# **FCC Test Report**

**Application Purpose** : Original grant

**Applicant Name:** : TECNO MOBILE LIMITED

FCC ID : 2ADYY-W5A

**Equipment Type** : Mobile phone

Model Name : W5

**Report Number** : FCC16104036A-5

Standard(S) : FCC Part 22H&24E&27 Rules

**Date Of Receipt** : October 09, 2016

Date Of Issue : October 27, 2016

Test By :

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**Registration Number: 588523** 

#### REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	October 27, 2016	Valid	Original Report
V1.1	/	November 18, 2016	Valid	Original Report

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1 CERTIFICAT	1 CERTIFICATION				
Applicant	TECNO MOBILE LIMITED				
Address	ROOMS 05-15, 13A/F., SOUTH TOWER,WORLD FINANCE CENTRE, HARBOUR CITY, 17 CANTON ROAD, TSIM SHA TSUI, KOWLOON, HONG KONG				
Manufacturer	SHENZHEN TECNO TECHNOLOGY CO.,LTD.				
Address	1-4th Floor,3rd Building,Pacific Industrial Park,No.2088,Shenyan Road,Yantian District,Shenzhen,Guangdong,China				
Equipment Type	Mobile phone				
Brand Name	TECNO				
Test Model	W5				
Hardware version:	V1.2				
Software version:	W5-H373D1-M-160907V2				
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. 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.

# **2 EUT INFORMATION**

**Table 2.1.1 General Information** 

Equipment Type:	Mobile phone	
Hardware version:	V1.2	
Software version:	W5-H373D1-M-160907V2	
Frequency Bands:	<ul> <li>☑GSM 850 ☑PCS 1900 (U.S. Bands)</li> <li>UTRA Bands:</li> <li>☑UTRA Band 2 ☑UTRA Band 4 ☑UTRA Band 5</li> <li>E-UTRA Bands:</li> <li>☑ E-UTRA Band 2 ☑ E-UTRA Band 4</li> <li>☑ E-UTRA Band 5</li> </ul>	
Antenna Type:	Internal Antenna	
Antenna gain:	PCS 1900/UTRA Band 2/E-UTRA Band 2: -4.0dBi UTRA Band 4/E-UTRA Band 4: -4.0dBi GSM850/UTRA Band 5/ E-UTRA Band 5 -4.0dBi	
Battery information:	Li-Polymer Battery : BL-30RT Voltage: 3.85V Capacity: 3000mAh Limited Charge Voltage: 4.4V	
Adapter Information:	Adapter: A8-501000 Input: 100-240V 50/60Hz 200mA Output: 5V 1A	
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 4.4V (Normal: DC 3.85V)	
Extreme Temp. Tolerance	0°C to 50°C	

**Note 1:** The High Voltage DC 4.4V 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	32.85	33.34
DCS1900	Class 1	GMSK	29.91	30.26
UTRA BAND 2	Class 3	QPSK	22.91	24.06
UTRA BAND 4	Class 3	QPSK	22.96	24.17
UTRA BAND 5	Class 3	QPSK	22.86	24.15
E-UTRA Band 2	Class 3	QPSK	21.50	23.48
E-UTRA Band 2	Class 3	16QAM	21.49	23.50
E-UTRA Band 4	Class 3	QPSK	21.49	23.50
E-UTRA Band 4	Class 3	16QAM	21.50	23.49
E-UTRA Band 5	Class 3	QPSK	21.50	23.50
E-UTRA Band 5	Class 3	16QAM	21.49	23.49

#### 3 TEST DESCRIPTION

#### 3.1 Test Facility

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

QTC Certification & Testing Co., Ltd.

Registration Number: 588523

### 3.2EUT 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	W5	2ADYY-W5A	EUT

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

# 3.3 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)
	1.4	18607	1850.7
	3	18615	1851.5
Low Panga	5	18625	1852.5
Low Range	10	18650	1855
	15	18675	1857.5
	20	18700	1860
Mid Range	1.4/3/5/10	18900	1880
Wild Kange	15 /20	16900	1000
	1.4	19193	1909.3
	3	19185	1908.5
High Bongo	5	19175	1907.5
High Range	10	19150	1905
	15	19125	1902.5
	20	19100	1900

LTE BAND 4						
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)			
	1.4	19957	1710.7			
	3	19965	1711.5			
Low Pongo	5	19975	1712.5			
Low Range	10	20000	1715			
	15	20025	1717.5			
	20	20050	1720			
Mid Range	1.4/3/5/10/15/20	20175	1732.5			
	1.4	20393	1754.3			
	3	20385	1753.5			
High Range	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)			
	1.4	20470	824.7			
Low Pongo	3	20415	825.5			
Low Range	5	20425	826.5			
	10	20450	829			
Mid Range	1.4/3/5/10	20525	836.5			
	1.4	20643	848.3			
High Range	3	20635	847.5			
	5	20625	846.5			
	10	20600	844			

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.

<b>3.4 Equipment Modifications</b> Not available for this EUT intended for grant.		

# 4 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)	§2.1046,	EIRP ≤ 2W(33dBm)	Pass	
Radiated Power	§24.232(c)	2	1 400	
Bandwidth	§2.1049	OBW: No limit.	Pass	
Danawidin	§24.238(a)	EBW: No limit.	r ass	
Band Edges	§2.1051,	-13dBm	Pass	
Dana Lages	§24.238(a)	TOUDIT	rass	
Spurious Emission	§2.1051,			
at Antenna	§24.238(a)	-13dBm	Pass	
Terminals	924.230(a)			
Field Strength of	§2.1053,	-13dBm	Pass	
Spurious Radiation	§24.238(a)	-1345111	F 055	
	§2.1055,	the fundamental emission stays		
Frequency Stability	§24.235	within the authorized frequency	Pass	
	924.233	block. (2.5ppm)		
Peak to average	§24.232(d)	<13dB	Pass	
ratio	324.202(u)	<b>130D</b>	F <b>ass</b>	

## 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

# BAND 5(GSM850/ 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

# **MEASUREMENT INSTRUMENTS**

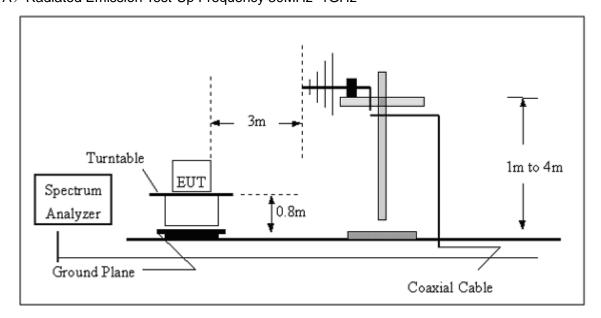
NAME OF EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	Calibration Date	Calibration Due.
EMI Test Receiver	R&S	ESCI	100005	08/19/2016	08/18/2017
LISN	AFJ	LS16	16010222119	08/19/2016	08/18/2017
LISN(EUT)	Mestec	AN3016	04/10040	08/19/2016	08/18/2017
Universal Radio Communication Tester	R&S	CMU 200	1100.0008.02	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	04/24/2016	04/23/2017
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

## 5 EFFECTIVE (ISOTROPIC) RADIATED POWER

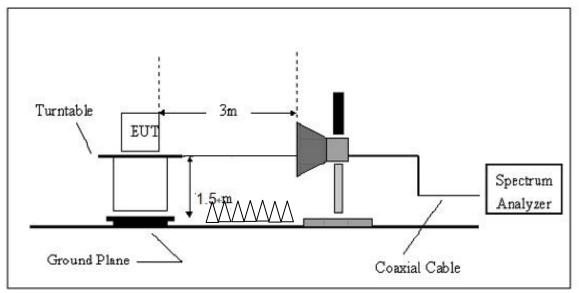
- (a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.
- (b) For single sideband, independent sideband, and single channel, controlled carrier radiotelephone transmitters the procedure specified in paragraph (a) of this section shall be employed and, in addition, the transmitter shall be modulated during the test as follows. In all tests, the input level of the modulating signal shall be such as to develop rated peak envelope power or carrier power, as appropriate, for the transmitter.
- (1) Single sideband transmitters in the A3A or A3J emission modes—by two tones at frequencies of 400 Hz and 1800 Hz (for 3.0 kHz authorized bandwidth), or 500 Hz and 2100 Hz (3.5 kHz authorized bandwidth), or 500 Hz and 2400 Hz (for 4.0 kHz authorized bandwidth), applied simultaneously, the input levels of the tones so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
- (2) Single sideband transmitters in the A3H emission mode—by one tone at a frequency of 1500 Hz (for 3.0 kHz authorized bandwidth), or 1700 Hz (for 3.5 kHz authorized bandwidth), or 1900 Hz (for 4.0 kHz authorized bandwidth), the level of which is adjusted to produce a radio frequency signal component equal in magnitude to the magnitude of the carrier in this mode.
- (3) As an alternative to paragraphs (b) (1) and (2) of this section other tones besides those specified may be used as modulating frequencies, upon a sufficient showing of need. However, any tones so chosen must not be harmonically related, the third and fifth order intermodulation products which occur must fall within the -25 dB step of the emission bandwidth limitation curve, the seventh and ninth order intermodulation product must fall within the 35 dB step of the referenced curve and the eleventh and all higher order products must fall beyond the -35 dB step of the referenced curve.
- (4) Independent sideband transmitters having two channels by 1700 Hz tones applied simultaneously in both channels, the input levels of the tones so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
- (5) Independent sideband transmitters having more than two channels by an appropriate signal or signals applied to all channels simultaneously. The input signal or signals shall simulate the input signals specified by the manufacturer for normal operation.
  - (6) Single-channel controlled-carrier transmitters in the A3 emission mode—by a 2500 Hz tone.
- (c) For measurements conducted pursuant to paragraphs (a) and (b) of this section, all calculations and methods used by the applicant for determining carrier power or peak envelope power, as appropriate, on the

basis of measured power in the radio frequency load attached to the transmitter output terminals shall be shown. Under the test conditions specified, no components of the emission spectrum shall exceed the limits specified in the applicable rule parts as necessary for meeting occupied bandwidth or emission limitations. Measurement Result

## (A) Radiated Emission Test-Up Frequency 30MHz~1GHz



#### (B) Radiated Emission Test-Up Frequency Above 1GHz



## GSM850 BAND:

Mode	Frequency	Peak	Avg.Burst	Tolerance	Duty cycle	Frame
Wiode	(MHz)	Power	Power	Tolerance	Factor(dB)	Power(dBm)
	824.2	33.34	32.63	0.71	-9	23.63
GSM850	836.6	33.19	32.85	0.34	-9	23.85
	848.8	33.03	32.76	0.27	-9	23.76
	824.2	30.22	29.17	1.05	-9	20.17
GPRS850	836.6	30.42	29.46	0.96	-9	20.46
	848.8	29.77	28.15	1.62	-9	19.15
	824.2	26.15	25.67	0.48	-9	16.67
EGPRS850	836.6	25.90	25.83	0.07	-9	16.83
	848.8	26.21	25.72	0.49	-9	16.72

## **PCS1900 BAND:**

Mode	Frequency (MHz)	Peak Power	Tolerance	Avg.Burst Power	Duty cycle Factor(dB)	Frame Power(dBm)
	1850.2	29.97	29.73	0.24	-9	20.73
GSM1900	1880	30.07	29.91	0.16	-9	20.91
	1909.8	30.26	29.77	0.49	-9	20.77
	1850.2	27.82	26.17	1.65	-9	17.17
GPRS1900	1880	27.57	26.67	0.90	-9	17.67
	1909.8	27.02	26.22	0.80	-9	17.22
	1850.2	25.51	25.29	0.22	-9	16.29
EGPRS1900	1880	25.55	24.65	0.90	-9	15.65
	1909.8	25.71	24.69	1.02	-9	15.69

# UTRA BANDS:

BAND 2:					
	Mode	Frequency (MHz)	Peak Power (dBm)	Avg. Burst Power(dBm)	PAPR (dB)
		1852.4	23.79	22.62	1.17
	RMC 12.2K	1880	24.06	22.91	1.15
		1907.6	23.65	22.86	0.79
	HSDPA SUBTEST 1	1852.4	23.91	22.31	1.60
		1880	23.23	22.58	0.65
		1907.6	23.77	22.42	1.35
HSUPA SUBTEST 1	1852.4	23.04	21.69	1.35	
	1880	23.35	21.87	1.48	
	30512311	1907.6	23.22	21.51	1.71

## BAND 4:

Mode	Frequency (MHz)	Peak Power (dBm)	Avg. Burst Power(dBm)	PAPR (dB)
	1712.4	24.17	22.74	1.43
RMC 12.2K	1732.6	23.76	22.96	0.80
	1752.6	23.69	22.85	0.84
ПСДВУ	1712.4	23.23	22.52	0.71
HSDPA SUBTEST 1	1732.6	23.47	22.71	0.76
	1752.6	22.93	22.63	0.30
HSUPA SUBTEST 1	1712.4	23.41	21.75	1.66
	1732.6	23.41	21.98	1.43
SOBILSTI	1752.6	22.98	21.66	1.32

## BAND 5:

Mode	Frequency (MHz)	Peak Power (dBm)	Avg. Burst Power(dBm)	PAPR (dB)
	826.4	24.15	22.42	1.27
RMC 12.2K	836.4	23.61	22.86	0.41
	846.6	23.54	22.62	0.93
HSDPA	826.4	23.51	22.16	0.85
SUBTEST 1	836.4	23.83	22.77	1.13
SUBTEST	846.6	23.62	22.24	0.26
HSUPA SUBTEST 1	826.4	23.47	21.82	1.65
	836.4	23.16	21.82	1.34
CODILOII	846.6	22.76	21.64	1.12

## E-UTRA BANDS: BAND 2:

:								PAPR
	UL	Frequency	Modulation	RB	RB	Average	Peak	(dB)
Bandwidth	Channel	, ,		Size	Offset	(dBm)	(dBm)	(ub)
1.4	18607	1850.7	QPSK	1	LOW	20.56	23.09	2.53
1.4	18607	1850.7	QPSK	1	MID	20.72	22.90	2.18
1.4	18607	1850.7	QPSK	1	HIGH	21.28	23.49	2.21
1.4	18607	1850.7	QPSK	3	LOW	21.19	22.75	1.56
1.4	18607	1850.7	QPSK	3	MID	21.10	23.02	1.92
1.4	18607	1850.7	QPSK	3	HIGH	20.64	22.84	2.2
1.4	18607	1850.7	QPSK	6	LOW	20.65	23.01	2.36
1.4	18607	1850.7	Q16	1	LOW	21.38	23.26	1.88
1.4	18607	1850.7	Q16	1	MID	21.32	23.31	1.99
1.4	18607	1850.7	Q16	1	HIGH	20.69	23.36	2.67
1.4	18607	1850.7	Q16	3	LOW	21.29	23.38	2.09
1.4	18607	1850.7	Q16	3	MID	20.66	22.81	2.15
1.4	18607	1850.7	Q16	3	HIGH	21.34	22.85	1.51
1.4	18607	1850.7	Q16	6	LOW	21.29	23.22	1.93
1.4	18900	1880	QPSK	1	LOW	21.12	22.56	1.44
1.4	18900	1880	QPSK	1	MID	20.91	23.29	2.38
1.4	18900	1880	QPSK	1	HIGH	21.32	22.73	1.41
1.4	18900	1880	QPSK	3	LOW	20.72	22.53	1.81
1.4	18900	1880	QPSK	3	MID	20.79	23.36	2.57
1.4	18900	1880	QPSK	3	HIGH	20.57	23.48	2.91
1.4	18900	1880	QPSK	6	LOW	21.40	22.82	1.42
1.4	18900	1880	Q16	1	LOW	21.44	22.86	1.42
1.4	18900	1880	Q16	1	MID	21.42	22.99	1.57
1.4	18900	1880	Q16	1	HIGH	21.44	23.27	1.83
1.4	18900	1880	Q16	3	LOW	20.89	23.24	2.35
1.4	18900	1880	Q16	3	MID	20.93	22.69	1.76
1.4	18900	1880	Q16	3	HIGH	20.81	22.51	1.7
1.4	18900	1880	Q16	6	LOW	21.47	23.05	1.58
1.4	19193	1909.3	QPSK	1	LOW	21.25	23.06	1.81
1.4	19193	1909.3	QPSK	1	MID	20.63	22.75	2.12
1.4	19193	1909.3	QPSK	1	HIGH	20.67	22.87	2.2
1.4	19193	1909.3	QPSK	3	LOW	20.59	22.76	2.17
1.4	19193	1909.3	QPSK	3	MID	21.38	23.35	1.97
1.4	19193	1909.3	QPSK	3	HIGH	21.26	23.49	2.23
1.4	19193	1909.3	QPSK	6	LOW	20.97	22.55	1.58

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
Bandwidth	Channel	. 1		Size	Offset	(dBm)	(dBm)	(ub)
1.4	19193	1909.3	Q16	1	LOW	21.28	23.15	1.87
1.4	19193	1909.3	Q16	1	MID	21.38	23.27	1.89
1.4	19193	1909.3	Q16	1	HIGH	20.70	23.14	2.44
1.4	19193	1909.3	Q16	3	LOW	20.73	22.52	1.79
1.4	19193	1909.3	Q16	3	MID	20.77	23.18	2.41
1.4	19193	1909.3	Q16	3	HIGH	21.39	23.45	2.06
1.4	19193	1909.3	Q16	6	LOW	21.32	23.06	1.74
3	18615	1851.5	QPSK	1	LOW	21.05	22.91	1.86
3	18615	1851.5	QPSK	1	MID	21.01	23.33	2.32
3	18615	1851.5	QPSK	1	HIGH	20.68	23.37	2.69
3	18615	1851.5	QPSK	8	LOW	21.01	22.51	1.5
3	18615	1851.5	QPSK	8	MID	20.90	22.74	1.84
3	18615	1851.5	QPSK	8	HIGH	21.18	23.36	2.18
3	18615	1851.5	QPSK	15	LOW	21.03	22.57	1.54
3	18615	1851.5	Q16	1	LOW	20.92	22.88	1.96
3	18615	1851.5	Q16	1	MID	21.00	22.96	1.96
3	18615	1851.5	Q16	1	HIGH	21.47	22.60	1.13
3	18615	1851.5	Q16	8	LOW	21.29	23.02	1.73
3	18615	1851.5	Q16	8	MID	21.13	22.95	1.82
3	18615	1851.5	Q16	8	HIGH	20.77	22.54	1.77
3	18615	1851.5	Q16	15	LOW	20.94	23.01	2.07
3	18900	1880	QPSK	1	LOW	20.55	22.64	2.09
3	18900	1880	QPSK	1	MID	20.83	23.05	2.22
3	18900	1880	QPSK	1	HIGH	21.30	23.44	2.14
3	18900	1880	QPSK	8	LOW	20.92	22.70	1.78
3	18900	1880	QPSK	8	MID	21.17	23.50	2.33
3	18900	1880	QPSK	8	HIGH	21.31	23.49	2.18
3	18900	1880	QPSK	15	LOW	21.33	23.23	1.9
3	18900	1880	Q16	1	LOW	20.60	22.53	1.93
3	18900	1880	Q16	1	MID	20.69	23.26	2.57
3	18900	1880	Q16	1	HIGH	20.51	23.12	2.61
3	18900	1880	Q16	8	LOW	20.69	23.05	2.36
3	18900	1880	Q16	8	MID	21.21	23.23	2.02
3	18900	1880	Q16	8	HIGH	20.98	23.38	2.4
3	18900	1880	Q16	15	LOW	21.10	22.56	1.46
3	19185	1908.5	QPSK	1	LOW	20.82	23.00	2.18
3	19185	1908.5	QPSK	1	MID	21.05	22.73	1.68

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR
Bandwidth	Channel	rrequerity	Modulation	Size	Offset	(dBm)	(dBm)	(dB)
3	19185	1908.5	QPSK	1	HIGH	21.42	22.72	1.3
3	19185	1908.5	QPSK	8	LOW	21.16	22.81	1.65
3	19185	1908.5	QPSK	8	MID	21.45	23.48	2.03
3	19185	1908.5	QPSK	8	HIGH	20.82	23.03	2.21
3	19185	1908.5	QPSK	15	LOW	20.76	22.91	2.15
3	19185	1908.5	Q16	1	LOW	20.68	23.05	2.37
3	19185	1908.5	Q16	1	MID	21.14	23.24	2.1
3	19185	1908.5	Q16	1	HIGH	20.71	23.43	2.72
3	19185	1908.5	Q16	8	LOW	20.93	22.98	2.05
3	19185	1908.5	Q16	8	MID	20.84	22.53	1.69
3	19185	1908.5	Q16	8	HIGH	20.85	23.09	2.24
3	19185	1908.5	Q16	15	LOW	21.15	22.73	1.58
5	18625	1852.5	QPSK	1	LOW	20.53	22.54	2.01
5	18625	1852.5	QPSK	1	MID	20.59	23.39	2.8
5	18625	1852.5	QPSK	1	HIGH	20.95	23.37	2.42
5	18625	1852.5	QPSK	12	LOW	21.31	23.43	2.12
5	18625	1852.5	QPSK	12	MID	20.80	22.56	1.76
5	18625	1852.5	QPSK	12	HIGH	20.60	22.96	2.36
5	18625	1852.5	QPSK	25	LOW	20.91	22.95	2.04
5	18625	1852.5	Q16	1	LOW	20.69	23.07	2.38
5	18625	1852.5	Q16	1	MID	20.63	23.29	2.66
5	18625	1852.5	Q16	1	HIGH	21.27	22.84	1.57
5	18625	1852.5	Q16	12	LOW	20.76	22.72	1.96
5	18625	1852.5	Q16	12	MID	20.93	23.42	2.49
5	18625	1852.5	Q16	12	HIGH	21.31	22.52	1.2
5	18625	1852.5	Q16	25	LOW	20.72	23.39	2.67
5	18900	1880	QPSK	1	LOW	20.87	23.11	2.24
5	18900	1880	QPSK	1	MID	20.60	22.62	2.02
5	18900	1880	QPSK	1	HIGH	21.22	22.56	1.34
5	18900	1880	QPSK	12	LOW	20.73	22.84	2.1
5	18900	1880	QPSK	12	MID	21.06	22.91	1.85
5	18900	1880	QPSK	12	HIGH	20.68	23.15	2.47
5	18900	1880	QPSK	25	LOW	20.73	23.41	2.68
5	18900	1880	Q16	1	LOW	20.51	22.62	2.11
5	18900	1880	Q16	1	MID	21.18	22.66	1.48
5	18900	1880	Q16	1	HIGH	20.76	22.92	2.16
5	18900	1880	Q16	12	LOW	21.40	23.43	2.03

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
Bandwidth	Channel			Size	Offset	(dBm)	(dBm)	(GD)
5	18900	1880	Q16	12	MID	21.32	22.51	1.19
5	18900	1880	Q16	12	HIGH	20.58	22.67	2.09
5	18900	1880	Q16	25	LOW	21.26	23.00	1.74
5	19175	1907.5	QPSK	1	LOW	20.74	22.87	2.13
5	19175	1907.5	QPSK	1	MID	20.73	22.62	1.89
5	19175	1907.5	QPSK	1	HIGH	21.17	23.30	2.13
5	19175	1907.5	QPSK	12	LOW	20.57	23.06	2.49
5	19175	1907.5	QPSK	12	MID	21.35	23.11	1.76
5	19175	1907.5	QPSK	12	HIGH	21.27	22.92	1.65
5	19175	1907.5	QPSK	25	LOW	20.54	23.47	2.93
5	19175	1907.5	Q16	1	LOW	21.23	22.85	1.62
5	19175	1907.5	Q16	1	MID	21.22	23.45	2.23
5	19175	1907.5	Q16	1	HIGH	21.44	23.43	1.99
5	19175	1907.5	Q16	12	LOW	21.30	23.01	1.71
5	19175	1907.5	Q16	12	MID	20.98	23.33	2.35
5	19175	1907.5	Q16	12	HIGH	21.28	23.17	1.89
5	19175	1907.5	Q16	25	LOW	20.53	23.19	2.66
10	18650	1855	QPSK	1	LOW	21.45	23.26	1.81
10	18650	1855	QPSK	1	MID	21.48	23.40	1.92
10	18650	1855	QPSK	1	HIGH	20.81	22.85	2.04
10	18650	1855	QPSK	25	LOW	21.32	22.81	1.49
10	18650	1855	QPSK	25	MID	21.36	23.12	1.76
10	18650	1855	QPSK	25	HIGH	20.58	23.06	2.48
10	18650	1855	QPSK	50	LOW	20.64	23.37	2.73
10	18650	1855	Q16	1	LOW	21.01	23.43	2.42
10	18650	1855	Q16	1	MID	21.29	23.24	1.95
10	18650	1855	Q16	1	HIGH	21.23	22.63	1.4
10	18650	1855	Q16	25	LOW	21.25	23.47	2.22
10	18650	1855	Q16	25	MID	20.73	23.48	2.75
10	18650	1855	Q16	25	HIGH	21.28	23.49	2.21
10	18650	1855	Q16	50	LOW	20.56	22.58	2.02
10	18900	1880	QPSK	1	LOW	20.65	23.26	2.61
10	18900	1880	QPSK	1	MID	20.99	22.70	1.71
10	18900	1880	QPSK	1	HIGH	21.47	22.58	1.11
10	18900	1880	QPSK	25	LOW	21.48	22.96	1.48
10	18900	1880	QPSK	25	MID	20.94	23.31	2.37
10	18900	1880	QPSK	25	HIGH	21.08	22.62	1.54

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
Bandwidth	Channel	, ,		Size	Offset	(dBm)	(dBm)	(GD)
10	18900	1880	QPSK	50	LOW	20.92	22.89	1.97
10	18900	1880	Q16	1	LOW	21.00	22.99	1.99
10	18900	1880	Q16	1	MID	20.51	23.25	2.74
10	18900	1880	Q16	1	HIGH	21.30	23.49	2.19
10	18900	1880	Q16	25	LOW	20.74	22.73	1.99
10	18900	1880	Q16	25	MID	20.50	22.82	2.32
10	18900	1880	Q16	25	HIGH	20.80	23.13	2.33
10	18900	1880	Q16	50	LOW	21.07	23.47	2.4
10	19150	1905	QPSK	1	LOW	20.72	23.17	2.45
10	19150	1905	QPSK	1	MID	20.58	22.92	2.34
10	19150	1905	QPSK	1	HIGH	20.96	23.34	2.38
10	19150	1905	QPSK	25	LOW	21.39	22.57	1.18
10	19150	1905	QPSK	25	MID	20.83	23.06	2.23
10	19150	1905	QPSK	25	HIGH	20.72	23.19	2.47
10	19150	1905	QPSK	50	LOW	21.17	23.02	1.85
10	19150	1905	Q16	1	LOW	21.13	23.14	2.01
10	19150	1905	Q16	1	MID	21.29	22.80	1.51
10	19150	1905	Q16	1	HIGH	21.48	22.78	1.3
10	19150	1905	Q16	25	LOW	21.43	22.83	1.4
10	19150	1905	Q16	25	MID	20.90	23.43	2.53
10	19150	1905	Q16	25	HIGH	21.50	22.72	1.22
10	19150	1905	Q16	50	LOW	20.55	22.87	2.32
15	18675	1857.5	QPSK	1	LOW	21.06	22.88	1.82
15	18675	1857.5	QPSK	1	MID	20.63	22.97	2.34
15	18675	1857.5	QPSK	1	HIGH	21.46	23.47	2.01
15	18675	1857.5	QPSK	36	LOW	20.59	22.51	1.92
15	18675	1857.5	QPSK	36	MID	21.27	23.42	2.15
15	18675	1857.5	QPSK	36	HIGH	21.48	23.30	1.82
15	18675	1857.5	QPSK	75	LOW	20.80	22.79	1.99
15	18675	1857.5	Q16	1	LOW	21.38	22.70	1.32
15	18675	1857.5	Q16	1	MID	20.83	23.31	2.48
15	18675	1857.5	Q16	1	HIGH	21.12	22.75	1.63
15	18675	1857.5	Q16	36	LOW	21.27	22.64	1.37
15	18675	1857.5	Q16	36	MID	21.11	23.20	2.09
15	18675	1857.5	Q16	36	HIGH	21.43	23.41	1.98
15	18675	1857.5	Q16	75	LOW	21.39	23.00	1.61
15	18900	1880	QPSK	1	LOW	21.40	23.11	1.71

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
Bandwidth	Channel			Size	Offset	(dBm)	(dBm)	(ub)
15	18900	1880	QPSK	1	MID	21.05	23.36	2.31
15	18900	1880	QPSK	1	HIGH	21.09	23.43	2.34
15	18900	1880	QPSK	36	LOW	20.94	23.15	2.21
15	18900	1880	QPSK	36	MID	21.20	22.62	1.42
15	18900	1880	QPSK	36	HIGH	20.57	23.12	2.55
15	18900	1880	QPSK	75	LOW	20.62	22.83	2.21
15	18900	1880	Q16	1	LOW	21.35	22.52	1.17
15	18900	1880	Q16	1	MID	21.49	22.77	1.28
15	18900	1880	Q16	1	HIGH	21.46	22.50	1.04
15	18900	1880	Q16	36	LOW	21.17	22.67	1.5
15	18900	1880	Q16	36	MID	20.85	22.99	2.14
15	18900	1880	Q16	36	HIGH	21.24	22.50	1.26
15	18900	1880	Q16	75	LOW	20.90	23.11	2.21
15	19125	1902.5	QPSK	1	LOW	21.22	22.63	1.41
15	19125	1902.5	QPSK	1	MID	21.37	22.50	1.13
15	19125	1902.5	QPSK	1	HIGH	20.67	22.85	2.18
15	19125	1902.5	QPSK	36	LOW	21.07	23.49	2.42
15	19125	1902.5	QPSK	36	MID	20.63	23.04	2.41
15	19125	1902.5	QPSK	36	HIGH	20.79	22.95	2.16
15	19125	1902.5	QPSK	75	LOW	21.21	22.57	1.36
15	19125	1902.5	Q16	1	LOW	21.00	23.43	2.43
15	19125	1902.5	Q16	1	MID	20.75	23.45	2.7
15	19125	1902.5	Q16	1	HIGH	20.62	22.75	2.13
15	19125	1902.5	Q16	36	LOW	20.66	22.64	1.98
15	19125	1902.5	Q16	36	MID	20.98	22.82	1.84
15	19125	1902.5	Q16	36	HIGH	21.16	22.51	1.35
15	19125	1902.5	Q16	75	LOW	20.73	23.37	2.64
20	18700	1860	QPSK	1	LOW	21.36	23.46	2.1
20	18700	1860	QPSK	1	MID	21.21	23.47	2.26
20	18700	1860	QPSK	1	HIGH	20.96	22.92	1.96
20	18700	1860	QPSK	50	LOW	20.95	22.51	1.56
20	18700	1860	QPSK	50	MID	20.65	23.16	2.51
20	18700	1860	QPSK	50	HIGH	21.05	23.33	2.28
20	18700	1860	QPSK	100	LOW	20.68	22.75	2.07
20	18700	1860	Q16	1	LOW	21.42	23.32	1.9
20	18700	1860	Q16	1	MID	21.25	23.02	1.77
20	18700	1860	Q16	1	HIGH	20.80	23.31	2.51

	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
Bandwidth	Channel			Size	Offset	(dBm)	(dBm)	(42)
20	18700	1860	Q16	50	LOW	20.75	22.98	2.23
20	18700	1860	Q16	50	MID	20.54	23.07	2.53
20	18700	1860	Q16	50	HIGH	20.95	22.84	1.89
20	18700	1860	Q16	100	LOW	21.10	22.56	1.46
20	18900	1880	QPSK	1	LOW	21.13	22.56	1.43
20	18900	1880	QPSK	1	MID	20.60	22.60	2
20	18900	1880	QPSK	1	HIGH	20.75	22.62	1.87
20	18900	1880	QPSK	50	LOW	20.69	23.04	2.35
20	18900	1880	QPSK	50	MID	21.13	23.45	2.32
20	18900	1880	QPSK	50	HIGH	21.18	23.15	1.97
20	18900	1880	QPSK	100	LOW	20.61	22.68	2.07
20	18900	1880	Q16	1	LOW	21.18	23.13	1.95
20	18900	1880	Q16	1	MID	21.12	22.65	1.53
20	18900	1880	Q16	1	HIGH	21.27	22.56	1.29
20	18900	1880	Q16	50	LOW	21.24	23.49	2.25
20	18900	1880	Q16	50	MID	20.57	22.70	2.13
20	18900	1880	Q16	50	HIGH	20.92	23.29	2.37
20	18900	1880	Q16	100	LOW	21.06	22.63	1.57
20	19100	1900	QPSK	1	LOW	21.18	22.86	1.68
20	19100	1900	QPSK	1	MID	20.88	23.17	2.29
20	19100	1900	QPSK	1	HIGH	20.86	23.46	2.6
20	19100	1900	QPSK	50	LOW	20.74	22.76	2.02
20	19100	1900	QPSK	50	MID	20.69	23.14	2.45
20	19100	1900	QPSK	50	HIGH	21.34	22.51	1.17
20	19100	1900	QPSK	100	LOW	21.39	23.48	2.09
20	19100	1900	Q16	1	LOW	21.07	22.95	1.88
20	19100	1900	Q16	1	MID	21.38	23.04	1.66
20	19100	1900	Q16	1	HIGH	21.09	23.17	2.08
20	19100	1900	Q16	50	LOW	21.21	23.20	1.99
20	19100	1900	Q16	50	MID	21.07	22.51	1.44
20	19100	1900	Q16	50	HIGH	21.13	23.25	2.12
20	19100	1900	Q16	100	LOW	20.90	22.63	1.73

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Den ded til	UL		Market et	RB	RB	Average	Peak	PAPR
Bandwidth	Channel	Frequency	Modulation	Size	Offset	(dBm)	(dBm)	(dB)
1.4	19957	1710.7	QPSK	1	LOW	20.97	22.88	1.91
1.4	19957	1710.7	QPSK	1	MID	20.56	22.54	1.98
1.4	19957	1710.7	QPSK	1	HIGH	21.15	23.25	2.1
1.4	19957	1710.7	QPSK	3	LOW	21.05	22.52	1.47
1.4	19957	1710.7	QPSK	3	MID	20.84	22.51	1.67
1.4	19957	1710.7	QPSK	3	HIGH	20.74	22.79	2.05
1.4	19957	1710.7	QPSK	6	LOW	20.73	22.55	1.82
1.4	19957	1710.7	Q16	1	LOW	20.80	23.48	2.68
1.4	19957	1710.7	Q16	1	MID	21.02	22.69	1.67
1.4	19957	1710.7	Q16	1	HIGH	21.38	23.31	1.93
1.4	19957	1710.7	Q16	3	LOW	21.35	23.21	1.86
1.4	19957	1710.7	Q16	3	MID	21.29	23.46	2.17
1.4	19957	1710.7	Q16	3	HIGH	20.84	22.83	1.99
1.4	19957	1710.7	Q16	6	LOW	20.87	22.89	2.02
1.4	20393	1754.3	QPSK	1	LOW	20.93	22.96	2.03
1.4	20393	1754.3	QPSK	1	MID	20.91	22.92	2.01
1.4	20393	1754.3	QPSK	1	HIGH	21.01	22.85	1.84
1.4	20393	1754.3	QPSK	3	LOW	20.84	22.54	1.7
1.4	20393	1754.3	QPSK	3	MID	20.93	22.64	1.71
1.4	20393	1754.3	QPSK	3	HIGH	20.73	23.12	2.39
1.4	20393	1754.3	QPSK	6	LOW	20.82	22.56	1.74
1.4	20393	1754.3	Q16	1	LOW	21.27	22.89	1.62
1.4	20393	1754.3	Q16	1	MID	20.69	22.51	1.82
1.4	20393	1754.3	Q16	1	HIGH	20.58	22.90	2.32
1.4	20393	1754.3	Q16	3	LOW	20.81	22.97	2.16
1.4	20393	1754.3	Q16	3	MID	20.88	22.62	1.74
1.4	20393	1754.3	Q16	3	HIGH	21.39	22.54	1.15
1.4	20393	1754.3	Q16	6	LOW	20.55	22.84	2.29
1.4	20175	1732.5	QPSK	1	LOW	21.10	23.43	2.33
1.4	20175	1732.5	QPSK	1	MID	21.38	23.36	1.98
1.4	20175	1732.5	QPSK	1	HIGH	20.79	22.91	2.12
1.4	20175	1732.5	QPSK	3	LOW	20.98	22.75	1.77
1.4	20175	1732.5	QPSK	3	MID	21.00	23.36	2.36
1.4	20175	1732.5	QPSK	3	HIGH	20.58	23.31	2.73
1.4	20175	1732.5	QPSK	6	LOW	21.09	22.92	1.83
1.4	20175	1732.5	Q16	1	LOW	20.96	23.08	2.12

