

FCC TEST REPORT and IC TEST REPORT

For

LE920-NA

Model: LE920-NA

Trade Name: Telit

Issued to

**Telit Communications S.p.A.
Via Stazione di Prosecco 5/B
34010 Sgonico, Trieste - Italy**

Issued by

**Compliance Certification Services Inc.
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Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
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1. TEST RESULT CERTIFICATION

Applicant: Telit Communications S.p.A.
Via Stazione di Prosecco 5/B
34010 Sgonico, Trieste - Italy

Equipment Under Test: LE920-NA

Trade Name: Telit

Model: LE920-NA

Date of Test: June 4 ~ 6, 2015

FCC PART 27, SUBPART C, L, FCC PART 2	
OPERATING BAND: 704 - 716 MHz	
Standard	TEST TYPE AND LIMIT
2.1046 27.50(B)(10) & RSS-130 Issue 1 October 2013 4.4	Maximum Peak Output Power Limit: max. 3 watts e.r.p peak power
2.1055 27.54 & RSS-130 Issue 1 October 2013 4.3	Frequency Stability
2.1049 27.53(g) & RSS-130 Issue 1 October 2013 4.3	Occupied Bandwidth
27.50(d)(5)	Peak to average ratio
27.53(g)	Band Edge Measurements
2.1051 27.53(g) & RSS-130 Issue 1 October 2013 4.6	Conducted Spurious Emissions
2.1053 27.53(g) & RSS-130 Issue 1 October 2013 4.6	Radiated Spurious Emissions

OPERATING BAND: 2500 - 2570 MHz	
Standard	TEST TYPE AND LIMIT
2.1046 27.50(d)(4) & RSS-199 Issue 1 January 2010 4.4	Maximum Peak Output Power Limit: max. 1 watts e.i.r.p peak power
2.1055 27.54 & RSS-199 Issue 1 January 2010 4.3	Frequency Stability
2.1049 27.53(h) & RSS-199 Issue 1 January 2010 4.5	Occupied Bandwidth
27.50(d)(5)	Peak to average ratio
27.53(h)	Band Edge Measurements
2.1051 27.53(h) & RSS-199 Issue 1 January 2010 4.5	Conducted Spurious Emissions
2.1053 27.53(h) & RSS-199 Issue 1 January 2010 4.6	Radiated Spurious Emissions

Note: 1. The test result judgment is decided by the limit of test standard
2. The information of measurement uncertainty is available upon the customer's request.

Deviation from Applicable Standard
None

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by

Reviewed by



Miller Lee
Manager
Compliance Certification Services Inc.

Angel Cheng
Section Manager
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	LE920-NA	
Model Number	LE920-NA	
Model Discrepancy	N/A	
Trade	Telit	
Received Date	May 28, 2015	
Power Supply	DC 3.8V powered from Host device.	
Modulation Technology	LTE Band 17	QPSK, 16QAM
	LTE Band 7	QPSK, 16QAM
Frequency Range	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711MHz
	LTE Band 7 Channel Bandwidth: 5MHz	2502.5MHz ~ 2567.5MHz
	LTE Band 7 Channel Bandwidth: 10MHz	2505MHz ~ 2560MHz
	LTE Band 7 Channel Bandwidth: 20MHz	2510MHz ~ 2560MHz
Maximum EIRP Power	LTE Band 17 Channel Bandwidth: 5MHz	QPSK: 13.03dBm 16QAM: 13.39dBm
	LTE Band 17 Channel Bandwidth: 10MHz	QPSK : 16.98dBm 16QAM: 17.61dBm
Maximum EIRP Power	LTE Band 7 Channel Bandwidth: 5MHz	QPSK: 14.58dBm 16QAM: 15.37dBm
	LTE Band 7 Channel Bandwidth: 10MHz	QPSK: 15.08dBm 16QAM: 13.61dBm
	LTE Band 7 Channel Bandwidth: 20MHz	QPSK: 12.65dBm 16QAM: 12.14dBm
Release	9	
Antenna Specification	1/4l Antenna / Gain: 2.14 dBi	

Note: 1. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3. TEST METHODOLOGY

3.1 DESCRIPTION OF TEST TYPE

The EUT (model: LE920-NA) had been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting mode was programmed.

LTE Band 17: 704 MHz ~ 716 MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency(MHz)	Channel	Frequency(MHz)
Low channel (L)	23755	706.5	23780	709.0
Middle channel (M)	23790	710.0	23790	710.0
High channel (H)	23825	713.5	23800	711.0

LTE Band 7: 2500 MHz ~ 2570 MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	5MHz		10MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low channel (L)	20775	2502.5	20800	2505	20850	2510
Middle channel (M)	21100	2535	21100	2535	21100	2535
High channel (H)	21425	2567.5	21400	2560	21350	2560

4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US42510252	11/23/2015
Thermostatic/Humidity Chamber	TAICHY	MHG-150LF	930619	10/07/2015
AC Power Source	EXTECH	6205	1140845	N.C.R
DC Power Supply	ABM	8301HD	D011531	N.C.R
Power Meter	Anritsu	ML2495A	1012009	06/08/2015
Power Sensor	Anritsu	MA2411A	0917072	06/09/2015
Spectrum Analyzer	ROHDE&SCHWARZ	FSV40	101073	07/09/2015

Wugu 966 Chamber A				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4407B	MY44212686	03/17/2016
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1042473	04/13/2016
Bilog Antenna	Sunol Sciences	JB3	A030205	08/18/2015
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
Spectrum Analyzer	ROHDE&SCHWARZ	FSV40	101073	07/09/2015
Horn Antenna	EMCO	3117	00055165	01/26/2016
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW 500	116875	04/13/2016

4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0138
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9483
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5975
3M Semi Anechoic Chamber / 8G~18G	+/- 2.6112
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7389
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9683

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

☐ No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

5.2 EQUIPMENT




Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, ridged waveguide, horn and/or Loop. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1309) to perform FCC Part 15 measurements	 FCC MRA: TW1309
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method -47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	 Testing Laboratory 1309
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	 IC 2324G-1 IC 2324G-2

* No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.

6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
	N/A						

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

7. TEST PROCEDURE AND RESULT

7.1 OUTPUT POWER MEASUREMENT

LIMITS

Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.

Portable stations (hand-held devices) operating in the 698–746 MHz band are limited to 3 watts ERP

TEST PROCEDURES

EIRP / ERP MEASUREMENT:

1. The EUT was set up for the maximum power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 10MHz for LTE.
2. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
3. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G d. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
4. $E.R.P = E.I.R.P - 2.15 \text{ dB}$

CONDUCTED POWER MEASUREMENT:

1. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
2. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

TEST RESULTS**LTE Band 17****Channel Bandwidth: 5MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	24.11	0.25763
710.00	23790	23.01	0.19999
713.50	23825	23.00	0.19953

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	23.07	0.20277
710.00	23790	22.80	0.19055
713.50	23825	23.17	0.20749

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	22.63	0.18323
710.00	23790	22.55	0.17989
713.50	23825	22.69	0.18578

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	22.69	0.18578
710.00	23790	22.47	0.17660
713.50	23825	22.75	0.18836

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 5MHz

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	23.07	0.20277
710.00	23790	22.13	0.16331
713.50	23825	22.36	0.17219

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	22.10	0.16218
710.00	23790	22.35	0.17179
713.50	23825	22.23	0.16711

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	21.53	0.14223
710.00	23790	21.28	0.13428
713.50	23825	21.91	0.15524

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
706.50	23755	21.87	0.15382
710.00	23790	21.79	0.15101
713.50	23825	22.38	0.17298

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

LTE Band 17**Channel Bandwidth: 10MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	24.04	0.25351
710.00	23790	23.80	0.23988
711.00	23800	23.71	0.23496

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	23.86	0.24322
710.00	23790	23.84	0.24210
711.00	23800	23.94	0.24774

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	22.08	0.16144
710.00	23790	21.98	0.15776
711.00	23800	22.19	0.16558

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	22.37	0.17258
710.00	23790	22.25	0.16788
711.00	23800	22.69	0.18578

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 10MHz

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	22.77	0.18923
710.00	23790	22.75	0.18836
711.00	23800	22.65	0.18408

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	22.71	0.18664
710.00	23790	22.71	0.18664
711.00	23800	22.76	0.18880

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	21.39	0.13772
710.00	23790	20.98	0.12531
711.00	23800	21.76	0.14997

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
709.00	23780	22.49	0.17742
710.00	23790	22.61	0.18239
711.00	23800	22.46	0.17620

Remarks:

1. $\text{Output Power (dBm)} = \text{Raw Value (dBm)} + \text{Correction Factor (dB)}$.
2. $\text{Correction Factor (dB)} = \text{Power Splitter Loss (dB)} + \text{Cable Loss (dB)} + 20\text{dB Attenuator}$.
3. The value in bold is the worst.

LTE Band 7**Channel Bandwidth: 5MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	22.89	0.19454
2535.00	21100	22.19	0.16558
2567.50	21425	22.59	0.18155

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	23.01	0.19999
2535.00	21100	22.34	0.17140
2567.50	21425	22.53	0.17906

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	21.29	0.13459
2535.00	21100	21.09	0.12853
2567.50	21425	21.44	0.13932

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	21.55	0.14289
2535.00	21100	21.46	0.13996
2567.50	21425	21.34	0.13614

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 5MHz

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	21.66	0.14655
2535.00	21100	21.46	0.13996
2567.50	21425	22.23	0.16711

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	21.85	0.15311
2535.00	21100	22.06	0.16069
2567.50	21425	21.57	0.14355

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	21.82	0.15205
2535.00	21100	21.28	0.13428
2567.50	21425	21.56	0.14322

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2502.50	20775	20.87	0.12218
2535.00	21100	20.56	0.11376
2567.50	21425	20.58	0.11429

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 10MHz

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	22.73	0.18750
2535.00	21100	22.21	0.16634
2565.00	21400	22.76	0.18880

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	22.31	0.17022
2535.00	21100	21.95	0.15668
2565.00	21400	22.32	0.17061

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	21.62	0.14521
2535.00	21100	21.05	0.12735
2565.00	21400	21.35	0.13646

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	21.57	0.14355
2535.00	21100	20.93	0.12388
2565.00	21400	21.29	0.13459

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 10MHz

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	22.97	0.19815
2535.00	21100	22.55	0.17989
2565.00	21400	23.14	0.20606

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	22.95	0.19724
2535.00	21100	22.49	0.17742
2565.00	21400	22.41	0.17418

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	21.78	0.15066
2535.00	21100	21.28	0.13428
2565.00	21400	21.49	0.14093

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2505.00	20800	20.74	0.11858
2535.00	21100	20.86	0.12190
2565.00	21400	21.73	0.14894

Remarks:

1. $\text{Output Power (dBm)} = \text{Raw Value (dBm)} + \text{Correction Factor (dB)}$.
2. $\text{Correction Factor (dB)} = \text{Power Splitter Loss (dB)} + \text{Cable Loss (dB)} + 20\text{dB Attenuator}$.
3. The value in bold is the worst.

Channel Bandwidth: 20MHz

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	22.77	0.18923
2535.00	21100	22.24	0.16749
2560.00	21350	22.95	0.19724

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	22.43	0.17498
2535.00	21100	22.02	0.15922
2560.00	21350	22.61	0.18239

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	21.46	0.13996
2535.00	21100	21.08	0.12823
2560.00	21350	21.54	0.14256

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	21.66	0.14655
2535.00	21100	21.37	0.13709
2560.00	21350	21.79	0.15101

Remarks:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
3. The value in bold is the worst.

Channel Bandwidth: 20MHz

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	21.76	0.14997
2535.00	21100	21.32	0.13552
2560.00	21350	22.52	0.17865

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	21.93	0.15596
2535.00	21100	21.10	0.12882
2560.00	21350	21.62	0.14521

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	21.25	0.13335
2535.00	21100	21.07	0.12794
2560.00	21350	21.26	0.13366

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency (MHz)	Channel	Output Power	
		(dBm)	(W)
2510.00	20850	20.67	0.11668
2535.00	21100	20.89	0.12274
2560.00	21350	20.66	0.11641

Remarks:

1. $\text{Output Power (dBm)} = \text{Raw Value (dBm)} + \text{Correction Factor (dB)}$.
2. $\text{Correction Factor (dB)} = \text{Power Splitter Loss (dB)} + \text{Cable Loss (dB)} + 20\text{dB Attenuator}$.
3. The value in bold is the worst.

ERP POWER**LTE Band 17****Channel Bandwidth: 5MHz / QPSK**

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23755	705.2000	V	6.15	3.13	6.34	9.36	38.45	-29.09
	705.0500	H	9.82	3.13	6.34	*13.03	38.45	-25.42
23790	708.3500	V	9.62	3.14	6.31	12.79	38.45	-25.66
	708.6500	H	5.59	3.14	6.3	8.75	38.45	-29.70
23825	715.1000	V	5.64	3.16	6.4	8.88	38.45	-29.57
	712.2500	H	8.28	3.15	6.35	11.48	38.45	-26.97

Channel Bandwidth: 5MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23755	706.7000	V	6.66	3.13	6.32	9.85	38.45	-28.60
	705.9500	H	10.19	3.13	6.33	*13.39	38.45	-25.06
23790	708.8000	V	10.01	3.14	6.3	13.17	38.45	-25.28
	708.5000	H	5.82	3.14	6.31	8.99	38.45	-29.46
23825	714.8000	V	6.55	3.15	6.4	9.80	38.45	-28.65
	715.2500	H	8.62	3.16	6.4	11.86	38.45	-26.59

Remark:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = S.G Level + Gain of Substitution horn + TX cable loss.
3. The value in bold is the worst.

Channel Bandwidth: 10MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23780	705.2000	V	8.91	3.13	6.34	12.12	38.45	-26.33
	705.5000	H	13.77	3.13	6.34	*16.98	38.45	-21.47
23790	706.7000	V	9.03	3.13	6.32	12.22	38.45	-26.23
	706.4000	H	13.42	3.13	6.33	16.62	38.45	-21.83
23800	707.7500	V	8.88	3.14	6.31	12.05	38.45	-26.40
	707.3000	H	13.04	3.13	6.32	16.23	38.45	-22.22

Channel Bandwidth: 10MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23780	705.9500	V	9.5	3.13	6.33	12.70	38.45	-25.75
	705.8000	H	14.41	3.13	6.33	*17.61	38.45	-20.84
23790	706.8500	V	9.29	3.13	6.32	12.48	38.45	-25.97
	706.7000	H	13.73	3.13	6.32	16.92	38.45	-21.53
23800	707.6000	V	9.4	3.14	6.31	12.57	38.45	-25.88
	707.9000	H	13.55	3.14	6.31	16.72	38.45	-21.73

Remark:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = S.G Level + Gain of Substitution horn + TX cable loss.
3. The value in bold is the worst.

EIRP POWER**LTE Band 7****Channel Bandwidth: 5MHz / QPSK**

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20775	2501.000	V	14.81	6.35	6.1	14.56	33.00	-18.44
	2501.000	H	8.39	6.35	6.1	8.14	33.00	-24.86
21100	2536.640	V	14.5	6.4	6.2	14.30	33.00	-18.70
	2536.520	H	12.71	6.4	6.19	12.50	33.00	-20.50
21425	2568.800	V	14.75	6.45	6.28	*14.58	33.00	-18.42
	2568.800	H	6.88	6.45	6.28	6.71	33.00	-26.29

Channel Bandwidth: 5MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20775	2503.400	V	15.18	6.35	6.11	14.94	33.00	-18.06
	2502.680	H	8.84	6.35	6.11	8.60	33.00	-24.40
21100	2535.080	V	14.62	6.4	6.19	14.41	33.00	-18.59
	2533.640	H	13.07	6.4	6.19	12.86	33.00	-20.14
21425	2567.600	V	15.53	6.44	6.28	*15.37	33.00	-17.63
	2567.960	H	7.43	6.45	6.28	7.26	33.00	-25.74

Channel Bandwidth: 10MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20800	2508.800	V	15.26	6.36	6.12	15.02	33.00	-17.98
	2501.240	H	11.48	6.35	6.1	11.23	33.00	-21.77
21100	2531.240	V	15.29	6.39	6.18	*15.08	33.00	-17.92
	2538.200	H	11.08	6.4	6.2	10.88	33.00	-22.12
21400	2562.320	V	12.88	6.44	6.26	12.70	33.00	-20.30
	2561.840	H	10.41	6.44	6.26	10.23	33.00	-22.77

Channel Bandwidth: 10MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20800	2504.840	V	13.44	6.36	6.11	13.19	33.00	-19.81
	2501.600	H	10.04	6.35	6.1	9.79	33.00	-23.21
21100	2538.800	V	13.81	6.4	6.2	*13.61	33.00	-19.39
	2537.600	H	11.71	6.4	6.2	11.51	33.00	-21.49
21400	2562.440	V	13.53	6.44	6.26	13.35	33.00	-19.65
	2566.760	H	10.32	6.44	6.27	10.15	33.00	-22.85

Channel Bandwidth: 20MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20850	2504.840	V	11.87	6.36	6.11	11.62	33.00	-21.38
	2504.840	H	5.43	6.36	6.11	5.18	33.00	-27.82
21100	2539.760	V	12.55	6.41	6.2	12.34	33.00	-20.66
	2539.760	H	7.76	6.41	6.2	7.55	33.00	-25.45
21350	2560.280	V	12.82	6.43	6.26	*12.65	33.00	-20.35
	2559.560	H	9.11	6.43	6.25	8.93	33.00	-24.07

Channel Bandwidth: 20MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20850	2505.200	V	12.16	6.36	6.11	11.91	33.00	-21.09
	2504.600	H	5.4	6.36	6.11	5.15	33.00	-27.85
21100	2530.400	V	12.35	6.39	6.18	*12.14	33.00	-20.86
	2534.000	H	6.04	6.4	6.19	5.83	33.00	-27.17
21350	2560.280	V	11.64	6.43	6.26	11.47	33.00	-21.53
	2559.320	H	5.75	6.43	6.25	5.57	33.00	-27.43

Remark:

1. Output Power (dBm) = Raw Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = S.G Level + Gain of Substitution horn + TX cable loss.
3. The value in bold is the worst.

7.2 FREQUENCY STABILITY MEASUREMENT

LIMIT

According to the FCC part 27.54 shall be tested the frequency stability. The rule is defined that "The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation. The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with the 1055(a)(1) -30°C $\sim 50^{\circ}\text{C}$.

TEST PROCEDURE

1. Because of the measure the carrier frequency under the condition of the AFC lock, it shall be used the mobile station in the LTE link mode. This is accomplished with the use of the communication simulator station. The oven room could control the temperatures and humidity.
2. Power must be removed when changing from one temperature to another or one voltage to another voltage. Power warm up is at least 15 min and power applied should perform before recording frequency error.
3. Laptop pc is connected the external power supply to control the AC input power. The various Volts from the minimum 126.5 Volts to 93.5 Volts. Each step shall be record the frequency error rate.
4. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing.
5. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: *The frequency error was recorded frequency error from the communication simulator.*

TEST RESULTS**FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT:****LTE Band 17**

Reference Frequency: LTE Band 17 710 MHz @ 20°C						
Limit: +/- 2.5 ppm = 1775 Hz						
Power Supply Vdc	Environment Temperature (°C)	5M Frequency (Hz)	Delta (Hz)	10M Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.8	50	709999990	-22	709999997	6	1775
3.8	40	709999996	-16	709999995	4	
3.8	30	709999995	-17	709999978	-13	
3.8	20	710000012	0	709999991	0	
3.8	10	709999991	-21	709999998	7	
3.8	0	709999995	-17	709999993	2	
3.8	-10	709999999	-13	709999992	1	
3.8	-20	709999997	-15	709999995	4	
3.8	-30	710000005	-7	709999989	-2	

LTE Band 7

Reference Frequency: LTE Band 7 2535 MHz @ 20°C						
Limit: +/- 2.5 ppm = 6337.5 Hz						
Power Supply Vdc	Environment Temperature (°C)	5M Frequency (Hz)	Delta (Hz)	10M Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.8	50	2534999994	-18	2534999995	4	6337.5
3.8	40	2534999995	-17	2534999994	3	
3.8	30	2534999995	-17	2535000010	19	
3.8	20	2535000012	0	2534999991	0	
3.8	10	2534999999	-13	2534999999	8	
3.8	0	2534999997	-15	2534999997	6	
3.8	-10	2534999996	-16	2534999995	4	
3.8	-20	2534999993	-19	2534999995	4	
3.8	-30	2535000010	-2	2534999997	6	

FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT:**LTE Band 17**

Reference Frequency: LTE Band 17 710 MHz @ 20°C						
Limit: +/- 2.5 ppm = 1775 Hz						
Power Supply Vdc	Environment Temperature (°C)	5M Frequency (Hz)	Delta (Hz)	10M Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.18	20	710000004	-8	710000010	19	1775
3.8		710000012	0	709999991	0	
3.23		710000017	5	709999992	1	

LTE Band 7

Reference Frequency: LTE Band 7 2535 MHz @ 20°C						
Limit: +/- 2.5 ppm = 6337.5 Hz						
Power Supply Vdc	Environment Temperature (°C)	5M Frequency (Hz)	Delta (Hz)	10M Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.18	20	2535000005	-7	2535000010	19	6337.5
3.8		2535000012	0	2534999991	0	
3.23		2534999991	-21	2534999992	1	

7.3 OCCUPIED BANDWIDTH MEASUREMENT

LIMITS

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

TEST PROCEDURES

1. The EUT makes a phone call to the communication simulator. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels. (low, middle and high operational frequency range.)
2. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
3. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

TEST RESULTS

LTE Band 17

CHANNEL BANDWIDTH: 5MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23755	706.50	4.5214
23790	710.00	4.5234
23825	713.50	4.5194

CHANNEL BANDWIDTH: 5MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23755	706.50	4.5197
23790	710.00	4.5009
23825	713.50	4.5113

CHANNEL BANDWIDTH: 10MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23780	709.00	8.9411
23790	710.00	8.9658
23800	711.00	8.9463

CHANNEL BANDWIDTH: 10MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23780	709.00	8.9475
23790	710.00	8.9650
23800	711.00	8.9643

LTE Band 7**CHANNEL BANDWIDTH: 5MHz / QPSK**

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20775	2502.50	4.5169
21100	2535.00	4.5127
21425	2567.50	4.4964

CHANNEL BANDWIDTH: 5MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20775	2502.50	4.5058
21100	2535.00	4.5110
21425	2567.50	4.5173

CHANNEL BANDWIDTH: 10MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20800	2505.00	8.9280
21100	2535.00	8.9498
21400	2565.00	8.9298

CHANNEL BANDWIDTH: 10MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20800	2505.00	8.9380
21100	2535.00	8.9284
21400	2565.00	8.9280

CHANNEL BANDWIDTH: 20MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20850	2510.00	17.8196
21100	2535.00	17.8133
21350	2560.00	17.8050

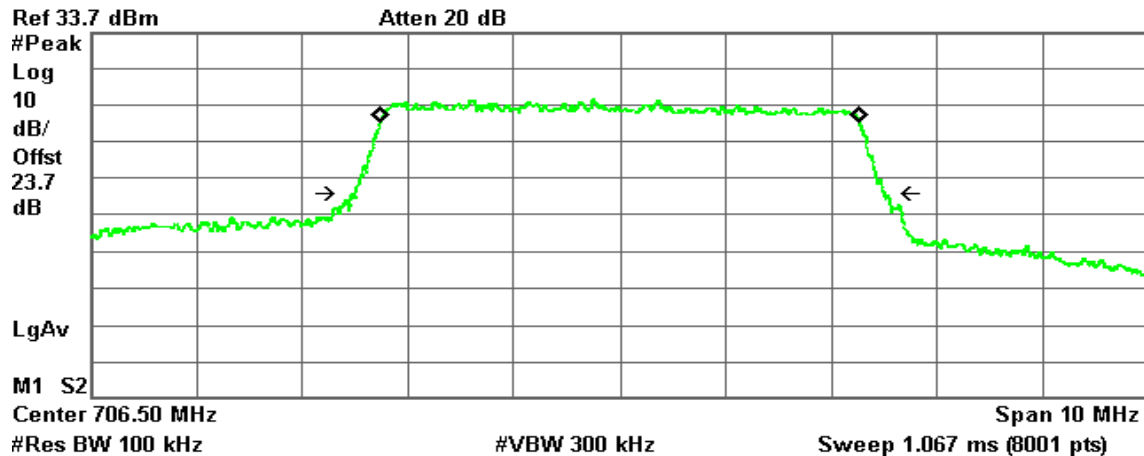
CHANNEL BANDWIDTH: 20MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20850	2510.00	17.8269
21100	2535.00	17.8253
21350	2560.00	17.8263

LTE Band 17**CHANNEL BANDWIDTH: 5MHz / QPSK****CH Low**

* Agilent

R T

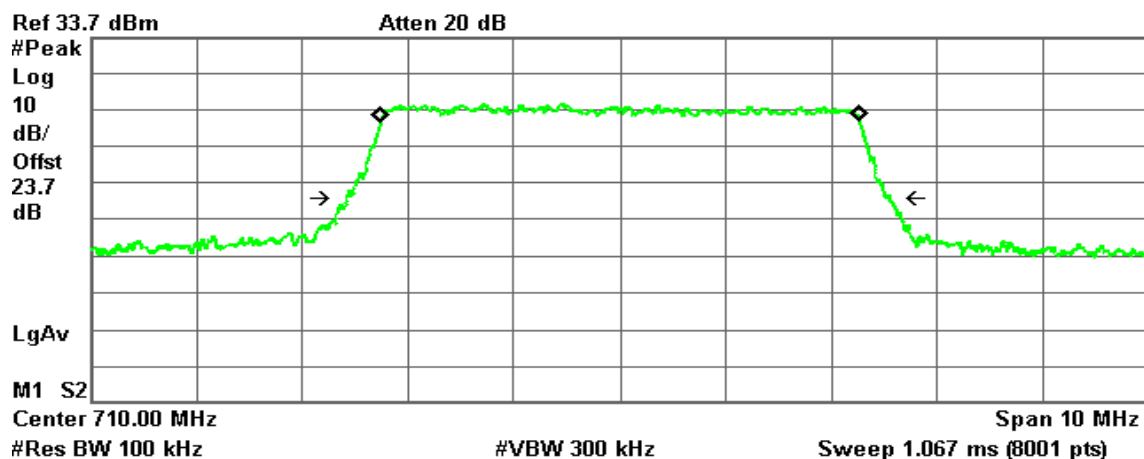


Transmit Freq Error -2.717 kHz
x dB Bandwidth 5.029 MHz

CH Mid

* Agilent

R T

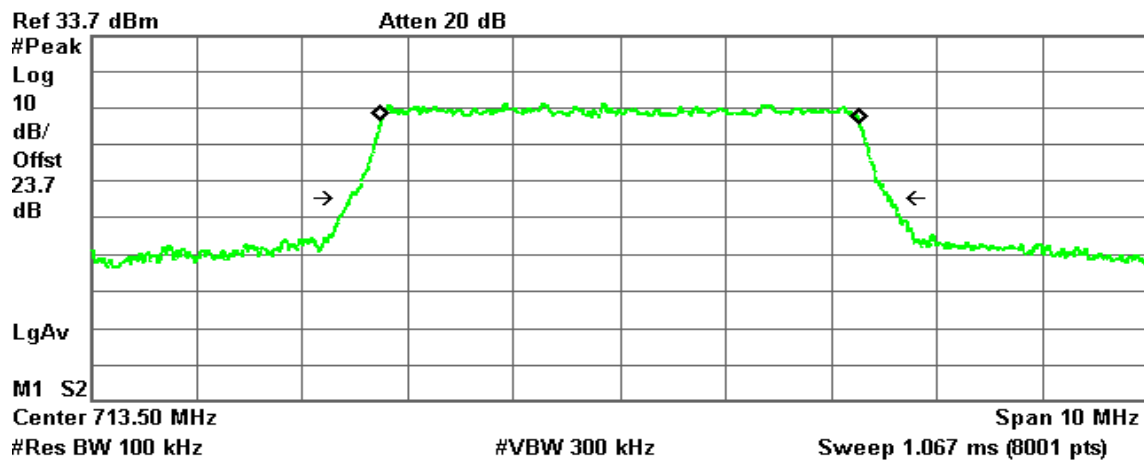


Transmit Freq Error 1.493 kHz
x dB Bandwidth 5.126 MHz

CH High

Agilent

R T



Occupied Bandwidth
4.5194 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 1.956 kHz
x dB Bandwidth 5.104 MHz

CHANNEL BANDWIDTH: 5MHz / 16QAM

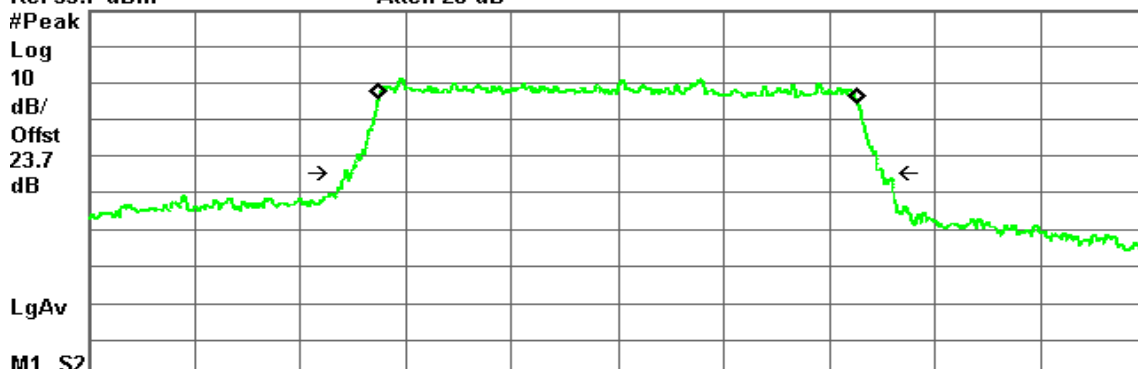
CH Low

Agilent

R T

Ref 33.7 dBm

Atten 20 dB



Center 706.50 MHz

Span 10 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.067 ms (8001 pts)

Occupied Bandwidth
4.5197 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error

-4.488 kHz

x dB Bandwidth

5.077 MHz

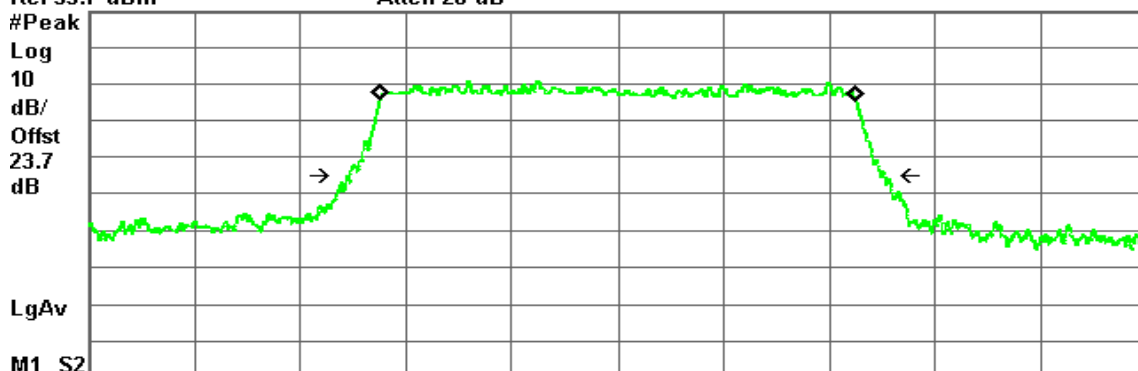
CH Mid

Agilent

R T

Ref 33.7 dBm

Atten 20 dB



Center 710.00 MHz

Span 10 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.067 ms (8001 pts)

Occupied Bandwidth
4.5009 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error

438.196 Hz

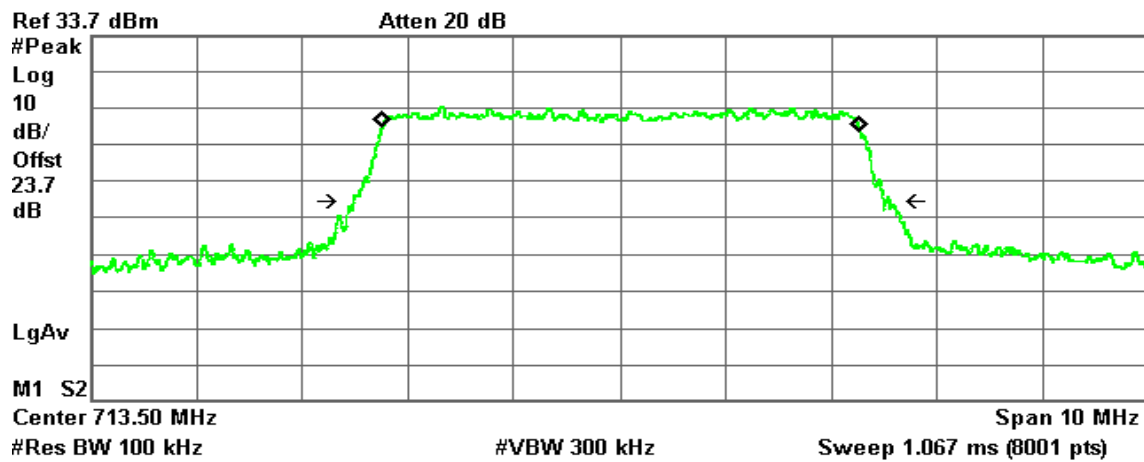
x dB Bandwidth

5.068 MHz

CH High

Agilent

R T



Occupied Bandwidth
4.5113 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

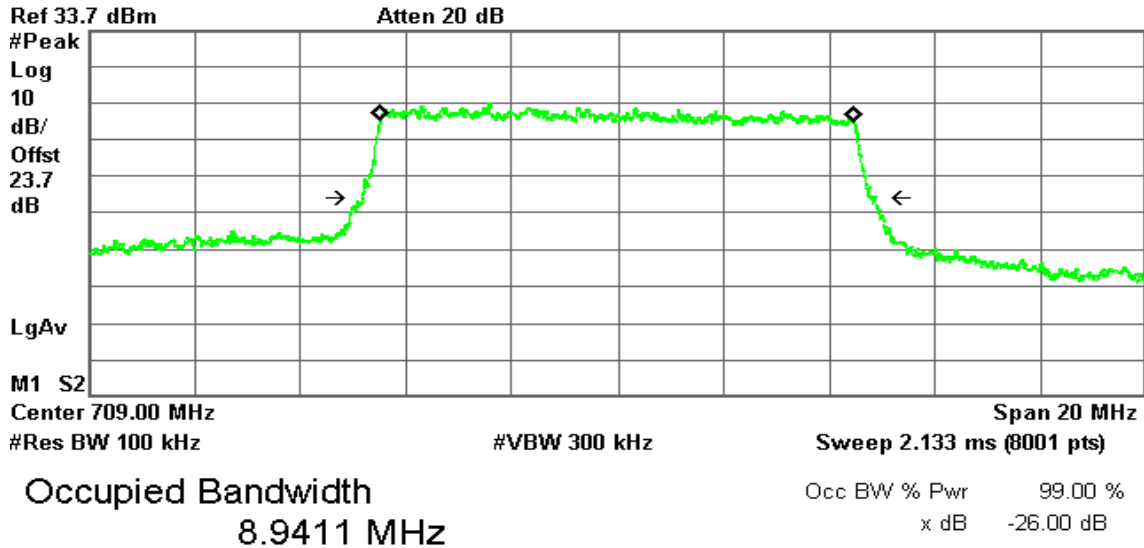
Transmit Freq Error 12.575 kHz
x dB Bandwidth 5.060 MHz

CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low

Agilent

R T

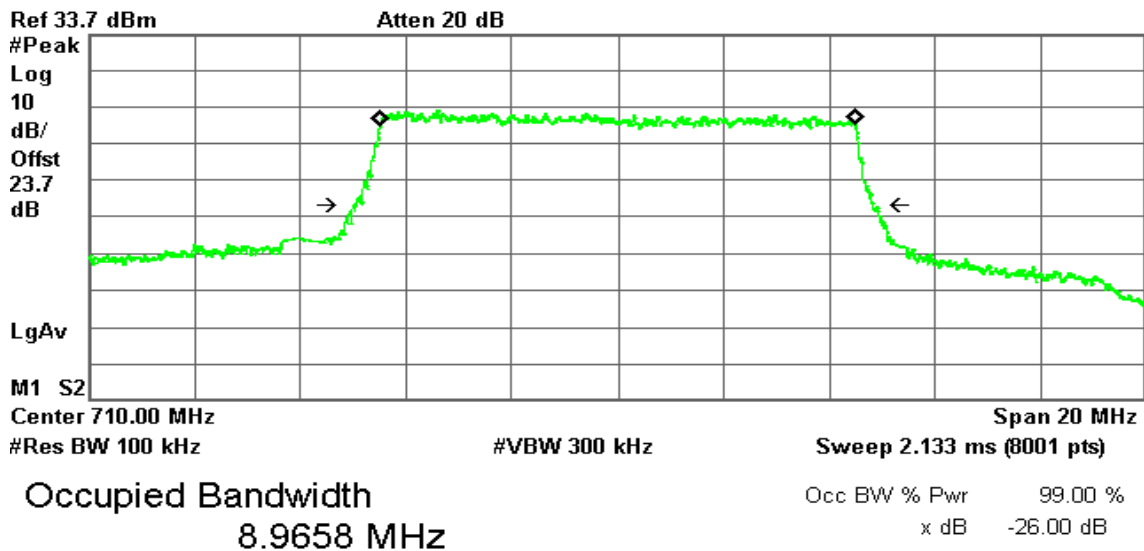


Transmit Freq Error -14.263 kHz
x dB Bandwidth 9.682 MHz

CH Mid

Agilent

R T

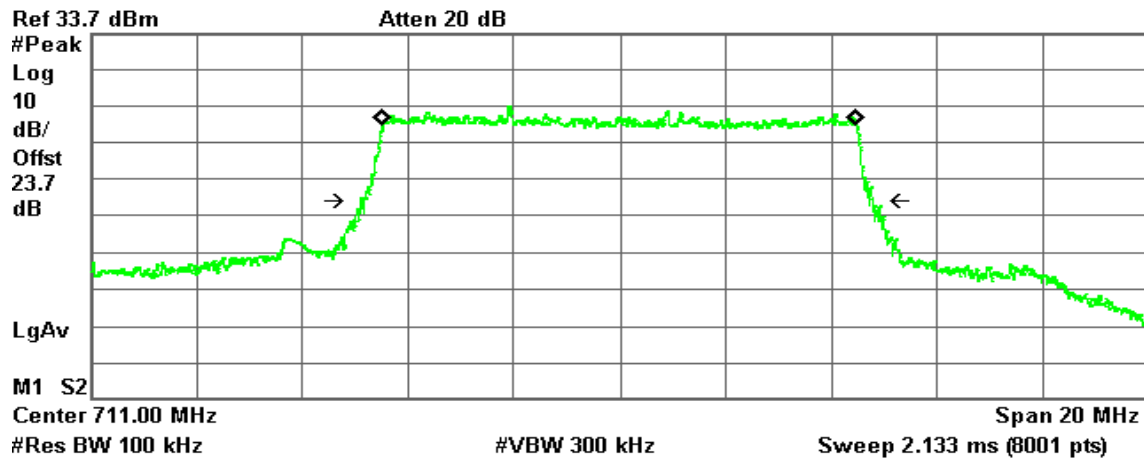


Transmit Freq Error -6.765 kHz
x dB Bandwidth 9.815 MHz

CH High

Agilent

R T



Occupied Bandwidth
8.9463 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

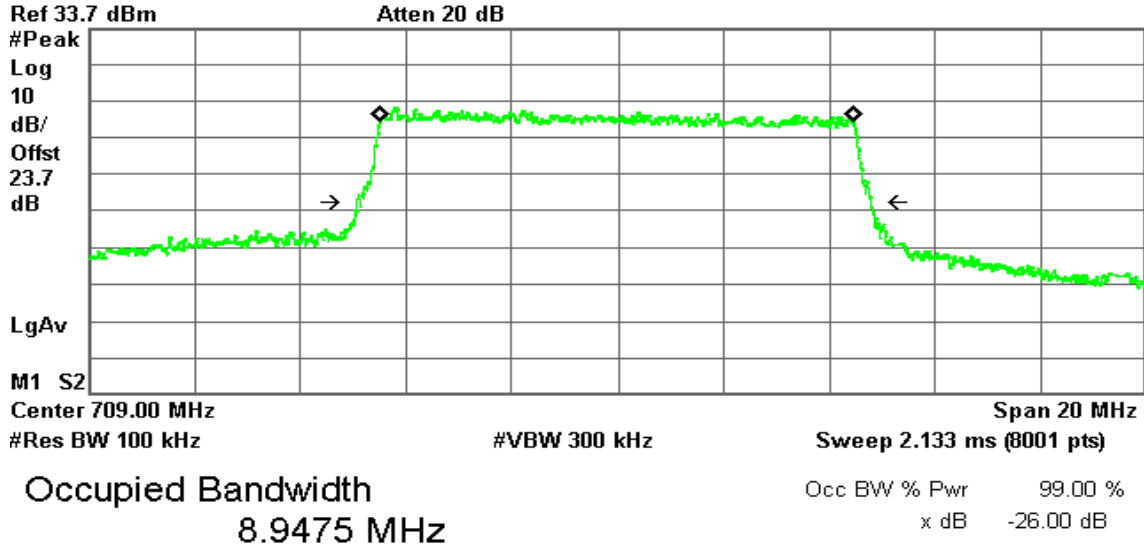
Transmit Freq Error -7.012 kHz
x dB Bandwidth 9.666 MHz

CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low

✱ Agilent

R T

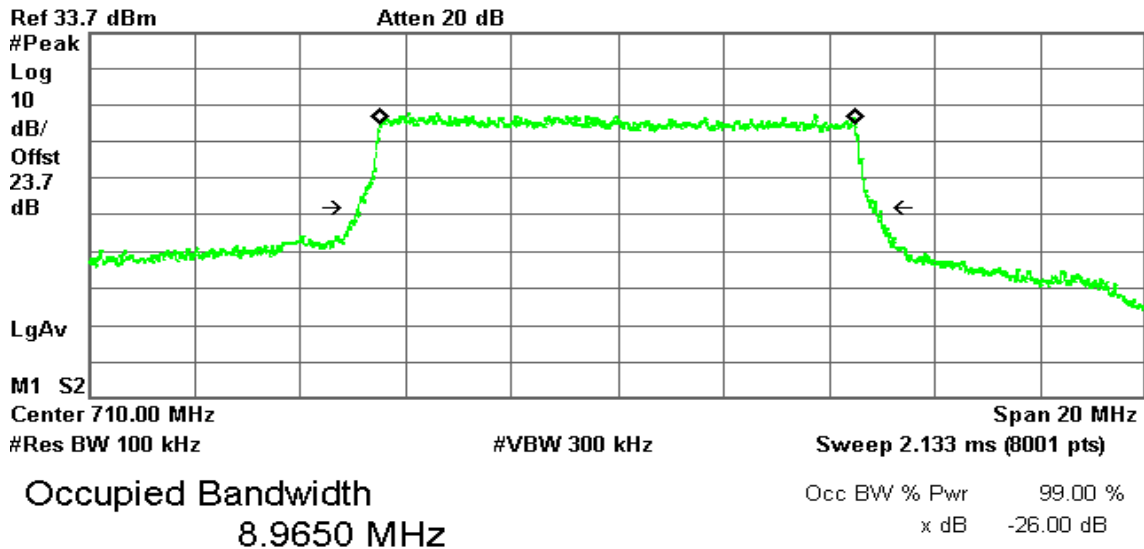


Transmit Freq Error -18.042 kHz
x dB Bandwidth 9.697 MHz

CH Mid

✱ Agilent

R T

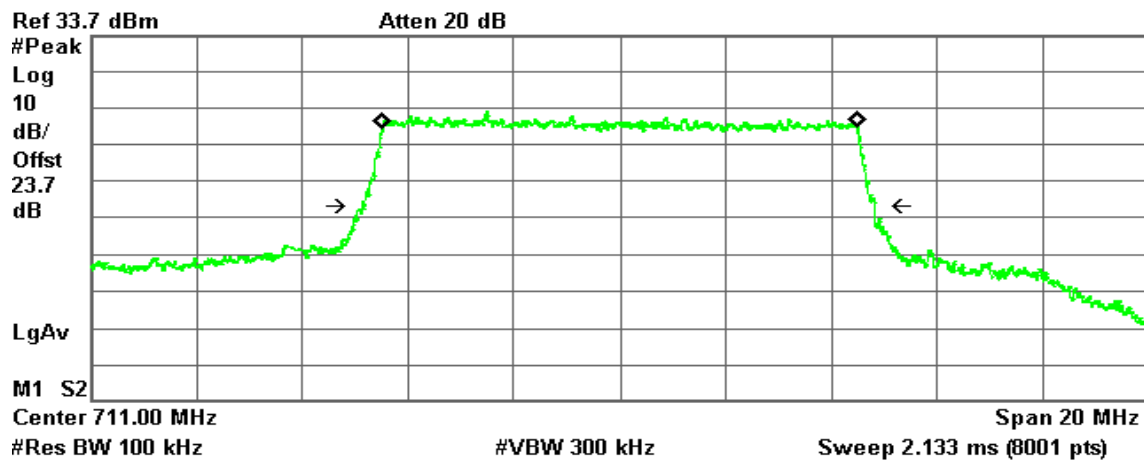


Transmit Freq Error -5.787 kHz
x dB Bandwidth 9.760 MHz

CH High

Agilent

R T



Occupied Bandwidth
8.9643 MHz

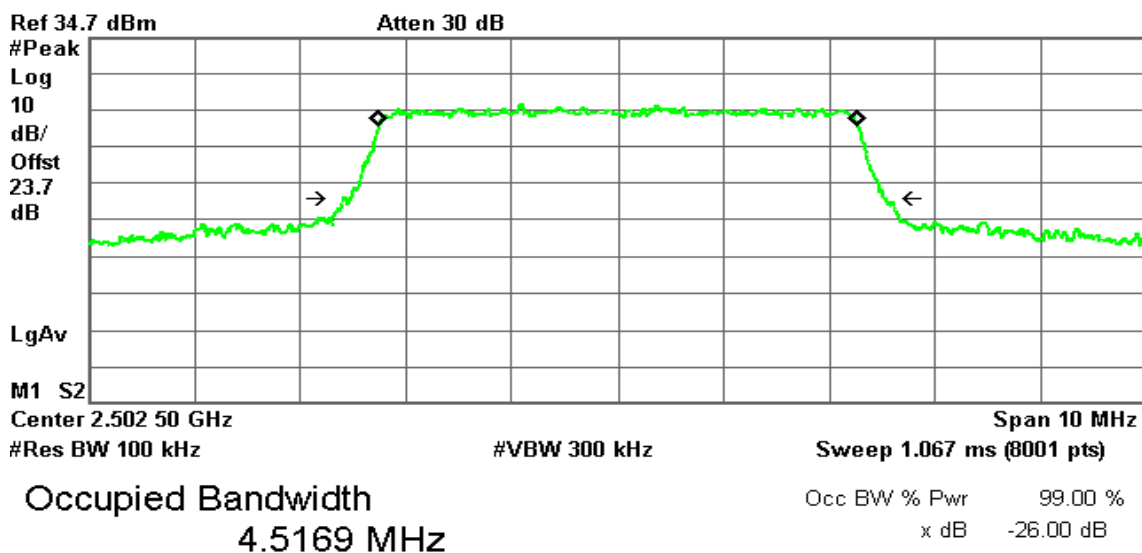
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -2.429 kHz
x dB Bandwidth 9.685 MHz

LTE Band 7**CHANNEL BANDWIDTH: 5MHz / QPSK****CH Low**

* Agilent

R T

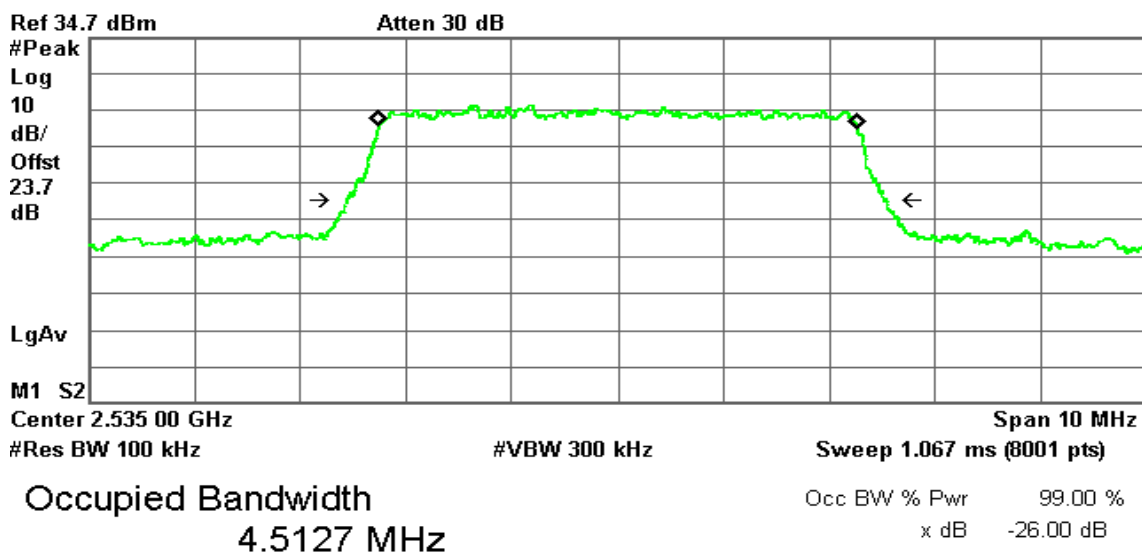


Transmit Freq Error 3.700 kHz
x dB Bandwidth 5.120 MHz

CH Mid

* Agilent

R T

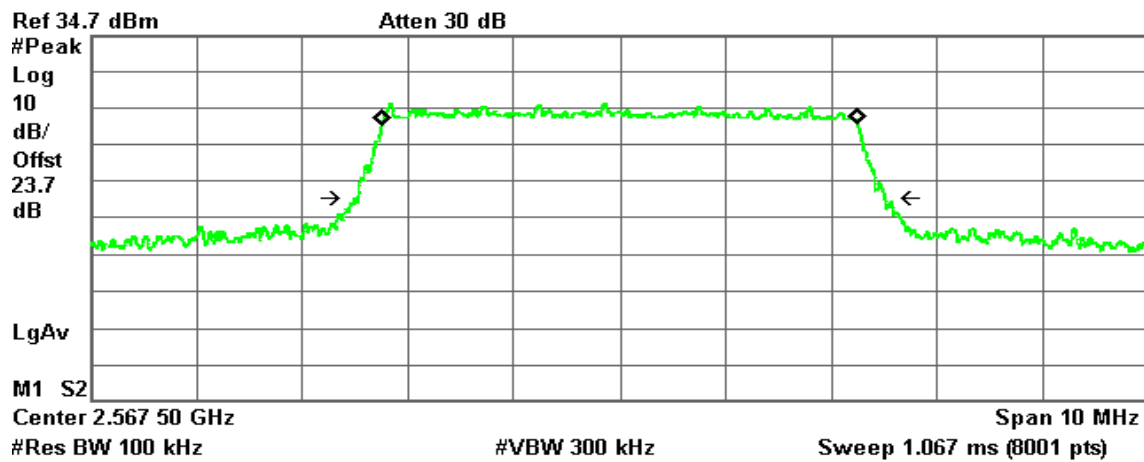


Transmit Freq Error 854.471 Hz
x dB Bandwidth 5.099 MHz

CH High

Agilent

R T



Occupied Bandwidth
4.4964 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -2.045 kHz
x dB Bandwidth 4.973 MHz

CHANNEL BANDWIDTH: 5MHz / 16QAM

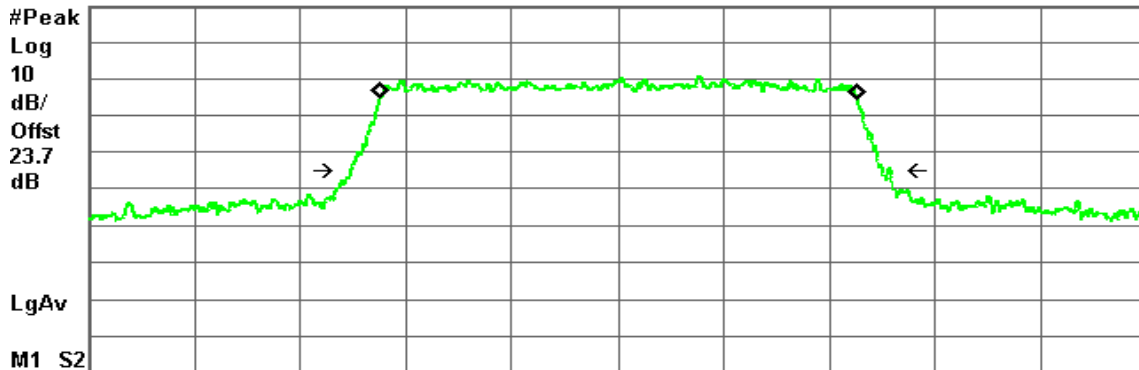
CH Low

Agilent

R T

Ref 34.7 dBm

Atten 30 dB



Occupied Bandwidth
4.5058 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 3.091 kHz
x dB Bandwidth 5.101 MHz

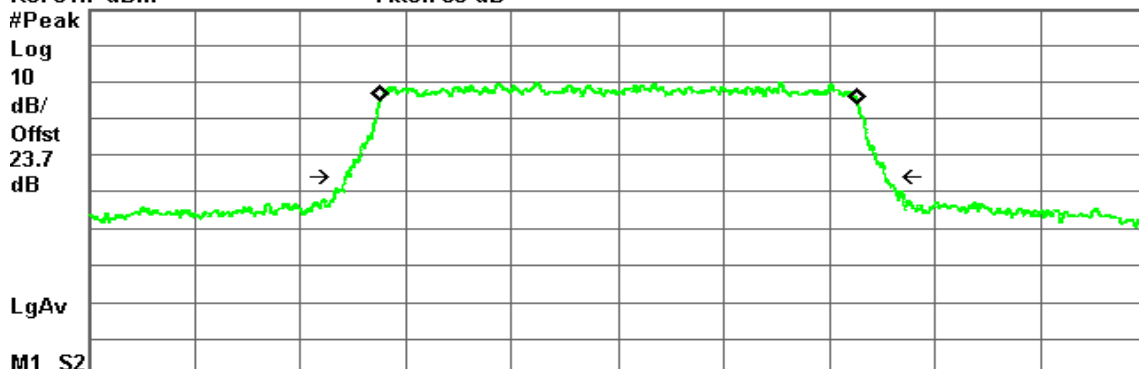
CH Mid

Agilent

R T

Ref 34.7 dBm

Atten 30 dB



Occupied Bandwidth
4.5110 MHz

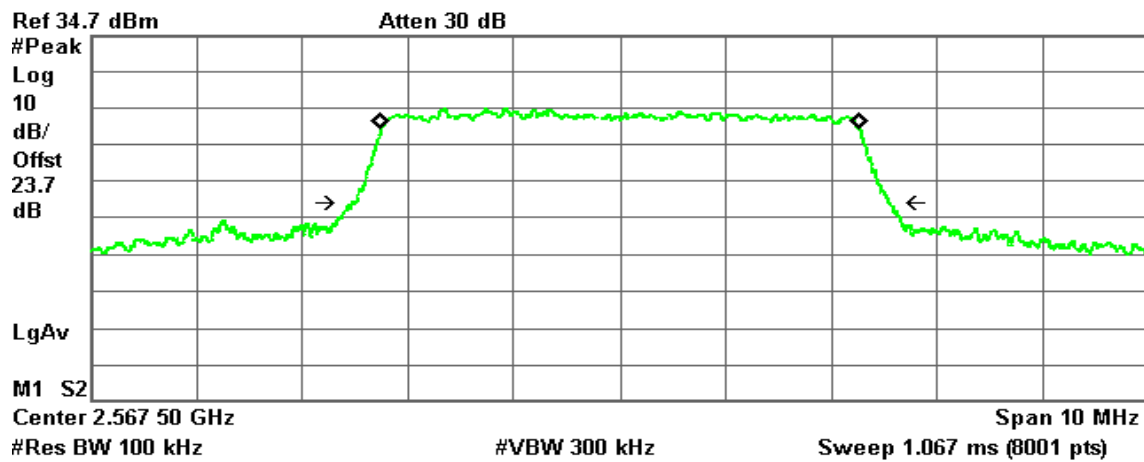
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 4.867 kHz
x dB Bandwidth 5.091 MHz

CH High

Agilent

R T



Occupied Bandwidth
4.5173 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

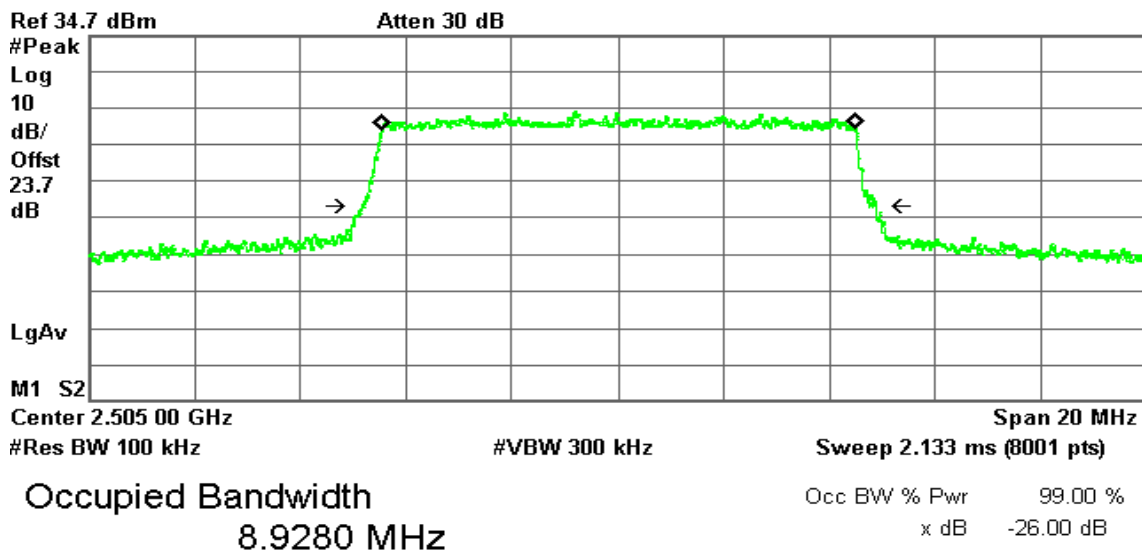
Transmit Freq Error 4.901 kHz
x dB Bandwidth 5.075 MHz

CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low

Agilent

R T

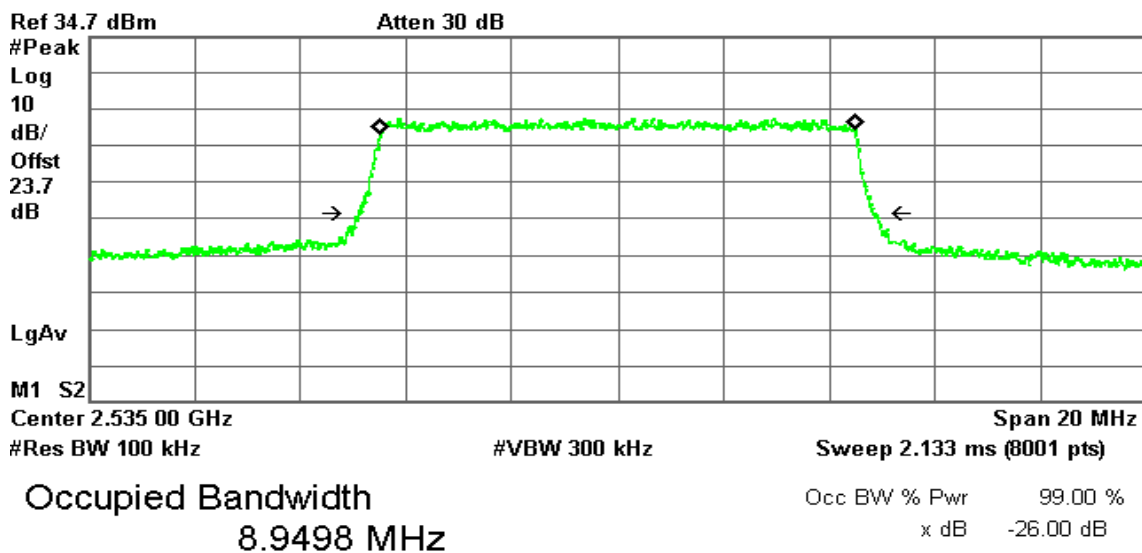


Transmit Freq Error 7.839 kHz
x dB Bandwidth 9.689 MHz

CH Mid

Agilent

R T



Transmit Freq Error -755.224 Hz
x dB Bandwidth 9.750 MHz

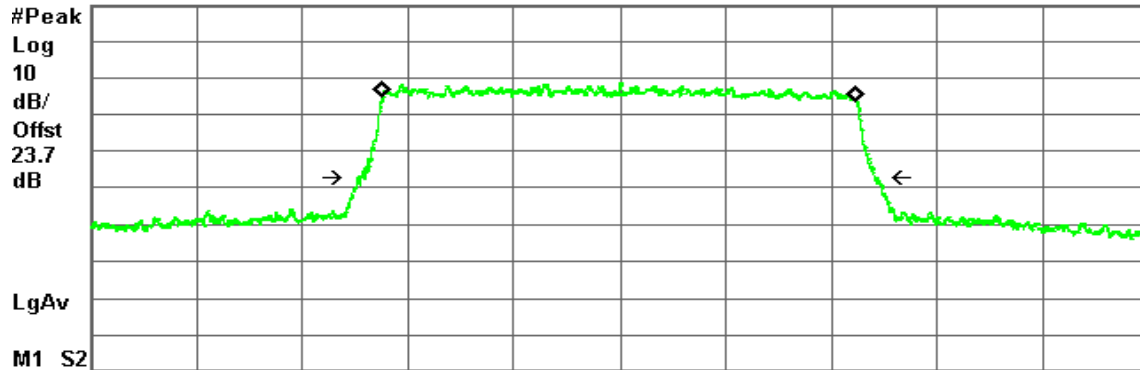
CH High

Agilent

R T

Ref 34.7 dBm

Atten 30 dB



Center 2.565 00 GHz

Span 20 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 2.133 ms (8001 pts)

Occupied Bandwidth
8.9298 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

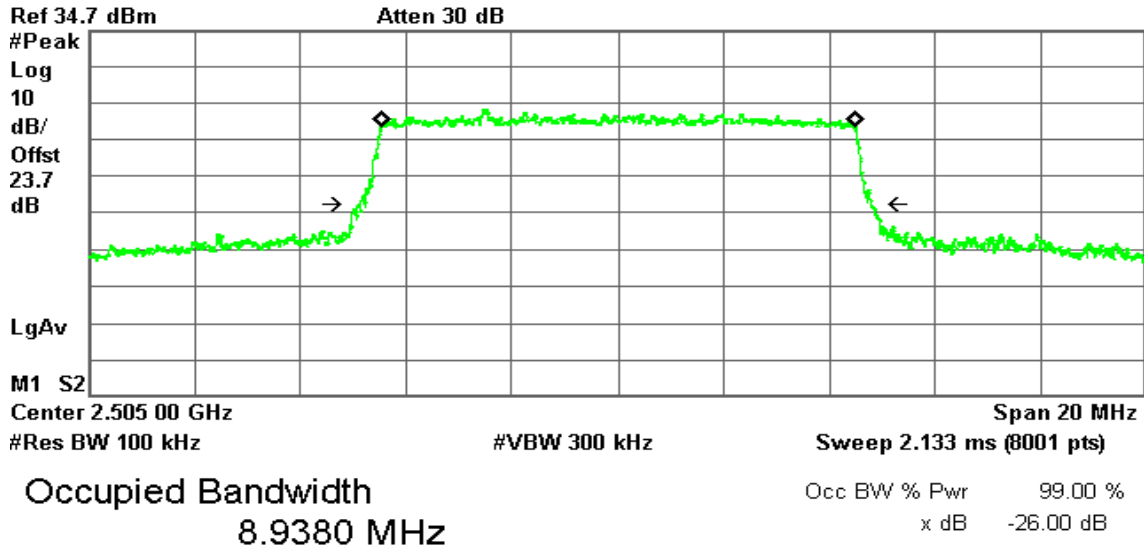
Transmit Freq Error -11.052 kHz
x dB Bandwidth 9.749 MHz

CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low

✱ Agilent

R T

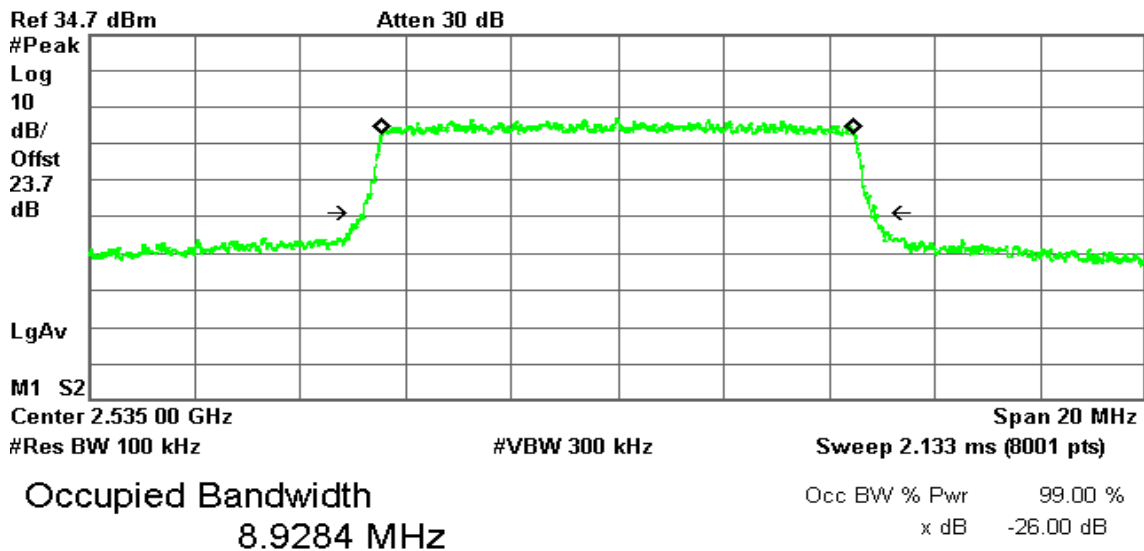


Transmit Freq Error 3.556 kHz
x dB Bandwidth 9.693 MHz

CH Mid

✱ Agilent

R T

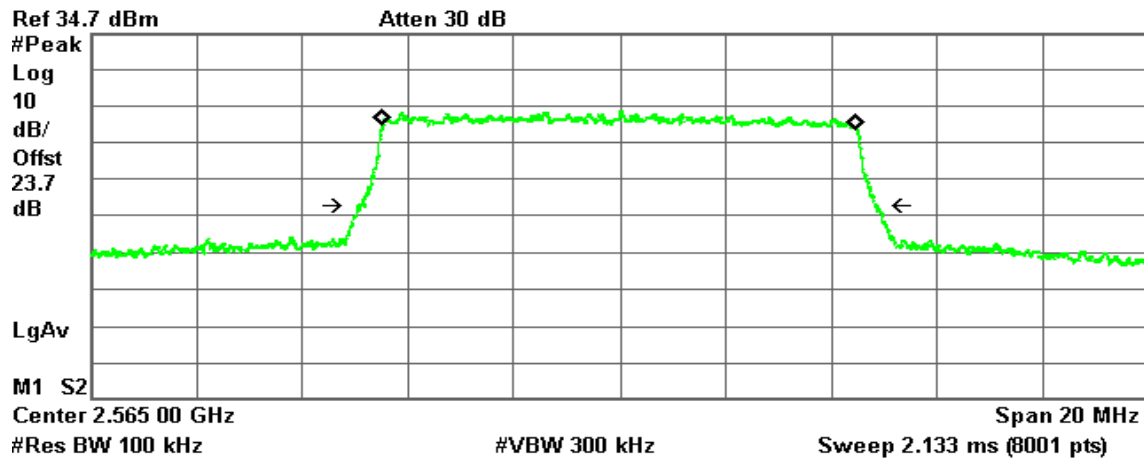


Transmit Freq Error 5.242 kHz
x dB Bandwidth 9.654 MHz

CH High

Agilent

R T



Occupied Bandwidth
8.9280 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

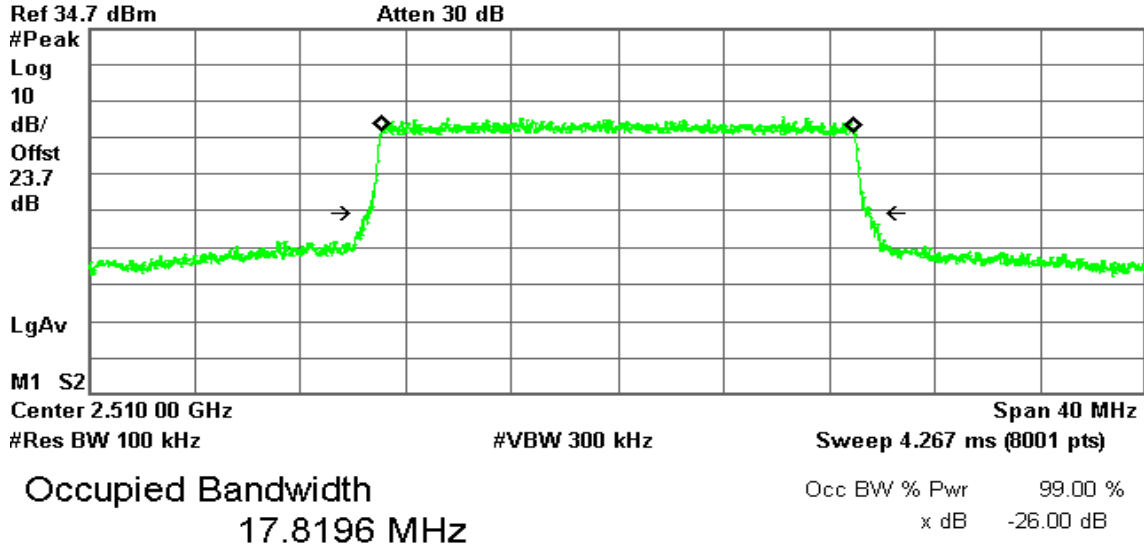
Transmit Freq Error -11.402 kHz
x dB Bandwidth 9.766 MHz

CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low

Agilent

R T

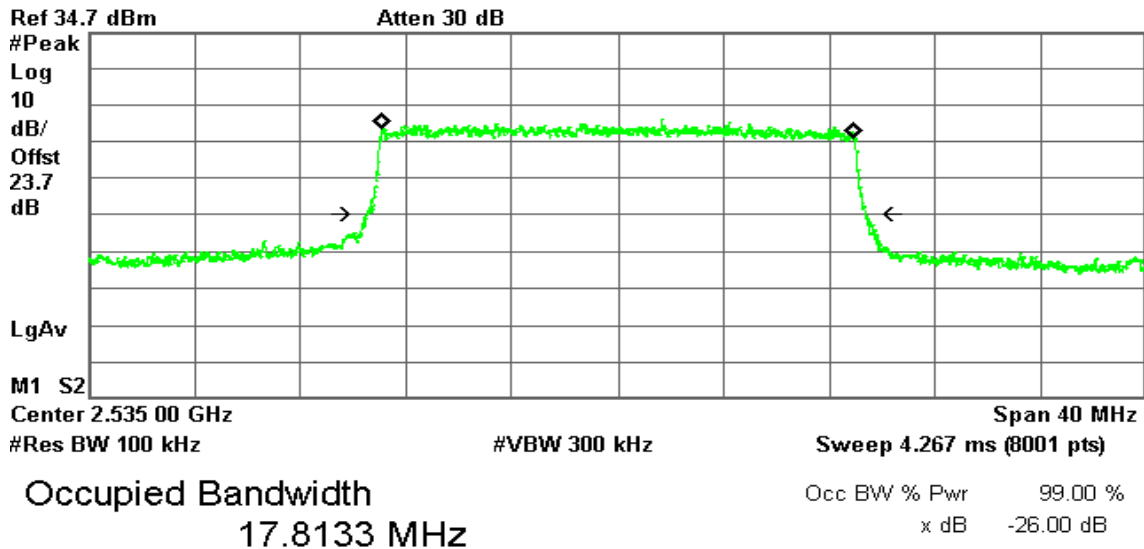


Transmit Freq Error 6.981 kHz
x dB Bandwidth 18.984 MHz

CH Mid

Agilent

R T

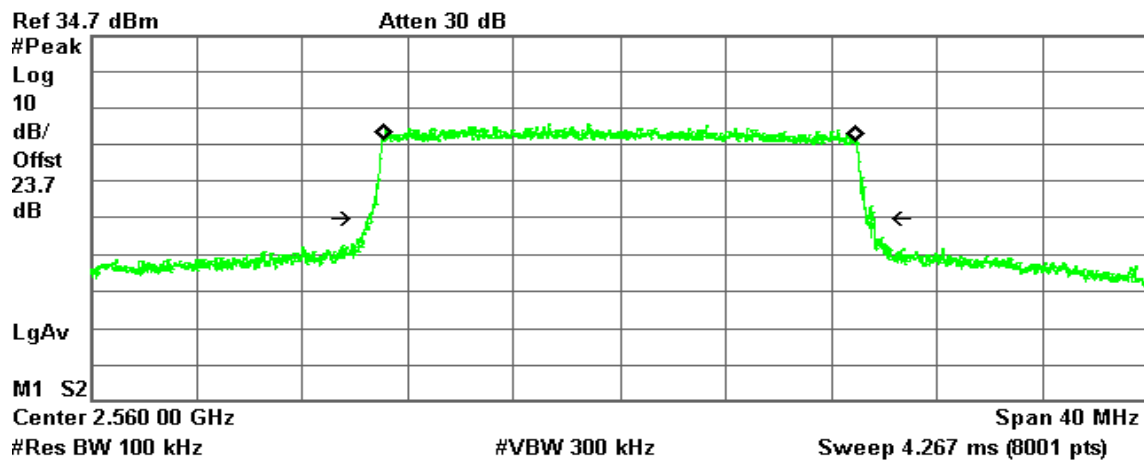


Transmit Freq Error -4.526 kHz
x dB Bandwidth 18.828 MHz

CH High

Agilent

R T



Occupied Bandwidth
17.8050 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

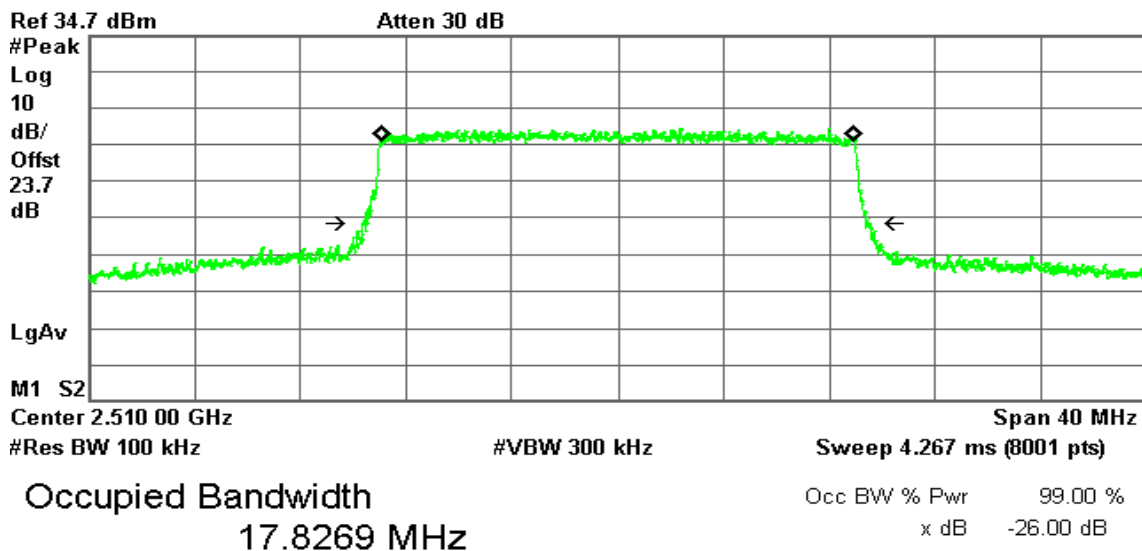
Transmit Freq Error -10.334 kHz
x dB Bandwidth 19.094 MHz

CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low

Agilent

R T

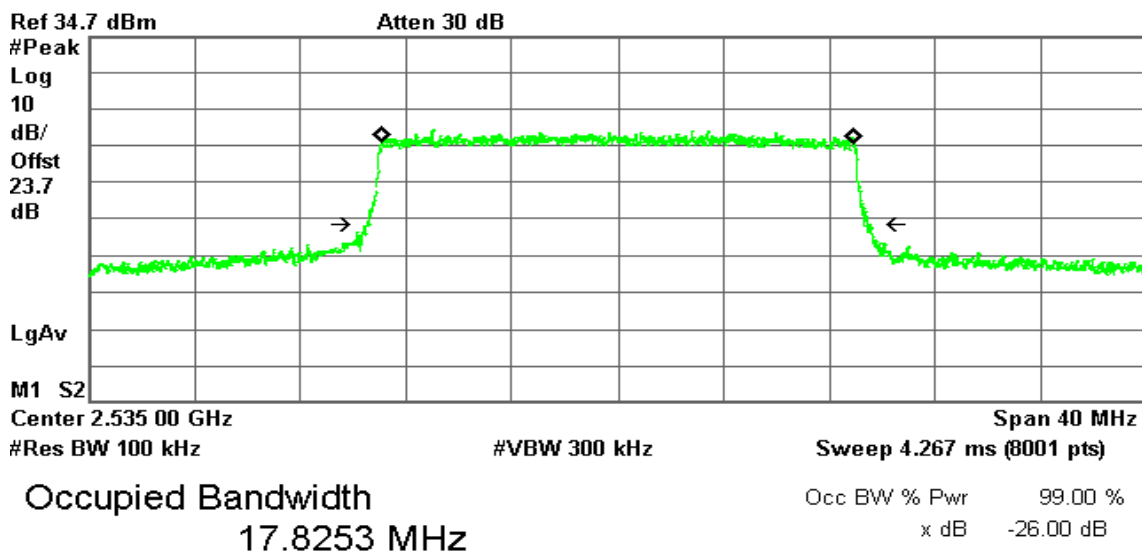


Transmit Freq Error -2.403 kHz
x dB Bandwidth 19.069 MHz

CH Mid

Agilent

R T

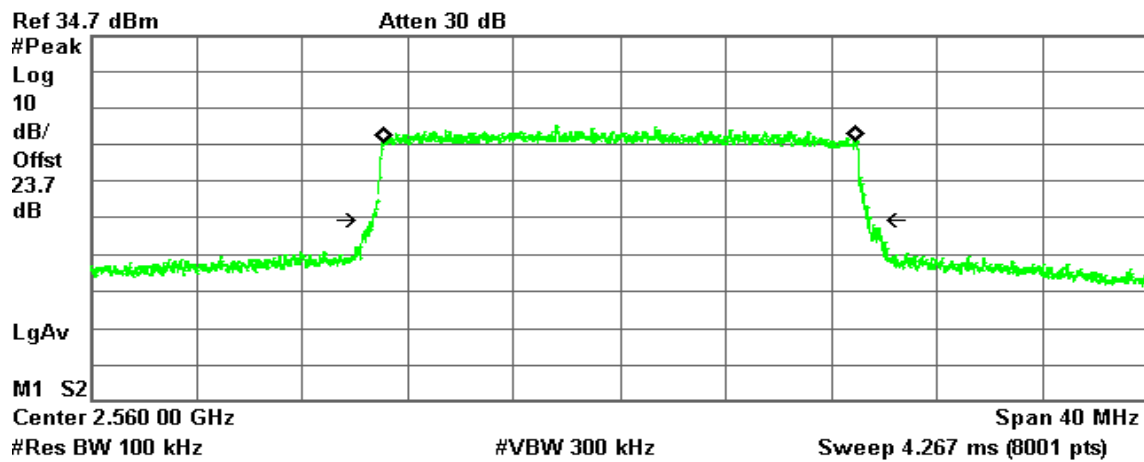


Transmit Freq Error -5.762 kHz
x dB Bandwidth 19.009 MHz

CH High

Agilent

R T



Occupied Bandwidth
17.8263 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 9.487 kHz
x dB Bandwidth 18.804 MHz

7.4PEAK TO AVERAGE RATIO

LIMIT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

TEST PROCEDURES

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS**LTE Band 17****CHANNEL BANDWIDTH: 5MHz / QPSK / 100%RB**

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23755	706.50	6.70
23790	710.00	7.21
23825	713.50	6.12

CHANNEL BANDWIDTH: 5MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23755	706.50	7.76
23790	710.00	5.92
23825	713.50	7.55

CHANNEL BANDWIDTH: 10MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23780	709.00	5.36
23790	710.00	5.28
23800	711.00	5.37

CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23780	709.00	6.89
23790	710.00	8.62
23800	711.00	7.10

LTE Band 7**CHANNEL BANDWIDTH: 5MHz / QPSK / 100%RB**

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20775	2502.50	5.22
21100	2535.00	6.15
21425	2567.50	11.32

CHANNEL BANDWIDTH: 5MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20775	2502.50	6.49
21100	2535.00	6.97
21425	2567.50	10.92

CHANNEL BANDWIDTH: 10MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20800	2505.00	4.96
21100	2535.00	5.43
21400	2565.00	5.84

CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB

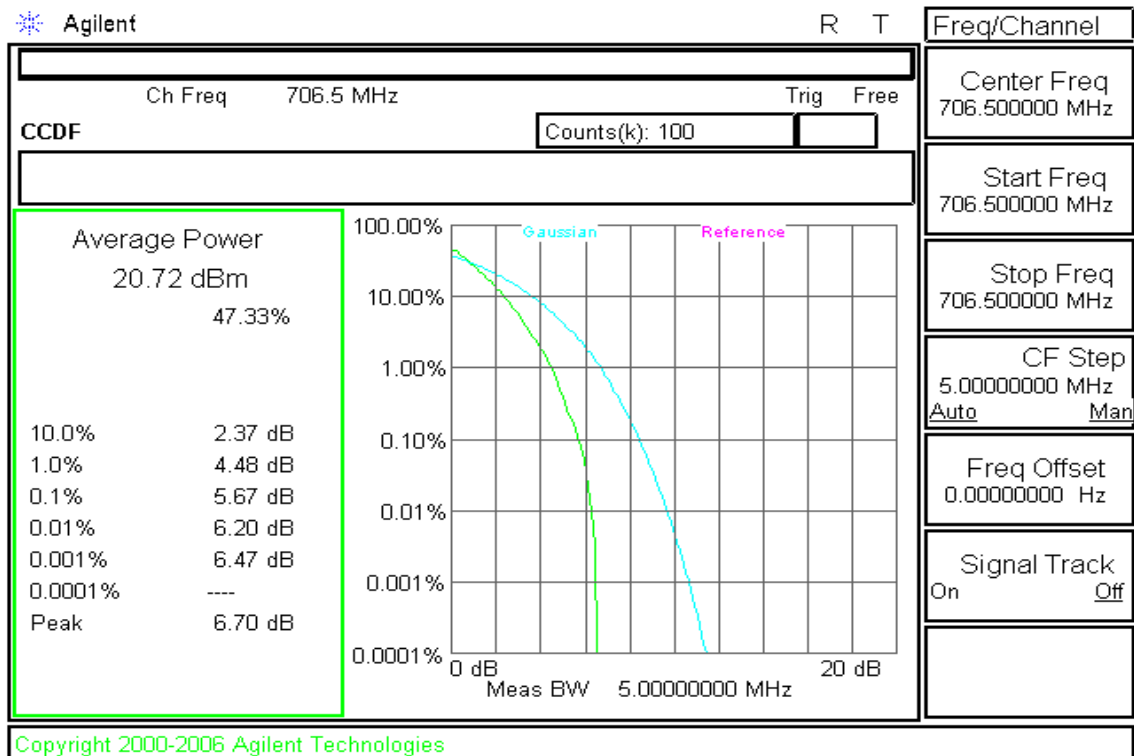
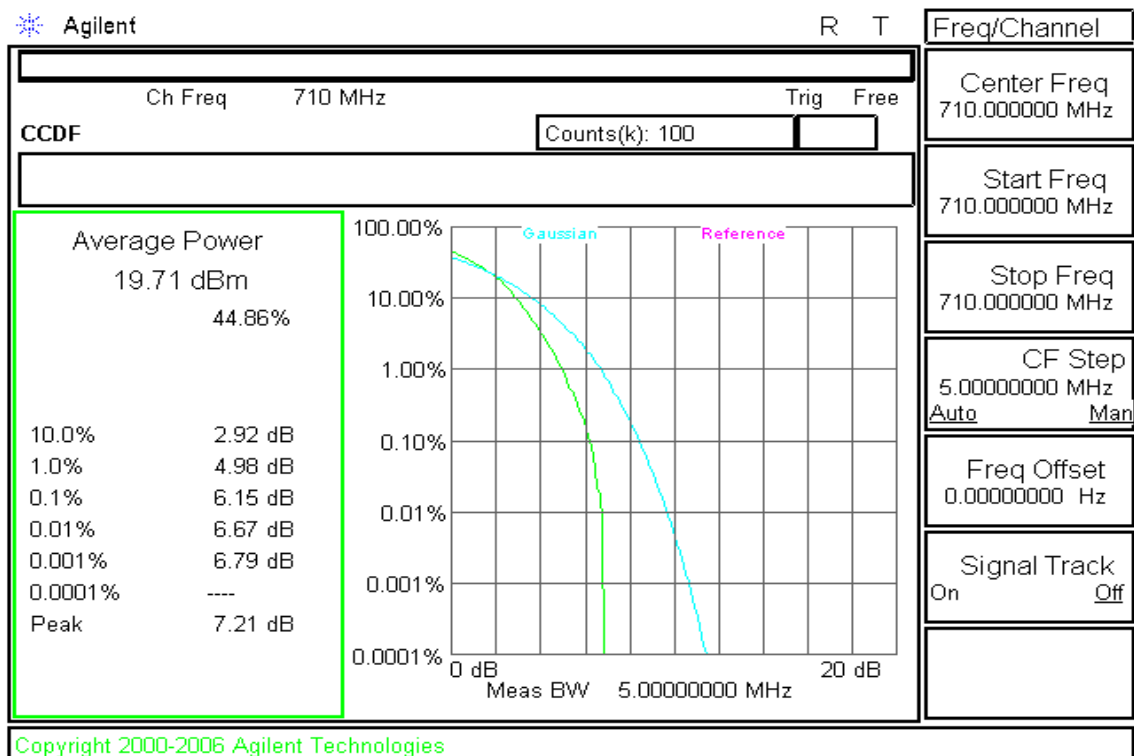
Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20800	2505.00	6.72
21100	2535.00	7.00
21400	2565.00	6.81

CHANNEL BANDWIDTH: 20MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20850	2510.00	7.29
21100	2535.00	7.44
21350	2560.00	7.24

CHANNEL BANDWIDTH: 20MHz / 16QAM / 100%RB

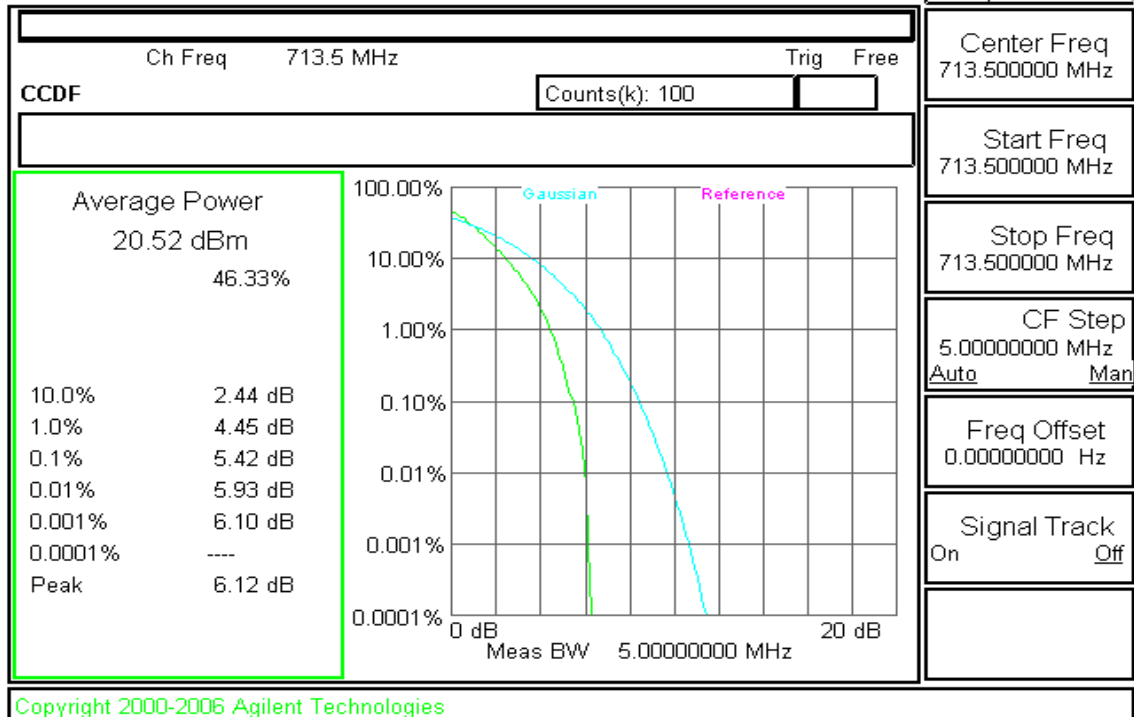
Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20850	2510.00	9.05
21100	2535.00	8.72
21350	2560.00	8.88

LTE Band 17**CHANNEL BANDWIDTH: 5MHz / QPSK****CH Low****CH Mid**

CH High

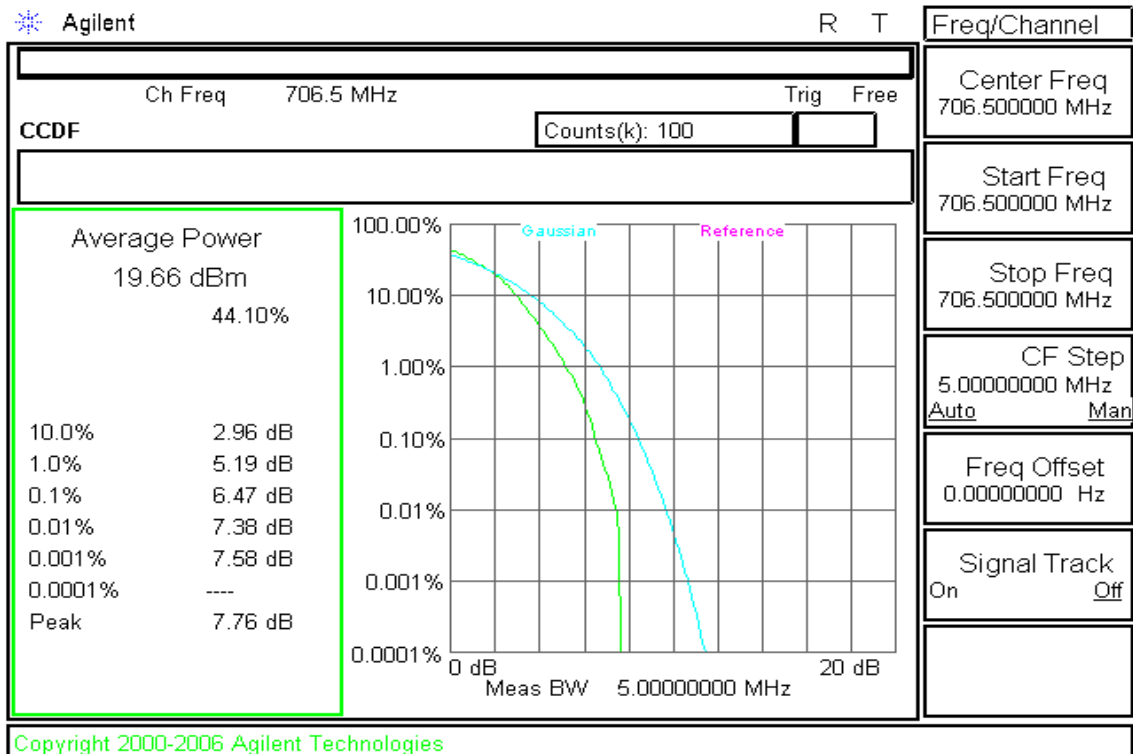
Agilent

R T

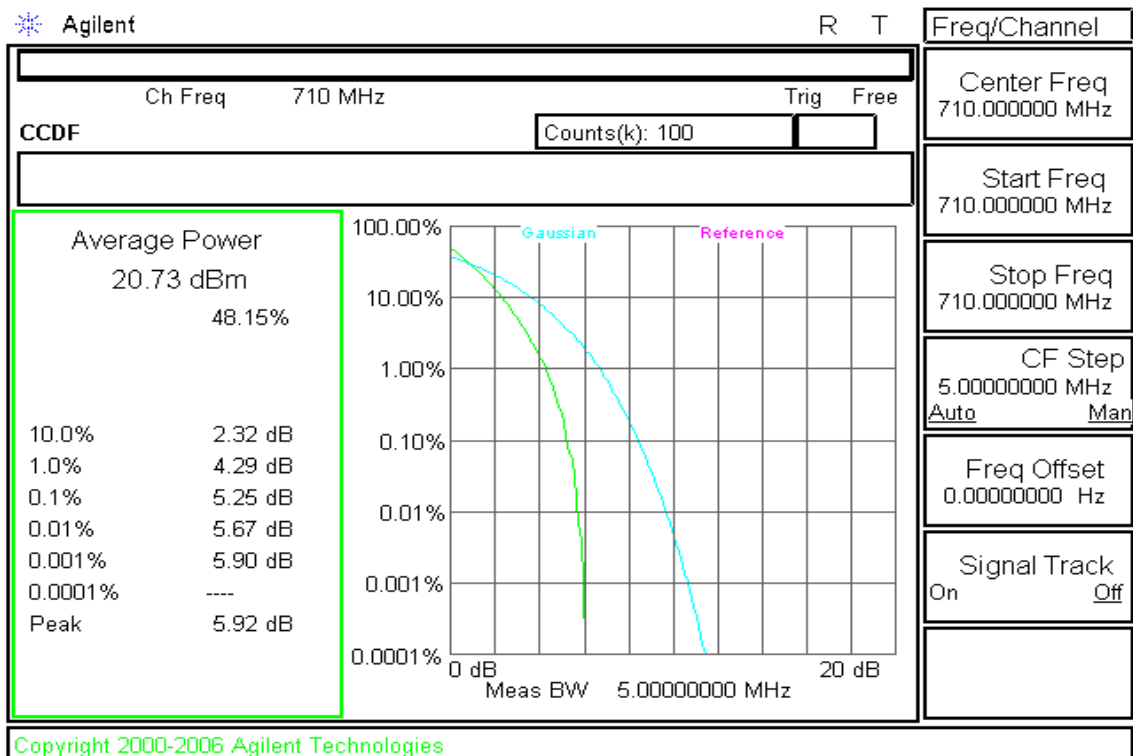


CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



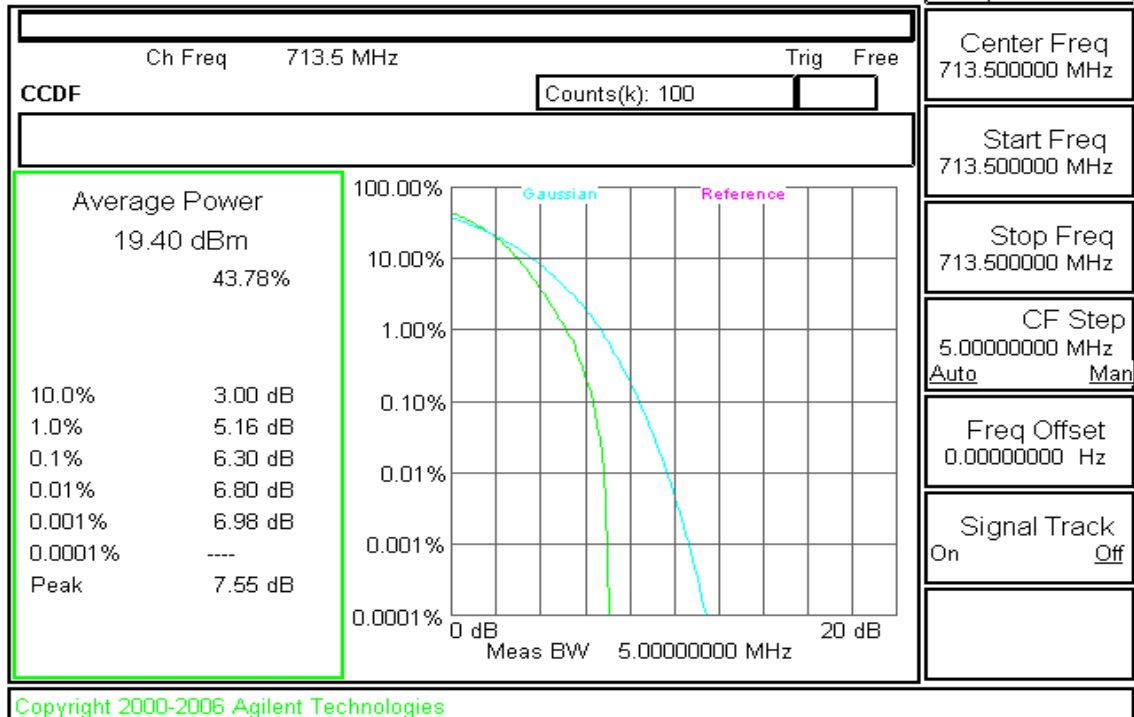
CH Mid



CH High

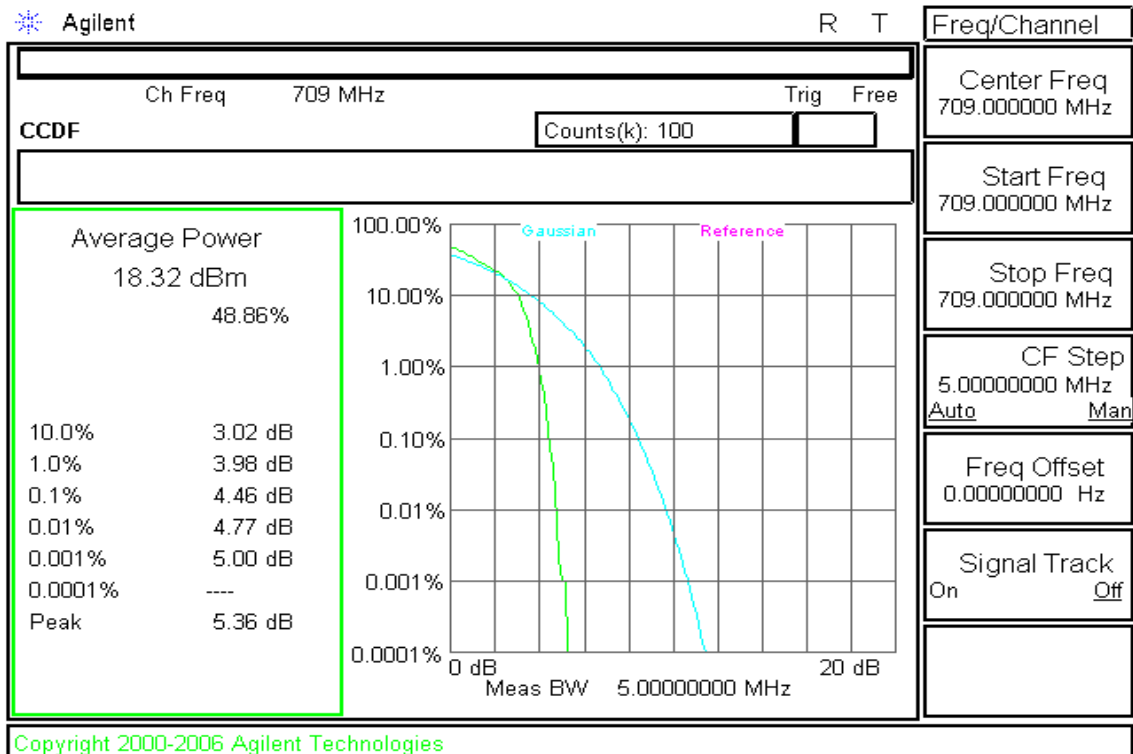
Agilent

R T

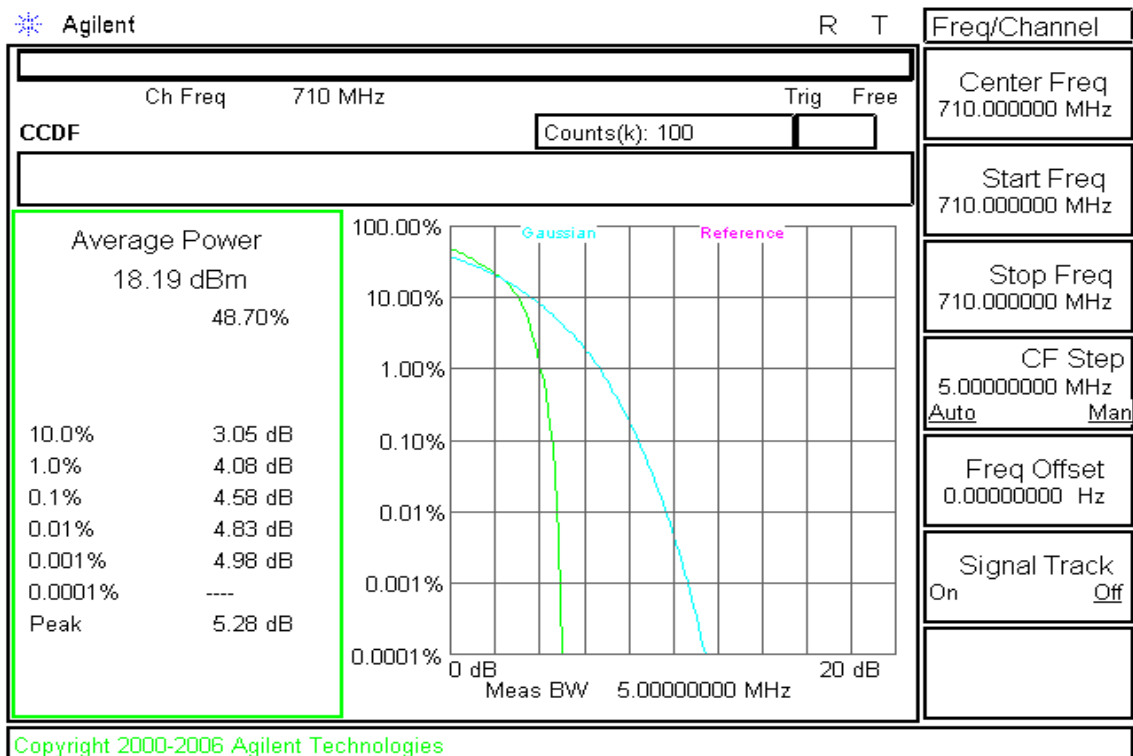


CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



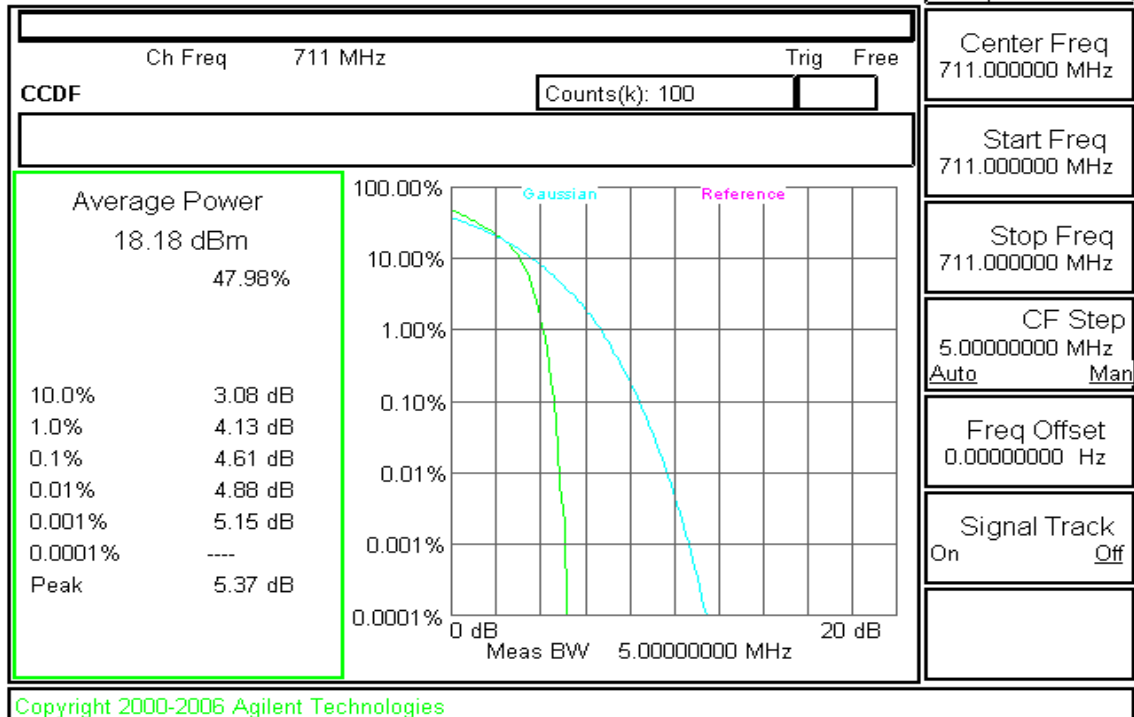
CH Mid

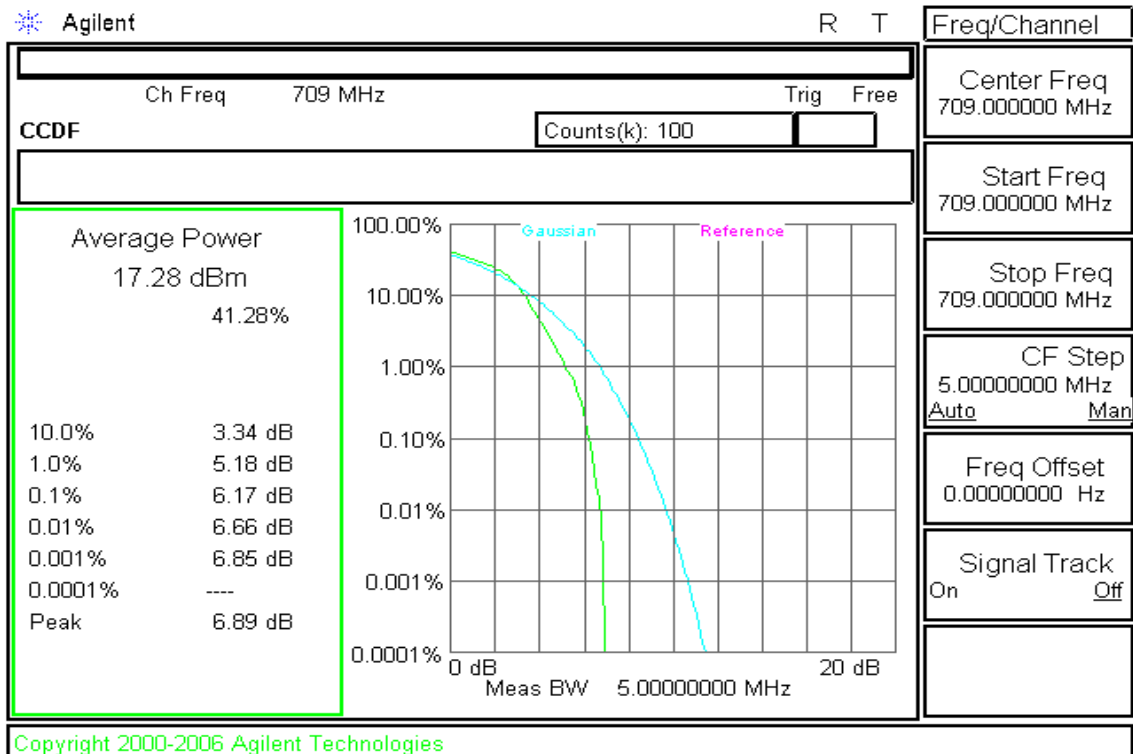
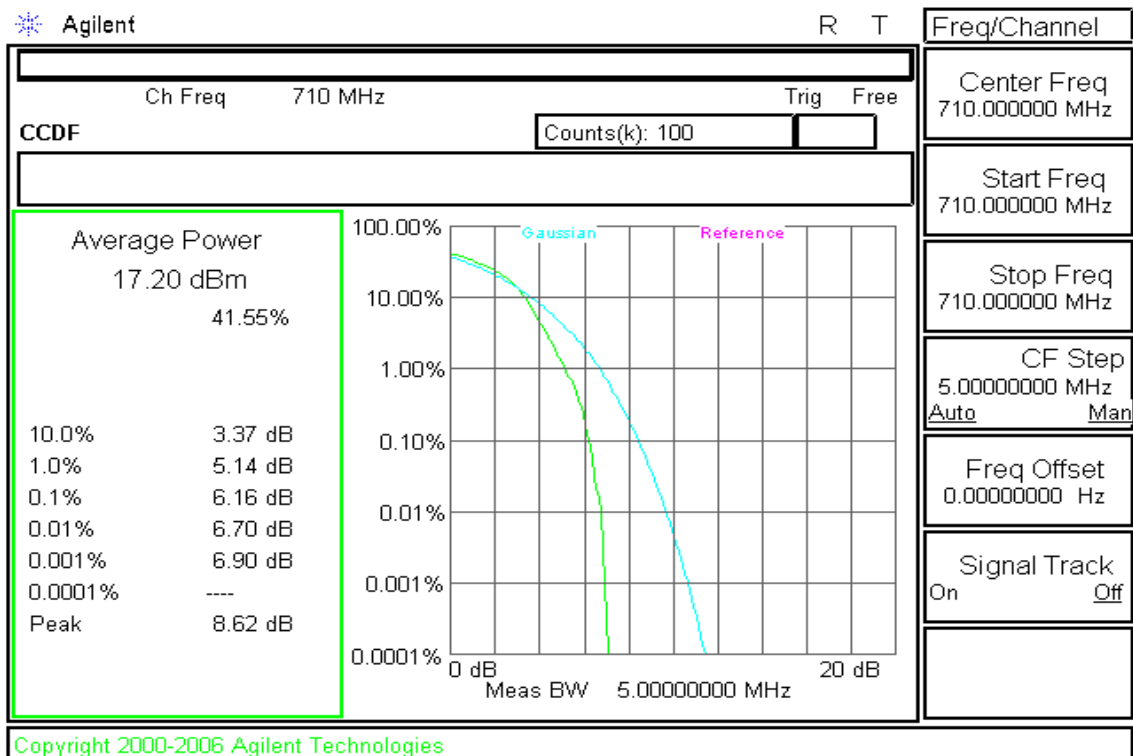


