

CERTIFICATION TEST REPORT

Report Number. : 4790976580-E4V2

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SC-51E, SCG25

FCC ID : A3LSMS921JPN

EUT Description : GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax,
NFC and WPT.

Test Standard(s) : FCC 47 CFR PART 27 SUBPART F,H,L,M

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Revision History

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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, NFC and WPT.

MODEL NUMBER: SC-51E, SCG25

SERIAL NUMBER: R3CWB0FGXJP, R3CWB0FGWHA (CONDUCTED);
R3CWB0FGWVN, R3CWB0FGVLK, R3CWB0FGW7E (RADIATED);

DATE TESTED: 2023-12-13 – 2024-01-19;

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 27F,H,L,M	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:

Tested By:



Seokhwan Hong
Suwon Lab Engineer
UL KOREA LTD.

Yeonhee Lim
Suwon Lab Engineer
UL KOREA LTD.

2. TEST METHODOLOGY

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

1. FCC 47 CFR Part 2.
2. FCC 47 CFR Part 27.
3. ANSI TIA-603-E, 2016
4. ANSI C63.26, 2015
5. KDB 971168 D01 Power Meas License Digital Systems v03r01
6. KDB 971168 D02 Misc Rev Approv License Devices v02r02
7. KDB 412172 D01 Determining ERP and EIRP v01r01

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	
<input checked="" type="checkbox"/>	Chamber 1(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 2(3m semi-anechoic chamber)
<input type="checkbox"/>	Chamber 3(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 4(3m Full-anechoic chamber)
<input type="checkbox"/>	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:

$EIRP = \text{PSA reading with EUT worst orientation (dBm)} + \text{Path loss (dB)} - \text{cable loss (between the SG and substitution antenna)} + \text{Substitution Antenna Factor (dBi)}$

$ERP = \text{PSA reading with EUT worst orientation (dBm)} + \text{Path loss (dB)} - \text{cable loss (between the SG and substitution antenna)}$

(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.

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/ax, NFC and WPT. This test report addresses the WWAN operational mode.

Representative model	Difference	Derivative model
		SCG25
SC-51E	Hardware	Same as SC-51E
	Software	Different UI

The model SC-51E was used for final testing and is representative of the test results in this report.

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 ERP greater than conducted measurements.

LTE Band 12

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 12	A	704.00 ~ 711.00	10	QPSK	23.07	202.77	18.39	69.02
				16QAM	22.43	174.98	17.45	55.59
				64QAM	21.33	135.83		
		701.50 ~ 713.50	5	QPSK	23.14	206.06	18.48	70.47
				16QAM	22.52	178.65	17.48	55.98
				64QAM	21.45	139.64		
		700.50 ~ 714.50	3	QPSK	23.13	205.59	17.19	52.36
				16QAM	22.49	177.42	17.19	52.36
				64QAM	21.43	139.00		
		699.70 ~ 715.30	1.4	QPSK	22.99	199.07	17.14	51.76
				16QAM	22.34	171.40	17.14	51.76
				64QAM	21.37	137.09		
FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 12	E	704.00 ~ 711.00	10	QPSK	23.47	222.33	19.31	85.31
				16QAM	22.83	191.87	18.35	68.39
				64QAM	21.77	150.31		
		701.50 ~ 713.50	5	QPSK	23.16	207.01	19.00	79.43
				16QAM	22.61	182.39	18.27	67.14
				64QAM	21.50	141.25		
		700.50 ~ 714.50	3	QPSK	23.19	208.45	18.09	64.42
				16QAM	22.55	179.89	17.58	57.28
				64QAM	21.49	140.93		
		699.70 ~ 715.30	1.4	QPSK	23.06	202.30	18.04	63.68
				16QAM	22.37	172.58	17.39	54.83
				64QAM	21.36	136.77		

LTE Band 13

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 13	A	782.00	10	QPSK	23.09	203.70	19.40	87.10
				16QAM	22.41	174.18	18.35	68.39
				64QAM	21.18	131.22		
		779.50 ~ 784.50	5	QPSK	23.13	205.59	19.49	88.92
				16QAM	22.48	177.01	18.41	69.34
				64QAM	21.36	136.77		

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 13	E	782.00	10	QPSK	23.64	231.21	19.91	97.95
				16QAM	22.87	193.64	18.68	73.79
				64QAM	21.82	152.05		
		779.50 ~ 784.50	5	QPSK	23.64	231.21	19.80	95.50
				16QAM	22.98	198.61	18.93	78.16
				64QAM	21.98	157.76		

LTE Band 41

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 41	B	2506.00 ~ 2680.00	20	QPSK	24.48	280.54	23.14	206.06
				16QAM	23.64	231.21	22.28	169.04
				64QAM	22.46	176.20		
		2503.50 ~ 2682.50	15	QPSK	24.39	274.79	23.02	200.45
				16QAM	23.40	218.78	22.13	163.31
				64QAM	22.42	174.58		
		2501.00 ~ 2685.00	10	QPSK	24.44	277.97	23.09	203.70
				16QAM	23.44	220.80	22.25	167.88
				64QAM	22.44	175.39		
		2498.50 ~ 2687.50	5	QPSK	24.47	279.90	23.03	200.91
				16QAM	23.62	230.14	22.24	167.49
				64QAM	22.37	172.58		

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 41	F	2506.00 ~ 2680.00	20	QPSK	24.40	275.42	22.54	179.47
				16QAM	23.71	234.96	21.37	137.09
				64QAM	22.35	171.79		
		2503.50 ~ 2682.50	15	QPSK	24.42	276.69	22.66	184.50
				16QAM	23.43	220.29	21.19	131.52
				64QAM	22.28	169.04		
		2501.00 ~ 2685.00	10	QPSK	24.48	280.54	22.76	188.80
				16QAM	23.34	215.77	20.58	114.29
				64QAM	22.31	170.22		
		2498.50 ~ 2687.50	5	QPSK	24.64	291.07	22.51	178.24
				16QAM	23.60	229.09	20.75	118.85
				64QAM	22.22	166.72		

LTE Band 41C (UL CA)

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
41C	B	2506.00 ~ 2680.00	40MHz (20MHz / 20MHz)	QPSK	24.76	299.23	22.26	168.27
				16QAM	24.04	253.51	21.59	144.21
		2503.50 ~ 2682.50	35MHz (15MHz / 20MHz)	QPSK	24.66	292.42		
				16QAM	24.31	269.77		
		2503.50 ~ 2682.50	30MHz (15MHz / 15MHz)	QPSK	24.71	295.80		
				16QAM	24.13	258.82		
		2498.50 ~ 2680.0	25MHz (5MHz / 20MHz)	QPSK	24.74	297.85		
				16QAM	24.53	283.79		
FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
41C	F	2506.00 ~ 2680.00	40MHz (20MHz / 20MHz)	QPSK	24.58	287.08	20.01	100.23
				16QAM	24.17	261.22	19.28	84.72
		2503.50 ~ 2682.50	35MHz (15MHz / 20MHz)	QPSK	24.47	279.90		
				16QAM	24.05	254.10		
		2503.50 ~ 2682.50	30MHz (15MHz / 15MHz)	QPSK	24.52	283.14		
				16QAM	23.98	250.03		
		2498.50 ~ 2680.0	25MHz (5MHz / 20MHz)	QPSK	24.52	283.14		
				16QAM	24.23	264.85		

LTE Band 66

FCC Part 27								
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Conducted		Radiated	
					Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
Band 66	A	1720.00 ~ 1770.00	20	QPSK	23.39	218.27	23.94	247.74
				16QAM	22.79	190.11	23.26	211.84
				64QAM	21.63	145.55		
		1717.50 ~ 1772.50	15	QPSK	23.48	222.84	24.10	257.04
				16QAM	22.83	191.87	23.48	222.84
				64QAM	21.68	147.23		
		1715.00 ~ 1775.00	10	QPSK	23.44	220.80	24.13	258.82
				16QAM	22.82	191.43	23.52	224.91
				64QAM	21.77	150.31		
		1712.50 ~ 1777.50	5	QPSK	23.56	226.99	24.35	272.27
				16QAM	22.88	194.09	23.61	229.61
				64QAM	21.74	149.28		
		1711.50 ~ 1778.50	3	QPSK	23.51	224.39	24.26	266.69
				16QAM	22.88	194.09	23.64	231.21
				64QAM	21.74	149.28		
		1710.70 ~ 1779.30	1.4	QPSK	23.43	220.29	24.13	258.82
				16QAM	22.70	186.21	23.53	225.42
				64QAM	21.66	146.55		

NR Band n41

FCC Part 27										
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated		
						Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]	
n41	B	2546.01 ~ 2640.00	100	DFT-s OFDM	$\pi/2$ BSK	24.49	281.39			
					QPSK	24.50	281.62	22.61	182.39	
					16QAM	23.40	218.86	21.39	137.72	
					64QAM	22.24	167.67			
					256QAM	19.92	98.17			
		2541.00 ~ 2644.98	90	DFT-s OFDM	C-OFDM	QPSK	23.13	205.69		
					$\pi/2$ BPSK	24.44	277.71			
					QPSK	24.64	290.88	22.78	189.67	
					16QAM	23.80	239.81	21.58	143.88	
					64QAM	22.03	159.42			
		2536.02 ~ 2649.99	80	DFT-s OFDM	CP-OFDM	QPSK	23.13	205.78		
					$\pi/2$ BPSK	24.56	285.71			
					QPSK	24.62	289.86	22.76	188.80	
					16QAM	23.71	235.00	21.39	137.72	
					64QAM	21.89	154.52			
		2531.02 ~ 2654.98	70	DFT-s OFDM	256QAM	19.96	99.04			
					CP-OFDM	QPSK	23.12	205.11		
					$\pi/2$ BPSK	24.54	284.16			
					QPSK	24.58	286.89	22.72	187.07	
					16QAM	23.46	221.75	21.30	134.90	
		2526.00 ~ 2659.98	60	DFT-s OFDM	64QAM	21.69	147.49			
					256QAM	19.77	94.76			
					CP-OFDM	QPSK	22.98	198.69		
					$\pi/2$ BPSK	24.30	268.85			
					QPSK	24.47	279.64	22.61	182.39	
		2521.01 ~ 2665.00	50	DFT-s OFDM	16QAM	23.39	218.24	21.38	137.40	
					64QAM	21.53	142.37			
					256QAM	19.68	92.82			
					CP-OFDM	QPSK	22.89	194.75		
					$\pi/2$ BPSK	24.53	283.60			
		2516.01 ~ 2670.00	40	DFT-s OFDM	QPSK	24.69	294.58	22.83	191.87	
					16QAM	23.48	222.98	21.47	140.28	
					64QAM	21.81	151.66			
					256QAM	19.97	99.34			
					CP-OFDM	QPSK	23.10	204.31		
		2511.00 ~ 2675.00	30	DFT-s OFDM	$\pi/2$ BPSK	24.36	272.73			
					QPSK	24.57	286.44	22.71	186.64	
					16QAM	23.27	212.44	21.26	133.66	
					64QAM	21.50	141.19			
					256QAM	19.61	91.38			
		2508.51 ~ 2677.50	25	DFT-s OFDM	CP-OFDM	QPSK	22.76	188.62		
					$\pi/2$ BPSK	24.41	276.06			
					QPSK	24.60	288.53	22.74	187.93	
					16QAM	23.35	216.23	21.34	136.14	
					64QAM	21.68	147.10			
		2506.02 ~ 2679.99	20	DFT-s OFDM	256QAM	19.86	96.75			
					CP-OFDM	QPSK	22.86	193.02		
					$\pi/2$ BPSK	23.98	249.83			
QPSK	23.90				245.54	22.04	159.96			
16QAM	22.98				198.82	20.97	125.03			
2503.50 ~ 2682.48	15	DFT-s OFDM	64QAM	21.65	146.14					
			256QAM	19.47	88.51					
			CP-OFDM	QPSK	22.46	176.05				
			$\pi/2$ BPSK	24.39	274.86					
			QPSK	24.40	275.14	22.54	179.47			
2501.01 ~ 2685.00	10	DFT-s OFDM	16QAM	23.45	221.17	21.44	139.32			
			64QAM	21.53	142.27					
			256QAM	19.69	93.06					
			CP-OFDM	QPSK	22.88	194.25				
			$\pi/2$ BPSK	24.33	271.21					
		DFT-s OFDM	QPSK	24.40	275.46	22.54	179.47			
			16QAM	23.45	221.39	21.44	139.32			
			64QAM	21.60	144.44					
			256QAM	19.78	95.05					
			CP-OFDM	QPSK	22.85	192.81				
		DFT-s OFDM	$\pi/2$ BPSK	24.40	275.32					
			QPSK	24.39	274.83	22.53	179.06			
			16QAM	23.44	220.69	21.43	139.00			
			64QAM	21.61	144.75					
			256QAM	19.63	91.81					
		DFT-s OFDM	CP-OFDM	QPSK	22.82	191.60				

FCC Part 27										
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated		
						Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]	
n41	F	2546.01 ~ 2640.00	100	DFT-s OFDM	$\pi/2$ BSK	24.40	275.68			
					QPSK	24.34	271.71	23.96	248.89	
					16QAM	23.37	217.40	22.92	195.88	
					64QAM	21.82	152.11			
		2541.00 ~ 2644.98	90	DFT-s OFDM	256QAM	19.96	99.15			
					C-OFDM	QPSK	22.88	194.28		
					$\pi/2$ BPSK	24.37	273.73			
					QPSK	24.61	289.25	24.28	267.92	
		2536.02 ~ 2649.99	80	DFT-s OFDM	16QAM	23.68	233.44	23.38	217.77	
					64QAM	21.91	155.38			
					256QAM	19.95	98.86			
					CP-OFDM	QPSK	23.10	204.40		
		2531.02 ~ 2654.98	70	DFT-s OFDM	$\pi/2$ BPSK	24.36	272.85			
					QPSK	24.48	280.64	24.21	263.63	
					16QAM	23.50	224.12	23.28	212.81	
					64QAM	21.84	152.87			
		2526.00 ~ 2659.98	60	DFT-s OFDM	256QAM	19.87	96.94			
					CP-OFDM	QPSK	23.03	200.89		
					$\pi/2$ BPSK	24.28	267.97			
					QPSK	24.55	285.19	24.27	267.30	
		2521.01 ~ 2665.00	50	DFT-s OFDM	16QAM	23.47	222.51	23.23	210.38	
					64QAM	21.71	148.10			
					256QAM	19.82	95.95			
					CP-OFDM	QPSK	22.93	196.29		
		2516.01 ~ 2670.00	40	DFT-s OFDM	$\pi/2$ BPSK	24.16	260.77			
					QPSK	24.29	268.48	24.03	252.93	
					16QAM	23.35	216.13	23.08	203.24	
					64QAM	21.50	141.23			
		2511.00 ~ 2675.00	30	DFT-s OFDM	256QAM	19.61	91.41			
					CP-OFDM	QPSK	22.81	190.96		
					$\pi/2$ BPSK	24.53	283.48			
					QPSK	24.69	294.28	24.44	277.97	
		2508.51 ~ 2677.50	25	DFT-s OFDM	16QAM	23.49	223.29	23.29	213.30	
					64QAM	21.80	151.22			
					256QAM	19.88	97.30			
					CP-OFDM	QPSK	22.99	199.27		
		2503.50 ~ 2682.48	15	DFT-s OFDM	$\pi/2$ BPSK	24.33	271.25			
					QPSK	24.50	281.95	24.25	266.07	
					16QAM	23.33	215.07	23.13	205.59	
					64QAM	21.53	142.25			
		2501.01 ~ 2685.00	10	DFT-s OFDM	256QAM	19.63	91.94			
					CP-OFDM	QPSK	22.76	189.00		
					$\pi/2$ BPSK	24.37	273.72			
					QPSK	24.54	284.63	24.29	268.53	
		2500.50 ~ 2682.48	10	DFT-s OFDM	16QAM	23.50	223.69	23.24	210.86	
					64QAM	21.71	148.25			
					256QAM	19.84	96.37			
					CP-OFDM	QPSK	22.91	195.39		
2500.50 ~ 2682.48	15	DFT-s OFDM	$\pi/2$ BPSK	24.51	282.60					
			QPSK	24.46	279.26	23.81	240.44			
			16QAM	23.42	219.79	22.91	195.43			
			64QAM	21.80	151.47					
2500.50 ~ 2682.48	15	DFT-s OFDM	256QAM	19.60	91.20					
			CP-OFDM	QPSK	22.70	186.36				
			$\pi/2$ BPSK	24.27	267.57					
			QPSK	24.37	273.46	24.12	258.23			
2500.50 ~ 2682.48	15	DFT-s OFDM	16QAM	23.34	215.97	23.11	204.64			
			64QAM	21.56	143.13					
			256QAM	19.63	91.75					
			CP-OFDM	QPSK	22.86	193.11				
2500.50 ~ 2682.48	15	DFT-s OFDM	$\pi/2$ BPSK	24.28	267.98					
			QPSK	24.46	279.24	24.21	263.63			
			16QAM	23.33	215.03	23.12	205.12			
			64QAM	21.66	146.71					
2500.50 ~ 2682.48	15	DFT-s OFDM	256QAM	19.70	93.34					
			CP-OFDM	QPSK	22.89	194.47				
			$\pi/2$ BPSK	24.21	263.79					
			QPSK	24.48	280.72	24.19	262.42			
2500.50 ~ 2682.48	15	DFT-s OFDM	16QAM	23.54	225.70	23.34	215.77			
			64QAM	21.76	149.86					
			256QAM	19.78	95.01					
			CP-OFDM	QPSK	22.90	194.79				

NR Band n66

FCC Part 27									
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
						Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n66	A	1730.00 ~ 1760.00	40	DFT-s OFDM	π/2 BPSK	23.20	208.93		
					QPSK	23.18	207.97	23.94	247.74
					16QAM	22.11	162.55	23.00	199.53
				64QAM	20.67	116.68			
				256QAM	17.96	62.52			
				CP-OFDM	QPSK	21.66	146.55		
		1727.50 ~ 1762.50	35	DFT-s OFDM	π/2 BPSK	23.21	209.41		
					QPSK	23.22	209.89	24.12	258.23
					16QAM	22.08	161.44	23.06	202.30
				64QAM	20.73	118.30			
				256QAM	17.96	62.52			
				CP-OFDM	QPSK	21.76	149.97		
		1725.00 ~ 1765.00	30	DFT-s OFDM	π/2 BPSK	23.36	216.77		
					QPSK	23.38	217.77	24.31	269.77
					16QAM	22.26	168.27	23.32	214.78
				64QAM	20.94	124.17			
				256QAM	18.26	66.99			
				CP-OFDM	QPSK	21.91	155.24		
		1722.50 ~ 1767.50	25	DFT-s OFDM	π/2 BPSK	23.29	213.30		
					QPSK	23.27	212.32	24.26	266.69
					16QAM	22.20	165.96	23.26	211.84
				64QAM	20.86	121.90			
				256QAM	18.16	65.46			
				CP-OFDM	QPSK	21.81	151.71		
		1720.00 ~ 1770.00	20	DFT-s OFDM	π/2 BPSK	23.12	205.12		
					QPSK	23.10	204.17	24.14	259.42
					16QAM	22.02	159.22	23.19	208.45
				64QAM	20.67	116.68			
				256QAM	17.98	62.81			
				CP-OFDM	QPSK	21.66	146.55		
		1717.50 ~ 1772.50	15	DFT-s OFDM	π/2 BPSK	23.18	207.97		
					QPSK	23.16	207.01	24.22	264.24
16QAM	22.01				158.85	23.26	211.84		
64QAM	20.70			117.49					
256QAM	18.58			72.11					
CP-OFDM	QPSK			21.73	148.94				
1715.00 ~ 1775.00	10	DFT-s OFDM	π/2 BPSK	23.01	199.99				
			QPSK	23.10	204.17	24.30	269.15		
			16QAM	21.99	158.12	23.32	214.78		
		64QAM	20.69	117.22					
		256QAM	18.00	63.10					
		CP-OFDM	QPSK	21.66	146.55				
1712.50 ~ 1777.50	5	DFT-s OFDM	π/2 BPSK	23.21	209.41				
			QPSK	23.17	207.49	24.31	269.77		
			16QAM	22.03	159.59	23.35	216.27		
		64QAM	20.77	119.40					
		256QAM	18.11	64.71					
		CP-OFDM	QPSK	21.69	147.57				

FCC Part 27									
Band	ANT	Frequency Range [MHz]	BandWidth [MHz]	Modulation	Mode	Conducted		Radiated	
						Avg [dBm]	Avg [mW]	Avg [dBm]	Avg [mW]
n66	F	1730.00 ~ 1760.00	40	DFT-s OFDM	$\pi/2$ BPSK	23.51	224.39		
					QPSK	23.53	225.42	23.41	219.28
					16QAM	22.51	178.24	22.45	175.79
					64QAM	20.92	123.59		
				256QAM	18.44	69.82			
				CP-OFDM	QPSK	22.16	164.44		
				DFT-s OFDM	$\pi/2$ BPSK	23.27	212.32		
					QPSK	23.25	211.35	23.21	209.41
		16QAM	22.19		165.58	22.07	161.06		
		64QAM	20.64		115.88				
		256QAM	18.36	68.55					
		CP-OFDM	QPSK	21.81	151.71				
		1725.00 ~ 1765.00	30	DFT-s OFDM	$\pi/2$ BPSK	23.62	230.14		
					QPSK	23.66	232.27	23.59	228.56
					16QAM	22.57	180.72	22.59	181.55
					64QAM	21.03	126.77		
					256QAM	18.76	75.16		
					CP-OFDM	QPSK	22.21	166.34	
		1722.50 ~ 1767.50	25	DFT-s OFDM	$\pi/2$ BPSK	23.17	207.49		
					QPSK	23.24	210.86	23.31	214.29
					16QAM	22.22	166.72	22.21	166.34
					64QAM	20.60	114.82		
				256QAM	18.54	71.45			
				CP-OFDM	QPSK	21.80	151.36		
		1720.00 ~ 1770.00	20	DFT-s OFDM	$\pi/2$ BPSK	23.06	202.30		
					QPSK	23.08	203.24	23.27	212.32
					16QAM	22.09	161.81	22.07	161.06
					64QAM	20.42	110.15		
				256QAM	18.27	67.14			
		CP-OFDM	QPSK	21.64	145.88				
		1717.50 ~ 1772.50	15	DFT-s OFDM	$\pi/2$ BPSK	23.16	207.01		
					QPSK	23.41	219.28	23.33	215.28
					16QAM	22.14	163.68	22.04	159.96
					64QAM	20.63	115.61		
				256QAM	18.39	69.02			
		CP-OFDM	QPSK	21.79	151.01				
		1715.00 ~ 1775.00	10	DFT-s OFDM	$\pi/2$ BPSK	23.34	215.77		
					QPSK	23.37	217.27	23.50	223.87
					16QAM	22.37	172.58	22.24	167.49
					64QAM	20.93	123.88		
				256QAM	18.59	72.28			
		CP-OFDM	QPSK	22.03	159.59				
		1712.50 ~ 1777.50	5	DFT-s OFDM	$\pi/2$ BPSK	23.46	221.82		
					QPSK	23.48	222.84	23.96	248.89
					16QAM	22.54	179.47	22.91	195.43
					64QAM	20.84	121.34		
				256QAM	18.45	69.98			
		CP-OFDM	QPSK	22.08	161.44				

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)	ANT	Peak Gain (dBi)
LTE Band 4 1710 - 1755 MHz	A	-3.0
LTE Band 66 / NR Band n66 1710 - 1780 MHz	A	-2.5
	F	-4.2
LTE Band 12 699 - 716 MHz	A	-5.2
	E	-5.1
LTE Band 13 777 - 787 MHz	A	-4.2
	E	-7.4
LTE Band 41 / NR Band 41 2496 - 2690 MHz	B	-4.1
	F	-4.7

5.4. WORST-CASE ORIENTATION

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

For LTE 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, and 64QAM modulations. It was found QPSK and 16QAM results were worst case.

