



REPORT No.: SZ21010412W07

TEST REPORT

APPLICANT : Reliance Communications LLC

PRODUCT NAME : Orbic Myra

MODEL NAME : R678L5

BRAND NAME : Orbic

FCC ID : 2ABGH-R678L5

STANDARD(S) : 47 CFR Part 22, Subpart H
47 CFR Part 24, Subpart E
47 CFR Part 27, Subpart F&H&L

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DIRECTORY

1. Technical Information	3
1.1. Applicant and Manufacturer Information	3
1.2. Equipment Under Test (EUT) Description	3
1.3. Maximum E.R.P./E.I.R.P. and Emission Designator	5
1.4. Test Standards and Results	9
1.5. Environmental Conditions	10
2. 47 CFR Part 2, Part 22H, Part 24E, Part 27 F&H&L Requirements	11
2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.	11
2.2. Occupied Bandwidth	89
2.3. Frequency Stability	141
2.4. Peak to Average Ratio	145
2.5. Conducted Spurious Emissions	179
2.6. Band Edge	222
2.7. Radiated Spurious Emissions	252
Annex A Test Uncertainty	284
Annex B Testing Laboratory Information	285

Change History		
Version	Date	Reason for change
1.0	2021-05-27	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Reliance Communications LLC
Applicant Address:	91 Colin Drive, Unit 1, HOLBROOK, New York 11741, United States
Manufacturer:	ZJY RIGHT SOURCE INDIA PRIVATE LIMITED
Manufacturer Address:	MIDC industrial Area, Shiravane, Nerul, India

1.2. Equipment Under Test (EUT) Description

Product Name:	Orbic Myra	
Serial No.:	(N/A, marked #1 by test site)	
Hardware Version:	V2.2	
Software Version:	ORB678L5_v1.0.42_BVZ	
Modulation Type:	QPSK, 16QAM, 64QAM	
Carrier Aggregation:	Not support	
Operation Band:	Band 2 / 4 / 5 / 12 / 13 / 46 / 66	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 13	Tx: 777MHz–787MHz
		Rx: 746MHz–756MHz
	LTE Band 46	Rx: 5150MHz–5925MHz
	LTE Band 66	Tx: 1710MHz –1780MHz
		Rx: 2110MHz –2200MHz



Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 13	5 MHz, 10MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	Fixed Internal Antenna	
Antenna Gain:	Top Antenna	
	LTE Band 2	-0.28dBi
	LTE Band 4	-1.55dBi
	LTE Band 5	-1.57dBi
	LTE Band 12	-1.77dBi
	LTE Band 13	-1.52dBi
	LTE Band 66	-1.55dBi
	Bottom Antenna	
	LTE Band 5	-1.57dBi
	LTE Band 12	-1.77dBi
	LTE Band 13	-1.52dBi
Accessory Information:	Battery	
	Brand Name:	Orbic
	Model No.:	BLE-5001
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	5000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.40V
	Manufacturer:	HUIZHOU DXDRAGON INC
	AC Adapter	
	Brand Name:	Orbic
	Model No.:	BLJ-QC06HU
	Serial No.:	(N/A, marked #1 by test site)
	Rated Output:	5V=3A, 9V=2A, 12V=1.5A,
	Rated Input:	100-240V~50/60Hz, 0.5A
	Manufacturer:	Baolijin



Note 1: The EUT supports top antenna and bottom antenna for LTE Band 5 / 12 / 13. For test item Transmitter Conducted Output Power and E.R.P./E.I.R.P. and Radiated Spurious Emissions we recorded the test result of two antennas separately, for other test items both of the two antennas were tested separately, we only recorded the worst test result(Top Antenna) in this report.

Note 2: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

LTE Band 2	Maximum E.R.P./E.I.R.P. (W)					
	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.141	0.108	0.104	/	/	/
15	0.137	0.111	0.111	/	/	/
10	0.134	0.113	0.103	/	/	/
5	0.136	0.112	0.110	/	/	/
3	0.138	0.107	0.106	/	/	/
1.4	0.133	0.112	0.112	/	/	/
LTE Band 4	Maximum E.R.P./E.I.R.P. (W)					
	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.100	0.079	0.081	/	/	/
15	0.098	0.077	0.081	/	/	/
10	0.097	0.078	0.081	/	/	/
5	0.096	0.078	0.080	/	/	/
3	0.098	0.079	0.076	/	/	/
1.4	0.096	0.079	0.077	/	/	/
LTE Band 5	Maximum E.R.P./E.I.R.P. (W)					
	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.108	0.087	0.070	0.071	0.060	0.046
5	0.103	0.089	0.069	0.068	0.059	0.047
3	0.101	0.089	0.069	0.067	0.059	0.045
1.4	0.099	0.090	0.071	0.066	0.060	0.047



LTE Band 12	Maximum E.R.P./E.I.R.P. (W)					
	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.106	0.086	0.069	0.095	0.079	0.072
5	0.105	0.091	0.070	0.094	0.078	0.071
3	0.104	0.094	0.070	0.094	0.080	0.072
1.4	0.104	0.088	0.069	0.091	0.081	0.075
LTE Band 13	Maximum E.R.P./E.I.R.P. (W)					
	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.101	0.086	0.071	0.096	0.076	0.070
5	0.099	0.088	0.071	0.091	0.081	0.076
LTE Band 66	Top Antenna			Bottom Antenna		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.101	0.080	0.081	/	/	/
15	0.099	0.079	0.080	/	/	/
10	0.100	0.084	0.078	/	/	/
5	0.095	0.078	0.074	/	/	/
3	0.094	0.083	0.076	/	/	/
1.4	0.098	0.082	0.074	/	/	/



LTE B2	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
1.4	1M09G7D	1M10W7D	1M09W7D
3	2M70G7D	2M71W7D	2M71W7D
5	4M51G7D	4M51W7D	4M51W7D
10	9M02G7D	8M98W7D	8M99W7D
15	13M5G7D	13M5W7D	13M5W7D
20	18M1G7D	18M0W7D	18M0W7D
LTE B4	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
1.4	1M10G7D	1M10W7D	1M09W7D
3	2M70G7D	2M70W7D	2M71W7D
5	4M51G7D	4M51W7D	4M51W7D
10	9M02G7D	8M99W7D	9M01W7D
15	13M5G7D	13M5W7D	13M5W7D
20	18M0G7D	18M0W7D	18M0W7D
LTE B5	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
1.4	1M09G7D	1M10W7D	1M09W7D
3	2M70G7D	2M70W7D	2M71W7D
5	4M51G7D	4M51W7D	4M51W7D
10	8M99G7D	8M97W7D	8M98W7D
LTE B12	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
1.4	1M10G7D	1M10W7D	1M09W7D
3	2M70G7D	2M70W7D	2M71W7D
5	4M51G7D	4M51W7D	4M50W7D
10	9M00G7D	8M97W7D	8M98W7D
LTE B13	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
5	4M50G7D	4M51W7D	4M50W7D
10	8M96G7D	8M96W7D	8M98W7D