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
24.14.114	Channel			Size	Offset	(dBm)	(dBm)	(ub)
1.4	20175	1732.5	Q16	1	MID	20.80	23.15	2.35
1.4	20175	1732.5	Q16	1	HIGH	21.06	23.48	2.42
1.4	20175	1732.5	Q16	3	LOW	20.94	22.95	2.01
1.4	20175	1732.5	Q16	3	MID	21.25	22.70	1.45
1.4	20175	1732.5	Q16	3	HIGH	21.29	22.99	1.7
1.4	20175	1732.5	Q16	6	LOW	21.04	22.80	1.76
3	19965	1711.5	QPSK	1	LOW	20.59	23.25	2.66
3	19965	1711.5	QPSK	1	MID	21.29	23.02	1.73
3	19965	1711.5	QPSK	1	HIGH	21.15	22.89	1.74
3	19965	1711.5	QPSK	8	LOW	21.25	23.45	2.2
3	19965	1711.5	QPSK	8	MID	20.85	22.79	1.94
3	19965	1711.5	QPSK	8	HIGH	20.99	23.12	2.13
3	19965	1711.5	QPSK	15	LOW	21.31	23.45	2.14
3	19965	1711.5	Q16	1	LOW	21.20	22.57	1.37
3	19965	1711.5	Q16	1	MID	21.37	23.34	1.97
3	19965	1711.5	Q16	1	HIGH	20.79	22.78	1.99
3	19965	1711.5	Q16	8	LOW	21.15	23.13	1.98
3	19965	1711.5	Q16	8	MID	20.85	22.67	1.82
3	19965	1711.5	Q16	8	HIGH	20.63	23.21	2.58
3	19965	1711.5	Q16	15	LOW	20.56	22.66	2.1
3	20385	1753.5	QPSK	1	LOW	21.09	22.68	1.59
3	20385	1753.5	QPSK	1	MID	21.09	23.41	2.32
3	20385	1753.5	QPSK	1	HIGH	20.93	22.99	2.06
3	20385	1753.5	QPSK	8	LOW	21.08	22.97	1.89
3	20385	1753.5	QPSK	8	MID	20.86	23.01	2.15
3	20385	1753.5	QPSK	8	HIGH	21.20	22.92	1.72
3	20385	1753.5	QPSK	15	LOW	21.13	22.96	1.83
3	20385	1753.5	Q16	1	LOW	21.30	23.40	2.1
3	20385	1753.5	Q16	1	MID	21.45	22.95	1.5
3	20385	1753.5	Q16	1	HIGH	20.93	23.34	2.41
3	20385	1753.5	Q16	8	LOW	20.89	23.43	2.54
3	20385	1753.5	Q16	8	MID	20.95	23.23	2.28
3	20385	1753.5	Q16	8	HIGH	20.97	22.99	2.02
3	20385	1753.5	Q16	15	LOW	21.11	22.59	1.48
3	20175	1732.5	QPSK	1	LOW	20.98	22.58	1.6
3	20175	1732.5	QPSK	1	MID	20.67	22.83	2.16
3	20175	1732.5	QPSK	1	HIGH	21.24	23.35	2.11

	UL			55	55	Δ.	Б	PAPR
Bandwidth	Channel	Frequency	Modulation	RB	RB	Average	Peak	(dB)
				Size	Offset	(dBm)	(dBm)	
3	20175	1732.5	QPSK	8	LOW	21.50	23.21	1.71
3	20175	1732.5	QPSK	8	MID	21.39	23.36	1.97
3	20175	1732.5	QPSK	8	HIGH	20.91	23.17	2.26
3	20175	1732.5	QPSK	15	LOW	21.05	23.24	2.19
3	20175	1732.5	Q16	1	LOW	20.59	23.01	2.42
3	20175	1732.5	Q16	1	MID	21.42	23.13	1.71
3	20175	1732.5	Q16	1	HIGH	21.42	23.39	1.97
3	20175	1732.5	Q16	8	LOW	21.37	22.88	1.51
3	20175	1732.5	Q16	8	MID	20.70	22.97	2.27
3	20175	1732.5	Q16	8	HIGH	21.14	22.86	1.72
3	20175	1732.5	Q16	15	LOW	20.96	23.15	2.19
5	19975	1712.5	QPSK	1	LOW	20.70	23.07	2.37
5	19975	1712.5	QPSK	1	MID	21.24	22.74	1.5
5	19975	1712.5	QPSK	1	HIGH	21.05	22.88	1.83
5	19975	1712.5	QPSK	12	LOW	21.14	23.09	1.95
5	19975	1712.5	QPSK	12	MID	21.00	22.54	1.54
5	19975	1712.5	QPSK	12	HIGH	21.21	22.64	1.43
5	19975	1712.5	QPSK	25	LOW	20.53	22.97	2.44
5	19975	1712.5	Q16	1	LOW	20.64	22.51	1.87
5	19975	1712.5	Q16	1	MID	20.70	22.98	2.28
5	19975	1712.5	Q16	1	HIGH	20.68	23.09	2.41
5	19975	1712.5	Q16	12	LOW	21.02	23.24	2.22
5	19975	1712.5	Q16	12	MID	20.58	23.31	2.73
5	19975	1712.5	Q16	12	HIGH	21.38	23.17	1.79
5	19975	1712.5	Q16	25	LOW	20.95	22.67	1.72
5	20375	1752.5	QPSK	1	LOW	20.72	22.80	2.08
5	20375	1752.5	QPSK	1	MID	20.77	22.66	1.89
5	20375	1752.5	QPSK	1	HIGH	21.06	22.74	1.68
5	20375	1752.5	QPSK	12	LOW	20.93	23.19	2.26
5	20375	1752.5	QPSK	12	MID	21.30	23.42	2.12
5	20375	1752.5	QPSK	12	HIGH	21.07	23.42	2.35
5	20375	1752.5	QPSK	25	LOW	21.30	22.65	1.35
5	20375	1752.5	Q16	1	LOW	20.78	22.75	1.97
5	20375	1752.5	Q16	1	MID	20.78	23.24	2.66
5	20375	1752.5	Q16	1	HIGH	20.63	23.24	2.63
5	20375	1752.5	Q16	12	LOW	20.63	22.99	2.36
5	20375	1752.5	Q16 Q16	12	MID	21.05	22.85	1.8
<u> </u>	203/3	1702.0	ر ان	14	טוועו	21.03	22.00	1.0

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR
Bandwidth	Channel	Frequency	iviodulation	Size	Offset	(dBm)	(dBm)	(dB)
5	20375	1752.5	Q16	12	HIGH	20.57	23.12	2.55
5	20375	1752.5	Q16	25	LOW	21.32	23.38	2.06
5	20175	1732.5	QPSK	1	LOW	21.02	22.90	1.88
5	20175	1732.5	QPSK	1	MID	21.25	23.32	2.07
5	20175	1732.5	QPSK	1	HIGH	20.85	22.68	1.83
5	20175	1732.5	QPSK	12	LOW	21.44	22.72	1.28
5	20175	1732.5	QPSK	12	MID	21.24	23.03	1.79
5	20175	1732.5	QPSK	12	HIGH	20.60	22.69	2.09
5	20175	1732.5	QPSK	25	LOW	20.57	23.00	2.43
5	20175	1732.5	Q16	1	LOW	20.94	23.23	2.29
5	20175	1732.5	Q16	1	MID	20.51	23.45	2.94
5	20175	1732.5	Q16	1	HIGH	21.37	22.73	1.36
5	20175	1732.5	Q16	12	LOW	20.81	22.54	1.73
5	20175	1732.5	Q16	12	MID	21.10	22.85	1.75
5	20175	1732.5	Q16	12	HIGH	21.20	23.39	2.19
5	20175	1732.5	Q16	25	LOW	20.62	23.21	2.59
10	20000	1715	QPSK	1	LOW	21.29	22.86	1.57
10	20000	1715	QPSK	1	MID	21.35	22.85	1.5
10	20000	1715	QPSK	1	HIGH	20.77	22.72	1.95
10	20000	1715	QPSK	25	LOW	20.76	22.86	2.1
10	20000	1715	QPSK	25	MID	20.76	23.22	2.46
10	20000	1715	QPSK	25	HIGH	20.76	23.47	2.71
10	20000	1715	QPSK	50	LOW	21.08	22.68	1.6
10	20000	1715	Q16	1	LOW	20.89	22.57	1.68
10	20000	1715	Q16	1	MID	20.63	23.00	2.37
10	20000	1715	Q16	1	HIGH	21.11	23.14	2.03
10	20000	1715	Q16	25	LOW	21.15	23.50	2.35
10	20000	1715	Q16	25	MID	21.08	23.13	2.05
10	20000	1715	Q16	25	HIGH	20.71	22.75	2.04
10	20000	1715	Q16	50	LOW	20.70	23.03	2.33
10	20350	1750	QPSK	1	LOW	21.39	23.03	1.64
10	20350	1750	QPSK	1	MID	20.87	23.00	2.13
10	20350	1750	QPSK	1	HIGH	21.33	22.86	1.53
10	20350	1750	QPSK	25	LOW	21.38	23.33	1.95
10	20350	1750	QPSK	25	MID	20.83	22.58	1.75
10	20350	1750	QPSK	25	HIGH	21.02	22.50	1.48
10	20350	1750	QPSK	50	LOW	21.50	23.40	1.9

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
	Channel			Size	Offset	(dBm)	(dBm)	(ub)
10	20350	1750	Q16	1	LOW	21.49	23.29	1.8
10	20350	1750	Q16	1	MID	20.57	22.78	2.21
10	20350	1750	Q16	1	HIGH	20.89	23.41	2.52
10	20350	1750	Q16	25	LOW	21.42	22.56	1.14
10	20350	1750	Q16	25	MID	20.60	22.92	2.32
10	20350	1750	Q16	25	HIGH	21.36	23.21	1.85
10	20350	1750	Q16	50	LOW	20.56	23.20	2.64
10	20175	1732.5	QPSK	1	LOW	20.89	23.49	2.6
10	20175	1732.5	QPSK	1	MID	21.25	23.19	1.94
10	20175	1732.5	QPSK	1	HIGH	20.98	22.84	1.86
10	20175	1732.5	QPSK	25	LOW	20.96	23.41	2.45
10	20175	1732.5	QPSK	25	MID	20.70	22.91	2.21
10	20175	1732.5	QPSK	25	HIGH	21.30	22.72	1.42
10	20175	1732.5	QPSK	50	LOW	21.35	22.71	1.36
10	20175	1732.5	Q16	1	LOW	21.34	23.42	2.08
10	20175	1732.5	Q16	1	MID	21.49	22.75	1.26
10	20175	1732.5	Q16	1	HIGH	20.85	23.11	2.26
10	20175	1732.5	Q16	25	LOW	21.19	23.35	2.16
10	20175	1732.5	Q16	25	MID	21.32	23.34	2.02
10	20175	1732.5	Q16	25	HIGH	20.99	23.09	2.1
10	20175	1732.5	Q16	50	LOW	21.28	22.69	1.41
15	20025	1717.5	QPSK	1	LOW	20.92	23.03	2.11
15	20025	1717.5	QPSK	1	MID	21.06	22.58	1.52
15	20025	1717.5	QPSK	1	HIGH	20.98	22.91	1.93
15	20025	1717.5	QPSK	36	LOW	21.20	23.31	2.11
15	20025	1717.5	QPSK	36	MID	21.35	23.32	1.97
15	20025	1717.5	QPSK	36	HIGH	20.51	23.44	2.93
15	20025	1717.5	QPSK	75	LOW	21.42	23.06	1.64
15	20025	1717.5	Q16	1	LOW	21.50	22.65	1.15
15	20025	1717.5	Q16	1	MID	21.25	23.32	2.07
15	20025	1717.5	Q16	1	HIGH	20.81	22.50	1.69
15	20025	1717.5	Q16	36	LOW	21.40	23.28	1.88
15	20025	1717.5	Q16	36	MID	21.38	22.61	1.23
15	20025	1717.5	Q16	36	HIGH	21.23	22.50	1.27
15	20025	1717.5	Q16	75	LOW	20.60	22.58	1.98
15	20325	1747.5	QPSK	1	LOW	21.36	23.21	1.85
15	20325	1747.5	QPSK	1	MID	21.02	23.39	2.37

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
	Channel			Size	Offset	(dBm)	(dBm)	(ub)
15	20325	1747.5	QPSK	1	HIGH	21.20	22.87	1.67
15	20325	1747.5	QPSK	36	LOW	21.28	23.02	1.74
15	20325	1747.5	QPSK	36	MID	21.28	22.85	1.57
15	20325	1747.5	QPSK	36	HIGH	21.05	22.52	1.47
15	20325	1747.5	QPSK	75	LOW	20.56	23.00	2.44
15	20325	1747.5	Q16	1	LOW	21.15	23.49	2.34
15	20325	1747.5	Q16	1	MID	20.85	22.72	1.87
15	20325	1747.5	Q16	1	HIGH	20.55	22.83	2.28
15	20325	1747.5	Q16	36	LOW	20.52	22.79	2.27
15	20325	1747.5	Q16	36	MID	21.13	22.50	1.37
15	20325	1747.5	Q16	36	HIGH	21.30	22.50	1.2
15	20325	1747.5	Q16	75	LOW	20.99	23.05	2.06
15	20175	1732.5	QPSK	1	LOW	21.24	23.38	2.14
15	20175	1732.5	QPSK	1	MID	21.12	23.03	1.91
15	20175	1732.5	QPSK	1	HIGH	21.35	22.92	1.57
15	20175	1732.5	QPSK	36	LOW	20.52	22.90	2.38
15	20175	1732.5	QPSK	36	MID	20.65	23.29	2.64
15	20175	1732.5	QPSK	36	HIGH	20.83	23.17	2.34
15	20175	1732.5	QPSK	75	LOW	20.52	22.51	1.99
15	20175	1732.5	Q16	1	LOW	21.27	23.29	2.02
15	20175	1732.5	Q16	1	MID	20.62	22.84	2.22
15	20175	1732.5	Q16	1	HIGH	20.84	22.70	1.86
15	20175	1732.5	Q16	36	LOW	21.11	22.78	1.67
15	20175	1732.5	Q16	36	MID	20.78	22.52	1.74
15	20175	1732.5	Q16	36	HIGH	20.63	22.75	2.12
15	20175	1732.5	Q16	75	LOW	21.27	22.65	1.38
20	20050	1720	QPSK	1	LOW	21.01	23.33	2.32
20	20050	1720	QPSK	1	MID	21.35	23.03	1.68
20	20050	1720	QPSK	1	HIGH	21.38	23.46	2.08
20	20050	1720	QPSK	50	LOW	21.31	23.11	1.8
20	20050	1720	QPSK	50	MID	20.83	23.10	2.27
20	20050	1720	QPSK	50	HIGH	20.51	22.59	2.08
20	20050	1720	QPSK	100	LOW	20.98	22.64	1.66
20	20050	1720	Q16	1	LOW	21.36	23.00	1.64
20	20050	1720	Q16	1	MID	20.86	23.26	2.4
20	20050	1720	Q16	1	HIGH	21.43	22.57	1.14
20	20050	1720	Q16	50	LOW	20.76	23.31	2.55

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
	Channel			Size	Offset	(dBm)	(dBm)	(db)
20	20050	1720	Q16	50	MID	20.51	22.71	2.2
20	20050	1720	Q16	50	HIGH	21.18	23.17	1.99
20	20050	1720	Q16	100	LOW	20.94	22.71	1.77
20	20300	1745	QPSK	1	LOW	20.88	22.91	2.03
20	20300	1745	QPSK	1	MID	21.31	23.31	2
20	20300	1745	QPSK	1	HIGH	20.68	22.51	1.83
20	20300	1745	QPSK	50	LOW	20.51	23.24	2.73
20	20300	1745	QPSK	50	MID	21.27	22.74	1.47
20	20300	1745	QPSK	50	HIGH	21.40	23.20	1.8
20	20300	1745	QPSK	100	LOW	21.47	23.23	1.76
20	20300	1745	Q16	1	LOW	20.95	23.23	2.28
20	20300	1745	Q16	1	MID	21.42	23.42	2
20	20300	1745	Q16	1	HIGH	20.94	22.74	1.8
20	20300	1745	Q16	50	LOW	21.00	22.84	1.84
20	20300	1745	Q16	50	MID	20.86	22.83	1.97
20	20300	1745	Q16	50	HIGH	20.74	23.05	2.31
20	20300	1745	Q16	100	LOW	21.43	23.38	1.95
20	20175	1732.5	QPSK	1	LOW	20.53	22.82	2.29
20	20175	1732.5	QPSK	1	MID	21.00	22.68	1.68
20	20175	1732.5	QPSK	1	HIGH	20.83	22.73	1.9
20	20175	1732.5	QPSK	50	LOW	20.74	23.33	2.59
20	20175	1732.5	QPSK	50	MID	21.29	22.94	1.65
20	20175	1732.5	QPSK	50	HIGH	21.20	23.37	2.17
20	20175	1732.5	QPSK	100	LOW	21.25	22.99	1.74
20	20175	1732.5	Q16	1	LOW	20.87	23.22	2.35
20	20175	1732.5	Q16	1	MID	20.97	22.71	1.74
20	20175	1732.5	Q16	1	HIGH	21.30	22.67	1.37
20	20175	1732.5	Q16	50	LOW	21.01	23.31	2.3
20	20175	1732.5	Q16	50	MID	21.18	22.51	1.33
20	20175	1732.5	Q16	50	HIGH	20.68	22.98	2.3
20	20175	1732.5	Q16	100	LOW	20.60	22.91	2.31

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Den ded til	UL		March de C	RB	RB	Average	Peak	PAPR
Bandwidth	Channel	Frequency	Modulation	Size	Offset	(dBm)	(dBm)	(dB)
1.4	20470	824.7	QPSK	1	LOW	21.03	22.95	1.92
1.4	20470	824.7	QPSK	1	MID	20.53	23.35	2.82
1.4	20470	824.7	QPSK	1	HIGH	21.07	23.26	2.19
1.4	20470	824.7	QPSK	3	LOW	20.53	22.94	2.41
1.4	20470	824.7	QPSK	3	MID	20.78	23.45	2.67
1.4	20470	824.7	QPSK	3	HIGH	21.41	22.53	1.12
1.4	20470	824.7	QPSK	6	LOW	20.89	22.66	1.77
1.4	20470	824.7	Q16	1	LOW	21.01	23.26	2.25
1.4	20470	824.7	Q16	1	MID	20.87	23.27	2.4
1.4	20470	824.7	Q16	1	HIGH	21.17	23.32	2.15
1.4	20470	824.7	Q16	3	LOW	20.87	23.39	2.52
1.4	20470	824.7	Q16	3	MID	20.83	23.44	2.61
1.4	20470	824.7	Q16	3	HIGH	21.44	23.04	1.6
1.4	20470	824.7	Q16	6	LOW	20.64	22.95	2.31
1.4	20525	836.5	QPSK	1	LOW	20.50	23.22	2.72
1.4	20525	836.5	QPSK	1	MID	21.16	22.69	1.53
1.4	20525	836.5	QPSK	1	HIGH	21.15	23.31	2.16
1.4	20525	836.5	QPSK	3	LOW	20.94	23.21	2.27
1.4	20525	836.5	QPSK	3	MID	21.36	22.72	1.36
1.4	20525	836.5	QPSK	3	HIGH	20.70	22.70	2
1.4	20525	836.5	QPSK	6	LOW	20.63	22.61	1.98
1.4	20525	836.5	Q16	1	LOW	21.34	22.59	1.25
1.4	20525	836.5	Q16	1	MID	21.43	22.95	1.52
1.4	20525	836.5	Q16	1	HIGH	20.77	22.66	1.89
1.4	20525	836.5	Q16	3	LOW	21.19	23.11	1.92
1.4	20525	836.5	Q16	3	MID	21.36	22.58	1.22
1.4	20525	836.5	Q16	3	HIGH	20.68	22.53	1.85
1.4	20525	836.5	Q16	6	LOW	20.74	23.41	2.67
1.4	20643	848.3	QPSK	1	LOW	21.41	23.00	1.59
1.4	20643	848.3	QPSK	1	MID	20.73	22.88	2.15
1.4	20643	848.3	QPSK	1	HIGH	20.72	23.15	2.43
1.4	20643	848.3	QPSK	3	LOW	21.47	22.80	1.33
1.4	20643	848.3	QPSK	3	MID	20.80	23.23	2.43
1.4	20643	848.3	QPSK	3	HIGH	21.43	23.20	1.77
1.4	20643	848.3	QPSK	6	LOW	21.19	23.25	2.06
1.4	20643	848.3	Q16	1	LOW	21.36	22.56	1.2

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
	Channel			Size	Offset	(dBm)	(dBm)	(ub)
1.4	20643	848.3	Q16	1	MID	20.56	22.62	2.06
1.4	20643	848.3	Q16	1	HIGH	20.89	22.82	1.93
1.4	20643	848.3	Q16	3	LOW	21.27	23.37	2.1
1.4	20643	848.3	Q16	3	MID	21.20	22.81	1.61
1.4	20643	848.3	Q16	3	HIGH	20.54	23.21	2.67
1.4	20643	848.3	Q16	6	LOW	20.80	23.35	2.55
3	20415	825.5	QPSK	1	LOW	21.10	23.17	2.07
3	20415	825.5	QPSK	1	MID	21.35	22.76	1.41
3	20415	825.5	QPSK	1	HIGH	20.72	22.57	1.85
3	20415	825.5	QPSK	8	LOW	21.21	23.02	1.81
3	20415	825.5	QPSK	8	MID	21.02	23.43	2.41
3	20415	825.5	QPSK	8	HIGH	20.67	22.51	1.84
3	20415	825.5	QPSK	15	LOW	21.09	22.89	1.8
3	20415	825.5	Q16	1	LOW	20.94	23.46	2.52
3	20415	825.5	Q16	1	MID	20.73	22.88	2.15
3	20415	825.5	Q16	1	HIGH	21.45	23.07	1.62
3	20415	825.5	Q16	8	LOW	21.38	22.76	1.38
3	20415	825.5	Q16	8	MID	20.93	22.52	1.59
3	20415	825.5	Q16	8	HIGH	21.35	22.58	1.23
3	20415	825.5	Q16	15	LOW	21.10	22.57	1.47
3	20525	836.5	QPSK	1	LOW	21.45	23.43	1.98
3	20525	836.5	QPSK	1	MID	21.01	22.66	1.65
3	20525	836.5	QPSK	1	HIGH	21.14	23.02	1.88
3	20525	836.5	QPSK	8	LOW	21.25	23.48	2.23
3	20525	836.5	QPSK	8	MID	21.38	23.12	1.74
3	20525	836.5	QPSK	8	HIGH	20.71	23.20	2.49
3	20525	836.5	QPSK	15	LOW	20.87	23.40	2.53
3	20525	836.5	Q16	1	LOW	20.93	22.54	1.61
3	20525	836.5	Q16	1	MID	21.16	22.54	1.38
3	20525	836.5	Q16	1	HIGH	21.09	23.19	2.1
3	20525	836.5	Q16	8	LOW	21.13	23.24	2.11
3	20525	836.5	Q16	8	MID	20.65	22.82	2.17
3	20525	836.5	Q16	8	HIGH	20.80	23.46	2.66
3	20525	836.5	Q16	15	LOW	20.89	22.52	1.63
3	20635	847.5	QPSK	1	LOW	20.96	22.97	2.01
3	20635	847.5	QPSK	1	MID	20.79	23.01	2.22
3	20635	847.5	QPSK	1	HIGH	21.15	23.32	2.17

	UL	_		RB	RB	Average	Peak	PAPR
Bandwidth	Channel	Frequency	Modulation	Size	Offset	(dBm)	(dBm)	(dB)
3	20635	847.5	QPSK	8	LOW	20.81	23.02	2.21
3	20635	847.5	QPSK	8	MID	20.88	22.80	1.92
3	20635	847.5	QPSK	8	HIGH	20.55	22.80	2.25
3	20635	847.5	QPSK	15	LOW	21.37	23.46	2.09
3	20635	847.5	Q16	1	LOW	21.21	23.06	1.85
3	20635	847.5	Q16	1	MID	21.44	23.00	1.56
3	20635	847.5	Q16	1	HIGH	20.72	23.45	2.73
3	20635	847.5	Q16	8	LOW	20.52	23.05	2.53
3	20635	847.5	Q16	8	MID	21.13	22.51	1.38
3	20635	847.5	Q16	8	HIGH	21.35	23.08	1.73
3	20635	847.5	Q16	15	LOW	20.57	23.43	2.86
5	20425	826.5	QPSK	1	LOW	21.16	23.30	2.14
5	20425	826.5	QPSK	1	MID	20.67	22.69	2.02
5	20425	826.5	QPSK	1	HIGH	20.78	22.67	1.89
5	20425	826.5	QPSK	12	LOW	20.64	23.24	2.6
5	20425	826.5	QPSK	12	MID	20.84	23.20	2.36
5	20425	826.5	QPSK	12	HIGH	20.72	23.17	2.45
5	20425	826.5	QPSK	25	LOW	20.52	22.87	2.35
5	20425	826.5	Q16	1	LOW	21.15	22.56	1.41
5	20425	826.5	Q16	1	MID	21.40	22.93	1.53
5	20425	826.5	Q16	1	HIGH	21.35	22.57	1.22
5	20425	826.5	Q16	12	LOW	20.82	22.75	1.93
5	20425	826.5	Q16	12	MID	20.84	23.40	2.56
5	20425	826.5	Q16	12	HIGH	20.84	22.58	1.74
5	20425	826.5	Q16	25	LOW	21.26	22.70	1.44
5	20525	836.5	QPSK	1	LOW	21.14	23.26	2.12
5	20525	836.5	QPSK	1	MID	20.74	23.14	2.4
5	20525	836.5	QPSK	1	HIGH	20.89	22.85	1.96
5	20525	836.5	QPSK	12	LOW	20.76	22.88	2.12
5	20525	836.5	QPSK	12	MID	20.56	23.22	2.66
5	20525	836.5	QPSK	12	HIGH	20.50	22.88	2.38
5	20525	836.5	QPSK	25	LOW	21.33	22.64	1.31
5	20525	836.5	Q16	1	LOW	21.03	22.94	1.91
5	20525	836.5	Q16	1	MID	20.62	23.03	2.41
5	20525	836.5	Q16	1	HIGH	20.98	22.68	1.7
5	20525	836.5	Q16	12	LOW	21.25	23.35	2.1
5	20525	836.5	Q16	12	MID	21.36	23.43	2.07

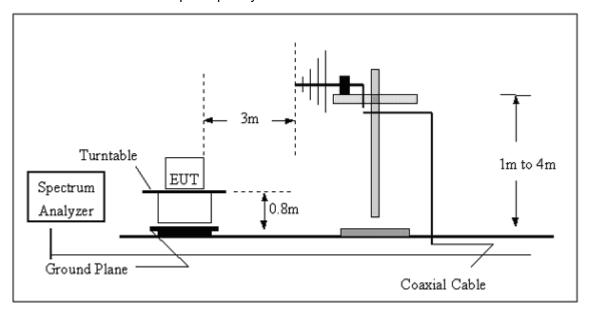
Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
24	Channel			Size	Offset	(dBm)	(dBm)	(ub)
5	20525	836.5	Q16	12	HIGH	20.81	22.73	1.92
5	20525	836.5	Q16	25	LOW	20.59	23.07	2.48
5	20625	846.5	QPSK	1	LOW	21.00	22.76	1.76
5	20625	846.5	QPSK	1	MID	20.84	23.12	2.28
5	20625	846.5	QPSK	1	HIGH	21.26	23.23	1.97
5	20625	846.5	QPSK	12	LOW	20.66	23.07	2.41
5	20625	846.5	QPSK	12	MID	20.82	22.93	2.11
5	20625	846.5	QPSK	12	HIGH	20.71	22.62	1.91
5	20625	846.5	QPSK	25	LOW	21.44	23.14	1.7
5	20625	846.5	Q16	1	LOW	20.57	23.50	2.93
5	20625	846.5	Q16	1	MID	21.15	22.66	1.51
5	20625	846.5	Q16	1	HIGH	21.02	23.41	2.39
5	20625	846.5	Q16	12	LOW	21.04	23.24	2.2
5	20625	846.5	Q16	12	MID	20.84	22.65	1.81
5	20625	846.5	Q16	12	HIGH	20.70	23.12	2.42
5	20625	846.5	Q16	25	LOW	20.87	22.56	1.69
10	20450	829	QPSK	1	LOW	20.72	22.86	2.14
10	20450	829	QPSK	1	MID	20.92	22.71	1.79
10	20450	829	QPSK	1	HIGH	21.20	22.73	1.53
10	20450	829	QPSK	25	LOW	20.88	23.35	2.47
10	20450	829	QPSK	25	MID	20.67	23.03	2.36
10	20450	829	QPSK	25	HIGH	21.14	23.23	2.09
10	20450	829	QPSK	50	LOW	20.79	22.87	2.08
10	20450	829	Q16	1	LOW	20.72	23.47	2.75
10	20450	829	Q16	1	MID	21.34	23.25	1.91
10	20450	829	Q16	1	HIGH	21.00	23.25	2.25
10	20450	829	Q16	25	LOW	21.43	23.02	1.59
10	20450	829	Q16	25	MID	21.36	22.74	1.38
10	20450	829	Q16	25	HIGH	21.09	22.95	1.86
10	20450	829	Q16	50	LOW	20.68	22.97	2.29
10	20525	836.5	QPSK	1	LOW	20.83	22.90	2.07
10	20525	836.5	QPSK	1	MID	20.58	23.21	2.63
10	20525	836.5	QPSK	1	HIGH	20.91	23.27	2.36
10	20525	836.5	QPSK	25	LOW	21.16	22.68	1.52
10	20525	836.5	QPSK	25	MID	21.02	22.69	1.67
10	20525	836.5	QPSK	25	HIGH	20.97	23.13	2.16
10	20525	836.5	QPSK	50	LOW	21.13	23.07	1.94

Bandwidth	UL	Frequency	Modulation	RB	RB	Average	Peak	PAPR (dB)
	Channel	1 11 17		Size	Offset	(dBm)	(dBm)	(ub)
10	20525	836.5	Q16	1	LOW	20.87	23.45	2.58
10	20525	836.5	Q16	1	MID	21.22	23.03	1.81
10	20525	836.5	Q16	1	HIGH	20.76	23.08	2.32
10	20525	836.5	Q16	25	LOW	21.47	22.74	1.27
10	20525	836.5	Q16	25	MID	21.30	22.50	1.2
10	20525	836.5	Q16	25	HIGH	20.51	22.55	2.04
10	20525	836.5	Q16	50	LOW	20.60	23.19	2.59
10	20600	844	QPSK	1	LOW	21.08	23.29	2.21
10	20600	836.5	QPSK	1	MID	21.37	22.87	1.5
10	20600	836.5	QPSK	1	HIGH	20.87	22.83	1.96
10	20600	836.5	QPSK	25	LOW	21.03	23.00	1.97
10	20600	836.5	QPSK	25	MID	21.13	23.24	2.11
10	20600	836.5	QPSK	25	HIGH	21.01	22.67	1.66
10	20600	836.5	QPSK	50	LOW	21.17	23.25	2.08
10	20600	836.5	Q16	1	LOW	20.71	22.81	2.1
10	20600	836.5	Q16	1	MID	20.90	22.69	1.79
10	20600	836.5	Q16	1	HIGH	20.67	23.50	2.83
10	20600	836.5	Q16	25	LOW	21.08	23.46	2.38
10	20600	836.5	Q16	25	MID	21.05	22.74	1.69
10	20600	836.5	Q16	25	HIGH	21.32	22.66	1.34
10	20600	836.5	Q16	50	LOW	21.47	23.11	1.64

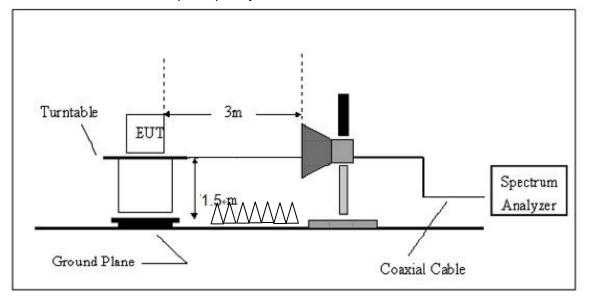
# **SPURIOUS EMISSION (Conducted and Radiated)**

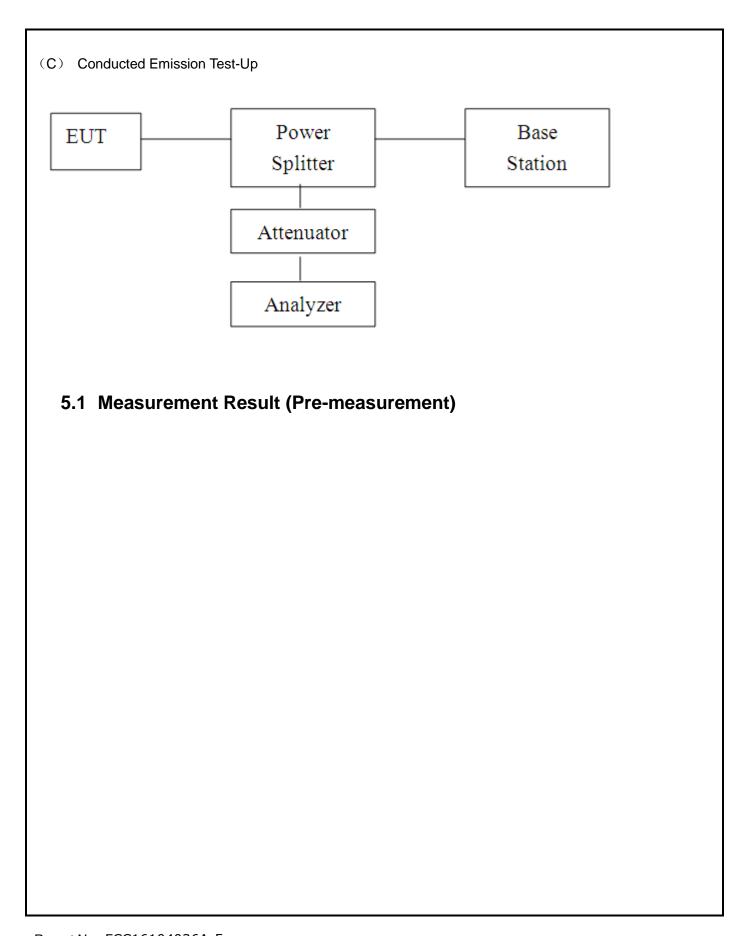
The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

