ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 22 SUBPART H, PART 24 SUBPART E and PART 27 SUBPART B, C & SUBPART L and PART 90S REQUIREMENT

OF

Applicant:	ASKEY COMPUTER CORP 3390 East Harmony Road Fort Collins, Colorado 80528 United States
Product Name:	Connected DashCAM
Brand Name:	ASKEY
Model No.:	CDR6013-WG
Model Difference:	N/A
FCC ID:	H8NCDR6013
Report Number:	ER/2018/300752
FCC Rule Part:	2 , 22H & 24E & 27B, C & L & 90S
Issue Date:	Apr. 18, 2018
Date of Test:	Mar. 21, 2018~ Apr. 11, 2018
Date of EUT Received:	Jan. 12, 2018

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26-2015 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Tested By: Louis Chen

Louis Chen / Engineer

Approved By: Jim Chang

Jim Chang / Manager

Testing Laboratory
0513

Revision History

Report Number	Revision	Description	Effected Page	Issue Date	Revised By
ER/2018/30075	Rev.00	Initial creation of document	All	Apr. 18, 2018	Stefanie Yu / Clerk

Contents

1. GENERAL PRODUCT INFORMATION

1.1. Product Description

General:

Product Name:	Connected DashCAM	
Brand Name:	ASKEY	
Model No.:	CDR6013-WG	
Model Difference:	N/A	
Hardware Version:	N/A	
Software Version:	N/A	
Power Supply:	3.7Vdc from Rechargeable Li-polymer Battery or 5V from USB port or 5Vdc/9Vdc form Car charger.	
	Battery:	Model No: ICP463048XS, Supplier:FUJI ELECTRONICS(SHENZHEN)CO., LTD.
	Car charger:	1. Model No: SYD1191-1005. Supplier: Sunny Computer Technology Co. LTD. 2. Model No: SYD1198-QC15 Supplier: Sunny Computer Technology Co. LTD.
IMEI:	359919089995050	

1.2. WCDMA / LTE: Cellular Phone Standards Frequency Range

Operating Frequency (MHz)			
WCDMA / HSPA+ Band II	1852.4	-	1907.6
WCDMA//HSPA+ Band IV	1712.4	-	1752.6
WCDMA / HSPA+ Band V	826.4	-	846.6

LTE Band	BW (MHz)	Operation Frequency (MHz)	LTE Band	BW (MHz)	Operation Frequency (MHz)
2	1.4	1850.7 - 1909.3	17	5	706.5 - 713.5
	3	1851.5 - 1908.5		10	709.0 - 711.0
	5	1852.5 - 1907.5	26	1.4	824.7 - 848.3
	10	1855.0 - 1905.0		3	825.5 - 847.5
	15	1857.5 - 1902.5		5	826.5 - 846.5
	20	1860.0 - 1900.0		10	829.0 - 844.0
4	1.4	1710.7 - 1754.3		15	831.5 - 841.5
	3	1711.5 - 1753.5	26 Part90	1.4	814.7 - 823.3
	5	1712.5 - 1752.5		3	815.5 - 822.5
	10	1715.0 - 1780.0		5	816.5 - 821.5
	15	1717.5 - 1747.5		10	819.0
	20	1720.0 - 1745.0			
5	1.4	824.7 - 848.3			
	3	825.5 - 847.5			
	5	826.5 - 846.5			
	10	829.0 - 844.0			

1.3. Type of Emission & Max ERP/EIRP Power Measurement Result::

	ERP / EIRP (dBm)		(W)	Type of Emission
WCDMA Band II	18.88	EIRP	0.077	4M12F9W
HSDPA Band II	19.50	EIRP	0.089	4M13F9W
HSUPA Band II	18.72	EIRP	0.074	4M12F9W
WCDMA Band IV	20.15	EIRP	0.104	4M12F9W
HSDPA Band IV	20.89	EIRP	0.123	4M12F9W
HSUPA Band IV	20.18	EIRP	0.104	4M11F9W
WCDMA Band V	17.65	ERP	0.058	4M14F9W
HSDPA Band V	16.97	ERP	0.050	4M12F9W
HSUPA Band V	18.19	ERP	0.066	4M11F9W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
2	1.4	QPSK	23.63	EIRP	0.231	1M11G7D
	1.4	16QAM	23.47	EIRP	0.222	1M11D7W
	3	QPSK	23.98	EIRP	0.250	2M71G7D
	3	16QAM	**24.39**	EIRP	**0.275**	2M71D7W
	5	QPSK	23.42	EIRP	0.220	4M52G7D
	5	16QAM	24.35	EIRP	0.272	4M53D7W
	10	QPSK	23.71	EIRP	0.235	9M00G7D
	10	16QAM	24.22	EIRP	0.264	8M99D7W
	15	QPSK	23.13	EIRP	0.206	13M5G7D
	15	16QAM	23.31	EIRP	0.214	13M5D7W
	20	QPSK	22.98	EIRP	0.199	**18M0G7D**
	20	16QAM	23.53	EIRP	0.225	17M9D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
4	1.4	QPSK	21.91	EIRP	0.155	1M10G7D
	1.4	16QAM	21.47	EIRP	0.140	1M10D7W
	3	QPSK	22.03	EIRP	0.160	2M72G7D
	3	16QAM	22.19	EIRP	0.166	2M71D7W
	5	QPSK	21.61	EIRP	0.145	4M51G7D
	5	16QAM	22.65	EIRP	0.184	4M50D7W
	10	QPSK	22.02	EIRP	0.159	8M98G7D
	10	16QAM	22.25	EIRP	0.168	8M99D7W
	15	QPSK	22.71	EIRP	0.187	13M5G7D
	15	16QAM	**23.42**	EIRP	**0.220**	13M5D7W
	20	QPSK	21.93	EIRP	0.156	17M9G7D
	20	16QAM	22.43	EIRP	0.175	**18M0D7W**

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
5	1.4	QPSK	17.44	ERP	0.055	1M10G7D
	1.4	16QAM	18.24	ERP	0.067	1M10D7W
	3	QPSK	18.03	ERP	0.064	2M71G7D
	3	16QAM	19.05	ERP	0.080	2M70D7W
	5	QPSK	**19.56**	ERP	**0.090**	4M51G7D
	5	16QAM	18.38	ERP	0.069	4M51D7W
	10	QPSK	17.26	ERP	0.053	8M97G7D
	10	16QAM	19.27	ERP	0.085	**8M98D7W**
17	5	QPSK	21.67	ERP	0.147	4M52G7D
	5	16QAM	**21.89**	ERP	**0.155**	4M51D7W
	10	QPSK	21.36	ERP	0.137	**8M98G7D**
	10	16QAM	21.61	ERP	0.145	8M97D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
26	1.4	QPSK	18.25	ERP	0.067	1M10G7D
	1.4	16QAM	19.16	ERP	0.082	1M11D7W
	3	QPSK	18.59	ERP	0.072	2M71G7D
	3	16QAM	19.51	ERP	0.089	2M72D7W
	5	QPSK	17.42	ERP	0.055	4M51G7D
	5	16QAM	18.75	ERP	0.075	4M51D7W
	10	QPSK	18.15	ERP	0.065	8M98G7D
	10	16QAM	18.48	ERP	0.070	9M00D7W
	15	QPSK	**20.06**	ERP	**0.101**	13M4G7D
	15	16QAM	19.92	ERP	0.098	**13M5D7W**
26 Part90	1.4	QPSK	18.45	ERP	0.070	1M10G7D
	1.4	16QAM	18.87	ERP	0.077	1M11D7W
	3	QPSK	**20.18**	ERP	**0.104**	2M71G7D
	3	16QAM	18.18	ERP	0.066	2M72D7W
	5	QPSK	19.65	ERP	0.092	4M51G7D
	5	16QAM	18.78	ERP	0.076	4M52D7W
	10	QPSK	17.99	ERP	0.063	8M95G7D
	10	16QAM	19.57	ERP	0.091	**8M97D7W**

1.4. Test Methodology of Applied Standards

CC 47 CFR Part 2, 22, 24, 27, Part 90S.

ANSI C63.26-2015

KDB971168 D01 Power Meas license Digital System v03

KDB941225 D01 SAR test for 3G devices v03r01 (SAR Measurement Procedures for 3G Devices, WCDMA / HSPA) was used for EUT and Base station setting.

TS 151 010-1 is used to set, and measure the output power.

Note: All test items have been performed and record as per the above standards.

1.5. Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803 code 0513)

FCC Registration Numbers are: 509634 / TW0001

1.6. Special Accessories

No special accessories were used during testing.

1.7. Equipment Modifications

There were no modifications incorporated into the EUT.

2. SYSTEM TEST CONFIGURATION

2.1. EUT Configuration

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

2.2. EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

2.3. Test Procedure

2.3.1 Conducted Measurement at Antenna Port

According to measurement procured ANSI C63.26-2015, the EUT is placed on a turn table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

2.3.2 Radiated Emissions (ERP/EIRP)

According to measurement procured ANSI C63.26-2015, The EUT is a placed on as turn table, for emission measurements below 1 GHz is 0.8 m above ground plane, for emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 8 and 13.

2.4. Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Following shows an offset computation in physical test.

	RF cable loss (dB)	Attenuation factor(dB)	offset(dB)
Low Band (Below 1GHz)	3.7	10	13.7
High Band (Above 1 GHz)	4	10	14

2.5. Final Amplifier Voltage and Current Information:

Test Mode	DC voltage (V)	DC current (mA)
HSDPA B2	3.7	0.675
WCDMA B4		0.688
WCDMA B5		0.648
LTE Band 2		0.694
LTE Band 4		0.694
LTE Band 5		0.690
LTE Band 17		0.689
LTE Band 26		0.693
LTE Band 26 (Part 90S)		0.693

2.6. Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Fixed Channel-Conducted)

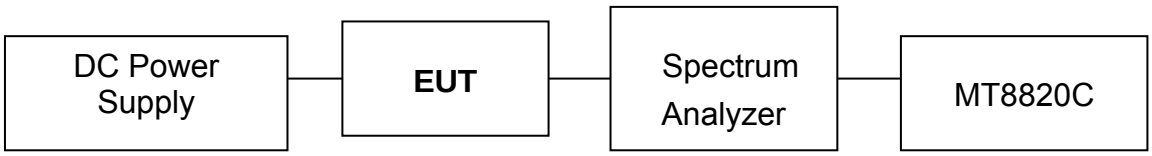
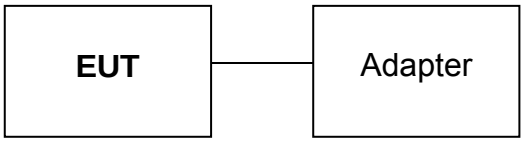


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)



Remote Side

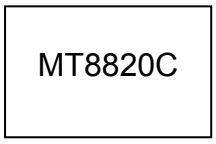


Table 2-1 Equipment Used in

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Universal Radio Communication Tester	Anritsu	MT8820C	6200307563	shielded	Un-shielded

3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§2.1046(a)	RF Power Output	Compliant
§2.1046(a) §22.913(a)(5) §24.232(c) §27.50(a)(3) §27.50(c)(10) §27.50(d)(4) §90.635	ERP/ EIRP measurement	Compliant
§2.1049(h)	99% & 26dB Occuupied Bandwidth	Compliant
§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.50(c)(5) §27.53(h) §27.53(m)(4)(6) §90.691	Out of Band Emissions at Antenna Terminals and Band Edge / Emission mask requirements	Compliant
§2.1053 §22.917(a) §24.238(a) §27.53(c)(2),(4) §27.50(c)(5) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4) §90.691(a)(1)(2)	Field Strength of Spurious Radiation	Compliant
§24.232(d) §27.53(d) (5) §27.50(i) (B)	Peak to Average Ratio	Compliant
§2.1055(a)(1) §22.355 §24.235 §27.54 §90.213	Frequency Stability	Compliant

4. DESCRIPTION OF TEST MODES

4.1. The Worst Test Modes and Channel Details

1. The EUT has been tested under operating condition.
2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X(E1)Y(E2)Z(H) axis and antenna ports. The worst case was found as listed below. Following channel(s) was (were) selected for the final test as listed below:

BAND	ERP/EIRP	RADIATED EMISSION
WCDMA/HSPA Band II	H-plan	H-plan
WCDMA/HSPA Band IV	H-plan	H-plan
WCDMA/HSPA Band V	H-plan	H-plan
LTE Band 2	H-plan	H-plan
LTE Band 4	H-plan	H-plan
LTE Band 5	H-plan	H-plan
LTE Band 17	H-plan	H-plan
LTE Band 26	H-plan	H-plan
LTE Band 26 (Part 90S)	H-plan	H-plan

WCDMA/HSPA MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	4132 to 4233	4132, 4183, 4233	WCDMA/HSPA Band V
EIRP	9262 to 9538	9262, 9400, 9538	WCDMA/HSPA Band II
FREQUENCY STABILITY	4132 to 4233 9262 to 9538	4183 9400	WCDMA Band II WCDMA Band V
OCCUPIED BANDWIDTH	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA/HSPA Band II WCDMA/HSPA Band V
PEAK TO AVERAGE RATIO	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA/HSPA Band II WCDMA/HSPA Band V
BAND EDGE	4132 to 4233 9262 to 9538	4132, 4233 9262, 9538	WCDMA Band II WCDMA Band V
CONDCUDETED EMISSION	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA Band II WCDMA Band V
RADIATED EMISSION	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA Band II WCDMA Band V

LTE Band 2 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB/ 0,5 RB Offest
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB/ 0,14 RB Offest
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STABILITY	18650 to 19150	18900	10MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	Full RB
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	Full RB
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	Full RB
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	Full RB
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	Full RB
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	Full RB
PEAK TO AV-ERAGE RATIO	18607 to 19193	18607, 18900, 19193	1.4MHz	16QAM	Full RB
	18615 to 19185	18615, 18900, 19185	3MHz	16QAM	Full RB
	18625 to 19175	18625, 18900, 19175	5MHz	16QAM	Full RB
	18650 to 19150	18650, 18900, 19150	10MHz	16QAM	Full RB
	18675 to 19125	18675, 18900, 19125	15MHz	16QAM	Full RB
	18700 to 19100	18700, 18900, 19100	20MHz	16QAM	Full RB
BAND EDGE	18607 to 19193	18607, 19193	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	18615 to 19185	18615, 19185	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	18625 to 19175	18625, 19175	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	18650 to 19150	18650, 19150	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	18675 to 19125	18675, 19125	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	18700 to 19100	18700, 19100	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK,	1 RB, 0 RB Offest
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK,	1 RB, 0 RB Offest
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK,	1 RB, 0 RB Offest
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK,	1 RB, 0 RB Offest
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK,	1 RB, 0 RB Offest
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	18625 to 19175	18625, 18900, 19175	3MHz	16QAM	1 RB, 14 RB Offest

LTE Band 4 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK, 16QAM	1 RB/ 0,5 RB Offest
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK, 16QAM	1 RB/ 0,14 RB Offest
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STABILITY	20000 to 20350	20175	10MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK, 16QAM	Full RB
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK, 16QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	Full RB
PEAK TO AV-ERAGE RATIO	19957 to 19393	19957, 20175, 19393	1.4MHz	16QAM	Full RB
	19965 to 22385	19965, 20175, 22385	3MHz	16QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	16QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	16QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	16QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	16QAM	Full RB
BAND EDGE	19957 to 19393	19957, 19393	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	19965 to 22385	19965, 22385	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	19975 to 20375	19975, 20375	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	20000 to 20350	20000, 20350	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	20025 to 20325	20025, 20325	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	20050 to 20300	20050, 20300	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK,	1 RB, 0 RB Offest
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK,	1 RB, 0 RB Offest
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK,	1 RB, 0 RB Offest
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK,	1 RB, 0 RB Offest
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK,	1 RB, 0 RB Offest
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	20000 to 20350	20000, 20175, 20350	15MHz	16QAM,	1 RB, 74 RB Offest

LTE Band 5 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK, 16QAM	1 RB/ 0,5 RB Offest
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM	1 RB/ 0,14 RB Offest
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
FREQUENCY STABILITY	20450 to 20600	20525	10MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK, 16QAM	Full RB
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM	Full RB
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM	Full RB
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM	Full RB
PEAK TO AV-ERAGE RATIO	20470 to 20643	20470, 20525, 20643	1.4MHz	16QAM	Full RB
	20415 to 20635	20415, 20525, 20635	3MHz	16QAM	Full RB
	20425 to 20625	20425, 20525, 20625	5MHz	16QAM	Full RB
	20450 to 20600	20450, 20525, 20600	10MHz	16QAM	Full RB
BAND EDGE	20470 to 20643	20470, 20643	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	20415 to 20635	20415, 20635	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	20425 to 20625	20425, 20625	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	20450 to 20600	20450, 20600	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK,	1 RB, 0 RB Offest
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK,	1 RB, 0 RB Offest
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK,	1 RB, 0 RB Offest
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	20450 to 20600	20450, 20525, 20600	5MHz	QPSK,	1 RB, 0 RB Offest

LTE Band 17 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
FREQUENCY STABILITY	23780 to 23800	23790	10MHz	QPSK	Full RB
OCCUPIED BANDWIDTH	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM	Full RB
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM	Full RB
PEAK TO AV-ERAGE RATIO	23755 to 23825	23755, 23790, 23825	5MHz	16QAM	Full RB
	23780 to 23800	23780, 23790, 23800	10MHz	16QAM	Full RB
BAND EDGE	23755 to 23825	23755, 23825	5MHz	QPSK	1 RB/ 0,24 RB Offest Full RB
	23780 to 23800	23780, 23800	10MHz	QPSK	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1 RB, 0 RB Offest
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1 RB, 0 RB Offest
RADIATED EMISSION	23780 to 23800	23780, 23790, 23800	5MHz	16QAM	1 RB/ 24 RB Offest

LTE Band 26 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM, 64QAM, 64QAM	1 RB/ 0,5 RB Offest
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,14 RB Offest
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,24 RB Offest
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,49 RB Offest
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,74 RB Offest
FREQUENCY STABILITY	26865 to 26965	26915	15MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM, 64QAM	Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM, 64QAM	Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM, 64QAM	Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM, 64QAM	Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM, 64QAM	Full RB
PEAK TO AV-ERAGE RATIO	26797 to 27033	26797, 26915, 27033	1.4MHz	16QAM	Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	16QAM	Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	16QAM	Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	16QAM	Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	16QAM	Full RB
BAND EDGE	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB/ 0,74 RB Offest
CONDCUDETED EMISSION	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,	1 RB, 0 RB Offest
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,	1 RB, 0 RB Offest
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK,	1 RB, 0 RB Offest
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,	1 RB, 0 RB Offest
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB, 0 RB Offest
RADIATED EMISSION	26805 to 27025	26805, 26915, 27025	115MHz	QPSK,	1 RB, 0 RB Offest

LTE Band 26 for 90S MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,5 RB Offest
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,14 RB Offest
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,24 RB Offest
	26740	26740	10MHz	QPSK, 16QAM, 64QAM	1 RB/ 0,49 RB Offest
FREQUENCY STABILITY	26697 to 26783	26740	1.4MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM, 64QAM	Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM, 64QAM	Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM, 64QAM	Full RB
	26740	26740	10MHz	QPSK, 16QAM, 64QAM	Full RB
PEAK TO AV-ERAGE RATIO	26697 to 26783	26697, 26740, 26783	1.4MHz	16QAM	Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	16QAM	Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	16QAM	Full RB
	26740	26740	10MHz	16QAM	Full RB
BAND EDGE	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	26740	26740	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK,	1 RB, 0 RB Offest
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK,	1 RB, 0 RB Offest
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK,	1 RB, 0 RB Offest
	26740	26740	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	26740	26740	3MHz	QPSK,	1 RB, 0 RB Offest

5. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.10 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB
99% Occupied Bandwidth	+/- 5.19 Hz
Out of Band Emissions at Antenna Terminals and Band Edge	+/- 0.70 dB
Peak to Average Ratio	+/- 0.70 dB
Frequency Stability vs. Temperature	+/- 5.19 Hz
Frequency Stability vs. Voltage	+/- 5.19 Hz
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%

Radiated Spurious Emission:

Measurement uncertainty (Polarization : **Vertical**)	9kHz – 30MHz: +/- 2.87 dB
	30MHz - 180MHz: +/- 3.37dB
	180MHz -417MHz: +/- 3.19dB
	0.417GHz-1GHz: +/- 3.19dB
	1GHz - 18GHz: +/- 4.04dB
	18GHz - 40GHz: +/- 4.04dB

Measurement uncertainty (Polarization : **Horizontal**)	9kHz – 30MHz: +/- 2.87 dB
	30MHz - 167MHz: +/- 4.22dB
	167MHz -500MHz: +/- 3.44dB
	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

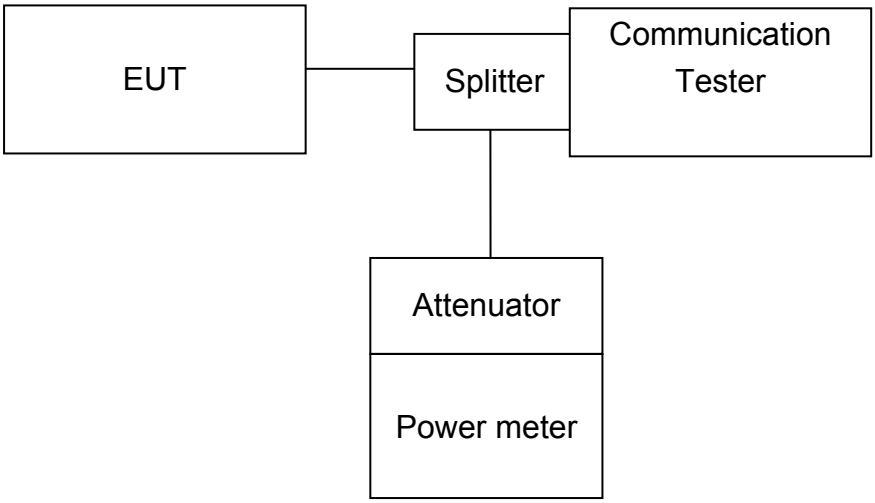
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

6. RF CONDUCTED OUTPUT POWER MEASUREMENT

6.1. Standard Applicable

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

6.2. Test Set-up



Note: *Measurement setup for testing on Antenna connector*

6.3. Measurement Procedure

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading. TS 151 010-1 is reference to conduct the test measurement of output power.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, (WCDMA/HSPA) was used for EUT and Base station setting. RMC 12.2kps is used for this testing, and KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results

6.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Power Meter	Anritsu	ML2495A	1005007	12/29/2017	12/28/2018
Power Sensor	Anritsu	MA2411B	917032	12/29/2017	12/28/2018
Power Meter	Anritsu	ML2496A	1242004	10/16/2017	10/15/2018
Power Sensor	Anritsu	MA2411B	1207365	10/16/2017	10/15/2018
Power Sensor	Anritsu	MA2411B	1207368	10/16/2017	10/15/2018
EXA Spectrum Ana-lyzer	Agilent	N9010A	MY54200716	10/16/2017	10/15/2018
EXA Spectrum Ana-lyzer	Agilent	N9030A	MY53120760	04/09/2018	04/08/2019
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019
Coaxial Cable	HU-BER+SUHNER	SUCOFLEX 102	23670/2	01/02/2018	01/01/2019
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019
Splitter	Agilent	11636B	N/A	01/02/2018	01/01/2019
DC Power Supply	Agilent	E3640A	MY52410006	11/28/2017	11/27/2018
Temperature Chamber	TERCHY	MHG-120LF	911009	05/19/2017	05/18/2018

6.5. Measurement Result

RF Conducted Output Power

WCDMA MODE:

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 V8.4.0 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7). RMC 12.2kps is used for this testing.

