

FCC RF TEST REPORT

APPLICANT

SHENZHEN ANTOP TECHNOLOGY., LTD.

PRODUCT NAME

Router Antenna

MODEL NAME

MV-9818/4G

TRADE NAME

N.A

BRAND NAME

N.A

FCC ID

2AG6P09819

STANDARD(S)

47 CFR Part 22, Subpart H 47 CFR Part 24, Subpart E

47 CFR Part 27, Subpart H&L

ISSUE DATE

Certification

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.

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DIRECTORY

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	Change History									
Issue	Issue Date Reason for change									
1.0	2016-08-12	First edition								
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TEST REPORT DECLARATION

Applicant	SHENZHEN ANTOP TECHNOLOGY., LTD.
Applicant Address	301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian Forest Farm, Songgang Street, Baoan District, 518100 Shenzhen City, Guang Dong Province, People's, Republic Of China
Manufacturer	SHENZHEN ANTOP TECHNOLOGY., LTD.
Manufacturer Address	301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian Forest Farm, Songgang Street, Baoan District, 518100 Shenzhen City, Guang Dong Province, People's, Republic Of China
Product Name	Router Antenna
Model Name	MV-9818/4G
Brand Name	N.A
HW Version	V1.0
SW Version	V1.0
Test Standards	47 CFR Part 22, Subpart H 47 CFR Part 24, Subpart E 47 CFR Part 27, Subpart H&L
Test Date	2016-05-30 to 2016-06-15
Test Result	PASS

Tested by	Yuan mg	
	Yuan Ling	

Reviewed by

Approved by Peng Huarui



1. GENERAL INFORMATION

1.1 EUT Description

EUT Type Router Antenna

Serial No. (n.a, marked #1 by test site)

Hardware Version...... V1.0 Software Version...... V1.0

Applicant SHENZHEN ANTOP TECHNOLOGY., LTD.

301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian

Forest Farm, Songgang Street, Baoan District, 518100 Shenzhen

City, Guang Dong Province, People's, Republic Of China

Manufacturer.....: SHENZHEN ANTOP TECHNOLOGY., LTD.

301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian

Forest Farm, Songgang Street, Baoan District, 518100 Shenzhen

City, Guang Dong Province, People's, Republic Of China

Modulation Type...... LTE Band 2: QPSK, 16QAM

LTE Band 4: QPSK, 16QAM LTE Band 5: QPSK, 16QAM LTE Band 17: QPSK, 16QAM

Tx Frequency Range...... LTE Band 2: 1850MHz ~1910MHz

LTE Band 4: 1710MHz ~1755MHz LTE Band 5: 824MHz ~ 849MHz LTE Band 17: 704MHz ~ 716MHz

Rx Frequency Range LTE Band 2: 1930MHz ~ 1990MHz

LTE Band 4: 2110MHz ~ 2155MHz LTE Band 5: 869MHz ~ 894MHz LTE Band 17: 734MHz ~ 746MHz

Emission Designator: 1M10G7D (LTE Band 2, QPSK, BW 1.4MHz)

1M11W7D (LTE Band 2, 16QAM, BW 1.4MHz)
2M72G7D (LTE Band 2, QPSK, BW 3MHz)
2M72 W7D (LTE Band 2, 16QAM, BW 3MHz)
4M53G7D (LTE Band 2, QPSK, BW 5MHz)
4M52 W7D (LTE Band 2, 16QAM, BW 5MHz)
9M01G7D (LTE Band 2, QPSK, BW 10MHz)
9M00W7D (LTE Band 2, 16QAM, BW 10MHz)
13M52G7D (LTE Band 2, QPSK, BW 15MHz)
13M48W7D (LTE Band 2, 16QAM, BW 15MHz)

17M98G7D (LTE Band 2, QPSK, BW 20MHz)



18M05W7D (LTE Band 2, 16QAM, BW 20MHz) 1M11G7D (LTE Band 4, QPSK, BW 1.4MHz) 1M11W7D (LTE Band 4, 16QAM, BW 1.4MHz) 2M72G7D (LTE Band 4, QPSK, BW 3MHz) 2M72W7D (LTE Band 4, 16QAM, BW 3MHz) 4M53G7D (LTE Band 4, QPSK, BW 5MHz) 4M52W7D (LTE Band 4, 16QAM, BW 5MHz) 9M00G7D (LTE Band 4, QPSK, BW 10MHz) 9M00W7D (LTE Band 4, 16QAM, BW 10MHz) 13M48G7D (LTE Band 4, QPSK, BW 15MHz) 13M48W7D (LTE Band 4, 16QAM, BW 15MHz) 17M98G7D (LTE Band 4, QPSK, BW 20MHz) 18M03W7D (LTE Band 4, 16QAM, BW 20MHz) 1M10G7D (LTE Band 5, QPSK, BW 1.4MHz) 1M10W7D (LTE Band 5, 16QAM, BW 1.4MHz) 2M71G7D (LTE Band 5, QPSK, BW 3MHz) 2M72W7D (LTE Band 5, 16QAM, BW 3MHz) 4M52G7D (LTE Band 5, QPSK, BW 5MHz) 4M52W7D (LTE Band 5, 16QAM, BW 5MHz) 8M99G7D (LTE Band 5, QPSK, BW 10MHz) 8M99W7D (LTE Band 5, 16QAM, BW 10MHz) 4M54G7D (LTE Band 17, QPSK, BW 5MHz) 4M53W7D (LTE Band 17, 16QAM, BW 5MHz) 8M98G7D (LTE Band 17, QPSK, BW 10MHz) 9M01W7D (LTE Band 17, 16QAM, BW 10MHz)

Antenna Type Dedicated Antenna

Power Supply...... 12V DC Power



1.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2 and 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
AB	ORLAL MOR	Rules and Regulations
2	47 CFR Part 22	Dublic Makile Comices
ORL	(10-1-09 Edition)	Public Mobile Services
3	47 CFR Part 24	Demonal Communications Company
-4	(10-1-09 Edition)	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:

No.	Section	Description	Result
1	2.1046	Transmitter Conducted Output Power	PASS
2	24.232(d), 27.50(d)(5)	Occupied Bandwidth	PASS
3	2.1049, 22.917 24.238, 27.53(g)	Frequency Stability	PASS
4	2.1055, 22.355 24.235, 27.54	Peak to Average Radio	PASS
5	2.1051,2.1057 24.238, 27.53(g)	Conducted Spurious Emissions	PASS
6	2.1051, 2.1057, 22.917, 24.238, 27.53(g)(h), 27.53(m)(4)	Band Edge	PASS
7	22.913, 24.232, 27.50(d)(4)	Equivalent Isotropic Radiated Power	PASS
8	2.1053, 2.1057, 22.917, 24.238, 27.53(g)	Radiated Spurious Emissions	PASS



1.3 Facilities and Accreditations

1.3.1 Facilities

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at FL.1, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China 518101. The test site is constructed in conformance with the requirements of TIA/EIA 603.D: 2010, ANSI C63.4: 2009 and CISPR Publication 22: 2010. The FCC registration number is 695796.

