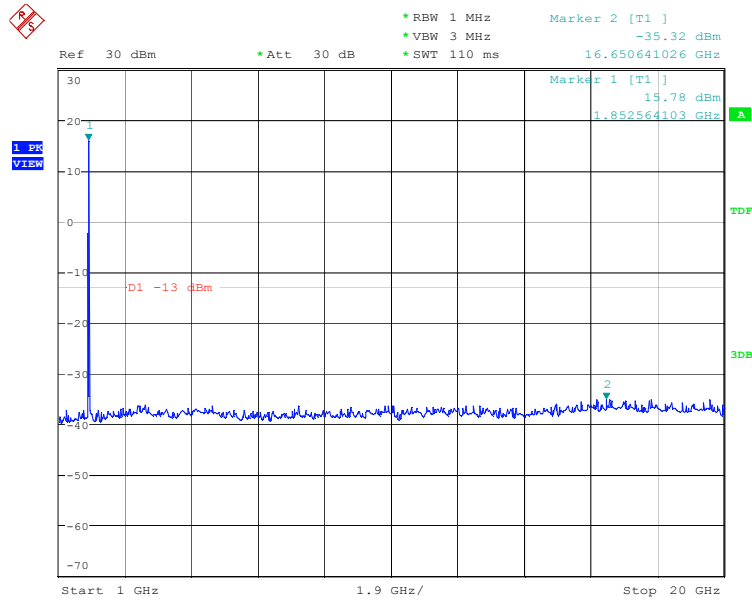
Date: 16.MAY.2017 15:19:51

Conducted Emission Transmitting Mode CH 9400 30MHz – 1GHz

```
                                          * RBW  100 kHz     Marker 1 [T1 ]
                                          * VBW  300 kHz             -45.41 dBm
  Ref  30 dBm          * Att  30 dB       * SWT  100 ms     193.221153846 MHz
   30
  -20                                                                  A
  -10
    0                                                                  TDF
  -10
      D1 -13 dBm
  -20
                                                                      3DB
  -30
  -40
        1
  -50
  -60
  -70
  Start  30 MHz                97 MHz/              Stop  1 GHz
```

1 PK VIEW

Date: 15.JUN.2017 18:51:25

Report No.: FCC17040291A-5
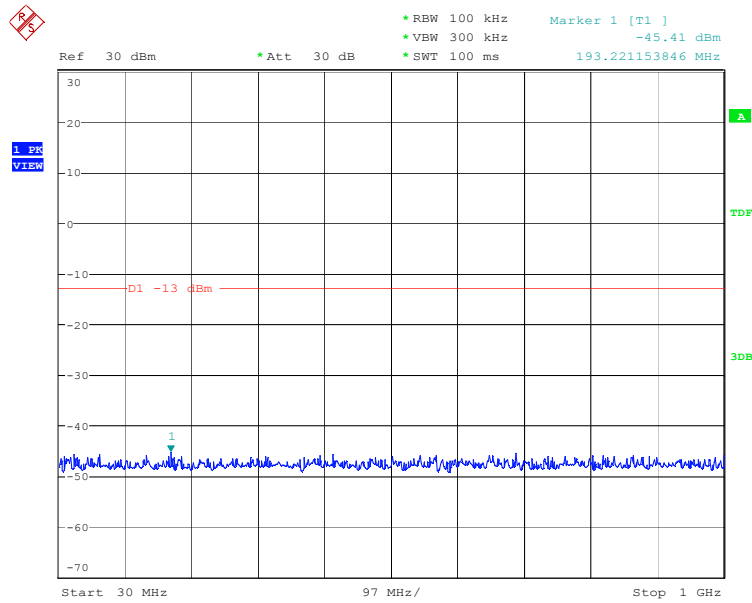
Conducted Emission Transmitting Mode CH 9400 1GHz – 20GHz

```
                                    * RBW  1 MHz      Marker 2 [T1 ]
                                    * VBW  3 MHz                -34.85 dBm
     Ref   30 dBm        * Att  30 dB   * SWT  110 ms      15.858974359 GHz
     30                                       Marker 1 [T1 ]
                                                          15.51 dBm
    -20   1                                          1.883012821 GHz     A
    -10
     0
                                                                          TDF
    -10
         D1 -13 dBm
    -20
                                                                          3DB
    -30                                            2
    -40
    -50
    -60
    -70
     Start  1 GHz                  1.9 GHz/              Stop  20 GHz
```
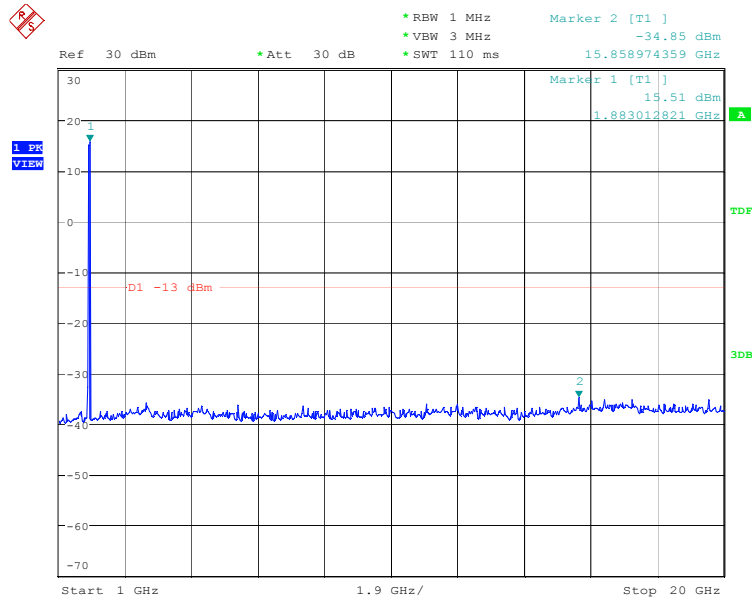
Date: 16.MAY.2017 15:21:03

Conducted Emission Transmitting Mode CH 9538 30MHz – 1GHz

```
                                    * RBW  100 kHz    Marker 1 [T1 ]
                                    * VBW  300 kHz              -40.03 dBm
     Ref   30 dBm        * Att  30 dB   * SWT  100 ms      931.602564103 MHz
     30
    -20                                                                    A
    -10
     0
                                                                          TDF
    -10
         D1 -13 dBm
    -20
                                                                          3DB
    -30
    -40                                                    1
    -50
    -60
    -70
     Start  30 MHz                 97 MHz/               Stop  1 GHz
```

Date: 16.MAY.2017 15:18:15

Report No.: FCC17040291A-5
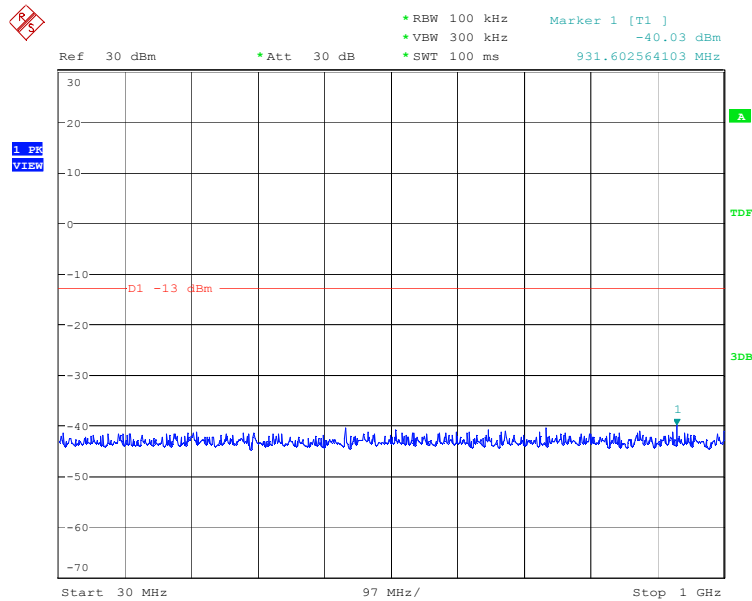
Conducted Emission Transmitting Mode CH 9538 1GHz – 20GHz

```
                                        *RBW  1 MHz        Marker 2 [T1 ]
                                        *VBW  3 MHz                  -39.71 dBm
Ref  30 dBm        *Att  30 dB         *SWT  110 ms        13.057692308 GHz

                                                            Marker 1 [T1 ]
                                                                  15.48 dBm
                                                           1.883012821 GHz   A
```

Start 1 GHz   1.9 GHz/   Stop 20 GHz
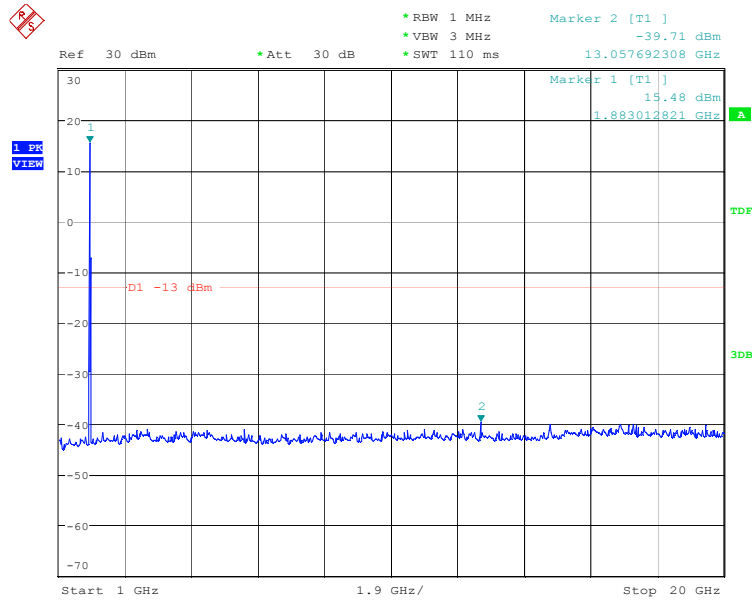
Date: 15.JUN.2017 18:54:41

CONDUCTED EMISSION IN WCDMA Band IV
Conducted Emission Transmitting Mode CH 1312 30MHz – 1GHz

```
                                        *RBW  100 kHz      Marker 1 [T1 ]
                                        *VBW  300 kHz                -45.36 dBm
Ref  30 dBm        *Att  30 dB          SWT  100 ms        331.570512821 MHz
```

Start 30 MHz   97 MHz/   Stop 1 GHz

Date: 31.MAR.2017 09:19:45

Report No.: FCC17040291A-5
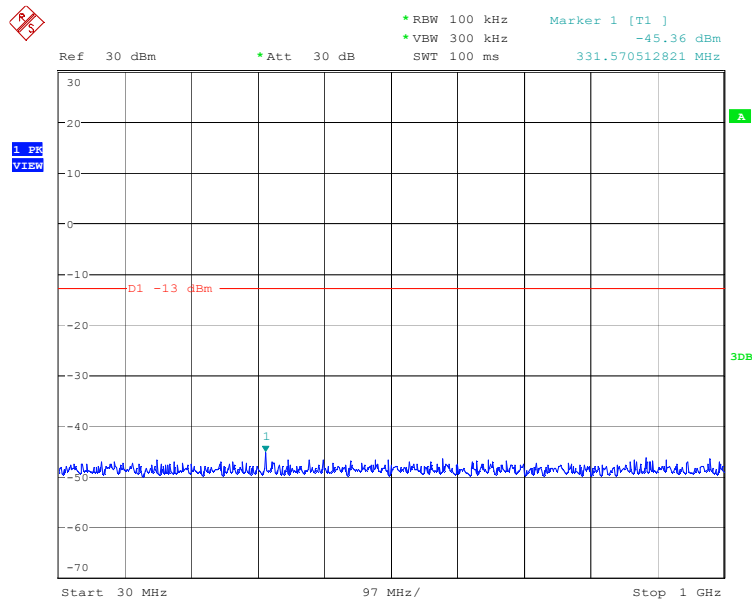
Conducted Emission Transmitting Mode CH 1312 1GHz – 20GHz
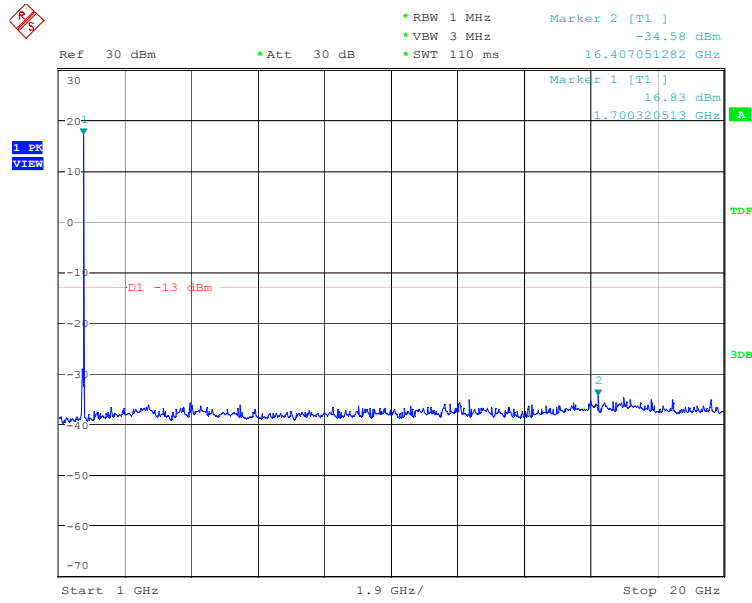
Date: 16.MAY.2017 20:44:37

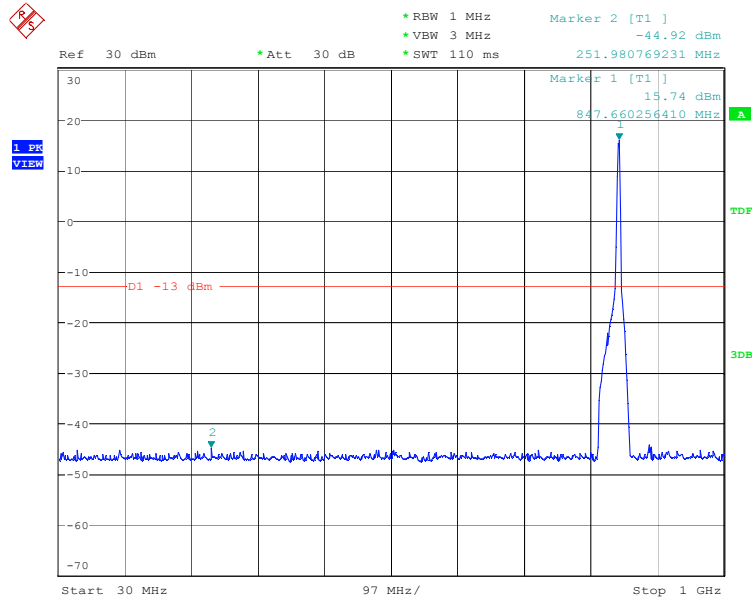## Conducted Emission Transmitting Mode CH 1413 30MHz – 1GHz
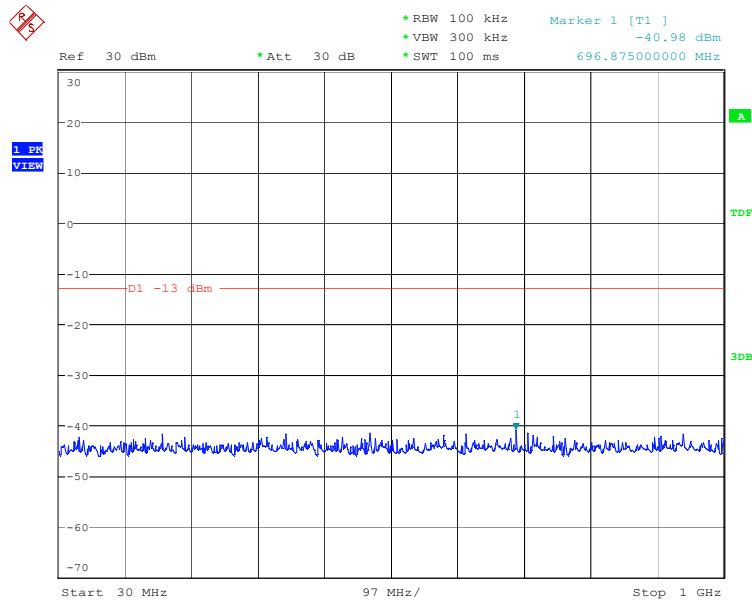
Date: 16.MAY.2017 20:41:57

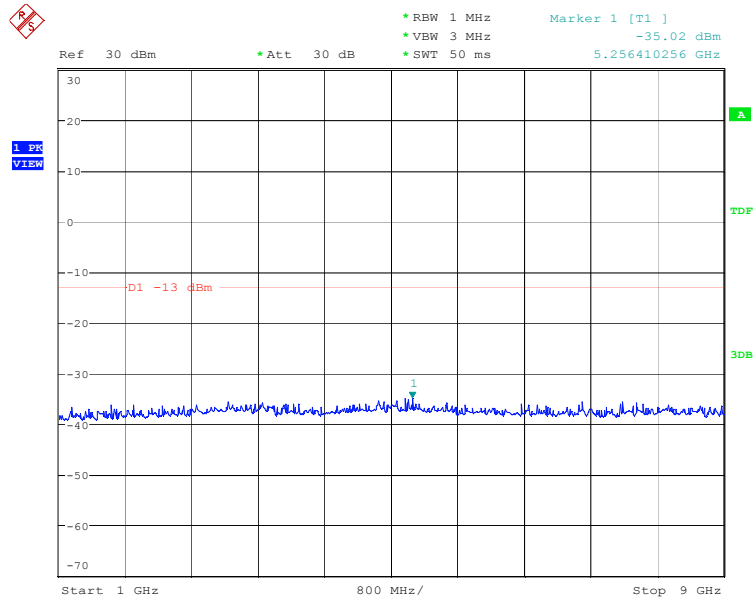## Conducted Emission Transmitting Mode CH 1413 1GHz – 20GHz

```
                                    *RBW 1 MHz        Marker 2 [T1 ]
                                    *VBW 3 MHz                  -34.87 dBm
     Ref  30 dBm        *Att  30 dB *SWT 110 ms        16.681089744 GHz

     30                                               Marker 1 [T1 ]
                                                              16.84 dBm
     20                                              1.730769231 GHz   A

     10

      0                                                                TDF

    -10    D1 -13 dBm

    -20

    -30                                                          2     3DB

    -40

    -50

    -60

    -70
     Start 1 GHz              1.9 GHz/              Stop  20 GHz
```
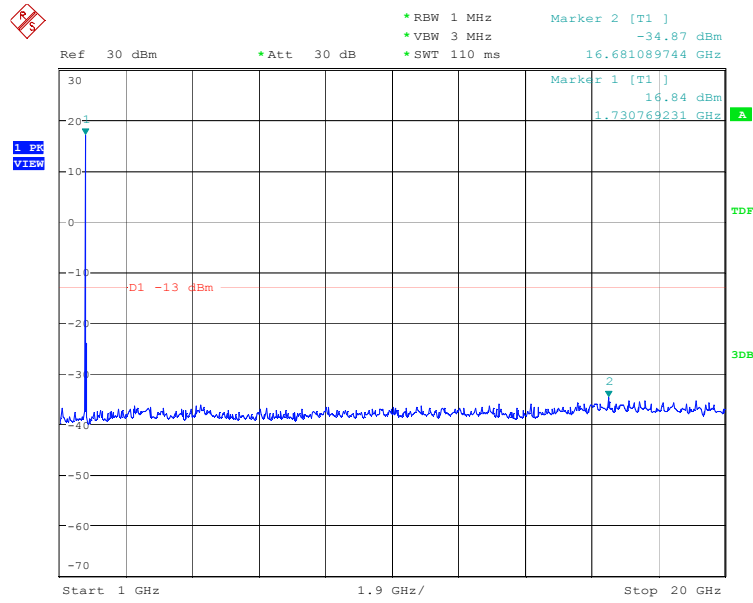
Date: 15.JUN.2017 18:57:19

Conducted Emission Transmitting Mode CH 1513 30MHz – 1GHz

```
                                    *RBW 100 kHz      Marker 1 [T1 ]
                                    *VBW 300 kHz                -41.11 dBm
     Ref  30 dBm        *Att  30 dB *SWT 100 ms        584.951923077 MHz

     30

     20                                                                A

     10

      0                                                                TDF

    -10    D1 -13 dBm

    -20

    -30                                                                3DB

    -40                                         1

    -50

    -60

    -70
     Start 30 MHz              97 MHz/              Stop  1 GHz
```

Date: 16.MAY.2017 20:42:29

Report No.: FCC17040291A-5
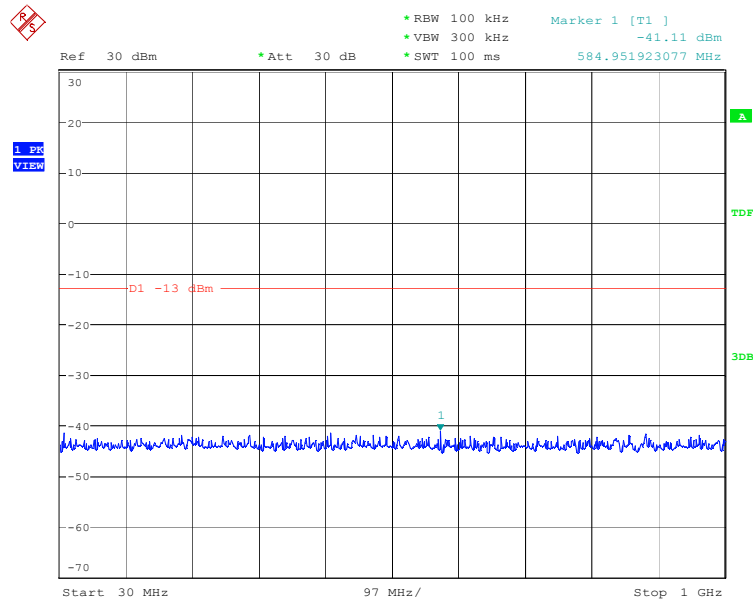
Conducted Emission Transmitting Mode CH 1513 1GHz – 20GHz
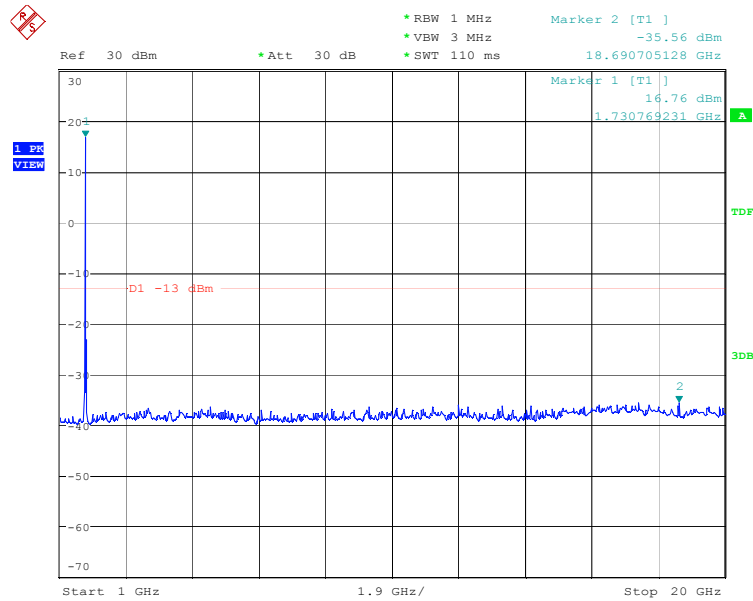
Date: 16.MAY.2017 20:46:17

CONDUCTED EMISSION IN WCDMA Band V
Conducted Emission Transmitting Mode CH 4132 30MHz – 1GHz

Date: 16.MAY.2017 15:48:18

Report No.: FCC17040291A-5
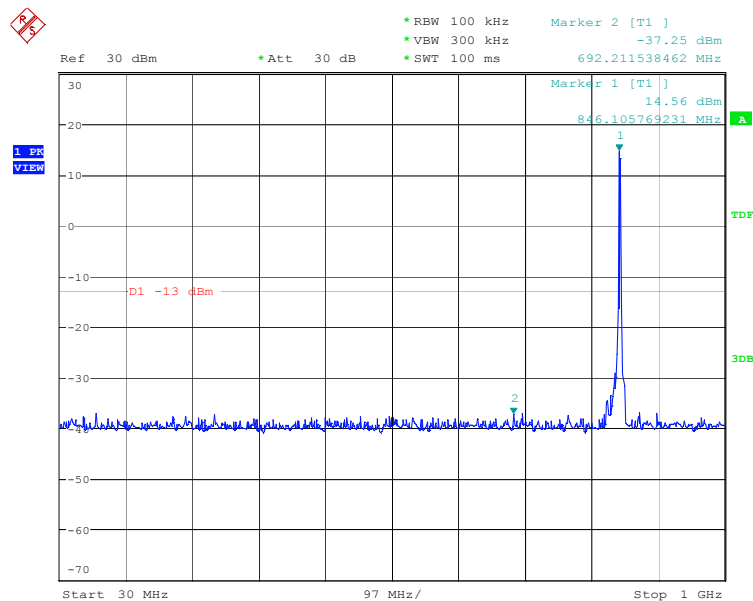
Conducted Emission Transmitting Mode CH 4132 1GHz – 9GHz

```
                                    * RBW 1 MHz        Marker 1 [T1 ]
                                    * VBW 3 MHz              -34.80 dBm
Ref  30 dBm         * Att  30 dB    * SWT 50 ms        3.538461538 GHz
```
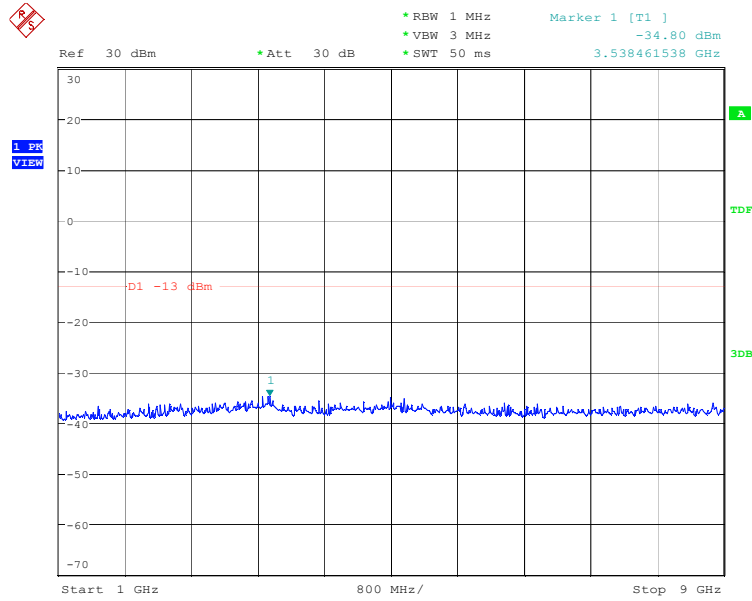
Date: 16.MAY.2017 15:44:12

Conducted Emission Transmitting Mode CH 4182 30MHz – 1GHz

```
                                    * RBW 100 kHz      Marker 2 [T1 ]
                                    * VBW 300 kHz            -36.13 dBm
Ref  30 dBm         * Att  30 dB    * SWT 100 ms       252.291666667 MHz
                                                       Marker 1 [T1 ]
                                                             15.20 dBm
                                                       836.778846154 MHz
```

Date: 16.MAY.2017 15:40:19

Report No.: FCC17040291A-5
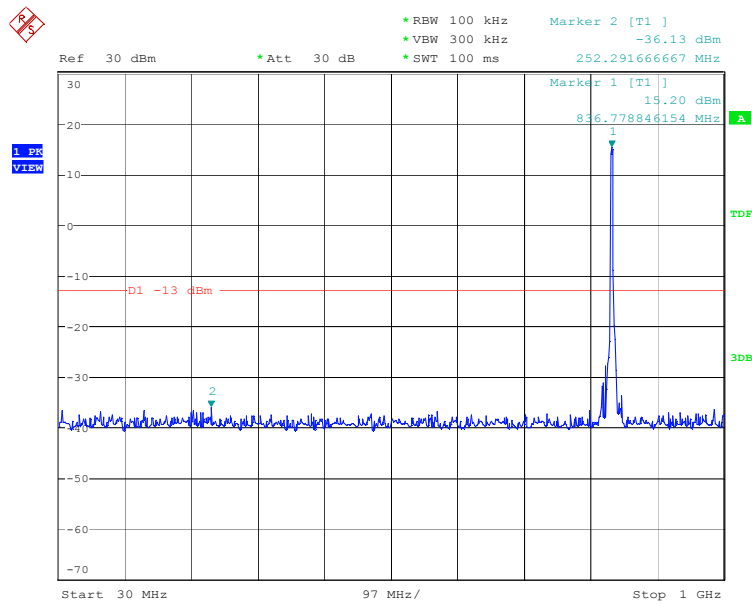
Conducted Emission Transmitting Mode CH 4182 1GHz – 9GHz

```
                              *RBW  1 MHz      Marker 1 [T1 ]
                              *VBW  3 MHz                  -35.79 dBm
         Ref  30 dBm      *Att  30 dB    *SWT 110 ms       5.256410256 GHz
    30
                                                                              A
     20

     10

      0                                                                      TDF

    -10
        D1 -13 dBm
    -20
                                                                             3DB
    -30
                                        1
    -40

    -50

    -60

    -70
    Start 1 GHz              800 MHz/                  Stop 9 GHz
```
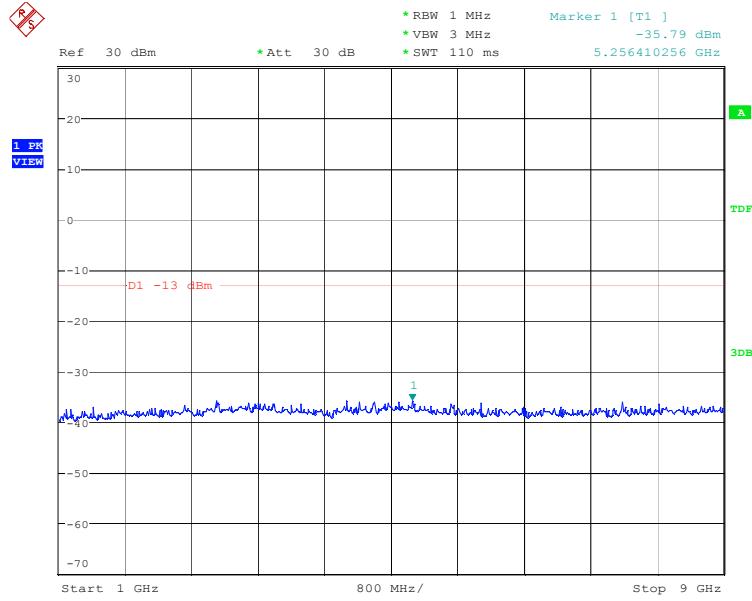
Date: 15.JUN.2017 18:59:39

Conducted Emission Transmitting Mode CH 4233 30MHz – 1GHz

```
                              *RBW  1 MHz      Marker 2 [T1 ]
                              *VBW  3 MHz                  -44.92 dBm
         Ref  30 dBm      *Att  30 dB    *SWT 110 ms       251.980769231 MHz
    30                                        Marker 1 [T1 ]
                                                          15.74 dBm
     20                                            847.660256410 MHz   A

     10

      0                                                                      TDF

    -10
        D1 -13 dBm
    -20
                                                                             3DB
    -30

    -40
                        2
    -50

    -60

    -70
    Start 30 MHz              97 MHz/                  Stop 1 GHz
```

Date: 15.JUN.2017 19:01:23

Report No.: FCC17040291A-5

Conducted Emission Transmitting Mode CH 4233 1GHz – 9GHz

```
                                    * RBW  1 MHz     Marker 1 [T1 ]
                                    * VBW  3 MHz              -35.02 dBm
   Ref   30 dBm        * Att  30 dB * SWT 50 ms      5.256410256 GHz

    30
                                                                        A
   -20

1 PK
VIEW -10
                                                                       TDF
    0

  --10
   D1 -13 dBm
  --20
                                                                       3DB
  --30
                                         1
      dwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww
  --40
  --50

  --60

  --70
   Start  1 GHz              800 MHz/              Stop  9 GHz
```

Date: 16.MAY.2017 15:46:45

Report No.: FCC17040291A-5

BAND 2@Conducted Spurious Emission

BW1.4MHz-1850.7MHz,Q16-6RB_LOW@Pass
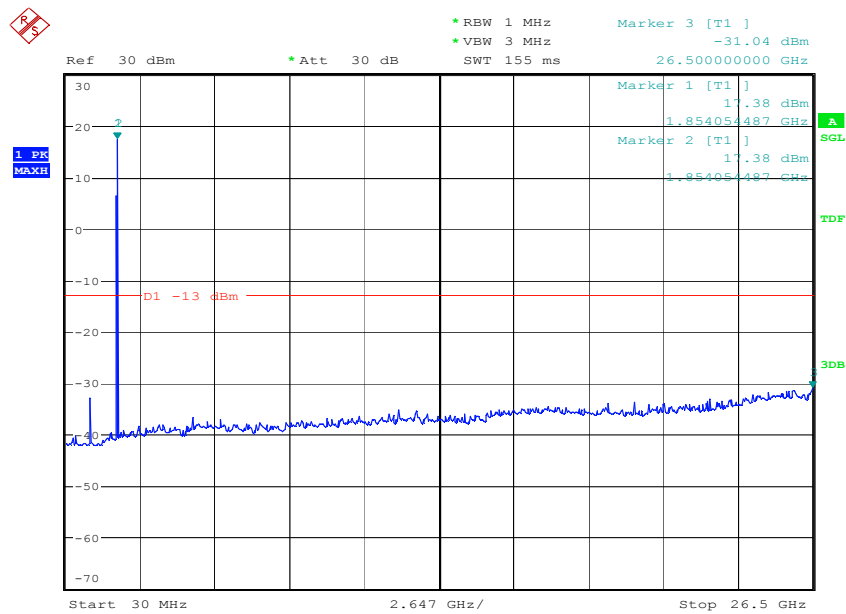
Date: 9.MAY.2017 20:43:14

BW1.4MHz-1850.7MHz,QPSK-6RB_LOW@Pass

Date: 9.MAY.2017 20:42:58

Report No.: FCC17040291A-5
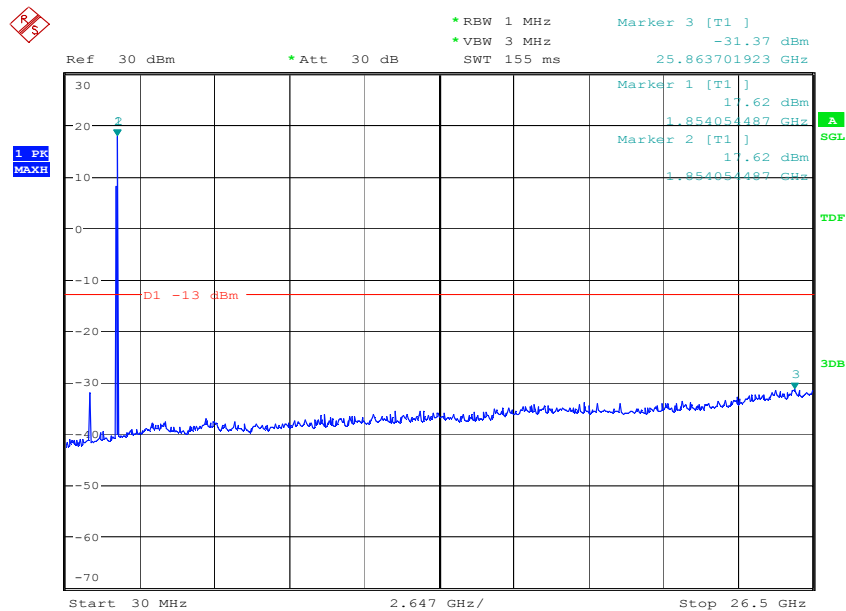
BW1.4MHz-1880MHz,Q16-6RB_LOW@Pass

```
                                        * RBW  1 MHz       Marker 3 [T1 ]
                                        * VBW  3 MHz                  -30.66 dBm
         Ref   30 dBm       * Att  30 dB   SWT  155 ms       25.863701923 GHz
                                                          Marker 1 [T1 ]
          30                                                       17.96 dBm
                                                              1.854054487 GHz         A
          20    2                                         Marker 2 [T1 ]             SGL
                                                                   17.96 dBm
          10                                                  1.854054487 GHz

           0                                                                         TDF

         -10
                D1 -13 dBm

         -20
                                                                                    3DB
                                                                              3
         -30

         -50

         -60

         -70
         Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```
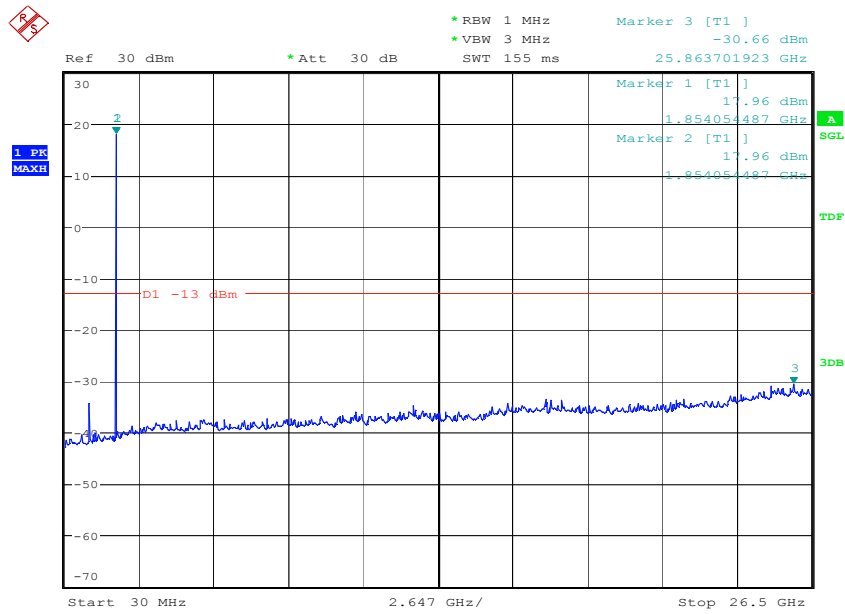
Date: 9.MAY.2017 20:44:17

BW1.4MHz-1880MHz,QPSK-6RB_LOW@Pass

```
                                        * RBW  1 MHz       Marker 3 [T1 ]
                                        * VBW  3 MHz                  -30.89 dBm
         Ref   30 dBm       * Att  30 dB   SWT  155 ms       25.906121795 GHz
                                                          Marker 1 [T1 ]
          30                                                       17.61 dBm
                                                              1.854054487 GHz         A
          20    2                                         Marker 2 [T1 ]             SGL
                                                                   17.61 dBm
          10                                                  1.854054487 GHz

           0                                                                         TDF

         -10
                D1 -13 dBm

         -20
                                                                                    3DB
                                                                              3
         -30

         -50

         -60

         -70
         Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```

Date: 9.MAY.2017 20:44:02

Report No.: FCC17040291A-5
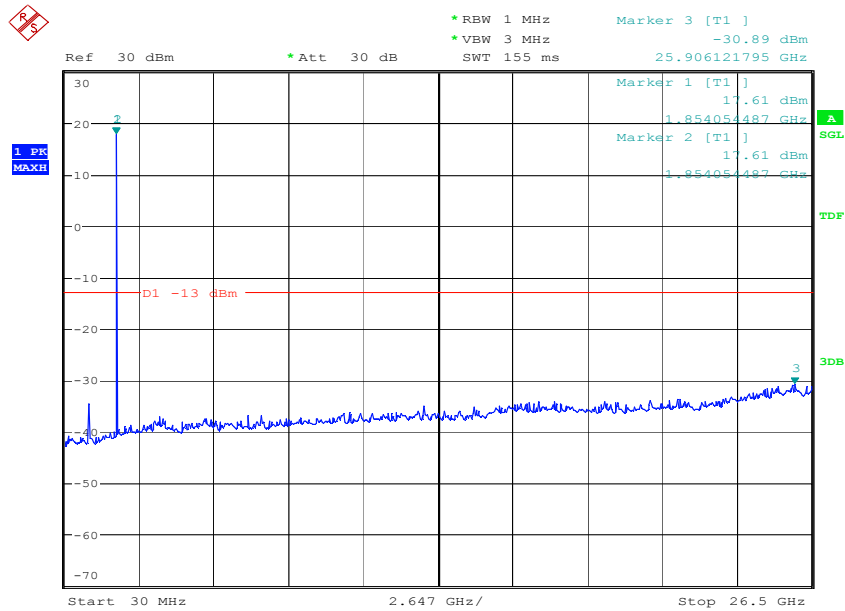
BW1.4MHz-1909.3MHz,Q16-6RB_LOW@Pass
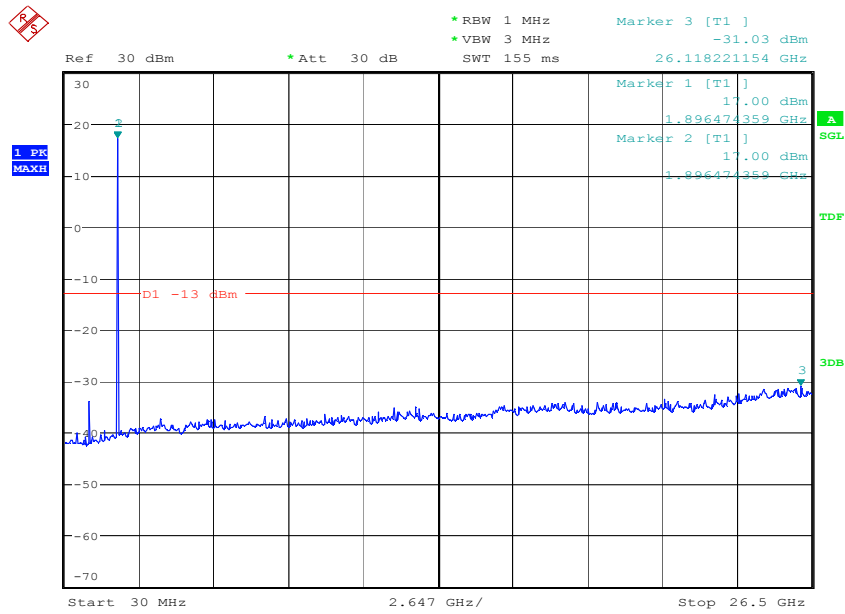
Date: 9.MAY.2017 20:43:45