Results:

BNAD II	Avg. Power (dBm) Channel		
	9262	9400	9538
WCDMA	23.30	23.80	23.70
HSDPA	21.80	22.10	22.00
HSUPA	21.50	21.70	21.60

BNAD IV	Avg. Power (dBm) Channel		
	1312	1413	1513
WCDMA	23.80	23.70	23.70
HSDPA	22.30	22.20	22.10
HSUPA	21.80	21.70	21.60

BNAD V	Avg. Power (dBm) Channel		
	4132	4183	4233
WCDMA	23.60	23.50	23.60
HSDPA	22.40	22.30	22.70
HSUPA	22.00	21.90	22.10

LTE Result:

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 18607	CH (Mid) 18900	CH (High) 19193	CH (Low) 18607	CH (Mid) 18900	CH (High) 19193
1.4	1	0	23.30	23.38	23.49	22.01	22.03	22.43
	1	5	23.31	23.33	23.19	21.59	21.64	22.37
	3	2	23.29	23.39	23.23	22.46	22.29	22.32
	6	0	22.44	22.47	22.43	21.20	21.18	21.33

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 18615	CH (Mid) 18900	CH (High) 19185	CH (Low) 18615	CH (Mid) 18900	CH (High) 19185
3	1	0	23.17	23.31	23.33	22.04	21.92	22.21
	1	14	23.21	23.13	23.20	21.95	22.05	22.44
	8	4	22.46	22.52	22.51	21.22	21.19	21.17
	15	0	22.37	22.44	22.49	21.30	21.15	21.37

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 18625	CH (Mid) 18900	CH (High) 19175	CH (Low) 18625	CH (Mid) 18900	CH (High) 19175
5	1	0	23.37	23.17	23.39	21.28	21.35	22.05
	1	24	23.47	23.36	23.23	22.10	22.05	22.27
	12	6	22.46	22.53	22.45	21.32	21.33	21.35
	25	0	22.48	22.51	22.40	21.36	21.31	21.36

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 18650	CH (Mid) 18900	CH (High) 19150	CH (Low) 18650	CH (Mid) 18900	CH (High) 19150
10	1	0	23.69	23.68	23.74	22.28	22.10	22.31
	1	49	23.69	23.65	23.07	22.21	22.08	22.15
	25	12	22.57	22.48	22.22	21.40	21.41	21.29
	50	0	22.60	22.57	22.54	21.33	21.42	21.40

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 18675	CH (Mid) 18900	CH (High) 19125	CH (Low) 18675	CH (Mid) 18900	CH (High) 19125
15	1	0	23.63	23.50	23.42	21.81	22.05	22.33
	1	74	23.62	23.26	22.85	22.25	22.19	22.28
	36	19	22.62	22.55	22.55	21.43	21.34	21.16
	75	0	22.62	22.61	22.52	21.40	21.30	21.42

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm) (dBm)					
			QPSK			16QAM		
			CH (Low) 18700	CH (Mid) 18900	CH (High) 19100	CH (Low) 18700	CH (Mid) 18900	CH (High) 19100
20	1	0	23.54	23.79	23.46	22.16	22.10	21.68
	1	99	23.67	23.62	23.21	22.12	22.29	22.24
	50	25	22.57	22.56	22.61	21.40	21.26	21.25
	100	0	22.60	22.58	22.64	21.46	21.31	21.44

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 19957	CH (Mid) 20175	CH (High) 20393	CH (Low) 19957	CH (Mid) 20175	CH (High) 20393
1.4	1	0	23.37	23.19	23.20	21.91	21.66	21.91
	1	5	23.29	23.26	23.30	22.04	21.69	21.79
	3	2	23.36	23.33	23.34	22.25	21.99	22.37
	6	0	22.33	22.15	22.25	20.97	20.85	21.23

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 19965	CH (Mid) 20175	CH (High) 20385	CH (Low) 19965	CH (Mid) 20175	CH (High) 20385
3	1	0	23.41	23.11	23.37	21.93	22.08	21.47
	1	14	23.16	23.47	23.45	22.24	22.16	22.14
	8	4	22.36	22.35	22.36	21.53	21.33	21.28
	15	0	22.43	22.30	22.29	21.49	21.01	21.38

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 19975	CH (Mid) 20175	CH (High) 20375	CH (Low) 19975	CH (Mid) 20175	CH (High) 20375
5	1	0	23.10	23.28	23.42	22.11	21.95	22.27
	1	24	23.38	23.46	23.16	22.01	20.84	22.08
	12	6	22.51	22.36	22.62	21.55	21.42	21.42
	25	0	22.40	22.34	22.58	21.39	21.13	21.48

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20000	CH (Mid) 20175	CH (High) 20350	CH (Low) 20000	CH (Mid) 20175	CH (High) 20350
10	1	0	23.44	22.70	23.70	22.14	22.13	22.44
	1	49	22.81	23.24	22.95	22.14	21.97	22.15
	25	12	22.60	22.35	22.65	21.55	21.24	21.49
	50	0	22.53	22.24	22.55	21.52	21.20	21.55

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20025	CH (Mid) 20175	CH (High) 20325	CH (Low) 20025	CH (Mid) 20175	CH (High) 20325
15	1	0	23.46	22.35	23.55	21.97	21.76	21.94
	1	74	22.36	23.27	22.66	21.83	21.91	22.05
	36	19	22.57	22.35	22.54	21.55	21.15	21.54
	75	0	22.55	22.35	22.57	21.52	21.29	21.47

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm) (dBm)					
			QPSK			16QAM		
			CH (Low) 20050	CH (Mid) 20175	CH (High) 20300	CH (Low) 20050	CH (Mid) 20175	CH (High) 20300
20	1	0	23.49	22.31	23.41	21.90	21.70	22.00
	1	99	22.73	23.58	22.82	21.79	21.97	22.10
	50	25	22.44	22.22	22.51	21.33	21.23	21.54
	100	0	22.49	22.30	22.48	21.41	21.04	21.38

LTE Band 5_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20407	CH (Mid) 20525	CH (High) 20643	CH (Low) 20407	CH (Mid) 20525	CH (High) 20643
1.4	1	0	22.54	22.25	22.58	21.16	20.97	21.56
	1	5	22.35	22.49	22.70	21.36	20.68	21.22
	3	2	22.53	22.28	22.54	21.47	21.44	21.64
	6	0	21.51	21.31	21.64	20.53	20.30	20.53

LTE Band 5_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20415	CH (Mid) 20525	CH (High) 20635	CH (Low) 20415	CH (Mid) 20525	CH (High) 20635
3	1	0	22.45	22.33	22.55	21.24	20.67	21.41
	1	14	22.47	22.33	22.64	20.93	21.05	20.94
	8	4	21.61	21.29	21.75	20.51	20.21	20.56
	15	0	21.54	21.23	21.72	20.53	20.27	20.56

LTE Band 5_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20425	CH (Mid) 20525	CH (High) 20625	CH (Low) 20425	CH (Mid) 20525	CH (High) 20625
5	1	0	22.41	22.19	22.59	21.22	20.99	20.94
	1	24	22.40	22.27	22.58	20.88	20.83	20.88
	12	6	21.60	21.33	21.66	20.25	20.16	20.60
	25	0	21.55	21.36	21.74	20.56	20.28	20.55

LTE Band 5_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 20450	CH (Mid) 20525	CH (High) 20600	CH (Low) 20450	CH (Mid) 20525	CH (High) 20600
10	1	0	22.66	22.39	22.28	21.39	20.72	21.16
	1	49	22.19	22.36	22.69	20.97	21.35	21.44
	25	12	21.42	21.38	21.68	20.45	20.23	20.41
	50	0	21.49	21.24	21.59	20.36	20.25	20.62

LTE Band 17_Uplink frequency band : 704 to 716 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 23755	CH (Mid) 23790	CH (High) 23825	CH (Low) 23755	CH (Mid) 23790	CH (High) 23825
5	1	0	22.65	22.53	22.86	21.08	21.24	21.27
	1	24	22.67	22.82	22.96	21.27	21.42	21.43
	12	6	21.74	21.82	21.96	20.82	20.77	20.92
	25	0	21.76	21.69	21.97	20.76	20.58	20.91

LTE Band 17_Uplink frequency band : 704 to 716 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 23780	CH (Mid) 23790	CH (High) 23800	CH (Low) 23780	CH (Mid) 23790	CH (High) 23800
10	1	0	22.80	22.47	22.78	21.53	21.33	21.56
	1	49	23.00	22.92	22.89	21.50	21.58	21.55
	25	12	21.85	21.73	21.89	20.74	20.76	20.83
	50	0	21.75	21.78	21.85	20.75	20.68	20.86

LTE Band 26_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26797	CH (Mid) 26915	CH (High) 27033	CH (Low) 26797	CH (Mid) 26915	CH (High) 27033
1.4	1	0	22.42	22.33	22.51	21.02	21.07	21.42
	1	5	22.27	22.18	22.37	21.33	21.08	20.99
	3	2	22.23	22.25	22.52	21.44	21.08	21.31
	6	0	21.34	21.26	21.45	20.27	20.33	20.28

LTE Band 26_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26805	CH (Mid) 26915	CH (High) 27025	CH (Low) 26805	CH (Mid) 26915	CH (High) 27025
3	1	0	22.56	22.48	22.61	21.15	21.23	21.13
	1	14	22.48	22.35	22.34	20.56	20.80	21.46
	8	4	21.42	21.32	21.36	20.49	20.26	20.13
	15	0	21.56	21.35	21.40	20.49	20.35	20.53

LTE Band 26_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26815	CH (Mid) 26915	CH (High) 27015	CH (Low) 26815	CH (Mid) 26915	CH (High) 27015
5	1	0	22.42	22.28	22.18	20.88	20.65	21.27
	1	24	22.36	22.27	22.33	21.08	20.72	21.10
	12	6	21.49	21.31	21.60	20.56	20.26	20.50
	25	0	21.43	21.31	21.57	20.39	20.32	20.62

LTE Band 26_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26840	CH (Mid) 26915	CH (High) 26990	CH (Low) 26840	CH (Mid) 26915	CH (High) 26990
10	1	0	22.48	22.50	22.51	21.39	21.27	21.00
	1	49	22.41	22.43	22.50	20.93	21.03	21.30
	25	12	21.41	21.32	21.48	20.54	20.29	20.35
	50	0	21.54	21.31	21.49	20.57	20.40	20.54

LTE Band 26_Uplink frequency band : 824 to 849 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26865	CH (Mid) 26915	CH (High) 26965	CH (Low) 26865	CH (Mid) 26915	CH (High) 26965
15	1	0	22.59	22.53	22.32	21.34	20.86	21.04
	1	74	22.20	22.32	22.42	20.81	21.26	20.87
	36	19	21.52	21.27	21.30	20.56	20.25	20.42
	75	0	21.47	21.31	21.39	20.56	20.39	20.39

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26697	CH (Mid) 26740	CH (High) 26783	CH (Low) 26697	CH (Mid) 26740	CH (High) 26783
1.4	1	0	22.60	22.45	22.53	21.11	21.18	21.17
	1	5	22.27	22.54	22.48	21.35	21.38	21.10
	3	2	22.49	22.60	22.40	21.48	21.40	21.50
	6	0	21.53	21.66	21.18	20.61	20.66	20.41

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26705	CH (Mid) 26740	CH (High) 26775	CH (Low) 26705	CH (Mid) 26740	CH (High) 26775
3	1	0	22.47	22.56	22.47	21.03	21.12	21.08
	1	14	22.50	22.53	22.53	20.91	21.27	21.16
	8	4	21.75	21.57	21.48	20.56	20.47	20.54
	15	0	21.67	21.64	21.46	20.60	20.48	20.42

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz								
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)					
			QPSK			16QAM		
			CH (Low) 26715	CH (Mid) 26740	CH (High) 26765	CH (Low) 26715	CH (Mid) 26740	CH (High) 26765
5	1	0	22.71	22.33	22.43	21.23	21.16	20.90
	1	24	22.35	22.10	22.34	21.02	20.72	21.14
	12	6	21.66	21.70	21.49	20.46	20.38	20.47
	25	0	21.66	21.65	21.39	20.58	20.57	20.31

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz				
BW (MHz)	RB Size	RB Offset	Conducted power (dBm)	
			QPSK	16QAM
			CH (Mid) 26740	CH (Mid) 26740
10	1	0	22.60	21.12
	1	49	22.48	20.95
	25	12	21.68	20.57
	50	0	21.63	20.66

HSDPA Release 6 MODE:

The following 4 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C10.1.4 & C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing.

HSDPA SUB-TEST Setting

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH(FOR HSDPA)

Sub-test	β_c	β_d	β_d ***(SF)***	β_c/β_d	β_{HS} (*Note1, Note 2*)	**CM (dB)** *(Note 3)*	**MPR (dB)** *(Note 3)*	**RMC (Kbps)**
1	2/15	15/15	64	2/15	4/15	0.0	0.0	12.2
2	12/15 *(Note 4)*	15/15 *(Note 4)*	64	12/15 *(Note 4)*	24/15	1.0	0.0	12.2
3	15/15	8/15	64	15/8	30/15	1.5	0.5	12.2
4	15/15	4/15	64	15/4	30/15	1.5	0.5	12.2

Note: The recommended HSDPA MPRs are implemented as per following sub-tests.

Results:

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		9262	9400	9538		
HSDPA II	1	21.80	22.10	22.00	20.3dBm – 25.7dBm	Pass
	2	21.03	21.65	21.87	20.3dBm – 25.7dBm	Pass
	3	20.88	21.76	21.78	19.8dBm – 25.7dBm	Pass
	4	20.87	21.52	21.06	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		1312	1413	1513		
HSDPA IV	1	22.30	22.20	22.10	20.3dBm – 25.7dBm	Pass
	2	22.12	22.01	21.96	20.3dBm – 25.7dBm	Pass
	3	22.07	22.12	21.87	19.8dBm – 25.7dBm	Pass
	4	21.89	21.98	21.89	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		4132	4183	4233		
HSDPA V	1	22.40	22.30	22.70	20.3dBm – 25.7dBm	Pass
	2	22.15	22.21	22.01	20.3dBm – 25.7dBm	Pass
	3	22.02	22.17	22.23	19.8dBm – 25.7dBm	Pass
	4	21.89	22.15	22.45	19.8dBm – 25.7dBm	Pass

HSPA (HSDPA & HSUPA) Release 6 MODE

The following 5 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing

HSPA SUB-TEST Setting

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH(FOR HSUPA)

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS}	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (Codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI	RMC (Kbps)
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75	12.2
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67	12.2
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed}1: 47/15 β_{ed}2: 47/15	4 4	2	2.0	1.0	15	92	12.2
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71	12.2
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81	12.2

Note: The recommended HSUPA MPRs are implemented as per following sub-tests.

Results:

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		9262	9400	9538		
HSUPA II	1	21.50	21.70	21.60	18.8dBm – 25.7dBm	Pass
	2	21.02	21.54	21.32	16.8dBm – 25.7dBm	Pass
	3	20.87	21.58	21.02	17.8dBm – 25.7dBm	Pass
	4	20.88	21.65	21.12	16.8dBm – 25.7dBm	Pass
	5	21.02	21.23	21.28	18.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		1312	1413	1513		
HSDPA IV	1	21.80	21.70	21.60	20.3dBm – 25.7dBm	Pass
	2	21.73	21.56	21.43	20.3dBm – 25.7dBm	Pass
	3	21.56	21.44	21.12	19.8dBm – 25.7dBm	Pass
	4	21.65	21.32	21.18	19.8dBm – 25.7dBm	Pass
	5	21.46	21.28	21.06	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		4132	4183	4233		
HSUPA V	1	22.00	21.90	22.10	18.8dBm – 25.7dBm	Pass
	2	21.89	21.67	21.98	16.8dBm – 25.7dBm	Pass
	3	21.78	21.76	21.87	17.8dBm – 25.7dBm	Pass
	4	21.87	21.44	21.78	16.8dBm – 25.7dBm	Pass
	5	21.67	21.03	21.67	18.8dBm – 25.7dBm	Pass

WCDMA/HSDPA/HSUPA band II, IV, V

The EUT output power was controlled by simulator. Set Communication Tester MT8820C function key “UE Power Control” and enter max rated power 24dBm. The EUT is going to be set to max output power to 24dBm. Then record the read (see page 15 for measurement data). The min. power was measures by a function key “minimum power” then record the read. It is -52.3dBm. The power variation can be 0.1dB step by setting.

7. EFFECTIVE RADIATED POWER AND EQUIVALENT ISOTROPIC RADIATED POWER MEASUREMENT

7.1. Standard Applicable

According to FCC §2.1046

FCC 22.913(a) Mobile station is limited to 7W ERP.

FCC 24.232(b) Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50(a)(3) Mobile and portable stations (hand-held devices) are limited to 250 mW/ 5MHz EIRP.

FCC 27.50(c)(10) Portable stations (hand-held devices) are limited to 3 watts ERP.

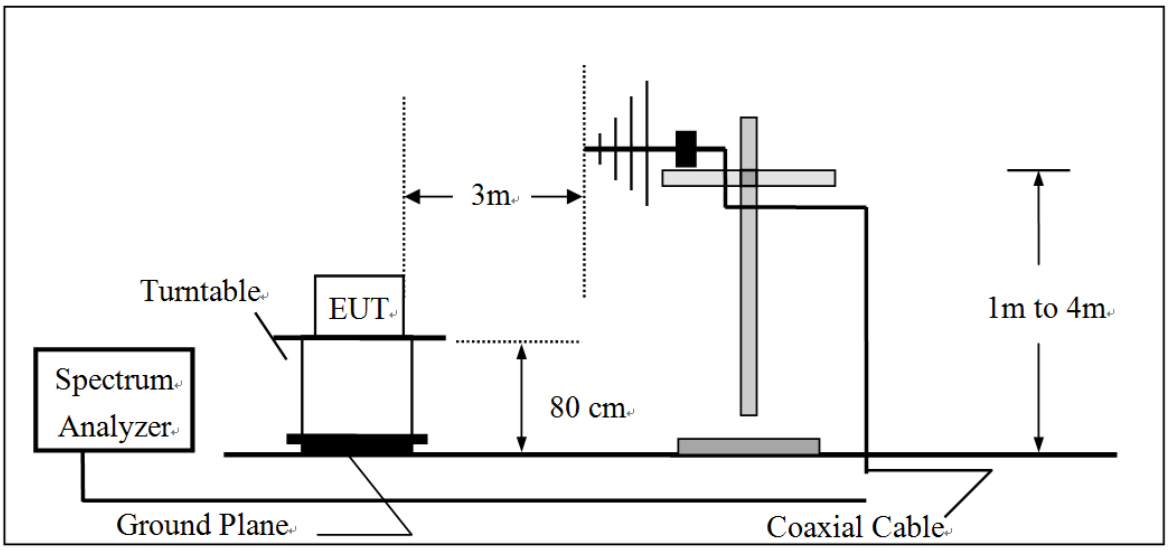
FCC 27.50(d)(4) Fixed, mobile, and portable (hand-held) stations are limited to 1W EIRP.

FCC 27, 50(h)(2) Mobile and other user stations. Mobile stations are limited to 2 W EIRP

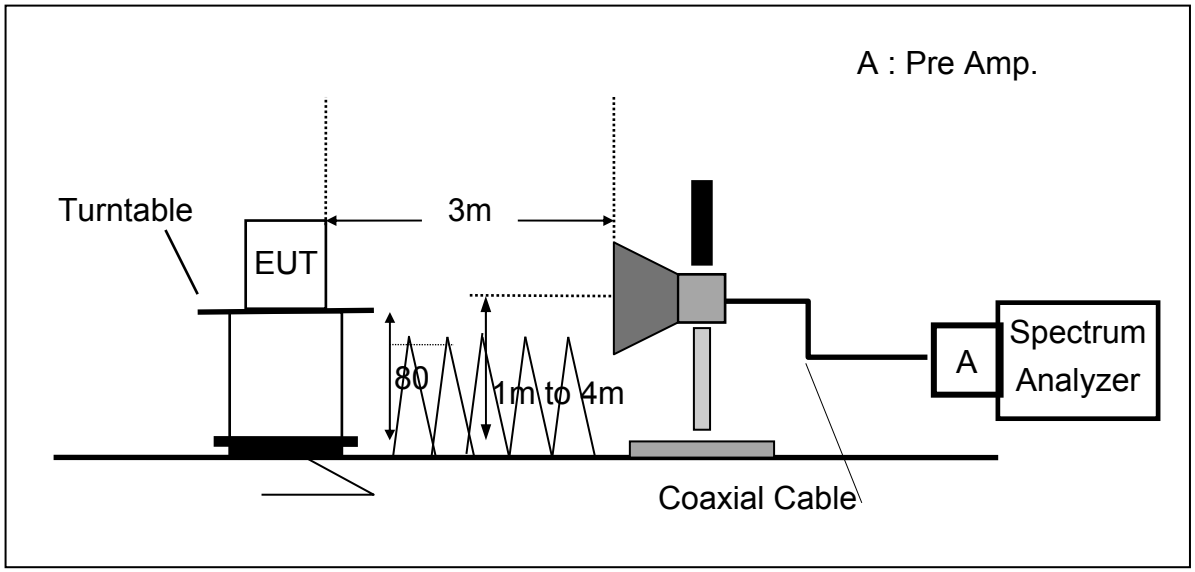
FCC 90.635(b) Mobile station is limited to 100W ERP

7.2. Test SET-UP

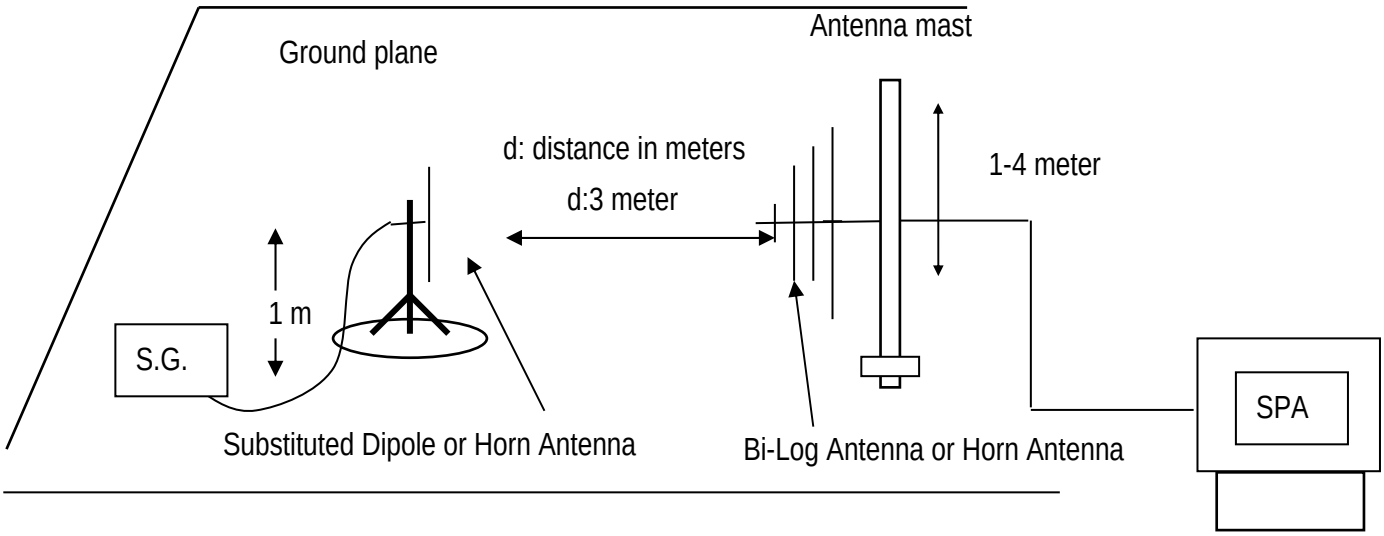
(A) Radiated Power Test Set-Up, Frequency Below1000MHz



(B) Radiated Power Test Set-UP Frequency Over 1 GHz



(C) Substituted Method Test Set-UP



7.3. Measurement Procedure

1. The testing follows the Measurement Procedure of FCC KDB 971168 D01
2. The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.
3. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated
4. The testing follows the Measurement Procedure of FCC KDB 971168 D01
5. 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 b. Record the power level of S.G.
6. ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB)
7. EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)
8. Spectrum setting:
   (1) Detector = Peak, marker the highest value of the detector by maximum hold, set RBW wide enough to capture the entire signal of emission, and VBW > =3xRBW.
   (2) KDB 971168 D01 is adopted, and the procedure as lists under item 4, Measurement of the Average Power over the Fundamental Signal Bandwidth, is followed to set correspondingly for the acquisition of proper measurement data.
   Set frequency = nominal signal center frequency;
   Set span = 2 X occupied BW;
   Set RBW ≈ 1~5% of the span, not to exceed 1 MHz
   Set VBW = 3 x RBW;
   Select average power (RMS) detector
   Set sweep time and number of measurement points to achieve a minimum of 1 millisecond/pt integration time (ex. Point = 601points, then sweet time = 601*10^-3 = 6s.

