CERTIFICATION TEST REPORT

Report Number. : 4790632108-E2V3

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	SM-A546U, SM-A546U1, SM-S546VL
FCC ID	:	A3LSMA546U
EUT Description	:	GSM/WCDMA/LTE 5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC
Test Standard(s)	:	FCC CFR47 PART 22 SUBPART H FCC CFR47 PART 24 SUBPART E FCC CFR47 PART 27 SUBPART D,F,H,L,M,O,Q FCC CFR47 PART 90 SUBPART R,S

Date Of Issue:
2023-01-30

Prepared by:
UL Korea, Ltd.
26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea

Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433

IAS ACCREDITED Testing Laboratory TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2023-01-20	Initial issue	Yeonhee Lim
V2	2023-01-26	Updated to address TCB's question	Yeonhee Lim
V3	2023-01-30	Updated to address TCB's question	Yeonhee Lim

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

TABLE OF CONTENTS

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC.
MODEL NUMBER:	SM-A546U, SM-A546U1, SM-S546VL
SERIAL NUMBER:	R3CTB0F5SXA, R3CTB0F5X3M, R3CTB0F6AQJ (CONDUCTED); R3CTA0LTMAH, R3CTB0F5WGD, R3CTB0F5QVZ, (RADIATED);
DATE TESTED:	2022-11-01 - 2023-01-20;

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22H, 24E, 27D,F,H,L,M,O,Q and 90R,S	Complies

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Korea, Ltd. By:

Seokhwan Hong
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:

Yeonhee Lim
Suwon Lab Engineer
UL Korea, Ltd.

1.1. INTRODUCTION OF TEST DATA REUSE

This report referenced from the FCC ID: A3LSMA546V WWAN mode.
And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID.

1.2. DIFFERENCE

The A3LSMA546U model shares the same enclosure and circuit board as A3LSMA546V. The WWAN antennas and surrounding circuitry and layout are identical between these two units.

After confirming through preliminary radiated emissions that the performance of the A3LSMA546V remains representative of A3LSMA546U. The test data of A3LSMA546V being submitted for this application to cover WWAN features.

1.3. SPOT CHECK VERIFICATION DATA

(Worst case of the radiated band-edge and radiated spurious emissions)

Band	Test Item	Worst Mode	Frequency	Test Limit	Original model	Spot check model	Deviation	Remark
					SM-A546V Results	SM-A546U Results		
					FCC ID : A3LSMA546V	FCC ID : A3LSMA546U		
GSM 850	Fund(Legacy)	GPRS	824.2 MHz	38.50 dBm	32.87 dBm	32.46 dBm	-0.41 dB	
	RSE(Legacy)	GPRS	1697.6 MHz	-13.00 dBm	-26.90 dBm	-33.50 dBm	-6.60 dB	
GSM 1900	Fund(Legacy)	GPRS	1909.8 MHz	33.00 dBm	31.02 dBm	31.63 dBm	0.61 dB	
	RSE(Legacy)	GPRS	3819.6 MHz	-13.00 dBm	-16.50 dBm	-28.70 dBm	-12.20 dB	
WCDMA Band 2	Fund(Legacy)	REL 99	846.6 MHz	38.50 dBm	21.08 dBm	21.96 dBm	0.88 dB	
	RSE(Legacy)	REL 99	1693.2 MHz	-13.00 dBm	-51.80 dBm	-50.80 dBm	1.00 dB	
WCDMA Band 4	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
WCDMA Band 5	Fund(Legacy)	REL 99	1907.6 MHz	33.00 dBm	24.71 dBm	25.67 dBm	0.96 dB	
	RSE(Legacy)	REL 99	3815.2 MHz	-13.00 dBm	-39.40 dBm	-42.40 dBm	-3.00 dB	
LTE Band 2	Fund(Legacy)	20M_QPSK_FUND (RB 1/49)	1900.0 MHz	33.00 dBm	26.87 dBm	26.56 dBm	-0.31 dB	
	RSE(Legacy)	20M_QPSK_HARM (RB 1/49)	3800.0 MHz	-13.00 dBm	-34.00 dBm	-37.70 dBm	-3.70 dB	
LTE Band 2 (Sub Ant)	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 5	Fund(Legacy)	3M_QPSK_FUND (RB 1/8)	836.5 MHz	38.50 dBm	21.04 dBm	21.83 dBm	0.79 dB	
	RSE(Legacy)	3M_QPSK_HARM (RB 1/8)	1651.0 MHz	-13.00 dBm	-38.10 dBm	-49.10 dBm	-11.00 dB	
LTE Band 7	Fund(Legacy)	15M_QPSK_FUND (RB 1/0)	2535.0 MHz	33.00 dBm	22.60 dBm	22.22 dBm	-0.38 dB	
	RSE(Legacy)	15M_QPSK_HARM (RB 1/0)	5070.0 MHz	-25.00 dBm	-39.30 dBm	-41.00 dBm	-1.70 dB	
LTE Band 12	Fund(Legacy)	10M_QPSK_FUND (RB 1/25)	704.0 MHz	34.80 dBm	20.18 dBm	18.95 dBm	-1.23 dB	
	RSE(Legacy)	10M_QPSK_HARM (RB 1/49)	1415.0 MHz	-13.00 dBm	-55.20 dBm	-57.00 dBm	-1.80 dB	
LTE Band 13	Fund(Legacy)	10M_QPSK_FUND (RB 1/0)	782.0 MHz	34.80 dBm	21.53 dBm	22.17 dBm	0.64 dB	
	RSE(Legacy)	10M_QPSK_HARM (RB 1/0)	1564.0 MHz	-13.00 dBm	-54.50 dBm	-62.70 dBm	-8.20 dB	
LTE Band 13	Fund(Legacy)	10M_QPSK_FUND (RB 1/0)	782.0 MHz	34.80 dBm	21.53 dBm	22.17 dBm	0.64 dB	
	RSE(Legacy)	10M_QPSK_HARM (RB 1/0)	1564.0 MHz	-13.00 dBm	-54.50 dBm	-62.70 dBm	-8.20 dB	
LTE Band 14	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 25	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 26	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 30	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 40	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 41 (PC2)	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 66	Fund(Legacy)	5M_QPSK_FUND (RB 1/12)	1745.0 MHz	30.00 dBm	24.63 dBm	25.13 dBm	0.50 dB	
	RSE(Legacy)	5M_QPSK_HARM (RB 1/12)	3555.0 MHz	-13.00 dBm	-44.90 dBm	-49.50 dBm	-4.60 dB	
LTE Band 66 (Sub Ant)	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE Band 71	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
NR n2	Fund(Legacy)	15M_BPSK_FUND (RB 1/1)	1892.5 MHz	33.00 dBm	24.78 dBm	25.24 dBm	0.46 dB	
	RSE(Legacy)	15M_BPSK_FUND (RB 1/1)	3735.0 MHz	-13.00 dBm	-46.40 dBm	-48.00 dBm	-1.60 dB	
NR n5	Fund(Legacy)	25M_QPSK_FUND (RB 1/67)	836.5 MHz	38.50 dBm	20.88 dBm	19.61 dBm	-1.27 dB	
	RSE(Legacy)	25M_QPSK_HARM (RB 1/67)	1673.0 MHz	-13.00 dBm	-41.80 dBm	-57.10 dBm	-15.30 dB	
LTE n12	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE n25	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE n30	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
LTE n41 (PC2)	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
NR n66	Fund(Legacy)	40M_QPSK_FUND (RB 1/214)	1730.0 MHz	30.00 dBm	24.40 dBm	24.05 dBm	-0.35 dB	
	RSE(Legacy)	40M_QPSK_HARM (RB 1/214)	3490.0 MHz	-13.00 dBm	-35.60 dBm	-52.00 dBm	-16.40 dB	
LTE n71	Fund(Legacy)	-	-	-	-	-	-	Full test
	RSE(Legacy)	-	-	-	-	-	-	Full test
NR n77(PC2)_Low	Fund(Legacy)	60M_QPSK_FUND (RB 1/81)	3519.0 MHz	30.00 dBm	25.50 dBm	24.16 dBm	-1.34 dB	
	RSE(Legacy)	60M_QPSK_HARM (RB 1/81)	7000.0 MHz	-13.00 dBm	-41.80 dBm	-43.93 dBm	-2.13 dB	
NR n77(PC2)_Low SRS1	Fund(Legacy)	10M_FUND	3544.0 MHz	30.00 dBm	7.36 dBm	7.61 dBm	0.25 dB	
	RSE(Legacy)	10M_HARM_NF	13820.0 MHz	-13.00 dBm	-35.80 dBm	-37.98 dBm	-2.18 dB	Noise Floor
NR n77(PC2)_Low SRS2	Fund(Legacy)	60M_FUND	3480.0 MHz	30.00 dBm	21.68 dBm	20.34 dBm	-1.34 dB	
	RSE(Legacy)	60M_HARM_NF	14076.0 MHz	-13.00 dBm	-37.10 dBm	-38.36 dBm	-1.26 dB	Noise Floor
NR n77(PC2)_Low SRS3	Fund(Legacy)	50M_FUND	3524.0 MHz	30.00 dBm	8.80 dBm	7.82 dBm	-0.98 dB	
	RSE(Legacy)	50M_HARM_NF	14096.0 MHz	-13.00 dBm	-35.50 dBm	-37.93 dBm	-2.43 dB	Noise Floor
NR n77(PC2)_High	Fund(Legacy)	30M_QPSK_FUND (RB 1/1)	3965.0 MHz	30.00 dBm	28.79 dBm	29.22 dBm	0.43 dB	
	RSE(Legacy)	30M_QPSK_HARM (RB 1/1)	7930.0 MHz	-13.00 dBm	-22.20 dBm	-20.91 dBm	1.29 dB	
NR n77(PC2)_High SRS1	Fund(Legacy)	70M_FUND	3735.0 MHz	30.00 dBm	16.37 dBm	16.91 dBm	0.54 dB	
	RSE(Legacy)	70M_HARM	7890.0 MHz	-13.00 dBm	-26.50 dBm	-24.01 dBm	2.49 dB	
NR n77(PC2)_High SRS2	Fund(Legacy)	30M_FUND	3735.0 MHz	30.00 dBm	17.83 dBm	17.49 dBm	-0.34 dB	
	RSE(Legacy)	30M_HARM	7430.0 MHz	-13.00 dBm	-45.40 dBm	-44.99 dBm	0.41 dB	
NR n77(PC2)_High SRS3	Fund(Legacy)	90M_FUND	3745.0 MHz	30.00 dBm	11.39 dBm	11.55 dBm	0.16 dB	
	RSE(Legacy)	90M_HARM_NF	15740.0 MHz	-13.00 dBm	-36.20 dBm	-36.10 dBm	0.10 dB	Noise Floor

Comparison of two models, upper deviation is within 3 dB range and all test results are under FCC Technical Limits.

1.4. REFERENCE DETAIL

Reference application that contains the reused reference data in the individual test reports:

Equipment Class	Reference FCC ID (Parent)	Application Type	Reference Test report number	Exhibit Type	Variant Test Report Number	Data Re-used
PCE	A3LSMA546V	Original Grant	4790632299-E2 (WWAN)	Test Report	4790632108-E2 (WWAN)	Partial
DTS	A3LSMA546V	Original Grant	4790632299-E3 (802.11b/g/n/ax)	Test Report	4790632108-E3 (802.11b/g/n/ax)	All
NII	A3LSMA546V	Original Grant	4790632299-E4 (Bluetooth LE)	Test Report	4790632108-E4 (Bluetooth LE)	All
DSS	A3LSMA546V	Original Grant	4790632299-E5 (Bluetooth)	Test Report	4790632108-E5 (Bluetooth)	All
NII	A3LSMA546V	Original Grant	4790632299-E6 (802.11a/n/ac/ax)	Test Report	4790632108-E6 (802.11a/n/ac/ax)	All
DXX	A3LSMA546V	Original Grant	4790632299-E7 (NFC)	Test Report	4790632108-E7 (NFC)	All
CBE	A3LSMA546V	Original Grant	4790632299-E8 (CBE)	Test Report	4790632108-E7 (CBE)	All

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 22.
3. FCC CFR 47 Part 24.
4. FCC CFR 47 Part 27.
5. FCC CFR 47 Part 90.
6. ANSI TIA-603-E, 2016
7. ANSI C63.26, 2015
8. KDB 971168 D01 Power Meas License Digital Systems v03r01

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do,16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro
☒ Chamber 1(3m semi-anechoic chamber)
☒ Chamber 2(3m semi-anechoic chamber)
☐ Chamber 3(3m semi-anechoic chamber)
☒ Chamber 4(3m Full-anechoic chamber)
☐ Chamber 5(3m Full-anechoic chamber)

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

EIRP = PSA reading with EUT worst orientation (dBm) + Path loss (dB) – cable loss(between the SG and substitution antenna) + Substitution Antenna Factor (dBi)

ERP = PSA reading with EUT worst orientation (dBm) + Path loss (dB) – cable loss(between the SG and substitution antenna)

(Path loss = Signal generator output – PSA reading with substitution antenna)

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	2.80 dB
Radiated Disturbance, 30 MHz to 1 GHz	3.92 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.06 dB
Radiated Disturbance, 18 GHz to 40 GHz	6.02 dB

Uncertainty figures are valid to a confidence level of 95%.

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2021.

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac and NFC.
This test report addresses the WWAN operational mode.

Representative model	Difference	Derivative model	
		SM-A546U1	SM-S546VL
SM-A546U	Hardware	Same as SM-A546U	Same as SM-A546U
	Software	Same as SM-A546U	Different from SM-A546U (Exclude some of the main band)

Thus, SM-A546U was set for final test.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum average radiated ERP / EIRP output powers as follows:
Radiated samples were set to a higher power than conducted resulting in radiated EIRP/ERP greater than conducted measurements.

GSM

FCC Part 22/24						
Band	Frequency Range [MHz]	Modulation	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
GSM850	824~849	GPRS	**33.06**	**2023.02**	**32.87**	**1936.42**
		EGPRS	26.24	420.73	27.37	545.76
GSM1900	1850~1910	GPRS	**30.46**	**1111.73**	**31.02**	**1264.74**
		EGPRS	26.10	407.38	29.64	920.45

WCDMA

FCC Part 22/24/27						
Band	Frequency Range [MHz]	Modulation	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 5	824~849	Rel. 99	**23.69**	**233.88**	**21.08**	**128.23**
		HSDPA	22.71	186.64	19.32	85.51
Band 4	1710~1755	Rel. 99	**23.16**	**207.01**	24.84	304.64
		HSDPA	23.10	204.17	**25.38**	**344.97**
Band 2	1850~1910	Rel. 99	22.96	197.70	**24.71**	**295.80**
		HSDPA	**23.03**	**200.91**	23.96	248.89

LTE Band 2 (Sub ANT)

FCC Part 24							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 2	1860.0 ~1900.0	20	QPSK	21.81	151.71	**21.52**	**141.93**
			16QAM	**21.97**	**157.40**	21.24	133.07
			64QAM	21.96	157.04		
			256QAM	19.34	85.90		
	1857.5 ~ 1902.5	15	QPSK	21.25	133.35		
			16QAM	21.69	147.57		
			64QAM	20.73	118.30		
			256QAM	19.27	84.53		
	1855.0 ~ 1905.0	10	QPSK	21.39	137.72		
			16QAM	**21.97**	**157.40**		
			64QAM	21.63	145.55		
			256QAM	18.79	75.68		
	1852.5 ~ 1907.5	5	QPSK	21.15	130.32		
			16QAM	21.96	157.04		
			64QAM	21.77	150.31		
			256QAM	19.73	93.97		
	1851.5 ~ 1908.5	3	QPSK	21.50	141.25		
			16QAM	21.54	142.56		
			64QAM	21.44	139.32		
			256QAM	18.91	77.80		
	1850.7 ~ 1909.3	1.4	QPSK	21.27	133.97		
			16QAM	21.32	135.52		
			64QAM	21.58	143.88		
			256QAM	18.16	65.46		

LTE Band 7

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 7	2510 - 2680	20	QPSK	**23.24**	**210.86**	22.28	169.04
			16QAM	22.51	178.24	21.39	137.72
			64QAM	21.29	134.59		
			256QAM	18.17	65.61		
	2507.5 - 2562.5	15	QPSK	23.14	206.06	**22.60**	**181.97**
			16QAM	22.31	170.22	21.65	146.22
			64QAM	21.33	135.83		
			256QAM	18.10	64.57		
	2505 - 2565	10	QPSK	23.17	207.49	22.29	169.43
			16QAM	22.20	165.96	21.44	139.32
			64QAM	21.07	127.94		
			256QAM	18.21	66.22		
	2502.5 - 2567.5	5	QPSK	22.97	198.15	22.58	181.13
			16QAM	22.20	165.96	21.29	134.59
			64QAM	21.08	128.23		
			256QAM	18.06	63.97		

LTE Band 12

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 12	704 - 711	10	QPSK	**24.21**	**263.63**	**20.18**	**104.23**
			16QAM	23.50	223.87	19.02	79.80
			64QAM	22.40	173.78		
			256QAM	19.48	88.72		
	701.5 - 713.5	5	QPSK	24.16	260.62	20.03	100.69
			16QAM	23.42	219.79	19.07	80.72
			64QAM	22.35	171.79		
			256QAM	19.20	83.18		
	700.5 - 714.5	3	QPSK	24.12	258.23	19.94	98.63
			16QAM	23.34	215.77	19.03	79.98
			64QAM	22.31	170.22		
			256QAM	19.37	86.50		
	699.7 - 715.3	1.4	QPSK	24.09	256.45	18.89	77.45
			16QAM	23.39	218.27	17.57	57.15
			64QAM	22.48	177.01		
			256QAM	19.31	85.31		

LTE Band 13

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 13	782	10	QPSK	**23.58**	**228.03**	**21.53**	**142.23**
			16QAM	22.88	194.09	20.18	104.23
			64QAM	21.67	146.89		
			256QAM	18.85	76.74		
	779.5 - 784.5	5	QPSK	23.57	227.51	21.47	140.28
			16QAM	22.99	199.07	20.43	110.41
			64QAM	21.82	152.05		
			256QAM	18.64	73.11		

LTE Band 14

FCC Part 90							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 14	793	10	QPSK	**23.79**	**239.33**	20.35	108.46
			16QAM	23.13	205.59	19.15	82.28
			64QAM	21.47	140.28		
			256QAM	18.84	76.56		
	790.5 - 795.5	5	QPSK	23.76	237.68	**20.48**	**111.81**
			16QAM	22.97	198.15	19.22	83.65
			64QAM	21.72	148.59		
			256QAM	19.00	79.43		

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 25

FCC Part 24							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 25	1860 - 1905	20	QPSK	24.26	266.69	**26.69**	**467.01**
			16QAM	23.56	226.99	25.71	372.67
			64QAM	22.29	169.43		
			256QAM	19.27	84.53		
	1857.5 - 1907.5	15	QPSK	**24.58**	**287.08**	25.79	379.21
			16QAM	23.98	250.03	25.14	326.72
			64QAM	22.70	186.21		
			256QAM	19.90	97.72		
	1855 - 1910	10	QPSK	24.57	286.42	26.33	429.71
			16QAM	23.84	242.10	25.54	358.24
			64QAM	22.76	188.80		
			256QAM	19.99	99.77		
	1852.5 - 1912.5	5	QPSK	24.44	277.97	26.13	410.37
			16QAM	23.73	236.05	25.38	345.28
			64QAM	22.57	180.72		
			256QAM	19.47	88.51		
	1851.5 - 1913.5	3	QPSK	24.57	286.42	25.69	370.83
			16QAM	23.81	240.44	25.04	319.28
			64QAM	22.48	177.01		
			256QAM	19.55	90.16		
	1850.7 - 1914.3	1.4	QPSK	24.43	277.33	26.09	406.61
			16QAM	23.63	230.67	25.39	346.08
			64QAM	22.57	180.72		
			256QAM	19.43	87.70		

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 26 (Part90)

FCC Part 90							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 26	821.5	15	QPSK	24.36	272.90	20.44	110.76
			16QAM	23.45	221.31	19.48	88.80
			64QAM	22.50	177.83		
			256QAM	19.74	94.19		
	819	10	QPSK	24.67	293.09	20.51	112.51
			16QAM	23.89	244.91	19.21	83.41
			64QAM	22.82	191.43		
			256QAM	19.84	96.38		
	816.5 - 821.5	5	QPSK	24.53	283.79	20.56	113.84
			16QAM	23.92	246.60	19.35	86.16
			64QAM	22.45	175.79		
			256QAM	19.87	97.05		
	815.5 - 822.5	3	QPSK	**24.84**	**304.79**	20.45	110.98
			16QAM	23.73	236.05	19.30	85.16
			64QAM	22.59	181.55		
			256QAM	19.66	92.47		
	814.7 - 823.3	1.4	QPSK	24.59	287.74	**20.61**	**114.97**
			16QAM	23.54	225.94	19.32	85.43
			64QAM	22.57	180.72		
			256QAM	19.51	89.33		

LTE Band 26 (Straddle)

Straddle							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 26	824	15	QPSK	24.44	277.97	21.10	128.72
			16QAM	23.57	227.51	19.88	97.20
			64QAM	22.50	177.83		
			256QAM	19.67	92.68		
		10	QPSK	**24.69**	**294.44**	20.58	114.20
			16QAM	23.94	247.74	19.56	90.42
			64QAM	22.86	193.20		
			256QAM	19.94	98.63		
		5	QPSK	24.66	292.42	**21.46**	**139.85**
			16QAM	23.96	248.89	20.47	111.34
			64QAM	22.63	183.23		
			256QAM	19.76	94.62		
		3	QPSK	24.67	293.09	20.47	111.34
			16QAM	23.86	243.22	19.33	85.63
			64QAM	22.78	189.67		
			256QAM	19.84	96.38		
		1.4	QPSK	24.63	290.40	20.68	116.86
			16QAM	23.69	233.88	19.62	91.71
			64QAM	22.78	189.67		
			256QAM	19.78	95.06		

LTE Band 26 (Part22)

FCC Part 22							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 26	831.5 ~ 841.5	15	QPSK	24.49	281.19	21.76	150.10
			16QAM	23.78	238.78	21.06	127.76
			64QAM	22.32	170.61		
			256QAM	19.48	88.72		
	829 ~ 844	10	QPSK	24.49	281.19	21.64	145.85
			16QAM	23.75	237.14	20.51	112.44
			64QAM	22.76	188.80		
			256QAM	19.86	96.83		
	826.5 ~ 846.5	5	QPSK	24.50	281.84	**21.89**	**154.35**
			16QAM	23.79	239.33	20.72	117.90
			64QAM	22.60	181.97		
			256QAM	19.75	94.41		
	825.5 ~ 847.5	3	QPSK	**24.67**	**293.09**	21.16	130.58
			16QAM	23.81	240.44	19.88	97.25
			64QAM	22.41	174.18		
			256QAM	19.59	90.99		
	824.7 ~ 848.3	1.4	QPSK	24.40	275.42	21.39	137.77
			16QAM	23.68	233.35	20.23	105.48
			64QAM	22.48	177.01		
			256QAM	19.57	90.57		

LTE Band 30

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 30	2310	10	QPSK	23.01	199.99	22.23	167.26
			16QAM	22.47	176.60	21.49	141.06
			64QAM	21.53	142.23		
			256QAM	18.99	79.25		
	2307.5 - 2312.5	5	QPSK	**23.70**	**234.42**	**22.26**	**168.42**
			16QAM	22.66	184.50	21.79	151.08
			64QAM	21.57	143.55		
			256QAM	19.00	79.43		

LTE Band 40

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 40	2310	10	QPSK	12.96	19.77	12.42	17.47
			16QAM	13.23	21.04	12.09	16.20
			64QAM	12.99	19.91		
			256QAM	13.04	20.14		
	2355		QPSK	13.44	22.08	12.91	19.56
			16QAM	**13.55**	**22.65**	12.43	17.51
			64QAM	13.39	21.83		
			256QAM	13.38	21.78		
	2307.5 - 2312.5	5	QPSK	13.20	20.89	12.48	17.72
			16QAM	13.10	20.42	11.88	15.43
			64QAM	13.18	20.80		
			256QAM	13.24	21.09		
	2352.5 - 2357.5		QPSK	13.44	22.08	**13.33**	**21.54**
			16QAM	13.38	21.78	12.90	19.51
			64QAM	13.53	22.54		
			256QAM	13.45	22.13		

LTE Band 41 (PC2)

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 41	2506 - 2680	20	QPSK	26.65	462.38	25.33	341.35
			16QAM	25.59	362.24	24.04	253.63
			64QAM	24.51	282.49		
			256QAM	21.88	154.17		
	2503.5 - 2682.5	15	QPSK	26.83	481.95	25.23	333.58
			16QAM	25.98	396.28	24.10	257.15
			64QAM	24.99	315.50		
			256QAM	21.85	153.11		
	2501 - 2685	10	QPSK	**26.99**	**500.03**	**25.92**	**391.02**
			16QAM	25.98	396.28	24.96	313.47
			64QAM	24.46	279.25		
			256QAM	21.89	154.53		
	2498.5 - 2687.5	5	QPSK	26.66	463.45	23.58	228.14
			16QAM	25.81	381.07	22.72	187.15
			64QAM	24.94	311.89		
			256QAM	21.80	151.36		

LTE Band 41C (ULCA)

Frequency Range (MHz)	Bandwidth (MHz)	Modulation	Output Power				
			Conducted Average Power	Antenna Gain	EIRP Average Power		Margin
			(dBm)	dBi	dBm	mW	
2496 - 2690	40MHz (20+20)	QPSK	26.63	-3.50	23.13	205.59	-9.87
		16QAM	26.73		23.23	210.38	-9.77
	35MHz (15+20)	QPSK	26.71		23.21	209.41	-9.79
		16QAM	26.72		23.22	209.89	-9.78
	30MHz (15+15)	QPSK	26.69		23.19	208.45	-9.81
		16QAM	26.62		23.12	205.12	-9.88
	25MHz (5+20)	QPSK	26.43		22.93	196.34	-10.07
		16QAM	26.3		22.8	190.55	-10.2

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 66

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 66	1720 - 1770	20	QPSK	**24.31**	**269.77**	24.38	274.16
			16QAM	23.47	222.33	23.70	234.42
			64QAM	21.86	153.46		
			256QAM	18.82	76.21		
	1717.5 - 1772.5	15	QPSK	24.23	264.85	23.97	249.46
			16QAM	23.62	230.14	23.29	213.30
			64QAM	21.82	152.05		
			256QAM	19.24	83.95		
	1715 - 1775	10	QPSK	24.03	252.93	24.50	281.84
			16QAM	23.01	199.99	23.57	227.51
			64QAM	22.04	159.96		
			256QAM	19.12	81.66		
	1712.5 - 1777.5	5	QPSK	23.88	244.34	**24.63**	**290.40**
			16QAM	23.15	206.54	23.62	230.14
			64QAM	22.14	163.68		
			256QAM	19.08	80.91		
	1711.5 - 1778.5	3	QPSK	24.02	252.35	24.20	263.03
			16QAM	23.16	207.01	23.43	220.29
			64QAM	21.93	155.96		
			256QAM	19.06	80.54		
	1710.7 - 1779.3	1.4	QPSK	24.18	261.82	24.14	259.42
			16QAM	23.48	222.84	23.70	234.42
			64QAM	21.90	154.88		
			256QAM	19.01	79.62		

LTE Band 66 (Sub ANT)

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 66	1720 - 1770	20	QPSK	21.25	133.35		
			16QAM	21.31	135.21		
			64QAM	21.15	130.32		
			256QAM	18.88	77.27		
	1717.5 - 1772.5	15	QPSK	21.44	139.32		
			16QAM	**21.50**	**141.25**		
			64QAM	21.48	140.60		
			256QAM	18.89	77.45		
	1715 - 1775	10	QPSK	21.40	138.04		
			16QAM	21.48	140.60		
			64QAM	20.99	125.60		
			256QAM	19.45	88.10		
	1712.5 - 1777.5	5	QPSK	21.47	140.28	21.70	148.01
			16QAM	21.46	139.96	21.40	138.13
			64QAM	21.10	128.82		
			256QAM	19.17	82.60		
	1711.5 - 1778.5	3	QPSK	21.49	140.93		
			16QAM	21.48	140.60		
			64QAM	21.48	140.60		
			256QAM	19.08	80.91		
	1710.7 - 1779.3	1.4	QPSK	21.49	140.93		
			16QAM	21.48	140.60		
			64QAM	21.47	140.28		
			256QAM	18.92	77.98		

LTE Band 71

FCC Part 27							
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
				Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 71	673.0 - 688.0	20	QPSK	24.64	291.07	20.49	111.83
			16QAM	23.85	242.66	19.51	89.24
			64QAM	22.38	172.98		
			256QAM	19.52	89.54		
	670.5 - 690.5	15	QPSK	24.66	292.42	20.62	115.23
			16QAM	23.60	229.09	19.58	90.69
			64QAM	22.66	184.50		
			256QAM	19.84	96.38		
	668.0 - 693.0	10	QPSK	**24.82**	**303.39**	20.81	120.47
			16QAM	23.89	244.91	19.88	97.25
			64QAM	22.61	182.39		
			256QAM	19.83	96.16		
	665.5 - 695.5	5	QPSK	24.19	262.42	**21.39**	**137.58**
			16QAM	23.37	217.27	20.20	104.61
			64QAM	22.18	165.20		
			256QAM	19.17	82.60		

NR Band n5

FCC Part 22								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n5	834 - 839	20	DFT-s OFDM	π/2 BPSK	24.28	267.92		
				QPSK	24.36	272.90	**20.55**	**113.50**
				16QAM	23.43	220.29	19.29	84.92
				64QAM	21.85	153.11		
				256QAM	19.75	94.41		
			CP-OFDM	QPSK	22.78	189.67		
	831.5 - 841.5	15	DFT-s OFDM	π/2 BPSK	24.30	269.15		
				QPSK	24.33	271.02	20.27	106.41
				16QAM	23.45	221.31	19.01	79.62
				64QAM	21.91	155.24		
				256QAM	19.74	94.19		
			CP-OFDM	QPSK	22.87	193.64		
	829 - 844	10	DFT-s OFDM	π/2 BPSK	24.36	272.90		
				QPSK	24.38	274.16	20.28	106.66
				16QAM	23.41	219.28	19.02	79.80
				64QAM	21.92	155.60		
				256QAM	19.86	96.83		
			CP-OFDM	QPSK	22.87	193.64		
	826.5 - 846.5	5	DFT-s OFDM	π/2 BPSK	24.36	272.90		
				QPSK	**24.39**	**274.79**	20.12	102.80
				16QAM	23.47	222.33	18.77	75.34
				64QAM	21.85	153.11		
				256QAM	19.74	94.19		
			CP-OFDM	QPSK	22.94	196.79		

NR Band n12

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n12	706.5 - 708.5	15	DFT-s OFDM	π/2 BPSK	24.39	274.79		
				QPSK	24.42	276.69	19.32	85.60
				16QAM	23.48	222.84	18.37	68.78
				64QAM	21.96	157.04		
				256QAM	19.96	99.08		
			CP-OFDM	QPSK	22.95	197.24		
	704 - 711	10	DFT-s OFDM	π/2 BPSK	24.43	277.33		
				QPSK	**24.51**	**282.49**	19.69	93.01
				16QAM	23.45	221.31	18.70	74.05
				64QAM	22.01	158.85		
				256QAM	19.93	98.40		
			CP-OFDM	QPSK	22.96	197.70		
	701.5 - 713.5	5	DFT-s OFDM	π/2 BPSK	24.49	281.19		
				QPSK	24.48	280.54	**19.90**	**97.78**
				16QAM	23.58	228.03	18.77	75.41
				64QAM	22.06	160.69		
				256QAM	19.86	96.83		
			CP-OFDM	QPSK	23.03	200.91		

NR Band n25

FCC Part 24								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n25	1870 - 1895	40	DFT-s OFDM	π/2 BPSK	24.58	287.08		
				QPSK	24.54	284.45	26.18	414.53
				16QAM	23.64	231.21	25.51	355.27
				64QAM	22.07	161.06		
				256QAM	20.06	101.39		
			CP-OFDM	QPSK	23.02	200.45		
	1865 - 1900	30	DFT-s OFDM	π/2 BPSK	24.51	282.49		
				QPSK	24.60	288.40	26.08	405.34
				16QAM	23.64	231.21	25.50	354.66
				64QAM	22.20	165.96		
				256QAM	20.16	103.75		
			CP-OFDM	QPSK	22.96	197.70		
	1862.5 - 1902.5	25	DFT-s OFDM	π/2 BPSK	24.57	286.42		
				QPSK	24.56	285.76	**27.04**	**505.38**
				16QAM	23.58	228.03	26.21	417.46
				64QAM	22.11	162.55		
				256QAM	20.11	102.57		
			CP-OFDM	QPSK	23.09	203.70		
	1860 - 1905	20	DFT-s OFDM	π/2 BPSK	24.54	284.45		
				QPSK	24.46	279.25	26.50	447.02
				16QAM	23.54	225.94	25.43	349.40
				64QAM	22.13	163.31		
				256QAM	20.20	104.71		
			CP-OFDM	QPSK	22.97	198.15		
	1857.5 - 1907.5	15	DFT-s OFDM	π/2 BPSK	24.54	284.45		
				QPSK	24.43	277.33	26.07	404.17
				16QAM	23.57	227.51	25.32	340.07
				64QAM	22.09	161.81		
				256QAM	20.21	104.95		
			CP-OFDM	QPSK	23.05	201.84		
	1855 - 1910	10	DFT-s OFDM	π/2 BPSK	**24.66**	**292.42**		
				QPSK	24.63	290.40	26.67	464.14
				16QAM	23.60	229.09	26.15	411.76
				64QAM	22.26	168.27		
				256QAM	20.16	103.75		
			CP-OFDM	QPSK	23.20	208.93		
	1852.5 - 1912.5	5	DFT-s OFDM	π/2 BPSK	24.54	284.45		
				QPSK	24.47	279.90	26.34	430.70
				16QAM	23.53	225.42	25.23	333.56
				64QAM	22.22	166.72		
				256QAM	20.23	105.44		
			CP-OFDM	QPSK	23.15	206.54		

NR Band n30

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n30	2310	10	DFT-s OFDM	π/2 BPSK	23.56	226.99		
				QPSK	23.59	228.56	21.62	145.12
				16QAM	21.91	155.24	20.97	124.95
				64QAM	21.00	125.89		
				256QAM	19.03	79.98		
			CP-OFDM	QPSK	21.55	142.89		
	2307.5 - 2312.5	5	DFT-s OFDM	π/2 BPSK	23.58	228.03		
				QPSK	**23.63**	**230.67**	**22.87**	**193.53**
				16QAM	22.70	186.21	21.89	154.47
				64QAM	21.16	130.62		
				256QAM	19.05	80.35		
			CP-OFDM	QPSK	21.87	153.82		

NR Band n41 (PC2)

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n41	2546.01~2640	100	DFT-s OFDM	π/2 BPSK	26.34	430.26		
				QPSK	26.21	417.70	24.40	275.42
				16QAM	24.97	314.35	23.31	214.29
				64QAM	23.65	231.77		
				256QAM	21.51	141.52		
			CP-OFDM	QPSK	24.41	275.87		
	2541~2644.98	90	DFT-s OFDM	π/2 BPSK	26.47	444.02		
				QPSK	26.36	432.70	24.37	273.62
				16QAM	25.22	332.87	23.36	216.85
				64QAM	23.58	227.95		
				256QAM	21.71	148.23		
			CP-OFDM	QPSK	24.62	289.88		
	2536.02~2649.99	80	DFT-s OFDM	π/2 BPSK	26.72	470.16		
				QPSK	26.54	451.26	24.26	266.55
				16QAM	25.27	336.46	23.24	210.75
				64QAM	23.92	246.42		
				256QAM	21.72	148.75		
			CP-OFDM	QPSK	24.75	298.51		
	2531.02~2644.98	70	DFT-s OFDM	π/2 BPSK	26.77	475.22		
				QPSK	**26.79**	**477.39**	24.90	308.84
				16QAM	25.53	357.39	23.96	248.73
				64QAM	24.03	252.74		
				256QAM	21.93	156.04		
			CP-OFDM	QPSK	24.90	309.09		
	2526~2659.98	60	DFT-s OFDM	π/2 BPSK	26.73	470.70		
				QPSK	26.73	471.37	**25.00**	**316.03**
				16QAM	25.46	351.37	23.98	249.88
				64QAM	23.99	250.55		
				256QAM	21.86	153.55		
			CP-OFDM	QPSK	24.90	309.07		
	2521.01~2665	50	DFT-s OFDM	π/2 BPSK	26.77	474.95		
				QPSK	26.79	477.22	24.40	275.51
				16QAM	25.49	354.35	23.38	217.84
				64QAM	24.22	264.47		
				256QAM	22.04	159.81		
			CP-OFDM	QPSK	24.87	307.09		
	2516.01~2670	40	DFT-s OFDM	π/2 BPSK	26.51	447.52		
				QPSK	26.46	442.73	23.81	240.29
				16QAM	25.54	358.23	22.99	198.94
				64QAM	23.94	247.72		
				256QAM	21.93	156.02		
			CP-OFDM	QPSK	24.89	308.47		
	2511~2675	30	DFT-s OFDM	π/2 BPSK	26.51	448.18		
				QPSK	26.46	442.74	24.09	256.29
				16QAM	25.67	369.23	23.23	210.25
				64QAM	23.88	244.16		
				256QAM	21.96	156.95		
			CP-OFDM	QPSK	24.97	313.82		
	2506.02~2679.99	20	DFT-s OFDM	π/2 BPSK	26.58	455.23		
				QPSK	26.34	430.37	24.57	286.53
				16QAM	25.46	351.51	23.55	226.55
				64QAM	24.24	265.22		
				256QAM	22.18	165.21		
			CP-OFDM	QPSK	25.05	320.21		
	2503.5~2682.48	15	DFT-s OFDM	π/2 BPSK	26.64	461.78		
				QPSK	26.17	414.12	22.77	189.26
				16QAM	25.41	347.21	22.41	174.20
				64QAM	24.38	274.18		
				256QAM	22.02	159.27		
			CP-OFDM	QPSK	24.97	313.84		
	2501.01~2685	10	DFT-s OFDM	π/2 BPSK	26.42	438.04		
				QPSK	26.30	426.50	24.56	285.59
				16QAM	25.27	336.34	23.63	230.54
				64QAM	23.97	249.71		
				256QAM	22.00	158.49		
			CP-OFDM	QPSK	24.78	300.67		

NR Band n66

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n66	1730.0 - 1760.0	40	DFT-s OFDM	π/2 BPSK	24.38	274.16		
				QPSK	24.40	275.42	**24.40**	**275.42**
				16QAM	23.40	218.78	23.67	232.81
				64QAM	21.48	140.60		
				256QAM	19.41	87.30		
			CP-OFDM	QPSK	22.44	175.39		
	1725.0 - 1765.0	30	DFT-s OFDM	π/2 BPSK	24.42	276.69		
				QPSK	**24.44**	**277.97**	23.75	237.14
				16QAM	23.28	212.81	23.08	203.24
				64QAM	21.76	149.97		
				256QAM	19.66	92.47		
			CP-OFDM	QPSK	22.74	187.93		
	1722.5 - 1767.5	25	DFT-s OFDM	π/2 BPSK	24.41	276.06		
				QPSK	24.42	276.69	24.08	255.86
				16QAM	23.28	212.81	22.87	193.64
				64QAM	22.05	160.32		
				256QAM	19.90	97.72		
			CP-OFDM	QPSK	22.95	197.24		
	1720.0 - 1770.0	20	DFT-s OFDM	π/2 BPSK	23.90	245.47		
				QPSK	24.01	251.77	23.11	204.64
				16QAM	23.02	200.45	22.57	180.72
				64QAM	21.25	133.35		
				256QAM	19.05	80.35		
			CP-OFDM	QPSK	22.14	163.68		
	1717.5 - 1772.5	15	DFT-s OFDM	π/2 BPSK	23.95	248.31		
				QPSK	23.94	247.74	23.75	237.14
				16QAM	22.90	194.98	22.73	187.50
				64QAM	21.54	142.56		
				256QAM	19.30	85.11		
			CP-OFDM	QPSK	22.38	172.98		
	1715.0 - 1775.0	10	DFT-s OFDM	π/2 BPSK	23.71	234.96		
				QPSK	23.70	234.42	23.88	244.34
				16QAM	22.75	188.36	22.98	198.61
				64QAM	21.25	133.35		
				256QAM	19.23	83.75		
			CP-OFDM	QPSK	22.20	165.96		
	1712.5 - 1777.5	5	DFT-s OFDM	π/2 BPSK	23.84	242.10		
				QPSK	23.85	242.66	23.48	222.84
				16QAM	22.89	194.54	23.01	199.99
				64QAM	21.36	136.77		
				256QAM	19.29	84.92		
			CP-OFDM	QPSK	22.31	170.22		

NR Band n71

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n71	673.0 - 688.0	20	DFT-s OFDM	π/2 BPSK	24.58	287.08		
				QPSK	**24.71**	**295.80**	20.23	105.40
				16QAM	23.47	222.33	19.21	83.34
				64QAM	22.08	161.44		
				256QAM	19.97	99.31		
			CP-OFDM	QPSK	23.04	201.37		
	670.5 - 690.5	15	DFT-s OFDM	π/2 BPSK	24.54	284.45		
				QPSK	24.57	286.42	20.09	102.06
				16QAM	23.64	231.21	19.07	80.69
				64QAM	22.08	161.44		
				256QAM	19.98	99.54		
			CP-OFDM	QPSK	23.05	201.84		
	668.0 - 693.0	10	DFT-s OFDM	π/2 BPSK	24.55	285.10		
				QPSK	24.62	289.73	20.58	114.33
				16QAM	23.59	228.56	19.46	88.34
				64QAM	22.14	163.68		
				256QAM	20.12	102.80		
			CP-OFDM	QPSK	23.13	205.59		
	665.5 - 695.5	5	DFT-s OFDM	π/2 BPSK	24.54	284.45		
				QPSK	24.59	287.74	**20.80**	**120.18**
				16QAM	23.66	232.27	19.78	95.03
				64QAM	22.16	164.44		
				256QAM	20.08	101.86		
			CP-OFDM	QPSK	23.13	205.59		

NR Band n77(PC2, 3450-3550 MHz)

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3499.98	100	DFT-s OFDM	π/2 BPSK	26.76	474.24		
				QPSK	26.84	483.06	23.52	225.07
				16QAM	25.31	339.63	22.63	183.32
				64QAM	23.82	240.99		
				256QAM	21.91	155.24		
			CP-OFDM	QPSK	24.62	289.73		
	3495.0 - 3504.99	90	DFT-s OFDM	π/2 BPSK	26.93	493.17		
				QPSK	**27.20**	**524.81**	24.01	251.60
				16QAM	25.40	346.74	22.70	186.27
				64QAM	24.08	255.86		
				256QAM	22.17	164.82		
			CP-OFDM	QPSK	24.88	307.61		
	3490.02 - 3510.0	80	DFT-s OFDM	π/2 BPSK	27.02	503.50		
				QPSK	26.99	500.03	24.06	254.83
				16QAM	25.64	366.44	23.14	206.04
				64QAM	24.26	266.69		
				256QAM	22.36	172.19		
			CP-OFDM	QPSK	24.98	314.77		
	3485.01 - 3514.98	70	DFT-s OFDM	π/2 BPSK	27.11	514.04		
				QPSK	27.14	517.61	24.21	263.84
				16QAM	25.84	383.71	23.26	212.05
				64QAM	24.19	262.42		
				256QAM	22.60	181.97		
			CP-OFDM	QPSK	24.89	308.32		
	3480 - 3519.99	60	DFT-s OFDM	π/2 BPSK	27.10	512.86		
				QPSK	27.01	502.34	**25.50**	**354.77**
				16QAM	25.74	374.97	24.57	286.38
				64QAM	24.17	261.22		
				256QAM	22.37	172.58		
			CP-OFDM	QPSK	25.13	325.84		
	3475.02 - 3525	50	DFT-s OFDM	π/2 BPSK	26.98	498.88		
				QPSK	26.99	500.03	24.57	286.69
				16QAM	25.60	363.08	23.58	228.25
				64QAM	24.38	274.16		
				256QAM	22.31	170.22		
			CP-OFDM	QPSK	25.17	328.85		
	3470.01 - 3529.98	40	DFT-s OFDM	π/2 BPSK	26.89	488.65		
				QPSK	26.96	496.59	24.67	293.19
				16QAM	25.90	389.05	23.78	238.86
				64QAM	24.26	266.69		
				256QAM	22.56	180.30		
			CP-OFDM	QPSK	25.28	337.29		
	3465.0 - 3535.02	30	DFT-s OFDM	π/2 BPSK	26.94	494.31		
				QPSK	26.87	486.41	24.67	293.07
				16QAM	25.62	364.75	23.94	247.72
				64QAM	24.18	261.82		
				256QAM	22.05	160.32		
			CP-OFDM	QPSK	24.99	315.50		
	3462.51 - 3537.48	25	DFT-s OFDM	π/2 BPSK	26.93	492.84		
				QPSK	26.98	498.57	24.70	295.16
				16QAM	25.98	396.50	23.60	229.11
				64QAM	24.38	274.05		
				256QAM	22.45	175.85		
			CP-OFDM	QPSK	25.43	348.82		
	3460.02 - 3540.0	20	DFT-s OFDM	π/2 BPSK	26.66	462.91		
				QPSK	26.59	455.51	25.09	322.70
				16QAM	25.83	382.38	23.79	239.42
				64QAM	24.17	260.92		
				256QAM	22.12	162.74		
			CP-OFDM	QPSK	24.86	305.84		
	3457.50 - 3542.49	15	DFT-s OFDM	π/2 BPSK	26.71	468.27		
				QPSK	26.62	458.67	24.68	293.87
				16QAM	25.56	359.34	23.79	239.42
				64QAM	24.01	251.48		
				256QAM	22.36	171.99		
			CP-OFDM	QPSK	24.90	308.67		
	3455.01 - 3544.98	10	DFT-s OFDM	π/2 BPSK	26.63	459.73		
				QPSK	26.71	468.27	25.01	316.71
				16QAM	25.46	351.16	23.98	249.84
				64QAM	24.48	280.22		
				256QAM	22.37	172.39		
			CP-OFDM	QPSK	24.88	307.26		

NR Band n77(PC2, 3450-3550 MHz, SRS1)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3499.98	100	18.35	68.39		
	3495.0 - 3504.99	90	18.70	74.13		
	3490.02 - 3510.00	80	18.65	73.28		
	3485.01 - 3514.98	70	18.91	77.80		
	3480 - 3519.99	60	18.87	77.09		
	3475.02 - 3525	50	19.07	80.72		
	3470.01 - 3529.98	40	19.04	80.17		
	3465.00 - 3535.02	30	19.24	83.95		
	3462.51 - 3537.48	25	19.19	82.99		
	3460.02 - 3540.0	20	19.24	83.95		
	3457.5 - 3542.49	15	19.20	83.18		
	3455.01 - 3549.99	10	**19.25**	**84.14**	**7.36**	**5.44**

NR Band n77(PC2, 3450-3550 MHz, SRS2)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3499.98	100	21.04	127.06		
	3495.0 - 3504.99	90	21.21	132.13		
	3490.02 - 3510.00	80	21.13	129.72		
	3485.01 - 3514.98	70	21.25	133.35		
	3480 - 3519.99	60	**21.28**	**134.28**	**21.68**	**147.38**
	3475.02 - 3525	50	21.11	129.12		
	3470.01 - 3529.98	40	20.81	120.50		
	3465.00 - 3535.02	30	21.11	129.12		
	3462.51 - 3537.48	25	20.65	116.14		
	3460.02 - 3540.0	20	20.50	112.20		
	3457.5 - 3542.49	15	20.98	125.31		
	3455.01 - 3549.99	10	20.67	116.68		

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

NR Band n77(PC2, 3450-3550 MHz, SRS3)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3499.98	100	18.55	71.61		
	3495.0 - 3504.99	90	18.76	75.16		
	3490.02 - 3510.00	80	18.82	76.21		
	3485.01 - 3514.98	70	19.02	79.80		
	3480 - 3519.99	60	19.14	82.04		
	3475.02 - 3525	50	**19.15**	**82.22**	**8.80**	**7.58**
	3470.01 - 3529.98	40	19.00	79.43		
	3465.00 - 3535.02	30	18.87	77.09		
	3462.51 - 3537.48	25	18.92	77.98		
	3460.02 - 3540.0	20	19.14	82.04		
	3457.5 - 3542.49	15	18.70	74.13		
	3455.01 - 3549.99	10	18.81	76.03		

NR Band n77(PC2, 3700-3980 MHz)

FCC Part 27								
Band	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3750.0 - 3930.0	100	DFT-s OFDM	π/2 BPSK	26.87	486.41		
				QPSK	26.96	496.59	28.23	665.99
				16QAM	25.24	334.20	27.28	534.89
				64QAM	23.79	239.33		
				256QAM	21.94	156.31		
			CP-OFDM	QPSK	24.65	291.74		
	3745.02 - 3934.98	90	DFT-s OFDM	π/2 BPSK	26.87	486.41		
				QPSK	26.67	464.52	28.35	683.90
				16QAM	25.21	331.89	27.45	555.64
				64QAM	23.81	240.44		
				256QAM	21.99	158.12		
			CP-OFDM	QPSK	24.80	302.00		
	3740.01 - 3939.99	80	DFT-s OFDM	π/2 BPSK	27.01	502.34		
				QPSK	26.85	484.17	28.18	657.26
				16QAM	25.70	371.54	27.21	525.94
				64QAM	24.32	270.40		
				256QAM	22.45	175.79		
			CP-OFDM	QPSK	25.22	332.66		
	3735.02 - 3944.98	70	DFT-s OFDM	π/2 BPSK	26.93	493.17		
				QPSK	26.96	496.59	28.15	653.40
				16QAM	25.60	363.08	27.16	519.85
				64QAM	24.34	271.64		
				256QAM	22.33	171.00		
			CP-OFDM	QPSK	25.26	335.74		
	3730.02 - 3949.98	60	DFT-s OFDM	π/2 BPSK	**27.14**	**517.61**		
				QPSK	27.12	515.23	28.19	659.65
				16QAM	25.61	363.92	27.18	522.41
				64QAM	24.13	258.82		
				256QAM	22.00	158.49		
			CP-OFDM	QPSK	25.11	324.34		
	3725.01 - 3954.99	50	DFT-s OFDM	π/2 BPSK	26.96	496.59		
				QPSK	27.08	510.50	28.33	680.27
				16QAM	25.35	342.77	27.26	531.72
				64QAM	24.07	255.27		
				256QAM	21.79	151.01		
			CP-OFDM	QPSK	25.10	323.59		
	3720.02 - 3960.0	40	DFT-s OFDM	π/2 BPSK	27.13	516.42		
				QPSK	27.06	508.16	27.61	576.15
				16QAM	25.92	390.84	26.80	478.12
				64QAM	24.44	277.97		
				256QAM	22.22	166.72		
			CP-OFDM	QPSK	25.23	333.43		
	3715.02 - 3964.98	30	DFT-s OFDM	π/2 BPSK	26.79	477.53		
				QPSK	26.79	477.53	**28.79**	**756.71**
				16QAM	25.64	366.44	26.93	493.10
				64QAM	24.48	280.54		
				256QAM	22.11	162.55		
			CP-OFDM	QPSK	25.30	338.84		
	3712.50 - 3967.50	25	DFT-s OFDM	π/2 BPSK	26.37	433.52		
				QPSK	26.41	437.57	28.68	738.60
				16QAM	25.26	335.74	27.58	573.34
				64QAM	23.91	246.12		
				256QAM	21.73	148.81		
			CP-OFDM	QPSK	24.74	297.78		
	3710.01 - 3969.99	20	DFT-s OFDM	π/2 BPSK	26.83	481.39		
				QPSK	26.89	488.09	28.68	737.27
				16QAM	25.90	388.60	27.50	561.86
				64QAM	24.62	289.40		
				256QAM	22.45	175.59		
			CP-OFDM	QPSK	25.31	339.23		
	3707.52 - 3972.48	15	DFT-s OFDM	π/2 BPSK	26.98	498.31		
				QPSK	26.83	481.39	28.60	724.07
				16QAM	25.75	375.40	27.25	530.61
				64QAM	24.46	278.93		
				256QAM	22.30	169.63		
			CP-OFDM	QPSK	25.34	341.59		
	3705.00 - 3975.00	10	DFT-s OFDM	π/2 BPSK	26.83	481.39		
				QPSK	26.86	484.73	28.73	746.32
				16QAM	25.58	360.99	27.94	622.19
				64QAM	24.05	253.80		
				256QAM	22.36	171.99		
			CP-OFDM	QPSK	25.30	338.45		

NR Band n77(PC2, 3700-3980 MHz, SRS1)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3750.00 - 3930.00	100	19.21	83.37		
	3745.02 - 3934.98	90	20.01	100.23		
	3740.01 - 3939.99	80	19.11	81.47		
	3735.02 - 3944.98	70	**20.05**	**101.16**	**16.37**	**43.32**
	3730.02 - 3949.98	60	19.18	82.79		
	3725.01 - 3954.99	50	19.69	93.11		
	3720.02 - 3960.0	40	19.10	81.28		
	3715.02 - 3964.98	30	19.13	81.85		
	3712.50 - 3967.50	25	19.73	93.97		
	3710.01 - 3969.99	20	18.61	72.61		
	3707.52 - 3972.48	15	18.77	75.34		
	3705.00 - 3975.00	10	18.57	71.94		

NR Band n77(PC2, 3700-3980 MHz, SRS2)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3750.00 - 3930.00	100	21.24	133.05		
	3745.02 - 3934.98	90	21.19	131.52		
	3740.01 - 3939.99	80	21.28	134.28		
	3735.02 - 3944.98	70	21.34	136.14		
	3730.02 - 3949.98	60	21.41	138.36		
	3725.01 - 3954.99	50	21.41	138.36		
	3720.02 - 3960.0	40	21.43	139.00		
	3715.02 - 3964.98	30	**21.44**	**139.32**	**17.83**	**60.66**
	3712.50 - 3967.50	25	21.42	138.68		
	3710.01 - 3969.99	20	21.41	138.36		
	3707.52 - 3972.48	15	21.36	136.77		
	3705.00 - 3975.00	10	21.41	138.36		

NR Band n77(PC2, 3700-3980 MHz, SRS3)

FCC Part 27						
Band	Frequency Range [MHz]	BandWidth [MHz]	Conducted		Radiated	
			Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n77	3750.00 - 3930.00	100	18.01	63.24		
	3745.02 - 3934.98	90	**18.11**	**64.71**	**11.39**	**13.76**
	3740.01 - 3939.99	80	18.02	63.39		
	3735.02 - 3944.98	70	17.94	62.23		
	3730.02 - 3949.98	60	18.10	64.57		
	3725.01 - 3954.99	50	17.99	62.95		
	3720.02 - 3960.0	40	17.90	61.66		
	3715.02 - 3964.98	30	17.96	62.52		
	3712.50 - 3967.50	25	17.99	62.95		
	3710.01 - 3969.99	20	17.90	61.66		
	3707.52 - 3972.48	15	17.80	60.26		
	3705.00 - 3975.00	10	17.83	60.67		

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a internal antenna for the supported bands with a maximum peak gain as follow:

Frequency (MHz)	Peak Gain (dBi)
GSM1900 / WCDMA Band 2 / LTE Band 2,25 / NR Band n2, 25 1850 - 1915 MHz	-3.10 (Main ANT)
	-4.90 (Sub ANT)
LTE Band 4 / LTE Band 66 / NR Band n66 1710 - 1780 MHz	-3.30 (Main ANT)
	-5.40 (Sub ANT)
GSM850 / WCDMA Band 5 / LTE Band 5, 26 / NR Band n5 814 - 849 MHz	-5.60
LTE Band 7, 38, 41 (PC2) / NR Band n41 (PC2) 2496 - 2690 MHz	-3.50
LTE Band 12 / NR Band n12 699 - 716 MHz	-4.10
LTE Band 13 777 - 787 MHz	-4.60
LTE Band 14 788 - 798 MHz	-4.30
LTE Band 30 / NR Band n30 2305 - 2315 MHz	-4.20
LTE Band 40 2300 - 2400 MHz	-4.20
LTE Band 71 / NR Band n71 663 – 698 MHz	-4.40
NR Band n77(PC2) 3450-3550 MHz	-6.50 (Antenna D Sub3)
	-5.10 (SRS1)
	-8.50 (SRS2)
	-8.30 (SRS3)
NR Band n77(PC2) 3700-3980 MHz	-6.50 (Antenna D Sub3)
	-5.10 (SRS1)
	-8.50 (SRS2)
	-8.30 (SRS3)

5.4. WORST-CASE ORIENTATION

Following modes should be considered as worst-case scenario for all other measurements.