CH High

Agilent

R T

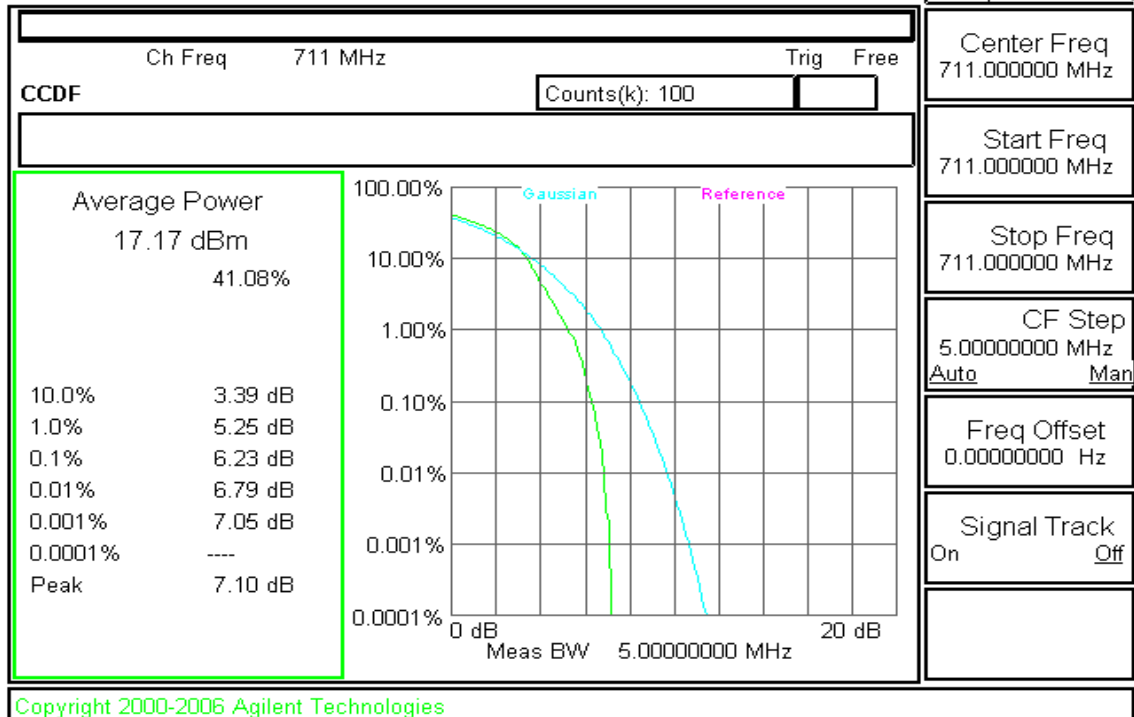


CHANNEL BANDWIDTH: 10MHz / 16QAM**CH Low****CH Mid**

CH High

Agilent

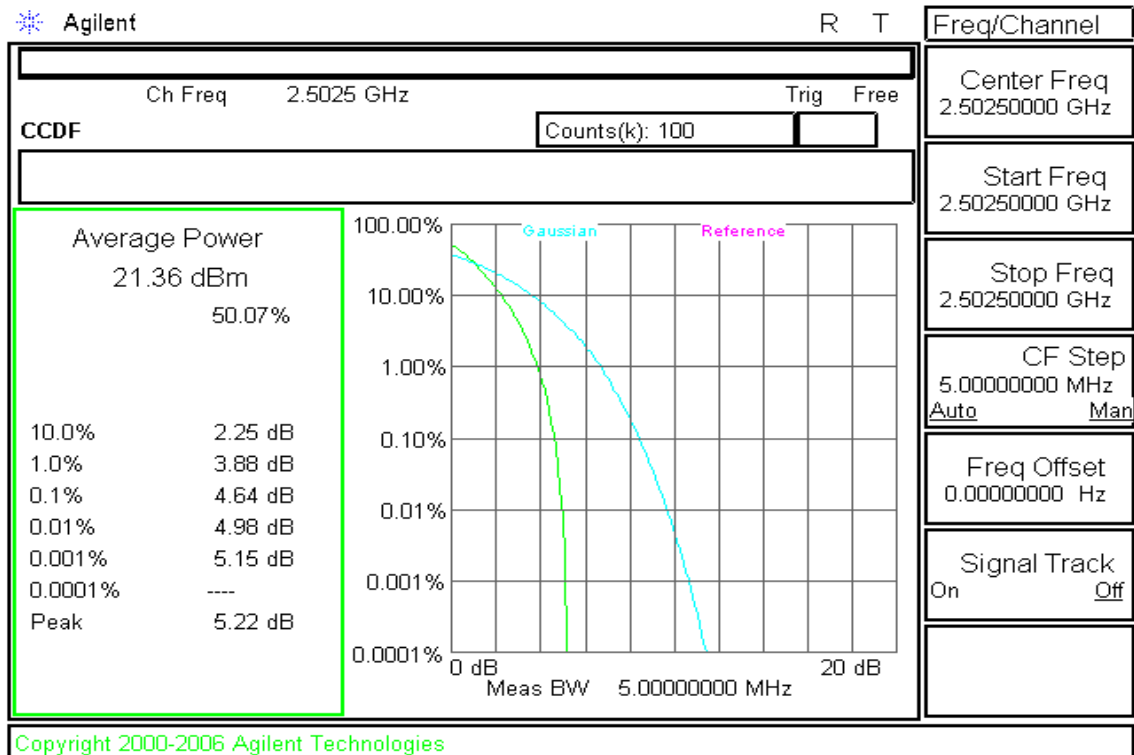
R T



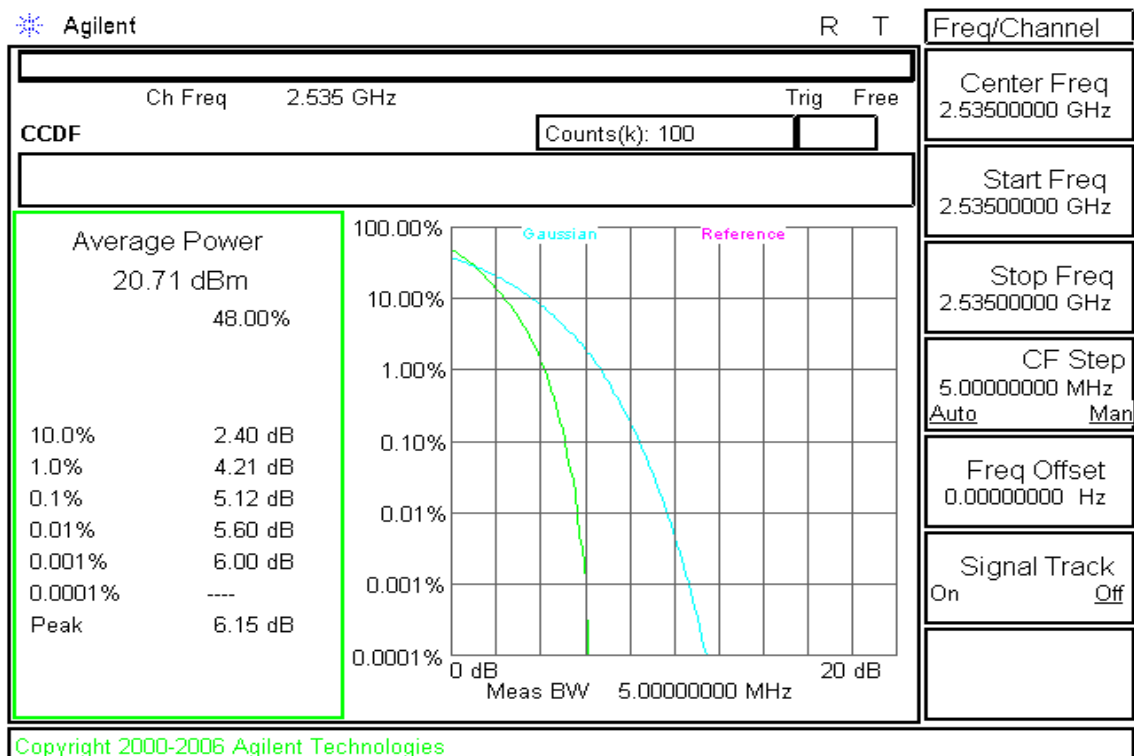
LTE Band 7

CHANNEL BANDWIDTH: 5MHz / QPSK

CH Low



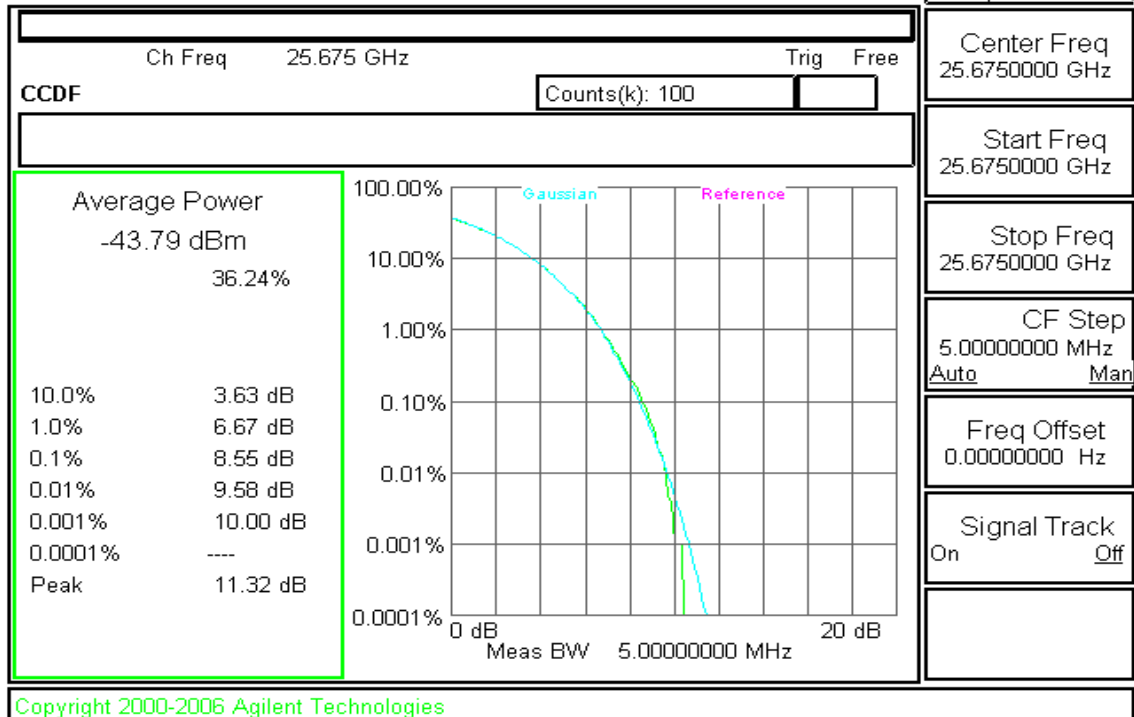
CH Mid



CH High

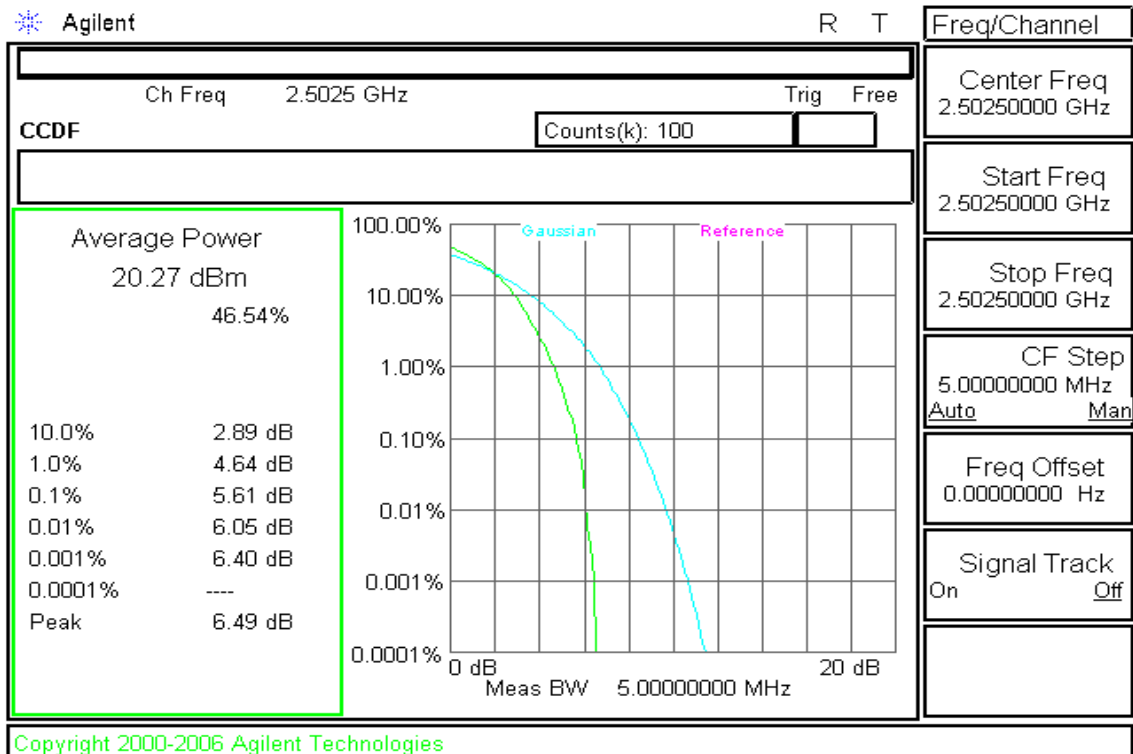
Agilent

R T

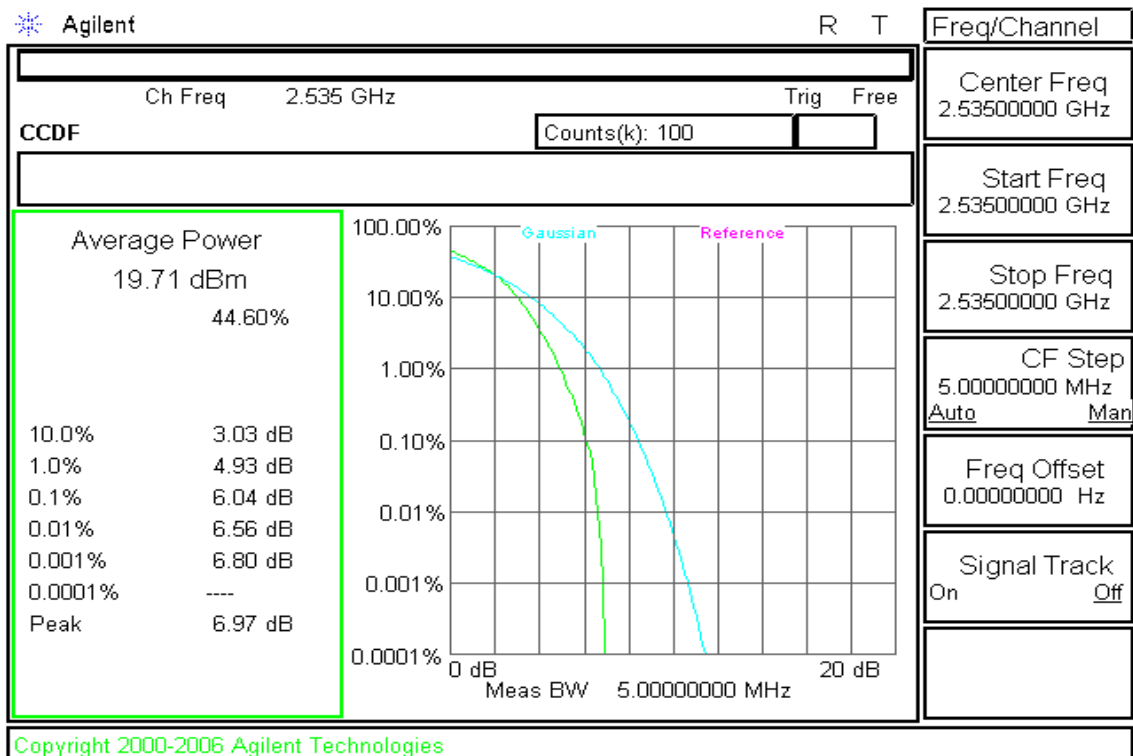


CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



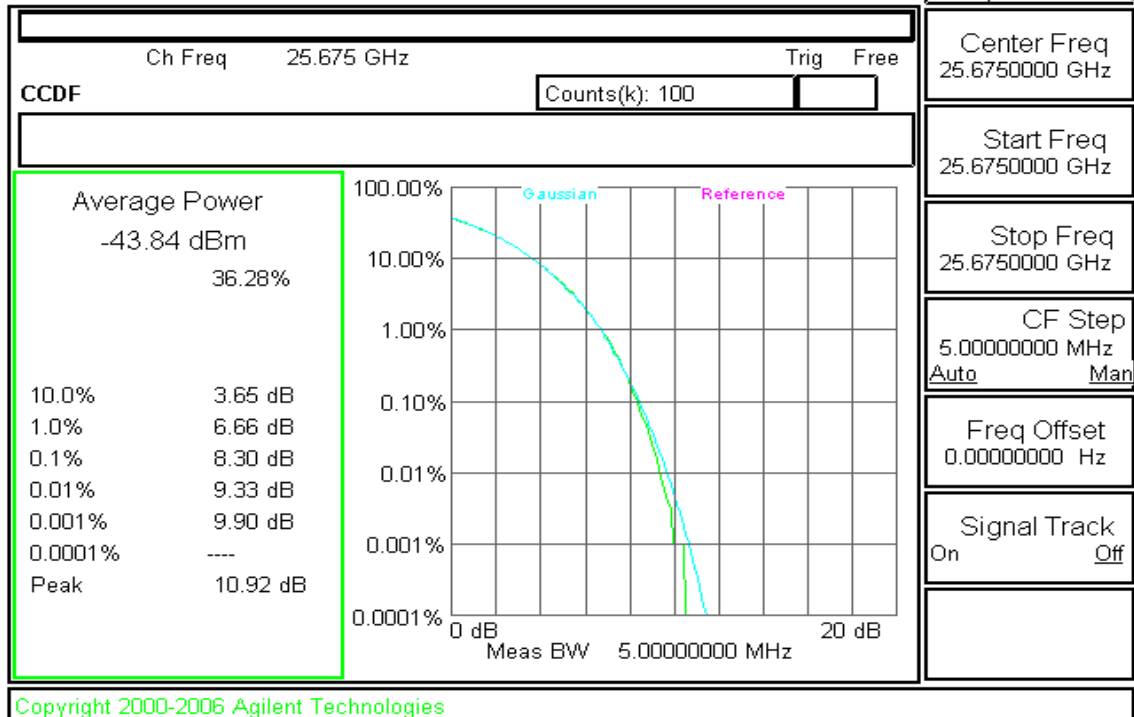
CH Mid



CH High

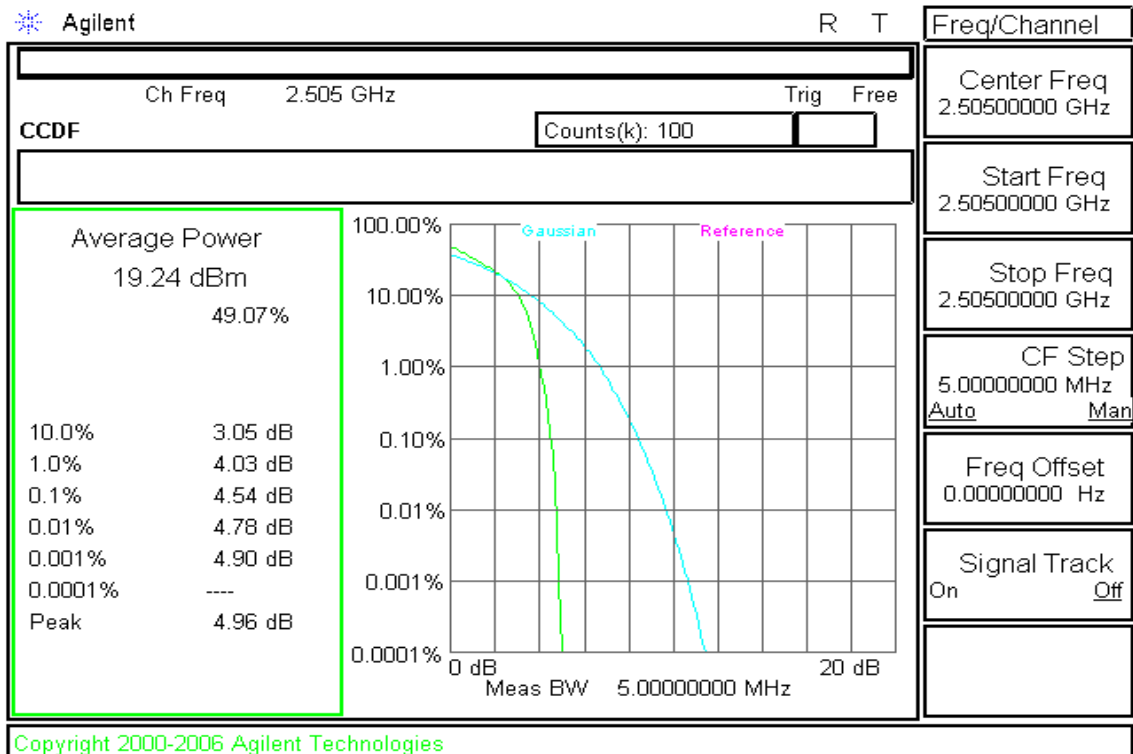
Agilent

R T

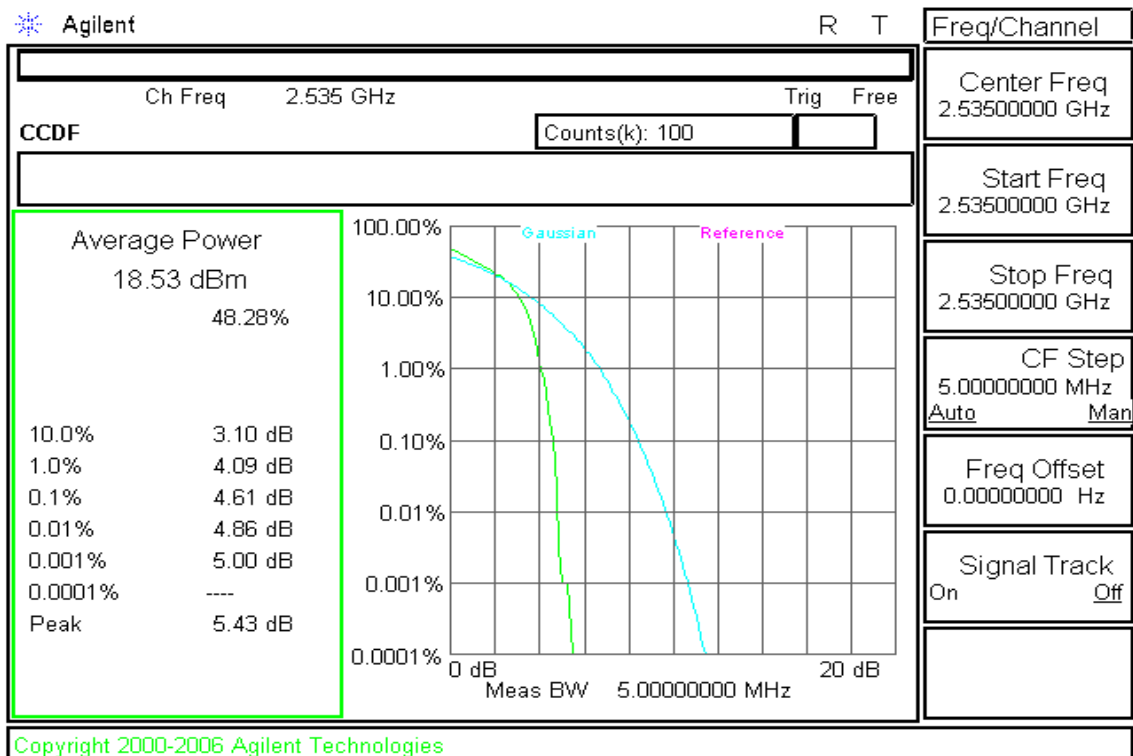


CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



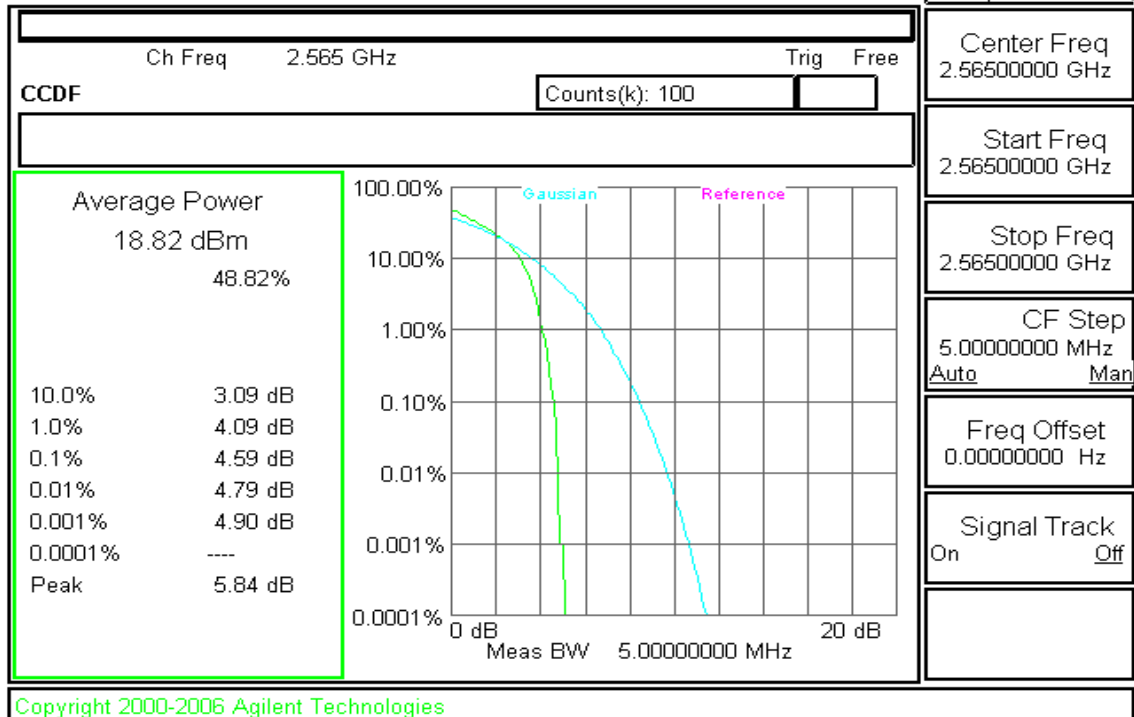
CH Mid



CH High

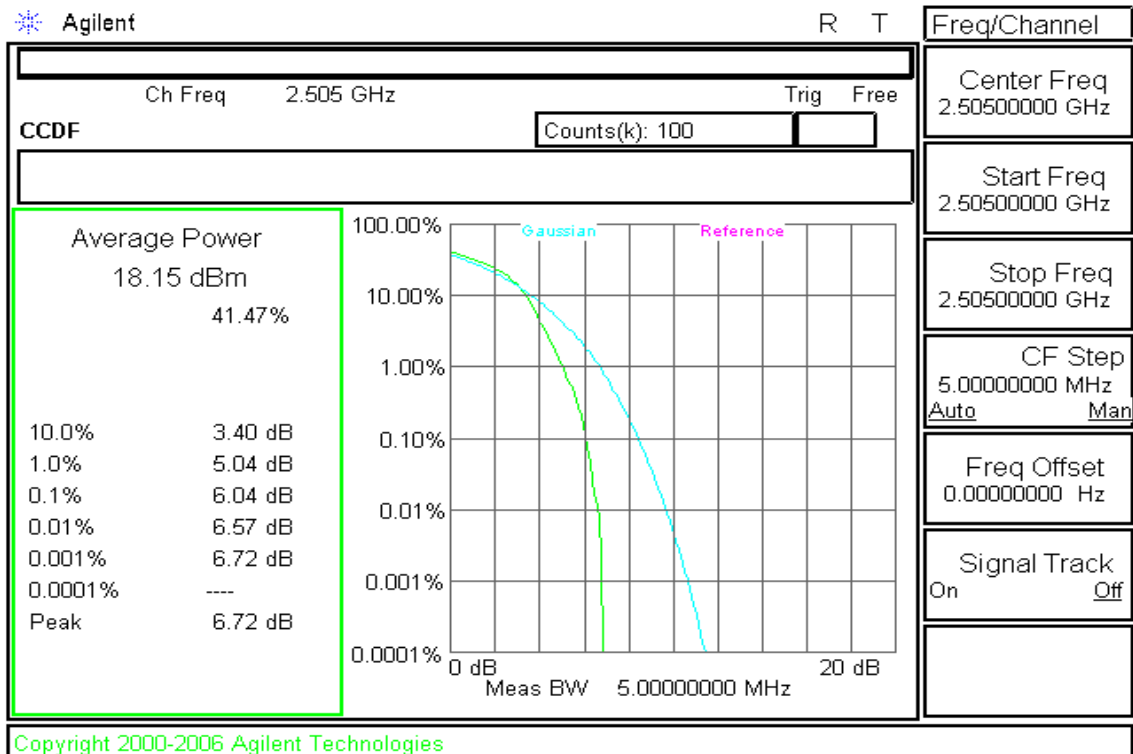
Agilent

R T

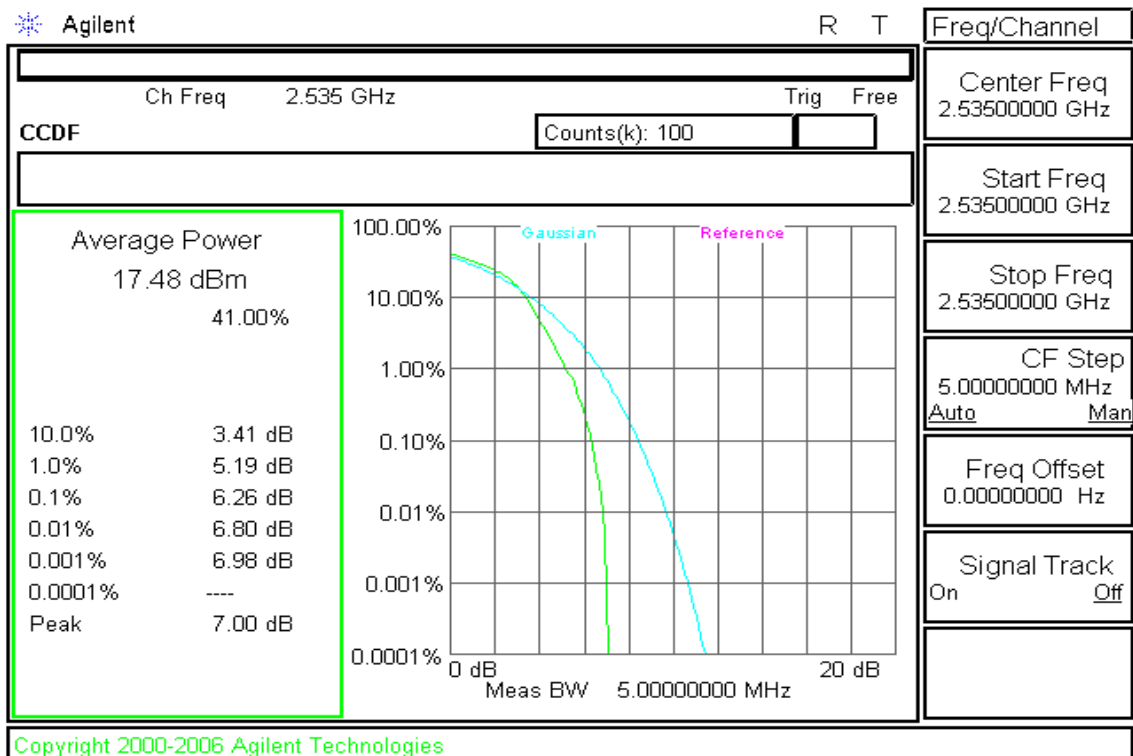


CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



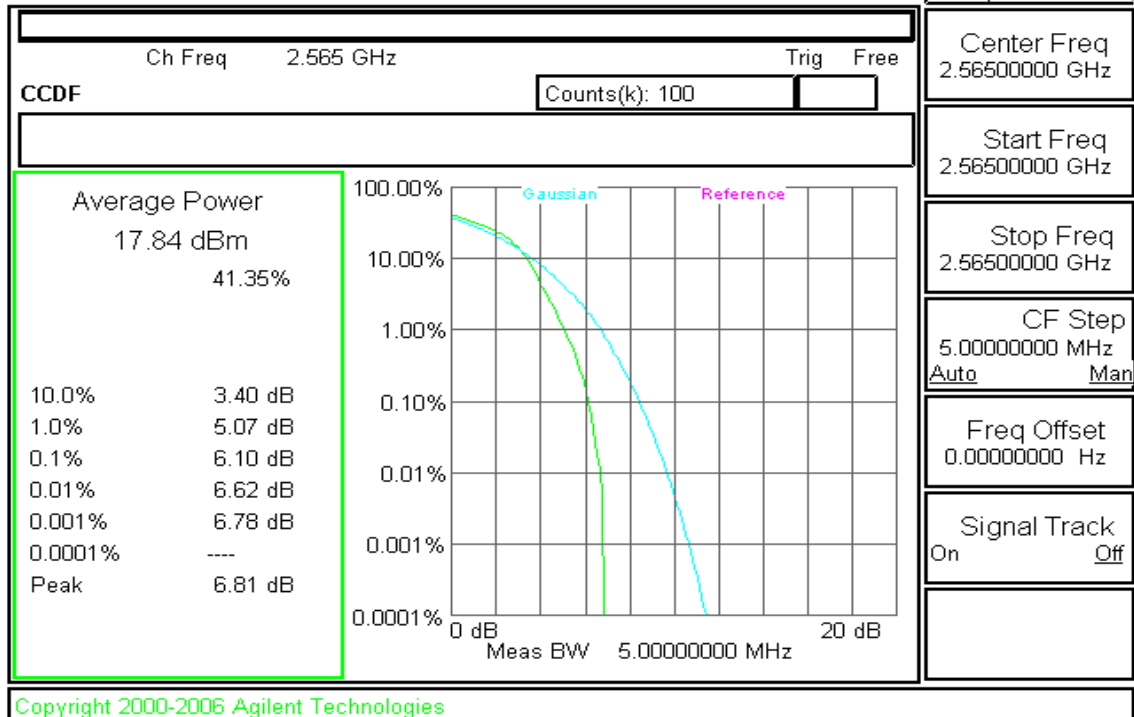
CH Mid



CH High

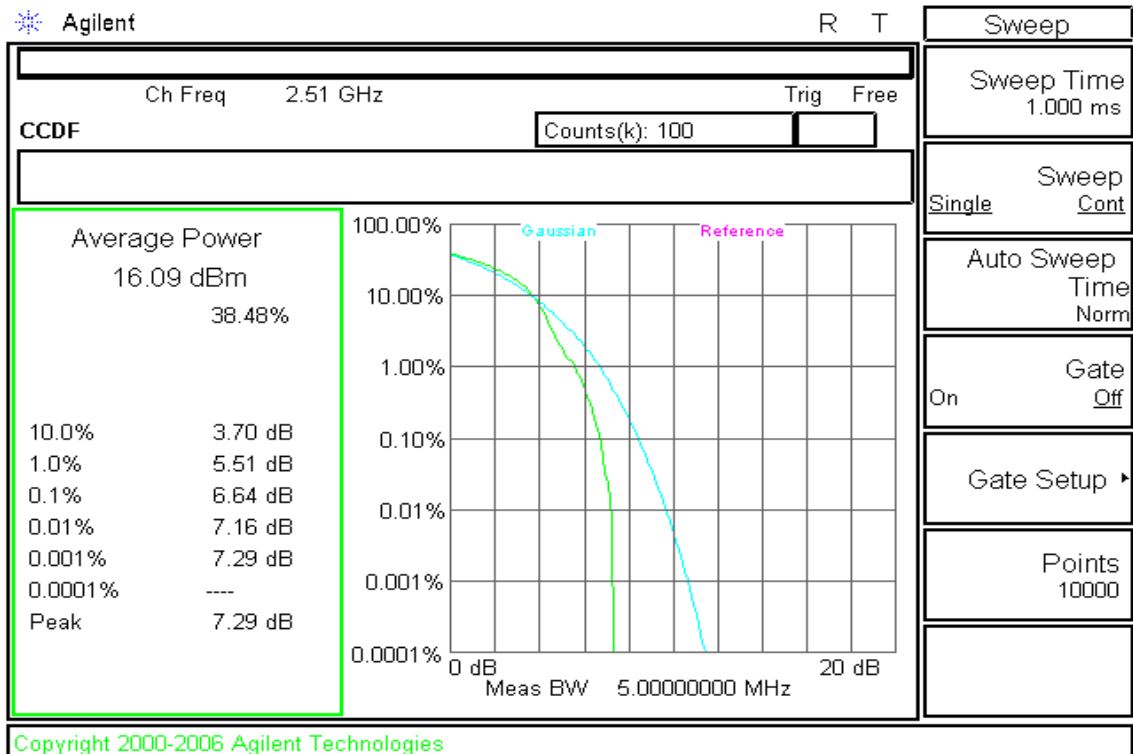
Agilent

R T

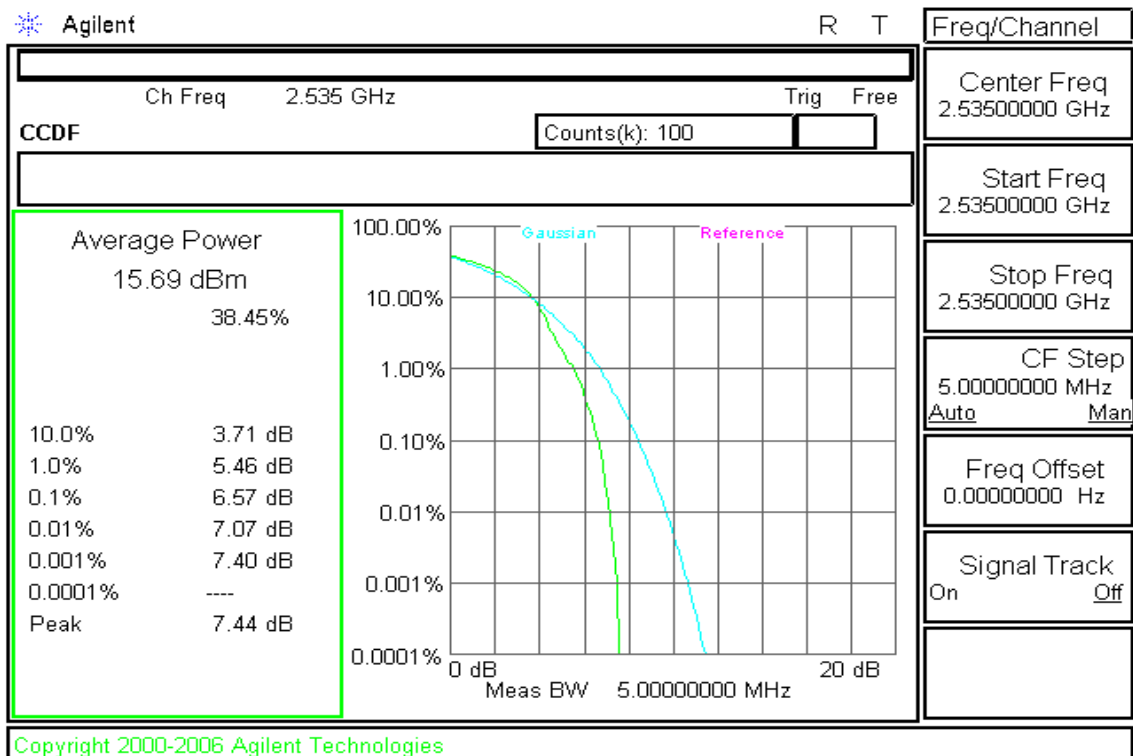


CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low



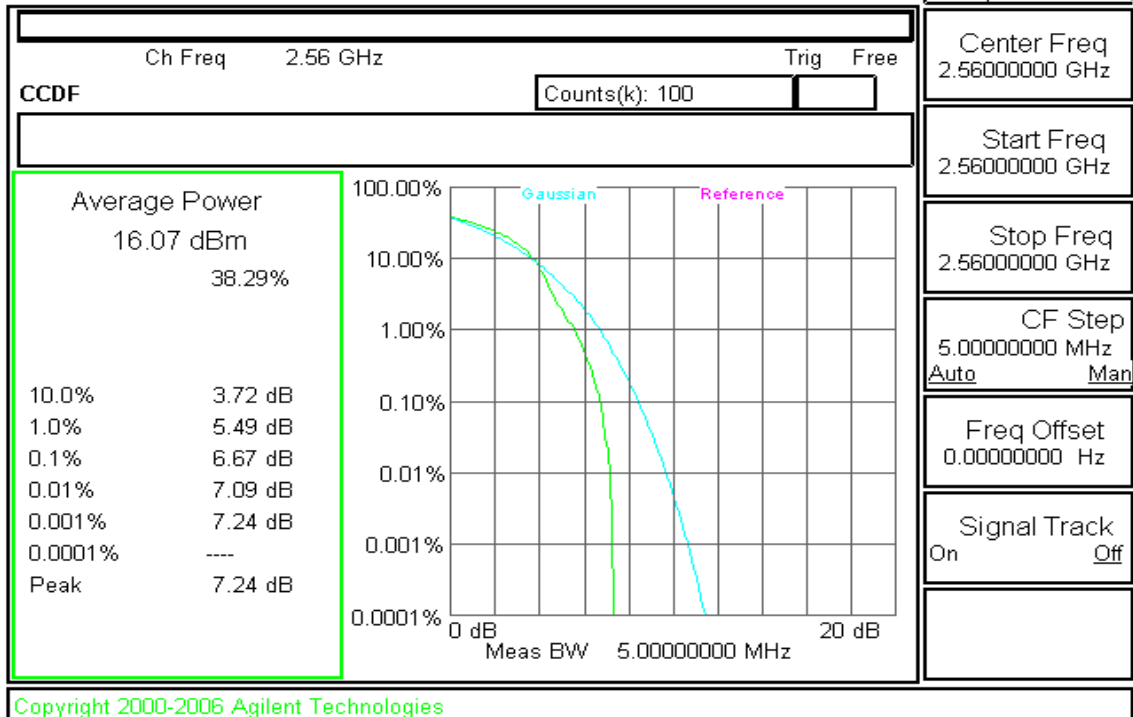
CH Mid



CH High