REPORT No.: SZ21010412W07

LTE B66	Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM
1.4	1M09G7D	1M10W7D	1M09W7D
3	2M70G7D	2M70W7D	2M70W7D
5	4M50G7D	4M51W7D	4M51W7D
10	9M03G7D	8M98W7D	9M00W7D
15	13M5G7D	13M5W7D	13M5W7D
20	18M0G7D	18M0W7D	18M1W7D



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24, Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 24.232(c) 27.50(b)(10) 27.50(c)(10) 27.50(d)(4)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Feb 01&03, 2021 May 15&26, 2021	Chen Hao Peng Xuwei	PASS	No deviation
2.1049	Occupied Bandwidth	Oct 30, 2020 Nov 14, 2020 Dec 24, 2020 Jan 05, 2021	Ling Keye	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Feb 02, 2021	Ling Keye	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Oct 30, 2020 Nov 14, 2020 Dec 24&31, 2020 Jan 05, 2021	Ling Keye	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Conducted Spurious Emissions	Nov 06&09, 2020 Dec 24, 2020 Jan 05, 2021	Ling Keye	PASS	No deviation



2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Band Edge	Oct 30, 2020 Nov 02&14&16, 2020 Dec 24, 2020	Ling Keye	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Radiated Spurious Emissions	Nov 12, 2020 Jan 14&15, 2021	Peng Xuewei	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 23.5dB contains two parts that cable loss 13.5dB and Attenuator 10dB.

Note 3: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 4: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% risk level.

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106



2.47 CFR Part 2, Part 22H, Part 24E, Part 27 F&H&L Requirements

2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

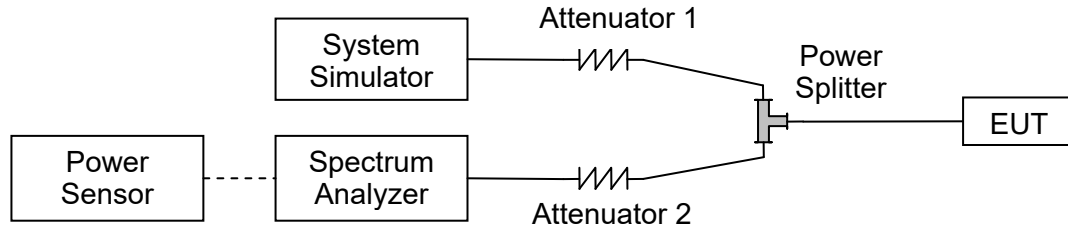
According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

According to FCC section 22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (b)(10) for LTE Band 13, Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts E.R.P.

According to FCC section 27.50 (c)(10) for LTE Band 12, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.1.3. Test Procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

$E.I.R.P. (dBm) = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15$

**2.1.4. Result****Conducted Output Power
Top Antenna**

LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	21.59	21.76	21.73
20	QPSK	1	49	21.55	21.63	21.56
20	QPSK	1	99	21.53	21.69	21.67
20	QPSK	50	0	20.61	20.69	20.67
20	QPSK	50	24	20.53	20.48	20.42
20	QPSK	50	50	20.48	20.44	20.50
20	QPSK	100	0	20.41	20.50	20.46
20	16QAM	1	0	20.47	20.47	20.49
20	16QAM	1	49	20.31	20.61	20.57
20	16QAM	1	99	20.56	20.41	20.57
20	16QAM	50	0	20.49	20.46	20.44
20	16QAM	50	24	20.45	20.50	20.51
20	16QAM	50	50	20.53	20.50	20.57
20	16QAM	100	0	20.56	20.57	20.44
20	64QAM	1	0	20.43	20.38	20.36
20	64QAM	1	49	20.38	20.32	20.23
20	64QAM	1	99	20.33	20.42	20.42
20	64QAM	50	0	20.43	20.35	20.40
20	64QAM	50	24	20.46	20.40	20.45
20	64QAM	50	50	20.45	20.46	20.40
20	64QAM	100	0	20.45	20.42	20.43



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	21.50	21.53	21.44
15	QPSK	1	37	21.29	21.65	21.53
15	QPSK	1	74	21.66	21.58	21.66
15	QPSK	36	0	20.40	20.49	20.48
15	QPSK	36	20	20.39	20.58	20.55
15	QPSK	36	39	20.51	20.52	20.49
15	QPSK	75	0	20.43	20.49	20.45
15	16QAM	1	0	20.52	20.60	20.54
15	16QAM	1	37	20.65	20.68	20.54
15	16QAM	1	74	20.60	20.72	20.72
15	16QAM	36	0	20.39	20.44	20.47
15	16QAM	36	20	20.48	20.41	20.54
15	16QAM	36	39	20.53	20.62	20.59
15	16QAM	75	0	20.40	20.42	20.51
15	64QAM	1	0	20.52	20.28	20.34
15	64QAM	1	37	20.51	20.32	20.74
15	64QAM	1	74	20.40	20.44	20.59
15	64QAM	36	0	20.25	20.42	20.30
15	64QAM	36	20	20.45	20.47	20.37
15	64QAM	36	39	20.33	20.38	20.47
15	64QAM	75	0	20.32	20.39	20.38



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	21.35	21.34	21.44
10	QPSK	1	25	21.46	21.56	21.44
10	QPSK	1	49	21.35	21.43	21.35
10	QPSK	25	0	20.63	20.64	20.60
10	QPSK	25	12	20.35	20.47	20.40
10	QPSK	25	25	20.26	20.39	20.35
10	QPSK	50	0	20.32	20.41	20.39
10	16QAM	1	0	20.80	20.73	20.72
10	16QAM	1	25	20.49	20.45	20.52
10	16QAM	1	49	20.44	20.52	20.31
10	16QAM	25	0	20.34	20.33	20.42
10	16QAM	25	12	20.44	20.40	20.39
10	16QAM	25	25	20.39	20.35	20.34
10	16QAM	50	0	20.35	20.28	20.32
10	64QAM	1	0	20.30	20.35	20.35
10	64QAM	1	25	20.33	20.38	20.42
10	64QAM	1	49	20.00	20.13	20.10
10	64QAM	25	0	20.30	20.34	20.35
10	64QAM	25	12	20.33	20.31	20.32
10	64QAM	25	25	20.26	20.28	20.26
10	64QAM	50	0	20.27	20.27	20.24