   Activate trace averaging routine over a minimum of 10 sweeps;
   Activate marker/span pair and set span = signal or channel bandwidth;
   Activate the band/interval power marker function;
   Record the band power level;
   Record adjusted value as the average signal power level. Then activate the occupied bandwidth measurement function.
   The proper adjustment due to limitation of spectrum capability is given compensated to spectrum with conversion factor of 10*log (TBW/RBW), where TBW is the transmission of UE exceeding the maximum BW UE can extends, and RBW is the resolution BW in UE.

7.4. Measurement Equipment Used

ERP, EIRP MEASUREMENT EQUIPMENT List 966 Chamber					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Bi-log Antenna	SCHWAZBECK	VULB9168	378	2017/12/29	2018/12/28
Bi-log Antenna	SCHWAZBECK	VULB9168	300	2017/12/20	2018/12/19
Horn Antenna	Schwarzbeck	BBHA9120D	309	2018/01/04	2019/1/3
Horn Antenna	Schwarzbeck	BBHA9120D	1441	2017/08/04	2018/8/3
Spectrum Analyzer	Agilent	E4446A	MY51100003	2017/05/10	2018/5/9
EMI Test Receiver	R&S	ESCI7	100760	2017/06/06	2018/6/5
Network Analyze	Anritsu	MS4644A	1216312	2017/05/25	2018/5/24
Radio Communication Analyer	Anritsu	MT8820C	6201465317	2018/01/15	2019/01/14
Pre-Amplifier	HP	8449B	3008A00578	2018/01/02	2019/1/1
Pre-Amplifier	HP	8447D	2944A07676	2018/01/02	2019/1/1
Attenuator	Mini-Circuit	BW-S10W2+		2018/01/02	2019/1/1
Filter 800-1000	Micro-Tronics	EWT	M1	2018/01/02	2019/1/1
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	2018/01/02	2019/1/1
Low Loss Cable	Huber Suhner	966_RX	9	2018/01/02	2019/1/1
Low Loss Cable	Huber Suhner	966 TX	1	2018/01/02	2019/1/1

7.5. Measurement Result: (Peak) –using option of peak measurement

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 1.4M QPSK RB: 1,0	1850.7	18607	V	18.1	9.77	-4.67	23.2	33.01
			H	13.31	9.77	-4.67	18.41	33.01
	1880.0	18900	V	18.13	9.85	-4.69	23.29	33.01
			H	13.62	9.85	-4.69	18.78	33.01
	1909.3	19193	V	16.58	9.94	-4.72	21.8	33.01
			H	12.14	9.94	-4.72	17.36	33.01
LTE BAND 2 BW: 1.4M QPSK RB: 1,5	1850.7	18607	V	18.52	9.77	-4.66	23.63	33.01
			H	12.05	9.77	-4.66	17.16	33.01
	1880.0	18900	V	16.95	9.85	-4.7	22.1	33.01
			H	12.79	9.85	-4.7	17.94	33.01
	1909.3	19193	V	16.52	9.94	-4.72	21.74	33.01
			H	12.79	9.94	-4.72	18.01	33.01
LTE BAND 2 BW: 1.4M 16QAM RB: 1,0	1850.7	18607	V	18.25	9.77	-4.67	23.35	33.01
			H	13.17	9.77	-4.67	18.27	33.01
	1880.0	18900	V	17	9.85	-4.69	22.16	33.01
			H	12.47	9.85	-4.69	17.63	33.01
	1909.3	19193	V	16.65	9.94	-4.72	21.87	33.01
			H	12.16	9.94	-4.72	17.38	33.01
LTE BAND 2 BW: 1.4M 16QAM RB: 1,5	1850.7	18607	V	18.36	9.77	-4.66	23.47	33.01
			H	12.44	9.77	-4.66	17.55	33.01
	1880.0	18900	V	16.91	9.85	-4.7	22.06	33.01
			H	12.65	9.85	-4.69	17.81	33.01
	1909.3	19193	V	17.78	9.94	-4.72	23	33.01
			H	12.86	9.94	-4.72	18.08	33.01

Remark： (1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 3M QPSK RB: 1,0	1851.5	18615	V	18.88	9.77	-4.67	23.98	33.01
			H	12.32	9.77	-4.67	17.42	33.01
	1880.0	18900	V	17.9	9.85	-4.69	23.06	33.01
			H	12.54	9.85	-4.69	17.7	33.01
	1908.5	19185	V	16.06	9.93	-4.72	21.27	33.01
			H	12.41	9.93	-4.72	17.62	33.01
LTE BAND 2 BW: 3M QPSK RB: 1,14	1851.5	18615	V	17.45	9.77	-4.67	22.55	33.01
			H	12.76	9.77	-4.66	17.87	33.01
	1880.0	18900	V	17.02	9.85	-4.7	22.17	33.01
			H	13.29	9.85	-4.7	18.44	33.01
	1908.5	19185	V	17.56	9.94	-4.72	22.78	33.01
			H	12.63	9.94	-4.72	17.85	33.01
LTE BAND 2 BW: 3M 16QAM RB: 1,0	1851.5	18615	V	18.74	9.77	-4.67	23.84	33.01
			H	13.58	9.77	-4.67	18.68	33.01
	1880.0	18900	V	18.13	9.85	-4.69	23.29	33.01
			H	12.27	9.85	-4.69	17.43	33.01
	1908.5	19185	V	17.09	9.93	-4.72	22.3	33.01
			H	12.46	9.93	-4.72	17.67	33.01
LTE BAND 2 BW: 3M 16QAM RB: 1,14	1851.5	18615	V	19.28	9.77	-4.66	**24.39**	33.01
			H	12.83	9.77	-4.67	17.93	33.01
	1880.0	18900	V	17.8	9.85	-4.7	22.95	33.01
			H	12.83	9.86	-4.7	17.99	33.01
	1908.5	19185	V	17.55	9.94	-4.72	22.77	33.01
			H	13.76	9.94	-4.72	18.98	33.01

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 5M QPSK RB: 1,0	1852.5	18625	V	18.32	9.77	-4.67	23.42	33.01
			H	11.47	9.77	-4.67	16.57	33.01
	1880.0	18900	V	17.22	9.84	-4.69	22.37	33.01
			H	12.85	9.84	-4.69	18	33.01
	1907.5	19175	V	15.44	9.93	-4.72	20.65	33.01
			H	11.39	9.93	-4.72	16.6	33.01
LTE BAND 2 BW: 5M QPSK RB: 1,24	1852.5	18625	V	17.18	9.78	-4.67	22.29	33.01
			H	13.07	9.77	-4.67	18.17	33.01
	1880.0	18900	V	17.13	9.86	-4.7	22.29	33.01
			H	12.35	9.86	-4.7	17.51	33.01
	1907.5	19175	V	16.56	9.94	-4.72	21.78	33.01
			H	11.8	9.94	-4.72	17.02	33.01
LTE BAND 2 BW: 5M 16QAM RB: 1,0	1852.5	18625	V	18.83	9.77	-4.67	23.93	33.01
			H	12.77	9.77	-4.67	17.87	33.01
	1880.0	18900	V	17.54	9.84	-4.69	22.69	33.01
			H	11.68	9.84	-4.69	16.83	33.01
	1907.5	19175	V	16.56	9.93	-4.72	21.77	33.01
			H	10.62	9.93	-4.72	15.83	33.01
LTE BAND 2 BW: 5M 16QAM RB: 1,24	1852.5	18625	V	19.24	9.78	-4.67	24.35	33.01
			H	13.03	9.78	-4.67	18.14	33.01
	1880.0	18900	V	16.98	9.86	-4.7	22.14	33.01
			H	13.43	9.86	-4.7	18.59	33.01
	1907.5	19175	V	16.68	9.94	-4.72	21.9	33.01
			H	12.85	9.94	-4.72	18.07	33.01

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 10M QPSK RB: 1,0	1855.0	18650	V	17.2	9.77	-4.67	22.3	33.01
			H	12.66	9.77	-4.67	17.76	33.01
	1880.0	18900	V	16.92	9.84	-4.69	22.07	33.01
			H	12.05	9.84	-4.69	17.2	33.01
	1905.0	19150	V	16.15	9.91	-4.71	21.35	33.01
			H	11.79	9.91	-4.71	16.99	33.01
LTE BAND 2 BW: 10M QPSK RB: 1,49	1855.0	18650	V	18.59	9.79	-4.67	23.71	33.01
			H	12.08	9.79	-4.67	17.2	33.01
	1880.0	18900	V	17.13	9.86	-4.7	22.29	33.01
			H	12.97	9.86	-4.7	18.13	33.01
	1905.0	19150	V	16.34	9.94	-4.72	21.56	33.01
			H	11.25	9.94	-4.72	16.47	33.01
LTE BAND 2 BW: 10M 16QAM RB: 1,0	1855.0	18650	V	19.12	9.77	-4.67	24.22	33.01
			H	11.69	9.77	-4.67	16.79	33.01
	1880.0	18900	V	15.83	9.84	-4.69	20.98	33.01
			H	11.41	9.84	-4.69	16.56	33.01
	1905.0	19150	V	15.96	9.91	-4.71	21.16	33.01
			H	11.88	9.91	-4.71	17.08	33.01
LTE BAND 2 BW: 10M 16QAM RB: 1,49	1855.0	18650	V	18.92	9.79	-4.67	24.04	33.01
			H	12.82	9.79	-4.67	17.94	33.01
	1880.0	18900	V	18.49	9.86	-4.7	23.65	33.01
			H	13.12	9.86	-4.7	18.28	33.01
	1905.0	19150	V	16.83	9.94	-4.72	22.05	33.01
			H	12.72	9.94	-4.72	17.94	33.01

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 15M QPSK RB: 1,0	1857.5	18675	V	17.24	9.77	-4.67	22.34	33.01
			H	12.1	9.77	-4.66	17.21	33.01
	1880.0	18900	V	16.57	9.83	-4.69	21.71	33.01
			H	11.59	9.83	-4.69	16.73	33.01
	1902.5	19125	V	16.93	9.9	-4.71	22.12	33.01
			H	12.45	9.9	-4.71	17.64	33.01
LTE BAND 2 BW: 15M QPSK RB: 1,74	1857.5	18675	V	18.01	9.8	-4.68	23.13	33.01
			H	13.16	9.8	-4.68	18.28	33.01
	1880.0	18900	V	17.84	9.87	-4.7	23.01	33.01
			H	13.34	9.87	-4.7	18.51	33.01
	1902.5	19125	V	16.45	9.94	-4.72	21.67	33.01
			H	11.75	9.94	-4.72	16.97	33.01
LTE BAND 2 BW: 15M 16QAM RB: 1,0	1857.5	18675	V	18.21	9.77	-4.67	23.31	33.01
			H	13	9.77	-4.67	18.1	33.01
	1880.0	18900	V	15.19	9.83	-4.69	20.33	33.01
			H	10.71	9.83	-4.69	15.85	33.01
	1902.5	19125	V	16.99	9.9	-4.71	22.18	33.01
			H	11.69	9.9	-4.71	16.88	33.01
LTE BAND 2 BW: 15M 16QAM RB: 1,74	1857.5	18675	V	16.59	9.8	-4.68	21.71	33.01
			H	12.77	9.8	-4.68	17.89	33.01
	1880.0	18900	V	17.15	9.87	-4.7	22.32	33.01
			H	13.77	9.87	-4.7	18.94	33.01
	1902.5	19125	V	16.45	9.94	-4.72	21.67	33.01
			H	12.31	9.94	-4.72	17.53	33.01

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 2 BW: 20M QPSK RB: 1,0	1860.0	18700	V	17.87	9.77	-4.66	22.98	33.01
			H	12.88	9.77	-4.66	17.99	33.01
	1880.0	18900	V	17.31	9.83	-4.69	22.45	33.01
			H	11.3	9.83	-4.69	16.44	33.01
	1900.0	19100	V	16.76	9.89	-4.71	21.94	33.01
			H	12.12	9.89	-4.71	17.3	33.01
LTE BAND 2 BW: 20M QPSK RB: 1,99	1860.0	18700	V	16.89	9.82	-4.68	22.03	33.01
			H	11.21	9.82	-4.68	16.35	33.01
	1880.0	18900	V	17.28	9.88	-4.7	22.46	33.01
			H	13.65	9.88	-4.7	18.83	33.01
	1900.0	19100	V	16.55	9.94	-4.72	21.77	33.01
			H	11.23	9.94	-4.72	16.45	33.01
LTE BAND 2 BW: 20M 16QAM RB: 1,0	1860.0	18700	V	17.83	9.77	-4.67	22.93	33.01
			H	12	9.77	-4.67	17.1	33.01
	1880.0	18900	V	16.75	9.83	-4.69	21.89	33.01
			H	11.49	9.83	-4.69	16.63	33.01
	1900.0	19100	V	18.35	9.89	-4.71	23.53	33.01
			H	13.81	9.89	-4.71	18.99	33.01
LTE BAND 2 BW: 15M 16QAM RB: 1,99	1860.0	18700	V	17.07	9.82	-4.68	22.21	33.01
			H	10.71	9.82	-4.68	15.85	33.01
	1880.0	18900	V	17.57	9.88	-4.7	22.75	33.01
			H	14.05	9.88	-4.7	19.23	33.01
	1900.0	19100	V	16.93	9.94	-4.72	22.15	33.01
			H	12.06	9.94	-4.72	17.28	33.01

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 1.4M QPSK RB: 1,0	1710.7	19957	V	16.89	9.33	-4.45	21.77	30.00
			H	10.63	9.34	-4.45	15.52	30.00
	1732.5	20175	V	16.69	9.39	-4.48	21.6	30.00
			H	10.1	9.39	-4.48	15.01	30.00
	1754.3	20393	V	16.18	9.46	-4.5	21.14	30.00
			H	9.68	9.46	-4.5	14.64	30.00
LTE BAND 4 BW: 1.4M QPSK RB: 1,5	1710.7	19957	V	17.03	9.34	-4.45	21.92	30.00
			H	10.45	9.33	-4.45	15.33	30.00
	1732.5	20175	V	16.38	9.4	-4.48	21.3	30.00
			H	10.13	9.4	-4.48	15.05	30.00
	1754.3	20393	V	15.53	9.47	-4.5	20.5	30.00
			H	8.98	9.47	-4.5	13.95	30.00
LTE BAND 4 BW: 1.4M 16QAM RB: 1,0	1710.7	19957	V	16.57	9.33	-4.45	21.45	30.00
			H	10.41	9.33	-4.45	15.29	30.00
	1732.5	20175	V	16.56	9.39	-4.48	21.47	30.00
			H	9.8	9.39	-4.48	14.71	30.00
	1754.3	20393	V	15.82	9.46	-4.49	20.79	30.00
			H	9.7	9.46	-4.49	14.67	30.00
LTE BAND 4 BW: 1.4M 16QAM RB: 1,5	1710.7	19957	V	16.39	9.34	-4.45	21.28	30.00
			H	10.01	9.33	-4.45	14.89	30.00
	1732.5	20175	V	16.23	9.4	-4.48	21.15	30.00
			H	8.92	9.4	-4.48	13.84	30.00
	1754.3	20393	V	16.14	9.47	-4.5	21.11	30.00
			H	9.43	9.47	-4.5	14.4	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 3M QPSK RB: 1,0	1711.5	19965	V	16.65	9.33	-4.45	21.53	30.00
			H	11.43	9.33	-4.45	16.31	30.00
	1732.5	20175	V	16.07	9.39	-4.47	20.99	30.00
			H	9.38	9.39	-4.47	14.3	30.00
	1753.5	20385	V	16.31	9.46	-4.49	21.28	30.00
			H	9.73	9.46	-4.49	14.7	30.00
LTE BAND 4 BW: 3M QPSK RB: 1,14	1711.5	19965	V	17.14	9.33	-4.45	22.02	30.00
			H	10.59	9.33	-4.45	15.47	30.00
	1732.5	20175	V	17.11	9.4	-4.48	22.03	30.00
			H	10.69	9.4	-4.48	15.61	30.00
	1753.5	20385	V	16.24	9.47	-4.5	21.21	30.00
			H	9.36	9.47	-4.5	14.33	30.00
LTE BAND 4 BW: 3M 16QAM RB: 1,0	1711.5	19965	V	16.05	9.34	-4.45	20.94	30.00
			H	10.36	9.33	-4.45	15.24	30.00
	1732.5	20175	V	17.04	9.39	-4.47	21.96	30.00
			H	8.59	9.39	-4.47	13.51	30.00
	1753.5	20385	V	16.52	9.46	-4.49	21.49	30.00
			H	10.71	9.46	-4.49	15.68	30.00
LTE BAND 4 BW: 3M 16QAM RB: 1,14	1711.5	19965	V	16.67	9.33	-4.45	21.55	30.00
			H	11.15	9.33	-4.45	16.03	30.00
	1732.5	20175	V	15.68	9.4	-4.48	20.6	30.00
			H	9.87	9.4	-4.48	14.79	30.00
	1753.5	20385	V	17.22	9.47	-4.5	22.19	30.00
			H	9.78	9.47	-4.5	14.75	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 5M QPSK RB: 1,0	1712.5	19975	V	15.84	9.34	-4.45	20.73	30.00
			H	9.41	9.34	-4.45	14.3	30.00
	1732.5	20175	V	15.46	9.39	-4.47	20.38	30.00
			H	10.28	9.39	-4.47	15.2	30.00
	1752.5	20375	V	16.01	9.45	-4.49	20.97	30.00
			H	9.96	9.45	-4.49	14.92	30.00
LTE BAND 4 BW: 5M QPSK RB: 1,24	1712.5	19975	V	15.5	9.34	-4.45	20.39	30.00
			H	11.36	9.34	-4.45	16.25	30.00
	1732.5	20175	V	16.69	9.4	-4.48	21.61	30.00
			H	9.47	9.4	-4.48	14.39	30.00
	1752.5	20375	V	16.47	9.47	-4.5	21.44	30.00
			H	8.59	9.47	-4.5	13.56	30.00
LTE BAND 4 BW: 5M 16QAM RB: 1,0	1712.5	19975	V	16.22	9.34	-4.45	21.11	30.00
			H	10.67	9.34	-4.45	15.56	30.00
	1732.5	20175	V	17.73	9.39	-4.47	22.65	30.00
			H	10.11	9.39	-4.47	15.03	30.00
	1752.5	20375	V	15.94	9.45	-4.49	20.9	30.00
			H	11.5	9.45	-4.49	16.46	30.00
LTE BAND 4 BW: 5M 16QAM RB: 1,24	1712.5	19975	V	16.39	9.34	-4.45	21.28	30.00
			H	11.76	9.34	-4.45	16.65	30.00
	1732.5	20175	V	16.28	9.4	-4.48	21.2	30.00
			H	9.2	9.4	-4.48	14.12	30.00
	1752.5	20375	V	16.88	9.47	-4.5	21.85	30.00
			H	10.41	9.47	-4.5	15.38	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 10M QPSK RB: 1,0	1715.0	20000	V	16.55	9.34	-4.45	21.44	30.00
			H	11.1	9.34	-4.45	15.99	30.00
	1732.0	20175	V	16.66	9.39	-4.47	21.58	30.00
			H	9.68	9.39	-4.47	14.6	30.00
	1750.0	20350	V	16.14	9.45	-4.49	21.1	30.00
			H	9.4	9.45	-4.49	14.36	30.00
LTE BAND 4 BW: 10M QPSK RB: 1,49	1715.0	20000	V	16.67	9.35	-4.46	21.56	30.00
			H	11.23	9.35	-4.46	16.12	30.00
	1732.0	20175	V	17.09	9.41	-4.48	22.02	30.00
			H	10.41	9.41	-4.48	15.34	30.00
	1750.0	20350	V	16.03	9.47	-4.5	21	30.00
			H	9.72	9.46	-4.5	14.68	30.00
LTE BAND 4 BW: 10M 16QAM RB: 1,0	1715.0	20000	V	16.32	9.34	-4.45	21.21	30.00
			H	11.58	9.33	-4.45	16.46	30.00
	1732.0	20175	V	16.87	9.39	-4.48	21.78	30.00
			H	9.71	9.39	-4.47	14.63	30.00
	1750.0	20350	V	17.29	9.45	-4.49	22.25	30.00
			H	9.9	9.45	-4.49	14.86	30.00
LTE BAND 4 BW: 10M 16QAM RB: 1,49	1715.0	20000	V	16.74	9.35	-4.46	21.63	30.00
			H	11.92	9.35	-4.46	16.81	30.00
	1732.0	20175	V	16.54	9.41	-4.48	21.47	30.00
			H	8.96	9.41	-4.48	13.89	30.00
	1750.0	20350	V	16.37	9.47	-4.5	21.34	30.00
			H	10.47	9.47	-4.5	15.44	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 15M QPSK RB: 1,0	1717.5	20025	V	16.79	9.34	-4.45	21.68	30.00
			H	10.89	9.33	-4.45	15.77	30.00
	1732.5	20175	V	17.8	9.38	-4.47	22.71	30.00
			H	10.29	9.39	-4.47	15.21	30.00
	1747.5	20325	V	15.75	9.43	-4.49	20.69	30.00
			H	9.41	9.43	-4.49	14.35	30.00
LTE BAND 4 BW: 15M QPSK RB: 1,74	1717.5	20025	V	17.74	9.37	-4.47	22.64	30.00
			H	9.72	9.37	-4.47	14.62	30.00
	1732.5	20175	V	15.54	9.42	-4.48	20.48	30.00
			H	9.82	9.42	-4.48	14.76	30.00
	1747.5	20325	V	15.89	9.46	-4.5	20.85	30.00
			H	8.88	9.46	-4.5	13.84	30.00
LTE BAND 4 BW: 15M 16QAM RB: 1,0	1717.5	20025	V	16.32	9.34	-4.45	21.21	30.00
			H	10.83	9.34	-4.45	15.72	30.00
	1732.5	20175	V	17.03	9.39	-4.47	21.95	30.00
			H	9.38	9.38	-4.47	14.29	30.00
	1747.5	20325	V	15.67	9.43	-4.49	20.61	30.00
			H	9.23	9.43	-4.49	14.17	30.00
LTE BAND 4 BW: 15M 16QAM RB: 1,74	1717.5	20025	V	18.51	9.37	-4.46	23.42	30.00
			H	11.4	9.37	-4.47	16.3	30.00
	1732.5	20175	V	16.42	9.42	-4.48	21.36	30.00
			H	10.7	9.42	-4.48	15.64	30.00
	1747.5	20325	V	16.3	9.46	-4.5	21.26	30.00
			H	9.84	9.46	-4.5	14.8	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
LTE BAND 4 BW: 20M QPSK RB: 1,0	1720.0	20050	V	17.04	9.34	-4.45	21.93	30.00
			H	10.77	9.34	-4.45	15.66	30.00
	1732.5	20175	V	15.87	9.37	-4.47	20.77	30.00
			H	9.79	9.37	-4.47	14.69	30.00
	1745.0	20300	V	15.78	9.41	-4.48	20.71	30.00
			H	9.42	9.41	-4.48	14.35	30.00
LTE BAND 4 BW: 20M QPSK RB: 1,99	1720.0	20050	V	16.17	9.38	-4.47	21.08	30.00
			H	10.06	9.38	-4.47	14.97	30.00
	1732.5	20175	V	16.98	9.42	-4.48	21.92	30.00
			H	9.37	9.42	-4.48	14.31	30.00
	1745.0	20300	V	15.44	9.46	-4.5	20.4	30.00
			H	8.56	9.46	-4.5	13.52	30.00
LTE BAND 4 BW: 20M 16QAM RB: 1,0	1720.0	20050	V	15.45	9.33	-4.45	20.33	30.00
			H	11.29	9.33	-4.45	16.17	30.00
	1732.5	20175	V	17.53	9.37	-4.47	22.43	30.00
			H	11.2	9.37	-4.47	16.1	30.00
	1745.0	20300	V	16.12	9.41	-4.48	21.05	30.00
			H	10.01	9.41	-4.48	14.94	30.00
LTE BAND 4 BW: 20M 16QAM RB: 1,99	1720.0	20050	V	17.23	9.38	-4.47	22.14	30.00
			H	9.08	9.38	-4.47	13.99	30.00
	1732.5	20175	V	16.46	9.42	-4.48	21.4	30.00
			H	9.95	9.42	-4.48	14.89	30.00
	1745.0	20300	V	17.22	9.47	-4.5	22.19	30.00
			H	10.68	9.46	-4.5	15.64	30.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 5 BW: 1.4M QPSK RB: 1,0	824.7	20407	V	15.14	3.45	-3.17	15.42	38.45
			H	15.01	3.45	-3.17	15.29	38.45
	836.5	20525	V	17.27	3.45	-3.28	17.44	38.45
			H	15.34	3.45	-3.28	15.51	38.45
	848.3	20643	V	15.17	3.46	-3.35	15.28	38.45
			H	14.35	3.46	-3.36	14.45	38.45
LTE BAND 5 BW: 1.4M QPSK RB: 1,5	824.7	20407	V	16.27	3.45	-3.1	16.62	38.45
			H	16.15	3.45	-3.14	16.46	38.45
	836.5	20525	V	15.91	3.45	-3.3	16.06	38.45
			H	15.13	3.45	-3.3	15.28	38.45
	848.3	20643	V	14.41	3.46	-3.29	14.58	38.45
			H	13.52	3.46	-3.27	13.71	38.45
LTE BAND 5 BW: 1.4M 16QAM RB: 1,0	824.7	20407	V	16.6	3.45	-3.17	16.88	38.45
			H	16.73	3.45	-3.17	17.01	38.45
	836.5	20525	V	17.16	3.45	-3.28	17.33	38.45
			H	15.61	3.45	-3.28	15.78	38.45
	848.3	20643	V	15.27	3.46	-3.33	15.4	38.45
			H	13.89	3.46	-3.25	14.1	38.45
LTE BAND 5 BW: 1.4M 16QAM RB: 1,5	824.7	20407	V	16.81	3.45	-3.11	17.15	38.45
			H	17.89	3.45	-3.1	18.24	38.45
	836.5	20525	V	17.3	3.45	-3.3	17.45	38.45
			H	14.69	3.45	-3.3	14.84	38.45
	848.3	20643	V	13.77	3.46	-3.28	13.95	38.45
			H	13.95	3.46	-3.29	14.12	38.45