BW1.4MHz-1909.3MHz,QPSK-6RB_LOW@Pass
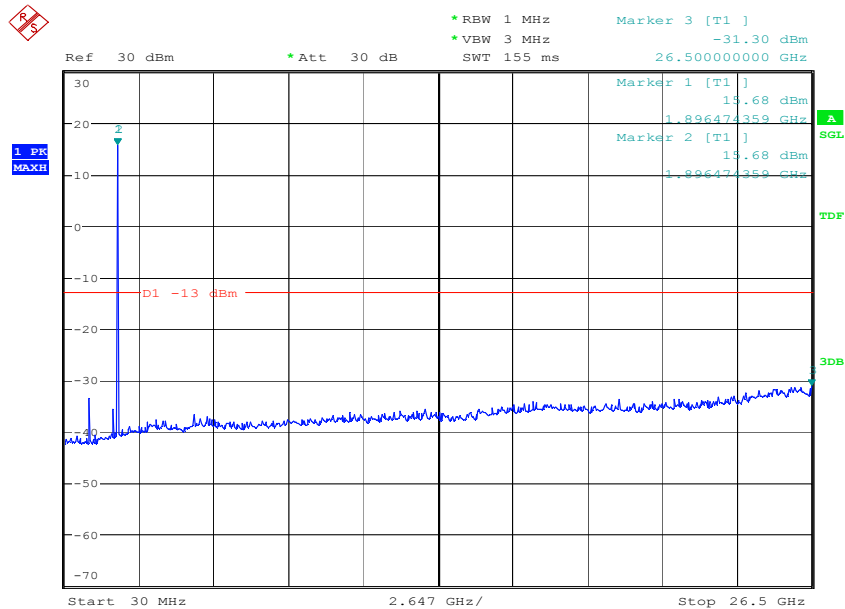
Date: 9.MAY.2017 20:43:30

BW10MHz-1855MHz,Q16-50RB_LOW@Pass

```
                                        * RBW  1 MHz      Marker 3 [T1 ]
                                        * VBW  3 MHz                    -30.77 dBm
    Ref   30 dBm        * Att   30 dB   SWT 155 ms        25.863701923 GHz
```



```
Start  30 MHz                    2.647 GHz/                    Stop  26.5 GHz
```
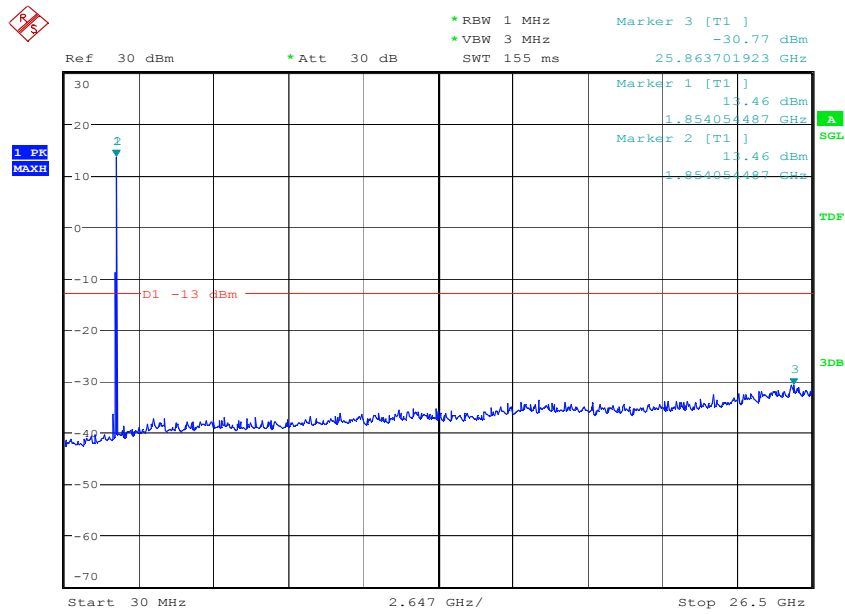
Date: 9.MAY.2017 20:48:19

BW10MHz-1855MHz,QPSK-50RB_LOW@Pass

```
                                        * RBW  1 MHz      Marker 3 [T1 ]
                                        * VBW  3 MHz                    -29.89 dBm
    Ref   30 dBm        * Att   30 dB   SWT 155 ms        26.372740385 GHz
```



```
Start  30 MHz                    2.647 GHz/                    Stop  26.5 GHz
```

Date: 9.MAY.2017 20:48:02

Report No.: FCC17040291A-5
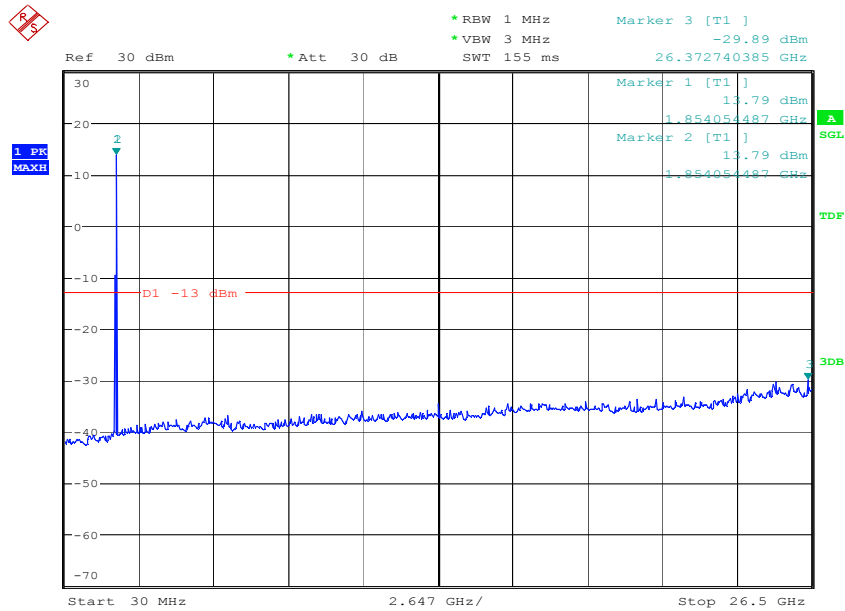
BW10MHz-1880MHz,Q16-50RB_LOW@Pass
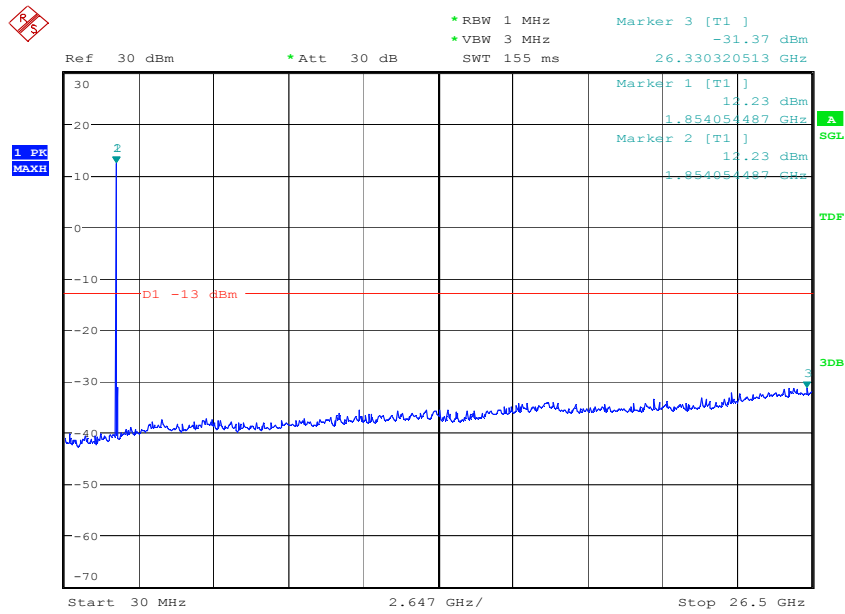
Date: 9.MAY.2017 20:49:31

BW10MHz-1880MHz,QPSK-50RB_LOW@Pass

Date: 9.MAY.2017 20:49:13

Report No.: FCC17040291A-5
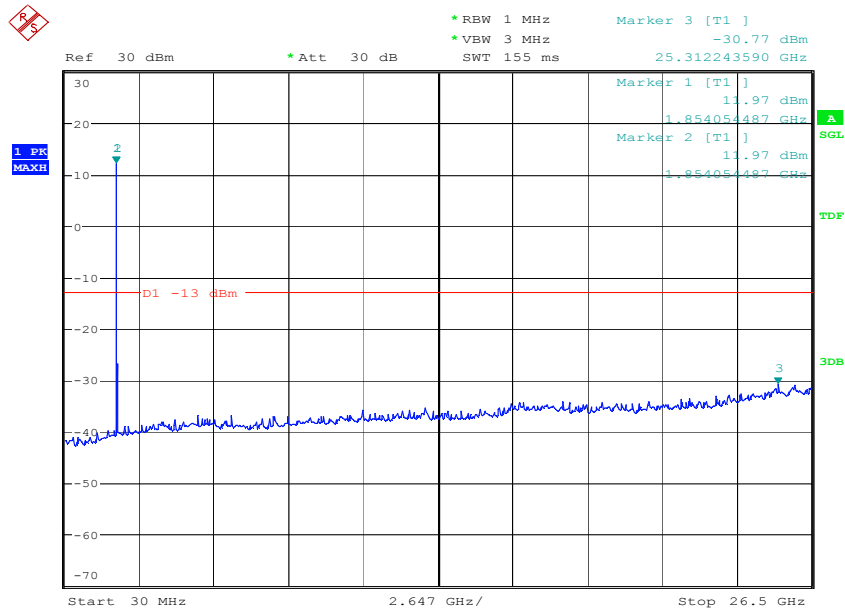
BW10MHz-1905MHz,Q16-50RB_LOW@Pass
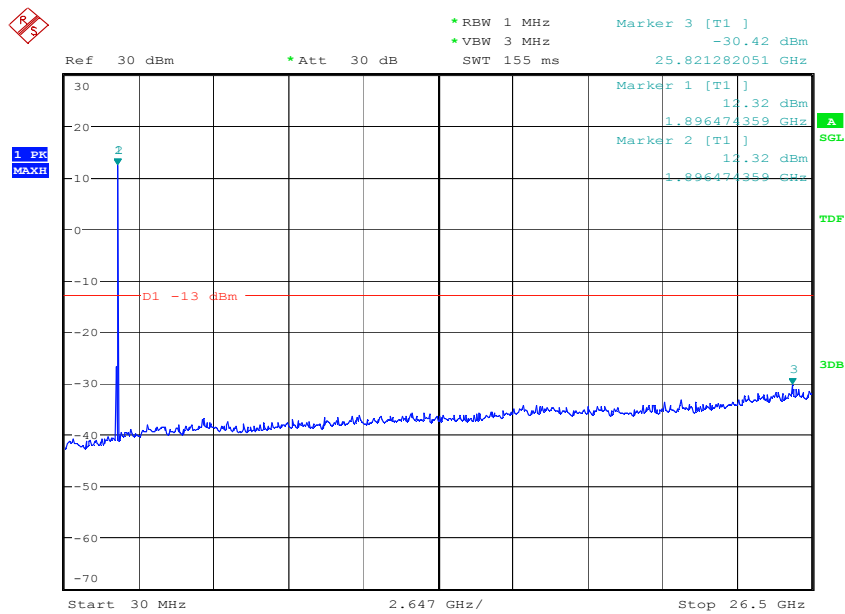
Date: 9.MAY.2017 20:48:55

BW10MHz-1905MHz,QPSK-50RB_LOW@Pass

Date: 9.MAY.2017 20:48:38

Report No.: FCC17040291A-5
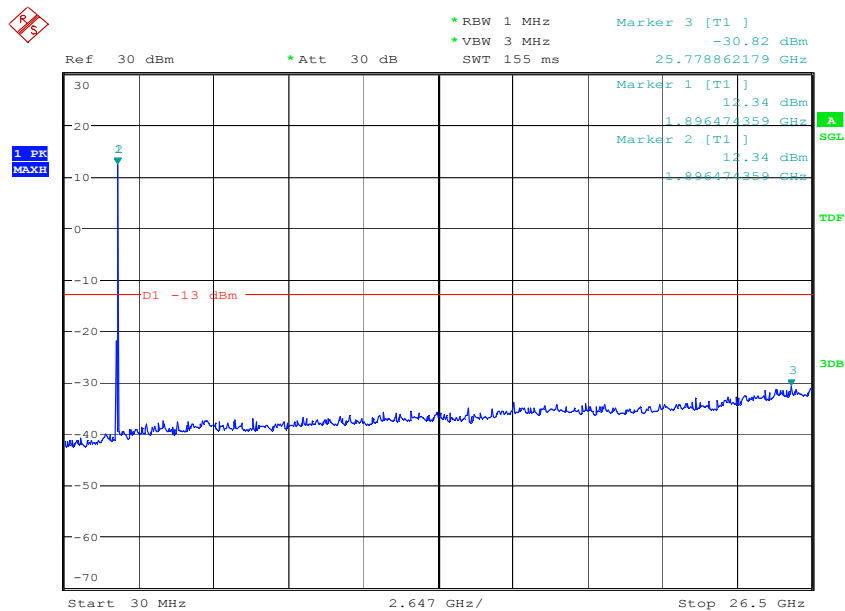
BW15MHz-1857.5MHz,Q16-75RB_LOW@Pass
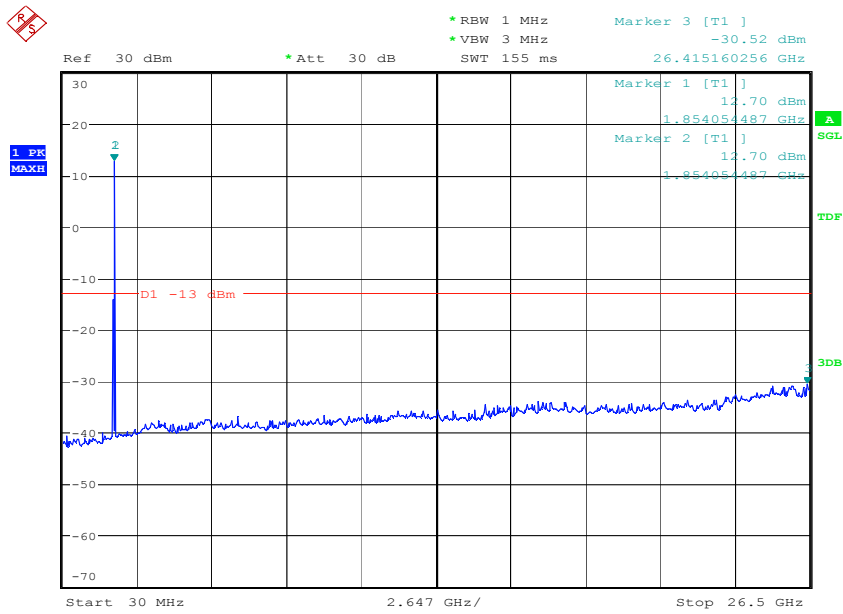
Date: 9.MAY.2017 20:50:12

BW15MHz-1857.5MHz,QPSK-75RB_LOW@Pass

Date: 9.MAY.2017 20:49:53

Report No.: FCC17040291A-5
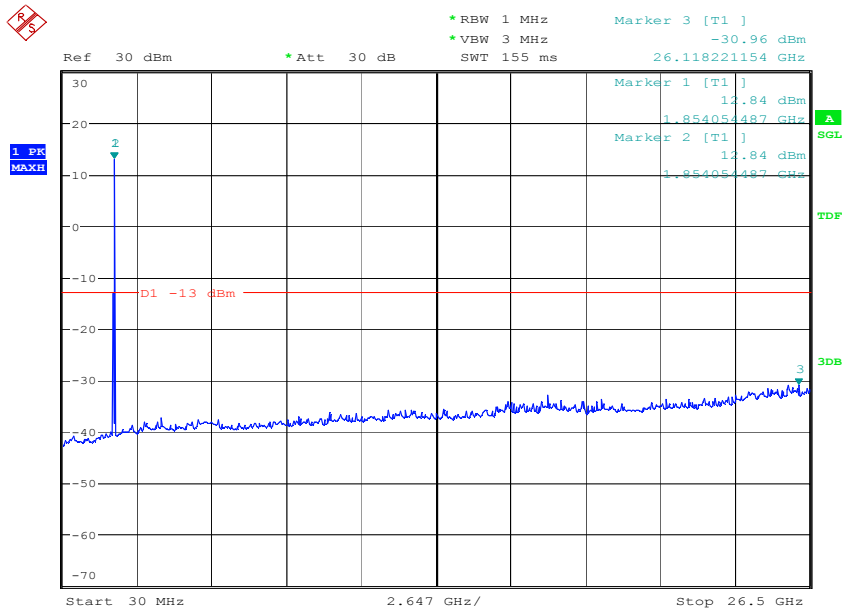
BW15MHz-1880MHz,Q16-75RB_LOW@Pass
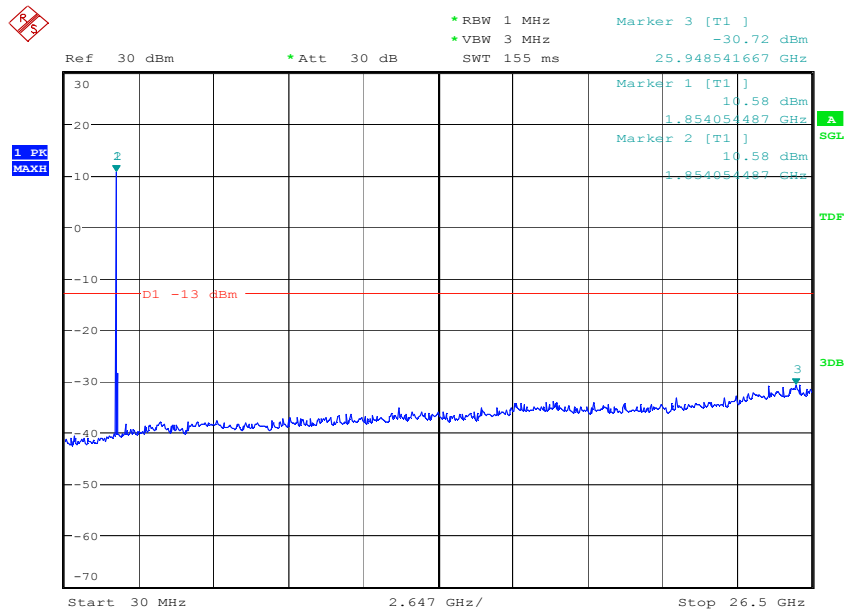
Date: 9.MAY.2017 20:51:32

BW15MHz-1880MHz,QPSK-75RB_LOW@Pass

Date: 9.MAY.2017 20:51:12

Report No.: FCC17040291A-5
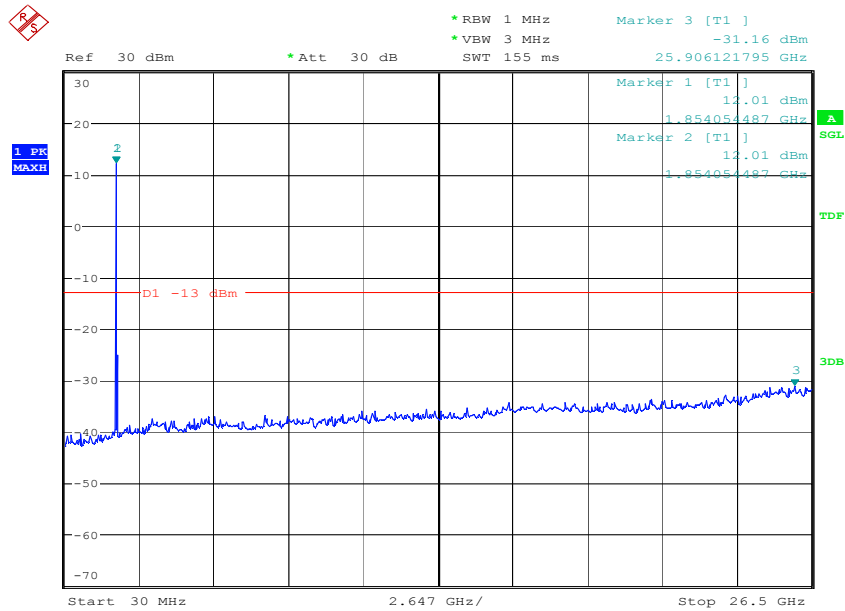
BW15MHz-1902.5MHz,Q16-75RB_LOW@Pass
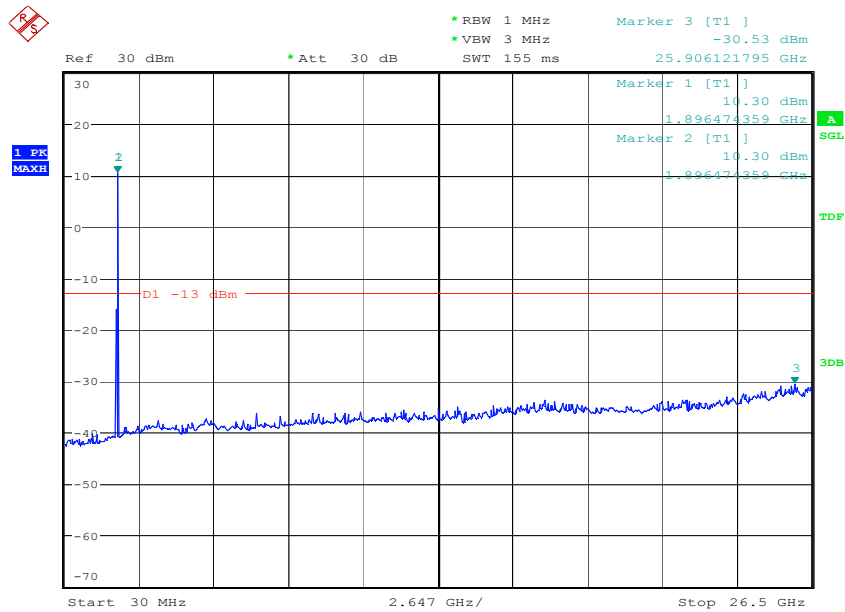
Date: 9.MAY.2017 20:50:52

BW15MHz-1902.5MHz,QPSK-75RB_LOW@Pass

Date: 9.MAY.2017 20:50:32

Report No.: FCC17040291A-5
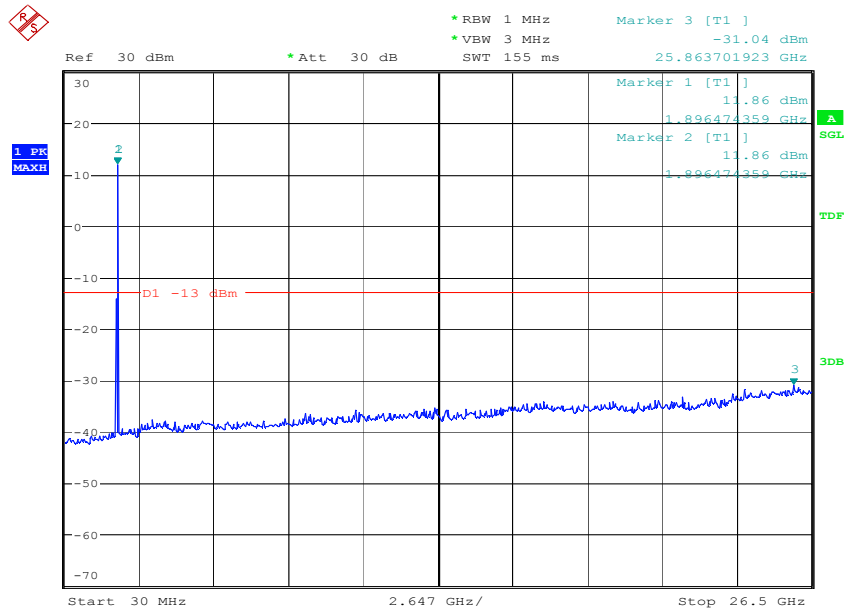
BW20MHz-1860MHz,Q16-100RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                 -29.89 dBm
        Ref   30 dBm      * Att  30 dB    SWT  155 ms        25.948541667 GHz
    30                                          Marker 1 [T1 ]
                                                         10.84 dBm
   -20                                            1.854054487 GHz      A
                                                Marker 2 [T1 ]         SGL
1 PK                                                     10.84 dBm
MAXH    10                                        1.854054487 GHz
     0                                                                TDF
   -10
        D1 -13 dBm
   -20
   -30                                                               3DB
   -40
   -50
   -60
   -70
        Start  30 MHz            2.647 GHz/           Stop  26.5 GHz
```
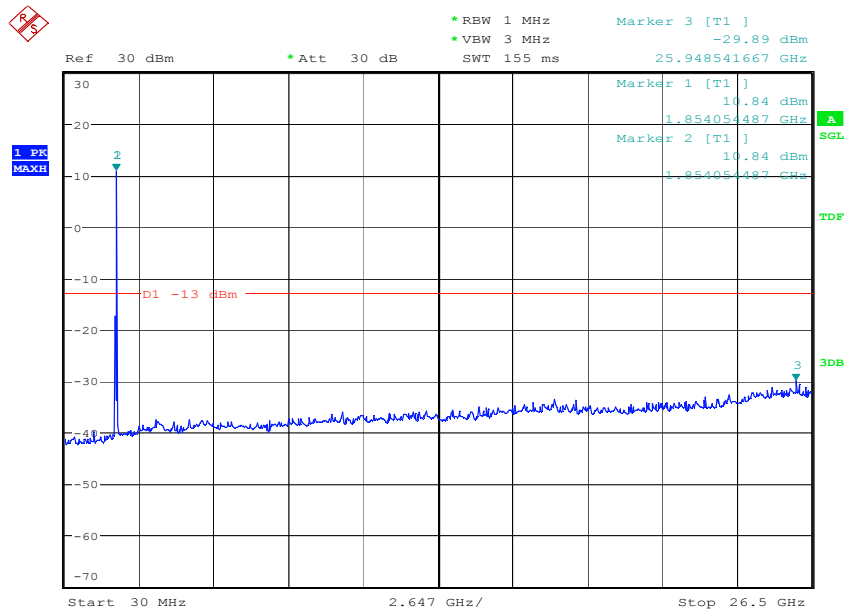
Date: 9.MAY.2017 20:52:14

BW20MHz-1860MHz,QPSK-100RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                 -30.66 dBm
        Ref   30 dBm      * Att  30 dB    SWT  155 ms        25.821282051 GHz
    30                                          Marker 1 [T1 ]
                                                         11.26 dBm
   -20                                            1.854054487 GHz      A
                                                Marker 2 [T1 ]         SGL
1 PK                                                     11.26 dBm
MAXH    10                                        1.854054487 GHz
     0                                                                TDF
   -10
        D1 -13 dBm
   -20
   -30                                                               3DB
   -40
   -50
   -60
   -70
        Start  30 MHz            2.647 GHz/           Stop  26.5 GHz
```

Date: 9.MAY.2017 20:51:54

Report No.: FCC17040291A-5

BW20MHz-1880MHz,Q16-100RB_LOW@Pass
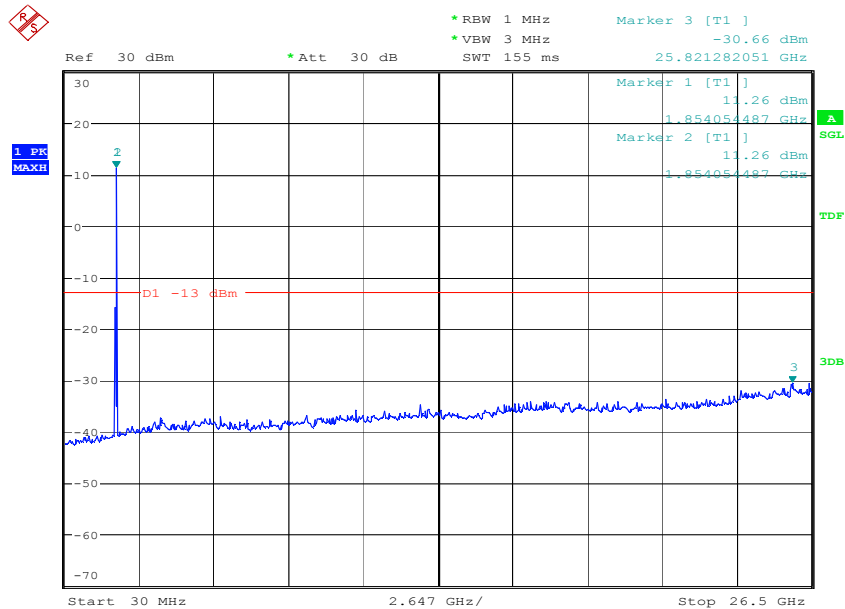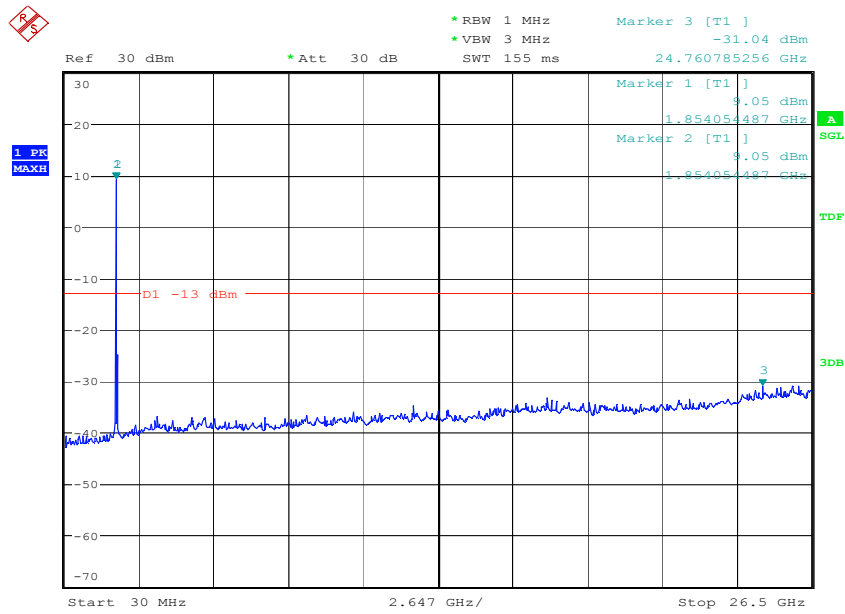
Date: 9.MAY.2017 20:53:34

BW20MHz-1880MHz,QPSK-100RB_LOW@Pass

Date: 9.MAY.2017 20:53:15
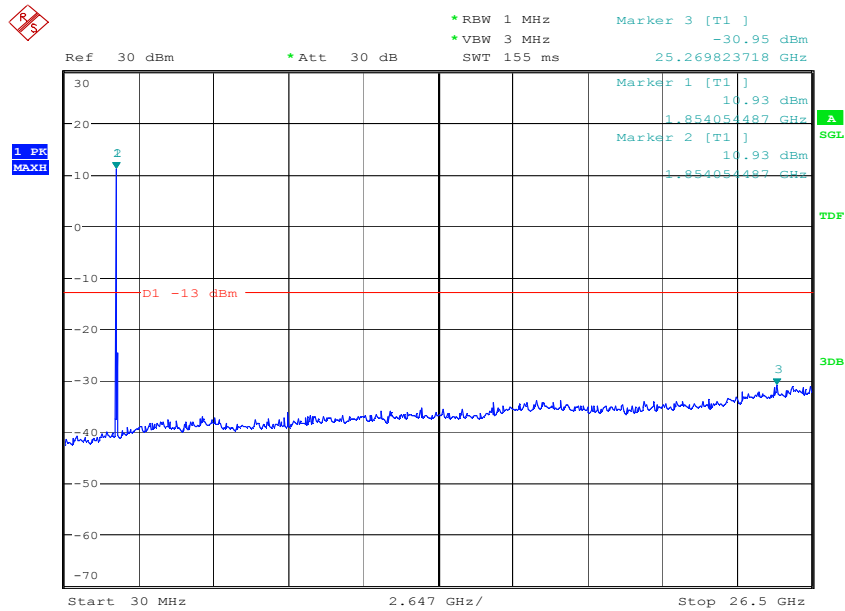
Report No.: FCC17040291A-5

BW20MHz-1900MHz,Q16-100RB_LOW@Pass
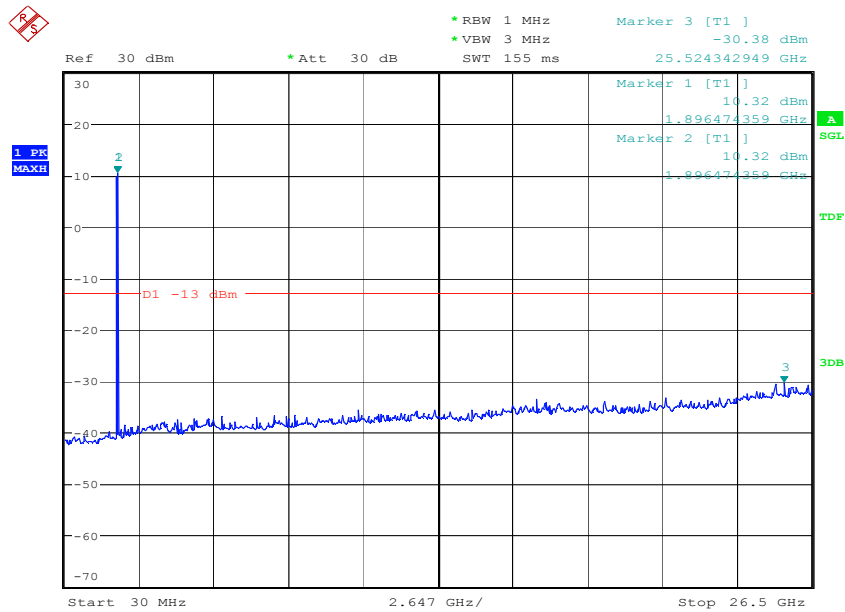
Date: 9.MAY.2017 20:52:54

BW20MHz-1900MHz,QPSK-100RB_LOW@Pass

Date: 9.MAY.2017 20:52:34

Report No.: FCC17040291A-5
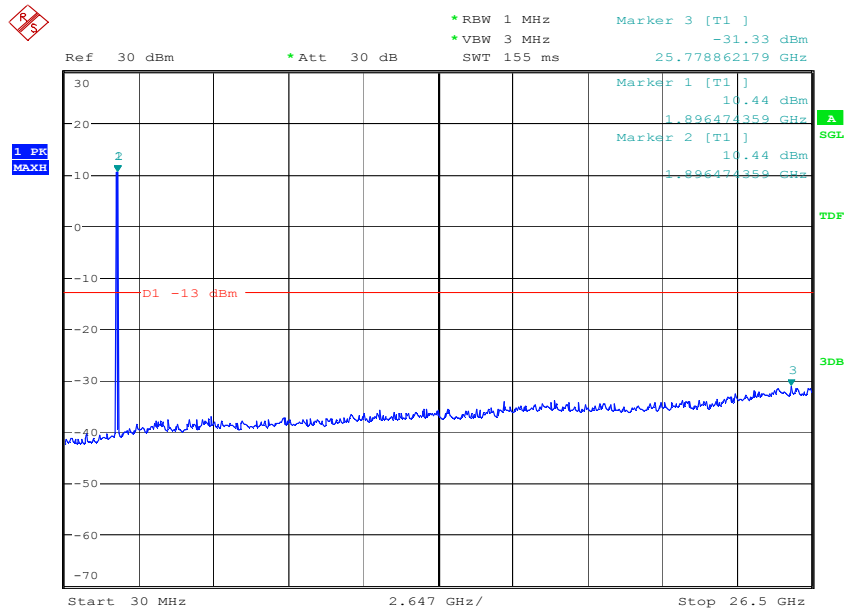
BW3MHz-1851.5MHz,Q16-15RB_LOW@Pass
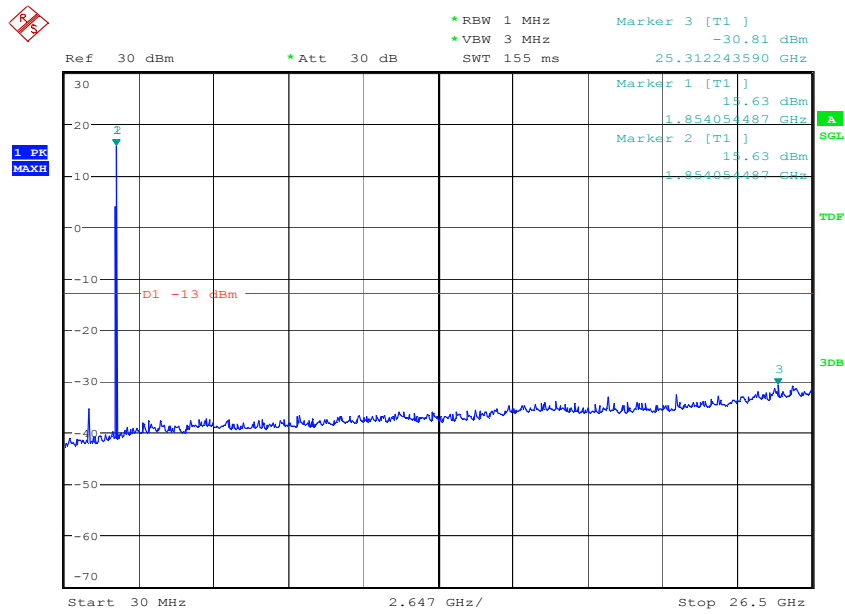
Date: 9.MAY.2017 20:44:51

BW3MHz-1851.5MHz,QPSK-15RB_LOW@Pass

Date: 9.MAY.2017 20:44:36

Report No.: FCC17040291A-5
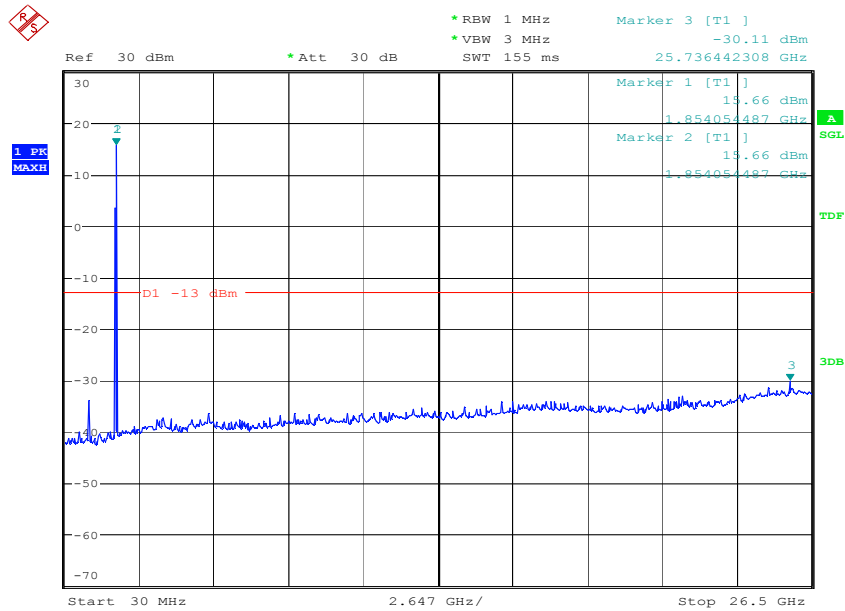
BW3MHz-1880MHz,Q16-15RB_LOW@Pass
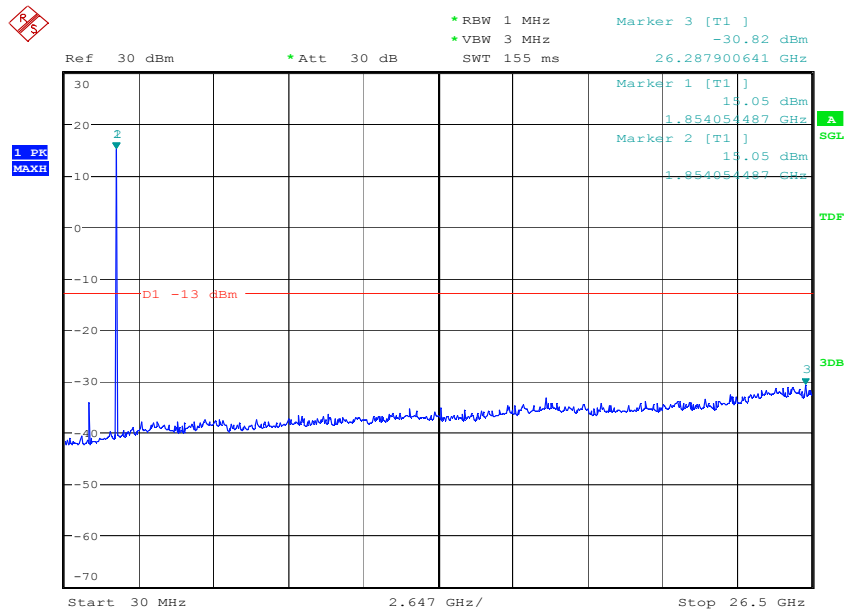
Date: 9.MAY.2017 20:45:56

BW3MHz-1880MHz,QPSK-15RB_LOW@Pass

Date: 9.MAY.2017 20:45:40

Report No.: FCC17040291A-5
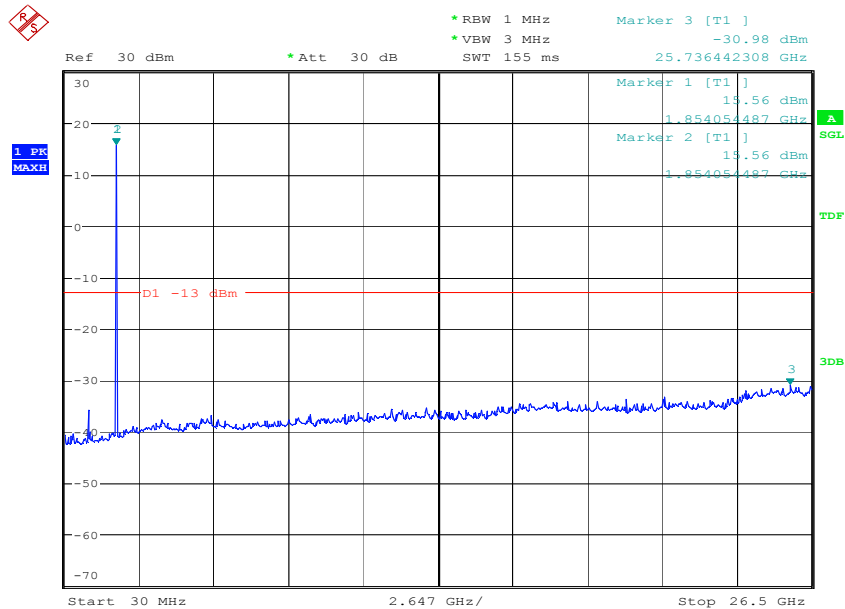
BW3MHz-1908.5MHz,Q16-15RB_LOW@Pass
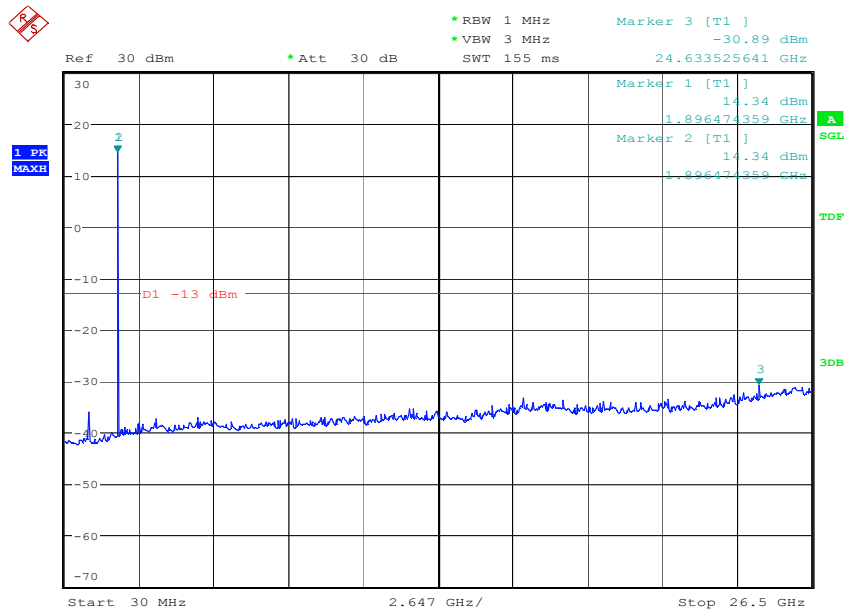
Date: 9.MAY.2017 20:45:23