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	21.49	21.54	21.48
5	QPSK	1	12	21.48	21.59	21.46
5	QPSK	1	24	21.44	21.60	21.53
5	QPSK	12	0	20.38	20.29	20.36
5	QPSK	12	7	20.39	20.44	20.36
5	QPSK	12	13	20.38	20.37	20.40
5	QPSK	25	0	20.37	20.35	20.37
5	16QAM	1	0	20.50	20.40	20.78
5	16QAM	1	12	20.48	20.41	20.78
5	16QAM	1	24	20.51	20.38	20.77
5	16QAM	12	0	20.45	20.48	20.25
5	16QAM	12	7	20.41	20.43	20.37
5	16QAM	12	13	20.44	20.33	20.28
5	16QAM	25	0	20.36	20.34	20.32
5	64QAM	1	0	20.69	20.24	20.29
5	64QAM	1	12	20.68	20.34	20.45
5	64QAM	1	24	20.69	20.33	20.35
5	64QAM	12	0	20.54	20.47	20.46
5	64QAM	12	7	20.60	20.44	20.44
5	64QAM	12	13	20.57	20.53	20.51
5	64QAM	25	0	20.64	20.44	20.51



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	21.54	21.32	21.44
3	QPSK	1	8	21.47	21.68	21.51
3	QPSK	1	14	21.66	21.53	21.53
3	QPSK	8	0	20.38	20.33	20.35
3	QPSK	8	4	20.44	20.38	20.39
3	QPSK	8	7	20.44	20.38	20.34
3	QPSK	15	0	20.36	20.44	20.37
3	16QAM	1	0	20.52	20.43	20.37
3	16QAM	1	8	20.56	20.50	20.46
3	16QAM	1	14	20.49	20.46	20.34
3	16QAM	8	0	20.40	20.53	20.45
3	16QAM	8	4	20.47	20.44	20.50
3	16QAM	8	7	20.37	20.42	20.45
3	16QAM	15	0	20.40	20.44	20.39
3	64QAM	1	0	20.37	20.30	20.33
3	64QAM	1	8	20.55	20.54	20.14
3	64QAM	1	14	20.16	20.52	20.16
3	64QAM	8	0	20.28	20.30	20.38
3	64QAM	8	4	20.38	20.28	20.52
3	64QAM	8	7	20.48	20.37	20.47
3	64QAM	15	0	20.33	20.33	20.55



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	21.41	21.43	21.39
1.4	QPSK	1	3	21.51	21.49	21.48
1.4	QPSK	1	5	21.48	21.46	21.44
1.4	QPSK	3	0	21.35	21.25	21.42
1.4	QPSK	3	1	21.43	21.26	21.33
1.4	QPSK	3	3	21.11	21.15	21.42
1.4	QPSK	6	0	20.58	20.56	20.55
1.4	16QAM	1	0	20.61	20.61	20.55
1.4	16QAM	1	3	20.57	20.77	20.75
1.4	16QAM	1	5	20.45	20.65	20.33
1.4	16QAM	3	0	20.47	20.52	20.49
1.4	16QAM	3	1	20.65	20.47	20.52
1.4	16QAM	3	3	20.67	20.64	20.38
1.4	16QAM	6	0	20.68	20.61	20.56
1.4	64QAM	1	0	20.44	20.36	20.39
1.4	64QAM	1	3	20.46	20.67	20.55
1.4	64QAM	1	5	20.44	20.79	20.38
1.4	64QAM	3	0	20.47	20.53	20.54
1.4	64QAM	3	1	20.56	20.53	20.27
1.4	64QAM	3	3	20.48	20.62	20.39
1.4	64QAM	6	0	20.53	20.56	20.45



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	21.42	21.54	21.49
20	QPSK	1	49	21.28	21.36	21.35
20	QPSK	1	99	21.20	21.33	21.45
20	QPSK	50	0	20.50	20.63	20.60
20	QPSK	50	24	20.50	20.58	20.58
20	QPSK	50	50	20.39	20.50	20.51
20	QPSK	100	0	20.49	20.53	20.60
20	16QAM	1	0	20.36	20.44	20.33
20	16QAM	1	49	20.51	20.28	20.42
20	16QAM	1	99	20.30	20.52	20.28
20	16QAM	50	0	20.17	20.22	20.32
20	16QAM	50	24	20.13	20.24	20.13
20	16QAM	50	50	20.09	20.10	20.10
20	16QAM	100	0	20.11	20.19	20.20
20	64QAM	1	0	20.28	20.39	20.61
20	64QAM	1	49	20.32	20.25	20.13
20	64QAM	1	99	20.59	20.16	20.63
20	64QAM	50	0	20.29	20.38	20.33
20	64QAM	50	24	20.31	20.42	20.36
20	64QAM	50	50	20.35	20.30	20.32
20	64QAM	100	0	20.38	20.36	20.45



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	21.29	21.33	21.43
15	QPSK	1	37	21.33	21.42	21.34
15	QPSK	1	74	21.20	21.42	21.45
15	QPSK	36	0	20.44	20.51	20.54
15	QPSK	36	20	20.48	20.61	20.57
15	QPSK	36	39	20.53	20.52	20.61
15	QPSK	75	0	20.48	20.50	20.51
15	16QAM	1	0	20.18	20.40	20.12
15	16QAM	1	37	20.26	20.26	20.10
15	16QAM	1	74	20.12	20.42	20.21
15	16QAM	36	0	20.13	20.15	20.34
15	16QAM	36	20	20.08	20.15	20.21
15	16QAM	36	39	20.04	20.13	20.19
15	16QAM	75	0	20.15	20.16	20.25
15	64QAM	1	0	20.15	20.46	20.51
15	64QAM	1	37	20.57	20.33	20.39
15	64QAM	1	74	20.61	20.32	20.36
15	64QAM	36	0	20.26	20.33	20.37
15	64QAM	36	20	20.32	20.34	20.36
15	64QAM	36	39	20.35	20.31	20.33
15	64QAM	75	0	20.28	20.39	20.32



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	21.21	21.40	21.23
10	QPSK	1	25	21.19	21.32	21.33
10	QPSK	1	49	21.27	21.10	21.33
10	QPSK	25	0	20.27	20.49	20.51
10	QPSK	25	12	20.39	20.45	20.49
10	QPSK	25	25	20.28	20.39	20.46
10	QPSK	50	0	20.34	20.44	20.36
10	16QAM	1	0	20.09	20.24	20.00
10	16QAM	1	25	20.36	20.10	20.42
10	16QAM	1	49	20.43	20.33	20.32
10	16QAM	25	0	20.09	20.08	20.07
10	16QAM	25	12	20.01	20.11	20.08
10	16QAM	25	25	20.35	20.26	20.35
10	16QAM	50	0	20.29	20.33	20.45
10	64QAM	1	0	20.20	20.28	20.18
10	64QAM	1	25	20.27	20.56	20.65
10	64QAM	1	49	20.25	20.29	20.24
10	64QAM	25	0	20.09	20.23	20.22
10	64QAM	25	12	20.18	20.29	20.33
10	64QAM	25	25	20.06	20.18	20.20
10	64QAM	50	0	20.12	20.19	20.18