#### (A) Radiated Emission Test-Up Frequency 30MHz~1GHz



#### (B) Radiated Emission Test-Up Frequency Above 1GHz





### 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)	BW(MHz) UL Channel F		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)	V(MHz) UL Channel i		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)	BW(MHz) UL Channel F		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)	BW(MHz) UL Channel F		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	III Channal	Frequency	Frequency Modulation	RB	RB	ludgomont
	Bandwidth	OL Chamile		Modulation	Size	Offset	Judgement
I	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

# BAND 5:

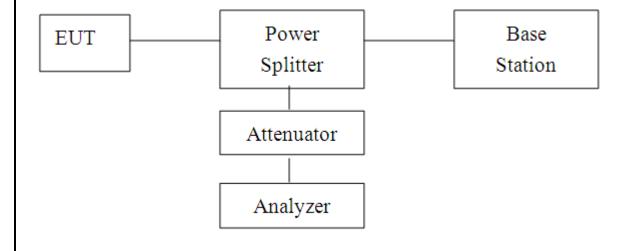
5 1 1 11		_		RB	RB	
Bandwidth	UL Channel	Frequency	Modulation	Size	Offset	Judgement
1.4	20470	824.7	QPSK	6	LOW	Pass
1.4	20470	824.7	Q16	6	LOW	Pass
1.4	20525	836.5	QPSK	6	LOW	Pass
1.4	20525	836.5	Q16	6	LOW	Pass
1.4	20643	848.3	QPSK	6	LOW	Pass
1.4	20643	848.3	Q16	6	LOW	Pass
3	20415	825.5	QPSK	15	LOW	Pass
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

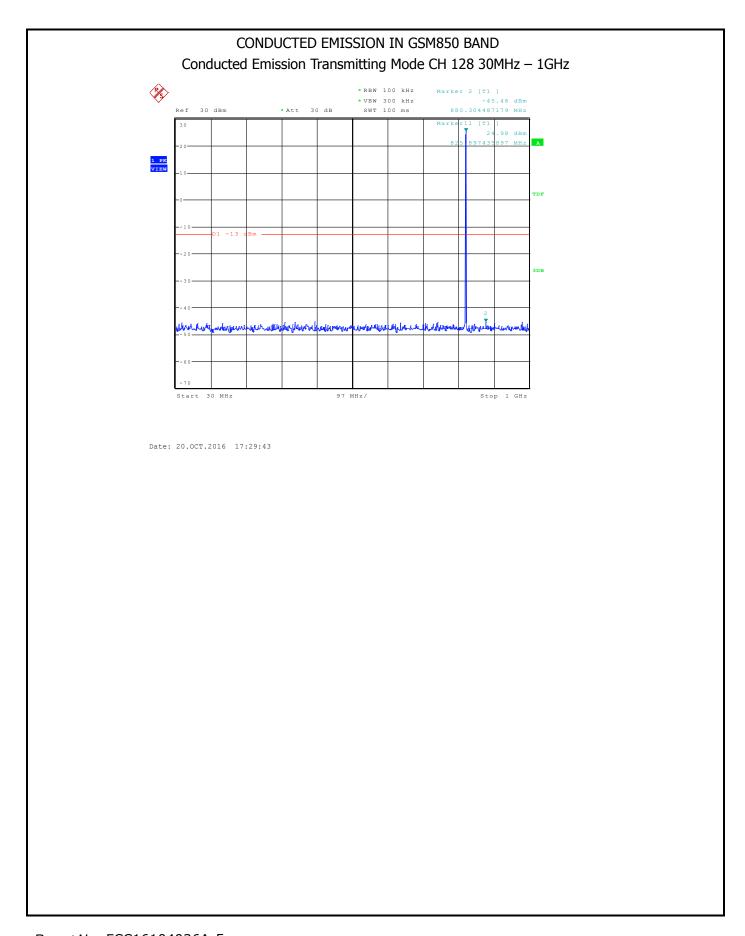
Test Plot(s)

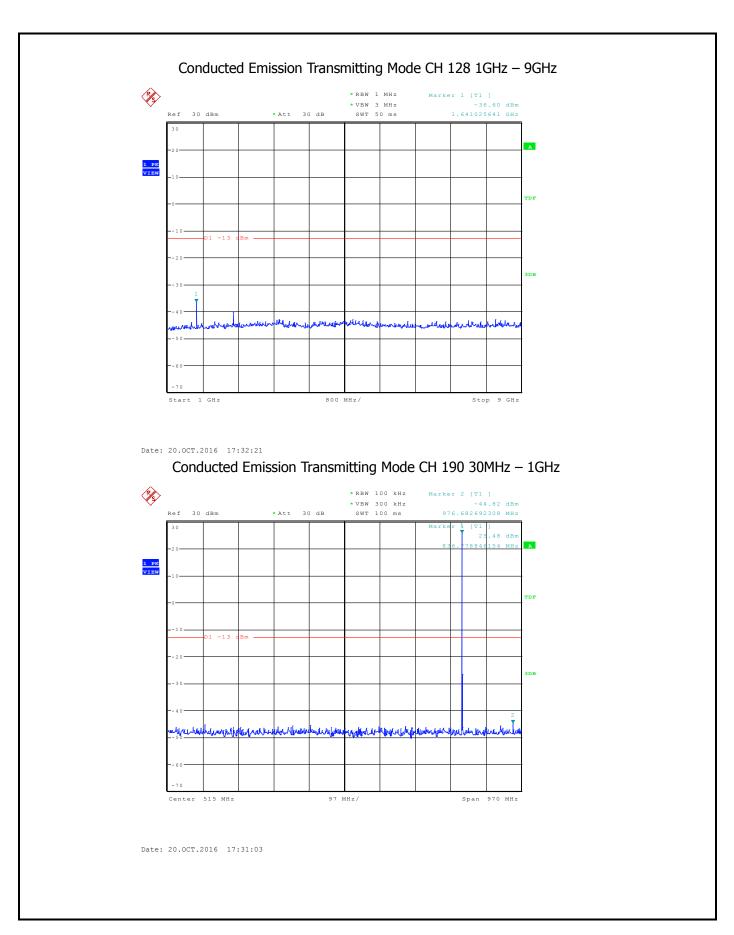
#### 5.1.1 Conducted method

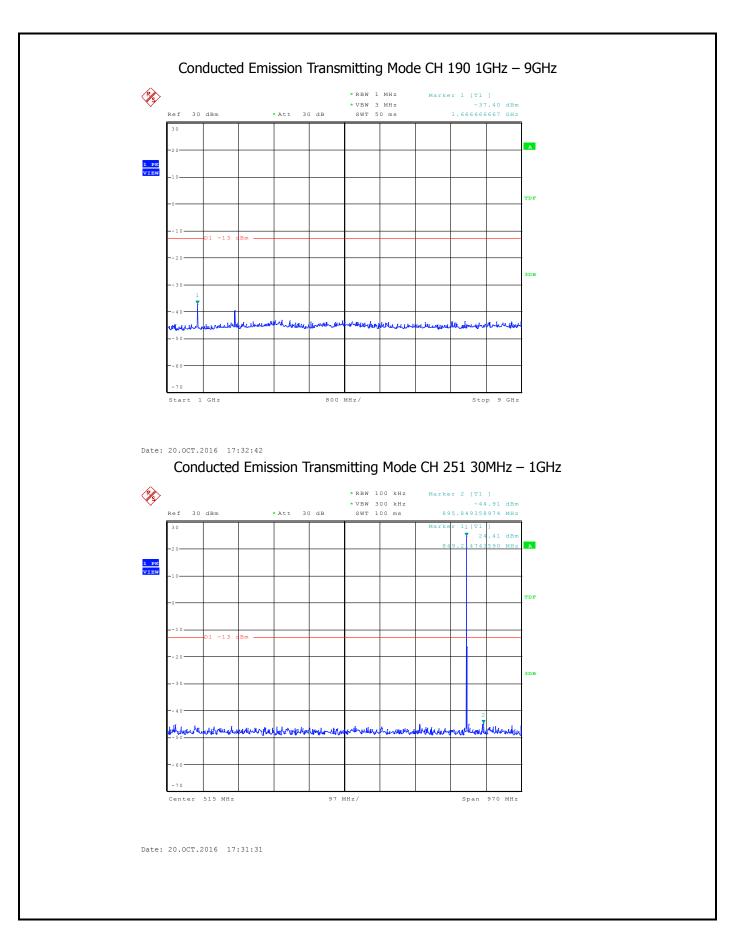
The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

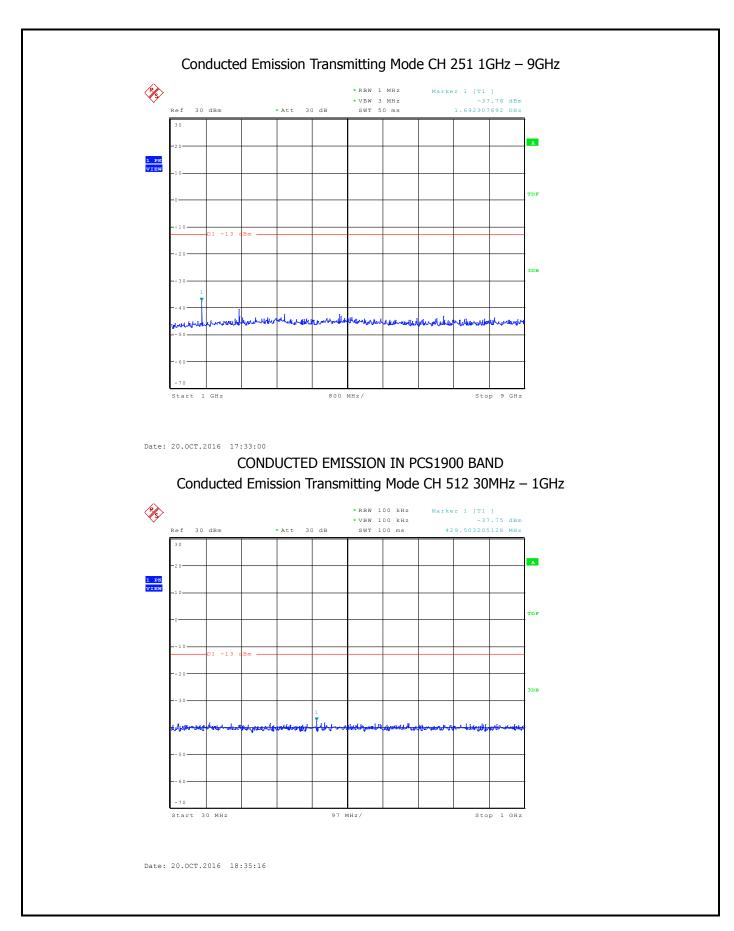
#### Conducted Emission Test-Up

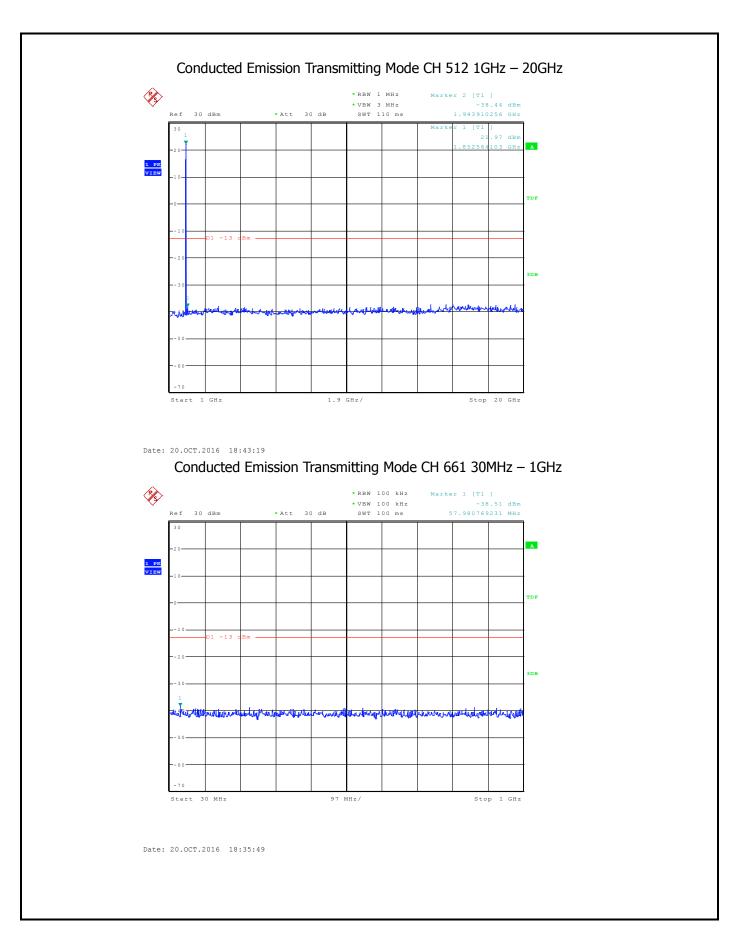


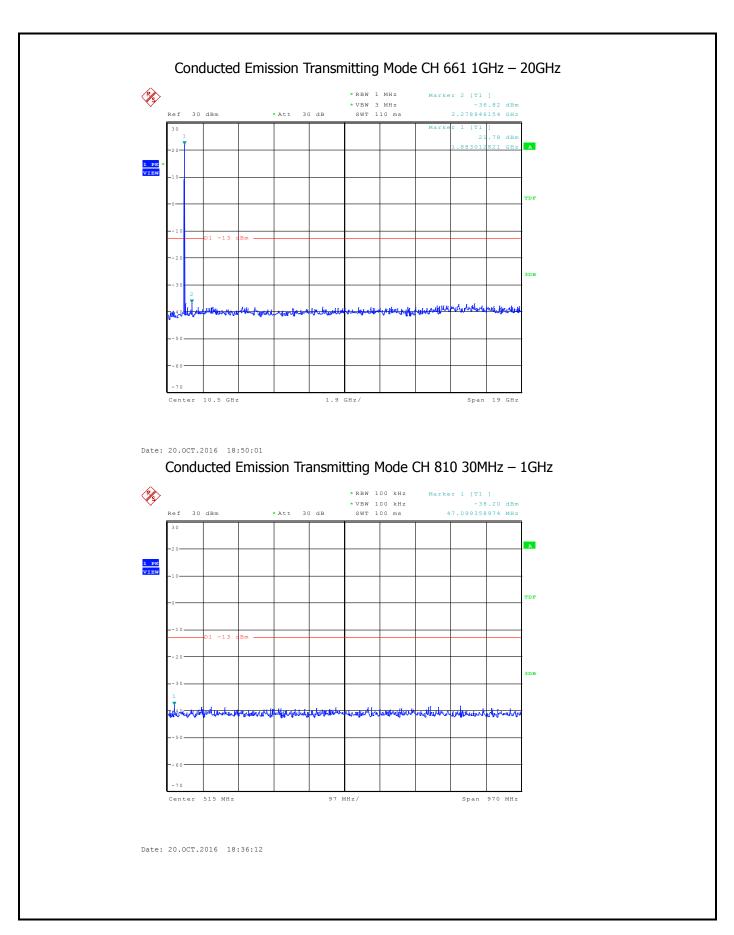


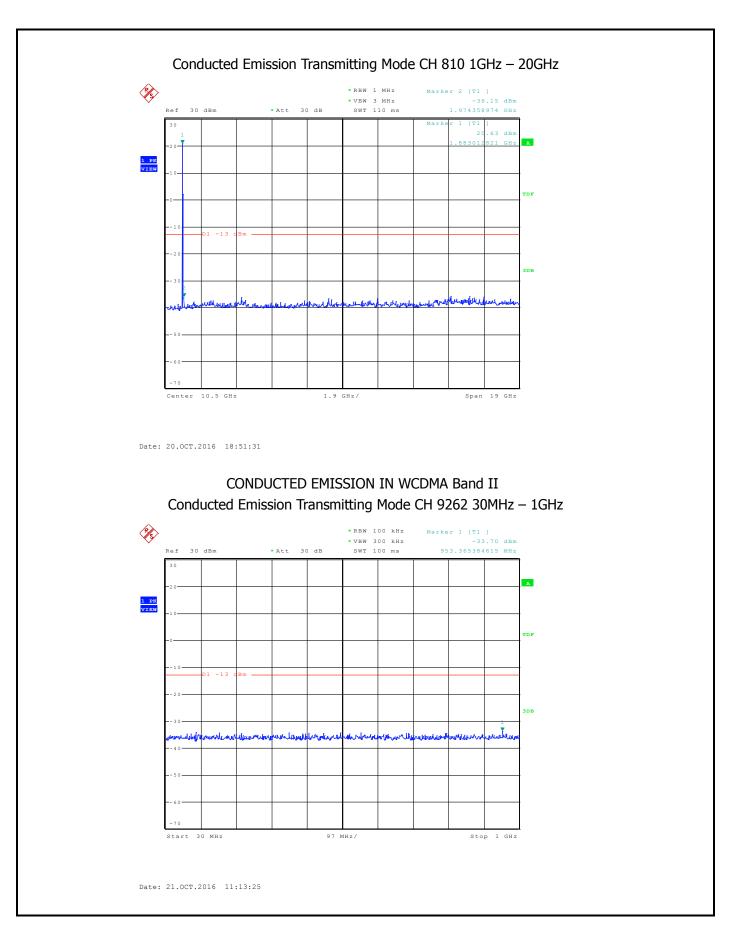


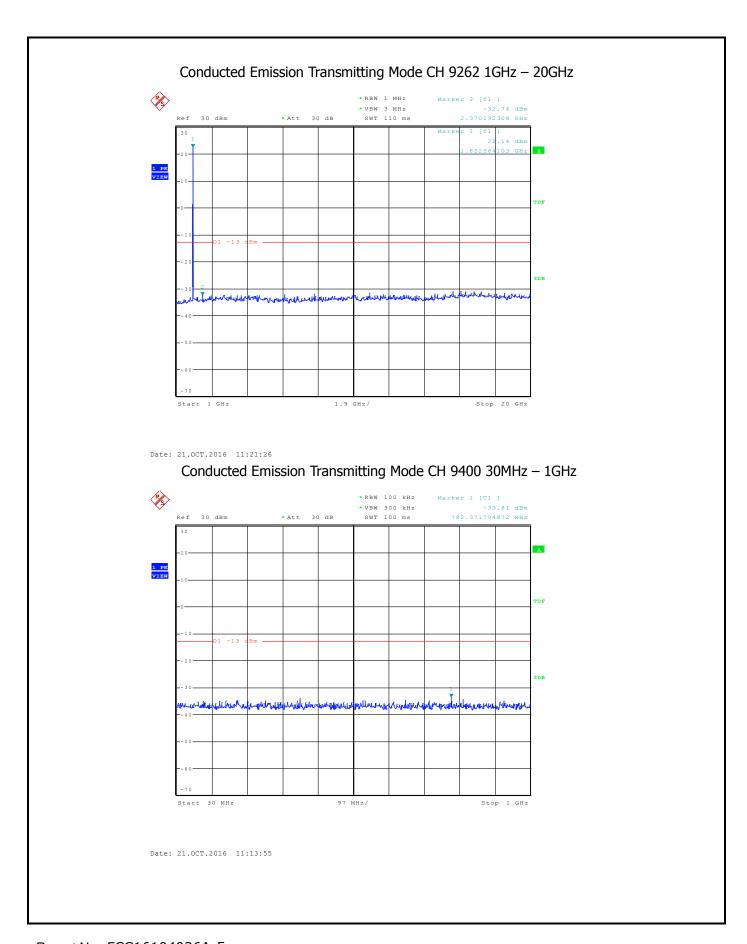


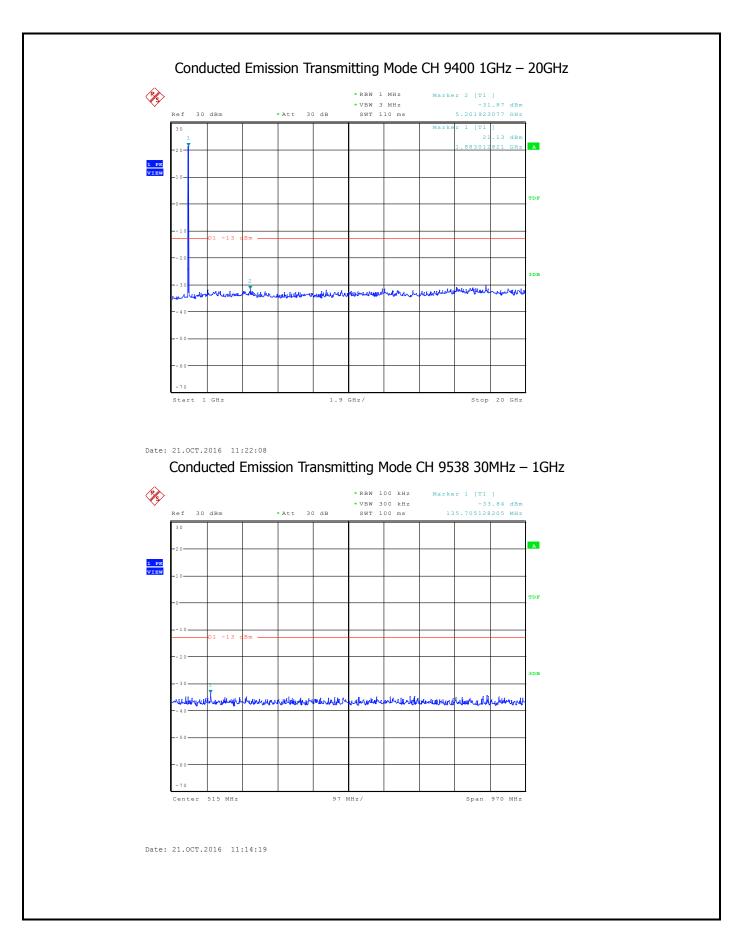


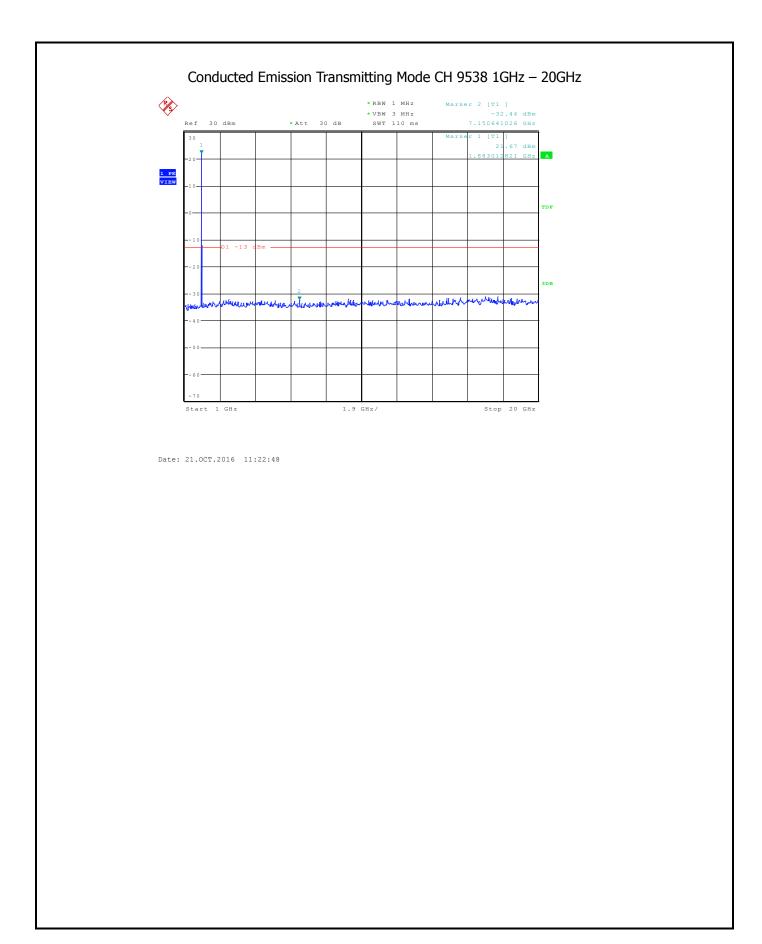




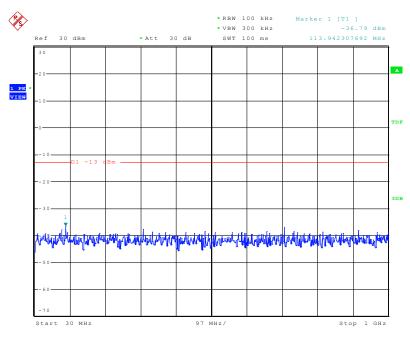




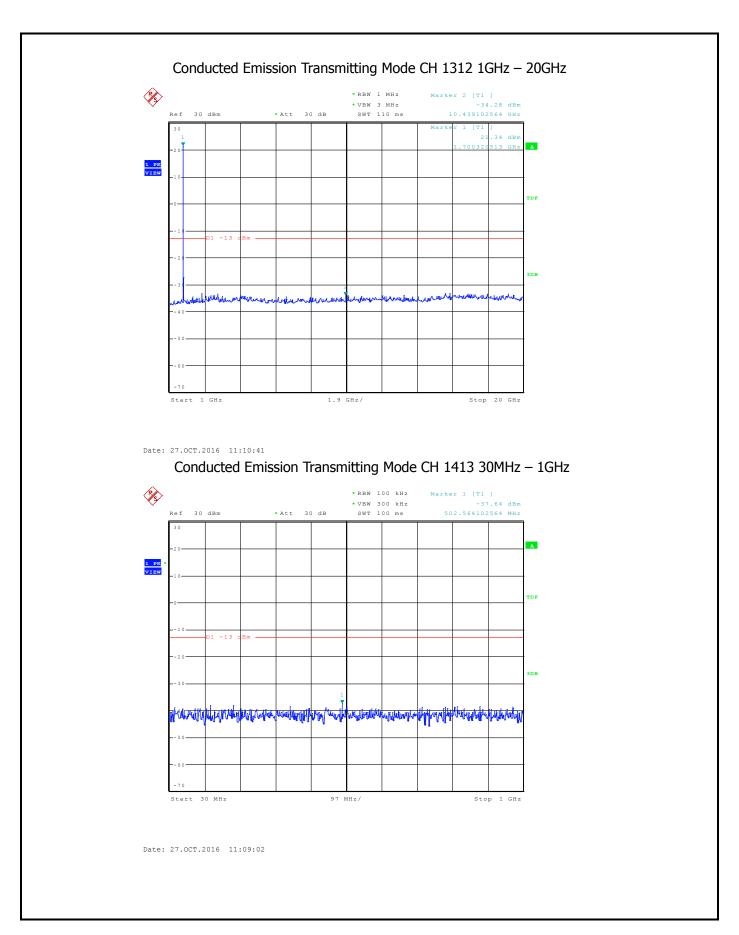


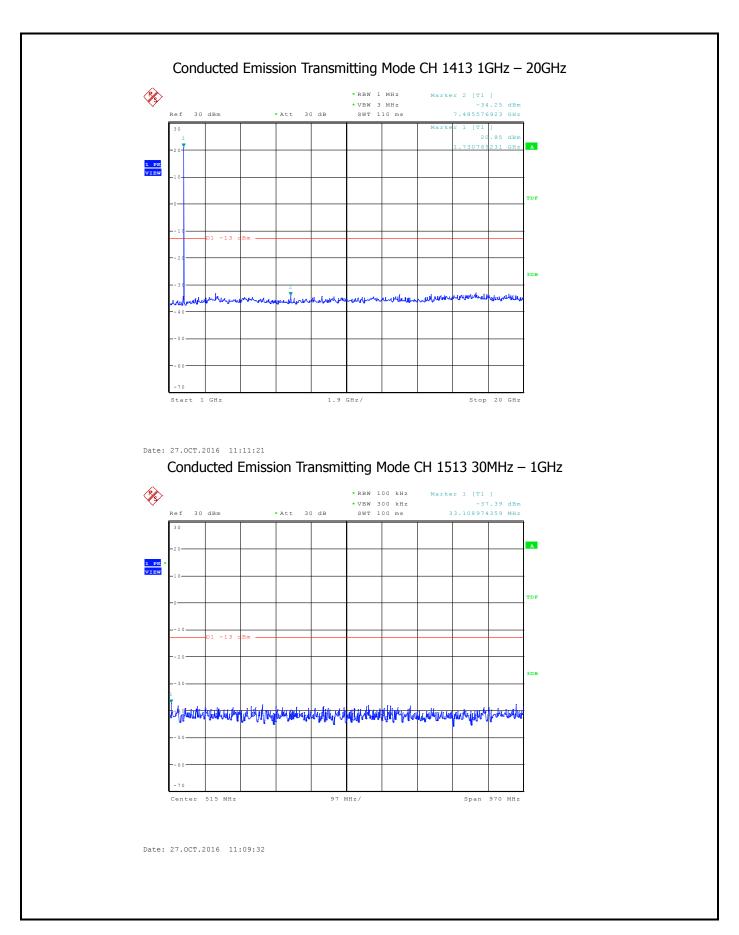


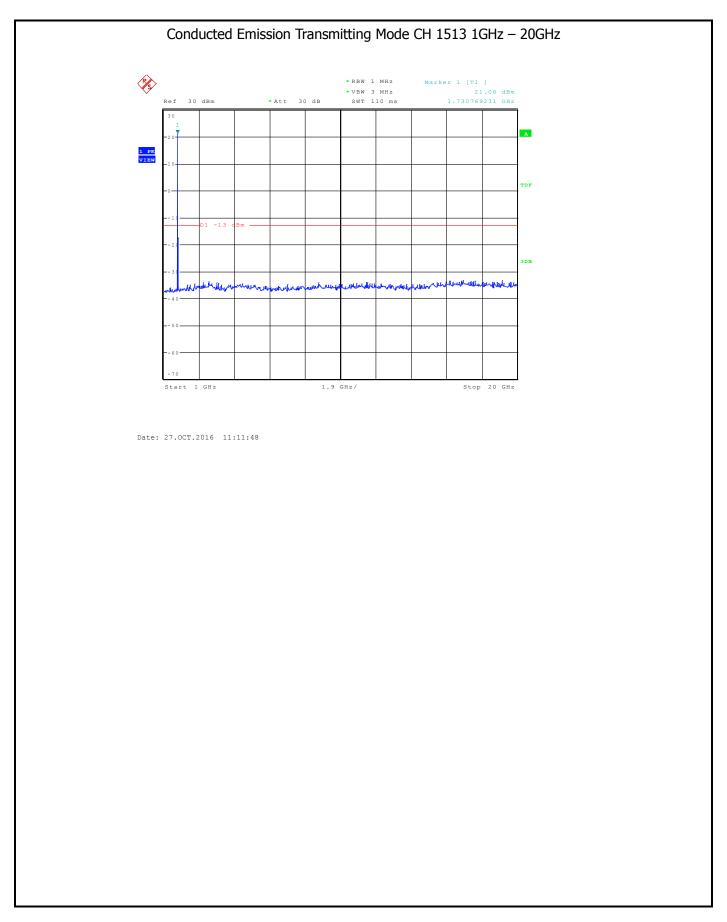
### CONDUCTED EMISSION IN WCDMA Band IV Conducted Emission Transmitting Mode CH 1312 30MHz – 1GHz

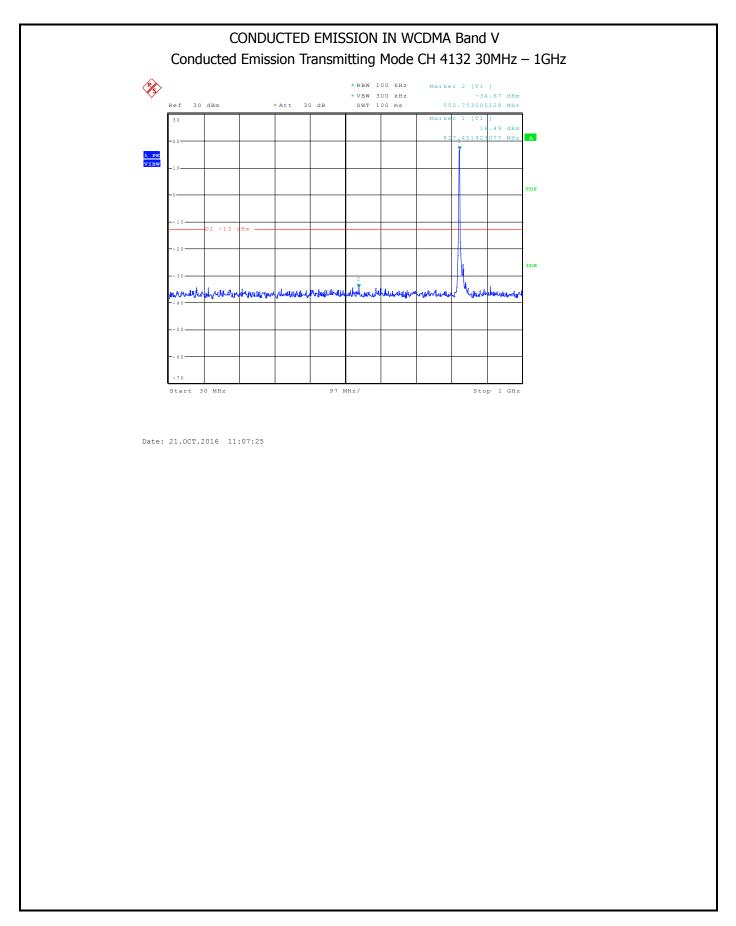


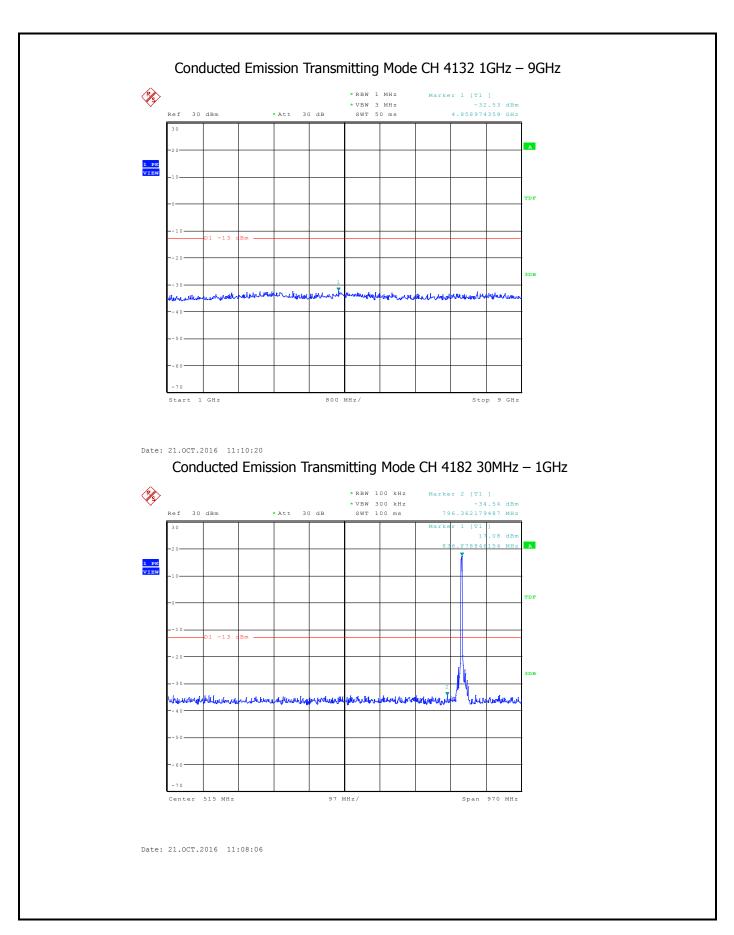
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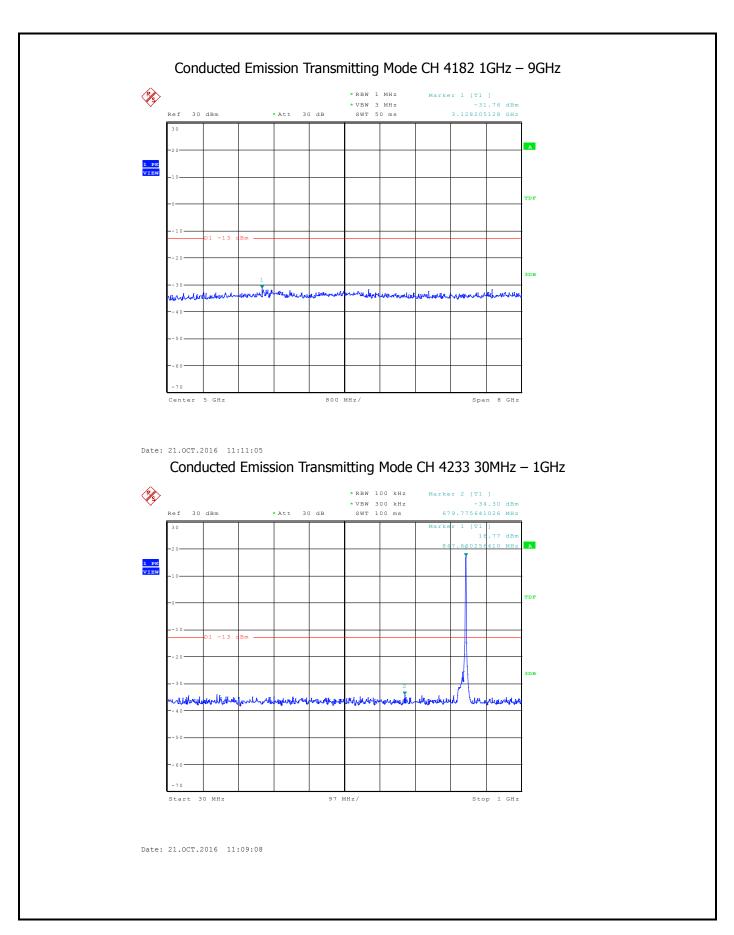