1.3.2 Test Environment Conditions

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

Te	emperature (°C):	15 - 35	- B M	LAB	ORLA	HOP
R	elative Humidity (%):	30 - 60	RIA	.0	in.	B
At	tmospheric Pressure (kPa):	86 - 106	LAB	ORLA	Mole	0. 1



2. 47 CFR PART 2, PART 22H & 24E & 27H&L REQUIREMENTS

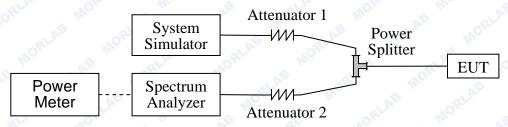
2.1 Transmitter Conducted Output Power

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).

2.1.2 Test Description

Test Setup:



The EUT, which is powered by the Battery, 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 500hm; 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.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Rohde& Schwarz	CMW500	1201.0002k5 0/124534/wk	2016.03.02	2017.03.01
Spectrum Analyzer	Rohde& Schwarz	FSL	10246	2016.03.02	2017.03.01
Spectrum Analyzer	Agilent	E4445A	MY44200685	2016.03.02	2017.03.01
Power Meter	Agilent	E4418B	GB43318055	2016.03.02	2017.03.01
Power Meter	Agilent	E4418B	GB43318055	2016.03.02	2017.03.01
Power Sensor	Agilent	8482A	MY41091706	2016.03.02	2017.03.01
Power Splitter	Weinschel	1506A	NW521	2016.03.02	2017.03.01
Attenuator 1	Resnet	20dB	(n.a.)	2016.03.02	2017.03.01
Attenuator 2	Resnet	3dB	(n.a.)	2016.03.02	2017.03.01

2.1.3 Test Results



Band	Band Width	Channel		AB	RB Cor	figuration	Average Powe
			Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)
-81	NOR.		, AB	RLAD	10	0	22.10
	-3	2LAB	ORL	MOL	№ 1	49	21.84
	RLL	VOIP	S W	as a	1 11	99	21.50
	all all	al	AL MOR	QPSK	50	0	21.05
	ORLAN	Mor	-0	LAE	50	25	21.12
	G MI	aB.	ORLA.	MOIL	50	49	20.49
	MOR!	L 4	O.B	QLAD	100	0	20.96
	~3	LAB	1860	Wa.	100	0	21.04
	RLE	18700	S W	AB OR	1 1	49	21.82
	, B	all	A NOR	MO	1	99	20.40
	ORL	MOLO	- B	16-QAM	50	0	20.59
	S M	A.B	RLA	. 5 G/ (IVI	50	25	20.64
	AT MORI	4	.0	QLAB	50	49	20.04
	RLAB	LAB	ORLA	Morr	<i>≤</i> 100	0	19.96
AB		OR	400	A A	1	0	21.47
	, B	LAB MORL	NO RI	QPSK	1	49	21.47
MORLAS MORLA	ORLAN		S. Phi		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	99	21.75
	HILL		M 1880 8900		50	0	
	TRLAS MORE	N				25	20.31
		All Control			50		20.22
LTE					50	49	20.55
	20MHz			16-QAM	100	0	20.39
Band 2	QRL A				1	0	20.68
Buriu Z	INC				1	49	20.61
	SE ORI				1	99	20.93
	M				50	0	20.87
	QLAB.	ORL	MO		50	25	20.63
	0,		IE ORI		50	49	19.34
	RLA.	"Obr	W.C.		100	0	19.36
	W.C.	4	aLAB	ORL	0 1	0	21.89
	E ORI	el el	Or a	AB	1	49	21.71
	ME	oB.	EL.AL	0001	10	99	21.89
	LAB	ORL	Mor	QPSK	50	0	20.72
	Ole.		S ARI	MOR	50	25	20.54
	alab	H	Mo.	NB.	50	49	20.92
	MOL	S III	1900	ORI.	100	0	20.81
	B ARL	19100	Ole 1	a AB	1,10	0	21.06
	19100	10100	QLA!	MORL	10	49	20.84
		ORLE	ORLAN HORL	16-QAM	1	99	20.96
		O. OPLA			50	0	20.56
					50	25	20.75
		e In	AB		50	49	20.36
	6	A.V	OFFI	0	100	0	19.87



AB	ARLA.	Channel	Freq.(MHz)	Modulation	RB Cor	figuration	Average Power
Band	Band Width				RB Size	RB Offset	(dBm)
-RI	WOL.	7	AB.	RLAD	10	0	21.71
	.0	2LAB	, ORL	Mo.	ॐ 1	37	21.23
	ORLAN	VOL	e bu	AB OR	1 1	74	21.54
	A.B	RL	MOR	QPSK	36	0	21.01
	ORL	Mo.	-3	CLAB	36	18	21.13
	8 11	A.B	ORLA	MOL	36	35	21.07
ORL.	WOLE.	_ \	10 NB	RLAN	75	0	21.05
	.3	3LAB	1857.5	Mo	√ 1	0	21.03
	ORLIN	18675	e u	AB OR	1 1	37	21.11
	AB	-RL	MOR	MIC	. 1	74	21.08
	ORL	MO.	-6	16-QAM	36	0	21.01
	6 6	A.B	ORLAN	HOL	36	18	20.58
	"IOE"	N	AB	RLAI	36	35	20.68
MO. VE	S. C.	QLAB.	MORL	MO	<i>3</i> 5 75	0	20.14
	ORLA	A ROLL HORL S	E TOP!	QPSK	1	0	22.01
	AB				. 1	37	21.98
	15MHz		AB 111		NOPE 1	74	21.56
			ORLAN		36	0.6	21.05
		4	Q.B		36	18	21.36
		M MHz 18900	1880		<i>№</i> 36	35	21.08
LTE					75	0	21.10
				16-QAM	. 1	0	21.40
Band 2	AORL.				10 ^{PL} 1	37	21.22
	e hi				1	74	21.36
	MORI	4			36	0	21.51
	.0	2LAB	ORL		36	18	21.29
	ORLAN	OF	S III.		36	35	21.04
	Q.B	-21.1	all the MORI		75	0	20.05
	ORL	Wo.		2LAS	1	0	21.40
	e hi	A.B	ORLL.	NOF	1	37	21.61
	MORI	, N	AB	al.Ab	108	74	21.52
	20	2LAB	ORL	QPSK	36	0	20.81
	ORLING	OF	S III.	AE ORI	36	18	21.03
	AB	LERL	MOE	ME	36	35	20.77
	"OBL"	H		2LAB	75	0	20.79
	S bi.	N.B	1902.5	NO.	1	0.0	20.66
	19125	19125	AB	RLAL	1010	37	20.45
AB MOTO		ALAE .	ORLAS ORLAS	Mo.		74	20.78
	ORLAN	OF	S W	16-QAM	36	0	20.89
	AB.	all	MORI	, III	36	18	20.36
	ORLA	More	~3 W	LAB	36	35	20.03
	S W	, C	RLA	NOIS	75	0	19.90