This device supports AsDiv Mode and Tx Device hopping Mode. Output Power measurements were measured and reported. So the test case is below.

LTE Band	AsDiv Mode	Tx Device hopping
LTE B12	Antenna Switching	-
LTE B13	Antenna Switching	-
LTE B41	-	Antenna Switching
LTE B41C (ULCA)	-	Antenna Switching

Test Item	Test case antenna & port
Conducted output power	All
RF port test	Worst case
ERP / EIRP	All
Radiated Spurious Emissions	All

For 5G NR 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 $\pi/2$ BPSK, QPSK, 16QAM, 64QAM and 256QAM modulations. It was found QPSK and 16QAM results were worst case.

This device supports NSA and SA Mode and Tx Device hopping Mode. Output Power measurements were measured on entire Mode and worst case is reported. worst case is SA Mode and Tx Device hopping Mode. So the test case is as below.

NR Band	NSA	SA	Tx Device hopping
n41	LTE B66	Standard alone	Antenna Switching
n66	LTE B2, B13	Standard alone	Antenna Switching

Test Item	Test case antenna & port
Conducted output power	All
RF port test	Worst case
ERP / EIRP	All
Radiated Spurious Emissions	All

As for the conducted test, 'Main ANT' is the same or higher than 'Sub ANT', so we tested with 'Main ANT'.

Band	Main antenna	Tune up Limit (dBm)	Sub antenna	Tune up Limit (dBm)
LTE B12	<u>A</u>	<u>24.0</u>	E	24.0
LTE B13	<u>A</u>	<u>24.0</u>	E	24.0
LTE B41	<u>B</u>	<u>25.0</u>	F	25.0
LTE B41C (ULCA)	<u>B</u>	<u>25.0</u>	F	25.0
LTE B66	<u>A</u>	<u>24.2</u>		
NR n41	<u>F</u>	<u>25.0</u>	B	25.0
NR n66	<u>A</u>	<u>24.0</u>	F	24.0

LTE Band 4 (ANT A)

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.

● **Conducted Spurious Emission**

Highest conducted output power setting for each bands					
LTE Band	ANT	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
12	A	701.50	5	1	12
		707.50		1	12
		713.50		1	0
13	A	779.50	5	1	0
		782.00		1	0
		784.50		1	0
41	B	2506.00	20	1	49
		2593.00		1	49
		2680.00		1	99
66	A	1712.50	5	1	12
		1745.00		1	12
		1777.50		1	12
NR Band	ANT	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
41	F	2521.01	50	1	131
		2592.99		1	131
		2665.00		1	131
66	A	1725.00	30	1	158
		1745.00		1	158
		1765.00		1	1

● **Uplink CA Conducted Spurious Emission**

Highest conducted output power setting for each bands						
LTE Band	ANT	Component Carreir	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
41C	B	PCC	2506.00	20+20	1	99
		SCC	2525.80		1	0
		PCC	2583.10		1	99
		SCC	2602.90		1	0
		PCC	2660.20		1	99
		SCC	2680.00		1	0

● Radiated Spurious Emission

Highest conducted output power setting for each bands					
LTE Band	ANT	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
12	A	701.50	5	1	12
		707.50		1	12
		713.50		1	0
12	E	704.00	10	1	0
		707.50		1	0
		711.00		1	0
13	A	779.50	5	1	0
		782.00		1	0
		784.50		1	0
13	E	782.00	10	1	25
41	B	2506.00	20	1	49
		2593.00		1	49
		2680.00		1	49
41	F	2501.00	10	1	25
		2593.00		1	25
		2685.00		1	49
66	A	1712.50	5	1	12
		1745.00		1	12
		1777.50		1	12
NR Band	ANT	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
41	F	2521.01	50	1	131
		2592.99		1	131
		2665.00		1	131
41	B	2521.01	50	1	131
		2592.99		1	131
		2665.00		1	1
66	A	1725.00	30	1	158
		1745.00		1	158
		1765.00		1	1
66	F	1712.50	5	1	23
		1745.00		1	23
		1777.50		1	23

● Uplink CA Radiated Spurious Emission

Highest EIRP setting for each bands						
LTE Band	ANT	Component Carreir	Frequency (MHz)	Bandwidth (MHz)	RB size	RB offset
41C	B	PCC	2506.00	20+20	1	99
		SCC	2525.80		1	0
		PCC	2583.10		1	99
		SCC	2602.90		1	0
		PCC	2660.20		1	99
		SCC	2680.00		1	0
41C	F	PCC	2506.00	20+20	1	99
		SCC	2525.80		1	0
		PCC	2583.10		1	99
		SCC	2602.90		1	0
		PCC	2660.20		1	99
		SCC	2680.00		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	ANT	ERP/EIRP			RSE		
		X	Y	Z	X	Y	Z
LTE B12	A	-	-	O	-	-	O
	E	-	-	O	-	-	O
LTE B13	A	-	-	O	O	-	-
	E	-	-	O	O	-	-
LTE B41	B	O	-	-	O	-	-
	F	-	O	-	-	-	O
LTE B66	A	O	-	-	-	O	-
NR n41	F	O	-	-	-	O	-
	B	-	O	-	-	-	O
NR n66	A	O	-	-	O	-	-
	F	O	-	-	O	-	-

Note : For the radiated 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	R37W61WENTASEA	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02117A	N/A

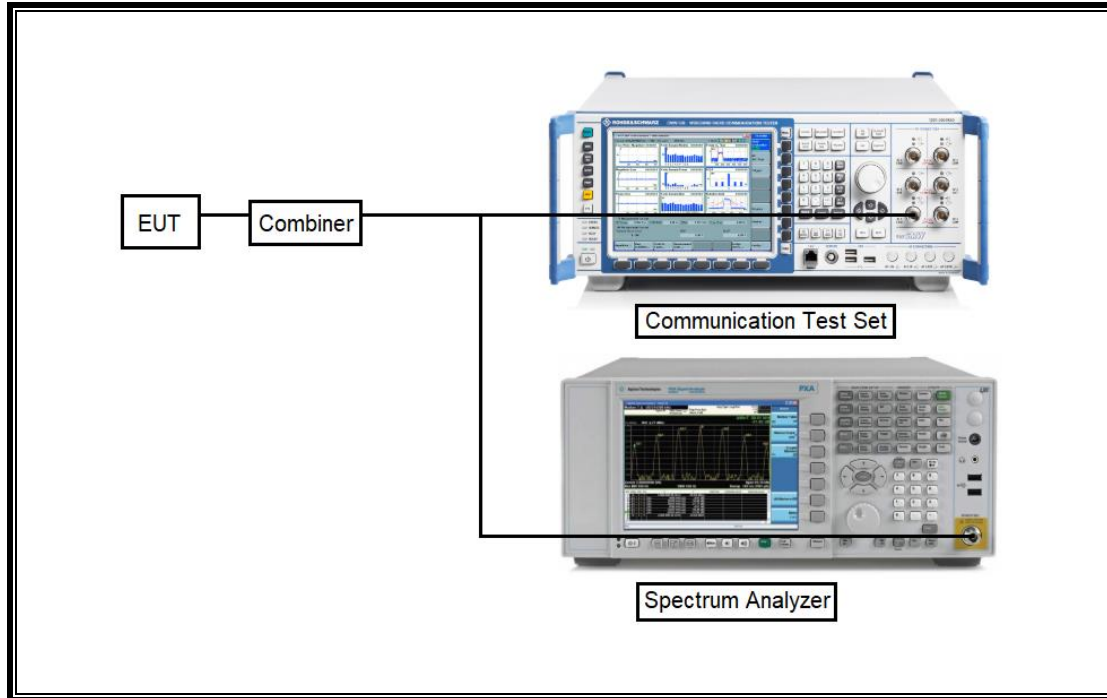
I/O CABLE

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

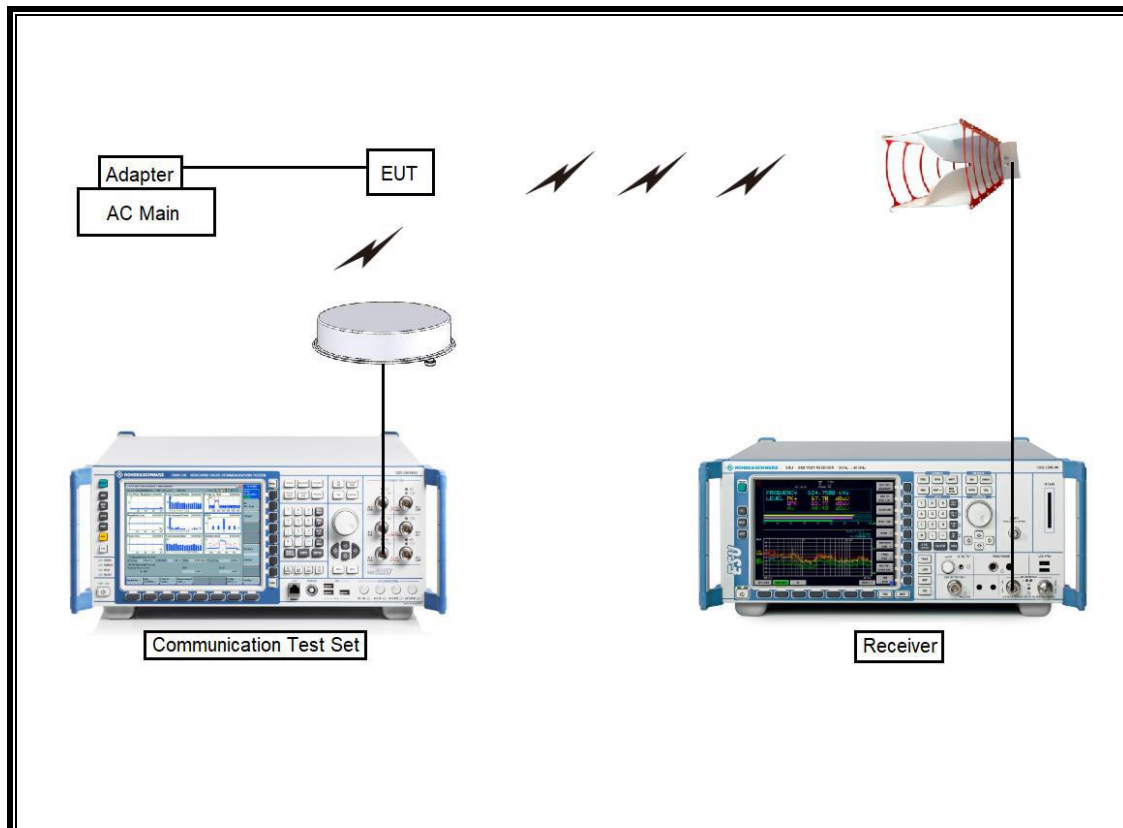
TEST SETUP

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	2025-01-17
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	00166155	2024-08-02
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2025-10-05
Preamplifier	ETS	3115-PA	00167475	2024-07-25
Preamplifier	ETS	3116C-PA	00168841	2024-07-25
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	00167211	2024-08-04
Antenna, Horn, 18 GHz	ETS	3115	00161451	2024-08-21
Antenna, Horn, 18 GHz	ETS	3117	00168724	2024-08-04
Antenna, Horn, 18 GHz	ETS	3117	00168717	2024-08-21
Communications Test Set	R&S	CMW500	169797	2024-07-23
DC Power Supply	Agilent / HP	E3640A	MY54226395	2024-07-24
Preamplifier, 1000 MHz	Sonoma	310N	341282	2024-07-24
Preamplifier, 1000 MHz	Sonoma	310N	370599	2024-07-24
Preamplifier, 1000 MHz	Sonoma	310N	351741	2024-07-24
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2024-07-24
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2024-07-25
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2024-07-25
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2024-07-24
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9030B	MY57143717	2024-07-24
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2024-07-23
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2024-07-24
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	2024-07-23
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	2024-07-23
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	2024-07-24
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	2024-07-24
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	2024-07-24
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	2024-07-24
Attenuator	PASTERNAK	PE7087-10	A009	2024-07-24
Attenuator	PASTERNAK	PE7087-10	A001	2024-07-24
Attenuator	PASTERNAK	PE7087-10	A008	2024-07-27
Attenuator	PASTERNAK	PE7004-10	2	2024-07-23
Attenuator	PASTERNAK	PE7395-10	A011	2024-07-25
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2025-09-06
Temperature Chamber	ESPEC	SH-642	93001109	2024-07-24
Power Splitter	MINI-CIRCUITS	WA1534	UL003	2025-01-02
Power Splitter	MINI-CIRCUITS	WA1534	UL004	2025-01-02
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY57510655	2025-01-03
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 Results
2.1046	Conducted Output Power	N/A	Conducted	Pass
2.1049	Occupied Bandwidth (99%)	N/A		Pass
27.53(c)(2) 27.53(g) 27.53(h)	Conducted Band Edge / Conducted Spurious Emission	-13 dBm		Pass
27.53(m)		-25 dBm		Pass
27.53(c)(4)		-35 dBm		Pass
27.53(m)	Emission Mask	Section 9.2.2		Pass
27.54	Frequency Stability	2.5 ppm		Pass
27.50(c)(10) 27.50(h)(10)	Effective Radiated Power	34.77 dBm		Radiated
27.50(h)(2)	Effective Isotropic Radiated Power	33 dBm	Pass	
27.50(d)(4)		30 dBm	Pass	
27.53(c)(2) 27.53(g) 27.53(h)	Radiated Spurious Emission	-13 dBm	Pass	
27.53(f)		-40 dBm	Pass	
27.53(m)		-25 dBm	Pass	

8. 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 ($\pi/2$ 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

LTE Band 12 (ANT A)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				23060	23095	23130		
				704 MHz	707.5 MHz	711 MHz		
10 MHz	QPSK	1	0	23.07	22.99	23.05	0.0	24.0
		1	25	23.02	22.98	23.02	0.0	24.0
		1	49	22.96	22.99	22.95	0.0	24.0
		25	0	22.02	22.01	22.01	1.0	23.0
		25	12	22.11	21.99	22.08	1.0	23.0
		25	25	22.09	22.07	22.05	1.0	23.0
	16QAM	50	0	22.07	21.97	22.07	1.0	23.0
		1	0	22.27	22.43	22.37	1.0	23.0
		1	25	22.24	22.41	22.40	1.0	23.0
		1	49	22.23	22.32	22.31	1.0	23.0
		25	0	21.08	21.06	21.04	2.0	22.0
		25	12	21.17	21.04	21.10	2.0	22.0
	64QAM	25	25	21.12	21.11	21.08	2.0	22.0
		50	0	21.07	21.00	21.06	2.0	22.0
		1	0	21.25	21.33	21.28	2.0	22.0
		1	25	21.17	21.33	21.23	2.0	22.0
		1	49	21.13	21.20	21.19	2.0	22.0
		25	0	20.04	20.00	19.95	3.0	21.0
5 MHz	QPSK	25	12	20.14	20.02	20.07	3.0	21.0
		25	25	20.12	20.05	20.07	3.0	21.0
		50	0	20.10	20.00	20.05	3.0	21.0
		1	0	22.99	23.04	23.14	0.0	24.0
		1	12	23.04	23.08	23.10	0.0	24.0
		1	24	22.97	23.01	23.04	0.0	24.0
	16QAM	12	0	22.01	22.02	21.98	1.0	23.0
		12	7	22.15	22.07	22.02	1.0	23.0
		12	13	22.09	22.08	22.05	1.0	23.0
		25	0	22.04	21.99	21.96	1.0	23.0
		1	0	22.43	22.35	22.39	1.0	23.0
		1	12	22.52	22.46	22.42	1.0	23.0
	64QAM	1	24	22.33	22.29	22.43	1.0	23.0
		12	0	21.13	21.04	21.04	2.0	22.0
		12	7	21.24	21.08	21.08	2.0	22.0
		12	13	21.20	21.10	21.10	2.0	22.0
		25	0	21.10	21.00	21.00	2.0	22.0
		1	0	21.32	21.20	21.39	2.0	22.0
64QAM	1	12	21.37	21.32	21.45	2.0	22.0	
	1	24	21.25	21.17	21.29	2.0	22.0	
	12	0	20.20	19.99	20.01	3.0	21.0	
	12	7	20.31	20.02	20.04	3.0	21.0	
	12	13	20.25	20.02	20.05	3.0	21.0	
	25	0	20.13	20.02	20.00	3.0	21.0	

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	23.02	22.93	22.98	0.0	24.0
		1	8	23.13	23.10	23.09	0.0	24.0
		1	14	22.99	22.90	22.94	0.0	24.0
		8	0	22.11	22.02	22.02	0.5	23.5
		8	4	22.13	22.03	22.09	0.5	23.5
		8	7	22.13	22.09	22.06	0.5	23.5
	16QAM	15	0	22.10	22.00	22.04	1.0	23.0
		1	0	22.32	22.36	22.33	1.0	23.0
		1	8	22.49	22.48	22.44	1.0	23.0
		1	14	22.32	22.35	22.31	1.0	23.0
		8	0	21.16	21.10	21.05	1.5	22.5
		8	4	21.18	21.09	21.13	1.5	22.5
	64QAM	8	7	21.13	21.15	21.21	1.5	22.5
		15	0	21.13	21.02	21.08	2.0	22.0
		1	0	21.27	21.18	21.13	2.0	22.0
		1	8	21.43	21.33	21.27	2.0	22.0
		1	14	21.27	21.16	21.09	2.0	22.0
		8	0	20.14	20.08	20.05	2.5	21.5
1.4 MHz	QPSK	8	4	20.15	20.11	20.18	2.5	21.5
		8	7	20.15	20.18	20.15	2.5	21.5
		15	0	20.12	20.02	20.07	3.0	21.0
		1	0	22.94	22.93	22.95	0.0	24.0
		1	3	22.98	22.99	22.96	0.0	24.0
		1	5	22.97	22.93	22.93	0.0	24.0
	16QAM	3	0	22.90	22.94	22.94	0.0	24.0
		3	1	22.92	22.94	22.94	0.0	24.0
		3	3	22.87	22.98	22.96	0.0	24.0
		6	0	21.95	21.91	21.95	0.5	23.5
		1	0	22.10	22.17	22.28	1.0	23.0
		1	3	22.22	22.25	22.34	1.0	23.0
	64QAM	1	5	22.12	22.18	22.31	1.0	23.0
		3	0	22.06	22.08	22.11	1.0	23.0
		3	1	22.09	22.06	22.14	1.0	23.0
		3	3	22.06	22.09	22.11	1.0	23.0
		6	0	21.08	20.99	21.02	1.5	22.5
		1	0	21.35	21.07	21.32	2.0	22.0
QPSK	1	3	21.37	21.19	21.32	2.0	22.0	
	1	5	21.27	21.08	21.26	2.0	22.0	
	3	0	21.08	21.06	21.12	2.0	22.0	
	3	1	21.11	21.12	21.16	2.0	22.0	
	3	3	21.07	21.13	21.14	2.0	22.0	
	6	0	20.16	19.99	20.05	2.5	21.5	