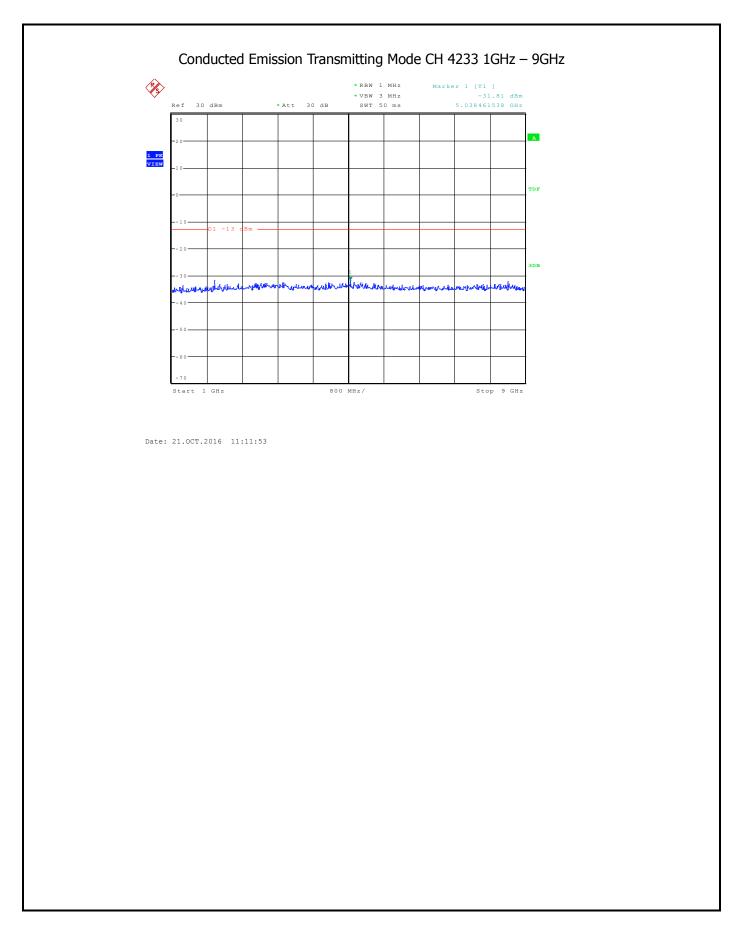


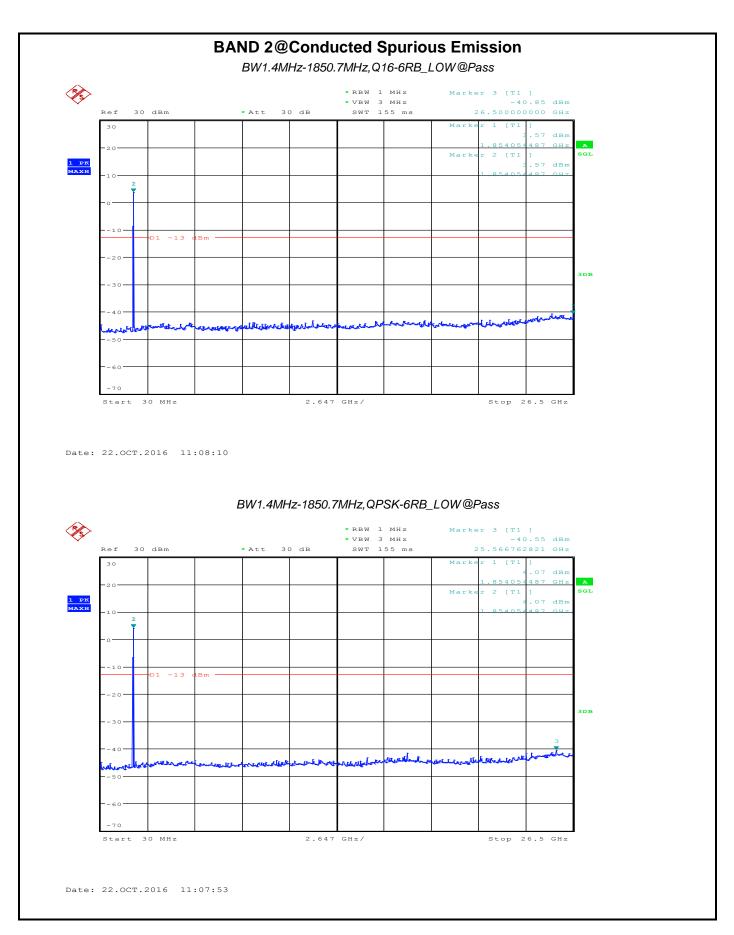


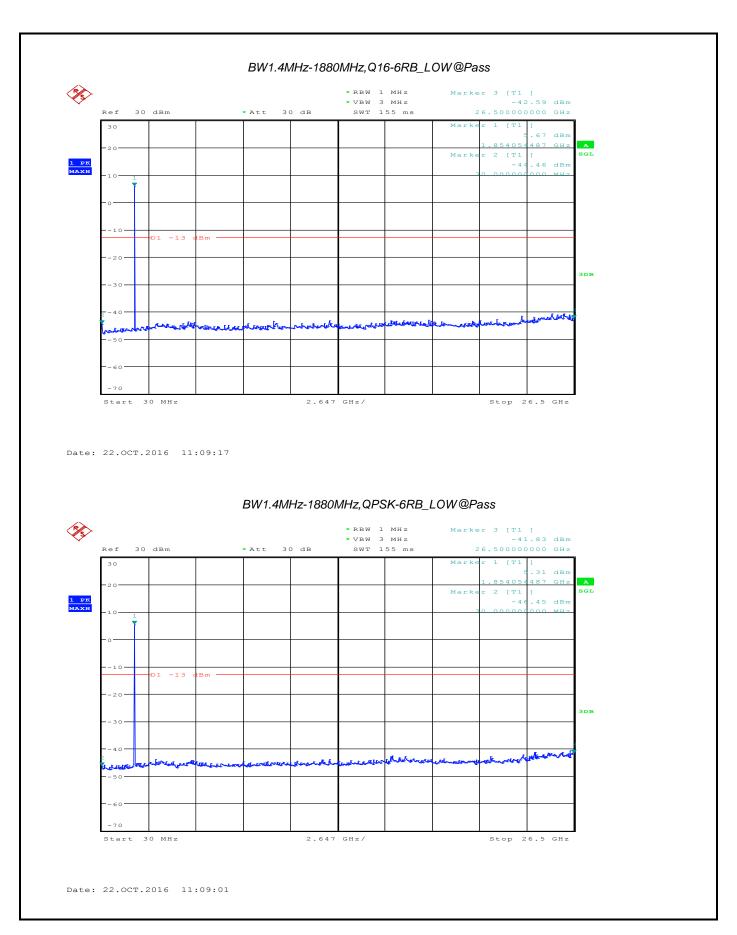


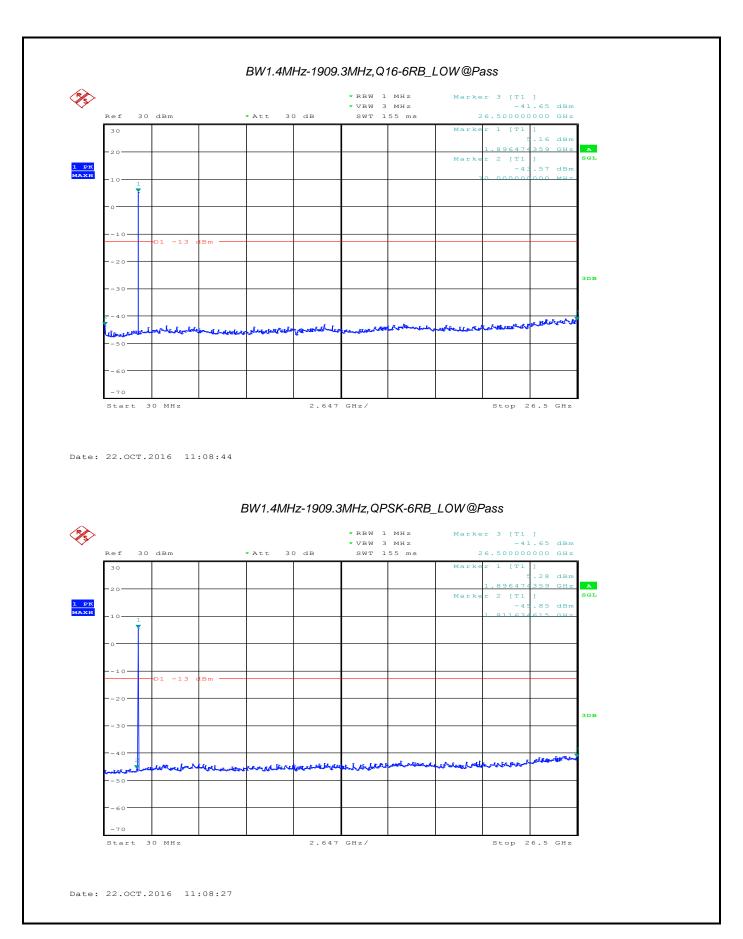


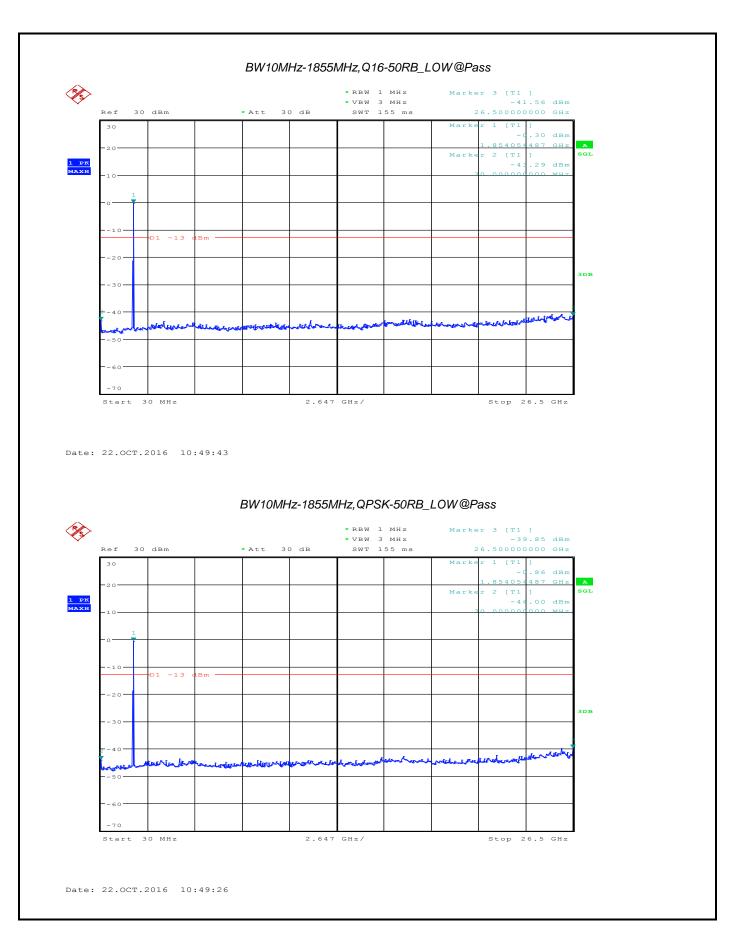


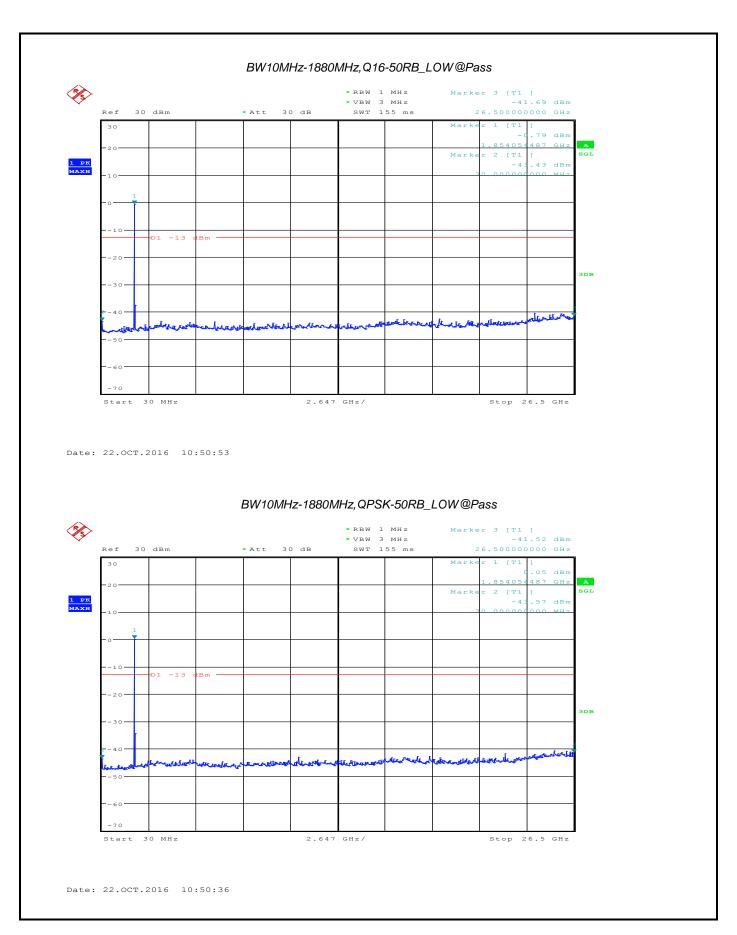


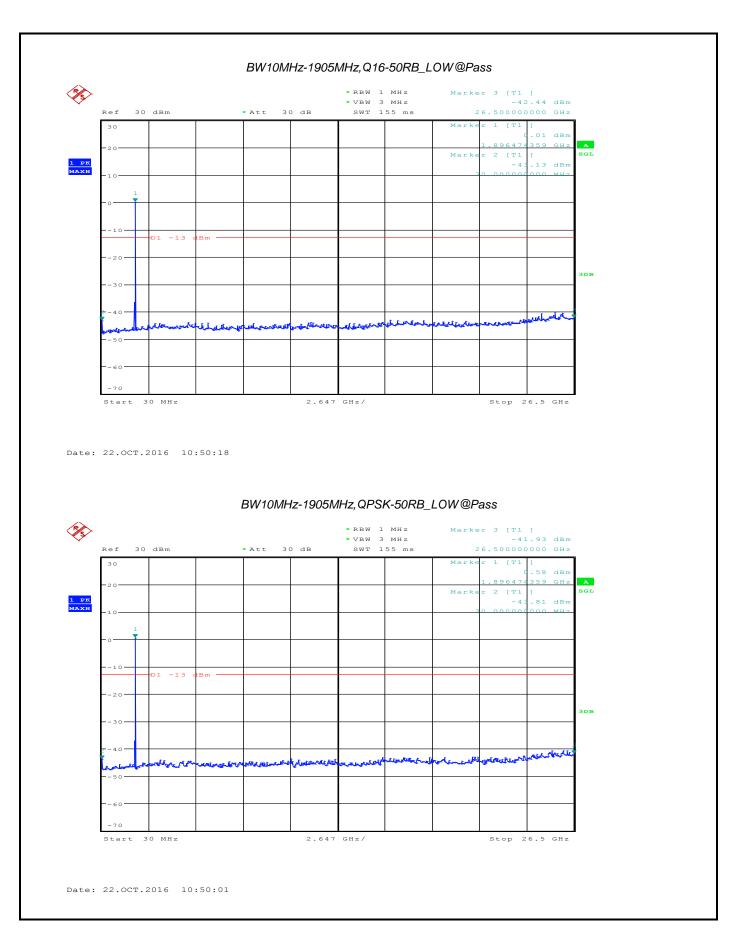


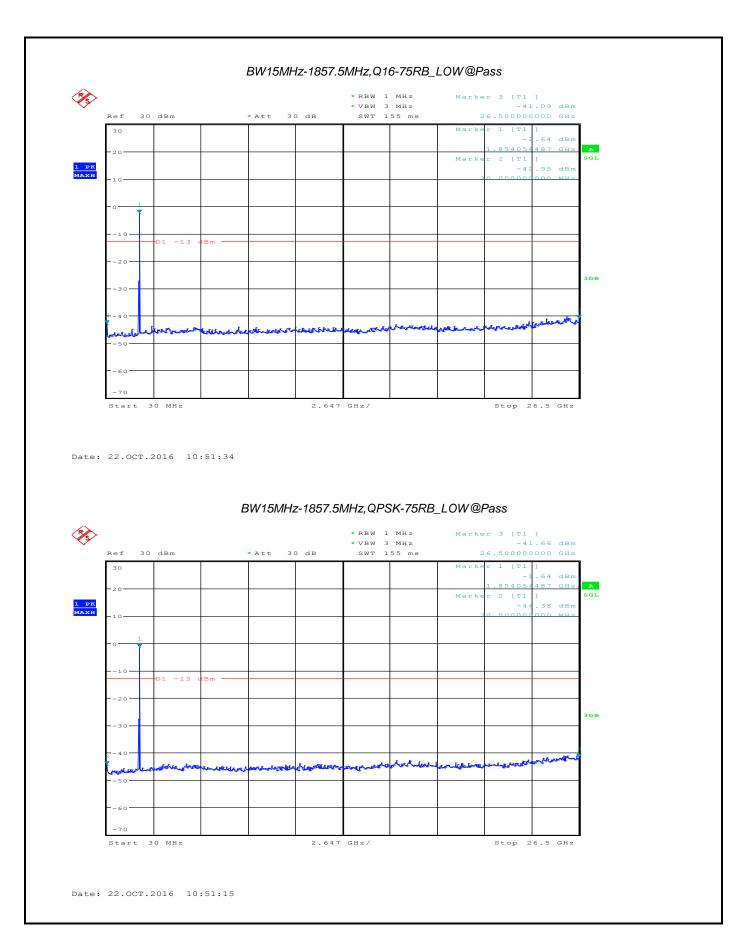


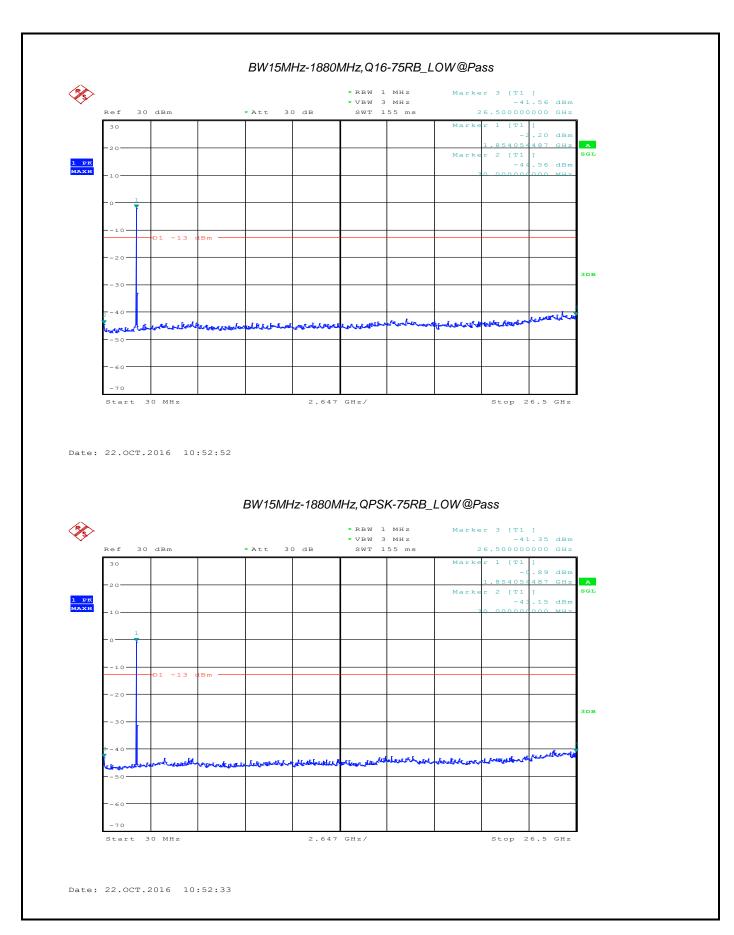


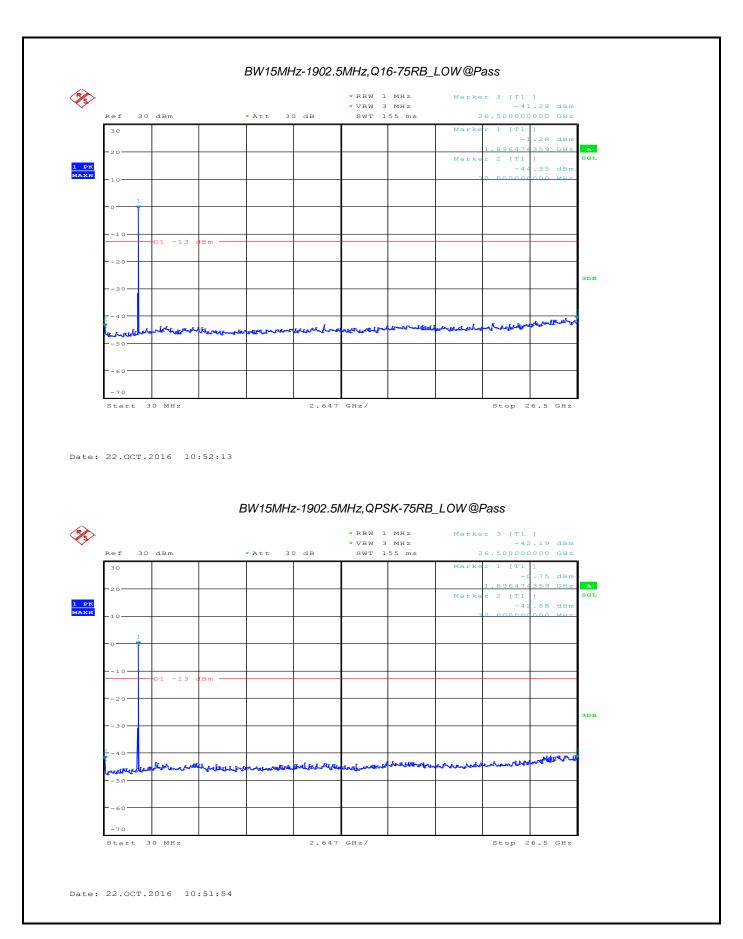


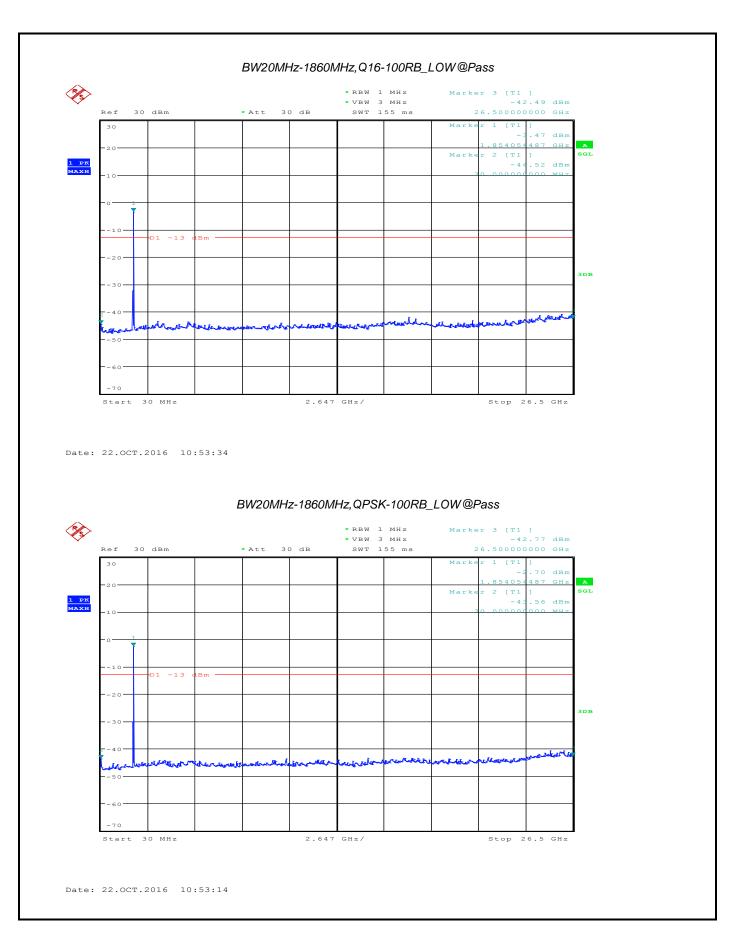


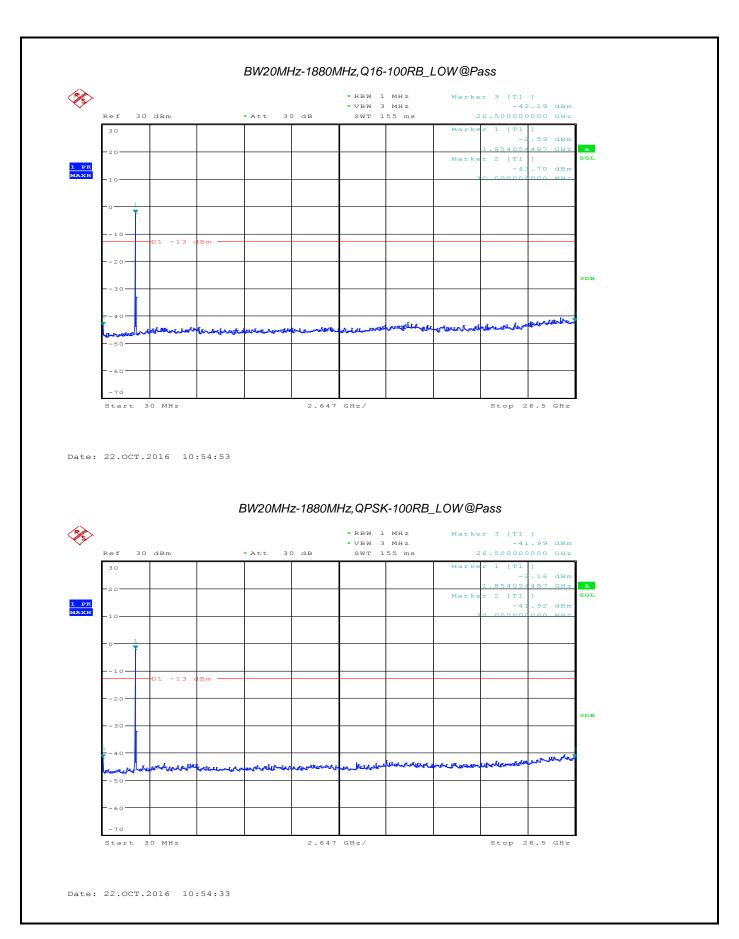


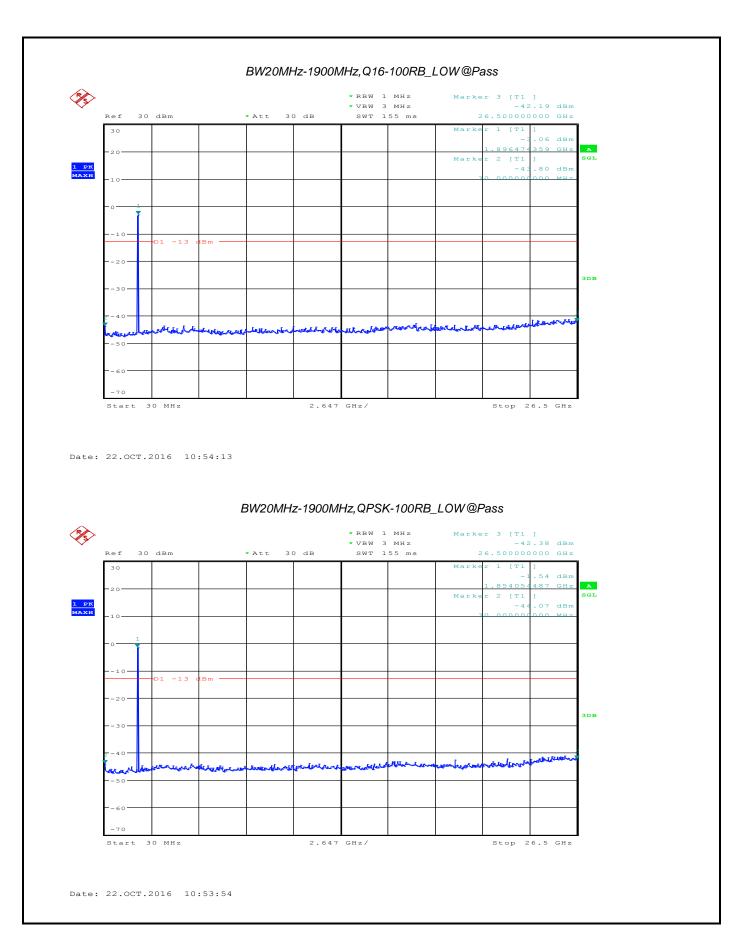


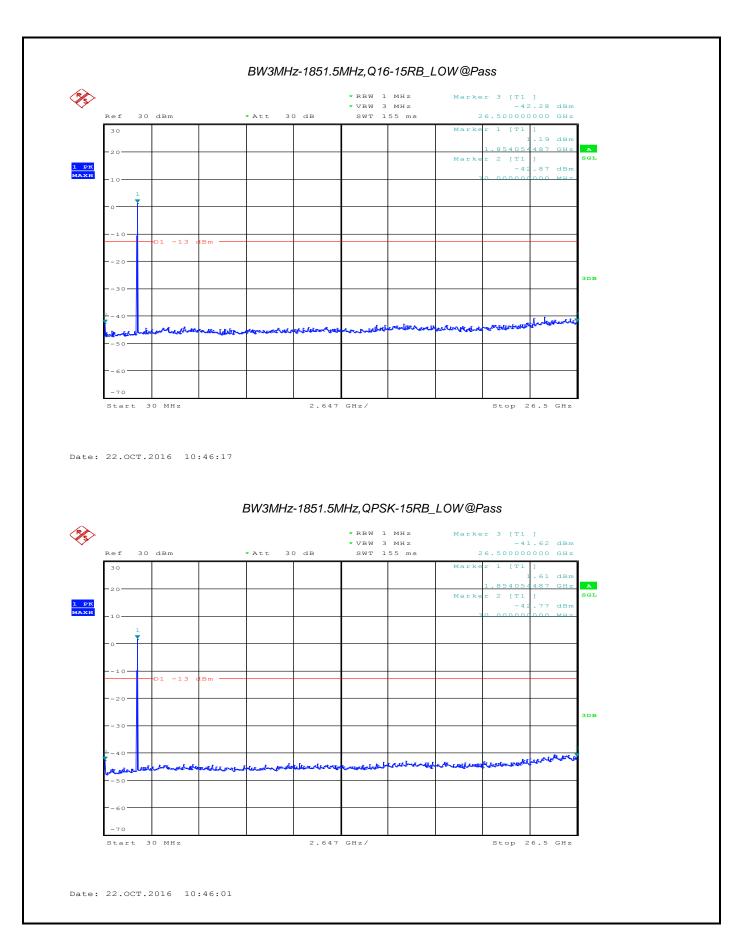


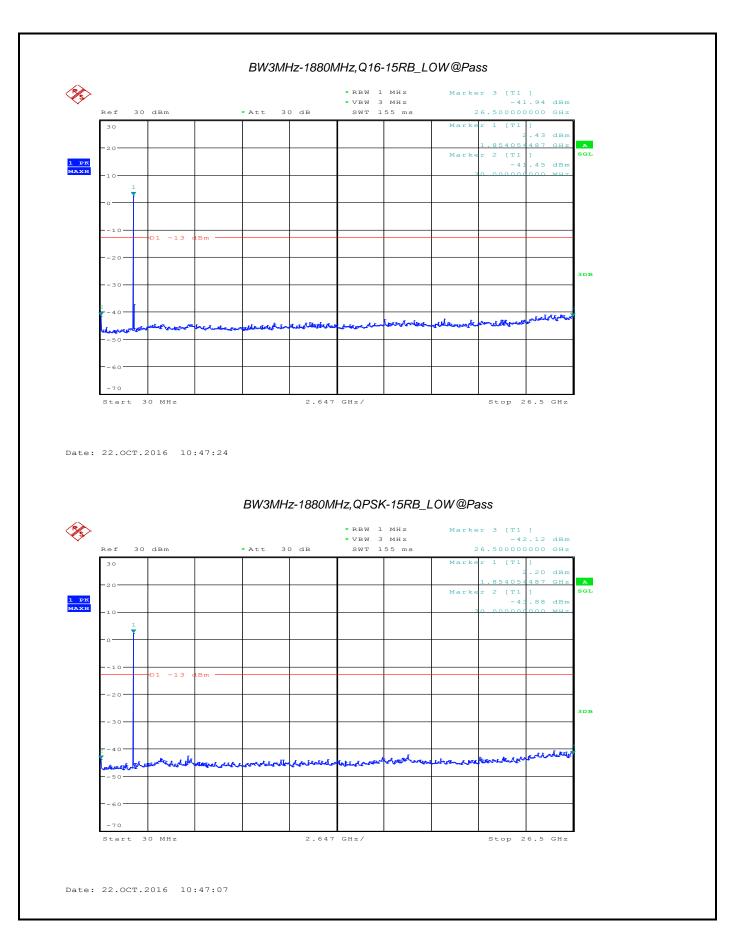


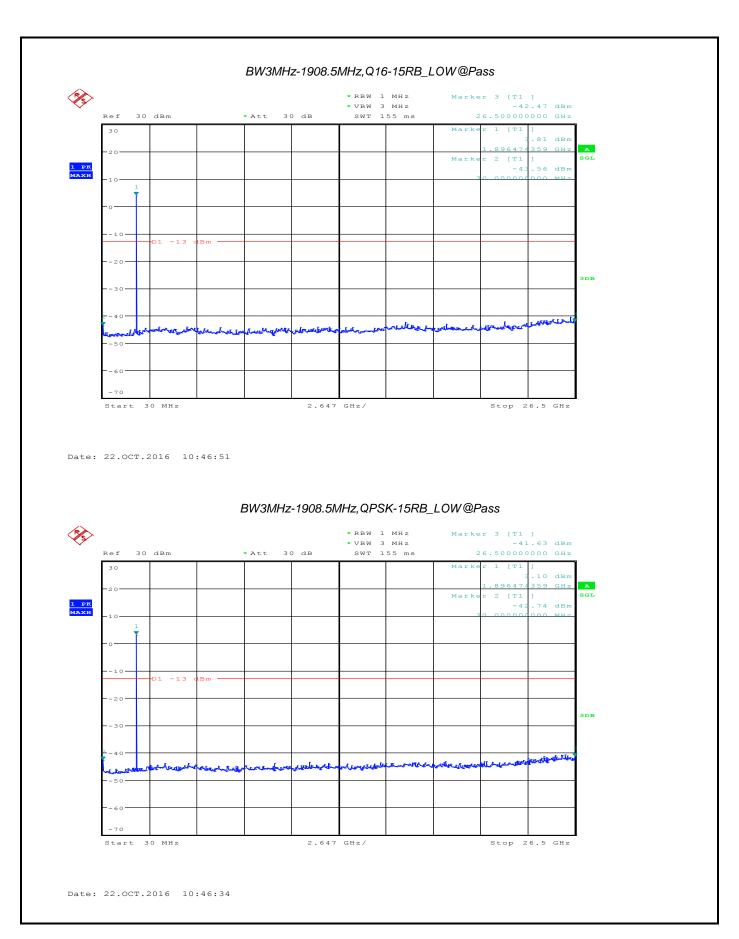


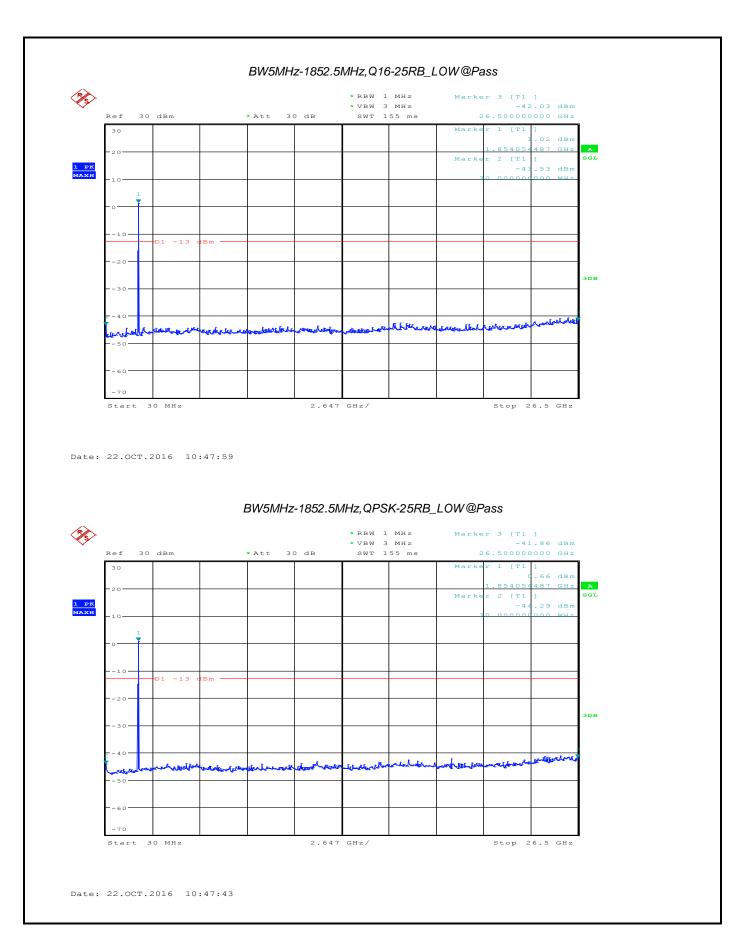


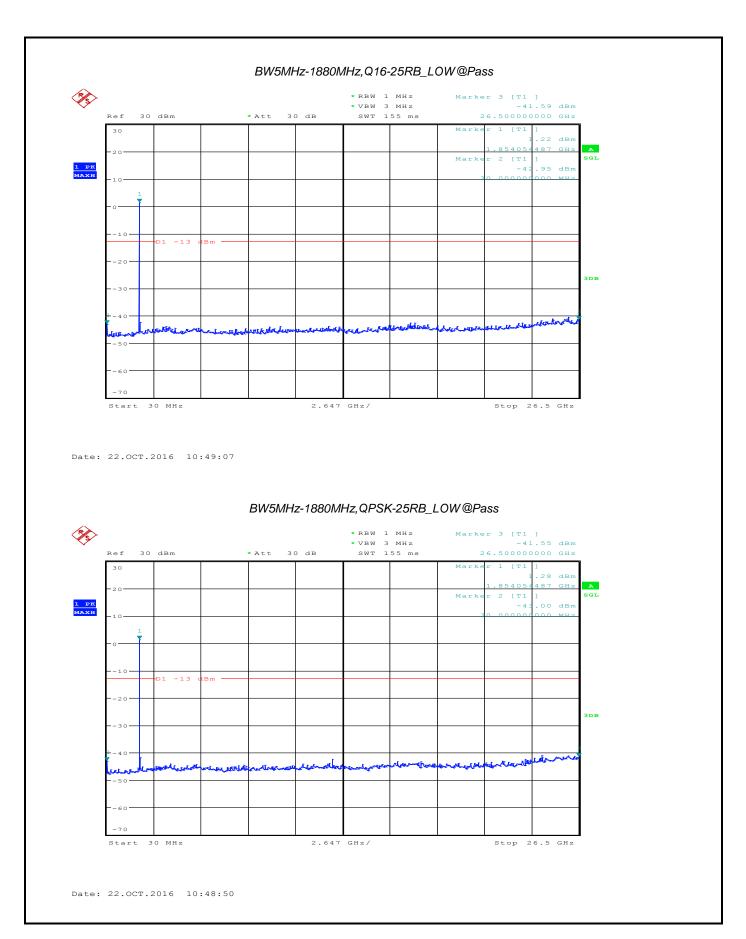


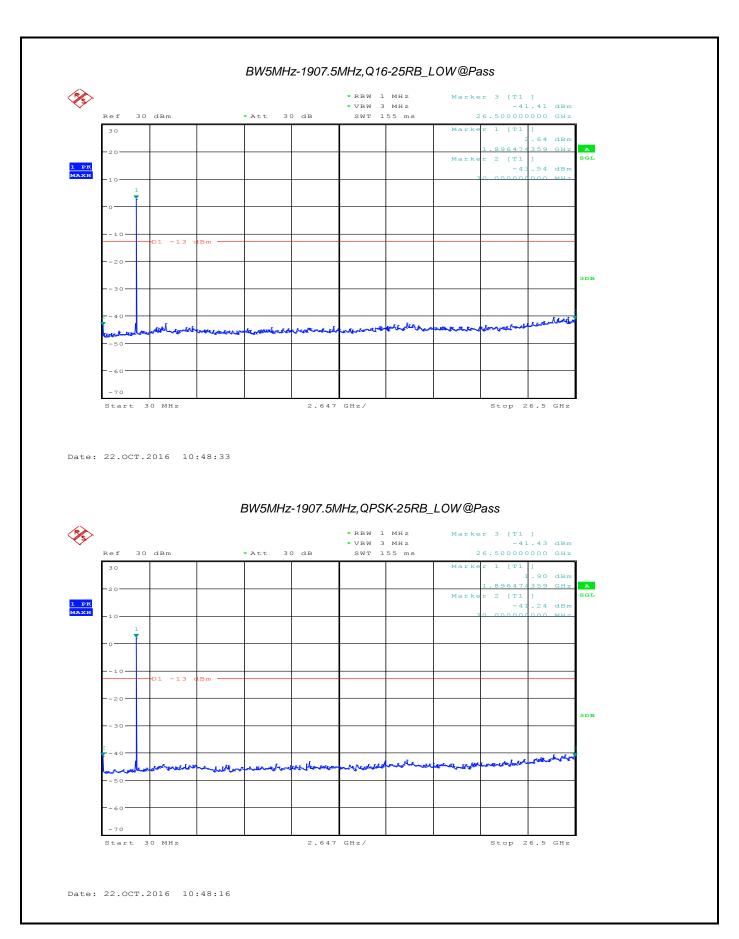


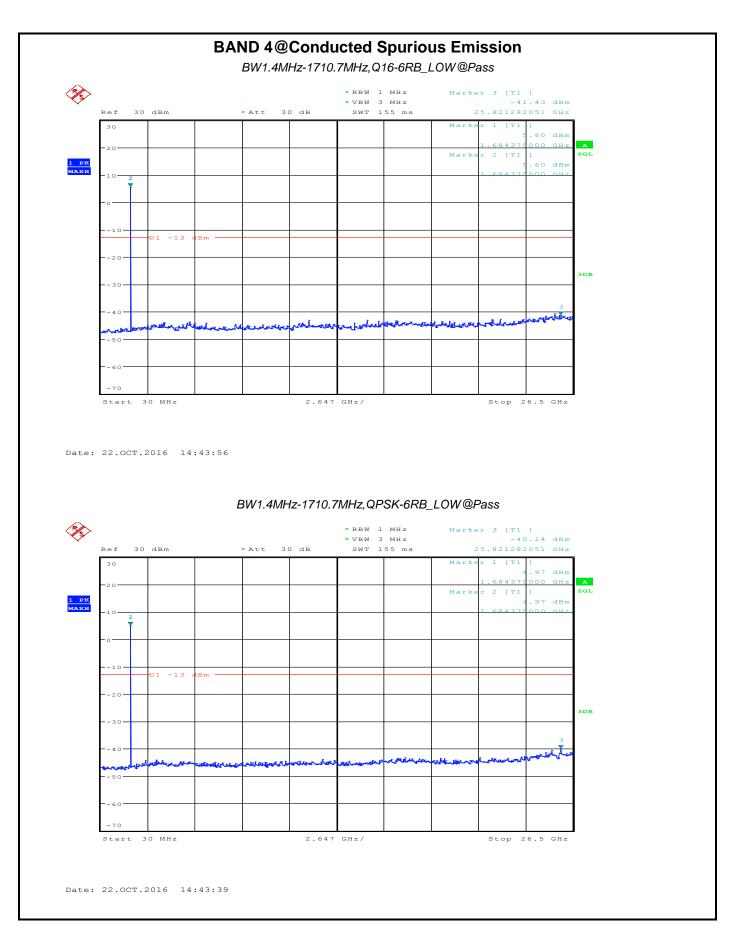


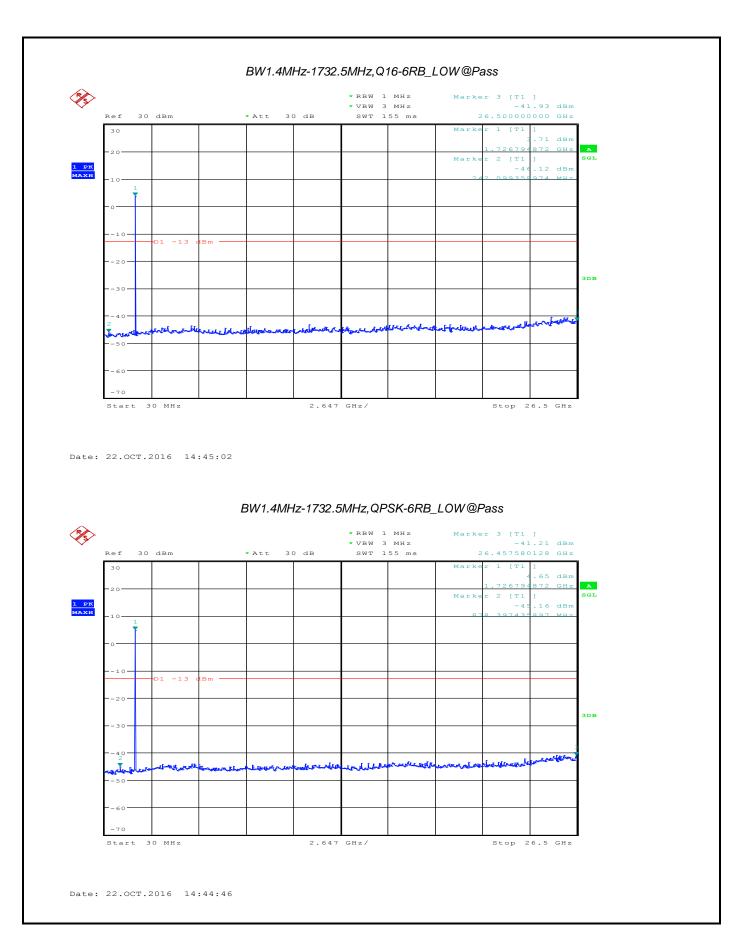


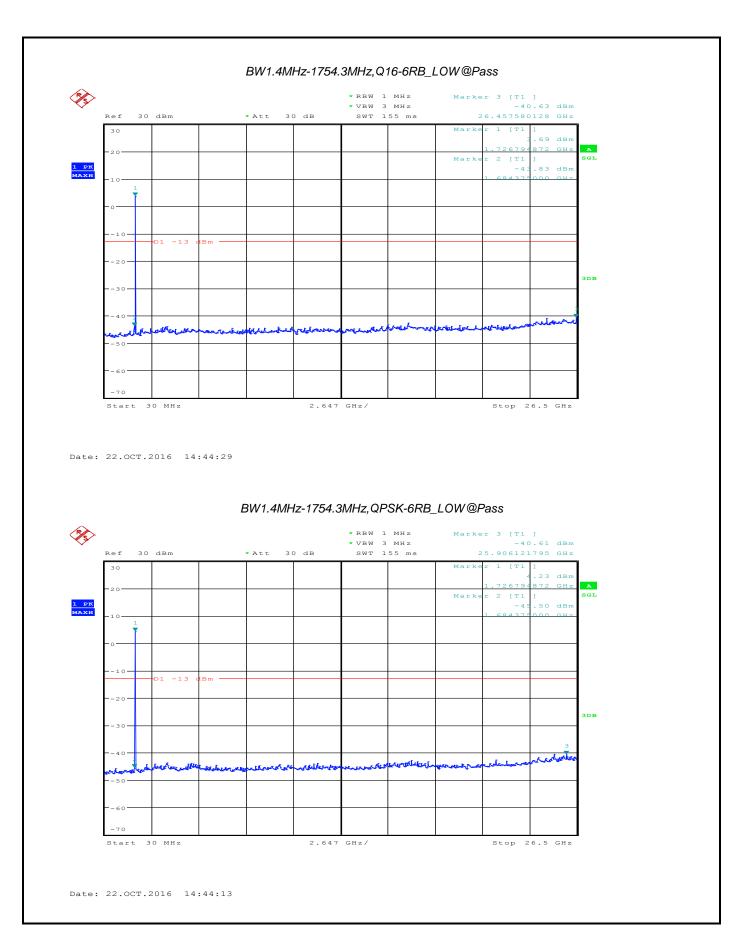


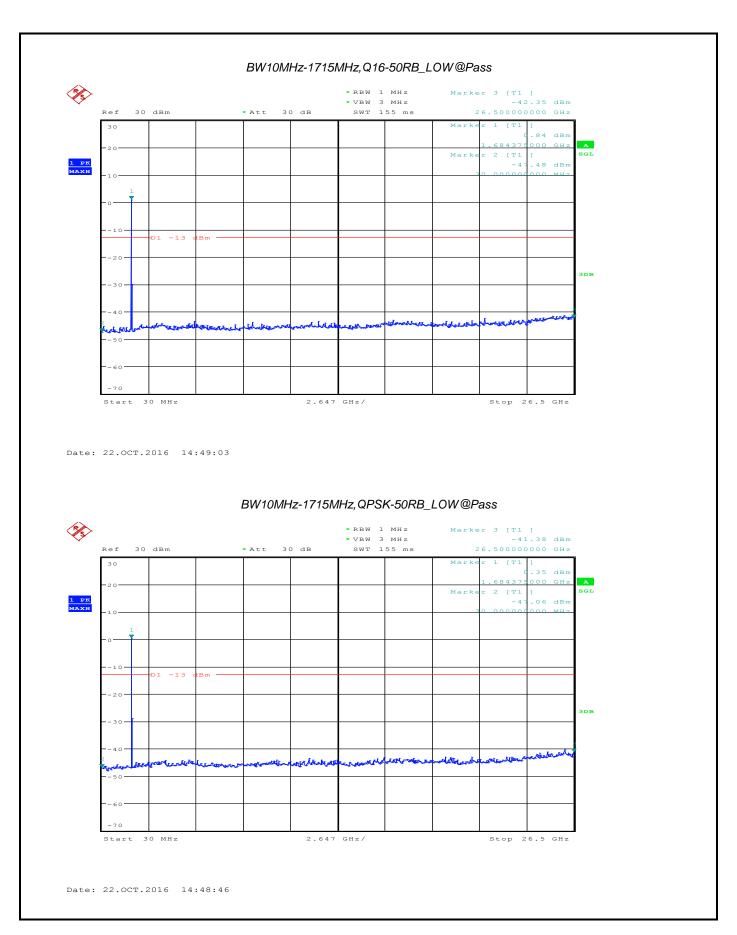


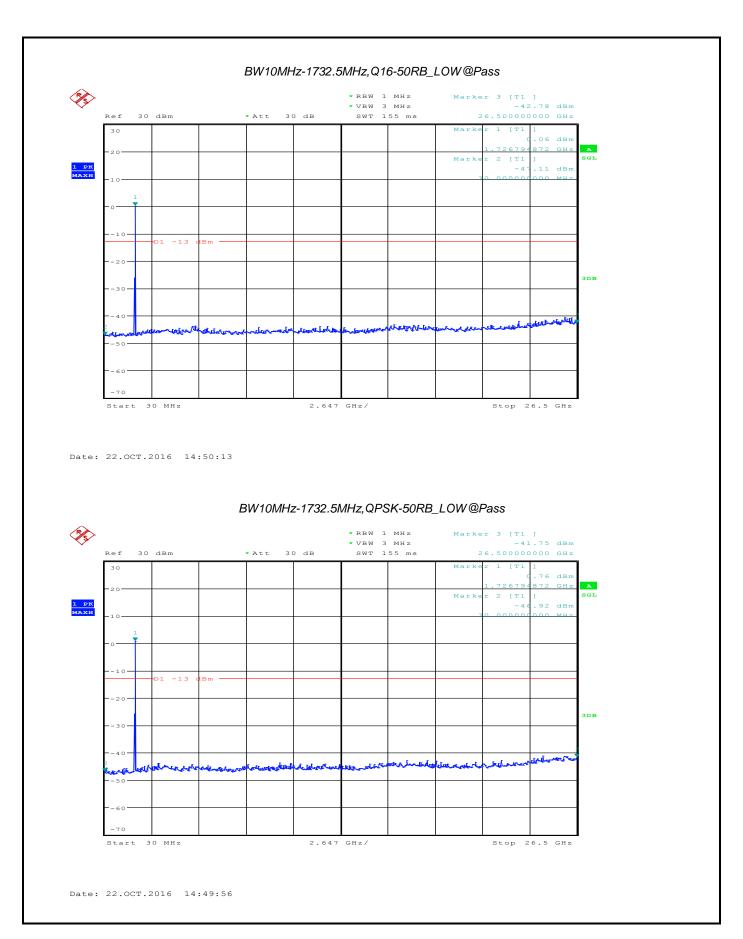


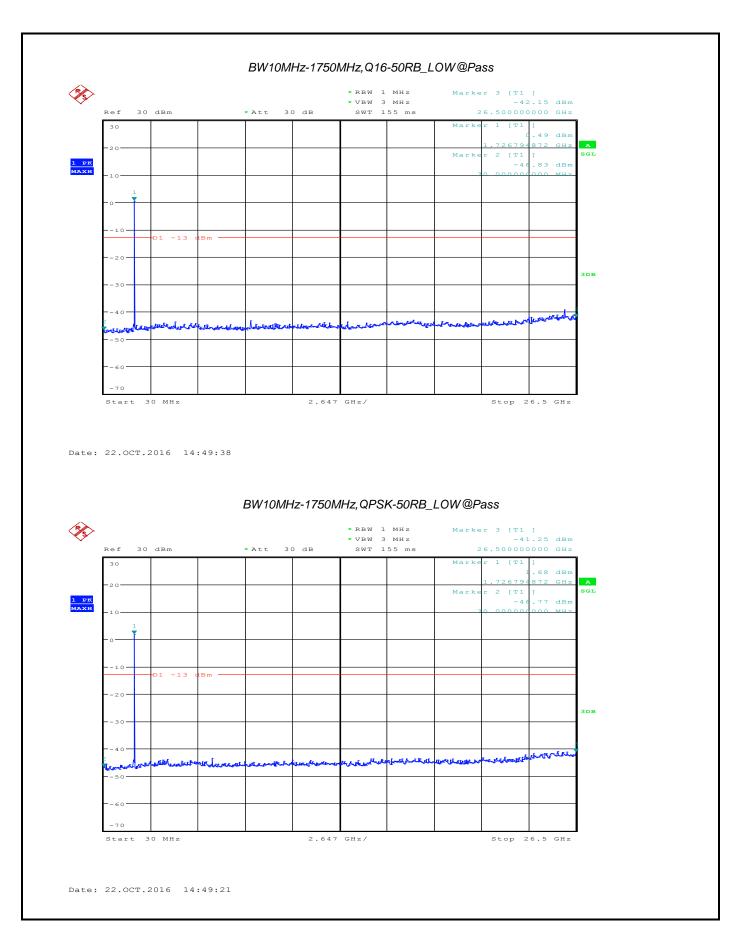


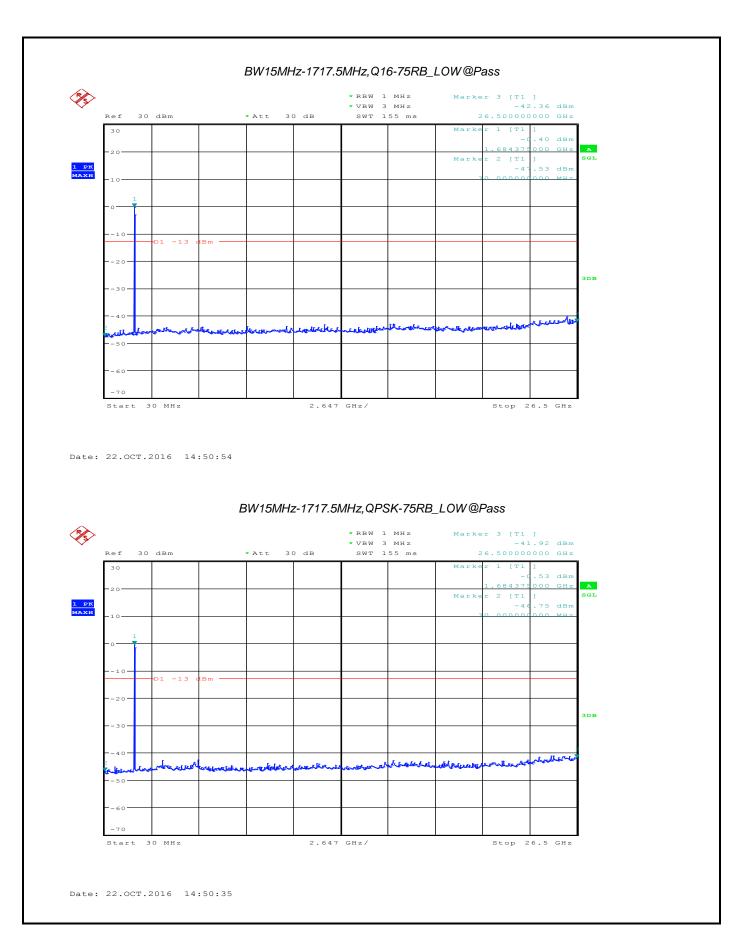


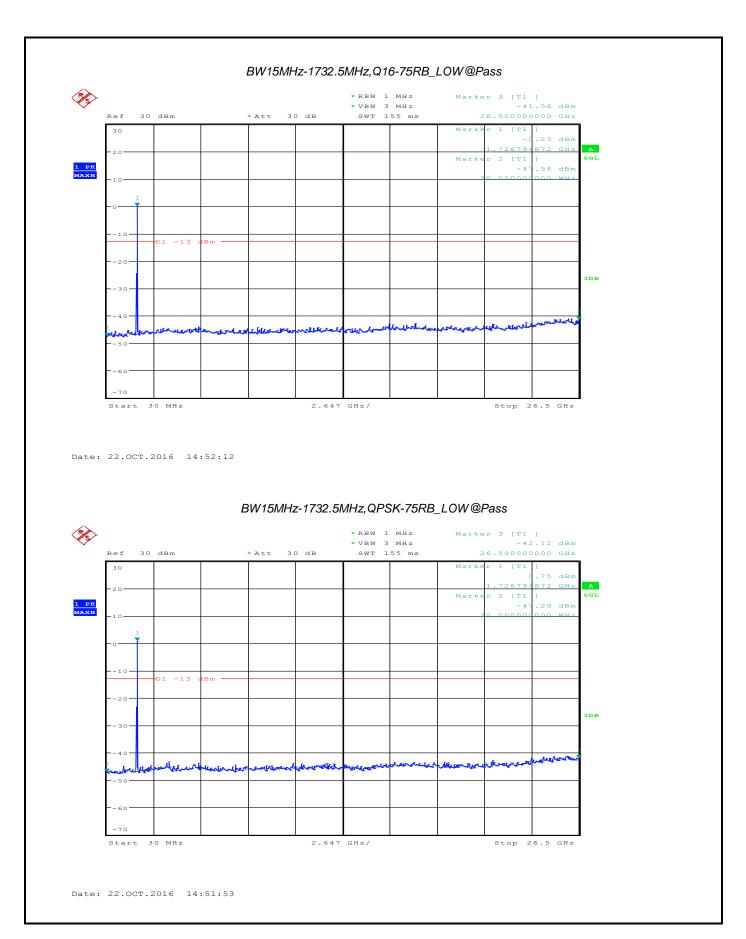


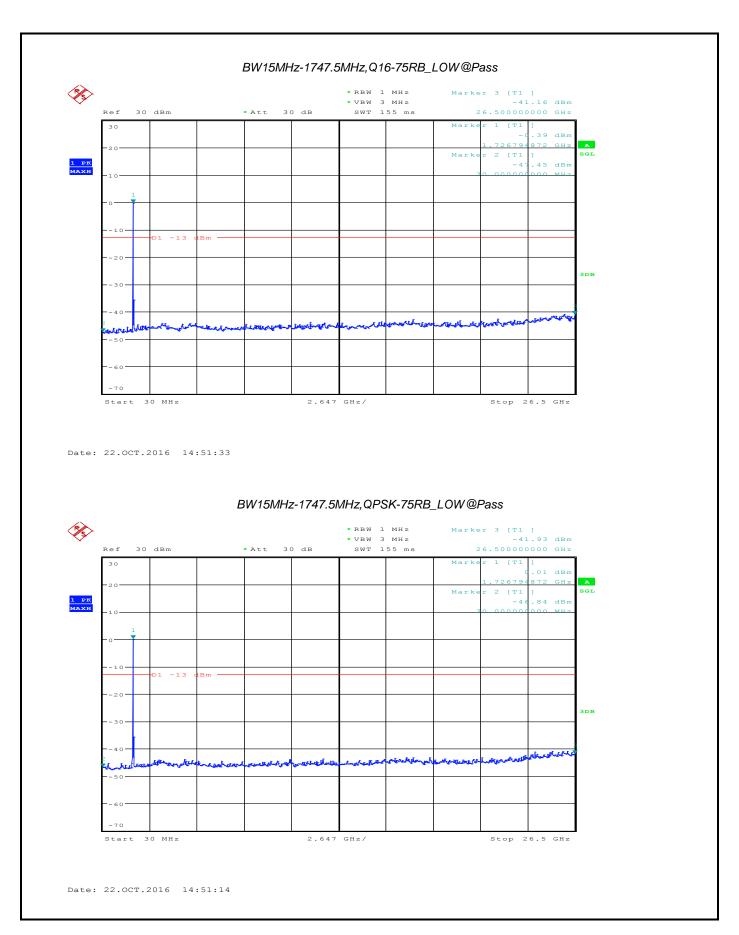


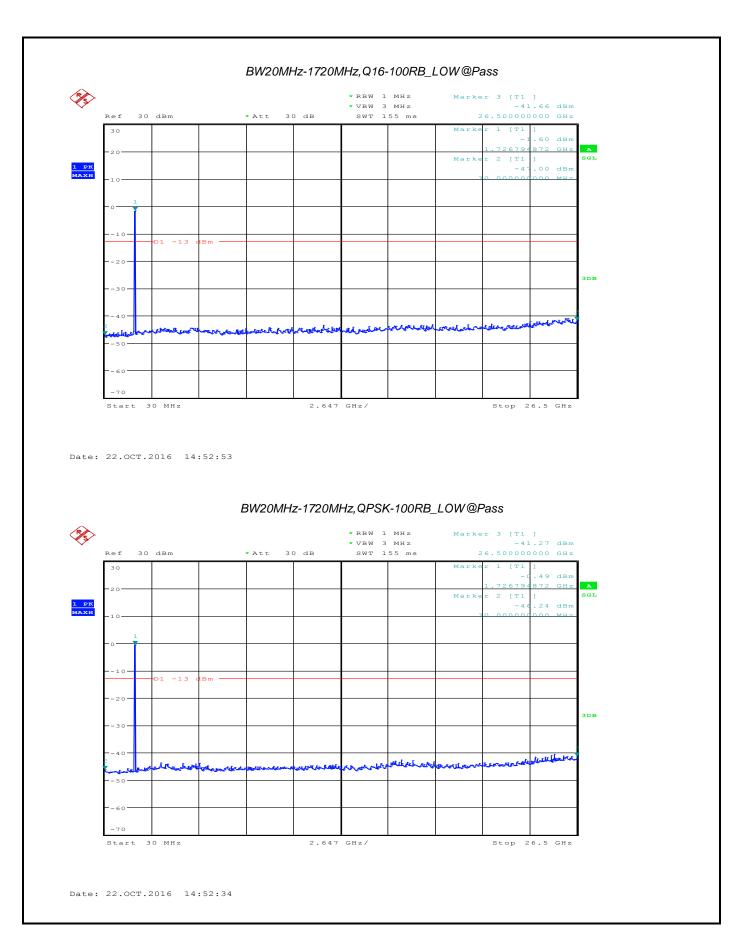


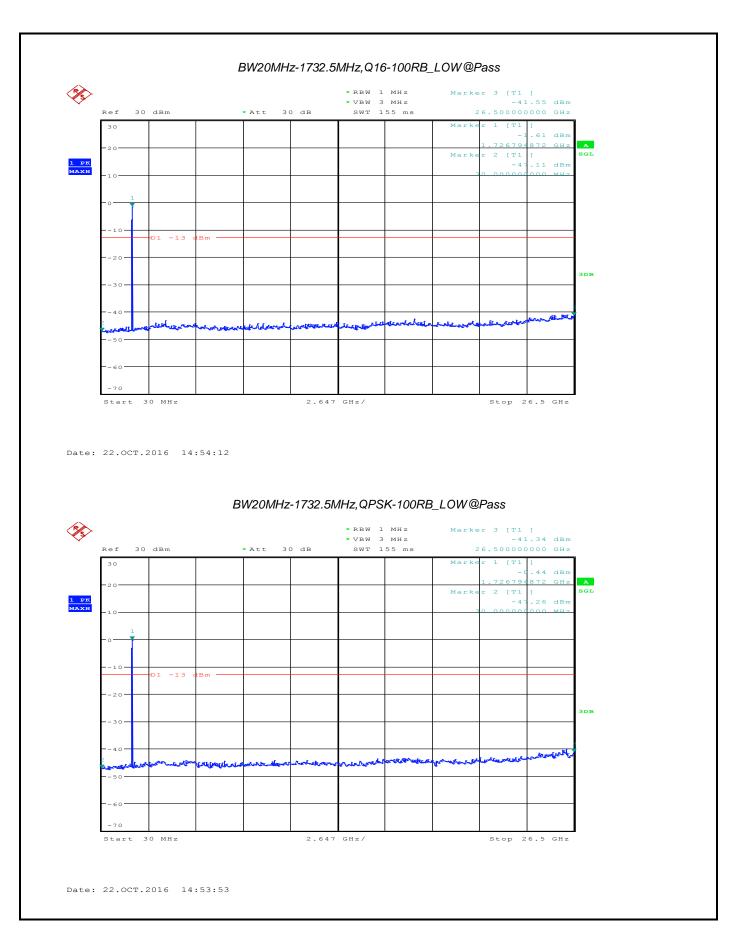


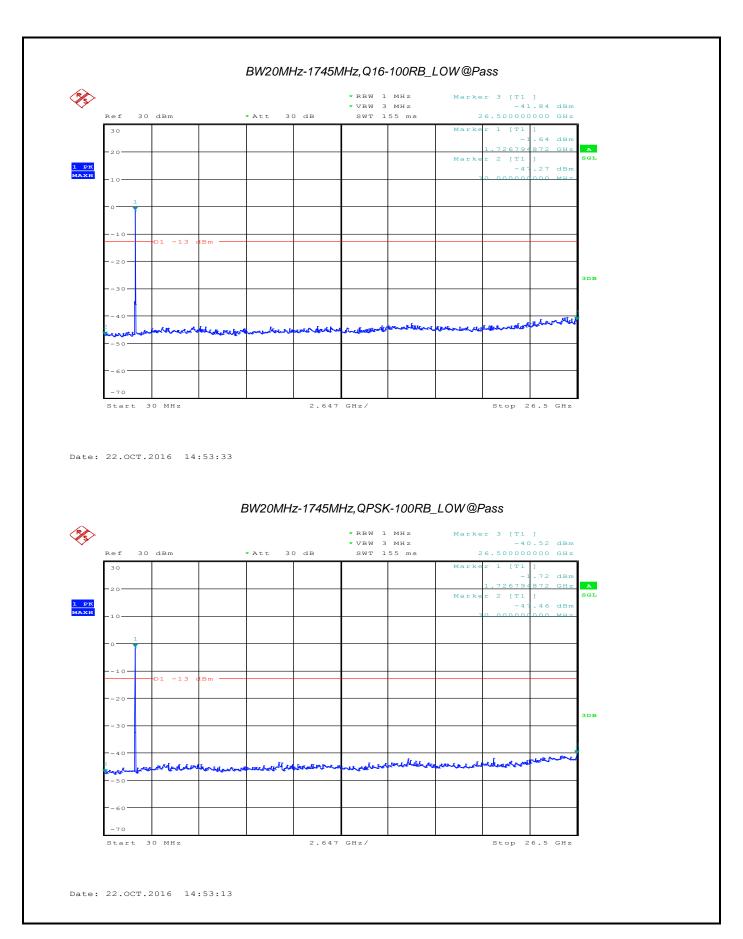


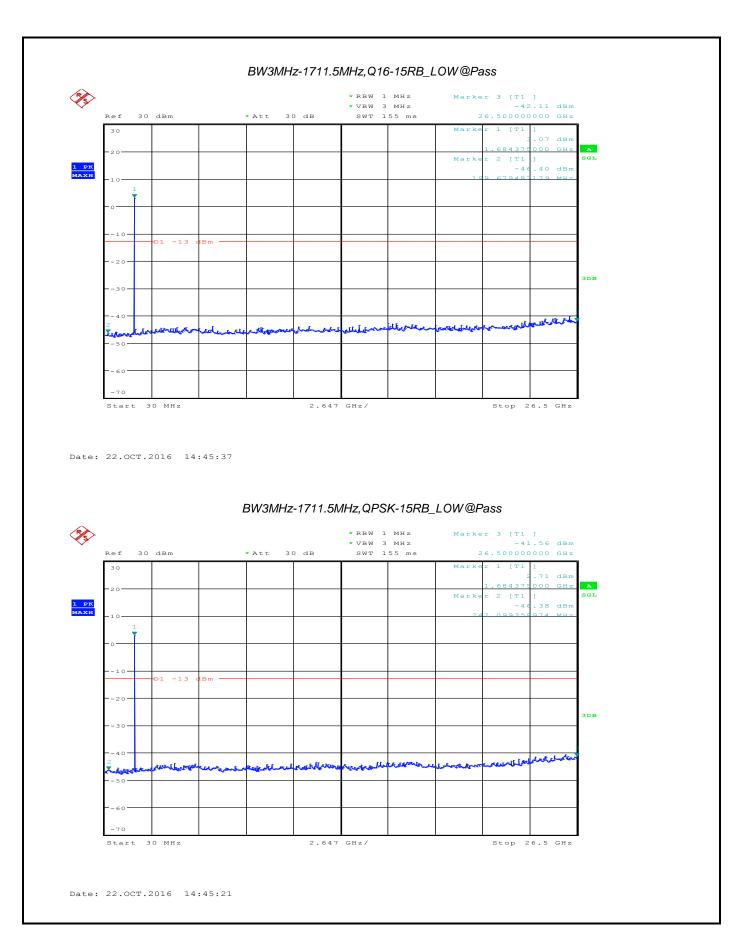


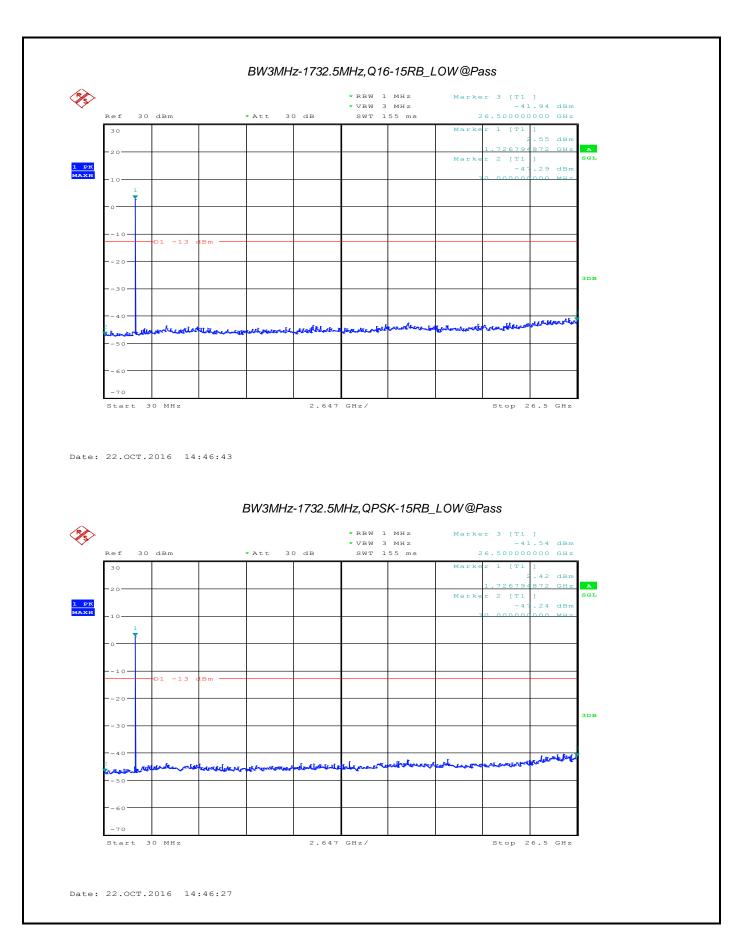


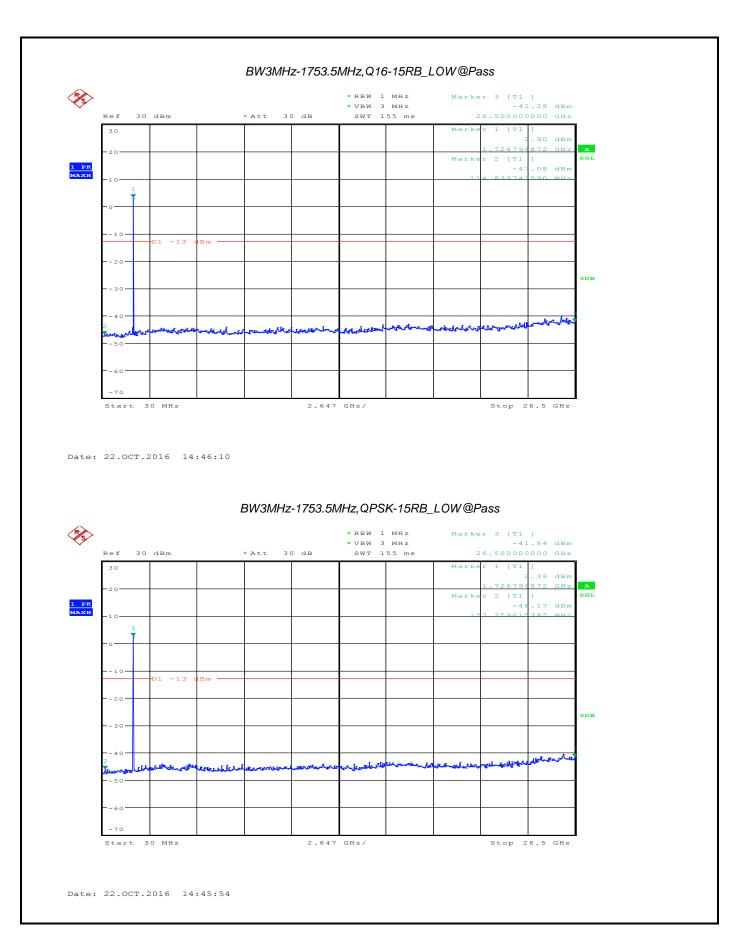


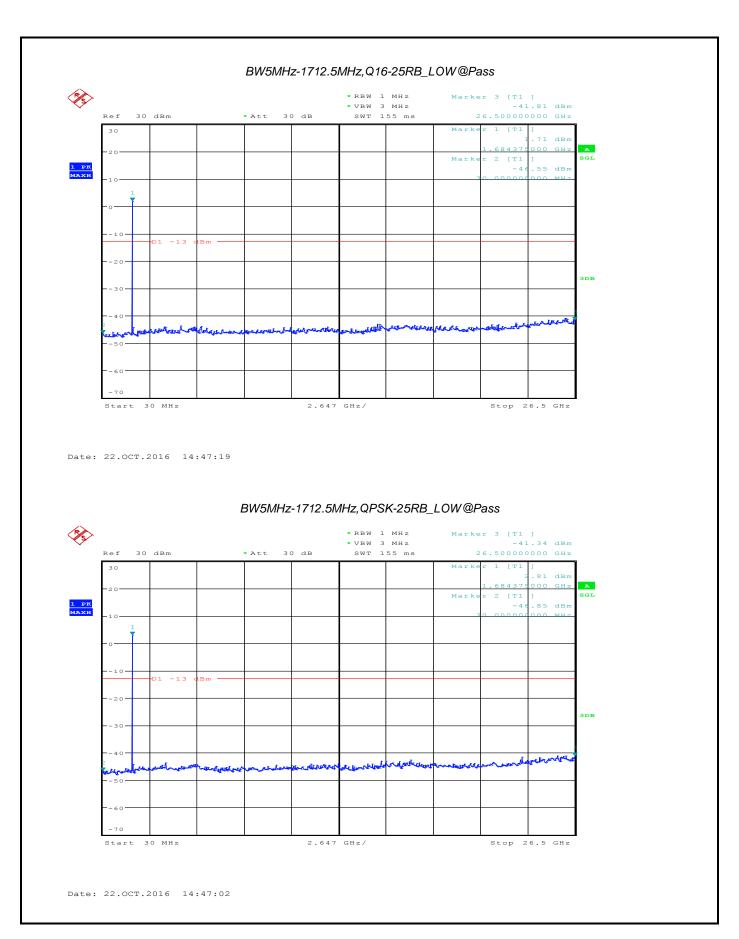


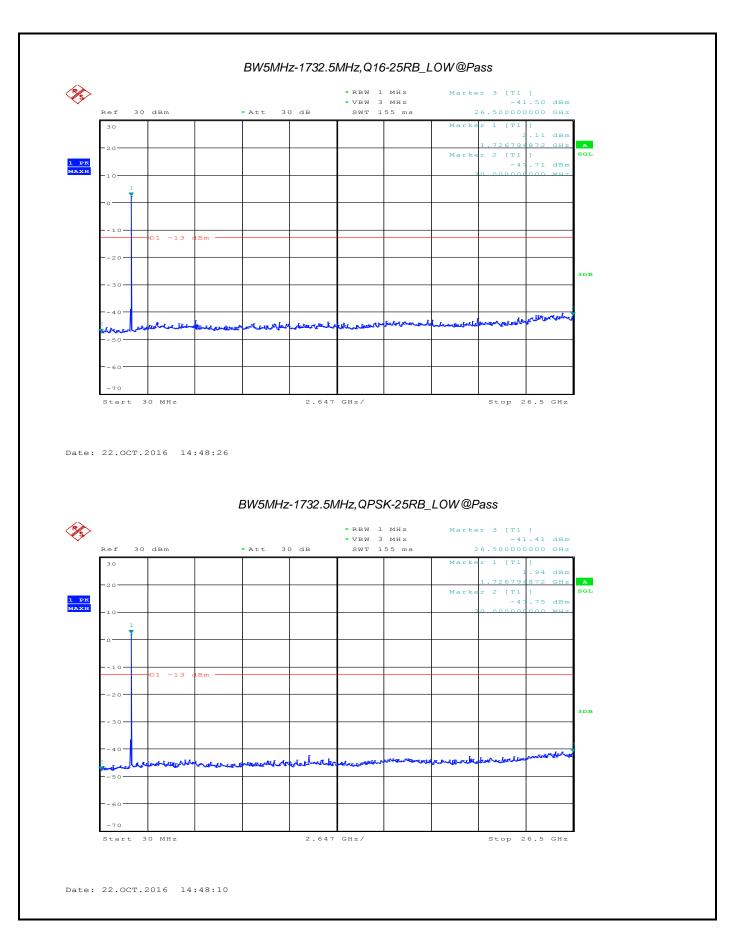


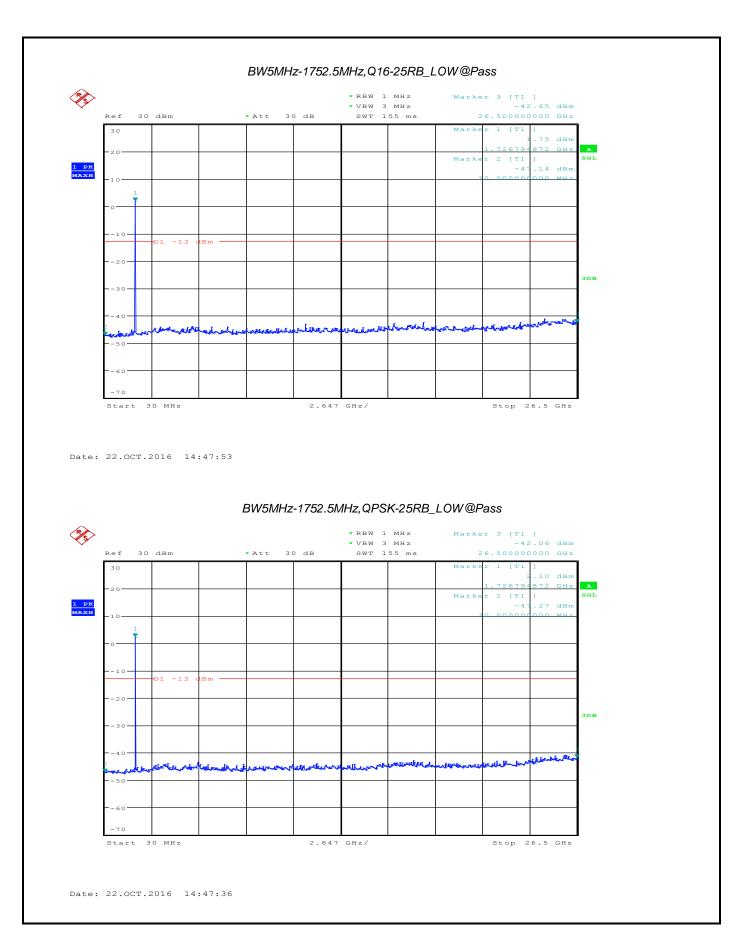


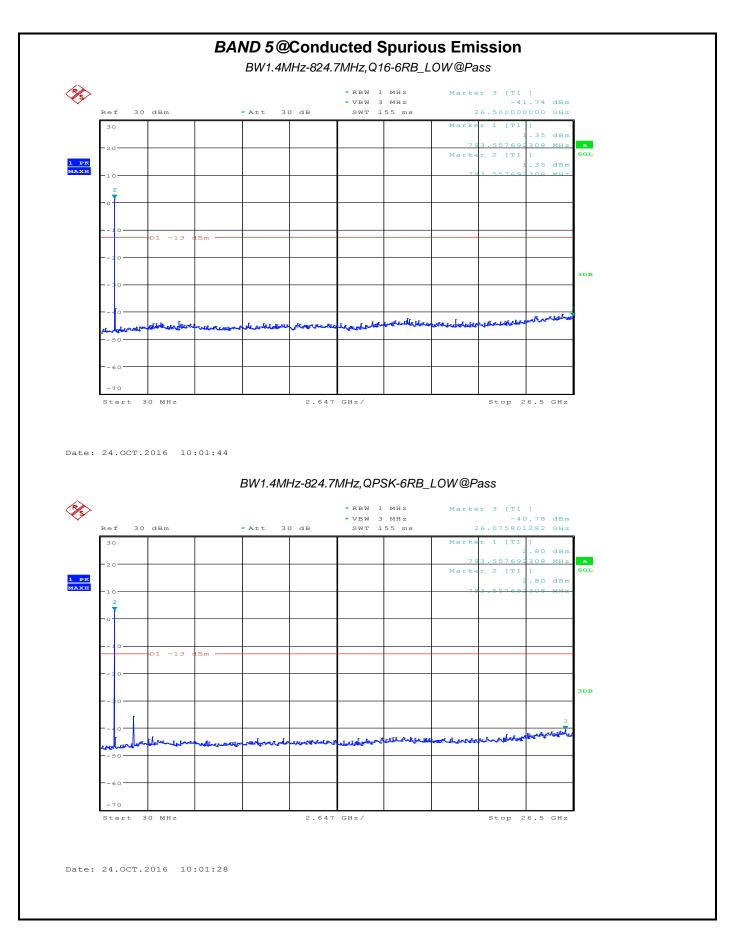


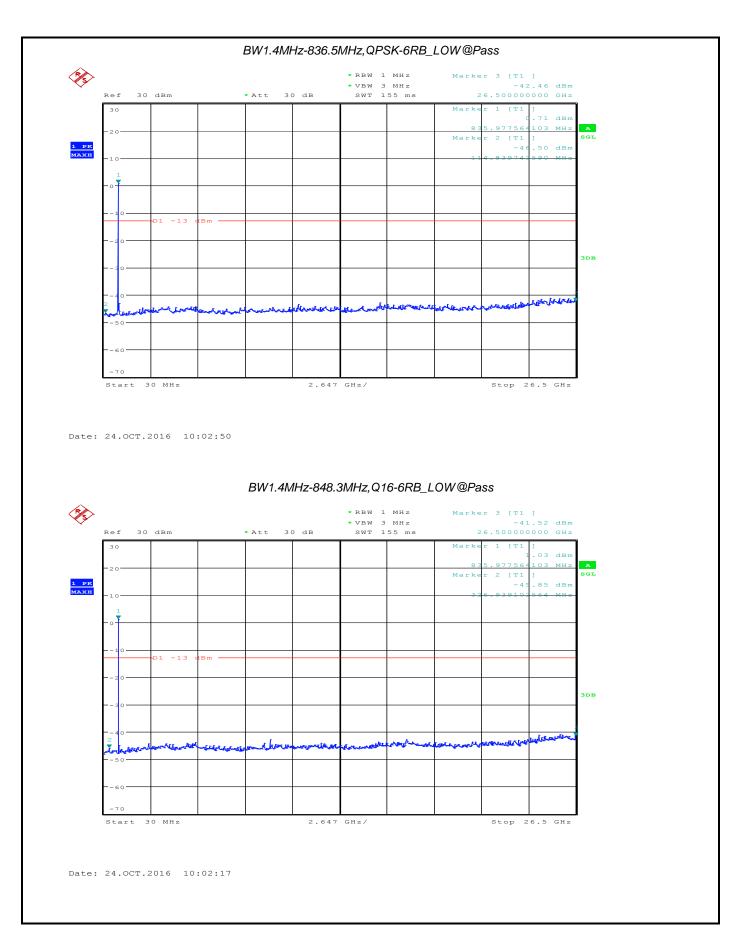


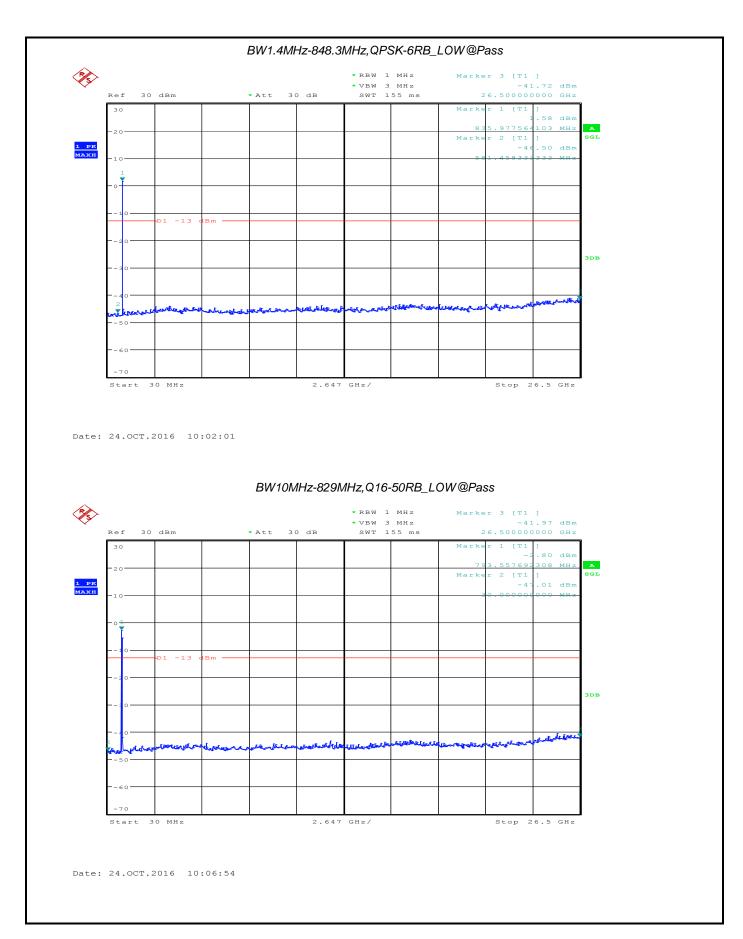


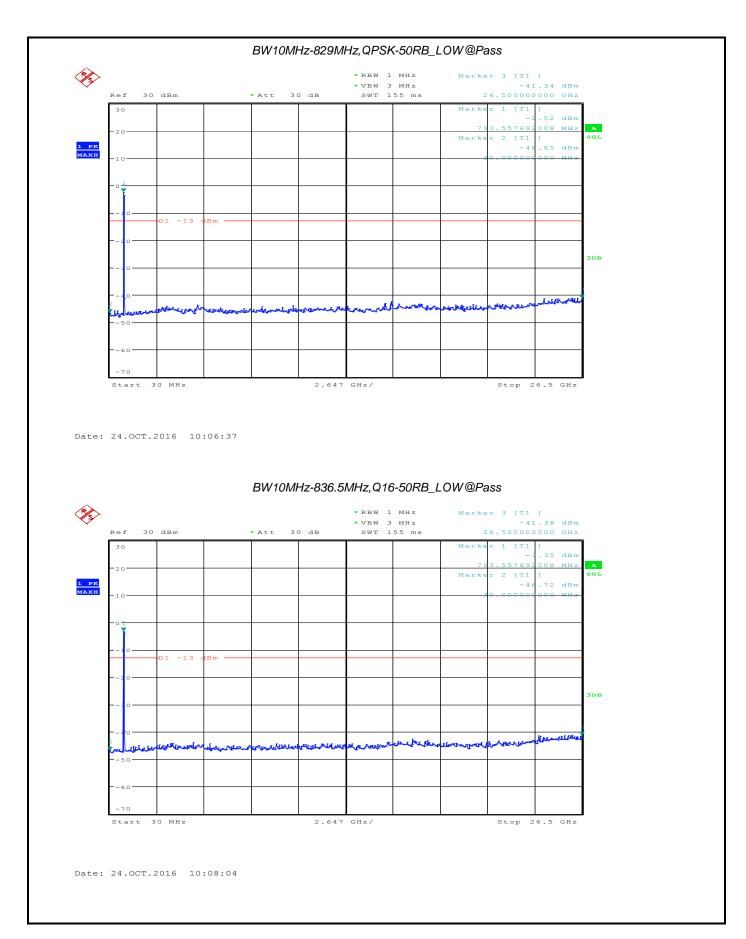


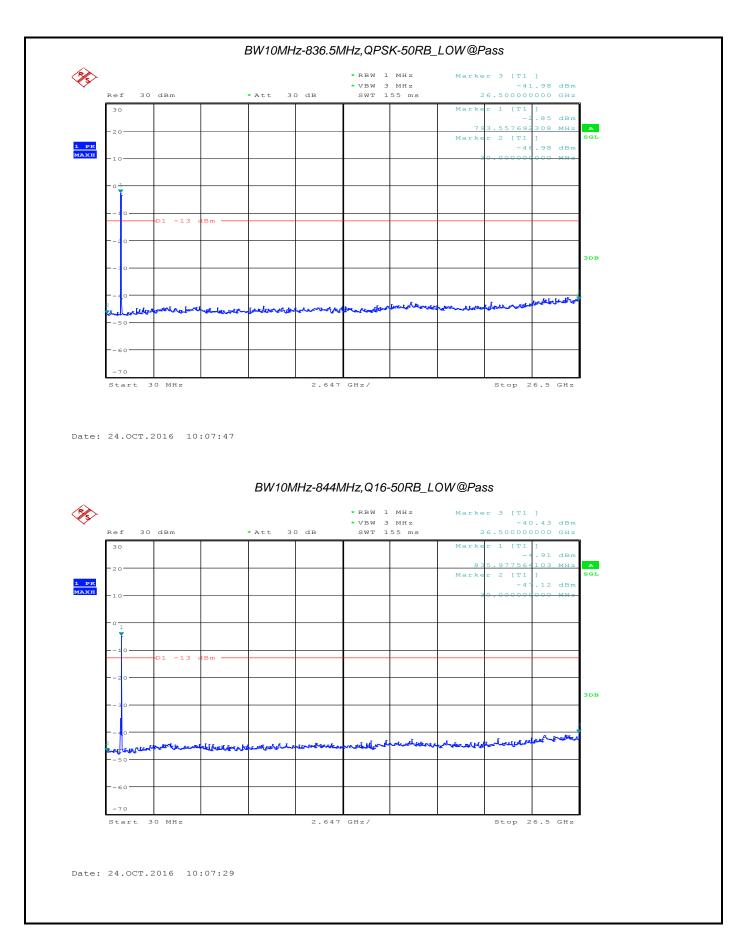


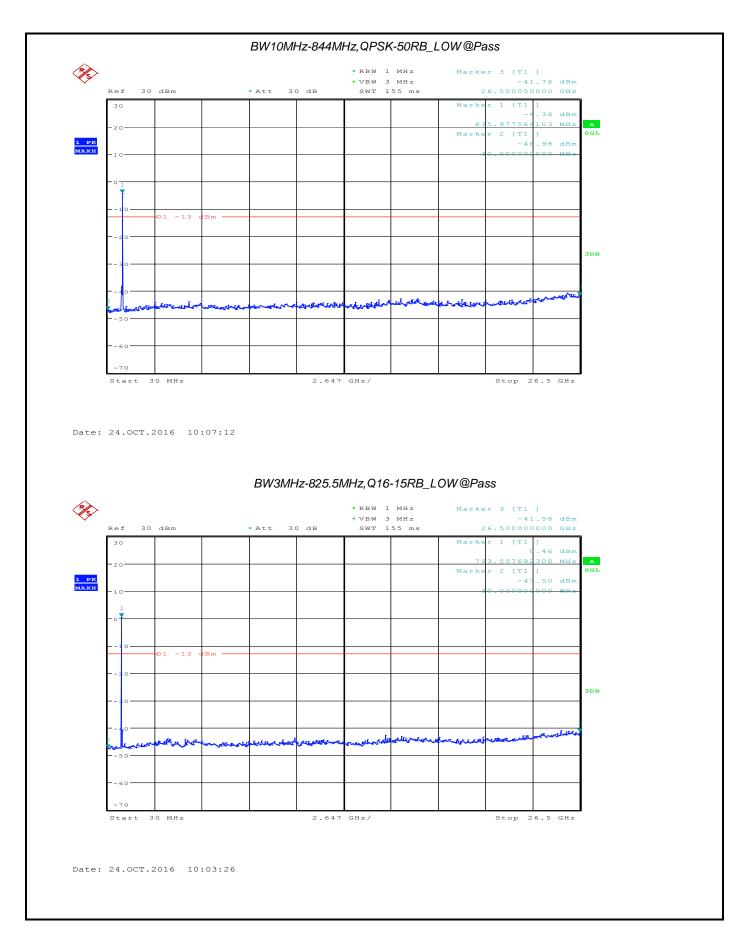


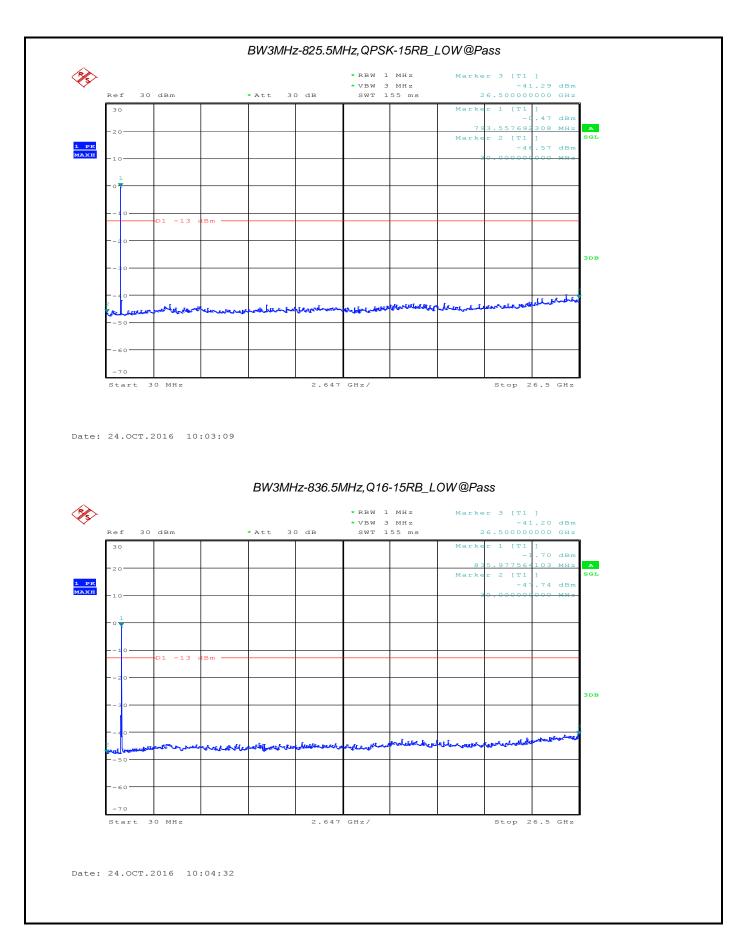


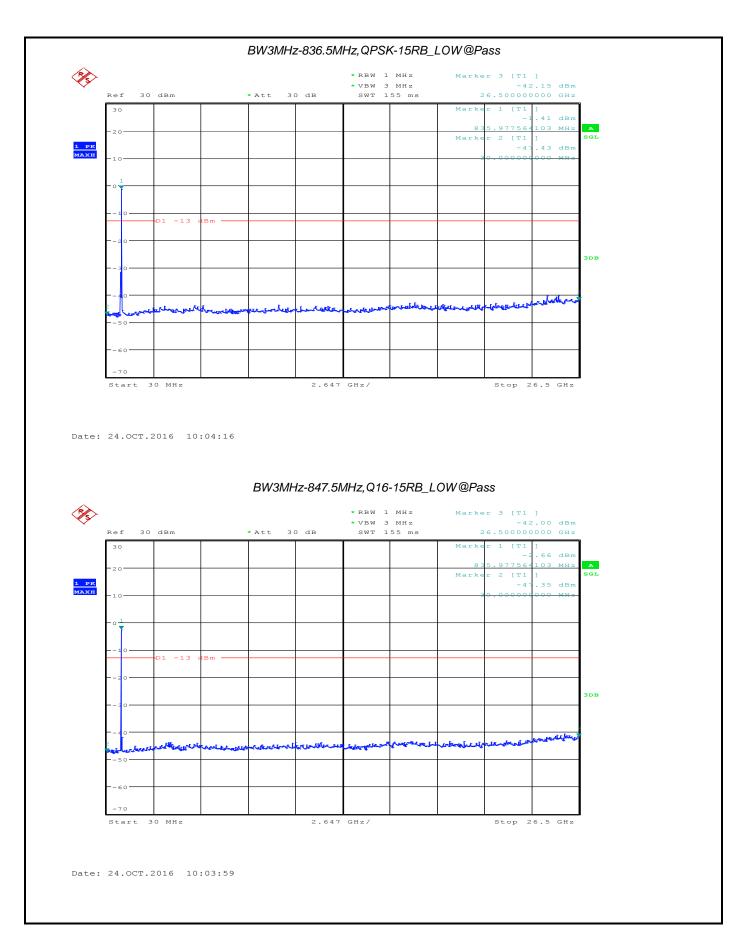


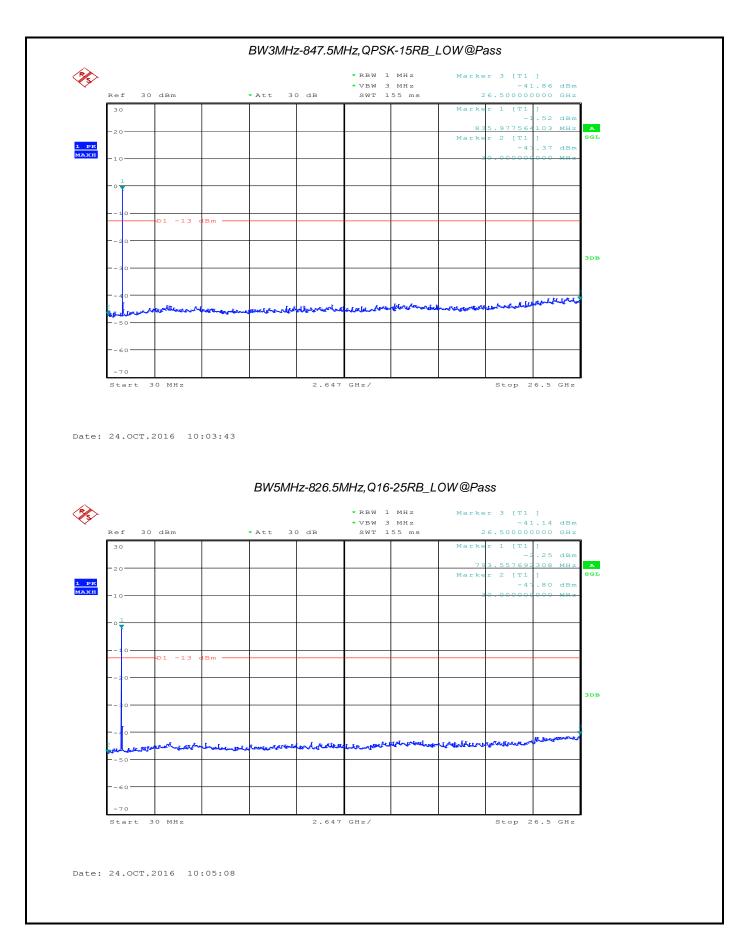


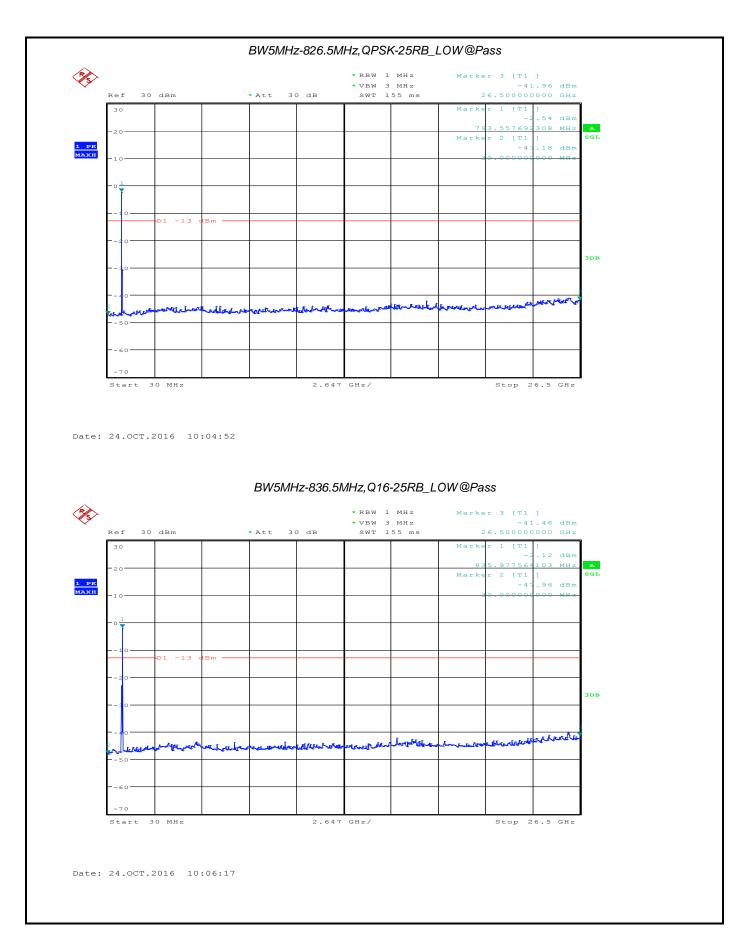


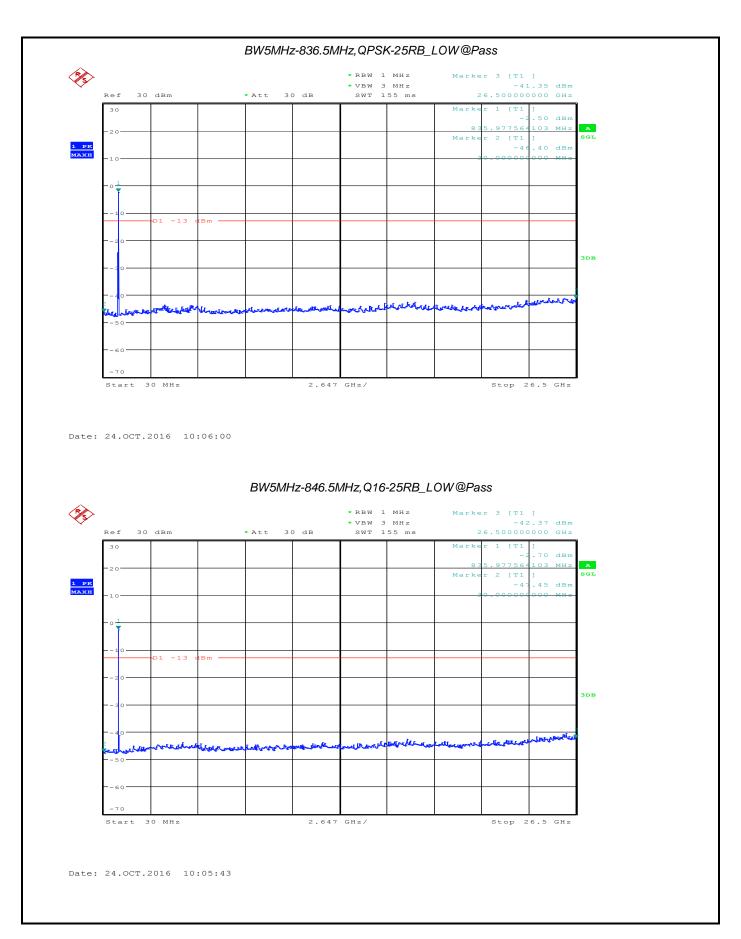


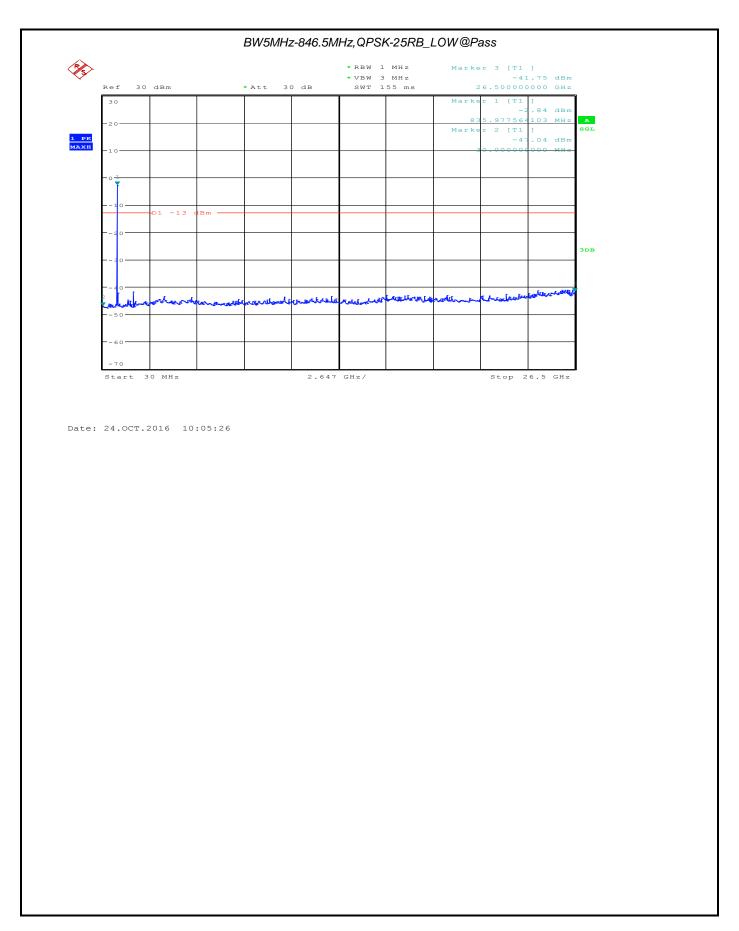








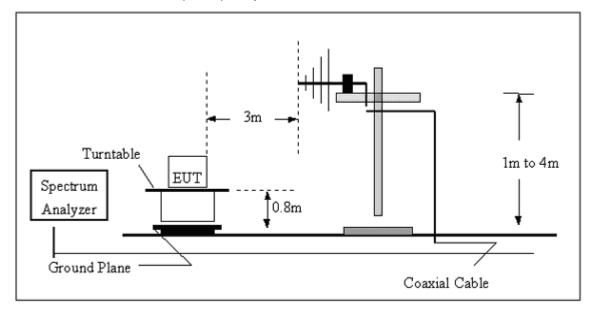




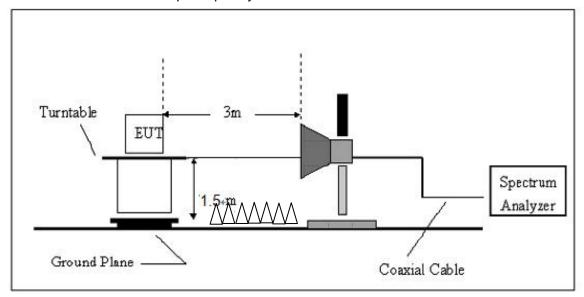
### 5.1.1 Radiated method

- (a) Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, contro I circuits, power leads, or intermediate circuit elements under normal conditions of installation and operation. Curves or equivalent data shall be supplied showing the magnitude of each harmonic and other spurious emission. For this test, single sideband, independent sideband, and controlled carrier transmitters shall be modulated under the conditions specified in paragraph (c) of §2.1049, as appropriate. For equipment operating on frequencies below 890 MHz, an open field test is normally required, with the measuring instrument antenna located in the far-field at all test frequencies. In the event it is either impractical or impossible to make open field measurements (e.g. a broadcast transmitter installed in a building) measurements will be accepted of the equipment as installed. Such measurements must be accompanied by a description of the site where the measurements were made showing the location of any possible source of reflections which might distort the field strength measurements. Information submitted shall include the relative radiated power of each spurious emission with reference to the rated power output of the transmitter, assuming all emissions are radiated from halfwave dipole antennas.
- (b) The measurements specified in paragraph (a) of this section shall be made for the following equipment:
- (1) Those in which the spurious emissions are required to be 60 dB or more below the mean power of the transmitte r.
- (2) All equipment operating on frequencies higher than 25 MHz.
- (3) All equipment where the antenna is an integral part of, and attached directly to the transmitter.
- (4) Other types of equipment as required, when deemed necessary by the Commission.

# (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	2 190		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** 

## 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

Test record:

### GSM850:

_									
	Mode 1								
	Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
	1648.4	-32.26	1.42	-33.68	-13	Horizontal			
	1648.4	-31.87	-2.48	-29.39	-13	Vertical			
	2472.6	-33.57	3.26	-36.83	-13	Horizontal			
	2472.6	-33.97	6.68	-40.65	-13	Vertical			

Mode 2							
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity		
1673.2	-36.72	1.42	-38.14	-13	Horizontal		
1673.2	-36.15	-2.48	-33.67	-13	Vertical		
2509.8	-31.94	3.26	-35.20	-13	Horizontal		
2509.8	-28.18	6.68	-34.86	-13	Vertical		

Mode 3

Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
1697.6	-32.31	1.42	-33.73	-13	Horizontal
1697.6	-36.99	-2.48	-34.51	-13	Vertical
2546.4	-33.13	3.26	-36.39	-13	Horizontal
2546.4	-32.12	6.68	-38.80	-13	Vertical

## PCS1900:

Mode 1							
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity		
3700.4	-32.88	-1.98	-30.90	-13	Horizontal		
3700.4	-36.03	-1.61	-34.42	-13	Vertical		
5550.6	-29.49	1.97	-31.46	-13	Horizontal		
5550.6	-33.70	-2.26	-31.44	-13	Vertical		

Mode 2								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3760	-35.58	-1.98	-33.60	-13	Horizontal			
3760	-34.37	-1.61	-32.76	-13	Vertical			
5640	-28.08	1.97	-30.05	-13	Horizontal			
5640	-33.65	-2.26	-31.39	-13	Vertical			

Mode 3								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3819.6	-35.58	-1.98	-33.60	-13	Horizontal			
3819.6	-34.37	-1.61	-32.76	-13	Vertical			
5729.4	-28.08	1.97	-30.05	-13	Horizontal			
5729.4	-33.65	-2.26	-31.39	-13	Vertical			

### **UTRA BANDS**

## BAND 2:

Mode 1								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3704.8	-62.24	10.32	-51.92	-13	Horizontal			
3704.8	-62.83	10.05	-52.77	-13	Vertical			
5557.2	-63.70	11.60	-52.09	-13	Horizontal			
5557.2	-65.29	12.50	-52.79	-13	Vertical			

Mode 2								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3760	-63.13	10.56	-52.56	-13	Horizontal			
3760	-62.71	10.91	-51.80	-13	Vertical			
5640	-63.76	11.98	-51.78	-13	Horizontal			
5640	-65.08	11.69	-53.39	-13	Vertical			

Mode 3							
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity		
3815.2	-62.48	10.47	-52.01	-13	Horizontal		
3815.2	-63.01	10.56	-52.44	-13	Vertical		