- GSM GPRS/EGPRS
- UMTS REL 99/HSDPA

For all Bands the worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. Output power measurements were measured on QPSK, 16QAM, 64QAM and 256QAM modulations. However, the out of band emissions and spurious radiation were only performed on bandwidth and RB offset(with RB size 1) with the highest power in QPSK.

For the worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. Output power measurements were measured on π/2 BPSK, QPSK, 16QAM, 64QAM and 256QAM modulations. It was found that π /2 BPSK, QPSK and 16QAM results were worst case as below.

Both NSA and SA modes were tested and worst case is reported. the out of band emissions and spurious radiation were only performed on bandwidth and RB offset(with RB size 1) with the highest conducted power.

-NR Worst case

BAND	Modulation	NSA or SA
n5, n12, n25, n30, n66 ,n71, n77 (PC2)_High	QPSK, 16QAM	NSA
n41 (PC2), n77 (PC2)_Low	QPSK, 16QAM	SA

This device supports SRS (sounding reference signal) 1, 2, 3 mode for NR TDD bands. For each SRS 1, 2 and 3, Conducted power and radiated measurement were performed through FTM mode provide by the customer. the worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. SRS1,2,3 the worstcase scenario was radiated tested and reported

LTE Band 2
LTE Band 2 (Frequency range: 1850-1910 MHz) is covered by LTE Band 25 (Frequency range: 1850-1915 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 4
LTE Band 4 (Frequency range: 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 5
LTE Band 5 (Frequency range: 824-849 MHz) is covered by LTE Band 26 (Frequency range: 814-849 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 38
LTE Band 38 (Frequency range: 2570-2620 MHz) is covered by LTE Band 41(PC2) (Frequency range: 2496-2690 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 41(PC3)
LTE Band 41(PC3, Frequency range : 2496-2690 MHz) is covered by LTE Band 41(PC2) (Frequency range: 2496-2690 MHz) due to same frequency range, same channel bandwidth and maximum tune-up limit is higher than LTE Band41(PC3).

NR Band 2
NR Band 2 (Frequency range: 1850-1910 MHz) is covered by NR Band 25 (Frequency range: 1850-1915 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

NR Band 41(PC3)
NR Band 41(PC3, Frequency range : 2496-2690 MHz) is covered by NR Band 41(PC2) (Frequency range: 2496-2690 MHz) due to same frequency range, same channel bandwidth and maximum tune-up limit is higher than NR Band 41(PC3).

NR Band 77(PC3, SRS 1, 2, 3)
NR Band 77(PC3, Frequency range : 3450-3550 MHz, 3700-3980 MHz) is covered by NR Band 77(PC2, Frequency range : 3450-3550 MHz, 3700-3980 MHz) due to same frequency range, same channel bandwidth and maximum tune-up limit is higher than NR Band 77(PC3).

Highest erp & eirp setting for each bands				
LTE Band	**Frequency (MHz)**	**Bandwidth (MHz)**	**RB size**	**RB offset**
7	2507.5	15	1	0
	2535.0		1	0
	2562.5		1	0
12	704.0	10	1	25
	707.5		1	49
	711.0		1	0
13	782.0	10	1	0
14	790.5	5	1	12
	793.0		1	12
	795.5		1	12
25	1860.0	20	1	0
	1882.5		1	0
	1905.0		1	0
26 (Part 90)	814.7	1.4	1	3
	823.3		1	3
26 (Straddle)	824.0	5	1	13
26 (Part 22)	826.5	5	1	13
	831.5		1	13
	846.5		1	13
30	2307.5	5	1	24
	2310.0		1	12
	2312.5		1	12
40_Low	2307.5	5	1	12
	2310.0		1	12
	2312.5		1	12
40_High	2352.5	5	1	12
	2355.0		1	0
	2357.5		1	12
41(PC2)	2501.0	10	1	0
	2593.0		1	0
	2685.0		1	0
66 (Main ANT)	1712.5	5	1	24
	1745.0		1	12
	1777.5		1	24
66 (Sub ANT)	1712.5	5	1	24
	1745.0		1	12
	1777.5		1	24
71	665.5	5	1	0
	680.5		1	24
	695.5		1	12

Highest erp & eirp setting for each bands				
NR Band	**Frequency (MHz)**	**Bandwidth (MHz)**	**RB size**	**RB offset**
5	834.0	20	1	53
	836.5		1	53
	839.0		1	53
12	701.5	5	1	23
	707.5		1	1
	713.5		1	1
25	1862.5	25	1	131
	1882.5		1	1
	1902.5		1	1
30	2307.5	5	1	23
	2310.0		1	23
	2312.5		1	23
41(PC2)	2526.01	60	1	81
	2592.99		1	81
	2660.00		1	160
66	1730.0	40	1	214
	1745.0		1	214
	1760.0		1	108
71	665.5	5	1	13
	680.5		1	13
	695.5		1	13
77(PC2) (3450-3550 MHz)	3480.00	60	1	160
	3499.98		1	160
	3519.00		1	81
77(PC2) (3700-3980 MHz)	3715.00	30	1	76
	3840.00		1	76
	3965.00		1	1

For LTE anchor, the band with highest output power was chosen among the possible combinations with NR Bands.

NR Band	LTE Band
2	**5,** 12, 13, 14, 48
5	**2,** 7, 30, 66
12	**2**, 66
25	**12**
30	**5,** 12, 14
41	**2,** 66
66	**5**, 7, 12, 13, 14, 48
71	**2,** 7, 48, 66
77(PC2) (3450-3550 MHz)	**2,** 5, 7, 12, 14, 30, 66
77(PC2) (3700-3980 MHz)	**2,** 5, 7, 12, 14, 30, 66

Highest power setting for each bands					
LTE Band	**Component Carrier**	**Frequency (MHz)**	**Bandwidth (MHz)**	**RB size**	**RB offset**
41 (Uplink CA)	PCC	2660.2	20	1	99
	SCC	2680.0	20	1	0

The fundamental and radiated spurious emission were investigated in three orthogonal orientations X, Y and Z, it was determined that below orientation was worst-case orientation for each band.

Band	ERP/EIRP			RSE		
	X	Y	Z	X	Y	Z
GSM850	-	-	O	-	-	O
GSM1900	-	-	O	O	-	-
WCDMA B5	-	-	O	-	-	O
WCDMA B4	O	-	-	-	-	O
WCDMA B2	-	-	O	O	-	-
LTE B7	O	-	-	-	-	O
LTE B12	-	-	O	-	O	-
LTE B13	-	-	O	-	O	-
LTE B14	-	-	O	-	O	-
LTE B25	-	-	O	-	-	O
LTE B26	-	-	O	O	-	-
LTE B30	O	-	-	O	-	-
LTE B40	-	-	O	-	-	O
LTE B41(PC2)	-	-	O	-	-	O
LTE B66 (Main ANT)	-	O	-	-	O	-
LTE B66 (Sub ANT)	-	-	O	-	-	O
LTE B71	O	-	-	-	O	-
NR n5	-	-	O	-	O	-
NR n12	O	-	-	O	-	-
NR n25	-	-	O	-	-	O
NR n30	O	-	-	O	-	-
NR n41(PC2)	-	O	-	-	-	O
NR n66	-	O	-	O	-	-
NR n71	O	-	-	O	-	-
NR n77(PC2) (3450 - 3550 MHz)	O	-	-	-	O	-
NR n77(PC2) (SRS1) (3450 - 3550 MHz)	O	-	-	O	-	-
NR n77(PC2) (SRS2) (3450 - 3550 MHz)	O	-	-	O	-	-
NR n77(PC2) (SRS3) (3450 - 3550 MHz)	O	-	-	O	-	-
NR n77(PC2) (3700 - 3980 MHz)	-	O	-	-	O	-
NR n77(PC2) (SRS1) (3700 - 3980 MHz)	O	-	-	-	-	O
NR n77(PC2) (SRS2) (3700 - 3980 MHz)	O	-	-	-	O	-
NR n77(PC2) (SRS3) (3700 - 3980 MHz)	-	O	-	-	O	-

Note : For ERP/EIRP testing, the EUT didn't attached with travel adapter. But radiated spurious testing, the EUT attached with travel adapter for the worst case condition. The EUT is continuously communicated with the call box during the tests.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacture**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA800	R37T7WW84Y9SEA	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02116A	N/A

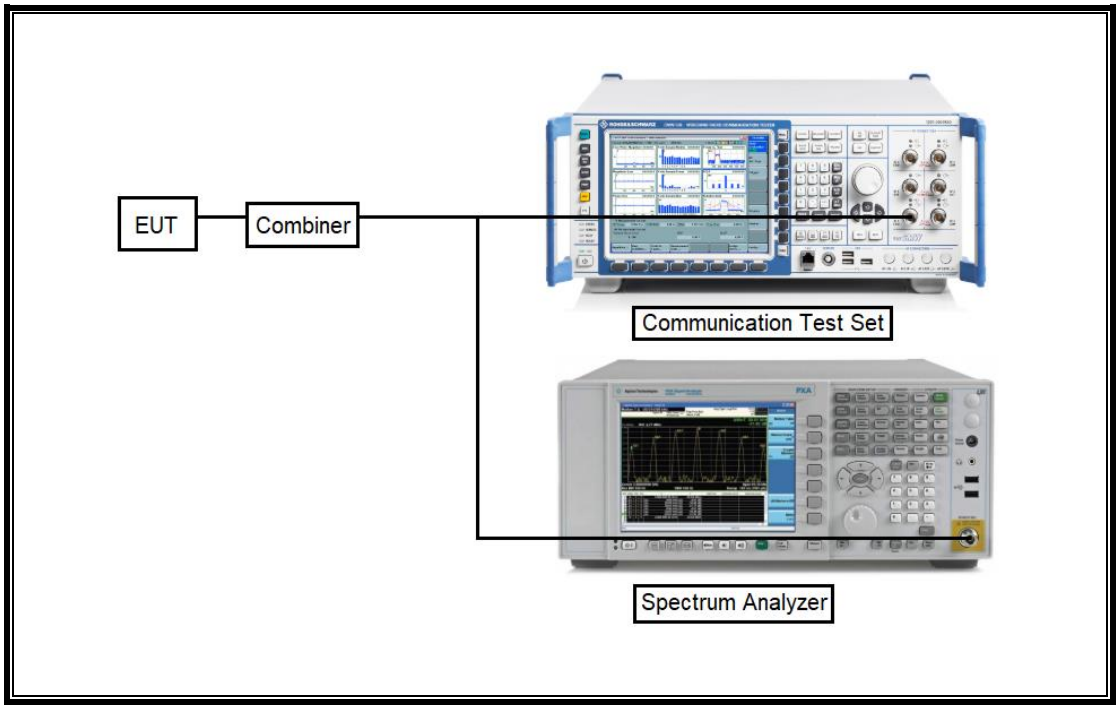
I/O CABLE

I/O Cable List						
Cable No.	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	C Type	Shielded	1.0 m	N/A

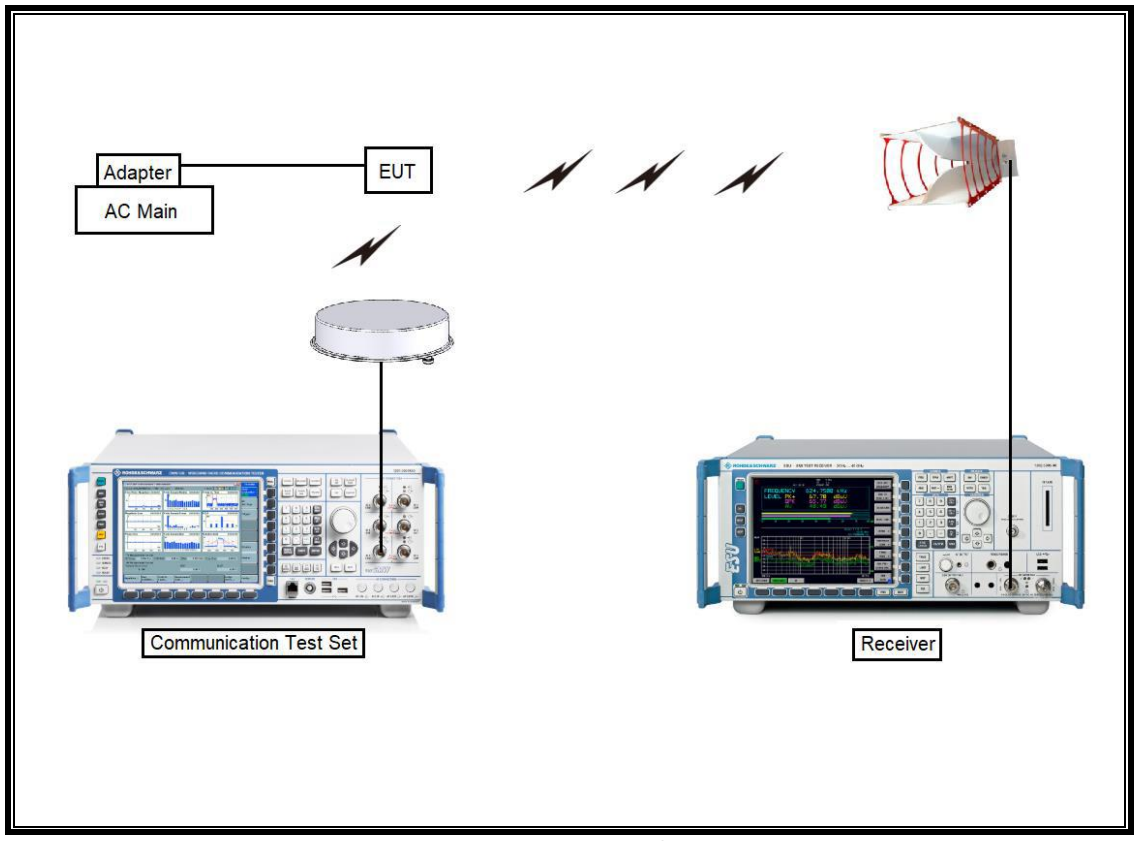
TEST SETUP

The EUT is continuously communicated with the call box during the tests.

SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)



SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	**Manufacturer**	**Model**	**S/N**	**Cal Due**
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121D DB4	00164753	2023-02-08
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	110367-0003	N/A
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	80108-0004	N/A
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2023-10-13
Preamplifier	ETS	3116C-PA	00168841	2023-08-04
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2024-08-15
Antenna, Horn, 18 GHz	ETS	3115	00161451	2024-08-21
Antenna, Horn, 18 GHz	ETS	3117	00168717	2024-08-21
Communications Test Set	R&S	CMW500	169796	2024-01-05
DC Power Supply	Agilent / HP	E3640A	MY54226395	2023-08-02
Preamplifier, 1000 MHz	Sonoma	310N	341282	2023-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2023-08-01
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2023-08-01
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2023-08-03
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2023-08-01
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2023-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2023-07-29
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	2023-08-01
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	2023-08-01
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	2023-08-01
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	2023-08-01
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	2023-08-01
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	2023-08-01
Attenuator	PASTERNACK	PE7087-10	A009	2023-08-03
Attenuator	PASTERNACK	PE7087-10	A001	2023-08-03
Attenuator	PASTERNACK	PE7087-10	A008	2023-08-03
Attenuator	PASTERNACK	PE7004-10	2	2023-08-01
Attenuator	PASTERNACK	PE7395-10	A011	2023-08-03
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2023-10-06
Temperature Chamber	ESPEC	SH-642	93001109	2023-08-01
Power Splitter	MINI-CIRCUITS	WA1534	UL003	2024-01-09
Power Splitter	MINI-CIRCUITS	WA1534	UL004	2024-01-09
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY57510655	2024-01-09

UL Software			
Description	**Manufacturer**	**Model**	**Version**
Antenna port test software	UL	CLT	Ver 3.4
Radiated software	UL	UL EMC	Ver 9.5
Antenna port test software (5G NR FR1)	UL	UL iM	Ver 1.06

7. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result
2.1049	Occupied Band width (99%)	N/A	Conducted	Pass
22.917(a) 24.238(a) 27.53(g),(h), 27.53(l)(2) 27.53(n)(2) 90.543(c) 90.691	Band Edge / Conducted Spurious Emission	-13dBm		Pass
90.543(e)		-35 dBm		Pass
27.53(m)	Conducted Spurious Emission	-25dBm		Pass
27.53(a),(m) 90.691	Emission mask	Section 9.2.2		Pass
2.1046	Conducted output power	N/A		Pass
90.635(b)		50 dBm		Pass
22.355 24.235 27.54 90.213 90.539	Frequency Stability	2.5PPM		Pass
22.913(a)(5)	Effective Radiated Power	38.5dBm	Radiated	Pass
27.50(c)(10) 27.50(b)(10) 90.542(a)(7) 90.635(b)		34.77dBm		Pass
24.232(c) 27.50(h)(2) 27.50(j)(3) 27.50(k)(3)	Equivalent Isotropic Radiated Power	33dBm		Pass
27.50(d)(4)		30dBm		Pass
22.917(a) 24.238(a) 27.53 (g),(h) 90.543(c),(f) 90.691	Radiated Spurious Emission	-13dBm		Pass
27.53(f)		-40dBm		Pass
27.53(m) 27.53(l)(2) 27.53(n)(2)		-25dBm		Pass

8. LIMITS AND CONDUCTED RESULTS

8.1. CONDUCTED OUTPUT POWER

Test Procedure

Per KDB 971168 D01 Power Meas License Digital Systems v03r01;

The transmitter output was connected to either CMW500 Test Set or E7515B Test set and configured to operate at maximum power.

NOTE

5G NR: All Waveforms (CP-OFDM vs DFT-s_OFDM) and modulations (π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

RESULTS

See the following pages.

8.1.1. CONDUCTED AVERAGE OUTPUT POWER

GSM

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	128	824.2	32.81	23.78	33.5	24.5
			190	836.6	32.24	23.21		
			251	848.8	32.11	23.08		
GPRS (GMSK)	CS1	1	128	824.2	32.40	23.37	33.5	24.5
			190	836.6	33.06	24.03		
			251	848.8	32.07	23.04		
		2	128	824.2	30.42	24.40	32.0	26.0
			190	836.6	30.58	24.56		
			251	848.8	30.29	24.27		
		3	128	824.2	28.81	24.55	30.0	25.7
			190	836.6	28.69	24.43		
			251	848.8	28.87	24.61		
		4	128	824.2	27.34	24.33	28.0	25.0
			190	836.6	27.47	24.46		
			251	848.8	27.19	24.18		
EGPRS (8PSK)	MCS5	1	128	824.2	26.20	17.17	27.5	18.5
			190	836.6	26.24	17.21		
			251	848.8	26.14	17.11		
		2	128	824.2	24.36	18.34	26.0	20.0
			190	836.6	24.36	18.34		
			251	848.8	24.36	18.34		
		3	128	824.2	22.82	18.56	24.0	19.7
			190	836.6	23.01	18.75		
			251	848.8	22.79	18.53		
		4	128	824.2	21.41	18.40	22.5	19.5
			190	836.6	21.66	18.65		
			251	848.8	21.44	18.43		

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	512	1850.2	30.50	21.47	31.0	22.0
			661	1880.0	28.88	19.85		
			810	1909.8	28.82	19.79		
GPRS (GMSK)	CS1	1	512	1850.2	29.36	20.33	31.0	22.0
			661	1880.0	30.46	21.43		
			810	1909.8	30.33	21.30		
		2	512	1850.2	26.60	20.58	28.0	22.0
			661	1880.0	26.90	20.88		
			810	1909.8	26.85	20.83		
		3	512	1850.2	24.88	20.62	26.0	21.7
			661	1880.0	24.86	20.60		
			810	1909.8	24.79	20.53		
		4	512	1850.2	23.29	20.28	25.0	**22.0**
			661	1880.0	23.52	20.51		
			810	1909.8	23.52	20.51		
EGPRS (8PSK)	MCS5	1	512	1850.2	26.03	17.00	27.0	18.0
			661	1880.0	26.10	17.07		
			810	1909.8	26.06	17.03		
		2	512	1850.2	23.80	17.78	25.5	19.5
			661	1880.0	23.75	17.73		
			810	1909.8	23.80	17.78		
		3	512	1850.2	22.44	18.18	23.0	18.7
			661	1880.0	20.95	16.69		
			810	1909.8	22.10	17.84		
		4	512	1850.2	20.77	17.76	22.0	19.0
			661	1880.0	20.82	17.81		
			810	1909.8	20.93	17.92		

WCDMA B5

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	23.53	N/A	25.0
		4183	836.6	23.69		
		4233	846.6	23.63		
HSDPA	Subtest 1	4132	826.4	22.50	0	23.5
		4183	836.6	22.71		
		4233	846.6	22.64		
	Subtest 2	4132	826.4	22.10	0	23.5
		4183	836.6	22.28		
		4233	846.6	22.21		
	Subtest 3	4132	826.4	21.61	0.5	23.0
		4183	836.6	21.80		
		4233	846.6	21.70		
	Subtest 4	4132	826.4	21.00	0.5	23.0
		4183	836.6	21.26		
		4233	846.6	21.18		
HSUPA	Subtest 1	4132	826.4	21.58	0	23.5
		4183	836.6	21.74		
		4233	846.6	21.65		
	Subtest 2	4132	826.4	19.52	2	21.5
		4183	836.6	19.64		
		4233	846.6	19.54		
	Subtest 3	4132	826.4	20.55	1	22.5
		4183	836.6	20.67		
		4233	846.6	20.56		
	Subtest 4	4132	826.4	19.51	2	21.5
		4183	836.6	19.62		
		4233	846.6	19.53		
	Subtest 5	4132	826.4	22.69	0	23.5
		4183	836.6	22.78		
		4233	846.6	22.70		
DC-HSDPA	Subtest 1	4132	826.4	22.49	0	23.0
		4183	836.6	22.69		
		4233	846.6	22.56		
	Subtest 2	4132	826.4	22.10	0	23.0
		4183	836.6	22.30		
		4233	846.6	22.23		
	Subtest 3	4132	826.4	20.52	0.5	22.5
		4183	836.6	20.68		
		4233	846.6	20.53		
	Subtest 4	4132	826.4	20.97	0.5	22.5
		4183	836.6	21.19		
		4233	846.6	21.14		

WCDMA B4

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	22.69	N/A	24.0
		1413	1732.6	22.74		
		1513	1752.6	23.16		
HSDPA	Subtest 1	1312	1712.4	22.59	0	23.5
		1413	1732.6	22.66		
		1513	1752.6	23.10		
	Subtest 2	1312	1712.4	22.08	0	23.5
		1413	1732.6	22.17		
		1513	1752.6	22.66		
	Subtest 3	1312	1712.4	21.51	0.5	23.0
		1413	1732.6	21.58		
		1513	1752.6	22.11		
	Subtest 4	1312	1712.4	21.52	0.5	23.0
		1413	1732.6	21.58		
		1513	1752.6	22.12		
HSUPA	Subtest 1	1312	1712.4	21.50	0	23.5
		1413	1732.6	21.50		
		1513	1752.6	21.42		
	Subtest 2	1312	1712.4	19.01	2	21.5
		1413	1732.6	19.01		
		1513	1752.6	19.45		
	Subtest 3	1312	1712.4	21.47	1	22.5
		1413	1732.6	21.50		
		1513	1752.6	22.01		
	Subtest 4	1312	1712.4	19.30	2	21.5
		1413	1732.6	19.32		
		1513	1752.6	19.09		
	Subtest 5	1312	1712.4	22.72	0	23.5
		1413	1732.6	22.68		
		1513	1752.6	23.01		
DC-HSDPA	Subtest 1	1312	1712.4	22.58	0	23.5
		1413	1732.6	22.96		
		1513	1752.6	23.13		
	Subtest 2	1312	1712.4	22.07	0	23.5
		1413	1732.6	22.49		
		1513	1752.6	22.66		
	Subtest 3	1312	1712.4	21.01	0.5	23.0
		1413	1732.6	21.35		
		1513	1752.6	21.55		
	Subtest 4	1312	1712.4	21.47	0.5	23.0
		1413	1732.6	21.89		
		1513	1752.6	22.08		

WCDMA B2

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	22.67	N/A	24.0
		9400	1880.0	22.89		
		9538	1907.6	22.96		
HSDPA	Subtest 1	9262	1852.4	22.79	0	23.5
		9400	1880.0	22.91		
		9538	1907.6	23.03		
	Subtest 2	9262	1852.4	22.31	0	23.5
		9400	1880.0	22.39		
		9538	1907.6	22.49		
	Subtest 3	9262	1852.4	21.85	0.5	23.0
		9400	1880.0	21.90		
		9538	1907.6	21.97		
	Subtest 4	9262	1852.4	21.32	0.5	23.0
		9400	1880.0	21.43		
		9538	1907.6	21.47		
HSUPA	Subtest 1	9262	1852.4	21.82	0	23.5
		9400	1880.0	21.81		
		9538	1907.6	21.86		
	Subtest 2	9262	1852.4	19.15	2	21.5
		9400	1880.0	19.22		
		9538	1907.6	19.28		
	Subtest 3	9262	1852.4	21.80	1	22.5
		9400	1880.0	21.81		
		9538	1907.6	21.86		
	Subtest 4	9262	1852.4	19.64	2	21.5
		9400	1880.0	19.77		
		9538	1907.6	19.83		
	Subtest 5	9262	1852.4	23.01	0	23.5
		9400	1880.0	23.02		
		9538	1907.6	23.11		
DC-HSDPA	Subtest 1	9262	1852.4	22.98	0	23.5
		9400	1880.0	22.83		
		9538	1907.6	22.85		
	Subtest 2	9262	1852.4	22.34	0	23.5
		9400	1880.0	22.33		
		9538	1907.6	22.29		
	Subtest 3	9262	1852.4	21.31	0.5	23.0
		9400	1880.0	21.29		
		9538	1907.6	21.33		
	Subtest 4	9262	1852.4	21.33	0.5	23.0
		9400	1880.0	21.34		
		9538	1907.6	21.32		

LTE Band 2 (Main ANT)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				18700	18900	19100		
				1860 MHz	1880 MHz	1900 MHz		
20 MHz	QPSK	1	0	23.98	24.35	24.22	0.0	25.0
		1	49	24.26	24.31	24.32	0.0	25.0
		1	99	24.38	24.27	24.17	0.0	25.0
		50	0	23.36	23.24	23.18	1.0	24.0
		50	24	23.34	23.22	23.15	1.0	24.0
		50	50	23.30	23.23	23.12	1.0	24.0
		100	0	23.31	23.24	23.15	1.0	24.0
	16QAM	1	0	23.42	23.22	23.40	1.0	24.0
		1	49	23.45	23.15	23.39	1.0	24.0
		1	99	23.40	23.22	23.29	1.0	24.0
		50	0	22.26	22.11	22.05	2.0	23.0
		50	24	22.22	22.13	22.02	2.0	23.0
		50	50	22.16	22.14	22.02	2.0	23.0
		100	0	22.23	22.13	22.05	2.0	23.0
	64QAM	1	0	22.28	22.03	22.21	2.0	23.0
		1	49	22.36	22.05	22.02	2.0	23.0
		1	99	22.16	22.10	22.12	2.0	23.0
		50	0	21.13	21.00	20.91	3.0	22.0
		50	24	21.10	21.01	20.93	3.0	22.0
		50	50	21.04	21.01	20.89	3.0	22.0
		100	0	21.08	20.98	20.88	3.0	22.0
	256QAM	1	0	19.35	19.19	19.17	5.0	20.0
		1	49	19.58	19.28	19.32	5.0	20.0
		1	99	19.27	19.15	19.09	5.0	20.0
		50	0	19.15	19.04	19.00	5.0	20.0
		50	24	19.14	19.02	18.99	5.0	20.0
		50	50	19.12	19.01	18.95	5.0	20.0
		100	0	19.14	19.02	18.98	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18675	18900	19125		
				1857.5 MHz	1880 MHz	1902.5 MHz		
15 MHz	QPSK	1	0	23.95	24.16	24.02	0.0	25.0
		1	37	24.46	24.22	24.07	0.0	25.0
		1	74	24.26	24.13	23.97	0.0	25.0
		36	0	23.39	23.31	23.17	1.0	24.0
		36	20	23.34	23.24	23.12	1.0	24.0
		36	39	23.34	23.23	23.10	1.0	24.0
		75	0	23.35	23.23	23.13	1.0	24.0
	16QAM	1	0	22.96	23.11	23.03	1.0	24.0
		1	37	23.06	23.22	23.23	1.0	24.0
		1	74	23.01	23.09	23.01	1.0	24.0
		36	0	22.24	22.12	22.09	2.0	23.0
		36	20	22.21	22.10	22.03	2.0	23.0
		36	39	22.21	22.09	22.00	2.0	23.0
		75	0	22.20	22.10	22.01	2.0	23.0
	64QAM	1	0	22.28	21.92	21.85	2.0	23.0
		1	37	22.45	22.04	21.92	2.0	23.0
		1	74	22.23	21.91	21.87	2.0	23.0
		36	0	21.08	21.01	20.82	3.0	22.0
		36	20	21.06	21.00	20.79	3.0	22.0
		36	39	21.03	20.99	20.76	3.0	22.0
		75	0	21.05	20.96	20.84	3.0	22.0
	256QAM	1	0	19.39	19.19	18.98	5.0	20.0
		1	37	19.49	19.22	18.97	5.0	20.0
		1	74	19.35	19.16	18.89	5.0	20.0
		36	0	19.09	18.94	18.83	5.0	20.0
		36	20	19.07	18.93	18.81	5.0	20.0
		36	39	19.03	18.91	18.79	5.0	20.0
		75	0	19.04	18.92	18.81	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18650	18900	19150		
				1855 MHz	1880 MHz	1905 MHz		
10 MHz	QPSK	1	0	24.48	24.39	24.18	0.0	25.0
		1	25	24.61	24.35	24.31	0.0	25.0
		1	49	24.49	24.34	24.19	0.0	25.0
		25	0	23.41	23.29	23.20	1.0	24.0
		25	12	23.41	23.28	23.18	1.0	24.0
		25	25	23.38	23.26	23.15	1.0	24.0
		50	0	23.40	23.28	23.17	1.0	24.0
	16QAM	1	0	23.52	23.35	23.33	1.0	24.0
		1	25	23.57	23.37	23.20	1.0	24.0
		1	49	23.46	23.38	23.22	1.0	24.0
		25	0	22.35	22.18	22.14	2.0	23.0
		25	12	22.34	22.19	22.12	2.0	23.0
		25	25	22.33	22.17	22.07	2.0	23.0
		50	0	22.33	22.18	22.08	2.0	23.0
	64QAM	1	0	22.07	22.21	21.93	2.0	23.0
		1	25	22.21	22.14	21.68	2.0	23.0
		1	49	22.03	22.30	21.96	2.0	23.0
		25	0	21.21	21.06	21.02	3.0	22.0
		25	12	21.19	21.03	20.99	3.0	22.0
		25	25	21.17	21.06	20.97	3.0	22.0
		50	0	21.17	21.03	20.95	3.0	22.0
	256QAM	1	0	19.26	19.32	19.18	5.0	20.0
		1	25	19.48	19.49	19.27	5.0	20.0
		1	49	19.27	19.29	19.09	5.0	20.0
		25	0	19.32	19.14	19.01	5.0	20.0
		25	12	19.29	19.13	18.99	5.0	20.0
		25	25	19.27	19.13	18.96	5.0	20.0
		50	0	19.22	19.08	18.95	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18625	18900	19175		
				1852.5 MHz	1880 MHz	1907.5 MHz		
5 MHz	QPSK	1	0	24.24	24.11	23.89	0.0	25.0
		1	12	24.23	24.07	23.97	0.0	25.0
		1	24	24.31	24.14	23.95	0.0	25.0
		12	0	23.27	23.12	22.98	1.0	24.0
		12	7	23.24	23.11	22.95	1.0	24.0
		12	13	23.24	23.10	22.95	1.0	24.0
		25	0	23.23	23.11	22.94	1.0	24.0
	16QAM	1	0	23.35	23.00	23.19	1.0	24.0
		1	12	23.42	23.12	22.94	1.0	24.0
		1	24	23.38	22.96	23.09	1.0	24.0
		12	0	22.13	21.97	21.94	2.0	23.0
		12	7	22.11	21.95	21.91	2.0	23.0
		12	13	22.11	21.95	21.88	2.0	23.0
		25	0	22.14	21.95	21.84	2.0	23.0
	64QAM	1	0	22.07	21.86	21.81	2.0	23.0
		1	12	22.03	21.95	22.02	2.0	23.0
		1	24	22.09	21.92	21.83	2.0	23.0
		12	0	20.95	20.93	20.73	3.0	22.0
		12	7	20.92	20.90	20.72	3.0	22.0
		12	13	20.97	20.91	20.66	3.0	22.0
		25	0	21.02	20.87	20.71	3.0	22.0
	256QAM	1	0	19.35	18.82	18.75	5.0	20.0
		1	12	19.56	18.91	18.83	5.0	20.0
		1	24	19.34	18.84	18.70	5.0	20.0
		12	0	19.11	18.93	18.80	5.0	20.0
		12	7	19.08	18.94	18.80	5.0	20.0
		12	13	19.10	18.91	18.77	5.0	20.0
		25	0	19.04	18.92	18.78	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18615	18900	19185		
				1851.5 MHz	1880 MHz	1908.5 MHz		
3 MHz	QPSK	1	0	24.12	24.14	24.00	0.0	25.0
		1	8	24.31	24.30	24.28	0.0	25.0
		1	14	24.14	24.20	24.07	0.0	25.0
		8	0	23.27	23.20	23.05	1.0	24.0
		8	4	23.24	23.16	22.94	1.0	24.0
		8	7	23.25	23.15	22.99	1.0	24.0
		15	0	23.21	23.09	22.94	1.0	24.0
	16QAM	1	0	23.35	23.17	23.11	1.0	24.0
		1	8	23.46	23.40	23.20	1.0	24.0
		1	14	23.39	23.11	22.99	1.0	24.0
		8	0	22.30	22.06	21.98	2.0	23.0
		8	4	22.22	22.02	21.92	2.0	23.0
		8	7	22.23	22.04	21.93	2.0	23.0
		15	0	22.14	22.00	21.84	2.0	23.0
	64QAM	1	0	21.79	22.14	21.85	2.0	23.0
		1	8	21.87	22.35	21.99	2.0	23.0
		1	14	21.78	22.21	21.90	2.0	23.0
		8	0	21.01	21.01	20.82	3.0	22.0
		8	4	20.99	20.98	20.79	3.0	22.0
		8	7	20.96	20.98	20.74	3.0	22.0
		15	0	20.98	20.83	20.82	3.0	22.0
	256QAM	1	0	19.04	19.23	19.01	5.0	20.0
		1	8	19.16	19.35	19.08	5.0	20.0
		1	14	19.09	19.16	19.00	5.0	20.0
		8	0	19.07	18.97	18.87	5.0	20.0
		8	4	19.07	18.97	18.82	5.0	20.0
		8	7	19.08	18.98	18.88	5.0	20.0
		15	0	19.12	18.95	18.85	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18607	18900	19193		
				1850.7 MHz	1880 MHz	1909.3 MHz		
1.4 MHz	QPSK	1	0	24.15	24.08	23.94	0.0	25.0
		1	3	24.24	24.08	24.06	0.0	25.0
		1	5	24.19	24.10	23.98	0.0	25.0
		3	0	24.07	24.06	23.93	0.0	25.0
		3	1	24.08	24.05	23.93	0.0	25.0
		3	3	24.16	23.99	23.93	0.0	25.0
		6	0	23.28	23.17	23.03	1.0	24.0
	16QAM	1	0	22.92	22.93	23.03	1.0	24.0
		1	3	23.01	22.83	23.17	1.0	24.0
		1	5	22.95	22.97	23.07	1.0	24.0
		3	0	23.12	22.97	22.76	1.0	24.0
		3	1	23.04	22.93	22.71	1.0	24.0
		3	3	23.13	22.88	22.73	1.0	24.0
		6	0	22.13	22.10	21.88	2.0	23.0
	64QAM	1	0	22.01	22.00	21.62	2.0	23.0
		1	3	22.13	21.72	21.82	2.0	23.0
		1	5	21.96	21.98	21.69	2.0	23.0
		3	0	22.05	21.95	21.70	2.0	23.0
		3	1	22.00	21.89	21.61	2.0	23.0
		3	3	22.02	21.93	21.64	2.0	23.0
		6	0	20.93	20.95	20.72	3.0	22.0
	256QAM	1	0	19.02	19.11	18.87	5.0	20.0
		1	3	19.24	19.29	19.05	5.0	20.0
		1	5	19.01	19.09	18.83	5.0	20.0
		3	0	18.93	18.92	18.83	5.0	20.0
		3	1	18.90	18.83	18.75	5.0	20.0
		3	3	18.87	18.86	18.73	5.0	20.0
		6	0	18.96	18.86	18.74	5.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 2 (Sub ANT)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				18700	18900	19100		
				1860 MHz	1880 MHz	1900 MHz		
20 MHz	QPSK	1	0	21.05	21.67	20.89	0.0	22.0
		1	49	20.80	21.81	20.72	0.0	22.0
		1	99	20.94	21.41	20.85	0.0	22.0
		50	0	21.62	21.64	21.57	0.0	22.0
		50	24	21.61	21.71	21.52	0.0	22.0
		50	50	21.62	21.57	21.51	0.0	22.0
		100	0	21.62	21.72	21.51	0.0	22.0
	16QAM	1	0	21.55	21.84	21.86	0.0	22.0
		1	49	21.57	21.95	21.95	0.0	22.0
		1	99	21.62	21.50	21.97	0.0	22.0
		50	0	21.47	21.68	21.45	0.0	22.0
		50	24	21.44	21.73	21.47	0.0	22.0
		50	50	21.41	21.56	21.43	0.0	22.0
		100	0	21.59	21.61	21.44	0.0	22.0
	64QAM	1	0	21.56	21.96	21.63	0.0	22.0
		1	49	21.76	21.38	21.65	0.0	22.0
		1	99	21.77	21.89	21.86	0.0	22.0
		50	0	20.38	20.66	20.50	1.0	21.0
		50	24	20.36	20.52	20.49	1.0	21.0
		50	50	20.39	20.61	20.45	1.0	21.0
		100	0	20.74	20.55	20.14	1.0	21.0
	256QAM	1	0	19.34	18.76	17.68	2.0	20.0
		1	49	19.27	18.54	17.76	2.0	20.0
		1	99	19.24	18.58	17.67	2.0	20.0
		50	0	18.50	18.56	18.62	2.0	20.0
		50	24	18.52	18.54	18.62	2.0	20.0
		50	50	18.49	18.53	18.57	2.0	20.0
		100	0	18.43	18.54	18.46	2.0	20.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18675	18900	19125		
				1857.5 MHz	1880 MHz	1902.5 MHz		
15 MHz	QPSK	1	0	20.67	20.76	21.11	0.0	22.0
		1	37	20.71	20.75	21.14	0.0	22.0
		1	74	20.65	20.79	21.18	0.0	22.0
		36	0	20.62	21.18	21.22	0.0	22.0
		36	20	20.61	21.17	21.25	0.0	22.0
		36	39	20.64	21.16	21.24	0.0	22.0
		75	0	20.72	21.09	21.21	0.0	22.0
	16QAM	1	0	20.59	20.72	20.29	0.0	22.0
		1	37	20.58	20.69	20.25	0.0	22.0
		1	74	20.56	20.65	20.26	0.0	22.0
		36	0	21.40	21.57	21.65	0.0	22.0
		36	20	21.62	21.55	21.69	0.0	22.0
		36	39	21.58	21.57	21.67	0.0	22.0
		75	0	21.51	20.96	21.65	0.0	22.0
	64QAM	1	0	19.86	20.73	20.67	0.0	22.0
		1	37	19.90	20.71	20.65	0.0	22.0
		1	74	19.78	20.69	20.62	0.0	22.0
		36	0	19.43	20.24	20.45	1.0	21.0
		36	20	19.47	20.21	20.59	1.0	21.0
		36	39	19.60	20.26	20.58	1.0	21.0
		75	0	19.51	20.26	20.51	1.0	21.0
	256QAM	1	0	17.73	18.71	19.27	2.0	20.0
		1	37	17.51	18.78	19.26	2.0	20.0
		1	74	17.52	18.73	19.12	2.0	20.0
		36	0	18.17	17.52	17.73	2.0	20.0
		36	20	18.14	17.52	17.69	2.0	20.0
		36	39	18.22	17.59	17.78	2.0	20.0
		75	0	17.94	17.76	17.72	2.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18650	18900	19150		
				1855 MHz	1880 MHz	1905 MHz		
10 MHz	QPSK	1	0	21.24	20.95	21.31	0.0	22.0
		1	25	21.25	20.87	21.27	0.0	22.0
		1	49	21.18	20.84	21.32	0.0	22.0
		25	0	21.16	21.35	21.30	0.0	22.0
		25	12	21.19	21.38	21.27	0.0	22.0
		25	25	21.14	21.38	21.25	0.0	22.0
		50	0	21.11	21.32	21.39	0.0	22.0
	16QAM	1	0	21.13	21.97	21.06	0.0	22.0
		1	25	21.12	21.96	21.12	0.0	22.0
		1	49	21.16	21.84	21.13	0.0	22.0
		25	0	21.87	21.10	20.90	0.0	22.0
		25	12	21.78	21.14	20.93	0.0	22.0
		25	25	21.69	21.18	20.85	0.0	22.0
		50	0	21.80	21.19	20.86	0.0	22.0
	64QAM	1	0	20.72	21.60	20.43	0.0	22.0
		1	25	20.68	21.58	20.46	0.0	22.0
		1	49	20.65	21.63	20.42	0.0	22.0
		25	0	19.31	20.75	19.55	1.0	21.0
		25	12	19.35	20.79	19.59	1.0	21.0
		25	25	19.36	20.76	19.58	1.0	21.0
		50	0	19.93	20.79	19.71	1.0	21.0
	256QAM	1	0	17.67	17.71	18.15	2.0	20.0
		1	25	17.63	18.13	18.13	2.0	20.0
		1	49	18.45	17.95	17.81	2.0	20.0
		25	0	18.79	17.65	18.03	2.0	20.0
		25	12	18.79	18.38	17.63	2.0	20.0
		25	25	18.76	18.40	17.60	2.0	20.0
		50	0	18.75	18.35	17.78	2.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18625	18900	19175		
				1852.5 MHz	1880 MHz	1907.5 MHz		
5 MHz	QPSK	1	0	19.83	19.61	20.02	0.0	22.0
		1	12	19.81	19.59	20.01	0.0	22.0
		1	24	19.84	19.56	20.05	0.0	22.0
		12	0	20.83	20.87	21.06	0.0	22.0
		12	7	20.81	20.91	21.09	0.0	22.0
		12	13	20.84	20.86	21.11	0.0	22.0
		25	0	20.77	20.91	21.15	0.0	22.0
	16QAM	1	0	21.95	20.53	21.37	0.0	22.0
		1	12	21.96	20.51	21.21	0.0	22.0
		1	24	21.93	20.58	21.38	0.0	22.0
		12	0	21.20	19.94	20.94	0.0	22.0
		12	7	21.18	19.91	20.96	0.0	22.0
		12	13	21.21	19.96	20.97	0.0	22.0
		25	0	21.28	20.81	20.98	0.0	22.0
	64QAM	1	0	20.71	20.53	21.77	0.0	22.0
		1	12	20.75	20.51	21.75	0.0	22.0
		1	24	20.79	20.52	21.69	0.0	22.0
		12	0	19.99	19.15	19.89	1.0	21.0
		12	7	19.94	19.23	19.91	1.0	21.0
		12	13	19.96	19.36	19.91	1.0	21.0
		25	0	19.87	19.26	19.45	1.0	21.0
	256QAM	1	0	19.73	17.81	18.85	2.0	20.0
		1	12	19.38	17.94	18.63	2.0	20.0
		1	24	19.41	18.00	18.71	2.0	20.0
		12	0	17.68	17.67	17.65	2.0	20.0
		12	7	17.79	17.74	17.51	2.0	20.0
		12	13	17.72	17.84	17.62	2.0	20.0
		25	0	17.82	17.82	17.93	2.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18615	18900	19185		
				1851.5 MHz	1880 MHz	1908.5 MHz		
3 MHz	QPSK	1	0	21.28	21.15	21.38	0.0	22.0
		1	8	21.31	21.14	21.36	0.0	22.0
		1	14	21.26	21.50	21.41	0.0	22.0
		8	0	21.01	21.49	21.43	0.0	22.0
		8	4	21.04	21.48	21.41	0.0	22.0
		8	7	21.06	21.45	21.45	0.0	22.0
		15	0	21.00	21.20	21.36	0.0	22.0
	16QAM	1	0	20.83	21.13	21.54	0.0	22.0
		1	8	20.91	21.14	21.49	0.0	22.0
		1	14	20.86	21.18	21.47	0.0	22.0
		8	0	20.87	21.31	21.37	0.0	22.0
		8	4	20.81	21.32	21.38	0.0	22.0
		8	7	20.94	21.36	21.39	0.0	22.0
		15	0	20.72	21.05	21.39	0.0	22.0
	64QAM	1	0	20.78	21.40	21.24	0.0	22.0
		1	8	20.81	21.38	21.29	0.0	22.0
		1	14	20.75	21.44	21.26	0.0	22.0
		8	0	19.36	20.39	19.98	1.0	21.0
		8	4	19.52	20.37	19.95	1.0	21.0
		8	7	19.90	20.39	20.01	1.0	21.0
		15	0	19.91	20.50	20.27	1.0	21.0
	256QAM	1	0	18.91	18.27	17.98	2.0	20.0
		1	8	18.82	18.26	17.85	2.0	20.0
		1	14	18.86	18.25	17.86	2.0	20.0
		8	0	17.73	17.91	18.51	2.0	20.0
		8	4	17.79	17.92	18.62	2.0	20.0
		8	7	17.76	17.86	18.36	2.0	20.0
		15	0	18.24	17.81	18.82	2.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18607	18900	19193		
				1850.7 MHz	1880 MHz	1909.3 MHz		
1.4 MHz	QPSK	1	0	20.85	20.93	21.11	0.0	22.0
		1	3	20.91	20.89	21.18	0.0	22.0
		1	5	21.14	20.92	21.14	0.0	22.0
		3	0	21.18	20.98	21.25	0.0	22.0
		3	1	21.15	20.95	21.24	0.0	22.0
		3	3	21.17	21.04	21.27	0.0	22.0
		6	0	21.11	21.05	21.27	0.0	22.0
	16QAM	1	0	21.07	21.23	20.92	0.0	22.0
		1	3	21.05	21.24	20.91	0.0	22.0
		1	5	21.16	21.18	21.14	0.0	22.0
		3	0	20.42	21.23	20.13	0.0	22.0
		3	1	20.91	21.25	21.15	0.0	22.0
		3	3	20.85	21.29	21.15	0.0	22.0
		6	0	20.89	21.32	21.14	0.0	22.0
	64QAM	1	0	20.58	21.27	21.07	0.0	22.0
		1	3	20.62	21.29	21.12	0.0	22.0
		1	5	20.69	21.34	21.14	0.0	22.0
		3	0	20.98	21.23	21.45	0.0	22.0
		3	1	20.91	21.28	21.51	0.0	22.0
		3	3	20.95	21.25	21.58	0.0	22.0
		6	0	19.65	20.14	21.53	0.0	22.0
	256QAM	1	0	18.05	17.77	17.96	2.0	20.0
		1	3	18.12	17.79	18.12	2.0	20.0
		1	5	18.16	17.74	17.82	2.0	20.0
		3	0	17.56	17.59	18.01	2.0	20.0
		3	1	17.82	17.60	18.12	2.0	20.0
		3	3	17.79	17.69	17.92	2.0	20.0
		6	0	17.92	17.97	17.86	2.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