LTE Band 12 (ANT E)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				23060 704 MHz	23095 707.5 MHz	23130 711 MHz		
10 MHz	QPSK	1	0	23.41	23.47	23.47	0.0	24.0
		1	25	23.41	23.45	23.45	0.0	24.0
		1	49	23.36	23.36	23.38	0.0	24.0
		25	0	22.43	22.43	22.41	1.0	23.0
		25	12	22.49	22.43	22.49	1.0	23.0
		25	25	22.50	22.49	22.46	1.0	23.0
	16QAM	50	0	22.48	22.40	22.46	1.0	23.0
		1	0	22.72	22.83	22.70	1.0	23.0
		1	25	22.77	22.73	22.66	1.0	23.0
		1	49	22.70	22.71	22.56	1.0	23.0
		25	0	21.50	21.49	21.45	2.0	22.0
		25	12	21.57	21.47	21.54	2.0	22.0
	64QAM	25	25	21.54	21.50	21.51	2.0	22.0
		50	0	21.53	21.40	21.49	2.0	22.0
		1	0	21.63	21.57	21.70	2.0	22.0
		1	25	21.63	21.64	21.77	2.0	22.0
		1	49	21.72	21.61	21.64	2.0	22.0
		25	0	20.44	20.45	20.43	3.0	21.0
5 MHz	QPSK	25	12	20.51	20.46	20.51	3.0	21.0
		25	25	20.48	20.48	20.47	3.0	21.0
		50	0	20.49	20.41	20.48	3.0	21.0
		1	0	23.07	23.15	23.13	0.0	24.0
		1	12	23.12	23.16	23.14	0.0	24.0
		1	24	23.04	23.10	23.12	0.0	24.0
	16QAM	12	0	22.12	22.12	22.09	1.0	23.0
		12	7	22.22	22.13	22.10	1.0	23.0
		12	13	22.17	22.16	22.14	1.0	23.0
		25	0	22.15	22.05	22.05	1.0	23.0
		1	0	22.49	22.45	22.56	1.0	23.0
		1	12	22.61	22.51	22.49	1.0	23.0
	64QAM	1	24	22.46	22.47	22.45	1.0	23.0
		12	0	21.28	21.11	21.12	2.0	22.0
		12	7	21.42	21.12	21.12	2.0	22.0
		12	13	21.33	21.14	21.17	2.0	22.0
		25	0	21.19	21.09	21.04	2.0	22.0
		1	0	21.39	21.36	21.33	2.0	22.0
64QAM	1	12	21.50	21.45	21.36	2.0	22.0	
	1	24	21.40	21.30	21.25	2.0	22.0	
	12	0	20.20	20.13	20.22	3.0	21.0	
	12	7	20.32	20.15	20.21	3.0	21.0	
	12	13	20.29	20.17	20.25	3.0	21.0	
	25	0	20.19	20.10	20.06	3.0	21.0	

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	23.10	23.07	23.03	0.0	24.0
		1	8	23.19	23.19	23.12	0.0	24.0
		1	14	23.07	23.01	23.01	0.0	24.0
		8	0	22.18	22.10	22.05	0.5	23.5
		8	4	22.19	22.11	22.19	0.5	23.5
		8	7	22.19	22.18	22.18	0.5	23.5
	16QAM	15	0	22.19	22.07	22.12	1.0	23.0
		1	0	22.42	22.43	22.40	1.0	23.0
		1	8	22.54	22.51	22.55	1.0	23.0
		1	14	22.39	22.33	22.42	1.0	23.0
		8	0	21.26	21.15	21.17	1.5	22.5
		8	4	21.26	21.17	21.24	1.5	22.5
	64QAM	8	7	21.26	21.25	21.25	1.5	22.5
		15	0	21.22	21.10	21.19	2.0	22.0
		1	0	21.21	21.29	21.34	2.0	22.0
		1	8	21.40	21.45	21.49	2.0	22.0
		1	14	21.23	21.29	21.21	2.0	22.0
		8	0	20.26	20.21	20.18	2.5	21.5
1.4 MHz	QPSK	8	4	20.28	20.22	20.26	2.5	21.5
		8	7	20.29	20.27	20.23	2.5	21.5
		15	0	20.24	20.10	20.17	3.0	21.0
		1	0	23.02	22.97	22.95	0.0	24.0
		1	3	23.06	23.02	23.00	0.0	24.0
		1	5	23.03	22.97	22.99	0.0	24.0
	16QAM	3	0	23.01	22.98	22.99	0.0	24.0
		3	1	23.00	22.98	22.98	0.0	24.0
		3	3	23.01	22.98	23.02	0.0	24.0
		6	0	22.11	22.02	22.03	0.5	23.5
		1	0	22.26	22.15	22.31	1.0	23.0
		1	3	22.36	22.20	22.37	1.0	23.0
	64QAM	1	5	22.30	22.25	22.34	1.0	23.0
		3	0	22.18	22.18	22.19	1.0	23.0
		3	1	22.18	22.14	22.15	1.0	23.0
		3	3	22.12	22.18	22.18	1.0	23.0
		6	0	21.17	21.06	21.09	1.5	22.5
		1	0	21.35	21.27	21.26	2.0	22.0
QPSK	1	3	21.35	21.36	21.23	2.0	22.0	
	1	5	21.27	21.23	21.16	2.0	22.0	
	3	0	21.20	21.13	21.17	2.0	22.0	
	3	1	21.22	21.17	21.18	2.0	22.0	
	3	3	21.21	21.23	21.18	2.0	22.0	
	6	0	20.22	20.12	20.16	2.5	21.5	

LTE Band 13 (ANT A)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
					23230			
10 MHz	QPSK	1	0		23.02		0.0	24.0
		1	25		23.09		0.0	24.0
		1	49		23.00		0.0	24.0
		25	0		22.02		1.0	23.0
		25	12		22.05		1.0	23.0
		25	25		22.03		1.0	23.0
	16QAM	50	0		21.98		1.0	23.0
		1	0		22.38		1.0	23.0
		1	25		22.41		1.0	23.0
		1	49		22.19		1.0	23.0
		25	0		21.03		2.0	22.0
		25	12		21.04		2.0	22.0
	64QAM	25	25		21.08		2.0	22.0
		50	0		21.00		2.0	22.0
		1	0		21.11		2.0	22.0
		1	25		21.18		2.0	22.0
		1	49		21.14		2.0	22.0
		25	0		19.78		3.0	21.0
		25	12		20.04		3.0	21.0
		25	25		20.06		3.0	21.0
50	0		19.98		3.0	21.0		
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	23.13	23.13	23.11	0.0	24.0
		1	12	23.11	23.11	23.07	0.0	24.0
		1	24	23.09	23.07	23.04	0.0	24.0
		12	0	22.02	22.04	22.10	1.0	23.0
		12	7	22.04	22.07	22.11	1.0	23.0
		12	13	22.09	22.08	21.99	1.0	23.0
	16QAM	25	0	22.03	21.99	22.05	1.0	23.0
		1	0	22.47	22.41	22.47	1.0	23.0
		1	12	22.44	22.48	22.48	1.0	23.0
		1	24	22.47	22.39	22.38	1.0	23.0
		12	0	21.07	21.14	21.14	2.0	22.0
		12	7	21.11	21.17	21.17	2.0	22.0
	64QAM	12	13	21.09	21.16	21.10	2.0	22.0
		25	0	21.02	21.06	21.05	2.0	22.0
		1	0	21.29	21.32	21.30	2.0	22.0
		1	12	21.32	21.36	21.34	2.0	22.0
		1	24	21.21	21.28	21.26	2.0	22.0
		12	0	19.98	20.14	20.11	3.0	21.0
		12	7	20.04	20.23	20.14	3.0	21.0
		12	13	20.05	20.20	20.04	3.0	21.0
25	0	20.02	20.02	20.08	3.0	21.0		

LTE Band 13 (ANT E)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					
				Measured Pwr (dBm)			MPR	Tune-up Limit	
					23230				
					782 MHz				
10 MHz	QPSK	1	0		23.62		0.0	24.0	
		1	25		23.64		0.0	24.0	
		1	49		23.49		0.0	24.0	
		25	0		22.61		1.0	23.0	
		25	12		22.65		1.0	23.0	
		25	25		22.62		1.0	23.0	
	16QAM	50	0		22.55		1.0	23.0	
		1	0		22.85		1.0	23.0	
		1	25		22.87		1.0	23.0	
		1	49		22.57		1.0	23.0	
		25	0		21.57		2.0	22.0	
		25	12		21.61		2.0	22.0	
	64QAM	25	25		21.64		2.0	22.0	
		50	0		21.58		2.0	22.0	
		1	0		21.70		2.0	22.0	
		1	25		21.82		2.0	22.0	
		1	49		21.78		2.0	22.0	
		25	0		20.14		3.0	21.0	
5 MHz	QPSK	25	12		20.65		3.0	21.0	
		50	0		20.58		3.0	21.0	
		1	0		23.58	23.57	23.64	0.0	24.0
		1	12		23.62	23.58	23.54	0.0	24.0
		1	24		23.63	23.58	23.61	0.0	24.0
		12	0		21.82	22.59	22.65	1.0	23.0
	16QAM	12	7		22.67	22.63	22.63	1.0	23.0
		12	13		22.65	22.65	22.57	1.0	23.0
		25	0		22.61	22.56	22.60	1.0	23.0
		1	0		22.98	22.83	22.97	1.0	23.0
		1	12		22.91	22.88	22.98	1.0	23.0
		1	24		22.82	22.94	22.90	1.0	23.0
	64QAM	12	0		21.75	21.63	21.73	2.0	22.0
		12	7		21.79	21.67	21.77	2.0	22.0
		12	13		21.73	21.68	21.69	2.0	22.0
		25	0		21.64	21.59	21.62	2.0	22.0
		1	0		21.75	21.90	21.90	2.0	22.0
		1	12		21.81	21.98	21.88	2.0	22.0
64QAM	1	24		21.76	21.88	21.76	2.0	22.0	
	12	0		19.90	20.69	20.60	3.0	21.0	
	12	7		20.67	20.70	20.63	3.0	21.0	
	12	13		20.75	20.73	20.56	3.0	21.0	
	25	0		20.63	20.56	20.59	3.0	21.0	

LTE Band 41 (ANT B)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				20850	21100	21350		
		2510.00 MHz	2535.00 MHz	2560.00 MHz				
20 MHz	QPSK	1	0	24.19	24.25	24.29	0.0	25.0
		1	49	24.36	24.32	24.30	0.0	25.0
		1	99	24.17	24.27	24.48	0.0	25.0
		50	0	23.18	23.28	23.36	1.0	24.0
		50	24	23.29	23.41	23.45	1.0	24.0
		50	50	23.26	23.41	23.39	1.0	24.0
	16QAM	100	0	23.23	23.36	23.36	1.0	24.0
		1	0	23.31	23.46	23.40	1.0	24.0
		1	49	23.44	23.49	23.64	1.0	24.0
		1	99	23.33	23.49	23.34	1.0	24.0
		50	0	22.18	22.32	22.22	2.0	23.0
		50	24	22.28	22.41	22.44	2.0	23.0
	64QAM	50	50	22.24	22.37	22.39	2.0	23.0
		100	0	22.27	22.31	22.48	2.0	23.0
		1	0	22.25	22.10	22.21	2.0	23.0
		1	49	22.38	22.46	22.40	2.0	23.0
		1	99	22.12	22.22	22.22	2.0	23.0
		50	0	21.14	21.22	21.29	3.0	22.0
15 MHz	QPSK	50	24	21.28	21.27	21.40	3.0	22.0
		50	50	21.19	21.32	21.31	3.0	22.0
		100	0	21.24	21.25	21.36	3.0	22.0
		1	0	24.16	24.34	24.27	0.0	25.0
		1	37	24.27	24.39	24.33	0.0	25.0
		1	74	24.14	24.29	24.39	0.0	25.0
	16QAM	36	0	23.27	23.25	23.33	1.0	24.0
		36	20	23.29	23.36	23.33	1.0	24.0
		36	39	23.22	23.36	23.26	1.0	24.0
		75	0	23.22	23.29	23.24	1.0	24.0
		1	0	23.27	23.12	23.35	1.0	24.0
		1	37	23.32	23.40	23.40	1.0	24.0
	64QAM	1	74	23.29	23.12	23.15	1.0	24.0
		36	0	22.27	22.29	22.36	2.0	23.0
		36	20	22.25	22.38	22.33	2.0	23.0
		36	39	22.28	22.41	22.30	2.0	23.0
		75	0	22.19	22.28	22.37	2.0	23.0
		1	0	22.38	22.05	22.24	2.0	23.0
64QAM	1	37	22.34	22.42	22.29	2.0	23.0	
	1	74	22.14	22.37	22.09	2.0	23.0	
	36	0	21.23	21.21	21.23	3.0	22.0	
	36	20	21.24	21.39	21.22	3.0	22.0	
	36	39	21.24	21.36	21.24	3.0	22.0	
	75	0	21.21	21.33	21.27	3.0	22.0	

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20800	21100	21400		
				2505.00 MHz	2535.00 MHz	2565.00 MHz		
10 MHz	QPSK	1	0	24.34	24.42	24.44	0.0	25.0
		1	25	24.27	24.41	24.42	0.0	25.0
		1	49	24.14	24.36	24.27	0.0	25.0
		25	0	23.26	23.36	23.29	1.0	24.0
		25	12	23.33	23.38	23.35	1.0	24.0
		25	25	23.24	23.40	23.33	1.0	24.0
	16QAM	50	0	23.24	23.38	23.31	1.0	24.0
		1	0	23.34	23.27	23.40	1.0	24.0
		1	25	23.44	23.40	23.39	1.0	24.0
		1	49	23.19	23.03	23.36	1.0	24.0
		25	0	22.30	22.32	22.29	2.0	23.0
		25	12	22.23	22.41	22.31	2.0	23.0
	64QAM	25	25	22.24	22.43	22.26	2.0	23.0
		50	0	22.29	22.27	22.26	2.0	23.0
		1	0	22.18	22.12	22.21	2.0	23.0
		1	25	22.23	22.24	22.16	2.0	23.0
		1	49	22.44	22.32	21.97	2.0	23.0
		25	0	21.29	21.36	21.21	3.0	22.0
5 MHz	QPSK	25	12	21.24	21.31	21.30	3.0	22.0
		25	25	21.31	21.34	21.27	3.0	22.0
		50	0	21.32	21.30	21.12	3.0	22.0
		1	0	24.29	24.20	24.47	0.0	25.0
		1	12	24.05	24.35	24.36	0.0	25.0
		1	24	24.21	24.32	24.34	0.0	25.0
	16QAM	12	0	23.19	23.42	23.33	1.0	24.0
		12	7	23.28	23.39	23.33	1.0	24.0
		12	13	23.23	23.40	23.30	1.0	24.0
		25	0	23.23	23.40	23.31	1.0	24.0
		1	0	23.20	23.27	23.48	1.0	24.0
		1	12	23.44	23.48	23.62	1.0	24.0
	64QAM	1	24	23.24	23.36	23.23	1.0	24.0
		12	0	22.34	22.48	22.34	2.0	23.0
		12	7	22.29	22.49	22.31	2.0	23.0
		12	13	22.33	22.44	22.31	2.0	23.0
		25	0	22.26	22.30	22.36	2.0	23.0
		1	0	22.06	22.30	22.26	2.0	23.0
64QAM	1	12	22.08	22.30	22.14	2.0	23.0	
	1	24	22.03	22.37	22.31	2.0	23.0	
	12	0	21.17	21.41	21.42	3.0	22.0	
	12	7	21.17	21.36	21.40	3.0	22.0	
	12	13	21.20	21.35	21.44	3.0	22.0	
	25	0	21.23	21.32	21.32	3.0	22.0	

LTE Band 41 (ANT F)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				20850 2510.00 MHz	21100 2535.00 MHz	21350 2560.00 MHz		
20 MHz	QPSK	1	0	24.26	24.06	24.19	0.0	25.0
		1	49	24.25	24.24	24.34	0.0	25.0
		1	99	24.24	24.08	24.40	0.0	25.0
		50	0	23.14	23.09	23.30	1.0	24.0
		50	24	23.28	23.26	23.30	1.0	24.0
		50	50	23.20	23.17	23.36	1.0	24.0
	16QAM	100	0	23.17	23.18	23.30	1.0	24.0
		1	0	23.17	23.09	23.54	1.0	24.0
		1	49	23.31	23.34	23.71	1.0	24.0
		1	99	23.27	23.25	23.40	1.0	24.0
		50	0	22.14	22.10	22.31	2.0	23.0
		50	24	22.27	22.20	22.31	2.0	23.0
	64QAM	50	50	22.24	22.12	22.36	2.0	23.0
		100	0	22.20	22.18	22.28	2.0	23.0
		1	0	22.03	21.97	22.35	2.0	23.0
		1	49	22.22	22.16	22.08	2.0	23.0
		1	99	22.08	22.04	22.15	2.0	23.0
		50	0	21.09	20.96	21.20	3.0	22.0
15 MHz	QPSK	50	24	21.10	21.09	21.25	3.0	22.0
		50	50	21.11	21.07	21.23	3.0	22.0
		100	0	21.07	21.08	21.14	3.0	22.0
		1	0	24.13	24.15	24.28	0.0	25.0
		1	37	24.27	24.11	24.42	0.0	25.0
		1	74	24.19	24.17	24.38	0.0	25.0
	16QAM	36	0	23.23	23.08	23.26	1.0	24.0
		36	20	23.24	23.18	23.37	1.0	24.0
		36	39	23.19	23.17	23.33	1.0	24.0
		75	0	23.16	23.10	23.31	1.0	24.0
		1	0	23.07	22.98	23.30	1.0	24.0
		1	37	23.43	23.24	23.18	1.0	24.0
	64QAM	1	74	23.34	23.12	23.11	1.0	24.0
		36	0	22.26	22.06	22.32	2.0	23.0
		36	20	22.22	22.18	22.38	2.0	23.0
		36	39	22.28	22.18	22.34	2.0	23.0
		75	0	22.20	22.11	22.33	2.0	23.0
		1	0	21.95	22.03	22.23	2.0	23.0
64QAM	1	37	22.16	22.14	22.28	2.0	23.0	
	1	74	22.10	21.96	22.21	2.0	23.0	
	36	0	21.08	21.02	21.18	3.0	22.0	
	36	20	21.09	21.05	21.31	3.0	22.0	
	36	39	21.07	21.06	21.25	3.0	22.0	
	75	0	20.99	20.90	21.26	3.0	22.0	

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20800	21100	21400		
				2505.00 MHz	2535.00 MHz	2565.00 MHz		
10 MHz	QPSK	1	0	24.11	24.06	24.21	0.0	25.0
		1	25	24.29	24.21	24.35	0.0	25.0
		1	49	24.21	24.09	24.48	0.0	25.0
		25	0	23.20	23.16	23.28	1.0	24.0
		25	12	23.19	23.24	23.28	1.0	24.0
		25	25	23.18	23.16	23.36	1.0	24.0
	16QAM	50	0	23.09	23.17	23.25	1.0	24.0
		1	0	23.16	23.31	23.18	1.0	24.0
		1	25	23.21	23.27	23.33	1.0	24.0
		1	49	23.34	23.18	23.18	1.0	24.0
		25	0	22.22	22.26	22.28	2.0	23.0
		25	12	22.26	22.29	22.27	2.0	23.0
	64QAM	25	25	22.22	22.31	22.34	2.0	23.0
		50	0	22.23	22.21	22.18	2.0	23.0
		1	0	22.07	22.05	22.31	2.0	23.0
		1	25	21.93	22.23	22.23	2.0	23.0
		1	49	22.22	22.07	22.19	2.0	23.0
		25	0	20.98	21.08	21.22	3.0	22.0
5 MHz	QPSK	25	12	21.06	21.03	21.24	3.0	22.0
		25	25	20.99	20.95	21.30	3.0	22.0
		50	0	20.98	21.04	21.03	3.0	22.0
		1	0	24.12	24.17	24.64	0.0	25.0
		1	12	24.12	24.19	24.34	0.0	25.0
		1	24	24.19	24.09	24.32	0.0	25.0
	16QAM	12	0	23.15	23.19	23.34	1.0	24.0
		12	7	23.17	23.19	23.36	1.0	24.0
		12	13	23.13	23.16	23.34	1.0	24.0
		25	0	23.16	23.98	23.34	1.0	24.0
		1	0	23.11	23.45	23.30	1.0	24.0
		1	12	23.32	23.55	23.60	1.0	24.0
	64QAM	1	24	23.09	23.46	23.33	1.0	24.0
		12	0	22.19	22.23	22.31	2.0	23.0
		12	7	22.22	22.23	22.34	2.0	23.0
		12	13	22.26	22.24	22.30	2.0	23.0
		25	0	22.13	22.11	22.44	2.0	23.0
		1	0	21.03	22.12	22.22	2.0	23.0
64QAM	1	12	22.00	22.14	22.21	2.0	23.0	
	1	24	21.83	21.99	22.07	2.0	23.0	
	12	0	20.99	21.15	21.20	3.0	22.0	
	12	7	21.04	21.12	21.17	3.0	22.0	
	12	13	20.97	20.95	21.11	3.0	22.0	
	25	0	20.89	21.02	21.02	3.0	22.0	

LTE Band 41 (UL CA, ANT B)