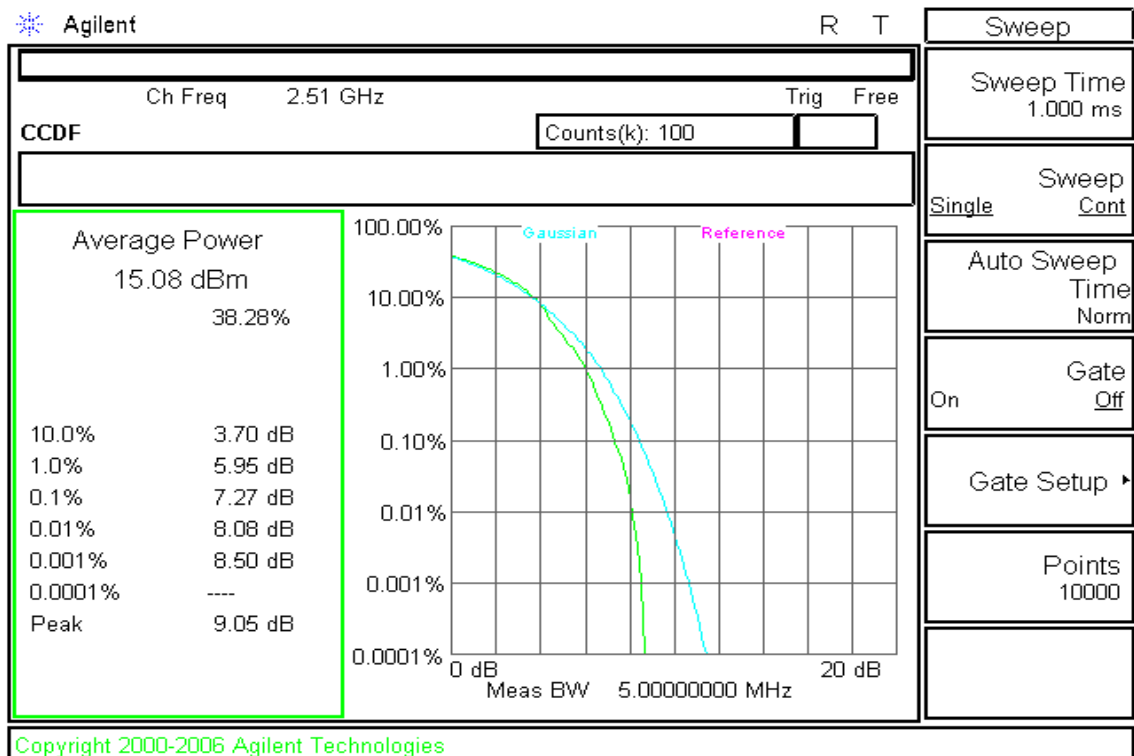
Agilent

R T

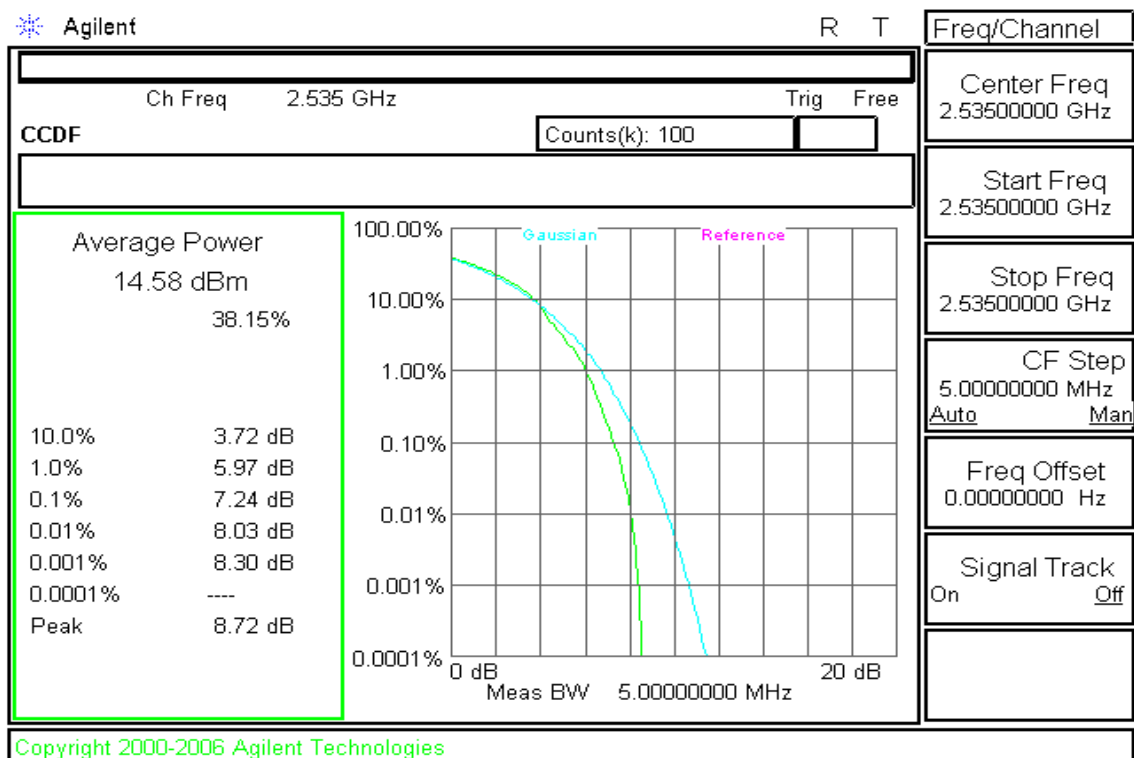


CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low



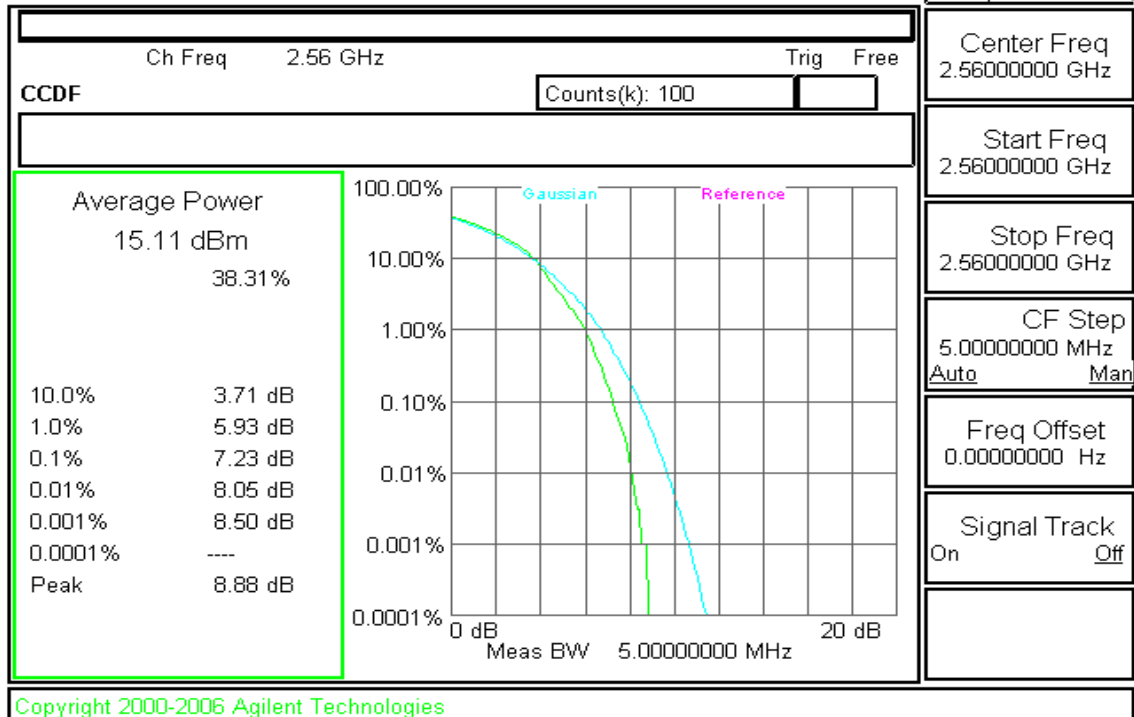
CH Mid



CH High

Agilent

R T



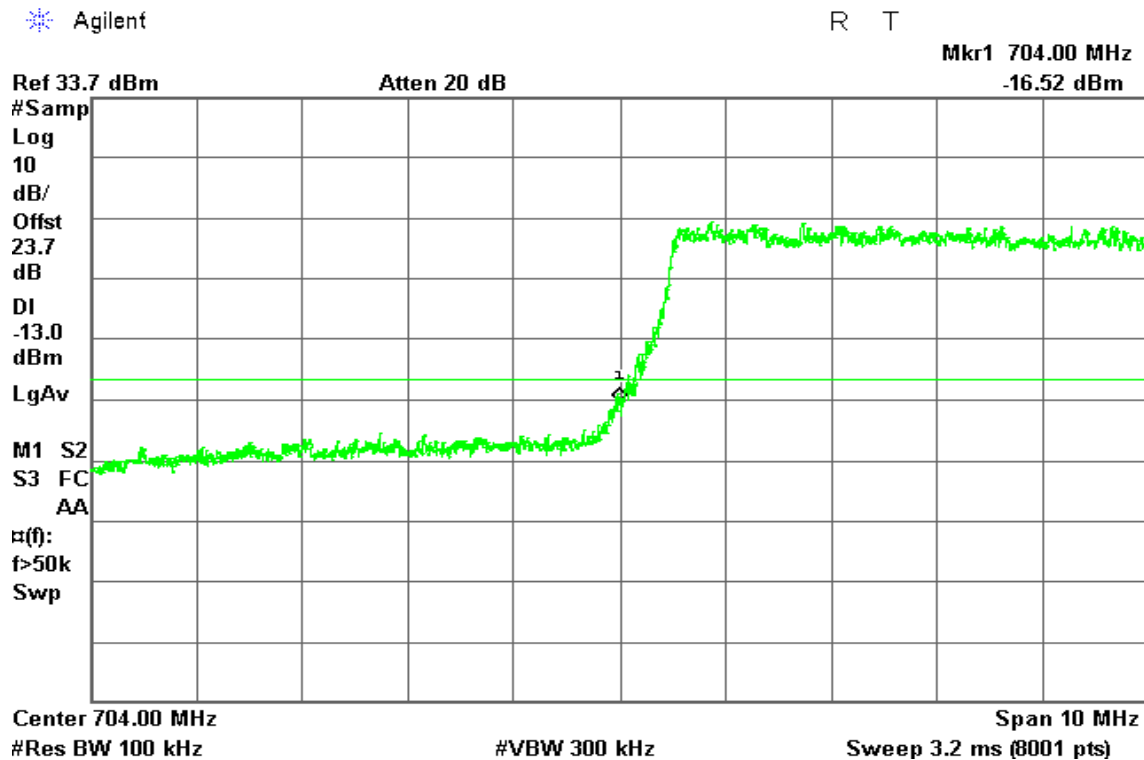
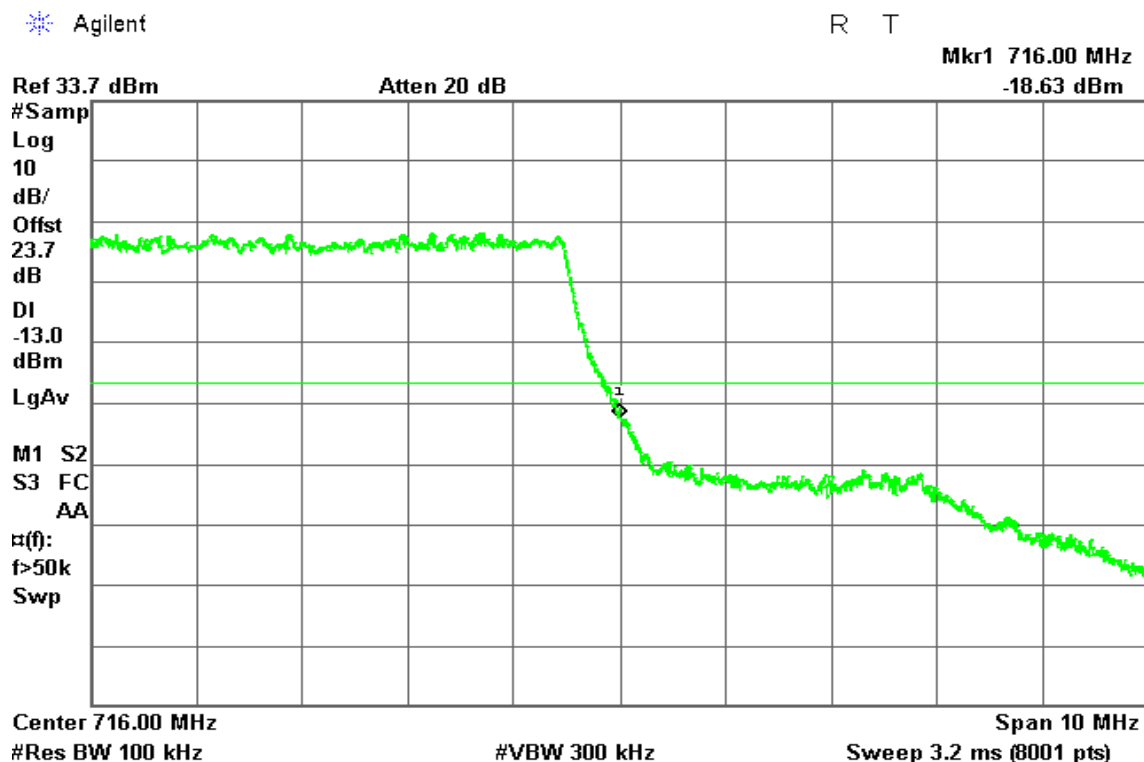
7.5BAND EDGE MEASUREMENT

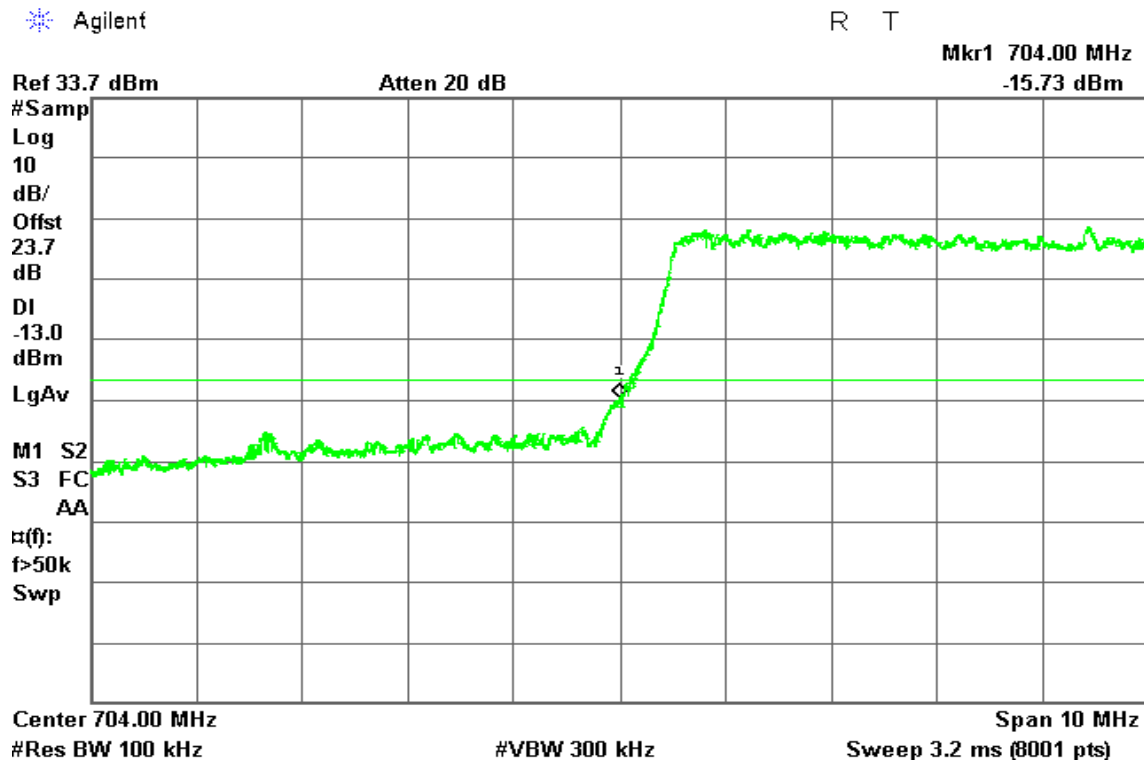
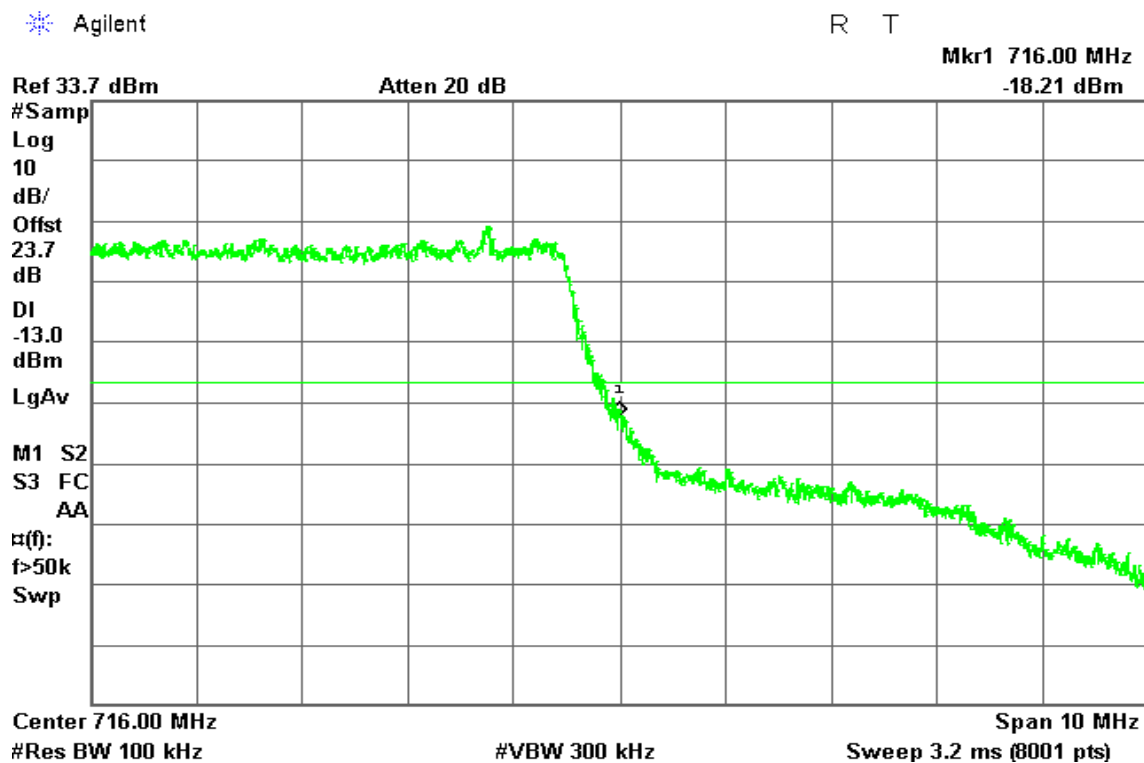
LIMIT

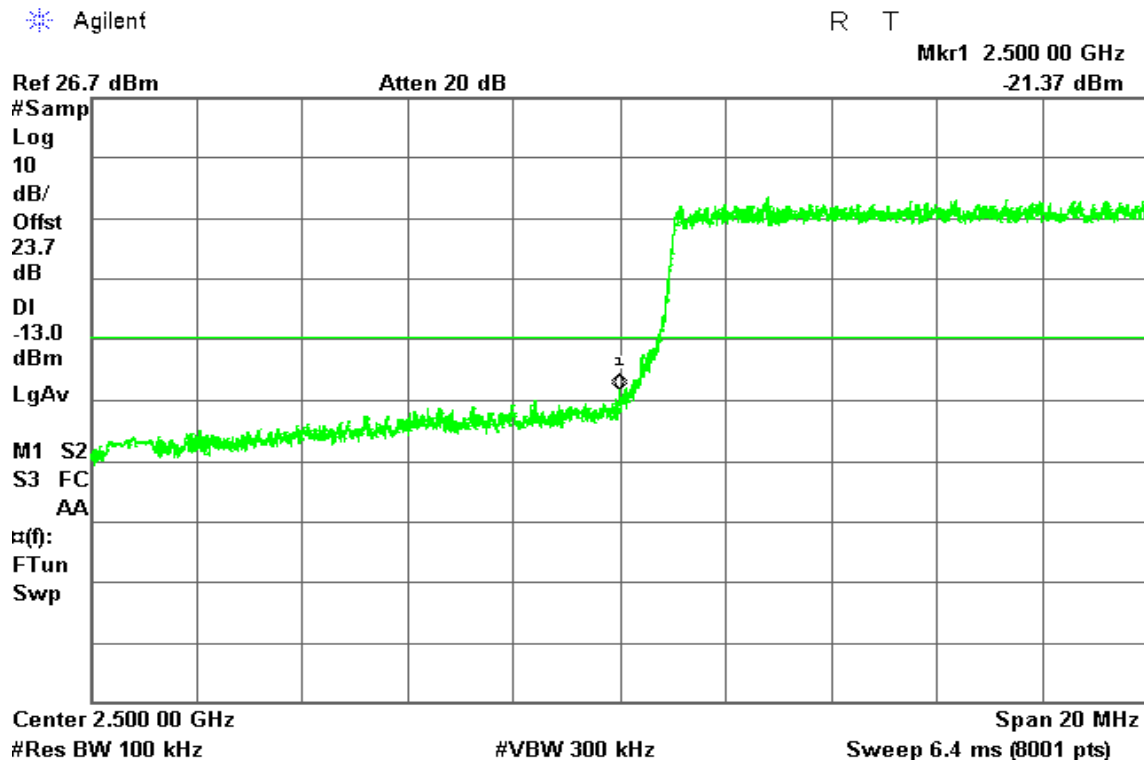
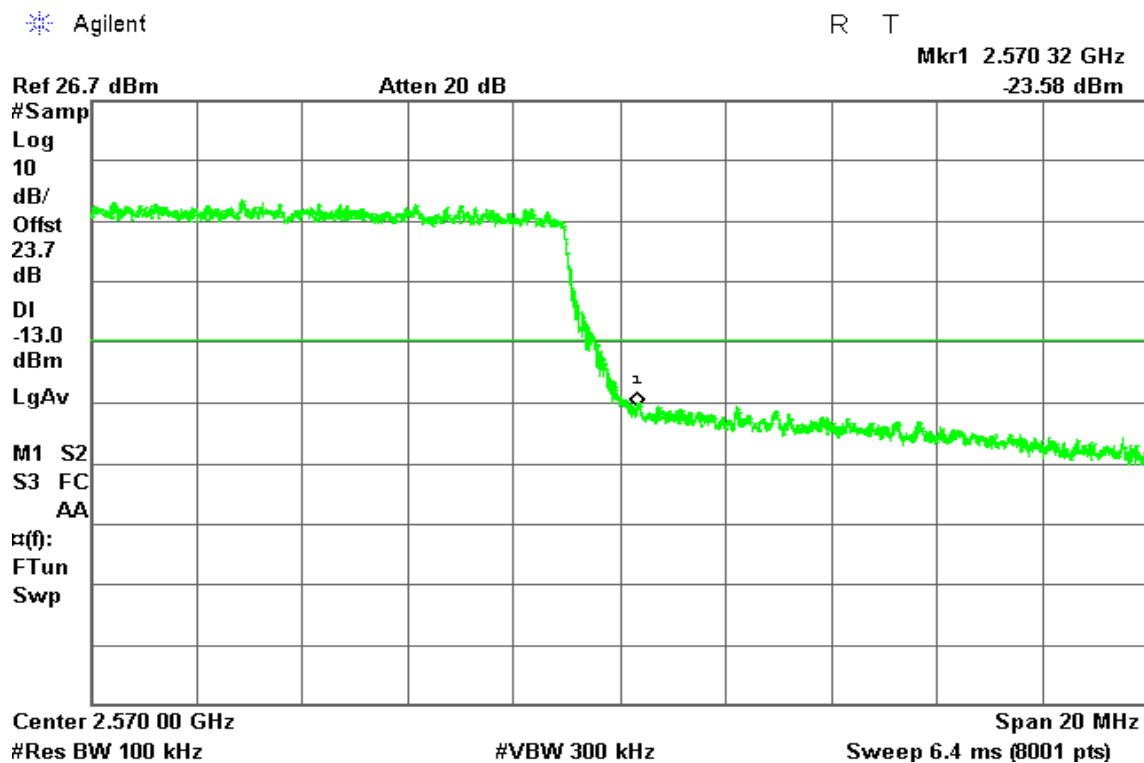
For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed. For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm . In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

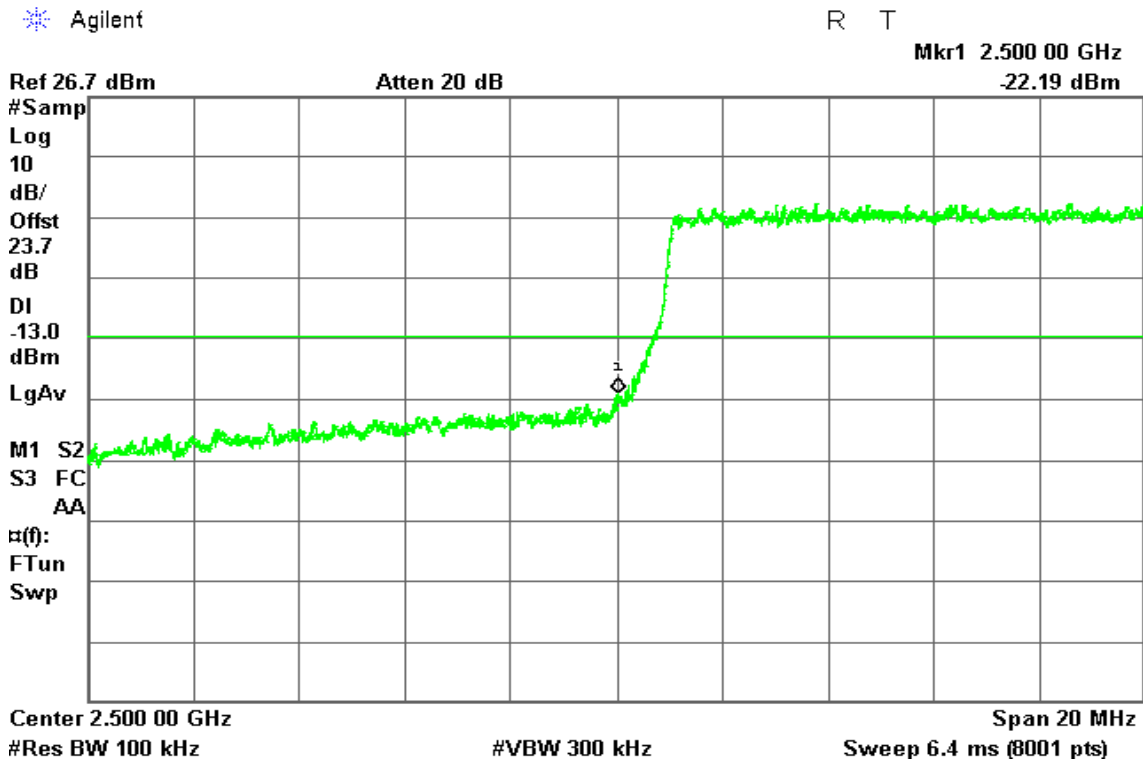
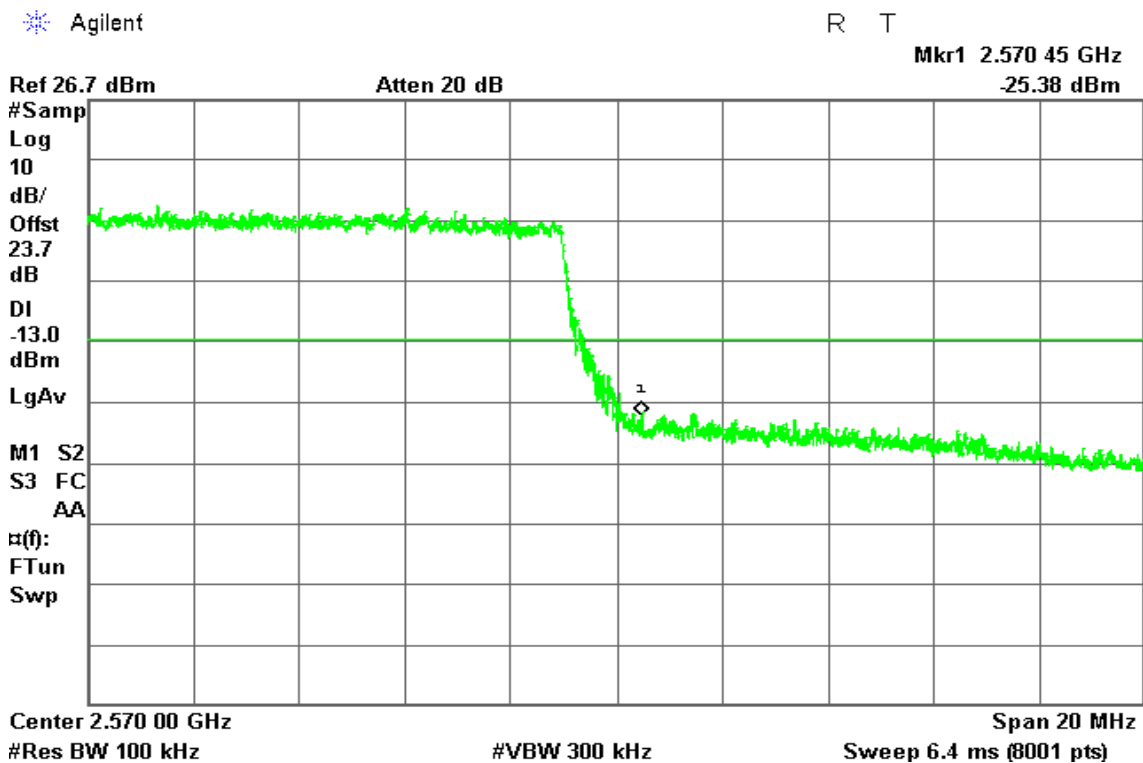
TEST PROCEDURES

1. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 2 channels (low and high operational frequency range.).
2. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer. This splitter loss and cable loss are the worst loss 7.2 dB in the transmitted path track.
3. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 50kHz and VB of the spectrum is 200kHz.
4. Record the max trace plot into the test report.