OB	alab	1087	40,	OB III	RB Cor	figuration	Average Power
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)
	P OP		O,	I'ME	4	- AND .	
	N. W.	, AB	ORLA.	MORE	10	0	21.49
	ALAB	ORL	MO	A 0	0 1	24	21.32
	0,		SE OR	QPSK	1	49	21.02
	ORLA!	MORE	M	QPSK	25	0	20.88
	Mo	B	al Alb	ORL	25	12	20.76
	AE ORI	L	O	in alak	25	24	20.69
	The state of the s	AB	1855	- INOPE	50	0	20.97
	al Alb	18650	MO	A 2	1 1	0	20.78
	0,		E OR	MOL	1 🕦	24	20.59
	RLAL	MORE	MIC	40.0014	1	49	20.67
	WO.	B	al Ab	16-QAM	25	0	20.36
	E ORI	4	OF	M. A.B	25	12	20.42
VE MOEF	MIC	0.6	QLA!	MORI	25	24	20.26
	CLAB	ORL	#IO.	- C	50	0	19.98
	OF	. 1	E MORI	QPSK	1 1	0	21.99
HORLAS HORLAS	QLA!	M Hz 18900			1	24	21.85
	10MHz		LAB		1	49	21.94
			1880		25	0	21.03
					25	12	21.11
LTE					25	24	21.07
					50	0 🕓	20.96
_ & `				16-QAM	1	0	21.42
Band 2					1 1	24	21.31
					1 1	49	21.39
	Mo.	.6			25	0	21.44
	AB	MORLA			<u>25</u>	12	21.54
	ORL				25	24	21.23
	TLAB	-ORL	Mor		50	0	19.97
	Mole	2 M	AB	ORLA.	1 1	0	21.67
	9 0	A.C.	ORL	MC NE	1,4	24	21.54
	MOL	.0	LAB	ORLAN	1	49	21.66
	AB	RLA	MORE	QPSK	25	0	20.89
	ORL	o.	8	AP OR	25	12	20.78
	LAB	Hole	Mole	S M	25	24	20.96
	MORE	M	1005	QLA!	50	0	20.69
	8	40470	1905	W. C.	1 1	0_0	20.37
	Mole	19150	AB	ORLA	10	24	20.41
	O.B	-QLAR	MORIE	16-QAM	1	49	20.39
	ORLLA AE NOR	0.	CRLIE INC. MORI		25	0	20.44
		RLP			25	12	20.36
	MORL	Mo	NB T	ZLAE	25	24	20.01
	8	N. P.	RL	VO.	50	0.00	19.87



LAB	ORLA	WO.	0	AB	RB Cor	figuration	Average Power						
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)						
OR!	1102		AB	RLAN	10	0	22.05						
	B	QLAB	, ORL	MO.		12	22.11						
	ORLAN	NOF	8 60	AB OR	1 1	24	22.01						
	AB	-RL	MOR	QPSK	12	0	20.85						
	ORL	Mo.	-3		12	6	21.03						
	8 11	AB	ORLA	MOL	12	11.00	20.96						
	an Mok	L 4	, all	RLAI	25	0	20.89						
	.3	3LAB	1852.5	Mo	<u>√</u> 1	0	21.53						
	ORLAN	18625	S W	AB OR	1 1	12	21.67						
	AB AB	al	MOR	MC	1	24	21.66						
	ORL	MO.	-8	16-QAM	12	0	21.52						
	S M	AB	ORLA	MOIN T.	12	6	21.47						
	AT MORI	4	N. B	QLAB	12	11	21.47						
	*B	LAB	ORLE	More	25	0	19.91						
	RLA	MORIAE MORIAE MORIAE M	4	0.0	1	0	21.96						
	(B)		NOR!	MO	1	12	21.85						
	ORLA		MOL	Mor	Mor	S In	AB	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24	21.74			
	HILL		RLAL	QPSK	12	9							
	No TORI		NO. OF	0,	QPSK		0 6	21.04					
	S W		ORL M.	ORLA	12		21.63						
LTE	QLA!	M	Mo	B 2	12	11	21.00						
	5MHz	Hz 18900	1880	MO	25	0	20.94						
Band 2	RLA		MORLAE INC.	OPLAS IN	AB	1	0	20.78					
Dana 2	Mo	3			WORLAR	ORL	1	12	20.45				
	E ORI	- 4				OR RLAB		Jir. B	.6	40 0 4 14	1	24	20.61
	MIC	AB					16-QAM	12	0	20.98			
	3LAB	ORL	MO	AB (1)	12	6	20.31						
	O		S AN	The Mole	12	11.0	20.12						
	RLAL	- noRr	W.	6.6	25	0	19.98						
	WO.	0	ALAB	ORL	1	0	22.01						
	B ARI	el.	Oh.	A.B	1,10	12	21.95						
	Mo	60	ZLA!	JORI	1	24	21.85						
	LAB	ORLIN	MOL	QPSK	12	0	20.90						
	Oke.		9 (2)	W. Moles	12	6	20.66						
	3LAB	Hofel	MO	20	12	11	20.54						
	MOLO	19175	1907.5	all.	25	0	20.51						
	e al		OR. 337.13	A.B	1	0	21.17						
	Wo.		ALAE .	ORL	10	12	21.24						
	AB		MOLC	N. W.	3 1	24	21.10						
	ORL		8 21	16-QAM	12	0	21.22						
	LAB	ORL	Mor		12	6	21.36						
	MORE	MOL OF IN	AB		12	11	21.02						
	0	A.P.	ORL	No.	25	0.0	19.66						



LAB	ORLA	More		LAB	RB Cor	figuration	Average Power	
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)	
OR!	MOE		AB	RLAD	10	0	21.97	
	.0	2LAB	ORL	MO.		7	21.88	
	ORLAN	NOTO	G bir	QPSK	1 1	14	21.94	
	A.B	-RL	AL MOR		8	0	21.63	
	ORL	Mo.	20		8	4	21.52	
	8 11	A.B	RLL	MOL	8	7 6	21.34	
	an anore	L	D.B	RLAI	15	0	21.22	
	.3	3LAB	1851.5	Mo	√ 1	0	21.23	
	ORLAN	18615	315	AB OR	1 1	7	21.12	
	AB AB	al	MOR!	MC	1	14	21.10	
	ORL	MO.	-3	16-QAM	8	0	21.47	
	S M	AB	ORLA.	HOP-	8	4	21.03	
	AT MORI	4	N. C.	aLAB	8	7	21.03	
	*B	LAB	ORLA	More	15	0	20.18	
	RLA	lo _E .		AE AE	1	0	21.84	
	20	ORLAE MORL	ID NOR	MO	1	7	21.88	
	ORLA		MOL	S In	AB	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14	21.82
	HILL		RLAB	QPSK	8	0		
	No TORI		TLAE NO.	0,	QFSK	8	4	21.89
	S W			OPLA	ORLAN			21.74
LTE	QLA!	M	MIC	all all	8	7	21.65	
	3MHz	MHz 18900	1880	MO	15	0	20.92	
Band 2	QRL.A.		8900	900	AB	1	0	21.25
Dariu Z	Mo	3			ORL	1	7	21.36
	E ORI	- 4	0,	40 0444	1	14	21.44	
	MILE	AB	RLAI	16-QAM	8	0	21.21	
	3LAB	ORL	MO.	OF ARIAR III IIIORI	8	4	21.25	
	O		E ORI		8	7	21.03	
	RLAL	- MORI	all c	- 69	15	0	19.93	
	Mo.	6	CLAB	ORL	0 1	0	21.66	
	E PI	A. 01	Ole.	A.B	1,01,0	7	20.95	
	Mo	60	al Al	JORL	1	14	20.51	
	LAB	ORLA	More	QPSK	8	0	20.48	
	Oke.		6 (8)	A. MOE.	8	4	20.36	
	3LAB	H	MO.	4	8	7	20.38	
	MOLO	19185	1908.5	all	15	0	20.51	
	e al		550.0	A.B	1	0	20.53	
	Mor		ALAE .	ORL	1	7	20.61	
	AB		MOL	Nu.	3 1	14	20.36	
	ORL		3 2	16-QAM	8	0	20.16	
	LAB		Mor	2 1112	8	4	20.13	
	MORE	MILE	AE THE TRIAL	8	7	20.02		
	0	A.C.	ORIL	No.	15	0	19.72	