BW3MHz-1908.5MHz,QPSK-15RB_LOW@Pass

Date: 9.MAY.2017 20:45:07

Report No.: FCC17040291A-5
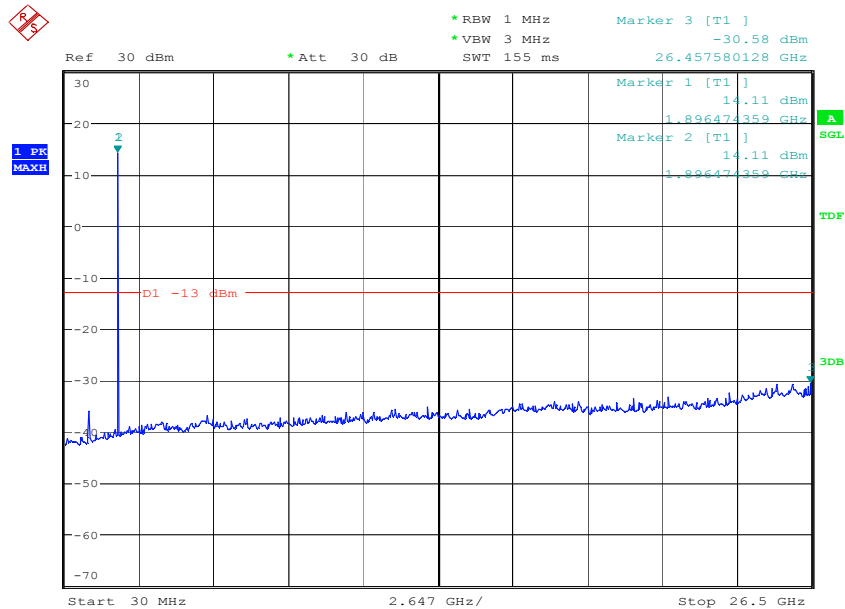
BW5MHz-1852.5MHz,Q16-25RB_LOW@Pass
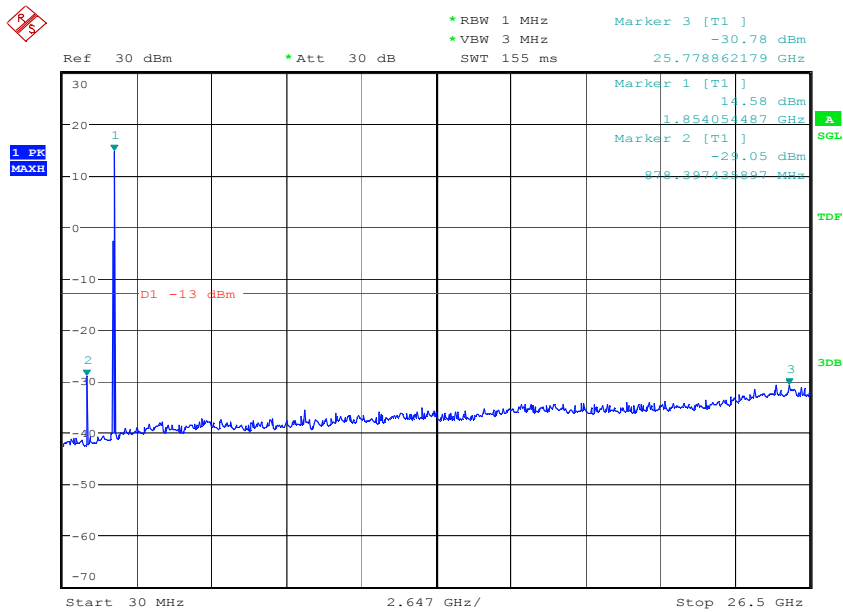
Date: 9.MAY.2017 20:46:33

BW5MHz-1852.5MHz,QPSK-25RB_LOW@Pass

Date: 9.MAY.2017 20:46:16

Report No.: FCC17040291A-5
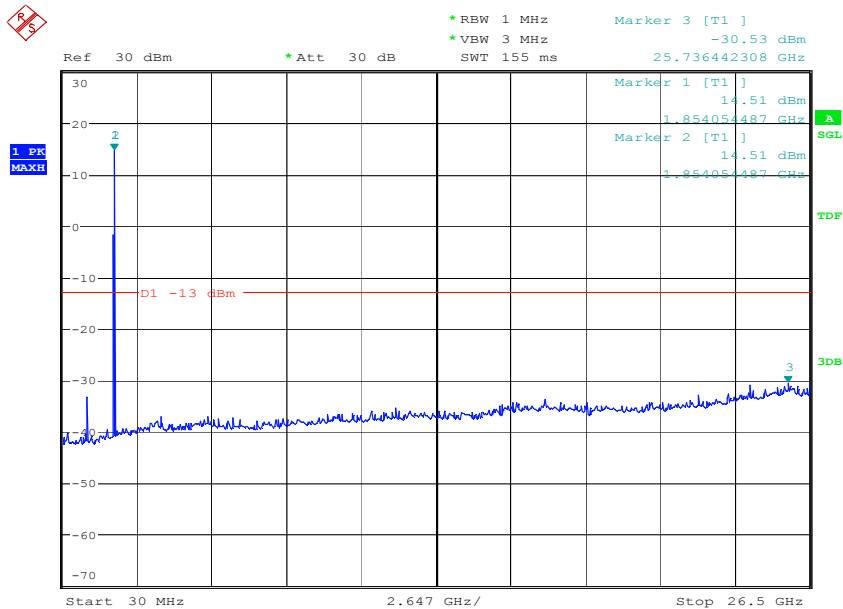
BW5MHz-1880MHz,Q16-25RB_LOW@Pass
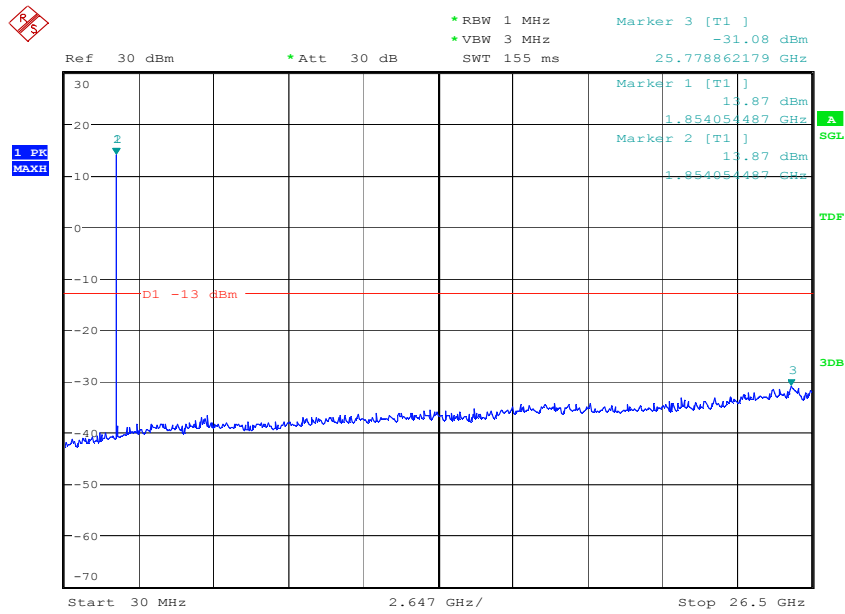
Date: 9.MAY.2017 20:47:42

BW5MHz-1880MHz,QPSK-25RB_LOW@Pass

Date: 9.MAY.2017 20:47:25
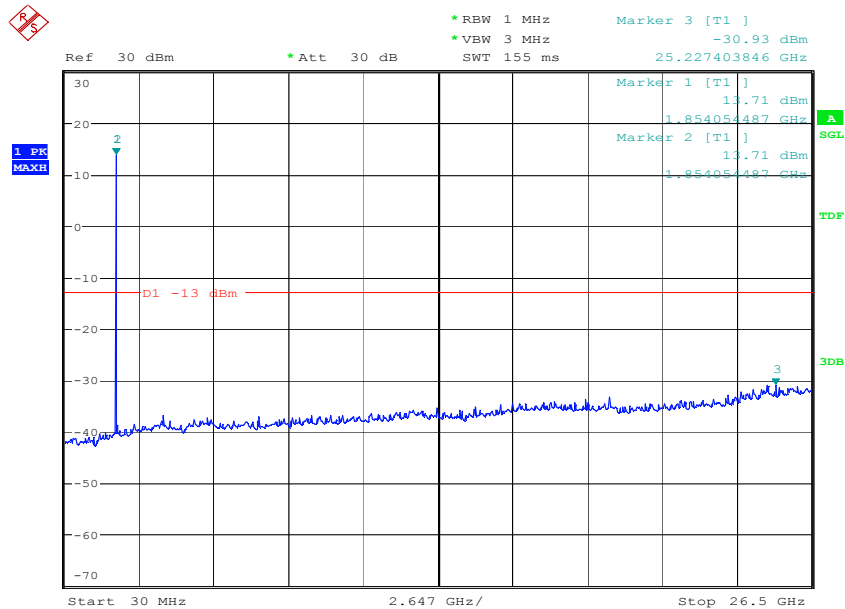
Report No.: FCC17040291A-5

BW5MHz-1907.5MHz,Q16-25RB_LOW@Pass
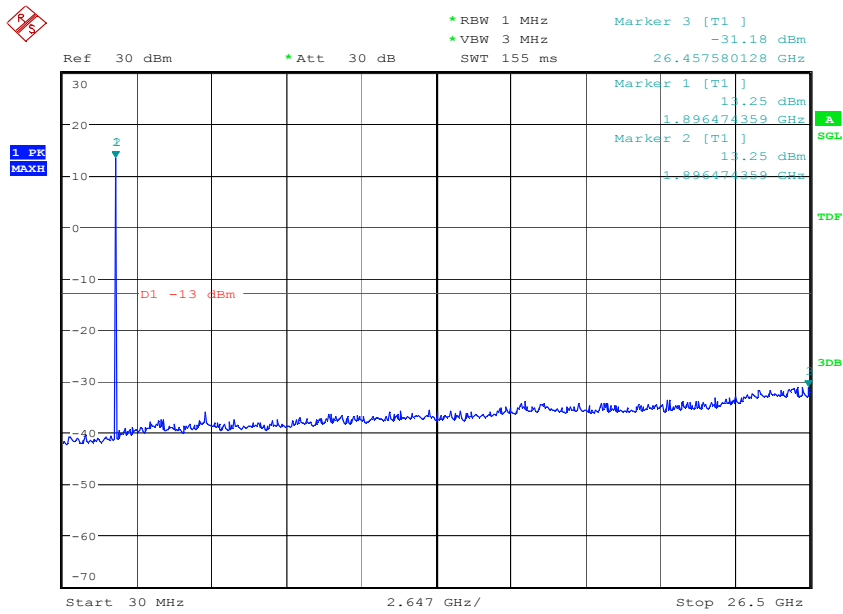
Date: 9.MAY.2017 20:47:07

BW5MHz-1907.5MHz,QPSK-25RB_LOW@Pass

Date: 9.MAY.2017 20:46:51

Report No.: FCC17040291A-5
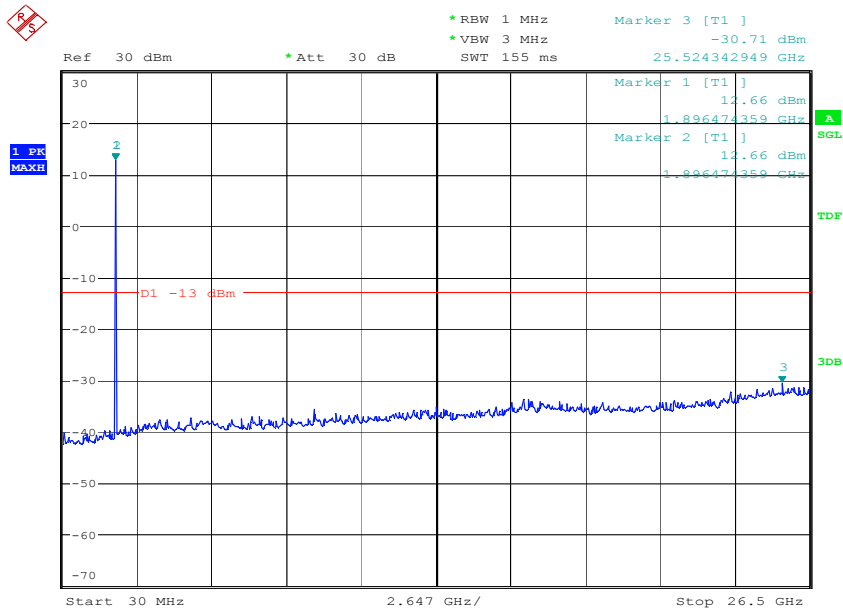
BAND 4@Conducted Spurious Emission
BW1.4MHz-1710.7MHz,Q16-6RB_LOW@Pass
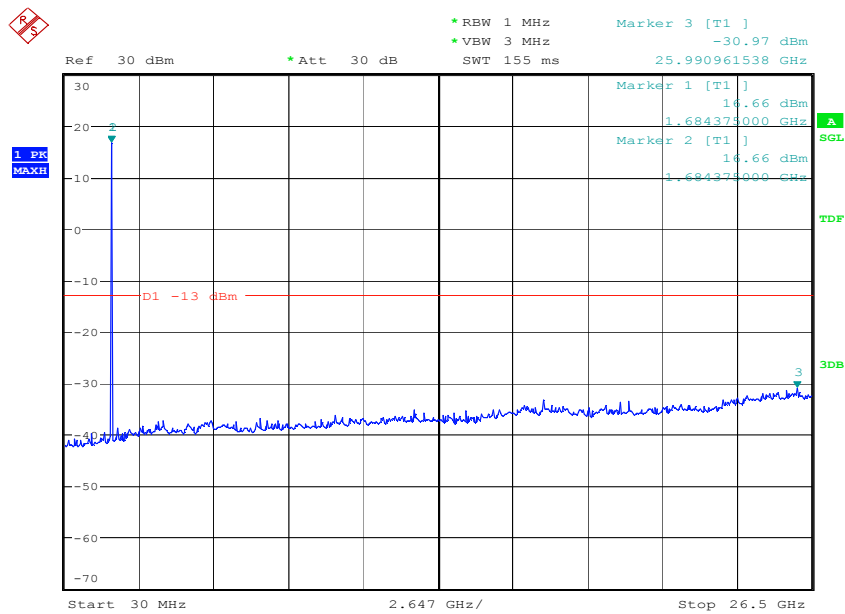
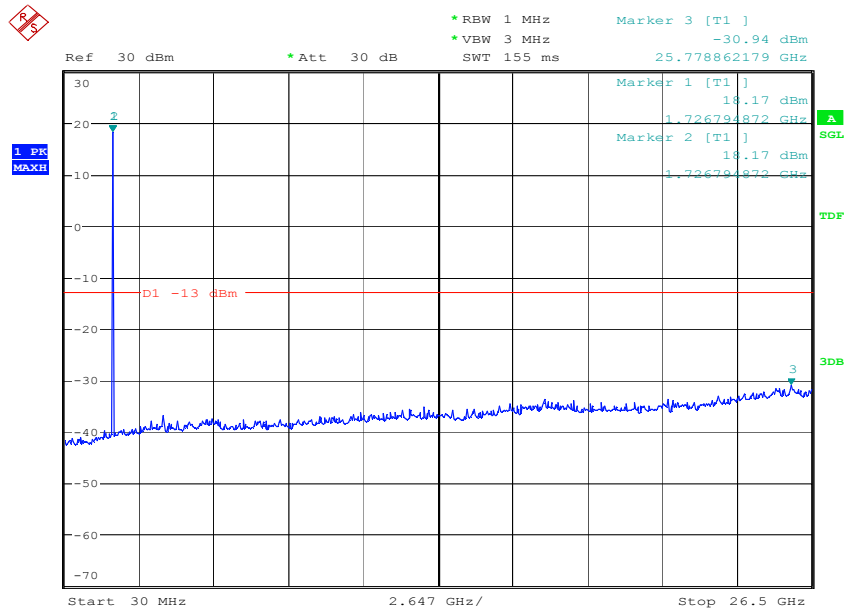Date: 10.MAY.2017 19:16:43

BW1.4MHz-1710.7MHz,QPSK-6RB_LOW@Pass

Date: 10.MAY.2017 19:16:26

Report No.: FCC17040291A-5
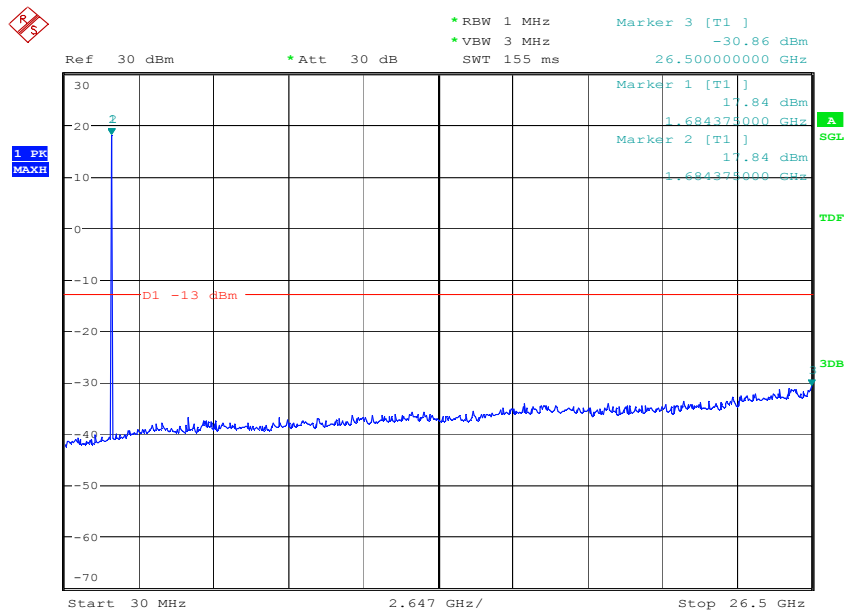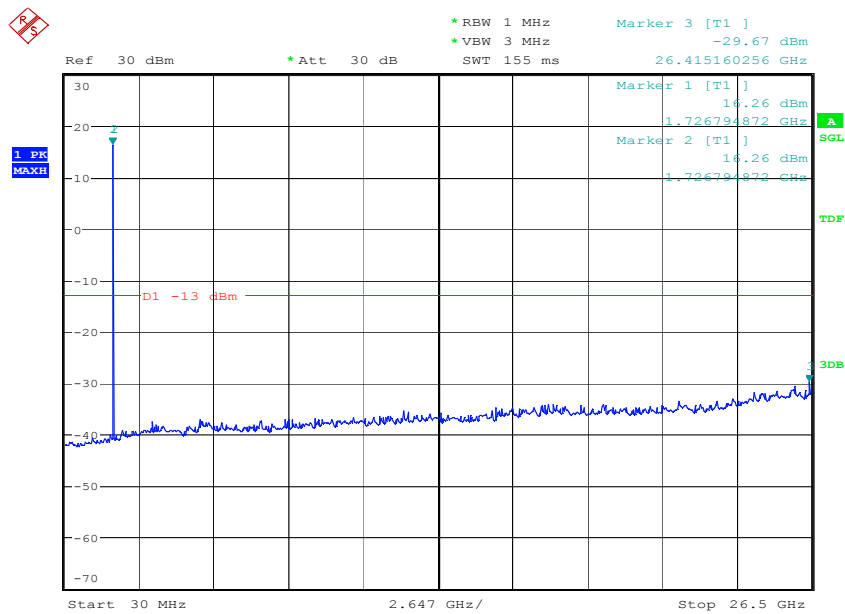
BW1.4MHz-1732.5MHz,Q16-6RB_LOW@Pass
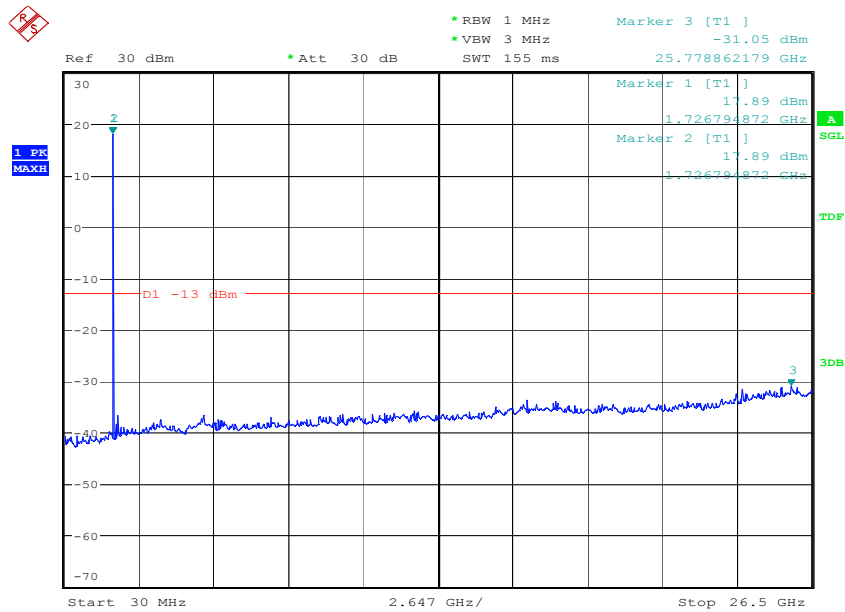
Date: 10.MAY.2017 19:17:49

BW1.4MHz-1732.5MHz,QPSK-6RB_LOW@Pass
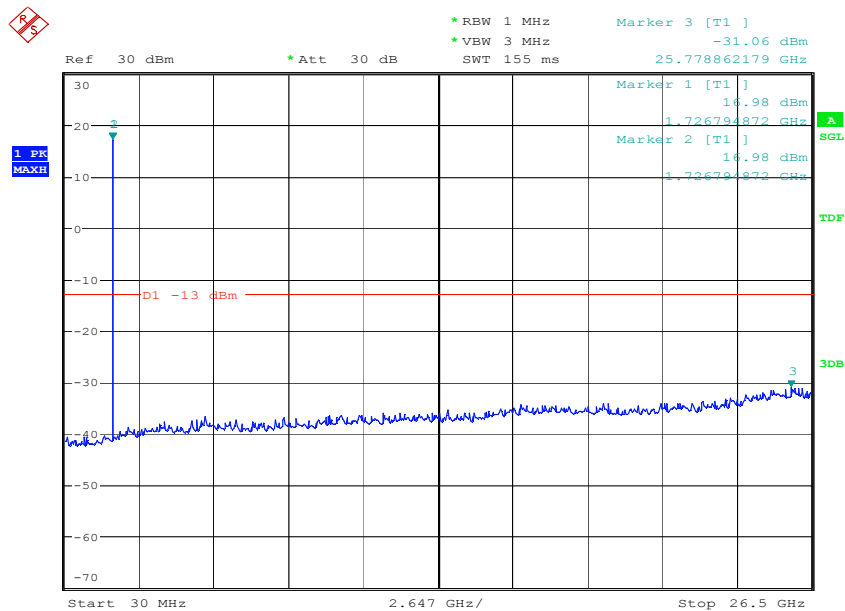

Date: 10.MAY.2017 19:17:33

Report No.: FCC17040291A-5

BW1.4MHz-1754.3MHz,Q16-6RB_LOW@Pass

Date: 10.MAY.2017 19:17:17

BW1.4MHz-1754.3MHz,QPSK-6RB_LOW@Pass

Date: 10.MAY.2017 19:17:00

Report No.: FCC17040291A-5

BW10MHz-1715MHz,Q16-50RB_LOW@Pass
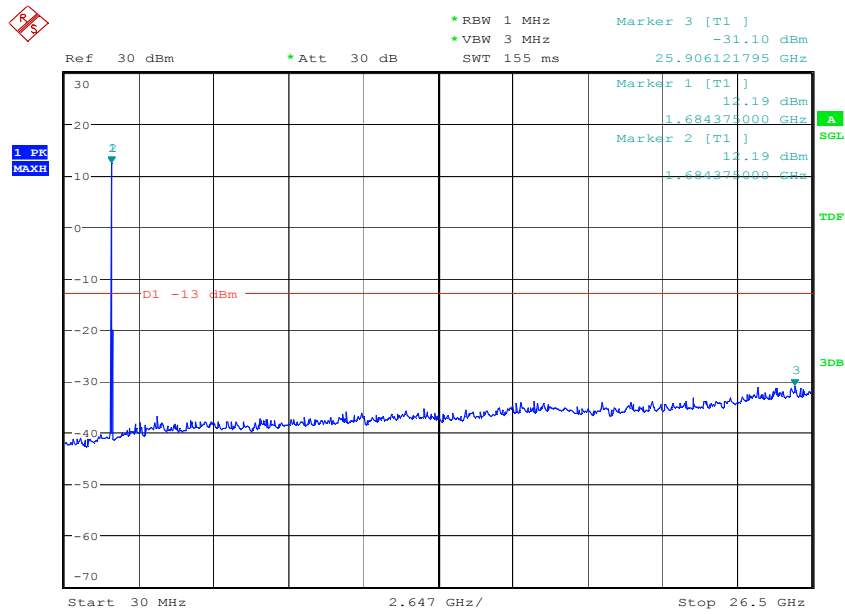
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BW10MHz-1715MHz,QPSK-50RB_LOW@Pass

Date: 10.MAY.2017 19:21:27

Report No.: FCC17040291A-5

BW10MHz-1732.5MHz,Q16-50RB_LOW@Pass
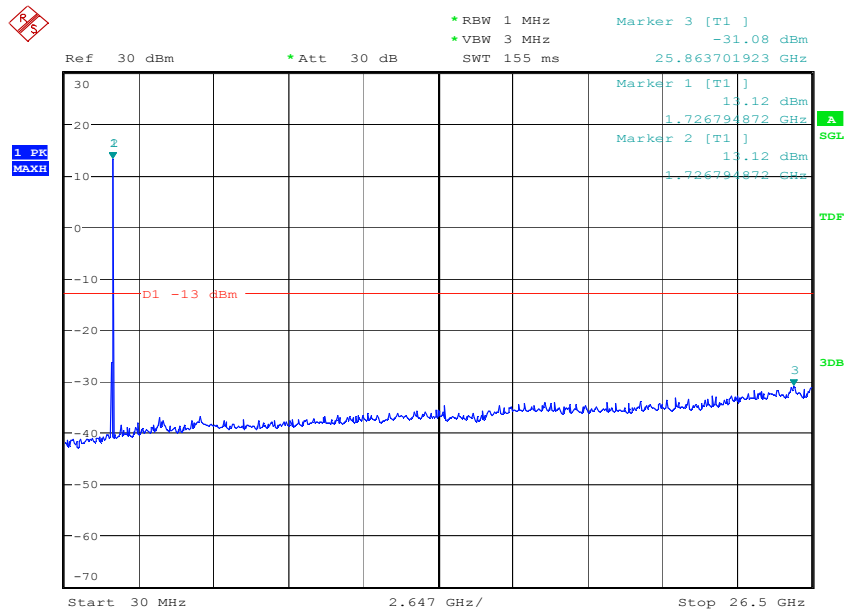
Date: 10.MAY.2017 19:22:51

BW10MHz-1732.5MHz,QPSK-50RB_LOW@Pass

Date: 10.MAY.2017 19:22:35
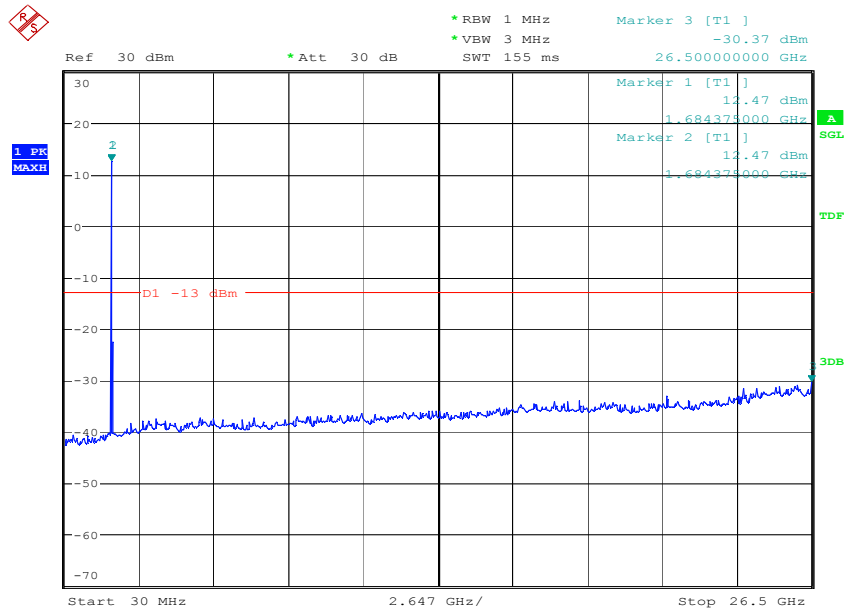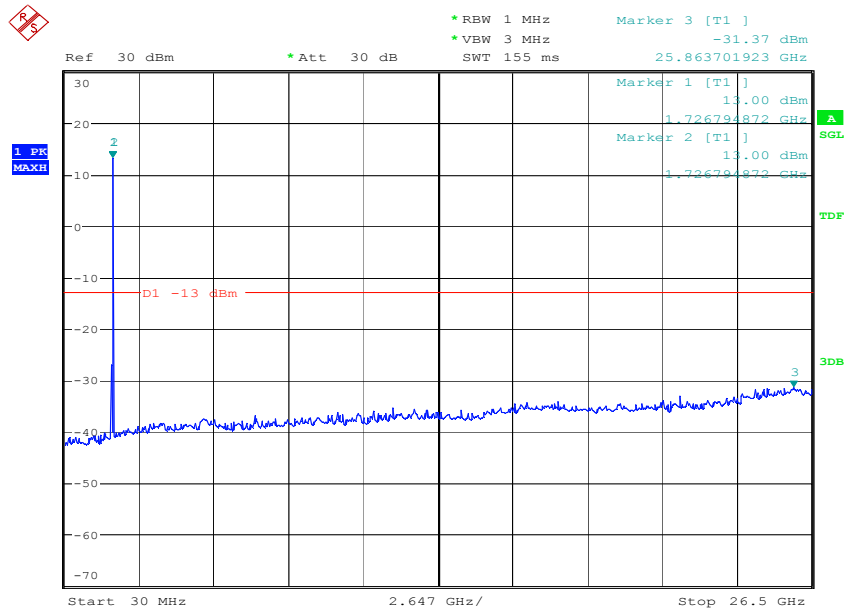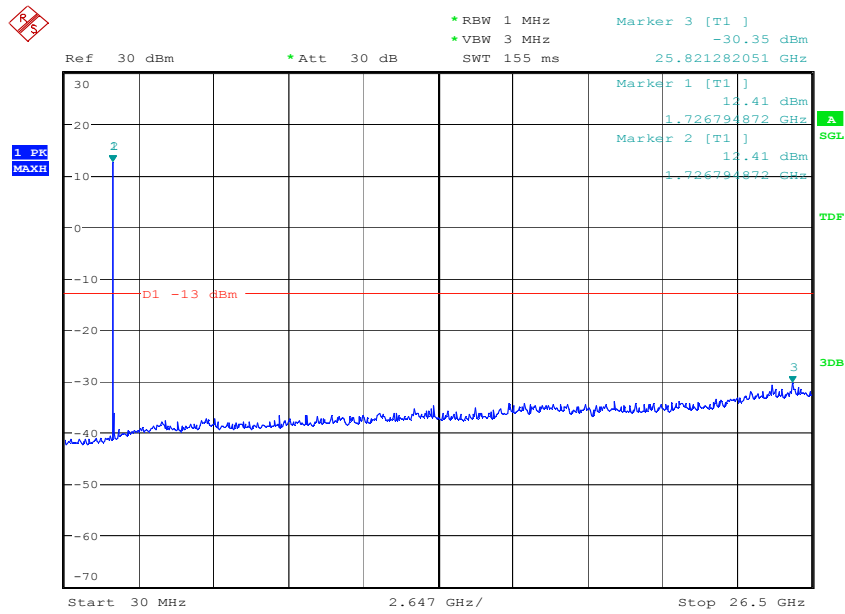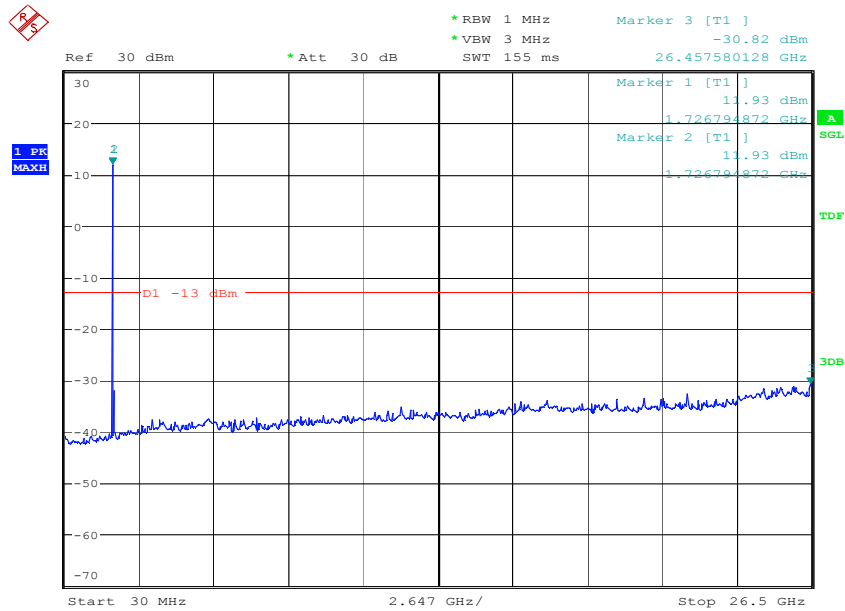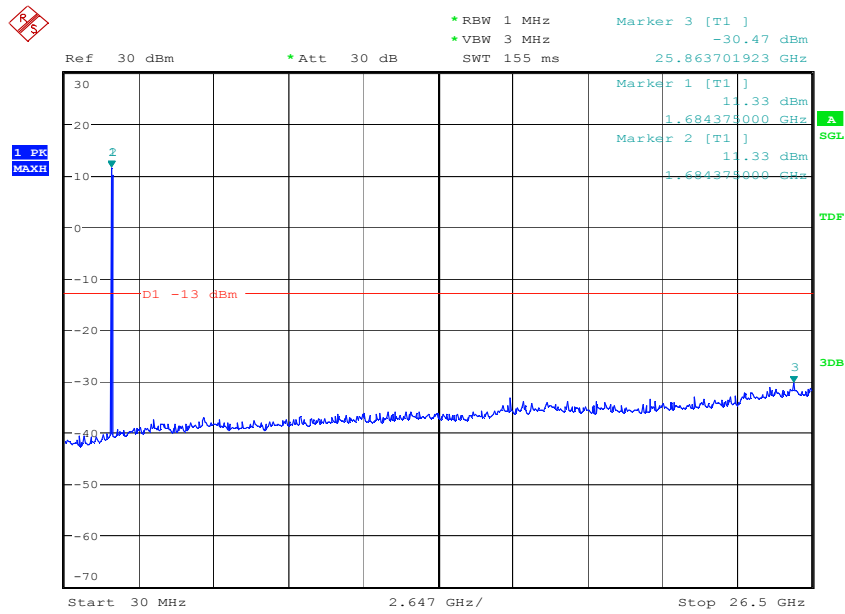
BW10MHz-1750MHz,Q16-50RB_LOW@Pass

```
                                      * RBW  1 MHz        Marker 3 [T1 ]
                                      * VBW  3 MHz                    -30.35 dBm
         Ref   30 dBm      * Att  30 dB   SWT  155 ms      25.821282051 GHz
   30                                                 Marker 1 [T1 ]
                                                                 12.41 dBm
   20                                                     1.726794872 GHz    A
                                                      Marker 2 [T1 ]        SGL
   10                                                            12.41 dBm
                                                          1.726794872 GHz
    0                                                                       TDF

  -10
        D1 -13 dBm
  -20
                                                                            3DB
  -30                                                                  3
  -40
  -50
  -60
  -70
   Start  30 MHz            2.647 GHz/              Stop  26.5 GHz
```

Date: 10.MAY.2017 19:22:17

BW10MHz-1750MHz,QPSK-50RB_LOW@Pass

```
                                      * RBW  1 MHz        Marker 3 [T1 ]
                                      * VBW  3 MHz                    -30.82 dBm
         Ref   30 dBm      * Att  30 dB   SWT  155 ms      26.457580128 GHz
   30                                                 Marker 1 [T1 ]
                                                                 11.93 dBm
   20                                                     1.726794872 GHz    A
                                                      Marker 2 [T1 ]        SGL
   10                                                            11.93 dBm
                                                          1.726794872 GHz
    0                                                                       TDF

  -10
        D1 -13 dBm
  -20
                                                                            3DB
  -30
  -40
  -50
  -60
  -70
   Start  30 MHz            2.647 GHz/              Stop  26.5 GHz
```

Date: 10.MAY.2017 19:22:01

BW15MHz-1717.5MHz,Q16-75RB_LOW@Pass

```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                  -30.47 dBm
           Ref   30 dBm    * Att  30 dB   SWT  155 ms     25.863701923 GHz
```

Marker 1 [T1] 11.33 dBm 1.684375000 GHz
Marker 2 [T1] 11.33 dBm 1.684375000 GHz

D1 -13 dBm

1 PK MAXH

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 19:23:31

BW15MHz-1717.5MHz,QPSK-75RB_LOW@Pass

```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                  -30.68 dBm
           Ref   30 dBm    * Att  30 dB   SWT  155 ms     26.415160256 GHz
```

Marker 1 [T1] 12.10 dBm 1.684375000 GHz
Marker 2 [T1] 12.10 dBm 1.684375000 GHz

D1 -13 dBm

1 PK MAXH

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 19:23:13

Report No.: FCC17040291A-5
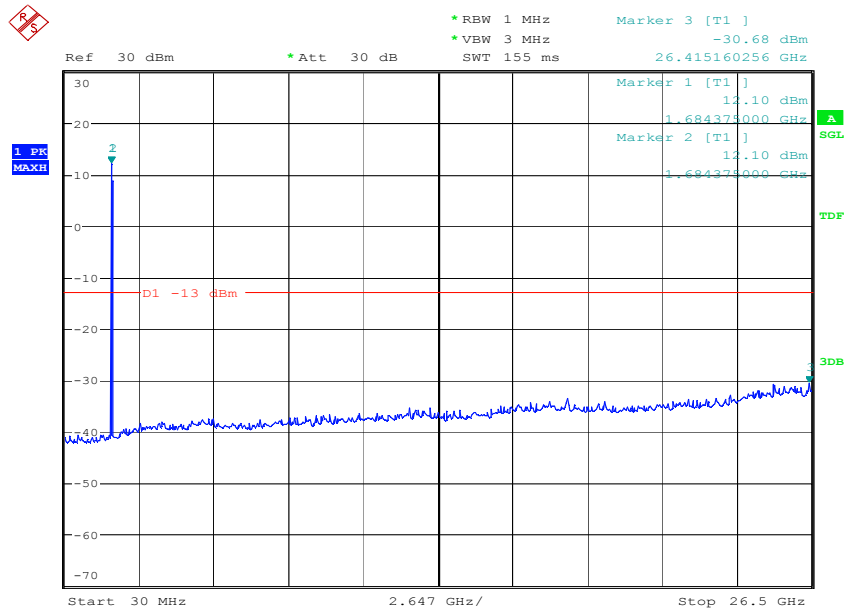
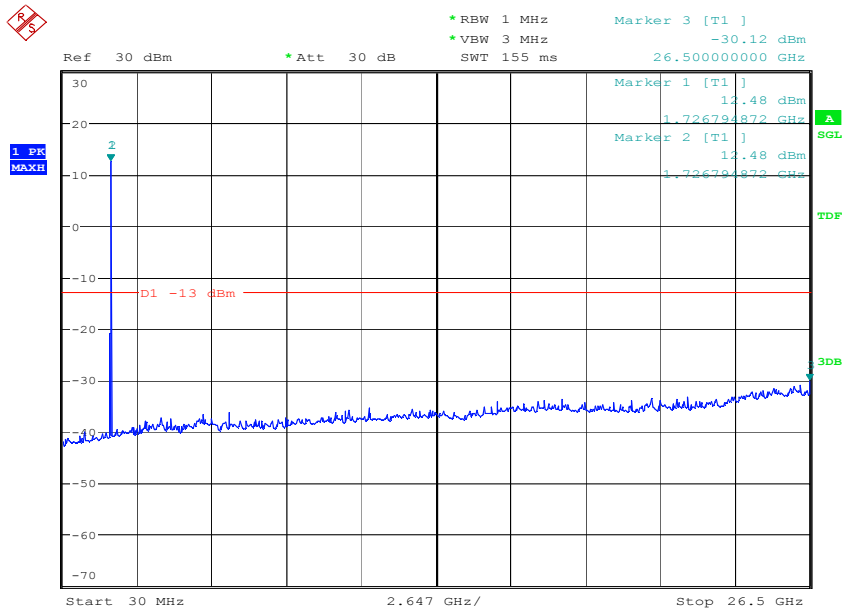### BW15MHz-1732.5MHz,Q16-75RB_LOW@Pass
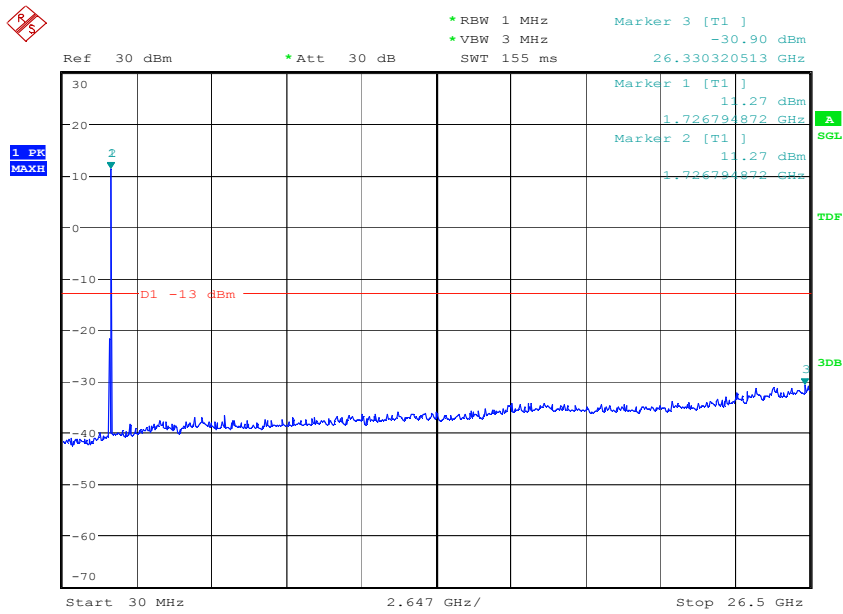
Date: 10.MAY.2017 19:24:48