LTE Band 4

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				20050	20175	20300		
				1720 MHz	1732.5 MHz	1745 MHz		
20 MHz	QPSK	1	0	23.40	23.26	23.94	0.0	25.0
		1	49	23.51	23.95	23.82	0.0	25.0
		1	99	23.87	23.89	23.79	0.0	25.0
		50	0	22.57	22.95	22.94	1.0	24.0
		50	24	22.79	22.94	22.92	1.0	24.0
		50	50	22.91	22.92	22.90	1.0	24.0
		100	0	22.78	22.94	22.90	1.0	24.0
	16QAM	1	0	22.53	22.69	23.26	1.0	24.0
		1	49	22.97	23.30	23.00	1.0	24.0
		1	99	23.27	23.27	23.19	1.0	24.0
		50	0	21.79	21.94	21.89	2.0	23.0
		50	24	21.90	21.89	21.87	2.0	23.0
		50	50	21.90	21.85	21.86	2.0	23.0
		100	0	21.91	21.91	21.84	2.0	23.0
	64QAM	1	0	21.73	22.02	21.96	2.0	23.0
		1	49	21.87	21.89	21.99	2.0	23.0
		1	99	21.84	21.93	21.95	2.0	23.0
		50	0	20.80	20.82	20.79	3.0	22.0
		50	24	20.80	20.78	20.79	3.0	22.0
		50	50	20.79	20.76	20.77	3.0	22.0
		100	0	20.80	20.76	20.76	3.0	22.0
	256QAM	1	0	18.86	18.96	18.81	5.0	20.0
		1	49	18.96	18.97	18.88	5.0	20.0
		1	99	18.86	18.85	18.77	5.0	20.0
		50	0	18.70	18.76	18.73	5.0	20.0
		50	24	18.73	18.73	18.71	5.0	20.0
		50	50	18.72	18.71	18.70	5.0	20.0
		100	0	18.74	18.74	18.73	5.0	20.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20025	20175	20325		
				1717.5 MHz	1732.5 MHz	1747.5 MHz		
15 MHz	QPSK	1	0	23.14	23.42	23.70	0.0	25.0
		1	37	23.11	23.85	24.11	0.0	25.0
		1	74	23.09	23.86	23.48	0.0	25.0
		36	0	22.17	22.82	23.24	1.0	24.0
		36	20	22.54	23.28	23.45	1.0	24.0
		36	39	22.66	23.45	23.37	1.0	24.0
		75	0	22.44	23.18	23.31	1.0	24.0
	16QAM	1	0	21.91	22.44	23.23	1.0	24.0
		1	37	22.79	23.46	23.77	1.0	24.0
		1	74	22.82	23.46	23.26	1.0	24.0
		36	0	21.64	22.32	22.54	2.0	23.0
		36	20	22.04	22.54	22.49	2.0	23.0
		36	39	22.18	22.55	22.46	2.0	23.0
		75	0	21.98	22.54	22.52	2.0	23.0
	64QAM	1	0	21.48	22.58	22.44	2.0	23.0
		1	37	22.16	22.76	22.52	2.0	23.0
		1	74	22.28	22.61	22.42	2.0	23.0
		36	0	21.21	21.46	21.42	3.0	22.0
		36	20	21.43	21.44	21.39	3.0	22.0
		36	39	21.41	21.41	21.37	3.0	22.0
		75	0	21.46	21.42	21.36	3.0	22.0
	256QAM	1	0	19.55	19.78	19.24	5.0	20.0
		1	37	19.64	19.76	19.24	5.0	20.0
		1	74	19.55	19.66	19.19	5.0	20.0
		36	0	19.38	19.39	19.28	5.0	20.0
		36	20	19.37	19.38	19.24	5.0	20.0
		36	39	19.37	19.33	19.23	5.0	20.0
		75	0	19.39	19.35	19.29	5.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20000	20175	20350		
				1715 MHz	1732.5 MHz	1750 MHz		
10 MHz	QPSK	1	0	23.89	23.54	24.16	0.0	25.0
		1	25	23.89	23.97	24.14	0.0	25.0
		1	49	23.98	24.22	23.87	0.0	25.0
		25	0	22.35	23.11	23.40	1.0	24.0
		25	12	22.61	23.39	23.47	1.0	24.0
		25	25	22.76	23.51	23.47	1.0	24.0
		50	0	22.60	23.40	23.47	1.0	24.0
	16QAM	1	0	22.26	23.06	23.64	1.0	24.0
		1	25	22.73	23.58	23.72	1.0	24.0
		1	49	22.90	23.70	23.65	1.0	24.0
		25	0	21.83	22.50	22.48	2.0	23.0
		25	12	22.11	22.45	22.45	2.0	23.0
		25	25	22.27	22.43	22.45	2.0	23.0
		50	0	22.11	22.47	22.40	2.0	23.0
	64QAM	1	0	21.86	22.56	22.32	2.0	23.0
		1	25	22.27	22.70	22.24	2.0	23.0
		1	49	22.25	22.57	22.38	2.0	23.0
		25	0	21.48	21.46	21.40	3.0	22.0
		25	12	21.47	21.41	21.37	3.0	22.0
		25	25	21.46	21.40	21.36	3.0	22.0
		50	0	21.42	21.39	21.35	3.0	22.0
	256QAM	1	0	19.45	19.73	19.24	5.0	20.0
		1	25	19.45	19.75	19.38	5.0	20.0
		1	49	19.45	19.59	19.21	5.0	20.0
		25	0	19.45	19.39	19.28	5.0	20.0
		25	12	19.42	19.35	19.26	5.0	20.0
		25	25	19.43	19.34	19.24	5.0	20.0
		50	0	19.35	19.32	19.24	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				19975	20175	20375		
				1712.5 MHz	1732.5 MHz	1752.5 MHz		
5 MHz	QPSK	1	0	23.93	24.12	24.11	0.0	25.0
		1	12	23.97	24.37	24.18	0.0	25.0
		1	24	24.01	24.20	24.19	0.0	25.0
		12	0	23.12	23.21	23.16	1.0	24.0
		12	7	23.16	23.21	23.14	1.0	24.0
		12	13	23.16	23.18	23.15	1.0	24.0
		25	0	23.17	23.17	23.13	1.0	24.0
	16QAM	1	0	23.01	23.57	23.38	1.0	24.0
		1	12	23.24	23.44	23.55	1.0	24.0
		1	24	23.38	23.49	23.41	1.0	24.0
		12	0	22.24	22.26	22.17	2.0	23.0
		12	7	22.22	22.24	22.15	2.0	23.0
		12	13	22.22	22.22	22.10	2.0	23.0
		25	0	22.11	22.13	22.08	2.0	23.0
	64QAM	1	0	22.15	22.32	22.03	2.0	23.0
		1	12	22.33	22.19	22.16	2.0	23.0
		1	24	22.29	22.28	22.10	2.0	23.0
		12	0	21.06	21.07	21.04	3.0	22.0
		12	7	21.06	21.06	21.01	3.0	22.0
		12	13	21.03	21.05	21.02	3.0	22.0
		25	0	21.07	21.10	20.99	3.0	22.0
	256QAM	1	0	18.97	19.27	19.06	5.0	20.0
		1	12	18.95	19.32	19.20	5.0	20.0
		1	24	18.97	19.22	19.03	5.0	20.0
		12	0	19.00	19.02	18.96	5.0	20.0
		12	7	19.02	18.98	18.96	5.0	20.0
		12	13	19.01	18.99	18.94	5.0	20.0
		25	0	19.04	18.98	18.92	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				19965	20175	20385		
				1711.5 MHz	1732.5 MHz	1753.5 MHz		
3 MHz	QPSK	1	0	24.04	24.23	24.22	0.0	25.0
		1	8	24.00	24.42	24.33	0.0	25.0
		1	14	23.95	24.30	24.31	0.0	25.0
		8	0	23.22	23.23	23.23	1.0	24.0
		8	4	23.22	23.17	23.17	1.0	24.0
		8	7	23.21	23.20	23.16	1.0	24.0
		15	0	23.20	23.18	23.17	1.0	24.0
	16QAM	1	0	23.15	23.40	23.08	1.0	24.0
		1	8	23.28	23.53	23.22	1.0	24.0
		1	14	23.35	23.32	23.00	1.0	24.0
		8	0	22.25	22.21	22.13	2.0	23.0
		8	4	22.20	22.15	22.16	2.0	23.0
		8	7	22.19	22.15	22.08	2.0	23.0
		15	0	22.15	22.09	22.11	2.0	23.0
	64QAM	1	0	21.74	22.38	22.17	2.0	23.0
		1	8	21.80	22.58	22.35	2.0	23.0
		1	14	21.73	22.47	22.28	2.0	23.0
		8	0	21.10	21.14	21.13	3.0	22.0
		8	4	21.07	21.10	21.08	3.0	22.0
		8	7	21.06	21.10	21.04	3.0	22.0
		15	0	21.13	21.04	21.12	3.0	22.0
	256QAM	1	0	19.08	19.41	19.10	5.0	20.0
		1	8	19.19	19.36	18.93	5.0	20.0
		1	14	19.05	19.38	19.00	5.0	20.0
		8	0	19.13	19.08	19.02	5.0	20.0
		8	4	19.07	19.08	18.96	5.0	20.0
		8	7	19.16	19.05	19.00	5.0	20.0
		15	0	19.09	19.00	19.00	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				19957	20175	20393		
				1710.7 MHz	1732.5 MHz	1754.3 MHz		
1.4 MHz	QPSK	1	0	24.02	24.15	24.14	0.0	25.0
		1	3	23.92	24.02	23.99	0.0	25.0
		1	5	23.88	24.19	24.19	0.0	25.0
		3	0	23.72	24.21	24.25	0.0	25.0
		3	1	23.71	24.18	24.12	0.0	25.0
		3	3	23.69	23.90	24.12	0.0	25.0
		6	0	23.15	23.19	23.17	1.0	24.0
	16QAM	1	0	23.19	23.19	23.35	1.0	24.0
		1	3	23.21	23.29	23.31	1.0	24.0
		1	5	23.25	23.22	23.39	1.0	24.0
		3	0	23.21	23.20	23.18	1.0	24.0
		3	1	23.22	23.21	23.16	1.0	24.0
		3	3	23.19	23.26	23.12	1.0	24.0
		6	0	22.17	22.20	22.08	2.0	23.0
	64QAM	1	0	22.28	22.17	21.71	2.0	23.0
		1	3	22.41	21.76	22.09	2.0	23.0
		1	5	22.26	22.16	21.81	2.0	23.0
		3	0	22.17	22.28	22.07	2.0	23.0
		3	1	22.15	22.16	22.05	2.0	23.0
		3	3	22.10	22.19	22.04	2.0	23.0
		6	0	21.12	21.16	21.04	3.0	22.0
	256QAM	1	0	18.95	19.14	19.11	5.0	20.0
		1	3	19.23	19.37	19.10	5.0	20.0
		1	5	18.88	19.10	19.04	5.0	20.0
		3	0	19.05	19.12	19.03	5.0	20.0
		3	1	18.99	19.04	18.92	5.0	20.0
		3	3	18.96	19.03	18.90	5.0	20.0
		6	0	19.08	19.04	18.94	5.0	20.0

LTE Band 5

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				20450	20525	20600		
				829 MHz	836.5 MHz	844 MHz		
10 MHz	QPSK	1	0	24.32	24.37	24.21	0.0	25.5
		1	25	24.38	24.36	24.04	0.0	25.5
		1	49	24.27	24.24	24.17	0.0	25.5
		25	0	23.31	23.27	23.21	1.0	24.5
		25	12	23.28	23.24	23.16	1.0	24.5
		25	25	23.24	23.19	23.12	1.0	24.5
		50	0	23.26	23.23	23.15	1.0	24.5
	16QAM	1	0	23.34	23.58	23.60	1.0	24.5
		1	25	23.45	23.71	23.52	1.0	24.5
		1	49	23.16	23.57	23.44	1.0	24.5
		25	0	22.26	22.24	22.17	2.0	23.5
		25	12	22.24	22.21	22.14	2.0	23.5
		25	25	22.19	22.18	22.10	2.0	23.5
		50	0	22.23	22.17	22.09	2.0	23.5
	64QAM	1	0	22.54	22.44	22.25	2.0	23.5
		1	25	22.71	22.45	22.15	2.0	23.5
		1	49	22.40	22.43	22.17	2.0	23.5
		25	0	21.44	21.40	21.38	3.0	22.5
		25	12	21.41	21.38	21.36	3.0	22.5
		25	25	21.38	21.36	21.31	3.0	22.5
		50	0	21.37	21.36	21.30	3.0	22.5
	256QAM	1	0	19.49	19.76	19.35	5.0	20.5
		1	25	19.40	19.87	19.46	5.0	20.5
		1	49	19.43	19.65	19.28	5.0	20.5
		25	0	19.46	19.45	19.31	5.0	20.5
		25	12	19.45	19.41	19.29	5.0	20.5
		25	25	19.40	19.37	19.24	5.0	20.5
		50	0	19.37	19.35	19.26	5.0	20.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20425	20525	20625		
				826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	24.09	23.98	23.89	0.0	25.5
		1	12	24.09	24.07	23.96	0.0	25.5
		1	24	24.06	24.01	23.91	0.0	25.5
		12	0	23.10	23.01	22.93	1.0	24.5
		12	7	23.09	23.00	22.90	1.0	24.5
		12	13	23.05	22.99	22.88	1.0	24.5
		25	0	23.05	22.99	22.90	1.0	24.5
	16QAM	1	0	23.51	23.31	23.23	1.0	24.5
		1	12	23.43	23.36	23.18	1.0	24.5
		1	24	23.41	23.33	23.09	1.0	24.5
		12	0	22.09	21.95	21.93	2.0	23.5
		12	7	22.08	21.93	21.88	2.0	23.5
		12	13	22.05	21.90	21.85	2.0	23.5
		25	0	22.02	21.95	21.87	2.0	23.5
	64QAM	1	0	22.13	22.49	22.19	2.0	23.5
		1	12	22.20	22.42	22.17	2.0	23.5
		1	24	22.14	22.43	22.16	2.0	23.5
		12	0	21.14	21.15	21.11	3.0	22.5
		12	7	21.14	21.14	21.07	3.0	22.5
		12	13	21.09	21.15	21.08	3.0	22.5
		25	0	21.17	21.17	21.04	3.0	22.5
	256QAM	1	0	19.30	19.43	19.22	5.0	20.5
		1	12	19.16	19.33	19.28	5.0	20.5
		1	24	19.23	19.51	19.17	5.0	20.5
		12	0	19.16	19.30	19.04	5.0	20.5
		12	7	19.16	19.15	19.01	5.0	20.5
		12	13	19.13	19.14	19.02	5.0	20.5
		25	0	19.18	19.10	19.02	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20415	20525	20635		
				825.5 MHz	836.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	23.99	24.00	23.96	0.0	25.5
		1	8	24.03	24.05	23.71	0.0	25.5
		1	14	23.95	24.05	24.00	0.0	25.5
		8	0	23.05	22.98	22.92	1.0	24.5
		8	4	23.04	22.98	22.89	1.0	24.5
		8	7	23.01	23.01	22.86	1.0	24.5
		15	0	23.03	22.93	22.85	1.0	24.5
	16QAM	1	0	23.26	23.22	23.00	1.0	24.5
		1	8	23.25	23.27	22.96	1.0	24.5
		1	14	23.26	23.17	22.87	1.0	24.5
		8	0	22.16	22.02	21.88	2.0	23.5
		8	4	22.12	22.01	21.89	2.0	23.5
		8	7	22.11	22.01	21.89	2.0	23.5
		15	0	22.06	21.97	21.81	2.0	23.5
	64QAM	1	0	22.48	22.54	22.29	2.0	23.5
		1	8	22.37	22.60	22.33	2.0	23.5
		1	14	22.37	22.58	22.32	2.0	23.5
		8	0	21.40	21.42	21.28	3.0	22.5
		8	4	21.37	21.40	21.27	3.0	22.5
		8	7	21.38	21.45	21.28	3.0	22.5
		15	0	21.43	21.32	21.33	3.0	22.5
	256QAM	1	0	19.53	19.81	19.38	5.0	20.5
		1	8	19.59	19.77	19.43	5.0	20.5
		1	14	19.53	19.76	19.36	5.0	20.5
		8	0	19.40	19.43	19.35	5.0	20.5
		8	4	19.38	19.47	19.28	5.0	20.5
		8	7	19.38	19.41	19.28	5.0	20.5
		15	0	19.48	19.36	19.31	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20407	20525	20643		
				824.7 MHz	836.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	24.36	24.21	24.08	0.0	25.5
		1	3	24.21	24.26	23.99	0.0	25.5
		1	5	24.36	24.21	24.10	0.0	25.5
		3	0	24.32	24.21	24.14	0.0	25.5
		3	1	24.26	24.25	24.08	0.0	25.5
		3	3	24.30	24.15	23.95	0.0	25.5
		6	0	23.27	23.20	23.12	1.0	24.5
	16QAM	1	0	23.27	23.24	23.20	1.0	24.5
		1	3	23.35	23.15	23.26	1.0	24.5
		1	5	23.49	23.27	23.22	1.0	24.5
		3	0	23.41	23.20	23.01	1.0	24.5
		3	1	23.29	23.14	23.06	1.0	24.5
		3	3	23.31	23.20	22.95	1.0	24.5
		6	0	22.38	22.21	22.00	2.0	23.5
	64QAM	1	0	22.49	22.09	21.88	2.0	23.5
		1	3	22.65	21.95	22.05	2.0	23.5
		1	5	22.44	22.07	21.94	2.0	23.5
		3	0	22.32	22.15	21.91	2.0	23.5
		3	1	22.19	22.03	21.92	2.0	23.5
		3	3	22.10	22.10	21.87	2.0	23.5
		6	0	21.15	21.13	20.93	3.0	22.5
	256QAM	1	0	19.31	19.12	19.06	5.0	20.5
		1	3	19.38	19.30	19.13	5.0	20.5
		1	5	19.26	19.12	19.06	5.0	20.5
		3	0	19.14	19.07	19.05	5.0	20.5
		3	1	19.09	19.05	19.04	5.0	20.5
		3	3	19.01	18.99	18.99	5.0	20.5
		6	0	19.13	19.11	18.96	5.0	20.5

LTE Band 7

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				20850	21100	21350		
				2510 MHz	2535 MHz	2560 MHz		
20 MHz	QPSK	1	0	23.24	22.68	22.66	0.0	24.0
		1	49	23.06	22.59	22.48	0.0	24.0
		1	99	23.10	22.61	22.49	0.0	24.0
		50	0	22.16	21.71	21.65	1.0	23.0
		50	24	22.11	21.67	21.57	1.0	23.0
		50	50	22.08	21.65	21.51	1.0	23.0
		100	0	22.12	21.70	21.59	1.0	23.0
	16QAM	1	0	22.51	22.03	22.06	1.0	23.0
		1	49	22.36	22.05	21.83	1.0	23.0
		1	99	22.24	21.92	21.74	1.0	23.0
		50	0	21.12	20.68	20.57	2.0	22.0
		50	24	21.06	20.63	20.46	2.0	22.0
		50	50	21.00	20.59	20.39	2.0	22.0
		100	0	21.06	20.66	20.50	2.0	22.0
	64QAM	1	0	21.29	20.86	20.98	2.0	22.0
		1	49	21.14	20.75	20.64	2.0	22.0
		1	99	21.12	20.84	20.74	2.0	22.0
		50	0	20.05	19.64	19.58	3.0	21.0
		50	24	20.00	19.61	19.46	3.0	21.0
		50	50	19.91	19.57	19.38	3.0	21.0
		100	0	19.99	19.60	19.47	3.0	21.0
	256QAM	1	0	18.17	17.91	17.72	5.0	19.0
		1	49	18.11	17.85	17.56	5.0	19.0
		1	99	17.96	17.78	17.44	5.0	19.0
		50	0	18.03	17.60	17.53	5.0	19.0
		50	24	17.95	17.55	17.44	5.0	19.0
		50	50	17.91	17.54	17.38	5.0	19.0
		100	0	17.95	17.55	17.44	5.0	19.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20825	21100	21375		
				2507.5 MHz	2535 MHz	2562.5 MHz		
15 MHz	QPSK	1	0	23.14	22.66	22.61	0.0	24.0
		1	37	23.09	22.56	22.51	0.0	24.0
		1	74	22.99	22.61	22.47	0.0	24.0
		36	0	22.21	21.80	21.74	1.0	23.0
		36	20	22.16	21.74	21.70	1.0	23.0
		36	39	22.15	21.72	21.66	1.0	23.0
		75	0	22.18	21.77	21.69	1.0	23.0
	16QAM	1	0	22.31	21.74	21.69	1.0	23.0
		1	37	21.88	21.60	21.20	1.0	23.0
		1	74	22.11	21.64	21.50	1.0	23.0
		36	0	21.10	20.73	20.60	2.0	22.0
		36	20	21.06	20.70	20.55	2.0	22.0
		36	39	21.01	20.67	20.50	2.0	22.0
		75	0	21.05	20.68	20.54	2.0	22.0
	64QAM	1	0	21.19	20.88	20.69	2.0	22.0
		1	37	21.33	20.72	20.67	2.0	22.0
		1	74	21.08	20.83	20.60	2.0	22.0
		36	0	20.06	19.74	19.58	3.0	21.0
		36	20	20.02	19.70	19.52	3.0	21.0
		36	39	19.97	19.68	19.45	3.0	21.0
		75	0	20.05	19.68	19.53	3.0	21.0
	256QAM	1	0	18.07	17.88	17.62	5.0	19.0
		1	37	18.10	18.00	17.58	5.0	19.0
		1	74	17.90	17.79	17.44	5.0	19.0
		36	0	18.04	17.68	17.54	5.0	19.0
		36	20	17.99	17.63	17.48	5.0	19.0
		36	39	17.95	17.61	17.43	5.0	19.0
		75	0	18.00	17.64	17.50	5.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20800	21100	21400		
				2505 MHz	2535 MHz	2565 MHz		
10 MHz	QPSK	1	0	23.09	22.58	22.49	0.0	24.0
		1	25	23.17	22.71	22.58	0.0	24.0
		1	49	23.05	22.62	22.44	0.0	24.0
		25	0	22.05	21.62	21.49	1.0	23.0
		25	12	22.01	21.61	21.46	1.0	23.0
		25	25	21.99	21.59	21.45	1.0	23.0
		50	0	22.03	21.62	21.48	1.0	23.0
	16QAM	1	0	22.20	21.79	21.71	1.0	23.0
		1	25	21.86	21.57	21.42	1.0	23.0
		1	49	22.03	21.70	21.61	1.0	23.0
		25	0	21.03	20.59	20.45	2.0	22.0
		25	12	21.01	20.57	20.42	2.0	22.0
		25	25	20.96	20.56	20.39	2.0	22.0
		50	0	20.99	20.58	20.44	2.0	22.0
	64QAM	1	0	21.07	20.69	20.55	2.0	22.0
		1	25	21.07	20.81	20.50	2.0	22.0
		1	49	21.02	20.73	20.56	2.0	22.0
		25	0	19.97	19.59	19.45	3.0	21.0
		25	12	19.94	19.58	19.42	3.0	21.0
		25	25	19.90	19.55	19.39	3.0	21.0
		50	0	19.89	19.57	19.39	3.0	21.0
	256QAM	1	0	18.21	17.88	17.81	5.0	19.0
		1	25	18.11	17.84	17.75	5.0	19.0
		1	49	18.03	17.73	17.67	5.0	19.0
		25	0	17.92	17.61	17.43	5.0	19.0
		25	12	17.89	17.60	17.42	5.0	19.0
		25	25	17.85	17.57	17.38	5.0	19.0
		50	0	17.89	17.57	17.37	5.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20775	21100	21425		
				2502.5 MHz	2535 MHz	2567.5 MHz		
5 MHz	QPSK	1	0	22.92	22.54	22.34	0.0	24.0
		1	12	22.97	22.48	22.50	0.0	24.0
		1	24	22.95	22.61	22.40	0.0	24.0
		12	0	21.95	21.58	21.47	1.0	23.0
		12	7	21.94	21.56	21.44	1.0	23.0
		12	13	21.95	21.56	21.44	1.0	23.0
		25	0	21.96	21.57	21.44	1.0	23.0
	16QAM	1	0	22.16	21.73	21.70	1.0	23.0
		1	12	22.20	21.78	21.61	1.0	23.0
		1	24	22.16	21.68	21.76	1.0	23.0
		12	0	20.95	20.58	20.41	2.0	22.0
		12	7	20.92	20.56	20.39	2.0	22.0
		12	13	20.93	20.57	20.36	2.0	22.0
		25	0	20.93	20.56	20.36	2.0	22.0
	64QAM	1	0	20.88	20.61	20.37	2.0	22.0
		1	12	21.08	20.76	20.50	2.0	22.0
		1	24	20.87	20.66	20.44	2.0	22.0
		12	0	19.82	19.49	19.37	3.0	21.0
		12	7	19.79	19.47	19.34	3.0	21.0
		12	13	19.77	19.48	19.36	3.0	21.0
		25	0	19.80	19.53	19.39	3.0	21.0
	256QAM	1	0	17.82	17.62	17.44	5.0	19.0
		1	12	18.06	17.86	17.66	5.0	19.0
		1	24	17.75	17.57	17.40	5.0	19.0
		12	0	17.84	17.55	17.41	5.0	19.0
		12	7	17.82	17.54	17.40	5.0	19.0
		12	13	17.82	17.54	17.40	5.0	19.0
		25	0	17.80	17.51	17.39	5.0	19.0

LTE Band 12

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				23060	23095	23130		
				704 MHz	707.5 MHz	711 MHz		
10 MHz	QPSK	1	0	24.12	24.20	24.12	0.0	25.0
		1	25	24.18	23.20	23.90	0.0	25.0
		1	49	24.14	24.21	24.08	0.0	25.0
		25	0	23.16	23.10	23.10	1.0	24.0
		25	12	23.11	23.08	23.06	1.0	24.0
		25	25	23.07	23.12	23.04	1.0	24.0
		50	0	23.12	23.08	23.07	1.0	24.0
	16QAM	1	0	23.25	23.32	23.50	1.0	24.0
		1	25	23.35	23.39	23.29	1.0	24.0
		1	49	23.09	23.24	23.38	1.0	24.0
		25	0	22.11	22.11	22.09	2.0	23.0
		25	12	22.08	22.07	22.04	2.0	23.0
		25	25	22.07	22.05	22.01	2.0	23.0
		50	0	22.08	22.04	22.01	2.0	23.0
	64QAM	1	0	22.35	22.17	22.09	2.0	23.0
		1	25	22.40	22.17	22.13	2.0	23.0
		1	49	22.33	22.14	21.93	2.0	23.0
		25	0	21.14	21.01	21.13	3.0	22.0
		25	12	21.11	20.99	21.08	3.0	22.0
		25	25	21.10	20.97	21.05	3.0	22.0
		50	0	21.09	20.98	21.04	3.0	22.0
	256QAM	1	0	19.48	19.25	19.20	5.0	20.0
		1	25	19.37	19.23	19.24	5.0	20.0
		1	49	19.34	19.14	19.12	5.0	20.0
		25	0	19.22	19.05	19.17	5.0	20.0
		25	12	19.17	19.02	19.14	5.0	20.0
		25	25	19.14	18.99	19.11	5.0	20.0
		50	0	19.14	18.97	19.09	5.0	20.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23035	23095	23155		
				701.5 MHz	707.5 MHz	713.5 MHz		
5 MHz	QPSK	1	0	23.06	23.99	23.92	0.0	25.0
		1	12	24.16	24.00	24.00	0.0	25.0
		1	24	24.10	23.97	23.92	0.0	25.0
		12	0	23.10	23.02	23.00	1.0	24.0
		12	7	23.07	23.02	22.99	1.0	24.0
		12	13	23.05	22.99	22.97	1.0	24.0
		25	0	23.09	23.01	22.97	1.0	24.0
	16QAM	1	0	23.33	23.41	23.19	1.0	24.0
		1	12	23.28	23.32	23.42	1.0	24.0
		1	24	23.25	23.31	23.35	1.0	24.0
		12	0	22.09	22.12	21.95	2.0	23.0
		12	7	22.05	22.12	21.94	2.0	23.0
		12	13	22.05	22.10	21.90	2.0	23.0
		25	0	22.06	21.98	21.90	2.0	23.0
	64QAM	1	0	22.35	22.22	22.03	2.0	23.0
		1	12	22.34	22.29	22.09	2.0	23.0
		1	24	22.26	22.22	22.05	2.0	23.0
		12	0	21.07	21.06	20.96	3.0	22.0
		12	7	21.06	21.05	20.95	3.0	22.0
		12	13	21.01	21.03	20.94	3.0	22.0
		25	0	21.05	20.95	20.94	3.0	22.0
	256QAM	1	0	19.20	18.88	19.08	5.0	20.0
		1	12	19.11	18.90	18.85	5.0	20.0
		1	24	19.13	18.85	18.97	5.0	20.0
		12	0	19.15	19.05	19.00	5.0	20.0
		12	7	19.13	19.03	18.99	5.0	20.0
		12	13	19.07	19.03	18.95	5.0	20.0
		25	0	19.04	18.98	18.96	5.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23025	23095	23165		
				700.5 MHz	707.5 MHz	714.5 MHz		
3 MHz	QPSK	1	0	23.06	24.10	24.06	0.0	25.0
		1	8	24.06	24.12	23.83	0.0	25.0
		1	14	24.04	24.10	24.10	0.0	25.0
		8	0	23.12	23.03	23.01	1.0	24.0
		8	4	23.13	23.04	22.99	1.0	24.0
		8	7	23.12	23.09	22.96	1.0	24.0
		15	0	23.11	23.00	22.96	1.0	24.0
	16QAM	1	0	23.33	23.29	23.14	1.0	24.0
		1	8	23.34	23.30	23.16	1.0	24.0
		1	14	23.34	23.21	23.03	1.0	24.0
		8	0	22.09	22.05	21.90	2.0	23.0
		8	4	22.12	21.99	21.96	2.0	23.0
		8	7	22.09	22.02	21.90	2.0	23.0
		15	0	22.06	22.04	21.93	2.0	23.0
	64QAM	1	0	22.26	22.25	22.02	2.0	23.0
		1	8	22.28	22.25	21.98	2.0	23.0
		1	14	22.30	22.31	21.95	2.0	23.0
		8	0	21.19	21.01	20.99	3.0	22.0
		8	4	21.14	21.05	20.93	3.0	22.0
		8	7	21.15	21.05	20.93	3.0	22.0
		15	0	21.00	21.08	20.92	3.0	22.0
	256QAM	1	0	19.37	19.08	18.95	5.0	20.0
		1	8	19.23	19.00	18.94	5.0	20.0
		1	14	19.21	19.04	18.92	5.0	20.0
		8	0	19.14	19.06	18.97	5.0	20.0
		8	4	19.15	19.04	18.98	5.0	20.0
		8	7	19.12	19.05	18.98	5.0	20.0
		15	0	19.10	19.08	19.01	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23017	23095	23173		
				699.7 MHz	707.5 MHz	715.3 MHz		
1.4 MHz	QPSK	1	0	24.03	24.02	23.98	0.0	25.0
		1	3	24.03	24.09	23.69	0.0	25.0
		1	5	24.08	24.00	23.96	0.0	25.0
		3	0	24.08	24.06	24.02	0.0	25.0
		3	1	24.01	24.05	23.99	0.0	25.0
		3	3	24.08	23.96	23.87	0.0	25.0
		6	0	23.08	23.01	23.04	1.0	24.0
	16QAM	1	0	23.25	23.06	23.16	1.0	24.0
		1	3	23.39	23.06	23.27	1.0	24.0
		1	5	23.28	23.09	23.18	1.0	24.0
		3	0	23.20	23.04	22.99	1.0	24.0
		3	1	23.09	22.93	22.99	1.0	24.0
		3	3	23.07	23.03	22.88	1.0	24.0
		6	0	22.14	22.07	21.95	2.0	23.0
	64QAM	1	0	22.35	22.08	22.18	2.0	23.0
		1	3	22.37	22.03	22.48	2.0	23.0
		1	5	22.29	22.04	22.28	2.0	23.0
		3	0	22.22	22.03	21.91	2.0	23.0
		3	1	22.18	21.95	21.86	2.0	23.0
		3	3	22.16	21.94	21.76	2.0	23.0
		6	0	21.14	21.09	20.97	3.0	22.0
	256QAM	1	0	18.98	19.21	18.97	5.0	20.0
		1	3	19.25	19.31	19.13	5.0	20.0
		1	5	18.94	19.17	18.91	5.0	20.0
		3	0	19.07	18.86	19.03	5.0	20.0
		3	1	19.02	18.84	19.04	5.0	20.0
		3	3	18.93	18.79	18.95	5.0	20.0
		6	0	19.10	18.98	18.88	5.0	20.0

LTE Band 13

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
					23230			
					782 MHz			
10 MHz	QPSK	1	0		23.58		0.0	25.0
		1	25		23.56		0.0	25.0
		1	49		23.56		0.0	25.0
		25	0		22.55		1.0	24.0
		25	12		22.53		1.0	24.0
		25	25		22.50		1.0	24.0
		50	0		22.54		1.0	24.0
	16QAM	1	0		22.76		1.0	24.0
		1	25		22.88		1.0	24.0
		1	49		22.70		1.0	24.0
		25	0		21.54		2.0	23.0
		25	12		21.54		2.0	23.0
		25	25		21.51		2.0	23.0
		50	0		21.49		2.0	23.0
	64QAM	1	0		21.60		2.0	23.0
		1	25		21.64		2.0	23.0
		1	49		21.67		2.0	23.0
		25	0		20.50		3.0	22.0
		25	12		20.48		3.0	22.0
		25	25		20.47		3.0	22.0
		50	0		20.46		3.0	22.0
	256QAM	1	0		18.75		5.0	20.0
		1	25		18.85		5.0	20.0
		1	49		18.72		5.0	20.0
		25	0		18.54		5.0	20.0
		25	12		18.49		5.0	20.0
		25	25		18.48		5.0	20.0
		50	0		18.46		5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23205	23230	23255		
				779.5 MHz	782 MHz	784.5 MHz		
5 MHz	QPSK	1	0	23.52	23.41	23.43	0.0	25.0
		1	12	23.56	23.51	23.57	0.0	25.0
		1	24	23.51	23.47	23.52	0.0	25.0
		12	0	22.57	22.51	22.55	1.0	24.0
		12	7	22.57	22.51	22.56	1.0	24.0
		12	13	22.53	22.49	22.55	1.0	24.0
		25	0	22.52	22.51	22.56	1.0	24.0
	16QAM	1	0	22.80	22.83	22.88	1.0	24.0
		1	12	22.90	22.96	22.99	1.0	24.0
		1	24	22.83	22.87	22.92	1.0	24.0
		12	0	21.51	21.48	21.54	2.0	23.0
		12	7	21.51	21.48	21.53	2.0	23.0
		12	13	21.47	21.45	21.52	2.0	23.0
		25	0	21.47	21.47	21.54	2.0	23.0
	64QAM	1	0	21.45	21.49	21.69	2.0	23.0
		1	12	21.56	21.57	21.82	2.0	23.0
		1	24	21.52	21.58	21.75	2.0	23.0
		12	0	20.43	20.42	20.47	3.0	22.0
		12	7	20.43	20.42	20.48	3.0	22.0
		12	13	20.42	20.40	20.46	3.0	22.0
		25	0	20.41	20.45	20.49	3.0	22.0
	256QAM	1	0	18.54	18.56	18.64	5.0	20.0
		1	12	18.50	18.43	18.54	5.0	20.0
		1	24	18.52	18.54	18.62	5.0	20.0
		12	0	18.42	18.42	18.50	5.0	20.0
		12	7	18.42	18.43	18.50	5.0	20.0
		12	13	18.39	18.38	18.47	5.0	20.0
		25	0	18.41	18.44	18.50	5.0	20.0

LTE Band 14

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
					23330			
					793 MHz			
10 MHz	QPSK	1	0		23.79		0.0	25.0
		1	25		23.55		0.0	25.0
		1	49		23.72		0.0	25.0
		25	0		22.78		1.0	24.0
		25	12		22.75		1.0	24.0
		25	25		22.72		1.0	24.0
		50	0		22.75		1.0	24.0
	16QAM	1	0		23.13		1.0	24.0
		1	25		23.00		1.0	24.0
		1	49		23.00		1.0	24.0
		25	0		21.75		2.0	23.0
		25	12		21.72		2.0	23.0
		25	25		21.68		2.0	23.0
		50	0		21.66		2.0	23.0
	64QAM	1	0		21.47		2.0	23.0
		1	25		21.27		2.0	23.0
		1	49		21.43		2.0	23.0
		25	0		20.76		3.0	22.0
		25	12		20.72		3.0	22.0
		25	25		20.70		3.0	22.0
		50	0		20.67		3.0	22.0
	256QAM	1	0		18.78		5.0	20.0
		1	25		18.84		5.0	20.0
		1	49		18.66		5.0	20.0
		25	0		18.69		5.0	20.0
		25	12		18.64		5.0	20.0
		25	25		18.60		5.0	20.0
		50	0		18.63		5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23305	23330	23355		
				790.5 MHz	793 MHz	795.5 MHz		
5 MHz	QPSK	1	0	23.47	23.62	23.46	0.0	25.0
		1	12	23.60	23.76	23.63	0.0	25.0
		1	24	23.51	23.65	23.56	0.0	25.0
		12	0	22.57	22.69	22.58	1.0	24.0
		12	7	22.58	22.67	22.54	1.0	24.0
		12	13	22.47	22.66	22.53	1.0	24.0
		25	0	22.52	22.66	22.54	1.0	24.0
	16QAM	1	0	22.80	22.91	22.75	1.0	24.0
		1	12	22.81	22.97	22.79	1.0	24.0
		1	24	22.70	22.84	22.71	1.0	24.0
		12	0	21.62	21.71	21.53	2.0	23.0
		12	7	21.57	21.66	21.49	2.0	23.0
		12	13	21.48	21.67	21.47	2.0	23.0
		25	0	21.51	21.66	21.47	2.0	23.0
	64QAM	1	0	21.52	21.72	21.60	2.0	23.0
		1	12	21.52	21.64	21.49	2.0	23.0
		1	24	21.58	21.71	21.52	2.0	23.0
		12	0	20.49	20.65	20.49	3.0	22.0
		12	7	20.55	20.64	20.48	3.0	22.0
		12	13	20.47	20.63	20.47	3.0	22.0
		25	0	20.42	20.62	20.52	3.0	22.0
	256QAM	1	0	18.83	18.96	18.82	5.0	20.0
		1	12	18.80	19.00	18.86	5.0	20.0
		1	24	18.74	18.89	18.80	5.0	20.0
		12	0	18.49	18.64	18.47	5.0	20.0
		12	7	18.46	18.60	18.41	5.0	20.0
		12	13	18.45	18.57	18.47	5.0	20.0
		25	0	18.42	18.58	18.48	5.0	20.0

LTE Band 25

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				26140	26365	26590		
				1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	QPSK	1	0	24.26	24.16	24.16	0.0	25.0
		1	49	24.20	24.06	24.08	0.0	25.0
		1	99	24.16	24.13	24.20	0.0	25.0
		50	0	23.24	23.20	23.23	1.0	24.0
		50	24	23.19	23.17	23.22	1.0	24.0
		50	50	23.16	23.17	23.21	1.0	24.0
		100	0	23.20	23.18	23.22	1.0	24.0
	16QAM	1	0	23.49	23.44	23.55	1.0	24.0
		1	49	23.11	23.40	23.56	1.0	24.0
		1	99	23.38	23.38	23.45	1.0	24.0
		50	0	22.20	22.18	22.20	2.0	23.0
		50	24	22.18	22.14	22.17	2.0	23.0
		50	50	22.13	22.13	22.15	2.0	23.0
		100	0	22.17	22.18	22.19	2.0	23.0
	64QAM	1	0	22.25	22.12	22.29	2.0	23.0
		1	49	22.16	21.95	22.19	2.0	23.0
		1	99	22.20	22.07	22.24	2.0	23.0
		50	0	21.20	21.19	21.22	3.0	22.0
		50	24	21.17	21.20	21.21	3.0	22.0
		50	50	21.12	21.17	21.18	3.0	22.0
		100	0	21.13	21.15	21.19	3.0	22.0
	256QAM	1	0	19.10	19.10	19.16	5.0	20.0
		1	49	19.27	19.18	19.21	5.0	20.0
		1	99	19.16	19.04	19.06	5.0	20.0
		50	0	19.09	19.12	19.13	5.0	20.0
		50	24	19.06	19.09	19.11	5.0	20.0
		50	50	19.04	19.08	19.11	5.0	20.0
		100	0	19.07	19.08	19.13	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26115	26365	26615		
				1857.5 MHz	1882.5 MHz	1907.5 MHz		
15 MHz	QPSK	1	0	23.24	24.46	24.09	0.0	25.0
		1	37	24.10	24.43	23.72	0.0	25.0
		1	74	24.58	24.23	23.23	0.0	25.0
		36	0	23.24	23.84	23.30	1.0	24.0
		36	20	23.72	23.88	23.32	1.0	24.0
		36	39	23.98	23.83	23.36	1.0	24.0
		75	0	23.69	23.86	23.32	1.0	24.0
	16QAM	1	0	22.92	23.82	23.65	1.0	24.0
		1	37	23.87	23.98	23.55	1.0	24.0
		1	74	23.94	23.87	23.04	1.0	24.0
		36	0	22.75	22.86	22.61	2.0	23.0
		36	20	22.92	22.81	22.54	2.0	23.0
		36	39	22.90	22.79	22.50	2.0	23.0
		75	0	22.93	22.79	22.59	2.0	23.0
	64QAM	1	0	22.56	22.54	22.29	2.0	23.0
		1	37	22.53	22.70	22.42	2.0	23.0
		1	74	22.55	22.52	22.16	2.0	23.0
		36	0	21.79	21.69	21.48	3.0	22.0
		36	20	21.75	21.65	21.44	3.0	22.0
		36	39	21.71	21.62	21.39	3.0	22.0
		75	0	21.78	21.62	21.40	3.0	22.0
	256QAM	1	0	19.75	19.78	19.42	5.0	20.0
		1	37	19.76	19.90	19.44	5.0	20.0
		1	74	19.63	19.74	19.21	5.0	20.0
		36	0	19.71	19.60	19.34	5.0	20.0
		36	20	19.68	19.57	19.29	5.0	20.0
		36	39	19.65	19.53	19.24	5.0	20.0
		75	0	19.69	19.57	19.33	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26090	26365	26640		
				1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	QPSK	1	0	23.65	24.57	23.82	0.0	25.0
		1	25	23.88	24.38	23.91	0.0	25.0
		1	49	24.29	24.20	23.43	0.0	25.0
		25	0	23.21	23.72	23.29	1.0	24.0
		25	12	23.45	23.67	23.41	1.0	24.0
		25	25	23.70	23.65	23.38	1.0	24.0
		50	0	23.50	23.67	23.39	1.0	24.0
	16QAM	1	0	23.12	23.84	23.60	1.0	24.0
		1	25	23.48	23.68	23.78	1.0	24.0
		1	49	23.82	23.84	23.37	1.0	24.0
		25	0	22.72	22.63	22.46	2.0	23.0
		25	12	22.77	22.59	22.38	2.0	23.0
		25	25	22.76	22.57	22.33	2.0	23.0
		50	0	22.78	22.57	22.29	2.0	23.0
	64QAM	1	0	22.56	22.42	22.32	2.0	23.0
		1	25	22.76	22.48	22.14	2.0	23.0
		1	49	22.54	22.47	22.29	2.0	23.0
		25	0	21.72	21.51	21.33	3.0	22.0
		25	12	21.69	21.48	21.27	3.0	22.0
		25	25	21.68	21.47	21.20	3.0	22.0
		50	0	21.64	21.45	21.23	3.0	22.0
	256QAM	1	0	19.77	19.79	19.38	5.0	20.0
		1	25	19.79	19.99	19.46	5.0	20.0
		1	49	19.70	19.75	19.17	5.0	20.0
		25	0	19.66	19.46	19.24	5.0	20.0
		25	12	19.63	19.44	19.18	5.0	20.0
		25	25	19.61	19.43	19.11	5.0	20.0
		50	0	19.56	19.40	19.12	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26065	26365	26665		
				1852.5 MHz	1882.5 MHz	1912.5 MHz		
5 MHz	QPSK	1	0	23.42	24.44	24.04	0.0	25.0
		1	12	23.46	24.33	24.11	0.0	25.0
		1	24	23.54	24.28	23.32	0.0	25.0
		12	0	23.02	23.47	23.21	1.0	24.0
		12	7	23.13	23.45	23.19	1.0	24.0
		12	13	23.20	23.43	23.16	1.0	24.0
		25	0	23.19	23.44	23.16	1.0	24.0
	16QAM	1	0	23.23	23.69	23.57	1.0	24.0
		1	12	23.31	23.73	23.37	1.0	24.0
		1	24	23.43	23.65	23.26	1.0	24.0
		12	0	22.56	22.41	22.20	2.0	23.0
		12	7	22.55	22.39	22.17	2.0	23.0
		12	13	22.50	22.39	22.15	2.0	23.0
		25	0	22.56	22.33	22.11	2.0	23.0
	64QAM	1	0	22.30	22.31	21.71	2.0	23.0
		1	12	22.57	22.21	21.78	2.0	23.0
		1	24	22.30	22.30	21.76	2.0	23.0
		12	0	21.27	21.15	20.95	3.0	22.0
		12	7	21.26	21.12	20.86	3.0	22.0
		12	13	21.25	21.14	20.86	3.0	22.0
		25	0	21.30	21.14	20.84	3.0	22.0
	256QAM	1	0	19.27	19.36	18.89	5.0	20.0
		1	12	19.23	19.47	19.03	5.0	20.0
		1	24	19.25	19.33	18.82	5.0	20.0
		12	0	19.24	19.14	18.84	5.0	20.0
		12	7	19.26	19.10	18.83	5.0	20.0
		12	13	19.24	19.11	18.79	5.0	20.0
		25	0	19.28	19.07	18.81	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26055	26365	26675		
				1851.5 MHz	1882.5 MHz	1913.5 MHz		
3 MHz	QPSK	1	0	24.42	24.41	24.15	0.0	25.0
		1	8	24.34	24.57	24.29	0.0	25.0
		1	14	24.19	24.49	23.65	0.0	25.0
		8	0	23.58	23.42	23.19	1.0	24.0
		8	4	23.56	23.37	23.12	1.0	24.0
		8	7	23.55	23.40	23.15	1.0	24.0
		15	0	23.51	23.37	23.10	1.0	24.0
	16QAM	1	0	23.67	23.66	23.22	1.0	24.0
		1	8	23.68	23.81	23.33	1.0	24.0
		1	14	23.68	23.62	23.12	1.0	24.0
		8	0	22.54	22.42	22.06	2.0	23.0
		8	4	22.49	22.34	22.07	2.0	23.0
		8	7	22.49	22.35	22.02	2.0	23.0
		15	0	22.48	22.29	22.02	2.0	23.0
	64QAM	1	0	22.21	22.35	21.89	2.0	23.0
		1	8	22.29	22.48	22.04	2.0	23.0
		1	14	22.19	22.43	21.96	2.0	23.0
		8	0	21.35	21.21	20.91	3.0	22.0
		8	4	21.30	21.20	20.85	3.0	22.0
		8	7	21.30	21.17	20.84	3.0	22.0
		15	0	21.38	21.13	20.94	3.0	22.0
	256QAM	1	0	19.37	19.45	19.05	5.0	20.0
		1	8	19.48	19.55	19.04	5.0	20.0
		1	14	19.35	19.43	18.97	5.0	20.0
		8	0	19.31	19.16	18.84	5.0	20.0
		8	4	19.26	19.12	18.75	5.0	20.0
		8	7	19.29	19.13	18.82	5.0	20.0
		15	0	19.33	19.10	18.82	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26047	26365	26683		
				1850.7 MHz	1882.5 MHz	1914.3 MHz		
1.4 MHz	QPSK	1	0	24.40	24.31	24.09	0.0	25.0
		1	3	24.41	24.23	24.06	0.0	25.0
		1	5	24.43	24.33	23.69	0.0	25.0
		3	0	24.32	24.39	23.94	0.0	25.0
		3	1	24.26	24.32	23.86	0.0	25.0
		3	3	24.20	24.21	23.76	0.0	25.0
		6	0	23.52	23.41	23.08	1.0	24.0
	16QAM	1	0	23.41	23.29	23.28	1.0	24.0
		1	3	23.25	23.55	23.31	1.0	24.0
		1	5	23.48	23.34	23.31	1.0	24.0
		3	0	23.63	23.19	23.09	1.0	24.0
		3	1	23.58	23.24	22.98	1.0	24.0
		3	3	23.55	23.27	22.99	1.0	24.0
		6	0	22.55	22.33	21.92	2.0	23.0
	64QAM	1	0	22.41	22.22	21.50	2.0	23.0
		1	3	22.57	21.90	21.69	2.0	23.0
		1	5	22.41	22.21	21.62	2.0	23.0
		3	0	22.43	22.32	21.84	2.0	23.0
		3	1	22.36	22.28	21.80	2.0	23.0
		3	3	22.34	22.22	21.81	2.0	23.0
		6	0	21.30	21.22	20.81	3.0	22.0
	256QAM	1	0	19.25	19.35	18.78	5.0	20.0
		1	3	19.38	19.43	18.79	5.0	20.0
		1	5	19.17	19.37	18.74	5.0	20.0
		3	0	19.20	19.15	18.74	5.0	20.0
		3	1	19.23	19.04	18.78	5.0	20.0
		3	3	19.24	19.13	18.74	5.0	20.0
		6	0	19.32	19.08	18.77	5.0	20.0