5722.8	-63.53	12.26	-51.27	-13	Horizontal		
5722.8	-64.91	11.60	-53.31	-13	Vertical		

## BAND 4:

Mode 1								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3424.8	-63.14	10.07	-53.07	-13	Horizontal			
3424.8	-63.10	10.52	-52.58	-13	Vertical			
5137.2	-64.06	11.93	-52.13	-13	Horizontal			
5137.2	-64.88	11.75	-53.13	-13	Vertical			

Mode 2								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3465.2	-62.81	10.42	-52.39	-13	Horizontal			
3465.2	-63.46	10.49	-52.97	-13	Vertical			
5197.8	-63.56	12.16	-51.40	-13	Horizontal			
5197.8	-65.13	12.26	-52.87	-13	Vertical			

Mode 3							
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity		
3505.2	-62.24	10.78	-51.46	-13	Horizontal		
3505.2	-63.22	10.13	-53.09	-13	Vertical		
5257.8	-64.16	12.20	-51.97	-13	Horizontal		
5257.8	-65.39	12.03	-53.36	-13	Vertical		

## BAND 5:

Mode 1								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
1652.8	-62.79	10.11	-52.69	-13	Horizontal			
1652.8	-62.74	10.22	-52.51	-13	Vertical			
2479.2	-63.82	12.12	-51.70	-13	Horizontal			
2479.2	-65.41	12.00	-53.41	-13	Vertical			

Mode 2								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
1672.8	-62.41	10.17	-52.23	-13	Horizontal			
1672.8	-62.96	10.41	-52.56	-13	Vertical			
2509.2	-64.00	11.88	-52.11	-13	Horizontal			
2509.2	-64.56	11.95	-52.61	-13	Vertical			

Mode 3								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
1693.2	-63.10	10.72	-52.38	-13	Horizontal			
1693.2	-62.98	10.91	-52.07	-13	Vertical			
2539.8	-63.83	12.16	-51.67	-13	Horizontal			
2539.8	-64.68	12.13	-52.54	-13	Vertical			

## **E-UTRA BANDS**

### BAND 2:

·								
Mode 1								
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity			
3720	-63.00	10.01	-53.00	-13	Horizontal			
3720	-62.55	10.63	-51.92	-13	Vertical			
5580	-64.36	12.01	-52.36	-13	Horizontal			
5580	-64.94	11.98	-52.95	-13	Vertical			

Mode 2					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
3760	-62.83	10.55	-52.29	-13	Horizontal
3760	-62.92	10.48	-52.44	-13	Vertical
5640	-64.16	12.04	-52.12	-13	Horizontal
5640	-64.89	11.82	-53.07	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
3800	-62.90	10.02	-52.88	-13	Horizontal
3800	-62.86	10.08	-52.78	-13	Vertical
5700	-63.95	11.74	-52.21	-13	Horizontal
5700	-65.21	12.34	-52.87	-13	Vertical

## BAND 4:

Mode 1					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
3440	-62.62	10.22	-52.40	-13	Horizontal
3440	-62.67	10.88	-51.79	-13	Vertical
5160	-64.00	12.08	-51.92	-13	Horizontal
5160	-64.61	12.27	-52.34	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
3490	-63.02	10.26	-52.75	-13	Horizontal
3490	-63.40	10.12	-53.28	-13	Vertical
5235	-63.61	11.66	-51.96	-13	Horizontal
5235	-65.17	11.57	-53.60	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
3465	-63.09	10.53	-52.56	-13	Horizontal
3465	-62.62	10.14	-52.47	-13	Vertical
5197.5	-64.21	11.98	-52.23	-13	Horizontal
5197.5	-65.18	12.39	-52.80	-13	Vertical

## BAND 5:

Mode 1					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
1679	-62.46	10.65	-51.81	-13	Horizontal
1679	-63.28	10.52	-52.76	-13	Vertical
2518.5	-64.04	11.55	-52.49	-13	Horizontal
2518.5	-65.17	12.36	-52.81	-13	Vertical

Mode 2					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
1680	-63.12	10.33	-52.79	-13	Horizontal
1680	-62.86	10.14	-52.72	-13	Vertical
2520	-63.72	12.44	-51.28	-13	Horizontal
2520	-64.64	12.22	-52.43	-13	Vertical

Mode 3					
Frequency(MHz)	Power(dBm)	A <sub>Rpl</sub> (dBm)	P <sub>Mea</sub> (dBm)	Limit (dBm)	Polarity
1683	-62.81	10.41	-52.39	-13	Horizontal
1683	-63.37	10.17	-53.21	-13	Vertical
2524.5	-64.35	12.04	-52.32	-13	Horizontal
2524.5	-65.10	11.50	-53.59	-13	Vertical

### **6 FREQUENCY STABILITY**

Frequency stability

- (a) The frequency stability shall be measured with variation of ambient temperature as follows:
- (1) From  $-30^{\circ}$  to  $+50^{\circ}$  centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section.
- (2) From -20° to + 50° centigrade for equipment to be licensed for use in the Maritime Services under part 80 of this chapter, except for Class A, B, and S Emergency Position Indicating Radiobeacons (EPIRBS), and equipment to be licensed for use above 952 MHz at operational fixed stations in all services, stations in the Local Television Transmission Service and Point-to-Point Microwave Radio Service under part 21 of this chapter, equipment licensed for use aboard aircraft in the Aviation Services under part 87 of this chapter, and equipment authorized for use in the Family Radio Service under part 95 of this chapter.
- (3) From 0° to + 50° centigrade for equipment to be licensed for use in the Radio Broadcast Services under part 73 of this chapter.
- (b) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. The short term transient effects on the frequency of the transmitter due to keying (except for broadcast transmitters) and any heating element cycling normally occurring at each ambient temperature level also shall be shown. Only the portion or portions of the transmitter containing the frequency determining and stabilizing circuitry need be subjected to the temperature variation test.
- (c) In addition to all other requirements of this section, the following information is required for equipment incorporating heater type crystal oscillators to be used in mobile stations, for which type acceptance is first requested after March 25, 1974, except for battery powered, hand carried, portable equipment having less than 3 watts mean output power.
- (1) Measurement data showing variation in transmitter output frequency from a cold start and the elapsed time necessary for the frequency to stabilize within the applicable tolerance. Tests shall be made after temperature stabilization at each of the ambient temperature levels; the lower temperature limit, 0° centigrade and + 30° centigrade with no primary power applied.
- (2) Beginning at each temperature level specified in paragraph (c)(1) of this section, the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level.

- (3) The elapsed time necessary for the frequency to stabilize within the applicable tolerance from each beginning ambient temperature level as determined from the tests specified in this paragraph shall be specified in the instruction book for the transmitter furnished to the user.