BW15MHz-1732.5MHz,QPSK-75RB_LOW@Pass

Date: 10.MAY.2017 19:24:29

Report No.: FCC17040291A-5
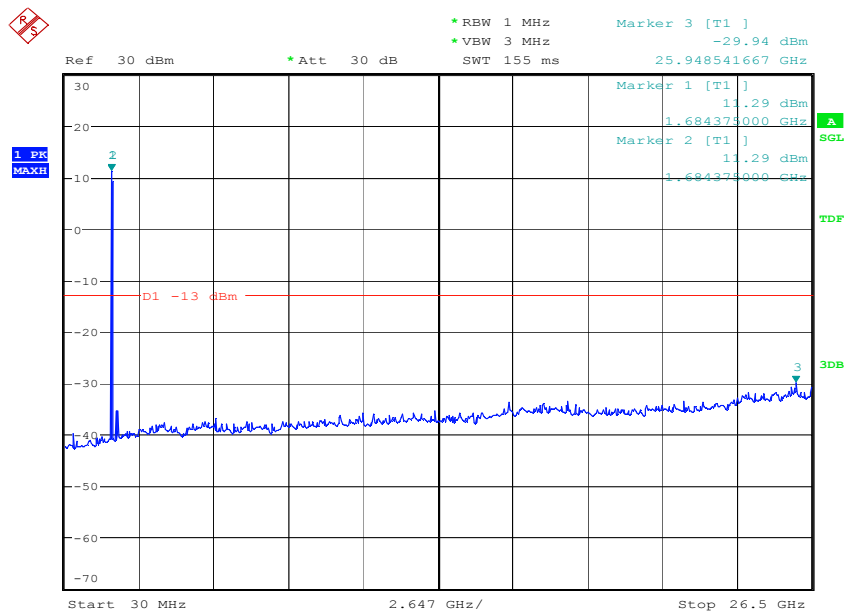
BW15MHz-1747.5MHz,Q16-75RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                    -31.23 dBm
         Ref   30 dBm      * Att   30 dB    SWT  155 ms       26.075801282 GHz
                                               Marker 1 [T1 ]
                                                           10.90 dBm
                                                       1.726794872 GHz
                                               Marker 2 [T1 ]
                                                           10.90 dBm
                                                       1.726794872 GHz
```
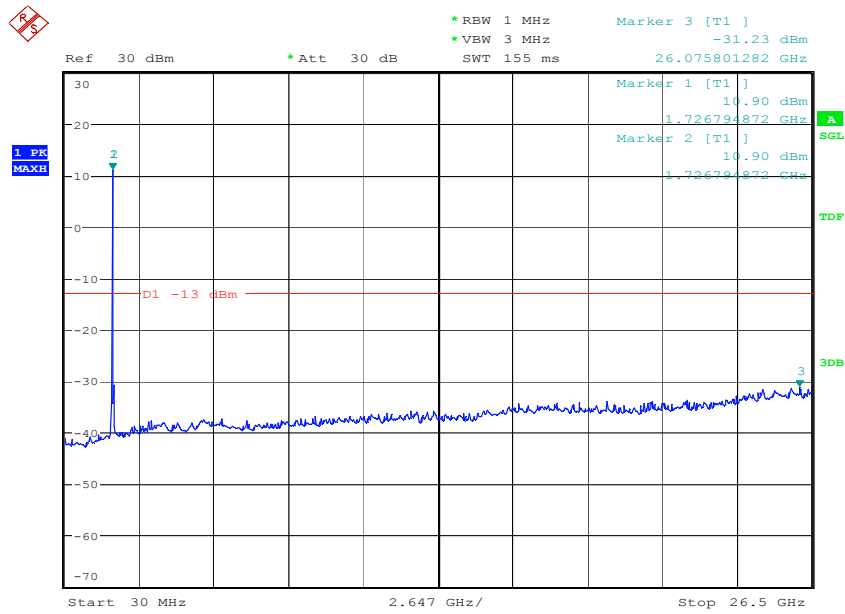
Date: 10.MAY.2017 19:24:10

BW15MHz-1747.5MHz,QPSK-75RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                    -31.37 dBm
         Ref   30 dBm      * Att   30 dB    SWT  155 ms       25.863701923 GHz
                                               Marker 1 [T1 ]
                                                           11.43 dBm
                                                       1.726794872 GHz
                                               Marker 2 [T1 ]
                                                           11.43 dBm
                                                       1.726794872 GHz
```

Date: 10.MAY.2017 19:23:51

Report No.: FCC17040291A-5
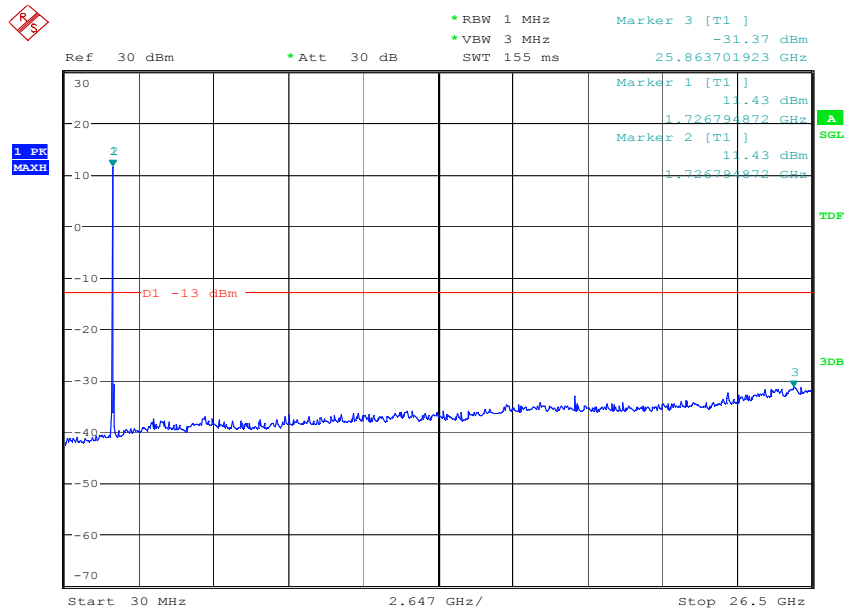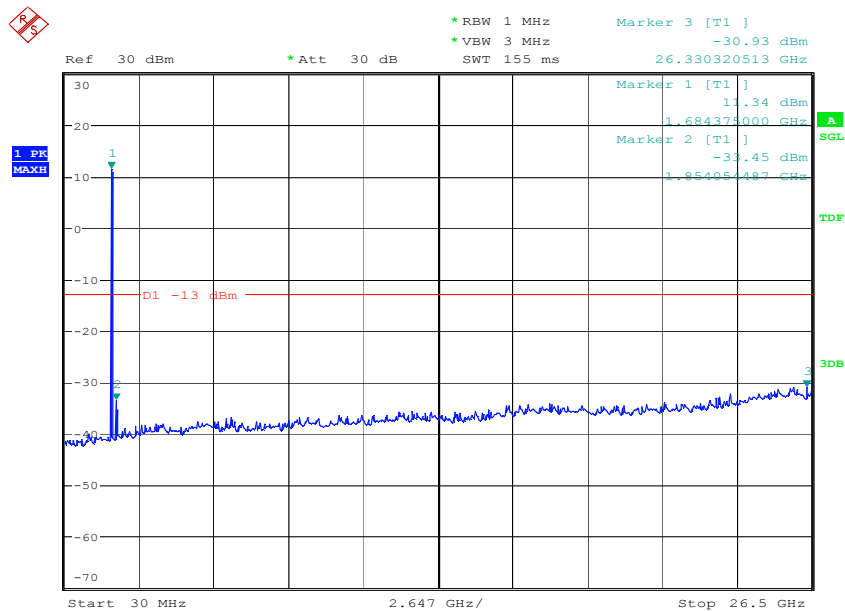
BW20MHz-1720MHz,Q16-100RB_LOW@Pass

Date: 10.MAY.2017 19:25:28

BW20MHz-1720MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 19:25:09

Report No.: FCC17040291A-5
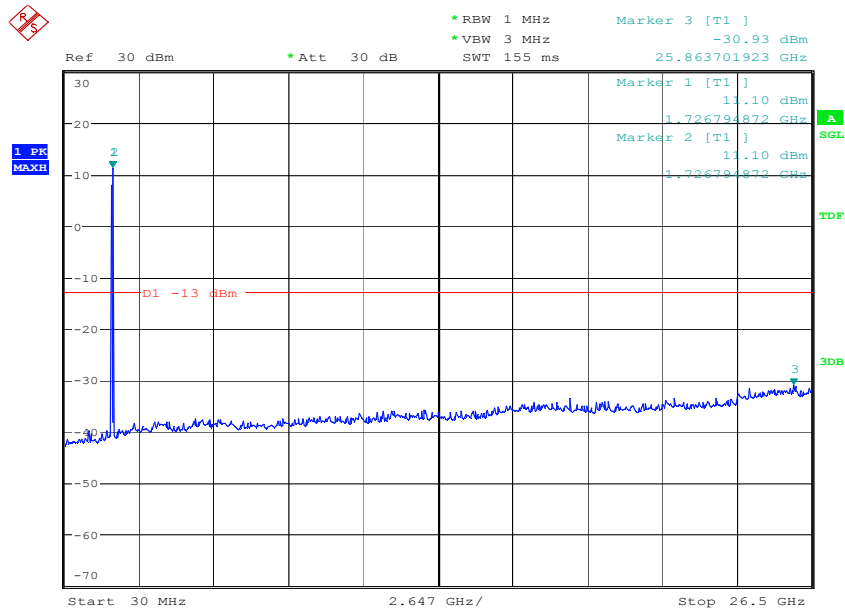
BW20MHz-1732.5MHz,Q16-100RB_LOW@Pass
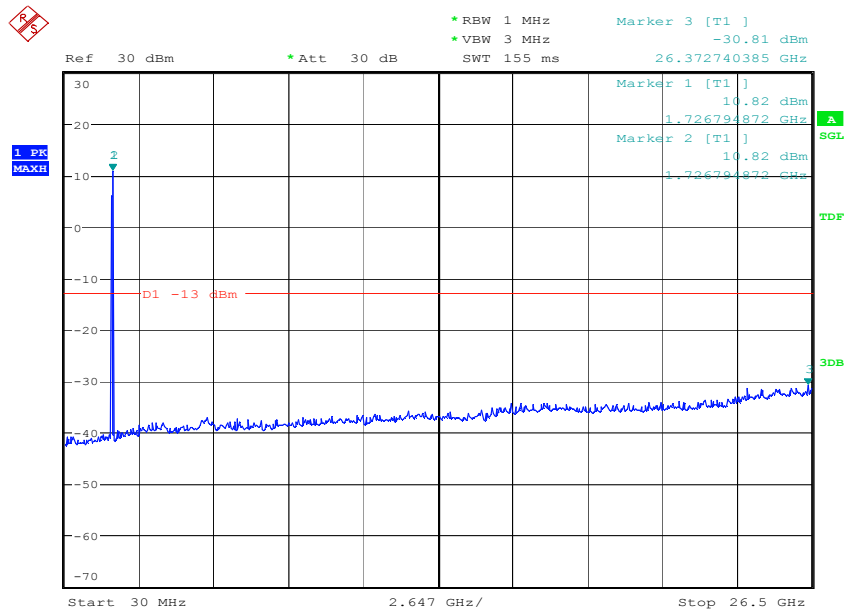
Date: 10.MAY.2017 19:26:45

BW20MHz-1732.5MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 19:26:26

Report No.: FCC17040291A-5

BW20MHz-1745MHz,Q16-100RB_LOW@Pass

Date: 10.MAY.2017 19:26:06

BW20MHz-1745MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 19:25:48
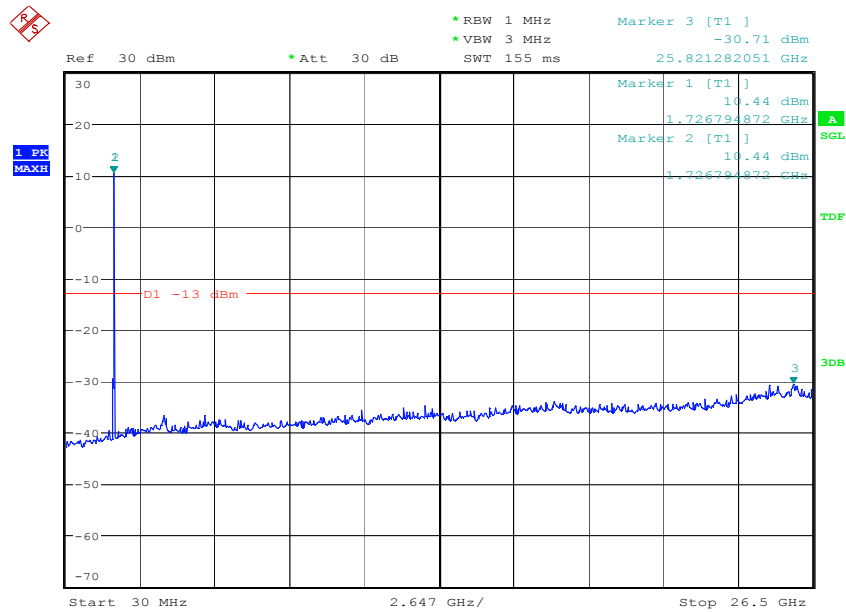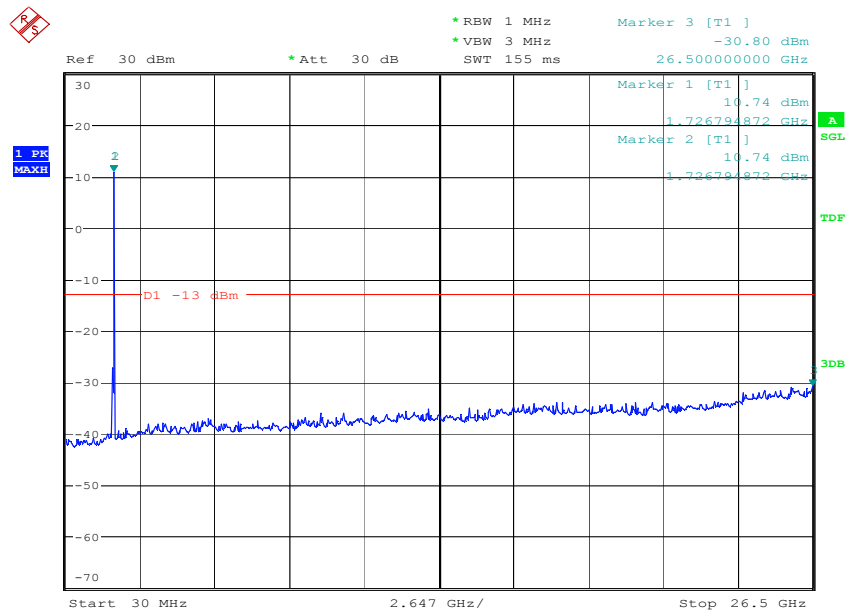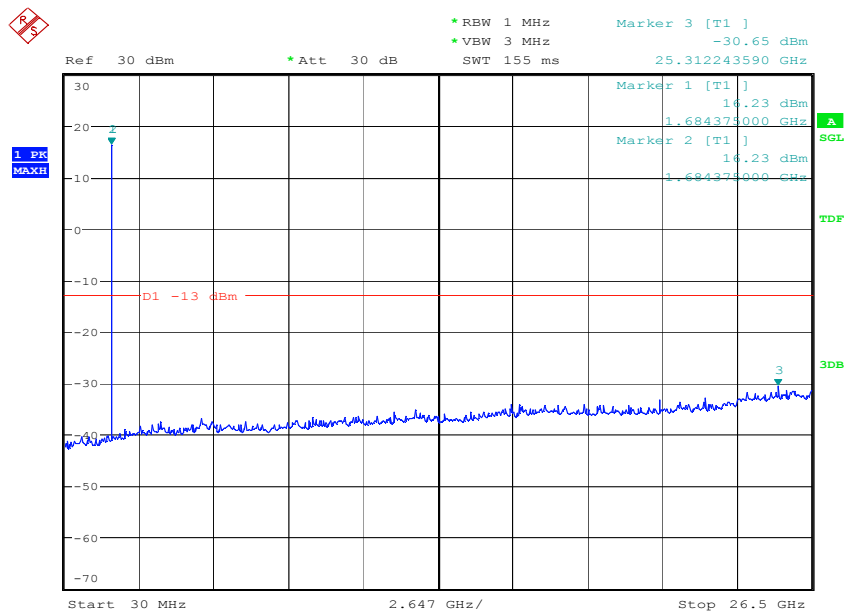
BW3MHz-1711.5MHz,Q16-15RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	-30.65 dBm
Ref 30 dBm	* Att 30 dB SWT 155 ms	25.312243590 GHz

Marker 1 [T1]
16.23 dBm
1.684375000 GHz
Marker 2 [T1]
16.23 dBm
1.684375000 GHz

D1 -13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 19:18:23

BW3MHz-1711.5MHz,QPSK-15RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	-30.29 dBm
Ref 30 dBm	* Att 30 dB SWT 155 ms	25.948541667 GHz

Marker 1 [T1]
15.66 dBm
1.684375000 GHz
Marker 2 [T1]
15.66 dBm
1.684375000 GHz

D1 -13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 19:18:07

Report No.: FCC17040291A-5
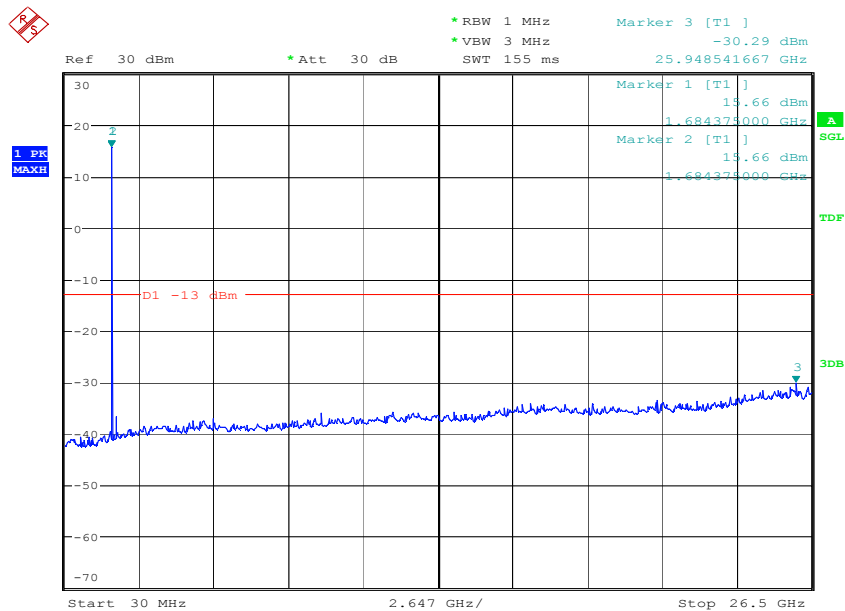
BW3MHz-1732.5MHz,Q16-15RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz               -30.50 dBm
    Ref  30 dBm      * Att  30 dB    SWT  155 ms       25.821282051 GHz
                                                     Marker 1 [T1 ]
     30                                                      15.76 dBm
                                                      1.726794872 GHz      A
     20   2                                           Marker 2 [T1 ]      SGL
                                                             15.76 dBm
     10                                                1.726794872 GHz
                                                                          TDF
      0

    -10
         D1 -13 dBm
    -20                                                                   3DB
                                                                       3
    -30
    -40
    -50
    -60
    -70
    Start  30 MHz           2.647 GHz/            Stop  26.5 GHz
```
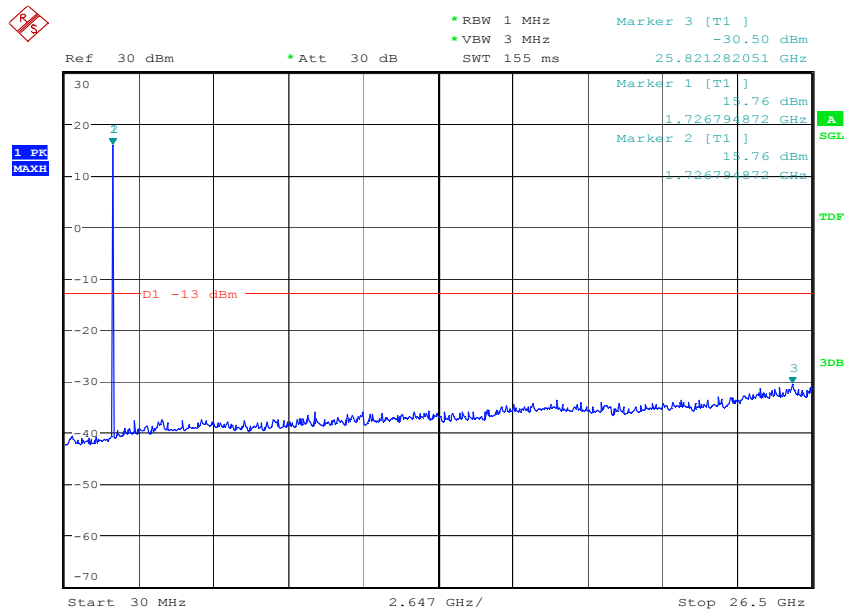
Date: 10.MAY.2017 19:19:27

BW3MHz-1732.5MHz,QPSK-15RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz               -31.61 dBm
    Ref  30 dBm      * Att  30 dB    SWT  155 ms       25.906121795 GHz
                                                     Marker 1 [T1 ]
     30                                                      15.68 dBm
                                                      1.726794872 GHz      A
     20   2                                           Marker 2 [T1 ]      SGL
                                                             15.68 dBm
     10                                                1.726794872 GHz
                                                                          TDF
      0

    -10
         D1 -13 dBm
    -20                                                                   3DB
                                                                       3
    -30
    -40
    -50
    -60
    -70
    Start  30 MHz           2.647 GHz/            Stop  26.5 GHz
```
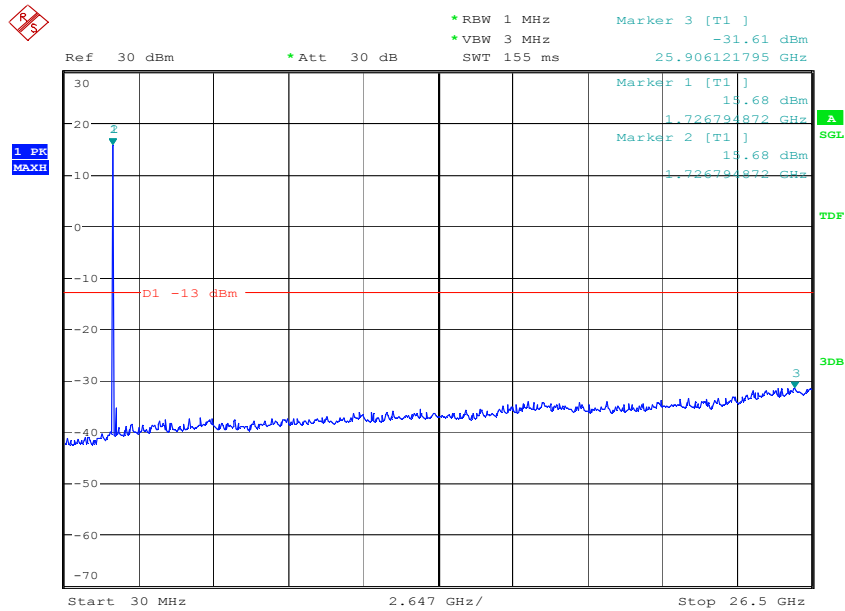
Date: 10.MAY.2017 19:19:11

BW3MHz-1753.5MHz,Q16-15RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                 -30.81 dBm
         Ref   30 dBm      * Att  30 dB    SWT  155 ms          26.330320513 GHz
                                                     Marker 1 [T1 ]
          30                                                  14.69 dBm
                                                           1.726794872 GHz      A
         -20   2                                     Marker 2 [T1 ]             SGL
                                                             14.69 dBm
  1 PK    10                                              1.726794872 GHz
  MAXH
           0                                                                    TDF

         -10
               D1 -13 dBm
         -20

                                                                               3DB
         -30                                                                3

         -40

         -50

         -60

         -70
         Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```
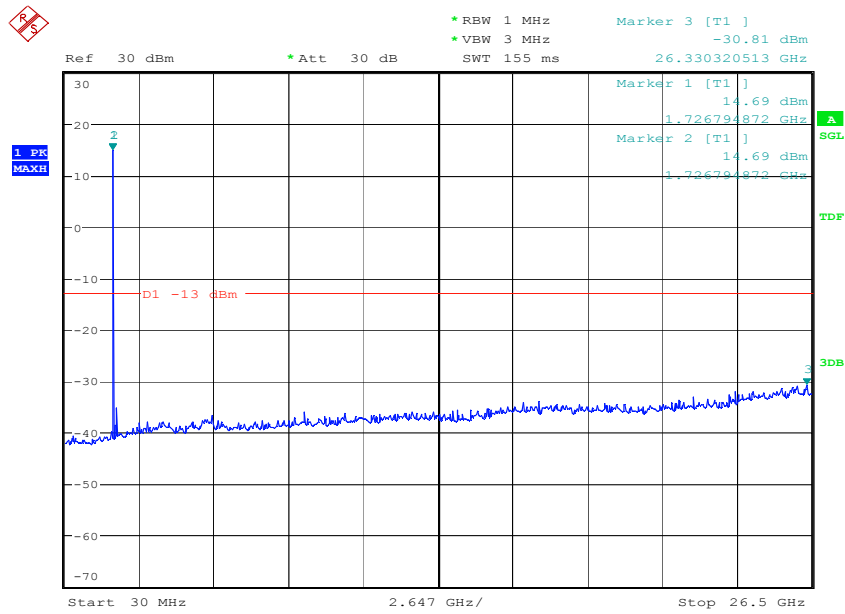
Date: 10.MAY.2017 19:18:55

BW3MHz-1753.5MHz,QPSK-15RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                 -30.02 dBm
         Ref   30 dBm      * Att  30 dB    SWT  155 ms          25.863701923 GHz
                                                     Marker 1 [T1 ]
          30                                                  14.24 dBm
                                                           1.726794872 GHz      A
         -20   2                                     Marker 2 [T1 ]             SGL
                                                             14.24 dBm
  1 PK    10                                              1.726794872 GHz
  MAXH
           0                                                                    TDF

         -10
               D1 -13 dBm
         -20

                                                                               3DB
         -30                                                                3

         -40

         -50

         -60

         -70
         Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```

Date: 10.MAY.2017 19:18:39

Report No.: FCC17040291A-5
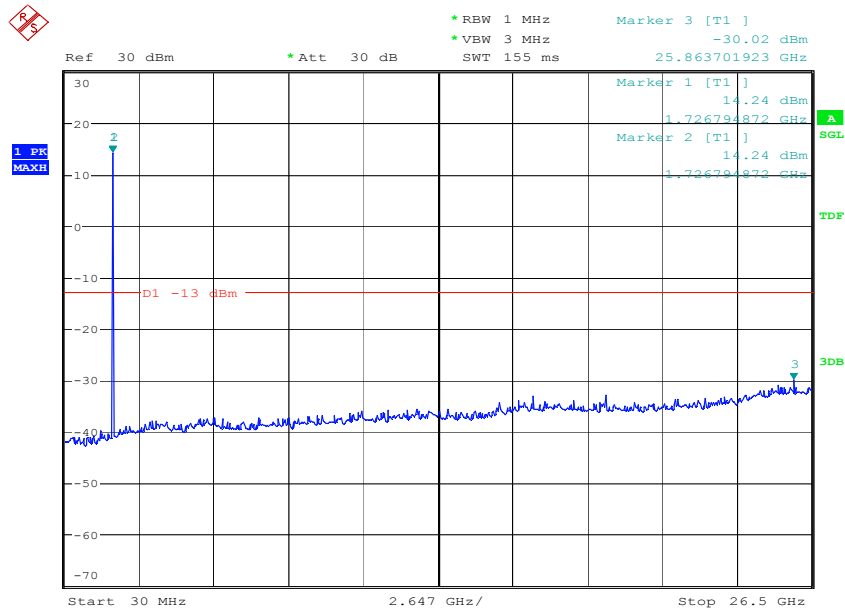
BW5MHz-1712.5MHz,Q16-25RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	−31.04 dBm
Ref 30 dBm	* Att 30 dB SWT 155 ms	25.609182692 GHz

Marker 1 [T1]
13.78 dBm
1.684375000 GHz

Marker 2 [T1]
13.78 dBm
1.684375000 GHz

1 PK
MAXH

D1 −13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz
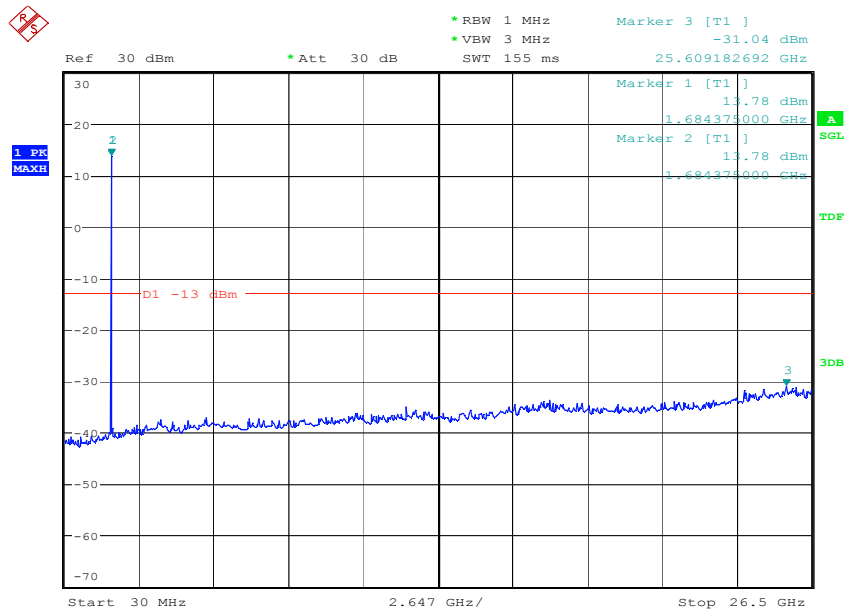
Date: 10.MAY.2017 19:20:02

BW5MHz-1712.5MHz,QPSK-25RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	−30.50 dBm
Ref 30 dBm	* Att 30 dB SWT 155 ms	26.457580128 GHz

Marker 1 [T1]
14.28 dBm
1.684375000 GHz

Marker 2 [T1]
−33.71 dBm
1.854054487 GHz

1 PK
MAXH

D1 −13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 19:19:46

Report No.: FCC17040291A-5
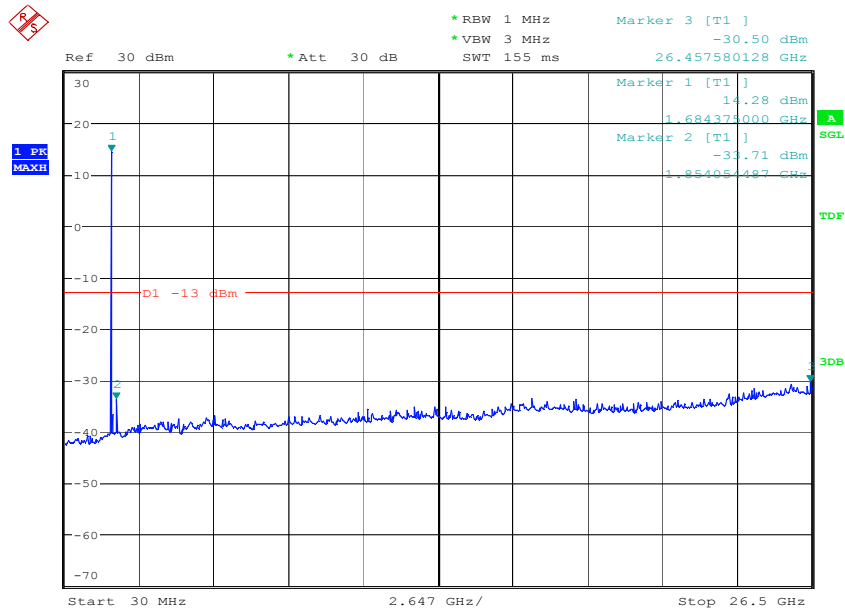
BW5MHz-1732.5MHz,Q16-25RB_LOW@Pass
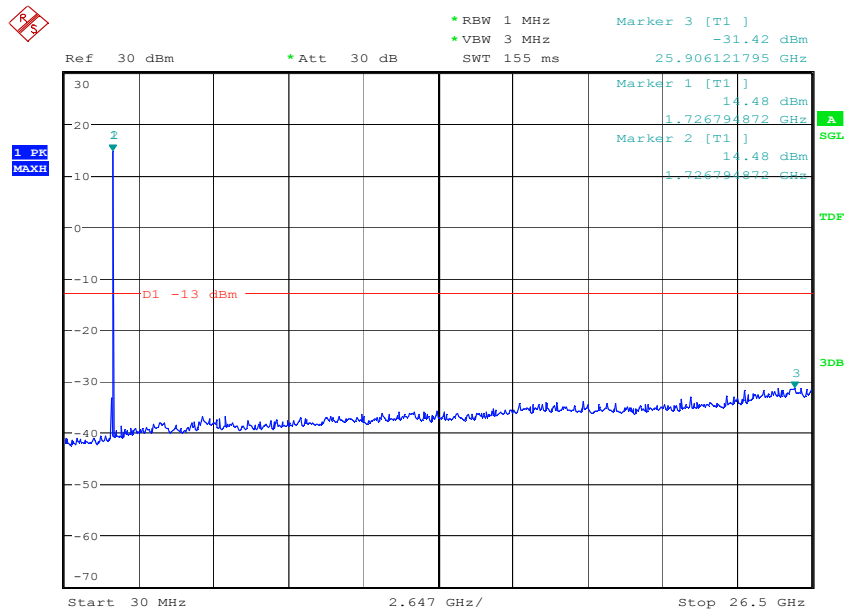
Date: 10.MAY.2017 19:21:08

BW5MHz-1732.5MHz,QPSK-25RB_LOW@Pass

Date: 10.MAY.2017 19:20:52

Report No.: FCC17040291A-5
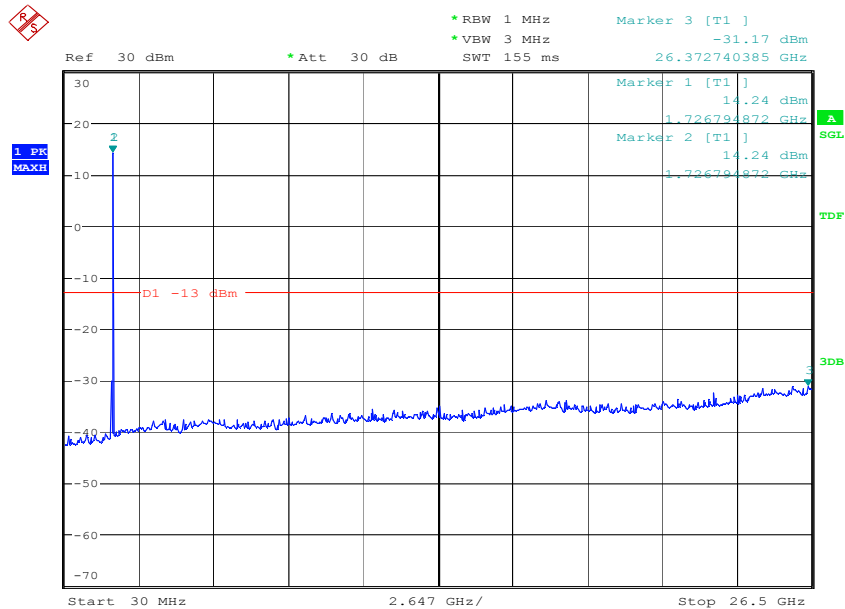
BW5MHz-1752.5MHz,Q16-25RB_LOW@Pass
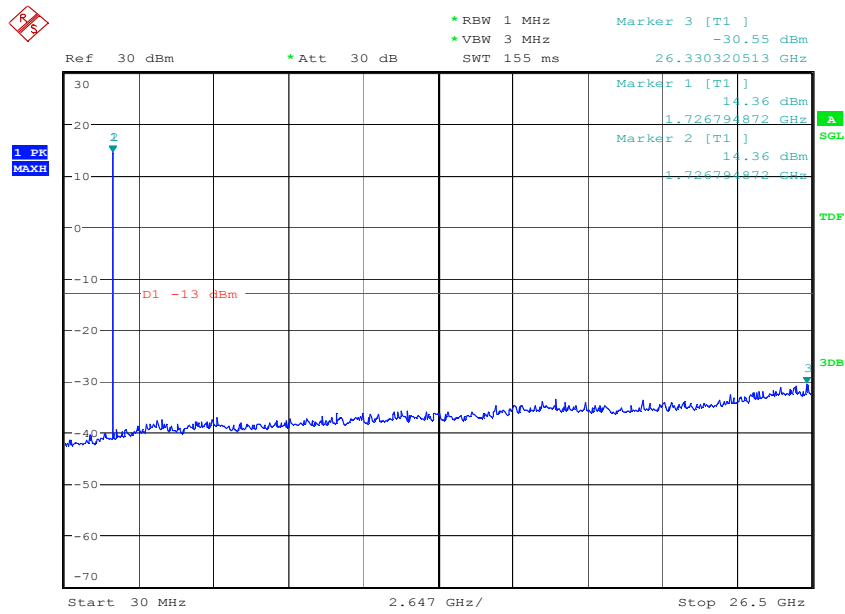
Date: 10.MAY.2017 19:20:35

BW5MHz-1752.5MHz,QPSK-25RB_LOW@Pass

Date: 10.MAY.2017 19:20:19

Report No.: FCC17040291A-5
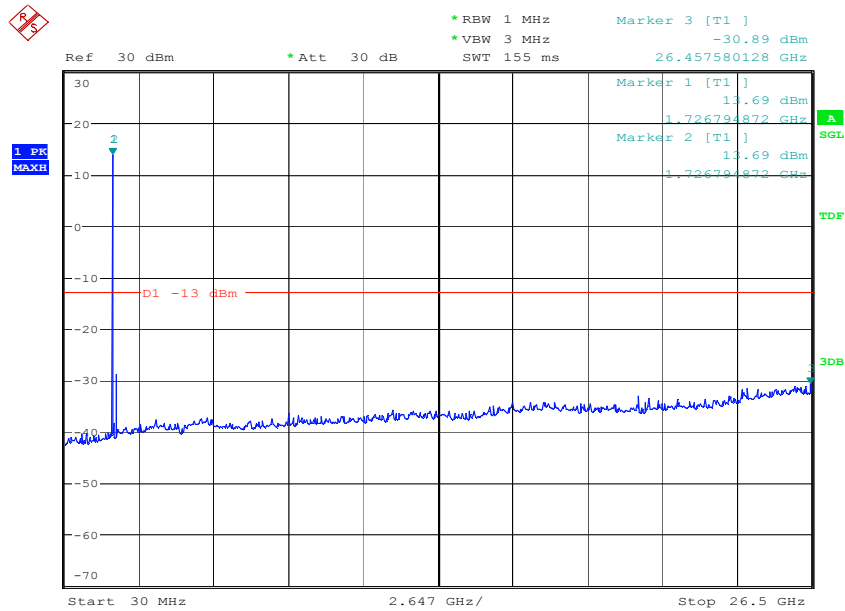
BAND 5@ Conducted Spurious Emission

BW1.4MHz-824.7MHz,Q16-6RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]	
* VBW 3 MHz	-31.08 dBm	
Ref 30 dBm * Att 30 dB SWT 155 ms	26.372740385 GHz	

Marker 1 [T1]
19.35 dBm
793.557692308 MHz

Marker 2 [T1]
19.35 dBm
793.557692308 MHz

D1 -13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz
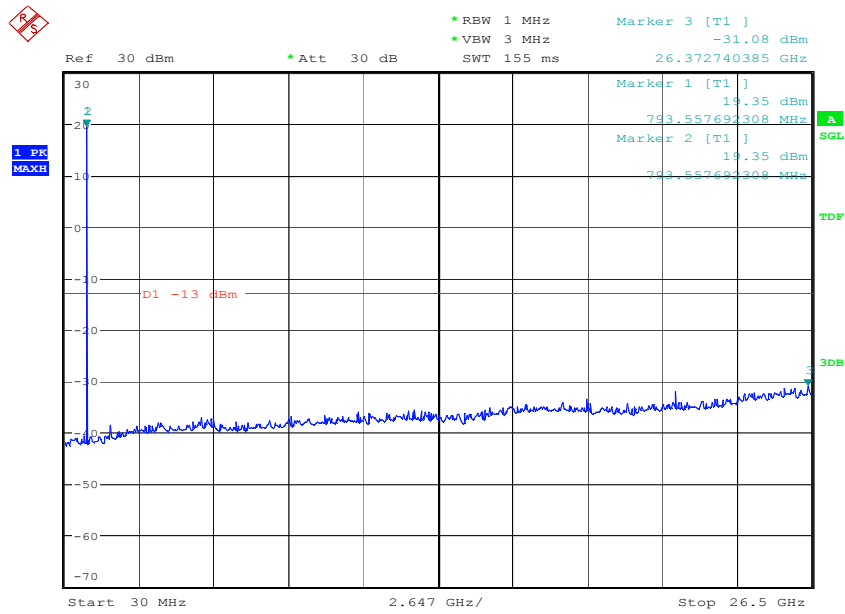
Date: 13.JUN.2017 19:43:46

BW1.4MHz-824.7MHz,QPSK-6RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]	
* VBW 3 MHz	-30.98 dBm	
Ref 30 dBm * Att 30 dB SWT 155 ms	26.287900641 GHz	

Marker 1 [T1]
20.32 dBm
793.557692308 MHz

Marker 2 [T1]
20.32 dBm
793.557692308 MHz

D1 -13 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 13.JUN.2017 19:43:31