TEST RESULTS:**LTE Band 17****CHANNEL BANDWIDTH: 10MHz / QPSK / FULL RB ALLOCATED****LOWER BAND EDGE****HIGHER BAND EDGE**

LTE Band 17**CHANNEL BANDWIDTH: 10MHz / 16QAM / FULL RB ALLOCATED****LOWER BAND EDGE****HIGHER BAND EDGE**

LTE Band 7**CHANNEL BANDWIDTH: 20MHz / QPSK / FULL RB ALLOCATION****LOWER BAND EDGE****HIGHER BAND EDGE**

CHANNEL BANDWIDTH: 20MHz / 16QAM / FULL RB ALLOCATION**LOWER BAND EDGE****HIGHER BAND EDGE**

7.6 CONDUCTED SPURIOUS EMISSIONS

LIMITS

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

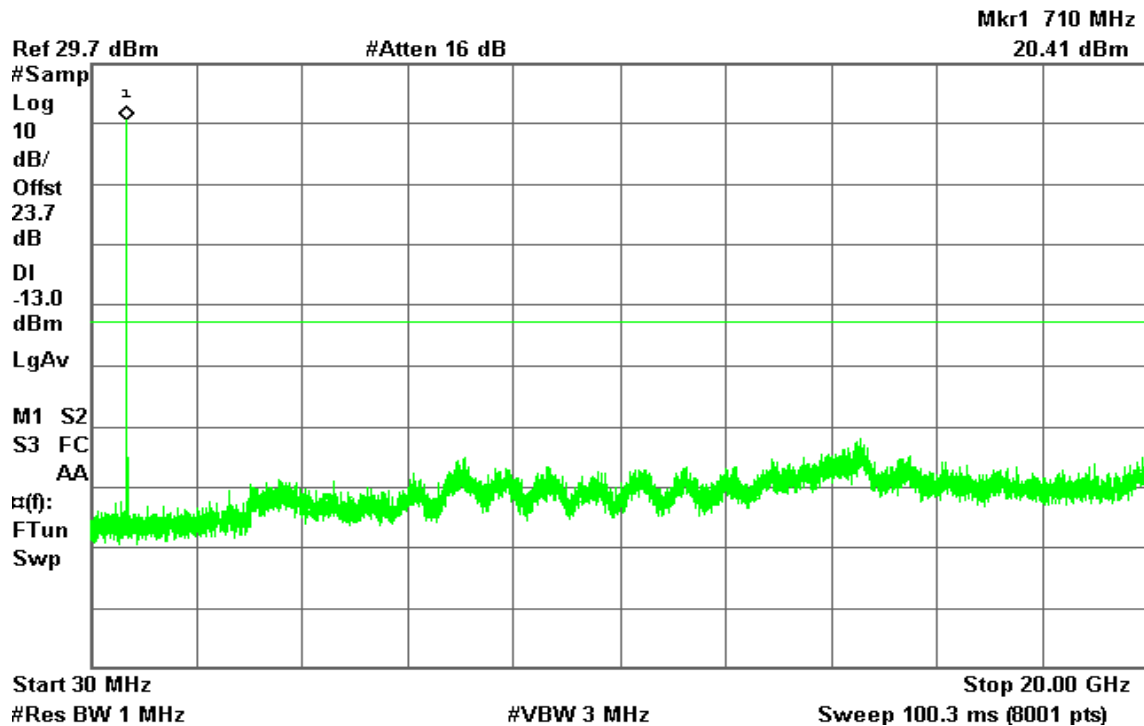
TEST PROCEDURES

1. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).
2. The conducted spurious emission used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
3. When the spectrum scanned from 30MHz to 3GHz, it shall be connected to the band reject filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.
4. When the spectrum scanned from 3GHz to 20GHz, it shall be connected to the high pass filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

TEST RESULTS**LTE Band 17****CHANNEL BANDWIDTH: 5MHz / QPSK****CH Low**

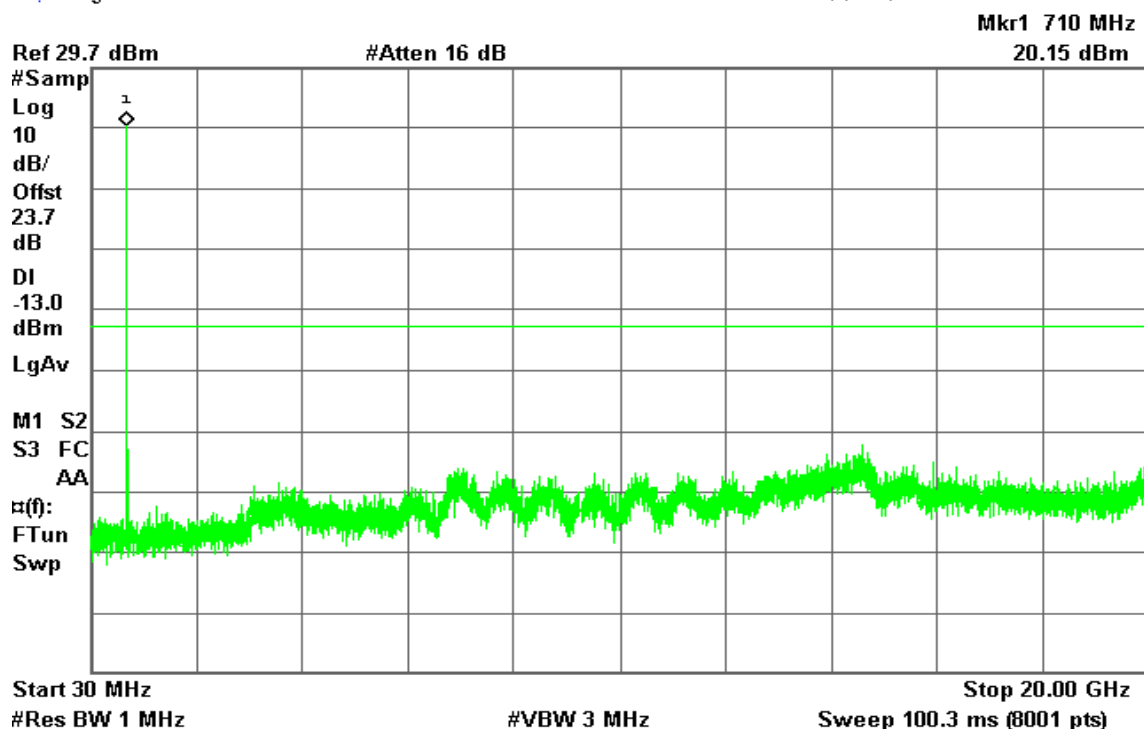
* Agilent

R T

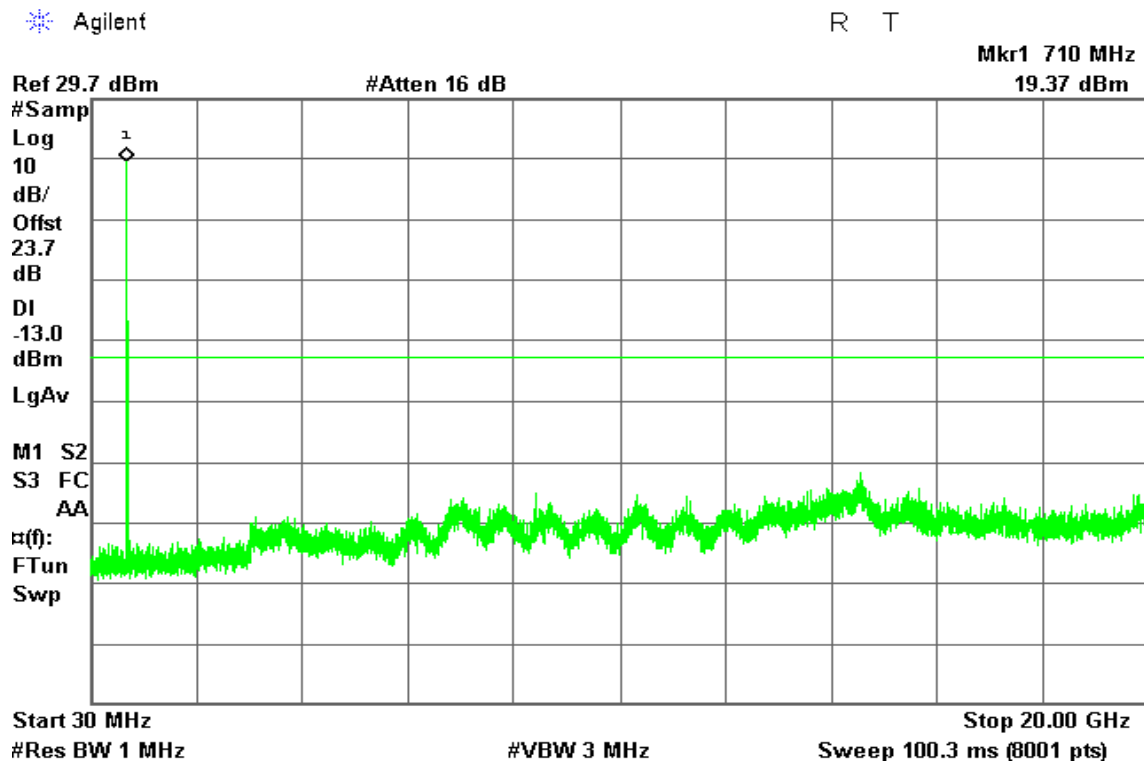
**CH Mid**

* Agilent

R T

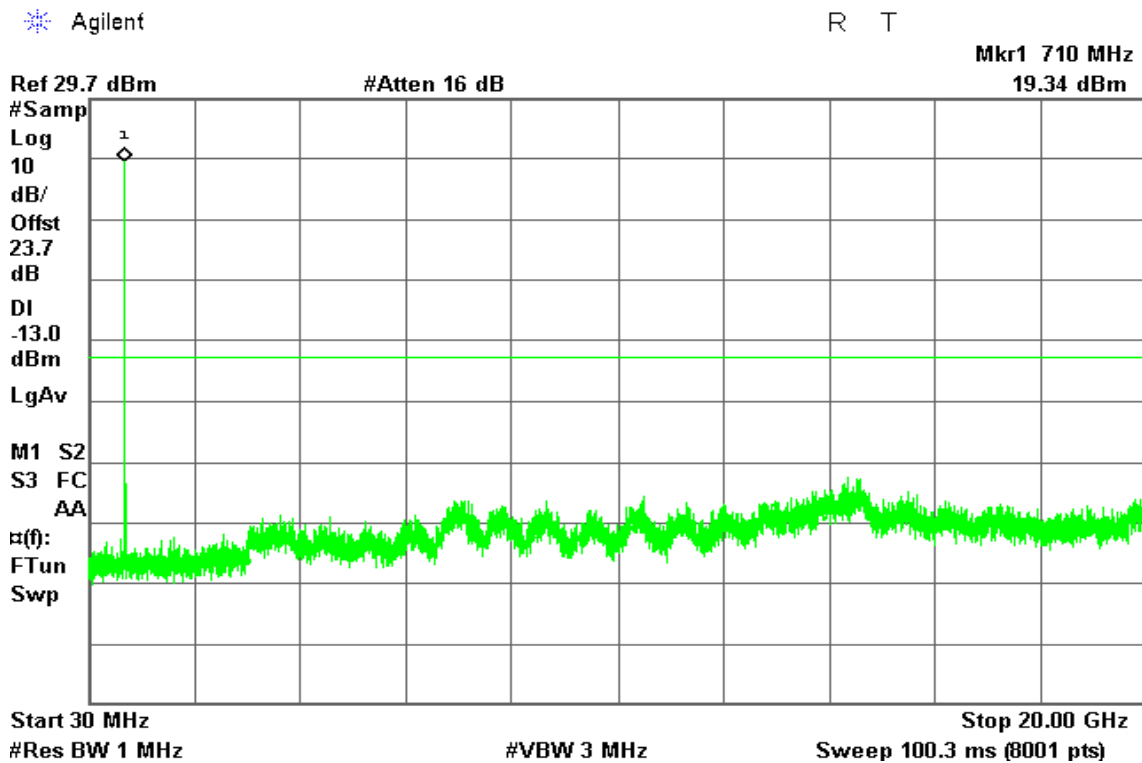


CH High

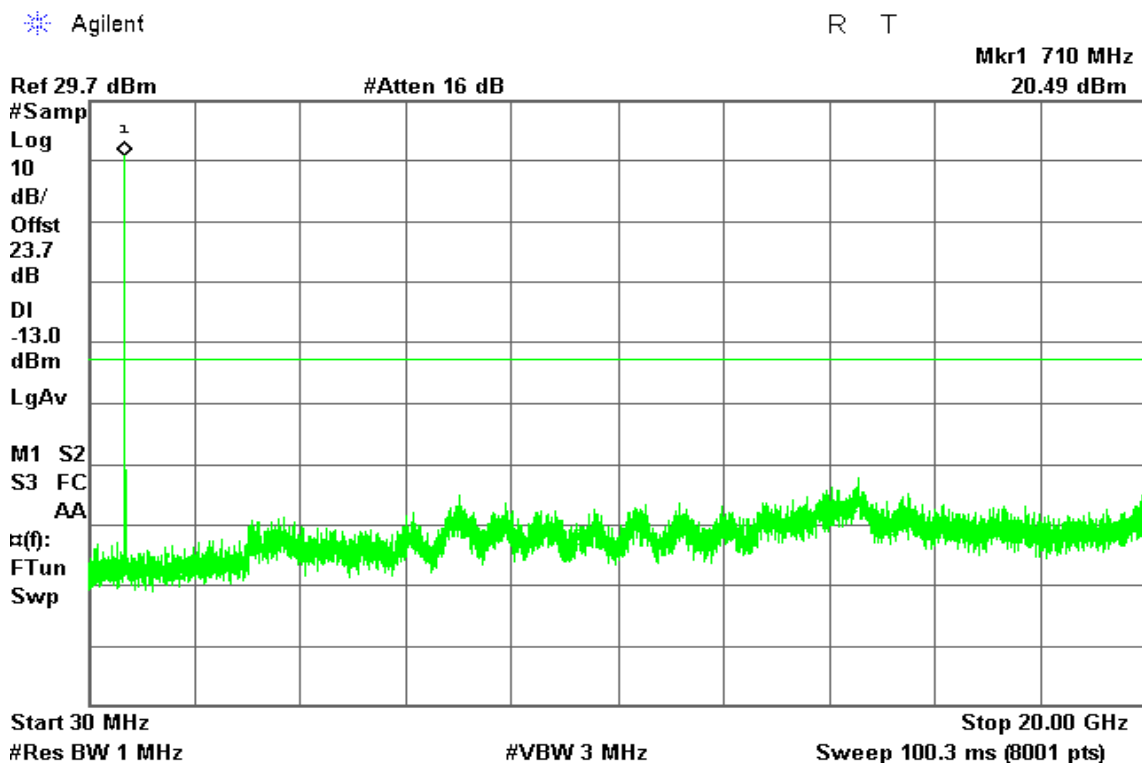


CHANNEL BANDWIDTH: 5MHz / 16QAM

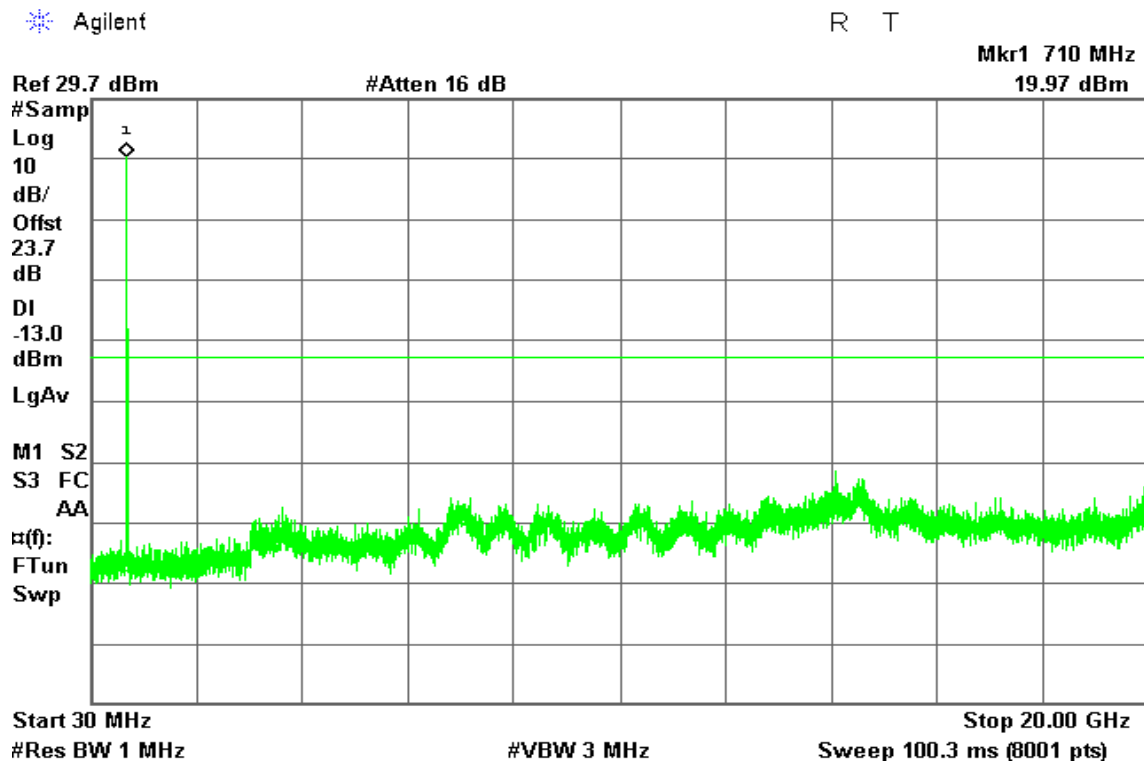
CH Low



CH Mid

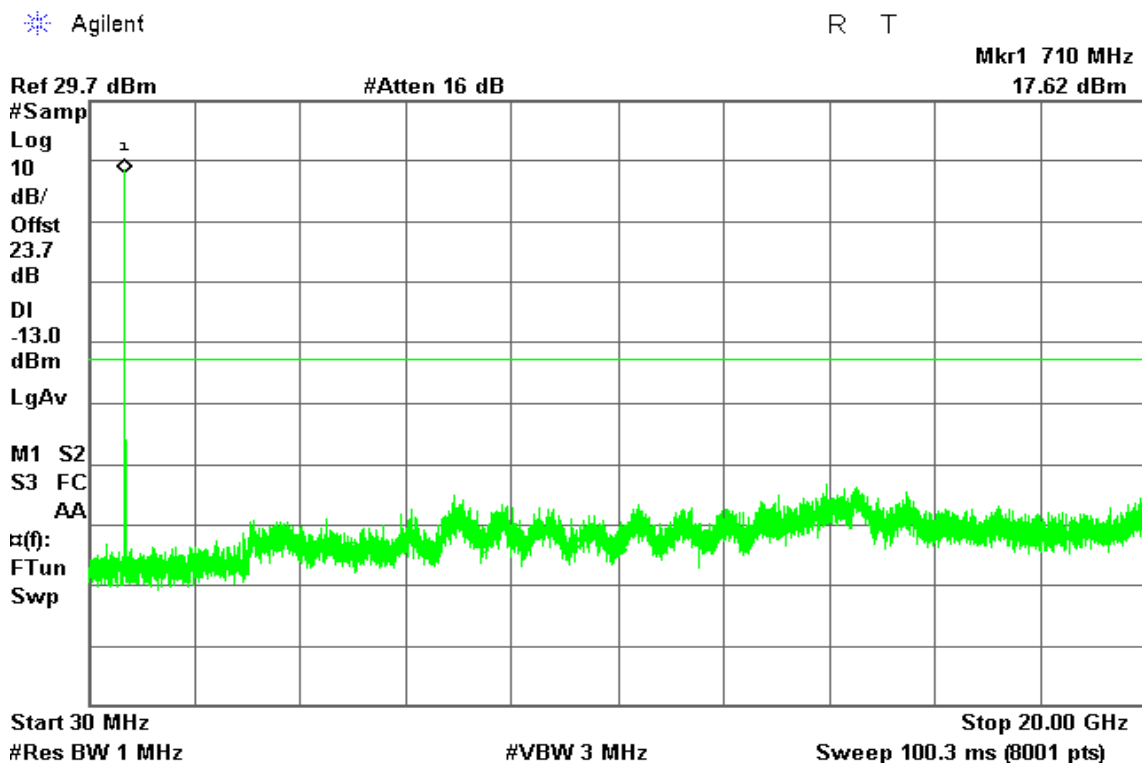


CH High

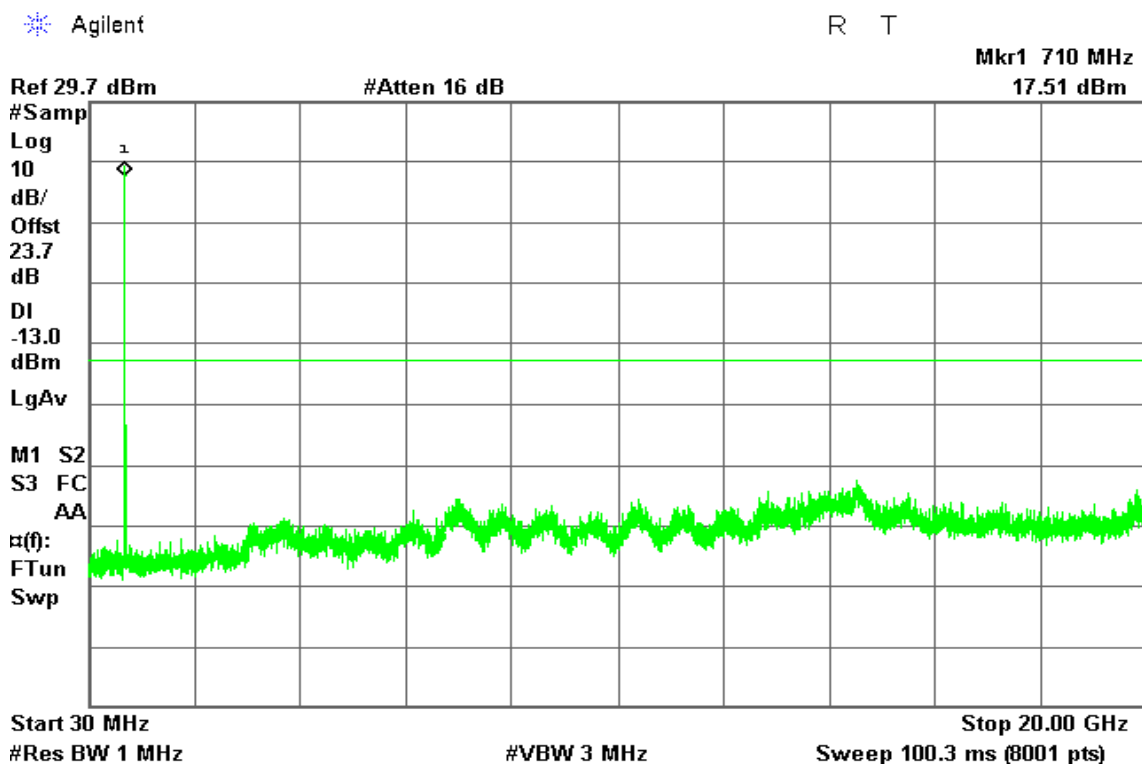


CHANNEL BANDWIDTH: 10MHz / QPSK

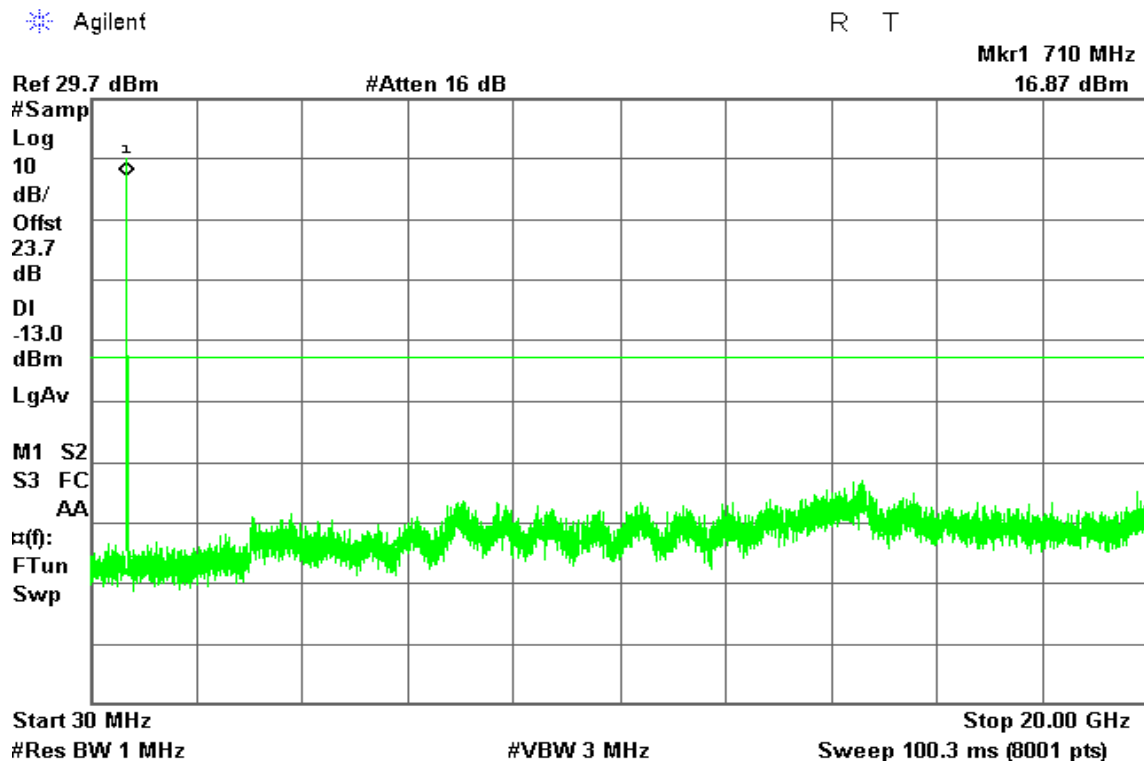
CH Low



CH Mid



CH High



CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low

Agilent

R T

Mkr1 710 MHz
16.68 dBm

Ref 29.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

CH Mid

Agilent

R T

Mkr1 710 MHz
17.81 dBm

Ref 29.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

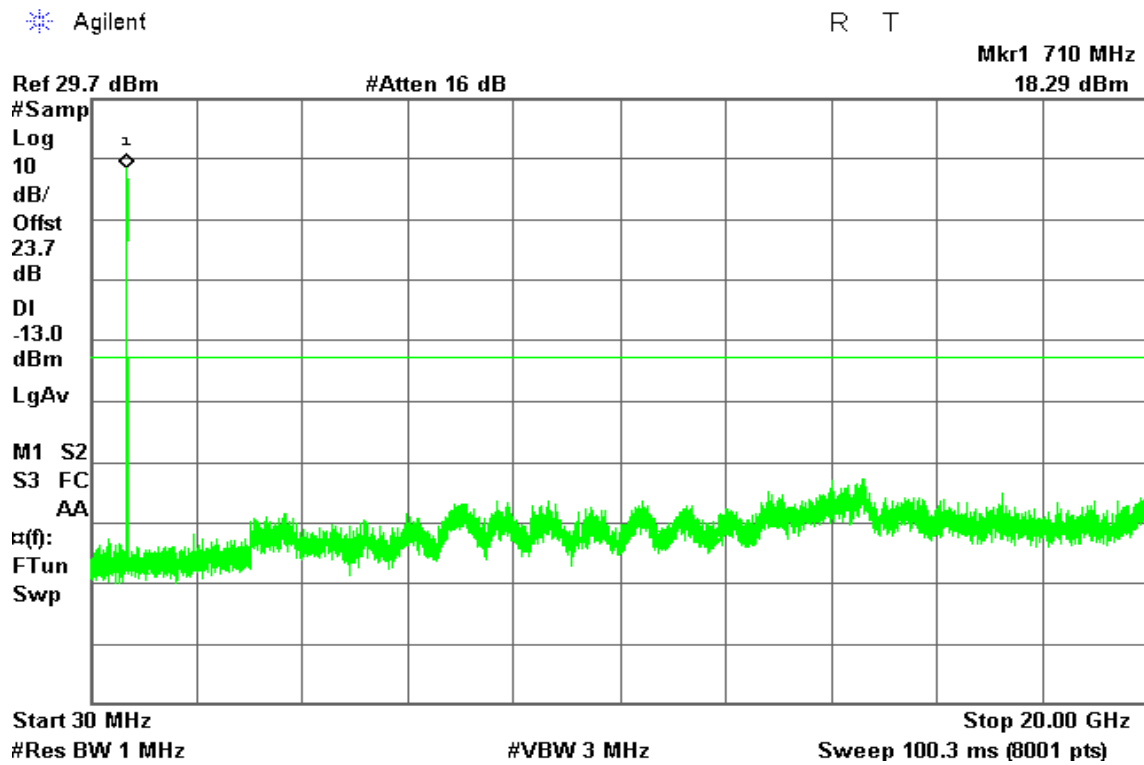
#Res BW 1 MHz

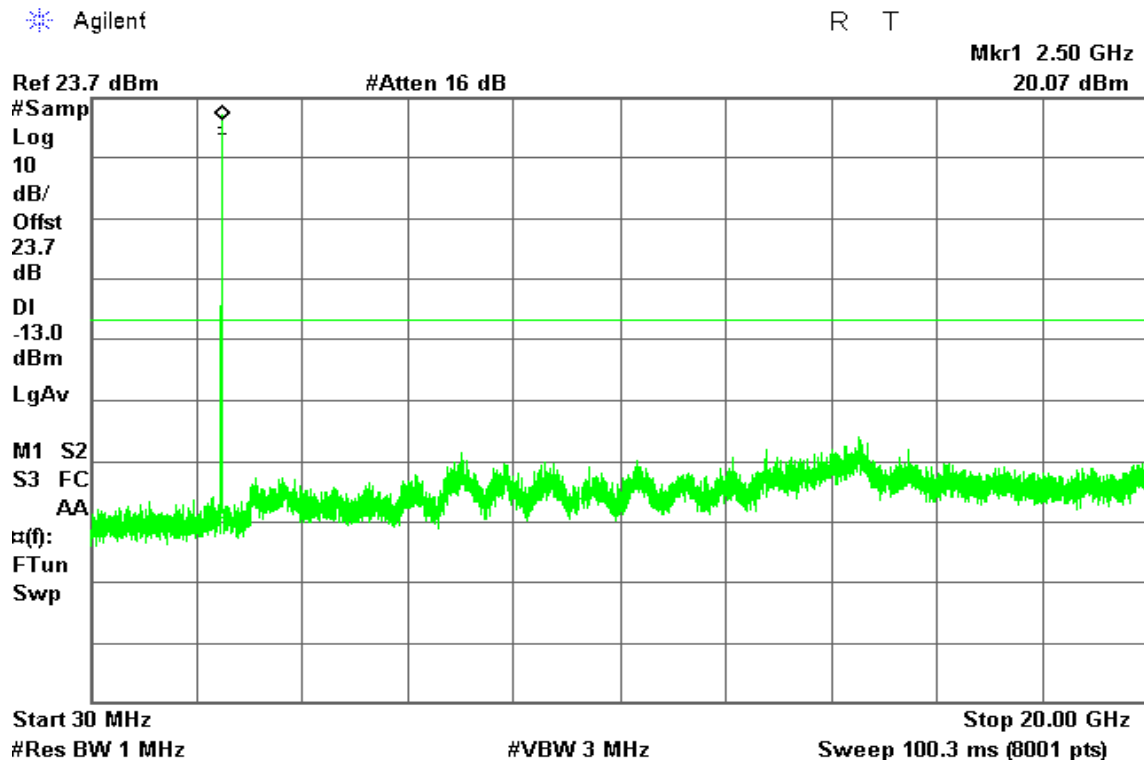
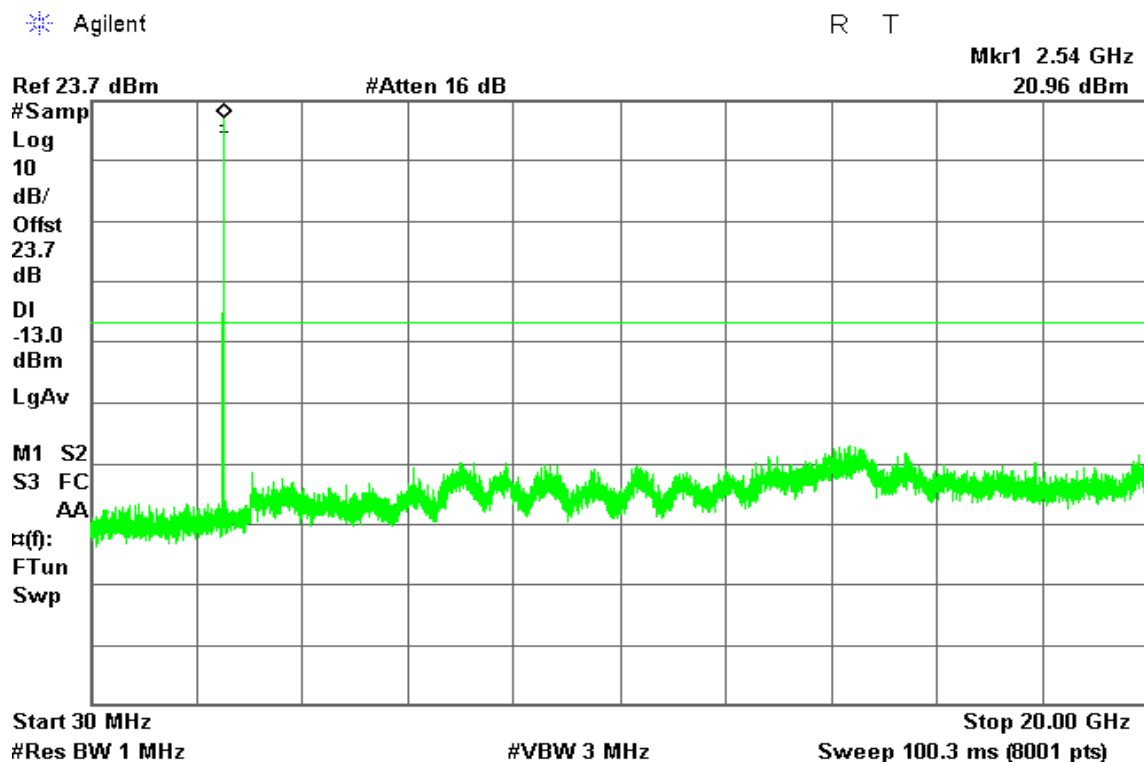
#VBW 3 MHz