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 5 BW: 3M QPSK RB: 1,0	825.5	20415	V	15.07	3.45	-3.17	15.35	38.45
			H	17.75	3.45	-3.17	18.03	38.45
	836.5	20525	V	16.6	3.45	-3.28	16.77	38.45
			H	15.46	3.45	-3.28	15.63	38.45
	847.5	20635	V	15.05	3.46	-3.43	15.08	38.45
			H	14.07	3.46	-3.42	14.11	38.45
LTE BAND 5 BW: 3M QPSK RB: 1,14	825.5	20415	V	17.57	3.45	-3.16	17.86	38.45
			H	15.92	3.45	-3.16	16.21	38.45
	836.5	20525	V	16.05	3.45	-3.31	16.19	38.45
			H	13.8	3.45	-3.31	13.94	38.45
	847.5	20635	V	13.41	3.46	-3.29	13.58	38.45
			H	13.36	3.46	-3.29	13.53	38.45
LTE BAND 5 BW: 3M 16QAM RB: 1,0	825.5	20415	V	15.33	3.45	-3.18	15.6	38.45
			H	15.68	3.45	-3.17	15.96	38.45
	836.5	20525	V	17.65	3.45	-3.27	17.83	38.45
			H	15.67	3.45	-3.28	15.84	38.45
	847.5	20635	V	15.94	3.46	-3.43	15.97	38.45
			H	16.42	3.46	-3.42	16.46	38.45
LTE BAND 5 BW: 3M 16QAM RB: 1,14	825.5	20415	V	18.76	3.45	-3.16	19.05	38.45
			H	17.23	3.45	-3.15	17.53	38.45
	836.5	20525	V	15.79	3.45	-3.31	15.93	38.45
			H	13.74	3.45	-3.31	13.88	38.45
	847.5	20635	V	13.69	3.46	-3.3	13.85	38.45
			H	13.43	3.46	-3.28	13.61	38.45

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 5 BW: 5M QPSK RB: 1,0	826.5	20425	V	18.99	3.45	-3.17	19.27	38.45
			H	19.24	3.45	-3.13	19.56	38.45
	836.5	20525	V	17.34	3.45	-3.26	17.53	38.45
			H	15.89	3.45	-3.26	16.08	38.45
	846.5	20625	V	18.24	3.46	-3.4	18.3	38.45
			H	16.46	3.46	-3.4	16.52	38.45
LTE BAND 5 BW: 5M QPSK RB: 1,24	826.5	20425	V	17.6	3.45	-3.18	17.87	38.45
			H	17.18	3.45	-3.19	17.44	38.45
	836.5	20525	V	15.4	3.45	-3.32	15.53	38.45
			H	12.17	3.45	-3.32	12.3	38.45
	846.5	20625	V	13.2	3.46	-3.29	13.37	38.45
			H	13.24	3.46	-3.29	13.41	38.45
LTE BAND 5 BW: 5M 16QAM RB: 1,0	826.5	20425	V	18.1	3.45	-3.17	18.38	38.45
			H	15.61	3.45	-3.18	15.88	38.45
	836.5	20525	V	17.78	3.45	-3.26	17.97	38.45
			H	16.06	3.45	-3.26	16.25	38.45
	846.5	20625	V	15.39	3.46	-3.4	15.45	38.45
			H	14.88	3.46	-3.39	14.95	38.45
LTE BAND 5 BW: 5M 16QAM RB: 1,24	826.5	20425	V	17.95	3.45	-3.19	18.21	38.45
			H	16.77	3.45	-3.18	17.04	38.45
	836.5	20525	V	15.92	3.46	-3.33	16.05	38.45
			H	13.78	3.45	-3.32	13.91	38.45
	846.5	20625	V	14.75	3.46	-3.28	14.93	38.45
			H	14.21	3.46	-3.25	14.42	38.45

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 5 BW: 10M QPSK RB: 1,0	829.0	20450	V	15.67	3.45	-3.18	15.94	38.45
			H	14.72	3.45	-3.18	14.99	38.45
	836.5	20525	V	17.04	3.45	-3.23	17.26	38.45
			H	16.62	3.45	-3.23	16.84	38.45
	844.0	20600	V	14.21	3.46	-3.33	14.34	38.45
			H	11.82	3.46	-3.33	11.95	38.45
LTE BAND 5 BW: 10M QPSK RB: 1,49	829.0	20450	V	16.99	3.45	-3.25	17.19	38.45
			H	15.43	3.45	-3.25	15.63	38.45
	836.5	20525	V	13.91	3.46	-3.35	14.02	38.45
			H	12.01	3.46	-3.34	12.13	38.45
	844.0	20600	V	14	3.46	-3.3	14.16	38.45
			H	12.24	3.46	-3.31	12.39	38.45
LTE BAND 5 BW: 10M 16QAM RB: 1,0	829.0	20450	V	14.59	3.45	-3.17	14.87	38.45
			H	15.75	3.45	-3.18	16.02	38.45
	836.5	20525	V	19.05	3.45	-3.23	19.27	38.45
			H	17.26	3.45	-3.23	17.48	38.45
	844.0	20600	V	13.95	3.46	-3.34	14.07	38.45
			H	13.53	3.46	-3.35	13.64	38.45
LTE BAND 5 BW: 10M 16QAM RB: 1,49	829.0	20450	V	18.35	3.45	-3.25	18.55	38.45
			H	17.07	3.45	-3.25	17.27	38.45
	836.5	20525	V	15.07	3.46	-3.35	15.18	38.45
			H	11.98	3.46	-3.35	12.09	38.45
	844.0	20600	V	14.2	3.46	-3.34	14.32	38.45
			H	13.34	3.46	-3.32	13.48	38.45

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 17 BW: 5M QPSK RB: 1,0	706.5	23755	V	19.87	3.65	-1.85	21.67	34.77
			H	16.02	3.65	-1.85	17.82	34.77
	710.0	23790	V	18.56	3.65	-1.87	20.34	34.77
			H	15.13	3.65	-1.87	16.91	34.77
	713.5	23825	V	19.35	3.62	-2.33	20.64	34.77
			H	17.13	3.62	-2.33	18.42	34.77
LTE BAND 17 BW: 5M QPSK RB: 1,24	706.5	23755	V	18.74	3.65	-1.93	20.46	34.77
			H	16.05	3.65	-1.92	17.78	34.77
	710.0	23790	V	17.7	3.63	-2.15	19.18	34.77
			H	16.38	3.63	-2.14	17.87	34.77
	713.5	23825	V	19.12	3.62	-2.36	20.38	34.77
			H	18.51	3.62	-2.36	19.77	34.77
LTE BAND 17 BW: 5M 16QAM RB: 1,0	706.5	23755	V	19.3	3.65	-1.84	21.11	34.77
			H	17.18	3.65	-1.84	18.99	34.77
	710.0	23790	V	19.37	3.65	-1.86	21.16	34.77
			H	16.61	3.65	-1.87	18.39	34.77
	713.5	23825	V	17.98	3.64	-2.08	19.54	34.77
			H	15.27	3.64	-2.08	16.83	34.77
LTE BAND 17 BW: 5M 16QAM RB: 1,24	706.5	23755	V	17.89	3.65	-1.92	19.62	34.77
			H	16.9	3.65	-1.92	18.63	34.77
	710.0	23790	V	18.43	3.63	-2.15	19.91	34.77
			H	16.36	3.63	-2.15	17.84	34.77
	713.5	23825	V	20.63	3.62	-2.36	**21.89**	34.77
			H	18.61	3.62	-2.35	19.88	34.77

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 17 BW: 10M QPSK RB: 1,0	709.0	23780	V	19.41	3.65	-1.85	21.21	34.77
			H	16.73	3.65	-1.85	18.53	34.77
	710.0	23790	V	17.67	3.65	-1.87	19.45	34.77
			H	15.63	3.65	-1.87	17.41	34.77
	711.0	23800	V	18.26	3.62	-2.33	19.55	34.77
			H	15.96	3.62	-2.33	17.25	34.77
LTE BAND 17 BW: 10M QPSK RB: 1,49	709.0	23780	V	17.6	3.65	-1.93	19.32	34.77
			H	15.92	3.65	-1.92	17.65	34.77
	710.0	23790	V	17.99	3.63	-2.15	19.47	34.77
			H	16.27	3.63	-2.14	17.76	34.77
	711.0	23800	V	20.1	3.62	-2.36	21.36	34.77
			H	17.22	3.62	-2.36	18.48	34.77
LTE BAND 17 BW: 10M 16QAM RB: 1,0	709.0	23780	V	18.9	3.65	-1.84	20.71	34.77
			H	17.89	3.65	-1.84	19.7	34.77
	710.0	23790	V	18.24	3.65	-1.86	20.03	34.77
			H	15.31	3.65	-1.87	17.09	34.77
	711.0	23800	V	18.2	3.64	-2.08	19.76	34.77
			H	15.29	3.64	-2.08	16.85	34.77
LTE BAND 17 BW: 10M 16QAM RB: 1,49	709.0	23780	V	18.4	3.65	-1.92	20.13	34.77
			H	16.6	3.65	-1.92	18.33	34.77
	710.0	23790	V	17.08	3.63	-2.15	18.56	34.77
			H	15.77	3.63	-2.15	17.25	34.77
	711.0	23800	V	20.35	3.62	-2.36	21.61	34.77
			H	18.1	3.62	-2.35	19.37	34.77

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 1.4M QPSK RB: 1,0	814.7	26697	V	15.52	3.44	-2.63	16.33	50.00
			H	15.74	3.44	-2.63	16.55	50.00
	819.0	26740	V	15.24	3.44	-2.67	16.01	50.00
			H	15.73	3.44	-2.66	16.51	50.00
	823.3	26783	V	13.01	3.45	-2.94	13.52	50.00
			H	14.44	3.45	-2.94	14.95	50.00
LTE BAND 26 BW: 1.4M QPSK RB: 1,5	814.7	26697	V	16.28	3.44	-2.52	17.2	50.00
			H	17.53	3.44	-2.52	18.45	50.00
	819.0	26740	V	13.55	3.44	-2.73	14.26	50.00
			H	14.95	3.44	-2.73	15.66	50.00
	823.3	26783	V	13.43	3.45	-2.98	13.9	50.00
			H	14.31	3.45	-2.99	14.77	50.00
LTE BAND 26 BW: 1.4M 16QAM RB: 1,0	814.7	26697	V	17.27	3.44	-2.61	18.1	50.00
			H	18.02	3.44	-2.59	18.87	50.00
	819.0	26740	V	14.49	3.44	-2.68	15.25	50.00
			H	15.88	3.44	-2.67	16.65	50.00
	823.3	26783	V	13.02	3.45	-2.94	13.53	50.00
			H	14.06	3.45	-2.94	14.57	50.00
LTE BAND 26 BW: 1.4M 16QAM RB: 1,5	814.7	26697	V	17.21	3.44	-2.52	18.13	50.00
			H	17.37	3.44	-2.52	18.29	50.00
	819.0	26740	V	14.67	3.44	-2.72	15.39	50.00
			H	15.45	3.44	-2.74	16.15	50.00
	823.3	26783	V	12.6	3.45	-2.99	13.06	50.00
			H	14.6	3.45	-2.97	15.08	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 3M QPSK RB: 1,0	815.5	26705	V	18.48	3.44	-2.62	19.3	50.00
			H	19.31	3.44	-2.57	20.18	50.00
	819.0	26740	V	15.66	3.44	-2.62	16.48	50.00
			H	16.7	3.44	-2.63	17.51	50.00
	822.5	26775	V	17.93	3.45	-2.94	18.44	50.00
			H	18.12	3.45	-2.88	18.69	50.00
LTE BAND 26 BW: 3M QPSK RB: 1,14	815.5	26705	V	16.92	3.44	-2.56	17.8	50.00
			H	16.91	3.44	-2.58	17.77	50.00
	819.0	26740	V	12.76	3.45	-2.78	13.43	50.00
			H	15.04	3.45	-2.77	15.72	50.00
	822.5	26775	V	13.11	3.45	-2.98	13.58	50.00
			H	14.98	3.45	-2.99	15.44	50.00
LTE BAND 26 BW: 3M 16QAM RB: 1,0	815.5	26705	V	16.8	3.44	-2.64	17.6	50.00
			H	17.35	3.44	-2.61	18.18	50.00
	819.0	26740	V	16.18	3.44	-2.64	16.98	50.00
			H	16.92	3.44	-2.63	17.73	50.00
	822.5	26775	V	14.4	3.45	-2.84	15.01	50.00
			H	15.59	3.45	-2.84	16.2	50.00
LTE BAND 26 BW: 3M 16QAM RB: 1,14	815.5	26705	V	17.33	3.44	-2.6	18.17	50.00
			H	16.65	3.44	-2.58	17.51	50.00
	819.0	26740	V	14.93	3.45	-2.78	15.6	50.00
			H	15.33	3.45	-2.79	15.99	50.00
	822.5	26775	V	13.01	3.45	-2.97	13.49	50.00
			H	15.79	3.45	-2.97	16.27	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 5M QPSK RB: 1,0	816.5	26715	V	18.85	3.44	-2.64	19.65	50.00
			H	18.17	3.44	-2.63	18.98	50.00
	819.0	26740	V	16.88	3.44	-2.58	17.74	50.00
			H	16.84	3.44	-2.59	17.69	50.00
	821.5	26765	V	17.26	3.44	-2.73	17.97	50.00
			H	18.52	3.44	-2.72	19.24	50.00
LTE BAND 26 BW: 5M QPSK RB: 1,24	816.5	26715	V	15.04	3.44	-2.69	15.79	50.00
			H	15.69	3.44	-2.69	16.44	50.00
	819.0	26740	V	13.85	3.45	-2.84	14.46	50.00
			H	14.98	3.45	-2.84	15.59	50.00
	821.5	26765	V	13.25	3.45	-2.98	13.72	50.00
			H	14.25	3.45	-2.98	14.72	50.00
LTE BAND 26 BW: 5M 16QAM RB: 1,0	816.5	26715	V	17.97	3.44	-2.63	18.78	50.00
			H	17.03	3.44	-2.65	17.82	50.00
	819.0	26740	V	16.38	3.44	-2.54	17.28	50.00
			H	17.43	3.44	-2.59	18.28	50.00
	821.5	26765	V	15.17	3.44	-2.73	15.88	50.00
			H	16.67	3.44	-2.68	17.43	50.00
LTE BAND 26 BW: 5M 16QAM RB: 1,24	816.5	26715	V	15.11	3.44	-2.7	15.85	50.00
			H	15.95	3.44	-2.68	16.71	50.00
	819.0	26740	V	12.92	3.45	-2.83	13.54	50.00
			H	15.02	3.45	-2.83	15.64	50.00
	821.5	26765	V	13.44	3.45	-2.98	13.91	50.00
			H	13.58	3.45	-2.99	14.04	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 10M QPSK RB: 1,0	819.0	26740	V	16.28	3.44	-2.47	17.25	50.00
			H	17.01	3.44	-2.46	17.99	50.00
LTE BAND 26 BW: 10M QPSK RB: 1,49	819.0	26740	V	13.54	3.45	-2.91	14.08	50.00
			H	14.93	3.45	-2.95	15.43	50.00
LTE BAND 26 BW: 10M 16QAM RB: 1,0	819.0	26740	V	18.58	3.44	-2.45	19.57	50.00
			H	17.89	3.44	-2.42	18.91	50.00
LTE BAND 26 BW: 10M 16QAM RB: 1,49	819.0	26740	V	12.89	3.45	-2.96	13.38	50.00
			H	14.21	3.45	-2.96	14.7	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 15M QPSK RB: 1,0	831.5	26865	V	16.05	3.44	-2.55	16.94	38.45
			H	16.99	5.59	-2.52	20.06	38.45
	836.5	26915	V	13.56	3.45	-3.05	13.96	38.45
			H	14.7	5.6	-3.04	17.26	38.45
	841.5	26965	V	14.6	3.45	-3.27	14.78	38.45
			H	15.19	5.6	-3.27	17.52	38.45
LTE BAND 26 BW: 15M QPSK RB: 1,74	831.5	26865	V	14.17	3.45	-3.2	14.42	38.45
			H	16.07	5.6	-3.19	18.48	38.45
	836.5	26915	V	14.3	3.45	-3.31	14.44	38.45
			H	12.53	5.6	-3.32	14.81	38.45
	841.5	26965	V	13.61	3.46	-3.33	13.74	38.45
			H	12.63	5.61	-3.33	14.91	38.45
LTE BAND 26 BW: 15M 16QAM RB: 1,0	831.5	26865	V	17.64	3.44	-2.54	18.54	38.45
			H	16.86	5.59	-2.53	19.92	38.45
	836.5	26915	V	13.96	3.45	-3.05	14.36	38.45
			H	15.84	5.6	-2.99	18.45	38.45
	841.5	26965	V	15.85	3.45	-3.28	16.02	38.45
			H	15.78	5.6	-3.27	18.11	38.45
LTE BAND 26 BW: 15M 16QAM RB: 1,74	831.5	26865	V	16.32	3.45	-3.2	16.57	38.45
			H	16.26	5.6	-3.19	18.67	38.45
	836.5	26915	V	14.44	3.45	-3.31	14.58	38.45
			H	12.51	5.6	-3.31	14.8	38.45
	841.5	26965	V	14.28	3.46	-3.31	14.43	38.45
			H	13.5	5.61	-3.32	15.79	38.45