Report No.: FCC17040291A-5
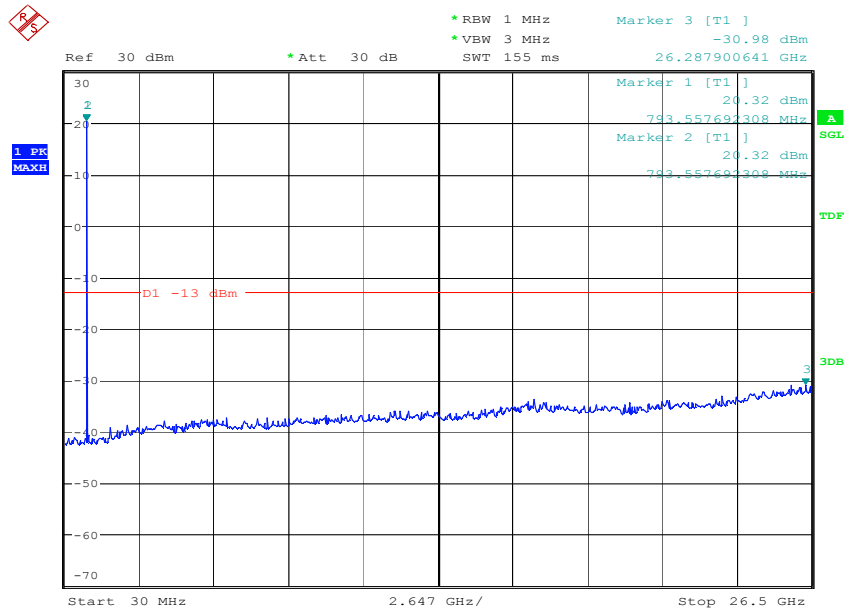
BW1.4MHz-836.5MHz,QPSK-6RB_LOW@Pass

```
                                      * RBW  1 MHz      Marker 3 [T1 ]
                                      * VBW  3 MHz                  -30.79 dBm
        Ref   30 dBm    * Att  30 dB    SWT  155 ms        26.075801282 GHz
         30                                              Marker 1 [T1 ]
                                                                    18.46 dBm
          20  2                                             835.977564103 MHz    A
 1 PK                                                    Marker 2 [T1 ]          SGL
 MAXH     10                                                        18.46 dBm
                                                           835.977564103 MHz
                                                                                TDF
           0

         -10     D1 -13 dBm
                                                                                3DB
         -20                                                               3
         -30
                                                                                3DB
         -40
         -50
         -60
         -70
        Start  30 MHz              2.647 GHz/           Stop  26.5 GHz
```

Date: 13.JUN.2017 19:44:50

BW1.4MHz-848.3MHz,Q16-6RB_LOW@Pass

```
                                      * RBW  1 MHz      Marker 3 [T1 ]
                                      * VBW  3 MHz                  -31.23 dBm
        Ref   30 dBm    * Att  30 dB    SWT  155 ms        26.245480769 GHz
         30                                              Marker 1 [T1 ]
                                                                    17.78 dBm
          20  3                                             835.977564103 MHz    A
 1 PK                                                    Marker 2 [T1 ]          SGL
 MAXH     10                                                        17.78 dBm
                                                           835.977564103 MHz
                                                                                TDF
           0

         -10     D1 -13 dBm
         -20
                                                                                3DB
         -30                                                               3
         -40
         -50
         -60
         -70
        Start  30 MHz              2.647 GHz/           Stop  26.5 GHz
```

Date: 13.JUN.2017 19:44:19

Report No.: FCC17040291A-5
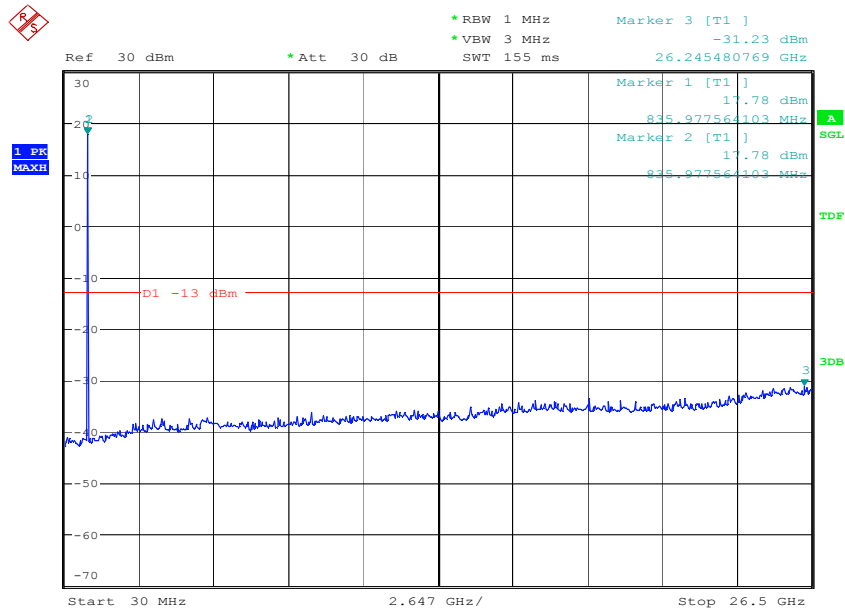
BW1.4MHz-848.3MHz,QPSK-6RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                -31.14 dBm
            Ref   30 dBm    * Att   30 dB    SWT  155 ms       25.227403846 GHz
  30
                                                        Marker 1 [T1 ]
  20  2                                                       19.13 dBm
                                                        835.977564103 MHz
  10                                                    Marker 2 [T1 ]
                                                              19.13 dBm
                                                        835.977564103 MHz
   0

 -10          D1 -13 dBm

                                                                       3
 -30                                                              3

 -50

 -60

 -70
    Start  30 MHz              2.647 GHz/            Stop  26.5 GHz
```

1 PK
MAXH

A
SGL

TDF

3DB

Date: 13.JUN.2017 19:44:03
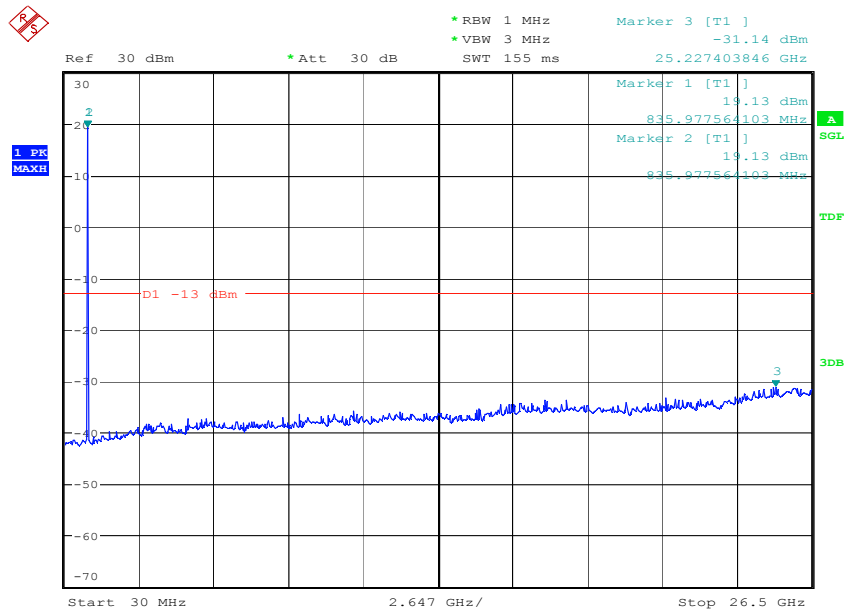
BW10MHz-829MHz,Q16-50RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                -30.76 dBm
            Ref   30 dBm    * Att   30 dB    SWT  155 ms       26.075801282 GHz
  30
                                                        Marker 1 [T1 ]
  20                                                          16.36 dBm
                                                        793.557692308 MHz
  10                                                    Marker 2 [T1 ]
                                                              16.36 dBm
                                                        793.557692308 MHz
   0

 -10          D1 -13 dBm

                                                                       3
 -30                                                              3

 -50

 -60

 -70
    Start  30 MHz              2.647 GHz/            Stop  26.5 GHz
```

1 PK
MAXH

A
SGL

TDF

3DB

Date: 13.JUN.2017 19:48:46

Report No.: FCC17040291A-5
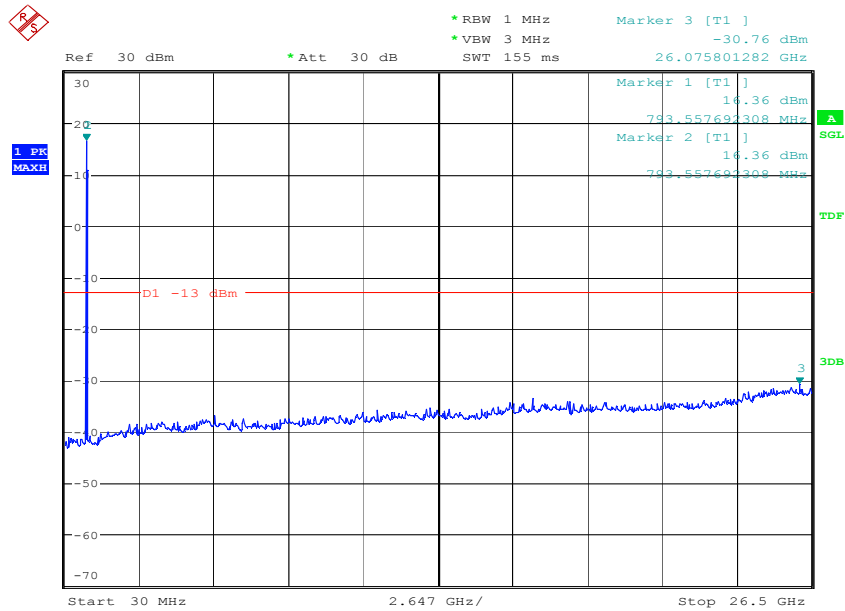
BW10MHz-829MHz,QPSK-50RB_LOW@Pass


```
                                              * RBW  1 MHz       Marker 3 [T1 ]
                                              * VBW  3 MHz                  -31.25 dBm
  Ref   30 dBm            * Att   30 dB       SWT  155 ms         25.821282051 GHz
                                                                 Marker 1 [T1 ]
   30                                                                    16.95 dBm
                                                                 793.557692308 MHz
   20                                                            Marker 2 [T1 ]
                                                                         16.95 dBm
   10                                                            793.557692308 MHz
    0
  -10         D1 -13 dBm
  -20
  -30                                                                            3
  -40
  -50
  -60
  -70
  Start  30 MHz                    2.647 GHz/                    Stop  26.5 GHz
```
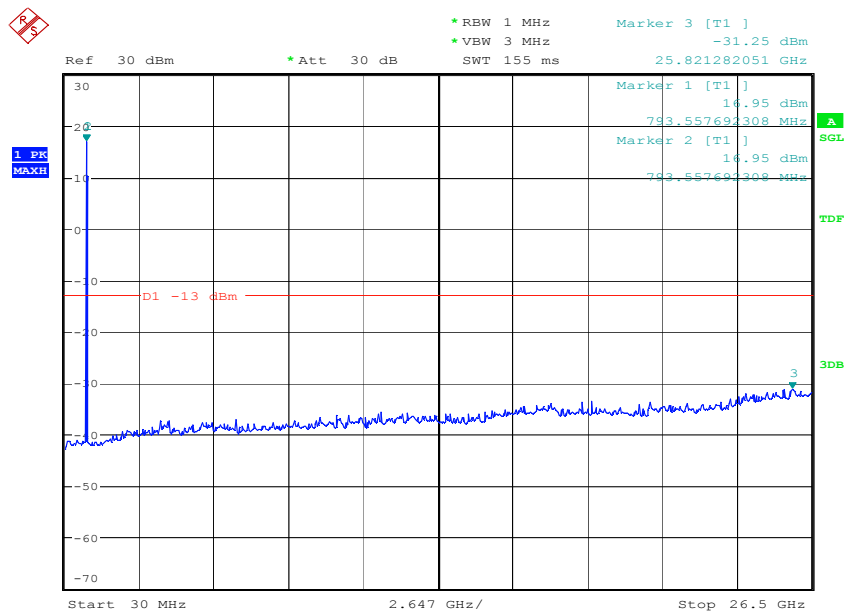
Date: 13.JUN.2017 19:48:30

BW10MHz-836.5MHz,Q16-50RB_LOW@Pass


```
                                              * RBW  1 MHz       Marker 3 [T1 ]
                                              * VBW  3 MHz                  -31.08 dBm
  Ref   30 dBm            * Att   30 dB       SWT  155 ms         26.372740385 GHz
                                                                 Marker 1 [T1 ]
   30                                                                    15.14 dBm
                                                                 835.977564103 MHz
   20                                                            Marker 2 [T1 ]
                                                                         15.14 dBm
   10                                                            835.977564103 MHz
    0
  -10         D1 -13 dBm
  -20
  -30                                                                            3
  -40
  -50
  -60
  -70
  Start  30 MHz                    2.647 GHz/                    Stop  26.5 GHz
```

Date: 13.JUN.2017 19:49:53

Report No.: FCC17040291A-5

BW10MHz-836.5MHz,QPSK-50RB_LOW@Pass

```
                                    * RBW  1 MHz       Marker 3 [T1 ]
                                    * VBW  3 MHz                     -30.61 dBm
     Ref   30 dBm      * Att  30 dB   SWT  155 ms        25.269823718 GHz
```



```
Date: 13.JUN.2017  19:49:37
```

BW10MHz-844MHz,Q16-50RB_LOW@Pass

```
                                    * RBW  1 MHz       Marker 3 [T1 ]
                                    * VBW  3 MHz                     -30.85 dBm
     Ref   30 dBm      * Att  30 dB   SWT  155 ms        25.990961538 GHz
```



```
Date: 13.JUN.2017  19:49:20
```

Report No.: FCC17040291A-5
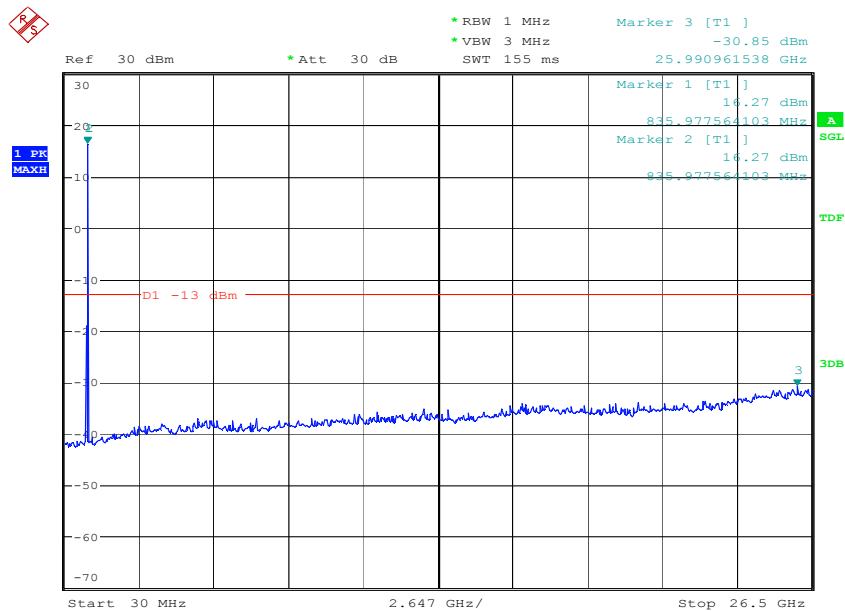
BW10MHz-844MHz,QPSK-50RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                    -29.79 dBm
Ref   30 dBm        * Att   30 dB     SWT  155 ms      25.948541667 GHz
                                                    Marker 1 [T1 ]
 30                                                             16.47 dBm
                                                       835.977564103 MHz
 20                                                 Marker 2 [T1 ]
                                                               16.47 dBm
 10                                                    835.977564103 MHz
  0
-10       D1 -13 dBm
-20
-30                                                                    3
-40
-50
-60
-70
Start  30 MHz              2.647 GHz/                   Stop  26.5 GHz
```

Date: 13.JUN.2017 19:49:03

BW3MHz-825.5MHz,Q16-15RB_LOW@Pass


```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                    -31.63 dBm
Ref   30 dBm        * Att   30 dB     SWT  155 ms      25.312243590 GHz
                                                    Marker 1 [T1 ]
 30                                                             18.93 dBm
                                                       793.557692308 MHz
 20                                                 Marker 2 [T1 ]
                                                               18.93 dBm
 10                                                    793.557692308 MHz
  0
-10       D1 -13 dBm
-20
-30                                                                    3
-40
-50
-60
-70
Start  30 MHz              2.647 GHz/                   Stop  26.5 GHz
```

Date: 13.JUN.2017 19:45:25

Report No.: FCC17040291A-5

BW3MHz-825.5MHz,QPSK-15RB_LOW@Pass
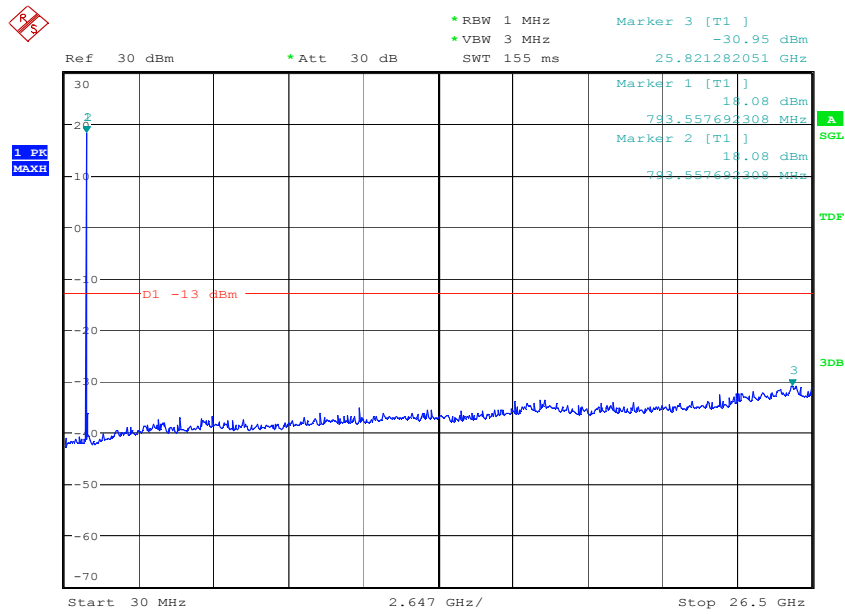
Date: 13.JUN.2017 19:45:09

BW3MHz-836.5MHz,Q16-15RB_LOW@Pass

Date: 13.JUN.2017 19:46:29

Report No.: FCC17040291A-5
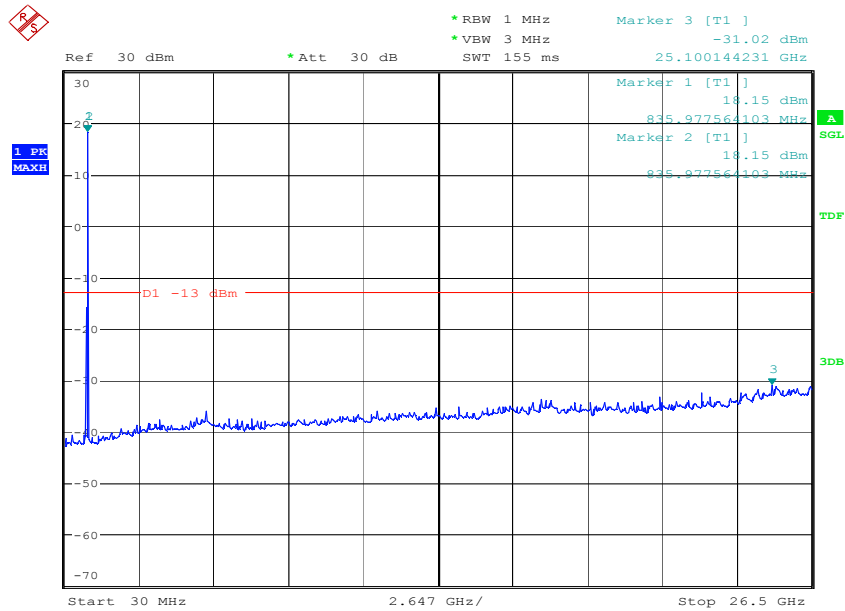
BW3MHz-836.5MHz,QPSK-15RB_LOW@Pass

```
                                    * RBW  1 MHz       Marker 3 [T1 ]
                                    * VBW  3 MHz                      -30.59 dBm
     Ref   30 dBm      * Att   30 dB   SWT  155 ms        25.778862179 GHz
```



```
                                                    Marker 1 [T1 ]
                                                              16.78 dBm
                                                    835.977564103 MHz
                                                    Marker 2 [T1 ]
                                                              16.78 dBm
                                                    835.977564103 MHz
```

```
     Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```
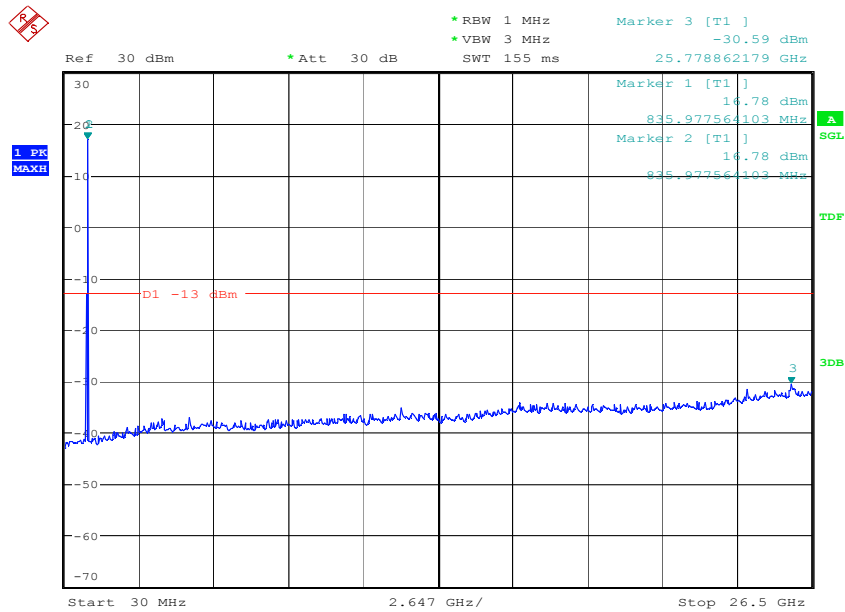
Date: 13.JUN.2017 19:46:13

BW3MHz-847.5MHz,Q16-15RB_LOW@Pass

```
                                    * RBW  1 MHz       Marker 3 [T1 ]
                                    * VBW  3 MHz                      -30.27 dBm
     Ref   30 dBm      * Att   30 dB   SWT  155 ms        26.500000000 GHz
```



```
                                                    Marker 1 [T1 ]
                                                              17.46 dBm
                                                    835.977564103 MHz
                                                    Marker 2 [T1 ]
                                                              17.46 dBm
                                                    835.977564103 MHz
```

```
     Start  30 MHz              2.647 GHz/              Stop  26.5 GHz
```
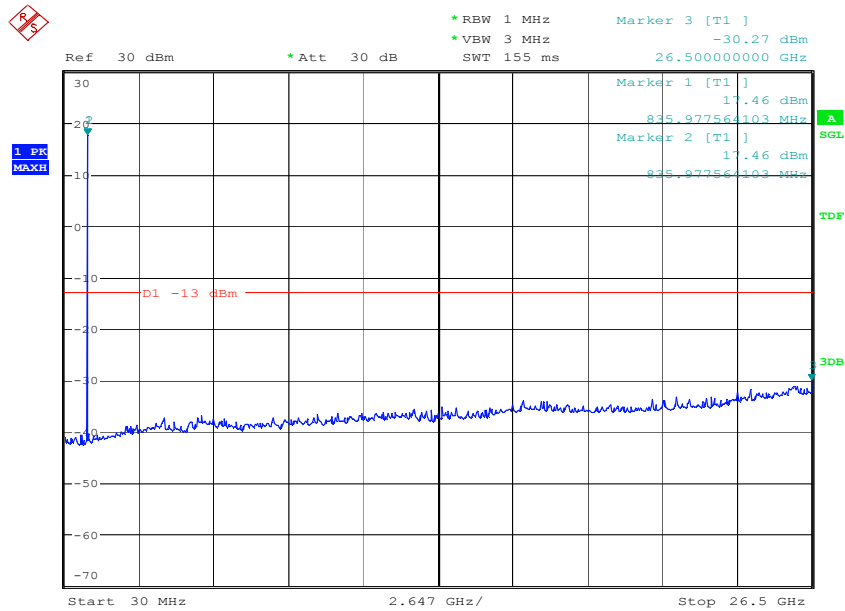
Date: 13.JUN.2017 19:45:57

BW3MHz-847.5MHz,QPSK-15RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                     -31.12 dBm
       Ref   30 dBm      * Att  30 dB     SWT  155 ms      25.990961538 GHz
        30                                          Marker 1 [T1 ]
                                                             16.63 dBm
        20                                           835.977564103 MHz    A
                                                   Marker 2 [T1 ]         SGL
        10                                                   16.63 dBm
                                                   835.977564103 MHz
                                                                         TDF
         0
       -10        D1 -13 dBm
       -20                                                               3DB
                                                                     3
       -30
       -40
       -50
       -60
       -70
       Start  30 MHz            2.647 GHz/            Stop  26.5 GHz
```

1 PK
MAXH
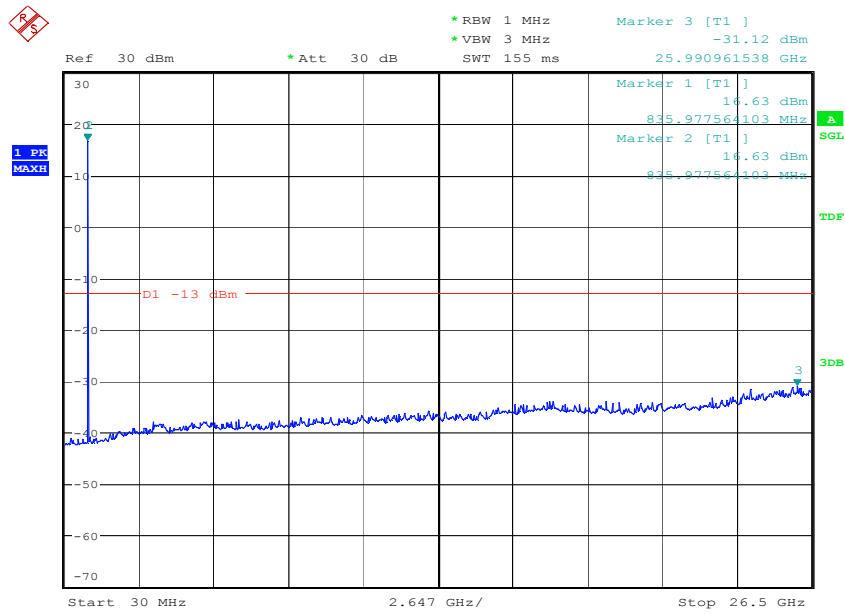
Date: 13.JUN.2017 19:45:41

BW5MHz-826.5MHz,Q16-25RB_LOW@Pass

```
                                    * RBW  1 MHz        Marker 3 [T1 ]
                                    * VBW  3 MHz                     -30.45 dBm
       Ref   30 dBm      * Att  30 dB     SWT  155 ms      26.500000000 GHz
        30                                          Marker 1 [T1 ]
                                                             16.92 dBm
        20                                           793.557692308 MHz    A
                                                   Marker 2 [T1 ]         SGL
        10                                                   16.92 dBm
                                                   793.557692308 MHz
                                                                         TDF
         0
       -10        D1 -13 dBm
       -20                                                               3DB
       -30
       -40
       -50
       -60
       -70
       Start  30 MHz            2.647 GHz/            Stop  26.5 GHz
```

1 PK
MAXH

Date: 13.JUN.2017 19:47:04

Report No.: FCC17040291A-5
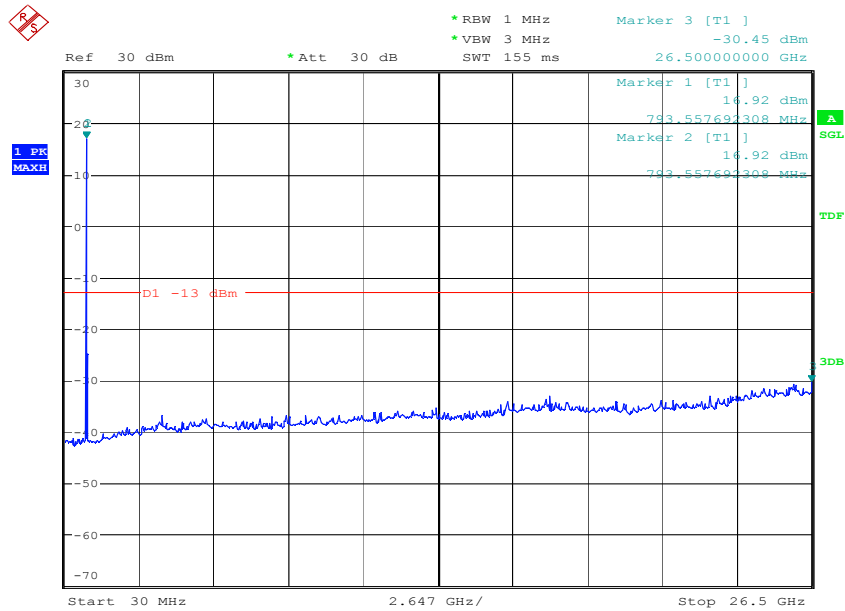
BW5MHz-826.5MHz,QPSK-25RB_LOW@Pass

```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                -31.25 dBm
        Ref   30 dBm    * Att   30 dB    SWT  155 ms    25.694022436 GHz
```



```
                                                      Marker 1 [T1 ]
                                                             17.21 dBm
                                                       793.557692308 MHz
                                                      Marker 2 [T1 ]
                                                             17.21 dBm
                                                       793.557692308 MHz
```

```
Start  30 MHz            2.647 GHz/              Stop  26.5 GHz
```
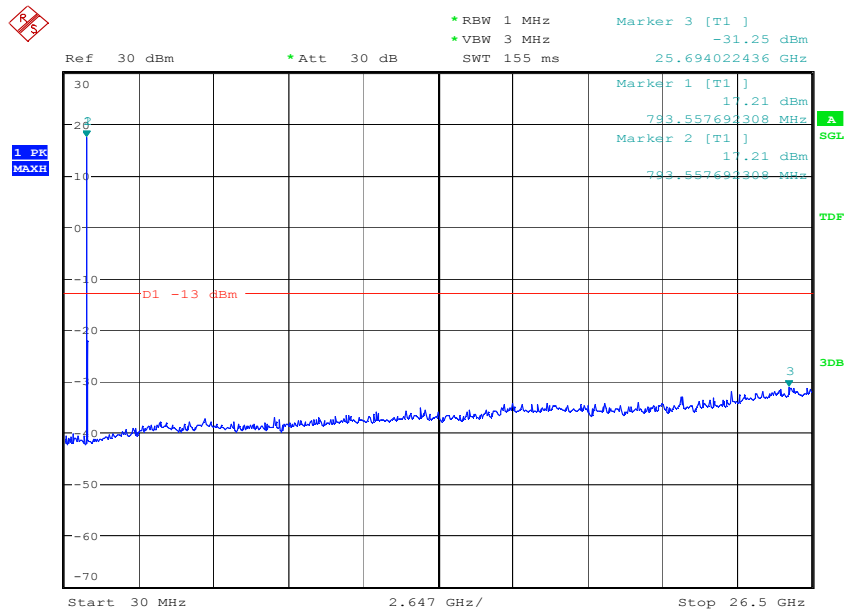
Date: 13.JUN.2017 19:46:48

BW5MHz-836.5MHz,Q16-25RB_LOW@Pass

```
                                    * RBW  1 MHz      Marker 3 [T1 ]
                                    * VBW  3 MHz                -30.60 dBm
        Ref   30 dBm    * Att   30 dB    SWT  155 ms    26.457580128 GHz
```



```
                                                      Marker 1 [T1 ]
                                                             16.04 dBm
                                                       835.977564103 MHz
                                                      Marker 2 [T1 ]
                                                             16.04 dBm
                                                       835.977564103 MHz
```