LTE Band 26

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)						
				Measured Pwr (dBm)					MPR	Tune-up Limit
				26765	26790.0	26915.0	26865	26965		
				821.5 MHz	824 MHz	836.5 MHz	831.5 MHz	841.5 MHz		
15 MHz	QPSK	1	0	24.31	24.44	24.29	24.49	24.20	0.0	25.5
		1	37	24.36	24.24	24.32	24.48	24.10	0.0	25.5
		1	74	24.27	24.30	24.22	24.42	24.15	0.0	25.5
		36	0	23.41	23.51	23.34	23.54	23.30	1.0	24.5
		36	20	23.36	23.47	23.31	23.51	23.26	1.0	24.5
		36	39	23.31	23.44	23.29	23.49	23.25	1.0	24.5
		75	0	23.38	23.48	23.32	23.52	23.28	1.0	24.5
	16QAM	1	0	23.43	23.57	23.58	23.78	23.40	1.0	24.5
		1	37	23.45	23.45	23.53	23.73	23.44	1.0	24.5
		1	74	23.33	23.42	23.49	23.69	23.32	1.0	24.5
		36	0	22.35	22.43	22.26	22.46	22.22	2.0	23.5
		36	20	22.31	22.40	22.24	22.44	22.18	2.0	23.5
		36	39	22.28	22.38	22.22	22.42	22.18	2.0	23.5
		75	0	22.33	22.40	22.26	22.46	22.23	2.0	23.5
	64QAM	1	0	22.46	22.50	22.12	22.32	22.17	2.0	23.5
		1	37	22.50	22.41	22.10	22.30	22.18	2.0	23.5
		1	74	22.42	22.39	22.01	22.21	22.13	2.0	23.5
		36	0	21.32	21.36	21.28	21.48	21.14	3.0	22.5
		36	20	21.32	21.33	21.28	21.48	21.12	3.0	22.5
		36	39	21.28	21.30	21.25	21.45	21.10	3.0	22.5
		75	0	21.33	21.32	21.24	21.44	21.18	3.0	22.5
	256QAM	1	0	19.74	19.67	19.28	19.48	19.21	5.0	20.5
		1	37	19.54	19.52	19.26	19.46	19.21	5.0	20.5
		1	74	19.68	19.57	19.18	19.38	19.12	5.0	20.5
		36	0	19.37	19.39	19.24	19.44	19.19	5.0	20.5
		36	20	19.34	19.37	19.20	19.40	19.14	5.0	20.5
		36	39	19.29	19.32	19.18	19.38	19.14	5.0	20.5
		75	0	19.31	19.35	19.20	19.40	19.14	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				26740	26790.0	26840.0	26865	26990		
				819 MHz	824 MHz	829 MHz	831.5 MHz	844 MHz		
10 MHz	QPSK	1	0	24.61	24.69	24.67	24.49	24.42	0.0	25.5
		1	25	24.67	24.64	24.72	24.40	24.34	0.0	25.5
		1	49	24.53	24.66	24.60	24.47	24.43	0.0	25.5
		25	0	23.59	23.69	23.63	23.48	23.40	1.0	24.5
		25	12	23.56	23.64	23.59	23.44	23.36	1.0	24.5
		25	25	23.55	23.62	23.57	23.41	23.33	1.0	24.5
		50	0	23.55	23.64	23.58	23.44	23.35	1.0	24.5
	16QAM	1	0	23.79	23.86	23.74	23.75	23.65	1.0	24.5
		1	25	23.89	23.94	23.76	23.56	23.75	1.0	24.5
		1	49	23.79	23.78	23.65	23.62	23.47	1.0	24.5
		25	0	22.59	22.68	22.60	22.47	22.40	2.0	23.5
		25	12	22.57	22.63	22.57	22.44	22.35	2.0	23.5
		25	25	22.57	22.60	22.54	22.41	22.32	2.0	23.5
		50	0	22.52	22.63	22.59	22.40	22.34	2.0	23.5
	64QAM	1	0	22.68	22.86	22.74	22.76	22.34	2.0	23.5
		1	25	22.82	22.75	22.82	22.67	22.25	2.0	23.5
		1	49	22.63	22.83	22.60	22.70	22.29	2.0	23.5
		25	0	21.69	21.66	21.62	21.59	21.48	3.0	22.5
		25	12	21.67	21.63	21.58	21.54	21.44	3.0	22.5
		25	25	21.65	21.61	21.55	21.53	21.42	3.0	22.5
		50	0	21.62	21.58	21.53	21.51	21.40	3.0	22.5
	256QAM	1	0	19.84	19.83	19.76	19.78	19.41	5.0	20.5
		1	25	19.83	19.94	19.79	19.86	19.49	5.0	20.5
		1	49	19.79	19.74	19.70	19.66	19.34	5.0	20.5
		25	0	19.73	19.66	19.61	19.58	19.41	5.0	20.5
		25	12	19.68	19.61	19.58	19.53	19.38	5.0	20.5
		25	25	19.66	19.60	19.56	19.50	19.35	5.0	20.5
		50	0	19.60	19.57	19.51	19.50	19.37	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				26715	26790.0	26815.0	26865	27015		
				816.5 MHz	824 MHz	826.5 MHz	831.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	24.43	24.59	24.58	24.39	24.22	0.0	25.5
		1	12	24.53	24.66	24.62	24.50	24.29	0.0	25.5
		1	24	24.49	24.64	24.60	24.42	24.26	0.0	25.5
		12	0	23.52	23.63	23.63	23.42	23.29	1.0	24.5
		12	7	23.51	23.63	23.63	23.40	23.28	1.0	24.5
		12	13	23.49	23.61	23.60	23.38	23.25	1.0	24.5
		25	0	23.50	23.60	23.59	23.39	23.23	1.0	24.5
	16QAM	1	0	23.78	23.96	23.97	23.79	23.63	1.0	24.5
		1	12	23.92	23.95	23.89	23.73	23.61	1.0	24.5
		1	24	23.86	23.88	23.88	23.70	23.52	1.0	24.5
		12	0	22.48	22.62	22.71	22.40	22.32	2.0	23.5
		12	7	22.48	22.60	22.69	22.37	22.31	2.0	23.5
		12	13	22.45	22.58	22.67	22.36	22.27	2.0	23.5
		25	0	22.48	22.54	22.59	22.34	22.21	2.0	23.5
	64QAM	1	0	22.40	22.63	22.76	22.57	22.35	2.0	23.5
		1	12	22.33	22.55	22.63	22.60	22.34	2.0	23.5
		1	24	22.45	22.63	22.69	22.55	22.30	2.0	23.5
		12	0	21.68	21.68	21.56	21.51	21.45	3.0	22.5
		12	7	21.66	21.65	21.56	21.49	21.40	3.0	22.5
		12	13	21.68	21.65	21.54	21.45	21.41	3.0	22.5
		25	0	21.61	21.61	21.59	21.49	21.38	3.0	22.5
	256QAM	1	0	19.80	19.76	19.92	19.75	19.54	5.0	20.5
		1	12	19.87	19.74	19.95	19.62	19.55	5.0	20.5
		1	24	19.75	19.72	19.87	19.72	19.49	5.0	20.5
		12	0	19.66	19.61	19.60	19.49	19.40	5.0	20.5
		12	7	19.65	19.59	19.58	19.48	19.39	5.0	20.5
		12	13	19.64	19.59	19.54	19.45	19.38	5.0	20.5
		25	0	19.63	19.58	19.52	19.50	19.38	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				26705	26790.0	26805.0	26865	27025		
				815.5 MHz	824 MHz	825.5 MHz	831.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	24.81	24.62	24.71	24.56	24.50	0.0	25.5
		1	8	24.46	24.67	24.79	24.67	24.57	0.0	25.5
		1	14	24.84	24.59	24.74	24.51	24.56	0.0	25.5
		8	0	23.79	23.67	23.67	23.61	23.48	1.0	24.5
		8	4	23.75	23.65	23.65	23.58	23.46	1.0	24.5
		8	7	23.70	23.61	23.69	23.57	23.51	1.0	24.5
		15	0	23.72	23.63	23.59	23.57	23.41	1.0	24.5
	16QAM	1	0	23.68	23.83	23.90	23.81	23.75	1.0	24.5
		1	8	23.73	23.86	23.95	23.81	23.80	1.0	24.5
		1	14	23.62	23.77	23.85	23.81	23.65	1.0	24.5
		8	0	22.70	22.66	22.66	22.64	22.47	2.0	23.5
		8	4	22.72	22.66	22.57	22.58	22.38	2.0	23.5
		8	7	22.71	22.61	22.55	22.59	22.39	2.0	23.5
		15	0	22.64	22.62	22.63	22.53	22.42	2.0	23.5
	64QAM	1	0	22.49	22.73	22.68	22.41	22.33	2.0	23.5
		1	8	22.59	22.78	22.60	22.31	22.38	2.0	23.5
		1	14	22.59	22.77	22.60	22.33	22.33	2.0	23.5
		8	0	21.46	21.64	21.55	21.25	21.26	3.0	22.5
		8	4	21.43	21.62	21.53	21.23	21.21	3.0	22.5
		8	7	21.44	21.64	21.51	21.23	21.22	3.0	22.5
		15	0	21.53	21.55	21.60	21.30	21.15	3.0	22.5
	256QAM	1	0	19.66	19.84	19.63	19.27	19.59	5.0	20.5
		1	8	19.56	19.73	19.62	19.30	19.50	5.0	20.5
		1	14	19.61	19.83	19.58	19.28	19.54	5.0	20.5
		8	0	19.58	19.65	19.63	19.34	19.31	5.0	20.5
		8	4	19.55	19.65	19.60	19.33	19.32	5.0	20.5
		8	7	19.54	19.63	19.63	19.34	19.33	5.0	20.5
		15	0	19.51	19.58	19.58	19.32	19.18	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				26697	26790.0	26797.0	26865	27033		
				814.7 MHz	824 MHz	824.7 MHz	831.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	24.44	24.51	24.68	24.37	24.26	0.0	25.5
		1	3	24.59	24.60	24.52	24.22	24.16	0.0	25.5
		1	5	24.46	24.56	24.70	24.39	24.28	0.0	25.5
		3	0	24.45	24.63	24.69	24.40	24.24	0.0	25.5
		3	1	24.40	24.53	24.65	24.36	24.20	0.0	25.5
		3	3	24.38	24.52	24.58	24.26	24.21	0.0	25.5
		6	0	23.47	23.64	23.70	23.41	23.28	1.0	24.5
	16QAM	1	0	23.48	23.66	23.78	23.56	23.23	1.0	24.5
		1	3	23.46	23.66	23.70	23.68	23.36	1.0	24.5
		1	5	23.54	23.69	23.82	23.58	23.26	1.0	24.5
		3	0	23.45	23.60	23.54	23.28	23.31	1.0	24.5
		3	1	23.38	23.53	23.54	23.30	23.18	1.0	24.5
		3	3	23.49	23.63	23.45	23.25	23.18	1.0	24.5
		6	0	22.49	22.65	22.60	22.30	22.26	2.0	23.5
	64QAM	1	0	22.52	22.60	22.60	22.35	22.17	2.0	23.5
		1	3	22.57	22.50	22.64	22.21	22.32	2.0	23.5
		1	5	22.50	22.54	22.58	22.27	22.22	2.0	23.5
		3	0	22.36	22.78	22.56	22.48	22.19	2.0	23.5
		3	1	22.33	22.68	22.51	22.39	22.19	2.0	23.5
		3	3	22.34	22.66	22.47	22.42	22.09	2.0	23.5
		6	0	21.44	21.66	21.55	21.35	21.21	3.0	22.5
	256QAM	1	0	19.42	19.63	19.60	19.35	19.13	5.0	20.5
		1	3	19.51	19.78	19.80	19.57	19.14	5.0	20.5
		1	5	19.42	19.65	19.56	19.35	19.11	5.0	20.5
		3	0	19.42	19.67	19.62	19.31	19.21	5.0	20.5
		3	1	19.33	19.60	19.57	19.36	19.19	5.0	20.5
		3	3	19.34	19.58	19.50	19.33	19.10	5.0	20.5
		6	0	19.51	19.66	19.55	19.37	19.19	5.0	20.5

LTE Band 30

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
					27710			
					2310 MHz			
10 MHz	QPSK	1	0		22.74		0.0	24.0
		1	25		23.01		0.0	24.0
		1	49		22.22		0.0	24.0
		25	0		22.07		1.0	23.0
		25	12		22.17		1.0	23.0
		25	25		22.00		1.0	23.0
		50	0		22.06		1.0	23.0
	16QAM	1	0		22.12		1.0	23.0
		1	25		22.47		1.0	23.0
		1	49		21.79		1.0	23.0
		25	0		21.38		2.0	22.0
		25	12		21.35		2.0	22.0
		25	25		21.33		2.0	22.0
		50	0		21.31		2.0	22.0
	64QAM	1	0		21.42		2.0	22.0
		1	25		21.53		2.0	22.0
		1	49		21.14		2.0	22.0
		25	0		20.30		3.0	21.0
		25	12		20.27		3.0	21.0
		25	25		20.22		3.0	21.0
		50	0		20.23		3.0	21.0
	256QAM	1	0		18.89		5.0	19.0
		1	25		18.87		5.0	19.0
		1	49		18.99		5.0	19.0
		25	0		18.75		5.0	19.0
		25	12		18.81		5.0	19.0
		25	25		18.81		5.0	19.0
		50	0		18.75		5.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				27685	27710	27735		
				2307.5 MHz	2310 MHz	2312.5 MHz		
5 MHz	QPSK	1	0	22.84	23.44	23.65	0.0	24.0
		1	12	23.11	23.65	23.70	0.0	24.0
		1	24	23.01	23.50	23.03	0.0	24.0
		12	0	22.08	22.23	22.40	1.0	23.0
		12	7	22.24	22.20	22.38	1.0	23.0
		12	13	22.28	22.21	22.41	1.0	23.0
		25	0	22.18	22.25	22.42	1.0	23.0
	16QAM	1	0	22.15	22.63	22.64	1.0	23.0
		1	12	22.53	22.46	22.63	1.0	23.0
		1	24	22.50	22.66	22.13	1.0	23.0
		12	0	21.28	21.28	21.47	2.0	22.0
		12	7	21.40	21.23	21.43	2.0	22.0
		12	13	21.36	21.19	21.41	2.0	22.0
		25	0	21.34	21.19	21.35	2.0	22.0
	64QAM	1	0	21.19	21.12	21.43	2.0	22.0
		1	12	21.34	21.05	21.57	2.0	22.0
		1	24	21.27	21.17	21.54	2.0	22.0
		12	0	20.17	20.06	20.29	3.0	21.0
		12	7	20.14	20.03	20.28	3.0	21.0
		12	13	20.15	20.05	20.26	3.0	21.0
		25	0	20.12	20.06	20.25	3.0	21.0
	256QAM	1	0	19.00	18.84	18.99	5.0	19.0
		1	12	18.99	18.83	19.00	5.0	19.0
		1	24	18.98	18.97	18.98	5.0	19.0
		12	0	18.84	18.70	18.93	5.0	19.0
		12	7	18.79	18.80	18.89	5.0	19.0
		12	13	18.76	18.75	18.87	5.0	19.0
		25	0	18.76	18.69	18.83	5.0	19.0

LTE Band 38

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				37850	38000	38150		
				2580 MHz	2595 MHz	2610 MHz		
20 MHz	QPSK	1	0		22.27		0.0	24.0
		1	49		22.50		0.0	24.0
		1	99		22.25		0.0	24.0
		50	0		21.34		1.0	23.0
		50	24		21.30		1.0	23.0
		50	50		21.29		1.0	23.0
		100	0		21.33		1.0	23.0
	16QAM	1	0		21.78		1.0	23.0
		1	49		21.94		1.0	23.0
		1	99		21.74		1.0	23.0
		50	0		20.35		2.0	22.0
		50	24		20.31		2.0	22.0
		50	50		20.28		2.0	22.0
		100	0		20.32		2.0	22.0
	64QAM	1	0		20.15		2.0	22.0
		1	49		20.17		2.0	22.0
		1	99		20.18		2.0	22.0
		50	0		19.42		3.0	21.0
		50	24		19.43		3.0	21.0
		50	50		19.39		3.0	21.0
		100	0		19.43		3.0	21.0
	256QAM	1	0		17.41		5.0	19.0
		1	49		17.72		5.0	19.0
		1	99		17.45		5.0	19.0
		50	0		17.40		5.0	19.0
		50	24		17.37		5.0	19.0
		50	50		17.38		5.0	19.0
		100	0		17.38		5.0	19.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				37825	38000	38175		
				2577.5 MHz	2595 MHz	2612.5 MHz		
15 MHz	QPSK	1	0	22.49	22.53	22.54	0.0	24.0
		1	37	22.43	22.52	22.61	0.0	24.0
		1	74	22.54	22.60	22.42	0.0	24.0
		36	0	21.62	21.66	21.52	1.0	23.0
		36	20	21.61	21.62	21.47	1.0	23.0
		36	39	21.61	21.63	21.49	1.0	23.0
		75	0	21.63	21.64	21.49	1.0	23.0
	16QAM	1	0	21.49	21.60	21.14	1.0	23.0
		1	37	21.62	21.50	21.27	1.0	23.0
		1	74	21.45	21.71	21.30	1.0	23.0
		36	0	20.57	20.68	20.45	2.0	22.0
		36	20	20.55	20.63	20.38	2.0	22.0
		36	39	20.55	20.61	20.41	2.0	22.0
		75	0	20.54	20.58	20.41	2.0	22.0
	64QAM	1	0	20.19	20.32	20.46	2.0	22.0
		1	37	20.20	20.18	20.42	2.0	22.0
		1	74	20.29	20.33	20.34	2.0	22.0
		36	0	19.55	19.61	19.66	3.0	21.0
		36	20	19.49	19.52	19.60	3.0	21.0
		36	39	19.49	19.53	19.60	3.0	21.0
		75	0	19.48	19.50	19.57	3.0	21.0
	256QAM	1	0	17.54	17.24	17.45	5.0	19.0
		1	37	17.52	17.36	17.56	5.0	19.0
		1	74	17.09	17.21	17.22	5.0	19.0
		36	0	17.46	17.50	17.59	5.0	19.0
		36	20	17.44	17.47	17.55	5.0	19.0
		36	39	17.40	17.46	17.53	5.0	19.0
		75	0	17.41	17.45	17.54	5.0	19.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				37800	38000	38200		
				2575 MHz	2595 MHz	2615 MHz		
10 MHz	QPSK	1	0	22.46	22.58	22.79	0.0	24.0
		1	25	22.51	22.61	22.82	0.0	24.0
		1	49	22.43	22.55	22.77	0.0	24.0
		25	0	21.47	21.57	21.79	1.0	23.0
		25	12	21.46	21.55	21.80	1.0	23.0
		25	25	21.47	21.56	21.77	1.0	23.0
		50	0	21.48	21.56	21.79	1.0	23.0
	16QAM	1	0	21.58	21.64	21.83	1.0	23.0
		1	25	21.54	21.60	21.76	1.0	23.0
		1	49	21.59	21.64	21.84	1.0	23.0
		25	0	20.50	20.55	20.77	2.0	22.0
		25	12	20.46	20.52	20.74	2.0	22.0
		25	25	20.46	20.52	20.72	2.0	22.0
		50	0	20.51	20.55	20.75	2.0	22.0
	64QAM	1	0	21.35	20.19	20.37	2.0	22.0
		1	25	20.35	20.39	20.45	2.0	22.0
		1	49	20.26	20.35	20.43	2.0	22.0
		25	0	19.31	19.37	19.57	3.0	21.0
		25	12	19.29	19.37	19.54	3.0	21.0
		25	25	19.30	19.35	19.54	3.0	21.0
		50	0	19.37	19.43	19.61	3.0	21.0
	256QAM	1	0	17.41	17.41	17.66	5.0	19.0
		1	25	17.19	17.27	17.43	5.0	19.0
		1	49	17.33	17.34	17.57	5.0	19.0
		25	0	17.37	17.39	17.56	5.0	19.0
		25	12	17.34	17.37	17.54	5.0	19.0
		25	25	17.35	17.38	17.53	5.0	19.0
		50	0	17.36	17.37	17.54	5.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				37775	38000	38225		
				2572.5 MHz	2595 MHz	2617.5 MHz		
5 MHz	QPSK	1	0	22.55	22.63	23.37	0.0	24.0
		1	12	22.67	22.49	23.36	0.0	24.0
		1	24	22.57	22.62	23.36	0.0	24.0
		12	0	21.58	21.62	22.38	1.0	23.0
		12	7	21.57	21.62	22.35	1.0	23.0
		12	13	21.59	21.60	22.36	1.0	23.0
		25	0	21.59	21.62	22.37	1.0	23.0
	16QAM	1	0	21.68	21.47	22.34	1.0	23.0
		1	12	21.76	21.54	22.53	1.0	23.0
		1	24	21.64	21.50	22.37	1.0	23.0
		12	0	20.65	20.55	21.32	2.0	22.0
		12	7	20.62	20.51	21.31	2.0	22.0
		12	13	20.60	20.53	21.30	2.0	22.0
		25	0	20.59	20.54	21.27	2.0	22.0
	64QAM	1	0	20.44	20.44	21.37	2.0	22.0
		1	12	20.59	20.62	21.14	2.0	22.0
		1	24	20.41	20.52	21.32	2.0	22.0
		12	0	19.44	19.51	20.23	3.0	21.0
		12	7	19.45	19.50	20.22	3.0	21.0
		12	13	19.46	19.51	20.22	3.0	21.0
		25	0	19.51	19.47	20.14	3.0	21.0
	256QAM	1	0	17.69	17.44	18.34	5.0	19.0
		1	12	17.68	17.38	18.13	5.0	19.0
		1	24	17.66	17.39	18.29	5.0	19.0
		12	0	17.44	17.50	18.17	5.0	19.0
		12	7	17.42	17.47	18.14	5.0	19.0
		12	13	17.44	17.48	18.13	5.0	19.0
		25	0	17.43	17.42	18.13	5.0	19.0

LTE Band 40

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)						MPR	Tune-up Limit
				Measured Pwr (dBm)							
					38750			39200			
					2310 MHz			2355 MHz			
10 MHz	QPSK	1	0		12.9			13.3		0.0	14.0
		1	25		12.9			13.4		0.0	14.0
		1	49		12.8			13.2		0.0	14.0
		25	0		13.0			13.3		0.0	14.0
		25	12		13.0			13.3		0.0	14.0
		25	25		12.9			13.3		0.0	14.0
		50	0		13.0			13.3		0.0	14.0
	16QAM	1	0		13.0			13.5		0.0	14.0
		1	25		13.2			13.6		0.0	14.0
		1	49		13.0			13.4		0.0	14.0
		25	0		13.0			13.3		0.0	14.0
		25	12		13.0			13.3		0.0	14.0
		25	25		13.0			13.2		0.0	14.0
		50	0		13.0			13.3		0.0	14.0
	64QAM	1	0		13.0			13.3		0.0	14.0
		1	25		13.0			13.4		0.0	14.0
		1	49		12.9			13.2		0.0	14.0
		25	0		13.0			13.3		0.0	14.0
		25	12		13.0			13.3		0.0	14.0
		25	25		12.9			13.3		0.0	14.0
		50	0		13.0			13.2		0.0	14.0
	256QAM	1	0		12.9			13.3		0.0	14.0
		1	25		13.0			13.4		0.0	14.0
		1	49		12.8			13.2		0.0	14.0
		25	0		13.0			13.3		0.0	14.0
		25	12		13.0			13.3		0.0	14.0
		25	25		13.0			13.3		0.0	14.0
		50	0		13.0			13.3		0.0	14.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
				38725	38750	38775	39175	39200	39225		
				2307.5 MHz	2310 MHz	2312.5 MHz	2352.5 MHz	2355 MHz	2357.5 MHz		
5 MHz	QPSK	1	0	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		1	12	13.1	13.1	13.2	13.4	13.4	13.4	0.0	14.0
		1	24	12.8	13.0	13.0	13.2	13.3	13.2	0.0	14.0
		12	0	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	7	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	13	12.9	13.0	13.0	13.2	13.3	13.2	0.0	14.0
		25	0	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
	16QAM	1	0	12.8	13.0	13.1	13.1	13.2	13.3	0.0	14.0
		1	12	12.7	13.0	13.1	13.1	13.3	13.4	0.0	14.0
		1	24	12.8	12.9	13.0	13.1	13.1	13.2	0.0	14.0
		12	0	12.9	13.0	13.1	13.2	13.3	13.3	0.0	14.0
		12	7	12.9	13.0	13.1	13.2	13.3	13.3	0.0	14.0
		12	13	12.8	13.0	13.0	13.2	13.3	13.2	0.0	14.0
		25	0	12.9	13.0	13.0	13.3	13.3	13.2	0.0	14.0
	64QAM	1	0	13.0	13.0	13.0	13.4	13.3	13.3	0.0	14.0
		1	12	13.1	13.1	13.2	13.5	13.5	13.4	0.0	14.0
		1	24	12.9	12.9	12.9	13.3	13.2	13.2	0.0	14.0
		12	0	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	7	12.9	12.9	13.0	13.2	13.3	13.2	0.0	14.0
		12	13	12.9	12.9	13.0	13.2	13.2	13.2	0.0	14.0
		25	0	12.9	13.0	13.0	13.3	13.3	13.3	0.0	14.0
	256QAM	1	0	13.0	13.0	13.0	13.2	13.3	13.4	0.0	14.0
		1	12	13.2	13.2	13.2	13.4	13.4	13.5	0.0	14.0
		1	24	13.0	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	0	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	7	12.9	13.0	13.0	13.2	13.3	13.3	0.0	14.0
		12	13	12.9	12.9	13.0	13.2	13.2	13.3	0.0	14.0
		25	0	12.9	13.0	13.0	13.2	13.2	13.2	0.0	14.0

LTE Band 41 (PC2)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				39750	40620	41490		
				2506 MHz	2593 MHz	2680 MHz		
20 MHz	QPSK	1	0	26.34	25.66	25.53	0.0	27.0
		1	49	26.65	25.81	26.00	0.0	27.0
		1	99	26.34	25.60	25.57	0.0	27.0
		50	0	25.23	24.54	24.54	1.0	26.0
		50	24	25.19	24.57	24.56	1.0	26.0
		50	50	25.15	24.45	24.57	1.0	26.0
		100	0	25.19	24.46	24.46	1.0	26.0
	16QAM	1	0	25.44	25.09	24.74	1.0	26.0
		1	49	25.59	25.42	24.97	1.0	26.0
		1	99	25.36	25.01	24.60	1.0	26.0
		50	0	24.15	23.45	23.50	2.0	25.0
		50	24	24.12	23.49	23.41	2.0	25.0
		50	50	24.10	23.46	23.44	2.0	25.0
		100	0	24.11	23.43	23.37	2.0	25.0
	64QAM	1	0	24.27	23.87	23.70	2.0	25.0
		1	49	24.51	24.19	24.07	2.0	25.0
		1	99	24.24	23.78	23.65	2.0	25.0
		50	0	23.06	22.36	23.42	3.0	24.0
		50	24	23.08	22.40	23.61	3.0	24.0
		50	50	23.03	22.34	23.51	3.0	24.0
		100	0	23.02	22.51	23.52	3.0	24.0
	256QAM	1	0	21.32	21.14	21.61	5.0	22.0
		1	49	21.34	21.09	21.85	5.0	22.0
		1	99	21.21	20.96	21.88	5.0	22.0
		50	0	21.01	20.41	21.55	5.0	22.0
		50	24	20.99	20.46	21.52	5.0	22.0
		50	50	20.97	20.41	21.50	5.0	22.0
		100	0	20.99	20.25	21.47	5.0	22.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39725	40620	41515		
				2503.5 MHz	2593 MHz	2682.5 MHz		
15 MHz	QPSK	1	0	26.80	26.73	26.61	0.0	27.0
		1	37	26.81	26.83	26.72	0.0	27.0
		1	74	26.83	26.36	26.70	0.0	27.0
		36	0	25.78	25.92	25.88	1.0	26.0
		36	20	25.98	25.90	25.85	1.0	26.0
		36	39	25.94	25.86	25.86	1.0	26.0
		75	0	25.90	25.84	25.70	1.0	26.0
	16QAM	1	0	25.47	25.96	25.98	1.0	26.0
		1	37	25.74	25.87	25.97	1.0	26.0
		1	74	25.61	25.57	25.92	1.0	26.0
		36	0	24.23	24.91	24.69	2.0	25.0
		36	20	24.19	24.97	24.70	2.0	25.0
		36	39	24.24	24.87	24.64	2.0	25.0
		75	0	24.30	24.75	24.73	2.0	25.0
	64QAM	1	0	24.91	24.72	24.99	2.0	25.0
		1	37	24.34	24.77	24.99	2.0	25.0
		1	74	24.27	24.51	24.89	2.0	25.0
		36	0	23.29	23.87	23.71	3.0	24.0
		36	20	23.29	23.85	23.70	3.0	24.0
		36	39	23.29	23.76	23.68	3.0	24.0
		75	0	23.23	23.74	23.56	3.0	24.0
	256QAM	1	0	21.15	21.12	21.74	5.0	22.0
		1	37	21.85	21.14	21.70	5.0	22.0
		1	74	21.77	21.05	21.64	5.0	22.0
		36	0	21.25	21.72	21.57	5.0	22.0
		36	20	21.21	21.67	21.52	5.0	22.0
		36	39	21.21	21.71	21.50	5.0	22.0
		75	0	21.10	21.70	21.55	5.0	22.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39700	40620	41540		
				2501 MHz	2593 MHz	2685 MHz		
10 MHz	QPSK	1	0	26.38	25.46	26.75	0.0	27.0
		1	25	26.27	25.58	26.99	0.0	27.0
		1	49	26.34	25.57	26.79	0.0	27.0
		25	0	25.28	24.49	25.73	1.0	26.0
		25	12	25.24	24.48	25.69	1.0	26.0
		25	25	25.28	24.48	25.69	1.0	26.0
		50	0	25.28	24.48	25.70	1.0	26.0
	16QAM	1	0	25.17	24.63	25.85	1.0	26.0
		1	25	25.18	24.88	25.98	1.0	26.0
		1	49	25.24	24.71	25.79	1.0	26.0
		25	0	24.21	23.48	24.63	2.0	25.0
		25	12	24.13	23.43	24.57	2.0	25.0
		25	25	24.18	23.43	24.56	2.0	25.0
		50	0	24.20	23.42	24.59	2.0	25.0
	64QAM	1	0	24.22	23.49	24.35	2.0	25.0
		1	25	24.06	23.48	24.46	2.0	25.0
		1	49	24.14	23.48	24.34	2.0	25.0
		25	0	23.20	22.41	23.50	3.0	24.0
		25	12	23.20	22.41	23.49	3.0	24.0
		25	25	23.16	22.39	23.46	3.0	24.0
		50	0	23.11	22.34	23.45	3.0	24.0
	256QAM	1	0	21.88	20.51	21.83	5.0	22.0
		1	25	21.76	20.69	21.87	5.0	22.0
		1	49	21.89	20.48	21.66	5.0	22.0
		25	0	21.12	20.40	21.48	5.0	22.0
		25	12	21.17	20.36	21.44	5.0	22.0
		25	25	21.17	20.34	21.43	5.0	22.0
		50	0	21.07	20.36	21.46	5.0	22.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39675	40620	41565		
				2498.5 MHz	2593 MHz	2687.5 MHz		
5 MHz	QPSK	1	0	25.60	25.60	26.57	0.0	27.0
		1	12	25.59	25.59	26.66	0.0	27.0
		1	24	25.56	25.56	26.62	0.0	27.0
		12	0	24.50	24.50	25.61	1.0	26.0
		12	7	24.49	24.49	25.61	1.0	26.0
		12	13	24.48	24.48	25.63	1.0	26.0
		25	0	24.49	24.49	25.59	1.0	26.0
	16QAM	1	0	25.04	25.04	25.76	1.0	26.0
		1	12	24.94	24.94	25.68	1.0	26.0
		1	24	24.81	24.81	25.81	1.0	26.0
		12	0	23.39	23.39	24.57	2.0	25.0
		12	7	23.41	23.41	24.54	2.0	25.0
		12	13	23.40	23.40	24.48	2.0	25.0
		25	0	23.43	23.43	24.50	2.0	25.0
	64QAM	1	0	23.30	23.30	24.84	2.0	25.0
		1	12	23.40	23.40	24.94	2.0	25.0
		1	24	23.27	23.27	24.81	2.0	25.0
		12	0	22.33	22.33	23.48	3.0	24.0
		12	7	22.30	22.30	23.48	3.0	24.0
		12	13	22.33	22.33	23.48	3.0	24.0
		25	0	22.38	22.38	23.45	3.0	24.0
	256QAM	1	0	20.87	20.87	21.80	5.0	22.0
		1	12	20.68	20.68	21.71	5.0	22.0
		1	24	20.87	20.87	21.68	5.0	22.0
		12	0	20.31	20.31	21.40	5.0	22.0
		12	7	20.33	20.33	21.36	5.0	22.0
		12	13	20.31	20.31	21.37	5.0	22.0
		25	0	20.27	20.27	21.30	5.0	22.0

LTE Band 41 (PC3)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				39790	40620	41490		
				2510 MHz	2593 MHz	2680 MHz		
20 MHz	QPSK	1	0	23.06	22.37	23.91	0.0	24.0
		1	49	23.12	22.25	23.94	0.0	24.0
		1	99	23.13	22.27	23.82	0.0	24.0
		50	0	22.16	21.35	22.91	1.0	23.0
		50	24	22.15	21.32	22.88	1.0	23.0
		50	50	22.14	21.32	22.86	1.0	23.0
		100	0	22.18	21.34	22.91	1.0	23.0
	16QAM	1	0	22.03	21.54	22.91	1.0	23.0
		1	49	22.73	21.63	23.59	1.0	23.0
		1	99	21.97	21.41	22.85	1.0	23.0
		50	0	21.19	20.37	21.86	2.0	22.0
		50	24	21.15	20.35	21.79	2.0	22.0
		50	50	21.12	20.33	21.77	2.0	22.0
		100	0	21.17	20.35	21.79	2.0	22.0
	64QAM	1	0	21.25	20.29	21.73	2.0	22.0
		1	49	21.30	20.58	21.68	2.0	22.0
		1	99	21.09	20.37	21.43	2.0	22.0
		50	0	20.11	19.33	20.77	3.0	21.0
		50	24	20.08	19.33	20.73	3.0	21.0
		50	50	20.12	19.26	20.69	3.0	21.0
		100	0	20.10	19.28	20.71	3.0	21.0
	256QAM	1	0	18.12	17.28	18.67	5.0	19.0
		1	49	17.89	17.30	18.82	5.0	19.0
		1	99	18.07	17.27	18.68	5.0	19.0
		50	0	18.11	17.28	18.69	5.0	19.0
		50	24	18.07	17.25	18.65	5.0	19.0
		50	50	18.04	17.25	18.65	5.0	19.0
		100	0	18.06	17.26	18.65	5.0	19.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39765	40620	41515		
				2507.5 MHz	2593 MHz	2682.5 MHz		
15 MHz	QPSK	1	0	23.18	22.53	22.54	0.0	24.0
		1	37	23.50	22.52	22.61	0.0	24.0
		1	74	23.25	22.60	22.42	0.0	24.0
		36	0	22.35	21.66	21.52	1.0	23.0
		36	20	22.33	21.62	21.47	1.0	23.0
		36	39	22.31	21.63	21.49	1.0	23.0
		75	0	22.32	21.64	21.49	1.0	23.0
	16QAM	1	0	22.28	21.60	21.14	1.0	23.0
		1	37	21.74	21.50	21.27	1.0	23.0
		1	74	22.26	21.71	21.30	1.0	23.0
		36	0	21.29	20.68	20.45	2.0	22.0
		36	20	21.32	20.63	20.38	2.0	22.0
		36	39	21.30	20.61	20.41	2.0	22.0
		75	0	21.25	20.58	20.41	2.0	22.0
	64QAM	1	0	20.64	20.32	20.46	2.0	22.0
		1	37	20.88	20.18	20.42	2.0	22.0
		1	74	21.26	20.33	20.34	2.0	22.0
		36	0	20.20	19.61	19.66	3.0	21.0
		36	20	20.17	19.52	19.60	3.0	21.0
		36	39	20.16	19.53	19.60	3.0	21.0
		75	0	20.13	19.50	19.57	3.0	21.0
	256QAM	1	0	18.03	17.24	17.45	5.0	19.0
		1	37	17.96	17.36	17.56	5.0	19.0
		1	74	18.05	17.21	17.22	5.0	19.0
		36	0	18.15	17.50	17.59	5.0	19.0
		36	20	18.12	17.47	17.55	5.0	19.0
		36	39	18.06	17.46	17.53	5.0	19.0
		75	0	18.07	17.45	17.54	5.0	19.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39740	40620	41540		
				2505 MHz	2593 MHz	2685 MHz		
10 MHz	QPSK	1	0	23.07	22.61	23.92	0.0	24.0
		1	25	22.89	22.54	23.79	0.0	24.0
		1	49	23.15	22.60	23.88	0.0	24.0
		25	0	22.14	21.62	22.92	1.0	23.0
		25	12	22.13	21.62	22.90	1.0	23.0
		25	25	22.13	21.59	22.87	1.0	23.0
		50	0	22.15	21.61	22.89	1.0	23.0
	16QAM	1	0	22.14	21.76	23.05	1.0	23.0
		1	25	22.40	22.00	23.05	1.0	23.0
		1	49	22.09	21.76	23.02	1.0	23.0
		25	0	21.16	20.61	21.84	2.0	22.0
		25	12	21.15	20.58	21.82	2.0	22.0
		25	25	21.13	20.55	21.78	2.0	22.0
		50	0	21.11	20.61	21.82	2.0	22.0
	64QAM	1	0	20.97	20.33	21.57	2.0	22.0
		1	25	21.07	20.48	21.74	2.0	22.0
		1	49	20.93	20.29	21.52	2.0	22.0
		25	0	20.06	19.52	20.70	3.0	21.0
		25	12	20.03	19.49	20.68	3.0	21.0
		25	25	20.02	19.49	20.66	3.0	21.0
		50	0	20.04	19.49	20.66	3.0	21.0
	256QAM	1	0	17.98	17.46	18.64	5.0	19.0
		1	25	18.17	17.68	18.79	5.0	19.0
		1	49	17.92	17.39	18.52	5.0	19.0
		25	0	18.05	17.50	18.66	5.0	19.0
		25	12	18.03	17.49	18.65	5.0	19.0
		25	25	18.01	17.47	18.62	5.0	19.0
		50	0	18.03	17.47	18.64	5.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				39715	40620	41565		
				2502.5 MHz	2593 MHz	2687.5 MHz		
5 MHz	QPSK	1	0	23.09	22.32	23.90	0.0	24.0
		1	12	23.30	22.56	23.90	0.0	24.0
		1	24	23.11	22.35	23.90	0.0	24.0
		12	0	22.11	21.36	22.89	1.0	23.0
		12	7	22.12	21.37	22.88	1.0	23.0
		12	13	22.14	21.38	22.85	1.0	23.0
		25	0	22.12	21.38	22.86	1.0	23.0
	16QAM	1	0	21.98	21.36	22.88	1.0	23.0
		1	12	21.99	21.39	22.80	1.0	23.0
		1	24	22.00	21.40	22.82	1.0	23.0
		12	0	21.15	20.42	21.86	2.0	22.0
		12	7	21.13	20.40	21.83	2.0	22.0
		12	13	21.10	20.40	21.80	2.0	22.0
		25	0	21.06	20.37	21.76	2.0	22.0
	64QAM	1	0	20.95	20.37	21.73	2.0	22.0
		1	12	21.18	20.58	21.95	2.0	22.0
		1	24	20.96	20.33	21.69	2.0	22.0
		12	0	19.98	19.31	20.69	3.0	21.0
		12	7	19.98	19.31	20.69	3.0	21.0
		12	13	19.97	19.31	20.67	3.0	21.0
		25	0	20.01	19.26	20.61	3.0	21.0
	256QAM	1	0	18.20	17.55	18.88	5.0	19.0
		1	12	18.37	17.73	19.11	5.0	19.0
		1	24	18.11	17.50	18.83	5.0	19.0
		12	0	17.96	17.26	18.56	5.0	19.0
		12	7	17.98	17.25	18.55	5.0	19.0
		12	13	17.95	17.21	18.51	5.0	19.0
		25	0	17.92	17.22	18.51	5.0	19.0

LTE Band 41C_PC2 (ULCA)

							AMPR Off		AMPR On	
Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)		Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM	QPSK	16QAM
40MHz (20MHz / 20MHz)	2506	2525.8	1	99	1	0	26.04	26.25	26.04	26.15
			1	0	1	99	25.91	26.18	15.77	16.12
			100	0	100	0	25.83	25.77	22.64	21.65
	2583.1	2602.9	1	99	1	0	25.20	25.40	25.29	25.62
			1	0	1	99	25.37	25.63	15.16	15.56
			100	0	100	0	25.26	25.19	21.80	21.00
	2660.2	2680	1	99	1	0	26.41	26.73	26.59	26.70
			1	0	1	99	26.63	26.54	16.32	16.93
			100	0	100	0	26.47	26.40	23.33	22.30

							AMPR Off		AMPR On	
Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)		Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM	QPSK	16QAM
35MHz (15MHz / 20MHz)	2503.5	2520.6	1	74	1	0	26.00	26.22	25.81	25.95
			1	0	1	99	26.00	26.16	15.69	15.82
			75	0	100	0	25.94	25.87	21.69	21.66
	2583.3	2600.4	1	74	1	0	25.58	25.42	25.09	25.45
			1	0	1	99	25.39	25.56	15.12	15.40
			75	0	100	0	25.30	25.25	21.06	21.08
	2662.9	2680	1	74	1	0	26.56	26.64	26.47	26.54
			1	0	1	99	26.71	26.72	16.35	17.10
			75	0	100	0	26.61	26.59	22.34	22.31

							AMPR Off		AMPR On	
Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)		Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM	QPSK	16QAM
30MHz (15MHz / 15MHz)	2503.5	2518.5	1	74	1	0	26.01	26.02	26.05	26.21
			1	0	1	74	25.84	26.01	15.85	16.07
			75	0	75	0	25.86	25.83	21.74	21.72
	2585.5	2600.5	1	74	1	0	25.24	25.51	25.06	25.26
			1	0	1	74	25.31	25.53	14.93	15.52
			75	0	75	0	25.35	25.20	21.08	21.04
	2667.5	2682.5	1	74	1	0	26.52	26.58	26.69	26.62
			1	0	1	74	26.42	26.47	16.57	16.77
			75	0	75	0	26.67	26.52	22.42	22.43

							AMPR Off		AMPR On	
Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)		Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM	QPSK	16QAM
25MHz (5MHz / 20MHz)	2498.5	2510.2	1	24	1	0	25.60	25.71	25.51	25.23
			1	0	1	99	25.75	25.85	15.64	15.97
			25	0	100	0	25,67	25.79	22.71	22.70
	2583.8	2595.5	1	24	1	0	25.15	25.41	25.12	25,91
			1	0	1	99	24.50	24.52	15.13	14.00
			25	0	100	0	25.05	25.09	22.01	21.90
	2668.3	2680	1	24	1	0	26.43	26.24	26.21	26.14
			1	0	1	99	26.24	26.20	16.12	16.33
			25	0	100	0	26.43	26.30	23.34	23.19

LTE Band 66 (Main ANT)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	23.29	24.04	23.89	0.0	25.0
		1	49	23.58	24.17	24.31	0.0	25.0
		1	99	23.78	24.13	24.07	0.0	25.0
		50	0	22.71	23.13	23.23	1.0	24.0
		50	24	22.70	23.07	23.21	1.0	24.0
		50	50	22.70	23.08	23.19	1.0	24.0
		100	0	22.70	23.08	23.22	1.0	24.0
	16QAM	1	0	22.53	23.47	23.21	1.0	24.0
		1	49	23.03	23.44	23.29	1.0	24.0
		1	99	22.99	23.47	23.39	1.0	24.0
		50	0	21.63	22.03	22.16	2.0	23.0
		50	24	21.63	21.97	22.14	2.0	23.0
		50	50	21.63	21.97	22.10	2.0	23.0
		100	0	21.67	22.01	22.10	2.0	23.0
	64QAM	1	0	21.56	21.57	21.32	2.0	23.0
		1	49	21.86	21.72	21.40	2.0	23.0
		1	99	21.66	21.56	21.27	2.0	23.0
		50	0	20.30	20.33	20.33	3.0	22.0
		50	24	20.30	20.29	20.30	3.0	22.0
		50	50	20.29	20.30	20.31	3.0	22.0
		100	0	20.31	20.28	20.30	3.0	22.0
	256QAM	1	0	18.43	18.60	18.52	5.0	20.0
		1	49	18.38	18.82	18.64	5.0	20.0
		1	99	18.41	18.60	18.51	5.0	20.0
		50	0	18.31	18.34	18.34	5.0	20.0
		50	24	18.29	18.33	18.32	5.0	20.0
		50	50	18.31	18.31	18.34	5.0	20.0
		100	0	18.30	18.34	18.34	5.0	20.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132047	132322	132597		
				1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	23.30	23.60	23.57	0.0	25.0
		1	37	23.81	24.16	24.23	0.0	25.0
		1	74	23.64	23.87	23.70	0.0	25.0
		36	0	22.75	23.10	23.06	1.0	24.0
		36	20	22.72	23.23	23.32	1.0	24.0
		36	39	22.73	23.23	23.35	1.0	24.0
		75	0	22.76	23.25	23.22	1.0	24.0
	16QAM	1	0	22.62	22.91	22.91	1.0	24.0
		1	37	22.87	23.19	23.62	1.0	24.0
		1	74	22.74	23.24	23.14	1.0	24.0
		36	0	21.67	22.15	22.23	2.0	23.0
		36	20	21.65	22.10	22.22	2.0	23.0
		36	39	21.65	22.09	22.20	2.0	23.0
		75	0	21.64	22.08	22.19	2.0	23.0
	64QAM	1	0	21.72	21.80	21.79	2.0	23.0
		1	37	21.56	21.81	21.80	2.0	23.0
		1	74	21.74	21.82	21.78	2.0	23.0
		36	0	20.63	20.79	20.86	3.0	22.0
		36	20	20.62	20.78	20.82	3.0	22.0
		36	39	20.62	20.75	20.83	3.0	22.0
		75	0	20.61	20.74	20.81	3.0	22.0
	256QAM	1	0	18.85	18.96	18.86	5.0	20.0
		1	37	18.96	19.24	19.03	5.0	20.0
		1	74	18.83	19.06	18.85	5.0	20.0
		36	0	18.62	18.76	18.86	5.0	20.0
		36	20	18.62	18.74	18.85	5.0	20.0
		36	39	18.60	18.71	18.82	5.0	20.0
		75	0	18.59	18.75	18.82	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132022	132322	132622		
				1715 MHz	1745 MHz	1775 MHz		
10 MHz	QPSK	1	0	23.72	23.74	23.81	0.0	25.0
		1	25	23.93	23.97	24.03	0.0	25.0
		1	49	23.78	23.81	23.91	0.0	25.0
		25	0	22.71	22.77	22.86	1.0	24.0
		25	12	22.70	22.76	22.86	1.0	24.0
		25	25	22.69	22.76	22.86	1.0	24.0
		50	0	22.71	22.77	22.86	1.0	24.0
	16QAM	1	0	22.81	22.98	23.01	1.0	24.0
		1	25	22.67	22.76	22.77	1.0	24.0
		1	49	22.80	22.96	22.93	1.0	24.0
		25	0	21.66	21.75	21.85	2.0	23.0
		25	12	21.64	21.73	21.83	2.0	23.0
		25	25	21.65	21.73	21.83	2.0	23.0
		50	0	21.67	21.73	21.79	2.0	23.0
	64QAM	1	0	21.56	21.90	21.71	2.0	23.0
		1	25	21.61	22.04	21.90	2.0	23.0
		1	49	21.67	21.99	21.77	2.0	23.0
		25	0	20.64	20.73	20.83	3.0	22.0
		25	12	20.63	20.71	20.81	3.0	22.0
		25	25	20.64	20.71	20.79	3.0	22.0
		50	0	20.61	20.69	20.77	3.0	22.0
	256QAM	1	0	18.87	18.91	19.03	5.0	20.0
		1	25	19.04	18.96	19.12	5.0	20.0
		1	49	18.85	18.84	18.96	5.0	20.0
		25	0	18.70	18.78	18.85	5.0	20.0
		25	12	18.69	18.78	18.85	5.0	20.0
		25	25	18.69	18.77	18.83	5.0	20.0
		50	0	18.67	18.77	18.82	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131997	132322	132647		
				1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	QPSK	1	0	23.61	23.65	23.76	0.0	25.0
		1	12	23.65	23.77	23.88	0.0	25.0
		1	24	23.68	23.74	23.88	0.0	25.0
		12	0	22.66	22.74	22.86	1.0	24.0
		12	7	22.66	22.74	22.85	1.0	24.0
		12	13	22.64	22.72	22.85	1.0	24.0
		25	0	22.65	22.72	22.85	1.0	24.0
	16QAM	1	0	22.80	22.81	23.14	1.0	24.0
		1	12	22.86	22.88	23.09	1.0	24.0
		1	24	22.79	22.85	23.15	1.0	24.0
		12	0	21.63	21.68	21.81	2.0	23.0
		12	7	21.62	21.66	21.79	2.0	23.0
		12	13	21.65	21.65	21.76	2.0	23.0
		25	0	21.64	21.66	21.78	2.0	23.0
	64QAM	1	0	21.56	21.69	21.85	2.0	23.0
		1	12	21.82	21.92	22.14	2.0	23.0
		1	24	21.70	21.76	21.91	2.0	23.0
		12	0	20.58	20.59	20.74	3.0	22.0
		12	7	20.59	20.58	20.73	3.0	22.0
		12	13	20.59	20.59	20.72	3.0	22.0
		25	0	20.58	20.62	20.74	3.0	22.0
	256QAM	1	0	18.56	18.69	18.86	5.0	20.0
		1	12	18.74	18.90	19.08	5.0	20.0
		1	24	18.55	18.65	18.85	5.0	20.0
		12	0	18.65	18.69	18.81	5.0	20.0
		12	7	18.66	18.70	18.81	5.0	20.0
		12	13	18.67	18.70	18.81	5.0	20.0
		25	0	18.64	18.69	18.82	5.0	20.0

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131987	132322	132657		
				1711.5 MHz	1745 MHz	1778.5 MHz		
3 MHz	QPSK	1	0	23.76	23.59	23.72	0.0	25.0
		1	8	24.02	23.75	23.86	0.0	25.0
		1	14	23.84	23.62	23.77	0.0	25.0
		8	0	22.80	22.74	22.89	1.0	24.0
		8	4	22.71	22.74	22.88	1.0	24.0
		8	7	22.77	22.74	22.90	1.0	24.0
		15	0	22.71	22.71	22.84	1.0	24.0
	16QAM	1	0	22.80	22.85	23.02	1.0	24.0
		1	8	22.97	23.03	23.16	1.0	24.0
		1	14	22.74	22.90	23.04	1.0	24.0
		8	0	21.68	21.77	21.94	2.0	23.0
		8	4	21.67	21.72	21.86	2.0	23.0
		8	7	21.62	21.73	21.90	2.0	23.0
		15	0	21.64	21.70	21.79	2.0	23.0
	64QAM	1	0	21.71	21.81	21.70	2.0	23.0
		1	8	21.65	21.92	21.60	2.0	23.0
		1	14	21.78	21.93	21.78	2.0	23.0
		8	0	20.64	20.60	20.77	3.0	22.0
		8	4	20.58	20.57	20.76	3.0	22.0
		8	7	20.61	20.62	20.79	3.0	22.0
		15	0	20.53	20.64	20.74	3.0	22.0
	256QAM	1	0	18.76	18.94	19.04	5.0	20.0
		1	8	18.83	19.06	19.06	5.0	20.0
		1	14	18.72	18.87	18.97	5.0	20.0
		8	0	18.70	18.77	18.89	5.0	20.0
		8	4	18.68	18.72	18.84	5.0	20.0
		8	7	18.66	18.75	18.85	5.0	20.0
		15	0	18.65	18.74	18.84	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131979	132322	132665		
				1710.7 MHz	1745 MHz	1779.3 MHz		
1.4 MHz	QPSK	1	0	23.61	24.05	24.14	0.0	25.0
		1	3	23.76	24.06	24.18	0.0	25.0
		1	5	23.90	24.11	24.13	0.0	25.0
		3	0	22.80	23.08	23.17	0.0	25.0
		3	1	22.85	23.07	23.15	0.0	25.0
		3	3	22.83	23.06	23.17	0.0	25.0
		6	0	22.84	23.06	23.15	1.0	24.0
	16QAM	1	0	22.81	23.27	23.48	1.0	24.0
		1	3	22.88	23.20	23.09	1.0	24.0
		1	5	23.08	23.24	23.44	1.0	24.0
		3	0	21.83	22.04	22.13	1.0	24.0
		3	1	21.82	22.03	22.10	1.0	24.0
		3	3	21.81	22.03	22.10	1.0	24.0
		6	0	21.76	21.99	22.07	2.0	23.0
	64QAM	1	0	21.66	21.73	21.78	2.0	23.0
		1	3	21.81	21.84	21.90	2.0	23.0
		1	5	21.66	21.80	21.87	2.0	23.0
		3	0	21.57	21.65	21.69	2.0	23.0
		3	1	21.47	21.59	21.69	2.0	23.0
		3	3	21.50	21.64	21.64	2.0	23.0
		6	0	20.53	20.62	20.69	3.0	22.0
	256QAM	1	0	18.50	18.59	18.84	5.0	20.0
		1	3	18.70	18.71	19.01	5.0	20.0
		1	5	18.50	18.53	18.76	5.0	20.0
		3	0	18.49	18.69	18.82	5.0	20.0
		3	1	18.48	18.67	18.77	5.0	20.0
		3	3	18.45	18.65	18.71	5.0	20.0
		6	0	18.47	18.62	18.78	5.0	20.0