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	21.11	21.33	21.38
5	QPSK	1	12	21.17	21.32	21.29
5	QPSK	1	24	21.12	21.24	21.23
5	QPSK	12	0	20.35	20.35	20.39
5	QPSK	12	7	20.35	20.46	20.43
5	QPSK	12	13	20.30	20.47	20.39
5	QPSK	25	0	20.33	20.37	20.43
5	16QAM	1	0	19.99	20.40	20.08
5	16QAM	1	12	20.10	20.45	20.04
5	16QAM	1	24	20.04	20.39	19.99
5	16QAM	12	0	20.03	19.97	20.00
5	16QAM	12	7	20.06	20.10	20.08
5	16QAM	12	13	20.33	20.40	20.44
5	16QAM	25	0	20.34	20.45	20.38
5	64QAM	1	0	20.16	20.60	20.58
5	64QAM	1	12	20.54	20.30	20.57
5	64QAM	1	24	20.50	20.20	20.27
5	64QAM	12	0	20.17	20.24	20.26
5	64QAM	12	7	20.16	20.25	20.31
5	64QAM	12	13	20.17	20.23	20.22
5	64QAM	25	0	20.12	20.26	20.17



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	21.23	21.24	21.36
3	QPSK	1	8	21.32	21.46	21.40
3	QPSK	1	14	21.12	21.31	21.31
3	QPSK	8	0	20.33	20.39	20.40
3	QPSK	8	4	20.39	20.47	20.49
3	QPSK	8	7	20.35	20.45	20.45
3	QPSK	15	0	20.35	20.41	20.35
3	16QAM	1	0	20.19	20.28	20.32
3	16QAM	1	8	20.41	20.41	20.15
3	16QAM	1	14	20.32	20.10	20.18
3	16QAM	8	0	20.11	20.12	20.21
3	16QAM	8	4	20.21	20.21	20.22
3	16QAM	8	7	20.43	20.51	20.55
3	16QAM	15	0	20.43	20.41	20.48
3	64QAM	1	0	20.15	20.24	20.22
3	64QAM	1	8	20.34	20.22	20.38
3	64QAM	1	14	20.15	20.22	20.05
3	64QAM	8	0	20.13	20.17	20.11
3	64QAM	8	4	20.25	20.23	20.27
3	64QAM	8	7	20.19	20.26	20.38
3	64QAM	15	0	20.15	20.23	20.14



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	20.98	21.19	21.20
1.4	QPSK	1	3	21.32	21.32	21.36
1.4	QPSK	1	5	21.18	21.27	21.29
1.4	QPSK	3	0	21.26	21.23	21.22
1.4	QPSK	3	1	21.22	21.32	21.37
1.4	QPSK	3	3	21.21	21.28	21.27
1.4	QPSK	6	0	20.11	20.20	20.20
1.4	16QAM	1	0	20.08	20.55	20.21
1.4	16QAM	1	3	20.21	20.29	20.33
1.4	16QAM	1	5	20.27	20.43	20.23
1.4	16QAM	3	0	20.30	20.34	20.25
1.4	16QAM	3	1	20.31	20.34	20.36
1.4	16QAM	3	3	20.30	20.42	20.31
1.4	16QAM	6	0	20.21	20.22	20.13
1.4	64QAM	1	0	20.04	19.98	20.12
1.4	64QAM	1	3	20.30	20.28	20.40
1.4	64QAM	1	5	20.21	20.17	20.01
1.4	64QAM	3	0	20.12	20.10	20.29
1.4	64QAM	3	1	20.03	20.18	20.15
1.4	64QAM	3	3	20.09	20.26	20.14
1.4	64QAM	6	0	20.08	20.09	20.16



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	24.34	24.47	24.18
10	QPSK	1	25	24.21	24.32	24.34
10	QPSK	1	49	24.22	24.15	24.09
10	QPSK	25	0	23.20	23.32	23.21
10	QPSK	25	12	23.24	23.23	23.19
10	QPSK	25	25	23.32	23.19	23.28
10	QPSK	50	0	23.28	23.23	23.31
10	16QAM	1	0	23.59	23.29	23.68
10	16QAM	1	25	23.25	23.23	23.27
10	16QAM	1	49	23.54	23.35	23.48
10	16QAM	25	0	22.26	22.24	22.31
10	16QAM	25	12	22.32	22.25	22.32
10	16QAM	25	25	22.28	22.31	22.25
10	16QAM	50	0	22.31	22.30	22.22
10	64QAM	1	0	22.40	22.61	22.35
10	64QAM	1	25	22.31	22.53	22.54
10	64QAM	1	49	22.56	22.42	22.22
10	64QAM	25	0	22.23	22.21	22.20
10	64QAM	25	12	22.33	22.21	22.15
10	64QAM	25	25	22.21	22.31	22.20
10	64QAM	50	0	22.28	22.29	22.24



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	24.22	24.07	24.09
5	QPSK	1	12	24.26	24.05	24.11
5	QPSK	1	24	24.20	24.21	23.97
5	QPSK	12	0	23.32	23.26	23.20
5	QPSK	12	7	23.25	23.23	23.20
5	QPSK	12	13	23.28	23.20	23.21
5	QPSK	25	0	23.26	23.31	23.20
5	16QAM	1	0	23.36	23.38	23.66
5	16QAM	1	12	23.37	23.42	23.30
5	16QAM	1	24	23.27	23.21	23.68
5	16QAM	12	0	22.20	22.14	22.30
5	16QAM	12	7	22.34	22.32	22.24
5	16QAM	12	13	22.27	22.32	22.30
5	16QAM	25	0	22.34	22.31	22.09
5	64QAM	1	0	22.54	22.61	22.34
5	64QAM	1	12	22.55	22.51	22.28
5	64QAM	1	24	22.42	22.45	22.33
5	64QAM	12	0	22.19	22.16	22.17
5	64QAM	12	7	22.31	22.24	22.17
5	64QAM	12	13	22.22	22.21	22.27
5	64QAM	25	0	22.20	22.28	22.22



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	24.14	24.05	24.02
3	QPSK	1	8	24.21	24.11	24.03
3	QPSK	1	14	24.03	24.11	24.07
3	QPSK	8	0	23.23	23.17	23.22
3	QPSK	8	4	23.22	23.20	23.20
3	QPSK	8	7	23.26	23.24	23.21
3	QPSK	15	0	23.19	23.23	23.10
3	16QAM	1	0	23.40	23.60	23.37
3	16QAM	1	8	23.66	23.60	23.33
3	16QAM	1	14	23.49	23.52	23.29
3	16QAM	8	0	22.25	22.19	22.31
3	16QAM	8	4	22.39	22.23	22.09
3	16QAM	8	7	22.11	22.24	22.25
3	16QAM	15	0	22.26	22.32	22.24
3	64QAM	1	0	22.44	22.34	22.34
3	64QAM	1	8	22.35	22.24	22.51
3	64QAM	1	14	22.35	22.51	22.45
3	64QAM	8	0	22.29	22.12	22.07
3	64QAM	8	4	22.18	22.46	22.13
3	64QAM	8	7	22.35	22.16	22.23
3	64QAM	15	0	22.24	22.23	22.16