```
Start  30 MHz            2.647 GHz/              Stop  26.5 GHz
```

Date: 13.JUN.2017 19:48:10

Report No.: FCC17040291A-5
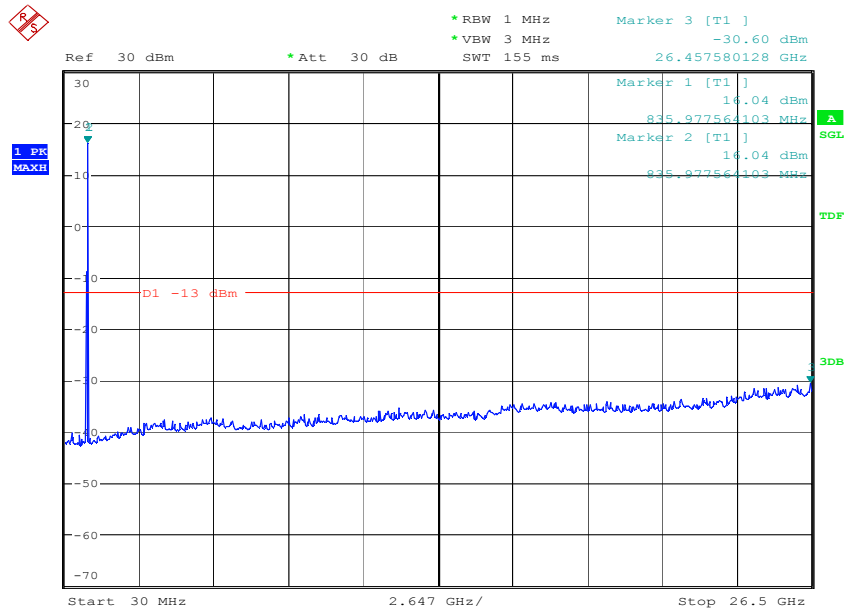
BW5MHz-836.5MHz,QPSK-25RB_LOW@Pass
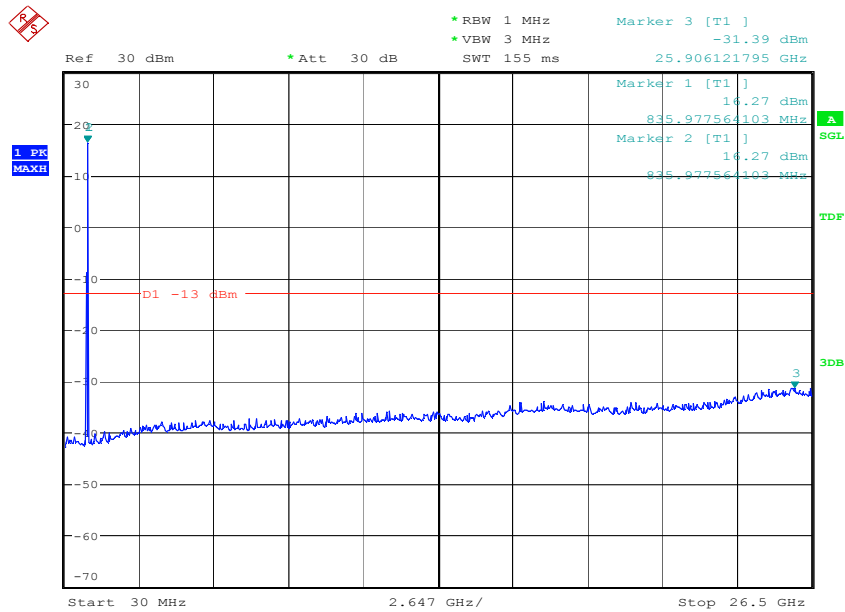
Date: 13.JUN.2017 19:47:54

BW5MHz-846.5MHz,Q16-25RB_LOW@Pass

Date: 13.JUN.2017 19:47:37

Report No.: FCC17040291A-5

BW5MHz-846.5MHz,QPSK-25RB_LOW@Pass
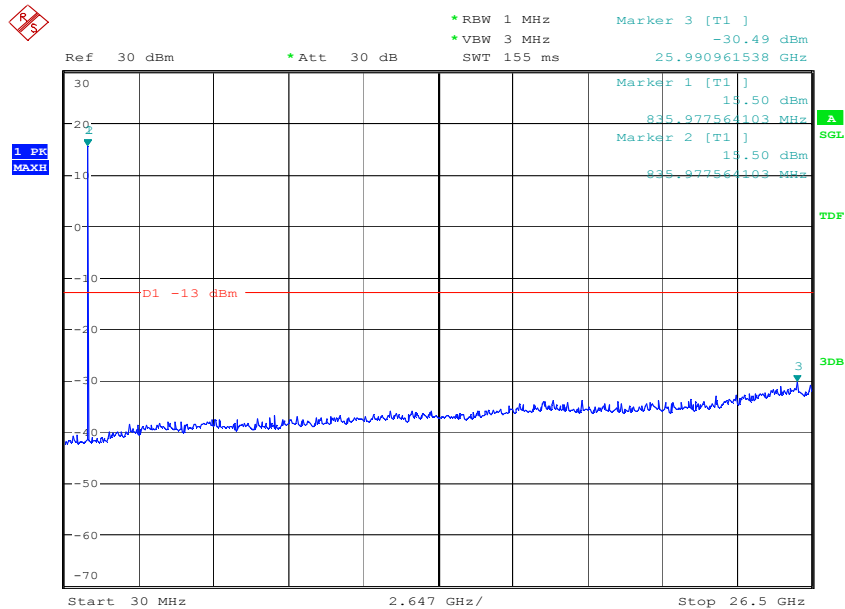
Date: 13.JUN.2017 19:47:21
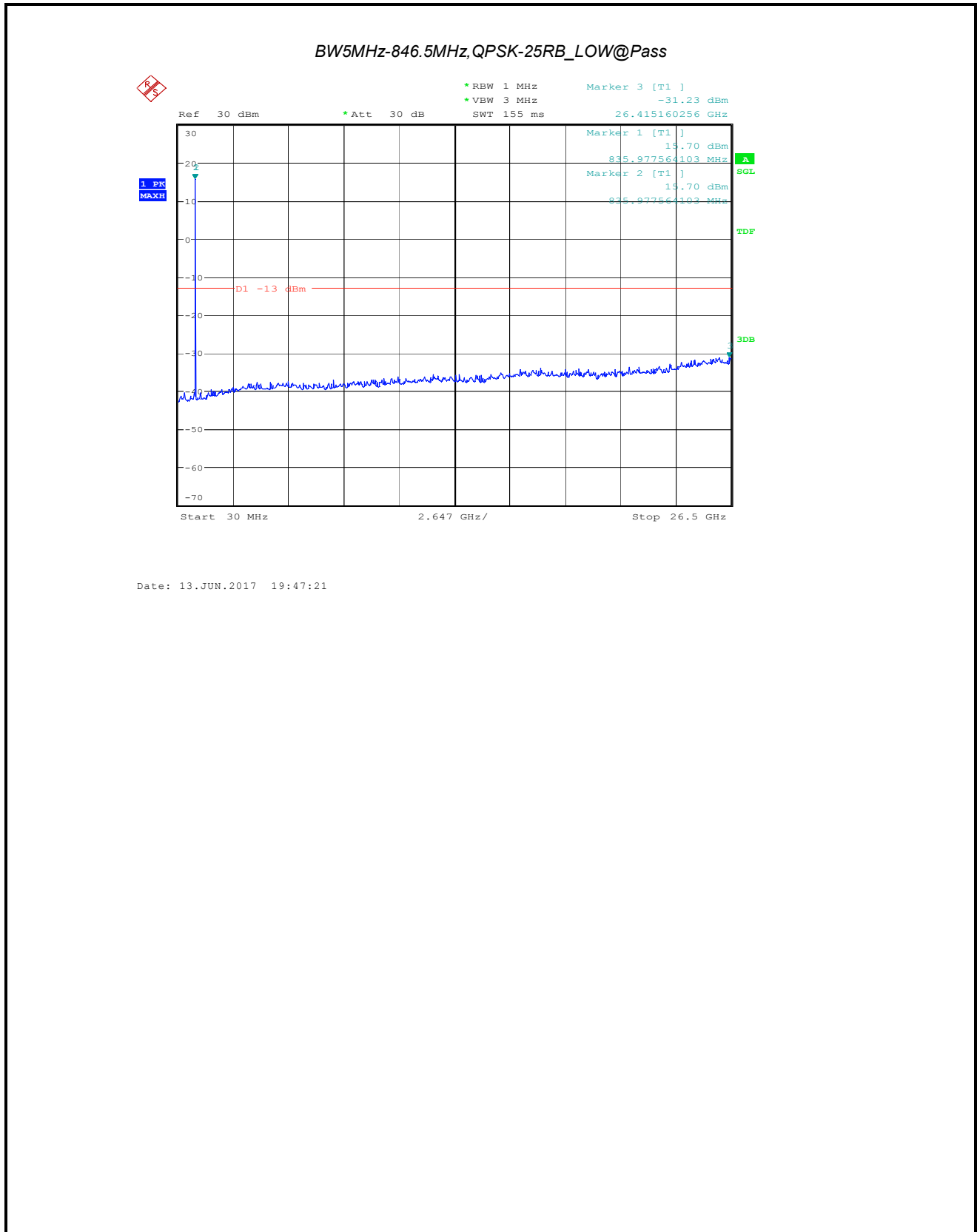
BAND 7@Conducted Spurious Emission

BW10MHz-2505MHz,Q16-50RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]
* VBW 3 MHz	−30.80 dBm
Ref 30 dBm * Att 30 dB SWT 155 ms	25.736442308 GHz

Marker 1 [T1] 9.70 dBm 2.490352564 GHz
Marker 2 [T1] 9.70 dBm 2.490352564 GHz

D1 −25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz
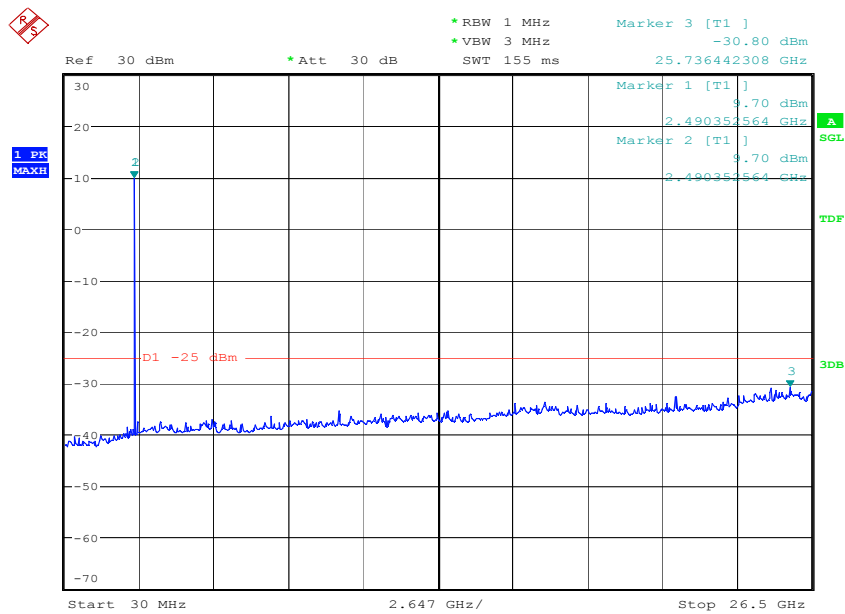
Date: 10.MAY.2017 20:08:09

BW10MHz-2505MHz,QPSK-50RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]
* VBW 3 MHz	−30.67 dBm
Ref 30 dBm * Att 30 dB SWT 155 ms	26.500000000 GHz

Marker 1 [T1] 9.71 dBm 2.490352564 GHz
Marker 2 [T1] 9.71 dBm 2.490352564 GHz

D1 −25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 20:07:52

Report No.: FCC17040291A-5
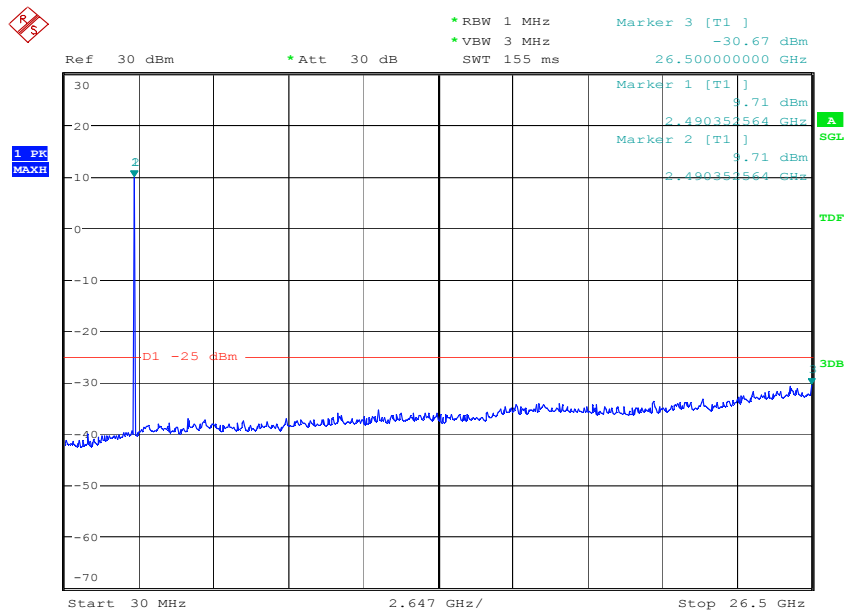
BW10MHz-2535MHz,Q16-50RB_LOW@Pass
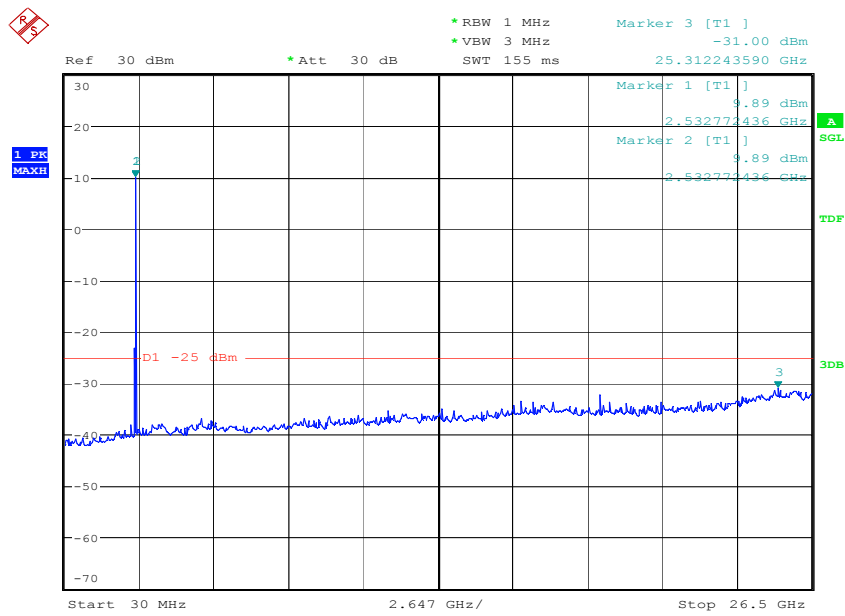
Date: 10.MAY.2017 20:09:17

BW10MHz-2535MHz,QPSK-50RB_LOW@Pass

Date: 10.MAY.2017 20:09:00

Report No.: FCC17040291A-5
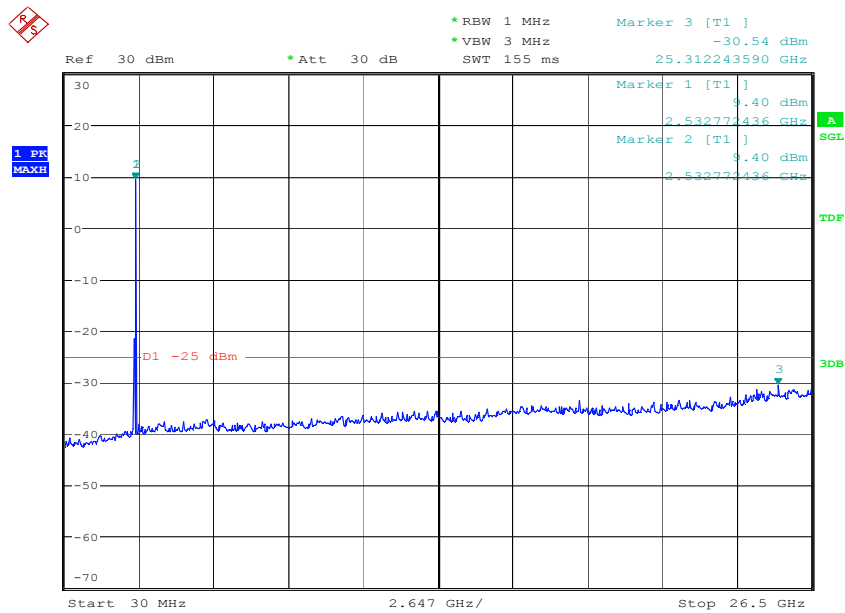
BW10MHz-2565MHz,Q16-50RB_LOW@Pass
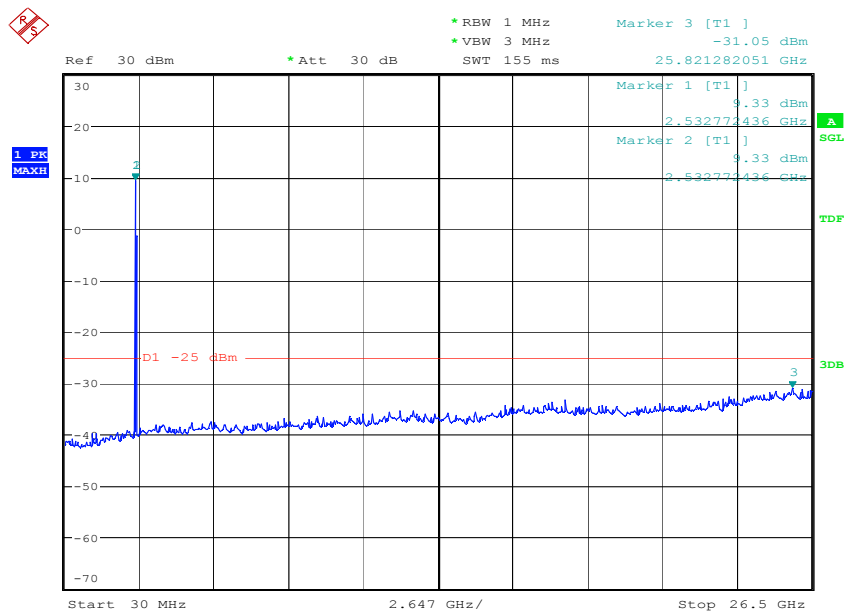
Date: 10.MAY.2017 20:08:43

BW10MHz-2565MHz,QPSK-50RB_LOW@Pass

Date: 10.MAY.2017 20:08:26

Report No.: FCC17040291A-5
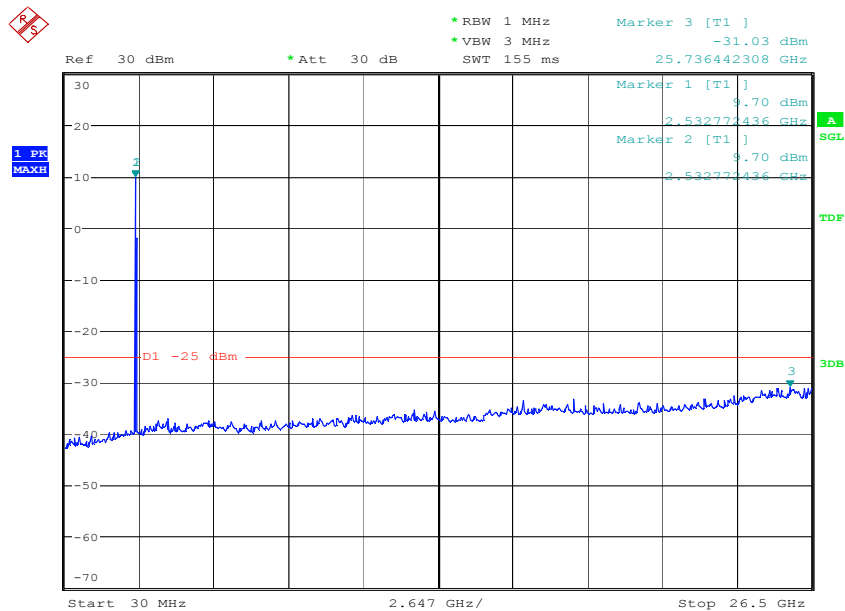
BW15MHz-2507.5MHz,Q16-75RB_LOW@Pass
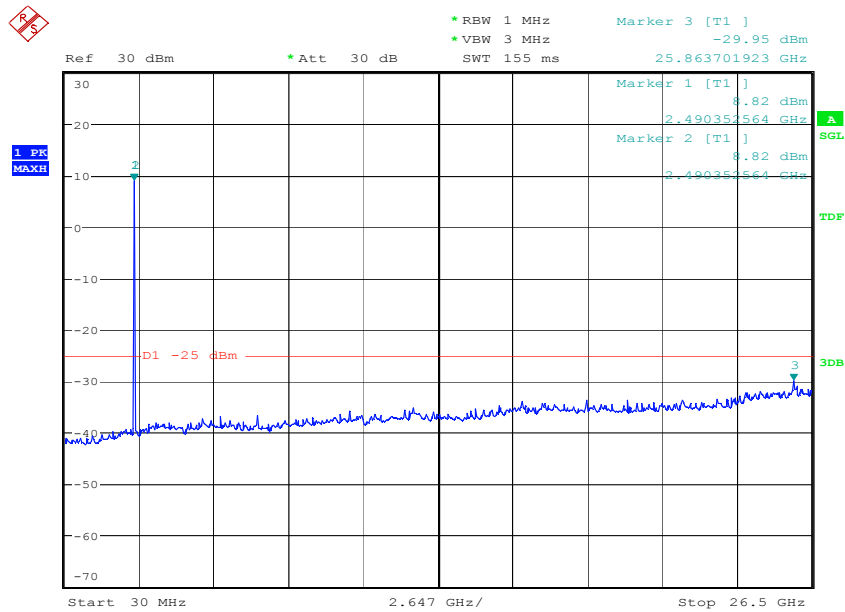
Date: 10.MAY.2017 20:09:58

BW15MHz-2507.5MHz,QPSK-75RB_LOW@Pass

Date: 10.MAY.2017 20:09:39

Report No.: FCC17040291A-5
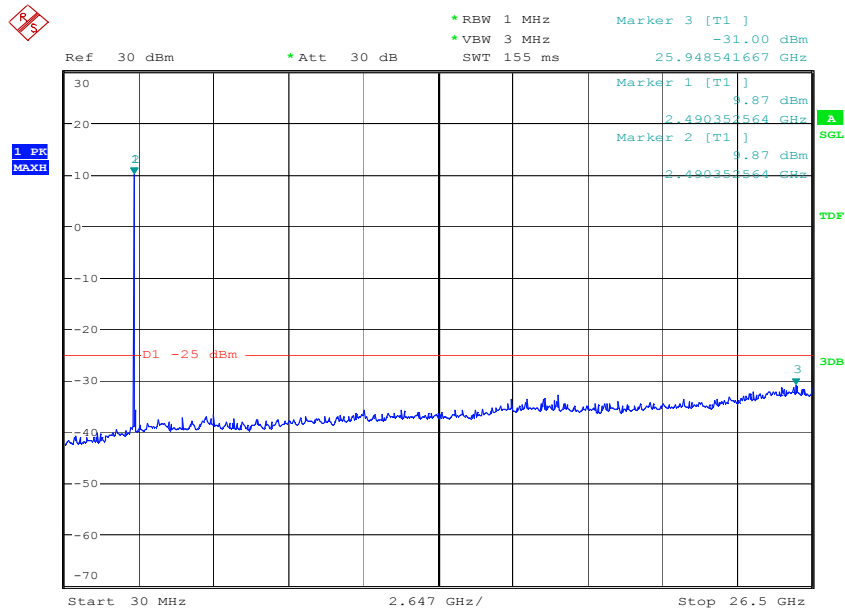
BW15MHz-2535MHz,Q16-75RB_LOW@Pass
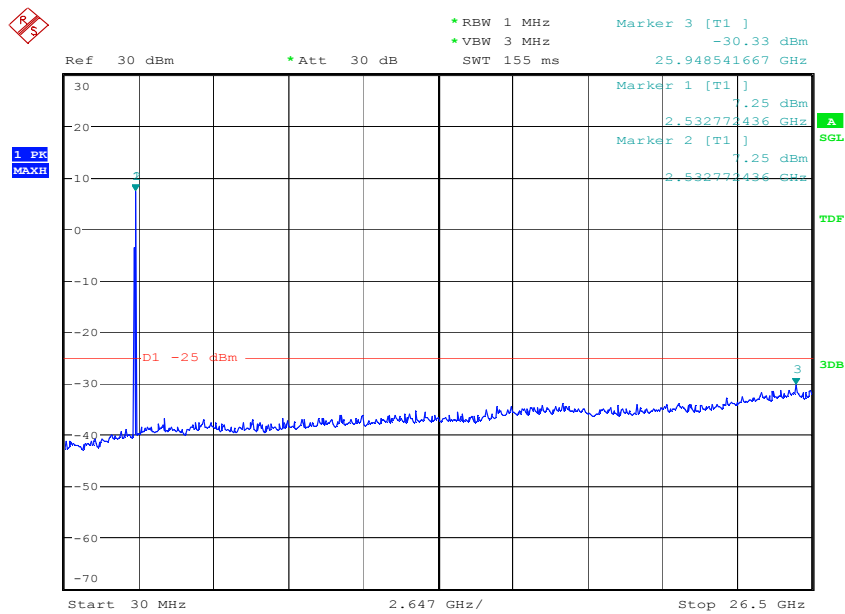
Date: 10.MAY.2017 20:11:14

BW15MHz-2535MHz,QPSK-75RB_LOW@Pass

Date: 10.MAY.2017 20:10:55
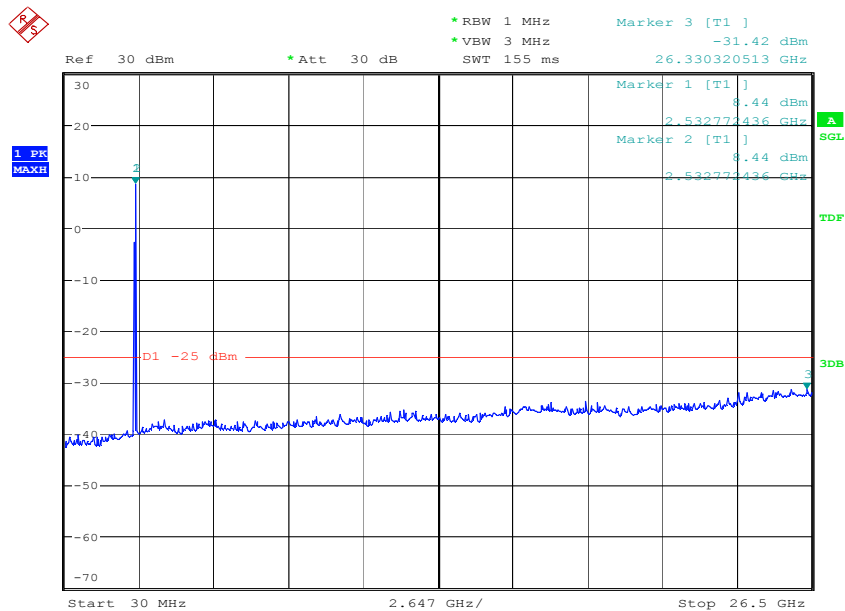
Report No.: FCC17040291A-5

BW15MHz-2562.5MHz,Q16-75RB_LOW@Pass
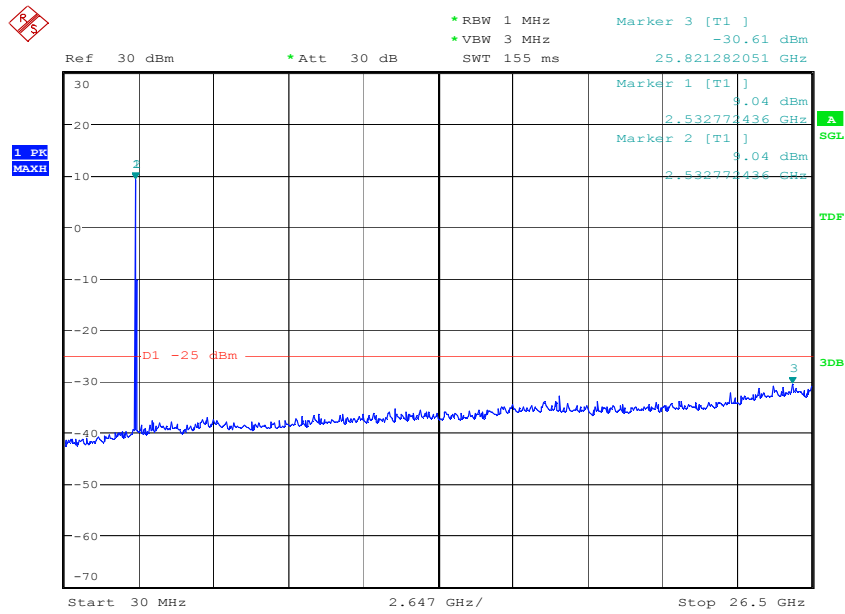
Date: 10.MAY.2017 20:10:36

BW15MHz-2562.5MHz,QPSK-75RB_LOW@Pass

Date: 10.MAY.2017 20:10:17

Report No.: FCC17040291A-5
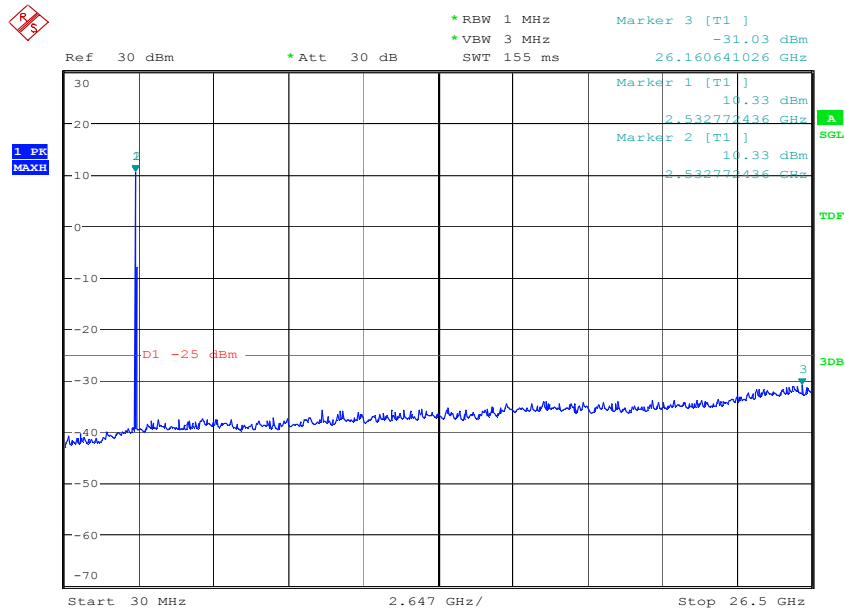
BW20MHz-2510MHz,Q16-100RB_LOW@Pass
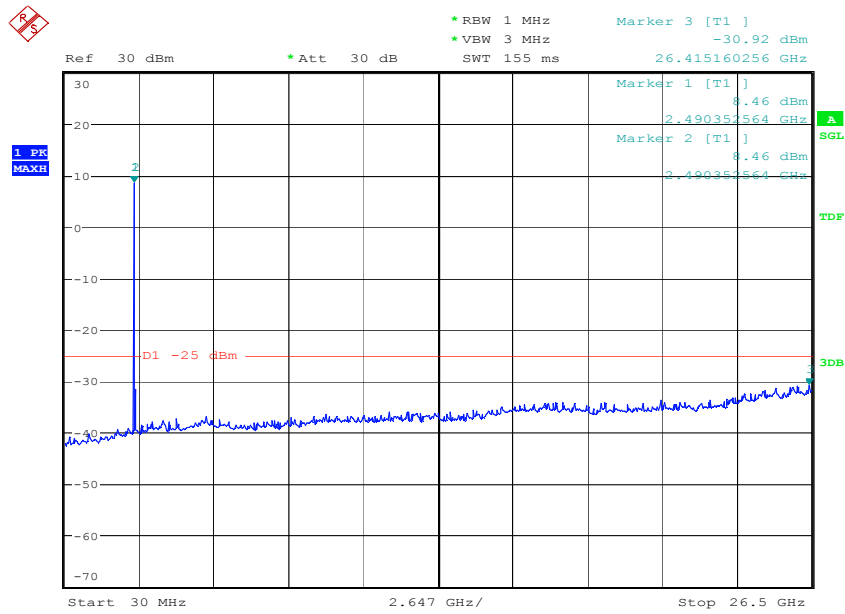
Date: 10.MAY.2017 20:11:55

BW20MHz-2510MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 20:11:36

Report No.: FCC17040291A-5
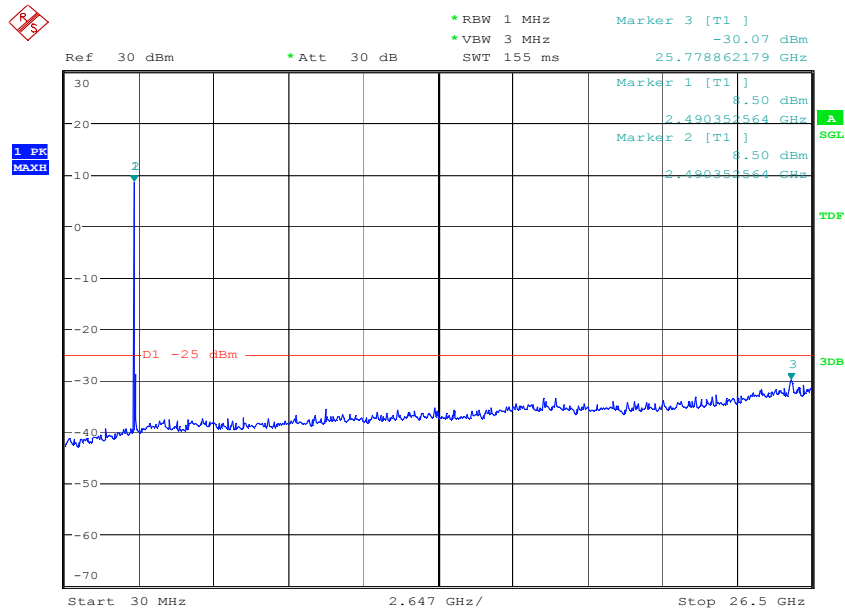
BW20MHz-2535MHz,Q16-100RB_LOW@Pass
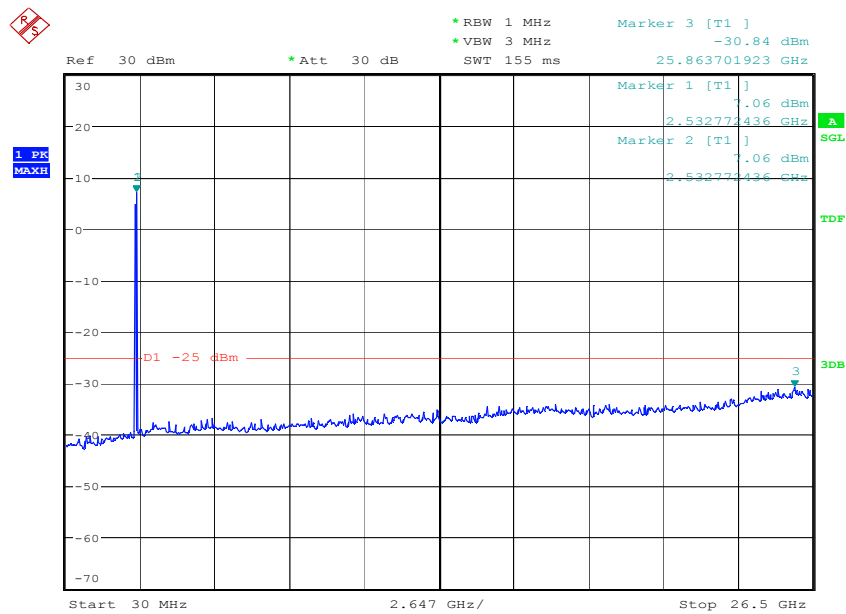
Date: 10.MAY.2017 20:13:12

BW20MHz-2535MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 20:12:54

Report No.: FCC17040291A-5
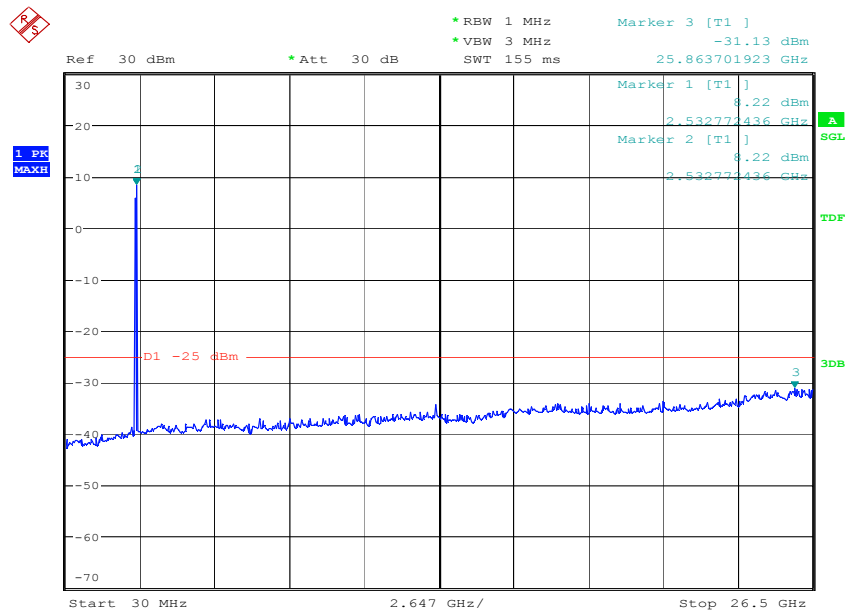
BW20MHz-2560MHz,Q16-100RB_LOW@Pass
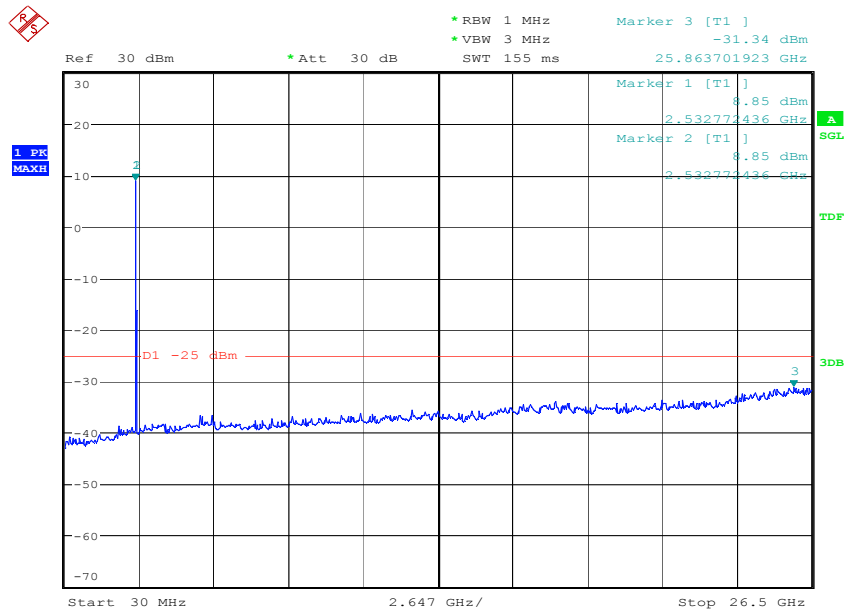
Date: 10.MAY.2017 20:12:34

BW20MHz-2560MHz,QPSK-100RB_LOW@Pass

Date: 10.MAY.2017 20:12:15
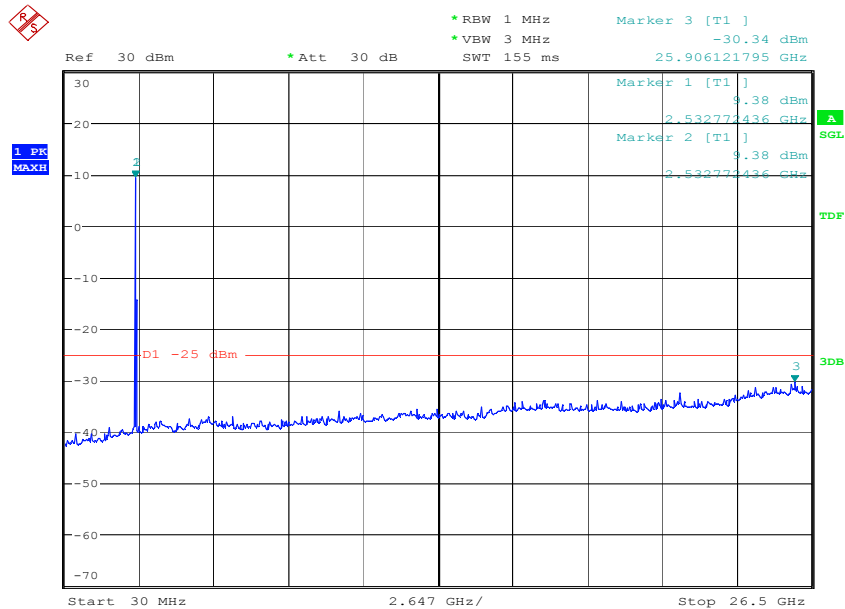
Report No.: FCC17040291A-5

BW5MHz-2502.5MHz,Q16-25RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	-30.54 dBm
Ref 30 dBm	* Att 30 dB	SWT 155 ms	25.863701923 GHz

Marker 1 [T1]
10.66 dBm
2.490352564 GHz

Marker 2 [T1]
10.66 dBm
2.490352564 GHz

1 PK MAXH

A SGL

TDF

3DB

D1 -25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz
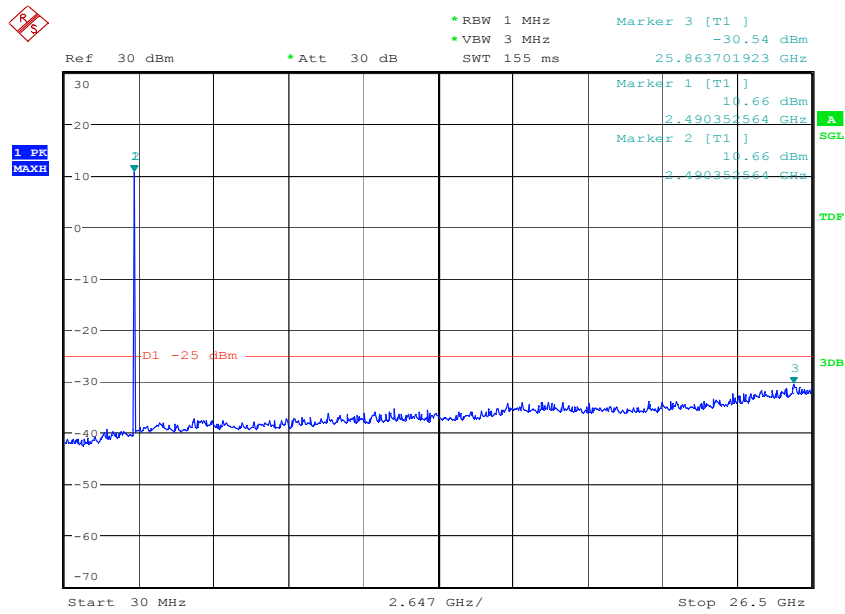
Date: 10.MAY.2017 20:06:27

BW5MHz-2502.5MHz,QPSK-25RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	-31.30 dBm
Ref 30 dBm	* Att 30 dB	SWT 155 ms	26.457580128 GHz

Marker 1 [T1]
11.42 dBm
2.490352564 GHz

Marker 2 [T1]
11.42 dBm
2.490352564 GHz

1 PK MAXH

A SGL

TDF

3DB

D1 -25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 20:06:10

Report No.: FCC17040291A-5
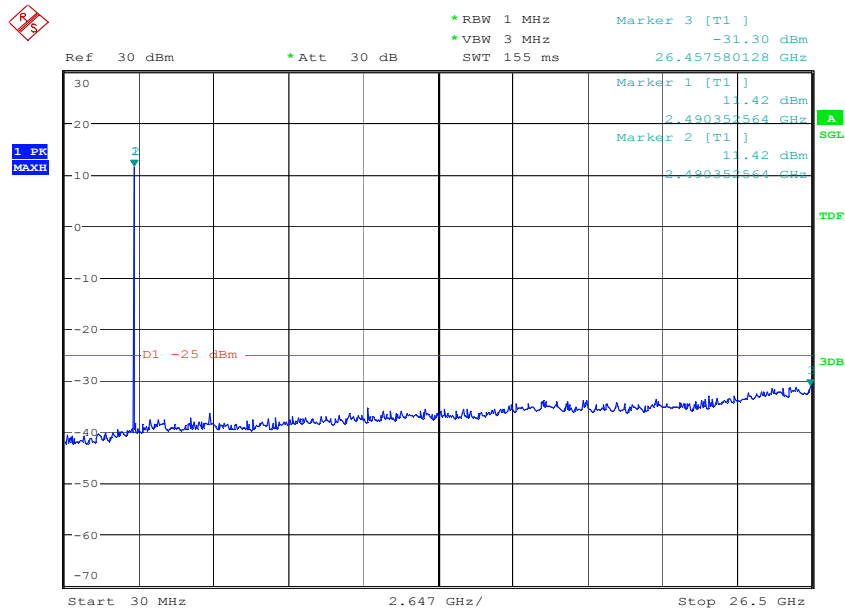
BW5MHz-2535MHz,QPSK-25RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]
* VBW 3 MHz	−30.48 dBm
Ref 30 dBm * Att 30 dB SWT 155 ms	26.033381410 GHz
	Marker 1 [T1]
	11.37 dBm
	2.532772436 GHz
	Marker 2 [T1]
	11.37 dBm
	2.532772436 GHz

D1 −25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz
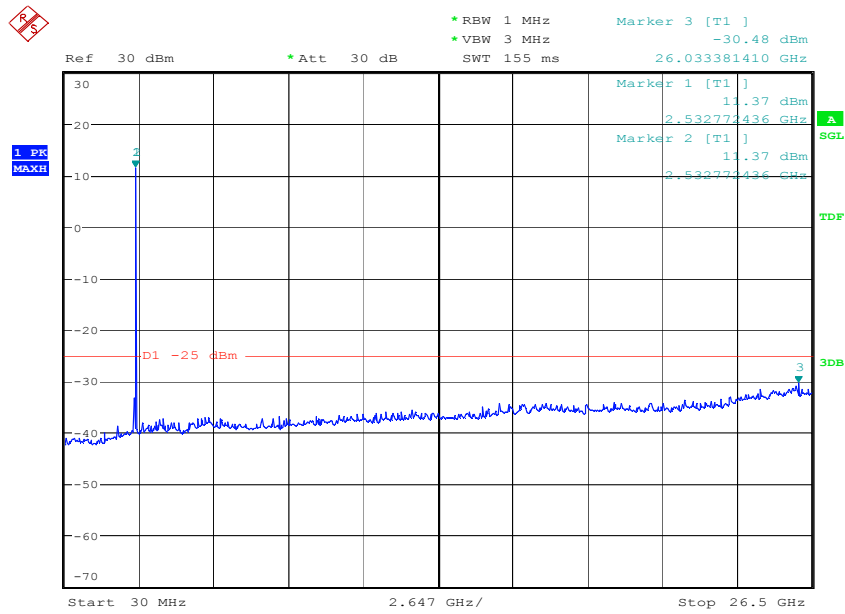
Date: 10.MAY.2017 20:07:33

BW5MHz-2567.5MHz,Q16-25RB_LOW@Pass

* RBW 1 MHz	Marker 3 [T1]
* VBW 3 MHz	−30.85 dBm
Ref 30 dBm * Att 30 dB SWT 155 ms	24.760785256 GHz
	Marker 1 [T1]
	11.80 dBm
	2.532772436 GHz
	Marker 2 [T1]
	11.80 dBm
	2.532772436 GHz

D1 −25 dBm

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 20:07:00

Report No.: FCC17040291A-5

BW5MHz-2567.5MHz,QPSK-25RB_LOW@Pass

	* RBW 1 MHz	Marker 3 [T1]
	* VBW 3 MHz	−31.41 dBm
Ref 30 dBm	* Att 30 dB SWT 155 ms	25.990961538 GHz

Marker 1 [T1]
11.65 dBm
2.532772436 GHz

Marker 2 [T1]
11.65 dBm
2.532772436 GHz

1 PK
MAXH

A
SGL

TDF

D1 −25 dBm

3DB

Start 30 MHz   2.647 GHz/   Stop 26.5 GHz

Date: 10.MAY.2017 20:06:44

5.1.1 Radiated method

Test limit:

The spurious (unwanted) emission limits specified in the individual FCC rule parts applicable to licensed digital transmitters (typically referred to under the heading 'emission limits') normally apply to any and all emissions that are present outside of the authorized frequency band/block and apply to emissions in both the out-of-band and spurious domains. In some rule parts, the unwanted emission limits are specified by an emission mask that defines the applicable limit as a function of the frequency range relative to the authorized frequency block.

Typically, unwanted emissions are required by the licensed rule parts to be attenuated below the transmitter power by a factor of at least X + 10log(P) dB, where P represents the transmitter power expressed in watts and X is a specified scalar value (e.g., 43). This specification can be interpreted in one of two equivalent ways. First, the required attenuation can be construed to be relative to the mean carrier power, with the resultant of the equation X + 10log(P) being expressed in dBc (dB relative to the maximum carrier power). Alternatively, the specification can be interpreted as an absolute limit when the specified attenuation is actually subtracted from the maximum permissible transmitter power [i.e., 10log(P) – {X + 10log(P)}], resulting in an absolute level of -X dBW [or (-X + 30) dBm]. See section 4.

Test procedure:

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site. The resolution bandwidth of the spectrum analyzer was set at 100 kHz below 1 GHz and 1 MHz above 1 GHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonics.

Test setup:

（A）Radiated Emission Test-Up Frequency 30MHz~1GHz
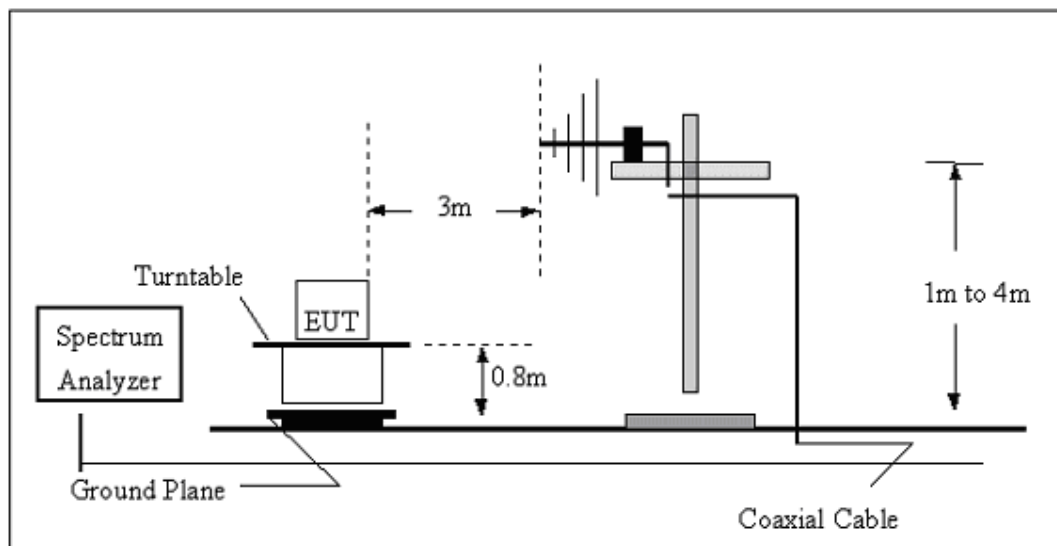
（B）Radiated Emission Test-Up Frequency Above 1GHz
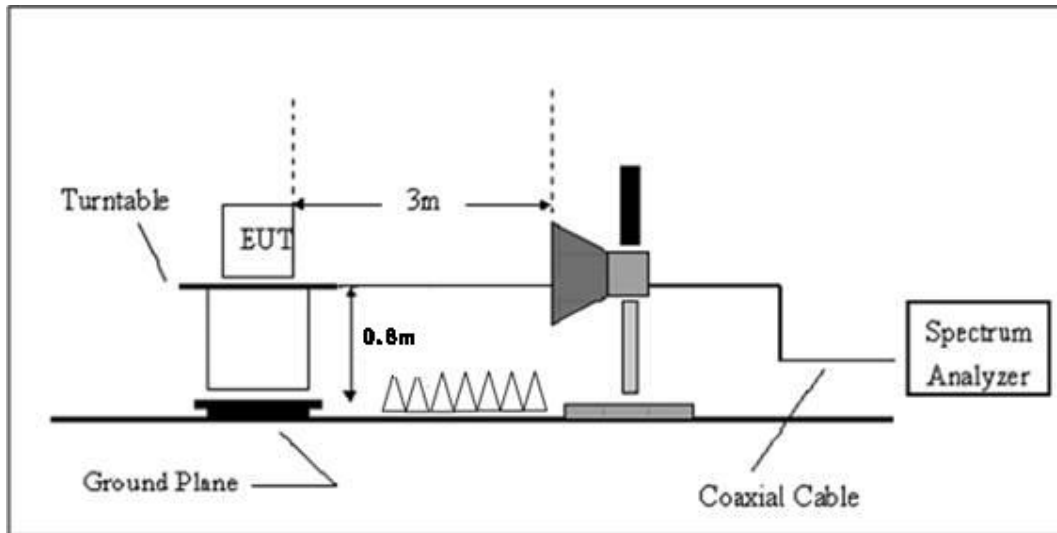
Note:

1, Below 30MHz no Spurious found.

2, UE is poistioned at 3 axis at the pre-scan stage, and only the measurement of the worst case(bandwidth:20MHz /Full RB /QPSK) is reported in this part.

List of final test modes:

GSM850:

Mode	UL Channel	Frequency	Judgement
1	128	824.2	Pass
2	190	836.6	Pass
3	251	848.8	Pass

PCS1900

Mode	UL Channel	Frequency	Judgement
1	512	1850.2	Pass
2	661	1880	Pass
3	810	1909.8	Pass

UTRA BANDS

BAND 2:

Mode	UL Channel	Frequency	Judgement
1	9262	1852.4	Pass
2	9400	1880	Pass
3	9538	1907.6	Pass

BAND 4:.

Mode	UL Channel	Frequency	Judgement
1	1312	1712.4	Pass
2	1413	1732.6	Pass
3	1513	1752.6	Pass

BAND 5:

Mode	UL Channel	Frequency	Judgement
1	4132	826.4	Pass
2	4182	836.4	Pass
3	4233	846.6	Pass

E-UTRA BANDS

This is the worst pattern data

BAND 2:

Mode	Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1	20	18700	1860	QPSK	100	LOW	Pass
2	20	18900	1880	QPSK	100	LOW	Pass
3	20	19100	1900	QPSK	100	LOW	Pass

BAND 4:

Mode	Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1	20	20050	1720	Q16	100	LOW	Pass
2	20	20300	1745	Q16	100	LOW	Pass
3	20	20175	1732.5	Q16	100	LOW	Pass

BAND 5:

Mode	Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1	10	20450	829	QPSK	100	LOW	Pass
2	10	20525	836.5	QPSK	100	LOW	Pass
3	10	20600	844	QPSK	100	LOW	Pass

BAND 7:

Mode	Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1	20	20850	2510	QPSK	100	LOW	Pass
2	20	21350	2560	QPSK	100	LOW	Pass
3	20	21100	2535	QPSK	100	LOW	Pass

Test record:

GSM850:

Mode 1					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1648.4	-31.59	1.42	-33.01	-13	Horizontal
1648.4	-28.90	-2.48	-26.42	-13	Vertical
2472.6	-33.31	3.26	-36.57	-13	Horizontal
2472.6	-36.13	6.68	-42.81	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1673.2	-33.13	-4.99	-28.14	-13	Horizontal
1673.2	-32.27	-2.45	-29.82	-13	Vertical
2509.8	-28.80	3.61	-32.41	-13	Horizontal
2509.8	-30.70	2.82	-33.52	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1697.6	-32.81	-4.99	-27.82	-13	Horizontal
1697.6	-27.95	-2.45	-25.50	-13	Vertical
2546.4	-25.67	3.61	-29.28	-13	Horizontal
2546.4	-34.83	2.82	-37.65	-13	Vertical

PCS1900:

<table>
<tr><th colspan="6">Mode 1</th></tr>
<tr><th>Frequency(MHz)</th><th>Power(dBm)</th><th>A_{Rpl} (dBm)</th><th>P_{Mea}(dBm)</th><th>Limit（dBm）</th><th>Polarity</th></tr>
<tr><td>3700.4</td><td>-35.37</td><td>-1.98</td><td>-33.39</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>3700.4</td><td>-28.37</td><td>-1.61</td><td>-26.76</td><td>-13</td><td>Vertical</td></tr>
<tr><td>5550.6</td><td>-35.87</td><td>1.97</td><td>-37.84</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>5550.6</td><td>-28.80</td><td>-2.26</td><td>-26.54</td><td>-13</td><td>Vertical</td></tr>
</table>

<table>
<tr><th colspan="6">Mode 2</th></tr>
<tr><th>Frequency(MHz)</th><th>Power(dBm)</th><th>A_{Rpl} (dBm)</th><th>P_{Mea}(dBm)</th><th>Limit（dBm）</th><th>Polarity</th></tr>
<tr><td>3760</td><td>-31.25</td><td>-3.21</td><td>-28.04</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>3760</td><td>-31.44</td><td>0.34</td><td>-31.78</td><td>-13</td><td>Vertical</td></tr>
<tr><td>5640</td><td>-30.64</td><td>3.95</td><td>-34.59</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>5640</td><td>-28.88</td><td>-2.26</td><td>-26.62</td><td>-13</td><td>Vertical</td></tr>
</table>

<table>
<tr><th colspan="6">Mode 3</th></tr>
<tr><th>Frequency(MHz)</th><th>Power(dBm)</th><th>A_{Rpl} (dBm)</th><th>P_{Mea}(dBm)</th><th>Limit（dBm）</th><th>Polarity</th></tr>
<tr><td>3819.6</td><td>-27.04</td><td>-3.21</td><td>-23.83</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>3819.6</td><td>-32.07</td><td>0.34</td><td>-32.41</td><td>-13</td><td>Vertical</td></tr>
<tr><td>5729.4</td><td>-32.92</td><td>3.95</td><td>-36.87</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>5729.4</td><td>-29.41</td><td>-2.26</td><td>-27.15</td><td>-13</td><td>Vertical</td></tr>
</table>

UTRA BANDS

BAND 2:

<table>
<tr><th colspan="6">Mode 1</th></tr>
<tr><th>Frequency(MHz)</th><th>Power(dBm)</th><th>A_{Rpl} (dBm)</th><th>P_{Mea}(dBm)</th><th>Limit（dBm）</th><th>Polarity</th></tr>
<tr><td>3704.8</td><td>-62.23</td><td>10.11</td><td>-52.11</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>3704.8</td><td>-63.01</td><td>10.04</td><td>-52.97</td><td>-13</td><td>Vertical</td></tr>
<tr><td>5557.2</td><td>-64.00</td><td>12.00</td><td>-51.99</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>5557.2</td><td>-64.85</td><td>11.77</td><td>-53.09</td><td>-13</td><td>Vertical</td></tr>
</table>

<table>
<tr><th colspan="6">Mode 2</th></tr>
<tr><th>Frequency(MHz)</th><th>Power(dBm)</th><th>A_{Rpl} (dBm)</th><th>P_{Mea}(dBm)</th><th>Limit（dBm）</th><th>Polarity</th></tr>
<tr><td>3760</td><td>-62.83</td><td>10.43</td><td>-52.40</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>3760</td><td>-62.87</td><td>10.84</td><td>-52.03</td><td>-13</td><td>Vertical</td></tr>
<tr><td>5640</td><td>-63.95</td><td>11.85</td><td>-52.10</td><td>-13</td><td>Horizontal</td></tr>
<tr><td>5640</td><td>-65.07</td><td>11.53</td><td>-53.54</td><td>-13</td><td>Vertical</td></tr>
</table>

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3815.2	-63.14	10.09	-53.04	-13	Horizontal
3815.2	-62.62	10.66	-51.96	-13	Vertical
5722.8	-63.71	12.35	-51.36	-13	Horizontal
5722.8	-65.03	12.00	-53.04	-13	Vertical

BAND 4:

Mode 1					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3424.8	-62.34	10.30	-52.03	-13	Horizontal
3424.8	-63.19	10.41	-52.78	-13	Vertical
5137.2	-64.21	12.15	-52.06	-13	Horizontal
5137.2	-65.07	12.40	-52.67	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3465.2	-62.85	10.84	-52.01	-13	Horizontal
3465.2	-62.76	10.05	-52.71	-13	Vertical
5197.8	-64.17	11.80	-52.37	-13	Horizontal
5197.8	-65.18	11.89	-53.29	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3505.2	-62.44	10.99	-51.45	-13	Horizontal
3505.2	-62.89	10.20	-52.69	-13	Vertical
5257.8	-64.13	12.08	-52.04	-13	Horizontal
5257.8	-65.43	12.09	-53.34	-13	Vertical

BAND 5:

Mode 1					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1652.8	-62.42	10.66	-51.75	-13	Horizontal
1652.8	-63.17	10.64	-52.53	-13	Vertical
2479.2	-63.86	12.45	-51.41	-13	Horizontal
2479.2	-64.74	12.42	-52.32	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1672.8	-62.27	10.05	-52.22	-13	Horizontal
1672.8	-62.85	10.11	-52.74	-13	Vertical
2509.2	-63.79	12.17	-51.62	-13	Horizontal
2509.2	-65.04	12.03	-53.01	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1693.2	-62.41	10.51	-51.90	-13	Horizontal
1693.2	-63.39	10.01	-53.38	-13	Vertical
2539.8	-64.44	11.88	-52.56	-13	Horizontal
2539.8	-64.58	11.83	-52.75	-13	Vertical

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BAND 2:

Mode 1					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3720	-63.21	10.07	-53.13	-13	Horizontal
3720	-63.37	10.38	-52.99	-13	Vertical
5580	-64.23	11.59	-52.64	-13	Horizontal
5580	-65.15	12.03	-53.11	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3760	-62.74	10.84	-51.90	-13	Horizontal
3760	-62.98	10.60	-52.38	-13	Vertical
5640	-63.82	11.68	-52.14	-13	Horizontal
5640	-64.81	12.12	-52.69	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
3800	-62.94	10.36	-52.59	-13	Horizontal
3800	-63.15	10.77	-52.38	-13	Vertical
5700	-64.44	12.37	-52.07	-13	Horizontal
5700	-64.65	12.16	-52.49	-13	Vertical

BAND 4:

Mode 1					
Frequency(MHz)	Power(dBm)	A$_{Rpl}$ (dBm)	P$_{Mea}$(dBm)	Limit（dBm）	Polarity
3440	-63.12	10.53	-52.58	-13	Horizontal
3440	-63.17	10.18	-52.99	-13	Vertical
5160	-63.82	12.29	-51.54	-13	Horizontal
5160	-65.48	11.78	-53.70	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A$_{Rpl}$ (dBm)	P$_{Mea}$(dBm)	Limit（dBm）	Polarity
3465	-62.27	10.46	-51.81	-13	Horizontal
3465	-63.27	10.72	-52.55	-13	Vertical
5197.5	-63.72	11.61	-52.11	-13	Horizontal
5197.5	-65.18	11.80	-53.38	-13	Vertical
Mode 3					
Frequency(MHz)	Power(dBm)	A$_{Rpl}$ (dBm)	P$_{Mea}$(dBm)	Limit（dBm）	Polarity
3490	-62.80	10.51	-52.29	-13	Horizontal
3490	-62.65	10.46	-52.19	-13	Vertical
5235	-64.35	12.41	-51.94	-13	Horizontal
5235	-64.73	12.15	-52.58	-13	Vertical

BAND 5:

Mode 1					
Frequency(MHz)	Power(dBm)	A$_{Rpl}$ (dBm)	P$_{Mea}$(dBm)	Limit（dBm）	Polarity
1658	-63.22	10.88	-52.34	-13	Horizontal
1658	-63.38	10.22	-53.16	-13	Vertical
2487	-64.34	11.96	-52.38	-13	Horizontal
2487	-64.81	12.31	-52.50	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A$_{Rpl}$ (dBm)	P$_{Mea}$(dBm)	Limit（dBm）	Polarity
1673	-62.60	10.16	-52.44	-13	Horizontal
1673	-63.18	10.20	-52.97	-13	Vertical
2509.5	-64.03	11.76	-52.27	-13	Horizontal
2509.5	-65.10	12.38	-52.73	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
1688	-63.05	10.50	-52.55	-13	Horizontal
1688	-62.74	10.53	-52.21	-13	Vertical
2532	-64.45	11.93	-52.52	-13	Horizontal
2532	-65.27	12.13	-53.14	-13	Vertical

BAND 7:

Mode 1					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
5020	-62.89	10.16	-52.73	-25	Horizontal
5020	-62.52	10.17	-52.35	-25	Vertical
7530	-63.51	11.87	-51.64	-25	Horizontal
7530	-65.15	11.53	-53.62	-25	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
5070	-62.75	10.52	-52.23	-25	Horizontal
5070	-62.53	10.26	-52.27	-25	Vertical
7605	-64.09	11.51	-52.57	-25	Horizontal
7605	-64.52	12.23	-52.29	-25	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A_{Rpl} (dBm)	P_{Mea}(dBm)	Limit（dBm）	Polarity
5120	-62.25	10.98	-51.27	-25	Horizontal
5120	-63.42	10.24	-53.18	-25	Vertical
7680	-63.98	11.61	-52.36	-25	Horizontal
7680	-65.20	12.47	-52.73	-25	Vertical

6 FREQUENCY STABILITY

Test limit:

The frequency stability of the transmitter shall be measured while varying the ambient temperatures and supply voltages over the ranges specified in §2.1055. The specific frequency stability limits are provided in the relevant rules section(s). see section 4.

Test procedure:

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

Test setup:
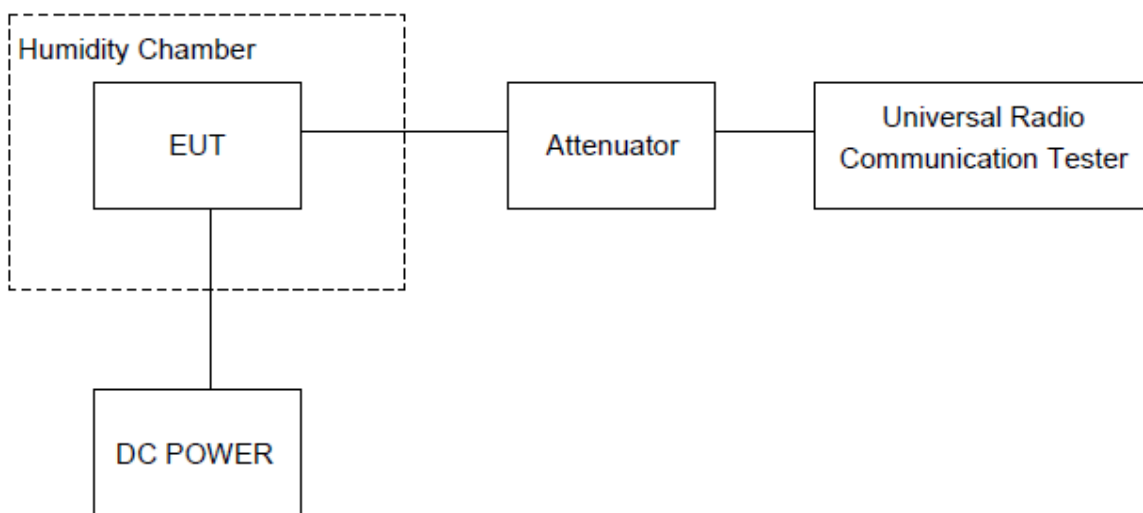
6.1 Measurement Result（Worst）

Frequency Error against Voltage for GSM 850 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	28	0.034
3.8	35	0.042
4.35	32	0.038

Frequency Error against Temperature for GSM 850 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	28	0.034
0	39	0.047
10	29	0.035
20	39	0.047
30	37	0.044
40	36	0.043
50	31	0.037

Frequency Error against Voltage for PCS 1900 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	32	0.017
3.8	30	0.016
4.35	31	0.016

Frequency Error against Temperature for PCS 1900 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	29	0.015
0	38	0.020
10	30	0.016
20	34	0.018
30	31	0.017
40	30	0.016
50	31	0.017

Frequency Error against Voltage for GPRS 850 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	38	0.045
3.8	33	0.039
4.35	30	0.035

Frequency Error against Temperature for GPRS 850 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	29	0.035
0	37	0.045
10	30	0.036
20	40	0.048
30	40	0.048
40	35	0.042
50	29	0.035

Frequency Error against Voltage for GPRS 1900 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	31	0.016
3.8	30	0.016
4.35	37	0.020

Frequency Error against Temperature for GPRS 1900 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	28	0.015
0	33	0.017
10	39	0.021
20	41	0.022
30	38	0.020
40	37	0.020
50	38	0.020

Frequency Error against Voltage for EGPRS 850 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	29	0.035
3.8	29	0.035
4.35	38	0.045

Frequency Error against Temperature for EGPRS 850 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	32	0.038
0	41	0.048
10	31	0.037
20	41	0.049
30	39	0.046
40	37	0.045
50	34	0.040

Frequency Error against Voltage for EGPRS 1900 band (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	28	0.015
3.8	38	0.020
4.35	31	0.016

Frequency Error against Temperature for EGPRS 1900 band (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	38	0.020
0	37	0.019
10	32	0.017
20	35	0.018
30	30	0.016
40	41	0.022
50	37	0.020

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Frequency Error against Voltage for WCDMA BAND 2 (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	34	0.018
3.8	33	0.018
4.35	31	0.016