LAB	_ oRLF	More		AB	RB Cor	figuration	Average Power				
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)				
ORL	MOR	4	, AB	RLAD	10	0	21.94				
	3	QLAD.	"OBT	MO	3 1	2	22.01				
	ORLIN	VO.	6 11	QPSK	1 🐠	5	22.05				
	AB	PL	MOR		3	0	22.01				
	ORL	Mo	.3	3LAB	3	1101	22.05				
	8 01	AB	ORLAN	MOL	3	2	22.09				
	"IOE	_ \	1850.7 607	RLAI	6	0	21.06				
		al.Ab		Mo	3 1	0	21.07				
	ORLA	18607		AB OR	1 1	2	20.93				
	AB	ORL.	MOR	INC	. 1	5	21.13				
	MORL	Mo.	20	16-QAM	3	0	21.21				
	6 1	AB	ORLA	MOIL	3	1.08	21.14				
	"OK	7 4	AB	SPLAN	3	2	21.36				
		al.Alb	NOR!	Mo	6	0	20.33				
	ORLA	M 1.4MHz 1880 18900	6	AB OR	1 11	0	21.37				
	AB		MOR	MIC	. 1	2	21.31				
	ORL		-B	2LAB	,0 ^{FF} 1	5	21.43				
	S W		ORLAN	QPSK	3	0.60	21.52				
	MORI		MORE A NE		3	1	21.41				
	AB		ORL	WO.	3	2	21.21				
LTE	ORLA		8	AB OR	6	0	30.32				
	1.4MHz		-61	1880	. 1	0	20.11				
Band 2	ORL		18900	ORLAE AB	2LAB	,0 ^R 1	2	19.87			
	S Mr.		ORLA		ORLA	WORLIN AB	NORLA AE	ORLE	HOLE	1	5
	MORE	4								16-QAM	3
	-3	al Ab	ORL	10 07 1111	3	2	20.23				
	ORLIN	NORTH MIC AE	AB OR	3	5	20.01					
	Q.B	-81.1	" WOE	MIC	6	0	19.69				
	ORL	Wo.	.0	2LAS	1	0	20.55				
	9 4	N.B	ORLA	NOTE OF	1	2	20.43				
	MORL	4	aB.	C.L.A.L.	1000	5	21.72				
	~	2LAB	ORL	QPSK	3	0	21.89				
	ORLAND N	OF	SIL	AB ORI	3	1.0	21.77				
	AB	LELL	MOR	MILE	3	2	21.75				
	S MORLAD HARL	HD.	- S	2LAB	6	0	20.96				
		1909.3	NO.	1	0	20.55					
	MORI	19193	AB.	alak	1000	2	20.44				
	.0		ORL	Mor	3 1	5	20.38				
	ORLAN		3 M	16-QAM	3	0	20.41				
	60		MORI	16-QAW	3	1	20.36				
	ORLE	More	7.00 M.	LAB	3	2	20.30				
	W	9	ala	OF	6	0	19.93				



LAB	- ORLA	MON		AB	RB Cor	figuration	Average Power
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)
ORL	MOR	4	, AB	RLA	10	0	22.28
	3	QLAD.	"OBT	MO	3 1	49	22.21
	ORLIN	VO.	6 6	QPSK	1 🐠	99	21.82
	AB	PL	MOR		50	0	21.03
	ORL	Mo	.3		50	25	21.05
	8 0	AB	ORLAN	MOIN	50	49	20.76
	NOE.	_ \	1700 013	RLAN	100	0	20.96
	3	al.Ab	1720.0	Mo		0	21.39
	ORLAN	20050	0050	AB OR	1 1	49	21.24
	AB	ORL.	MOR	Me	. 1	99	20.89
	MORL	Mo.	20	16-QAM	50	0	20.74
	6 0	AB	ORLA	MOIN	50	25	20.63
	" MOR	7 4	AB	RLAR	50	49	20.34
	.0	al.Alb	, ORL	MO	100	0	19.89
	ORLA	RIAE MORL	6	AB OR	1 1	0	22.28
	AB		MOR	HILL	. 1	49	21.84
	ORL		-B	2LAB	***1	99	21.98
	S In		ORLAN	QPSK	50	0.6	20.73
	NOFE.		E N. LAB	aB.	AB	50	25
	4	М	ORL	WO.	<i>5</i> 0	49	20.70
LTE	ORLA	IVI	0	AB ORI	100	0	20.71
	20MHz	20175	1732.5	Miss	. 1	0	21.84
Band 4	ORL		20175	QLAB.	,0 ^R 1	49	21.54
	8 4			16-QAM	1 .	99	21.70
	MORI	4			50	0	21.72
	4	al Ab	ORL	MO.	5050	25	21.36
	ORLAN	VO.	S MI	AB ORI	50	49	20.51
	A.B	-21.1	" WOE	MIC	100	0	19.74
	ORL	Wo.	.0	2LAS	1	0	21.82
	9 4	N.B	ORLA	WOL.	1	49	21.65
	MORI	4	aB.	RLAP	1000	99	21.84
	20	2LAB	ORL	QPSK	50	0	20.77
	ORLING	OF	SIL	AE ORI	50	25	20.64
	AB	LERL	MOLE	ME	50	49	20.76
	ORL	H	-S-	2LAB	100	0	20.74
	S M	20300	1745.0	NOT OF	1	0.6	21.49
	MORI		AB.	RLAL	1000	49	21.52
	.0		ORL	Wo.	3 1	99	21.45
	ORLAN		3 M	16-QAM	50	0	21.31
	60		MORI	III.	50	25	21.02
	ORLE	More	7.00 M.	LAB	50	49	21.11
	W.	AB	RLA	MORE	100	0	19.73