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 1.4M QPSK RB: 1,0	814.7	26697	V	15.52	3.44	-2.63	16.33	50.00
			H	15.74	3.44	-2.63	16.55	50.00
	819.0	26740	V	15.24	3.44	-2.67	16.01	50.00
			H	15.73	3.44	-2.66	16.51	50.00
	823.3	26783	V	13.01	3.45	-2.94	13.52	50.00
			H	14.44	3.45	-2.94	14.95	50.00
LTE BAND 26 BW: 1.4M QPSK RB: 1,5	814.7	26697	V	16.28	3.44	-2.52	17.2	50.00
			H	17.53	3.44	-2.52	18.45	50.00
	819.0	26740	V	13.55	3.44	-2.73	14.26	50.00
			H	14.95	3.44	-2.73	15.66	50.00
	823.3	26783	V	13.43	3.45	-2.98	13.9	50.00
			H	14.31	3.45	-2.99	14.77	50.00
LTE BAND 26 BW: 1.4M 16QAM RB: 1,0	814.7	26697	V	17.27	3.44	-2.61	18.1	50.00
			H	18.02	3.44	-2.59	18.87	50.00
	819.0	26740	V	14.49	3.44	-2.68	15.25	50.00
			H	15.88	3.44	-2.67	16.65	50.00
	823.3	26783	V	13.02	3.45	-2.94	13.53	50.00
			H	14.06	3.45	-2.94	14.57	50.00
LTE BAND 26 BW: 1.4M 16QAM RB: 1,5	814.7	26697	V	17.21	3.44	-2.52	18.13	50.00
			H	17.37	3.44	-2.52	18.29	50.00
	819.0	26740	V	14.67	3.44	-2.72	15.39	50.00
			H	15.45	3.44	-2.74	16.15	50.00
	823.3	26783	V	12.6	3.45	-2.99	13.06	50.00
			H	14.6	3.45	-2.97	15.08	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 3M QPSK RB: 1,0	815.5	26705	V	18.48	3.44	-2.62	19.3	50.00
			H	19.31	3.44	-2.57	20.18	50.00
	819.0	26740	V	15.66	3.44	-2.62	16.48	50.00
			H	16.7	3.44	-2.63	17.51	50.00
	822.5	26775	V	17.93	3.45	-2.94	18.44	50.00
			H	18.12	3.45	-2.88	18.69	50.00
LTE BAND 26 BW: 3M QPSK RB: 1,14	815.5	26705	V	16.92	3.44	-2.56	17.8	50.00
			H	16.91	3.44	-2.58	17.77	50.00
	819.0	26740	V	12.76	3.45	-2.78	13.43	50.00
			H	15.04	3.45	-2.77	15.72	50.00
	822.5	26775	V	13.11	3.45	-2.98	13.58	50.00
			H	14.98	3.45	-2.99	15.44	50.00
LTE BAND 26 BW: 3M 16QAM RB: 1,0	815.5	26705	V	16.8	3.44	-2.64	17.6	50.00
			H	17.35	3.44	-2.61	18.18	50.00
	819.0	26740	V	16.18	3.44	-2.64	16.98	50.00
			H	16.92	3.44	-2.63	17.73	50.00
	822.5	26775	V	14.4	3.45	-2.84	15.01	50.00
			H	15.59	3.45	-2.84	16.2	50.00
LTE BAND 26 BW: 3M 16QAM RB: 1,14	815.5	26705	V	17.33	3.44	-2.6	18.17	50.00
			H	16.65	3.44	-2.58	17.51	50.00
	819.0	26740	V	14.93	3.45	-2.78	15.6	50.00
			H	15.33	3.45	-2.79	15.99	50.00
	822.5	26775	V	13.01	3.45	-2.97	13.49	50.00
			H	15.79	3.45	-2.97	16.27	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 5M QPSK RB: 1,0	816.5	26715	V	18.85	3.44	-2.64	19.65	50.00
			H	18.17	3.44	-2.63	18.98	50.00
	819.0	26740	V	16.88	3.44	-2.58	17.74	50.00
			H	16.84	3.44	-2.59	17.69	50.00
	821.5	26765	V	17.26	3.44	-2.73	17.97	50.00
			H	18.52	3.44	-2.72	19.24	50.00
LTE BAND 26 BW: 5M QPSK RB: 1,24	816.5	26715	V	15.04	3.44	-2.69	15.79	50.00
			H	15.69	3.44	-2.69	16.44	50.00
	819.0	26740	V	13.85	3.45	-2.84	14.46	50.00
			H	14.98	3.45	-2.84	15.59	50.00
	821.5	26765	V	13.25	3.45	-2.98	13.72	50.00
			H	14.25	3.45	-2.98	14.72	50.00
LTE BAND 26 BW: 5M 16QAM RB: 1,0	816.5	26715	V	17.97	3.44	-2.63	18.78	50.00
			H	17.03	3.44	-2.65	17.82	50.00
	819.0	26740	V	16.38	3.44	-2.54	17.28	50.00
			H	17.43	3.44	-2.59	18.28	50.00
	821.5	26765	V	15.17	3.44	-2.73	15.88	50.00
			H	16.67	3.44	-2.68	17.43	50.00
LTE BAND 26 BW: 5M 16QAM RB: 1,24	816.5	26715	V	15.11	3.44	-2.7	15.85	50.00
			H	15.95	3.44	-2.68	16.71	50.00
	819.0	26740	V	12.92	3.45	-2.83	13.54	50.00
			H	15.02	3.45	-2.83	15.64	50.00
	821.5	26765	V	13.44	3.45	-2.98	13.91	50.00
			H	13.58	3.45	-2.99	14.04	50.00

Remark：

(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

EUT			Measurement					
Operation Band	Fundamental Frequency	CH	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
LTE BAND 26 BW: 10M QPSK RB: 1,0	819.0	26740	V	16.28	3.44	-2.47	17.25	50.00
			H	17.01	3.44	-2.46	17.99	50.00
LTE BAND 26 BW: 10M QPSK RB: 1,49	819.0	26740	V	13.54	3.45	-2.91	14.08	50.00
			H	14.93	3.45	-2.95	15.43	50.00
LTE BAND 26 BW: 10M 16QAM RB: 1,0	819.0	26740	V	18.58	3.44	-2.45	19.57	50.00
			H	17.89	3.44	-2.42	18.91	50.00
LTE BAND 26 BW: 10M 16QAM RB: 1,49	819.0	26740	V	12.89	3.45	-2.96	13.38	50.00
			H	14.21	3.45	-2.96	14.7	50.00

Remark：

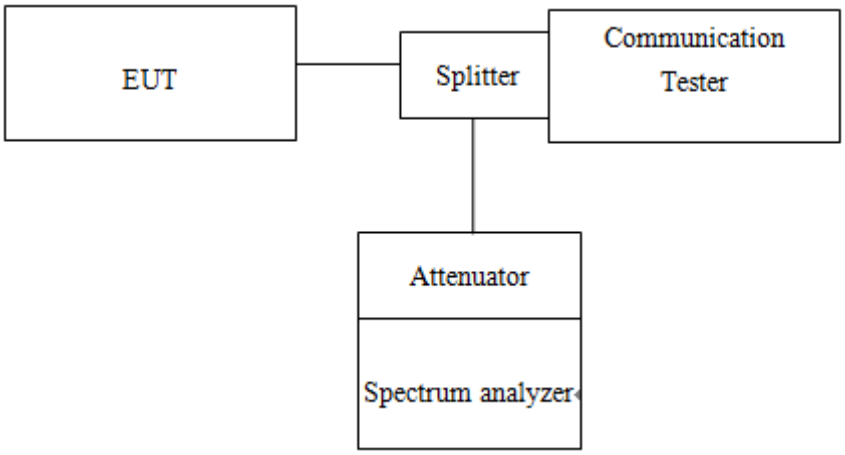
(1)The RBW,VBW of SPA for frequency RBW= 8MHz , VBW= 8MHz

8. OCCUPIED BANDWIDTH MEASUREMENT

8.1. Standard Applicable

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power.

8.2. Test Set-up



8.3. Measurement Procedure

99% &26dB Bandwidth with detector peak

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW= 3 times RBW, -26dBc display line was placed on the screen (or 26dB bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace. Then set RBW to 99% bandwidth, RBW= 1%, VBW= 3 RBW, with span > 2 * Signal BW, set % Power = 99%.

99% Bandwidth with detector sample

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW, -20dBc display line was placed on the screen (or 20dB bandwidth). Set RBW to 99% bandwidth, RBW= 1% ~ 5%, VBW= 3 RBW, with span > 2 * Signal BW, set % Power = 99%.

8.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Power Meter	Anritsu	ML2495A	1005007	12/29/2017	12/28/2018
Power Sensor	Anritsu	MA2411B	917032	12/29/2017	12/28/2018
Power Meter	Anritsu	ML2496A	1242004	10/16/2017	10/15/2018
Power Sensor	Anritsu	MA2411B	1207365	10/16/2017	10/15/2018
Power Sensor	Anritsu	MA2411B	1207368	10/16/2017	10/15/2018
EXA Spectrum Ana-lyzer	Agilent	N9010A	MY54200716	10/16/2017	10/15/2018
EXA Spectrum Ana-lyzer	Agilent	N9030A	MY53120760	04/09/2018	04/08/2019
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019
Coaxial Cable	HU-BER+SUHNER	SUCOFLEX 102	23670/2	01/02/2018	01/01/2019
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019
Splitter	Agilent	11636B	N/A	01/02/2018	01/01/2019
DC Power Supply	Agilent	E3640A	MY52410006	11/28/2017	11/27/2018
Temperature Chamber	TERCHY	MHG-120LF	911009	05/19/2017	05/18/2018

8.5. Measurement Result

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA II	HSDPA II	HSUPA II	WCDMA II	HSDPA II	HSUPA II
1852.40	9262	4.10240	4.10730	4.10950	4.67690	4.68520	4.66240
1880.00	9400	4.10620	4.10720	4.10880	4.68580	4.67900	4.69120
1907.60	9538	4.11500	4.12150	4.12050	4.71410	4.69890	4.70300

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA IV	HSDPA IV	HSUPA IV	WCDMA IV	HSDPA IV	HSUPA IV
1712.40	1312	4.09680	4.09330	4.11140	4.65500	4.65900	4.66200
1732.60	1413	4.11450	4.10610	4.11340	4.66100	4.65100	4.66800
1752.60	1513	4.10720	4.11800	4.10530	4.67300	4.65900	4.66100

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA V	HSDPA V	HSUPA V	WCDMA V	HSDPA V	HSUPA V
826.40	4132	4.13510	4.10810	4.10100	4.69260	4.66270	4.65750
836.60	4183	4.10980	4.11240	4.10690	4.66080	4.65750	4.66480
846.60	4233	4.10570	4.09920	4.10670	4.65210	4.66120	4.66510

LTE BAND 2 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1850.7	18607	1.1066	1.1075	1.3144	1.7377
1880.0	18900	1.0997	1.1042	1.2978	1.7379
1909.3	19193	1.0966	1.1055	1.2828	1.3159

LTE BAND 2 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1851.5	18615	2.7095	2.7110	3.0036	3.4168
1880.0	18900	2.7122	2.7083	3.0022	2.9921
1908.5	19185	2.7028	2.7148	2.9973	3.0035

LTE BAND 2 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1852.5	18625	4.5169	4.5119	5.0047	5.0528
1880.0	18900	4.5012	4.5252	5.0391	4.9692
1907.5	19175	4.4886	4.4967	4.9995	4.9925

LTE BAND 2 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1855.0	18650	8.9984	8.9949	9.894	9.884
1880.0	18900	8.9948	8.9725	9.847	9.865
1905.0	19150	8.9375	8.9416	9.847	9.864

LTE BAND 2 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1857.5	18675	13.463	13.464	14.733	14.683
1880.0	18900	13.378	13.411	14.504	14.698
1902.5	19125	13.401	13.402	14.530	14.643

LTE BAND 2 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1860.0	18700	17.957	17.933	19.604	19.479
1880.0	18900	17.873	17.844	19.425	19.301
1900.0	19100	17.888	17.864	19.478	19.259

LTE BAND 4 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1710.7	19957	1.0951	1.1018	1.2951	1.3070
1732.5	20175	1.0985	1.1023	1.2983	1.3056
1754.3	20393	1.0997	1.0995	1.2994	1.3086

LTE BAND 4 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1711.5	19965	2.7162	2.7090	2.9971	2.9844
1732.5	20175	2.7132	2.7147	2.9989	2.9964
1753.5	20385	2.7062	2.7029	2.9980	3.0024

LTE BAND 4 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1712.5	19957	4.5111	4.4995	5.0222	4.9657
1732.5	20175	4.5035	4.4991	4.9780	5.0479
1752.5	20375	4.5096	4.4915	4.9716	4.9797

LTE BAND 4 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1715.0	20000	8.9754	8.9665	9.920	9.882
1732.5	20175	8.9711	8.9892	9.874	9.841
1750.0	20350	8.9814	8.9813	9.899	9.930

LTE BAND 4 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1717.5	20025	13.458	13.454	14.712	14.757
1732.5	20175	13.429	13.421	14.492	14.679
1747.5	20325	13.401	13.387	14.730	14.627

LTE BAND 4 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1720.0	20050	17.943	17.953	19.515	19.556
1732.5	20175	17.920	17.907	19.538	19.434
1745.0	20300	17.875	17.871	19.249	19.321

LTE BAND 5 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
824.7	20407	1.1007	1.1001	1.3204	1.3045
836.5	20525	1.1007	1.0993	1.2891	1.3100
848.3	20643	1.0971	1.1048	1.2989	1.3168

LTE BAND 5 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
825.5	20415	2.7076	2.7043	2.9852	2.9777
836.5	20525	2.7120	2.7062	2.9997	3.0070
847.5	20635	2.7056	2.7033	2.9884	2.9968

LTE BAND 5 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
826.5	20425	4.5022	4.4935	4.9995	5.0129
836.5	20525	4.5109	4.5059	5.0343	5.0294
846.5	20625	4.5080	4.4950	4.9951	4.9863

LTE BAND 5 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
829.0	20450	8.9718	8.9711	9.891	9.829
836.5	20525	8.9663	8.9832	9.942	9.860
844.0	20600	8.9475	8.9716	9.860	9.809

LTE BAND 17 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
706.5	23755	4.4852	4.5030	4.9838	4.9995
710.0	23790	4.5217	4.4939	5.0217	4.9962
713.5	23825	4.5059	4.5106	5.0069	4.9841

LTE BAND 17 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
709.0	23780	8.9753	8.9749	9.898	9.878
710.0	23790	8.9842	8.9698	9.783	9.833
711.0	23780	8.9733	8.9524	9.907	9.877

LTE BAND 26 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
824.7	26797	1.0977	1.1021	1.3099	1.3071
836.5	26915	1.1007	1.0974	1.2964	1.3011
848.3	27033	1.1037	1.1059	1.3023	1.2916

LTE BAND 26 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
825.5	26805	2.7057	2.7161	3.0090	3.0107
836.5	26915	2.7073	2.7085	2.9988	3.0088
847.5	27025	2.7135	2.7046	2.9938	2.9873

LTE BAND 26 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
826.5	26815	4.5015	4.5137	5.0025	4.9831
836.5	26915	4.5033	4.5065	4.9671	5.0360
846.5	27015	4.5083	4.4997	4.9954	5.0254

LTE BAND 26 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
829.0	26840	8.9574	8.9468	9.909	9.819
836.5	26915	8.9760	9.0007	9.949	9.899
844.0	26990	8.9650	8.9462	9.873	9.867

LTE BAND 26 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
831.5	26865	13.426	13.424	14.643	14.620
836.5	26915	13.443	13.471	14.720	14.789
841.5	26965	13.413	13.421	14.634	14.625

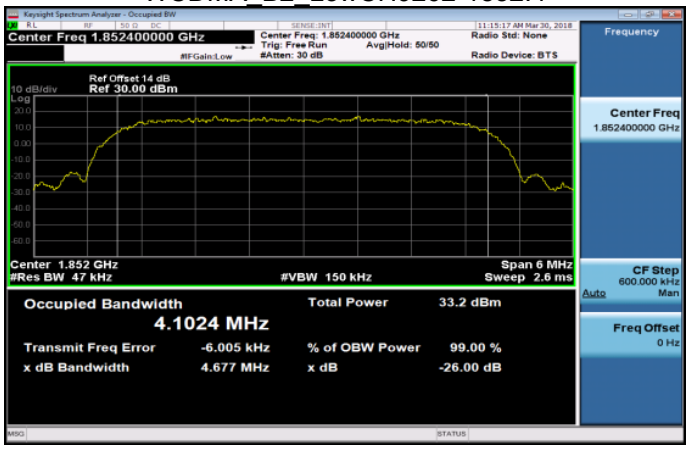
LTE BAND 26 for part 90S Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
814.7	26697	1.0998	1.1006	1.3010	1.3111
819.0	26740	1.0955	1.1044	1.3145	1.2918
823.3	26783	1.1000	1.1051	1.2695	1.3183

LTE BAND 26 for part 90S Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
815.5	26705	2.7086	2.7159	2.9894	2.9880
819.0	26740	2.7122	2.7037	3.0102	2.9836
822.5	26775	2.7123	2.7141	2.9965	3.0082

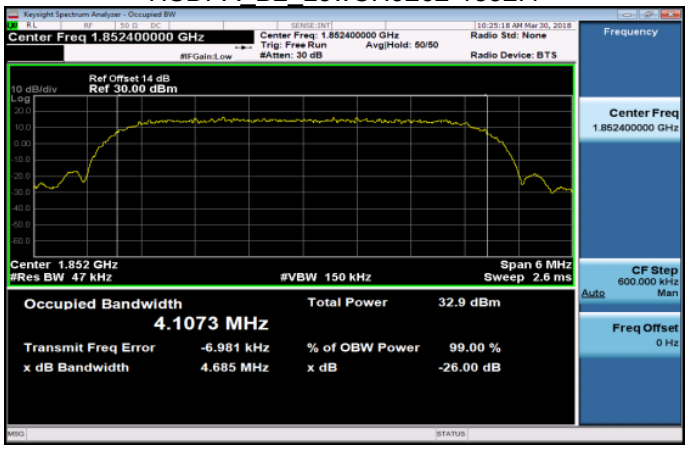
LTE BAND 26 for part 90S Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
816.5	26715	4.4993	4.5153	5.0020	4.9859
819.0	26740	4.5092	4.4891	4.9896	5.0478
821.5	26765	4.5007	4.5060	5.0077	4.9888

LTE BAND 26 for part 90S Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
819.0	26740	8.9523	8.9691	9.860	9.921

WCDMA_B2_LowCH9262-1852.4



HSDPA_B2_LowCH9262-1852.4



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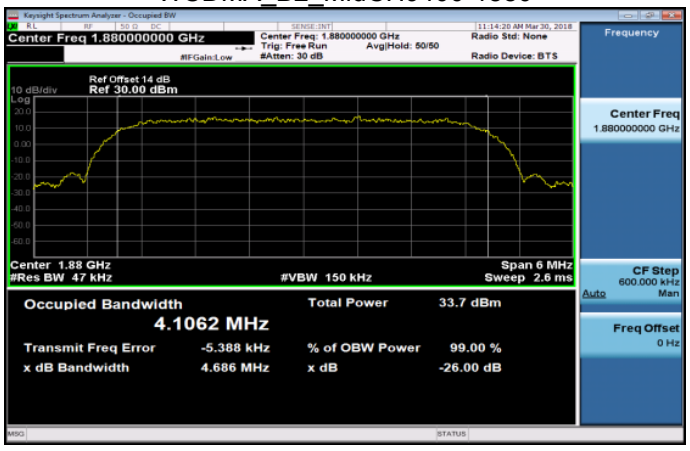

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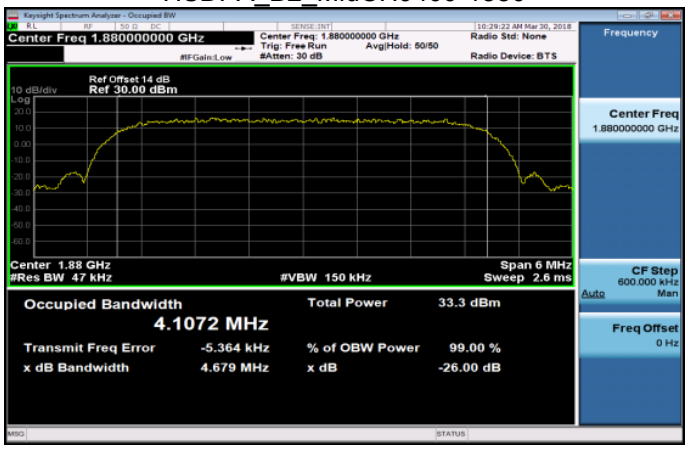

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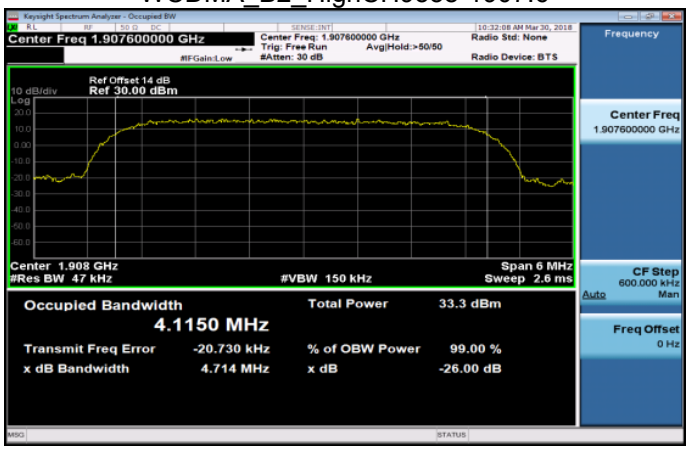

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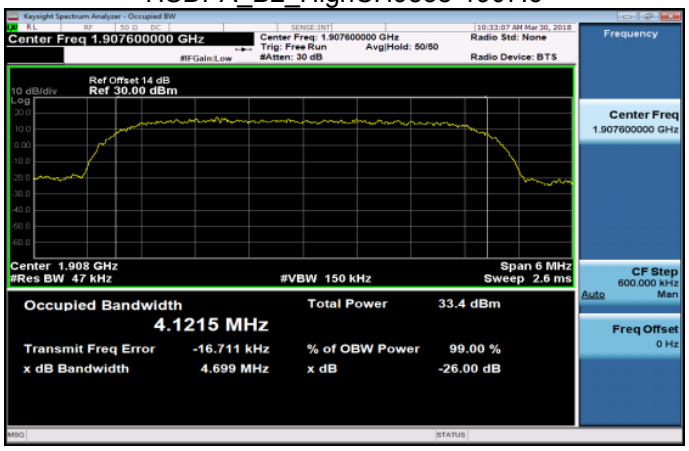

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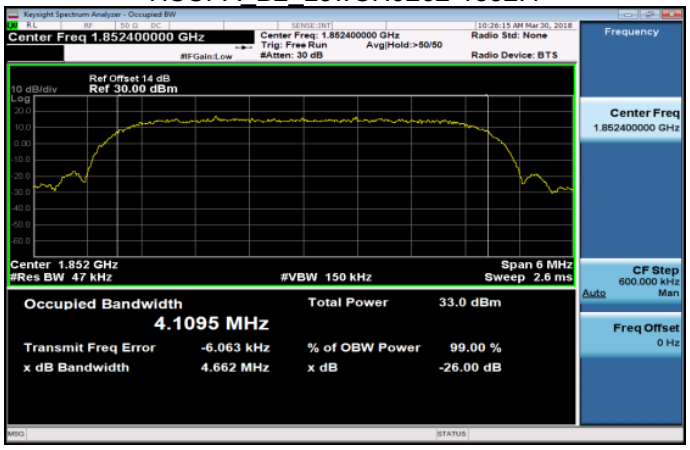

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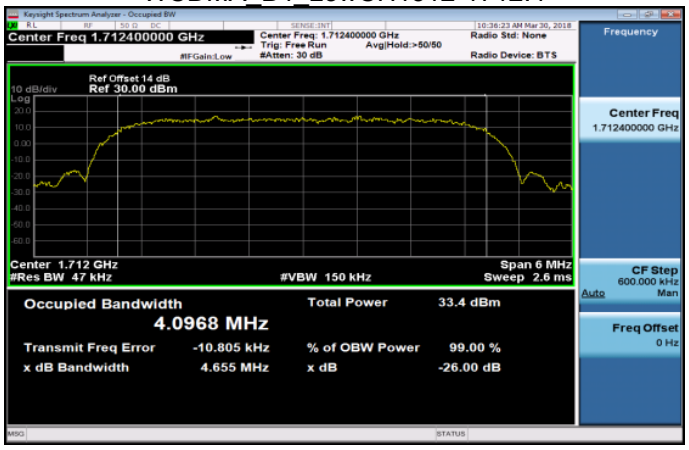

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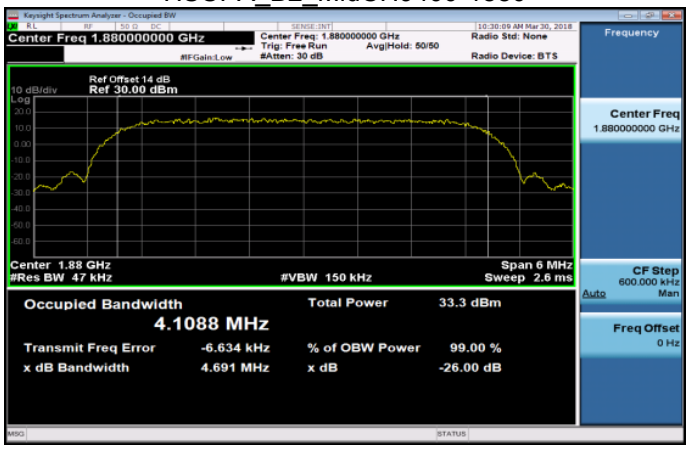