Frequency Error against Temperature for WCDMA BAND 2 (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	30	0.016
0	30	0.016
10	29	0.015
20	40	0.021
30	40	0.022
40	30	0.016
50	31	0.017

Frequency Error against Voltage for WCDMA BAND 4 (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	35	0.020
3.8	34	0.020
4.35	38	0.022

Frequency Error against Temperature for WCDMA BAND 4 (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	29	0.017
0	41	0.024
10	35	0.020
20	39	0.022
30	36	0.021
40	38	0.022
50	31	0.018

Frequency Error against Voltage for WCDMA BAND 5 (Mid channel)

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	35	0.041
3.8	41	0.049
4.35	40	0.048

Frequency Error against Temperature for WCDMA BAND 5 (Mid channel)

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	36	0.043
0	39	0.047
10	30	0.036
20	34	0.040
30	34	0.041
40	39	0.047
50	31	0.037

E-UTRA

BAND 2:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
1.4	18900	1880	QPSK	1	LOW	1.7	0.000904
1.4	18900	1880	QPSK	1	MID	-2.3	-0.00122
1.4	18900	1880	QPSK	1	HIGH	-1.4	-0.00074
1.4	18900	1880	QPSK	3	LOW	2.9	0.001543
1.4	18900	1880	QPSK	3	MID	-2.4	-0.00128
1.4	18900	1880	QPSK	3	HIGH	-2.1	-0.00112
1.4	18900	1880	QPSK	6	LOW	-2.6	-0.00138
1.4	18900	1880	Q16	1	LOW	-1.8	-0.00096
1.4	18900	1880	Q16	1	MID	2.8	0.001489
1.4	18900	1880	Q16	1	HIGH	1.2	0.000638
1.4	18900	1880	Q16	3	LOW	-2.7	-0.00144
1.4	18900	1880	Q16	3	MID	-2.1	-0.00112
1.4	18900	1880	Q16	3	HIGH	0.4	0.000213
1.4	18900	1880	Q16	6	LOW	-0.7	-0.00037
3	18900	1880	QPSK	1	LOW	-2.5	-0.00133
3	18900	1880	QPSK	1	MID	2.9	0.001543
3	18900	1880	QPSK	1	HIGH	-4.2	-0.00223
3	18900	1880	QPSK	8	LOW	-4.4	-0.00234
3	18900	1880	QPSK	8	MID	3.3	0.001755
3	18900	1880	QPSK	8	HIGH	-1.6	-0.00085
3	18900	1880	QPSK	15	LOW	1.1	0.000585
3	18900	1880	Q16	1	LOW	4.5	0.002394
3	18900	1880	Q16	1	MID	4.6	0.002447
3	18900	1880	Q16	1	HIGH	-0.8	-0.00043
3	18900	1880	Q16	8	LOW	-3.5	-0.00186
3	18900	1880	Q16	8	MID	-2.1	-0.00112
3	18900	1880	Q16	8	HIGH	0.5	0.000266
3	18900	1880	Q16	15	LOW	4.7	0.0025
5	18900	1880	QPSK	1	LOW	-2.1	-0.00112
5	18900	1880	QPSK	1	MID	3.3	0.001755
5	18900	1880	QPSK	1	HIGH	-3.8	-0.00202
5	18900	1880	QPSK	12	LOW	-3.3	-0.00176
5	18900	1880	QPSK	12	MID	0.7	0.000372
5	18900	1880	QPSK	12	HIGH	0.7	0.000372

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
5	18900	1880	QPSK	25	LOW	2.9	0.001543
5	18900	1880	Q16	1	LOW	-3	-0.0016
5	18900	1880	Q16	1	MID	1.2	0.000638
5	18900	1880	Q16	1	HIGH	-1.4	-0.00074
5	18900	1880	Q16	12	LOW	4.7	0.0025
5	18900	1880	Q16	12	MID	-2.2	-0.00117
5	18900	1880	Q16	12	HIGH	3.8	0.002021
5	18900	1880	Q16	25	LOW	-3.4	-0.00181
10	18900	1880	QPSK	1	LOW	-3.8	-0.00202
10	18900	1880	QPSK	1	MID	1.9	0.001011
10	18900	1880	QPSK	1	HIGH	2.5	0.00133
10	18900	1880	QPSK	25	LOW	-3.5	-0.00186
10	18900	1880	QPSK	25	MID	0.7	0.000372
10	18900	1880	QPSK	25	HIGH	4.7	0.0025
10	18900	1880	QPSK	50	LOW	-1.7	-0.0009
10	18900	1880	Q16	1	LOW	-1.1	-0.00059
10	18900	1880	Q16	1	MID	4.8	0.002553
10	18900	1880	Q16	1	HIGH	-0.8	-0.00043
10	18900	1880	Q16	25	LOW	-3.9	-0.00207
10	18900	1880	Q16	25	MID	1.8	0.000957
10	18900	1880	Q16	25	HIGH	-0.5	-0.00027
10	18900	1880	Q16	50	LOW	-4.3	-0.00229
15	18900	1880	QPSK	1	LOW	-1.3	-0.00069
15	18900	1880	QPSK	1	MID	-4.9	-0.00261
15	18900	1880	QPSK	1	HIGH	-2.4	-0.00128
15	18900	1880	QPSK	36	LOW	-3.1	-0.00165
15	18900	1880	QPSK	36	MID	-3.7	-0.00197
15	18900	1880	QPSK	36	HIGH	0.3	0.00016
15	18900	1880	QPSK	75	LOW	-2.3	-0.00122
15	18900	1880	Q16	1	LOW	2	0.001064
15	18900	1880	Q16	1	MID	-3.7	-0.00197
15	18900	1880	Q16	1	HIGH	-0.4	-0.00021
15	18900	1880	Q16	36	LOW	4.3	0.002287
15	18900	1880	Q16	36	MID	-3.1	-0.00165
15	18900	1880	Q16	36	HIGH	3.1	0.001649
15	18900	1880	Q16	75	LOW	0.2	0.000106

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
20	18900	1880	QPSK	1	LOW	2.2	0.00117
20	18900	1880	QPSK	1	MID	-3.8	-0.00202
20	18900	1880	QPSK	1	HIGH	2.1	0.001117
20	18900	1880	QPSK	50	LOW	4.5	0.002394
20	18900	1880	QPSK	50	MID	4.4	0.00234
20	18900	1880	QPSK	50	HIGH	-4.2	-0.00223
20	18900	1880	QPSK	100	LOW	-3.7	-0.00197
20	18900	1880	Q16	1	LOW	-1.3	-0.00069
20	18900	1880	Q16	1	MID	3	0.001596
20	18900	1880	Q16	1	HIGH	-0.4	-0.00021
20	18900	1880	Q16	50	LOW	3.7	0.001968
20	18900	1880	Q16	50	MID	-0.6	-0.00032
20	18900	1880	Q16	50	HIGH	-2.5	-0.00133
20	18900	1880	Q16	100	LOW	-0.7	-0.00037

BAND 4:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
1.4	20175	1732.5	QPSK	1	LOW	2	0.001154
1.4	20175	1732.5	QPSK	1	MID	-3.1	-0.00179
1.4	20175	1732.5	QPSK	1	HIGH	2.1	0.001212
1.4	20175	1732.5	QPSK	3	LOW	-1.8	-0.00104
1.4	20175	1732.5	QPSK	3	MID	-2.7	-0.00156
1.4	20175	1732.5	QPSK	3	HIGH	0.4	0.000231
1.4	20175	1732.5	QPSK	6	LOW	0.6	0.000346
1.4	20175	1732.5	Q16	1	LOW	-3.4	-0.00196
1.4	20175	1732.5	Q16	1	MID	-4	-0.00231
1.4	20175	1732.5	Q16	1	HIGH	1.1	0.000635
1.4	20175	1732.5	Q16	3	LOW	-1.2	-0.00069
1.4	20175	1732.5	Q16	3	MID	0.6	0.000346
1.4	20175	1732.5	Q16	3	HIGH	-4	-0.00231
1.4	20175	1732.5	Q16	6	LOW	1.8	0.001039
3	20175	1732.5	QPSK	1	LOW	-0.8	-0.00046
3	20175	1732.5	QPSK	1	MID	-3.9	-0.00225

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
3	20175	1732.5	QPSK	1	HIGH	2.1	0.001212
3	20175	1732.5	QPSK	8	LOW	-2	-0.00115
3	20175	1732.5	QPSK	8	MID	0.4	0.000231
3	20175	1732.5	QPSK	8	HIGH	4.8	0.002771
3	20175	1732.5	QPSK	15	LOW	0.9	0.000519
3	20175	1732.5	Q16	1	LOW	2.3	0.001328
3	20175	1732.5	Q16	1	MID	-3.2	-0.00185
3	20175	1732.5	Q16	1	HIGH	-0.7	-0.0004
3	20175	1732.5	Q16	8	LOW	-1	-0.00058
3	20175	1732.5	Q16	8	MID	3.1	0.001789
3	20175	1732.5	Q16	8	HIGH	-2	-0.00115
3	20175	1732.5	Q16	15	LOW	-2.7	-0.00156
5	20175	1732.5	QPSK	1	LOW	4.8	0.002771
5	20175	1732.5	QPSK	1	MID	-0.8	-0.00046
5	20175	1732.5	QPSK	1	HIGH	-4.2	-0.00242
5	20175	1732.5	QPSK	12	LOW	-3.3	-0.0019
5	20175	1732.5	QPSK	12	MID	2.3	0.001328
5	20175	1732.5	QPSK	12	HIGH	-0.8	-0.00046
5	20175	1732.5	QPSK	25	LOW	-2.8	-0.00162
5	20175	1732.5	Q16	1	LOW	-1.3	-0.00075
5	20175	1732.5	Q16	1	MID	0.9	0.000519
5	20175	1732.5	Q16	1	HIGH	0.3	0.000173
5	20175	1732.5	Q16	12	LOW	-1.6	-0.00092
5	20175	1732.5	Q16	12	MID	-2.4	-0.00139
5	20175	1732.5	Q16	12	HIGH	-4.9	-0.00283
5	20175	1732.5	Q16	25	LOW	0.3	0.000173
10	20175	1732.5	QPSK	1	LOW	-3	-0.00173
10	20175	1732.5	QPSK	1	MID	-3	-0.00173
10	20175	1732.5	QPSK	1	HIGH	3.3	0.001905
10	20175	1732.5	QPSK	25	LOW	-2.6	-0.0015
10	20175	1732.5	QPSK	25	MID	4.8	0.002771
10	20175	1732.5	QPSK	25	HIGH	-2.9	-0.00167
10	20175	1732.5	QPSK	50	LOW	4.5	0.002597
10	20175	1732.5	Q16	1	LOW	-4.8	-0.00277
10	20175	1732.5	Q16	1	MID	-2.9	-0.00167
10	20175	1732.5	Q16	1	HIGH	-0.5	-0.00029

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
10	20175	1732.5	Q16	25	LOW	-3.5	-0.00202
10	20175	1732.5	Q16	25	MID	-3.8	-0.00219
10	20175	1732.5	Q16	25	HIGH	-3.9	-0.00225
10	20175	1732.5	Q16	50	LOW	-0.8	-0.00046
15	20175	1732.5	QPSK	1	LOW	0.5	0.000289
15	20175	1732.5	QPSK	1	MID	-2.5	-0.00144
15	20175	1732.5	QPSK	1	HIGH	-1.5	-0.00087
15	20175	1732.5	QPSK	36	LOW	-3.3	-0.0019
15	20175	1732.5	QPSK	36	MID	-1	-0.00058
15	20175	1732.5	QPSK	36	HIGH	2.8	0.001616
15	20175	1732.5	QPSK	75	LOW	5	0.002886
15	20175	1732.5	Q16	1	LOW	0.6	0.000346
15	20175	1732.5	Q16	1	MID	-0.8	-0.00046
15	20175	1732.5	Q16	1	HIGH	-2.3	-0.00133
15	20175	1732.5	Q16	36	LOW	-1.6	-0.00092
15	20175	1732.5	Q16	36	MID	-1.9	-0.0011
15	20175	1732.5	Q16	36	HIGH	3	0.001732
15	20175	1732.5	Q16	75	LOW	-1.3	-0.00075
20	20175	1732.5	QPSK	1	LOW	-3	-0.00173
20	20175	1732.5	QPSK	1	MID	-2.6	-0.0015
20	20175	1732.5	QPSK	1	HIGH	-3.8	-0.00219
20	20175	1732.5	QPSK	50	LOW	4.7	0.002713
20	20175	1732.5	QPSK	50	MID	-2.4	-0.00139
20	20175	1732.5	QPSK	50	HIGH	-3.2	-0.00185
20	20175	1732.5	QPSK	100	LOW	2.8	0.001616
20	20175	1732.5	Q16	1	LOW	1.2	0.000693
20	20175	1732.5	Q16	1	MID	3.1	0.001789
20	20175	1732.5	Q16	1	HIGH	-4.7	-0.00271
20	20175	1732.5	Q16	50	LOW	3.7	0.002136
20	20175	1732.5	Q16	50	MID	-1.4	-0.00081
20	20175	1732.5	Q16	50	HIGH	1.1	0.000635
20	20175	1732.5	Q16	100	LOW	1.3	0.00075

BAND 5:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
1.4	20525	836.5	QPSK	1	LOW	-1.5	-0.00179
1.4	20525	836.5	QPSK	1	MID	-4.1	-0.0049
1.4	20525	836.5	QPSK	1	HIGH	-0.4	-0.00048
1.4	20525	836.5	QPSK	3	LOW	-2.1	-0.00251
1.4	20525	836.5	QPSK	3	MID	-4.1	-0.0049
1.4	20525	836.5	QPSK	3	HIGH	-1.9	-0.00227
1.4	20525	836.5	QPSK	6	LOW	-0.9	-0.00108
1.4	20525	836.5	Q16	1	LOW	1.2	0.001435
1.4	20525	836.5	Q16	1	MID	4.6	0.005499
1.4	20525	836.5	Q16	1	HIGH	3.3	0.003945
1.4	20525	836.5	Q16	3	LOW	1.7	0.002032
1.4	20525	836.5	Q16	3	MID	3.1	0.003706
1.4	20525	836.5	Q16	3	HIGH	-5	-0.00598
1.4	20525	836.5	Q16	6	LOW	-2.8	-0.00335
3	20525	836.5	QPSK	1	LOW	-3.2	-0.00383
3	20525	836.5	QPSK	1	MID	-1.5	-0.00179
3	20525	836.5	QPSK	1	HIGH	1.1	0.001315
3	20525	836.5	QPSK	8	LOW	3	0.003586
3	20525	836.5	QPSK	8	MID	-4.7	-0.00562
3	20525	836.5	QPSK	8	HIGH	-3.8	-0.00454
3	20525	836.5	QPSK	15	LOW	3.8	0.004543
3	20525	836.5	Q16	1	LOW	-1.5	-0.00179
3	20525	836.5	Q16	1	MID	4.9	0.005858
3	20525	836.5	Q16	1	HIGH	-0.3	-0.00036
3	20525	836.5	Q16	8	LOW	-2	-0.00239
3	20525	836.5	Q16	8	MID	-3.7	-0.00442
3	20525	836.5	Q16	8	HIGH	-0.5	-0.0006
3	20525	836.5	Q16	15	LOW	-1.3	-0.00155
5	20525	836.5	QPSK	1	LOW	2.2	0.00263
5	20525	836.5	QPSK	1	MID	0.8	0.000956
5	20525	836.5	QPSK	1	HIGH	-3.4	-0.00406
5	20525	836.5	QPSK	12	LOW	-4.2	-0.00502
5	20525	836.5	QPSK	12	MID	0.1	0.00012
5	20525	836.5	QPSK	12	HIGH	0.8	0.000956
5	20525	836.5	QPSK	25	LOW	-2.6	-0.00311

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Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency Error (Hz)	Frequency Error (ppm)
5	20525	836.5	Q16	1	LOW	1.4	0.001674
5	20525	836.5	Q16	1	MID	-2.8	-0.00335
5	20525	836.5	Q16	1	HIGH	-4.2	-0.00502
5	20525	836.5	Q16	12	LOW	-2.5	-0.00299
5	20525	836.5	Q16	12	MID	-2.7	-0.00323
5	20525	836.5	Q16	12	HIGH	-1.5	-0.00179
5	20525	836.5	Q16	25	LOW	-4.1	-0.0049
10	20525	836.5	QPSK	1	LOW	1.9	0.002271
10	20525	836.5	QPSK	1	MID	-0.7	-0.00084
10	20525	836.5	QPSK	1	HIGH	-3.8	-0.00454
10	20525	836.5	QPSK	25	LOW	-2	-0.00239
10	20525	836.5	QPSK	25	MID	2.3	0.00275
10	20525	836.5	QPSK	25	HIGH	-3.9	-0.00466
10	20525	836.5	QPSK	50	LOW	-2.8	-0.00335
10	20525	836.5	Q16	1	LOW	-5	-0.00598
10	20525	836.5	Q16	1	MID	-0.5	-0.0006
10	20525	836.5	Q16	1	HIGH	-2.7	-0.00323
10	20525	836.5	Q16	25	LOW	-2.8	-0.00335
10	20525	836.5	Q16	25	MID	4.1	0.004901
10	20525	836.5	Q16	25	HIGH	-1.9	-0.00227
10	20525	836.5	Q16	50	LOW	1.4	0.001674

BAND 7:

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency error (Hz)	Frequency Error (ppm)
5	21100	2535	QPSK	1	LOW	-0.2	-7.9E-05
5	21100	2535	QPSK	1	MID	0.2	7.89E-05
5	21100	2535	QPSK	1	HIGH	1.4	0.000552
5	21100	2535	QPSK	12	LOW	5	0.001972
5	21100	2535	QPSK	12	MID	-2.1	-0.00083
5	21100	2535	QPSK	12	HIGH	2.7	0.001065
5	21100	2535	QPSK	25	LOW	-1.7	-0.00067
5	21100	2535	Q16	1	LOW	-3.4	-0.00134
5	21100	2535	Q16	1	MID	-1.3	-0.00051
5	21100	2535	Q16	1	HIGH	-3.7	-0.00146
5	21100	2535	Q16	12	LOW	4.1	0.001617
5	21100	2535	Q16	12	MID	-2.3	-0.00091
5	21100	2535	Q16	12	HIGH	4.3	0.001696
5	21100	2535	Q16	25	LOW	2.5	0.000986
10	21100	2535	QPSK	1	LOW	3.7	0.00146
10	21100	2535	QPSK	1	MID	-4.6	-0.00181
10	21100	2535	QPSK	1	HIGH	2.8	0.001105
10	21100	2535	QPSK	25	LOW	4.8	0.001893
10	21100	2535	QPSK	25	MID	-3.6	-0.00142
10	21100	2535	QPSK	25	HIGH	5	0.001972
10	21100	2535	QPSK	50	LOW	-1.8	-0.00071
10	21100	2535	QPSK	1	LOW	3.3	0.001302
10	21100	2535	QPSK	1	MID	4.8	0.001893
10	21100	2535	QPSK	1	HIGH	-2.5	-0.00099
10	21100	2535	Q16	25	LOW	2	0.000789
10	21100	2535	Q16	25	MID	0.8	0.000316
10	21100	2535	Q16	25	HIGH	-2.7	-0.00107
10	21100	2535	Q16	50	LOW	4.6	0.001815
15	21100	2535	QPSK	1	LOW	-0.6	-0.00024
15	21100	2535	QPSK	1	MID	1.1	0.000434
15	21100	2535	QPSK	1	HIGH	3.2	0.001262
15	21100	2535	QPSK	36	LOW	-1.3	-0.00051
15	21100	2535	QPSK	36	MID	4.8	0.001893
15	21100	2535	QPSK	36	HIGH	-1.6	-0.00063
15	21100	2535	QPSK	75	LOW	-2.1	-0.00083

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Frequency error (Hz)	Frequency Error (ppm)
15	21100	2535	Q16	1	LOW	-4.6	-0.00181
15	21100	2535	Q16	1	MID	-0.2	-7.9E-05
15	21100	2535	Q16	1	HIGH	-1.8	-0.00071
15	21100	2535	Q16	36	LOW	-2.1	-0.00083
15	21100	2535	Q16	36	MID	0.4	0.000158
15	21100	2535	Q16	36	HIGH	2.2	0.000868
15	21100	2535	Q16	75	LOW	-4.2	-0.00166
20	21100	2535	QPSK	1	LOW	-2.7	-0.00107
20	21100	2535	QPSK	1	MID	-1	-0.00039
20	21100	2535	QPSK	1	HIGH	0.5	0.000197
20	21100	2535	QPSK	50	LOW	-4.5	-0.00178
20	21100	2535	QPSK	50	MID	-2.6	-0.00103
20	21100	2535	QPSK	50	HIGH	-0.3	-0.00012
20	21100	2535	QPSK	100	LOW	0.2	7.89E-05
20	21100	2535	Q16	1	LOW	4.9	0.001933
20	21100	2535	Q16	1	MID	-4.8	-0.00189
20	21100	2535	Q16	1	HIGH	-4.2	-0.00166
20	21100	2535	Q16	50	LOW	-3	-0.00118
20	21100	2535	Q16	50	MID	-4.6	-0.00181
20	21100	2535	Q16	50	HIGH	-0.7	-0.00028
20	21100	2535	Q16	100	LOW	2	0.000789

7 OCCUPIED BANDWIDTH& Emission Bandwidth

Test limit:

The occupied bandwidth (OBW), that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission, shall be measured when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user. [¡¡2.1049(h)]

Many of the individual rule parts specify a relative OBW in lieu of the 99% OBW. In such cases, the OBW is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated by at least X dB below the transmitter power, where the value of X is typically specified as 26.

The relative OBW must be measured and reported when it is specified in the applicable rule part; otherwise, the 99% OBW shall be measured and reported. The test report shall specify which OBW is reported.

A spectrum/signal analyzer or other instrument providing a spectral display is recommended for these measurements and the video bandwidth shall be set to a value at least three times greater than the IF/resolution bandwidth to avoid any amplitude smoothing. Video filtering shall not be used during occupied bandwidth tests.

The OBW shall be measured for all operating conditions that will affect the bandwidth results (e.g. variable modulations, coding, or channel bandwidth settings). See section 4.

Test procedure:

Occupied bandwidth – relative measurement procedure

The reference value is the highest level of the spectral envelope of the modulated signal.

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.

b) The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

c) Set the reference level of the instrument as required to prevent the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.

e) The dynamic range of the spectrum analyzer at the selected RBW shall be at least 10 dB below the target "-X dB down" requirement (i.e., if the requirement calls for measuring the –26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference value).

f) Set the detection mode to peak, and the trace mode to max hold.

g) Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).

h) Determine the "-X dB down amplitude" as equal to (Reference Value – X). Alternatively, this calculation can be performed by the analyzer by using the marker-delta function.

i) Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "–X dB down amplitude" determined in step g). If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

j) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

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Occupied bandwidth – power bandwidth (99%) measurement procedure

The following procedure shall be used for measuring (99 %) power bandwidth

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.

e) Set the detection mode to peak, and the trace mode to max hold..

f) Use the 99 % power bandwidth function of the spectrum analyzer (if available) and report the measured bandwidth.

g) If the instrument does not have a 99 % power bandwidth function, the trace data points are to be recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % power bandwidth is the difference between these two frequencies.

h) The OBW shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Test setup:

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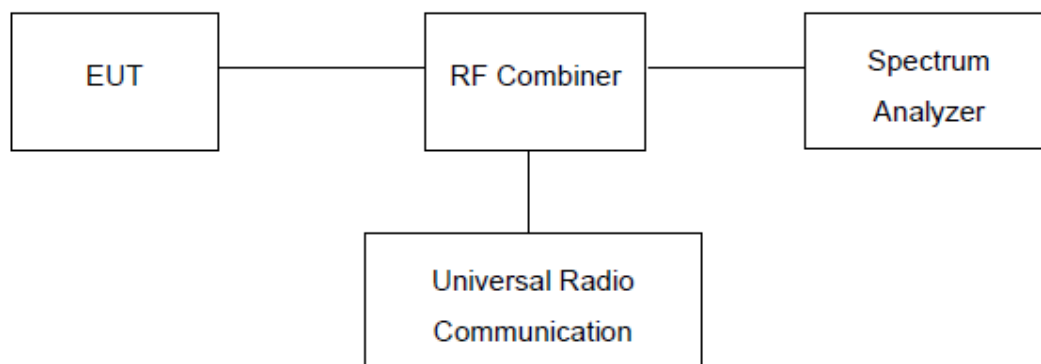
7.1 Measurement Result

GSM850:

Frequency	OBW(99%)	26dB BW
824.2	248.40KHz	314.10KHz
836.6	245.19KHz	312.50KHz
848.8	245.19KHz	315.71KHz

PCS1900:

Frequency	OBW(99%)	26dB BW
1850.2	245.19KHz	310.90KHz
1880	243.59KHz	318.91KHz
1909.8	245.19KHz	309.29KHz

GPRS850:

Frequency	OBW(99%)	26dB BW
824.2	243.59KHz	318.18KHz
836.6	245.19KHz	315.71KHz
848.8	242.00KHz	317.31KHz

GPRS 1900:

Frequency	OBW(99%)	26dB BW
1850.2	245.19KHz	315.71KHz
1880	245.19KHz	315.71KHz
1909.8	245.19KHz	317.31KHz

EGPRS 850:

Frequency	OBW(99%)	26dB BW
824.2	242.00KHz	282.05KHz
836.6	243.59KHz	280.45KHz
848.8	225.96KHz	250.00KHz

EGPRS 1900:

Frequency	OBW(99%)	26dB BW
1850.2	250.00KHz	301.28KHz
1880	248.40KHz	304.49KHz
1909.8	245.19KHz	318.91KHz

UTRA BANDS
BAND 2:

Frequency	OBW(99%)	26dB BW
1852.4	4.215MHz	4.888MHz
1880	4.215MHz	4.872MHz
1907.6	4.215MHz	4.872MHz

BAND 4:

Frequency	OBW(99%)	26dB BW
1712.4	4.215MHz	4.892MHz
1732.6	4.231MHz	4.920MHz
1752.6	4.247MHz	4.872MHz

BAND 5:

Frequency	OBW(99%)	26dB BW
826.4	4.231MHz	4.904MHz
836.4	4.247MHz	4.888MHz
846.6	4.263MHz	4.920MHz

7.2 Test Plot(s)

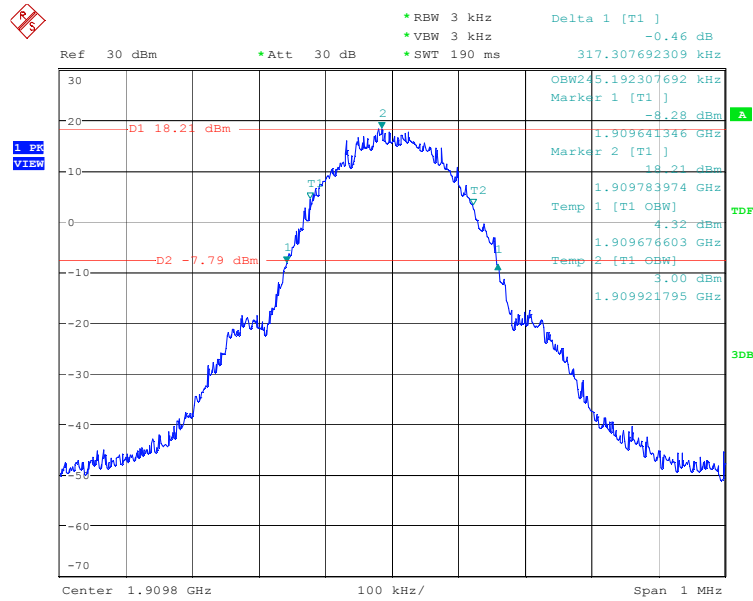Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 128
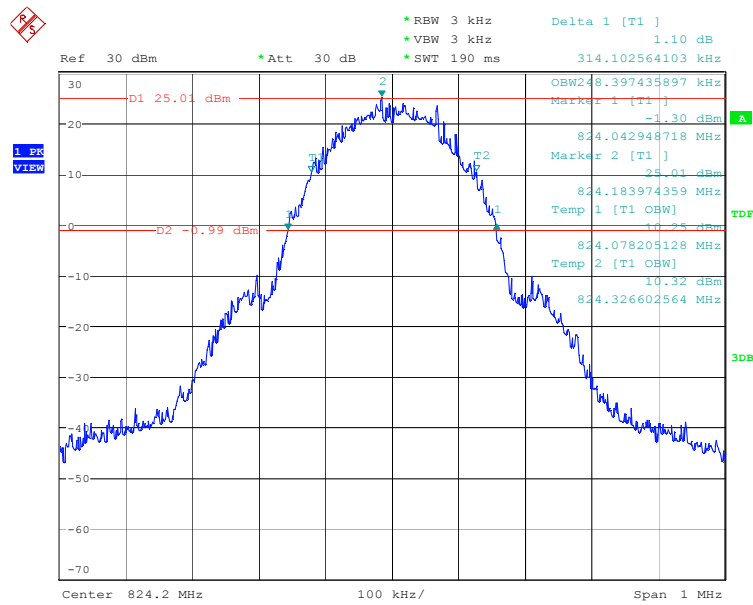
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Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 190
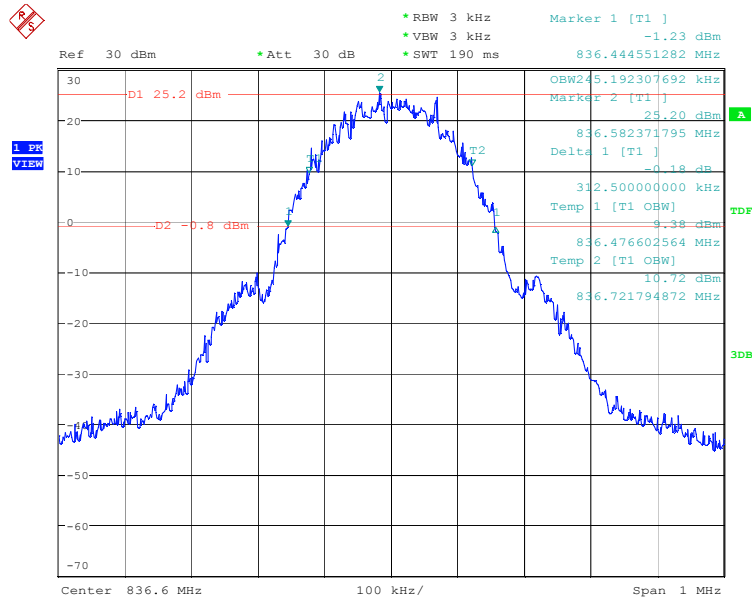
Date: 16.MAY.2017 16:18:24

Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 251

Date: 16.MAY.2017 16:20:25

Report No.: FCC17040291A-5
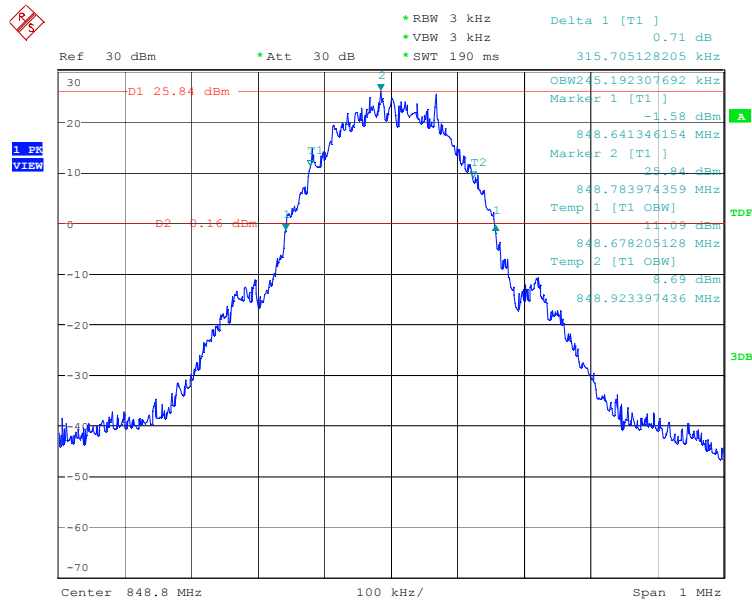
Occupied Bandwidth (99% and -26dBc) GSM 1900 BAND CH 512
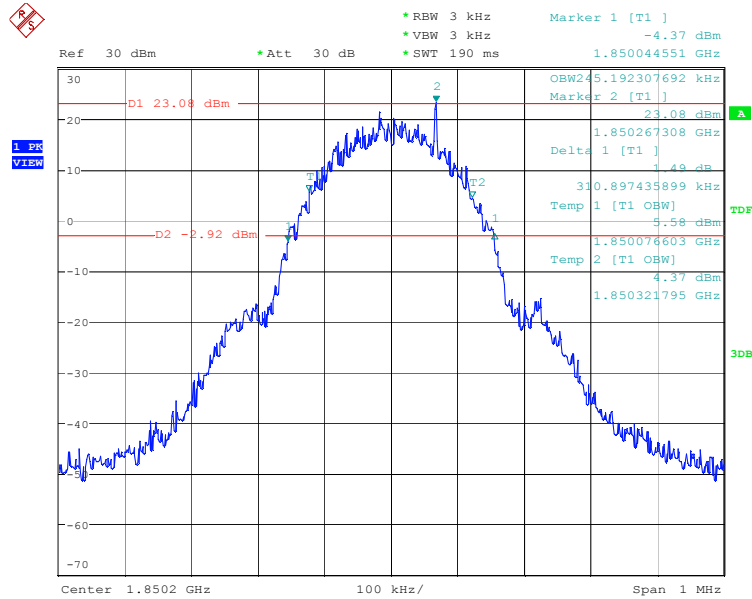
Date: 16.MAY.2017 16:25:38

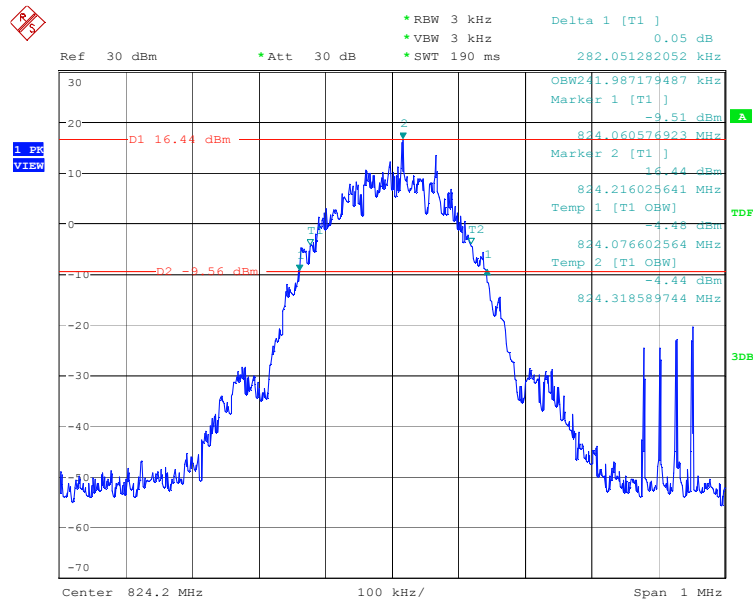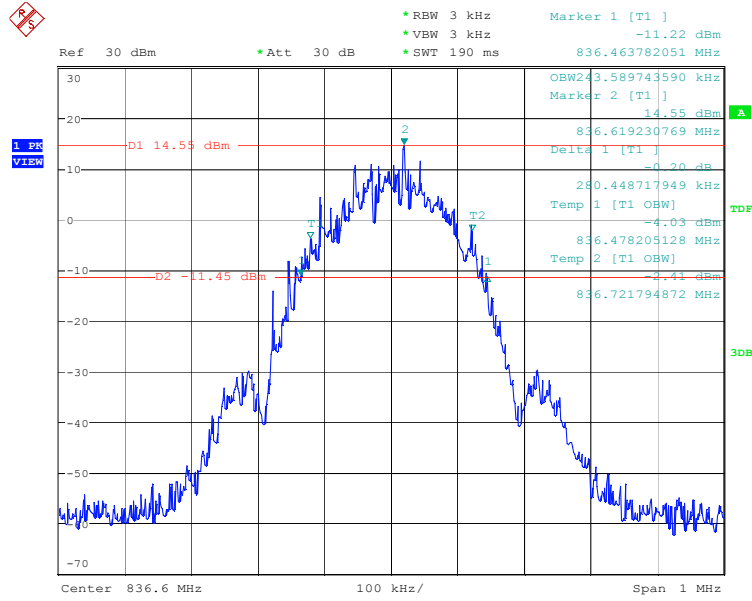## Occupied Bandwidth (99% and -26dBc) PCS 1900 BAND CH 661

Date: 16.MAY.2017 16:27:24

Report No.: FCC17040291A-5
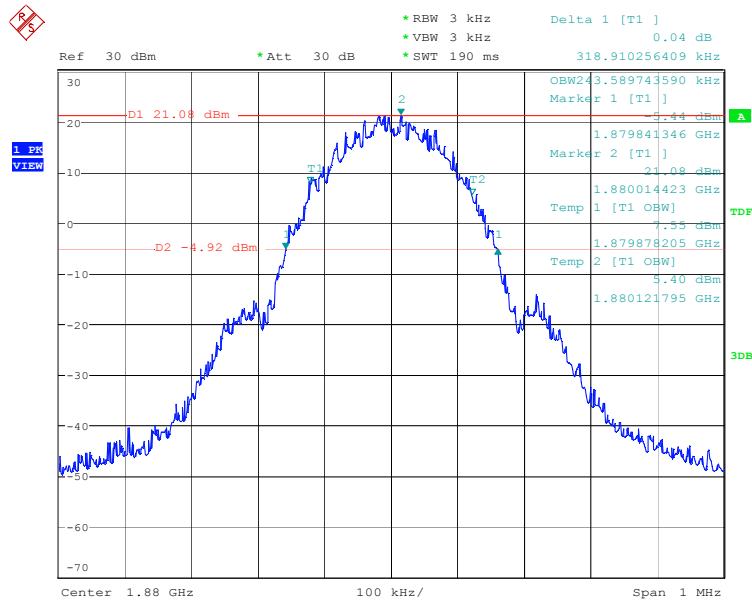
Occupied Bandwidth (99% and -26dBc) PCS 1900 BAND CH 810
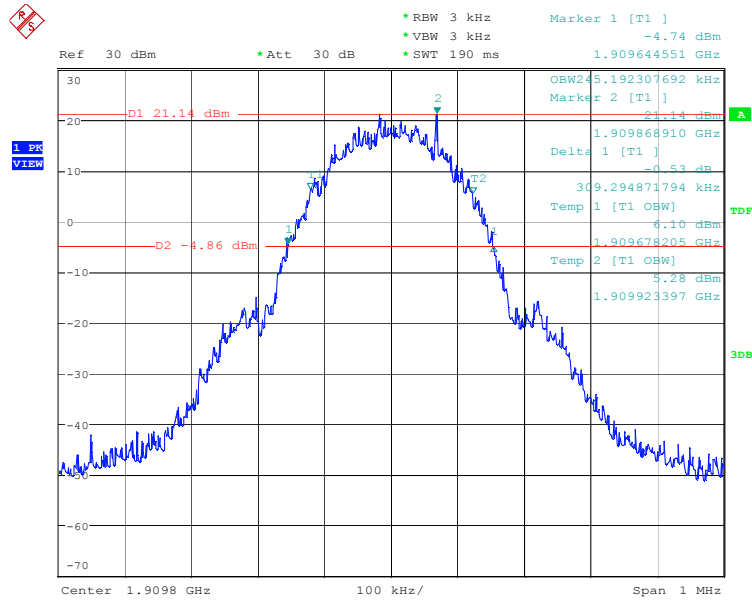
Date: 16.MAY.2017 16:28:55

Occupied Bandwidth (99% and -26dBc) GPRS 850 BAND CH 128

Date: 16.MAY.2017 16:40:19

Report No.: FCC17040291A-5
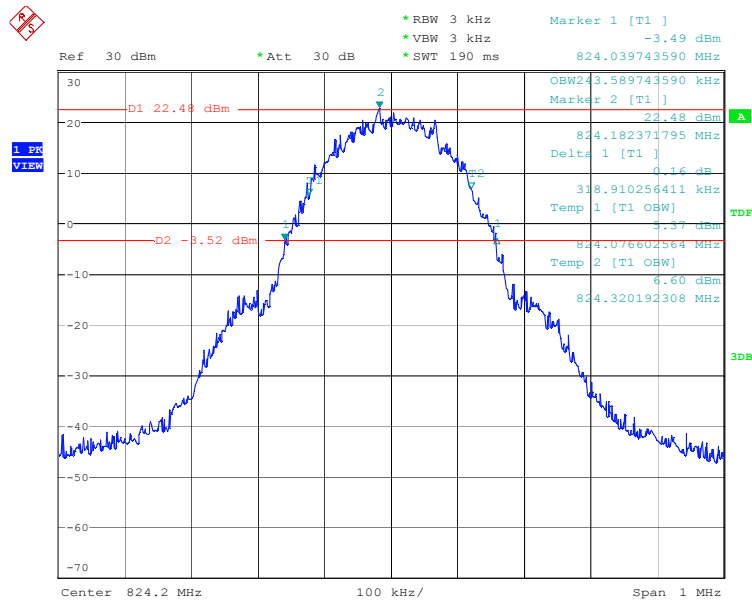
Occupied Bandwidth (99% and -26dBc) GPRS 850 BAND CH 190
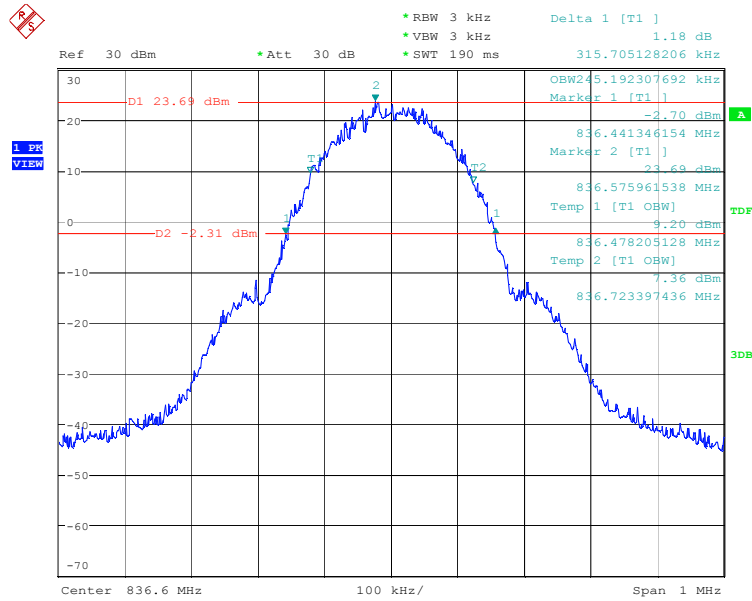
Date: 16.MAY.2017 16:42:23
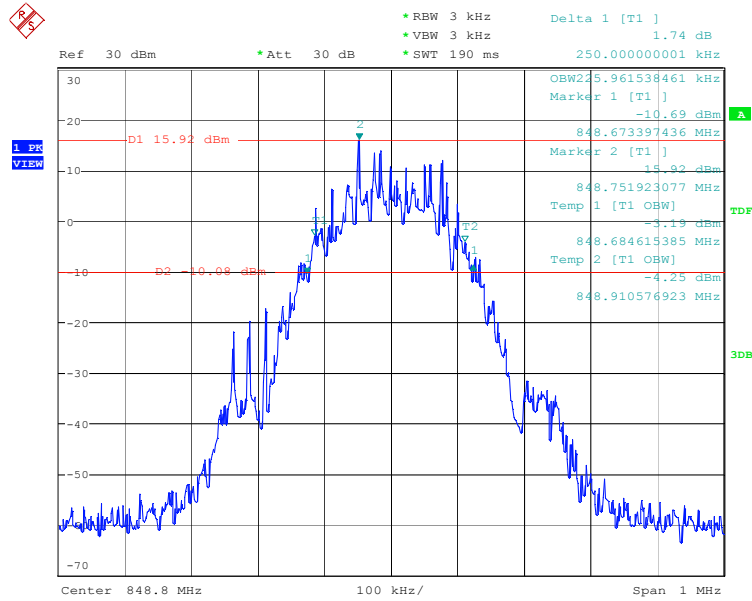
Occupied Bandwidth (99% and -26dBc) GPRS 850 BAND CH 251

Date: 16.MAY.2017 16:43:42

Report No.: FCC17040291A-5
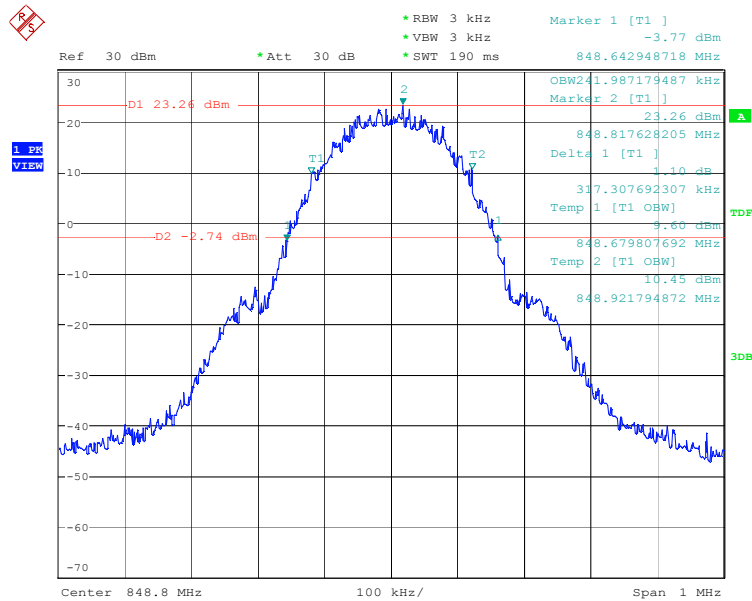
Occupied Bandwidth (99% and -26dBc) GPRS 1900 BAND CH 512
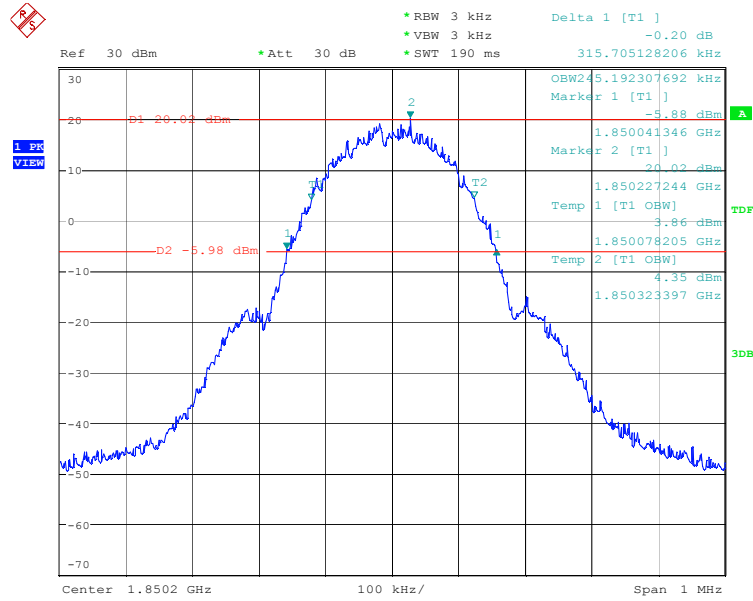
Date: 16.MAY.2017 16:32:36

Occupied Bandwidth (99% and -26dBc) GPRS 1900 BAND CH 661

Date: 16.MAY.2017 16:34:29

Report No.: FCC17040291A-5
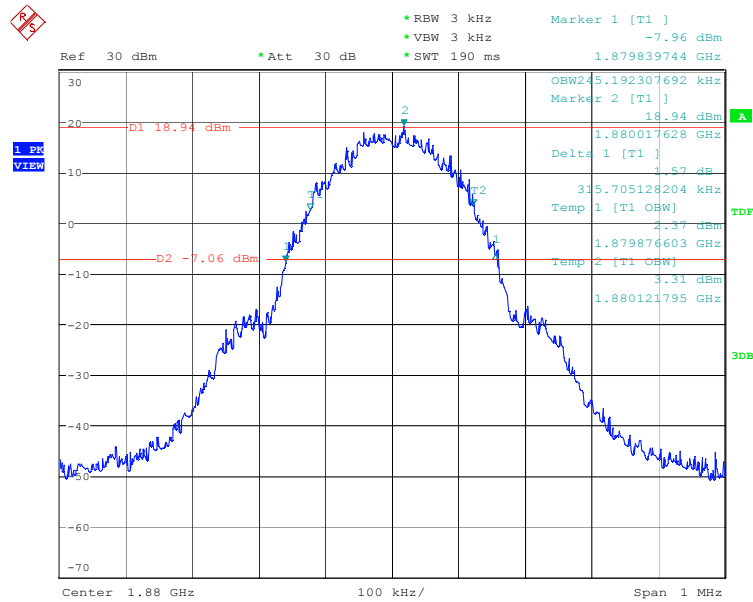
Occupied Bandwidth (99% and -26dBc) GPRS 1900 BAND CH 810

Date: 16.MAY.2017 16:36:02
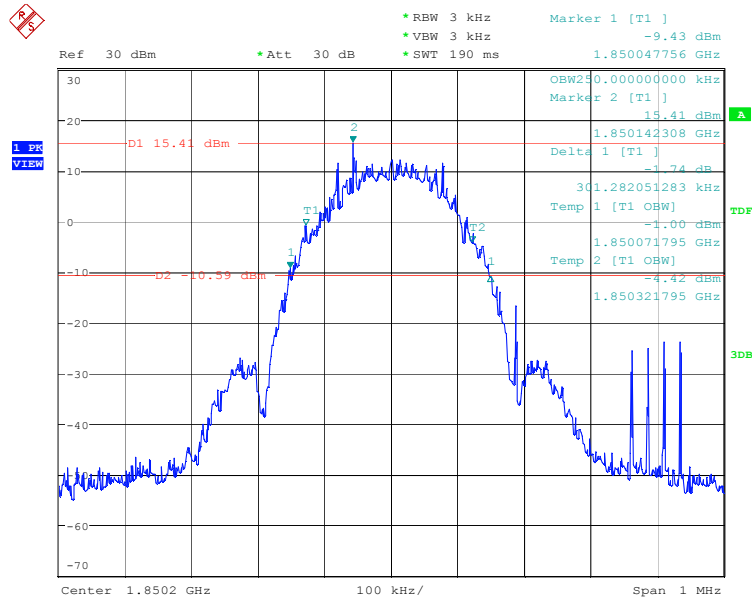
Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 128

Date: 16.MAY.2017 17:03:22

Report No.: FCC17040291A-5

Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 190