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	24.04	24.05	24.06
1.4	QPSK	1	3	24.11	24.08	24.06
1.4	QPSK	1	5	23.98	24.08	23.96
1.4	QPSK	3	0	24.06	24.06	24.05
1.4	QPSK	3	1	24.08	24.08	24.02
1.4	QPSK	3	3	24.01	24.12	23.95
1.4	QPSK	6	0	23.11	23.12	23.08
1.4	16QAM	1	0	23.59	23.39	23.34
1.4	16QAM	1	3	23.70	23.68	23.35
1.4	16QAM	1	5	23.68	23.48	23.30
1.4	16QAM	3	0	23.03	23.07	23.18
1.4	16QAM	3	1	23.08	23.15	23.18
1.4	16QAM	3	3	23.05	23.06	23.04
1.4	16QAM	6	0	22.56	22.35	22.28
1.4	64QAM	1	0	22.65	22.41	22.39
1.4	64QAM	1	3	22.28	22.65	22.36
1.4	64QAM	1	5	22.54	22.54	22.24
1.4	64QAM	3	0	22.35	22.42	22.32
1.4	64QAM	3	1	22.26	22.26	22.39
1.4	64QAM	3	3	22.45	22.34	22.34
1.4	64QAM	6	0	22.36	22.28	22.54



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	24.42	24.14	24.19
10	QPSK	1	25	24.33	24.32	24.38
10	QPSK	1	49	24.32	24.32	24.33
10	QPSK	25	0	23.47	23.30	23.34
10	QPSK	25	12	23.44	23.35	23.42
10	QPSK	25	25	23.27	23.24	23.33
10	QPSK	50	0	23.38	23.24	23.46
10	16QAM	1	0	23.46	23.35	23.34
10	16QAM	1	25	23.21	23.51	23.51
10	16QAM	1	49	23.36	23.61	23.50
10	16QAM	25	0	22.33	22.29	22.35
10	16QAM	25	12	22.43	22.43	22.41
10	16QAM	25	25	22.31	22.49	22.44
10	16QAM	50	0	22.38	22.34	22.44
10	64QAM	1	0	22.41	22.54	22.43
10	64QAM	1	25	22.32	22.55	22.42
10	64QAM	1	49	22.35	22.42	22.51
10	64QAM	25	0	22.51	22.25	22.31
10	64QAM	25	12	22.45	22.42	22.35
10	64QAM	25	25	22.37	22.51	22.36
10	64QAM	50	0	22.26	22.26	22.40



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	24.24	24.16	24.29
5	QPSK	1	12	24.35	24.26	24.15
5	QPSK	1	24	24.31	24.37	24.28
5	QPSK	12	0	23.24	23.38	23.28
5	QPSK	12	7	23.38	23.43	23.37
5	QPSK	12	13	23.32	23.35	23.37
5	QPSK	25	0	23.30	23.34	23.24
5	16QAM	1	0	23.64	23.73	23.71
5	16QAM	1	12	23.46	23.57	23.50
5	16QAM	1	24	23.36	23.50	23.57
5	16QAM	12	0	22.25	22.39	22.38
5	16QAM	12	7	22.48	22.42	22.44
5	16QAM	12	13	22.35	22.38	22.41
5	16QAM	25	0	22.40	22.39	22.20
5	64QAM	1	0	22.54	22.42	22.51
5	64QAM	1	12	22.55	22.35	22.34
5	64QAM	1	24	22.61	22.62	22.55
5	64QAM	12	0	22.18	22.40	22.31
5	64QAM	12	7	22.45	22.35	22.42
5	64QAM	12	13	22.32	22.43	22.40
5	64QAM	25	0	22.38	22.41	22.27



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	24.28	24.29	24.28
3	QPSK	1	8	24.32	24.33	24.33
3	QPSK	1	14	24.26	24.26	24.24
3	QPSK	8	0	23.31	23.40	23.30
3	QPSK	8	4	23.34	23.31	23.41
3	QPSK	8	7	23.29	23.34	23.24
3	QPSK	15	0	23.29	23.26	23.27
3	16QAM	1	0	23.81	23.58	23.69
3	16QAM	1	8	23.78	23.85	23.70
3	16QAM	1	14	23.72	23.90	23.60
3	16QAM	8	0	22.47	22.49	22.34
3	16QAM	8	4	22.45	22.41	22.34
3	16QAM	8	7	22.29	22.48	22.29
3	16QAM	15	0	22.46	22.40	22.24
3	64QAM	1	0	22.51	22.42	22.42
3	64QAM	1	8	22.52	22.61	22.51
3	64QAM	1	14	22.55	22.51	22.50
3	64QAM	8	0	22.38	22.36	22.26
3	64QAM	8	4	22.30	22.37	22.34
3	64QAM	8	7	22.38	22.30	22.25
3	64QAM	15	0	22.28	22.44	22.30



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	24.28	24.20	24.20
1.4	QPSK	1	3	24.17	24.34	24.23
1.4	QPSK	1	5	24.14	24.20	24.13
1.4	QPSK	3	0	24.16	24.16	24.26
1.4	QPSK	3	1	24.17	24.26	24.18
1.4	QPSK	3	3	24.15	24.25	24.26
1.4	QPSK	6	0	23.28	23.29	23.30
1.4	16QAM	1	0	23.46	23.49	23.45
1.4	16QAM	1	3	23.43	23.58	23.48
1.4	16QAM	1	5	23.40	23.42	23.42
1.4	16QAM	3	0	23.33	23.34	23.34
1.4	16QAM	3	1	23.40	23.40	23.29
1.4	16QAM	3	3	23.29	23.34	23.27
1.4	16QAM	6	0	22.30	22.39	22.34
1.4	64QAM	1	0	22.38	22.38	22.25
1.4	64QAM	1	3	22.38	22.54	22.35
1.4	64QAM	1	5	22.35	22.38	22.48
1.4	64QAM	3	0	22.29	22.51	22.27
1.4	64QAM	3	1	22.26	22.26	22.36
1.4	64QAM	3	3	22.28	22.54	22.29
1.4	64QAM	6	0	22.30	22.36	22.30



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	23230	/
Frequency (MHz)				/	782	/
10	QPSK	1	0	/	24.02	/
10	QPSK	1	25	/	24.20	/
10	QPSK	1	49	/	24.10	/
10	QPSK	25	0	/	23.08	/
10	QPSK	25	12	/	23.15	/
10	QPSK	25	25	/	23.17	/
10	QPSK	50	0	/	23.16	/
10	16QAM	1	0	/	23.26	/
10	16QAM	1	25	/	23.50	/
10	16QAM	1	49	/	23.47	/
10	16QAM	25	0	/	22.64	/
10	16QAM	25	12	/	22.54	/
10	16QAM	25	25	/	22.54	/
10	16QAM	50	0	/	22.62	/
10	64QAM	1	0	/	22.51	/
10	64QAM	1	25	/	22.62	/
10	64QAM	1	49	/	22.48	/
10	64QAM	25	0	/	22.54	/
10	64QAM	25	12	/	22.56	/
10	64QAM	25	25	/	22.67	/
10	64QAM	50	0	/	22.51	/