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
40MHz (20MHz / 20MHz)	2506.00	2525.80	1	99	1	0	24.72	23.96
			1	0	1	99	16.35	16.53
			100	0	100	0	23.07	22.03
	2583.10	2602.90	1	99	1	0	24.56	23.84
			1	0	1	99	16.41	16.45
			100	0	100	0	23.03	22.07
	2660.20	2680.00	1	99	1	0	24.76	24.04
			1	0	1	99	15.88	15.89
			100	0	100	0	23.08	22.01

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
35MHz (15MHz / 20MHz)	2503.50	2520.60	1	74	1	0	24.59	23.86
			1	0	1	99	16.45	16.62
			75	0	100	0	23.08	22.03
	2583.20	2600.30	1	74	1	0	24.01	23.71
			1	0	1	99	16.65	16.78
			75	0	100	0	23.05	21.09
	2662.90	2680.00	1	74	1	0	24.66	24.31
			1	0	1	99	16.51	16.66
			75	0	100	0	23.01	22.13

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
30MHz (15MHz / 15MHz)	2503.50	2518.50	1	74	1	0	24.61	24.11
			1	0	1	74	16.33	16.91
			75	0	75	0	23.05	22.07
	2585.50	2600.50	1	74	1	0	24.67	23.03
			1	0	1	74	16.66	16.91
			75	0	75	0	23.04	21.98
	2667.50	2682.50	1	74	1	0	24.71	24.13
			1	0	1	74	16.65	17.03
			75	0	75	0	23.12	21.98

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
25MHz (5MHz / 20MHz)	2498.50	2510.20	1	24	1	0	24.71	24.53
			1	0	1	99	16.52	17.11
			25	0	100	0	23.01	21.94
	2583.60	2595.30	1	24	1	0	24.68	24.08
			1	0	1	99	16.43	16.82
			25	0	100	0	22.95	22.03
	2668.30	2680.00	1	24	1	0	24.74	24.52
			1	0	1	99	16.81	17.22
			25	0	100	0	23.06	22.05

LTE Band 41 (UL CA, ANT F)

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
40MHz (20MHz / 20MHz)	2506.00	2525.80	1	99	1	0	24.49	24.01
			1	0	1	99	16.07	16.76
			100	0	100	0	22.61	21.66
	2583.10	2602.90	1	99	1	0	24.48	23.76
			1	0	1	99	15.99	16.37
			100	0	100	0	22.65	21.74
	2660.20	2680.00	1	99	1	0	24.58	24.17
			1	0	1	99	16.41	16.85
			100	0	100	0	22.87	21.79

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
35MHz (15MHz / 20MHz)	2503.50	2520.60	1	74	1	0	24.46	23.79
			1	0	1	99	16.04	16.53
			75	0	100	0	22.70	21.79
	2583.20	2600.30	1	74	1	0	23.74	23.41
			1	0	1	99	16.41	16.65
			75	0	100	0	22.82	21.81
	2662.90	2680.00	1	74	1	0	24.47	24.05
			1	0	1	99	16.24	16.83
			75	0	100	0	22.79	21.83

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
30MHz (15MHz / 15MHz)	2503.50	2518.50	1	74	1	0	24.38	23.91
			1	0	1	74	16.16	16.74
			75	0	75	0	22.71	21.72
	2585.50	2600.50	1	74	1	0	24.52	23.74
			1	0	1	74	16.31	16.66
			75	0	75	0	22.74	21.75
	2667.50	2682.50	1	74	1	0	24.48	23.98
			1	0	1	74	16.35	16.91
			75	0	75	0	22.81	21.72

Bandwidth	PCC Frequency (MHz)	SCC1 Frequency (MHz)	PCC RB	PCC RB	SCC1 RB	SCC1 RB	Conducted Average Power (dBm)	
			Size	Offset	Size	Offset	QPSK	16QAM
25MHz (5MHz / 20MHz)	2498.50	2510.20	1	24	1	0	24.45	24.16
			1	0	1	99	16.26	16.82
			25	0	100	0	22.70	21.67
	2583.60	2595.30	1	24	1	0	24.52	23.81
			1	0	1	99	16.17	16.63
			25	0	100	0	22.75	21.82
	2668.30	2680.00	1	24	1	0	24.41	24.23
			1	0	1	99	16.54	17.01
			25	0	100	0	22.83	21.77

LTE Band 66 (ANT A)

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				132072	132322	132572		
				1720.00 MHz	1745.00 MHz	1770.00 MHz		
20 MHz	QPSK	1	0	22.96	23.34	23.36	0.0	24.2
		1	49	22.60	23.39	23.28	0.0	24.2
		1	99	23.14	23.29	23.19	0.0	24.2
		50	0	22.20	22.38	22.32	1.0	23.2
		50	24	22.27	22.36	22.36	1.0	23.2
		50	50	22.28	22.39	22.29	1.0	23.2
	16QAM	100	0	22.27	22.33	22.34	1.0	23.2
		1	0	22.00	22.79	22.65	1.0	23.2
		1	49	21.72	22.75	22.61	1.0	23.2
		1	99	22.36	22.67	22.57	1.0	23.2
		50	0	21.24	21.40	21.32	2.0	22.2
		50	24	21.31	21.38	21.38	2.0	22.2
	64QAM	50	50	21.30	21.39	21.30	2.0	22.2
		100	0	21.29	21.34	21.37	2.0	22.2
		1	0	21.53	21.61	21.59	2.0	22.2
		1	49	21.20	21.63	21.60	2.0	22.2
		1	99	21.57	21.53	21.43	2.0	22.2
		50	0	20.18	20.35	20.29	3.0	21.2
15 MHz	QPSK	50	24	20.28	20.33	20.31	3.0	21.2
		50	50	20.27	20.36	20.25	3.0	21.2
		100	0	20.26	20.34	20.33	3.0	21.2
		1	0	23.07	23.48	23.42	0.0	24.2
		1	37	22.79	23.46	23.44	0.0	24.2
		1	74	22.92	23.43	23.32	0.0	24.2
	16QAM	36	0	22.24	22.40	22.34	1.0	23.2
		36	20	22.34	22.41	22.39	1.0	23.2
		36	39	22.33	22.46	22.36	1.0	23.2
		75	0	22.29	22.36	22.38	1.0	23.2
		1	0	21.28	22.83	22.79	1.0	23.2
		1	37	21.10	22.79	22.73	1.0	23.2
	64QAM	1	74	21.19	22.69	22.62	1.0	23.2
		36	0	21.27	21.43	21.38	2.0	22.2
		36	20	21.35	21.41	21.46	2.0	22.2
		36	39	21.34	21.47	21.38	2.0	22.2
		75	0	21.31	21.39	21.40	2.0	22.2
		1	0	20.87	21.68	21.60	2.0	22.2
10 MHz	QPSK	1	37	20.57	21.66	21.55	2.0	22.2
		1	74	20.61	21.57	21.47	2.0	22.2
		36	0	20.25	20.43	20.37	3.0	21.2
		36	20	20.36	20.40	20.40	3.0	21.2
		36	39	20.34	20.46	20.36	3.0	21.2
		75	0	20.32	20.37	20.39	3.0	21.2
	16QAM	1	0	23.00	23.41	23.38	0.0	24.2
		1	25	22.94	23.44	23.39	0.0	24.2
		1	49	22.81	23.41	23.31	0.0	24.2
		25	0	22.24	22.42	22.34	1.0	23.2
		25	12	22.36	22.42	22.44	1.0	23.2
		25	25	22.30	22.47	22.38	1.0	23.2
	64QAM	50	0	22.32	22.49	22.41	1.0	23.2
		1	0	21.13	22.76	22.70	1.0	23.2
		1	25	21.15	22.82	22.75	1.0	23.2
		1	49	21.07	22.74	22.65	1.0	23.2
		25	0	21.26	21.47	21.37	2.0	22.2
		25	12	21.36	21.48	21.44	2.0	22.2
64QAM	25	25	21.33	21.54	21.42	2.0	22.2	
	50	0	21.34	21.45	21.44	2.0	22.2	
	1	0	20.78	21.71	21.50	2.0	22.2	
	1	25	20.67	21.77	21.52	2.0	22.2	
	1	49	20.51	21.64	21.41	2.0	22.2	
	25	0	20.26	20.42	20.36	3.0	21.2	
64QAM	25	12	20.37	20.42	20.41	3.0	21.2	
	25	25	20.36	20.47	20.37	3.0	21.2	
	50	0	20.34	20.40	20.39	3.0	21.2	

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
				131997	132322	132647			
				1712.50 MHz	1745.00 MHz	1777.50 MHz			
5 MHz	QPSK	1	0	22.96	23.49	23.29	0.0	24.2	
		1	12	23.02	23.56	23.38	0.0	24.2	
		1	24	22.79	23.49	23.30	0.0	24.2	
		12	0	22.33	22.43	22.36	1.0	23.2	
		12	7	22.39	22.47	22.47	1.0	23.2	
		12	13	22.34	22.50	22.41	1.0	23.2	
		25	0	22.33	22.40	22.38	1.0	23.2	
	16QAM	1	0	21.31	22.88	22.68	1.0	23.2	
		1	12	21.44	22.87	22.79	1.0	23.2	
		1	24	21.22	22.86	22.74	1.0	23.2	
		12	0	21.44	21.49	21.39	2.0	22.2	
		12	7	21.50	21.53	21.48	2.0	22.2	
		12	13	21.45	21.53	21.46	2.0	22.2	
		25	0	21.35	21.45	21.44	2.0	22.2	
	64QAM	1	0	20.73	21.66	21.70	2.0	22.2	
		1	12	20.85	21.71	21.73	2.0	22.2	
		1	24	20.56	21.74	21.58	2.0	22.2	
		12	0	20.38	20.47	20.30	3.0	21.2	
		12	7	20.42	20.50	20.46	3.0	21.2	
		12	13	20.40	20.51	20.39	3.0	21.2	
		25	0	20.32	20.41	20.37	3.0	21.2	
	BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					131987	132322	132657		
					1711.50 MHz	1745.00 MHz	1778.50 MHz		
	3 MHz	QPSK	1	0	22.14	23.38	23.31	0.0	24.2
1			8	22.16	23.51	23.45	0.0	24.2	
1			14	22.09	23.41	23.29	0.0	24.2	
8			0	22.31	22.42	22.41	1.0	23.2	
8			4	22.32	22.45	22.34	1.0	23.2	
8			7	22.34	22.53	22.41	1.0	23.2	
15			0	22.33	22.42	22.31	1.0	23.2	
16QAM		1	0	21.32	22.84	22.62	1.0	23.2	
		1	8	21.35	22.96	22.80	1.0	23.2	
		1	14	21.32	22.80	22.64	1.0	23.2	
		8	0	21.39	21.45	21.38	2.0	22.2	
		8	4	21.43	21.50	21.38	2.0	22.2	
		8	7	21.45	21.55	21.47	2.0	22.2	
		15	0	21.38	21.49	21.33	2.0	22.2	
64QAM		1	0	20.95	21.62	21.45	2.0	22.2	
		1	8	20.95	21.82	21.55	2.0	22.2	
		1	14	20.87	21.63	21.46	2.0	22.2	
		8	0	20.38	20.52	20.32	3.0	21.2	
		8	4	20.37	20.52	20.36	3.0	21.2	
		8	7	20.38	20.58	20.44	3.0	21.2	
		15	0	20.37	20.43	20.32	3.0	21.2	
BW (MHz)		Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					131979	132322	132665		
					1710.70 MHz	1745.00 MHz	1779.30 MHz		
1.4 MHz		QPSK	1	0	22.58	23.41	23.30	0.0	24.2
	1		3	22.51	23.39	23.26	0.0	24.2	
	1		5	22.44	23.37	23.30	0.0	24.2	
	3		0	23.19	23.43	23.27	0.0	24.2	
	3		1	23.22	23.38	23.32	0.0	24.2	
	3		3	23.23	23.39	23.31	0.0	24.2	
	6		0	22.27	22.44	22.33	1.0	23.2	
	16QAM	1	0	21.50	22.70	22.69	1.0	23.2	
		1	3	21.60	22.60	22.67	1.0	23.2	
		1	5	21.56	22.65	22.64	1.0	23.2	
		3	0	22.41	22.58	22.44	1.0	23.2	
		3	1	22.35	22.55	22.46	1.0	23.2	
		3	3	22.34	22.57	22.40	1.0	23.2	
		6	0	21.40	21.49	21.39	2.0	22.2	
	64QAM	1	0	21.36	21.66	21.58	2.0	22.2	
		1	3	21.23	21.60	21.57	2.0	22.2	
		1	5	21.10	21.59	21.60	2.0	22.2	
		3	0	21.42	21.62	21.41	2.0	22.2	
		3	1	21.40	21.61	21.38	2.0	22.2	
		3	3	21.41	21.58	21.39	2.0	22.2	
		6	0	20.38	20.61	20.28	3.0	21.2	

NR Band n41 (ANT F)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average PPOWER (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					509202	518598	528000		
					2546.01 MHz	2592.99 MHz	2640.00 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.37	24.30	24.40	0.0	25.0
			1	137	23.98	24.20	24.04	0.0	25.0
			1	271	24.29	24.21	24.09	0.0	25.0
			135	0	23.61	23.73	23.95	0.5	24.5
			135	69	24.08	24.13	23.94	0.0	25.0
			135	138	23.70	23.61	23.95	0.5	24.5
		270	0	23.69	23.76	23.94	0.5	24.5	
		QPSK	1	1	24.27	24.21	23.93	0.0	25.0
			1	137	23.92	24.00	23.99	0.0	25.0
			1	271	24.23	24.12	24.34	0.0	25.0
			135	0	23.15	23.17	23.25	1.0	24.0
			135	69	24.05	24.18	23.95	0.0	25.0
			135	138	23.13	23.15	23.23	1.0	24.0
		270	0	23.23	23.17	23.21	1.0	24.0	
	16QAM	1	1	23.07	23.07	23.10	1.0	24.0	
		1	137	22.86	22.90	22.85	1.0	24.0	
	64QAM	1	1	21.69	21.78	21.82	2.5	22.5	
1		1	19.89	19.90	19.96	4.5	20.5		
256QAM	1	1	19.89	19.90	19.96	4.5	20.5		
CP-OFDM	QPSK	1	1	22.80	22.78	22.88	1.5	23.5	
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.28	24.31	24.37	0.0	25.0
			1	123	24.22	24.28	24.03	0.0	25.0
			1	243	24.27	24.10	24.32	0.0	25.0
			120	0	23.71	23.71	23.66	0.5	24.5
			120	63	24.20	24.35	24.18	0.0	25.0
			120	125	23.69	23.75	23.68	0.5	24.5
		243	0	23.68	23.79	23.69	0.5	24.5	
		QPSK	1	1	24.47	24.52	24.61	0.0	25.0
			1	123	24.34	24.46	24.31	0.0	25.0
			1	243	24.47	24.45	24.55	0.0	25.0
			120	0	23.51	23.46	23.48	1.0	24.0
			120	63	24.38	24.53	24.38	0.0	25.0
			120	125	23.52	23.48	23.41	1.0	24.0
		243	0	23.44	23.51	23.49	1.0	24.0	
	16QAM	1	1	23.68	23.58	23.67	1.0	24.0	
		1	1	21.91	21.71	21.85	2.5	22.5	
	64QAM	1	1	19.95	19.86	19.88	4.5	20.5	
1		1	19.95	19.86	19.88	4.5	20.5		
256QAM	1	1	19.95	19.86	19.88	4.5	20.5		
CP-OFDM	QPSK	1	1	23.10	23.07	23.04	1.5	23.5	
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.26	24.19	24.25	0.0	25.0
			1	109	24.01	24.18	23.91	0.0	25.0
			1	215	24.23	24.12	24.31	0.0	25.0
			108	0	23.65	23.73	23.63	0.5	24.5
			108	55	24.23	24.36	24.20	0.0	25.0
			108	109	23.73	23.80	23.72	0.5	24.5
		216	0	23.67	23.76	23.67	0.5	24.5	
		QPSK	1	1	24.45	24.41	24.35	0.0	25.0
			1	109	24.32	24.44	24.15	0.0	25.0
			1	215	24.41	24.36	24.48	0.0	25.0
			108	0	23.46	23.51	23.44	1.0	24.0
			108	55	24.45	24.46	24.37	0.0	25.0
			108	109	23.47	23.49	23.49	1.0	24.0
		216	0	23.50	23.55	23.45	1.0	24.0	
	16QAM	1	1	23.48	23.47	23.50	1.0	24.0	
		1	1	21.84	21.68	21.68	2.5	22.5	
	64QAM	1	1	19.84	19.87	19.74	4.5	20.5	
1		1	19.84	19.87	19.74	4.5	20.5		
256QAM	1	1	19.84	19.87	19.74	4.5	20.5		
CP-OFDM	QPSK	1	1	23.03	22.99	22.96	1.5	23.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					506202	518598	531000		
					2531.02 MHz	2592.99 MHz	2655.00 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.18	24.15	24.06	0.0	25.0
			1	95	24.02	24.12	24.03	0.0	25.0
			1	188	24.13	24.19	24.28	0.0	25.0
			90	0	23.62	24.21	23.67	0.5	24.5
			90	50	24.19	24.17	24.22	0.0	25.0
			90	99	23.75	24.14	23.77	0.5	24.5
		180	0	23.70	24.17	23.69	0.5	24.5	
		QPSK	1	1	24.27	24.39	24.32	0.0	25.0
			1	95	24.28	24.44	24.17	0.0	25.0
			1	188	24.48	24.24	24.47	0.0	25.0
			90	0	23.49	23.52	23.36	1.0	24.0
			90	50	24.49	24.55	24.35	0.0	25.0
			90	99	23.49	23.52	23.49	1.0	24.0
		180	0	23.50	23.48	23.44	1.0	24.0	
16QAM	1	1	23.47	23.45	23.32	1.0	24.0		
64QAM	1	1	21.71	21.62	21.63	2.5	22.5		
256QAM	1	1	19.75	19.82	19.60	4.5	20.5		
CP-OFDM	QPSK	1	1	22.93	22.85	22.71	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					505200	518598	513996		
					2526.00 MHz	2592.99 MHz	2659.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.92	23.98	23.95	0.0	25.0
			1	81	23.90	24.10	23.87	0.0	25.0
			1	160	24.09	24.10	24.16	0.0	25.0
			81	0	23.58	24.13	23.53	0.5	24.5
			81	41	23.96	24.07	23.94	0.0	25.0
			81	81	23.53	24.10	23.61	0.5	24.5
		162	0	23.51	23.67	23.47	0.5	24.5	
		QPSK	1	1	24.23	24.23	24.16	0.0	25.0
			1	81	24.18	24.22	24.09	0.0	25.0
			1	160	24.29	24.24	24.29	0.0	25.0
			81	0	23.43	23.39	23.18	1.0	24.0
			81	41	24.24	24.28	24.19	0.0	25.0
			81	81	23.28	23.43	23.40	1.0	24.0
		162	0	23.34	23.36	23.27	1.0	24.0	
16QAM	1	1	23.35	23.27	23.13	1.0	24.0		
64QAM	1	1	21.50	21.49	21.40	2.5	22.5		
256QAM	1	1	19.61	19.50	19.49	4.5	20.5		
CP-OFDM	QPSK	1	1	22.77	22.81	22.66	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					504204	518598	532998		
					2521.01 MHz	2592.99 MHz	2665.00 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.26	24.25	24.21	0.0	25.0
			1	67	24.26	24.37	24.21	0.0	25.0
			1	131	24.33	24.40	24.36	0.0	25.0
			64	0	23.84	23.86	23.71	0.5	24.5
			64	35	24.40	24.53	24.42	0.0	25.0
			64	69	23.79	23.88	23.80	0.5	24.5
		128	0	23.70	23.86	23.76	0.5	24.5	
		QPSK	1	1	24.42	24.45	24.31	0.0	25.0
			1	67	24.40	24.43	24.35	0.0	25.0
			1	131	24.58	24.47	24.61	0.0	25.0
			64	0	23.64	23.63	23.43	1.0	24.0
			64	35	24.65	24.69	24.53	0.0	25.0
			64	69	23.56	23.59	23.65	1.0	24.0
		128	0	23.55	23.62	23.52	1.0	24.0	
16QAM	1	1	23.47	23.49	23.46	1.0	24.0		
64QAM	1	1	21.80	21.72	21.69	2.5	22.5		
256QAM	1	1	19.87	19.88	19.69	4.5	20.5		
CP-OFDM	QPSK	1	1	22.99	22.95	22.81	1.5	23.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					503202	518598	534000		
					2516.01 MHz	2592.99 MHz	2670.00 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.07	24.07	23.97	0.0	25.0
			1	53	24.20	24.07	24.01	0.0	25.0
			1	104	24.07	24.11	24.07	0.0	25.0
			50	0	23.67	23.71	24.10	0.5	24.5
			50	28	24.28	24.33	24.07	0.0	25.0
			50	56	23.67	23.84	24.07	0.5	24.5
		100	0	23.75	23.71	24.08	0.5	24.5	
		QPSK	1	1	24.32	24.25	24.13	0.0	25.0
			1	53	24.28	24.35	24.33	0.0	25.0
			1	104	24.19	24.34	24.38	0.0	25.0
			50	0	23.50	23.49	23.32	1.0	24.0
			50	28	24.49	24.50	24.44	0.0	25.0
			50	56	23.41	23.58	23.51	1.0	24.0
		100	0	23.45	23.47	23.33	1.0	24.0	
16QAM	1	1	23.23	23.33	23.07	1.0	24.0		
64QAM	1	1	21.52	21.53	21.47	2.5	22.5		
256QAM	1	1	19.54	19.63	19.60	4.5	20.5		
CP-OFDM	QPSK	1	1	22.72	22.76	22.57	1.5	23.5	
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.28	24.28	24.13	0.0	25.0
			1	39	24.09	24.16	24.15	0.0	25.0
			1	76	24.23	24.34	24.19	0.0	25.0
			36	0	23.73	23.83	23.66	0.5	24.5
			36	21	24.27	24.37	24.24	0.0	25.0
			36	42	23.64	23.78	23.73	0.5	24.5
		75	0	23.72	23.85	23.68	0.5	24.5	
		QPSK	1	1	24.44	24.42	24.26	0.0	25.0
			1	39	24.28	24.31	24.28	0.0	25.0
			1	76	24.39	24.45	24.51	0.0	25.0
			36	0	23.44	23.55	23.38	1.0	24.0
			36	21	24.50	24.54	24.49	0.0	25.0
			36	42	23.50	23.51	23.51	1.0	24.0
		75	0	23.49	23.52	23.47	1.0	24.0	
16QAM	1	1	23.50	23.44	23.27	1.0	24.0		
64QAM	1	1	21.71	21.70	21.58	2.5	22.5		
256QAM	1	1	19.78	19.84	19.63	4.5	20.5		
CP-OFDM	QPSK	1	1	22.86	22.91	22.78	1.5	23.5	
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.78	24.00	23.65	0.0	25.0
			1	32	24.51	23.97	24.25	0.0	25.0
			1	63	24.51	23.97	24.22	0.0	25.0
			32	0	24.50	23.54	23.67	0.5	24.5
			32	16	24.49	23.49	23.67	0.0	25.0
			32	33	24.48	23.46	23.66	0.5	24.5
		64	0	24.47	23.53	23.69	0.5	24.5	
		QPSK	1	1	24.46	24.06	24.16	0.0	25.0
			1	32	23.45	23.91	24.13	0.0	25.0
			1	63	23.65	23.99	24.19	0.0	25.0
			32	0	23.45	23.09	23.17	1.0	24.0
			32	16	24.43	23.02	23.13	0.0	25.0
			32	33	23.43	23.01	23.12	1.0	24.0
		64	0	23.36	23.02	23.17	1.0	24.0	
16QAM	1	1	23.42	23.11	23.27	1.0	24.0		
64QAM	1	1	21.26	21.65	21.80	2.5	22.5		
256QAM	1	1	19.60	19.57	19.59	4.5	20.5		
CP-OFDM	QPSK	1	1	22.46	22.70	22.63	1.5	23.5	