- (4) When it is impracticable to subject the complete transmitter to this test because of its physical dimensions or power rating, only its frequency determining and stabilizing portions need be tested.
- (d) The frequency stability shall be measured with variation of primary supply voltage as follows:
- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.
- (3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.
- (e) When deemed necessary, the Commission may require tests of frequency stability under conditions in addition to those specifically set out in paragraphs (a), (b), (c), and (d) of this section. (For example measurements showing the effect of proximity to large metal objects, or of various types of antennas, may be required for portable equipment.)

## **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	31	0.037
3.85	29	0.035
4.4	36	0.043

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

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	38	0.046
0	30	0.036
10	33	0.039
20	33	0.039
30	40	0.048
40	30	0.036
50	35	0.042

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

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	34	0.018
3.85	30	0.016
4.4	37	0.020

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

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	35	0.018
0	29	0.015
10	34	0.018
20	39	0.021
30	29	0.015
40	29	0.016
50	36	0.019

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

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	38	0.046
3.85	39	0.047
4.4	33	0.039

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

	<u> </u>	·
Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	31	0.037
0	40	0.048
10	32	0.039
20	38	0.046
30	38	0.045
40	31	0.037
50	33	0.039

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

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	35	0.019
3.85	32	0.017
4.4	35	0.018

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

rrequericy Error against reinperature for Critto 1300 band (mid chainle)		
Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	38	0.020
0	36	0.019
10	36	0.019
20	40	0.021
30	29	0.016
40	32	0.017
50	29	0.015

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

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	38	0.045
3.85	39	0.047
4.4	38	0.046

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

Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	29	0.035
0	29	0.034
10	38	0.046
20	28	0.034
30	36	0.043
40	39	0.047
50	37	0.045

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

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.45	30	0.016
3.85	38	0.020
4.4	30	0.016

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

	<u> </u>	,
Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	32	0.017
0	36	0.019
10	36	0.019
20	36	0.019
30	29	0.015
40	29	0.015
50	39	0.021

#### **UTRA BANDS**

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

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	32	0.017
3.85	33	0.018
4.4	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	29	0.016

10	40	0.022
20	29	0.016
30	30	0.016
40	34	0.018
50	34	0.018

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

Voltage(V)	Frequency error(Hz)	Frequency error (ppm)
3.45	37	0.022
3.85	36	0.021
4.4	29	0.017

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

troduction, many and a second contract of the								
Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)						
-10	38	0.022						
0	38	0.022						
10	39	0.023						
20	39	0.022						
30	38	0.022						
40	30	0.017						
50	40	0.023						

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

- 1 - 7				
Voltage(V)	Frequency error(Hz)	Frequency error(ppm)		
3.45	32	0.038		
3.85	39	0.047		
4.4	32	0.038		

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

<u> </u>	•	,
Temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-10	39	0.046
0	34	0.040
10	33	0.040
20	33	0.040
30	35	0.042
40	37	0.044
50	34	0.041

# E-UTRA BAND 2:

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
1.4	18607	1850.7	QPSK	1	LOW	-10.11	-0.0055
1.4	18607	1850.7	QPSK	1	MID	5.78	0.0031
1.4	18607	1850.7	QPSK	1	HIGH	5.29	0.0029
1.4	18607	1850.7	QPSK	3	LOW	2.9	0.0016
1.4	18607	1850.7	QPSK	3	MID	2.6	0.0014
1.4	18607	1850.7	QPSK	3	HIGH	4.18	0.0023
1.4	18607	1850.7	QPSK	6	LOW	-4.05	-0.0022
1.4	18607	1850.7	Q16	1	LOW	-4.59	-0.0025
1.4	18607	1850.7	Q16	1	MID	2.59	0.0014
1.4	18607	1850.7	Q16	1	HIGH	-4.85	-0.0026
1.4	18607	1850.7	Q16	3	LOW	-4.09	-0.0022
1.4	18607	1850.7	Q16	3	MID	-3.1	-0.0017
1.4	18607	1850.7	Q16	3	HIGH	3.36	0.0018
1.4	18607	1850.7	Q16	6	LOW	4.08	0.0022
1.4	18900	1880	QPSK	1	LOW	5.36	0.0029
1.4	18900	1880	QPSK	1	MID	-8.5	-0.0045
1.4	18900	1880	QPSK	1	HIGH	-9.83	-0.0052
1.4	18900	1880	QPSK	3	LOW	-3.05	-0.0016
1.4	18900	1880	QPSK	3	MID	5.31	0.0028
1.4	18900	1880	QPSK	3	HIGH	7.8	0.0041
1.4	18900	1880	QPSK	6	LOW	7.25	0.0039
1.4	18900	1880	Q16	1	LOW	2.83	0.0015
1.4	18900	1880	Q16	1	MID	3.12	0.0017
1.4	18900	1880	Q16	1	HIGH	-4.98	-0.0026
1.4	18900	1880	Q16	3	LOW	3.39	0.0018
1.4	18900	1880	Q16	3	MID	-3.33	-0.0018
1.4	18900	1880	Q16	3	HIGH	4.06	0.0022
1.4	18900	1880	Q16	6	LOW	4.46	0.0024
1.4	19193	1909.3	QPSK	1	LOW	7.42	0.0039
1.4	19193	1909.3	QPSK	1	MID	7.4	0.0039
1.4	19193	1909.3	QPSK	1	HIGH	5.69	0.003
1.4	19193	1909.3	QPSK	3	LOW	4.81	0.0025
1.4	19193	1909.3	QPSK	3	MID	-4.86	-0.0025
1.4	19193	1909.3	QPSK	3	HIGH	-5.59	-0.0029

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
1.4	19193	1909.3	QPSK	6	LOW	4.55	0.0024
1.4	19193	1909.3	Q16	1	LOW	-4.55	-0.0024
1.4	19193	1909.3	Q16	1	MID	-5.79	-0.003
1.4	19193	1909.3	Q16	1	HIGH	-5.85	-0.0031
1.4	19193	1909.3	Q16	3	LOW	-5.99	-0.0031
1.4	19193	1909.3	Q16	3	MID	4.22	0.0022
1.4	19193	1909.3	Q16	3	HIGH	-4.62	-0.0024
1.4	19193	1909.3	Q16	6	LOW	3.86	0.002
3	18615	1851.5	QPSK	1	LOW	13.75	0.0074
3	18615	1851.5	QPSK	1	MID	11.47	0.0062
3	18615	1851.5	QPSK	1	HIGH	10.49	0.0057
3	18615	1851.5	QPSK	8	LOW	5.18	0.0028
3	18615	1851.5	QPSK	8	MID	5.36	0.0029
3	18615	1851.5	QPSK	8	HIGH	5.78	0.0031
3	18615	1851.5	QPSK	15	LOW	-2.62	-0.0014
3	18615	1851.5	Q16	1	LOW	-5.01	-0.0027
3	18615	1851.5	Q16	1	MID	-5.46	-0.0029
3	18615	1851.5	Q16	1	HIGH	-6.19	-0.0033
3	18615	1851.5	Q16	8	LOW	-4.96	-0.0027
3	18615	1851.5	Q16	8	MID	-6.09	-0.0033
3	18615	1851.5	Q16	8	HIGH	-6.38	-0.0034
3	18615	1851.5	Q16	15	LOW	-2.73	-0.0015
3	18900	1880	QPSK	1	LOW	6.87	0.0037