AB	ORLA	MOS	- M	AB	RB Cor	figuration	Average Power				
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)				
-81	MOR	7	O.B.	QLAB	10	0	22.53				
	-0	OLAE .	ORL	MOL	№ 1	37	22.50				
	RLA	VOICE	S W	AB OR	1 11	74	21.80				
	NO OF	al	AL MOR	QPSK	36	0	21.80				
	ORL	Morra	-8	QI SIX	36	18	21.77				
	S W	AB .	PLA	MOLE	36	35	21.63				
	AL MORI	L	OB	ALAD	75	0	21.71				
	-8	CLAB	1717.5	Mole	1	0	21.74				
	RLA	20025	0025	AB AR	1 11	37	21.45				
	, B	الله	NO P	MO	. 1	74	21.36				
	ORLAN	MOLO	e bu	16-QAM	36	0	21.71				
	I III	AB	RLAI	TO GAIN	36	18	21.71				
	AL NORTH	4		ZLAB.	36	35	21.32				
	e lu	RLAE	ORLAND	More		0	72 V				
	PLAI	ORV	4110	AP - Q	75	9.7	20.78				
	0,	ORLAS MORL	E ORI	WO.	1 1	0	22.25				
	ORLAN		S W	AB	1 ¹⁰	37	21.50				
	Me		NORLAS AE	QPSK		74	21.73				
	E ORI			QPSK	36	0	20.82				
	M		TAB ORLAN	RLA	ORLAN	36	18	20.45			
LTE	QLAB.	M	Mo.	NB 01	36	35	20.36				
	15MHz		1732.5	The WOL	75	0	20.70				
Band 4	1011112		20175	ORLAE ME	Q.B	1	0	21.40			
Danu 4	MO.	4	WORLAS		ORL	1	37	21.13			
	E ORI	- 1			Jir. B	Off.		31	9	40.0414	1,10
	MILE	0B	RLAI	16-QAM	36	0	21.47				
	2LAB	ORL	Mo.	AB 01	36	18	21.24				
	Op.	. 1	E ORI	MOR	36	35	20.29				
	QLAL.	, ORL	W.C.		75	0	19.87				
	MOL	0	LAB	ORLA	1	0	21.88				
	E PL	A	Office	AB AB	1	37	22.62				
	MO	.8	ZLAB	JORL	1	74	22.67				
	LAB	ORLA	MOL	QPSK	36	0	21.26				
	Okr.		3 21	AL	36	18	21.17				
	3LAB	H	MO.	20	36	35	21.75				
	More	20325	1747.5	ORLA"	75	0	21.62				
	8 01		ORNI III	all all	1	0	20.99				
	Mor		ALAE .	ORL	1	37	20.85				
	AB		Mole	S W	1	74	21.74				
	ORL		3 2	16-QAM	36	0	20.36				
	LAB		Mor	RIAE IN	36	18	20.41				
	MORE	M	AB		36	35	20.39				
	0	AF	ORL	No.	75	0	20.71				



LAB	ORLA	More		LAB	RB Cor	figuration	Average Power	
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)	
OR!	MOE		, AB	RLAD	10	0	22.49	
	S	QLAB.	NORL	MO	3 1	24	22.64	
	ORLAN	NOTO	8 60	QPSK	1 1	49	22.02	
	AB	PL	MOR		25	0	21.70	
	ORL	Mo	.3		25	12	21.54	
	8 6	AB	ORLAN	MOIN	25	24	21.36	
	WOLE.	_ \	1715.0	RLAN	50	0	21.72	
	3	al.Ale		Me	№ 1	0	21.70	
	ORLIN	20000	6 6	AB OR	1 1	24	21.48	
	AB	ORL.	MOR	Me	. 1	49	21.40	
	MORIL	MO	.0	16-QAM	25	0	21.36	
	6 4	AB	ORLA	MOIN	25	12	21.25	
	MOR	2 4	AB	RLAN	25	24	21.31	
	AB .	RLAB	MORL	Mo	<u>50</u>	0	20.71	
	OPLIN	lo.	0	AE OR	1 🖷	0	21.66	
	A.B	M M	MOR	HILL	. 1	24	21.36	
	MORL		20	al Ab	1 0PC	49	21.15	
	9 1		ORLE	QPSK	25	0.6	20.70	
	MOE		Se CA	D.B	RLAI	25	12	21.03
			NORL	MO	25	24	21.08	
LTE	ORLA	IVI	9 4700 5	AB OR	50	0	20.65	
	10MHz	MHz 20175	1732.5	lay.	. 1	0	21.14	
Band 4	"OBL"		20175	ORLAB	QLAB.	OF 1	24	21.04
	9 1	NB .	WORLAN AB		ORLAN	NO.	1	49
	MOR	4		16-QAM	25	0	20.67	
	S. C.	al Ab	NORL	MIC	25	12	20.96	
	ORLA	O	8 11.	AB ORI	25	24	20.36	
	AB	QRL.	MOE	ME	50	0	19.82	
	NORL	Mo	.0	QLA!	OF 1	0	22.47	
	8 1	N.E	ORLAN	MOL	1.0	24	22.64	
	MOFE	4	AB	RLA	1000	49	22.71	
	60	QLAD.	NORL	QPSK	25	0	21.61	
	ORLA	O	3 41	AB ORI	25	12	21.54	
	AB	H.R.L.	"IOR	P. W.	25	24	21.38	
	MORLAN HORE	4750.0	ZLAB	50	0	21.69		
	8 11.	20350	1750.0	NO.	1	0.00	21.12	
	MOE		, AB	RLA	1	24	21.44	
	NB .		MORIL	MO	3 1	49	21.42	
	ORL		8 7	16-QAM	25	0	21.39	
	AB		"IOR"	10-QAIVI	25	12	21.30	
	MORIL	Mo	.6		25	24	21.23	
	S III.	N. C.	RLI	VOL.	50	0.0	20.72	



LAB	ORLA	"IO"	A 10-	AB	RB Cor	figuration	Average Power		
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)		
-RI	NOR.	_ <	, als	RLAD	10	0	22.73		
	.0	2LAB	ORL	Mo.	ॐ 1	12	22.78		
	ORLAN	VOL	S W	AB OR	1 🐠	24	22.72		
	A.B	RL	anor.	QPSK	12	0	21.64		
	ORL	Mo.	AB BLAD	12	6	21.53			
	8 11	A.B	ORLAN	MOL	12	11.00	21.58		
	NOE.	_ \	1-10 NB	RLAN	25	0	21.61		
	3	al.Ab	1712.5	Mo		0	22.15		
	ORLIN	19975	75	AB OR	1 1	12	22.23		
	AB	ORL.	MOR	Me	. 1	24	22.08		
	MORL	MO	S	16-QAM	12	0	22.04		
	6 4	AB	ORLA	MOIN	12	6	22.08		
	MOR	4	AB	RLAI	12	11	21.58		
	AB .	RLAB	NORL	Mo	25	0	20.61		
	OPLIN	M	0	AE OR	1 🖷	0	21.82		
	AB		"IOF	M	. 1	12	21.22		
	MORL		20	2LAB	1 0PC	24	21.74		
	9 1		RLA	QPSK	12	0.08	20.51		
	MOE		Ok.	LAB		12	6	21.36	
	3		MORL	Mo	1 2	al 11	20.69		
LTE	ORLA	IVI	4700 5	AB OR	25	0	20.47		
	5MHz	20175	1732.5	lay.	. 1	0	21.38		
Band 4	MORL		20175	QLAB.	0 ^{FR} 1	12	21.12		
	9 4			MOIS	1	24	21.31		
	MORE	4		16-QAM	12	0	21.20		
	68	QLAD.	MORL	Mo	12	6	21.36		
	ORLA	VO.	3	S W	S W	AB OR	12	11.0	21.01
	AB	QRL.	MOE	M	25	0	19.69		
	MORL	Illo	.0	QLA.	OP 1	0	22.59		
	6 1	A.F	ORLIN	NO.	1	12	22.61		
	MOE	2 4	AB	RLA	1000	24	21.85		
	OB .	QLAD.	MORIL	QPSK	12	0	21.66		
	ORLIN	VO.	8 4.	AB ORI	12	6	21.42		
	AB	Hope	MOFE	N. C.	12	11	21.36		
	MORI	MP	4750.5	al Al	25	0	21.64		
	8	20375	1752.5	No.	1	0.00	21.91		
	MOEE		AB	RLA	1000	12	21.62		
	O.B		MORIL	Mo	1	24	21.58		
	ORL		3 4	16-QAM	12	0	21.45		
	AB	ARL.P	MORE	10-QAIVI	12	6	21.37		
	MORIL	Mo	NB T		12	11	21.31		
	S III.	N. C.	RLI	VOL.	25	0.0	20.63		