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	23.97	24.11	24.08
5	QPSK	1	12	24.04	24.07	24.02
5	QPSK	1	24	24.02	24.02	24.08
5	QPSK	12	0	23.04	23.06	23.07
5	QPSK	12	7	23.18	23.04	23.17
5	QPSK	12	13	23.09	23.18	23.11
5	QPSK	25	0	23.20	23.13	23.16
5	16QAM	1	0	23.55	23.38	23.30
5	16QAM	1	12	23.21	23.56	23.50
5	16QAM	1	24	23.43	23.59	23.57
5	16QAM	12	0	22.56	22.07	22.13
5	16QAM	12	7	22.61	22.05	22.25
5	16QAM	12	13	22.54	22.27	22.16
5	16QAM	25	0	22.52	22.45	22.15
5	64QAM	1	0	22.55	22.61	22.61
5	64QAM	1	12	22.45	22.45	22.29
5	64QAM	1	24	22.61	22.26	22.34
5	64QAM	12	0	22.45	22.34	22.48
5	64QAM	12	7	22.48	22.27	22.34
5	64QAM	12	13	22.64	22.17	22.13
5	64QAM	25	0	22.35	22.13	22.24



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	21.45	21.61	21.50
20	QPSK	1	49	21.31	21.44	21.47
20	QPSK	1	99	21.41	21.42	21.41
20	QPSK	50	0	20.62	20.72	20.63
20	QPSK	50	24	20.59	20.53	20.32
20	QPSK	50	50	20.64	20.70	20.63
20	QPSK	100	0	20.65	20.67	20.58
20	16QAM	1	0	20.58	20.13	20.26
20	16QAM	1	49	20.33	20.28	20.42
20	16QAM	1	99	20.42	20.47	20.36
20	16QAM	50	0	20.31	20.33	20.27
20	16QAM	50	24	20.35	20.39	20.28
20	16QAM	50	50	20.40	20.41	20.35
20	16QAM	100	0	20.30	20.38	20.43
20	64QAM	1	0	20.13	20.25	20.59
20	64QAM	1	49	20.57	20.63	20.22
20	64QAM	1	99	20.59	20.27	20.20
20	64QAM	50	0	20.10	20.04	20.01
20	64QAM	50	24	20.15	20.18	20.10
20	64QAM	50	50	20.20	20.17	20.17
20	64QAM	100	0	20.12	20.05	20.16



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	21.20	21.36	21.31
15	QPSK	1	37	21.36	21.52	21.36
15	QPSK	1	74	21.32	21.51	21.37
15	QPSK	36	0	20.35	20.42	20.41
15	QPSK	36	20	20.46	20.48	20.45
15	QPSK	36	39	20.41	20.44	20.41
15	QPSK	75	0	20.37	20.49	20.45
15	16QAM	1	0	20.38	20.40	20.42
15	16QAM	1	37	20.55	20.50	20.51
15	16QAM	1	74	20.51	20.49	20.45
15	16QAM	36	0	20.25	20.22	20.25
15	16QAM	36	20	20.39	20.44	20.28
15	16QAM	36	39	20.34	20.31	20.36
15	16QAM	75	0	20.35	20.31	20.33
15	64QAM	1	0	20.11	20.12	20.17
15	64QAM	1	37	20.56	20.26	20.19
15	64QAM	1	74	20.54	20.23	20.28
15	64QAM	36	0	20.08	20.10	20.05
15	64QAM	36	20	20.18	20.06	20.12
15	64QAM	36	39	20.05	20.15	20.20
15	64QAM	75	0	20.20	20.16	20.13



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	21.28	21.37	21.22
10	QPSK	1	25	21.46	21.45	21.55
10	QPSK	1	49	21.40	21.51	21.46
10	QPSK	25	0	20.43	20.41	20.41
10	QPSK	25	12	20.46	20.49	20.50
10	QPSK	25	25	20.41	20.49	20.43
10	QPSK	50	0	20.40	20.48	20.34
10	16QAM	1	0	20.41	20.77	20.36
10	16QAM	1	25	20.61	20.59	20.54
10	16QAM	1	49	20.44	20.49	20.35
10	16QAM	25	0	20.41	20.30	20.33
10	16QAM	25	12	20.46	20.43	20.54
10	16QAM	25	25	20.30	20.33	20.39
10	16QAM	50	0	20.28	20.21	20.20
10	64QAM	1	0	20.12	20.46	20.45
10	64QAM	1	25	20.41	20.31	20.32
10	64QAM	1	49	20.34	20.19	20.30
10	64QAM	25	0	20.01	20.09	20.00
10	64QAM	25	12	20.10	20.14	20.13
10	64QAM	25	25	20.09	20.01	20.16
10	64QAM	50	0	20.08	20.10	20.02



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	21.34	21.35	21.27
5	QPSK	1	12	21.29	21.33	21.22
5	QPSK	1	24	21.24	21.19	21.24
5	QPSK	12	0	20.15	20.52	20.19
5	QPSK	12	7	20.21	20.18	20.08
5	QPSK	12	13	20.31	20.34	20.31
5	QPSK	25	0	20.26	20.28	20.25
5	16QAM	1	0	20.07	20.17	20.35
5	16QAM	1	12	20.22	20.08	20.36
5	16QAM	1	24	20.16	20.47	20.12
5	16QAM	12	0	20.01	20.11	20.04
5	16QAM	12	7	20.06	19.98	20.09
5	16QAM	12	13	20.14	20.19	20.02
5	16QAM	25	0	20.02	20.14	20.12
5	64QAM	1	0	20.30	20.14	19.87
5	64QAM	1	12	20.24	20.21	20.26
5	64QAM	1	24	20.22	20.27	20.18
5	64QAM	12	0	19.96	19.97	20.02
5	64QAM	12	7	20.01	20.02	20.02
5	64QAM	12	13	20.05	20.12	19.97
5	64QAM	25	0	19.98	19.95	20.07