LTE Band 66 (Sub ANT)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	20.84	21.12	20.93	0.0	21.5
		1	49	20.80	21.11	20.98	0.0	21.5
		1	99	20.90	21.15	20.87	0.0	21.5
		50	0	20.89	21.14	20.94	0.0	21.5
		50	24	20.83	21.25	20.99	0.0	21.5
		50	50	20.91	21.17	21.03	0.0	21.5
		100	0	20.81	21.23	21.08	0.0	21.5
	16QAM	1	0	20.96	21.23	21.10	0.0	21.5
		1	49	21.11	21.31	20.97	0.0	21.5
		1	99	21.10	21.27	21.16	0.0	21.5
		50	0	20.95	21.15	21.04	0.0	21.5
		50	24	20.83	21.24	21.09	0.0	21.5
		50	50	20.86	21.28	20.95	0.0	21.5
		100	0	20.94	21.13	21.08	0.0	21.5
	64QAM	1	0	20.93	21.13	21.09	0.0	21.5
		1	49	20.79	21.12	20.93	0.0	21.5
		1	99	21.02	21.15	21.05	0.0	21.5
		50	0	20.37	20.72	20.55	0.0	21.5
		50	24	20.45	20.77	20.49	0.0	21.5
		50	50	20.49	20.76	20.48	0.0	21.5
		100	0	20.39	20.62	20.46	0.0	21.5
	256QAM	1	0	18.43	18.77	18.50	2.0	19.5
		1	49	18.51	18.88	18.45	2.0	19.5
		1	99	18.39	18.74	18.62	2.0	19.5
		50	0	18.28	18.64	18.37	2.0	19.5
		50	24	18.37	18.61	18.44	2.0	19.5
		50	50	18.34	18.63	18.41	2.0	19.5
		100	0	18.34	18.67	18.41	2.0	19.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132047	132322	132597		
				1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	21.00	20.71	20.79	0.0	21.5
		1	37	21.04	20.86	20.85	0.0	21.5
		1	74	21.11	20.78	20.84	0.0	21.5
		36	0	20.68	21.35	21.44	0.0	21.5
		36	20	20.63	21.37	21.41	0.0	21.5
		36	39	20.73	21.41	21.40	0.0	21.5
		75	0	20.67	21.42	21.41	0.0	21.5
	16QAM	1	0	21.09	20.31	21.48	0.0	21.5
		1	37	21.15	20.29	21.31	0.0	21.5
		1	74	21.14	20.38	20.81	0.0	21.5
		36	0	21.16	21.44	20.86	0.0	21.5
		36	20	21.18	21.45	21.50	0.0	21.5
		36	39	21.15	21.45	21.47	0.0	21.5
		75	0	21.10	21.34	21.37	0.0	21.5
	64QAM	1	0	20.10	21.44	20.57	0.0	21.5
		1	37	20.14	21.32	21.48	0.0	21.5
		1	74	20.16	21.38	20.28	0.0	21.5
		36	0	20.08	21.30	20.83	0.0	21.5
		36	20	20.50	21.27	20.81	0.0	21.5
		36	39	20.14	21.28	20.81	0.0	21.5
		75	0	20.16	20.69	20.50	0.0	21.5
	256QAM	1	0	18.76	18.43	18.57	2.0	19.5
		1	37	18.82	18.20	18.62	2.0	19.5
		1	74	18.86	18.35	18.69	2.0	19.5
		36	0	18.76	18.63	18.52	2.0	19.5
		36	20	18.72	18.65	18.57	2.0	19.5
		36	39	18.79	18.62	18.64	2.0	19.5
		75	0	18.75	18.89	18.71	2.0	19.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132022	132322	132622		
				1715 MHz	1745 MHz	1775 MHz		
10 MHz	QPSK	1	0	20.30	20.48	19.79	0.0	21.5
		1	25	20.28	20.47	19.82	0.0	21.5
		1	49	20.35	20.51	19.87	0.0	21.5
		25	0	20.63	21.14	21.40	0.0	21.5
		25	12	20.62	21.25	21.38	0.0	21.5
		25	25	20.68	21.31	21.32	0.0	21.5
		50	0	20.67	21.15	21.37	0.0	21.5
	16QAM	1	0	20.61	21.27	21.38	0.0	21.5
		1	25	20.64	21.25	21.34	0.0	21.5
		1	49	20.68	21.21	21.36	0.0	21.5
		25	0	20.58	21.38	21.41	0.0	21.5
		25	12	20.51	21.41	21.48	0.0	21.5
		25	25	20.56	21.41	21.47	0.0	21.5
		50	0	20.54	21.46	21.45	0.0	21.5
	64QAM	1	0	20.99	20.93	20.38	0.0	21.5
		1	25	20.85	20.91	20.38	0.0	21.5
		1	49	20.82	20.98	20.36	0.0	21.5
		25	0	20.75	19.93	20.35	0.0	21.5
		25	12	20.69	19.95	20.32	0.0	21.5
		25	25	20.59	19.87	20.27	0.0	21.5
		50	0	20.66	20.52	20.29	0.0	21.5
	256QAM	1	0	18.12	19.02	18.74	2.0	19.5
		1	25	18.25	19.04	18.65	2.0	19.5
		1	49	18.32	19.21	18.92	2.0	19.5
		25	0	18.37	19.23	19.45	2.0	19.5
		25	12	18.35	19.34	19.24	2.0	19.5
		25	25	18.25	19.41	19.38	2.0	19.5
		50	0	18.23	19.36	19.45	2.0	19.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131997	132322	132647		
				1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	QPSK	1	0	19.92	21.13	20.52	0.0	21.5
		1	12	20.04	21.21	20.56	0.0	21.5
		1	24	20.06	21.31	20.48	0.0	21.5
		12	0	20.89	21.33	21.46	0.0	21.5
		12	7	20.91	21.38	21.47	0.0	21.5
		12	13	20.90	21.31	21.42	0.0	21.5
		25	0	21.00	21.34	21.45	0.0	21.5
	16QAM	1	0	21.06	19.33	21.17	0.0	21.5
		1	12	21.10	19.54	21.15	0.0	21.5
		1	24	21.29	19.42	21.19	0.0	21.5
		12	0	20.91	21.24	21.46	0.0	21.5
		12	7	21.10	21.29	21.35	0.0	21.5
		12	13	21.14	21.35	21.41	0.0	21.5
		25	0	20.95	21.46	21.22	0.0	21.5
	64QAM	1	0	20.71	20.87	20.95	0.0	21.5
		1	12	20.78	20.83	20.89	0.0	21.5
		1	24	20.81	20.85	20.75	0.0	21.5
		12	0	20.83	20.83	21.04	0.0	21.5
		12	7	20.89	20.79	21.04	0.0	21.5
		12	13	20.81	20.72	21.10	0.0	21.5
		25	0	20.79	20.85	21.02	0.0	21.5
	256QAM	1	0	17.92	18.93	19.00	2.0	19.5
		1	12	17.94	18.92	19.17	2.0	19.5
		1	24	17.82	18.95	19.14	2.0	19.5
		12	0	17.83	18.70	18.47	2.0	19.5
		12	7	17.69	18.69	18.51	2.0	19.5
		12	13	17.77	18.59	18.65	2.0	19.5
		25	0	17.72	18.61	18.48	2.0	19.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131987	132322	132657		
				1711.5 MHz	1745 MHz	1778.5 MHz		
3 MHz	QPSK	1	0	21.17	20.87	21.38	0.0	21.5
		1	8	21.15	20.91	21.29	0.0	21.5
		1	14	21.12	20.95	21.48	0.0	21.5
		8	0	21.09	21.31	21.41	0.0	21.5
		8	4	21.00	21.32	21.38	0.0	21.5
		8	7	20.96	21.27	21.49	0.0	21.5
		15	0	20.87	21.25	21.41	0.0	21.5
	16QAM	1	0	21.24	21.13	21.39	0.0	21.5
		1	8	21.26	21.18	21.48	0.0	21.5
		1	14	21.36	21.28	21.42	0.0	21.5
		8	0	20.53	20.76	21.38	0.0	21.5
		8	4	20.68	20.57	21.41	0.0	21.5
		8	7	20.71	20.51	21.38	0.0	21.5
		15	0	20.65	20.68	21.28	0.0	21.5
	64QAM	1	0	21.00	21.48	21.20	0.0	21.5
		1	8	21.25	21.45	21.09	0.0	21.5
		1	14	21.14	21.43	21.12	0.0	21.5
		8	0	19.90	19.71	21.08	0.0	21.5
		8	4	19.95	19.89	21.05	0.0	21.5
		8	7	19.92	19.82	21.04	0.0	21.5
		15	0	20.95	19.72	21.08	0.0	21.5
	256QAM	1	0	18.87	18.76	19.01	2.0	19.5
		1	8	18.86	18.59	19.02	2.0	19.5
		1	14	18.82	18.62	19.04	2.0	19.5
		8	0	17.68	18.43	19.08	2.0	19.5
		8	4	17.72	18.52	18.96	2.0	19.5
		8	7	17.71	18.61	18.95	2.0	19.5
		15	0	17.79	18.78	18.92	2.0	19.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131979	132322	132665		
				1710.7 MHz	1745 MHz	1779.3 MHz		
1.4 MHz	QPSK	1	0	21.49	21.29	21.38	0.0	21.5
		1	3	21.48	21.31	21.32	0.0	21.5
		1	5	21.42	21.34	21.48	0.0	21.5
		3	0	21.47	21.41	21.42	0.0	21.5
		3	1	21.38	21.38	21.45	0.0	21.5
		3	3	21.32	21.44	21.47	0.0	21.5
		6	0	21.29	21.39	21.31	0.0	21.5
	16QAM	1	0	21.06	21.09	21.35	0.0	21.5
		1	3	21.03	21.12	21.32	0.0	21.5
		1	5	21.13	21.13	21.28	0.0	21.5
		3	0	21.18	21.47	21.31	0.0	21.5
		3	1	21.15	21.42	21.35	0.0	21.5
		3	3	21.27	21.43	21.41	0.0	21.5
		6	0	21.35	21.46	21.48	0.0	21.5
	64QAM	1	0	20.87	21.21	21.18	0.0	21.5
		1	3	20.85	21.34	21.18	0.0	21.5
		1	5	20.71	21.38	21.21	0.0	21.5
		3	0	20.58	21.28	21.25	0.0	21.5
		3	1	20.71	21.41	21.24	0.0	21.5
		3	3	20.81	21.42	21.32	0.0	21.5
		6	0	20.57	21.47	21.31	0.0	21.5
	256QAM	1	0	18.20	18.92	18.85	2.0	19.5
		1	3	18.50	18.71	18.52	2.0	19.5
		1	5	18.53	18.82	18.73	2.0	19.5
		3	0	18.72	18.84	18.69	2.0	19.5
		3	1	18.84	18.92	18.51	2.0	19.5
		3	3	18.76	18.91	18.62	2.0	19.5
		6	0	18.52	18.92	18.48	2.0	19.5

LTE Band 71

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				133222	133297	133372		
				673 MHz	680.5 MHz	688 MHz		
20 MHz	QPSK	1	0	24.50	24.64	24.48	0.0	25.5
		1	49	24.29	24.44	24.25	0.0	25.5
		1	99	24.23	24.35	24.24	0.0	25.5
		50	0	23.42	23.56	23.38	1.0	24.5
		50	24	23.28	23.47	23.38	1.0	24.5
		50	50	23.28	23.40	23.28	1.0	24.5
		100	0	23.36	23.47	23.30	1.0	24.5
	16QAM	1	0	23.62	23.78	23.62	1.0	24.5
		1	49	23.66	23.85	23.76	1.0	24.5
		1	99	23.35	23.51	23.42	1.0	24.5
		50	0	22.32	22.51	22.34	2.0	23.5
		50	24	22.27	22.44	22.34	2.0	23.5
		50	50	22.17	22.37	22.18	2.0	23.5
		100	0	22.24	22.40	22.30	2.0	23.5
	64QAM	1	0	22.22	22.38	22.20	2.0	23.5
		1	49	22.02	22.18	22.02	2.0	23.5
		1	99	22.03	22.18	21.99	2.0	23.5
		50	0	21.21	21.34	21.15	3.0	22.5
		50	24	21.18	21.29	21.09	3.0	22.5
		50	50	21.05	21.21	21.01	3.0	22.5
		100	0	21.07	21.26	21.12	3.0	22.5
	256QAM	1	0	19.34	19.52	19.37	5.0	20.5
		1	49	19.32	19.43	19.26	5.0	20.5
		1	99	19.13	19.24	19.11	5.0	20.5
		50	0	19.21	19.33	19.13	5.0	20.5
		50	24	19.10	19.26	19.10	5.0	20.5
		50	50	19.05	19.19	19.00	5.0	20.5
		100	0	19.15	19.28	19.14	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				133197	133297	133397		
				670.5 MHz	680.5 MHz	690.5 MHz		
15 MHz	QPSK	1	0	24.47	24.66	24.48	0.0	25.5
		1	37	24.26	24.42	24.25	0.0	25.5
		1	74	24.32	24.46	24.33	0.0	25.5
		36	0	23.62	23.75	23.66	1.0	24.5
		36	20	23.48	23.68	23.56	1.0	24.5
		36	39	23.41	23.61	23.46	1.0	24.5
		75	0	23.50	23.68	23.53	1.0	24.5
	16QAM	1	0	23.43	23.60	23.43	1.0	24.5
		1	37	23.21	23.40	23.29	1.0	24.5
		1	74	23.37	23.46	23.37	1.0	24.5
		36	0	22.31	22.45	22.27	2.0	23.5
		36	20	22.20	22.38	22.23	2.0	23.5
		36	39	22.22	22.33	22.20	2.0	23.5
		75	0	22.29	22.44	22.35	2.0	23.5
	64QAM	1	0	22.52	22.66	22.51	2.0	23.5
		1	37	22.30	22.45	22.25	2.0	23.5
		1	74	22.28	22.46	22.31	2.0	23.5
		36	0	21.45	21.58	21.47	3.0	22.5
		36	20	21.35	21.53	21.41	3.0	22.5
		36	39	21.30	21.48	21.35	3.0	22.5
		75	0	21.34	21.49	21.35	3.0	22.5
	256QAM	1	0	19.69	19.84	19.74	5.0	20.5
		1	37	19.47	19.57	19.46	5.0	20.5
		1	74	19.48	19.63	19.53	5.0	20.5
		36	0	19.39	19.56	19.39	5.0	20.5
		36	20	19.38	19.51	19.34	5.0	20.5
		36	39	19.24	19.44	19.24	5.0	20.5
		75	0	19.30	19.50	19.40	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				133172	133297	133422		
				668 MHz	680.5 MHz	693 MHz		
10 MHz	QPSK	1	0	24.82	24.28	24.45	0.0	25.5
		1	25	24.65	24.20	24.27	0.0	25.5
		1	49	24.66	24.15	24.37	0.0	25.5
		25	0	23.79	23.23	23.45	1.0	24.5
		25	12	23.74	23.18	23.40	1.0	24.5
		25	25	23.67	23.16	23.36	1.0	24.5
		50	0	23.71	23.21	23.38	1.0	24.5
	16QAM	1	0	23.84	23.37	23.84	1.0	24.5
		1	25	23.89	23.41	23.74	1.0	24.5
		1	49	23.65	23.30	23.67	1.0	24.5
		25	0	22.69	22.26	22.43	2.0	23.5
		25	12	22.65	22.20	22.39	2.0	23.5
		25	25	22.60	22.18	22.35	2.0	23.5
		50	0	22.67	22.18	22.31	2.0	23.5
	64QAM	1	0	22.61	22.40	22.38	2.0	23.5
		1	25	22.60	22.43	22.24	2.0	23.5
		1	49	22.42	22.31	22.32	2.0	23.5
		25	0	21.73	21.23	21.39	3.0	22.5
		25	12	21.68	21.22	21.37	3.0	22.5
		25	25	21.64	21.18	21.30	3.0	22.5
		50	0	21.65	21.18	21.31	3.0	22.5
	256QAM	1	0	19.83	19.30	19.65	5.0	20.5
		1	25	19.78	19.24	19.42	5.0	20.5
		1	49	19.60	19.11	19.49	5.0	20.5
		25	0	19.78	19.31	19.38	5.0	20.5
		25	12	19.73	19.27	19.33	5.0	20.5
		25	25	19.67	19.21	19.29	5.0	20.5
		50	0	19.63	19.19	19.29	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				133147	133297	133447		
				665.5 MHz	680.5 MHz	695.5 MHz		
5 MHz	QPSK	1	0	24.19	23.94	23.80	0.0	25.5
		1	12	24.18	23.75	23.81	0.0	25.5
		1	24	24.17	23.95	23.79	0.0	25.5
		12	0	23.20	22.97	22.84	1.0	24.5
		12	7	23.18	22.95	22.81	1.0	24.5
		12	13	23.17	22.94	22.80	1.0	24.5
		25	0	23.18	22.94	22.80	1.0	24.5
	16QAM	1	0	23.32	23.37	23.18	1.0	24.5
		1	12	23.27	23.24	23.19	1.0	24.5
		1	24	23.25	23.29	23.14	1.0	24.5
		12	0	22.17	22.03	21.82	2.0	23.5
		12	7	22.14	22.02	21.81	2.0	23.5
		12	13	22.14	21.99	21.78	2.0	23.5
		25	0	22.17	21.95	21.79	2.0	23.5
	64QAM	1	0	22.15	22.04	21.73	2.0	23.5
		1	12	22.17	21.90	21.59	2.0	23.5
		1	24	22.18	21.94	21.71	2.0	23.5
		12	0	21.08	20.89	20.78	3.0	22.5
		12	7	21.05	20.87	20.74	3.0	22.5
		12	13	21.02	20.84	20.72	3.0	22.5
		25	0	21.08	20.90	20.70	3.0	22.5
	256QAM	1	0	19.17	19.09	18.70	5.0	20.5
		1	12	18.88	19.01	18.63	5.0	20.5
		1	24	19.06	19.04	18.66	5.0	20.5
		12	0	19.12	18.94	18.77	5.0	20.5
		12	7	19.11	18.93	18.77	5.0	20.5
		12	13	19.08	18.86	18.76	5.0	20.5
		25	0	19.11	18.84	18.75	5.0	20.5

NR Band n2

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					388000	392000	396000		
					1860 MHz	1880 MHz	1900 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.40	24.31	24.33	0.0	25.0
			1	108	24.19	24.17	24.32	0.0	25.0
			1	214	24.28	24.22	24.22	0.0	25.0
			108	0	23.44	23.42	23.22	0.5	24.5
			108	54	24.34	24.31	24.32	0.0	25.0
			108	108	23.34	23.42	23.51	0.5	24.5
			216	0	23.30	23.21	23.30	0.5	24.5
		QPSK	1	1	24.33	24.36	24.33	0.0	25.0
			1	108	24.23	24.23	24.17	0.0	25.0
			1	214	24.32	24.26	24.35	0.0	25.0
			108	0	23.47	23.24	23.21	1.0	24.0
			108	54	24.29	24.30	24.29	0.0	25.0
			108	108	23.32	23.33	23.33	1.0	24.0
			216	0	23.20	23.26	23.33	1.0	24.0
		16QAM	1	1	23.04	23.72	23.45	1.0	24.0
			1	108	22.88	23.25	23.28	1.0	24.0
			1	214	23.28	23.16	23.36	1.0	24.0
		64QAM	1	1	22.04	21.96	22.01	2.5	22.5
		256QAM	1	1	19.82	19.96	19.79	4.5	20.5
	CP-OFDM	QPSK	1	1	21.30	21.26	21.25	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					373000	376000	379000		
					1865 MHz	1880 MHz	1895 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.40	24.31	24.12	0.0	25.0
			1	80	24.12	24.25	24.31	0.0	25.0
			1	158	24.23	24.30	24.21	0.0	25.0
			80	0	23.37	23.32	23.34	0.5	24.5
			80	40	24.27	24.28	24.21	0.0	25.0
			80	80	23.32	23.29	23.34	0.5	24.5
			160	0	23.27	23.16	23.28	0.5	24.5
		QPSK	1	1	24.22	24.12	24.30	0.0	25.0
			1	80	24.18	24.20	24.34	0.0	25.0
			1	158	24.24	24.30	24.26	0.0	25.0
			80	0	23.38	23.32	23.42	1.0	24.0
			80	40	24.26	24.22	24.44	0.0	25.0
			80	80	23.29	23.27	23.45	1.0	24.0
			160	0	23.24	23.30	23.38	1.0	24.0
		16QAM	1	1	23.45	23.22	23.37	1.0	24.0
		64QAM	1	1	21.92	21.79	21.95	2.5	22.5
		256QAM	1	1	19.72	19.70	19.73	4.5	20.5
	CP-OFDM	QPSK	1	1	21.30	21.70	21.34	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					372500	376000	379500		
					1862.5 MHz	1880 MHz	1897.5 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.36	24.22	24.35	0.0	25.0
			1	67	24.23	24.24	24.23	0.0	25.0
			1	131	24.50	24.34	24.21	0.0	25.0
			64	0	23.54	23.40	23.50	0.5	24.5
			64	35	24.47	24.33	24.41	0.0	25.0
			64	69	23.48	23.37	23.42	0.5	24.5
			128	0	23.25	23.19	23.35	0.5	24.5
		QPSK	1	1	24.42	24.37	24.33	0.0	25.0
			1	67	24.41	24.16	24.35	0.0	25.0
			1	131	24.48	24.31	24.34	0.0	25.0
			64	0	23.53	23.36	23.43	1.0	24.0
			64	35	24.46	24.26	24.39	0.0	25.0
			64	69	23.37	23.27	23.36	1.0	24.0
			128	0	23.36	23.31	23.28	1.0	24.0
		16QAM	1	1	23.47	23.34	23.52	1.0	24.0
		64QAM	1	1	22.11	22.23	21.82	2.5	22.5
		256QAM	1	1	20.13	19.82	20.17	4.5	20.5
	CP-OFDM	QPSK	1	1	21.41	21.29	22.55	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					372000	376000	380000		
					1860 MHz	1880 MHz	1900 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.10	24.24	24.19	0.0	25.0
			1	53	24.26	24.09	24.09	0.0	25.0
			1	104	24.23	24.10	24.11	0.0	25.0
			50	0	23.42	23.74	23.75	0.5	24.5
			50	28	24.35	24.21	24.18	0.0	25.0
			50	56	23.31	23.67	23.66	0.5	24.5
			100	0	23.36	23.71	23.72	0.5	24.5
		QPSK	1	1	24.12	24.08	24.11	0.0	25.0
			1	53	24.28	24.05	24.08	0.0	25.0
			1	104	24.27	24.06	24.15	0.0	25.0
			50	0	23.44	23.22	23.20	1.0	24.0
			50	28	24.37	24.14	24.15	0.0	25.0
			50	56	23.32	23.13	23.22	1.0	24.0
			100	0	23.38	23.17	23.18	1.0	24.0
		16QAM	1	1	23.36	23.21	23.32	1.0	24.0
		64QAM	1	1	21.80	21.80	21.68	2.5	22.5
		256QAM	1	1	19.78	19.66	19.62	4.5	20.5
	CP-OFDM	QPSK	1	1	22.84	22.72	22.64	1.5	23.5

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					387500	392000	396500		
					1857.5 MHz	1880 MHz	1902.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.20	24.13	23.90	0.0	25.0
			1	40	24.20	24.00	23.85	0.0	25.0
			1	77	24.19	24.09	23.97	0.0	25.0
			36	0	23.39	23.69	23.01	0.5	24.5
			36	22	24.36	24.16	24.00	0.0	25.0
			36	43	23.33	23.65	23.06	0.5	24.5
			75	0	23.40	23.68	23.03	0.5	24.5
		QPSK	1	1	24.14	24.13	24.05	0.0	25.0
			1	40	24.29	24.01	23.95	0.0	25.0
			1	77	24.26	24.10	24.03	0.0	25.0
			36	0	23.48	23.20	23.06	1.0	24.0
			36	22	24.43	24.14	24.05	0.0	25.0
			36	43	23.39	23.15	23.12	1.0	24.0
			75	0	23.44	23.18	23.08	1.0	24.0
		16QAM	1	1	23.30	23.17	23.05	1.0	24.0
		64QAM	1	1	21.96	21.71	21.77	2.5	22.5
		256QAM	1	1	19.80	19.55	19.56	4.5	20.5
	CP-OFDM	QPSK	1	1	22.92	22.61	22.51	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					387000	392000	397000		
					1855 MHz	1880 MHz	1905 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.29	23.01	24.03	0.0	25.0
			1	26	24.28	24.02	24.06	0.0	25.0
			1	50	24.28	23.97	24.11	0.0	25.0
			25	0	23.35	23.60	23.13	0.5	24.5
			25	14	24.35	24.14	24.12	0.0	25.0
			25	27	23.35	23.67	23.14	0.5	24.5
			50	0	23.36	23.69	23.15	0.5	24.5
		QPSK	1	1	24.29	24.22	24.07	0.0	25.0
			1	26	24.33	24.10	24.11	0.0	25.0
			1	50	24.32	24.15	24.13	0.0	25.0
			25	0	23.37	23.20	23.15	1.0	24.0
			25	14	24.36	23.96	24.14	0.0	25.0
			25	27	23.36	22.98	23.17	1.0	24.0
			50	0	23.36	23.01	23.17	1.0	24.0
		16QAM	1	1	23.42	22.99	23.17	1.0	24.0
		64QAM	1	1	21.86	21.66	21.63	2.5	22.5
		256QAM	1	1	19.73	19.53	19.55	4.5	20.5
	CP-OFDM	QPSK	1	1	22.84	22.71	22.51	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					386500	392000	397500		
					1852.5 MHz	1880 MHz	1907.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.86	23.94	23.98	0.0	25.0
			1	13	23.93	23.87	23.90	0.0	25.0
			1	23	24.06	23.93	24.00	0.0	25.0
			12	0	23.11	23.67	23.51	0.5	24.5
			12	7	24.10	24.18	24.20	0.0	25.0
			12	13	23.19	23.65	23.68	0.5	24.5
			25	0	23.17	23.63	22.97	0.5	24.5
		QPSK	1	1	24.12	23.93	24.04	0.0	25.0
			1	13	24.09	23.88	23.96	0.0	25.0
			1	23	24.22	23.97	24.06	0.0	25.0
			12	0	23.21	23.00	23.10	1.0	24.0
			12	7	24.19	23.98	24.05	0.0	25.0
			12	13	23.25	23.00	23.07	1.0	24.0
			25	0	23.23	23.01	23.08	1.0	24.0
		16QAM	1	1	23.25	23.00	23.19	1.0	24.0
		64QAM	1	1	21.67	21.52	21.70	2.5	22.5
		256QAM	1	1	19.56	19.27	19.52	4.5	20.5
	CP-OFDM	QPSK	1	1	22.59	22.48	22.59	1.5	23.5

NR Band n5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
						167300			
						836.5 MHz			
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.36		0.0	25.5
			1	67		24.47		0.0	25.5
			1	131		24.35		0.0	25.5
			64	0		24.05		0.5	25.0
			64	35		24.50		0.0	25.5
			64	69		24.04		0.5	25.0
			128	0		24.06		0.5	25.0
		QPSK	1	1		24.40		0.0	25.5
			1	67		24.44		0.0	25.5
			1	131		24.38		0.0	25.5
			64	0		23.51		1.0	24.5
			64	35		24.59		0.0	25.5
			64	69		23.57		1.0	24.5
			128	0		23.55		1.0	24.5
		16QAM	1	1		23.44		1.0	24.5
			1	53		23.40		1.0	24.5
			1	104		23.52		1.0	24.5
		64QAM	1	1		22.00		2.5	23.0
		256QAM	1	1		19.88		4.5	21.0
	CP-OFDM	QPSK	1	1		22.97		1.5	24.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					166800	167300	167800		
					834 MHz	836.5 MHz	839 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.04	24.13	24.06	0.0	25.5
			1	53	24.25	24.25	24.12	0.0	25.5
			1	104	24.09	24.11	24.04	0.0	25.5
			50	0	23.19	23.27	23.21	0.5	25.0
			50	28	24.21	24.28	24.19	0.0	25.5
			50	56	23.21	23.26	23.14	0.5	25.0
			100	0	23.25	23.29	23.22	0.5	25.0
		QPSK	1	1	24.17	24.20	24.18	0.0	25.5
			1	53	24.36	24.28	24.31	0.0	25.5
			1	104	24.21	24.17	24.05	0.0	25.5
			50	0	23.28	23.31	23.27	1.0	24.5
			50	28	24.30	24.32	24.26	0.0	25.5
			50	56	23.30	23.29	23.19	1.0	24.5
			100	0	23.32	23.32	23.26	1.0	24.5
		16QAM	1	1	23.20	23.24	23.27	1.0	24.5
			1	53	23.37	23.39	23.43	1.0	24.5
			1	104	23.21	23.18	23.10	1.0	24.5
		64QAM	1	1	21.85	21.74	21.73	2.5	23.0
		256QAM	1	1	19.66	19.75	19.70	4.5	21.0
	CP-OFDM	QPSK	1	1	22.68	22.78	22.76	1.5	24.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					166300	167300	168300		
					831.5 MHz	836.5 MHz	841.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.07	24.20	24.24	0.0	25.5
			1	40	24.10	24.17	24.16	0.0	25.5
			1	77	24.16	24.18	24.15	0.0	25.5
			36	0	23.22	23.31	23.31	0.5	25.0
			36	22	24.25	24.30	24.30	0.0	25.5
			36	43	23.26	23.32	23.25	0.5	25.0
			75	0	23.25	23.32	23.32	0.5	25.0
		QPSK	1	1	24.13	24.29	24.29	0.0	25.5
			1	40	24.15	24.23	24.22	0.0	25.5
			1	77	24.22	24.23	24.20	0.0	25.5
			36	0	23.24	23.37	23.35	1.0	24.5
			36	22	24.28	24.27	24.33	0.0	25.5
			36	43	23.29	23.34	23.34	1.0	24.5
			75	0	23.30	23.35	23.32	1.0	24.5
		16QAM	1	1	23.35	23.39	23.45	1.0	24.5
		64QAM	1	1	21.78	21.91	21.81	2.5	23.0
		256QAM	1	1	19.58	19.70	19.74	4.5	21.0
	CP-OFDM	QPSK	1	1	22.70	22.82	22.87	1.5	24.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800		
					829 MHz	836.5 MHz	844 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.19	24.29	24.25	0.0	25.5
			1	26	24.29	24.33	24.19	0.0	25.5
			1	50	24.32	24.30	24.15	0.0	25.5
			25	0	23.30	23.38	23.00	0.5	25.0
			25	14	24.33	24.36	24.25	0.0	25.5
			25	27	23.34	23.38	23.10	0.5	25.0
			50	0	23.33	23.37	23.41	0.5	25.0
		QPSK	1	1	24.26	24.35	24.30	0.0	25.5
			1	26	24.37	24.35	24.31	0.0	25.5
			1	50	24.36	24.34	24.20	0.0	25.5
			25	0	23.31	23.40	23.33	1.0	24.5
			25	14	24.34	24.38	24.27	0.0	25.5
			25	27	23.36	23.38	23.28	1.0	24.5
			50	0	23.36	23.39	23.31	1.0	24.5
		16QAM	1	1	23.33	23.40	23.41	1.0	24.5
		64QAM	1	1	21.74	21.84	21.92	2.5	23.0
		256QAM	1	1	19.72	19.75	19.86	4.5	21.0
	CP-OFDM	QPSK	1	1	22.79	22.87	22.80	1.5	24.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300		
					826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.18	24.36	24.18	0.0	25.5
			1	13	24.12	24.23	24.10	0.0	25.5
			1	23	24.25	24.31	24.24	0.0	25.5
			12	0	23.23	23.36	23.26	0.5	25.0
			12	7	24.25	24.35	24.20	0.0	25.5
			12	13	23.29	23.36	23.25	0.5	25.0
			25	0	23.29	23.37	22.53	0.5	25.0
		QPSK	1	1	24.26	24.39	24.24	0.0	25.5
			1	13	24.21	24.28	24.19	0.0	25.5
			1	23	24.33	24.37	24.21	0.0	25.5
			12	0	23.28	23.39	23.29	1.0	24.5
			12	7	24.29	24.37	24.27	0.0	25.5
			12	13	23.33	23.39	23.24	1.0	24.5
			25	0	23.33	23.40	23.29	1.0	24.5
		16QAM	1	1	23.36	23.47	23.26	1.0	24.5
		64QAM	1	1	21.75	21.83	21.85	2.5	23.0
		256QAM	1	1	19.74	19.73	19.71	4.5	21.0
	CP-OFDM	QPSK	1	1	22.83	22.94	22.76	1.5	24.0

NR Band n12

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					141300	141500	141700		
					706.5 MHz	707.5 MHz	708.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.22	24.25	24.28	0.0	25.0
			1	40	24.26	24.29	24.31	0.0	25.0
			1	77	24.36	24.37	24.37	0.0	25.0
			36	0	23.33	23.34	23.37	0.5	24.5
			36	22	24.34	24.39	24.38	0.0	25.0
			36	43	23.38	23.42	23.44	0.5	24.5
			75	0	23.35	23.40	23.42	0.5	24.5
		QPSK	1	1	24.32	24.33	24.38	0.0	25.0
			1	40	24.32	24.29	24.34	0.0	25.0
			1	77	24.40	24.41	24.40	0.0	25.0
			36	0	23.36	23.41	23.42	1.0	24.0
			36	22	24.38	24.42	24.41	0.0	25.0
			36	43	23.42	23.44	23.46	1.0	24.0
			75	0	23.40	23.43	23.44	1.0	24.0
		16QAM	1	1	23.42	23.48	23.30	1.0	24.0
			1	40	23.39	23.43	23.30	1.0	24.0
			1	77	23.45	23.54	23.40	1.0	24.0
		64QAM	1	1	21.88	21.96	21.81	2.5	22.5
		256QAM	1	1	19.78	19.89	19.96	4.5	20.5
	CP-OFDM	QPSK	1	1	22.83	22.95	22.92	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					140800	141500	142200		
					704 MHz	707.5 MHz	711 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.26	24.35	24.34	0.0	25.0
			1	26	24.39	24.42	24.43	0.0	25.0
			1	50	24.38	24.43	24.37	0.0	25.0
			25	0	23.35	23.42	23.37	0.5	24.5
			25	14	24.33	24.43	24.38	0.0	25.0
			25	27	23.38	23.45	23.41	0.5	24.5
			50	0	23.37	23.44	23.40	0.5	24.5
		QPSK	1	1	24.32	24.45	24.36	0.0	25.0
			1	26	24.42	24.48	24.44	0.0	25.0
			1	50	24.37	24.51	24.39	0.0	25.0
			25	0	23.37	23.46	23.43	1.0	24.0
			25	14	24.37	24.45	24.43	0.0	25.0
			25	27	23.42	23.48	23.45	1.0	24.0
			50	0	23.40	23.46	23.44	1.0	24.0
		16QAM	1	1	23.37	23.43	23.45	1.0	24.0
		64QAM	1	1	21.93	22.01	21.75	2.5	22.5
		256QAM	1	1	19.93	19.92	19.91	4.5	20.5
	CP-OFDM	QPSK	1	1	22.88	22.91	22.96	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					140300	141500	142700		
					701.5 MHz	707.5 MHz	713.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.36	24.44	24.40	0.0	25.0
			1	13	24.32	24.39	24.33	0.0	25.0
			1	23	24.42	24.49	24.41	0.0	25.0
			12	0	23.40	23.46	23.42	0.5	24.5
			12	7	24.38	24.46	24.40	0.0	25.0
			12	13	23.41	23.46	23.43	0.5	24.5
			25	0	23.42	23.48	23.43	0.5	24.5
		QPSK	1	1	24.38	24.48	24.40	0.0	25.0
			1	13	24.30	24.37	24.32	0.0	25.0
			1	23	24.41	24.48	24.36	0.0	25.0
			12	0	23.43	23.48	23.45	1.0	24.0
			12	7	24.40	24.48	24.43	0.0	25.0
			12	13	23.43	23.47	23.45	1.0	24.0
			25	0	23.43	23.49	23.47	1.0	24.0
		16QAM	1	1	23.39	23.43	23.58	1.0	24.0
		64QAM	1	1	21.94	21.91	22.06	2.5	22.5
		256QAM	1	1	19.83	19.84	19.86	4.5	20.5
	CP-OFDM	QPSK	1	1	22.88	23.03	22.98	1.5	23.5

NR Band n25

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					374000	376500	379000		
					1870 MHz	1882.5 MHz	1895 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.01	24.37	24.38	0.0	25.0
			1	108	24.58	24.39	24.40	0.0	25.0
			1	214	24.41	24.33	23.85	0.0	25.0
			108	0	23.56	23.51	23.49	0.5	24.5
			108	54	24.55	24.40	24.51	0.0	25.0
			108	108	23.52	23.46	23.50	0.5	24.5
			216	0	23.54	23.44	23.51	0.5	24.5
		QPSK	1	1	23.70	24.54	24.50	0.0	25.0
			1	108	24.46	24.39	24.45	0.0	25.0
			1	214	24.23	24.38	23.51	0.0	25.0
			108	0	23.60	23.57	23.55	1.0	24.0
			108	54	24.48	24.51	24.28	0.0	25.0
			108	108	23.52	23.52	23.30	1.0	24.0
			216	0	23.56	23.47	23.55	1.0	24.0
		16QAM	1	1	23.07	23.49	23.64	1.0	24.0
			1	108	23.63	23.52	23.67	1.0	24.0
			1	214	23.55	23.40	23.03	1.0	24.0
		64QAM	1	1	22.01	21.96	22.07	2.5	22.5
		256QAM	1	1	20.06	19.93	19.96	4.5	20.5
	CP-OFDM	QPSK	1	1	22.67	23.02	22.97	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					373000	376500	380000		
					1865 MHz	1882.5 MHz	1900 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.39	24.27	24.31	0.0	25.0
			1	80	24.49	24.25	24.36	0.0	25.0
			1	158	24.34	24.32	24.13	0.0	25.0
			80	0	23.55	23.44	23.43	0.5	24.5
			80	40	24.51	24.38	24.44	0.0	25.0
			80	80	23.52	23.44	23.47	0.5	24.5
			160	0	23.52	23.39	23.46	0.5	24.5
		QPSK	1	1	24.04	24.43	24.35	0.0	25.0
			1	80	24.54	24.45	24.41	0.0	25.0
			1	158	24.43	24.42	23.78	0.0	25.0
			80	0	23.64	23.52	23.52	1.0	24.0
			80	40	24.60	24.44	24.46	0.0	25.0
			80	80	23.60	23.50	23.38	1.0	24.0
			160	0	23.58	23.44	23.53	1.0	24.0
		16QAM	1	1	23.29	23.37	23.64	1.0	24.0
		64QAM	1	1	22.20	21.98	22.05	2.5	22.5
		256QAM	1	1	20.16	19.88	19.86	4.5	20.5
	CP-OFDM	QPSK	1	1	22.85	22.96	22.90	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					372500	376500	380500		
					1862.5 MHz	1882.5 MHz	1902.5 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.10	24.36	24.31	0.0	25.0
			1	67	24.47	24.26	24.30	0.0	25.0
			1	131	24.52	24.35	24.15	0.0	25.0
			64	0	23.64	23.49	23.45	0.5	24.5
			64	35	24.57	24.43	24.44	0.0	25.0
			64	69	23.58	23.49	23.47	0.5	24.5
			128	0	23.57	23.46	23.48	0.5	24.5
		QPSK	1	1	23.76	24.50	24.50	0.0	25.0
			1	67	24.47	24.38	24.22	0.0	25.0
			1	131	24.56	24.42	23.80	0.0	25.0
			64	0	23.48	23.58	23.52	1.0	24.0
			64	35	24.54	24.49	24.33	0.0	25.0
			64	69	23.62	23.55	23.37	1.0	24.0
			128	0	23.61	23.52	23.53	1.0	24.0
		16QAM	1	1	23.21	23.58	23.46	1.0	24.0
		64QAM	1	1	22.11	22.09	21.98	2.5	22.5
		256QAM	1	1	20.11	20.04	19.98	4.5	20.5
	CP-OFDM	QPSK	1	1	22.80	23.09	23.01	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					372000	376500	381000		
					1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.71	24.32	24.37	0.0	25.0
			1	53	24.49	24.28	24.24	0.0	25.0
			1	104	24.54	24.36	23.73	0.0	25.0
			50	0	23.41	23.44	23.53	0.5	24.5
			50	28	24.44	24.36	24.26	0.0	25.0
			50	56	23.65	23.41	23.40	0.5	24.5
			100	0	23.65	23.42	23.58	0.5	24.5
		QPSK	1	1	23.36	24.46	24.42	0.0	25.0
			1	53	24.23	24.36	23.89	0.0	25.0
			1	104	24.45	24.33	23.44	0.0	25.0
			50	0	23.20	23.50	23.59	1.0	24.0
			50	28	24.28	24.42	24.03	0.0	25.0
			50	56	23.68	23.48	23.22	1.0	24.0
			100	0	23.65	23.45	23.61	1.0	24.0
		16QAM	1	1	22.77	23.53	23.54	1.0	24.0
			1	53	23.68	23.43	23.45	1.0	24.0
			1	104	23.58	23.43	22.96	1.0	24.0
		64QAM	1	1	21.71	22.11	22.13	2.5	22.5
		256QAM	1	1	20.20	19.89	19.95	4.5	20.5
	CP-OFDM	QPSK	1	1	22.46	22.95	22.97	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					371500	376500	381500		
					1857.5 MHz	1882.5 MHz	1907.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.94	24.41	24.31	0.0	25.0
			1	40	24.47	24.26	24.25	0.0	25.0
			1	77	24.54	24.17	23.92	0.0	25.0
			36	0	23.54	23.44	23.48	0.5	24.5
			36	22	24.53	24.41	24.43	0.0	25.0
			36	43	23.61	23.44	23.45	0.5	24.5
			75	0	23.67	23.44	23.48	0.5	24.5
		QPSK	1	1	23.34	24.24	24.43	0.0	25.0
			1	40	24.23	24.34	24.03	0.0	25.0
			1	77	24.39	23.88	23.49	0.0	25.0
			36	0	23.23	23.52	23.56	1.0	24.0
			36	22	24.26	24.36	24.11	0.0	25.0
			36	43	23.68	23.51	23.45	1.0	24.0
			75	0	23.58	23.50	23.55	1.0	24.0
		16QAM	1	1	22.76	23.44	23.57	1.0	24.0
		64QAM	1	1	21.65	22.02	22.09	2.5	22.5
		256QAM	1	1	20.21	20.06	19.95	4.5	20.5
	CP-OFDM	QPSK	1	1	22.40	23.00	23.05	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					371000	376500	382000		
					1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.53	24.34	24.42	0.0	25.0
			1	26	24.58	24.28	24.36	0.0	25.0
			1	50	24.56	24.33	24.05	0.0	25.0
			25	0	23.69	23.43	23.51	0.5	24.5
			25	14	24.66	24.39	24.35	0.0	25.0
			25	27	23.67	23.42	23.49	0.5	24.5
			50	0	23.71	23.42	23.52	0.5	24.5
		QPSK	1	1	24.27	24.41	24.03	0.0	25.0
			1	26	24.50	24.36	24.01	0.0	25.0
			1	50	24.63	24.26	23.72	0.0	25.0
			25	0	23.76	23.51	23.50	1.0	24.0
			25	14	24.54	24.44	24.11	0.0	25.0
			25	27	23.75	23.49	23.54	1.0	24.0
			50	0	23.77	23.49	23.57	1.0	24.0
		16QAM	1	1	23.60	23.55	23.49	1.0	24.0
		64QAM	1	1	22.26	22.05	22.11	2.5	22.5
		256QAM	1	1	20.16	19.90	20.03	4.5	20.5
	CP-OFDM	QPSK	1	1	23.20	22.91	23.01	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					370500	376500	382500		
					1852.5 MHz	1882.5 MHz	1912.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.54	24.38	24.36	0.0	25.0
			1	13	24.44	24.32	24.24	0.0	25.0
			1	23	24.45	24.43	24.08	0.0	25.0
			12	0	23.67	23.48	23.41	0.5	24.5
			12	7	24.38	24.44	24.37	0.0	25.0
			12	13	23.71	23.49	23.40	0.5	24.5
			25	0	23.69	23.48	23.41	0.5	24.5
		QPSK	1	1	24.12	24.47	24.08	0.0	25.0
			1	13	24.09	24.36	24.17	0.0	25.0
			1	23	24.13	24.29	23.68	0.0	25.0
			12	0	23.55	23.53	23.50	1.0	24.0
			12	7	24.15	24.43	24.19	0.0	25.0
			12	13	23.64	23.52	23.45	1.0	24.0
			25	0	23.64	23.52	23.47	1.0	24.0
		16QAM	1	1	23.53	23.51	23.46	1.0	24.0
		64QAM	1	1	22.22	21.96	21.98	2.5	22.5
		256QAM	1	1	20.23	20.11	19.95	4.5	20.5
	CP-OFDM	QPSK	1	1	23.15	23.05	23.02	1.5	23.5

NR Band n30

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
					Measured Pwr (dBm)				
						462000			
						2310 MHz			
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1		22.74		0.0	24.0
			1	26		23.49		0.0	24.0
			1	50		23.55		0.0	24.0
			25	0		22.52		0.5	23.5
			25	14		23.56		0.0	24.0
			25	27		22.56		0.5	23.5
			50	0		22.55		0.5	23.5
		QPSK	1	1		22.49		0.0	24.0
			1	26		23.52		0.0	24.0
			1	50		23.58		0.0	24.0
			25	0		22.58		1.0	23.0
			25	14		23.59		0.0	24.0
			25	27		22.62		1.0	23.0
			50	0		22.59		1.0	23.0
		16QAM	1	1		21.91		1.0	23.0
			1	26		22.52		1.0	23.0
			1	50		22.59		1.0	23.0
		64QAM	1	1		21.00		2.5	21.5
		256QAM	1	1		19.03		4.5	19.5
	CP-OFDM	QPSK	1	1		21.55		1.5	22.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					461500	462000	462500		
					2307.5 MHz	2310 MHz	2312.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.22	23.48	22.73	0.0	24.0
			1	13	23.45	23.51	23.49	0.0	24.0
			1	23	23.56	23.58	23.54	0.0	24.0
			12	0	22.52	22.55	22.52	0.5	23.5
			12	7	23.54	23.56	23.56	0.0	24.0
			12	13	22.59	22.59	22.57	0.5	23.5
			25	0	22.57	22.57	22.55	0.5	23.5
		QPSK	1	1	22.79	23.28	22.48	0.0	24.0
			1	13	23.46	23.54	23.54	0.0	24.0
			1	23	23.62	23.63	23.60	0.0	24.0
			12	0	22.56	22.62	22.59	1.0	23.0
			12	7	23.46	23.62	23.60	0.0	24.0
			12	13	22.65	22.63	22.61	1.0	23.0
			25	0	22.62	22.63	22.59	1.0	23.0
		16QAM	1	1	22.26	22.70	21.94	1.0	23.0
		64QAM	1	1	21.16	21.16	21.02	2.5	21.5
		256QAM	1	1	19.02	19.05	18.89	4.5	19.5
	CP-OFDM	QPSK	1	1	21.87	21.85	21.47	1.5	22.5