BW (MHz)	Modulation	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	DFT-s-OFDM	π/2 BPSK	1	1	24.09	23.69	23.96	0.0	25.0
			1	26	24.13	24.18	24.15	0.0	25.0
			1	49	24.01	24.19	24.13	0.0	25.0
			25	0	23.64	23.71	23.56	0.5	24.5
			25	13	24.27	24.27	24.17	0.0	25.0
			25	26	23.58	23.79	23.71	0.5	24.5
		QPSK	50	0	23.72	23.70	23.59	0.5	24.5
			1	1	24.33	24.22	24.03	0.0	25.0
			1	26	23.40	23.51	23.18	0.0	25.0
			1	49	23.45	23.47	23.32	0.0	25.0
			25	0	23.40	23.53	23.35	1.0	24.0
			25	13	24.35	24.37	24.25	0.0	25.0
		16QAM	25	26	23.46	23.41	23.40	1.0	24.0
			50	0	23.23	23.28	23.16	1.0	24.0
1	1		23.34	23.30	23.25	1.0	24.0		
64QAM	1	1	21.54	21.56	21.38	2.5	22.5		
	1	1	19.61	19.63	19.36	4.5	20.5		
CP-OFDM	QPSK	1	1	22.86	22.70	22.61	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					500700	518598	536496		
					2503.50 MHz	2592.99 MHz	2682.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.12	24.13	24.11	0.0	25.0
			1	19	24.11	24.20	24.11	0.0	25.0
			1	36	24.14	24.25	24.19	0.0	25.0
			18	0	23.66	23.74	24.19	0.5	24.5
			18	10	24.19	24.28	24.15	0.0	25.0
			18	20	23.62	23.71	24.15	0.5	24.5
		QPSK	36	0	23.67	23.76	24.16	0.5	24.5
			1	1	24.36	24.24	24.12	0.0	25.0
			1	19	24.45	24.37	24.29	0.0	25.0
			1	36	24.38	24.43	24.36	0.0	25.0
			18	0	23.51	23.55	23.39	1.0	24.0
			18	10	24.41	24.46	24.29	0.0	25.0
		16QAM	18	20	23.44	23.37	23.38	1.0	24.0
			36	0	23.47	23.41	23.33	1.0	24.0
1	1		23.33	23.32	23.25	1.0	24.0		
64QAM	1	1	21.66	21.63	21.47	2.5	22.5		
	1	1	19.68	19.70	19.45	4.5	20.5		
CP-OFDM	QPSK	1	1	22.89	22.77	22.58	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					500202	518598	537000		
					2501.01 MHz	2592.99 MHz	2685.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.07	23.49	24.13	0.0	25.0
			1	12	24.11	24.08	24.05	0.0	25.0
			1	22	24.13	24.18	24.21	0.0	25.0
			12	0	23.50	23.54	23.56	0.5	24.5
			12	6	24.08	24.14	24.06	0.0	25.0
			12	12	23.60	23.67	23.70	0.5	24.5
		QPSK	24	0	23.52	23.66	23.62	0.5	24.5
			1	1	24.40	24.40	24.23	0.0	25.0
			1	12	24.42	24.39	24.29	0.0	25.0
			1	22	24.48	24.39	24.36	0.0	25.0
			12	0	23.46	23.51	23.32	1.0	24.0
			12	6	24.39	24.44	24.27	0.0	25.0
		16QAM	12	12	23.45	23.53	23.34	1.0	24.0
			24	0	23.45	23.45	23.30	1.0	24.0
1	1		23.41	23.54	23.43	1.0	24.0		
64QAM	1	1	21.70	21.76	21.54	2.5	22.5		
	1	1	19.77	19.78	19.61	4.5	20.5		
CP-OFDM	QPSK	1	1	22.90	22.90	22.72	1.5	23.5	

NR Band n41 (ANT B)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average PPOWER (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					509202	518598	528000		
					2546.01 MHz	2592.99 MHz	2640.00 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.28	24.49	24.32	0.0	25.0
			1	137	23.99	24.30	24.23	0.0	25.0
			1	271	24.30	24.35	24.23	0.0	25.0
			135	0	23.22	24.41	23.86	0.5	24.5
			135	69	24.00	24.36	24.27	0.0	25.0
			135	138	23.11	24.38	23.78	0.5	24.5
		270	0	23.16	24.34	23.88	0.5	24.5	
		QPSK	1	1	24.28	24.35	24.50	0.0	25.0
			1	137	23.89	24.36	24.15	0.0	25.0
			1	271	24.25	24.47	24.12	0.0	25.0
			135	0	23.15	23.38	23.38	1.0	24.0
			135	69	23.99	24.38	24.23	0.0	25.0
			135	138	23.11	23.39	23.26	1.0	24.0
		270	0	23.15	23.44	23.43	1.0	24.0	
		16QAM	1	1	23.04	23.40	23.31	1.0	24.0
			1	137	22.71	23.15	22.92	1.0	24.0
		64QAM	1	1	21.81	22.24	21.71	2.5	22.5
			1	1	19.92	19.85	19.75	4.5	20.5
256QAM	1	1	19.92	19.85	19.75	4.5	20.5		
CP-OFDM	QPSK	1	1	22.82	22.97	23.13	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					508200	518598	528996		
					2541.00 MHz	2592.99 MHz	2644.98 MHz		
					90 MHz	DFT-s-OFDM	π/2 BPSK	1	1
1	123	24.24	24.36	24.16				0.0	25.0
1	243	24.20	24.30	24.26				0.0	25.0
120	0	23.66	23.90	23.91				0.5	24.5
120	63	24.23	24.40	24.26				0.0	25.0
120	125	23.67	23.91	23.71				0.5	24.5
243	0	23.73	23.81	23.80			0.5	24.5	
QPSK	1	1	24.17	24.60			24.61	0.0	25.0
	1	123	24.26	24.58			24.38	0.0	25.0
	1	243	24.32	24.62			24.50	0.0	25.0
	120	0	23.25	23.60			23.54	1.0	24.0
	120	63	24.21	24.64			24.36	0.0	25.0
	120	125	23.35	23.63			23.42	1.0	24.0
243	0	23.23	23.63	23.46			1.0	24.0	
16QAM	1	1	23.36	23.59			23.80	1.0	24.0
64QAM	1	1	21.54	21.77			22.03	2.5	22.5
256QAM	1	1	19.66	19.87			20.00	4.5	20.5
CP-OFDM	QPSK	1	1	22.72			23.13	23.13	1.5
BW (MHz)	Modulation	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	DFT-s-OFDM	π/2 BPSK	1	1
1	109	24.15	24.41	24.04				0.0	25.0
1	215	24.12	24.28	24.25				0.0	25.0
108	0	23.65	23.90	23.76				0.5	24.5
108	55	24.25	24.56	24.32				0.0	25.0
108	109	23.68	23.89	23.72				0.5	24.5
216	0	23.63	23.94	23.73			0.5	24.5	
QPSK	1	1	24.18	24.46			24.62	0.0	25.0
	1	109	24.01	24.44			24.19	0.0	25.0
	1	215	24.28	24.41			24.46	0.0	25.0
	108	0	23.21	23.58			23.54	1.0	24.0
	108	55	24.24	24.62			24.42	0.0	25.0
	108	109	23.32	23.64			23.38	1.0	24.0
216	0	23.22	23.54	23.42			1.0	24.0	
16QAM	1	1	23.17	23.40			23.71	1.0	24.0
64QAM	1	1	21.40	21.73			21.89	2.5	22.5
256QAM	1	1	19.65	19.91			19.96	4.5	20.5
CP-OFDM	QPSK	1	1	22.67			23.10	23.12	1.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					506202	518598	531000		
					2531.02 MHz	2592.99 MHz	2655.00 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.34	24.27	24.21	0.0	25.0
			1	95	24.15	24.37	24.07	0.0	25.0
			1	188	24.11	24.26	24.26	0.0	25.0
			90	0	23.70	23.92	23.78	0.5	24.5
			90	50	24.29	24.54	24.24	0.0	25.0
			90	99	23.69	23.98	23.68	0.5	24.5
		180	0	23.72	23.95	23.71	0.5	24.5	
		QPSK	1	1	24.07	24.39	24.44	0.0	25.0
			1	95	24.06	24.43	24.23	0.0	25.0
			1	188	24.29	24.49	24.34	0.0	25.0
			90	0	23.22	23.62	23.42	1.0	24.0
			90	50	24.20	24.58	24.45	0.0	25.0
			90	99	23.35	23.65	23.42	1.0	24.0
		180	0	23.22	23.59	23.35	1.0	24.0	
16QAM	1	1	23.13	23.31	23.46	1.0	24.0		
64QAM	1	1	21.26	21.62	21.69	2.5	22.5		
256QAM	1	1	19.51	19.77	19.65	4.5	20.5		
CP-OFDM	QPSK	1	1	22.54	22.98	22.97	1.5	23.5	
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.93	24.24	24.09	0.0	25.0
			1	81	23.90	24.30	23.94	0.0	25.0
			1	160	24.02	24.26	23.72	0.0	25.0
			81	0	23.58	23.87	23.57	0.5	24.5
			81	41	23.99	24.27	24.09	0.0	25.0
			81	81	23.55	23.85	23.65	0.5	24.5
		162	0	23.53	23.76	23.66	0.5	24.5	
		QPSK	1	1	23.84	24.38	24.25	0.0	25.0
			1	81	23.98	24.39	24.09	0.0	25.0
			1	160	24.14	24.34	24.31	0.0	25.0
			81	0	23.02	23.44	23.33	1.0	24.0
			81	41	23.98	24.47	24.12	0.0	25.0
			81	81	23.11	23.54	23.26	1.0	24.0
		162	0	23.11	23.52	23.27	1.0	24.0	
16QAM	1	1	22.84	23.39	23.25	1.0	24.0		
64QAM	1	1	21.19	21.53	21.53	2.5	22.5		
256QAM	1	1	19.40	19.68	19.64	4.5	20.5		
CP-OFDM	QPSK	1	1	22.55	22.89	22.83	1.5	23.5	
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.07	24.23	24.16	0.0	25.0
			1	67	24.05	24.32	24.06	0.0	25.0
			1	131	24.14	24.41	23.80	0.0	25.0
			64	0	23.68	23.93	23.70	0.5	24.5
			64	35	24.19	24.53	24.30	0.0	25.0
			64	69	23.60	23.94	23.69	0.5	24.5
		128	0	23.54	23.88	23.65	0.5	24.5	
		QPSK	1	1	24.19	24.52	24.38	0.0	25.0
			1	67	24.12	24.54	24.28	0.0	25.0
			1	131	24.32	24.61	24.35	0.0	25.0
			64	0	23.25	23.60	23.45	1.0	24.0
			64	35	24.25	24.69	24.43	0.0	25.0
			64	69	23.31	23.72	23.44	1.0	24.0
		128	0	23.21	23.70	23.47	1.0	24.0	
16QAM	1	1	23.11	23.48	23.47	1.0	24.0		
64QAM	1	1	21.39	21.81	21.70	2.5	22.5		
256QAM	1	1	19.57	19.97	19.65	4.5	20.5		
CP-OFDM	QPSK	1	1	22.70	23.10	22.93	1.5	23.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
					503202	518598	534000			
					2516.01 MHz	2592.99 MHz	2670.00 MHz			
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.79	24.12	23.89	0.0	25.0	
			1	53	23.95	24.28	23.96	0.0	25.0	
			1	104	23.87	24.14	23.87	0.0	25.0	
			50	0	23.51	23.79	23.56	0.5	24.5	
			50	28	24.10	24.36	24.16	0.0	25.0	
			50	56	23.45	23.80	23.56	0.5	24.5	
		QPSK	100	0	23.49	23.80	23.53	0.5	24.5	
			1	1	23.99	24.21	24.13	0.0	25.0	
			1	53	24.03	24.45	24.22	0.0	25.0	
			1	104	24.15	24.31	23.68	0.0	25.0	
			50	0	23.17	23.43	23.23	1.0	24.0	
			50	28	24.18	24.57	24.30	0.0	25.0	
		CP-OFDM	QPSK	50	56	23.13	23.53	23.26	1.0	24.0
				100	0	23.15	23.50	23.22	1.0	24.0
16QAM	1			1	23.02	23.27	23.14	1.0	24.0	
64QAM	1			1	21.21	21.50	21.34	2.5	22.5	
256QAM	1	1	19.44	19.61	19.47	4.5	20.5			
CP-OFDM	QPSK	1	1	22.42	22.76	22.61	1.5	23.5		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.01	24.22	24.06	0.0	25.0	
			1	39	24.01	24.25	24.01	0.0	25.0	
			1	76	23.94	24.31	23.77	0.0	25.0	
			36	0	23.47	23.80	23.56	0.5	24.5	
			36	21	24.10	24.41	24.18	0.0	25.0	
			36	42	23.54	23.89	23.60	0.5	24.5	
		QPSK	75	0	23.55	23.86	23.56	0.5	24.5	
			1	1	24.05	24.39	24.22	0.0	25.0	
			1	39	23.99	24.43	24.26	0.0	25.0	
			1	76	24.07	24.47	23.86	0.0	25.0	
			36	0	23.15	23.55	23.25	1.0	24.0	
			36	21	24.17	24.60	24.27	0.0	25.0	
		CP-OFDM	QPSK	36	42	23.13	23.55	23.31	1.0	24.0
				75	0	23.13	23.59	23.25	1.0	24.0
16QAM	1			1	23.04	23.35	23.28	1.0	24.0	
64QAM	1			1	21.35	21.68	21.46	2.5	22.5	
256QAM	1	1	19.60	19.86	19.58	4.5	20.5			
CP-OFDM	QPSK	1	1	22.52	22.86	22.75	1.5	23.5		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.93	23.98	23.87	0.0	25.0	
			1	32	23.84	23.94	23.91	0.0	25.0	
			1	63	23.92	23.94	23.95	0.0	25.0	
			32	0	23.29	23.44	23.28	0.5	24.5	
			32	16	23.40	23.41	23.32	0.0	25.0	
			32	33	23.37	23.41	23.44	0.5	24.5	
		QPSK	64	0	23.31	23.47	23.31	0.5	24.5	
			1	1	23.89	23.88	23.84	0.0	25.0	
			1	32	23.73	23.90	23.74	0.0	25.0	
			1	63	23.77	23.86	23.87	0.0	25.0	
			32	0	22.85	22.94	22.81	1.0	24.0	
			32	16	22.89	22.93	22.80	0.0	25.0	
		CP-OFDM	QPSK	32	33	22.89	22.97	22.90	1.0	24.0
				64	0	22.86	22.97	22.83	1.0	24.0
16QAM	1			1	22.87	22.98	22.81	1.0	24.0	
64QAM	1			1	21.65	21.56	21.39	2.5	22.5	
256QAM	1	1	19.35	19.47	19.31	4.5	20.5			
CP-OFDM	QPSK	1	1	22.35	22.46	22.33	1.5	23.5		

BW (MHz)	Modulation	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	DFT-s-OFDM	π/2 BPSK	1	1	23.88	24.16	24.02	0.0	25.0
			1	26	23.85	24.23	24.01	0.0	25.0
			1	49	23.84	24.22	23.62	0.0	25.0
			25	0	22.85	23.71	23.55	0.5	24.5
			25	13	23.99	24.39	24.12	0.0	25.0
			25	26	23.42	23.77	23.56	0.5	24.5
		QPSK	50	0	23.43	23.81	23.49	0.5	24.5
			1	1	23.80	24.30	24.16	0.0	25.0
			1	26	23.04	23.42	23.21	0.0	25.0
			1	49	23.03	23.43	23.17	0.0	25.0
			25	0	23.03	23.50	23.22	1.0	24.0
			25	13	23.98	24.40	24.11	0.0	25.0
		16QAM	25	26	23.02	23.50	23.20	1.0	24.0
			50	0	22.85	23.21	22.53	1.0	24.0
64QAM	1	1	22.90	23.45	23.08	1.0	24.0		
256QAM	1	1	21.13	21.53	21.27	2.5	22.5		
256QAM	1	1	19.41	19.69	19.43	4.5	20.5		
CP-OFDM	QPSK	1	1	22.40	22.88	22.61	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					500700	518598	536496		
					2503.50 MHz	2592.99 MHz	2682.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.74	24.20	23.93	0.0	25.0
			1	19	23.97	24.27	23.97	0.0	25.0
			1	36	23.98	24.33	24.01	0.0	25.0
			18	0	23.96	23.81	24.04	0.5	24.5
			18	10	23.92	24.32	23.97	0.0	25.0
			18	20	23.91	23.76	23.95	0.5	24.5
		QPSK	36	0	24.04	23.80	24.00	0.5	24.5
			1	1	23.85	24.31	24.15	0.0	25.0
			1	19	23.89	24.32	24.11	0.0	25.0
			1	36	23.92	24.33	23.67	0.0	25.0
			18	0	22.99	23.42	23.16	1.0	24.0
			18	10	23.95	24.40	24.12	0.0	25.0
		16QAM	18	20	22.98	23.44	23.17	1.0	24.0
			36	0	22.96	23.45	23.14	1.0	24.0
64QAM	1	1	22.78	23.45	23.08	1.0	24.0		
256QAM	1	1	20.94	21.60	21.30	2.5	22.5		
256QAM	1	1	19.42	19.78	19.44	4.5	20.5		
CP-OFDM	QPSK	1	1	22.16	22.85	22.67	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					500202	518598	537000		
					2501.01 MHz	2592.99 MHz	2685.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.36	24.37	24.18	0.0	25.0
			1	12	24.28	24.40	23.95	0.0	25.0
			1	22	24.12	24.34	23.62	0.0	25.0
			12	0	23.58	23.80	23.52	0.5	24.5
			12	6	24.09	24.30	23.51	0.0	25.0
			12	12	23.62	23.84	23.51	0.5	24.5
		QPSK	24	0	23.57	23.82	23.54	0.5	24.5
			1	1	24.10	24.35	24.12	0.0	25.0
			1	12	23.97	24.32	23.82	0.0	25.0
			1	22	24.02	24.39	23.51	0.0	25.0
			12	0	23.02	23.44	23.17	1.0	24.0
			12	6	23.94	24.27	24.11	0.0	25.0
		16QAM	12	12	23.04	23.37	23.22	1.0	24.0
			24	0	22.97	23.36	23.22	1.0	24.0
64QAM	1	1	23.09	23.44	23.12	1.0	24.0		
256QAM	1	1	21.17	21.61	21.39	2.5	22.5		
256QAM	1	1	19.39	19.63	19.51	4.5	20.5		
CP-OFDM	QPSK	1	1	22.43	22.82	22.51	1.5	23.5	