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	21.17	21.26	21.26
3	QPSK	1	8	21.27	21.24	21.28
3	QPSK	1	14	21.21	21.28	21.28
3	QPSK	8	0	20.24	20.33	20.35
3	QPSK	8	4	20.32	20.39	20.34
3	QPSK	8	7	20.35	20.38	20.42
3	QPSK	15	0	20.41	20.34	20.36
3	16QAM	1	0	20.57	20.68	20.75
3	16QAM	1	8	20.39	20.50	20.48
3	16QAM	1	14	20.43	20.43	20.65
3	16QAM	8	0	20.02	20.13	20.15
3	16QAM	8	4	20.09	20.12	20.11
3	16QAM	8	7	20.15	20.13	20.02
3	16QAM	15	0	20.10	20.18	20.10
3	64QAM	1	0	20.20	20.17	20.05
3	64QAM	1	8	20.10	20.25	20.34
3	64QAM	1	14	20.09	20.21	20.27
3	64QAM	8	0	19.94	20.02	20.01
3	64QAM	8	4	20.05	20.04	20.11
3	64QAM	8	7	20.09	20.00	20.02
3	64QAM	15	0	19.94	20.04	19.99



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	21.31	21.35	21.28
1.4	QPSK	1	3	21.42	21.41	21.43
1.4	QPSK	1	5	21.31	21.36	21.32
1.4	QPSK	3	0	21.26	21.39	21.37
1.4	QPSK	3	1	21.47	21.47	21.48
1.4	QPSK	3	3	21.42	21.44	21.40
1.4	QPSK	6	0	20.40	20.37	20.35
1.4	16QAM	1	0	20.44	20.38	20.23
1.4	16QAM	1	3	20.25	20.68	20.35
1.4	16QAM	1	5	20.37	20.38	20.37
1.4	16QAM	3	0	20.21	20.24	20.25
1.4	16QAM	3	1	20.37	20.45	20.29
1.4	16QAM	3	3	20.20	20.34	20.34
1.4	16QAM	6	0	20.13	20.33	20.23
1.4	64QAM	1	0	19.96	20.11	19.95
1.4	64QAM	1	3	20.08	20.01	20.06
1.4	64QAM	1	5	20.24	20.27	20.23
1.4	64QAM	3	0	20.14	20.15	19.98
1.4	64QAM	3	1	20.12	20.36	20.21
1.4	64QAM	3	3	20.14	19.98	20.14
1.4	64QAM	6	0	20.10	20.11	19.98

**Bottom Antenna**

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.56	22.69	22.40
10	QPSK	1	25	22.43	22.54	22.56
10	QPSK	1	49	22.44	22.37	22.31
10	QPSK	25	0	21.42	21.54	21.43
10	QPSK	25	12	21.46	21.45	21.41
10	QPSK	25	25	21.54	21.41	21.50
10	QPSK	50	0	21.50	21.45	21.53
10	16QAM	1	0	21.81	21.51	21.90
10	16QAM	1	25	21.47	21.45	21.49
10	16QAM	1	49	21.76	21.57	21.70
10	16QAM	25	0	20.48	20.46	20.53
10	16QAM	25	12	20.54	20.47	20.54
10	16QAM	25	25	20.50	20.53	20.47
10	16QAM	50	0	20.53	20.52	20.44
10	64QAM	1	0	20.62	20.83	20.57
10	64QAM	1	25	20.53	20.75	20.76
10	64QAM	1	49	20.78	20.64	20.44
10	64QAM	25	0	20.45	20.43	20.42
10	64QAM	25	12	20.55	20.43	20.37
10	64QAM	25	25	20.43	20.53	20.42
10	64QAM	50	0	20.50	20.51	20.46



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.44	22.29	22.31
5	QPSK	1	12	22.48	22.27	22.33
5	QPSK	1	24	22.42	22.43	22.19
5	QPSK	12	0	21.54	21.48	21.42
5	QPSK	12	7	21.47	21.45	21.42
5	QPSK	12	13	21.50	21.42	21.43
5	QPSK	25	0	21.48	21.53	21.42
5	16QAM	1	0	21.58	21.60	21.88
5	16QAM	1	12	21.59	21.64	21.52
5	16QAM	1	24	21.49	21.43	21.90
5	16QAM	12	0	20.42	20.36	20.52
5	16QAM	12	7	20.56	20.54	20.46
5	16QAM	12	13	20.49	20.54	20.52
5	16QAM	25	0	20.56	20.53	20.31
5	64QAM	1	0	20.76	20.83	20.56
5	64QAM	1	12	20.77	20.73	20.50
5	64QAM	1	24	20.64	20.67	20.55
5	64QAM	12	0	20.41	20.38	20.39
5	64QAM	12	7	20.53	20.46	20.39
5	64QAM	12	13	20.44	20.43	20.49
5	64QAM	25	0	20.42	20.50	20.44



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.36	22.27	22.24
3	QPSK	1	8	22.43	22.33	22.25
3	QPSK	1	14	22.25	22.33	22.29
3	QPSK	8	0	21.45	21.39	21.44
3	QPSK	8	4	21.44	21.42	21.42
3	QPSK	8	7	21.48	21.46	21.43
3	QPSK	15	0	21.41	21.45	21.32
3	16QAM	1	0	21.62	21.82	21.59
3	16QAM	1	8	21.88	21.82	21.55
3	16QAM	1	14	21.71	21.74	21.51
3	16QAM	8	0	20.47	20.41	20.53
3	16QAM	8	4	20.61	20.45	20.31
3	16QAM	8	7	20.33	20.46	20.47
3	16QAM	15	0	20.48	20.54	20.46
3	64QAM	1	0	20.66	20.56	20.56
3	64QAM	1	8	20.57	20.46	20.73
3	64QAM	1	14	20.57	20.73	20.67
3	64QAM	8	0	20.51	20.34	20.29
3	64QAM	8	4	20.40	20.68	20.35
3	64QAM	8	7	20.57	20.38	20.45
3	64QAM	15	0	20.46	20.45	20.38



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.26	22.27	22.28
1.4	QPSK	1	3	22.33	22.30	22.28
1.4	QPSK	1	5	22.20	22.30	22.18
1.4	QPSK	3	0	22.28	22.28	22.27
1.4	QPSK	3	1	22.30	22.30	22.24
1.4	QPSK	3	3	22.23	22.34	22.17
1.4	QPSK	6	0	21.33	21.34	21.30
1.4	16QAM	1	0	21.81	21.61	21.56
1.4	16QAM	1	3	21.92	21.90	21.57
1.4	16QAM	1	5	21.90	21.70	21.52
1.4	16QAM	3	0	21.25	21.29	21.40
1.4	16QAM	3	1	21.30	21.37	21.40
1.4	16QAM	3	3	21.27	21.28	21.26
1.4	16QAM	6	0	20.78	20.57	20.50
1.4	64QAM	1	0	20.87	20.63	20.61
1.4	64QAM	1	3	20.50	20.87	20.58
1.4	64QAM	1	5	20.76	20.76	20.46
1.4	64QAM	3	0	20.57	20.64	20.54
1.4	64QAM	3	1	20.48	20.48	20.61
1.4	64QAM	3	3	20.67	20.56	20.56
1.4	64QAM	6	0	20.58	20.50	20.76