Stop 20.00 GHz

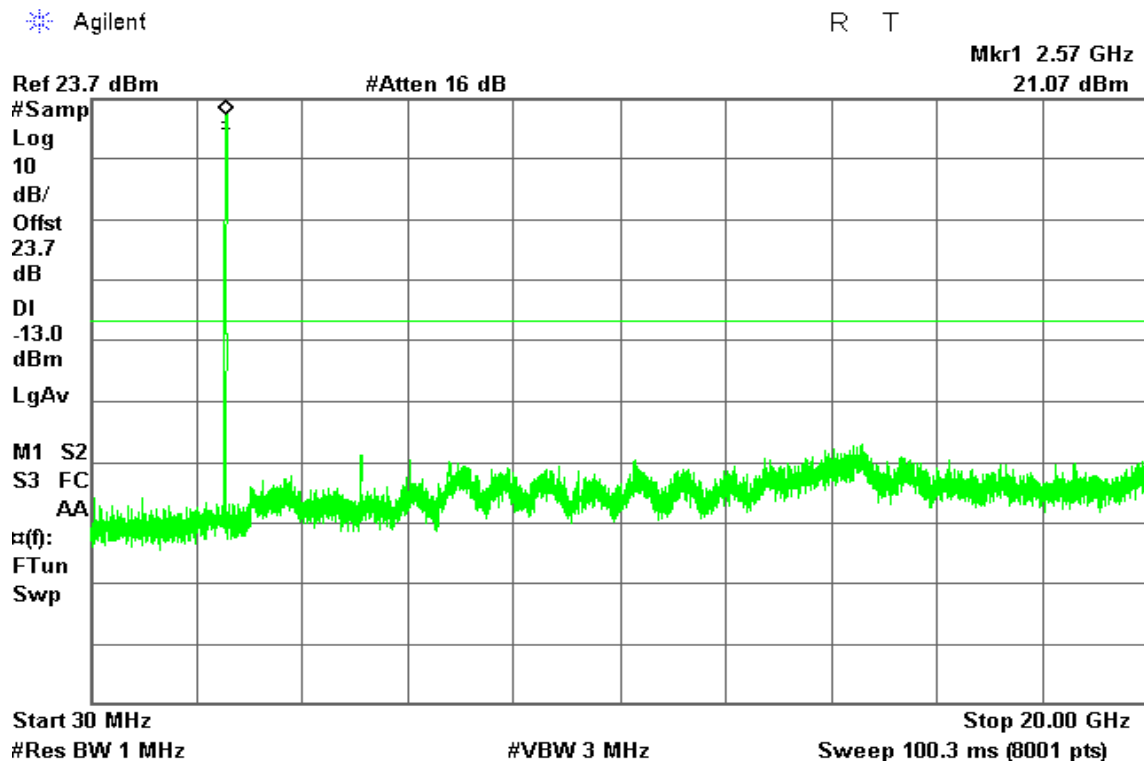
Sweep 100.3 ms (8001 pts)

CH High



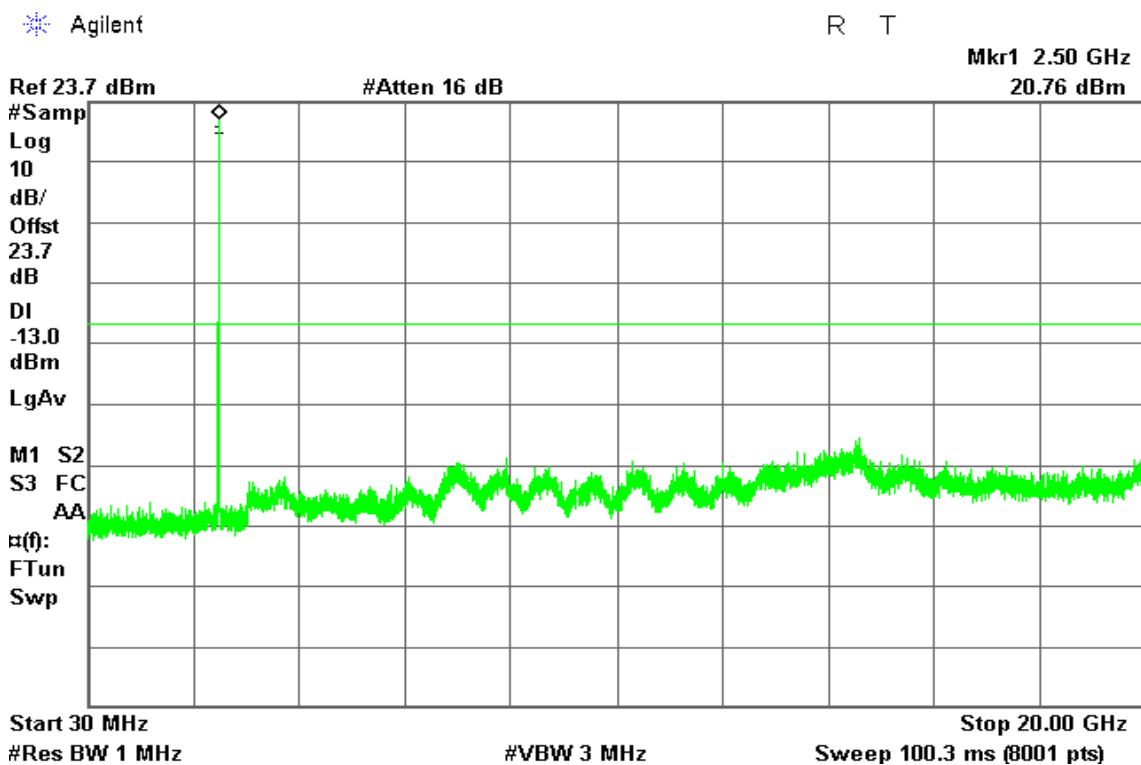
LTE Band 7**CHANNEL BANDWIDTH: 5MHz / QPSK****CH Low****CH Mid**

CH High

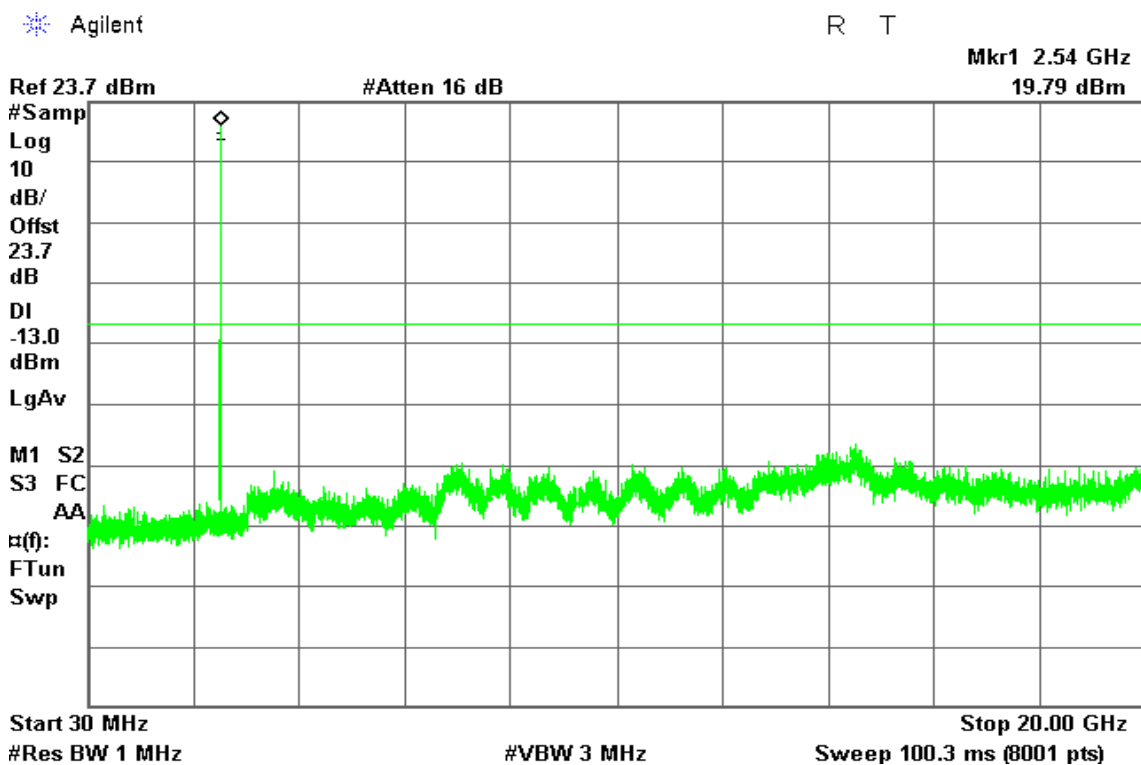


CHANNEL BANDWIDTH: 5MHz / 16QAM

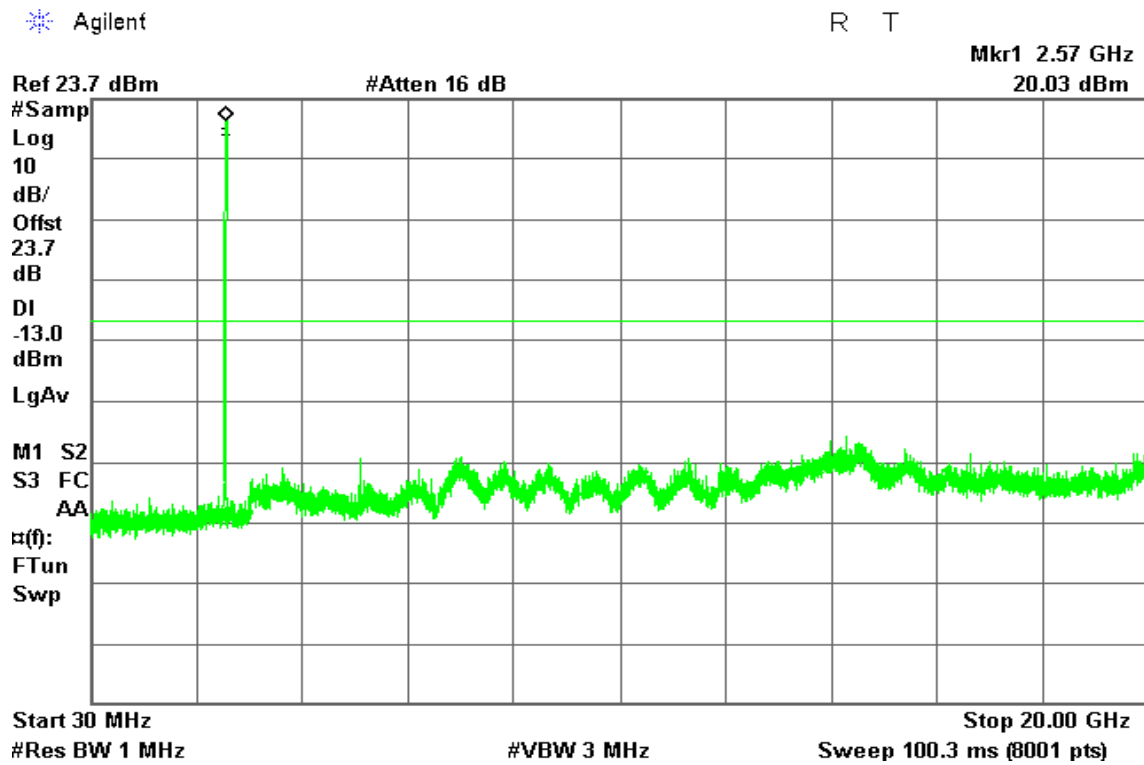
CH Low



CH Mid



CH High



CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low

Agilent

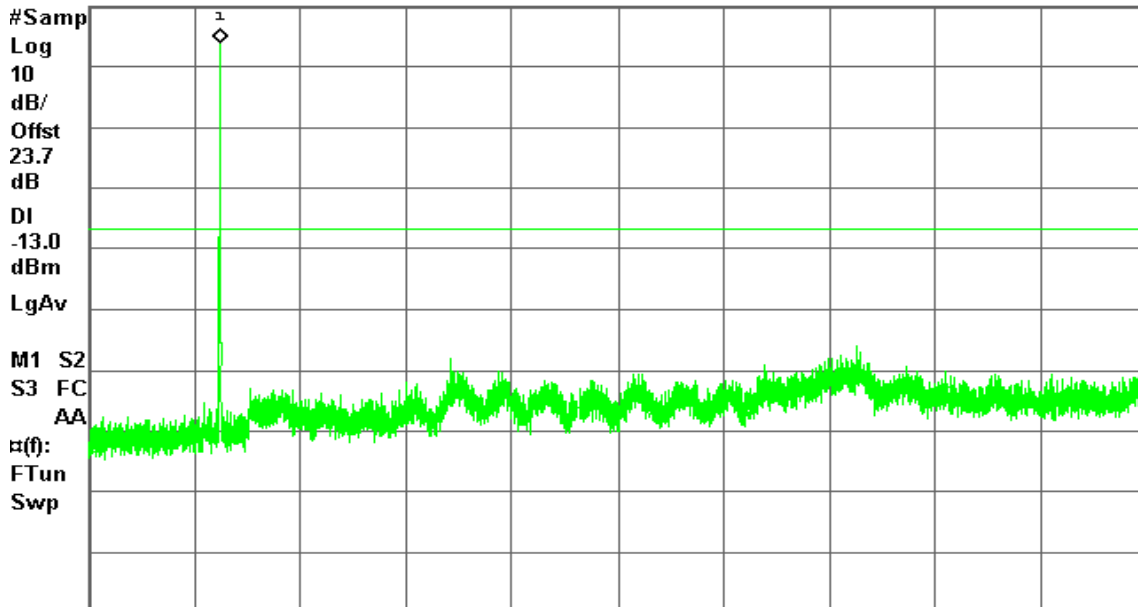
R T

Mkr1 2.51 GHz

17.72 dBm

Ref 23.7 dBm

#Atten 16 dB



Start 30 MHz

Stop 20.00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 100.3 ms (8001 pts)

CH Mid

Agilent

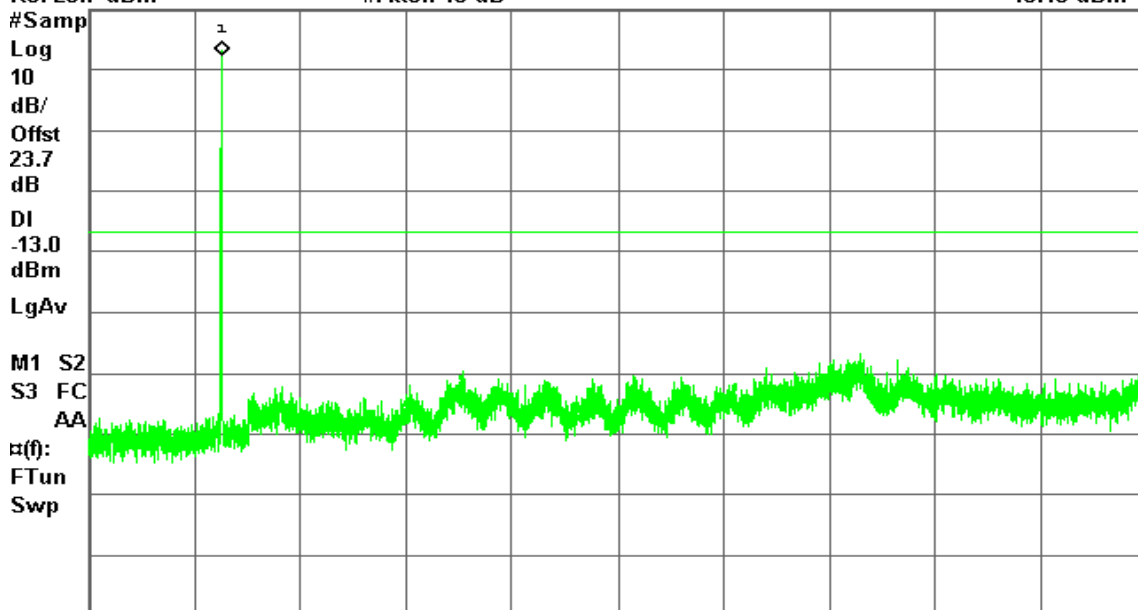
R T

Mkr1 2.53 GHz

16.13 dBm

Ref 23.7 dBm

#Atten 16 dB



Start 30 MHz

Stop 20.00 GHz

#Res BW 1 MHz

#VBW 3 MHz

Sweep 100.3 ms (8001 pts)

CH High

Agilent

R T

Mkr1 2.57 GHz
16.38 dBm

Ref 23.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

$\alpha(f)$:

FTun

Swp

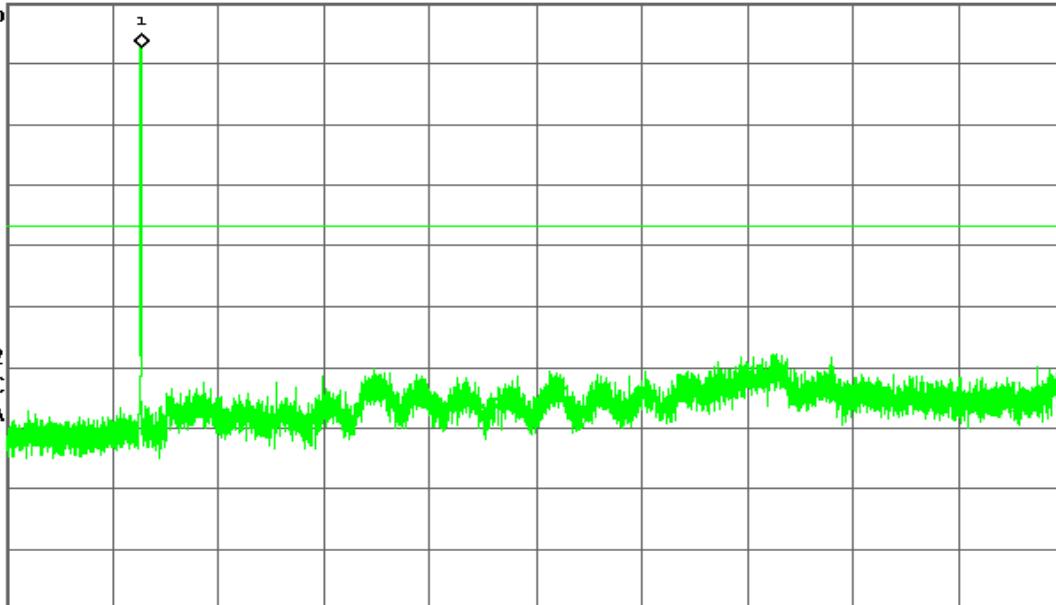
Start 30 MHz

#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

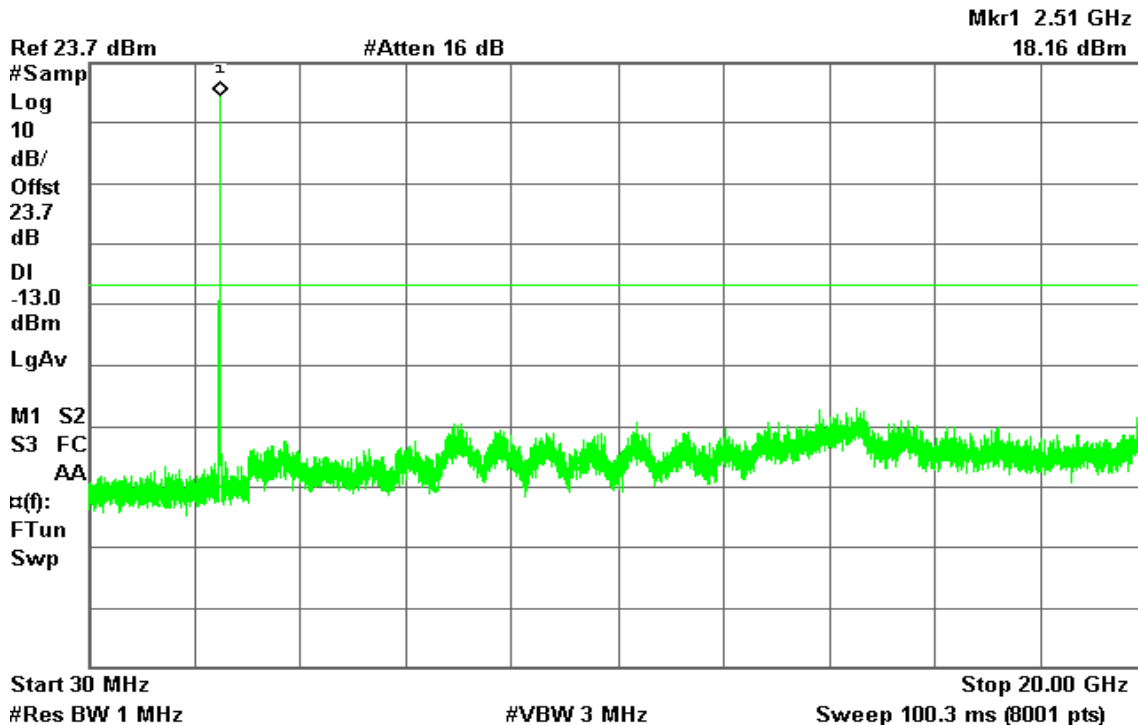


CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low

Agilent

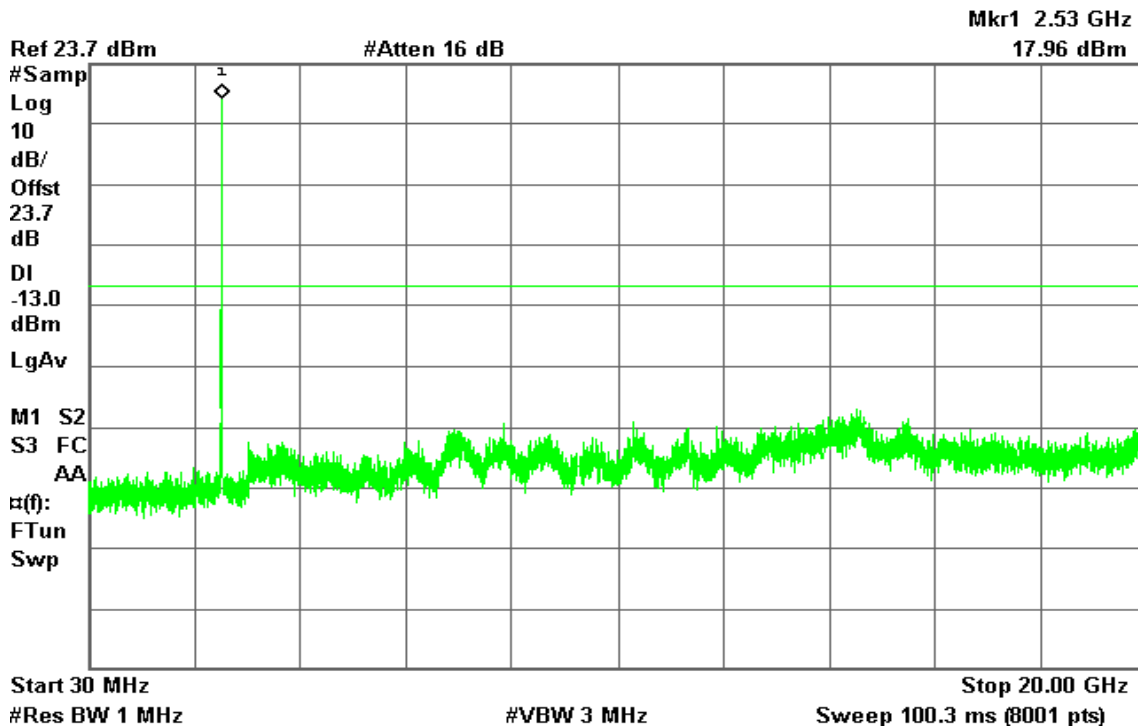
R T



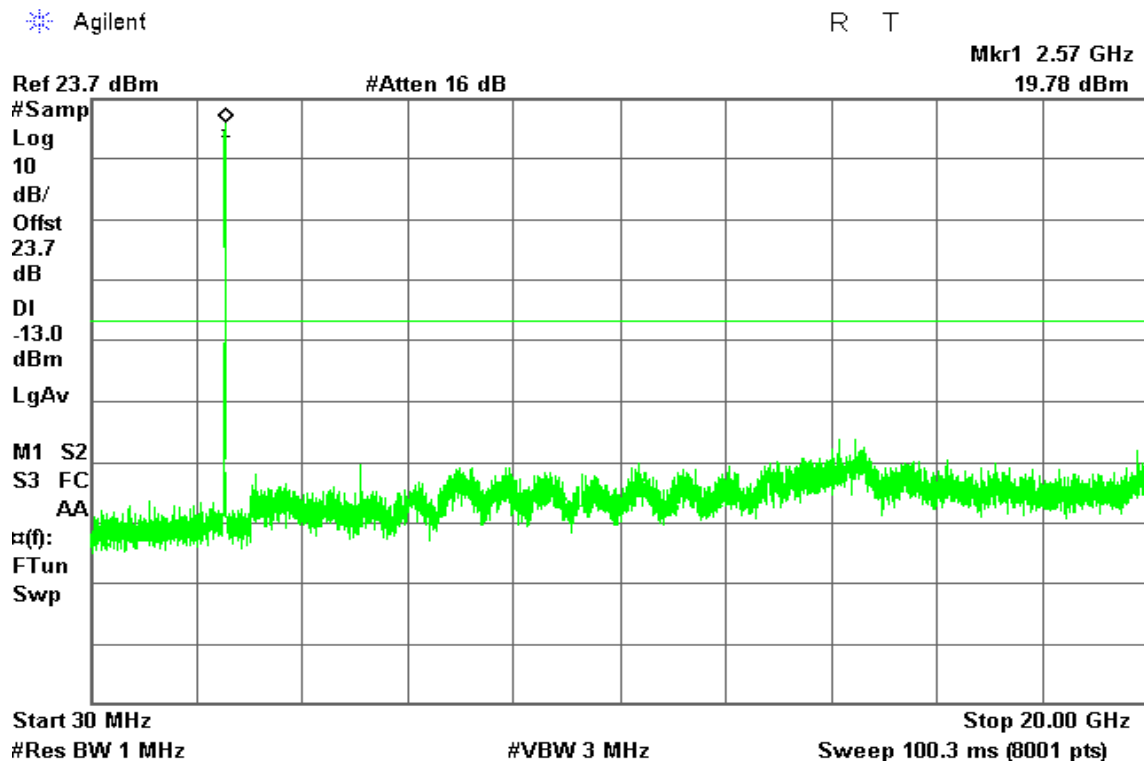
CH Mid

Agilent

R T



CH High



CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low

Agilent

R T

Mkr1 2.51 GHz

14.93 dBm

Ref 23.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

CH Mid

Agilent

R T

Mkr1 2.53 GHz

13.04 dBm

Ref 23.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

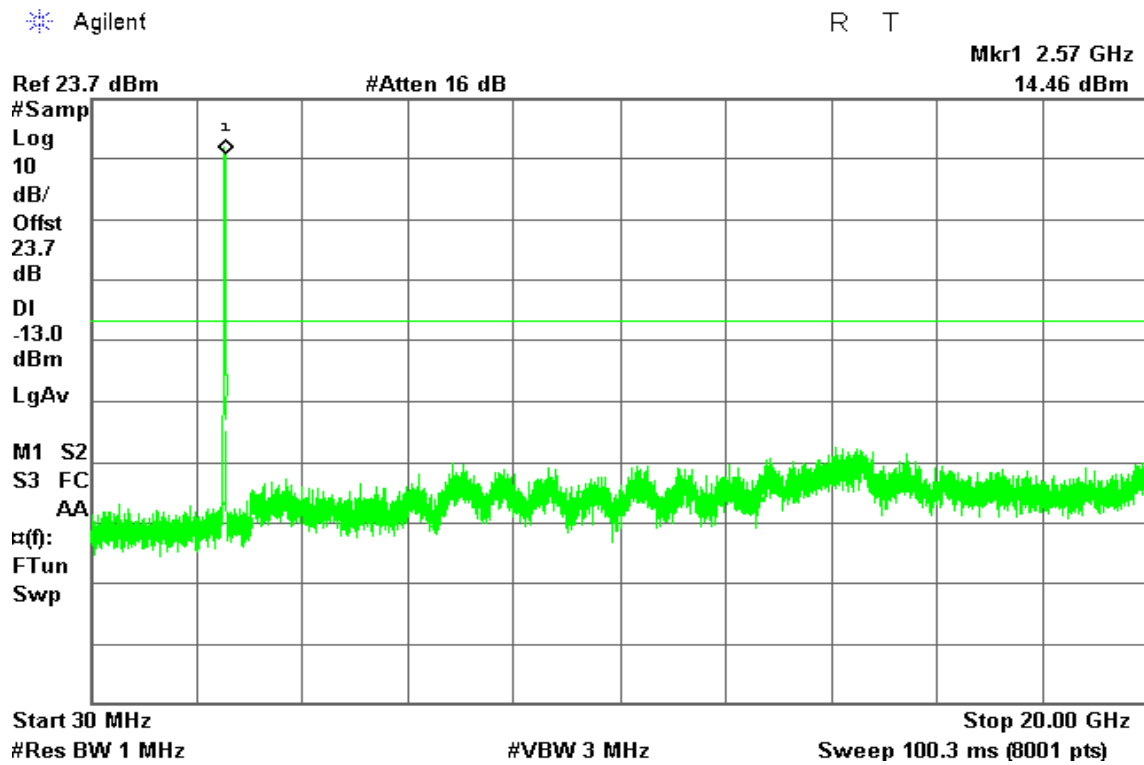
#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

CH High



CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low

Agilent

R T

Mkr1 2.51 GHz

12.83 dBm

Ref 23.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

CH Mid

Agilent

R T

Mkr1 2.54 GHz

14.69 dBm

Ref 23.7 dBm

#Atten 16 dB

#Samp

Log

10

dB/

Offst

23.7

dB

DI

-13.0

dBm

LgAv

M1 S2

S3 FC

AA

 $\alpha(f)$:

FTun

Swp

Start 30 MHz

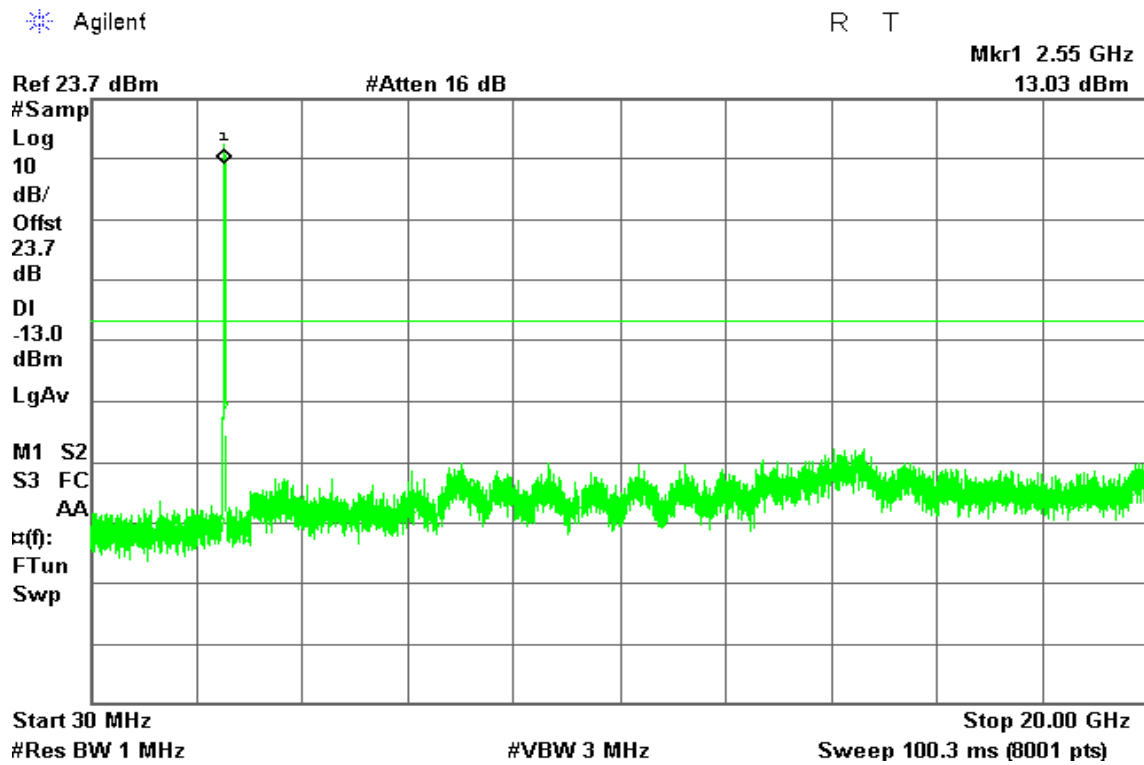
#Res BW 1 MHz

#VBW 3 MHz

Stop 20.00 GHz

Sweep 100.3 ms (8001 pts)

CH High



7.7 RADIATED EMISSION MEASUREMENT

LIMITS

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13 dBm

So the limit of emission is the same absolute specified line.