LAB	_ coRL	Mor		LAB	RB Cor	figuration	Average Power		
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)		
ORL	MOR	4	, AB	RLAD	10	0	22.41		
	S	QLAB.	NORL	MO	3 1	7	22.45		
	ORLAN	NOF	e bu	AB OR	1 1	14	22.43		
	AB	PL	MOR	QPSK	8	0	22.05		
	ORL	Mo	.3	3LAB	8	4	22.34		
	8 11	AB	ORLAN	MOL	8	7 6	22.11		
	NOE.	_ \		RLAI	15	0	21.62		
	00	QLAD.	1711.5	Mo	1	0	21.68		
	ORLIN	19965	6 6	AB OR	1 1	7	21.36		
	AB	ORL.	MOR	INC	. 1	14	21.54		
	MORIL	Mo	.0	16-QAM	8	0	21.18		
	6 4	AB	ORLA	MOIL	8	4	21.02		
	MOR	4	AB	ARLA!	8	7	21.01		
	O.B	RLAR	MORL	Mo	15	0	20.66		
	ORLE	M	0	AE OR	1 🖷	0 💉	22.22		
	AB		"IOF	III.	. 1	7	21.96		
	MORL		20	3LAB	1 0PC	14	22.09		
	9 1		ORLA	QPSK	8	0.0	22.03		
	MOE			LAB	RLAI	8	4	22.07	
			NORL	MO	8	7	21.56		
LTE	ORLA	IVI	4700 5	AB OR	15	0	21.28		
	3MHz		1732.5	lay.	. 1	0	21.73		
Band 4	"OBL"	20175	20175	ORLAS AS	ORLAG	3LAB	OF 1	7	21.48
	9 11	A.B				NOIS	1 . 1	14	21.57
	MOR	4	4		16-QAM	8	0	21.41	
	S. C.	QLAB.	NORL	MIC	8	4	21.53		
	ORLA	O	8 4	AB OR	8	7	21.49		
	AB	- RL	Mole	MIC	15	0	20.50		
	NORL	We	.0	2LAB	011	0	22.53		
	6 N.	N.C	ORLA	VO.	1	7.00	22.56		
	"OK"	4	AB	RLA	1000	14	22.54		
	OB T	QLAB.	MORL	QPSK	8	0	22.34		
	ORL	lo.	8 4	AB OR	8	4	22.12		
	AB	L.P.L.	MOFE	MIC	8	7	21.78		
	MORIL	20385	4750.5	QLAB	15	0	21.59		
	8 11.		1753.5	40.	1	0	21.34		
	MOE		AB	RLA	1	7	21.22		
	NB .		MORIL	Mo	3 1	14	21.04		
	ORL		3 7	16-QAM	8	0	21.17		
	AB	QRL.P	MOR	ME	8	4	21.36		
	MORL	Mo.	.0	CLAB	8	7	21.08		
	S III	N.B	RLA	VOL.	15	0.0	20.56		



LAB	5 ORLE	or More		LAB	RB Cor	figuration	Average Power			
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)			
ORL	MOR	4	, AB	RLAD	10	0	22.39			
	3	QLAD.	NORL	MO	3 1	2	22.13			
	ORLA	VO.	6 6	AB OR	1 🐠	5	22.17			
	A.B	PL	MOR	QPSK	3	0	22.29			
	NORL	Mo	68	3LAB	3	1101	21.08			
	9 0	AB	ORLAN	MOL	3	2	22.15			
	"IOE	_ \	1-10 NB	RLAI	6	0	21.41			
	3	al.Ale	1710.7	Mo	1	0	21.04			
	ORLA	19957	6 6	AB OR	1 1	2	20.85			
	AB	ORL.	MOF	nno nno	. 1	5	21.06			
	MORL	MO	S	16-QAM	3	0	21.14			
	8 11	AB	ORLA	MOIL	3	1.08	21.03			
	MOR	2 4	AB	ARLA.	3	2	21.21			
	oB.	al Alb	MORL	We.	6	0	20.33			
	ORLA	ORLAS NORL	6	AB OR	1 11	0	21.76			
	AB		"IOE	MILE	. 1	2	21.83			
	"OBT"		25	3LAB	,0 ^{PC} 1	5	21.79			
	8 11		ORLE	QPSK	3	0.00	21.92			
	MOE		D.B	RLAI	3	1	21.84			
	OF MICE	М	MORL	MO	3	2	21.99			
LTE	ORLA	IVI	9 1700 7 0	AB OR	6	0	20.84			
	1.4MHz	1.4MHz 20175	1732.5	Muse	. 1	0	20.28			
Band 4	ORL		5 NORLAR W	RLAB	3LAB	OF 1	2	20.36		
	e h				ORLA	ORLAN	ORLAN	ORLA	HOLE	1
	MOE	No.		16-QAM	3	0	20.36			
	A	2LAB	ORL	MO	3	2	20.41			
	ORLAN	VO.	e bu	AB OR	3	5	20.31			
	AB	- RL	Mole	MIC	6	0	19.87			
	NORL	We	.0	2LAB	O ^R 1	0	21.83			
	e lu	N.E	ORLAN	VOL.	1	2	21.91			
	MOKE	, N	Q.B	RLAN	1000	5	21.82			
	23	2LAB	ORL	QPSK	3	0	21.96			
	ORLING	OL	8 111	AB OR	3	1.0	21.87			
	AB	LERL	MOFE	MILE	3	2	21.94			
	ORL	Horal	- S	ZLAB	6	0	20.97			
	IN LE	1754.3	NO.	1	0.00	20.32				
	MORI	20393	AB.	alak	1000	2	20.52			
	A		ORL	Mor	3 1	5	20.46			
	ORLAN		S	16-QAM	3	0	20.56			
	O.B		MORI	16-QAM	3	1	20.09			
	ORL	More	7.00 M.		3	2	20.14			
	411	E	RLA	Non	6	0	20.14			