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	23.93	23.76	23.80
10	QPSK	1	25	23.81	23.68	23.60
10	QPSK	1	49	23.67	23.85	23.72
10	QPSK	25	0	22.92	22.84	22.84
10	QPSK	25	12	22.82	22.74	22.89
10	QPSK	25	25	22.84	22.75	22.86
10	QPSK	50	0	22.96	22.75	22.92
10	16QAM	1	0	22.98	23.00	23.10
10	16QAM	1	25	22.95	23.12	22.82
10	16QAM	1	49	23.05	23.06	23.12
10	16QAM	25	0	22.74	22.76	22.64
10	16QAM	25	12	22.87	22.64	22.53
10	16QAM	25	25	22.49	22.58	22.55
10	16QAM	50	0	22.79	22.67	22.62
10	64QAM	1	0	22.38	22.56	22.64
10	64QAM	1	25	22.62	22.56	22.49
10	64QAM	1	49	22.58	22.67	22.68
10	64QAM	25	0	22.77	22.64	22.75
10	64QAM	25	12	22.64	22.58	22.49
10	64QAM	25	25	22.55	22.64	22.57
10	64QAM	50	0	22.64	22.58	22.61



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	23.68	23.60	23.70
5	QPSK	1	12	23.69	23.80	23.71
5	QPSK	1	24	23.76	23.90	23.63
5	QPSK	12	0	22.76	22.85	22.77
5	QPSK	12	7	22.83	22.90	22.94
5	QPSK	12	13	22.81	22.90	22.77
5	QPSK	25	0	22.85	22.89	22.76
5	16QAM	1	0	22.96	22.89	23.07
5	16QAM	1	12	22.82	23.01	22.99
5	16QAM	1	24	23.21	22.90	23.19
5	16QAM	12	0	22.82	22.57	22.55
5	16QAM	12	7	22.64	22.62	22.60
5	16QAM	12	13	22.75	22.57	22.45
5	16QAM	25	0	22.62	22.55	22.51
5	64QAM	1	0	22.64	22.62	22.62
5	64QAM	1	12	22.54	22.34	22.34
5	64QAM	1	24	22.56	22.54	22.34
5	64QAM	12	0	22.67	22.15	22.51
5	64QAM	12	7	22.55	22.61	22.34
5	64QAM	12	13	22.62	22.51	22.54
5	64QAM	25	0	22.57	22.54	22.57



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.78	23.77	23.71
3	QPSK	1	8	23.65	23.93	23.89
3	QPSK	1	14	23.60	23.82	23.75
3	QPSK	8	0	22.82	22.82	22.74
3	QPSK	8	4	22.80	22.83	22.83
3	QPSK	8	7	22.75	22.83	22.82
3	QPSK	15	0	22.80	22.79	22.75
3	16QAM	1	0	23.16	22.89	22.94
3	16QAM	1	8	23.05	22.98	23.00
3	16QAM	1	14	23.02	23.10	23.11
3	16QAM	8	0	22.57	22.62	22.62
3	16QAM	8	4	22.62	22.51	22.54
3	16QAM	8	7	22.57	22.31	22.32
3	16QAM	15	0	22.46	22.61	22.43
3	64QAM	1	0	22.59	22.54	22.62
3	64QAM	1	8	22.61	22.53	22.55
3	64QAM	1	14	22.63	22.50	22.44
3	64QAM	8	0	22.57	22.72	22.57
3	64QAM	8	4	22.62	22.61	22.54
3	64QAM	8	7	22.57	22.46	22.53
3	64QAM	15	0	22.56	22.72	22.61



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.62	23.72	23.72
1.4	QPSK	1	3	23.70	23.75	23.72
1.4	QPSK	1	5	23.62	23.69	23.62
1.4	QPSK	3	0	23.68	23.72	23.66
1.4	QPSK	3	1	23.70	23.68	23.72
1.4	QPSK	3	3	23.65	23.72	23.60
1.4	QPSK	6	0	22.74	22.73	22.73
1.4	16QAM	1	0	22.95	23.24	22.90
1.4	16QAM	1	3	22.94	23.11	22.92
1.4	16QAM	1	5	23.09	23.19	23.10
1.4	16QAM	3	0	22.73	22.72	22.76
1.4	16QAM	3	1	22.84	22.75	22.89
1.4	16QAM	3	3	22.71	22.68	22.78
1.4	16QAM	6	0	22.65	22.66	22.82
1.4	64QAM	1	0	22.64	22.64	22.90
1.4	64QAM	1	3	22.82	22.71	22.87
1.4	64QAM	1	5	22.83	22.90	22.83
1.4	64QAM	3	0	22.71	22.82	22.96
1.4	64QAM	3	1	22.79	22.76	22.89
1.4	64QAM	3	3	22.70	22.79	22.77
1.4	64QAM	6	0	22.55	22.75	22.64



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	23230	/
Frequency (MHz)				/	782	/
10	QPSK	1	0	/	23.67	/
10	QPSK	1	25	/	23.99	/
10	QPSK	1	49	/	23.60	/
10	QPSK	25	0	/	22.66	/
10	QPSK	25	12	/	22.74	/
10	QPSK	25	25	/	22.75	/
10	QPSK	50	0	/	22.73	/
10	16QAM	1	0	/	22.80	/
10	16QAM	1	25	/	22.97	/
10	16QAM	1	49	/	22.80	/
10	16QAM	25	0	/	22.66	/
10	16QAM	25	12	/	22.75	/
10	16QAM	25	25	/	22.84	/
10	16QAM	50	0	/	22.82	/
10	64QAM	1	0	/	22.56	/
10	64QAM	1	25	/	22.37	/
10	64QAM	1	49	/	22.62	/
10	64QAM	25	0	/	21.79	/
10	64QAM	25	12	/	21.76	/
10	64QAM	25	25	/	21.72	/
10	64QAM	50	0	/	21.62	/



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	23.55	23.71	23.73
5	QPSK	1	12	23.59	23.65	23.61
5	QPSK	1	24	23.71	23.80	23.72
5	QPSK	12	0	22.68	22.72	22.68
5	QPSK	12	7	22.80	22.69	22.80
5	QPSK	12	13	22.79	22.73	22.73
5	QPSK	25	0	22.83	22.67	22.76
5	16QAM	1	0	22.90	22.77	22.81
5	16QAM	1	12	22.98	22.99	23.01
5	16QAM	1	24	23.26	23.05	22.91
5	16QAM	12	0	22.75	22.75	22.75
5	16QAM	12	7	22.64	22.72	22.65
5	16QAM	12	13	22.57	22.61	22.54
5	16QAM	25	0	22.68	22.73	22.62
5	64QAM	1	0	22.98	22.45	22.76
5	64QAM	1	12	22.35	22.62	22.86
5	64QAM	1	24	22.66	22.61	22.63
5	64QAM	12	0	21.62	21.82	21.69
5	64QAM	12	7	21.86	21.71	21.74
5	64QAM	12	13	21.82	21.82	21.75
5	64QAM	25	0	21.84	21.80	21.79