NR Band n66 (ANT A)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					346000	349000	352000		
1730.00 MHz	1745.00 MHz	1760.00 MHz							
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.00	23.07	23.01	0.0	24.0
			1	108	22.99	23.11	23.03	0.0	24.0
			1	214	23.09	23.20	23.10	0.0	24.0
			108	0	22.02	22.09	22.15	0.5	23.5
			108	54	23.05	23.10	23.16	0.0	24.0
			108	108	22.11	22.13	22.15	0.5	23.5
		216	0	22.02	22.05	22.11	0.5	23.5	
		QPSK	1	1	22.98	23.09	23.02	0.0	24.0
			1	108	22.97	23.10	23.07	0.0	24.0
			1	214	23.06	23.18	23.04	0.0	24.0
			108	0	22.03	22.11	22.11	1.0	23.0
			108	54	23.03	23.15	23.12	0.0	24.0
			108	108	22.07	22.22	22.10	1.0	23.0
		216	0	21.97	22.11	22.12	1.0	23.0	
		16QAM	1	1	21.91	22.01	21.90	1.0	23.0
			1	108	22.07	22.04	22.05	1.0	23.0
			1	214	21.95	22.11	21.98	1.0	23.0
		64QAM	1	1	20.53	20.67	20.67	2.5	21.5
1	1		17.82	17.96	17.96	4.5	19.5		
256QAM	1	1	17.82	17.96	17.96	4.5	19.5		
CP-OFDM	QPSK	1	1	21.57	21.65	21.66	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					345500	349000	352500		
					1727.50 MHz	1745.00 MHz	1762.50 MHz		
35 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.93	23.06	23.03	0.0	24.0
			1	93	23.16	23.06	23.18	0.0	24.0
			1	186	23.08	23.10	23.05	0.0	24.0
			90	0	21.98	22.10	22.17	0.5	23.5
			90	49	23.14	23.18	23.21	0.0	24.0
			90	98	22.14	22.26	22.15	0.5	23.5
		180	0	22.07	22.08	22.15	0.5	23.5	
		QPSK	1	1	22.98	23.07	23.02	0.0	24.0
			1	93	23.17	23.11	23.22	0.0	24.0
			1	186	23.11	23.10	23.08	0.0	24.0
			90	0	22.00	22.15	22.23	1.0	23.0
			90	49	23.16	23.15	23.18	0.0	24.0
			90	98	22.15	22.10	22.13	1.0	23.0
		180	0	22.11	22.09	22.13	1.0	23.0	
		16QAM	1	1	21.97	22.05	21.93	1.0	23.0
			1	93	22.03	21.97	22.03	1.0	23.0
			1	186	21.97	22.08	21.97	1.0	23.0
		64QAM	1	1	20.58	20.73	20.69	2.5	21.5
256QAM	1	1	17.89	17.96	17.93	4.5	19.5		
CP-OFDM	QPSK	1	1	21.59	21.68	21.76	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					345000	349000	353000		
					1725.00 MHz	1745.00 MHz	1765.00 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.08	23.23	23.36	0.0	24.0
			1	80	23.17	23.15	23.24	0.0	24.0
			1	158	23.20	23.33	23.22	0.0	24.0
			80	0	22.56	22.18	22.35	0.5	23.5
			80	40	22.08	23.23	23.36	0.0	24.0
			80	80	22.24	22.22	22.28	0.5	23.5
		160	0	22.14	22.20	22.30	0.5	23.5	
		QPSK	1	1	23.14	23.19	23.38	0.0	24.0
			1	80	23.10	23.19	23.28	0.0	24.0
			1	158	23.28	23.30	23.22	0.0	24.0
			80	0	22.16	22.23	22.31	1.0	23.0
			80	40	23.18	23.23	23.32	0.0	24.0
			80	80	22.17	22.22	22.26	1.0	23.0
		160	0	22.15	22.18	22.28	1.0	23.0	
		16QAM	1	1	22.14	22.14	22.26	1.0	23.0
			1	80	22.11	22.08	22.20	1.0	23.0
			1	158	22.07	22.26	22.20	1.0	23.0
		64QAM	1	1	20.63	20.80	20.94	2.5	21.5
256QAM	1	1	17.99	18.19	18.26	4.5	19.5		
CP-OFDM	QPSK	1	1	21.66	21.82	21.91	1.5	22.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344500	349000	353500		
					1722.50 MHz	1745.00 MHz	1767.50 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.99	23.13	23.20	0.0	24.0
			1	67	23.10	23.29	23.20	0.0	24.0
			1	131	23.08	23.24	23.17	0.0	24.0
			64	0	22.00	22.13	22.21	0.5	23.5
			64	35	23.08	23.11	23.17	0.0	24.0
			64	69	22.08	22.20	22.18	0.5	23.5
		128	0	21.95	22.14	22.22	0.5	23.5	
		QPSK	1	1	23.00	23.14	23.27	0.0	24.0
			1	67	23.08	23.21	23.26	0.0	24.0
			1	131	23.06	23.23	23.07	0.0	24.0
			64	0	21.94	22.15	22.20	1.0	23.0
			64	35	23.03	23.13	23.17	0.0	24.0
			64	69	22.05	22.14	22.16	1.0	23.0
		128	0	22.09	22.10	22.16	1.0	23.0	
		16QAM	1	1	22.02	22.07	22.14	1.0	23.0
			1	67	21.96	22.01	22.11	1.0	23.0
1	131		21.95	22.20	22.02	1.0	23.0		
64QAM	1	1	20.63	20.80	20.86	2.5	21.5		
256QAM	1	1	17.96	18.08	18.16	4.5	19.5		
CP-OFDM	QPSK	1	1	21.63	21.76	21.81	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000		
					1720.00 MHz	1745.00 MHz	1770.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.80	22.98	23.05	0.0	24.0
			1	53	22.92	23.12	23.02	0.0	24.0
			1	104	22.90	23.10	23.07	0.0	24.0
			50	0	22.00	22.03	22.12	0.5	23.5
			50	28	22.99	23.03	23.04	0.0	24.0
			50	56	21.98	22.11	22.02	0.5	23.5
		100	0	21.99	22.02	22.06	0.5	23.5	
		QPSK	1	1	22.80	22.95	23.07	0.0	24.0
			1	53	22.83	23.00	23.04	0.0	24.0
			1	104	22.92	23.10	23.10	0.0	24.0
			50	0	21.92	22.07	22.08	1.0	23.0
			50	28	22.95	23.04	23.08	0.0	24.0
			50	56	21.99	22.12	22.08	1.0	23.0
		100	0	21.88	22.00	22.09	1.0	23.0	
		16QAM	1	1	21.73	21.84	21.91	1.0	23.0
			1	53	21.78	21.93	21.87	1.0	23.0
1	104		21.82	21.98	22.02	1.0	23.0		
64QAM	1	1	20.44	20.56	20.67	2.5	21.5		
256QAM	1	1	17.72	17.92	17.98	4.5	19.5		
CP-OFDM	QPSK	1	1	21.45	21.61	21.66	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500		
					1717.50 MHz	1745.00 MHz	1772.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.94	23.18	23.09	0.0	24.0
			1	40	22.88	23.09	22.98	0.0	24.0
			1	77	22.95	23.11	22.95	0.0	24.0
			36	0	21.90	22.13	22.07	0.5	23.5
			36	22	22.93	23.09	23.02	0.0	24.0
			36	43	21.96	22.14	22.01	0.5	23.5
		75	0	21.91	22.13	22.03	0.5	23.5	
		QPSK	1	1	22.93	23.07	23.10	0.0	24.0
			1	40	22.81	23.08	22.86	0.0	24.0
			1	77	22.88	23.16	22.95	0.0	24.0
			36	0	21.95	22.18	22.07	1.0	23.0
			36	22	22.98	23.10	23.05	0.0	24.0
			36	43	22.03	22.17	22.08	1.0	23.0
		75	0	22.00	22.01	22.01	1.0	23.0	
		16QAM	1	1	21.90	21.94	22.01	1.0	23.0
			1	40	21.87	21.97	21.89	1.0	23.0
1	77		21.80	22.00	21.98	1.0	23.0		
64QAM	1	1	20.69	20.52	20.70	2.5	21.5		
256QAM	1	1	17.97	18.58	18.04	4.5	19.5		
CP-OFDM	QPSK	1	1	21.64	21.73	21.69	1.5	22.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000		
					1715.00 MHz	1745.00 MHz	1775.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.93	22.98	22.97	0.0	24.0
			1	26	22.98	23.01	22.93	0.0	24.0
			1	50	22.99	22.97	22.94	0.0	24.0
			25	0	22.04	22.11	22.13	0.5	23.5
			25	14	22.95	23.01	23.00	0.0	24.0
			25	27	22.07	22.14	22.12	0.5	23.5
		50	0	22.02	22.09	22.09	0.5	23.5	
		QPSK	1	1	22.99	23.06	23.05	0.0	24.0
			1	26	23.04	22.95	23.10	0.0	24.0
			1	50	22.98	22.97	23.01	0.0	24.0
			25	0	22.07	22.15	22.11	1.0	23.0
			25	14	23.00	23.04	23.06	0.0	24.0
			25	27	22.11	22.13	22.10	1.0	23.0
		16QAM	1	1	21.80	21.93	21.92	1.0	23.0
			1	26	21.82	21.98	21.99	1.0	23.0
1	50		21.88	21.95	21.94	1.0	23.0		
64QAM	1	1	20.61	20.69	20.68	2.5	21.5		
256QAM	1	1	17.89	18.00	17.99	4.5	19.5		
CP-OFDM	QPSK	1	1	21.48	21.66	21.66	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500		
					1712.50 MHz	1745.00 MHz	1777.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.95	23.21	23.01	0.0	24.0
			1	13	22.92	23.18	22.97	0.0	24.0
			1	23	22.95	23.19	22.97	0.0	24.0
			12	0	21.90	22.07	21.95	0.5	23.5
			12	7	22.93	23.10	22.99	0.0	24.0
			12	13	21.86	22.11	21.94	0.5	23.5
		25	0	21.98	22.19	22.01	0.5	23.5	
		QPSK	1	1	22.97	23.17	23.06	0.0	24.0
			1	13	22.97	23.16	23.02	0.0	24.0
			1	23	22.95	23.17	23.01	0.0	24.0
			12	0	21.88	22.11	21.97	1.0	23.0
			12	7	22.98	23.14	22.97	0.0	24.0
			12	13	21.91	22.09	21.98	1.0	23.0
		25	0	21.89	22.13	22.02	1.0	23.0	
		16QAM	1	1	21.74	22.01	21.95	1.0	23.0
			1	13	21.89	22.02	21.96	1.0	23.0
			1	23	21.90	22.03	21.97	1.0	23.0
		64QAM	1	1	20.46	20.77	20.62	2.5	21.5
256QAM	1	1	17.81	18.11	17.99	4.5	19.5		
CP-OFDM	QPSK	1	1	21.58	21.69	21.64	1.5	22.5	

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BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					346000	349000	352000		
1730.00 MHz	1745.00 MHz	1760.00 MHz							
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.49	22.57	23.45	0.0	24.0
			1	108	23.47	23.50	23.21	0.0	24.0
			1	214	23.11	23.12	23.08	0.0	24.0
			108	0	22.49	22.51	22.31	0.5	23.5
			108	54	23.51	23.46	23.31	0.0	24.0
			108	108	22.35	22.34	22.14	0.5	23.5
		216	0	22.38	22.41	22.23	0.5	23.5	
		QPSK	1	1	23.47	23.47	23.36	0.0	24.0
			1	108	23.47	23.48	23.14	0.0	24.0
			1	214	23.22	23.10	22.98	0.0	24.0
			108	0	22.52	22.48	22.40	1.0	23.0
			108	54	23.53	23.53	23.27	0.0	24.0
			108	108	22.40	22.35	22.19	1.0	23.0
		216	0	22.39	22.51	22.31	1.0	23.0	
		16QAM	1	1	22.48	22.44	22.51	1.0	23.0
			1	108	22.46	22.44	22.22	1.0	23.0
			1	214	22.24	22.17	22.05	1.0	23.0
		64QAM	1	1	20.92	20.85	20.86	2.5	21.5
256QAM	1	1	18.41	18.44	18.38	4.5	19.5		
CP-OFDM	QPSK	1	1	22.15	22.16	21.99	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					345500	349000	352500		
					1727.50 MHz	1745.00 MHz	1762.50 MHz		
35 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.32	23.01	23.00	0.0	24.0
			1	93	23.18	23.24	23.03	0.0	24.0
			1	186	23.13	22.94	22.90	0.0	24.0
			90	0	22.15	22.21	22.22	0.5	23.5
			90	49	23.27	23.26	23.09	0.0	24.0
			90	98	22.20	22.13	22.01	0.5	23.5
		180	0	22.17	22.25	22.03	0.5	23.5	
		QPSK	1	1	22.43	22.94	22.96	0.0	24.0
			1	93	23.09	23.25	23.08	0.0	24.0
			1	186	23.15	22.94	22.83	0.0	24.0
			90	0	22.31	22.27	22.06	1.0	23.0
			90	49	23.19	23.25	23.03	0.0	24.0
			90	98	22.35	22.23	22.07	1.0	23.0
		180	0	22.23	22.18	22.11	1.0	23.0	
		16QAM	1	1	21.47	22.03	22.05	1.0	23.0
			1	93	22.11	22.19	21.85	1.0	23.0
			1	186	22.08	22.00	21.90	1.0	23.0
		64QAM	1	1	19.91	20.64	20.60	2.5	21.5
256QAM	1	1	18.29	18.36	18.30	4.5	19.5		
CP-OFDM	QPSK	1	1	21.13	21.81	21.71	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					345000	349000	353000		
					1725.00 MHz	1745.00 MHz	1765.00 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.83	23.45	23.43	0.0	24.0
			1	80	23.53	23.51	23.31	0.0	24.0
			1	158	23.50	23.42	23.20	0.0	24.0
			80	0	22.61	22.56	22.46	0.5	23.5
			80	40	23.62	23.60	23.42	0.0	24.0
			80	80	22.61	22.57	22.36	0.5	23.5
		160	0	22.54	22.58	22.39	0.5	23.5	
		QPSK	1	1	23.04	23.50	23.41	0.0	24.0
			1	80	23.54	23.49	23.43	0.0	24.0
			1	158	23.57	23.38	23.21	0.0	24.0
			80	0	22.67	22.57	22.48	1.0	23.0
			80	40	23.62	23.66	23.41	0.0	24.0
			80	80	22.65	22.52	22.38	1.0	23.0
		160	0	22.57	22.52	22.38	1.0	23.0	
		16QAM	1	1	22.17	22.56	22.54	1.0	23.0
			1	80	22.50	22.50	22.31	1.0	23.0
			1	158	22.57	22.47	22.28	1.0	23.0
		64QAM	1	1	20.52	21.03	20.92	2.5	21.5
256QAM	1	1	18.59	18.76	18.61	4.5	19.5		
CP-OFDM	QPSK	1	1	22.03	22.21	22.13	1.5	22.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344500	349000	353500		
					1722.50 MHz	1745.00 MHz	1767.50 MHz		
25 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.66	23.06	22.95	0.0	24.0
			1	67	23.17	23.16	22.95	0.0	24.0
			1	131	23.00	23.03	22.89	0.0	24.0
			64	0	22.02	22.29	22.06	0.5	23.5
			64	35	23.13	23.14	22.98	0.0	24.0
			64	69	22.12	22.16	22.05	0.5	23.5
		128	0	22.06	22.16	22.00	0.5	23.5	
		QPSK	1	1	22.72	23.18	23.03	0.0	24.0
			1	67	23.24	23.21	23.08	0.0	24.0
			1	131	23.03	23.06	22.83	0.0	24.0
			64	0	22.03	22.18	22.06	1.0	23.0
			64	35	23.11	23.18	23.09	0.0	24.0
			64	69	22.08	22.23	22.08	1.0	23.0
		16QAM	1	1	21.83	22.14	22.10	1.0	23.0
1	67		22.19	22.22	22.04	1.0	23.0		
1	131		22.10	22.15	21.97	1.0	23.0		
64QAM	1	1	20.17	20.59	20.60	2.5	21.5		
256QAM	1	1	18.38	18.54	18.44	4.5	19.5		
CP-OFDM	QPSK	1	1	21.47	21.79	21.80	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000		
					1720.00 MHz	1745.00 MHz	1770.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.77	22.96	22.83	0.0	24.0
			1	53	22.76	22.95	22.79	0.0	24.0
			1	104	22.96	22.89	22.79	0.0	24.0
			50	0	21.96	22.16	22.01	0.5	23.5
			50	28	23.02	23.06	22.90	0.0	24.0
			50	56	22.11	22.07	21.93	0.5	23.5
		100	0	21.95	22.08	21.99	0.5	23.5	
		QPSK	1	1	22.69	22.99	22.86	0.0	24.0
			1	53	22.87	22.99	22.83	0.0	24.0
			1	104	23.00	22.94	22.82	0.0	24.0
			50	0	22.00	22.05	22.04	1.0	23.0
			50	28	23.02	23.08	23.00	0.0	24.0
			50	56	22.06	22.17	21.96	1.0	23.0
		100	0	22.04	22.09	21.87	1.0	23.0	
16QAM	1	1	21.84	21.96	21.91	1.0	23.0		
	1	53	21.80	22.09	21.84	1.0	23.0		
	1	104	21.93	22.00	21.79	1.0	23.0		
64QAM	1	1	20.35	20.42	20.35	2.5	21.5		
256QAM	1	1	18.18	18.27	18.03	4.5	19.5		
CP-OFDM	QPSK	1	1	21.45	21.64	21.57	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500		
					1717.50 MHz	1745.00 MHz	1772.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.56	23.05	22.97	0.0	24.0
			1	40	22.72	23.03	22.77	0.0	24.0
			1	77	22.99	23.07	22.84	0.0	24.0
			36	0	21.98	22.19	22.07	0.5	23.5
			36	22	23.16	23.13	23.02	0.0	24.0
			36	43	22.07	22.18	22.12	0.5	23.5
		75	0	22.21	22.17	22.07	0.5	23.5	
		QPSK	1	1	22.51	23.18	22.78	0.0	24.0
			1	40	22.73	23.03	22.73	0.0	24.0
			1	77	22.99	23.12	22.79	0.0	24.0
			36	0	22.10	22.12	22.02	1.0	23.0
			36	22	23.41	23.12	22.98	0.0	24.0
			36	43	22.06	22.18	21.91	1.0	23.0
		75	0	22.23	22.13	21.89	1.0	23.0	
16QAM	1	1	21.72	22.14	21.80	1.0	23.0		
	1	40	21.92	21.96	21.69	1.0	23.0		
	1	77	21.96	21.97	21.73	1.0	23.0		
64QAM	1	1	20.16	20.63	20.43	2.5	21.5		
256QAM	1	1	18.30	18.39	18.20	4.5	19.5		
CP-OFDM	QPSK	1	1	21.66	21.79	21.56	1.5	22.5	

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000		
					1715.00 MHz	1745.00 MHz	1775.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.81	23.31	22.90	0.0	24.0
			1	26	23.01	23.29	22.91	0.0	24.0
			1	50	23.06	23.34	22.86	0.0	24.0
			25	0	22.42	22.34	22.08	0.5	23.5
			25	14	23.29	23.33	23.07	0.0	24.0
			25	27	22.27	22.41	22.10	0.5	23.5
		QPSK	50	0	22.45	22.29	22.15	0.5	23.5
			1	1	22.66	23.33	22.91	0.0	24.0
			1	26	22.94	23.19	22.92	0.0	24.0
			1	50	22.86	23.10	22.89	0.0	24.0
			25	0	22.27	22.47	22.00	1.0	23.0
			25	14	23.21	23.37	23.07	0.0	24.0
		16QAM	25	27	22.39	22.38	22.07	1.0	23.0
			50	0	22.27	22.47	22.05	1.0	23.0
			1	1	21.63	22.37	21.90	1.0	23.0
64QAM	1	26	21.99	22.20	21.75	1.0	23.0		
	1	50	22.00	22.20	21.92	1.0	23.0		
256QAM	1	1	20.08	20.93	20.33	2.5	21.5		
CP-OFDM	QPSK	1	1	18.33	18.59	18.18	4.5	19.5	
		1	1	21.28	22.03	21.51	1.5	22.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500		
					1712.50 MHz	1745.00 MHz	1777.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.63	23.34	23.05	0.0	24.0
			1	13	22.70	23.46	22.92	0.0	24.0
			1	23	22.89	23.41	22.63	0.0	24.0
			12	0	22.37	22.41	22.34	0.5	23.5
			12	7	23.31	23.42	23.42	0.0	24.0
			12	13	22.30	22.35	22.33	0.5	23.5
		QPSK	25	0	22.32	22.44	22.43	0.5	23.5
			1	1	22.72	23.32	23.40	0.0	24.0
			1	13	22.66	23.36	23.48	0.0	24.0
			1	23	22.74	23.43	23.39	0.0	24.0
			12	0	22.26	22.44	22.42	1.0	23.0
			12	7	23.32	23.46	23.44	0.0	24.0
		16QAM	12	13	22.27	22.43	22.38	1.0	23.0
			25	0	22.33	22.50	22.42	1.0	23.0
			1	1	21.83	22.49	22.47	1.0	23.0
		64QAM	1	13	21.88	22.54	22.54	1.0	23.0
			1	23	22.26	22.48	22.42	1.0	23.0
		256QAM	1	1	20.06	20.84	20.70	2.5	21.5
CP-OFDM	QPSK	1	1	18.19	18.45	18.37	4.5	19.5	
		1	1	21.43	22.08	21.98	1.5	22.5	

8.2. PEAK TO AVERAGE RATIO

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. 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