<u> </u>	alab	1087	40,	40, 48	DP Cor	figuration	Average Power			
Band	Band Width	Channel	Freq.(MHz)	Modulation	AV		O. P. C. L.			
	\$ 0	Jan.	Ole.	and the	RB Size	RB Offset	(dBm)			
	Mo	oB.	QLAP.	NORL	10	0	22.53			
	LAB	ORLIN	MOL	8 10.	№ 1	24	22.58			
	OF		S C	ALL	1 🐠	49	22.54			
	3LAB	MORL	MO	QPSK	25	0	21.45			
	MOLO	8 10.	LAB	ORLA	25	12	21.36			
	B RI	L	OF	ME AE	25	24	21.47			
	WO.	.6	829	ORL.	50	0	21.51			
	LAB	20450	110.0	S M	1	0	20.96			
	ORL	20430	S a	AL	1 🐠	24	20.95			
	OLAE .	ORL	MO.	-8	. 1	49	21.43			
	Mole	AE NE N	AB.	16-QAM	25	0	21.31			
	9 0		ORL	MC OF	25	12	21.25			
	MOL		LAB	ORLE	25	24	21.06			
	AB	RLA	MORY	W	5 0	0	20.51			
	ORL	NO.	9 0	AB NOR	1 1	0 💉	22.47			
	LAB	ORL	More	. B Pi	. 1	24	22.29			
	MORE	MILE	A.B	RLA	1	49	21.03			
	9 2	ORI AE	IE NORL TLAE	QPSK	25	0	21.36			
	AB MORE	0			25	12	21.27			
ALTE		M	MORE	MC	25	24	21.09			
LTE	ORL		836.5	AB OR	50	0	21.49			
	10MHz	10MHz 20525		S W.	.1	0	21.92			
Band 5	MORL			RLAD	1 1	24	21.78			
	6		AE ORLE	ORLA	PLL	ORL	ORL	No.	1 1	49
	MOK	2 1	AB	16-QAM	25	0	20.36			
	o.B	QLA!	MORL		25	12	20.14			
	ORLA	0,0	8 41	AB OR	25	24	20.22			
	AB	RL	"IOF	M	50	0	20.64			
	MORL	We	20	aLA	OFE 1	0	22.61			
	S 4.	X.E	ORLA	VO.	1	24	22.36			
	MOFE	4	Q.B	RLA	1	49	22.25			
	.0	al-Ab	ORL	QPSK	25	0	21.41			
	ORLAN	Or	8 4	AB ORI	25	12	21.36			
	N.B	LL PL	"IOE	ME	25	24	21.36			
	MORL	H		QLAB.	50	0	21.35			
	20600	, B	844	70°	1	0.00	21.37			
		OB.	-QLAL	1000	24	21.23				
		ORL	Mor	3 1	49	21.29				
		S W	16-QAM	25	0	21.10				
	- B	NE VIE	MORI	MO	25	12	21.14			
	ORLE	More	7.Q	LAB	25	24	21.14			
	M	S	QLA.	OR	50	0	20.49			



, AB	GRLA	MOR	lan-	V.B	RB Con	figuration	Average Power	
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)	
-81	NO PA	7	O. O.B	QLAB	10	0	21.70	
	-0	OLAE .	ORLIN	MOL	№ 1	12	21.41	
	PLA	VOIS.	a William	AB OR	1 1	24	21.36	
	N OF	al	AL MOR	QPSK	12	0	20.27	
	ORL	Morra	-8	LAB	12	6	20.21	
	a bloom	AB.	RLA	MORE	12	11.00	20.25	
	AL MORI	L	N. C.	ALAB	25	0	20.43	
	0	LAB	826.5	MOL	<u>≥</u> 5	0	21.17	
	RLA	20425	MILE	AB GR	1 11	12	21.17	
	, B	21	NO P	MO	1	24	21.14	
	ORLIN	MOL	S III	16-QAM	12	0	21.14	
	MIC	AB .	RLAL	10-QAW	~	6		
	N. ORI	4	0.	LAB	12	677.6	21.01	
	B M	MORLAR	ORLAN	Mole	12	11	21.06	
	QLA!		ALC:	<u>.</u>	25	0	19.57	
	0,	الله الله	S OP	MOL	1 1	0	21.22	
	RLA	HORL B HORL	III.	AB	100	12	20.61	
	W.C.		RLAB	QPSK	1	24	20.99	
	E ORI		O. S.		12	0	19.77	
	ME		LAE ORLA	QLA!	ORLAN	12	6	20.03
LTE	JLAE .	M	Mo.	-B 11	12	11	19.85	
	5MHz	WII IZ	836.5	'A' MOR	25	0	19.74	
D 00-	JIVII IZ		20525	60	1	0	20.07	
Band 5	MOL	20020		CLAS OPLA	ORLA	1	12	20.01
	B CEL	P		AE AE	1	24	20.03	
	MO	.0	ZLAB	16-QAM	12	0	19.85	
	AB	ORLA	More	S bu	12	6	19.46	
	OR		9 0	AL	12 🦠	11	19.64	
	ZLAB	ORL	Mo.		25	0	18.91	
	MOLE	S III	AB	ORLAN	OF 1	0	22.01	
	9 01	ALC:	ORL	MC OF	1 1	12	22.03	
	MOL	.0	LAB	ORL	10	24	21.95	
	AB	ORLA"	MORE	QPSK	12	0	20.72	
	ORL	NO.	9 21	AB JORI	12	6	21.69	
	LAB	Hopel	MOL	B M.	12	11	21.36	
	MORE	H 20625	846.5	-QLA	25	0	20.45	
	8		040.3	NO.	1	0.0	21.51	
	MOLE		AB	ORLA.	1	12	21.43	
	AB .		MORI	Mo	1	24	21.36	
	ORL		8	16-QAM	12	0	21.38	
	AB	QRL.P	"IOR"	10-QAW	12	6	21.03	
	MORL	Mo	.6		12	11	20.58	
	3	N.E	RL	VO.	25	0.0	19.67	



AB	RLA	"IOE	The state of the s	0.B	RB Cor	nfiguration	Average Power		
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)		
	1081		0,	OLAE .	1	0	21.60		
	S PII	LAB	ORLA	MOLE	Ø 1	7	21.56		
	RLA	MORE	I III	OB B	1 1	14	21.74		
	10		N TOR	QPSK	8	0	21.74		
	ORLAN	Morra	. G PII	QI OIX	8	4	20.51		
	nne.	a.B	RLAD	MORE	8	7	20.75		
	AL TORI	L	0.	ZLAB.	15	0			
	S III	LAB	825.5	Mor		0	20.68		
	RLAI	20415	MIC	aB a	1	7	21.04 21.07		
	0,	2	.P	", Mor		100			
	QRL.M.	Mole	S W	16-QAM	1	14	21.11		
	Mo	AB .	QLAP.	10-QAIVI	8	0	21.36		
	N AORI	ORI GLAS NOT	0,	LAB	8	7	21.21		
	I IN		AB CEL	RLA	MOKE	8		21.03	
	QLAD.	ORL	400	× 2	15	0	19.77		
	O.	الله الله	E ORI	MOL	1 🖷	0	21.28		
	RLAI	MORE	MILL	AB	1	7	21.03		
	WO.	0	3LAB	ODOK	1	14	21.11		
	E ORI	ORLA" N	4OF	QPSK	8	0	21.23		
	ME	o.B	QLAP.	MORIL	8	4	21.30		
LTE	OLAE .	M	MO	-8 1	8	7	20.10		
	3MHz	. 1	836.5	A MOR	15	0	20.13		
	SIVII IZ	20525	Mo	A	1	0	20.72		
Band 5	MOL	20525	20323	LAE ORLE	1	7	20.50		
	S (2)		JRL A	Ver in	OR	MORE	ME AE	1	14
	MO.	.0	ZLAB	16-QAM	8	0	20.41		
	AB	ORLA	More		8	4	20.24		
	OR.		3 (2)	AL MOR	8	7 🕓	20.23		
	3LAB	ORL	Wo.	-0	15	0	19.33		
	Mole	S III	AB	ORLA	1 1	0	21.87		
	8 01	ALC:	ORL	AL AE	1	7	21.35		
	MOIN	.0	LAB	ORLAN	1	14	21.24		
	AB	RLA	MORE	QPSK	<i></i> 8	0	21.13		
	ORL	No.	3 21	AP JORI	8	4	21.05		
	AB	Hole	Mole	Par Maria	8	7	20.74		
	MORE	MI	847.5	-QLA	15	0	20.69		
	9 1	20635	047.5	No.	1,10	0_0	20.84		
	"IOK"		AB	ORLA.	1	7	20.67		
	OB.		MORIL	Mo	1	14	20.52		
	OPL		8 4	16-QAM	8	0	20.31		
	AB.		"IOE"	10-QAW	8	4	20.37		
	MORL	Mo.	.0	QLAB	8	7	20.26		
	S III.	A.B	RLA	VOL.	15	0.0	19.89		