3	18900	1880	QPSK	1	MID	-4.05	-0.0022
3	18900	1880	QPSK	1	HIGH	-7.12	-0.0038
3	18900	1880	QPSK	8	LOW	5.84	0.0031
3	18900	1880	QPSK	8	MID	7.4	0.0039
3	18900	1880	QPSK	8	HIGH	3.82	0.002
3	18900	1880	QPSK	15	LOW	5.94	0.0032
3	18900	1880	Q16	1	LOW	-6.45	-0.0034
3	18900	1880	Q16	1	MID	-3.5	-0.0019
3	18900	1880	Q16	1	HIGH	-3.68	-0.002
3	18900	1880	Q16	8	LOW	-4.25	-0.0023
3	18900	1880	Q16	8	MID	-6.68	-0.0036
3	18900	1880	Q16	8	HIGH	-6.35	-0.0034
3	18900	1880	Q16	15	LOW	3.45	0.0018

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
3	19185	1908.5	QPSK	1	LOW	-7.17	-0.0038
3	19185	1908.5	QPSK	1	MID	-6.11	-0.0032
3	19185	1908.5	QPSK	1	HIGH	4.02	0.0021
3	19185	1908.5	QPSK	8	LOW	-3.65	-0.0019
3	19185	1908.5	QPSK	8	MID	-5.68	-0.003
3	19185	1908.5	QPSK	8	HIGH	-6.15	-0.0032
3	19185	1908.5	QPSK	15	LOW	-5.95	-0.0031
3	19185	1908.5	Q16	1	LOW	-4.25	-0.0022
3	19185	1908.5	Q16	1	MID	-7.6	-0.004
3	19185	1908.5	Q16	1	HIGH	-6.07	-0.0032
3	19185	1908.5	Q16	8	LOW	-8.44	-0.0044
3	19185	1908.5	Q16	8	MID	-6.18	-0.0032
3	19185	1908.5	Q16	8	HIGH	-8.17	-0.0043
3	19185	1908.5	Q16	15	LOW	-7.1	-0.0037
5	18625	1852.5	QPSK	1	LOW	11.3	0.0061
5	18625	1852.5	QPSK	1	MID	7.28	0.0039
5	18625	1852.5	QPSK	1	HIGH	4.45	0.0024
5	18625	1852.5	QPSK	12	LOW	5.48	0.003
5	18625	1852.5	QPSK	12	MID	4.21	0.0023
5	18625	1852.5	QPSK	12	HIGH	3.42	0.0018
5	18625	1852.5	QPSK	25	LOW	3.99	0.0022
5	18625	1852.5	Q16	1	LOW	-4.53	-0.0024
5	18625	1852.5	Q16	1	MID	-4.11	-0.0022
5	18625	1852.5	Q16	1	HIGH	4.45	0.0024
5	18625	1852.5	Q16	12	LOW	3.65	0.002
5	18625	1852.5	Q16	12	MID	3.63	0.002
5	18625	1852.5	Q16	12	HIGH	-4.23	-0.0023
5	18625	1852.5	Q16	25	LOW	-4.02	-0.0022
5	18900	1880	QPSK	1	LOW	-4.71	-0.0025
5	18900	1880	QPSK	1	MID	-5.61	-0.003
5	18900	1880	QPSK	1	HIGH	-2.23	-0.0012
5	18900	1880	QPSK	12	LOW	2.52	0.0013
5	18900	1880	QPSK	12	MID	4.55	0.0024
5	18900	1880	QPSK	12	HIGH	4.63	0.0025
5	18900	1880	QPSK	25	LOW	3.38	0.0018
5	18900	1880	Q16	1	LOW	4.72	0.0025

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
5	18900	1880	Q16	1	MID	-4.28	-0.0023
5	18900	1880	Q16	1	HIGH	-7.75	-0.0041
5	18900	1880	Q16	12	LOW	4.68	0.0025
5	18900	1880	Q16	12	MID	-7.18	-0.0038
5	18900	1880	Q16	12	HIGH	5.65	0.003
5	18900	1880	Q16	25	LOW	-5.85	-0.0031
5	19175	1907.5	QPSK	1	LOW	-5.32	-0.0028
5	19175	1907.5	QPSK	1	MID	6.94	0.0036
5	19175	1907.5	QPSK	1	HIGH	4.35	0.0023
5	19175	1907.5	QPSK	12	LOW	4.86	0.0025
5	19175	1907.5	QPSK	12	MID	7.75	0.0041
5	19175	1907.5	QPSK	12	HIGH	-3.68	-0.0019
5	19175	1907.5	QPSK	25	LOW	5.15	0.0027
5	19175	1907.5	Q16	1	LOW	-3.12	-0.0016
5	19175	1907.5	Q16	1	MID	3.55	0.0019
5	19175	1907.5	Q16	1	HIGH	4.75	0.0025
5	19175	1907.5	Q16	12	LOW	6.18	0.0032
5	19175	1907.5	Q16	12	MID	-4.23	-0.0022
5	19175	1907.5	Q16	12	HIGH	7.05	0.0037
5	19175	1907.5	Q16	25	LOW	6.04	0.0032
10	18650	1855	QPSK	1	LOW	4.31	0.0023
10	18650	1855	QPSK	1	MID	2.36	0.0013
10	18650	1855	QPSK	1	HIGH	-5.02	-0.0027
10	18650	1855	QPSK	25	LOW	-4.59	-0.0025
10	18650	1855	QPSK	25	MID	-7.65	-0.0041
10	18650	1855	QPSK	25	HIGH	3.36	0.0018
10	18650	1855	QPSK	50	LOW	-4.79	-0.0026
10	18650	1855	Q16	1	LOW	-8.58	-0.0046
10	18650	1855	Q16	1	MID	-10.5	-0.0057
10	18650	1855	Q16	1	HIGH	-8.78	-0.0047
10	18650	1855	Q16	25	LOW	-5.45	-0.0029
10	18650	1855	Q16	25	MID	-5.92	-0.0032
10	18650	1855	Q16	25	HIGH	-5.58	-0.003
10	18650	1855	Q16	50	LOW	-7.31	-0.0039
10	18900	1880	QPSK	1	LOW	-5.75	-0.0031
10	18900	1880	QPSK	1	MID	-2.92	-0.0016

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
10	18900	1880	QPSK	1	HIGH	7.15	0.0038
10	18900	1880	QPSK	25	LOW	2.56	0.0014
10	18900	1880	QPSK	25	MID	-3.18	-0.0017
10	18900	1880	QPSK	25	HIGH	-5.64	-0.003
10	18900	1880	QPSK	50	LOW	-3.86	-0.0021
10	18900	1880	Q16	1	LOW	-5.87	-0.0031
10	18900	1880	Q16	1	MID	-4.02	-0.0021
10	18900	1880	Q16	1	HIGH	-3.03	-0.0016
10	18900	1880	Q16	25	LOW	-6.77	-0.0036
10	18900	1880	Q16	25	MID	-6.74	-0.0036
10	18900	1880	Q16	25	HIGH	-6.12	-0.0033
10	18900	1880	Q16	50	LOW	-4.56	-0.0024
10	19150	1905	QPSK	1	LOW	-6.05	-0.0032
10	19150	1905	QPSK	1	MID	-3.28	-0.0017
10	19150	1905	QPSK	1	HIGH	-4.18	-0.0022
10	19150	1905	QPSK	25	LOW	-5.55	-0.0029
10	19150	1905	QPSK	25	MID	-3.6	-0.0019
10	19150	1905	QPSK	25	HIGH	-7.7	-0.004
10	19150	1905	QPSK	50	LOW	-4.92	-0.0026
10	19150	1905	Q16	1	LOW	-5.95	-0.0031
10	19150	1905	Q16	1	MID	-6.24	-0.0033
10	19150	1905	Q16	1	HIGH	-7.55	-0.004
10	19150	1905	Q16	25	LOW	-4.41	-0.0023
10	19150	1905	Q16	25	MID	-4.02	-0.0021
10	19150	1905	Q16	25	HIGH	-5.16	-0.0027
10	19150	1905	Q16	50	LOW	-4.42	-0.0023
15	18675	1857.5	QPSK	1	LOW	8.05	0.0043
15	18675	1857.5	QPSK	1	MID	6.75	0.0036
15	18675	1857.5	QPSK	1	HIGH	5.81	0.0031
15	18675	1857.5	QPSK	36	LOW	3.59	0.0019
15	18675	1857.5	QPSK	36	MID	-2.92	-0.0016
15	18675	1857.5	QPSK	36	HIGH	5.71	0.0031
15	18675	1857.5	QPSK	75	LOW	-4.51	-0.0024
15	18675	1857.5	Q16	1	LOW	5.87	0.0032
15	18675	1857.5	Q16	1	MID	-4.76	-0.0026
15	18675	1857.5	Q16	1	HIGH	5.09	0.0027

							Frequency
Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
15	18675	1857.5	Q16	36	LOW	3.33	0.0018
15	18675	1857.5	Q16	36	MID	4.59	0.0025
15	18675	1857.5	Q16	36	HIGH	4.51	0.0024
15	18675	1857.5	Q16	75	LOW	4.91	0.0026
15	18900	1880	QPSK	1	LOW	-3.96	-0.0021
15	18900	1880	QPSK	1	MID	3	0.0016
15	18900	1880	QPSK	1	HIGH	-3.42	-0.0018
15	18900	1880	QPSK	36	LOW	-4.11	-0.0022
15	18900	1880	QPSK	36	MID	-5.29	-0.0028
15	18900	1880	QPSK	36	HIGH	-3.85	-0.002
15	18900	1880	QPSK	75	LOW	-3.4	-0.0018
15	18900	1880	Q16	1	LOW	-7.07	-0.0038
15	18900	1880	Q16	1	MID	-5.65	-0.003
15	18900	1880	Q16	1	HIGH	-5.26	-0.0028
15	18900	1880	Q16	36	LOW	-5.04	-0.0027
15	18900	1880	Q16	36	MID	-5.09	-0.0027
15	18900	1880	Q16	36	HIGH	-5.55	-0.003
15	18900	1880	Q16	75	LOW	-5.08	-0.0027
15	19125	1902.5	QPSK	1	LOW	7.55	0.004
15	19125	1902.5	QPSK	1	MID	13.95	0.0073
15	19125	1902.5	QPSK	1	HIGH	12.06	0.0063
15	19125	1902.5	QPSK	36	LOW	14.71	0.0077
15	19125	1902.5	QPSK	36	MID	4.82	0.0025
15	19125	1902.5	QPSK	36	HIGH	3.49	0.0018
15	19125	1902.5	QPSK	75	LOW	4.96	0.0026
15	19125	1902.5	Q16	1	LOW	4.81	0.0025
15	19125	1902.5	Q16	1	MID	3.73	0.002
15	19125	1902.5	Q16	1	HIGH	4.89	0.0026
15	19125	1902.5	Q16	36	LOW	4.51	0.0024
15	19125	1902.5	Q16	36	MID	5.42	0.0028
15	19125	1902.5	Q16	36	HIGH	-5.31	-0.0028
15	19125	1902.5	Q16	75	LOW	4.28	0.0022
20	18700	1860	QPSK	1	LOW	7.98	0.0043
20	18700	1860	QPSK	1	MID	5.91	0.0032
20	18700	1860	QPSK	1	HIGH	7.72	0.0042
20	18700	1860	QPSK	50	LOW	4.78	0.0026

							Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
20	18700	1860	QPSK	50	MID	3.78	0.002
20	18700	1860	QPSK	50	HIGH	4.05	0.0022
20	18700	1860	QPSK	100	LOW	-5.19	-0.0028
20	18700	1860	Q16	1	LOW	3.71	0.002
20	18700	1860	Q16	1	MID	-4.15	-0.0022
20	18700	1860	Q16	1	HIGH	6.92	0.0037
20	18700	1860	Q16	50	LOW	4.23	0.0023
20	18700	1860	Q16	50	MID	-2.46	-0.0013
20	18700	1860	Q16	50	HIGH	-5.26	-0.0028
20	18700	1860	Q16	100	LOW	-3.98	-0.0021
20	18900	1880	QPSK	1	LOW	-5.35	-0.0028
20	18900	1880	QPSK	1	MID	-3.96	-0.0021
20	18900	1880	QPSK	1	HIGH	3.72	0.002
20	18900	1880	QPSK	50	LOW	3.82	0.002
20	18900	1880	QPSK	50	MID	6.92	0.0037
20	18900	1880	QPSK	50	HIGH	-5.34	-0.0028
20	18900	1880	QPSK	100	LOW	-4.85	-0.0026
20	18900	1880	Q16	1	LOW	-4.68	-0.0025
20	18900	1880	Q16	1	MID	5.42	0.0029
20	18900	1880	Q16	1	HIGH	6.05	0.0032
20	18900	1880	Q16	50	LOW	-3.36	-0.0018
20	18900	1880	Q16	50	MID	-4.18	-0.0022
20	18900	1880	Q16	50	HIGH	-3.75	-0.002
20	18900	1880	Q16	100	LOW	4.28	0.0023
20	19100	1900	QPSK	1	LOW	7.47	0.0039
20	19100	1900	QPSK	1	MID	5.05	0.0027
20	19100	1900	QPSK	1	HIGH	3.68	0.0019
20	19100	1900	QPSK	50	LOW	10.73	0.0056
20	19100	1900	QPSK	50	MID	2.95	0.0016
20	19100	1900	QPSK	50	HIGH	4.05	0.0021
20	19100	1900	QPSK	100	LOW	-5.29	-0.0028
20	19100	1900	Q16	1	LOW	-8.48	-0.0045
20	19100	1900	Q16	1	MID	-7.2	-0.0038
20	19100	1900	Q16	1	HIGH	-8.47	-0.0045
20	19100	1900	Q16	50	LOW	-4.84	-0.0025
20	19100	1900	Q16	50	MID	-4.09	-0.0022

el Frequency	Modulation	RB			Frequency
CI		KD	RB	Frequency Error	Error
		Size	Offset	(Hz)	(ppm)
1900	Q16	50	HIGH	-5.28	-0.0028
1900	Q16	100	LOW	-6.71	-0.0035
-					

BAND 4:

4: 						Frequency	Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
1.4	19957	1710.7	QPSK	1	LOW	-9.91	-0.0058
1.4	19957	1710.7	QPSK	1	MID	5.35	0.0031
1.4	19957	1710.7	QPSK	1	HIGH	2.63	0.0015
1.4	19957	1710.7	QPSK	3	LOW	3.2	0.0019
1.4	19957	1710.7	QPSK	3	MID	-3.06	-0.0018
1.4	19957	1710.7	QPSK	3	HIGH	5.61	0.0033
1.4	19957	1710.7	QPSK	6	LOW	6.44	0.0038
1.4	19957	1710.7	Q16	1	LOW	6.04	0.0035
1.4	19957	1710.7	Q16	1	MID	4.63	0.0027
1.4	19957	1710.7	Q16	1	HIGH	8.41	0.0049
1.4	19957	1710.7	Q16	3	LOW	-5.72	-0.0033
1.4	19957	1710.7	Q16	3	MID	6.74	0.0039
1.4	19957	1710.7	Q16	3	HIGH	4.49	0.0026
1.4	19957	1710.7	Q16	6	LOW	7.47	0.0044
1.4	20393	1754.3	QPSK	1	LOW	3.69	0.0021
1.4	20393	1754.3	QPSK	1	MID	4.15	0.0024
1.4	20393	1754.3	QPSK	1	HIGH	-3.68	-0.0021
1.4	20393	1754.3	QPSK	3	LOW	-2.93	-0.0017
1.4	20393	1754.3	QPSK	3	MID	-4.46	-0.0025
1.4	20393	1754.3	QPSK	3	HIGH	-3.99	-0.0023
1.4	20393	1754.3	QPSK	6	LOW	3.91	0.0022
1.4	20393	1754.3	Q16	1	LOW	-4.55	-0.0026
1.4	20393	1754.3	Q16	1	MID	-6.24	-0.0036
1.4	20393	1754.3	Q16	1	HIGH	-5.02	-0.0029
1.4	20393	1754.3	Q16	3	LOW	-5.06	-0.0029
1.4	20393	1754.3	Q16	3	MID	-2.62	-0.0015
1.4	20393	1754.3	Q16	3	HIGH	3.26	0.0019
1.4	20393	1754.3	Q16	6	LOW	5.06	0.0029
1.4	20175	1732.5	QPSK	1	LOW	3.78	0.0022
1.4	20175	1732.5	QPSK	1	MID	-6.09	-0.0035
1.4	20175	1732.5	QPSK	1	HIGH	3.6	0.0021
1.4	20175	1732.5	QPSK	3	LOW	5.79	0.0033
1.4	20175	1732.5	QPSK	3	MID	8.5	0.0049
1.4	20175	1732.5	QPSK	3	HIGH	5.52	0.0032

Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Frequency Error
Danawidin	Channel	rrequericy	Modulation	Size	Offset	(Hz)	(ppm)
1.4	20175	1732.5	QPSK	6	LOW	2.85	0.0016
1.4	20175	1732.5	Q16	1	LOW	-4.38	-0.0025
1.4			Q16 Q16	1			
	20175	1732.5			MID	-3.2	-0.0018
1.4	20175	1732.5	Q16	1	HIGH	-3.71	-0.0021
1.4	20175	1732.5	Q16	3	LOW	-3.23	-0.0019
1.4	20175	1732.5	Q16		MID	-2.19	-0.0013
1.4	20175	1732.5	Q16	3	HIGH	4.22	0.0024
1.4	20175	1732.5	Q16	6	LOW	-2.68	-0.0015
3	19965	1711.5	QPSK	1	LOW	-11.4	-0.0067
3	19965	1711.5	QPSK	1	MID	6.55	0.0038
3	19965	1711.5	QPSK	1	HIGH	4.88	0.0029
3	19965	1711.5	QPSK	8	LOW	-5.94	-0.0035
3	19965	1711.5	QPSK	8	MID	-5.42	-0.0032
3	19965	1711.5	QPSK	8	HIGH	2.13	0.0012
3	19965	1711.5	QPSK	15	LOW	4.75	0.0028
3	19965	1711.5	Q16	1	LOW	-2.26	-0.0013
3	19965	1711.5	Q16	1	MID	2.93	0.0017
3	19965	1711.5	Q16	1	HIGH	-5.11	-0.003
3	19965	1711.5	Q16	8	LOW	-5.71	-0.0033
3	19965	1711.5	Q16	8	MID	-4.85	-0.0028
3	19965	1711.5	Q16	8	HIGH	-4.45	-0.0026
3	19965	1711.5	Q16	15	LOW	-3.83	-0.0022
3	20385	1753.5	QPSK	1	LOW	4.63	0.0026
3	20385	1753.5	QPSK	1	MID	-3.03	-0.0017
3	20385	1753.5	QPSK	1	HIGH	-3.38	-0.0019
3	20385	1753.5	QPSK	8	LOW	4.18	0.0024
3	20385	1753.5	QPSK	8	MID	-3.16	-0.0018
3	20385	1753.5	QPSK	8	HIGH	-4.01	-0.0023
3	20385	1753.5	QPSK	15	LOW	3.45	0.002
3	20385	1753.5	Q16	1	LOW	-6.12	-0.0035
3	20385	1753.5	Q16	1	MID	-5.51	-0.0031
3	20385	1753.5	Q16	1	HIGH	-8.17	-0.0047
3	20385	1753.5	Q16	8	LOW	-7.35	-0.0042
3	20385	1753.5	Q16	8	MID	-5.06	-0.0029
3	20385	1753.5	Q16	8	HIGH	-5.35	-0.0031
3	20385	1753.5	Q16	15	LOW	-5.12	-0.0029

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Onamie			Size	Offset	(Hz)	(ppm)
3	20175	1732.5	QPSK	1	LOW	-4.69	-0.0027
3	20175	1732.5	QPSK	1	MID	-7.07	-0.0041
3	20175	1732.5	QPSK	1	HIGH	-4.39	-0.0025
3	20175	1732.5	QPSK	8	LOW	4.73	0.0027
3	20175	1732.5	QPSK	8	MID	5.98	0.0035
3	20175	1732.5	QPSK	8	HIGH	7.7	0.0044
3	20175	1732.5	QPSK	15	LOW	6.9	0.004
3	20175	1732.5	Q16	1	LOW	-4.56	-0.0026
3	20175	1732.5	Q16	1	MID	-5.05	-0.0029
3	20175	1732.5	Q16	1	HIGH	3.59	0.0021
3	20175	1732.5	Q16	8	LOW	-3.6	-0.0021
3	20175	1732.5	Q16	8	MID	-6.09	-0.0035
3	20175	1732.5	Q16	8	HIGH	-4.91	-0.0028
3	20175	1732.5	Q16	15	LOW	-5.92	-0.0034
5	19975	1712.5	QPSK	1	LOW	-5.52	-0.0032
5	19975	1712.5	QPSK	1	MID	8.04	0.0047
5	19975	1712.5	QPSK	1	HIGH	5.91	0.0035
5	19975	1712.5	QPSK	12	LOW	8.54	0.005
5	19975	1712.5	QPSK	12	MID	5.85	0.0034
5	19975	1712.5	QPSK	12	HIGH	4.63	0.0027
5	19975	1712.5	QPSK	25	LOW	5.42	0.0032
5	19975	1712.5	Q16	1	LOW	6.52	0.0038
5	19975	1712.5	Q16	1	MID	5.66	0.0033
5	19975	1712.5	Q16	1	HIGH	6.42	0.0037
5	19975	1712.5	Q16	12	LOW	8.28	0.0048
5	19975	1712.5	Q16	12	MID	7.61	0.0044
5	19975	1712.5	Q16	12	HIGH	4.48	0.0026
5	19975	1712.5	Q16	25	LOW	4.53	0.0026
5	20375	1752.5	QPSK	1	LOW	-3.99	-0.0023
5	20375	1752.5	QPSK	1	MID	-3.02	-0.0017
5	20375	1752.5	QPSK	1	HIGH	4.15	0.0024
5	20375	1752.5	QPSK	12	LOW	4.58	0.0026
5	20375	1752.5	QPSK	12	MID	3.39	0.0019
5	20375	1752.5	QPSK	12	HIGH	-6.58	-0.0038
5	20375	1752.5	QPSK	25	LOW	3.16	0.0018
5	20375	1752.5	Q16	1	LOW	2.57	0.0015

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Onamici			Size	Offset	(Hz)	(ppm)
5	20375	1752.5	Q16	1	MID	-5.39	-0.0031
5	20375	1752.5	Q16	1	HIGH	5.66	0.0032
5	20375	1752.5	Q16	12	LOW	2.73	0.0016
5	20375	1752.5	Q16	12	MID	-5.25	-0.003
5	20375	1752.5	Q16	12	HIGH	-4.42	-0.0025
5	20375	1752.5	Q16	25	LOW	-3.72	-0.0021
5	20175	1732.5	QPSK	1	LOW	-4.75	-0.0027
5	20175	1732.5	QPSK	1	MID	-5.36	-0.0031
5	20175	1732.5	QPSK	1	HIGH	3.3	0.0019
5	20175	1732.5	QPSK	12	LOW	-3.96	-0.0023
5	20175	1732.5	QPSK	12	MID	4.66	0.0027
5	20175	1732.5	QPSK	12	HIGH	5.42	0.0031
5	20175	1732.5	QPSK	25	LOW	5.08	0.0029
5	20175	1732.5	Q16	1	LOW	-3.2	-0.0018
5	20175	1732.5	Q16	1	MID	3.76	0.0022
5	20175	1732.5	Q16	1	HIGH	-4.22	-0.0024
5	20175	1732.5	Q16	12	LOW	3.81	0.0022
5	20175	1732.5	Q16	12	MID	4.15	0.0024
5	20175	1732.5	Q16	12	HIGH	-2.89	-0.0017
5	20175	1732.5	Q16	25	LOW	-3.59	-0.0021
10	20000	1715	QPSK	1	LOW	-8.24	-0.0048
10	20000	1715	QPSK	1	MID	-4.66	-0.0027
10	20000	1715	QPSK	1	HIGH	-6.88	-0.004
10	20000	1715	QPSK	25	LOW	-5.05	-0.0029
10	20000	1715	QPSK	25	MID	-4.06	-0.0024
10	20000	1715	QPSK	25	HIGH	-3.38	-0.002
10	20000	1715	QPSK	50	LOW	-4.91	-0.0029
10	20000	1715	Q16	1	LOW	-3.49	-0.002
10	20000	1715	Q16	1	MID	-3.6	-0.0021
10	20000	1715	Q16	1	HIGH	-4.91	-0.0029
10	20000	1715	Q16	25	LOW	-6.54	-0.0038
10	20000	1715	Q16	25	MID	-6.09	-0.0036
10	20000	1715	Q16	25	HIGH	-8.8	-0.0051
10	20000	1715	Q16	50	LOW	-2.65	-0.0015
10	20350	1750	QPSK	1	LOW	-3.93	-0.0022
10	20350	1750	QPSK	1	MID	-2.69	-0.0015

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Citatille			Size	Offset	(Hz)	(ppm)
10	20350	1750	QPSK	1	HIGH	3.58	0.002
10	20350	1750	QPSK	25	LOW	-3.19	-0.0018
10	20350	1750	QPSK	25	MID	-2.82	-0.0016
10	20350	1750	QPSK	25	HIGH	5.89	0.0034
10	20350	1750	QPSK	50	LOW	-5.75	-0.0033
10	20350	1750	Q16	1	LOW	-5.94	-0.0034
10	20350	1750	Q16	1	MID	-5.02	-0.0029
10	20350	1750	Q16	1	HIGH	-4.28	-0.0024
10	20350	1750	Q16	25	LOW	2.15	0.0012
10	20350	1750	Q16	25	MID	-3.38	-0.0019
10	20350	1750	Q16	25	HIGH	-3.68	-0.0021
10	20350	1750	Q16	50	LOW	-4.88	-0.0028
10	20175	1732.5	QPSK	1	LOW	-7.02	-0.0041
10	20175	1732.5	QPSK	1	MID	-4.28	-0.0025
10	20175	1732.5	QPSK	1	HIGH	-3.55	-0.002
10	20175	1732.5	QPSK	25	LOW	-3.91	-0.0023
10	20175	1732.5	QPSK	25	MID	-6.39	-0.0037
10	20175	1732.5	QPSK	25	HIGH	-5.79	-0.0033
10	20175	1732.5	QPSK	50	LOW	-5.06	-0.0029
10	20175	1732.5	Q16	1	LOW	-6.25	-0.0036
10	20175	1732.5	Q16	1	MID	-5.34	-0.0031
10	20175	1732.5	Q16	1	HIGH	-5.22	-0.003
10	20175	1732.5	Q16	25	LOW	-3.12	-0.0018
10	20175	1732.5	Q16	25	MID	-5.89	-0.0034
10	20175	1732.5	Q16	25	HIGH	-6.02	-0.0035
10	20175	1732.5	Q16	50	LOW	-4.36	-0.0025
15	20025	1717.5	QPSK	1	LOW	-7.44	-0.0043
15	20025	1717.5	QPSK	1	MID	-5.34	-0.0031
15	20025	1717.5	QPSK	1	HIGH	4.49	0.0026
15	20025	1717.5	QPSK	36	LOW	4.11	0.0024
15	20025	1717.5	QPSK	36	MID	-5.36	-0.0031
15	20025	1717.5	QPSK	36	HIGH	-3.66	-0.0021
15	20025	1717.5	QPSK	75	LOW	-2.26	-0.0013
15	20025	1717.5	Q16	1	LOW	3.53	0.0021
15	20025	1717.5	Q16	1	MID	3.86	0.0022
15	20025	1717.5	Q16	1	HIGH	-5.58	-0.0032

	UL					Frequency	Frequenc
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Onamici			Size	Offset	(Hz)	(ppm)
15	20025	1717.5	Q16	36	LOW	5.38	0.0031
15	20025	1717.5	Q16	36	MID	-4.25	-0.0025
15	20025	1717.5	Q16	36	HIGH	-4.36	-0.0025
15	20025	1717.5	Q16	75	LOW	-3.36	-0.002
15	20325	1747.5	QPSK	1	LOW	-7.2	-0.0041
15	20325	1747.5	QPSK	1	MID	-3.92	-0.0022
15	20325	1747.5	QPSK	1	HIGH	-5.39	-0.0031
15	20325	1747.5	QPSK	36	LOW	-3.85	-0.0022
15	20325	1747.5	QPSK	36	MID	-2.42	-0.0014
15	20325	1747.5	QPSK	36	HIGH	-5.28	-0.003
15	20325	1747.5	QPSK	75	LOW	-4.94	-0.0028
15	20325	1747.5	Q16	1	LOW	-6.27	-0.0036
15	20325	1747.5	Q16	1	MID	-7.11	-0.0041
15	20325	1747.5	Q16	1	HIGH	-4.23	-0.0024
15	20325	1747.5	Q16	36	LOW	-4.51	-0.0026
15	20325	1747.5	Q16	36	MID	-4.52	-0.0026
15	20325	1747.5	Q16	36	HIGH	-5.31	-0.003
15	20325	1747.5	Q16	75	LOW	-2.92	-0.0017
15	20175	1732.5	QPSK	1	LOW	4.39	0.0025
15	20175	1732.5	QPSK	1	MID	6.34	0.0037
15	20175	1732.5	QPSK	1	HIGH	5.94	0.0034
15	20175	1732.5	QPSK	36	LOW	7.11	0.0041
15	20175	1732.5	QPSK	36	MID	6.15	0.0035
15	20175	1732.5	QPSK	36	HIGH	5.22	0.003
15	20175	1732.5	QPSK	75	LOW	4.91	0.0028
15	20175	1732.5	Q16	1	LOW	5.48	0.0032
15	20175	1732.5	Q16	1	MID	4.82	0.0028
15	20175	1732.5	Q16	1	HIGH	-4.38	-0.0025
15	20175	1732.5	Q16	36	LOW	4.02	0.0023
15	20175	1732.5	Q16	36	MID	5.25	0.003
15	20175	1732.5	Q16	36	HIGH	3.81	0.0022
15	20175	1732.5	Q16	75	LOW	4.02	0.0023
20	20050	1720	QPSK	1	LOW	-8.55	-0.005
20	20050	1720	QPSK	1	MID	7.01	0.0041
20	20050	1720	QPSK	1	HIGH	4.52	0.0026
20	20050	1720	QPSK	50	LOW	4.99	0.0029

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Citatille			Size	Offset	(Hz)	(ppm)
20	20050	1720	QPSK	50	MID	-3.81	-0.0022
20	20050	1720	QPSK	50	HIGH	-4.02	-0.0023
20	20050	1720	QPSK	100	LOW	3.71	0.0022
20	20050	1720	Q16	1	LOW	-5.11	-0.003
20	20050	1720	Q16	1	MID	-6.55	-0.0038
20	20050	1720	Q16	1	HIGH	-9.08	-0.0053
20	20050	1720	Q16	50	LOW	3.25	0.0019
20	20050	1720	Q16	50	MID	-2.36	-0.0014
20	20050	1720	Q16	50	HIGH	-5.31	-0.0031
20	20050	1720	Q16	100	LOW	2.37	0.0014
20	20300	1745	QPSK	1	LOW	-5.05	-0.0029
20	20300	1745	QPSK	1	MID	-4.33	-0.0025
20	20300	1745	QPSK	1	HIGH	-3.36	-0.0019
20	20300	1745	QPSK	50	LOW	4.49	0.0026
20	20300	1745	QPSK	50	MID	3.81	0.0022
20	20300	1745	QPSK	50	HIGH	-3.66	-0.0021
20	20300	1745	QPSK	100	LOW	-4.38	-0.0025
20	20300	1745	Q16	1	LOW	-6.71	-0.0038
20	20300	1745	Q16	1	MID	5.69	0.0033
20	20300	1745	Q16	1	HIGH	-5.02	-0.0029
20	20300	1745	Q16	50	LOW	-3.83	-0.0022
20	20300	1745	Q16	50	MID	-3.45	-0.002
20	20300	1745	Q16	50	HIGH	-4.94	-0.0028
20	20300	1745	Q16	100	LOW	-4.65	-0.0027
20	20175	1732.5	QPSK	1	LOW	8.65	0.005
20	20175	1732.5	QPSK	1	MID	-7.52	-0.0043
20	20175	1732.5	QPSK	1	HIGH	3.6	0.0021
20	20175	1732.5	QPSK	50	LOW	3.5	0.002
20	20175	1732.5	QPSK	50	MID	3.96	0.0023
20	20175	1732.5	QPSK	50	HIGH	-5.79	-0.0033
20	20175	1732.5	QPSK	100	LOW	-2.8	-0.0016
20	20175	1732.5	Q16	1	LOW	6.68	0.0039
20	20175	1732.5	Q16	1	MID	3.88	0.0022
20	20175	1732.5	Q16	1	HIGH	-4.02	-0.0023
20	20175	1732.5	Q16	50	LOW	-2.62	-0.0015
20	20175	1732.5	Q16	50	MID	2.88	0.0017

Bandwidth	UL	Frequency	Modulation	RB	RB	Frequency Error	Frequency Error
	Channel			Size	Offset	(Hz)	(ppm)
20	20175	1732.5	Q16	50	HIGH	3.06	0.0018
20	20175	1732.5	Q16	100	LOW	-4.94	-0.0029

BAND 5:

5: 						Frequency	Frequency
Bandwidth	UL	Frequency	Modulation	RB	RB	Error	Error
	Channel			Size	Offset	(Hz)	(ppm)
1.4	20470	824.7	QPSK	1	LOW	-3.86	-0.00468
1.4	20470	824.7	QPSK	1	MID	-1.97	-0.00239
1.4	20470	824.7	QPSK	1	HIGH	3.16	0.003832
1.4	20470	824.7	QPSK	3	LOW	-3.65	-0.00443
1.4	20470	824.7	QPSK	3	MID	-1.71	-0.00207
1.4	20470	824.7	QPSK	3	HIGH	-0.62	-0.00075
1.4	20470	824.7	QPSK	6	LOW	-3.68	-0.00446
1.4	20470	824.7	Q16	1	LOW	-2.19	-0.00266
1.4	20470	824.7	Q16	1	MID	-4.96	-0.00601
1.4	20470	824.7	Q16	1	HIGH	3.42	0.004147
1.4	20470	824.7	Q16	3	LOW	-3.97	-0.00481
1.4	20470	824.7	Q16	3	MID	0.44	0.000534
1.4	20470	824.7	Q16	3	HIGH	-0.15	-0.00018
1.4	20470	824.7	Q16	6	LOW	1.08	0.00131
1.4	20525	836.5	QPSK	1	LOW	2.75	0.003288
1.4	20525	836.5	QPSK	1	MID	-1.39	-0.00166
1.4	20525	836.5	QPSK	1	HIGH	-3.85	-0.0046
1.4	20525	836.5	QPSK	3	LOW	-4.2	-0.00502
1.4	20525	836.5	QPSK	3	MID	-3.94	-0.00471
1.4	20525	836.5	QPSK	3	HIGH	-3.18	-0.0038
1.4	20525	836.5	QPSK	6	LOW	4.04	0.00483
1.4	20525	836.5	Q16	1	LOW	4.29	0.005129
1.4	20525	836.5	Q16	1	MID	3.08	0.003682
1.4	20525	836.5	Q16	1	HIGH	3.68	0.004399
1.4	20525	836.5	Q16	3	LOW	3.35	0.004005
1.4	20525	836.5	Q16	3	MID	-2.7	-0.00323
1.4	20525	836.5	Q16	3	HIGH	1.22	0.001458
1.4	20525	836.5	Q16	6	LOW	-4.41	-0.00527
1.4	20643	848.3	QPSK	1	LOW	-3	-0.00354
1.4	20643	848.3	QPSK	1	MID	0.23	0.000271
1.4	20643	848.3	QPSK	1	HIGH	1.09	0.001285
1.4	20643	848.3	QPSK	3	LOW	-4.99	-0.00588
1.4	20643	848.3	QPSK	3	MID	3.39	0.003996
1.4	20643	848.3	QPSK	3	HIGH	-2.47	-0.00291
1.4	20643	848.3	QPSK	6	LOW	0.23	0.000271

	UL					Frequency	Frequenc
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Onamici			Size	Offset	(Hz)	(ppm)
1.4	20643	848.3	Q16	1	LOW	-0.2	-0.00024
1.4	20643	848.3	Q16	1	MID	-2.19	-0.00258
1.4	20643	848.3	Q16	1	HIGH	-1.96	-0.00231
1.4	20643	848.3	Q16	3	LOW	-4.57	-0.00539
1.4	20643	848.3	Q16	3	MID	-1.71	-0.00202
1.4	20643	848.3	Q16	3	HIGH	-4.13	-0.00487
1.4	20643	848.3	Q16	6	LOW	-0.75	-0.00088
3	20415	825.5	QPSK	1	LOW	-1.95	-0.00236
3	20415	825.5	QPSK	1	MID	0.48	0.00058
3	20415	825.5	QPSK	1	HIGH	1.69	0.002047
3	20415	825.5	QPSK	8	LOW	-2.43	-0.00294
3	20415	825.5	QPSK	8	MID	4.31	0.00522
3	20415	825.5	QPSK	8	HIGH	3.61	0.004373
3	20415	825.5	QPSK	15	LOW	-3.77	-0.00457
3	20415	825.5	Q16	1	LOW	0.12	0.00014
3	20415	825.5	Q16	1	MID	3.68	0.00445
3	20415	825.5	Q16	1	HIGH	3.86	0.00467
3	20415	825.5	Q16	8	LOW	-4.88	-0.0059
3	20415	825.5	Q16	8	MID	-4	-0.00485
3	20415	825.5	Q16	8	HIGH	-3.26	-0.00395
3	20415	825.5	Q16	15	LOW	-2.27	-0.00275
3	20525	836.5	QPSK	1	LOW	1.99	0.00237
3	20525	836.5	QPSK	1	MID	2.2	0.00263
3	20525	836.5	QPSK	1	HIGH	-2.2	-0.00263
3	20525	836.5	QPSK	8	LOW	-1.56	-0.00186
3	20525	836.5	QPSK	8	MID	-2.65	-0.00317
3	20525	836.5	QPSK	8	HIGH	-0.24	-0.00029
3	20525	836.5	QPSK	15	LOW	2.28	0.00272
3	20525	836.5	Q16	1	LOW	-1	-0.0012
3	20525	836.5	Q16	1	MID	1.08	0.00129
3	20525	836.5	Q16	1	HIGH	-1.26	-0.0015
3	20525	836.5	Q16	8	LOW	1.26	0.00150
3	20525	836.5	Q16	8	MID	-1.2	-0.00143
3	20525	836.5	Q16	8	HIGH	2.25	0.00269
3	20525	836.5	Q16	15	LOW	1.14	0.001363
3	20635	847.5	QPSK	1	LOW	3.26	0.003847

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Onamici			Size	Offset	(Hz)	(ppm)
3	20635	847.5	QPSK	1	MID	-1.6	-0.00189
3	20635	847.5	QPSK	1	HIGH	-0.18	-0.00021
3	20635	847.5	QPSK	8	LOW	-2.75	-0.00324
3	20635	847.5	QPSK	8	MID	-0.48	-0.00057
3	20635	847.5	QPSK	8	HIGH	1.84	0.002171
3	20635	847.5	QPSK	15	LOW	0.07	8.26E-05
3	20635	847.5	Q16	1	LOW	-4.28	-0.00505
3	20635	847.5	Q16	1	MID	1.89	0.00223
3	20635	847.5	Q16	1	HIGH	-0.84	-0.00099
3	20635	847.5	Q16	8	LOW	-2.49	-0.00294
3	20635	847.5	Q16	8	MID	-2.96	-0.00349
3	20635	847.5	Q16	8	HIGH	3.15	0.003717
3	20635	847.5	Q16	15	LOW	-4.84	-0.00571
5	20425	826.5	QPSK	1	LOW	-1.78	-0.00215
5	20425	826.5	QPSK	1	MID	2.46	0.002976
5	20425	826.5	QPSK	1	HIGH	-0.07	-8.5E-05
5	20425	826.5	QPSK	12	LOW	-0.39	-0.00047
5	20425	826.5	QPSK	12	MID	0.78	0.000944
5	20425	826.5	QPSK	12	HIGH	2.85	0.003448
5	20425	826.5	QPSK	25	LOW	-3.13	-0.00379
5	20425	826.5	Q16	1	LOW	-0.42	-0.00051
5	20425	826.5	Q16	1	MID	-1.29	-0.00156
5	20425	826.5	Q16	1	HIGH	3.73	0.004513
5	20425	826.5	Q16	12	LOW	-1.97	-0.00238
5	20425	826.5	Q16	12	MID	-4.48	-0.00542
5	20425	826.5	Q16	12	HIGH	-2.88	-0.00348
5	20425	826.5	Q16	25	LOW	-1.92	-0.00232
5	20525	836.5	QPSK	1	LOW	4.9	0.005858
5	20525	836.5	QPSK	1	MID	-0.76	-0.00091
5	20525	836.5	QPSK	1	HIGH	-0.93	-0.00111
5	20525	836.5	QPSK	12	LOW	1.15	0.001375
5	20525	836.5	QPSK	12	MID	4.05	0.004842
5	20525	836.5	QPSK	12	HIGH	1.22	0.001458
5	20525	836.5	QPSK	25	LOW	2.46	0.002941
5	20525	836.5	Q16	1	LOW	-0.42	-0.0005
5	20525	836.5	Q16	1	MID	4.83	0.005774

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Ondrinoi			Size	Offset	(Hz)	(ppm)
5	20525	836.5	Q16	1	HIGH	1.99	0.002379
5	20525	836.5	Q16	12	LOW	-2.07	-0.00247
5	20525	836.5	Q16	12	MID	-1.56	-0.00186
5	20525	836.5	Q16	12	HIGH	-3.17	-0.00379
5	20525	836.5	Q16	25	LOW	-4.66	-0.00557
5	20625	846.5	QPSK	1	LOW	4.06	0.004796
5	20625	846.5	QPSK	1	MID	-1.78	-0.0021
5	20625	846.5	QPSK	1	HIGH	1.17	0.001382
5	20625	846.5	QPSK	12	LOW	4.27	0.005044
5	20625	846.5	QPSK	12	MID	-0.35	-0.00041
5	20625	846.5	QPSK	12	HIGH	-2.81	-0.00332
5	20625	846.5	QPSK	25	LOW	1.54	0.001819
5	20625	846.5	Q16	1	LOW	4.71	0.005564
5	20625	846.5	Q16	1	MID	-1.9	-0.00224
5	20625	846.5	Q16	1	HIGH	-3.11	-0.00367
5	20625	846.5	Q16	12	LOW	4.34	0.005127
5	20625	846.5	Q16	12	MID	-3.43	-0.00405
5	20625	846.5	Q16	12	HIGH	2.31	0.002729
5	20625	846.5	Q16	25	LOW	2.45	0.002894
10	20450	829	QPSK	1	LOW	4.57	0.005513
10	20450	829	QPSK	1	MID	4.47	0.005392
10	20450	829	QPSK	1	HIGH	-2.73	-0.00329
10	20450	829	QPSK	25	LOW	0.85	0.001025
10	20450	829	QPSK	25	MID	0.95	0.001146
10	20450	829	QPSK	25	HIGH	-3.52	-0.00425
10	20450	829	QPSK	50	LOW	-0.39	-0.00047
10	20450	829	Q16	1	LOW	-3.21	-0.00387
10	20450	829	Q16	1	MID	4.44	0.005356
10	20450	829	Q16	1	HIGH	-1.68	-0.00203
10	20450	829	Q16	25	LOW	-2.44	-0.00294
10	20450	829	Q16	25	MID	3.29	0.003969
10	20450	829	Q16	25	HIGH	4.41	0.00532
10	20450	829	Q16	50	LOW	3.41	0.004113
10	20525	836.5	QPSK	1	LOW	-4.86	-0.00581
10	20525	836.5	QPSK	1	MID	0.92	0.0011
10	20525	836.5	QPSK	1	HIGH	4.54	0.005427

	UL					Frequency	Frequency
Bandwidth	Channel	Frequency	Modulation	RB	RB	Error	Error
	Chamilei			Size	Offset	(Hz)	(ppm)
10	20525	836.5	QPSK	25	LOW	2.55	0.003048
10	20525	836.5	QPSK	25	MID	-4.2	-0.00502
10	20525	836.5	QPSK	25	HIGH	4.53	0.005415
10	20525	836.5	QPSK	50	LOW	4.82	0.005762
10	20525	836.5	Q16	1	LOW	1.21	0.001447
10	20525	836.5	Q16	1	MID	-4.88	-0.00583
10	20525	836.5	Q16	1	HIGH	4.98	0.005953
10	20525	836.5	Q16	25	LOW	-3.09	-0.00369
10	20525	836.5	Q16	25	MID	2.71	0.00324
10	20525	836.5	Q16	25	HIGH	-3.48	-0.00416
10	20525	836.5	Q16	50	LOW	0.68	0.000813
10	20600	844	QPSK	1	LOW	-1.99	-0.00236
10	20600	844	QPSK	1	MID	-2.39	-0.00283
10	20600	844	QPSK	1	HIGH	-1.61	-0.00191
10	20600	844	QPSK	25	LOW	-3.88	-0.0046
10	20600	844	QPSK	25	MID	-4.33	-0.00513
10	20600	844	QPSK	25	HIGH	-1.08	-0.00128
10	20600	844	QPSK	50	LOW	-3.11	-0.00368
10	20600	844	Q16	1	LOW	4.41	0.005225
10	20600	844	Q16	1	MID	-0.1	-0.00012
10	20600	844	Q16	1	HIGH	-4.22	-0.005
10	20600	844	Q16	25	LOW	-1.97	-0.00233
10	20600	844	Q16	25	MID	2.17	0.002571
10	20600	844	Q16	25	HIGH	4.23	0.005012
10	20600	844	Q16	50	LOW	0.61	0.000723