```
                                          *RBW  3 kHz      Marker 1 [T1 ]
                                          *VBW  3 kHz                -11.22 dBm
      Ref  30 dBm          *Att  30 dB    *SWT 190 ms        836.463782051 MHz
      30                                            OBW243.589743590 kHz
                                                    Marker 2 [T1 ]                    A
      -20                                      2             14.55 dBm
                                                     836.619230769 MHz
 1 PK      D1 14.55 dBm                              Delta 1 [T1 ]
 VIEW                                               -10             -0.20 dB
                                                     280.448717949 kHz
                                                    Temp 1 [T1 OBW]                  TDF
       0                                        T2            -4.03 dBm
                                                     836.478205128 MHz
      -10      D2 -11.45 dBm                         Temp 2 [T1 OBW]
                                                             -2.41 dBm
                                                     836.721794872 MHz
      -20
                                                                                    3DB
      -30

      -40

      -50

      -70
      Center  836.6 MHz              100 kHz/              Span  1 MHz
```

Date: 16.MAY.2017 18:58:03

Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 251

```
                                          *RBW  3 kHz      Delta 1 [T1 ]
                                          *VBW  3 kHz                 1.74 dB
      Ref  30 dBm          *Att  30 dB    *SWT 190 ms        250.000000001 kHz
      30                                            OBW225.961538461 kHz
                                                    Marker 1 [T1 ]                    A
      -20                                      2            -10.69 dBm
                                                     848.673397436 MHz
 1 PK      D1 15.92 dBm                              Marker 2 [T1 ]
 VIEW                                               -10            15.92 dBm
                                                     848.751923077 MHz
                                                    Temp 1 [T1 OBW]                  TDF
       0                                        T2            -3.19 dBm
                                                     848.684615385 MHz
      -10      D2 -10.08 dBm                         Temp 2 [T1 OBW]
                                                             -4.25 dBm
                                                     848.910576923 MHz
      -20
                                                                                    3DB
      -30

      -40

      -50

      -70
      Center  848.8 MHz              100 kHz/              Span  1 MHz
```
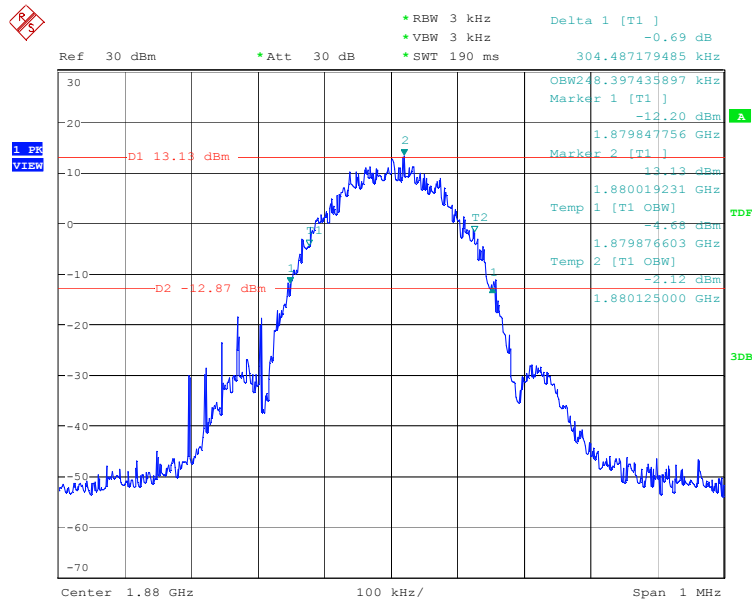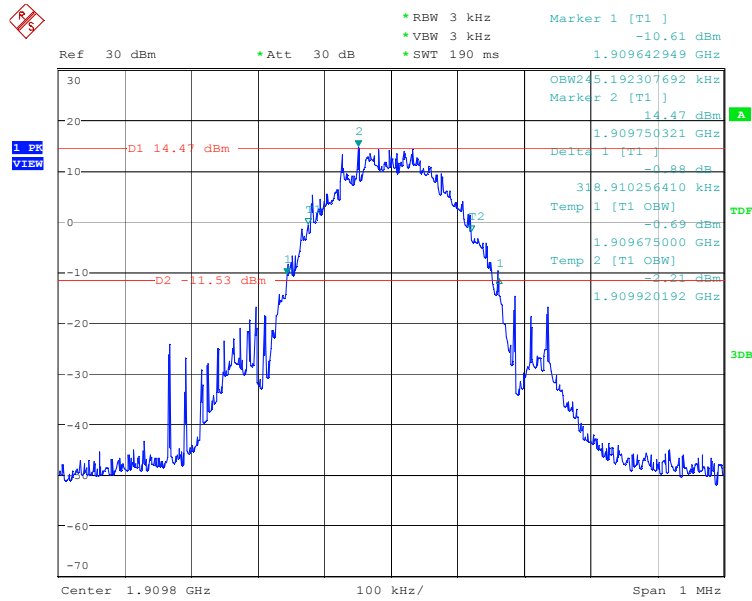
Date: 16.MAY.2017 19:01:14

Occupied Bandwidth (99% and -26dBc) EGPRS 1900 BAND CH 512

Date: 16.MAY.2017 19:08:04

Occupied Bandwidth (99% and -26dBc) EGPRS 1900 BAND CH 661
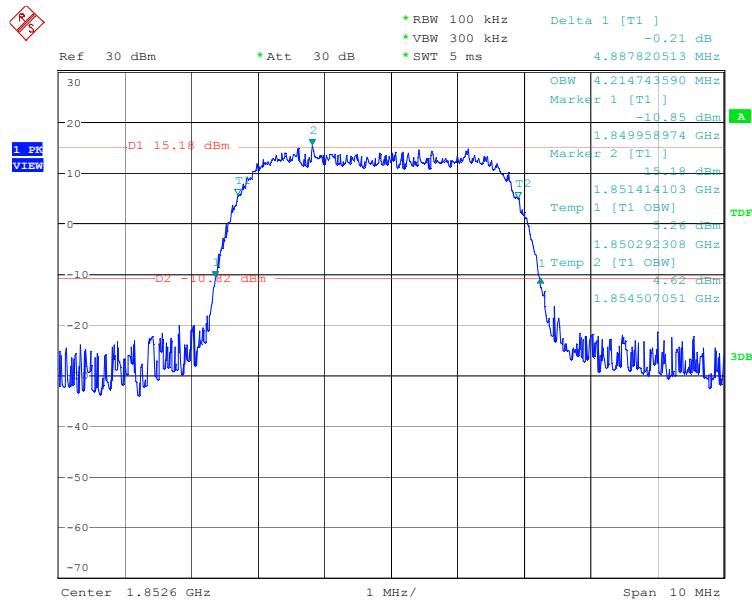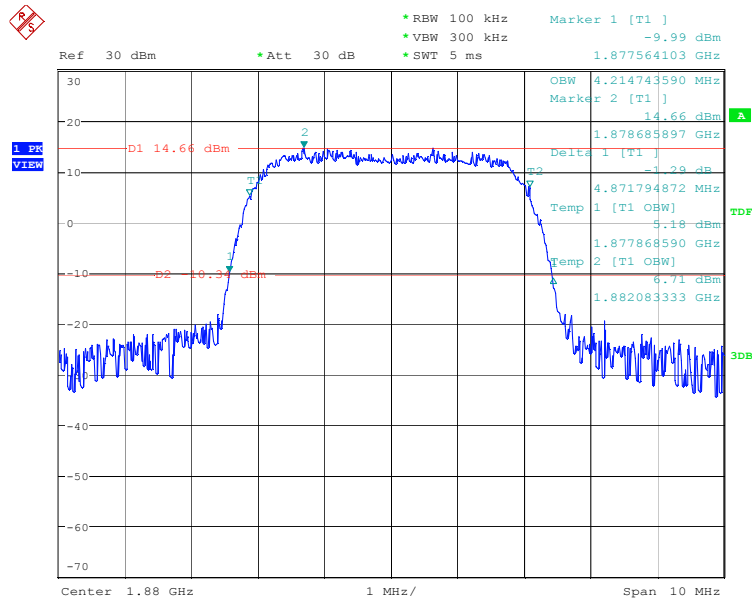

Date: 16.MAY.2017 19:09:40

Report No.: FCC17040291A-5

Occupied Bandwidth (99% and -26dBc) EGPRS 1900 BAND CH 810

Date: 16.MAY.2017 19:12:05

UTRA BANDS
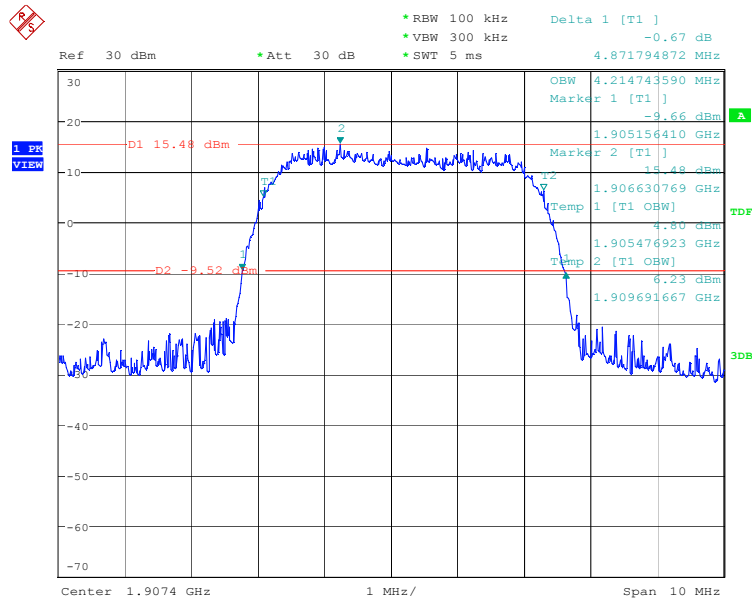## Occupied Bandwidth (99% and -26dBc) WCDMA BAND II CH 9262

Date: 16.MAY.2017 19:17:28

Report No.: FCC17040291A-5

Occupied Bandwidth (99%and-26dBc) WCDMA BAND II CH 9400

Occupied Bandwidth (99%and-26dBc) WCDMA BAND II CH 9538

Date: 16.MAY.2017 19:19:48

Report No.: FCC17040291A-5

Occupied Bandwidth (99% and -26dBc) WCDMA BAND IV CH 1312
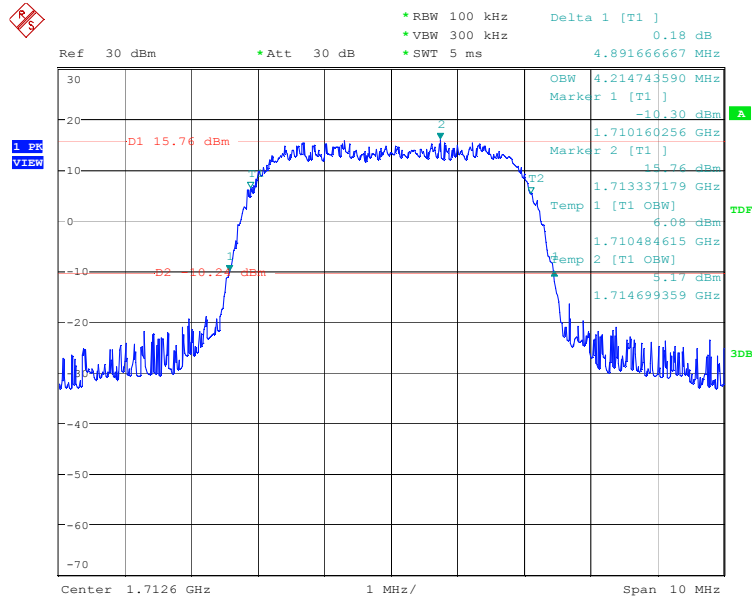
Date: 16.MAY.2017 20:19:13

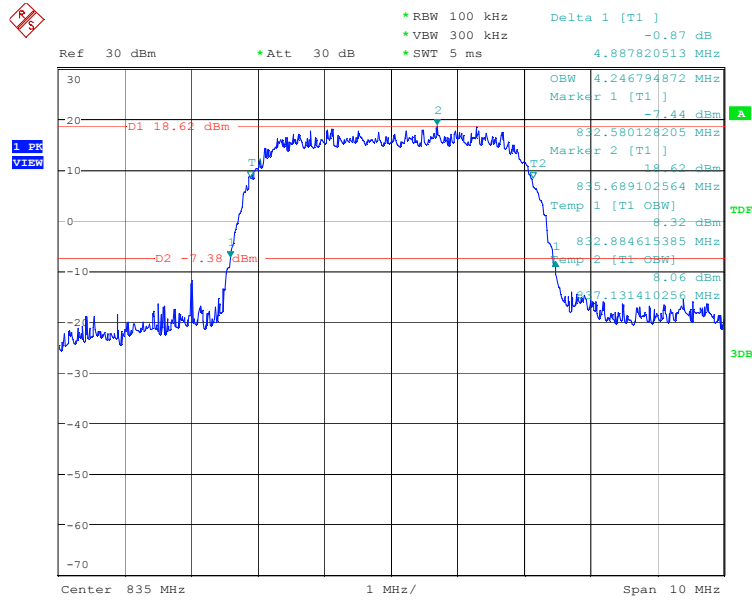## Occupied Bandwidth (99% and -26dBc) WCDMA BAND IV CH 1413

Date: 16.MAY.2017 20:20:28

Report No.: FCC17040291A-5
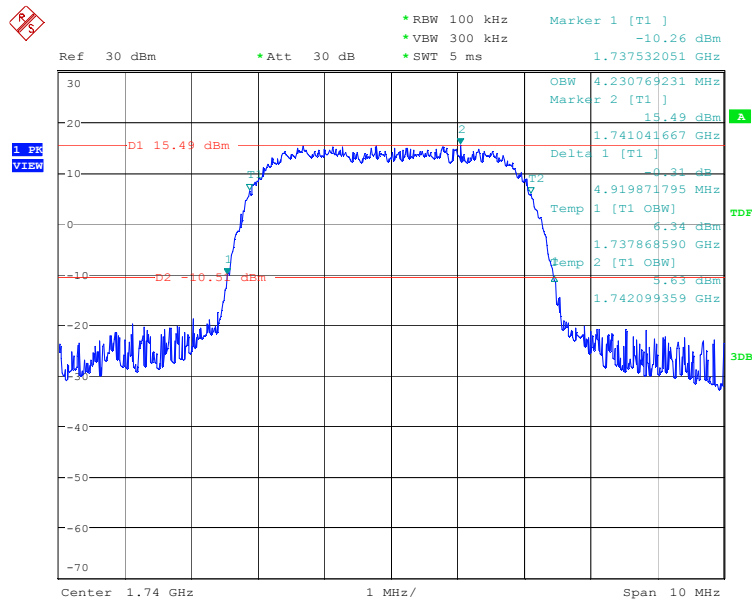
Occupied Bandwidth (99% and -26dBc) WCDMA BAND IV CH 1513
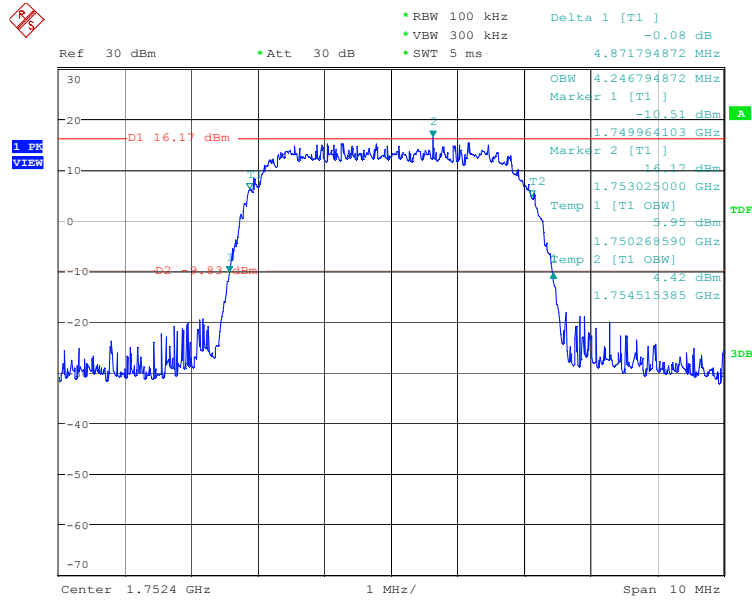
Date: 16.MAY.2017 20:21:45
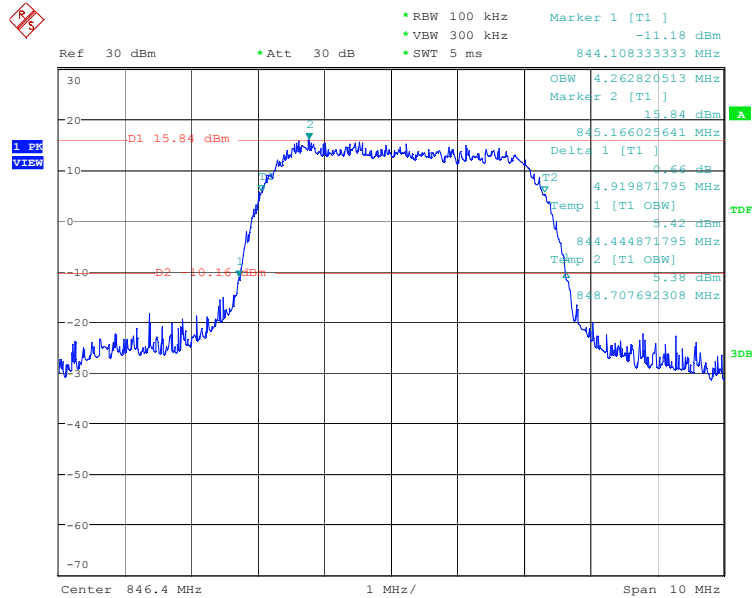
Occupied Bandwidth (99%and-26dBc) WCDMA BAND V CH 4132

Date: 16.MAY.2017 19:22:01

Report No.: FCC17040291A-5
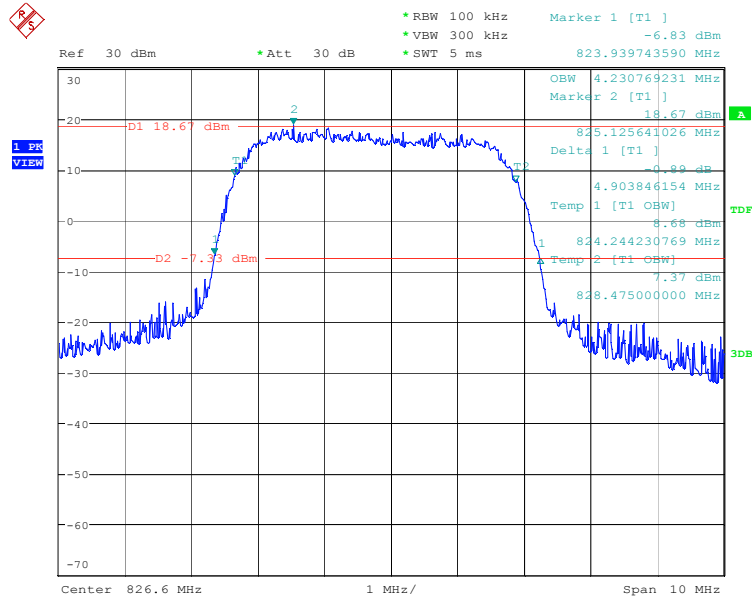
Occupied Bandwidth (99%and-26dBc) WCDMA BAND V CH 4182

Date: 16.MAY.2017 19:26:21

Occupied Bandwidth (99%and-26dBc) WCDMA BAND V CH 4233

Date: 16.MAY.2017 19:27:43

Report No.: FCC17040291A-5