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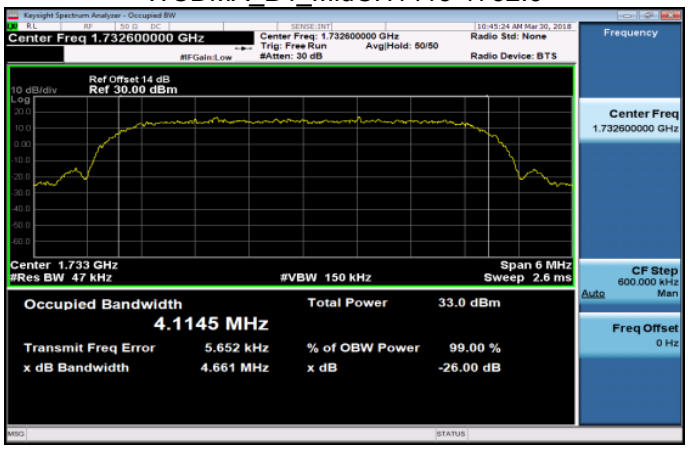

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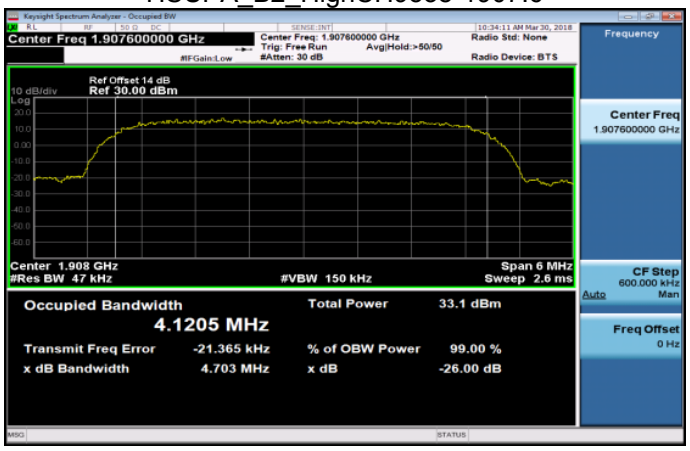

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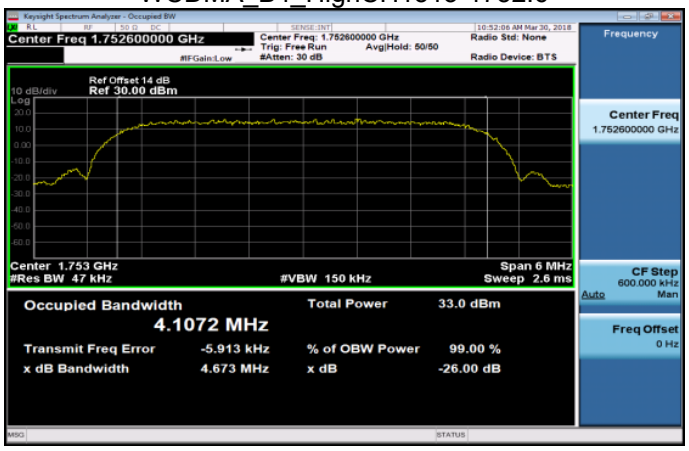
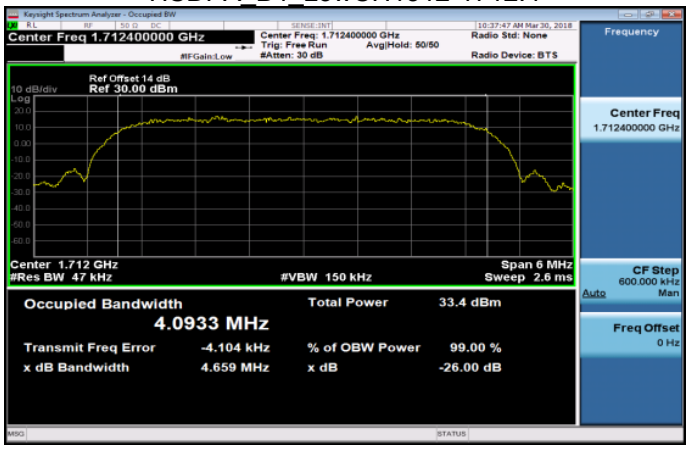


HSDPA_B4_LowCH1312-1712.4



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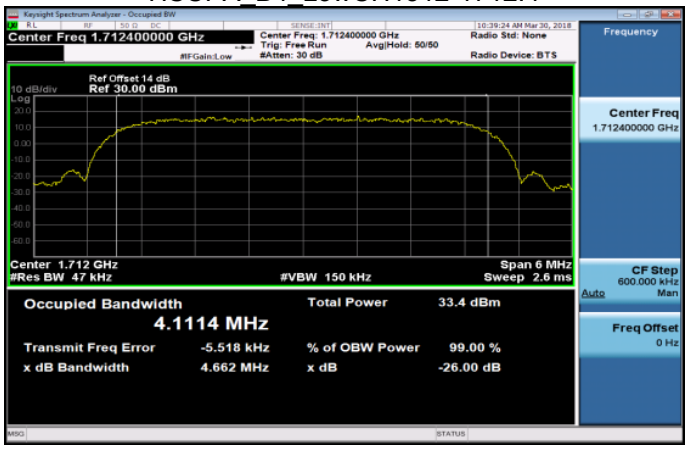

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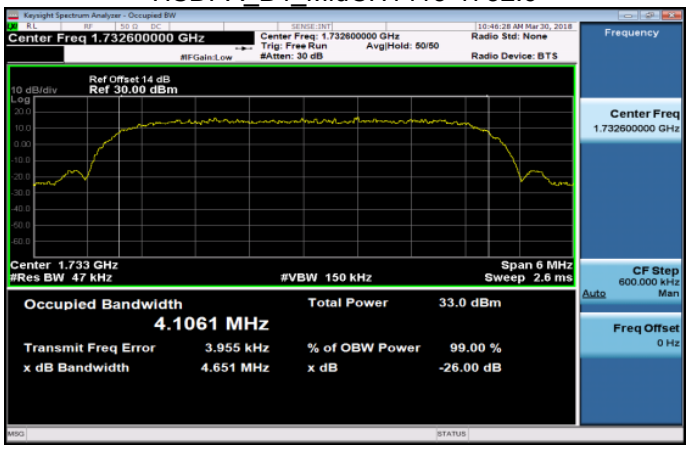

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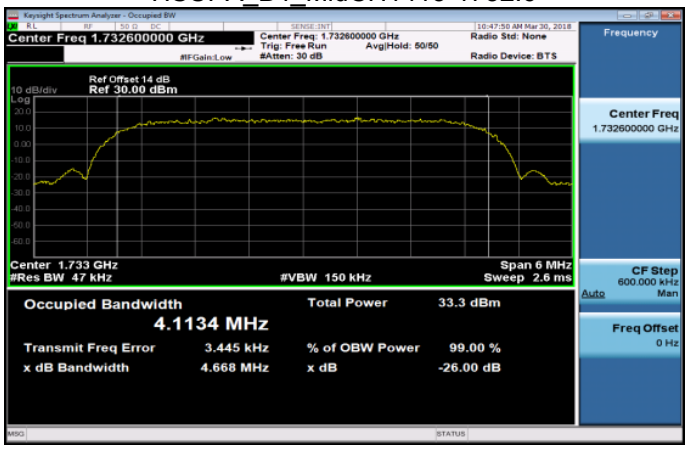

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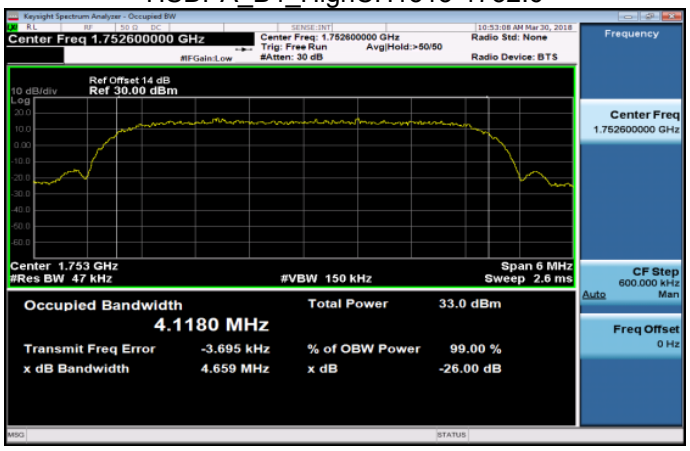

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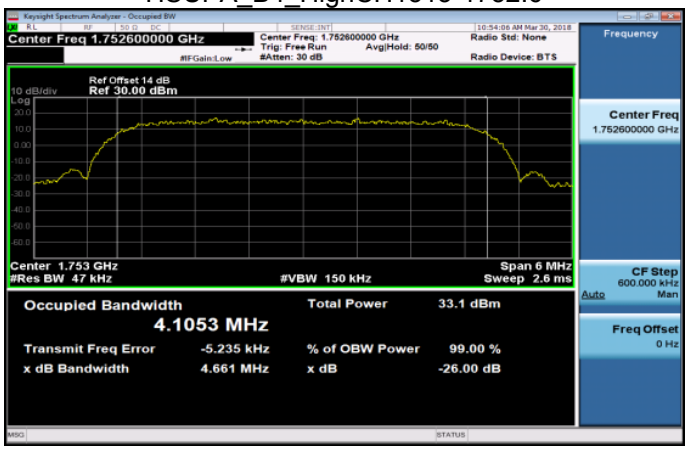
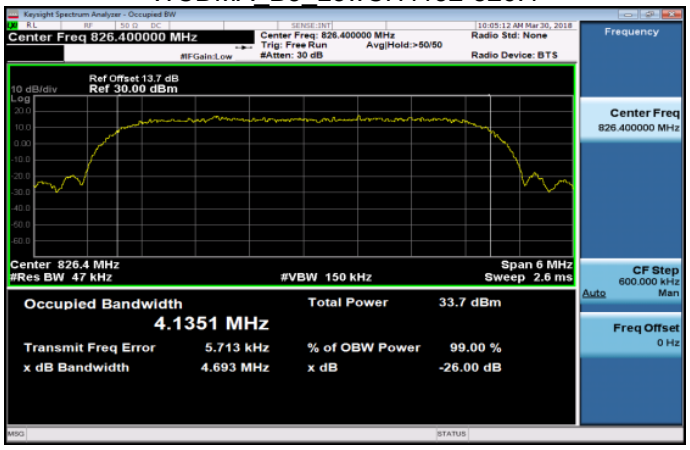


WCDMA_B5_LowCH4132-826.4



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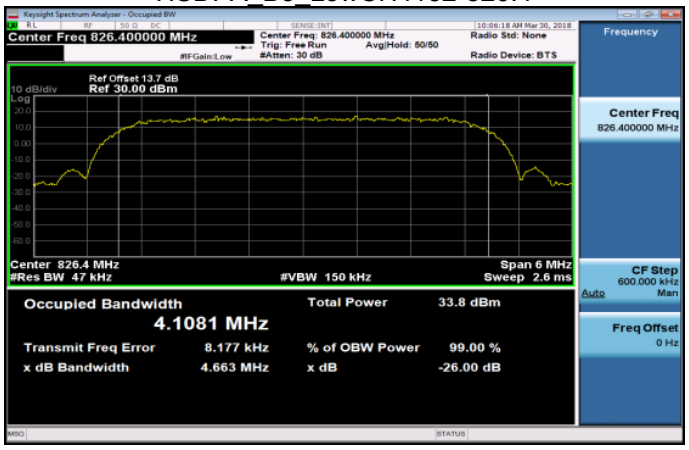

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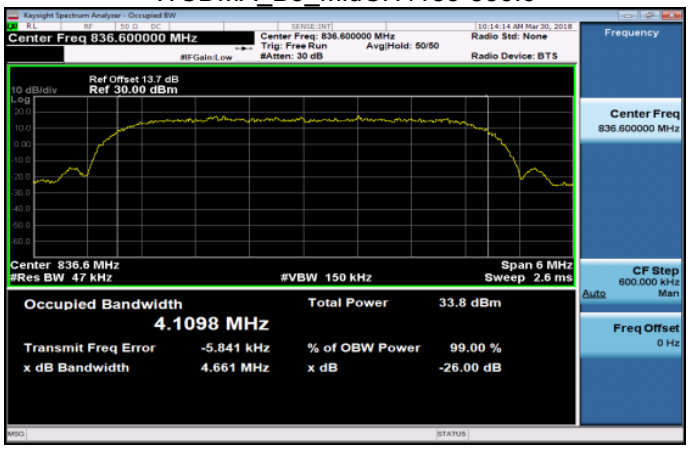

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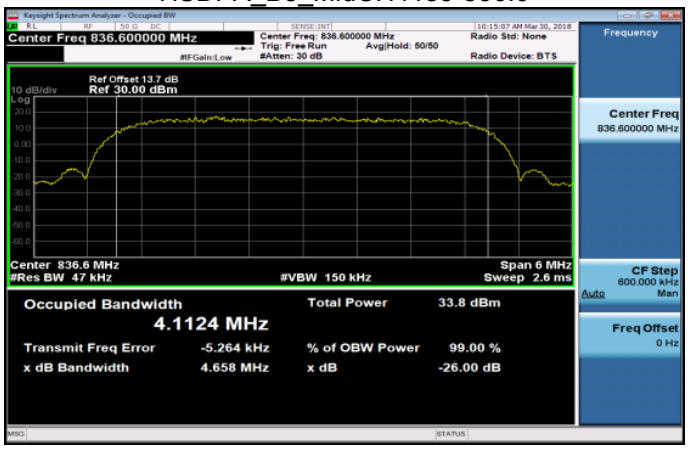

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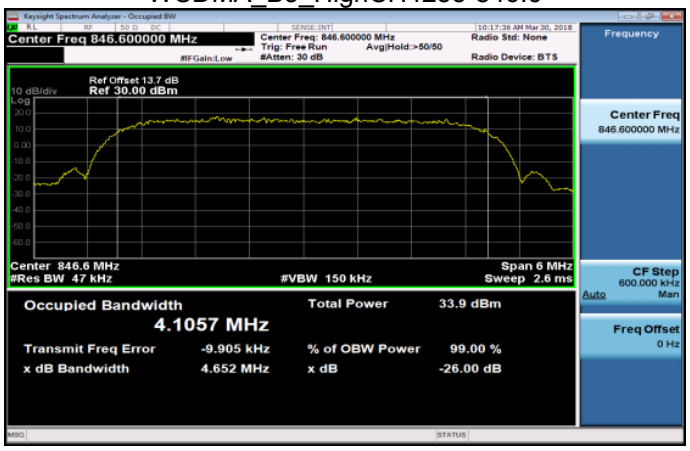

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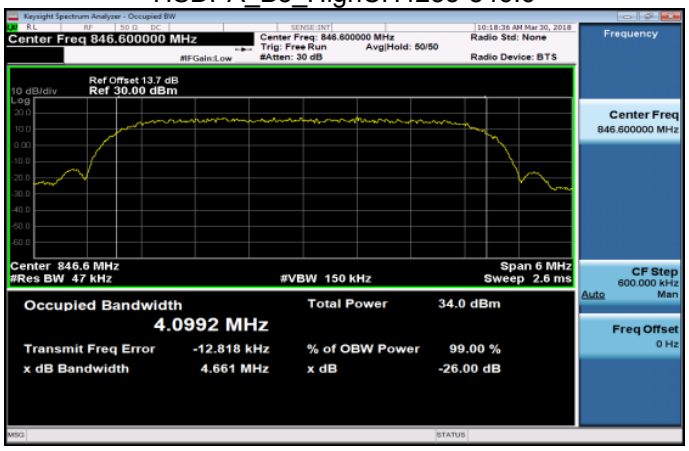

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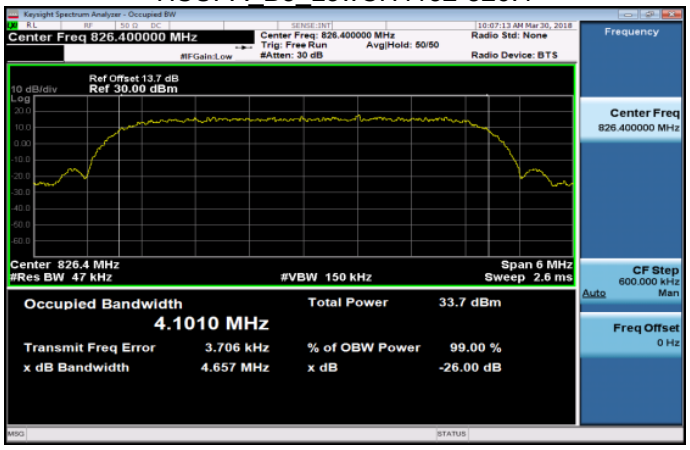

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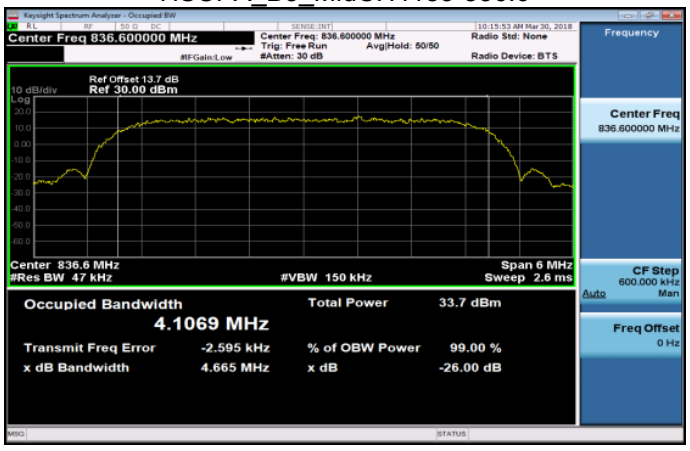

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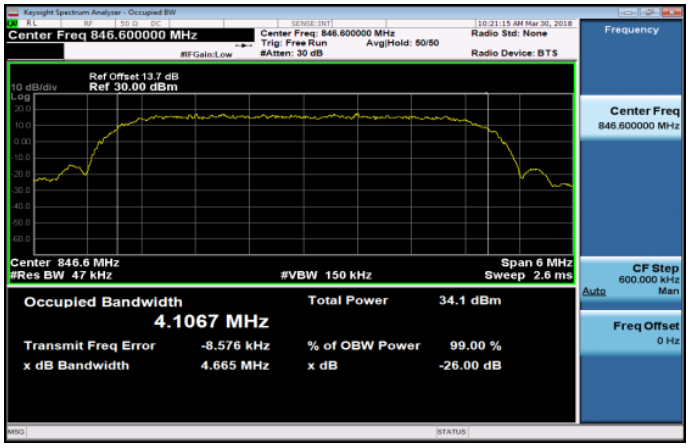
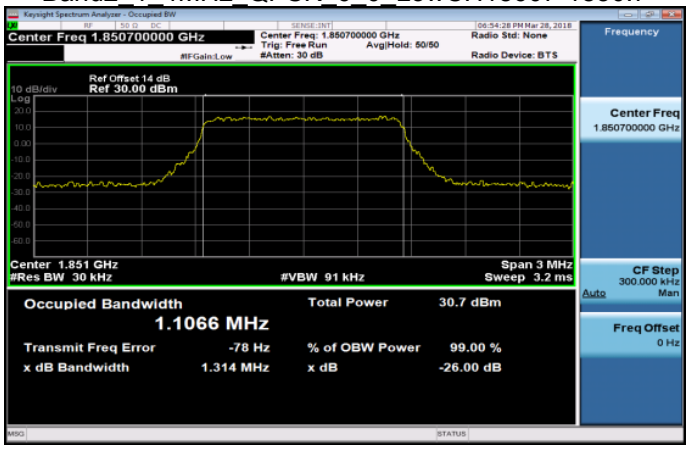
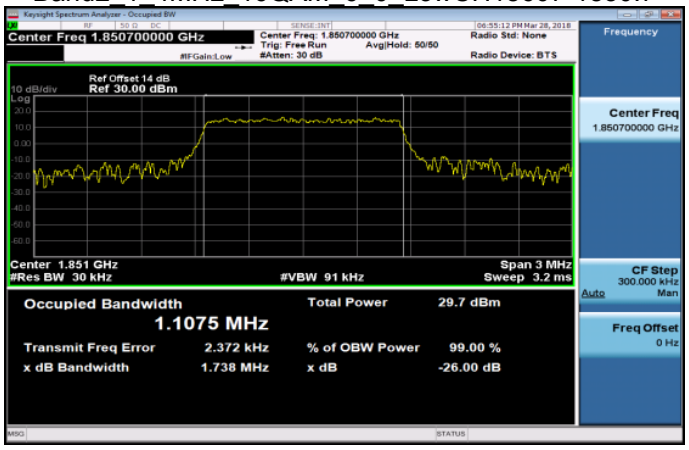


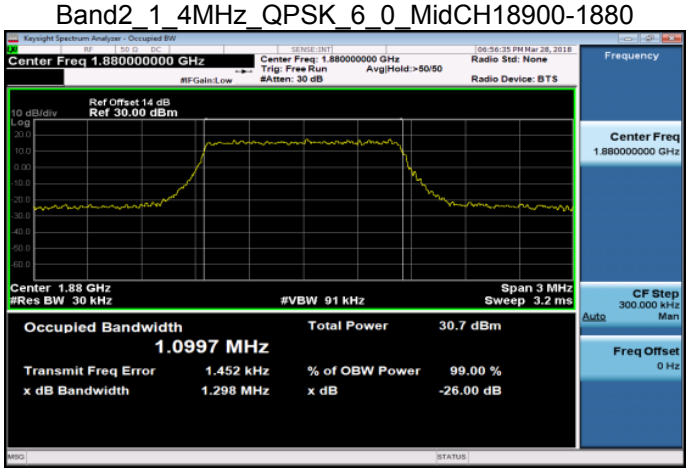
Band2_1_4MHz_QPSK_6_0_LowCH18607-1850.7



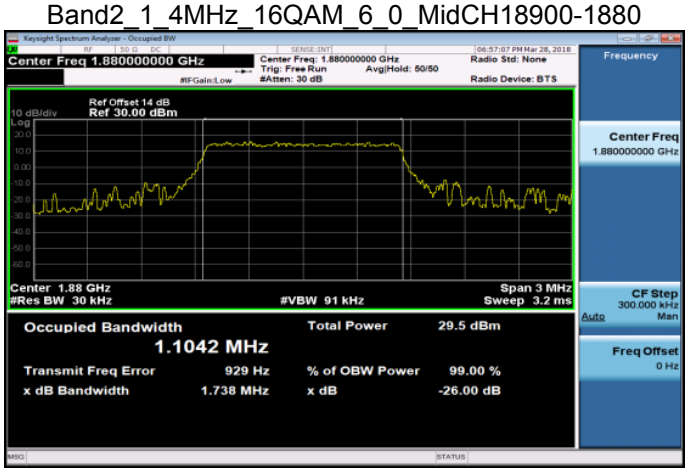
Band2_1_4MHz_16QAM_6_0_LowCH18607-1850.7