NR Band n41 (PC2)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				Measured Pwr (dBm)				
				509202	518598	528000		
				2546.01 MHz	2592.99 MHz	2640 MHz		
100 MHz	π/2 BPSK	1	1	25.78	25.64	25.97	0.0	27.0
		1	137	25.83	26.01	26.34	0.0	27.0
		1	271	25.89	25.89	24.71	0.0	27.0
		135	0	25.33	25.57	25.88	0.5	26.5
		135	69	25.87	26.06	26.22	0.0	27.0
		135	138	25.57	25.17	25.83	0.5	26.5
		270	0	25.41	25.50	25.85	0.5	26.5
	QPSK	1	1	25.91	25.74	25.97	0.0	27.0
		1	137	25.95	26.11	26.21	0.0	27.0
		1	271	25.77	25.77	24.65	0.0	27.0
		135	0	24.83	25.11	25.42	1.0	26.0
		135	69	25.89	26.10	26.16	0.0	27.0
		135	138	25.06	24.79	25.45	1.0	26.0
		270	0	24.90	24.98	25.50	1.0	26.0
	16QAM	1	1	24.74	24.68	24.97	1.0	26.0
		1	137	24.72	24.97	25.49	1.0	26.0
		1	271	24.86	24.90	23.89	1.0	26.0
	64QAM	1	1	23.22	23.20	23.65	2.5	24.5
	256QAM	1	1	21.26	21.25	21.51	4.5	22.5
	QPSK	1	1	24.19	24.17	24.41	1.5	25.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				508200	518598	528996		
				2541 MHz	2592.99 MHz	2644.98 MHz		
90 MHz	π/2 BPSK	1	1	25.85	25.85	26.18	0.0	27.0
		1	123	25.77	26.00	26.43	0.0	27.0
		1	243	25.92	25.61	24.89	0.0	27.0
		120	0	25.30	25.62	25.95	0.5	26.5
		120	63	25.86	26.11	26.47	0.0	27.0
		120	125	25.58	25.25	25.91	0.5	26.5
		243	0	25.34	25.53	26.04	0.5	26.5
	QPSK	1	1	25.95	26.02	26.31	0.0	27.0
		1	123	25.88	26.12	26.13	0.0	27.0
		1	243	26.01	25.46	24.74	0.0	27.0
		120	0	25.55	25.10	25.41	1.0	26.0
		120	63	25.84	26.15	26.36	0.0	27.0
		120	125	25.05	24.79	25.53	1.0	26.0
		243	0	24.84	25.09	25.60	1.0	26.0
	16QAM	1	1	24.80	24.92	25.22	1.0	26.0
	64QAM	1	1	23.49	23.47	23.58	2.5	24.5
	256QAM	1	1	21.33	21.40	21.71	4.5	22.5
	QPSK	1	1	24.22	24.27	24.62	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				507204	518598	529998		
				2536.02 MHz	2592.99 MHz	2649.99 MHz		
80 MHz	π/2 BPSK	1	1	25.79	25.83	26.28	0.0	27.0
		1	109	25.70	25.97	26.63	0.0	27.0
		1	215	26.02	25.45	25.10	0.0	27.0
		108	0	25.31	25.57	26.01	0.5	26.5
		108	55	25.76	26.08	26.72	0.0	27.0
		108	109	25.48	25.27	26.07	0.5	26.5
		216	0	25.22	25.52	26.19	0.5	26.5
	QPSK	1	1	25.90	26.02	26.41	0.0	27.0
		1	109	25.80	26.09	26.43	0.0	27.0
		1	215	26.11	25.38	24.93	0.0	27.0
		108	0	24.76	25.07	25.55	1.0	26.0
		108	55	25.79	26.13	26.54	0.0	27.0
		108	109	25.05	24.82	25.67	1.0	26.0
		216	0	24.82	25.00	25.72	1.0	26.0
	16QAM	1	1	24.80	25.04	25.27	1.0	26.0
	64QAM	1	1	23.48	23.39	23.92	2.5	24.5
	256QAM	1	1	21.34	21.39	21.72	4.5	22.5
	QPSK	1	1	24.21	24.30	24.75	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				506202	518598	531000		
				2531.02 MHz	2592.99 MHz	2644.98 MHz		
70 MHz	π/2 BPSK	1	1	25.56	25.90	26.36	0.0	27.0
		1	95	25.63	25.93	26.67	0.0	27.0
		1	187	25.21	25.47	25.62	0.0	27.0
		90	0	25.15	25.49	26.06	0.5	26.5
		90	50	25.72	26.06	26.77	0.0	27.0
		90	99	25.36	25.33	26.18	0.5	26.5
		180	0	25.24	25.60	26.25	0.5	26.5
	QPSK	1	1	25.78	26.00	26.37	0.0	27.0
		1	95	25.80	26.02	26.79	0.0	27.0
		1	187	25.42	25.79	25.55	0.0	27.0
		90	0	24.74	25.01	25.60	1.0	26.0
		90	50	25.78	26.10	26.76	0.0	27.0
		90	99	24.86	25.14	25.74	1.0	26.0
		180	0	24.70	25.04	25.79	1.0	26.0
	16QAM	1	1	24.56	25.10	25.53	1.0	26.0
	64QAM	1	1	23.24	23.56	24.03	2.5	24.5
	256QAM	1	1	21.16	21.47	21.93	4.5	22.5
	QPSK	1	1	24.02	24.44	24.90	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				505200	518598	531996		
				2526 MHz	2592.99 MHz	2659.98 MHz		
60 MHz	π/2 BPSK	1	1	25.68	25.93	26.36	0.0	27.0
		1	81	25.76	26.00	26.66	0.0	27.0
		1	160	25.84	25.27	25.20	0.0	27.0
		81	0	25.23	25.53	26.12	0.5	26.5
		81	41	25.79	26.01	26.73	0.0	27.0
		81	81	25.21	25.42	26.06	0.5	26.5
		162	0	25.31	25.62	26.21	0.5	26.5
	QPSK	1	1	25.82	26.01	26.44	0.0	27.0
		1	81	25.82	26.15	26.57	0.0	27.0
		1	160	25.92	25.15	25.03	0.0	27.0
		81	0	24.77	25.00	25.67	1.0	26.0
		81	41	25.84	26.12	26.73	0.0	27.0
		81	81	24.78	24.93	25.65	1.0	26.0
		162	0	24.77	25.02	25.71	1.0	26.0
	16QAM	1	1	24.45	24.87	25.46	1.0	26.0
	64QAM	1	1	23.28	23.55	23.99	2.5	24.5
	256QAM	1	1	21.33	21.42	21.86	4.5	22.5
	QPSK	1	1	24.12	24.35	24.90	1.5	25.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				504204	518598	532998		
				2521.01 MHz	2592.99 MHz	2665 MHz		
50 MHz	π/2 BPSK	1	1	25.76	25.93	26.49	0.0	27.0
		1	67	25.77	25.99	26.65	0.0	27.0
		1	131	25.77	25.33	25.36	0.0	27.0
		64	0	25.29	25.39	26.11	0.5	26.5
		64	35	25.84	26.09	26.77	0.0	27.0
		64	69	25.32	25.49	25.98	0.5	26.5
		128	0	25.28	25.53	26.23	0.5	26.5
	QPSK	1	1	25.92	26.08	26.64	0.0	27.0
		1	67	25.64	26.13	26.57	0.0	27.0
		1	131	25.81	25.25	25.26	0.0	27.0
		64	0	24.75	24.99	25.62	1.0	26.0
		64	35	25.92	26.12	26.79	0.0	27.0
		64	69	24.79	25.08	25.55	1.0	26.0
		128	0	24.74	24.98	25.75	1.0	26.0
	16QAM	1	1	24.65	24.94	25.49	1.0	26.0
	64QAM	1	1	23.18	23.52	24.22	2.5	24.5
	256QAM	1	1	21.18	21.48	22.04	4.5	22.5
	QPSK	1	1	24.17	24.35	24.87	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				503202	518598	534000		
				2516.01 MHz	2592.99 MHz	2670 MHz		
40 MHz	π/2 BPSK	1	1	25.68	25.88	26.51	0.0	27.0
		1	53	25.16	25.50	26.14	0.0	27.0
		1	104	25.48	24.64	24.87	0.0	27.0
		50	0	25.28	25.48	26.13	0.5	26.5
		50	28	25.17	25.64	26.18	0.0	27.0
		50	56	24.68	24.61	25.07	0.5	26.5
		100	0	25.04	25.42	25.81	0.5	26.5
	QPSK	1	1	25.84	26.03	26.46	0.0	27.0
		1	53	25.06	25.37	25.92	0.0	27.0
		1	104	25.40	24.60	24.68	0.0	27.0
		50	0	24.79	24.95	25.62	1.0	26.0
		50	28	25.10	25.59	26.01	0.0	27.0
		50	56	24.16	24.16	24.62	1.0	26.0
		100	0	24.52	25.00	25.44	1.0	26.0
	16QAM	1	1	24.70	24.87	25.54	1.0	26.0
	64QAM	1	1	23.28	23.31	23.94	2.5	24.5
	256QAM	1	1	21.32	21.44	21.93	4.5	22.5
	QPSK	1	1	24.15	24.33	24.89	1.5	25.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				502200	518598	534996		
				2511 MHx	2592.99 MHz	2675.0 MHz		
30 MHz	π/2 BPSK	1	1	25.71	25.85	26.51	0.0	27.0
		1	53	25.41	25.55	26.17	0.0	27.0
		1	104	25.19	24.87	25.06	0.0	27.0
		50	0	25.24	25.47	26.22	0.5	26.5
		50	28	25.39	25.67	26.17	0.0	27.0
		50	56	24.65	24.70	25.05	0.5	26.5
		100	0	25.01	25.33	25.79	0.5	26.5
	QPSK	1	1	25.73	25.95	26.46	0.0	27.0
		1	53	25.26	25.39	25.97	0.0	27.0
		1	104	25.09	24.77	24.93	0.0	27.0
		50	0	24.76	24.95	25.67	1.0	26.0
		50	28	25.31	25.59	26.09	0.0	27.0
		50	56	24.12	24.25	24.62	1.0	26.0
		100	0	24.48	24.87	25.38	1.0	26.0
	16QAM	1	1	24.69	24.99	25.67	1.0	26.0
	64QAM	1	1	23.28	23.45	23.88	2.5	24.5
	256QAM	1	1	21.29	21.13	21.96	4.5	22.5
	QPSK	1	1	24.19	24.26	24.97	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				501204	518598	535998		
				2506.02 MHz	2592.99 MHz	2679.99 MHz		
20 MHz	π/2 BPSK	1	1	25.54	25.83	26.58	0.0	27.0
		1	26	25.41	25.63	25.72	0.0	27.0
		1	49	25.02	24.89	24.81	0.0	27.0
		25	0	25.17	25.46	25.91	0.5	26.5
		25	13	25.55	25.72	25.69	0.0	27.0
		25	26	24.91	24.90	24.80	0.5	26.5
		50	0	25.17	25.28	25.35	0.5	26.5
	QPSK	1	1	25.49	25.94	26.34	0.0	27.0
		1	26	25.29	25.49	25.52	0.0	27.0
		1	49	24.97	24.83	24.63	0.0	27.0
		25	0	24.68	25.02	25.37	1.0	26.0
		25	13	25.42	25.60	25.59	0.0	27.0
		25	26	24.33	24.36	24.35	1.0	26.0
		50	0	24.61	24.83	24.96	1.0	26.0
	16QAM	1	1	24.53	24.99	25.46	1.0	26.0
	64QAM	1	1	23.30	23.40	24.24	2.5	24.5
	256QAM	1	1	21.26	21.41	22.18	4.5	22.5
	QPSK	1	1	24.17	24.25	25.05	1.5	25.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				500700	518598	536496		
				2503.5 MHz	2592.99 MHz	2682.48 MHz		
15 MHz	π/2 BPSK	1	1	25.89	26.19	26.64	0.0	27.0
		1	19	26.19	26.17	26.10	0.0	27.0
		1	36	25.39	25.27	25.07	0.0	27.0
		18	0	25.72	25.88	25.88	0.5	26.5
		18	10	26.15	26.11	25.99	0.0	27.0
		18	20	25.40	25.28	25.18	0.5	26.5
		36	0	25.67	25.68	25.59	0.5	26.5
	QPSK	1	1	25.68	26.08	26.17	0.0	27.0
		1	19	26.02	25.95	25.80	0.0	27.0
		1	36	25.28	25.17	24.92	0.0	27.0
		18	0	25.14	25.37	25.41	1.0	26.0
		18	10	25.99	26.03	25.93	0.0	27.0
		18	20	24.89	24.84	24.69	1.0	26.0
		36	0	25.17	25.25	25.12	1.0	26.0
	16QAM	1	1	24.80	25.11	25.41	1.0	26.0
	64QAM	1	1	23.58	23.92	24.38	2.5	24.5
	256QAM	1	1	21.60	21.71	22.02	4.5	22.5
	QPSK	1	1	24.43	24.65	24.97	1.5	25.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				500202	518598	537000		
				2501.01 MHz	2592.99 MHz	2685 MHz		
10 MHz	π/2 BPSK	1	1	26.15	26.33	26.42	0.0	27.0
		1	12	26.16	26.14	25.87	0.0	27.0
		1	22	26.04	25.79	25.38	0.0	27.0
		12	0	25.72	25.89	25.68	0.5	26.5
		12	6	26.18	26.11	25.79	0.0	27.0
		12	12	25.75	25.56	25.18	0.5	26.5
		24	0	25.76	25.79	25.41	0.5	26.5
	QPSK	1	1	25.92	26.30	26.03	0.0	27.0
		1	12	26.01	25.96	25.59	0.0	27.0
		1	22	25.87	25.71	25.22	0.0	27.0
		12	0	25.24	25.29	25.17	1.0	26.0
		12	6	26.04	26.00	25.74	0.0	27.0
		12	12	25.17	25.05	24.78	1.0	26.0
		24	0	25.25	25.33	25.02	1.0	26.0
	16QAM	1	1	24.96	25.27	25.20	1.0	26.0
	64QAM	1	1	23.82	23.97	23.91	2.5	24.5
	256QAM	1	1	21.72	21.90	22.00	4.5	22.5
	QPSK	1	1	24.64	24.78	24.77	1.5	25.5

NR Band n41 (PC3)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				509202	518598	528000		
				2546.01 MHz	2592.99 MHz	2640 MHz		
100 MHz	π/2 BPSK	1	1	23.12	23.00	23.21	0.0	24.0
		1	137	23.12	23.21	23.66	0.0	24.0
		1	271	23.32	23.69	23.13	0.0	24.0
		135	0	22.51	22.76	23.04	0.5	23.5
		135	69	23.10	23.21	23.84	0.0	24.0
		135	138	22.83	23.15	23.49	0.5	23.5
		270	0	22.67	22.80	23.37	0.5	23.5
	QPSK	1	1	23.17	23.13	23.29	0.0	24.0
		1	137	23.16	23.28	23.87	0.0	24.0
		1	271	23.35	23.86	22.99	0.0	24.0
		135	0	22.04	22.32	22.64	1.0	23.0
		135	69	23.12	23.29	23.93	0.0	24.0
		135	138	22.34	22.53	22.96	1.0	23.0
		270	0	22.15	22.27	22.84	1.0	23.0
	16QAM	1	1	22.11	22.15	22.29	1.0	23.0
		1	137	22.10	22.24	22.75	1.0	23.0
		1	271	22.25	22.58	22.11	1.0	23.0
	64QAM	1	1	20.67	20.70	20.88	2.5	21.5
	256QAM	1	1	18.70	18.64	18.79	4.5	19.5
	QPSK	1	1	21.48	21.50	21.66	1.5	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				508200	518598	528996		
				2541 MHz	2592.99 MHz	2644.98 MHz		
90 MHz	π/2 BPSK	1	1	23.14	23.10	23.30	0.0	24.0
		1	123	22.94	23.22	23.84	0.0	24.0
		1	243	23.07	23.71	23.29	0.0	24.0
		120	0	22.52	22.78	23.12	0.5	23.5
		120	63	22.99	23.30	23.89	0.0	24.0
		120	125	22.70	23.11	23.48	0.5	23.5
		243	0	22.56	22.77	23.28	0.5	23.5
	QPSK	1	1	23.10	23.26	23.43	0.0	24.0
		1	123	23.03	23.32	23.88	0.0	24.0
		1	243	23.22	23.72	23.17	0.0	24.0
		120	0	22.14	22.27	22.60	1.0	23.0
		120	63	23.08	23.36	23.80	0.0	24.0
		120	125	22.29	22.59	22.97	1.0	23.0
		243	0	22.11	22.21	22.73	1.0	23.0
	16QAM	1	1	22.02	22.11	22.49	1.0	23.0
	64QAM	1	1	20.54	20.73	21.07	2.5	21.5
	256QAM	1	1	18.61	18.78	18.95	4.5	19.5
	QPSK	1	1	21.53	21.65	21.89	1.5	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				507204	518598	529998		
				2536.02 MHz	2592.99 MHz	2649.99 MHz		
80 MHz	π/2 BPSK	1	1	23.06	23.14	23.38	0.0	24.0
		1	109	22.93	23.15	23.79	0.0	24.0
		1	215	23.19	23.56	23.48	0.0	24.0
		108	0	22.51	22.70	23.22	0.5	23.5
		108	55	22.97	23.26	23.98	0.0	24.0
		108	109	22.77	22.95	23.45	0.5	23.5
		216	0	22.45	22.70	23.41	0.5	23.5
	QPSK	1	1	23.13	23.18	23.63	0.0	24.0
		1	109	23.06	23.27	23.90	0.0	24.0
		1	215	23.25	23.54	23.35	0.0	24.0
		108	0	22.07	22.20	22.67	1.0	23.0
		108	55	23.08	23.22	23.89	0.0	24.0
		108	109	22.22	22.50	22.94	1.0	23.0
		216	0	22.01	22.15	22.84	1.0	23.0
	16QAM	1	1	22.03	22.32	22.56	1.0	23.0
	64QAM	1	1	20.77	20.93	21.17	2.5	21.5
	256QAM	1	1	18.65	18.82	18.91	4.5	19.5
	QPSK	1	1	21.47	21.60	21.98	1.5	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				505200	518598	531996		
				2526 MHz	2592.99 MHz	2659.98 MHz		
70 MHz	π/2 BPSK	1	1	22.82	23.11	23.48	0.0	24.0
		1	95	22.89	23.11	23.79	0.0	24.0
		1	187	22.99	23.22	23.33	0.0	24.0
		90	0	22.41	22.69	23.21	0.5	23.5
		90	50	22.98	23.15	23.85	0.0	24.0
		90	99	22.47	22.94	23.44	0.5	23.5
		180	0	22.47	22.64	23.39	0.5	23.5
	QPSK	1	1	23.01	23.17	23.56	0.0	24.0
		1	95	23.00	23.25	23.87	0.0	24.0
		1	187	23.11	23.16	23.23	0.0	24.0
		90	0	21.95	22.18	22.75	1.0	23.0
		90	50	22.92	23.23	23.85	0.0	24.0
		90	99	21.98	22.37	22.91	1.0	23.0
		180	0	21.94	22.20	22.90	1.0	23.0
	16QAM	1	1	21.92	21.90	22.59	1.0	23.0
	64QAM	1	1	20.62	20.76	21.17	2.5	21.5
	256QAM	1	1	18.37	18.50	18.88	4.5	19.5
	QPSK	1	1	21.32	21.59	22.09	1.5	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				504204	518598	532998		
				2521.01 MHz	2592.99 MHz	2665 MHz		
60 MHz	π/2 BPSK	1	1	22.80	23.01	23.50	0.0	24.0
		1	81	22.89	23.11	23.71	0.0	24.0
		1	160	22.97	23.22	23.40	0.0	24.0
		81	0	22.39	22.55	23.28	0.5	23.5
		81	41	22.93	23.12	23.82	0.0	24.0
		81	81	22.43	22.88	23.48	0.5	23.5
		162	0	22.38	22.67	23.29	0.5	23.5
	QPSK	1	1	22.98	23.06	23.56	0.0	24.0
		1	81	23.02	23.24	23.85	0.0	24.0
		1	160	22.99	23.12	23.29	0.0	24.0
		81	0	21.91	22.12	22.65	1.0	23.0
		81	41	22.99	23.11	23.81	0.0	24.0
		81	81	21.91	22.37	22.92	1.0	23.0
		162	0	21.88	22.03	22.78	1.0	23.0
	16QAM	1	1	21.90	22.11	22.45	1.0	23.0
	64QAM	1	1	20.44	20.71	20.98	2.5	21.5
	256QAM	1	1	18.38	18.56	19.03	4.5	19.5
	QPSK	1	1	21.28	21.51	21.92	1.5	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				504204	518598	532998		
				2521.01 MHz	2592.99 MHz	2665 MHz		
50 MHz	π/2 BPSK	1	1	22.85	23.04	23.56	0.0	24.0
		1	67	22.85	23.11	23.83	0.0	24.0
		1	131	22.83	23.24	23.62	0.0	24.0
		64	0	22.36	22.49	23.20	0.5	23.5
		64	35	22.98	23.10	23.84	0.0	24.0
		64	69	22.38	22.88	23.48	0.5	23.5
		128	0	22.38	22.55	23.36	0.5	23.5
	QPSK	1	1	22.97	23.11	23.68	0.0	24.0
		1	67	22.90	23.19	23.87	0.0	24.0
		1	131	22.97	23.17	23.55	0.0	24.0
		64	0	21.95	22.06	22.74	1.0	23.0
		64	35	22.96	23.19	23.81	0.0	24.0
		64	69	21.84	22.30	22.94	1.0	23.0
		128	0	21.95	22.02	22.87	1.0	23.0
	16QAM	1	1	21.91	22.15	22.56	1.0	23.0
	64QAM	1	1	20.52	20.68	21.05	2.5	21.5
	256QAM	1	1	18.38	18.62	19.10	4.5	19.5
	QPSK	1	1	21.33	21.54	22.04	1.5	22.5

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				503202	518598	534000		
				2516.01 MHz	2592.99 MHz	2670 MHz		
40 MHz	π/2 BPSK	1	1	22.90	23.01	23.57	0.0	24.0
		1	53	22.89	23.10	23.84	0.0	24.0
		1	104	22.77	22.35	22.89	0.0	24.0
		50	0	22.43	22.51	23.18	0.5	23.5
		50	28	22.93	23.17	23.91	0.0	24.0
		50	56	22.43	22.23	22.94	0.5	23.5
		100	0	22.48	22.59	23.40	0.5	23.5
	QPSK	1	1	22.94	23.20	23.74	0.0	24.0
		1	53	22.88	23.21	23.83	0.0	24.0
		1	104	22.83	22.33	22.81	0.0	24.0
		50	0	21.92	22.01	22.69	1.0	23.0
		50	28	22.92	23.13	23.92	0.0	24.0
		50	56	21.84	21.83	22.36	1.0	23.0
		100	0	21.94	22.12	22.79	1.0	23.0
	16QAM	1	1	21.99	22.27	22.89	1.0	23.0
	64QAM	1	1	20.44	20.63	21.04	2.5	21.5
	256QAM	1	1	18.44	18.54	19.03	4.5	19.5
	QPSK	1	1	21.33	21.44	22.03	1.5	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				502200	518598	534996		
				2511 MHx	2592.99 MHz	2675.0 MHz		
30 MHz	π/2 BPSK	1	1	22.85	23.00	23.59	0.0	24.0
		1	53	22.89	23.12	23.76	0.0	24.0
		1	104	22.80	22.47	23.13	0.0	24.0
		50	0	22.45	22.50	23.39	0.5	23.5
		50	28	22.91	23.18	23.90	0.0	24.0
		50	56	22.38	22.41	22.96	0.5	23.5
		100	0	22.47	22.60	23.39	0.5	23.5
	QPSK	1	1	23.00	23.13	23.71	0.0	24.0
		1	53	22.97	23.20	23.94	0.0	24.0
		1	104	22.90	22.47	23.01	0.0	24.0
		50	0	21.95	22.08	22.83	1.0	23.0
		50	28	22.93	23.18	23.90	0.0	24.0
		50	56	22.02	21.94	22.45	1.0	23.0
		100	0	22.00	22.17	22.85	1.0	23.0
	16QAM	1	1	22.16	21.90	22.55	1.0	23.0
	64QAM	1	1	20.52	20.45	21.13	2.5	21.5
	256QAM	1	1	18.41	18.62	19.25	4.5	19.5
	QPSK	1	1	21.38	21.38	22.09	1.5	22.5

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				501204	518598	535998		
				2506.02 MHz	2592.99 MHz	2679.99 MHz		
20 MHz	π/2 BPSK	1	1	22.88	23.00	23.78	0.0	24.0
		1	26	22.84	23.02	23.55	0.0	24.0
		1	49	22.65	22.51	22.72	0.0	24.0
		25	0	22.39	22.63	23.38	0.5	23.5
		25	13	22.86	23.10	23.55	0.0	24.0
		25	26	22.46	22.47	22.70	0.5	23.5
		50	0	22.47	22.64	23.20	0.5	23.5
	QPSK	1	1	23.04	23.10	23.97	0.0	24.0
		1	26	22.93	23.13	23.39	0.0	24.0
		1	49	22.64	22.47	22.67	0.0	24.0
		25	0	21.90	22.09	22.89	1.0	23.0
		25	13	22.91	23.17	23.55	0.0	24.0
		25	26	21.94	22.02	22.17	1.0	23.0
		50	0	21.92	22.08	22.73	1.0	23.0
	16QAM	1	1	21.79	21.81	22.77	1.0	23.0
	64QAM	1	1	20.34	20.54	21.33	2.5	21.5
	256QAM	1	1	18.52	18.55	19.34	4.5	19.5
	QPSK	1	1	21.41	21.45	22.19	1.5	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				500700	518598	536496		
				2503.5 MHz	2592.99 MHz	2682.48MHz		
15 MHz	π/2 BPSK	1	1	22.92	22.95	23.92	0.0	24.0
		1	19	22.80	23.03	23.48	0.0	24.0
		1	36	22.40	22.35	22.58	0.0	24.0
		18	0	22.42	22.65	23.26	0.5	23.5
		18	10	22.90	23.17	23.50	0.0	24.0
		18	20	22.37	22.40	22.61	0.5	23.5
		36	0	22.36	22.61	23.01	0.5	23.5
	QPSK	1	1	22.93	23.16	23.69	0.0	24.0
		1	19	22.90	23.28	23.41	0.0	24.0
		1	36	22.36	22.28	22.56	0.0	24.0
		18	0	21.95	22.12	22.73	1.0	23.0
		18	10	22.91	23.16	23.42	0.0	24.0
		18	20	21.90	21.94	22.12	1.0	23.0
		36	0	21.87	22.06	22.52	1.0	23.0
	16QAM	1	1	21.97	22.01	22.83	1.0	23.0
	64QAM	1	1	20.55	20.41	21.48	2.5	21.5
	256QAM	1	1	18.54	18.81	19.39	4.5	19.5
	QPSK	1	1	21.35	21.46	22.32	1.5	22.5

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				500202	518598	537000		
				2501.01 MHz	2592.99 MHz	2685 MHz		
10 MHz	π/2 BPSK	1	1	22.84	23.10	23.77	0.0	24.0
		1	12	22.77	23.13	23.36	0.0	24.0
		1	22	22.79	23.03	23.02	0.0	24.0
		12	0	22.38	22.62	23.14	0.5	23.5
		12	6	22.80	23.17	23.37	0.0	24.0
		12	12	22.26	22.62	22.71	0.5	23.5
		24	0	22.36	22.61	22.91	0.5	23.5
	QPSK	1	1	23.01	23.18	23.62	0.0	24.0
		1	12	22.94	23.21	23.27	0.0	24.0
		1	22	22.87	22.99	22.96	0.0	24.0
		12	0	21.94	22.12	22.62	1.0	23.0
		12	6	22.81	23.13	23.31	0.0	24.0
		12	12	21.86	22.12	22.24	1.0	23.0
		24	0	21.83	22.11	22.43	1.0	23.0
	16QAM	1	1	21.81	22.27	22.52	1.0	23.0
	64QAM	1	1	20.36	20.69	21.50	2.5	21.5
	256QAM	1	1	18.44	18.45	19.50	4.5	19.5
	QPSK	1	1	21.36	21.50	22.29	1.5	22.5

NR Band n66

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					346000	349000	352000		
					1730 MHz	1745 MHz	1760 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.82	23.59	23.90	0.0	25.0
			1	108	23.72	24.13	24.29	0.0	25.0
			1	214	24.07	24.24	24.12	0.0	25.0
			108	0	22.79	22.92	23.25	0.5	24.5
			108	54	23.74	24.18	24.38	0.0	25.0
			108	108	22.99	23.37	23.31	0.5	24.5
			216	0	22.70	23.16	23.36	0.5	24.5
		QPSK	1	1	23.87	23.61	23.93	0.0	25.0
			1	108	23.77	24.15	24.37	0.0	25.0
			1	214	24.11	24.28	24.15	0.0	25.0
			108	0	22.82	22.94	23.27	1.0	24.0
			108	54	23.76	24.17	24.40	0.0	25.0
			108	108	23.01	23.37	23.33	1.0	24.0
			216	0	22.72	23.17	23.38	1.0	24.0
		16QAM	1	1	22.89	22.63	23.02	1.0	24.0
			1	108	22.89	23.19	23.40	1.0	24.0
			1	214	23.15	23.29	23.22	1.0	24.0
		64QAM	1	1	21.39	21.21	21.48	2.5	22.5
		256QAM	1	1	19.30	19.06	19.41	4.5	20.5
	CP-OFDM	QPSK	1	1	22.44	22.18	22.44	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					345000	349000	353000		
					1725 MHz	1745 MHz	1765 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.95	23.71	24.25	0.0	25.0
			1	80	23.71	24.15	24.34	0.0	25.0
			1	158	23.97	24.36	24.23	0.0	25.0
			80	0	22.96	23.04	23.45	0.5	24.5
			80	40	23.79	24.20	24.42	0.0	25.0
			80	80	22.84	23.35	23.36	0.5	24.5
			160	0	22.78	23.20	23.42	0.5	24.5
		QPSK	1	1	23.99	23.75	24.25	0.0	25.0
			1	80	23.76	24.19	24.37	0.0	25.0
			1	158	24.00	24.38	24.27	0.0	25.0
			80	0	22.98	23.05	23.47	1.0	24.0
			80	40	23.80	24.23	24.44	0.0	25.0
			80	80	22.86	23.36	23.37	1.0	24.0
			160	0	22.80	23.22	23.43	1.0	24.0
		16QAM	1	1	22.97	22.81	23.28	1.0	24.0
		64QAM	1	1	21.55	21.24	21.76	2.5	22.5
		256QAM	1	1	19.47	19.18	19.66	4.5	20.5
	CP-OFDM	QPSK	1	1	22.55	22.27	22.74	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344500	349000	353500		
					1722.5 MHz	1745 MHz	1767.5 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.91	23.79	24.32	0.0	25.0
			1	67	23.73	24.09	24.34	0.0	25.0
			1	131	23.82	24.37	24.30	0.0	25.0
			64	0	22.98	23.09	23.47	0.5	24.5
			64	35	23.81	24.22	24.41	0.0	25.0
			64	69	22.77	23.37	23.32	0.5	24.5
			128	0	22.82	23.21	23.41	0.5	24.5
		QPSK	1	1	23.98	23.85	24.39	0.0	25.0
			1	67	23.74	24.13	24.34	0.0	25.0
			1	131	23.83	24.40	24.28	0.0	25.0
			64	0	23.00	23.09	23.50	1.0	24.0
			64	35	23.81	24.24	24.42	0.0	25.0
			64	69	22.78	23.36	23.33	1.0	24.0
			128	0	22.82	23.21	23.41	1.0	24.0
		16QAM	1	1	23.13	22.78	23.28	1.0	24.0
		64QAM	1	1	21.50	21.35	22.05	2.5	22.5
		256QAM	1	1	19.44	19.32	19.90	4.5	20.5
	CP-OFDM	QPSK	1	1	22.48	22.39	22.95	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.47	23.49	23.47	0.0	25.0
			1	53	23.80	23.82	23.81	0.0	25.0
			1	104	23.87	23.89	23.90	0.0	25.0
			50	0	23.19	23.20	23.21	0.5	24.5
			50	28	23.77	23.78	23.81	0.0	25.0
			50	56	23.40	23.37	23.41	0.5	24.5
			100	0	23.30	23.29	23.32	0.5	24.5
		QPSK	1	1	23.63	23.61	23.58	0.0	25.0
			1	53	23.87	23.87	23.79	0.0	25.0
			1	104	24.01	24.00	23.96	0.0	25.0
			50	0	22.76	22.75	22.79	1.0	24.0
			50	28	23.83	23.82	23.86	0.0	25.0
			50	56	22.94	22.94	22.94	1.0	24.0
			100	0	22.85	22.79	22.85	1.0	24.0
		16QAM	1	1	22.62	22.62	22.65	1.0	24.0
		64QAM	1	1	21.25	21.09	21.10	2.5	22.5
		256QAM	1	1	18.98	18.99	19.05	4.5	20.5
	CP-OFDM	QPSK	1	1	21.91	22.06	22.14	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500		
					1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.72	22.81	22.85	0.0	25.0
			1	40	23.55	23.73	23.79	0.0	25.0
			1	77	23.45	23.95	23.83	0.0	25.0
			36	0	23.28	23.25	23.31	0.5	24.5
			36	22	23.66	23.87	23.92	0.0	25.0
			36	43	23.06	23.46	23.50	0.5	24.5
			75	0	23.19	23.15	23.43	0.5	24.5
		QPSK	1	1	23.72	23.63	23.88	0.0	25.0
			1	40	23.57	23.75	23.80	0.0	25.0
			1	77	23.41	23.94	23.85	0.0	25.0
			36	0	22.81	22.78	22.92	1.0	24.0
			36	22	23.68	23.83	23.87	0.0	25.0
			36	43	22.58	22.91	22.86	1.0	24.0
			75	0	22.69	22.85	22.91	1.0	24.0
		16QAM	1	1	22.72	22.64	22.90	1.0	24.0
		64QAM	1	1	21.27	21.24	21.54	2.5	22.5
		256QAM	1	1	19.25	19.05	19.30	4.5	20.5
	CP-OFDM	QPSK	1	1	22.22	22.15	22.38	1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000		
					1715 MHz	1745 MHz	1775 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.40	23.53	23.64	0.0	25.0
			1	26	23.45	23.58	23.67	0.0	25.0
			1	50	23.31	23.71	23.64	0.0	25.0
			25	0	23.01	23.10	23.20	0.5	24.5
			25	14	23.47	23.63	23.66	0.0	25.0
			25	27	22.93	23.17	23.17	0.5	24.5
			50	0	23.00	23.15	23.20	0.5	24.5
		QPSK	1	1	23.51	23.51	23.70	0.0	25.0
			1	26	23.45	23.56	23.68	0.0	25.0
			1	50	23.34	23.66	23.63	0.0	25.0
			25	0	22.58	22.63	22.74	1.0	24.0
			25	14	23.52	23.64	23.70	0.0	25.0
			25	27	22.47	22.69	22.71	1.0	24.0
			50	0	22.54	22.63	22.71	1.0	24.0
		16QAM	1	1	22.55	22.58	22.75	1.0	24.0
		64QAM	1	1	21.05	21.12	21.25	2.5	22.5
		256QAM	1	1	18.98	18.99	19.23	4.5	20.5
	CP-OFDM	QPSK	1	1	22.08	21.97	22.20	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500		
					1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.65	23.56	23.73	0.0	25.0
			1	13	23.64	23.56	23.70	0.0	25.0
			1	23	23.69	23.72	23.79	0.0	25.0
			12	0	23.36	23.22	23.32	0.5	24.5
			12	7	23.84	23.75	23.81	0.0	25.0
			12	13	23.33	23.29	23.35	0.5	24.5
			25	0	23.34	23.30	23.34	0.5	24.5
		QPSK	1	1	23.81	23.77	23.79	0.0	25.0
			1	13	23.75	23.72	23.71	0.0	25.0
			1	23	23.62	23.83	23.80	0.0	25.0
			12	0	22.67	22.80	22.88	1.0	24.0
			12	7	23.66	23.79	23.85	0.0	25.0
			12	13	22.70	22.83	22.87	1.0	24.0
			25	0	22.71	22.82	22.87	1.0	24.0
		16QAM	1	1	22.80	22.78	22.89	1.0	24.0
		64QAM	1	1	21.24	21.36	21.31	2.5	22.5
		256QAM	1	1	19.25	19.29	19.25	4.5	20.5
	CP-OFDM	QPSK	1	1	22.17	22.22	22.31	1.5	23.5

NR Band n71

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					134600	136100	137600		
					673 MHz	680.5 MHz	688 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.25	24.29	24.41	0.0	25.5
			1	53	24.49	24.58	24.51	0.0	25.5
			1	104	24.47	24.42	24.44	0.0	25.5
			50	0	23.40	23.42	23.57	0.5	25.0
			50	28	24.48	24.47	24.54	0.0	25.5
			50	56	23.53	23.49	23.53	0.5	25.0
			100	0	23.49	23.49	23.57	0.5	25.0
		QPSK	1	1	24.37	24.40	24.55	0.0	25.5
			1	53	24.63	24.71	24.70	0.0	25.5
			1	104	24.60	24.42	24.43	0.0	25.5
			50	0	23.44	23.46	23.59	1.0	24.5
			50	28	24.52	24.57	24.56	0.0	25.5
			50	56	23.56	23.53	23.55	1.0	24.5
			100	0	23.52	23.53	23.59	1.0	24.5
		16QAM	1	1	23.36	23.36	23.47	1.0	24.5
			1	53	23.63	23.65	23.68	1.0	24.5
			1	104	23.61	23.47	23.42	1.0	24.5
		64QAM	1	1	21.87	21.97	22.08	2.5	23.0
		256QAM	1	1	19.89	19.80	19.97	4.5	21.0
	CP-OFDM	QPSK	1	1	22.84	22.90	23.04	1.5	24.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					134100	136100	138100		
					670.5 MHz	680.5 MHz	690.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.29	24.40	24.50	0.0	25.5
			1	40	24.33	24.42	24.38	0.0	25.5
			1	77	24.50	24.49	24.39	0.0	25.5
			36	0	23.40	23.49	23.55	0.5	25.0
			36	22	24.44	24.54	24.52	0.0	25.5
			36	43	23.52	23.56	23.52	0.5	25.0
			75	0	23.47	23.56	23.55	0.5	25.0
		QPSK	1	1	24.39	24.49	24.55	0.0	25.5
			1	40	24.42	24.49	24.45	0.0	25.5
			1	77	24.51	24.54	24.46	0.0	25.5
			36	0	23.43	23.52	23.60	1.0	24.5
			36	22	24.47	24.57	24.56	0.0	25.5
			36	43	23.54	23.58	23.56	1.0	24.5
			75	0	23.49	23.59	23.58	1.0	24.5
		16QAM	1	1	23.45	23.44	23.64	1.0	24.5
		64QAM	1	1	21.85	22.05	22.08	2.5	23.0
		256QAM	1	1	19.81	19.95	19.98	4.5	21.0
	CP-OFDM	QPSK	1	1	22.88	22.99	23.05	1.5	24.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					133600	136100	138600		
					668 MHz	680.5 MHz	693 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.36	24.47	24.50	0.0	25.5
			1	26	24.49	24.51	24.55	0.0	25.5
			1	50	24.47	24.51	24.42	0.0	25.5
			25	0	23.42	23.52	23.54	0.5	25.0
			25	14	24.44	24.54	24.53	0.0	25.5
			25	27	23.50	23.57	23.52	0.5	25.0
			50	0	23.46	23.57	23.55	0.5	25.0
		QPSK	1	1	24.40	24.46	24.54	0.0	25.5
			1	26	24.50	24.57	24.62	0.0	25.5
			1	50	24.52	24.57	24.48	0.0	25.5
			25	0	23.45	23.54	23.57	1.0	24.5
			25	14	24.49	24.56	24.56	0.0	25.5
			25	27	23.52	23.59	23.54	1.0	24.5
			50	0	23.49	23.59	23.57	1.0	24.5
		16QAM	1	1	23.47	23.59	23.53	1.0	24.5
		64QAM	1	1	21.90	22.00	22.14	2.5	23.0
		256QAM	1	1	19.92	20.04	20.12	4.5	21.0
	CP-OFDM	QPSK	1	1	22.90	23.09	23.13	1.5	24.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					133100	136100	139100		
					665.5 MHz	680.5 MHz	695.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.40	24.49	24.53	0.0	25.5
			1	13	24.32	24.44	24.41	0.0	25.5
			1	23	24.45	24.52	24.48	0.0	25.5
			12	0	23.44	23.54	23.58	0.5	25.0
			12	7	24.44	24.54	24.53	0.0	25.5
			12	13	23.46	23.57	23.54	0.5	25.0
			25	0	23.46	23.56	23.55	0.5	25.0
		QPSK	1	1	24.46	24.53	24.57	0.0	25.5
			1	13	24.39	24.49	24.48	0.0	25.5
			1	23	24.48	24.59	24.55	0.0	25.5
			12	0	23.47	23.56	23.60	1.0	24.5
			12	7	24.47	24.57	24.56	0.0	25.5
			12	13	23.49	23.58	23.57	1.0	24.5
			25	0	23.48	23.57	23.60	1.0	24.5
		16QAM	1	1	23.43	23.66	23.57	1.0	24.5
		64QAM	1	1	21.92	22.03	22.16	2.5	23.0
		256QAM	1	1	19.89	20.08	20.06	4.5	21.0
	CP-OFDM	QPSK	1	1	22.98	23.13	23.11	1.5	24.0

NR Band n77(PC2)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							
					Measured Pwr (dBm)						MPR	Tune-up Limit
					[redacted]	633332	[redacted]	650000	656000	662000		
						3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1		26.16		26.03	25.72	26.36	0.0	28.0
			1	137		26.60		25.79	26.23	26.44	0.0	28.0
			1	271		25.99		25.84	26.39	26.51	0.0	28.0
			135	0		26.57		26.14	26.02	26.60	0.5	27.5
			135	69		26.68		25.90	26.18	26.41	0.0	28.0
			135	138		26.76		25.80	26.53	26.87	0.5	27.5
			270	0		26.54		25.84	26.22	26.48	0.5	27.5
		QPSK	1	1		26.28		25.95	25.90	26.38	0.0	28.0
			1	137		26.72		25.92	26.27	26.49	0.0	28.0
			1	271		26.03		25.88	26.33	26.57	0.0	28.0
			135	0		26.66		26.22	26.08	26.66	1.0	27.0
			135	69		26.55		25.88	26.41	26.40	0.0	28.0
			135	138		26.84		25.96	26.65	26.96	1.0	27.0
			270	0		26.49		25.76	26.22	26.46	1.0	27.0
		16QAM	1	1		25.31		25.10	24.90	25.24	1.0	27.0
			1	137		25.68		24.85	25.10	25.34	1.0	27.0
			1	271		25.09		24.57	25.46	25.56	1.0	27.0
		64QAM	1	1		23.82		23.41	23.37	23.79	2.5	25.5
		256QAM	1	1		21.91		21.54	21.20	21.94	4.5	23.5
	CP-OFDM	QPSK	1	1		24.62		24.42	24.23	24.65	1.5	26.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					633000	633332	633666	649666	656000	662332		
					3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.53	26.40	26.45	26.10	25.71	26.35	0.0	28.0
			123	1	26.73	26.69	26.67	26.04	26.27	26.58	0.0	28.0
			243	1	26.52	26.26	26.06	25.95	26.47	26.54	0.0	28.0
			1	120	26.61	26.59	26.50	26.22	26.12	26.63	0.5	27.5
			63	120	26.80	26.81	26.82	26.00	26.27	26.49	0.0	28.0
			125	120	26.91	26.93	26.78	25.86	26.53	26.87	0.5	27.5
			0	243	26.66	26.57	26.74	26.02	26.28	26.65	0.5	27.5
		QPSK	1	1	26.33	26.47	26.62	26.02	26.00	26.38	0.0	28.0
			123	1	26.77	26.78	26.80	26.13	26.22	26.63	0.0	28.0
			243	1	26.47	27.20	26.11	25.92	26.52	26.66	0.0	28.0
			1	120	26.76	26.75	26.56	26.27	26.11	26.63	1.0	27.0
			63	120	26.68	26.58	26.68	26.01	26.37	26.52	0.0	28.0
			125	120	26.98	26.92	26.76	25.86	26.67	26.50	1.0	27.0
			0	243	26.55	26.52	26.60	25.80	26.27	26.59	1.0	27.0
		16QAM	1	1	25.20	25.26	25.40	25.15	24.56	25.21	1.0	27.0
		64QAM	1	1	23.65	23.92	24.08	23.81	23.32	23.77	2.5	25.5
		256QAM	1	1	22.01	22.06	22.17	21.73	21.31	21.99	4.5	23.5
	CP-OFDM	QPSK	1	1	24.70	24.76	24.88	24.43	24.25	24.80	1.5	26.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632668	633332	634000	649334	656000	662666		
					3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.19	26.55	26.67	26.06	25.80	26.69	0.0	28.0
			1	109	26.58	26.70	26.50	26.10	26.36	26.85	0.0	28.0
			1	215	26.75	26.53	26.17	26.00	26.65	26.69	0.0	28.0
			108	0	26.62	26.66	26.49	26.23	26.24	26.74	0.5	27.5
			108	55	26.62	26.86	27.02	26.11	26.39	26.79	0.0	28.0
			108	109	26.91	27.01	26.86	25.99	26.75	27.01	0.5	27.5
			216	0	26.49	26.69	26.87	26.04	26.41	26.94	0.5	27.5
		QPSK	1	1	26.21	26.68	26.73	25.95	26.06	26.66	0.0	28.0
			1	109	26.58	26.80	26.95	26.04	26.23	26.85	0.0	28.0
			1	215	26.67	26.50	26.02	25.99	26.60	26.70	0.0	28.0
			108	0	26.63	26.80	26.58	26.24	26.25	26.76	1.0	27.0
			108	55	26.44	26.72	26.89	26.01	26.51	26.74	0.0	28.0
			108	109	26.93	26.99	26.93	26.07	26.74	26.35	1.0	27.0
			216	0	26.48	26.59	26.72	25.97	26.41	26.79	1.0	27.0
		16QAM	1	1	25.23	25.55	25.64	24.90	24.96	25.70	1.0	27.0
		64QAM	1	1	23.62	24.26	24.05	23.56	23.28	24.32	2.5	25.5
		256QAM	1	1	22.11	22.23	22.36	21.44	21.24	22.45	4.5	23.5
	CP-OFDM	QPSK	1	1	24.68	24.96	24.98	24.45	24.39	25.22	1.5	26.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632334	633332	634332	649000	656000	663000		
					3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.04	26.43	26.55	25.93	25.83	26.57	0.0	28.0
			1	95	26.40	26.69	26.81	26.05	26.32	26.93	0.0	28.0
			1	187	27.11	26.84	26.33	26.07	26.52	26.23	0.0	28.0
			90	0	26.31	26.53	26.51	26.08	26.18	26.55	0.5	27.5
			90	50	26.59	26.70	26.95	26.13	26.31	26.81	0.0	28.0
			90	99	26.67	26.92	26.68	26.05	26.56	26.90	0.5	27.5
			180	0	26.57	26.71	26.84	26.09	26.34	26.90	0.5	27.5
		QPSK	1	1	26.05	26.54	26.68	25.92	26.06	26.58	0.0	28.0
			1	95	26.57	26.66	26.81	26.22	26.28	26.96	0.0	28.0
			1	187	27.14	26.72	26.36	26.17	25.62	26.30	0.0	28.0
			90	0	26.45	26.60	26.66	26.16	26.26	26.58	1.0	27.0
			90	50	26.53	26.57	26.80	26.10	26.38	26.93	0.0	28.0
			90	99	26.73	26.99	26.77	26.11	26.70	26.40	1.0	27.0
			180	0	26.52	26.53	26.80	26.00	26.31	26.83	1.0	27.0
		16QAM	1	1	25.20	25.48	25.84	25.14	24.90	25.60	1.0	27.0
		64QAM	1	1	23.38	24.01	24.19	23.76	23.57	24.34	2.5	25.5
		256QAM	1	1	21.83	21.85	22.60	21.46	21.56	22.33	4.5	23.5
	CP-OFDM	QPSK	1	1	24.48	24.79	24.89	24.33	24.50	25.26	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632000	633332	634666	648668	656000	663332		
					3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.36	26.63	26.61	26.02	26.03	26.40	0.0	28.0
			1	81	26.88	26.75	26.93	26.19	26.42	27.12	0.0	28.0
			1	160	26.92	26.82	26.12	26.19	26.67	26.54	0.0	28.0
			81	0	26.67	26.68	26.81	26.21	26.25	26.59	0.5	27.5
			81	41	26.93	26.85	27.10	26.36	26.40	27.07	0.0	28.0
			81	81	26.73	27.06	26.69	26.05	26.55	26.84	0.5	27.5
			162	0	26.79	26.77	27.02	26.26	26.34	27.14	0.5	27.5
		QPSK	1	1	26.36	26.81	26.72	25.99	26.22	26.40	0.0	28.0
			1	81	26.77	26.75	27.01	26.35	26.28	27.12	0.0	28.0
			1	160	26.82	26.78	26.05	26.19	26.63	26.67	0.0	28.0
			81	0	26.77	26.75	26.88	26.27	26.25	26.67	1.0	27.0
			81	41	26.74	26.70	26.98	26.24	26.50	27.06	0.0	28.0
			81	81	26.76	27.00	26.85	26.02	26.62	26.40	1.0	27.0
			162	0	26.76	26.73	26.99	26.17	26.35	26.60	1.0	27.0
		16QAM	1	1	25.38	25.62	25.74	25.01	24.97	25.61	1.0	27.0
		64QAM	1	1	23.75	24.17	24.12	23.94	23.57	24.13	2.5	25.5
		256QAM	1	1	22.10	22.19	22.37	21.76	21.77	22.00	4.5	23.5
	CP-OFDM	QPSK	1	1	24.75	24.99	25.13	24.46	24.58	25.11	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631668	633332	635000	648334	656000	663666		
					3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.22	26.80	26.77	25.88	26.09	26.35	0.0	28.0
			67	1	26.66	26.76	26.89	26.15	26.34	26.96	0.0	28.0
			131	1	26.66	26.87	26.13	25.83	26.64	26.46	0.0	28.0
			0	64	26.55	26.59	26.86	26.06	26.21	26.72	0.5	27.5
			35	64	26.88	26.84	26.96	26.19	26.34	26.88	0.0	28.0
			69	64	26.64	26.98	26.55	25.98	26.49	26.66	0.5	27.5
			0	128	26.80	26.75	26.88	26.15	26.33	26.92	0.5	27.5
		QPSK	1	1	26.40	26.82	26.87	25.87	26.36	26.41	0.0	28.0
			67	1	26.72	26.80	26.86	26.24	26.33	27.08	0.0	28.0
			131	1	26.56	26.83	26.01	25.88	26.60	26.61	0.0	28.0
			0	64	26.61	26.68	26.85	26.10	26.21	26.74	1.0	27.0
			35	64	26.66	26.72	26.84	26.15	26.43	26.96	0.0	28.0
			69	64	26.72	26.99	26.65	26.04	26.56	26.86	1.0	27.0
			0	128	26.75	26.72	26.84	26.06	26.33	26.65	1.0	27.0
		16QAM	1	1	25.05	25.56	25.60	24.76	25.35	25.34	1.0	27.0
		64QAM	1	1	23.77	24.38	24.19	23.59	23.90	24.07	2.5	25.5
		256QAM	1	1	21.76	22.23	22.31	21.43	21.74	21.79	4.5	23.5
	CP-OFDM	QPSK	1	1	24.89	25.17	25.12	24.51	24.77	25.10	1.5	26.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631334	633332	635332	648000	656000	664000		
					3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.18	26.77	26.82	26.00	26.07	26.68	0.0	28.0
			1	53	26.60	26.74	26.74	26.15	26.19	26.98	0.0	28.0
			1	104	26.45	26.89	26.15	25.99	26.42	26.52	0.0	28.0
			50	0	26.37	26.62	26.88	26.10	26.15	26.94	0.5	27.5
			50	28	26.74	26.87	26.79	26.26	26.10	26.92	0.0	28.0
			50	56	26.70	26.87	26.47	26.16	26.25	26.70	0.5	27.5
			100	0	26.69	26.78	26.80	26.27	26.20	27.13	0.5	27.5
		QPSK	1	1	26.36	26.84	26.96	25.91	26.08	26.70	0.0	28.0
			1	53	26.62	26.72	26.76	26.25	26.07	27.06	0.0	28.0
			1	104	26.53	26.85	26.07	26.04	26.33	26.65	0.0	28.0
			50	0	26.55	26.63	26.94	26.07	26.10	26.65	1.0	27.0
			50	28	26.63	26.66	26.67	26.22	26.32	27.02	0.0	28.0
			50	56	26.84	26.96	26.55	26.13	26.40	26.84	1.0	27.0
			100	0	26.70	26.66	26.75	26.11	26.23	26.54	1.0	27.0
		16QAM	1	1	25.28	25.53	25.90	25.01	25.29	25.92	1.0	27.0
		64QAM	1	1	23.58	24.26	24.18	23.89	23.98	24.44	2.5	25.5
		256QAM	1	1	22.20	22.56	22.31	21.35	21.72	22.22	4.5	23.5
	CP-OFDM	QPSK	1	1	24.72	25.04	25.28	24.48	24.65	25.23	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631000	633332	635668	647668	656000	664332		
					3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.27	26.81	26.73	25.85	25.84	26.70	0.0	28.0
			1	39	26.57	26.73	26.48	25.98	26.01	26.65	0.0	28.0
			1	76	26.71	26.94	25.87	26.05	25.88	26.36	0.0	28.0
			36	0	26.44	26.60	26.49	25.92	25.95	26.79	0.5	27.5
			36	21	26.75	26.87	26.52	25.95	25.95	26.57	0.0	28.0
			36	42	26.72	26.87	26.14	25.98	26.10	26.47	0.5	27.5
			75	0	26.75	26.57	26.46	26.04	25.97	26.72	0.5	27.5
		QPSK	1	1	26.40	26.65	26.67	25.81	25.98	26.70	0.0	28.0
			1	39	26.66	26.52	26.41	26.00	25.90	26.66	0.0	28.0
			1	76	26.67	26.50	25.82	25.98	26.15	26.39	0.0	28.0
			36	0	26.56	26.43	26.61	25.95	25.88	26.79	1.0	27.0
			36	21	26.58	26.46	26.34	25.97	26.08	26.70	0.0	28.0
			36	42	26.87	26.71	26.27	26.00	26.19	26.58	1.0	27.0
			75	0	26.69	26.49	26.35	25.90	25.97	26.69	1.0	27.0
		16QAM	1	1	25.48	25.62	25.57	24.96	24.99	25.64	1.0	27.0
		64QAM	1	1	24.09	24.17	24.18	23.23	23.53	24.48	2.5	25.5
		256QAM	1	1	21.88	22.05	22.02	21.36	21.40	22.11	4.5	23.5
	CP-OFDM	QPSK	1	1	24.78	24.82	24.99	24.21	24.51	25.30	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630834	633332	635832	647500	656000	664500		
					3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.24	26.62	26.88	26.23	25.89	25.95	0.0	28.0
			1	32	26.42	26.86	26.69	26.32	25.90	25.80	0.0	28.0
			1	64	26.59	26.82	26.37	26.31	26.04	25.88	0.0	28.0
			0	30	26.45	26.79	26.93	26.34	25.97	25.95	0.5	27.5
			15	30	26.50	26.83	26.82	26.35	25.98	25.94	0.0	28.0
				30	26.60	26.91	26.63	26.37	26.01	25.91	0.5	27.5
			65	0	26.55	26.86	26.74	26.32	26.00	25.96	0.5	27.5
		QPSK	1	1	26.39	26.71	26.92	26.36	25.96	26.03	0.0	28.0
			1	32	26.55	26.98	26.86	26.41	26.12	26.01	0.0	28.0
			1	64	26.74	26.96	26.43	26.41	26.10	26.01	0.0	28.0
			0	30	26.47	26.82	26.96	26.31	26.01	25.98	1.0	27.0
			15	30	26.58	26.86	26.80	26.33	26.02	25.97	0.0	28.0
				30	26.58	26.86	26.62	26.38	26.06	25.92	1.0	27.0
			65	0	26.62	26.90	26.77	26.33	25.96	25.95	1.0	27.0
		16QAM	1	1	25.33	25.87	25.98	25.26	24.87	24.98	1.0	27.0
		64QAM	1	1	23.94	24.27	24.38	23.91	23.45	23.50	2.5	25.5
		256QAM	1	1	21.62	22.00	22.45	21.73	21.41	21.46	4.5	23.5
	CP-OFDM	QPSK	1	1	24.66	25.12	25.43	24.74	24.43	24.51	1.5	26.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630668	633332	636000	647334	656000	664666		
					3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.14	26.42	26.57	25.94	26.03	26.82	0.0	28.0
			1	26	26.39	26.48	26.20	25.94	26.18	26.62	0.0	28.0
			1	49	26.51	26.66	25.93	26.17	26.25	26.52	0.0	28.0
			25	0	26.15	26.43	26.36	25.96	26.09	26.83	0.5	27.5
			25	13	26.37	26.54	26.26	26.04	26.22	26.72	0.0	28.0
			25	26	26.41	26.57	26.12	26.00	26.18	26.63	0.5	27.5
			50	0	26.39	26.57	26.26	26.10	26.10	26.74	0.5	27.5
		QPSK	1	1	26.16	26.53	26.57	25.87	26.26	26.82	0.0	28.0
			1	26	26.39	26.50	26.22	26.05	26.13	26.73	0.0	28.0
			1	49	26.41	26.55	25.80	26.20	26.25	26.64	0.0	28.0
			25	0	26.26	26.45	26.39	26.06	26.03	26.89	1.0	27.0
			25	13	26.28	26.46	26.18	26.05	26.27	26.62	0.0	28.0
			25	26	26.52	26.59	26.17	25.96	26.28	26.78	1.0	27.0
			50	0	26.26	26.45	26.27	25.95	26.22	26.71	1.0	27.0
		16QAM	1	1	25.19	25.42	25.83	25.34	25.67	25.90	1.0	27.0
		64QAM	1	1	23.37	23.78	24.17	23.55	23.63	24.62	2.5	25.5
		256QAM	1	1	21.68	21.89	22.12	21.30	21.48	22.45	4.5	23.5
	CP-OFDM	QPSK	1	1	24.30	24.82	24.86	24.42	24.66	25.31	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630500	633332	636168	647168	656000	664832		
					3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.11	26.56	26.41	26.12	26.09	26.75	0.0	28.0
			1	19	26.24	26.52	26.09	26.01	26.16	26.64	0.0	28.0
			1	36	26.38	26.71	25.96	26.20	26.28	26.60	0.0	28.0
			18	0	26.08	26.44	26.33	26.06	26.14	26.81	0.5	27.5
			18	10	26.37	26.57	26.31	26.11	26.23	26.59	0.0	28.0
			18	20	26.41	26.62	26.11	26.07	26.29	26.65	0.5	27.5
			36	0	26.31	26.59	26.34	26.09	26.25	26.98	0.5	27.5
		QPSK	1	1	26.13	26.62	26.45	25.89	26.37	26.69	0.0	28.0
			1	19	26.26	26.49	26.10	26.07	26.10	26.71	0.0	28.0
			1	36	26.32	26.60	25.94	26.17	26.29	26.64	0.0	28.0
			18	0	26.20	26.55	26.33	26.08	26.18	26.83	1.0	27.0
			18	10	26.21	26.46	26.19	26.04	26.30	26.71	0.0	28.0
			18	20	26.45	26.62	26.20	26.08	26.33	26.81	1.0	27.0
			36	0	26.22	26.47	26.21	25.96	26.28	26.77	1.0	27.0
		16QAM	1	1	24.93	25.56	25.41	24.99	25.34	25.75	1.0	27.0
		64QAM	1	1	23.56	24.01	23.57	23.88	23.87	24.46	2.5	25.5
		256QAM	1	1	21.67	22.36	22.24	21.41	21.60	22.30	4.5	23.5
	CP-OFDM	QPSK	1	1	24.52	24.90	24.81	24.42	24.75	25.34	1.5	26.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630334	633332	636332	647000	656000	665000		
					3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	26.15	26.50	26.13	26.12	26.15	26.75	0.0	28.0
			1	12	26.21	26.47	26.02	26.05	26.15	26.75	0.0	28.0
			1	22	26.30	26.61	26.04	26.17	26.27	26.65	0.0	28.0
			12	0	26.10	26.45	25.94	26.02	26.16	26.79	0.5	27.5
			12	6	26.33	26.63	26.12	26.04	26.14	26.67	0.0	28.0
			12	12	26.27	26.59	26.10	26.07	26.20	26.69	0.5	27.5
			24	0	26.28	26.58	26.07	26.12	26.25	26.83	0.5	27.5
		QPSK	1	1	26.20	26.69	26.23	25.93	26.31	26.77	0.0	28.0
			1	12	26.19	26.58	26.05	26.06	26.15	26.78	0.0	28.0
			1	22	26.24	26.58	25.98	26.09	26.28	26.69	0.0	28.0
			12	0	26.11	26.57	26.11	26.12	26.20	26.82	1.0	27.0
			12	6	26.12	26.54	25.91	26.04	26.29	26.72	0.0	28.0
			12	12	26.36	26.71	26.10	26.06	26.33	26.86	1.0	27.0
			24	0	26.16	26.57	26.04	26.06	26.20	26.78	1.0	27.0
		16QAM	1	1	25.12	25.46	25.02	25.19	24.96	25.58	1.0	27.0
		64QAM	1	1	23.56	24.48	23.86	23.73	23.93	24.05	2.5	25.5
		256QAM	1	1	21.86	22.37	21.72	21.54	21.64	22.36	4.5	23.5
	CP-OFDM	QPSK	1	1	24.57	24.88	24.53	24.45	24.76	25.30	1.5	26.5