Limits	EQUIVALENT FIELD STRENGTH AT 3m (dBuV/m) (NOTE)
-13	82.22

NOTE: The following formula is used to convert the equipment radiated power to field strength.

$$E = [1000000 \sqrt{(30P)}] / 3 \text{ uV/m, where P is Watts}$$

TEST PROCEDURES

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the receiving antenna, which was mounted on antenna tower and its position at 0.8 m above the ground.
3. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading and recorded the value.
4. Repeat step 1 ~ 3 for horizontal polarization.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

TEST RESULTS**Below 1GHz****LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / QPSK**

Operation Mode: Tx / Low channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-58.24	0.93	-1.93	-61.10	-13.00	-48.10	V
120.2100	-63.08	1.27	-2.06	-66.41	-13.00	-53.41	V
309.3600	-82.54	2.13	5.78	-78.89	-13.00	-65.89	V
393.7500	-76.51	2.34	5.99	-72.86	-13.00	-59.86	V
601.3300	-79.94	2.91	6.39	-76.46	-13.00	-63.46	V
896.2100	-70	3.51	6.65	-66.86	-13.00	-53.86	V
65.8900	-56.97	0.93	-1.93	-59.83	-13.00	-46.83	H
111.4800	-54.86	1.22	-1.76	-57.84	-13.00	-44.84	H
161.9200	-67.33	1.5	1.61	-67.22	-13.00	-54.22	H
345.2500	-70.06	2.2	5.8	-66.46	-13.00	-53.46	H
529.5500	-71.32	2.75	6	-68.07	-13.00	-55.07	H
612.9700	-74.18	2.94	6.23	-70.89	-13.00	-57.89	H

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: Tx / Middle channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-59.24	0.79	-5.83	-65.86	-13.00	-52.86	V
120.2100	-64.09	1.27	-2.06	-67.42	-13.00	-54.42	V
246.3100	-83.31	1.83	5.54	-79.60	-13.00	-66.60	V
346.2200	-75.8	2.21	5.8	-72.21	-13.00	-59.21	V
529.5500	-78.48	2.75	6	-75.23	-13.00	-62.23	V
896.2100	-68.88	3.51	6.65	-65.74	-13.00	-52.74	V
65.8900	-56.35	0.93	-1.93	-59.21	-13.00	-46.21	H
191.9900	-74.5	1.62	3.79	-72.33	-13.00	-59.33	H
309.3600	-74.66	2.13	5.78	-71.01	-13.00	-58.01	H
439.3400	-73.93	2.53	5.9	-70.56	-13.00	-57.56	H
529.5500	-71.55	2.75	6	-68.30	-13.00	-55.30	H
896.2100	-64.73	3.51	6.65	-61.59	-13.00	-48.59	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
35.8200	-52.04	0.69	-16.52	-69.25	-13.00	-56.25	V
130.8800	-70.6	1.35	-1.3	-73.25	-13.00	-60.25	V
273.4700	-83.49	1.99	5.17	-80.31	-13.00	-67.31	V
390.8400	-77.2	2.32	6	-73.52	-13.00	-60.52	V
492.6900	-80.55	2.68	5.82	-77.41	-13.00	-64.41	V
612.9700	-79.62	2.94	6.23	-76.33	-13.00	-63.33	V
111.4800	-56.11	1.22	-1.76	-59.09	-13.00	-46.09	H
234.6700	-74.42	1.8	5.38	-70.84	-13.00	-57.84	H
346.2200	-69.46	2.21	5.8	-65.87	-13.00	-52.87	H
402.4800	-74.25	2.41	5.97	-70.69	-13.00	-57.69	H
529.5500	-71.91	2.75	6	-68.66	-13.00	-55.66	H
625.5800	-74.48	2.96	6.16	-71.28	-13.00	-58.28	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-57.39	0.93	-1.93	-60.25	-13.00	-47.25	V
120.2100	-63.19	1.27	-2.06	-66.52	-13.00	-53.52	V
234.6700	-82.99	1.8	5.38	-79.41	-13.00	-66.41	V
346.2200	-75.83	2.21	5.8	-72.24	-13.00	-59.24	V
439.3400	-76.03	2.53	5.9	-72.66	-13.00	-59.66	V
529.5500	-78.33	2.75	6	-75.08	-13.00	-62.08	V
65.8900	-56.82	0.93	-1.93	-59.68	-13.00	-46.68	H
113.4200	-57.43	1.23	-1.84	-60.50	-13.00	-47.50	H
234.6700	-74.62	1.8	5.38	-71.04	-13.00	-58.04	H
345.2500	-69.18	2.2	5.8	-65.58	-13.00	-52.58	H
448.0700	-73.13	2.58	5.74	-69.97	-13.00	-56.97	H
529.5500	-70.51	2.75	6	-67.26	-13.00	-54.26	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-59.31	0.97	-1.61	-61.89	-13.00	-48.89	V
120.2100	-63.2	1.27	-2.06	-66.53	-13.00	-53.53	V
165.8000	-74.1	1.53	2.05	-73.58	-13.00	-60.58	V
346.2200	-75.24	2.21	5.8	-71.65	-13.00	-58.65	V
439.3400	-76.68	2.53	5.9	-73.31	-13.00	-60.31	V
529.5500	-78.51	2.75	6	-75.26	-13.00	-62.26	V
111.4800	-55.04	1.22	-1.76	-58.02	-13.00	-45.02	H
150.2800	-66.58	1.43	0.71	-67.30	-13.00	-54.30	H
267.6500	-74.46	1.96	5.22	-71.20	-13.00	-58.20	H
372.4100	-74.82	2.3	5.85	-71.27	-13.00	-58.27	H
505.3000	-74.87	2.69	5.95	-71.61	-13.00	-58.61	H
643.0400	-73.22	3.01	6.16	-70.07	-13.00	-57.07	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-57.52	0.93	-1.93	-60.38	-13.00	-47.38	V
120.2100	-63.34	1.27	-2.06	-66.67	-13.00	-53.67	V
161.9200	-69.2	1.5	1.61	-69.09	-13.00	-56.09	V
246.3100	-82.52	1.83	5.54	-78.81	-13.00	-65.81	V
345.2500	-74.89	2.2	5.8	-71.29	-13.00	-58.29	V
439.3400	-75.75	2.53	5.9	-72.38	-13.00	-59.38	V
65.8900	-56.85	0.93	-1.93	-59.71	-13.00	-46.71	H
111.4800	-54.53	1.22	-1.76	-57.51	-13.00	-44.51	H
150.2800	-65.88	1.43	0.71	-66.60	-13.00	-53.60	H
234.6700	-74.43	1.8	5.38	-70.85	-13.00	-57.85	H
346.2200	-68.34	2.21	5.8	-64.75	-13.00	-51.75	H
516.9400	-70.9	2.7	6.07	-67.53	-13.00	-54.53	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-58.61	0.93	-1.93	-61.47	-13.00	-48.47	V
161.9200	-71.62	1.5	1.61	-71.51	-13.00	-58.51	V
234.6700	-83.42	1.8	5.38	-79.84	-13.00	-66.84	V
393.7500	-77.42	2.34	5.99	-73.77	-13.00	-60.77	V
572.2300	-80.77	2.87	6.09	-77.55	-13.00	-64.55	V
637.2200	-79.72	3	6.15	-76.57	-13.00	-63.57	V
65.8900	-56.69	0.93	-1.93	-59.55	-13.00	-46.55	H
111.4800	-54.76	1.22	-1.76	-57.74	-13.00	-44.74	H
161.9200	-67.31	1.5	1.61	-67.20	-13.00	-54.20	H
345.2500	-68.39	2.2	5.8	-64.79	-13.00	-51.79	H
354.9500	-70.86	2.25	5.75	-67.36	-13.00	-54.36	H
612.9700	-74.23	2.94	6.23	-70.94	-13.00	-57.94	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-58.09	0.93	-1.93	-60.95	-13.00	-47.95	V
120.2100	-63.85	1.27	-2.06	-67.18	-13.00	-54.18	V
161.9200	-70.46	1.5	1.61	-70.35	-13.00	-57.35	V
354.9500	-74.89	2.25	5.75	-71.39	-13.00	-58.39	V
439.3400	-76.01	2.53	5.9	-72.64	-13.00	-59.64	V
541.1900	-80.16	2.78	6.25	-76.69	-13.00	-63.69	V
111.4800	-55.23	1.22	-1.76	-58.21	-13.00	-45.21	H
267.6500	-75.28	1.96	5.22	-72.02	-13.00	-59.02	H
345.2500	-68.95	2.2	5.8	-65.35	-13.00	-52.35	H
426.7300	-74.34	2.48	5.8	-71.02	-13.00	-58.02	H
529.5500	-70.75	2.75	6	-67.50	-13.00	-54.50	H
625.5800	-74.07	2.96	6.16	-70.87	-13.00	-57.87	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-59.18	0.79	-5.83	-65.80	-13.00	-52.80	V
120.2100	-64.68	1.27	-2.06	-68.01	-13.00	-55.01	V
246.3100	-82.35	1.83	5.54	-78.64	-13.00	-65.64	V
342.3400	-76.05	2.18	5.8	-72.43	-13.00	-59.43	V
439.3400	-76.53	2.53	5.9	-73.16	-13.00	-60.16	V
637.2200	-79.57	3	6.15	-76.42	-13.00	-63.42	V
65.8900	-57.32	0.93	-1.93	-60.18	-13.00	-47.18	H
234.6700	-75.94	1.8	5.38	-72.36	-13.00	-59.36	H
346.2200	-69.48	2.21	5.8	-65.89	-13.00	-52.89	H
402.4800	-74.38	2.41	5.97	-70.82	-13.00	-57.82	H
529.5500	-71.92	2.75	6	-68.67	-13.00	-55.67	H
625.5800	-74.37	2.96	6.16	-71.17	-13.00	-58.17	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-58.74	0.97	-1.61	-61.32	-13.00	-48.32	V
161.9200	-70.2	1.5	1.61	-70.09	-13.00	-57.09	V
342.3400	-75.99	2.18	5.8	-72.37	-13.00	-59.37	V
439.3400	-75.86	2.53	5.9	-72.49	-13.00	-59.49	V
529.5500	-77.76	2.75	6	-74.51	-13.00	-61.51	V
612.9700	-78.19	2.94	6.23	-74.90	-13.00	-61.90	V
65.8900	-56.31	0.93	-1.93	-59.17	-13.00	-46.17	H
111.4800	-53.8	1.22	-1.76	-56.78	-13.00	-43.78	H
161.9200	-66.16	1.5	1.61	-66.05	-13.00	-53.05	H
345.2500	-69.89	2.2	5.8	-66.29	-13.00	-53.29	H
459.7100	-74.29	2.6	5.88	-71.01	-13.00	-58.01	H
610.0600	-74.19	2.94	6.29	-70.84	-13.00	-57.84	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-58.42	0.93	-1.93	-61.28	-13.00	-48.28	V
120.2100	-63.37	1.27	-2.06	-66.70	-13.00	-53.70	V
243.4000	-82.42	1.82	5.43	-78.81	-13.00	-65.81	V
354.9500	-75.76	2.25	5.75	-72.26	-13.00	-59.26	V
439.3400	-77.18	2.53	5.9	-73.81	-13.00	-60.81	V
598.4200	-80.4	2.9	6.37	-76.93	-13.00	-63.93	V
120.2100	-58.56	1.27	-2.06	-61.89	-13.00	-48.89	H
309.3600	-74.88	2.13	5.78	-71.23	-13.00	-58.23	H
346.2200	-68.65	2.21	5.8	-65.06	-13.00	-52.06	H
516.9400	-72.01	2.7	6.07	-68.64	-13.00	-55.64	H
529.5500	-71.75	2.75	6	-68.50	-13.00	-55.50	H
673.1100	-73.22	3.08	6.36	-69.94	-13.00	-56.94	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 5, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
65.8900	-57.44	0.93	-1.93	-60.30	-13.00	-47.30	V
120.2100	-62.78	1.27	-2.06	-66.11	-13.00	-53.11	V
246.3100	-82.15	1.83	5.54	-78.44	-13.00	-65.44	V
342.3400	-76.1	2.18	5.8	-72.48	-13.00	-59.48	V
393.7500	-77.21	2.34	5.99	-73.56	-13.00	-60.56	V
529.5500	-78.05	2.75	6	-74.80	-13.00	-61.80	V
65.8900	-56.29	0.93	-1.93	-59.15	-13.00	-46.15	H
111.4800	-54.82	1.22	-1.76	-57.80	-13.00	-44.80	H
234.6700	-75.28	1.8	5.38	-71.70	-13.00	-58.70	H
345.2500	-67.54	2.2	5.8	-63.94	-13.00	-50.94	H
402.4800	-73.63	2.41	5.97	-70.07	-13.00	-57.07	H
529.5500	-70.03	2.75	6	-66.78	-13.00	-53.78	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 5MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
66.8600	-62.67	0.93	-1.89	-65.49	-13.00	-52.49	V
101.7800	-57.92	1.16	-0.64	-59.72	-13.00	-46.72	V
150.2800	-68.4	1.43	0.71	-69.12	-13.00	-56.12	V
234.6700	-82.24	1.8	5.38	-78.66	-13.00	-65.66	V
342.3400	-73.43	2.18	5.8	-69.81	-13.00	-56.81	V
390.8400	-73.59	2.32	6	-69.91	-13.00	-56.91	V
101.7800	-57.23	1.16	-0.64	-59.03	-13.00	-46.03	H
161.9200	-66.45	1.5	1.61	-66.34	-13.00	-53.34	H
270.5600	-79.83	1.98	5.11	-76.70	-13.00	-63.70	H
330.7000	-76.71	2.16	5.71	-73.16	-13.00	-60.16	H
426.7300	-76	2.48	5.8	-72.68	-13.00	-59.68	H
582.9000	-75.97	2.89	6.06	-72.80	-13.00	-59.80	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-58.28	1.14	-0.21	-59.63	-13.00	-46.63	V
174.5300	-71.98	1.59	3	-70.57	-13.00	-57.57	V
234.6700	-81.67	1.8	5.38	-78.09	-13.00	-65.09	V
342.3400	-74.89	2.18	5.8	-71.27	-13.00	-58.27	V
390.8400	-74.34	2.32	6	-70.66	-13.00	-57.66	V
439.3400	-75.59	2.53	5.9	-72.22	-13.00	-59.22	V
98.8700	-56.3	1.14	-0.21	-57.65	-13.00	-44.65	H
174.5300	-69.86	1.59	3	-68.45	-13.00	-55.45	H
330.7000	-76.4	2.16	5.71	-72.85	-13.00	-59.85	H
426.7300	-75.47	2.48	5.8	-72.15	-13.00	-59.15	H
516.9400	-75.73	2.7	6.07	-72.36	-13.00	-59.36	H
601.3300	-76.32	2.91	6.39	-72.84	-13.00	-59.84	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the ackground noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-58.14	1.16	-0.64	-59.94	-13.00	-46.94	V
174.5300	-71.73	1.59	3	-70.32	-13.00	-57.32	V
234.6700	-82.4	1.8	5.38	-78.82	-13.00	-65.82	V
312.2700	-79.19	2.14	5.76	-75.57	-13.00	-62.57	V
342.3400	-74.91	2.18	5.8	-71.29	-13.00	-58.29	V
439.3400	-75.45	2.53	5.9	-72.08	-13.00	-59.08	V
98.8700	-57.05	1.14	-0.21	-58.40	-13.00	-45.40	H
161.9200	-67.47	1.5	1.61	-67.36	-13.00	-54.36	H
174.5300	-69.88	1.59	3	-68.47	-13.00	-55.47	H
227.8800	-78.47	1.79	5.38	-74.88	-13.00	-61.88	H
330.7000	-75.01	2.16	5.71	-71.46	-13.00	-58.46	H
426.7300	-75.54	2.48	5.8	-72.22	-13.00	-59.22	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 10MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.39	1.16	-0.64	-59.19	-13.00	-46.19	V
150.2800	-68.3	1.43	0.71	-69.02	-13.00	-56.02	V
234.6700	-82.12	1.8	5.38	-78.54	-13.00	-65.54	V
319.0600	-79.93	2.17	5.71	-76.39	-13.00	-63.39	V
390.8400	-74.04	2.32	6	-70.36	-13.00	-57.36	V
439.3400	-75.94	2.53	5.9	-72.57	-13.00	-59.57	V
101.7800	-57.34	1.16	-0.64	-59.14	-13.00	-46.14	H
161.9200	-67.26	1.5	1.61	-67.15	-13.00	-54.15	H
226.9100	-78.23	1.79	5.37	-74.65	-13.00	-61.65	H
330.7000	-77.35	2.16	5.71	-73.80	-13.00	-60.80	H
426.7300	-75.47	2.48	5.8	-72.15	-13.00	-59.15	H
529.5500	-75.61	2.75	6	-72.36	-13.00	-59.36	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-58.3	1.16	-0.64	-60.10	-13.00	-47.10	V
150.2800	-68.64	1.43	0.71	-69.36	-13.00	-56.36	V
264.7400	-83.77	1.94	5.36	-80.35	-13.00	-67.35	V
342.3400	-74.5	2.18	5.8	-70.88	-13.00	-57.88	V
390.8400	-74.74	2.32	6	-71.06	-13.00	-58.06	V
448.0700	-75.24	2.58	5.74	-72.08	-13.00	-59.08	V
98.8700	-57.69	1.14	-0.21	-59.04	-13.00	-46.04	H
161.9200	-67.21	1.5	1.61	-67.10	-13.00	-54.10	H
186.1700	-75.04	1.62	3.85	-72.81	-13.00	-59.81	H
330.7000	-75.25	2.16	5.71	-71.70	-13.00	-58.70	H
435.4600	-75.63	2.51	5.86	-72.28	-13.00	-59.28	H
529.5500	-75.31	2.75	6	-72.06	-13.00	-59.06	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-58.47	1.14	-0.21	-59.82	-13.00	-46.82	V
120.2100	-62.27	1.27	-2.06	-65.60	-13.00	-52.60	V
174.5300	-71.59	1.59	3	-70.18	-13.00	-57.18	V
342.3400	-74.33	2.18	5.8	-70.71	-13.00	-57.71	V
390.8400	-74.25	2.32	6	-70.57	-13.00	-57.57	V
450.9800	-76.64	2.59	5.74	-73.49	-13.00	-60.49	V
62.9800	-67.74	0.9	-2.06	-70.70	-13.00	-57.70	H
101.7800	-57.78	1.16	-0.64	-59.58	-13.00	-46.58	H
161.9200	-66.83	1.5	1.61	-66.72	-13.00	-53.72	H
224.9700	-79.26	1.78	5.36	-75.68	-13.00	-62.68	H
342.3400	-76.7	2.18	5.8	-73.08	-13.00	-60.08	H
426.7300	-75.22	2.48	5.8	-71.90	-13.00	-58.90	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 20MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.86	1.16	-0.64	-59.66	-13.00	-46.66	V
138.6400	-66.35	1.39	-0.38	-68.12	-13.00	-55.12	V
174.5300	-71.92	1.59	3	-70.51	-13.00	-57.51	V
342.3400	-74.75	2.18	5.8	-71.13	-13.00	-58.13	V
390.8400	-75.09	2.32	6	-71.41	-13.00	-58.41	V
439.3400	-75.91	2.53	5.9	-72.54	-13.00	-59.54	V
101.7800	-57.21	1.16	-0.64	-59.01	-13.00	-46.01	H
161.9200	-67.55	1.5	1.61	-67.44	-13.00	-54.44	H
270.5600	-79.74	1.98	5.11	-76.61	-13.00	-63.61	H
330.7000	-76.26	2.16	5.71	-72.71	-13.00	-59.71	H
435.4600	-75.07	2.51	5.86	-71.72	-13.00	-58.72	H
529.5500	-75.83	2.75	6	-72.58	-13.00	-59.58	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
66.8600	-64.14	0.93	-1.89	-66.96	-13.00	-53.96	V
98.8700	-58.41	1.14	-0.21	-59.76	-13.00	-46.76	V
174.5300	-71.7	1.59	3	-70.29	-13.00	-57.29	V
330.7000	-74.89	2.16	5.71	-71.34	-13.00	-58.34	V
390.8400	-74.05	2.32	6	-70.37	-13.00	-57.37	V
439.3400	-75.59	2.53	5.9	-72.22	-13.00	-59.22	V
98.8700	-57.12	1.14	-0.21	-58.47	-13.00	-45.47	H
330.7000	-75.03	2.16	5.71	-71.48	-13.00	-58.48	H
426.7300	-75.32	2.48	5.8	-72.00	-13.00	-59.00	H
448.0700	-75.99	2.58	5.74	-72.83	-13.00	-59.83	H
529.5500	-75.76	2.75	6	-72.51	-13.00	-59.51	H
598.4200	-76.03	2.9	6.37	-72.56	-13.00	-59.56	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-57.83	1.14	-0.21	-59.18	-13.00	-46.18	V
174.5300	-72.12	1.59	3	-70.71	-13.00	-57.71	V
297.7200	-81.48	2.08	5.55	-78.01	-13.00	-65.01	V
342.3400	-75.39	2.18	5.8	-71.77	-13.00	-58.77	V
390.8400	-74.88	2.32	6	-71.20	-13.00	-58.20	V
439.3400	-75.02	2.53	5.9	-71.65	-13.00	-58.65	V
98.8700	-56.58	1.14	-0.21	-57.93	-13.00	-44.93	H
150.2800	-61.7	1.43	0.71	-62.42	-13.00	-49.42	H
319.0600	-72.39	2.17	5.71	-68.85	-13.00	-55.85	H
346.2200	-72.19	2.21	5.8	-68.60	-13.00	-55.60	H
448.0700	-70.45	2.58	5.74	-67.29	-13.00	-54.29	H
541.1900	-74.48	2.78	6.25	-71.01	-13.00	-58.01	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 5MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-57.75	1.14	-0.21	-59.10	-13.00	-46.10	V
174.5300	-71.8	1.59	3	-70.39	-13.00	-57.39	V
309.3600	-80.89	2.13	5.78	-77.24	-13.00	-64.24	V
342.3400	-74.39	2.18	5.8	-70.77	-13.00	-57.77	V
390.8400	-74.88	2.32	6	-71.20	-13.00	-58.20	V
439.3400	-76.04	2.53	5.9	-72.67	-13.00	-59.67	V
101.7800	-57	1.16	-0.64	-58.80	-13.00	-45.80	H
150.2800	-66.75	1.43	0.71	-67.47	-13.00	-54.47	H
258.9200	-80.5	1.9	5.6	-76.80	-13.00	-63.80	H
426.7300	-76.06	2.48	5.8	-72.74	-13.00	-59.74	H
574.1700	-76.15	2.88	6.07	-72.96	-13.00	-59.96	H
805.0300	-75.83	3.33	6.41	-72.75	-13.00	-59.75	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.2	1.16	-0.64	-59.00	-13.00	-46.00	V
174.5300	-72.04	1.59	3	-70.63	-13.00	-57.63	V
234.6700	-81.36	1.8	5.38	-77.78	-13.00	-64.78	V
342.3400	-74.81	2.18	5.8	-71.19	-13.00	-58.19	V
390.8400	-73.93	2.32	6	-70.25	-13.00	-57.25	V
439.3400	-75.17	2.53	5.9	-71.80	-13.00	-58.80	V
95.9600	-57.53	1.13	0.26	-58.40	-13.00	-45.40	H
161.9200	-68	1.5	1.61	-67.89	-13.00	-54.89	H
330.7000	-76.94	2.16	5.71	-73.39	-13.00	-60.39	H
459.7100	-76.45	2.6	5.88	-73.17	-13.00	-60.17	H
516.9400	-75.22	2.7	6.07	-71.85	-13.00	-58.85	H
598.4200	-75.53	2.9	6.37	-72.06	-13.00	-59.06	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the ackground noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
66.8600	-63.5	0.93	-1.89	-66.32	-13.00	-53.32	V
98.8700	-58.47	1.14	-0.21	-59.82	-13.00	-46.82	V
150.2800	-68.75	1.43	0.71	-69.47	-13.00	-56.47	V
174.5300	-71.47	1.59	3	-70.06	-13.00	-57.06	V
330.7000	-75.33	2.16	5.71	-71.78	-13.00	-58.78	V
439.3400	-76.07	2.53	5.9	-72.70	-13.00	-59.70	V
98.8700	-56.55	1.14	-0.21	-57.90	-13.00	-44.90	H
161.9200	-65.81	1.5	1.61	-65.70	-13.00	-52.70	H
242.4300	-78.42	1.81	5.39	-74.84	-13.00	-61.84	H
330.7000	-75.01	2.16	5.71	-71.46	-13.00	-58.46	H
426.7300	-74.85	2.48	5.8	-71.53	-13.00	-58.53	H
529.5500	-74.22	2.75	6	-70.97	-13.00	-57.97	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.68	1.16	-0.64	-59.48	-13.00	-46.48	V
150.2800	-68.79	1.43	0.71	-69.51	-13.00	-56.51	V
174.5300	-71.33	1.59	3	-69.92	-13.00	-56.92	V
342.3400	-74.22	2.18	5.8	-70.60	-13.00	-57.60	V
390.8400	-74.32	2.32	6	-70.64	-13.00	-57.64	V
439.3400	-75.39	2.53	5.9	-72.02	-13.00	-59.02	V
98.8700	-56.58	1.14	-0.21	-57.93	-13.00	-44.93	H
174.5300	-69.08	1.59	3	-67.67	-13.00	-54.67	H
330.7000	-76.65	2.16	5.71	-73.10	-13.00	-60.10	H
390.8400	-76.68	2.32	6	-73.00	-13.00	-60.00	H
472.3200	-77.48	2.62	5.72	-74.38	-13.00	-61.38	H
562.5300	-75.92	2.85	6.01	-72.76	-13.00	-59.76	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-58.07	1.16	-0.64	-59.87	-13.00	-46.87	V
150.2800	-69.02	1.43	0.71	-69.74	-13.00	-56.74	V
303.5400	-81.46	2.11	5.67	-77.90	-13.00	-64.90	V
342.3400	-74.34	2.18	5.8	-70.72	-13.00	-57.72	V
390.8400	-75.19	2.32	6	-71.51	-13.00	-58.51	V
439.3400	-75.46	2.53	5.9	-72.09	-13.00	-59.09	V
101.7800	-57.22	1.16	-0.64	-59.02	-13.00	-46.02	H
161.9200	-66.99	1.5	1.61	-66.88	-13.00	-53.88	H
215.2700	-78.52	1.73	5.37	-74.88	-13.00	-61.88	H
390.8400	-76.91	2.32	6	-73.23	-13.00	-60.23	H
448.0700	-76.45	2.58	5.74	-73.29	-13.00	-60.29	H
529.5500	-76.33	2.75	6	-73.08	-13.00	-60.08	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-57.07	1.14	-0.21	-58.42	-13.00	-45.42	V
150.2800	-61.51	1.43	0.71	-62.23	-13.00	-49.23	V
330.7000	-70.3	2.16	5.71	-66.75	-13.00	-53.75	V
448.0700	-71.11	2.58	5.74	-67.95	-13.00	-54.95	V
529.5500	-71.23	2.75	6	-67.98	-13.00	-54.98	V
598.4200	-73.66	2.9	6.37	-70.19	-13.00	-57.19	V
62.9800	-63.4	0.9	-2.06	-66.36	-13.00	-53.36	H
98.8700	-56.24	1.14	-0.21	-57.59	-13.00	-44.59	H
150.2800	-62	1.43	0.71	-62.72	-13.00	-49.72	H
330.7000	-71.29	2.16	5.71	-67.74	-13.00	-54.74	H
426.7300	-72.34	2.48	5.8	-69.02	-13.00	-56.02	H
529.5500	-71.69	2.75	6	-68.44	-13.00	-55.44	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 20MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
98.8700	-57.57	1.14	-0.21	-58.92	-13.00	-45.92	V
126.0300	-64.94	1.32	-1.69	-67.95	-13.00	-54.95	V
174.5300	-71.44	1.59	3	-70.03	-13.00	-57.03	V
234.6700	-82.58	1.8	5.38	-79.00	-13.00	-66.00	V
342.3400	-74.34	2.18	5.8	-70.72	-13.00	-57.72	V
450.9800	-75.23	2.59	5.74	-72.08	-13.00	-59.08	V
98.8700	-56.25	1.14	-0.21	-57.60	-13.00	-44.60	H
150.2800	-61.47	1.43	0.71	-62.19	-13.00	-49.19	H
186.1700	-73.25	1.62	3.85	-71.02	-13.00	-58.02	H
306.4500	-74.59	2.12	5.73	-70.98	-13.00	-57.98	H
330.7000	-70.98	2.16	5.71	-67.43	-13.00	-54.43	H
516.9400	-72.81	2.7	6.07	-69.44	-13.00	-56.44	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.24	1.16	-0.64	-59.04	-13.00	-46.04	V
174.5300	-71.65	1.59	3	-70.24	-13.00	-57.24	V
234.6700	-83.03	1.8	5.38	-79.45	-13.00	-66.45	V
342.3400	-74.6	2.18	5.8	-70.98	-13.00	-57.98	V
390.8400	-75.04	2.32	6	-71.36	-13.00	-58.36	V
439.3400	-75.37	2.53	5.9	-72.00	-13.00	-59.00	V
101.7800	-56.37	1.16	-0.64	-58.17	-13.00	-45.17	H
161.9200	-62.25	1.5	1.61	-62.14	-13.00	-49.14	H
319.0600	-71.95	2.17	5.71	-68.41	-13.00	-55.41	H
330.7000	-70.44	2.16	5.71	-66.89	-13.00	-53.89	H
435.4600	-71.22	2.51	5.86	-67.87	-13.00	-54.87	H
612.9700	-72.77	2.94	6.23	-69.48	-13.00	-56.48	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 6, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-57.38	1.16	-0.64	-59.18	-13.00	-46.18	V
141.5500	-67.4	1.4	-0.1	-68.90	-13.00	-55.90	V
174.5300	-71.99	1.59	3	-70.58	-13.00	-57.58	V
342.3400	-75.04	2.18	5.8	-71.42	-13.00	-58.42	V
390.8400	-74.79	2.32	6	-71.11	-13.00	-58.11	V
439.3400	-75.38	2.53	5.9	-72.01	-13.00	-59.01	V
101.7800	-57.04	1.16	-0.64	-58.84	-13.00	-45.84	H
150.2800	-61.57	1.43	0.71	-62.29	-13.00	-49.29	H
276.3800	-75.18	1.99	5.23	-71.94	-13.00	-58.94	H
330.7000	-69.98	2.16	5.71	-66.43	-13.00	-53.43	H
354.9500	-70.81	2.25	5.75	-67.31	-13.00	-54.31	H
448.0700	-71.56	2.58	5.74	-68.40	-13.00	-55.40	H

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Above 1GHz**LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / QPSK**

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1413.000	-55.56	4.67	5.67	-54.56	-13.00	-41.56	V
2435.000	-51.8	6.24	6.01	-52.03	-13.00	-39.03	V
N/A							
1413.000	-54.07	4.67	5.67	-53.07	-13.00	-40.07	H
2435.000	-52.2	6.24	6.01	-52.43	-13.00	-39.43	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-55.57	4.68	5.72	-54.53	-13.00	-41.53	V
2267.000	-55.01	6.03	5.77	-55.27	-13.00	-42.27	V
N/A							
1420.000	-53.72	4.68	5.72	-52.68	-13.00	-39.68	H
2435.000	-51.14	6.24	6.01	-51.37	-13.00	-38.37	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1427.000	-54.72	4.7	5.77	-53.65	-13.00	-40.65	V
2855.000	-52.07	7	7.02	-52.05	-13.00	-39.05	V
N/A							
1420.000	-53.55	4.68	5.72	-52.51	-13.00	-39.51	H
2435.000	-49.05	6.24	6.01	-49.28	-13.00	-36.28	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1413.000	-56.16	4.67	5.67	-55.16	-13.00	-42.16	V
2834.000	-53.22	6.93	6.97	-53.18	-13.00	-40.18	V
N/A							
1420.000	-56.05	4.68	5.72	-55.01	-13.00	-42.01	H
2435.000	-51.34	6.24	6.01	-51.57	-13.00	-38.57	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-55.63	4.68	5.72	-54.59	-13.00	-41.59	V
2442.000	-51.63	6.25	6.02	-51.86	-13.00	-38.86	V
N/A							
1420.000	-55.25	4.68	5.72	-54.21	-13.00	-41.21	H
2827.000	-53.64	6.9	6.95	-53.59	-13.00	-40.59	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-56.96	4.68	5.72	-55.92	-13.00	-42.92	V
2841.000	-52.62	6.95	6.99	-52.58	-13.00	-39.58	V
N/A							
1420.000	-55.58	4.68	5.72	-54.54	-13.00	-41.54	H
2435.000	-52.23	6.24	6.01	-52.46	-13.00	-39.46	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1413.000	-55.23	4.67	5.67	-54.23	-13.00	-41.23	V
2827.000	-52.49	6.9	6.95	-52.44	-13.00	-39.44	V
N/A							
1413.000	-54.76	4.67	5.67	-53.76	-13.00	-40.76	H
2435.000	-51.35	6.24	6.01	-51.58	-13.00	-38.58	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-55.35	4.68	5.72	-54.31	-13.00	-41.31	V
2841.000	-53.68	6.95	6.99	-53.64	-13.00	-40.64	V
N/A							
1420.000	-52.99	4.68	5.72	-51.95	-13.00	-38.95	H
3030.000	-52.74	7.06	7.49	-52.31	-13.00	-39.31	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-56.21	4.68	5.72	-55.17	-13.00	-42.17	V
2855.000	-53.9	7	7.02	-53.88	-13.00	-40.88	V
N/A							
1427.000	-54.74	4.7	5.77	-53.67	-13.00	-40.67	H
2435.000	-49.77	6.24	6.01	-50.00	-13.00	-37.00	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-57.25	4.68	5.72	-56.21	-13.00	-43.21	V
2834.000	-52.9	6.93	6.97	-52.86	-13.00	-39.86	V
N/A							
1413.000	-55.47	4.67	5.67	-54.47	-13.00	-41.47	H
2974.000	-53.69	7.05	7.33	-53.41	-13.00	-40.41	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1413.000	-57.18	4.67	5.67	-56.18	-13.00	-43.18	V
2211.000	-54.69	5.96	5.7	-54.95	-13.00	-41.95	V
N/A							
1413.000	-55.29	4.67	5.67	-54.29	-13.00	-41.29	H
2435.000	-51.99	6.24	6.01	-52.22	-13.00	-39.22	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1420.000	-56.45	4.68	5.72	-55.41	-13.00	-42.41	V
2841.000	-52.45	6.95	6.99	-52.41	-13.00	-39.41	V
N/A							
1420.000	-53.83	4.68	5.72	-52.79	-13.00	-39.79	H
2442.000	-52.87	6.25	6.02	-53.10	-13.00	-40.10	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 5MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5004.000	-47.97	9.41	10.6	-46.78	-13.00	-33.78	V
6754.000	-48.02	11.3	11.6	-47.72	-13.00	-34.72	V
N/A							
5004.000	-50.61	9.41	10.6	-49.42	-13.00	-36.42	H
6355.000	-48.12	11.01	11.18	-47.95	-13.00	-34.95	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3569.000	-53.05	8.04	8.97	-52.12	-13.00	-39.12	V
5067.000	-46.85	9.44	10.63	-45.66	-13.00	-32.66	V
N/A							
3912.000	-50.78	8.39	9.31	-49.86	-13.00	-36.86	H
5655.000	-50.11	10.17	10.83	-49.45	-13.00	-36.45	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
4374.000	-51.75	8.63	9.7	-50.68	-13.00	-37.68	V
5137.000	-45.7	9.49	10.65	-44.54	-13.00	-31.54	V
N/A							
5137.000	-49.03	9.49	10.65	-47.87	-13.00	-34.87	H
6670.000	-47.09	11.28	11.5	-46.87	-13.00	-33.87	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 10MHz / QPSK

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3772.000	-52.53	8.24	9.17	-51.60	-13.00	-38.60	V
5011.000	-47.57	9.41	10.6	-46.38	-13.00	-33.38	V
N/A							
4472.000	-49.86	8.83	9.78	-48.91	-13.00	-35.91	H
5949.000	-49.88	10.61	10.89	-49.60	-13.00	-36.60	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3828.000	-51.42	8.3	9.23	-50.49	-13.00	-37.49	V
5067.000	-46.49	9.44	10.63	-45.30	-13.00	-32.30	V
N/A							
3891.000	-50.94	8.38	9.29	-50.03	-13.00	-37.03	H
5536.000	-48.7	10.03	10.81	-47.92	-13.00	-34.92	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3807.000	-53.28	8.27	9.21	-52.34	-13.00	-39.34	V
5130.000	-45.87	9.48	10.65	-44.70	-13.00	-31.70	V
N/A							
3807.000	-51.81	8.27	9.21	-50.87	-13.00	-37.87	H
6257.000	-47.94	10.95	11.11	-47.78	-13.00	-34.78	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 20MHz / QPSK**Operation Mode:** Tx / Low channel **Test Date:** June 4, 2015**Temperature:** 24°C **Tested by:** Owen Wu**Humidity:** 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5018.000	-45.83	9.42	10.61	-44.64	-13.00	-31.64	V
6978.000	-44.66	11.54	11.87	-44.33	-13.00	-31.33	V
N/A							
5025.000	-49.47	9.42	10.61	-48.28	-13.00	-35.28	H
6761.000	-46.61	11.3	11.61	-46.30	-13.00	-33.30	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3814.000	-51.36	8.28	9.21	-50.43	-13.00	-37.43	V
5067.000	-49.11	9.44	10.63	-47.92	-13.00	-34.92	V
N/A							
3877.000	-50.79	8.36	9.28	-49.87	-13.00	-36.87	H
6061.000	-48.75	10.7	10.95	-48.50	-13.00	-35.50	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5109.000	-47.11	9.46	10.64	-45.93	-13.00	-32.93	V
6950.000	-44.71	11.54	11.84	-44.41	-13.00	-31.41	V
N/A							
5123.000	-49.7	9.48	10.65	-48.53	-13.00	-35.53	H
7027.000	-44.07	11.62	11.94	-43.75	-13.00	-30.75	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 5MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3863.000	-52.25	8.34	9.26	-51.33	-13.00	-38.33	V
5004.000	-47.66	9.41	10.6	-46.47	-13.00	-33.47	V
N/A							
4388.000	-50.49	8.64	9.71	-49.42	-13.00	-36.42	H
6292.000	-48.27	10.79	11.13	-47.93	-13.00	-34.93	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5067.000	-47	9.44	10.63	-45.81	-13.00	-32.81	V
7020.000	-45.13	11.6	11.93	-44.80	-13.00	-31.80	V
N/A							
3898.000	-52.02	8.39	9.3	-51.11	-13.00	-38.11	H
4927.000	-50.85	9.3	10.48	-49.67	-13.00	-36.67	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5137.000	-43.73	9.49	10.65	-42.57	-13.00	-29.57	V
7020.000	-45.96	11.6	11.93	-45.63	-13.00	-32.63	V
N/A							
5137.000	-50.13	9.49	10.65	-48.97	-13.00	-35.97	H
6411.000	-46.69	11.2	11.23	-46.66	-13.00	-33.66	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Low channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3569.000	-53.74	8.04	8.97	-52.81	-13.00	-39.81	V
5011.000	-47.69	9.41	10.6	-46.50	-13.00	-33.50	V
N/A							
4094.000	-51.14	8.45	9.48	-50.11	-13.00	-37.11	H
5837.000	-49.29	10.41	10.87	-48.83	-13.00	-35.83	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5067.000	-47.92	9.44	10.63	-46.73	-13.00	-33.73	V
6670.000	-47.78	11.28	11.5	-47.56	-13.00	-34.56	V
N/A							
4976.000	-50.41	9.37	10.56	-49.22	-13.00	-36.22	H
6866.000	-44.6	11.45	11.74	-44.31	-13.00	-31.31	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3828.000	-52.95	8.3	9.23	-52.02	-13.00	-39.02	V
5130.000	-47.49	9.48	10.65	-46.32	-13.00	-33.32	V
N/A							
3919.000	-51.75	8.38	9.32	-50.81	-13.00	-37.81	H
6117.000	-49.3	10.72	10.99	-49.03	-13.00	-36.03	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.

LTE Band 7 / CHANNEL BANDWIDTH: 20MHz / 16QAM**Operation Mode:** Tx / Low channel **Test Date:** June 4, 2015**Temperature:** 24°C **Tested by:** Owen Wu**Humidity:** 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3940.000	-51.4	8.37	9.34	-50.43	-13.00	-37.43	V
5018.000	-47.58	9.42	10.61	-46.39	-13.00	-33.39	V
N/A							
5032.000	-50.27	9.42	10.61	-49.08	-13.00	-36.08	H
6635.000	-46.78	11.25	11.46	-46.57	-13.00	-33.57	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / Middle channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3905.000	-51.82	8.39	9.31	-50.90	-13.00	-37.90	V
5067.000	-49.69	9.44	10.63	-48.50	-13.00	-35.50	V
N/A							
5074.000	-50.32	9.44	10.63	-49.13	-13.00	-36.13	H
6306.000	-47.8	10.78	11.14	-47.44	-13.00	-34.44	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

Operation Mode: Tx / High channel **Test Date:** June 4, 2015
Temperature: 24°C **Tested by:** Owen Wu
Humidity: 61% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5116.000	-47.96	9.47	10.65	-46.78	-13.00	-33.78	V
6670.000	-47.21	11.28	11.5	-46.99	-13.00	-33.99	V
N/A							
5382.000	-49.7	9.79	10.75	-48.74	-13.00	-35.74	H
6929.000	-45.32	11.53	11.81	-45.04	-13.00	-32.04	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.