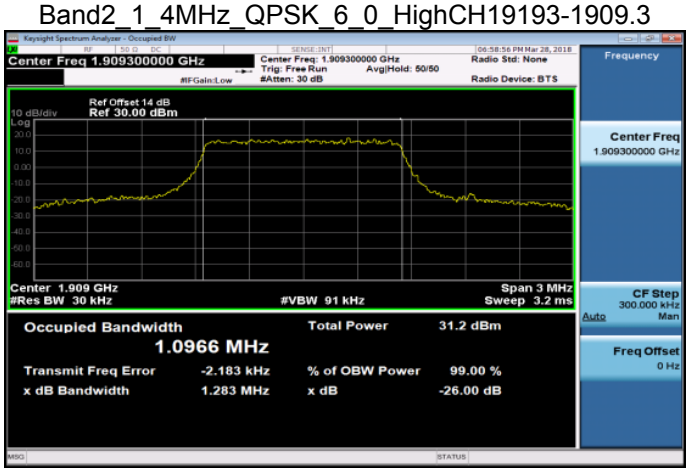
Band2_1_4MHz_QPSK_6_0_MidCH18900-1880



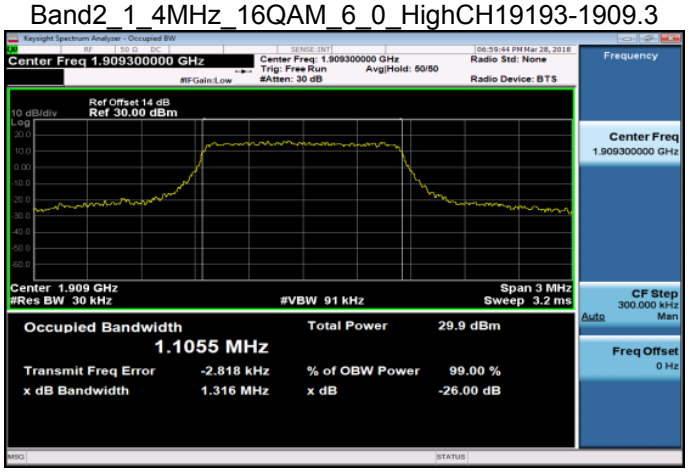
Band2_1_4MHz_16QAM_6_0_MidCH18900-1880



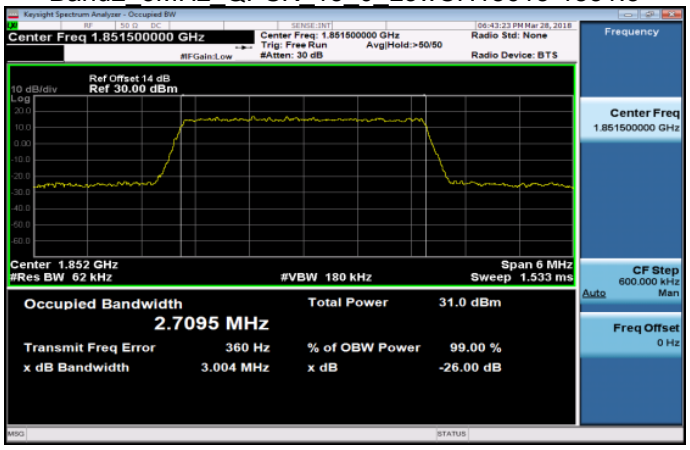
Band2_1_4MHz_QPSK_6_0_HighCH19193-1909.3



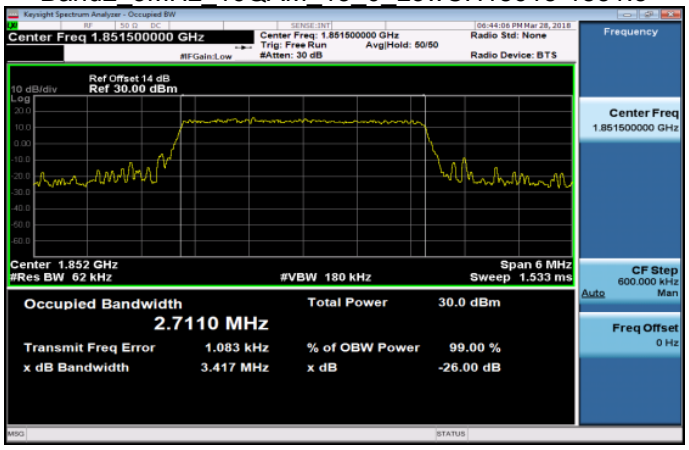
Band2_1_4MHz_16QAM_6_0_HighCH19193-1909.3



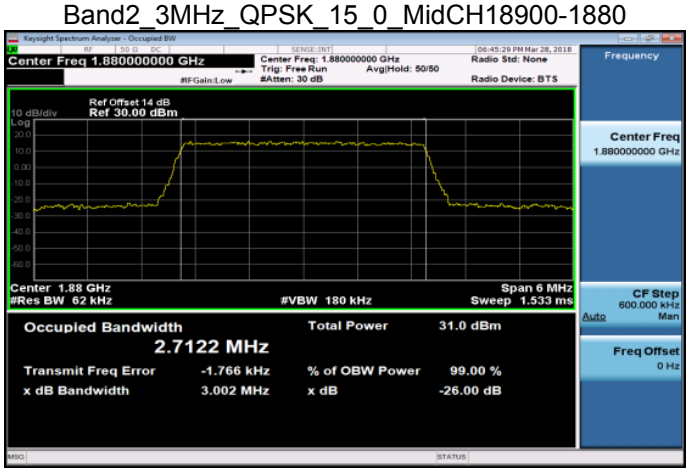
Band2_3MHz_QPSK_15_0_LowCH18615-1851.5



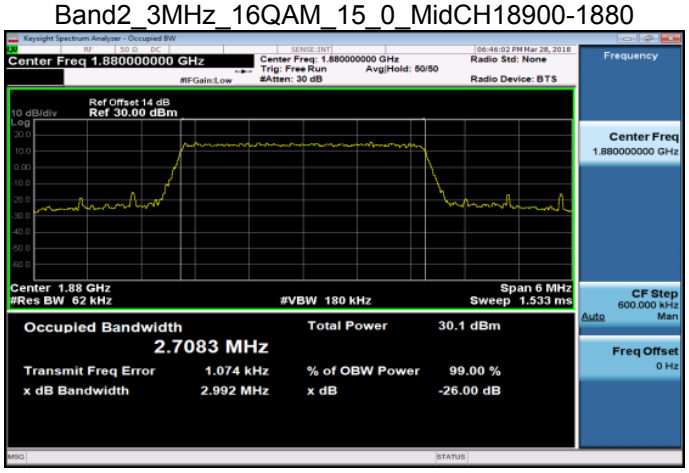
Band2_3MHz_16QAM_15_0_LowCH18615-1851.5



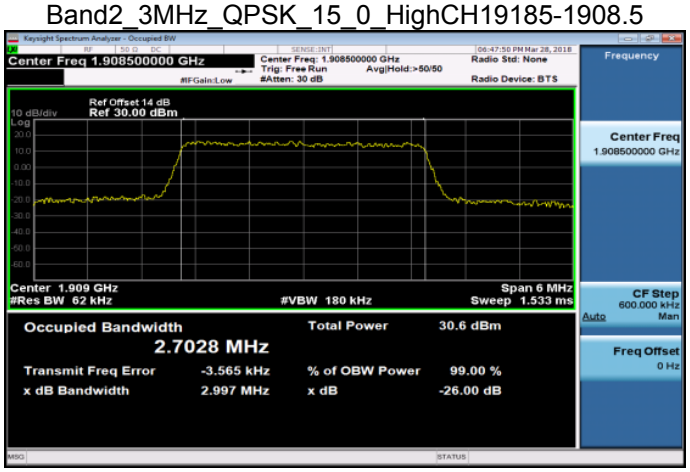
Band2_3MHz_QPSK_15_0_MidCH18900-1880



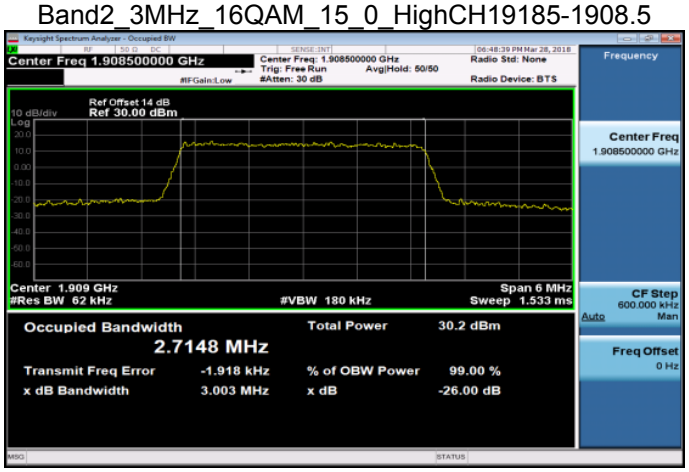
Band2_3MHz_16QAM_15_0_MidCH18900-1880



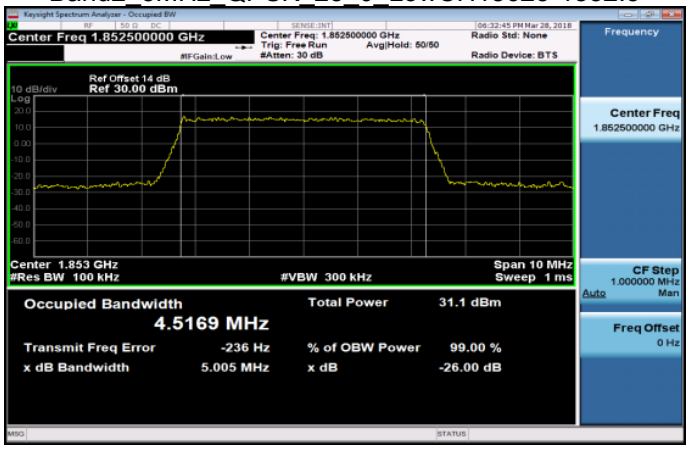
Band2_3MHz_QPSK_15_0_HighCH19185-1908.5



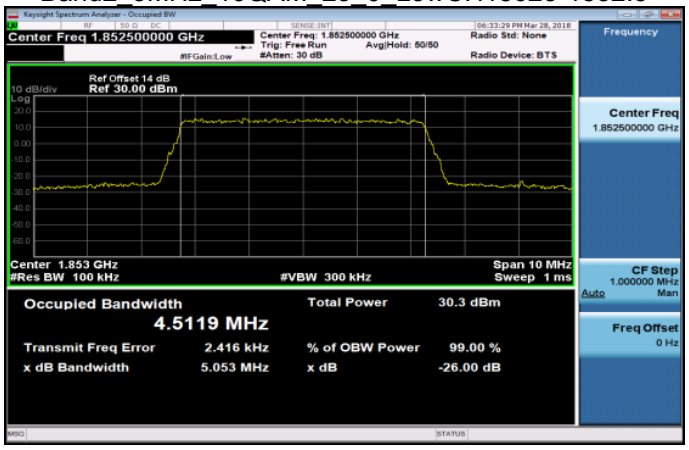
Band2_3MHz_16QAM_15_0_HighCH19185-1908.5



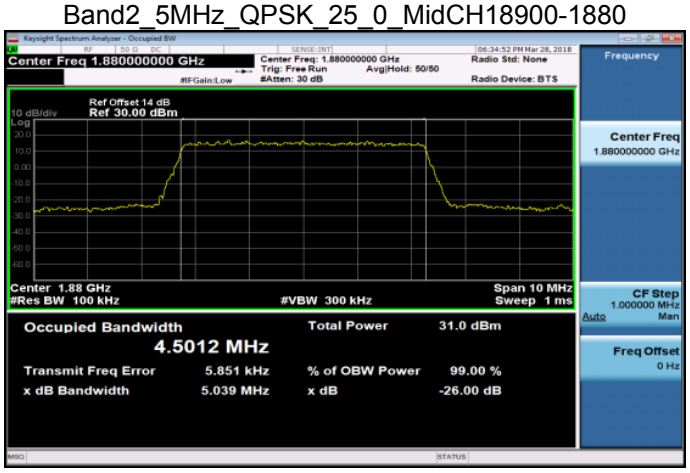
Band2_5MHz_QPSK_25_0_LowCH18625-1852.5



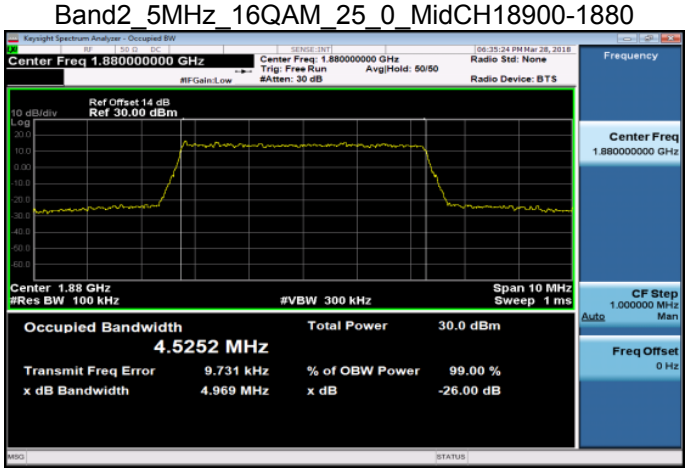
Band2_5MHz_16QAM_25_0_LowCH18625-1852.5



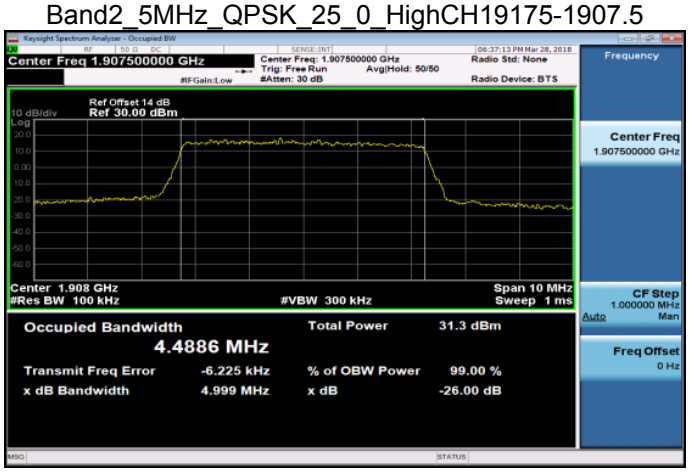
Band2_5MHz_QPSK_25_0_MidCH18900-1880



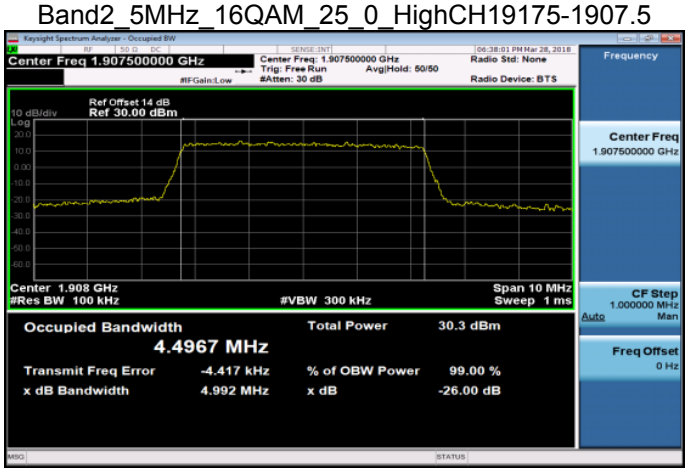
Band2_5MHz_16QAM_25_0_MidCH18900-1880



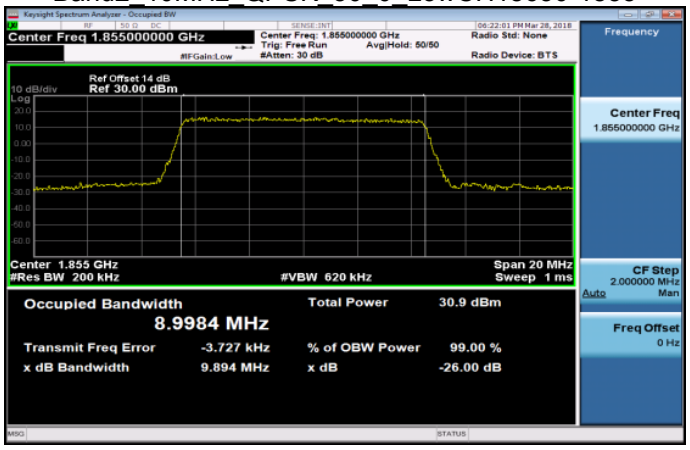
Band2_5MHz_QPSK_25_0_HighCH19175-1907.5



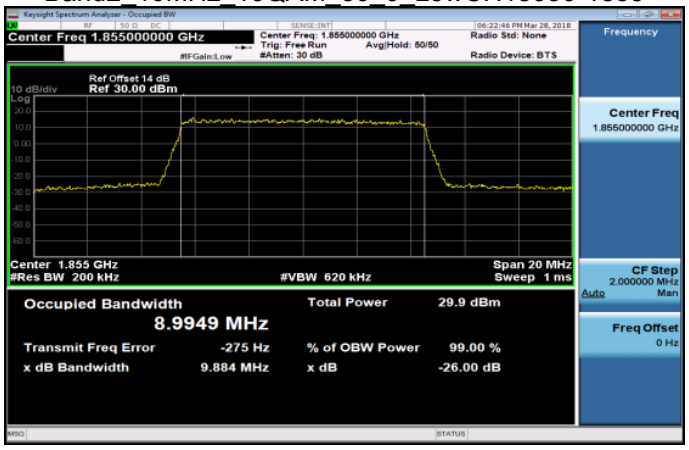
Band2_5MHz_16QAM_25_0_HighCH19175-1907.5



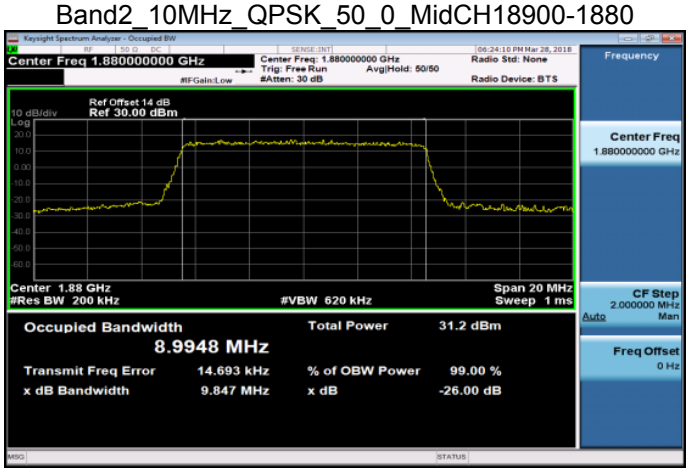
Band2_10MHz_QPSK_50_0_LowCH18650-1855



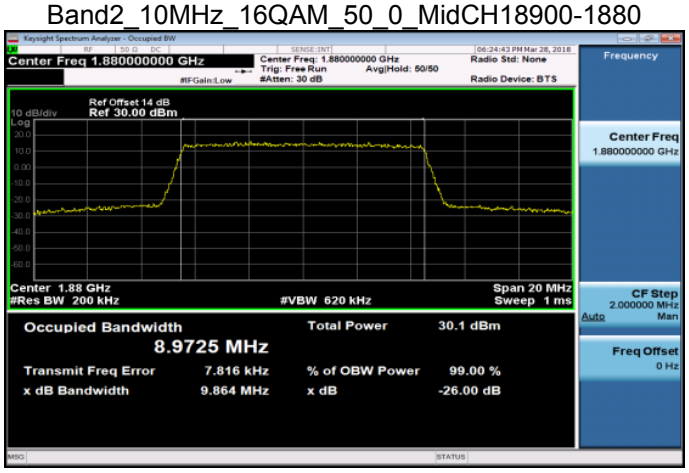
Band2_10MHz_16QAM_50_0_LowCH18650-1855



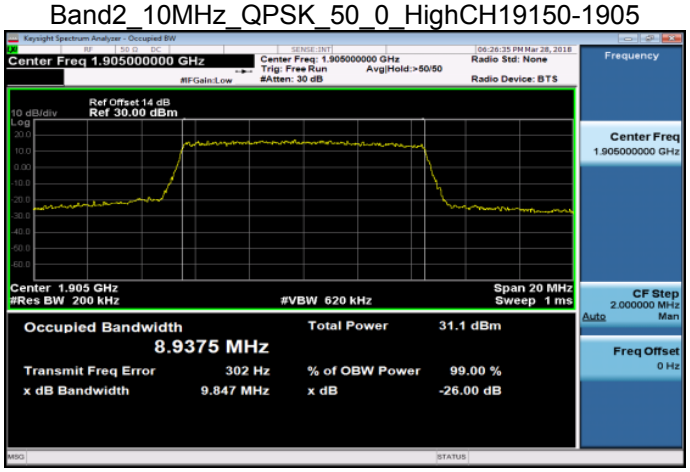
Band2_10MHz_QPSK_50_0_MidCH18900-1880



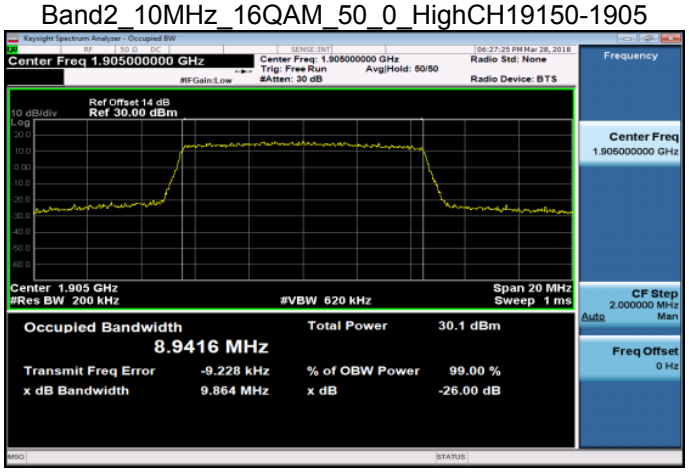
Band2_10MHz_16QAM_50_0_MidCH18900-1880



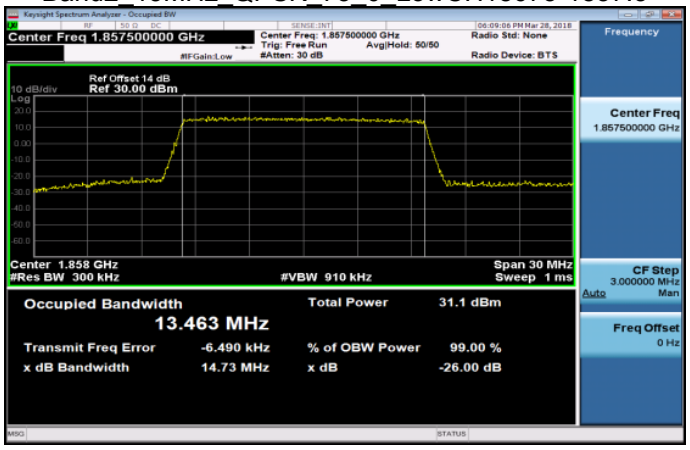
Band2_10MHz_QPSK_50_0_HighCH19150-1905



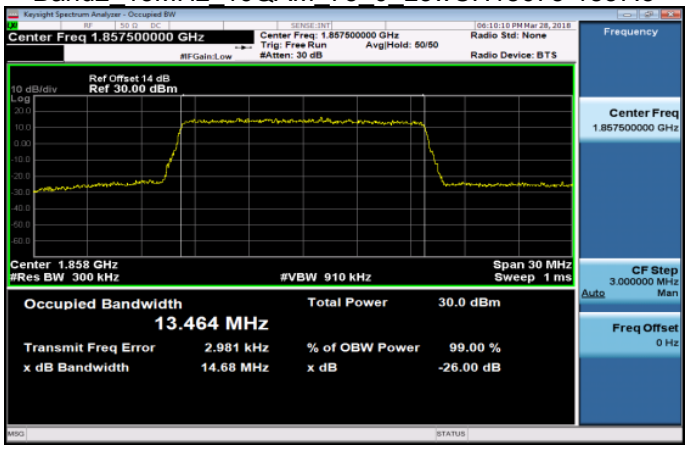
Band2_10MHz_16QAM_50_0_HighCH19150-1905



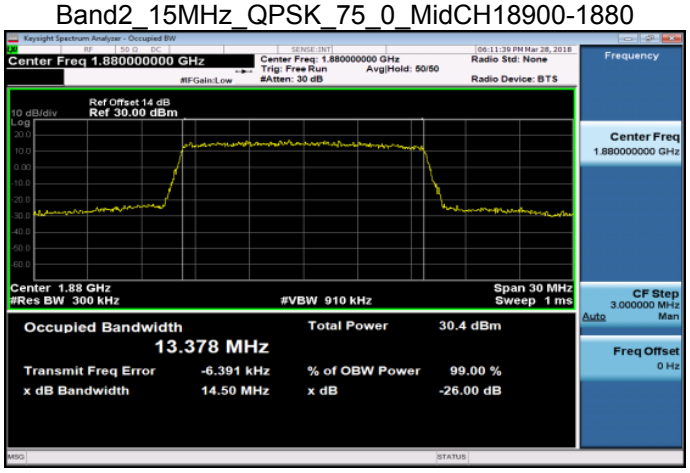
Band2_15MHz_QPSK_75_0_LowCH18675-1857.5



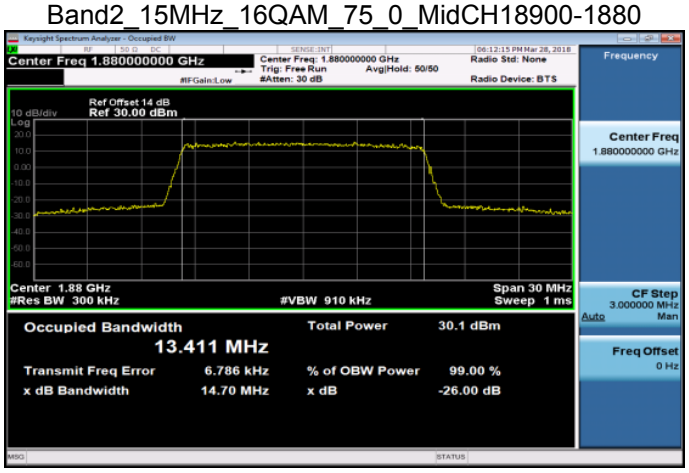
Band2_15MHz_16QAM_75_0_LowCH18675-1857.5