NR Band n77(PC2, SRS1)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS1							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				18.35		18.38	18.18	19.21	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			18.39	18.60	18.70	18.48	18.13	20.01	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			18.47	18.63	18.65	18.46	18.28	19.11	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			18.40	18.91	18.70	18.51	18.57	20.05	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			18.31	18.87	18.70	18.35	18.30	19.18	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			18.50	19.07	18.93	18.45	18.50	19.69	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	19.5
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			18.50	19.00	19.04	18.41	18.55	19.10	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			18.59	19.01	19.24	18.45	18.77	19.13	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			18.66	19.19	19.01	18.44	18.36	19.73	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			18.80	19.24	18.87	18.49	18.20	18.61	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			18.80	19.20	19.07	18.22	18.16	18.77	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			18.79	19.25	18.99	18.42	18.43	18.57	0.0	

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

NR Band n77(PC2, SRS2)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS2							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				21.04		21.24	20.98	19.96	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			21.21	21.16	21.10	21.19	21.01	19.99	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			21.13	20.83	20.99	21.28	21.06	20.01	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			21.25	21.06	20.90	21.34	20.93	20.14	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			21.28	21.16	20.96	21.41	21.36	20.27	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			21.11	20.63	20.62	21.36	21.41	20.37	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	**21.0**
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			20.81	20.76	20.40	21.36	21.43	20.10	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			20.72	21.11	20.23	21.14	21.44	19.92	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			20.65	19.97	19.88	21.42	21.31	19.89	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			20.50	19.83	20.15	21.39	21.41	20.00	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			20.98	19.84	20.71	21.36	21.01	19.94	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			20.67	19.96	20.29	21.41	21.22	20.14	0.0	

NR Band n77(PC2, SRS3)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS3							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				18.55		18.01	17.53	17.27	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			18.36	18.37	18.76	18.07	17.52	18.11	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			18.53	18.65	18.82	18.02	17.52	17.64	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			19.02	18.69	18.79	17.94	17.81	17.90	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			19.14	19.02	18.84	17.95	17.84	18.10	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			18.83	19.15	18.91	17.99	17.92	17.98	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	18.5
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			18.68	19.00	18.78	17.86	17.90	17.64	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			18.70	18.57	18.87	17.79	17.96	17.50	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			18.81	18.60	18.92	17.80	17.99	17.52	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			18.58	19.14	19.03	17.77	17.90	17.49	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			18.35	18.37	18.70	17.71	17.80	17.51	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			18.65	18.38	18.81	17.66	17.83	17.65	0.0	

NR Band n77(PC3)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							
					Measured Pwr (dBm)						MPR	Tune-up Limit
					[redacted]	633332	[redacted]	650000	656000	662000		
						3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1		22.51		21.99	22.53	21.66	0.0	23.2
			1	137		22.08		22.42	21.81	21.72	0.0	23.2
			1	271		21.75		22.00	21.64	21.80	0.0	23.2
			135	0		22.13		21.73	21.97	21.41	0.5	22.7
			135	69		22.08		22.41	21.91	21.62	0.0	23.2
			135	138		21.41		21.96	21.31	21.39	0.5	22.7
			270	0		21.59		21.75	21.41	21.19	0.5	22.7
		QPSK	1	1		22.59		22.07	22.51	21.72	0.0	23.2
			1	137		22.04		22.36	21.87	21.70	0.0	23.2
			1	271		21.82		22.05	21.65	21.93	0.0	23.2
			135	0		21.63		21.20	21.52	20.85	1.0	22.2
			135	69		22.14		22.38	22.05	21.74	0.0	23.2
			135	138		20.90		21.45	20.82	20.88	1.0	22.2
			270	0		21.17		21.25	20.98	20.71	1.0	22.2
		16QAM	1	1		21.54		21.03	21.62	20.41	1.0	22.2
			1	137		21.00		21.33	20.98	20.62	1.0	22.2
			1	271		21.07		21.27	20.68	20.91	1.0	22.2
		64QAM	1	1		20.01		19.46	20.23	19.31	2.5	20.7
	CP-OFDM	QPSK	1	1		21.09		20.58	21.03	20.12	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					633000	633332	633666	649666	656000	662332		
					3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.21	22.60	22.48	22.20	22.55	21.59	0.0	23.2
			123	1	22.83	22.07	23.16	22.47	21.88	21.70	0.0	23.2
			243	1	22.31	22.00	22.08	21.98	21.67	21.77	0.0	23.2
			1	120	21.28	22.07	21.38	21.75	22.01	21.38	0.5	22.7
			63	120	22.76	22.04	22.97	22.56	21.93	21.64	0.0	23.2
			125	120	21.72	21.43	21.89	22.00	21.31	21.28	0.5	22.7
			0	243	21.52	21.59	22.35	21.90	21.94	21.15	0.5	22.7
		QPSK	1	1	22.48	22.65	22.12	22.15	22.63	21.62	0.0	23.2
			123	1	21.84	21.95	23.08	22.56	21.92	21.74	0.0	23.2
			243	1	22.09	21.98	22.49	22.10	21.74	21.92	0.0	23.2
			1	120	21.57	21.58	21.37	21.22	21.66	20.83	1.0	22.2
			63	120	22.13	22.22	22.96	22.51	22.09	21.79	0.0	23.2
			125	120	22.16	21.21	21.54	21.39	20.84	20.80	1.0	22.2
			0	243	21.59	21.44	21.57	21.34	21.04	20.66	1.0	22.2
		16QAM	1	1	20.92	21.84	21.89	21.15	21.69	20.16	1.0	22.2
		64QAM	1	1	19.89	19.26	19.71	20.39	19.70	19.35	2.5	20.7
		256QAM	1	1	17.77	17.51	17.36	18.04	17.00	17.48	4.5	18.7
	CP-OFDM	QPSK	1	1	20.42	21.22	21.32	20.73	21.11	20.18	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632668	633332	634000	649334	656000	662666		
					3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.31	22.72	22.44	22.13	22.73	22.08	0.0	23.2
			1	109	22.92	22.19	23.20	22.79	22.13	22.38	0.0	23.2
			1	215	22.40	22.13	22.04	22.13	22.11	22.31	0.0	23.2
			108	0	21.31	22.18	21.41	21.91	22.31	21.94	0.5	22.7
			108	55	22.78	22.24	23.02	22.80	22.34	22.27	0.0	23.2
			108	109	21.80	21.52	21.82	22.22	21.60	21.88	0.5	22.7
			216	0	21.60	21.69	22.42	22.16	22.28	21.78	0.5	22.7
		QPSK	1	1	22.55	22.73	22.13	22.25	22.79	22.18	0.0	23.2
			1	109	21.94	22.01	23.15	22.80	22.29	22.37	0.0	23.2
			1	215	22.19	22.13	22.42	22.19	22.03	22.45	0.0	23.2
			108	0	21.68	21.69	21.39	21.43	22.07	21.42	1.0	22.2
			108	55	22.10	21.98	23.06	22.86	22.56	22.41	0.0	23.2
			108	109	22.15	20.87	21.55	21.65	21.15	21.38	1.0	22.2
			216	0	21.61	21.32	21.67	21.61	21.33	21.33	1.0	22.2
		16QAM	1	1	20.74	21.71	21.78	21.35	21.89	20.77	1.0	22.2
		64QAM	1	1	19.90	19.37	19.76	20.51	19.81	19.89	2.5	20.7
		256QAM	1	1	17.89	17.53	17.27	18.39	17.39	17.91	4.5	18.7
	CP-OFDM	QPSK	1	1	20.60	21.11	21.24	20.97	21.32	20.72	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632334	633332	634332	649000	656000	663000		
					3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.31	22.67	22.51	21.98	22.47	21.54	0.0	23.2
			1	95	22.92	22.26	23.20	22.67	21.89	21.97	0.0	23.2
			1	188	22.40	22.16	21.93	21.88	21.59	21.76	0.0	23.2
			90	0	21.31	22.24	21.56	21.85	22.07	21.46	0.5	22.7
			90	50	22.78	21.66	22.59	22.24	21.54	21.28	0.0	23.2
			90	99	21.80	21.48	21.87	22.16	21.36	21.37	0.5	22.7
			180	0	21.60	21.73	22.55	22.11	22.00	21.32	0.5	22.7
		QPSK	1	1	22.55	22.78	22.24	22.09	22.60	21.57	0.0	23.2
			1	95	21.94	22.19	22.40	22.71	22.04	21.95	0.0	23.2
			1	188	22.19	22.19	22.35	21.97	21.73	21.86	0.0	23.2
			90	0	21.68	21.63	21.54	21.26	21.81	20.89	1.0	22.2
			90	50	22.10	21.19	22.11	21.65	21.22	22.15	0.0	23.2
			90	99	22.15	21.17	21.52	21.55	20.93	20.88	1.0	22.2
			180	0	21.61	21.39	21.69	21.47	21.17	20.86	1.0	22.2
		16QAM	1	1	20.74	21.93	21.99	21.06	21.80	20.31	1.0	22.2
		64QAM	1	1	19.90	19.31	19.80	20.00	19.75	19.29	2.5	20.7
		256QAM	1	1	17.89	17.63	17.33	17.90	16.98	17.29	4.5	18.7
	CP-OFDM	QPSK	1	1	20.60	21.27	21.36	20.65	21.01	20.11	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					632000	633332	634666	648668	656000	663332		
					3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.24	22.67	22.51	21.98	22.47	21.54	0.0	23.2
			1	81	22.90	22.26	23.20	22.67	21.89	21.97	0.0	23.2
			1	160	22.29	22.16	21.93	21.88	21.59	21.76	0.0	23.2
			81	0	21.26	22.24	21.56	21.85	22.07	21.46	0.5	22.7
			81	41	22.20	21.66	22.59	22.24	21.54	21.28	0.0	23.2
			81	81	21.64	21.48	21.87	22.16	21.36	21.37	0.5	22.7
			162	0	21.54	21.73	22.55	22.11	22.00	21.32	0.5	22.7
		QPSK	1	1	22.46	22.78	22.24	22.09	22.60	21.57	0.0	23.2
			1	81	21.88	22.19	22.40	22.71	22.04	21.95	0.0	23.2
			1	160	22.19	22.19	22.35	21.97	21.73	21.86	0.0	23.2
			81	0	21.62	21.63	21.54	21.26	21.81	20.89	1.0	22.2
			81	41	21.07	21.19	22.11	21.65	21.22	21.05	0.0	23.2
			81	81	21.97	21.17	21.52	21.55	20.93	20.88	1.0	22.2
			162	0	21.53	21.39	21.69	21.47	21.17	20.86	1.0	22.2
		16QAM	1	1	20.79	21.93	21.99	21.06	21.80	20.31	1.0	22.2
		64QAM	1	1	19.84	19.31	19.80	20.00	19.75	19.29	2.5	20.7
		256QAM	1	1	17.75	17.63	17.33	17.90	16.98	17.29	4.5	18.7
	CP-OFDM	QPSK	1	1	20.39	21.27	21.36	20.65	21.01	20.11	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631668	633332	635000	648334	656000	663666		
					3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.22	22.72	22.65	22.02	22.48	21.42	0.0	23.2
			67	1	22.85	22.18	23.20	22.73	21.90	21.81	0.0	23.2
			131	1	22.20	22.13	22.00	21.96	21.60	21.68	0.0	23.2
			0	64	21.28	22.19	21.66	21.84	22.02	21.44	0.5	22.7
			35	64	22.70	22.10	23.20	22.82	21.97	21.75	0.0	23.2
			69	64	21.54	21.48	21.82	22.30	21.28	21.34	0.5	22.7
			0	128	21.54	21.72	22.62	22.16	21.96	21.25	0.5	22.7
		QPSK	1	1	22.47	22.77	22.37	22.08	22.49	21.48	0.0	23.2
			67	1	21.91	22.01	22.38	22.81	21.92	21.85	0.0	23.2
			131	1	22.06	22.16	22.34	21.95	21.59	21.76	0.0	23.2
			0	64	21.58	21.69	21.68	21.30	21.74	20.86	1.0	22.2
			35	64	22.07	22.27	23.15	22.63	22.17	21.87	0.0	23.2
			69	64	21.90	21.21	21.50	21.66	20.86	20.80	1.0	22.2
			0	128	21.57	21.47	21.79	21.50	21.06	20.76	1.0	22.2
		16QAM	1	1	20.86	22.05	21.98	21.17	21.53	20.22	1.0	22.2
		64QAM	1	1	19.89	19.38	19.91	20.20	19.39	19.24	2.5	20.7
		256QAM	1	1	17.66	17.75	17.40	18.03	17.09	17.28	4.5	18.7
	CP-OFDM	QPSK	1	1	20.41	21.38	21.57	20.70	20.99	19.99	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631334	633332	635332	648000	656000	664000		
					3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.23	22.81	22.69	22.00	22.46	21.47	0.0	23.2
			1	53	22.81	22.15	23.18	22.67	21.78	21.83	0.0	23.2
			1	104	22.09	22.21	21.89	21.94	21.51	21.71	0.0	23.2
			50	0	21.17	22.27	21.69	21.74	21.99	21.49	0.5	22.7
			50	28	22.68	22.12	23.08	22.66	21.91	21.76	0.0	23.2
			50	56	21.48	21.42	21.68	22.37	21.23	21.30	0.5	22.7
			100	0	21.56	21.71	22.57	22.05	21.92	21.23	0.5	22.7
		QPSK	1	1	22.54	22.85	22.45	22.08	22.51	21.59	0.0	23.2
			1	53	21.81	22.06	23.18	22.69	21.89	21.82	0.0	23.2
			1	104	21.93	22.21	22.38	22.14	21.55	21.81	0.0	23.2
			50	0	21.54	21.71	21.67	21.21	21.67	20.94	1.0	22.2
			50	28	22.07	22.23	23.17	22.65	22.13	21.88	0.0	23.2
			50	56	21.92	21.11	21.39	21.74	20.80	20.82	1.0	22.2
			100	0	21.55	21.46	21.69	21.51	21.03	20.74	1.0	22.2
		16QAM	1	1	20.87	21.99	22.16	21.19	21.48	20.21	1.0	22.2
		64QAM	1	1	19.91	19.47	20.16	19.99	19.67	19.24	2.5	20.7
		256QAM	1	1	17.60	17.73	17.37	18.11	17.03	17.19	4.5	18.7
	CP-OFDM	QPSK	1	1	20.42	21.26	21.49	20.64	21.01	20.03	1.5	21.7
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					631000	633332	635668	647668	656000	664332		
					3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.28	22.74	22.83	21.86	22.40	21.55	0.0	23.2
			1	39	22.79	22.15	23.19	22.57	21.81	21.82	0.0	23.2
			1	76	22.02	22.19	21.91	22.16	21.51	21.71	0.0	23.2
			36	0	21.19	22.21	21.76	21.77	22.02	21.53	0.5	22.7
			36	21	22.69	22.14	23.07	22.66	21.92	21.73	0.0	23.2
			36	42	21.48	21.40	21.66	22.33	21.19	21.25	0.5	22.7
			75	0	21.52	21.67	22.46	22.02	21.91	21.14	0.5	22.7
		QPSK	1	1	22.54	22.89	22.58	22.06	22.47	21.63	0.0	23.2
			1	39	21.78	22.02	23.16	22.61	21.86	21.81	0.0	23.2
			1	76	21.88	22.21	22.37	22.30	21.49	21.84	0.0	23.2
			36	0	21.50	21.72	21.79	21.13	21.66	20.92	1.0	22.2
			36	21	22.06	22.22	23.13	22.59	22.10	21.81	0.0	23.2
			36	42	21.82	21.15	21.34	21.74	20.78	20.79	1.0	22.2
			75	0	21.58	21.42	21.71	21.45	21.05	20.68	1.0	22.2
		16QAM	1	1	20.78	22.05	22.15	21.17	21.62	20.48	1.0	22.2
		64QAM	1	1	19.85	19.52	20.17	20.13	19.40	19.47	2.5	20.7
		256QAM	1	1	17.76	17.71	17.42	17.88	16.62	17.31	4.5	18.7
	CP-OFDM	QPSK	1	1	20.51	21.31	21.70	20.58	21.02	20.21	1.5	21.7
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630834	633332	635832	647500	656000	664500		
					3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.28	22.90	22.89	22.02	22.48	21.61	0.0	23.2
			1	26	22.70	22.16	23.13	22.62	21.82	21.78	0.0	23.2
			1	49	21.98	22.19	21.94	22.19	21.45	21.75	0.0	23.2
			25	0	21.19	22.33	21.74	21.79	22.05	21.49	0.5	22.7
			25	13	22.63	22.16	23.01	22.68	21.98	21.66	0.0	23.2
			25	26	21.48	21.43	21.58	22.39	21.24	21.26	0.5	22.7
			50	0	21.45	21.75	22.48	22.08	21.93	21.18	0.5	22.7
		QPSK	1	1	22.53	22.89	22.59	22.13	22.51	21.63	0.0	23.2
			1	26	21.80	22.06	23.12	22.70	21.89	21.75	0.0	23.2
			1	49	21.86	22.21	22.35	22.34	21.56	21.83	0.0	23.2
			25	0	21.49	21.80	21.74	21.24	21.75	20.94	1.0	22.2
			25	13	22.01	22.25	23.06	22.59	22.13	21.78	0.0	23.2
			25	26	21.82	21.15	21.27	21.77	20.86	20.78	1.0	22.2
			50	0	21.49	21.48	21.64	21.51	21.14	20.67	1.0	22.2
		16QAM	1	1	20.87	22.06	22.14	21.03	21.47	20.40	1.0	22.2
		64QAM	1	1	19.96	19.61	20.18	20.06	19.45	19.42	2.5	20.7
		256QAM	1	1	17.89	17.86	17.69	17.99	17.01	17.30	4.5	18.7
	CP-OFDM	QPSK	1	1	20.48	21.44	21.70	20.64	21.09	20.16	1.5	21.7

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630668	633332	636000	647334	656000	664666		
					3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.27	22.92	22.86	21.93	22.50	21.61	0.0	23.2
			1	26	22.72	22.16	23.06	22.63	21.83	21.72	0.0	23.2
			1	49	22.02	22.13	21.91	22.25	21.47	21.79	0.0	23.2
			25	0	21.22	22.33	21.71	21.80	22.03	21.40	0.5	22.7
			25	13	22.59	22.16	22.94	22.65	21.96	21.64	0.0	23.2
			25	26	21.41	21.40	21.50	22.32	21.31	21.23	0.5	22.7
			50	0	21.47	21.75	22.44	22.05	21.91	21.13	0.5	22.7
		QPSK	1	1	22.54	23.02	22.60	22.12	22.58	21.66	0.0	23.2
			1	26	21.75	22.06	23.05	22.64	21.89	21.75	0.0	23.2
			1	49	21.89	22.19	22.32	22.36	21.55	21.87	0.0	23.2
			25	0	21.43	21.81	21.70	21.23	21.73	20.87	1.0	22.2
			25	13	21.95	22.25	22.99	22.61	22.19	21.72	0.0	23.2
			25	26	21.78	21.12	21.19	21.69	20.83	20.76	1.0	22.2
			50	0	21.46	21.54	21.60	21.49	21.07	20.65	1.0	22.2
		16QAM	1	1	20.77	22.16	22.14	21.14	21.62	20.16	1.0	22.2
		64QAM	1	1	19.98	19.70	20.23	19.97	19.55	19.21	2.5	20.7
		256QAM	1	1	17.75	17.93	17.64	17.96	16.99	17.32	4.5	18.7
	CP-OFDM	QPSK	1	1	20.60	21.43	21.70	20.73	21.09	20.18	1.5	21.7
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630500	633332	636168	647168	656000	664832		
					3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.43	22.95	22.79	21.98	22.46	21.50	0.0	23.2
			1	19	22.83	22.25	23.04	22.58	21.74	21.69	0.0	23.2
			1	36	22.10	22.20	21.81	22.13	21.39	21.64	0.0	23.2
			18	0	21.30	22.33	21.57	21.75	22.01	21.43	0.5	22.7
			18	10	22.71	22.20	22.91	22.61	21.84	21.64	0.0	23.2
			18	20	21.57	21.39	21.48	22.30	21.22	21.29	0.5	22.7
			36	0	21.61	21.77	22.33	21.99	21.86	21.18	0.5	22.7
		QPSK	1	1	22.72	23.03	22.54	22.08	22.49	21.65	0.0	23.2
			1	19	21.88	22.06	22.98	22.66	21.85	21.77	0.0	23.2
			1	36	21.95	22.16	22.28	22.24	21.48	21.91	0.0	23.2
			18	0	21.58	21.86	21.57	21.19	21.70	20.88	1.0	22.2
			18	10	22.04	22.25	22.89	22.57	22.08	21.78	0.0	23.2
			18	20	21.88	21.07	21.15	21.67	20.80	20.81	1.0	22.2
			36	0	21.50	21.49	21.54	21.41	21.01	20.67	1.0	22.2
		16QAM	1	1	20.96	22.20	22.10	21.00	21.56	20.51	1.0	22.2
		64QAM	1	1	20.03	19.77	20.00	20.00	19.58	19.36	2.5	20.7
		256QAM	1	1	17.85	17.95	17.40	18.03	16.82	17.58	4.5	18.7
	CP-OFDM	QPSK	1	1	20.60	21.41	21.64	20.71	21.00	20.15	1.5	21.7
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					630334	633332	636332	647000	656000	665000		
					3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.08	22.87	22.65	21.88	22.45	21.49	0.0	23.2
			1	12	22.41	22.03	22.86	22.52	21.79	21.74	0.0	23.2
			1	22	21.71	22.01	21.79	22.13	21.44	21.70	0.0	23.2
			12	0	21.01	22.22	21.52	21.73	21.99	21.42	0.5	22.7
			12	6	22.36	22.01	22.67	22.59	21.87	21.64	0.0	23.2
			12	12	21.22	21.24	21.34	22.26	21.19	21.35	0.5	22.7
			24	0	21.22	21.63	22.25	22.00	21.89	21.19	0.5	22.7
		QPSK	1	1	22.41	22.90	22.37	22.02	22.50	21.71	0.0	23.2
			1	12	21.54	21.94	22.83	22.57	21.82	21.81	0.0	23.2
			1	22	21.61	22.01	22.26	22.17	21.51	21.97	0.0	23.2
			12	0	21.29	21.76	21.49	21.20	21.62	20.95	1.0	22.2
			12	6	21.75	22.12	22.78	22.51	22.01	21.88	0.0	23.2
			12	12	21.58	20.98	21.03	21.63	20.79	20.93	1.0	22.2
			24	0	21.29	21.44	21.39	21.38	20.95	20.78	1.0	22.2
		16QAM	1	1	20.73	22.12	22.10	21.03	21.96	20.49	1.0	22.2
		64QAM	1	1	19.77	19.41	20.05	20.26	19.45	19.30	2.5	20.7
		256QAM	1	1	17.44	17.95	17.40	17.87	16.99	17.72	4.5	18.7
	CP-OFDM	QPSK	1	1	20.37	21.35	21.68	20.67	21.05	20.34	1.5	21.7

NR Band n77(PC3, SRS1)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS1							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				18.66		18.29	18.63	19.57	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			18.63	18.92	18.81	18.40	18.14	20.14	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			18.57	18.83	18.75	18.18	18.25	19.52	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			18.31	18.83	18.63	18.49	18.34	20.46	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			18.41	18.82	18.78	18.65	18.22	20.44	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			18.01	18.82	18.97	18.57	18.27	20.30	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	19.5
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			18.26	19.14	19.14	18.92	18.28	20.38	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			18.34	19.10	19.39	18.55	18.06	20.41	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			18.42	18.96	19.39	18.93	18.11	20.34	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			18.28	18.96	19.57	18.47	18.09	19.93	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			18.80	18.92	19.55	18.82	18.01	20.35	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			18.59	19.11	19.65	18.97	18.03	20.01	0.0	

NR Band n77(PC3, SRS2)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS2							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				21.04		20.54	20.49	20.22	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			21.41	21.31	21.48	20.66	20.38	20.03	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			20.94	21.33	21.44	20.52	20.26	20.08	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			21.17	21.21	20.94	20.80	20.37	20.44	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			21.35	21.35	21.40	20.77	20.66	20.09	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			21.11	21.40	21.73	20.69	20.72	20.30	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	21.0
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			21.00	21.55	21.60	21.08	20.68	20.36	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			21.33	21.54	21.55	21.31	20.94	20.17	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			21.00	21.52	21.92	20.66	20.56	20.12	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			21.23	21.66	21.73	21.02	20.76	20.07	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			21.43	21.50	21.65	21.22	20.53	20.11	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			21.32	21.66	21.58	20.93	20.66	20.10	0.0	

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

NR Band n77(PC3, SRS3)

BW (MHz)	RB Allocation	RB offset	Maximum Average Power (dBm) SRS3							
			Measured Pwr (dBm)						MPR	Tune-up Limit
100 MHz	1	1	[redacted]	633332	[redacted]	650000	656000	662000		
				3499.98MHz		3750 MHz	3840 MHz	3930 MHz		
				18.40		17.79	17.10	17.33	0.0	
90 MHz	1	1	633000	633332	633666	649666	656000	662332	MPR	
			3495MHz	3499.98MHz	3504.99MHz	3744.99MHz	3840 MHz	3934.98MHz		
			18.59	18.42	18.47	17.80	17.14	17.72	0.0	
80 MHz	1	1	632668	633332	634000	649334	656000	662666	MPR	
			3490.02 MHz	3499.98MHz	3510 MHz	3740.01 MHz	3840 MHz	3939.99 MHz		
			18.70	18.53	18.04	17.42	17.18	17.51	0.0	
70 MHz	1	1	632334	633332	634332	649000	656000	663000	MPR	
			3485.01 MHz	3499.98MHz	3514.98 MHz	3735MHz	3840 MHz	3945MHz		
			18.61	18.33	18.17	17.39	17.20	17.79	0.0	
60 MHz	1	1	632000	633332	634666	648668	656000	663332	MPR	
			3480 MHz	3499.98MHz	3519.99 MHz	3730.02 MHz	3840 MHz	3949.98 MHz		
			18.77	18.72	18.03	17.33	17.19	17.95	0.0	
50 MHz	1	1	631668	633332	635000	648334	656000	663666	MPR	
			3475.02 MHz	3499.98MHz	3525 MHz	3725.01 MHz	3840 MHz	3954.99 MHz		
			18.67	18.25	17.97	17.43	17.26	17.91	0.0	
40 MHz	1	1	631334	633332	635332	648000	656000	664000	MPR	**18.5**
			3470.01 MHz	3499.98MHz	3529.98 MHz	3720.02 MHz	3840 MHz	3960 MHz		
			18.93	18.53	18.00	17.72	17.28	18.15	0.0	
30 MHz	1	1	631000	633332	635668	647668	656000	664332	MPR	
			3465 MHz	3499.98MHz	3535.02 MHz	3715.02 MHz	3840 MHz	3964.98 MHz		
			19.33	18.83	18.25	17.75	17.33	18.19	0.0	
25 MHz	1	1	630834	633332	635832	647500	656000	664500	MPR	
			3462.51 MHz	3499.98MHz	3537.48 MHz	3712.5 MHz	3840 MHz	3967.5 MHz		
			19.31	18.89	18.06	17.63	17.54	17.80	0.0	
20 MHz	1	1	630668	633332	636000	647334	656000	664666	MPR	
			3460.02 MHz	3499.98MHz	3540 MHz	3710.01 MHz	3840 MHz	3969.99 MHz		
			19.41	18.60	18.38	17.67	17.37	18.10	0.0	
15 MHz	1	1	630500	633332	636168	647168	656000	664832	MPR	
			3457.5 MHz	3499.98MHz	3542.52 MHz	3709.52 MHz	3840 MHz	3972.48 MHz		
			19.34	18.69	18.15	17.88	17.27	18.07	0.0	
10 MHz	1	1	630334	633332	636332	647000	656000	665000	MPR	
			3455.01 MHz	3499.98 MHz	3544.98 MHz	3705 MHz	3840 MHz	3975 MHz		
			19.45	18.89	18.08	17.91	17.21	17.99	0.0	

8.2. PEAK TO AVERAGE RATIO

Test Procedure

Per KDB 971168 D01 Power Meas License Digital Systems v03r01;

The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The PAR were measured on the Spectrum Analyzer.

Test Spec

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

NOTE

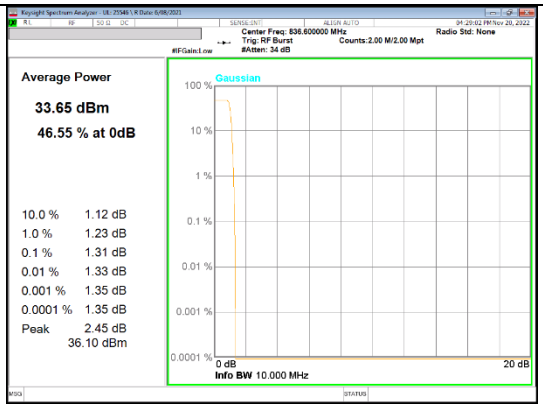
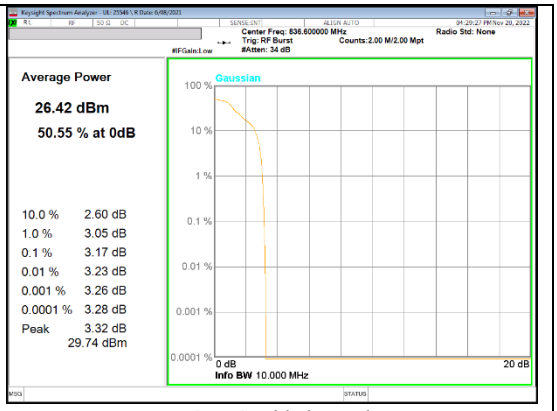
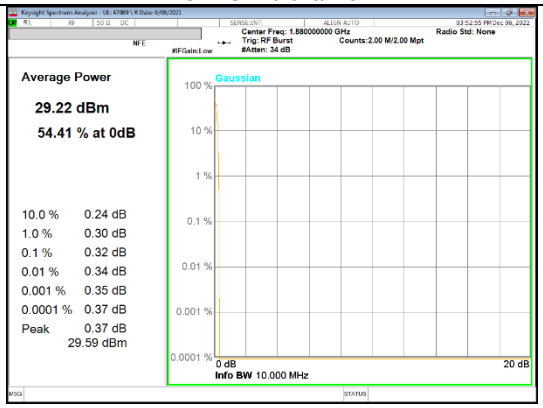
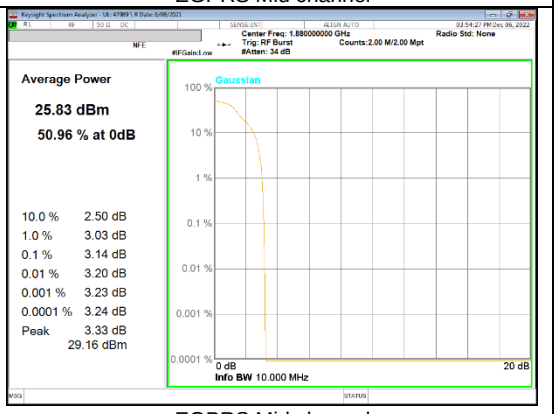
5G NR: All Waveforms (CP-OFDM vs DFT-s_OFDM) and modulations (π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

RESULTS

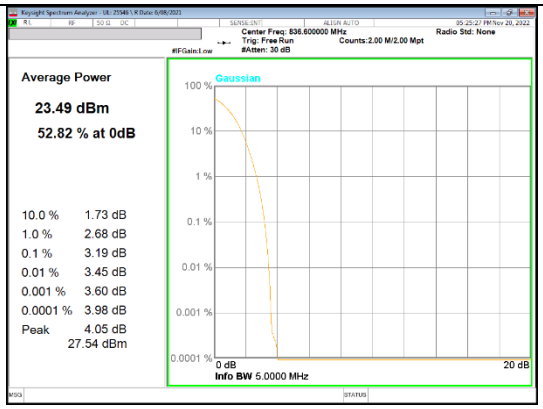
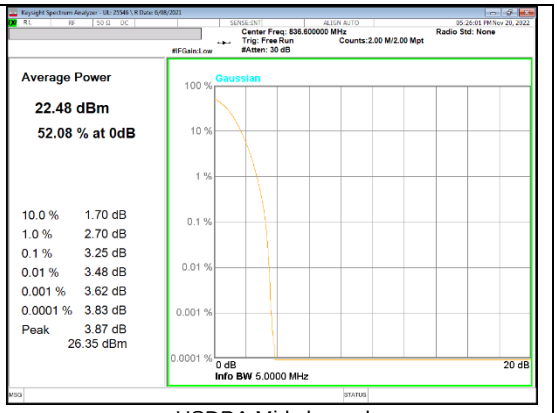
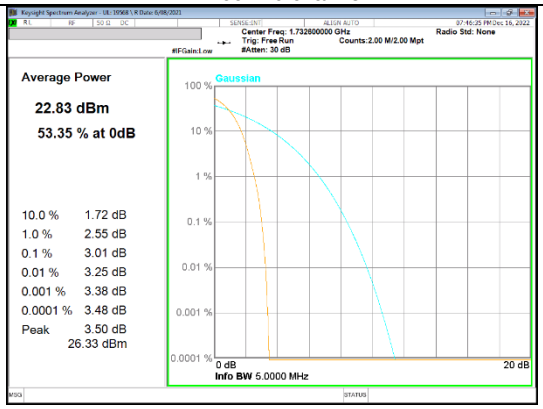
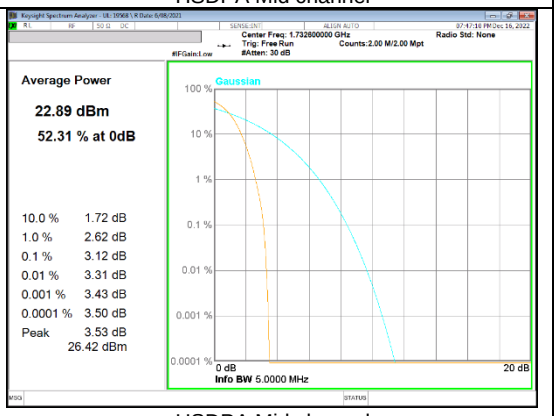
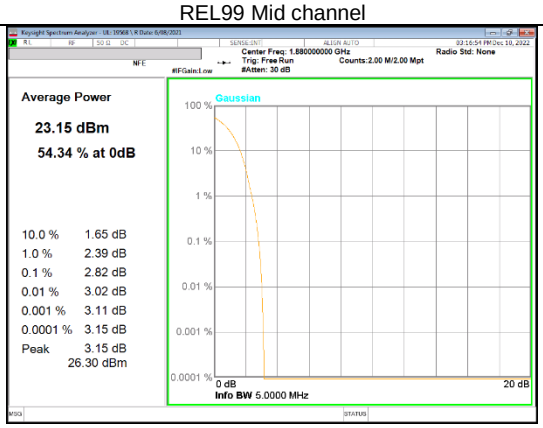
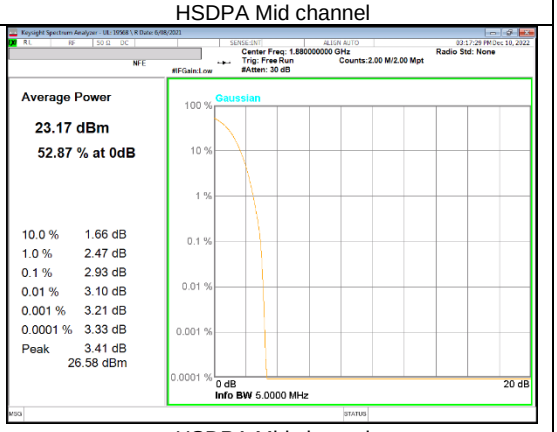
See the following pages.

8.2.1. CONDUCTED PEAK TO AVERAGE RESULT

GSM

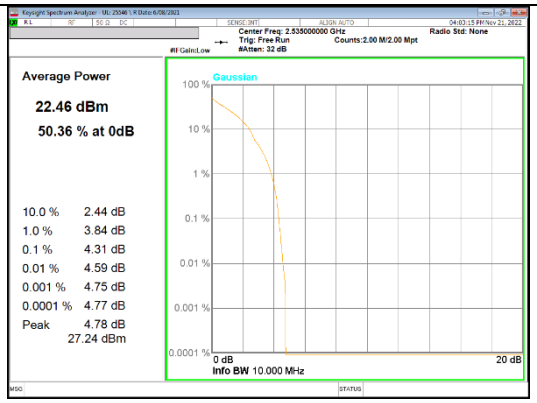
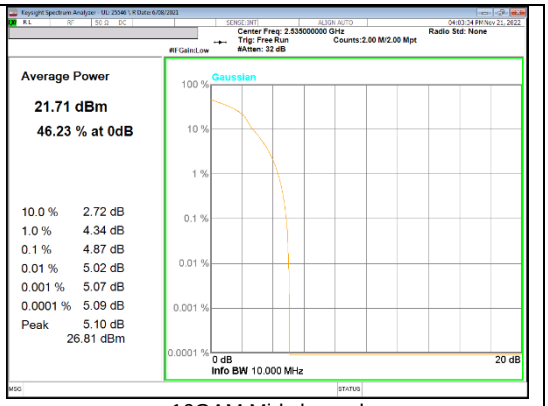
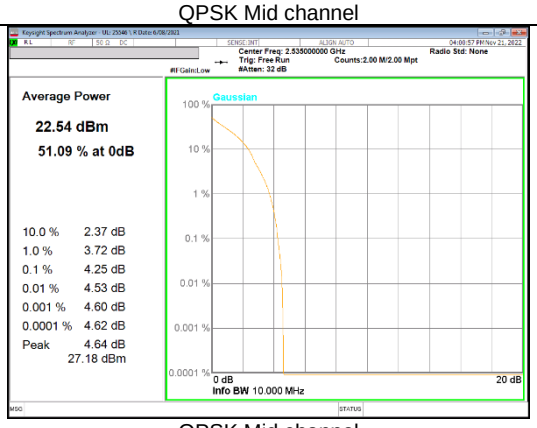
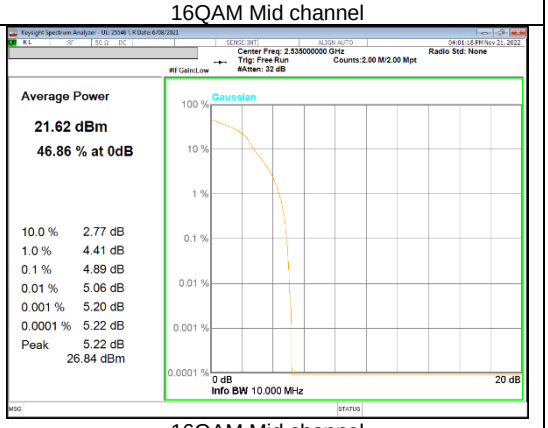
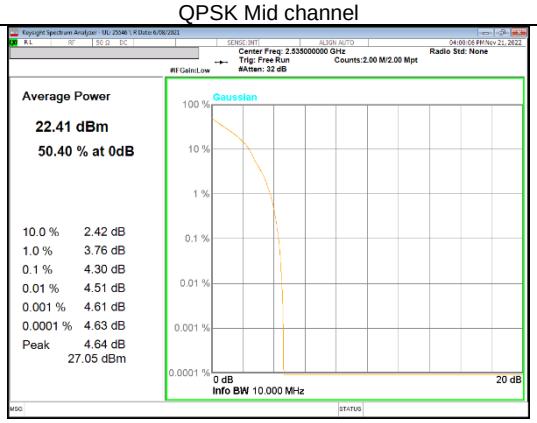
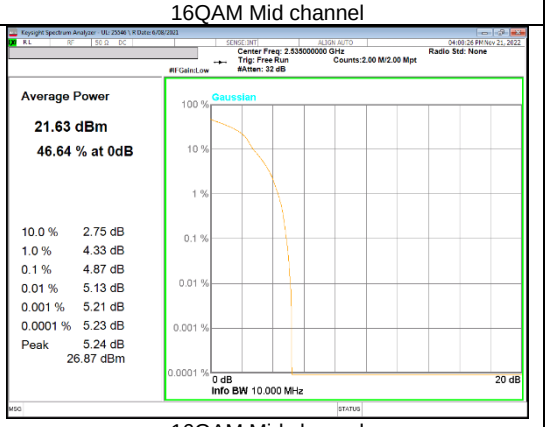
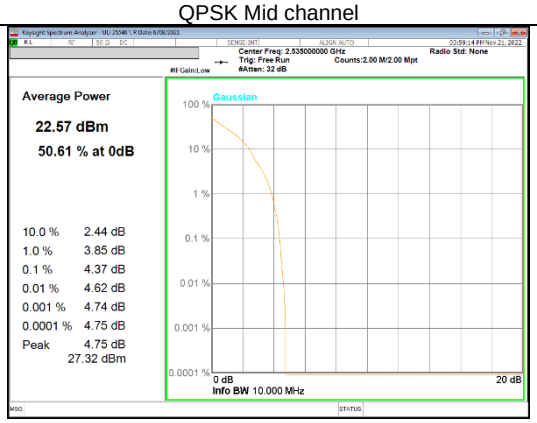
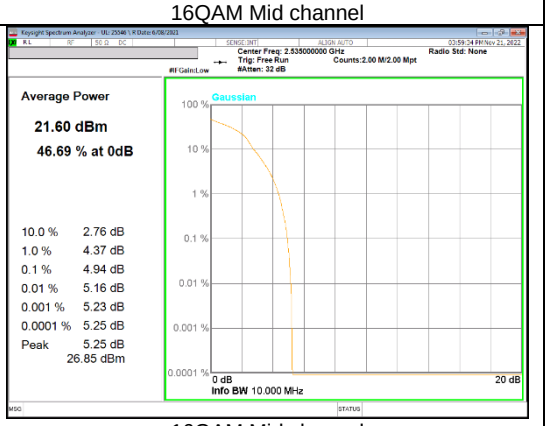
GSM 850	 GPRS Mid channel	 EGPRS Mid channel
GSM 1900	 GPRS Mid channel	 EGPRS Mid channel