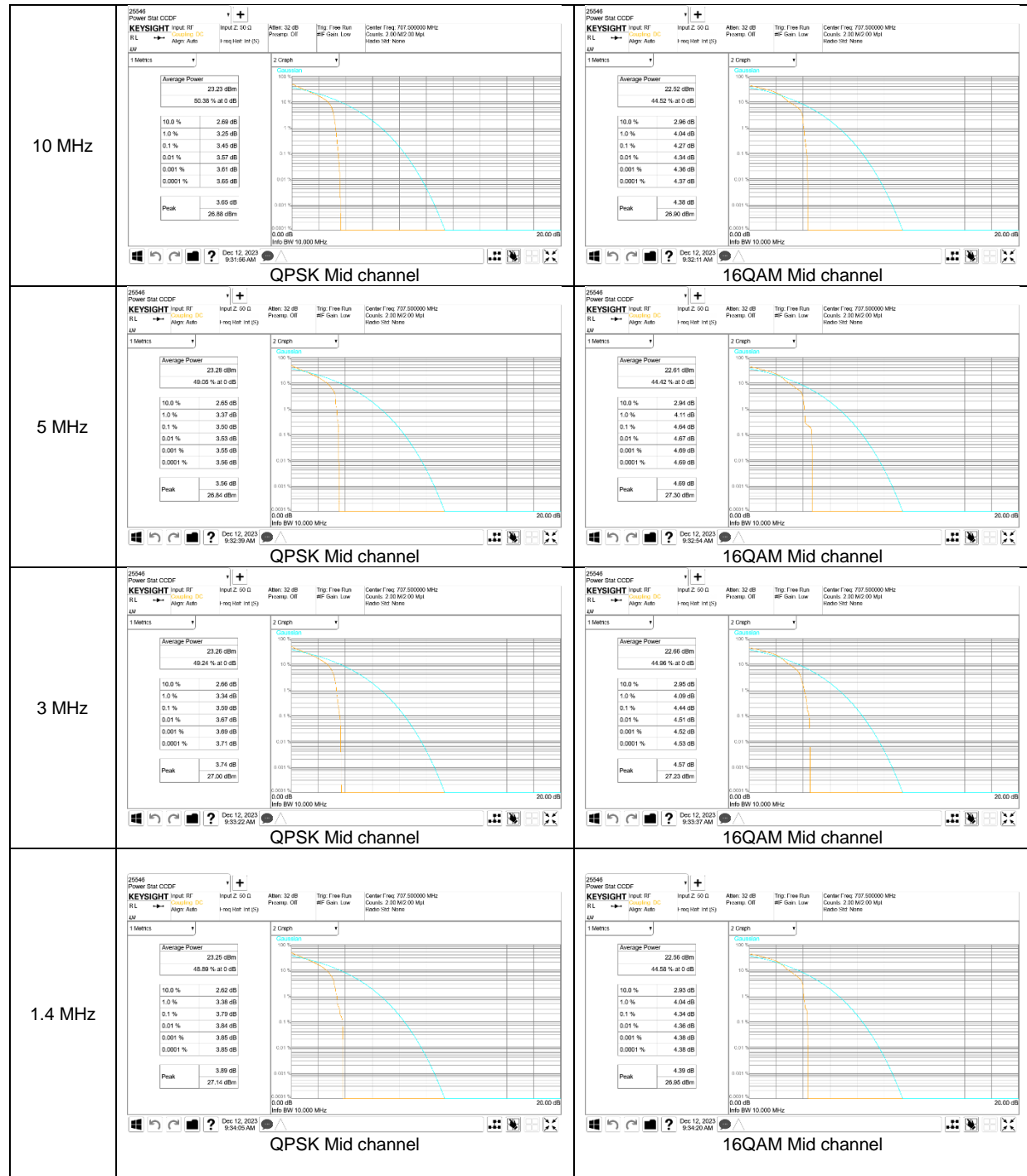
5G NR: All Waveforms (CP-OFDM vs DFT-s_OFDM) and modulations ($\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM) were investigated to determine the worst case configuration. All Modes of operation were investigated and the worst case configuration results are reported in this section.

RESULTS

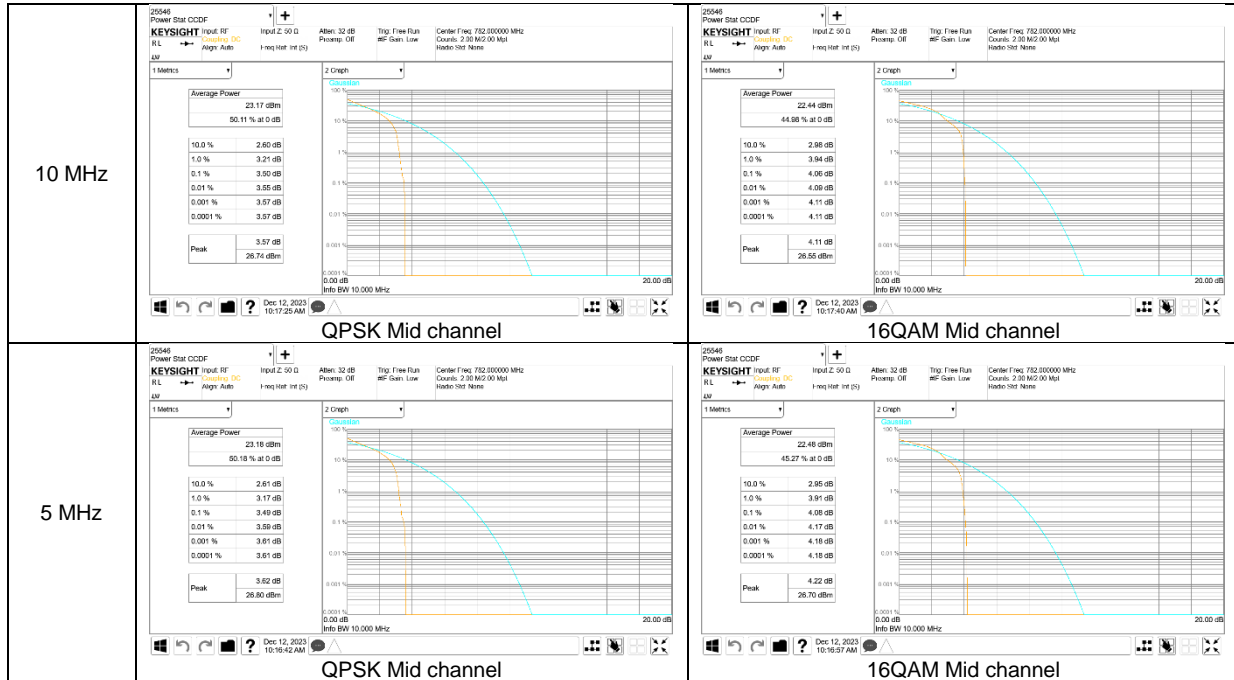
See the following pages.