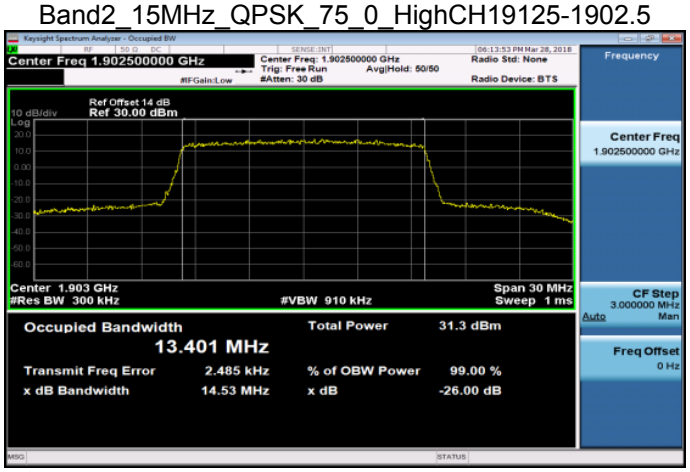
Band2_15MHz_QPSK_75_0_MidCH18900-1880



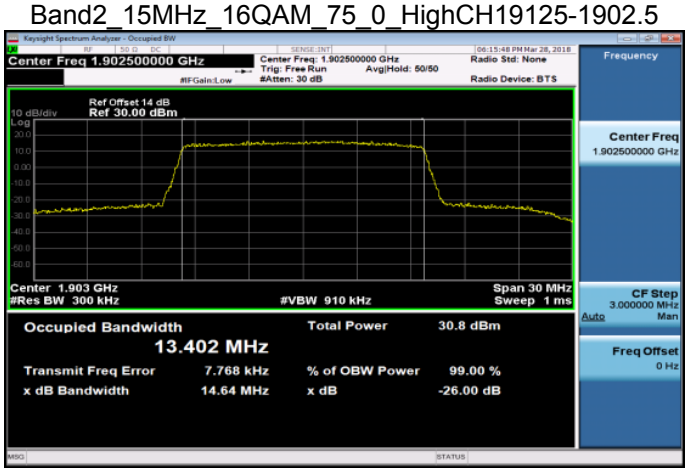
Band2_15MHz_16QAM_75_0_MidCH18900-1880



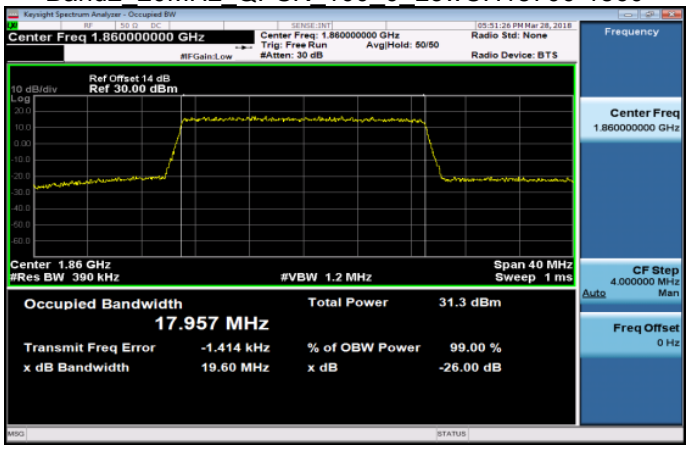
Band2_15MHz_QPSK_75_0_HighCH19125-1902.5



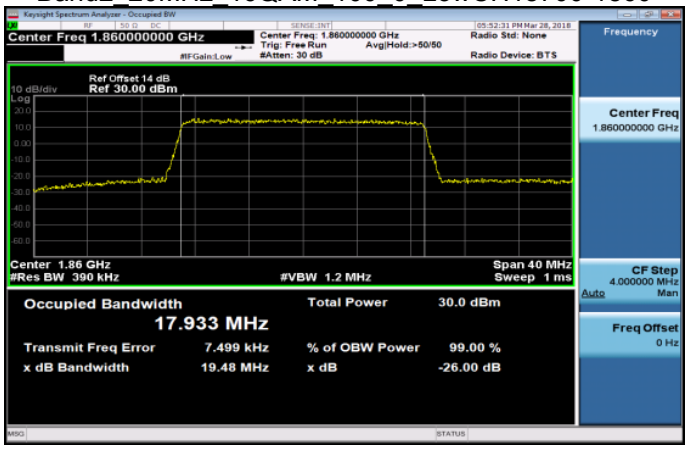
Band2_15MHz_16QAM_75_0_HighCH19125-1902.5



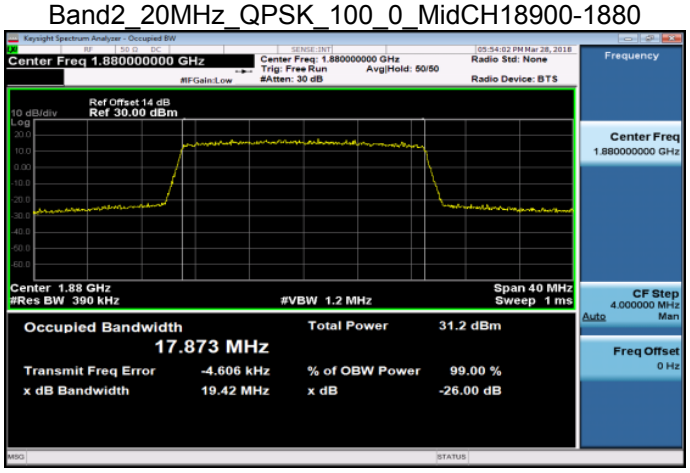
Band2_20MHz_QPSK_100_0_LowCH18700-1860



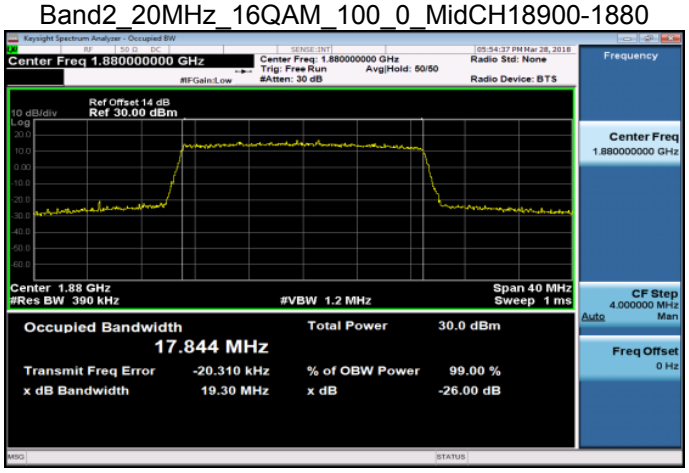
Band2_20MHz_16QAM_100_0_LowCH18700-1860



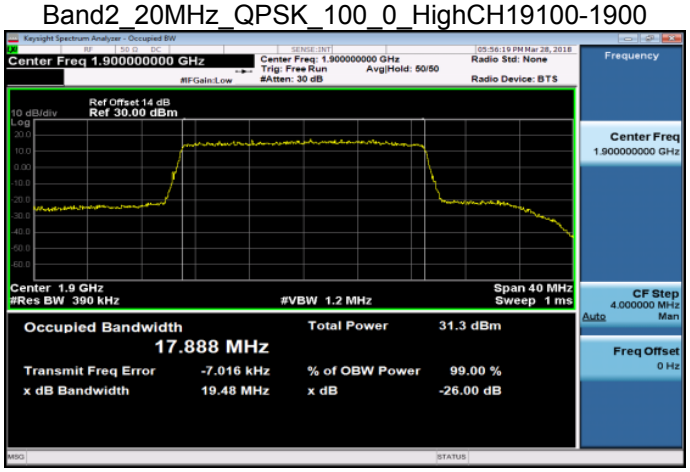
Band2_20MHz_QPSK_100_0_MidCH18900-1880



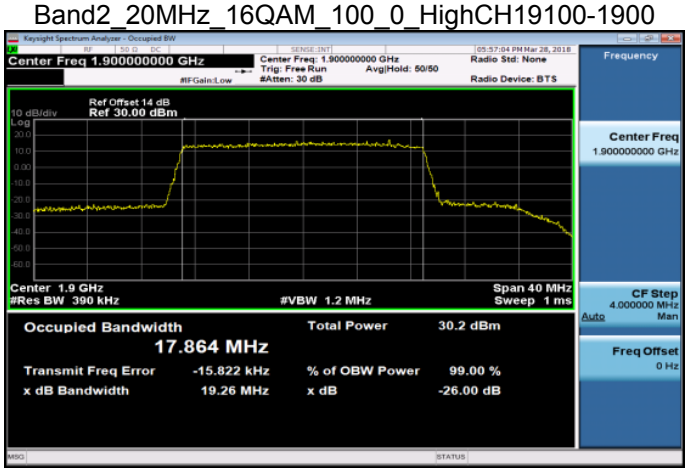
Band2_20MHz_16QAM_100_0_MidCH18900-1880



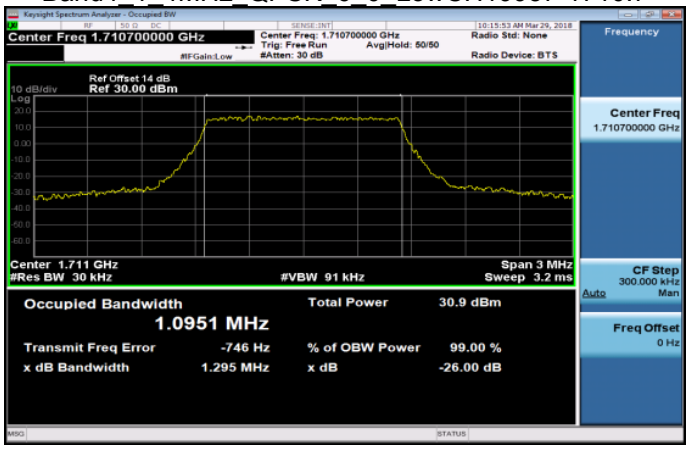
Band2_20MHz_QPSK_100_0_HighCH19100-1900



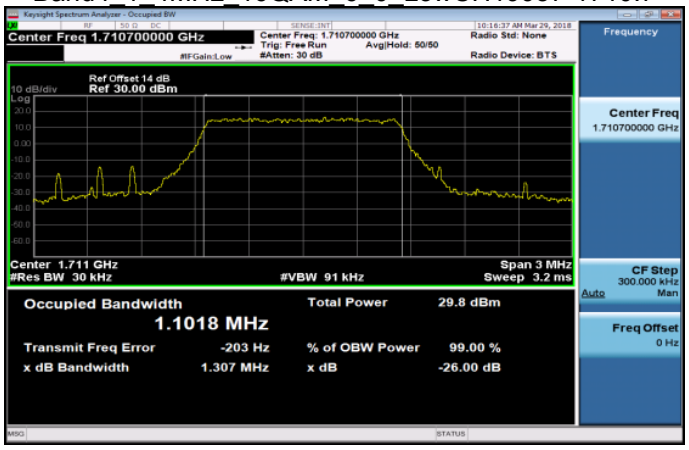
Band2_20MHz_16QAM_100_0_HighCH19100-1900



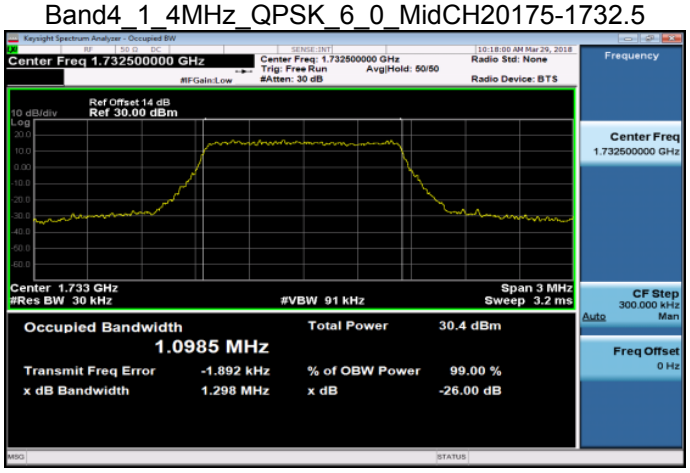
Band4_1_4MHz_QPSK_6_0_LowCH19957-1710.7



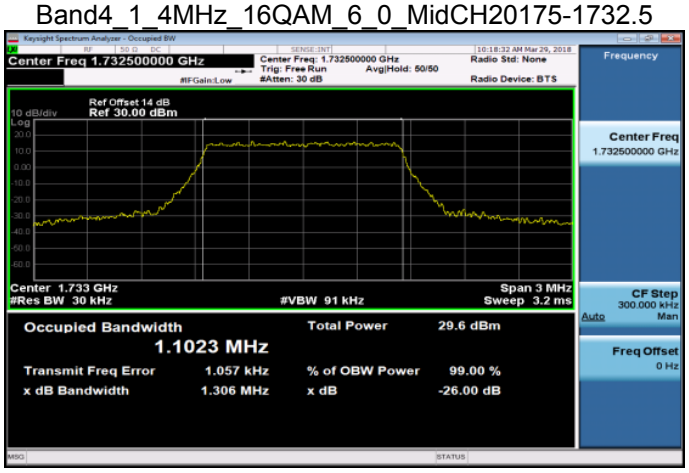
Band4_1_4MHz_16QAM_6_0_LowCH19957-1710.7



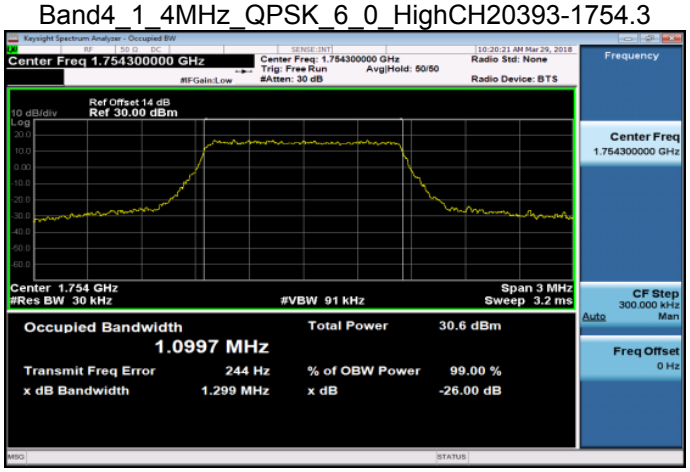
Band4_1_4MHz_QPSK_6_0_MidCH20175-1732.5



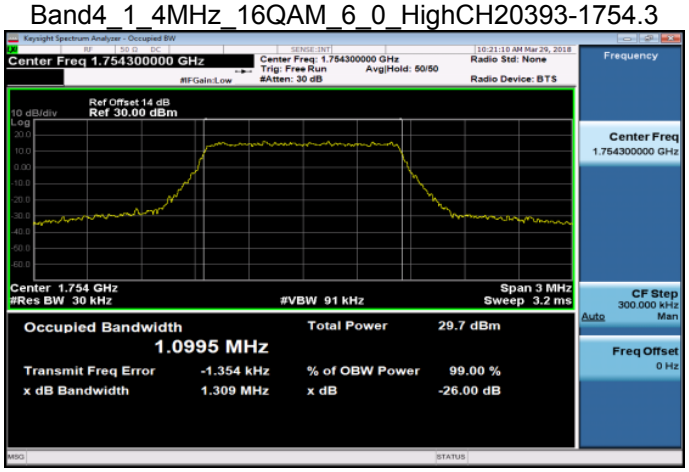
Band4_1_4MHz_16QAM_6_0_MidCH20175-1732.5



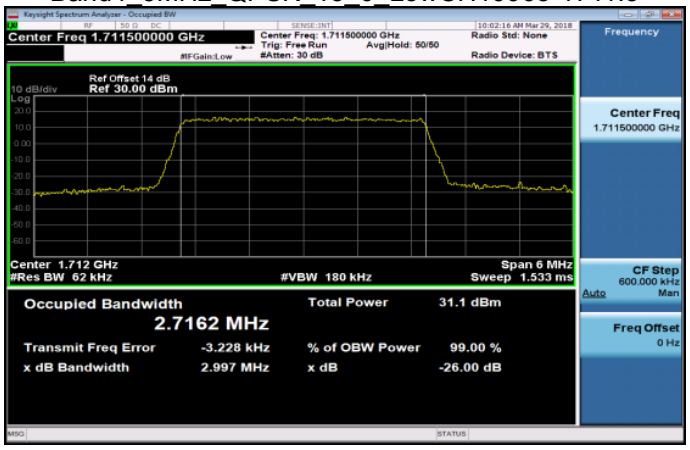
Band4_1_4MHz_QPSK_6_0_HighCH20393-1754.3



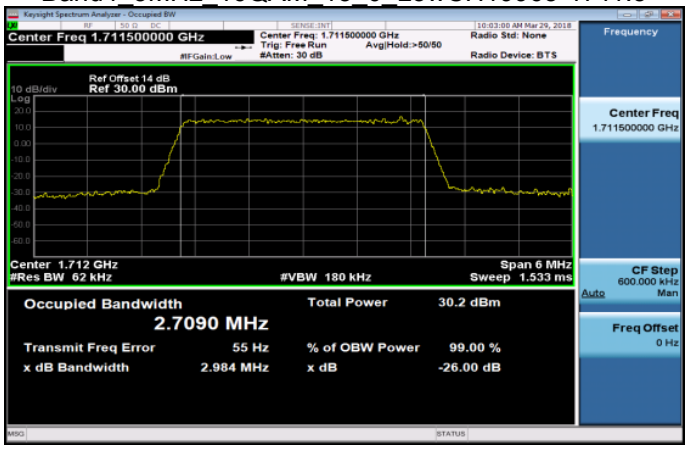
Band4_1_4MHz_16QAM_6_0_HighCH20393-1754.3



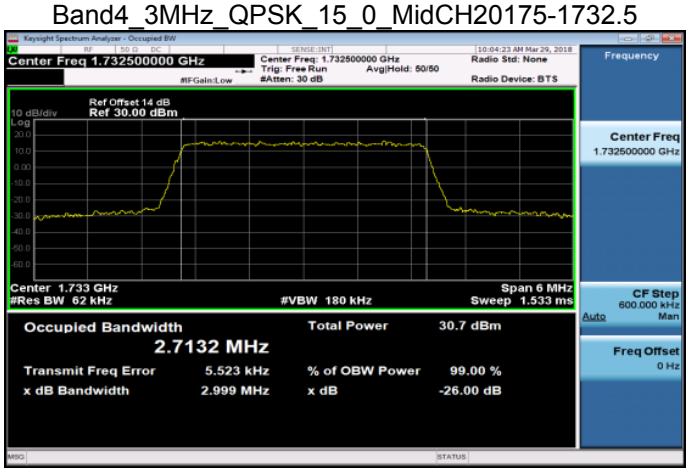
Band4_3MHz_QPSK_15_0_LowCH19965-1711.5



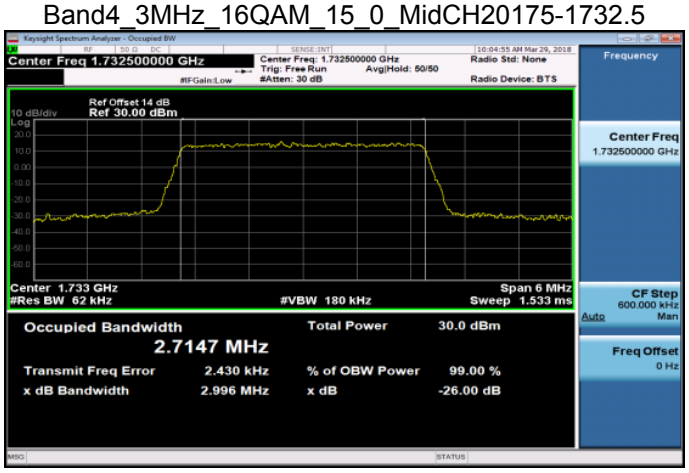
Band4_3MHz_16QAM_15_0_LowCH19965-1711.5



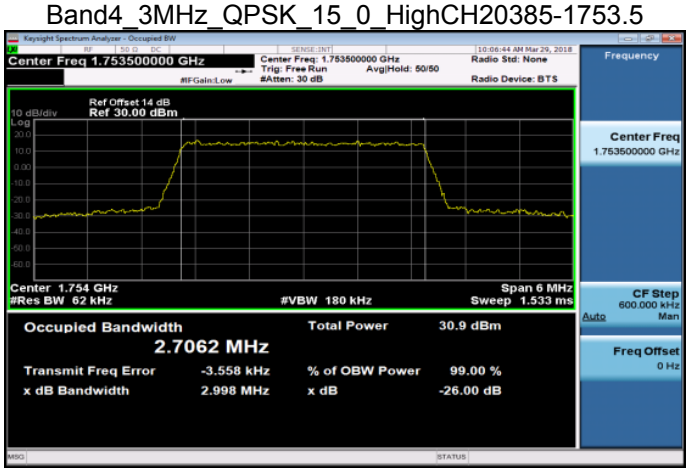
Band4_3MHz_QPSK_15_0_MidCH20175-1732.5



Band4_3MHz_16QAM_15_0_MidCH20175-1732.5



Band4_3MHz_QPSK_15_0_HighCH20385-1753.5



Band4_3MHz_16QAM_15_0_HighCH20385-1753.5