WCDMA

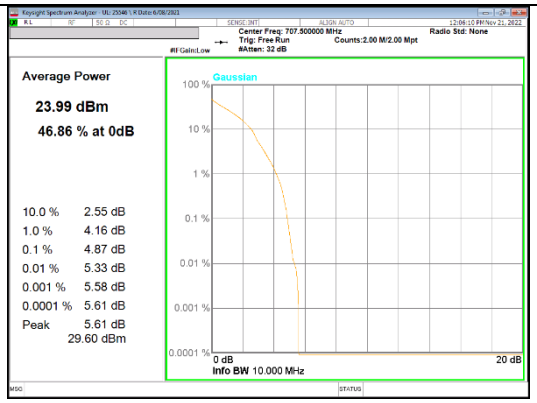
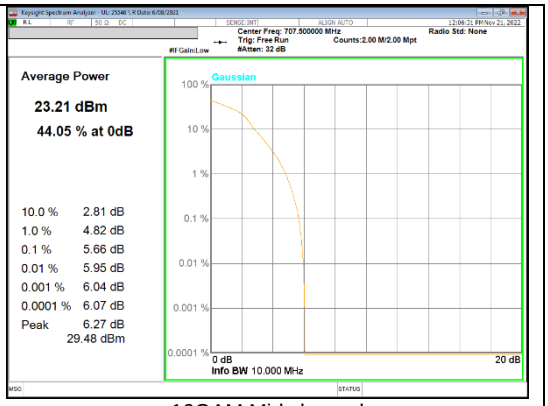
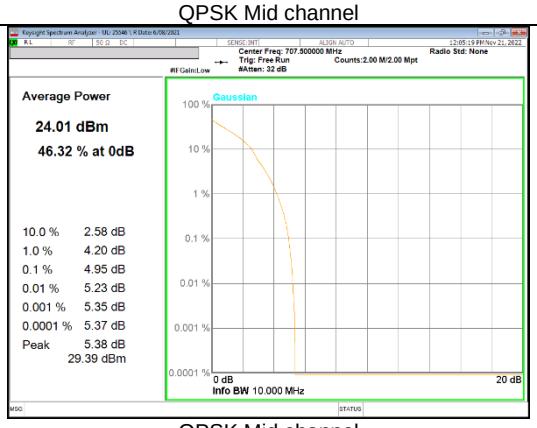
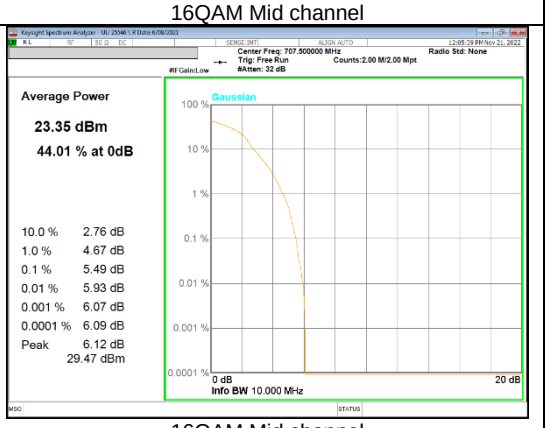
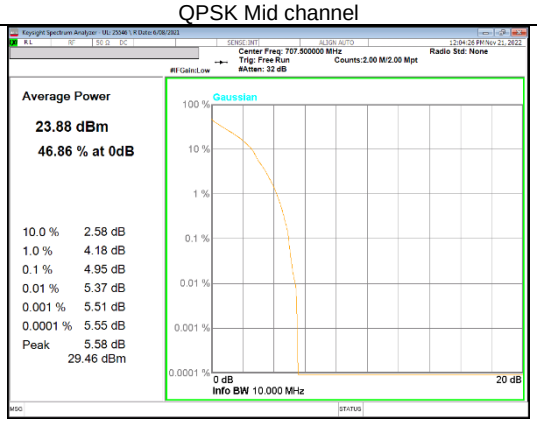
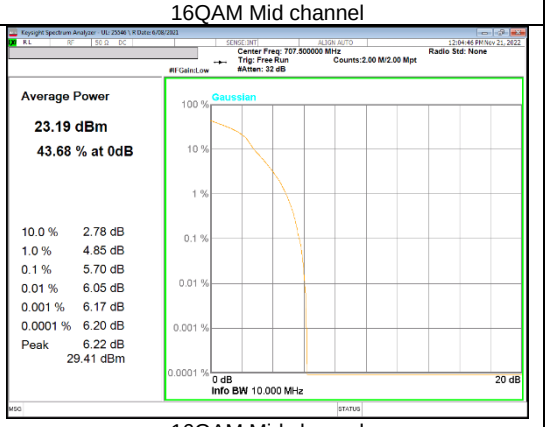
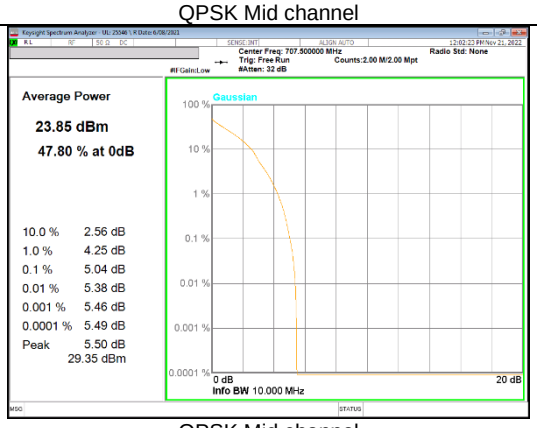
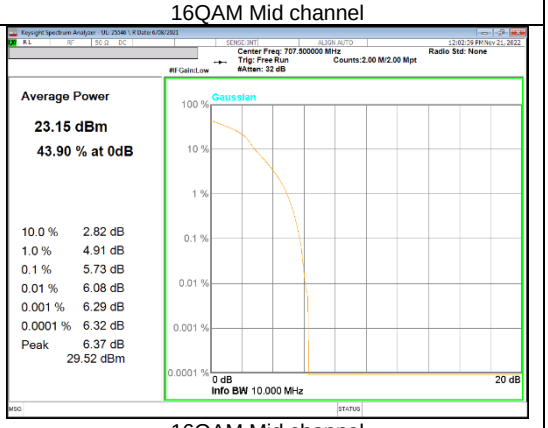
Band 5	 REL99 Mid channel	 HSDPA Mid channel
Band 4	 REL99 Mid channel	 HSDPA Mid channel
Band 2	 REL99 Mid channel	 HSDPA Mid channel

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_22/24/27/90(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

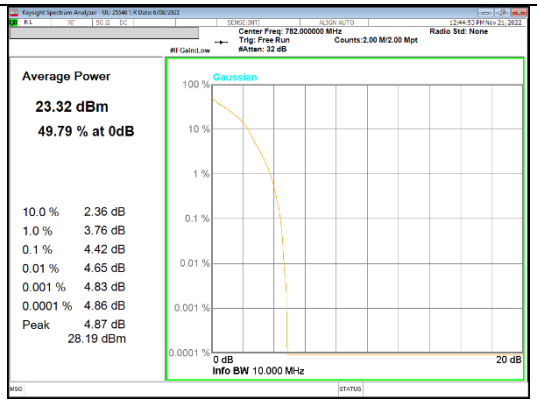
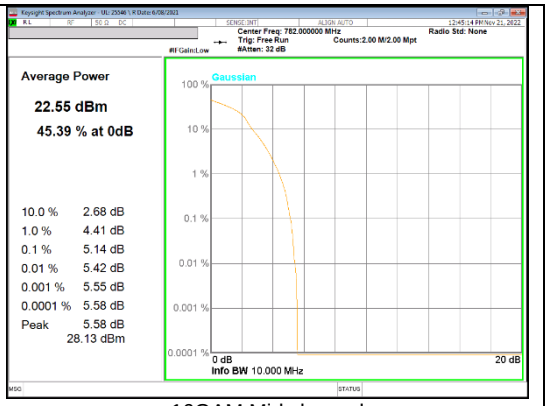
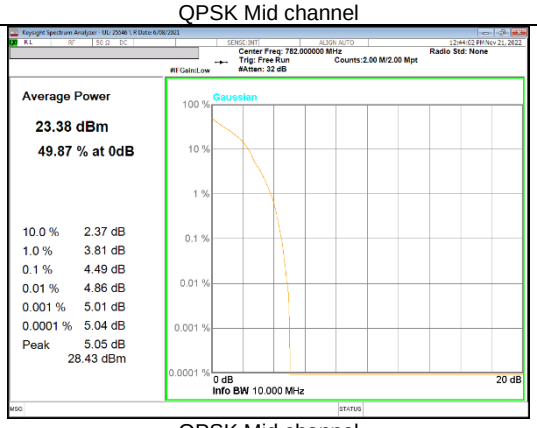
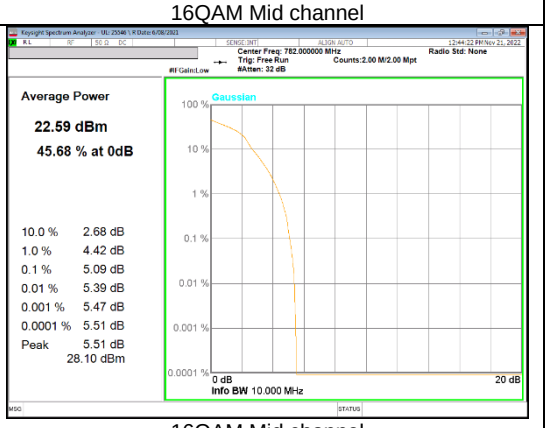
LTE Band 7

20 MHz	 QPSK Mid channel	 16QAM Mid channel
15 MHz	 QPSK Mid channel	 16QAM Mid channel
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

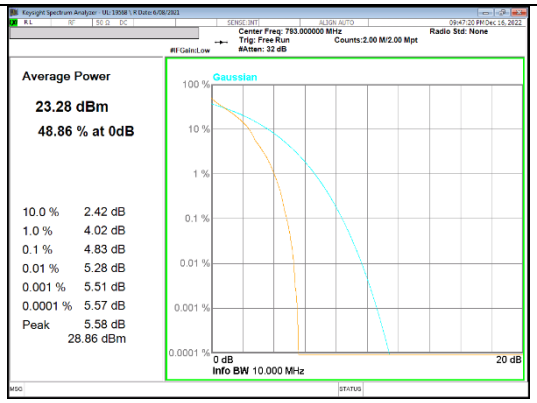
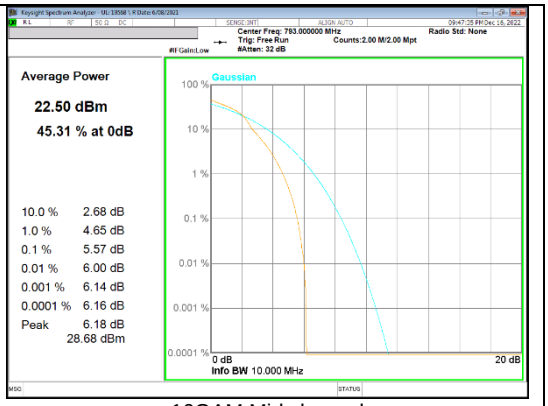
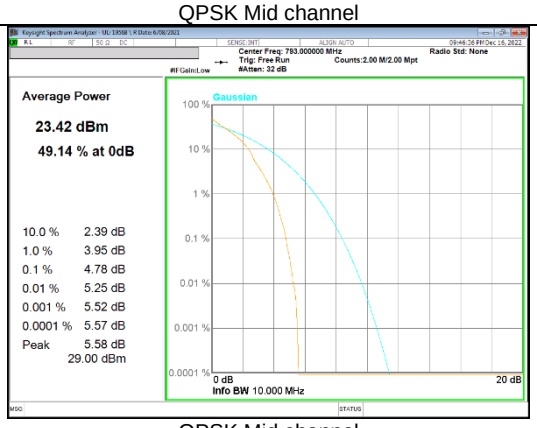
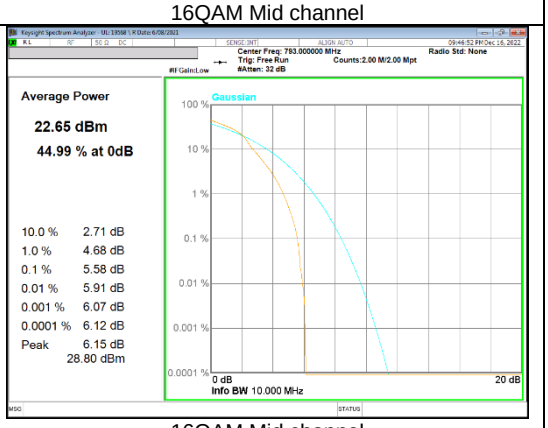
LTE Band 12

10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel
3 MHz	 QPSK Mid channel	 16QAM Mid channel
1.4 MHz	 QPSK Mid channel	 16QAM Mid channel

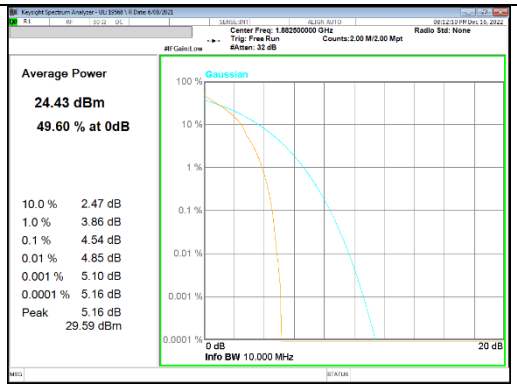
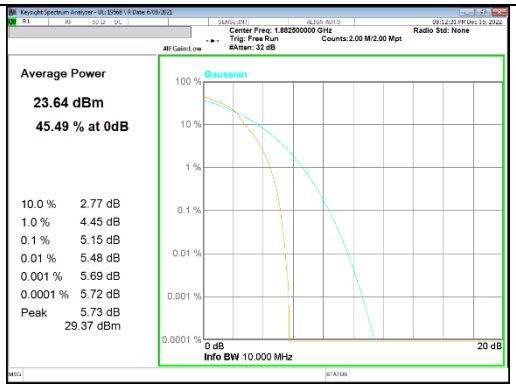
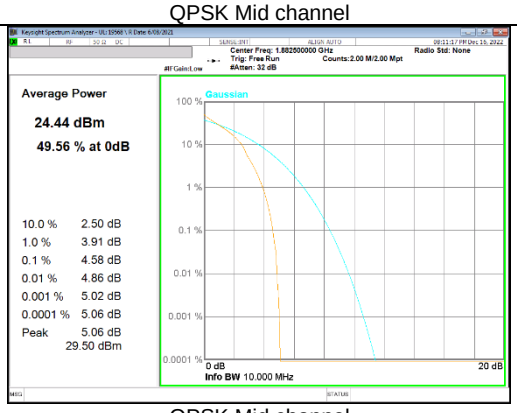
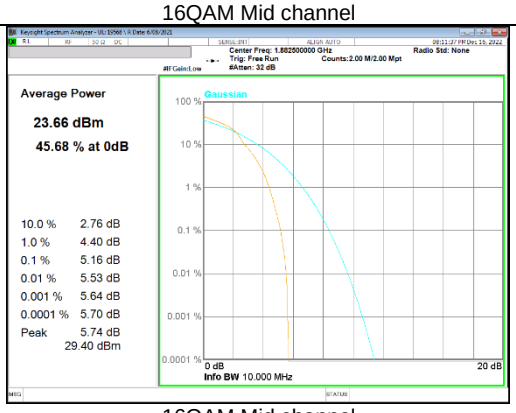
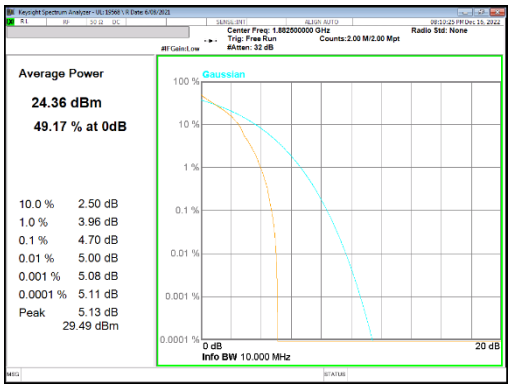
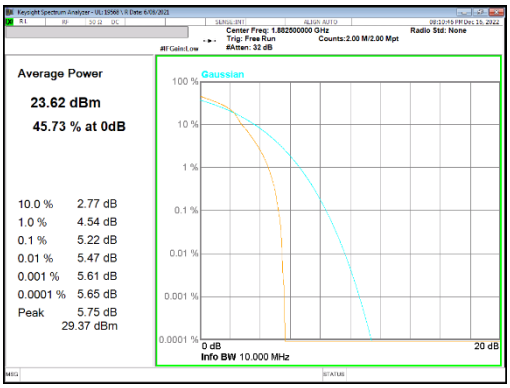
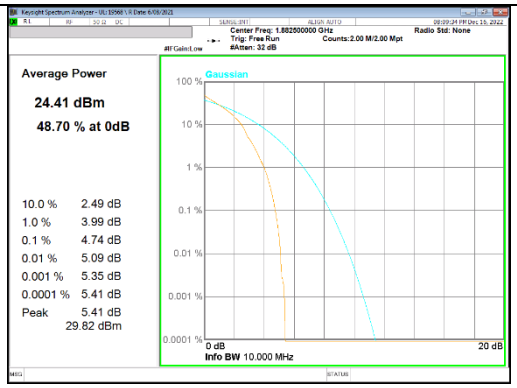
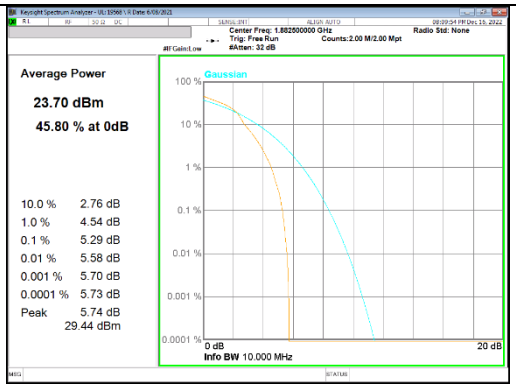
LTE Band 13

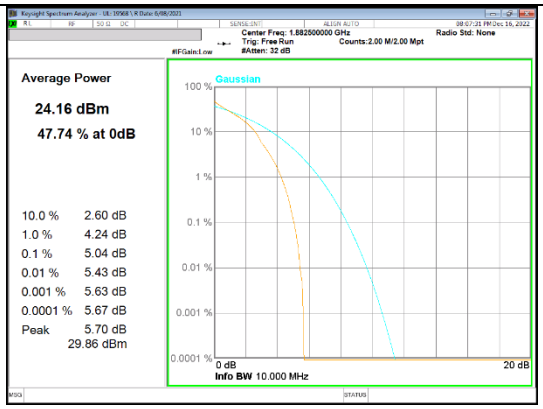
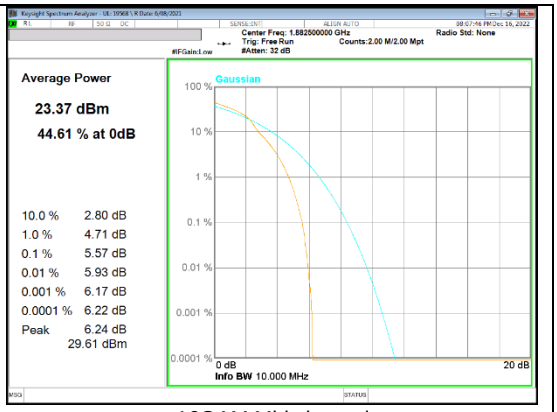
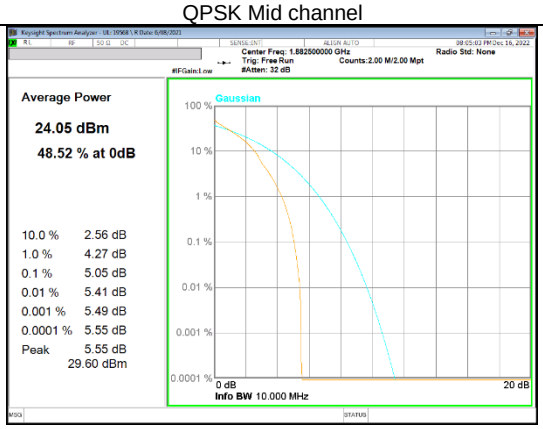
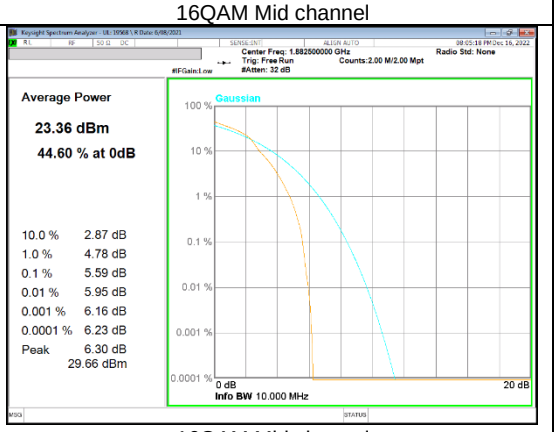
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

LTE Band 14

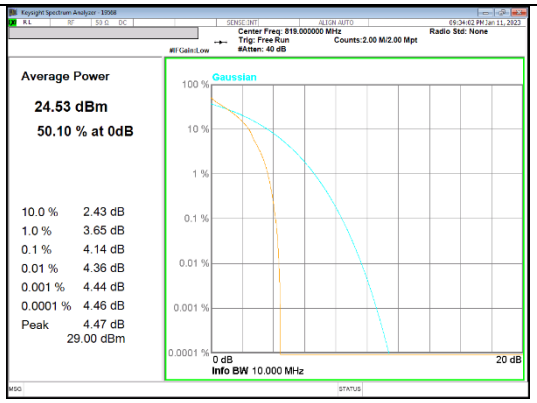
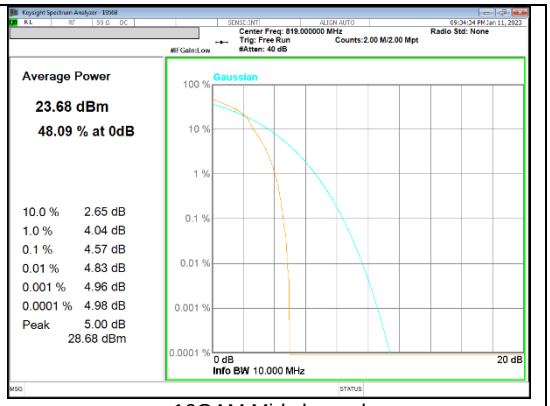
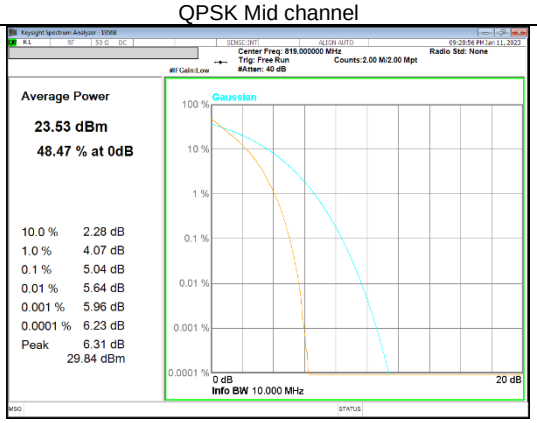
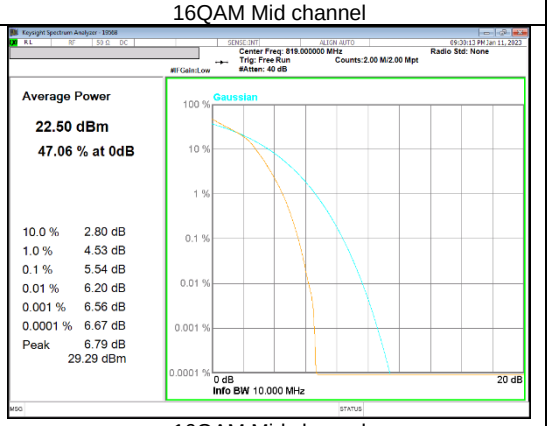
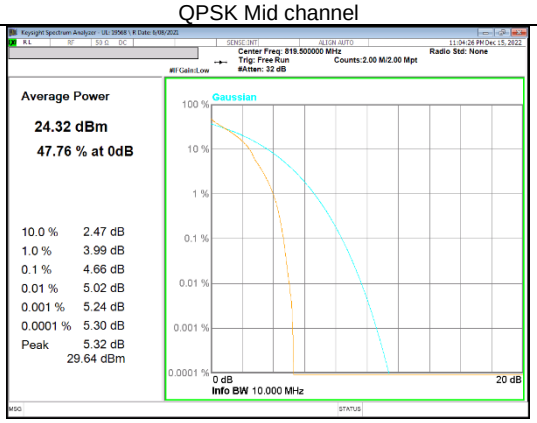
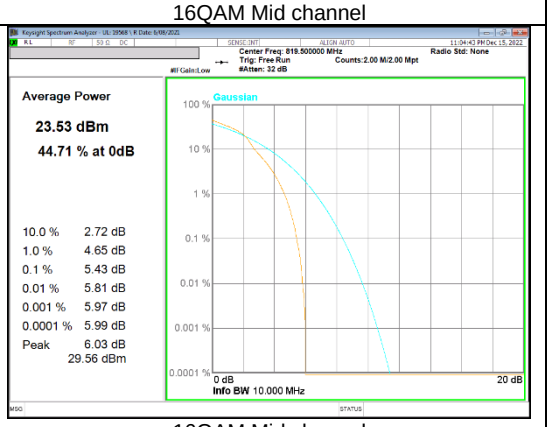
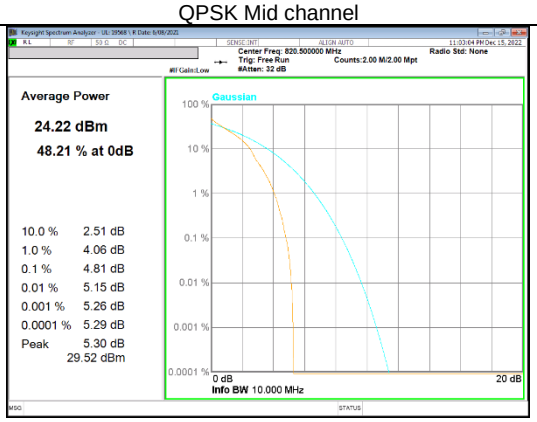
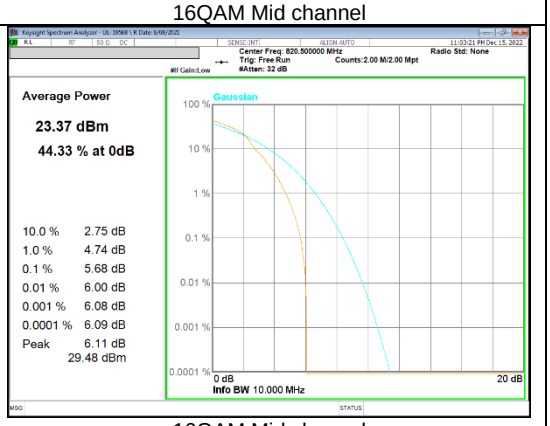
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

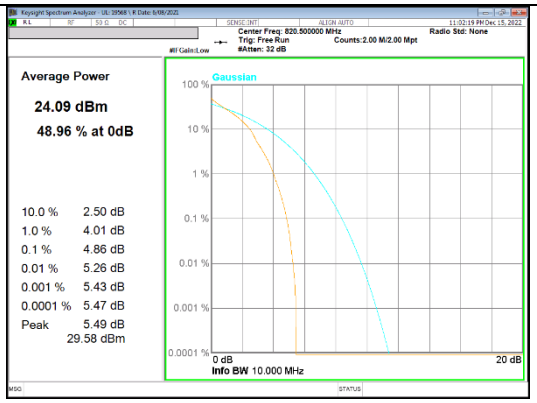
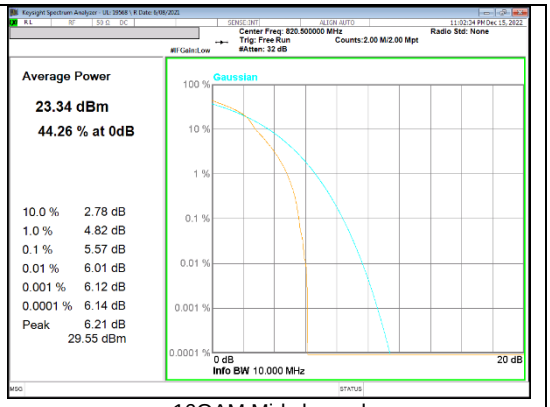
LTE Band 25

20 MHz	 QPSK Mid channel	 16QAM Mid channel
15 MHz	 QPSK Mid channel	 16QAM Mid channel
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

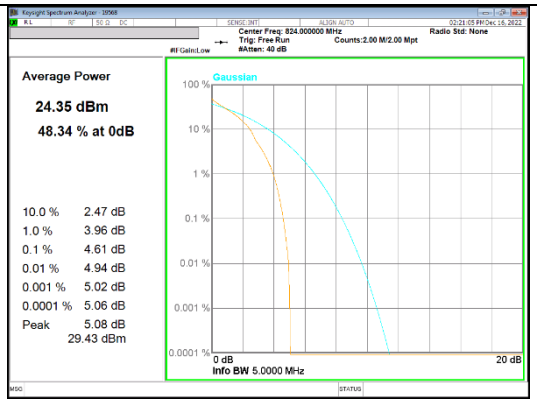
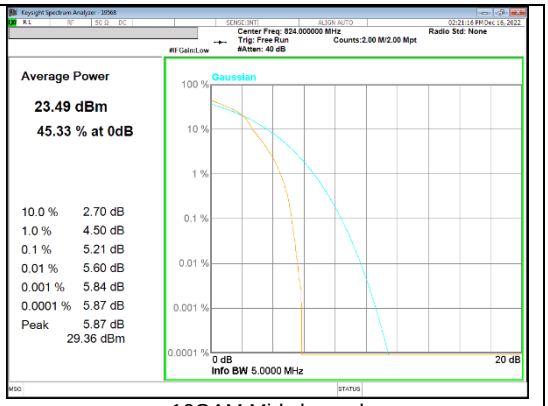
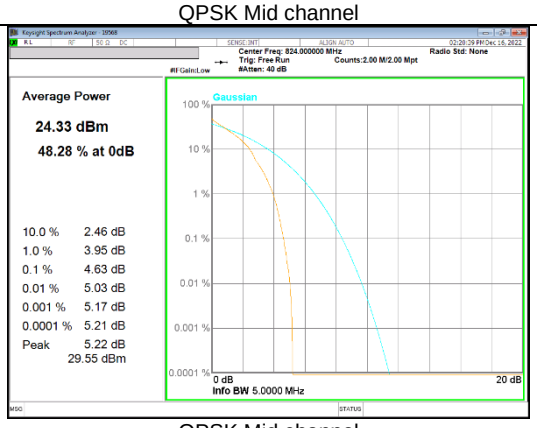
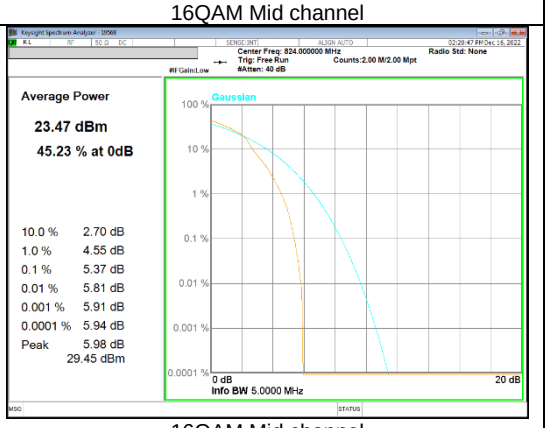
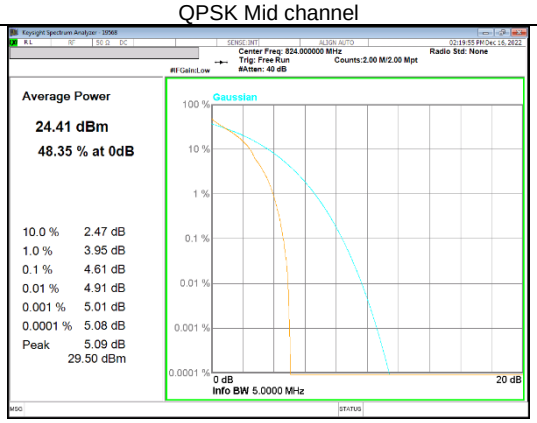
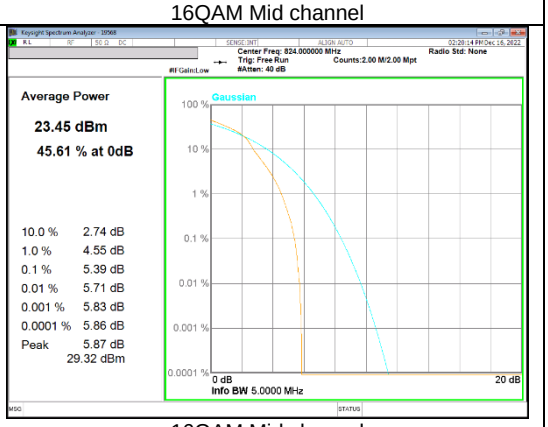
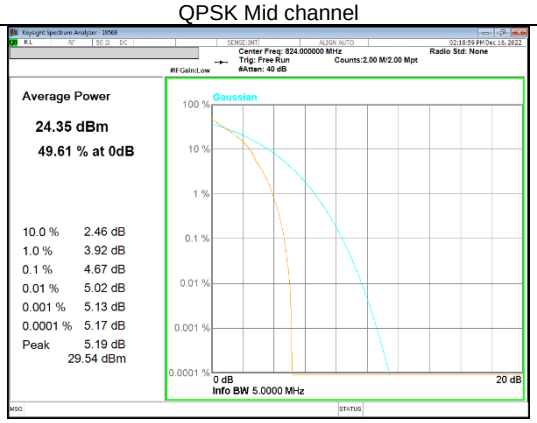
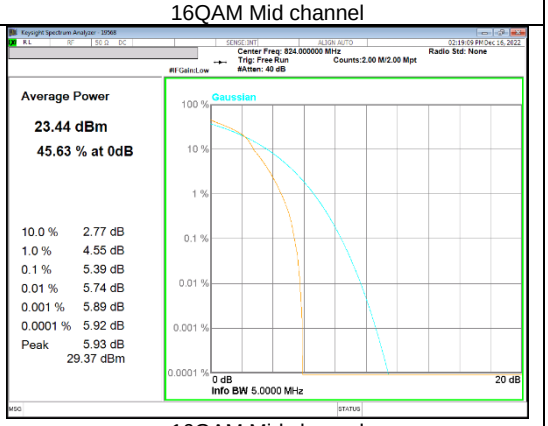
3 MHz	 QPSK Mid channel	 16QAM Mid channel
1.4 MHz	 QPSK Mid channel	 16QAM Mid channel

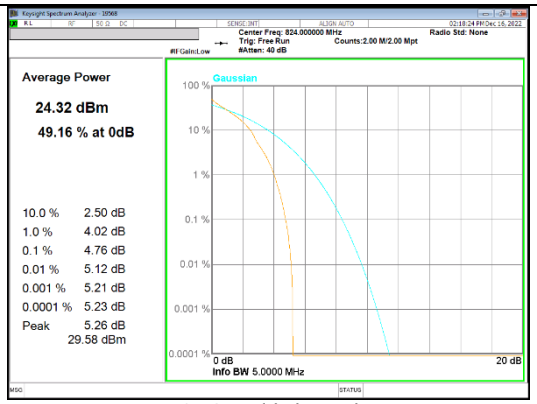
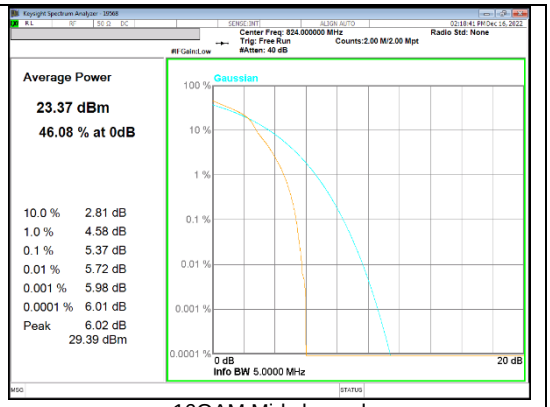
LTE Band 26 (Part 90)

15 MHz	 QPSK Mid channel	 16QAM Mid channel
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel
3 MHz	 QPSK Mid channel	 16QAM Mid channel

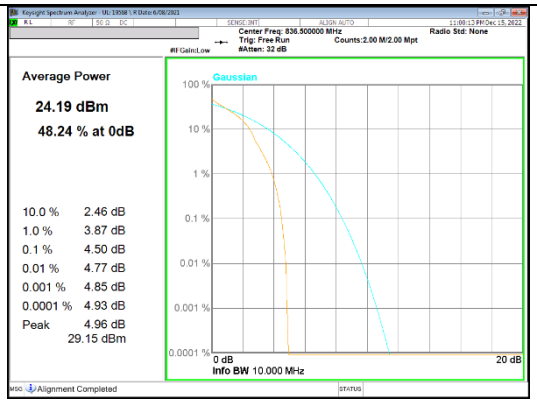
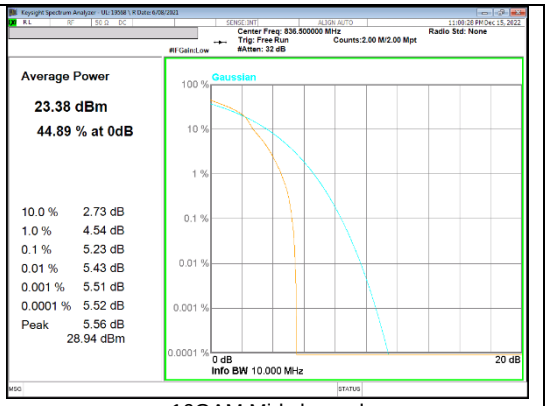
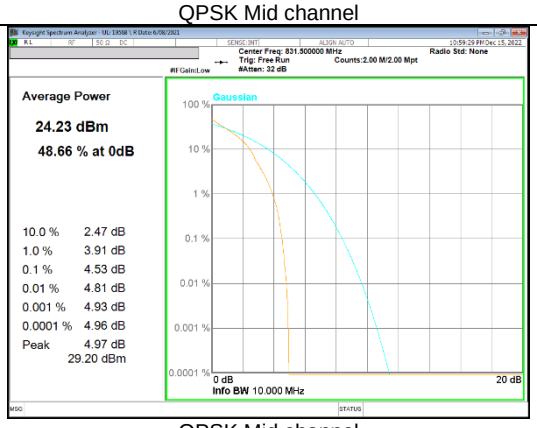
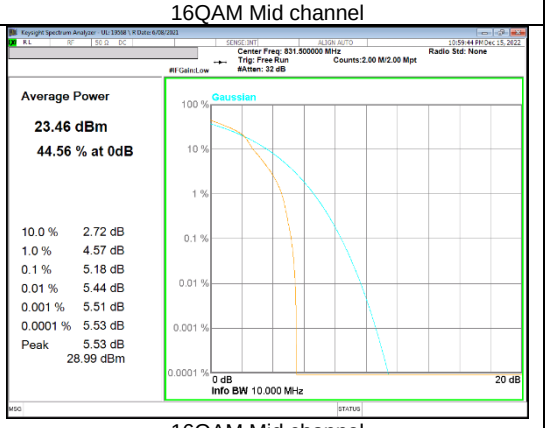
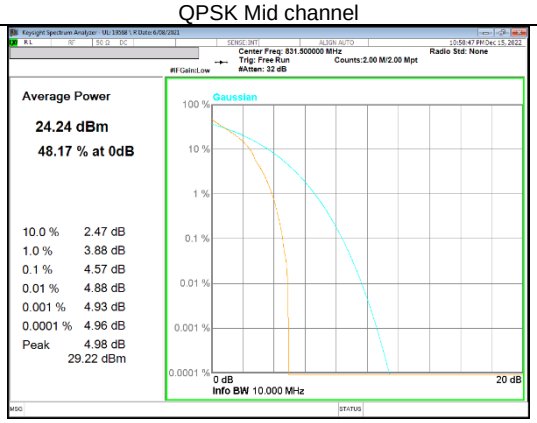
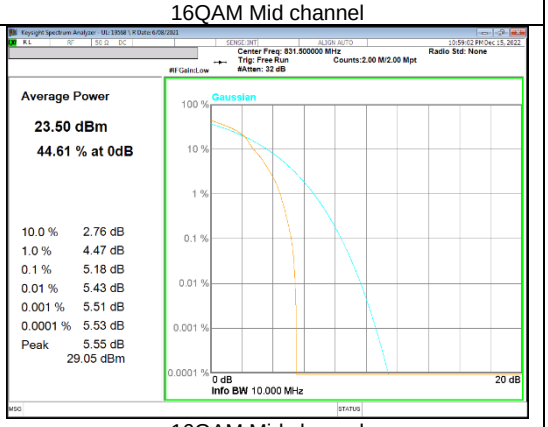
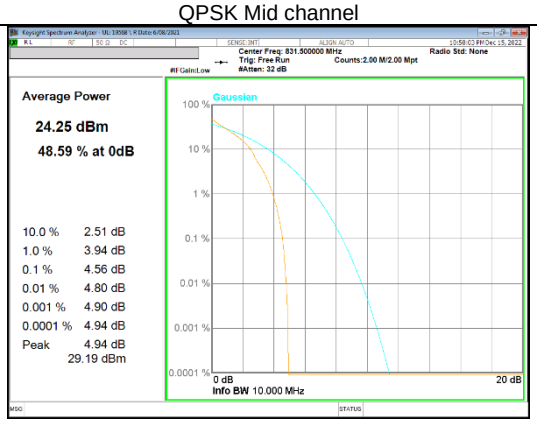
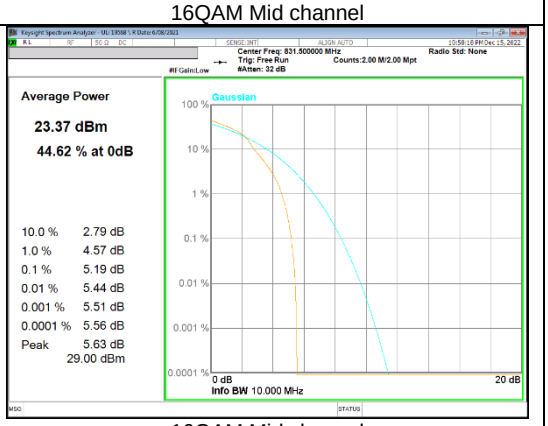
1.4 MHz		
	QPSK Mid channel	16QAM Mid channel

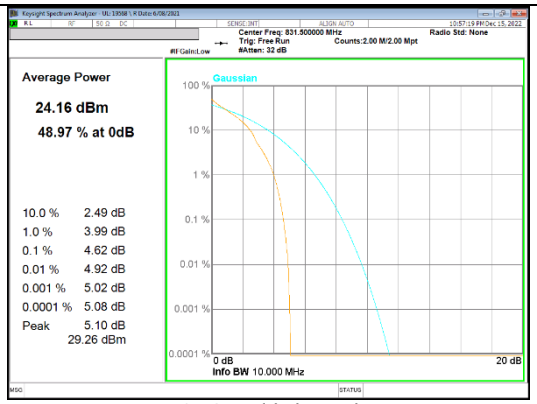
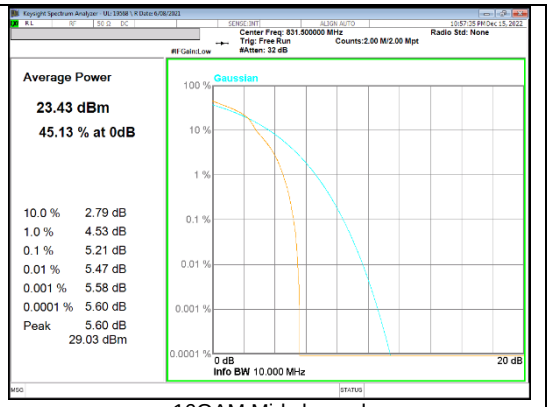
LTE Band 26 (Straddle)

15 MHz	 QPSK Mid channel	 16QAM Mid channel
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel
3 MHz	 QPSK Mid channel	 16QAM Mid channel

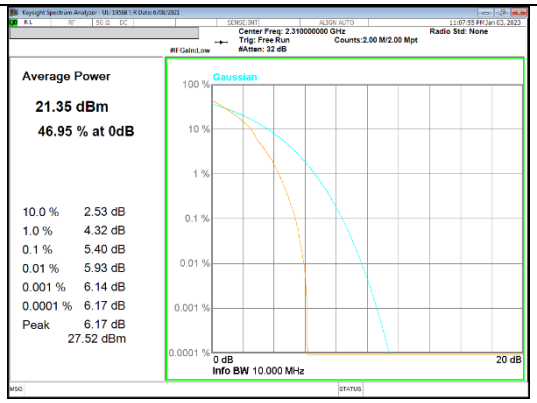
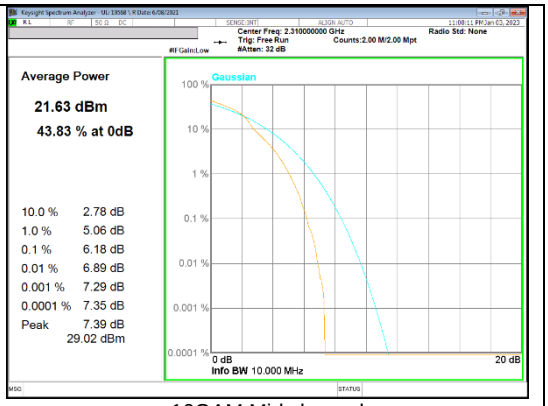
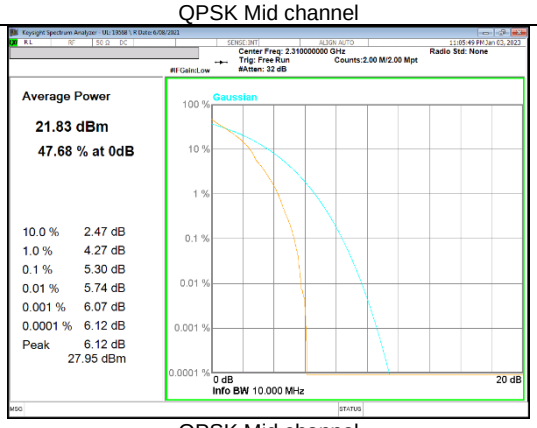
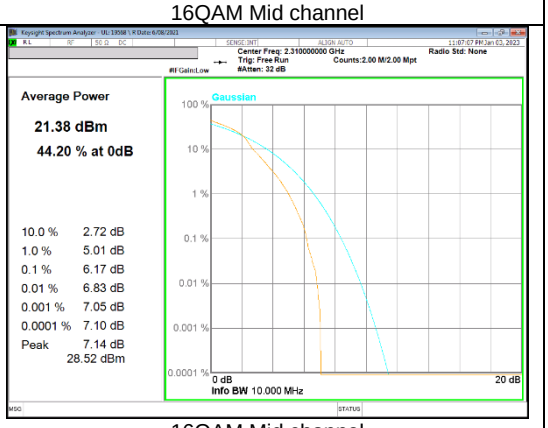
1.4 MHz		
	QPSK Mid channel	16QAM Mid channel

LTE Band 26 (Part 22)

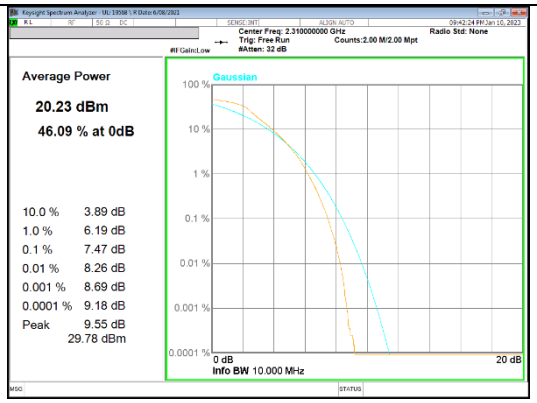
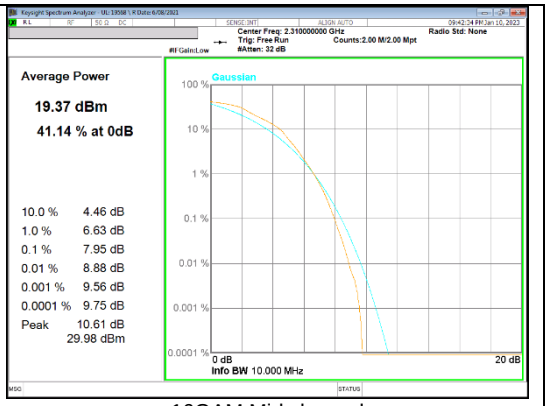
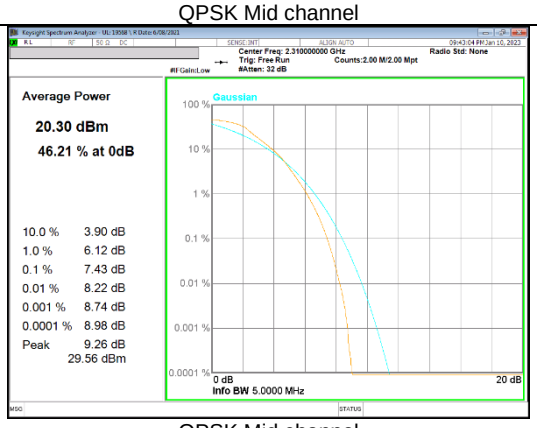
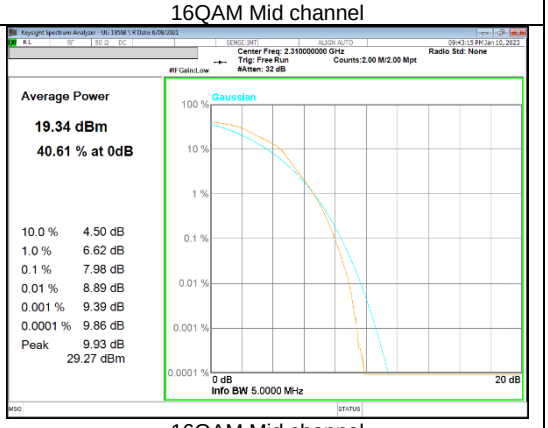
15 MHz	 QPSK Mid channel	 16QAM Mid channel
10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel
3 MHz	 QPSK Mid channel	 16QAM Mid channel

1.4 MHz	 QPSK Mid channel	 16QAM Mid channel

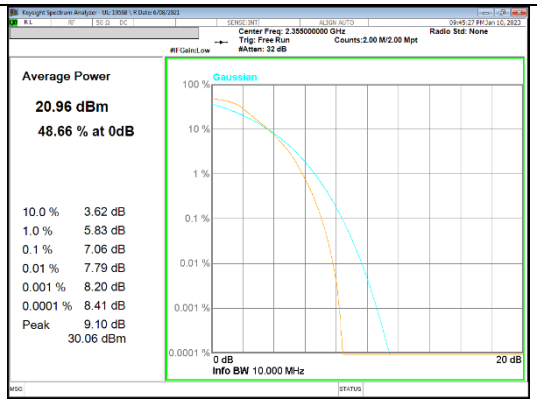
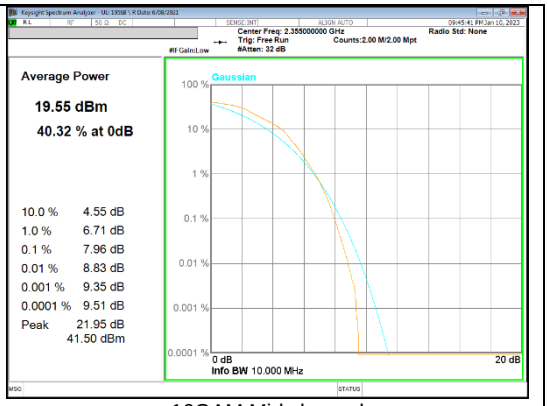
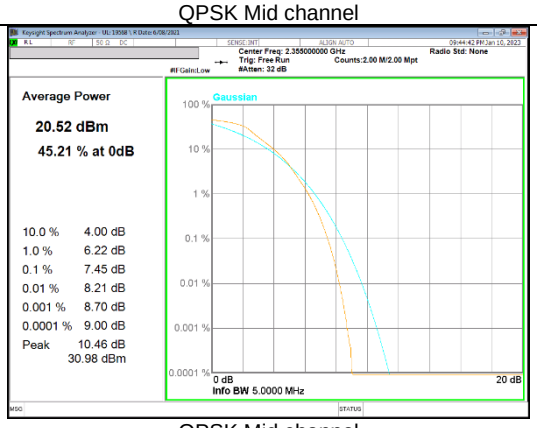
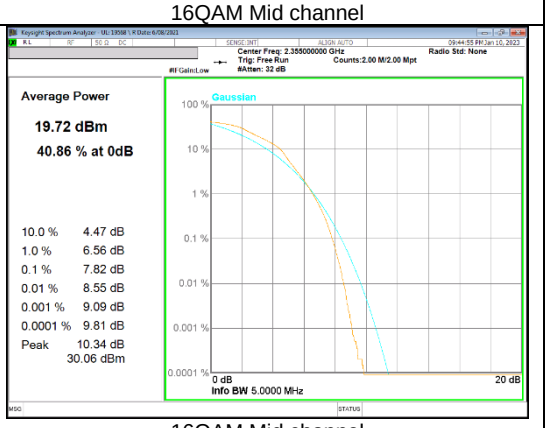
LTE Band 30

10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

LTE Band 40 (Lower)

10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel

LTE Band 40 (Upper)

10 MHz	 QPSK Mid channel	 16QAM Mid channel
5 MHz	 QPSK Mid channel	 16QAM Mid channel