8.2.1. CONDUCTED PEAK TO AVERAGE RESULTS

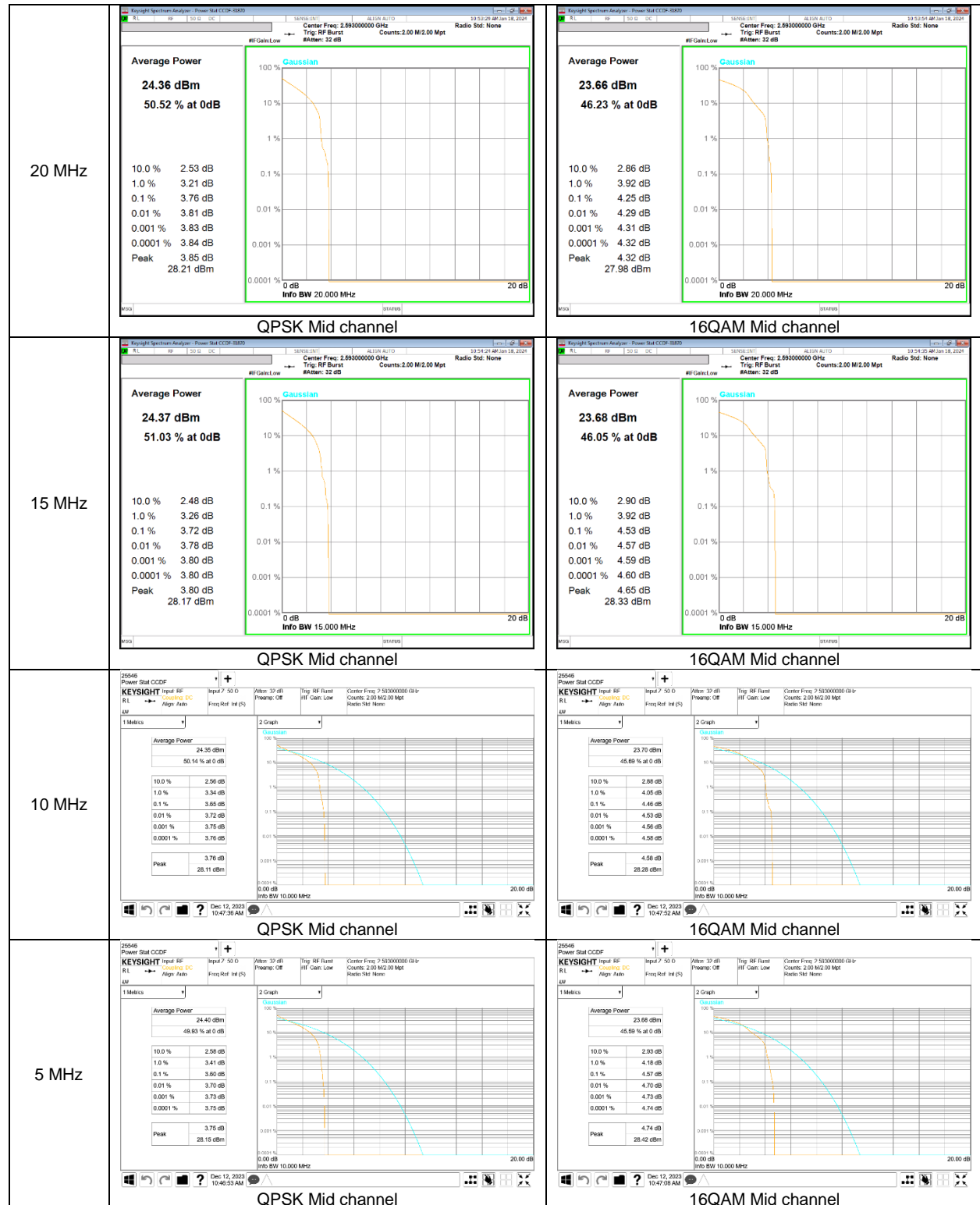
LTE Band 12



LTE Band 13

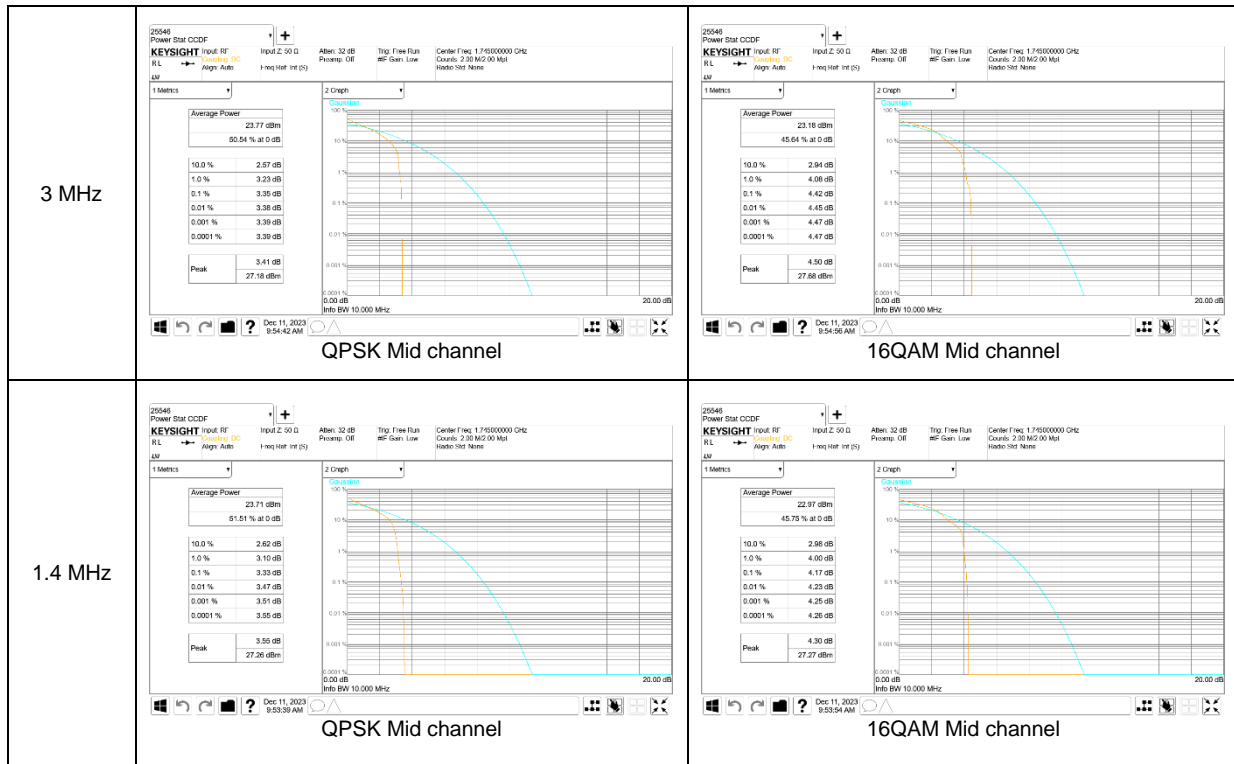


LTE Band 41

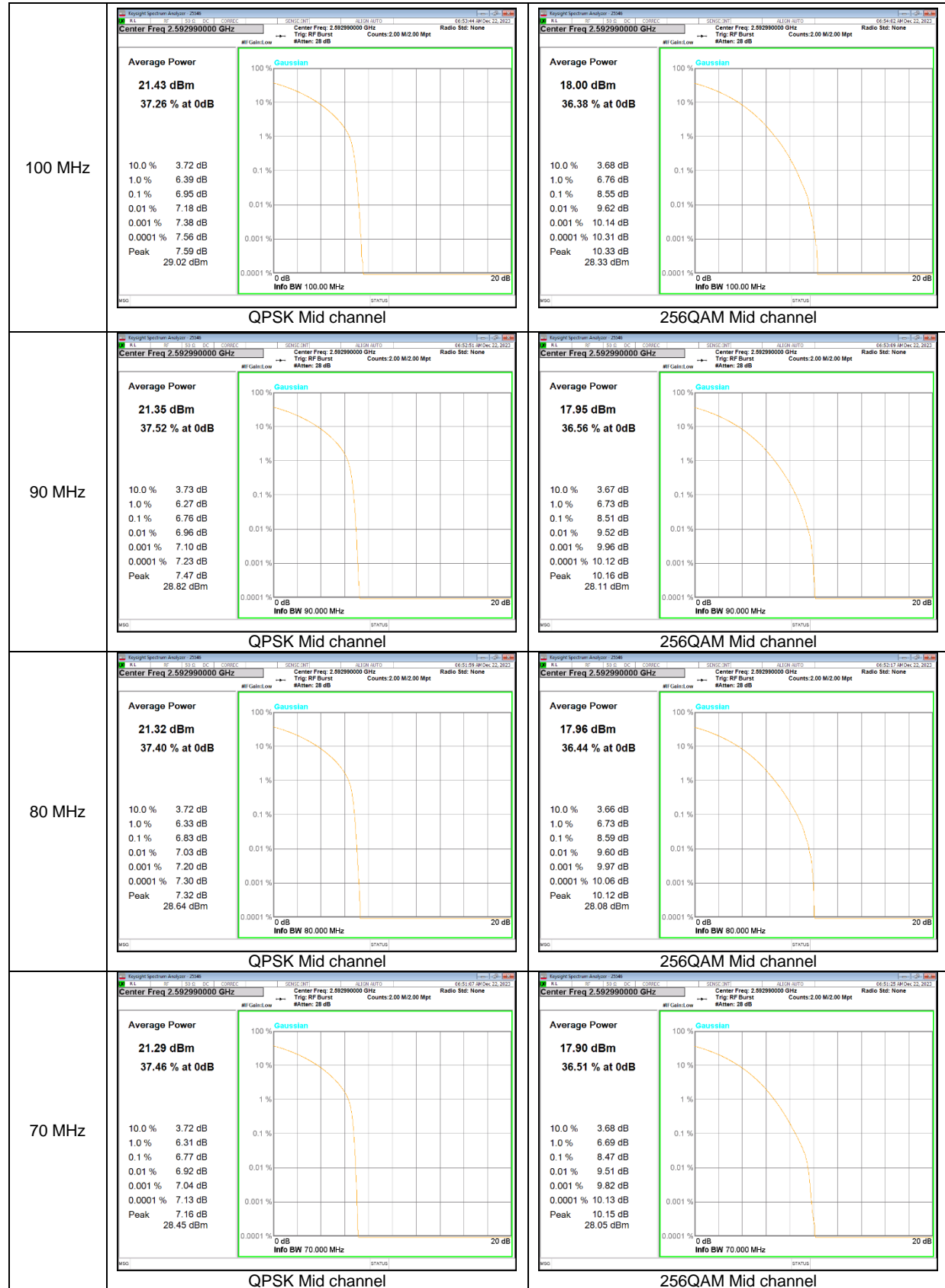


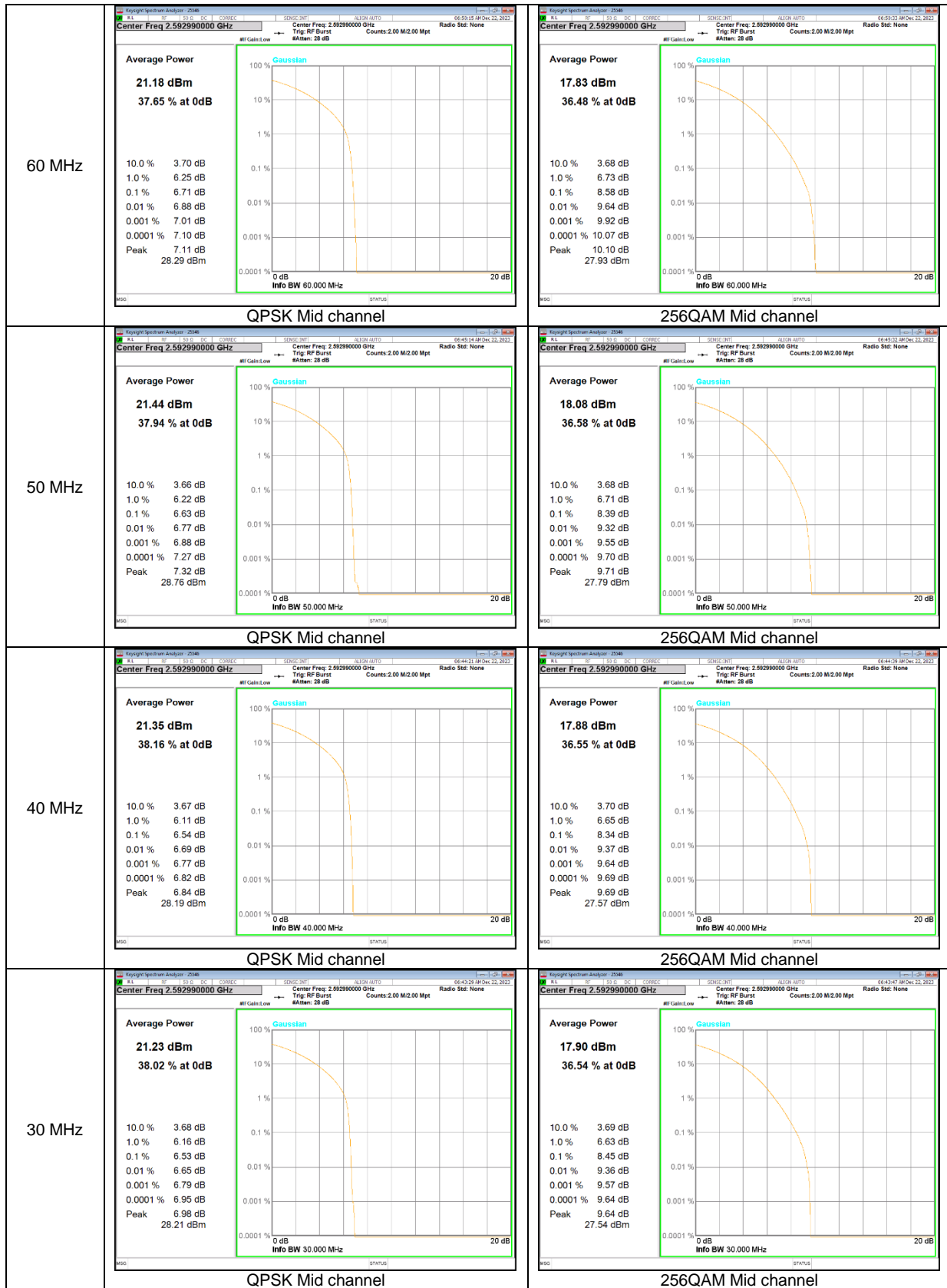
LTE Band 66





NR Band n41 CP-OFDM

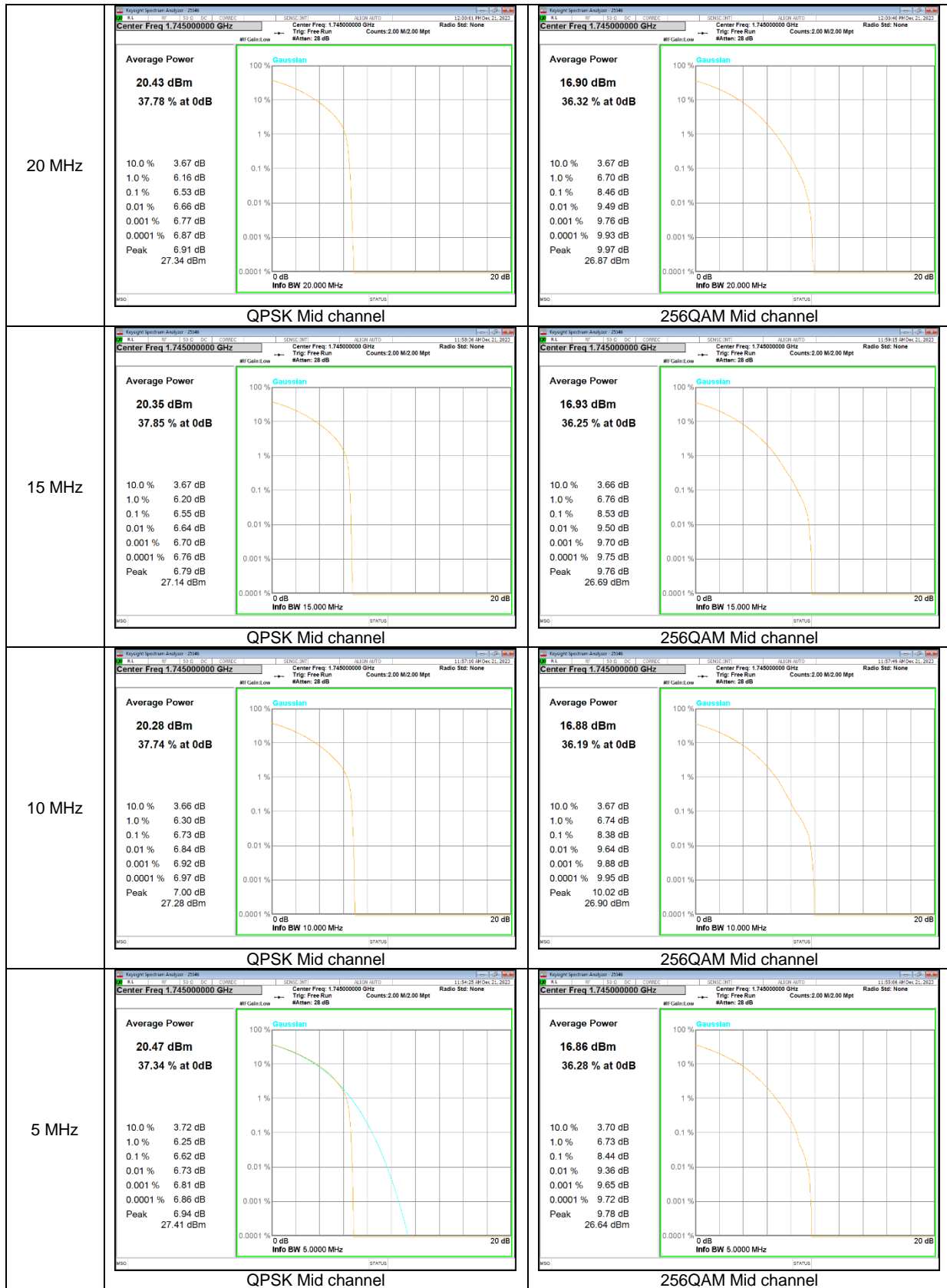






NR Band n66 CP-OFDM





8.3. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at middle channel in each band. The -26dB bandwidth was also measured and recorded.

(KDB 971168 D01 Power Meas License Digital Systems v03r01)

RESULTS

See the following pages.

- LTE Band 12

Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B12	10M	QPSK	707.5	8.964	9.962
		16QAM		8.969	9.934
	5M	QPSK		4.495	5.091
		16QAM		4.495	5.037
	3M	QPSK		2.703	3.030
		16QAM		2.701	3.071
	1.4M	QPSK		1.088	1.368
		16QAM		1.097	1.384

- LTE Band 13

Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B13	10M	QPSK	782.0	8.954	9.815
		16QAM		8.967	9.928
	5M	QPSK		4.489	5.055
		16QAM		4.487	5.002

- LTE Band 41

Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41	20M	QPSK	2593.0	17.908	19.78
		16QAM		17.935	19.38
	15M	QPSK		13.448	14.71
		16QAM		13.444	14.70
	10M	QPSK		8.955	10.16
		16QAM		8.966	9.917
	5M	QPSK		4.473	4.969
		16QAM		4.488	5.218

- LTE Band 41C (UL CA)

Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41C	20+20M	QPSK	2593.0	37.616	40.39
		16QAM		37.532	39.57
	15+20M	QPSK		32.568	34.12
		16QAM		32.604	34.46
	15+15M	QPSK		28.314	30.02
		16QAM		28.325	29.94
	5+20M	QPSK		22.852	23.79
		16QAM		22.841	24.25

- LTE Band 66

Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B66	20M	QPSK	1745.0	17.926	19.60
		16QAM		17.922	19.57
	15M	QPSK		13.460	14.78
		16QAM		13.461	14.73
	10M	QPSK		8.985	9.961
		16QAM		8.980	9.955
	5M	QPSK		4.505	5.134
		16QAM		4.501	5.105
	3M	QPSK		2.699	3.079
		16QAM		2.697	3.037
	1.4M	QPSK		1.091	1.389
		16QAM		1.096	1.467

- NR Band n41 CP-OFDM

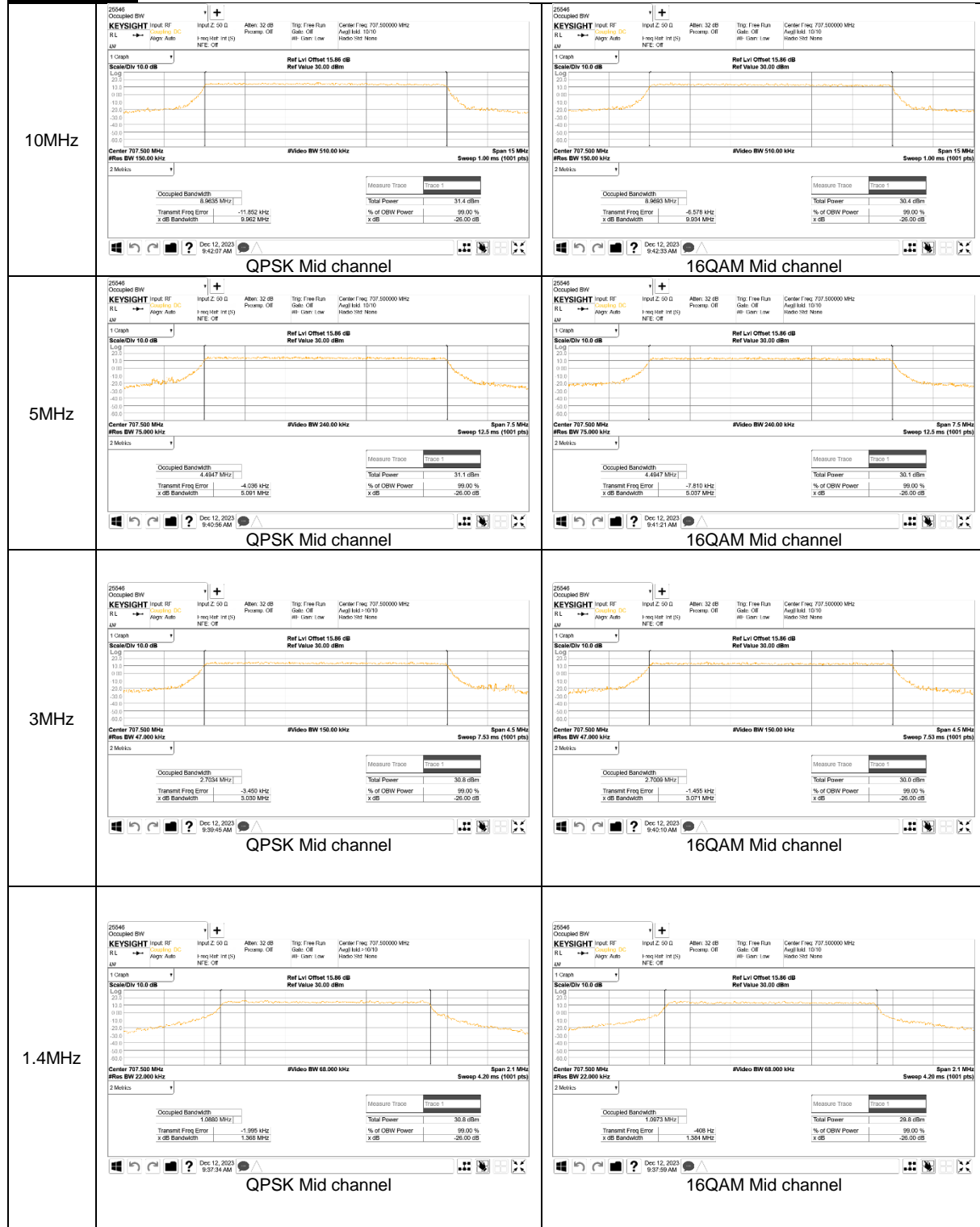
Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n41	100M	QPSK	2593.0	96.510	100.4
		16QAM		96.191	100.4
	90M	QPSK		86.549	90.66
		16QAM		86.647	90.39
	80M	QPSK		77.035	80.53
		16QAM		76.956	80.44
	70M	QPSK		64.239	67.37
		16QAM		63.901	67.03
	60M	QPSK		57.813	60.22
		16QAM		57.653	60.19
	50M	QPSK		45.623	47.67
		16QAM		45.703	47.73
	40M	QPSK		35.718	37.61
		16QAM		35.781	37.36
	30M	QPSK		26.954	28.38
		16QAM		26.658	28.32
	25M	QPSK		22.916	24.56
		16QAM		22.866	24.25
	20M	QPSK		17.945	19.29
		16QAM		17.903	19.34
	15M	QPSK		12.944	14.03
		16QAM		12.999	14.41
	10M	QPSK		8.624	9.348
		16QAM		8.634	9.417

- NR Band n66 CP-OFDM

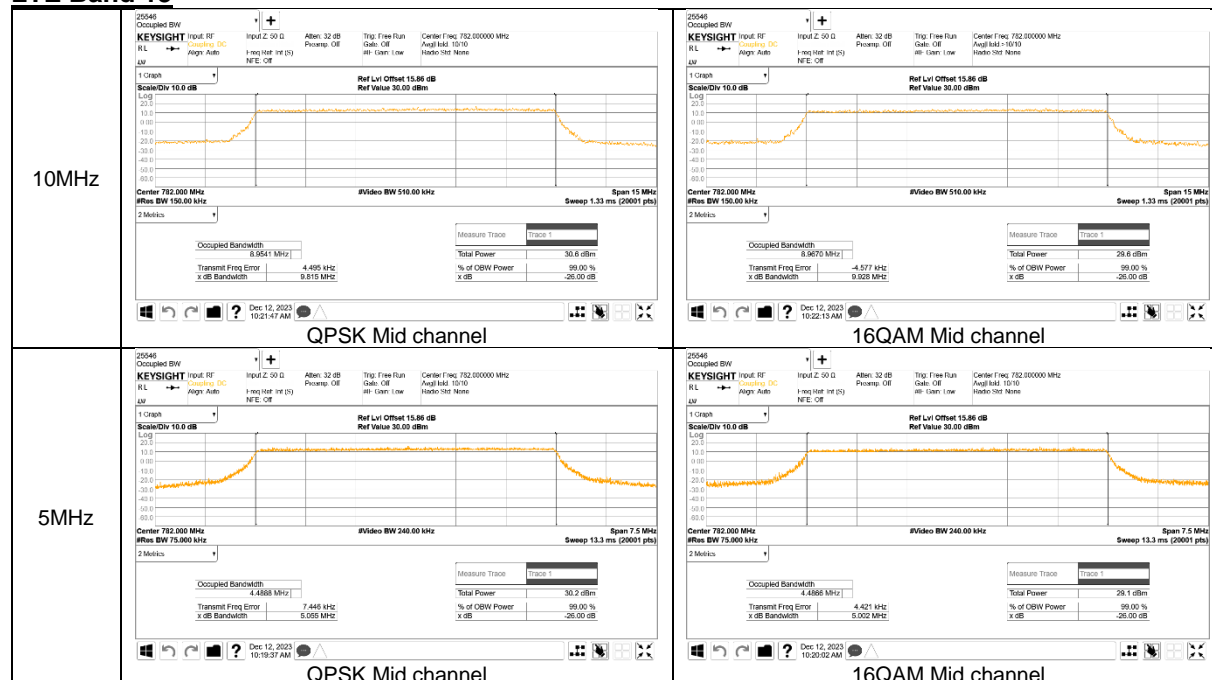
Band	BW	Modulation	Frequency [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n66	40M	QPSK	1745.0	38.649	40.39
		16QAM		38.592	40.29
	35M	QPSK		33.594	35.08
		16QAM		33.668	34.98
	30M	QPSK		28.636	29.97
		16QAM		28.624	29.84
	25M	QPSK		23.799	24.88
		16QAM		23.808	25.07
	20M	QPSK		18.894	20.03
		16QAM		18.956	20.08
	15M	QPSK		14.096	14.97
		16QAM		14.122	14.93
	10M	QPSK		9.282	10.01
		16QAM		9.287	10.11
	5M	QPSK		4.481	5.022
		16QAM		4.467	5.096

8.3.1. OCCUPIED BANDWIDTH RESULTS

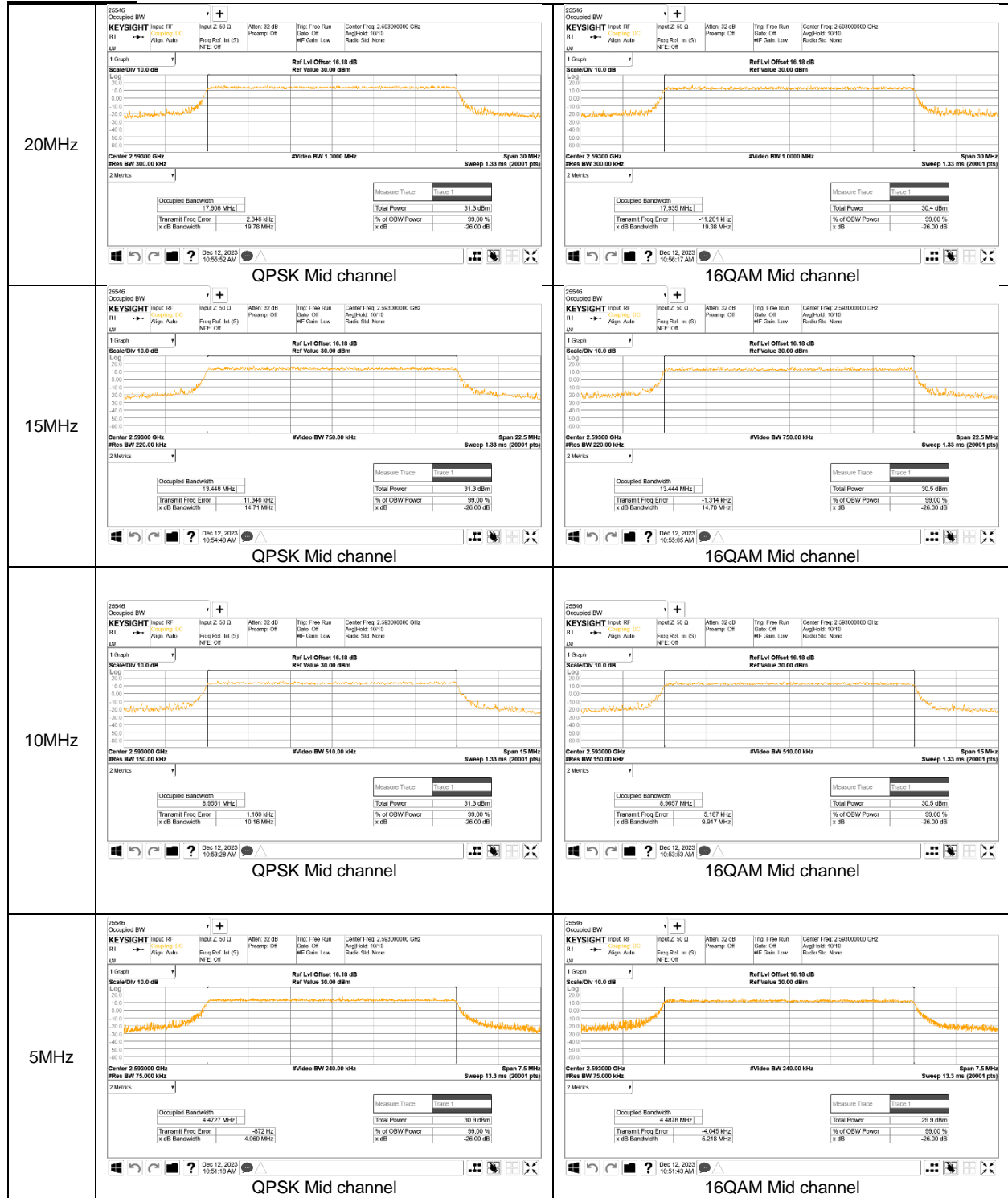
LTE Band 12



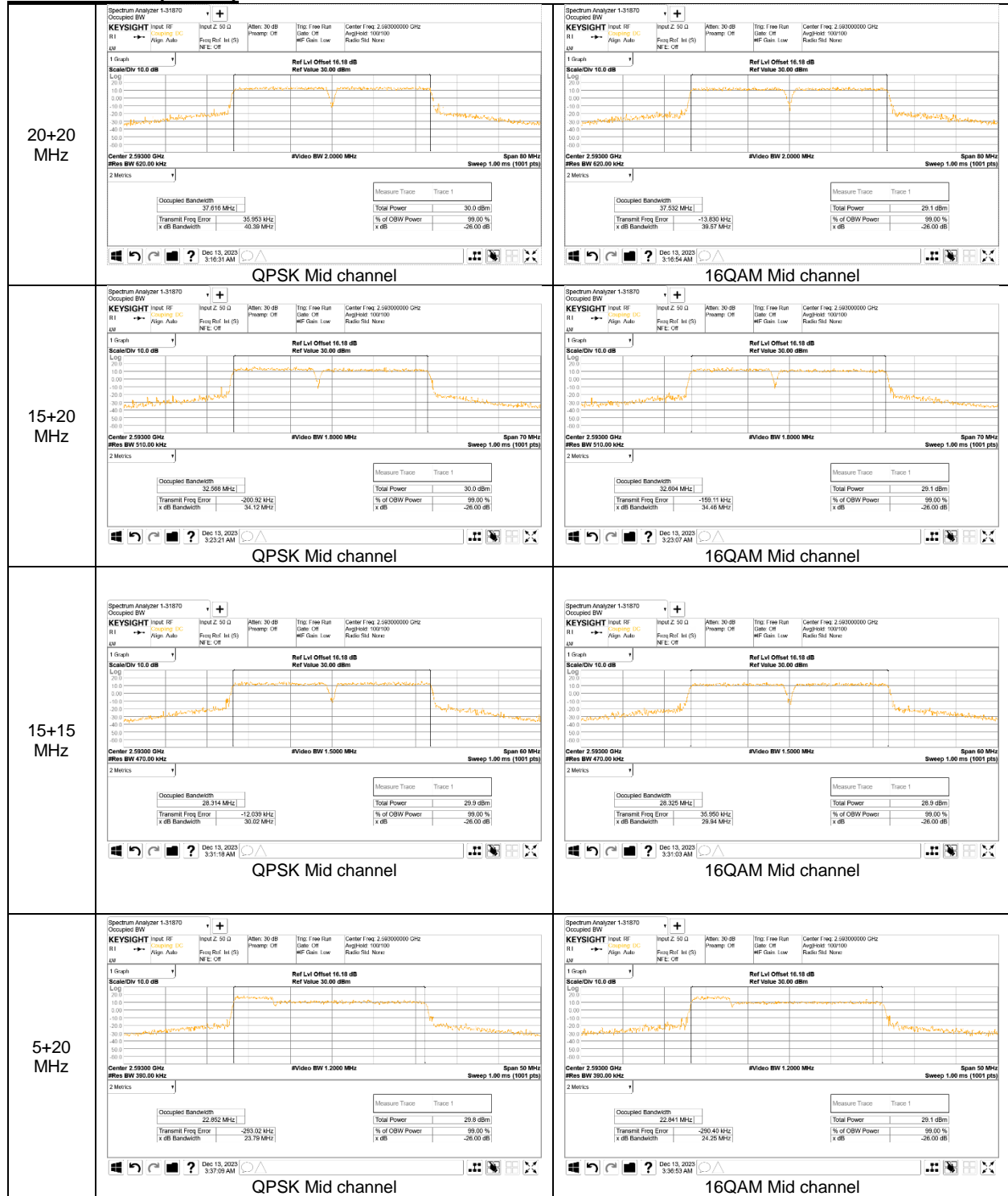
LTE Band 13



LTE Band 41



LTE Band 41C (UL CA)



LTE Band 66