LAB	- ORLA	Mor		LAB	RB Cor	figuration	Average Power					
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)					
ORL	MOR	4	, AB	RLAD	10	0	21.44					
	3	QLAD.	NORL	MO	3 1	2	21.34					
	ORLIN	VO.	8 11	QPSK	1 🐠	5	21.22					
	AB	PL	MOR		3	0	21.50					
	ORL	Mo	.3		3	1101	21.47					
	8 1	AB	ORLAN		3	2	21.36					
	NOE.	_ \	004703	RLAI	6	0	20.53					
	3	20407	824.7	Me	3 1	0	20.71					
	ORLAN		8 11	AB OR	1 1	2	20.34					
	AB		MOR	INC	. 1	5	20.47					
	, ORL		23	16-QAM	3	0	20.31					
	8 01		ORLA	MOL	3	1.08	20.22					
	MOE		AB	RLAI	3	2	20.10					
	20		, ORL	Mo.	6	0	19.63					
	ORLA	lo.	0 1	AE OR	1 💖	0	21.10					
	A.B	-RL	"UOK"	MIC	. 1	2	20.97					
	ORL	MO.	OFLAS IN	OB III	OB III.	OB III	2LAB	,0 ^{FF} 1	5	21.04		
	S In	AB .		QPSK	3	0.60	21.06					
	NOFE.	4	N.B	RLAL	3	.1	21.04					
	-B	М	ORL	WO.	3	2	21.09					
LTE	ORLA	IVI	S INC	S OF	6	0	20.14					
	1.4MHz	RL	836.5	Min	. 1	0	20.03					
Band 5	ORL	20525	OB II	OB TO	6 5	OB II	OB II	AB	2LAB	,0 ^R 1	2	20.11
	e hu	NB .	ORLAN	HOLE	1	5	20.06					
	MORI	4	QB.	16-QAM	3	0	20.12					
	4	al Ab	ORL	10 37 1111	3	2	20.31					
	ORLAN	VO.	S MI	AB OR	3	5	20.05					
	A.B	-81.1	" WOE	MIC	6	0	19.27					
	ORL	Wo.	.0	2LAS	1	0	21.38					
	9 4	N.B	ORLA	NOTE OF	1	2	21.24					
	MORI	4	aB.	C.L.AL	1000	5	21.34					
	20	2LAB	ORL	QPSK	3	0	21.28					
	ORLING	OF	S MI	AB ORI	3	1.0	21.31					
	AB.	LELL	MOR	MILE	3	2	21.22					
	"OPL	Horal	.0	al AB	6	0	20.51					
	S bu	A.B	848.3	NO.	1	0	20.43					
	MORI	20643	AB.	alak	1000	2	20.34					
	.0	ALAB	ORL	Mor	3 1	5	20.37					
	ORLAN	OF	S	16-QAM	3	0	20.35					
	60	all	MORI	W.	3	1	20.37					
	ORLE	More	7.00 M	LAB	3	2	20.01					
	W.	AB	PLA	VOL.	6	0	19.78					



AB	ORLA	110	A 100	AB	RB Cor	figuration	Average Powe
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Size	RB Offset	(dBm)
-RI	WOL.	7	, AB	RLAD	1	0	23.04
	.0	2LAB	ORL	Mo.	ॐ 1	24	22.96
	ORLAN	VOL	e un	AB OR	1 🐠	49	22.81
	A.B	RL	MOR	QPSK	25	0	21.79
	ORL	Mo.	-3	RLAB	25	12	21.67
	8 11	A.B	ORLAN	MOL	25	24	21.83
	an anore	L	08	RLAI	50	0	21.75
	.3	23780	709	Mo		0	22.45
	ORLAN		C W	AB OR	1 1	24	22.34
	AB.		MOR	MC	. 1	49	22.33
	ORL		-8	16-QAM	25	0	22.21
	S M		ORLA	MOIN T.	25	12	22.41
	AT MORI		N. B	QLAB	25	24	22.41
	78 W.		ORL	More	50	0	20.77
	ORLA.		411	VE OF	1	0	22.88
	, B	الله	ILAE MORI	" "IIO"	1	24	22.87
	ORLAN	MOL	6	LAB	1 0 P	49	22.85
	III.	AB .	ORLAD	QPSK	25	0	21.86
	AP NORT	d		QI OIL	25	12	21.73
	9 10	A.A.B	ORLAN	MORF	25	24	21.73
LTE	RLAI	M	MIL	AB C	50	0	21.79
	10MHz	21.	710	40,	1	0	21.19
Band 17	ORLA	23790	e lu	AB	0121	24	21.19
Stern	MIC	B	RLAL	MORLE	1	49	21.33
	No Cal	4	0,	16-QAM	25	0	
	e m	AB	ORLAN			12	21.13
	RLAL	ORL	Mo	all al	25		21.05
	0,	الم	S ORI	MOL	25	24	21.01
	QRL.A.	"lok"		. 0.8	50	0	20.75
	Mo	9	ALAB	ORL	O 1	0	22.93
	E ORI	, a	0,	I.A.B	1,00	24	22.75
	M	AB	RLA	ODOK	10	49	22.34
	QLAB	ORL	Wo.	QPSK	25	0	21.83
	0,	- 3	S ORI	Mole	25	12	21.67
	RLA	Ho	III.	O.B	25	24	21.78
	MO	.6	711	1081.	50	0	21.77
	E ORL	23800	0	AB	1,10	0	21.30
	We	00	allAr	MORI	1	24	21.22
	CLAB	ORL	More	· · · · · · · · · · · · · · · · · · ·	1	49	21.94
	Dr. 3	. 0	B ARI	16-QAM	25	0	21.77
	aLAB	MORIL	Wo.	ORLAS INC.	25	12	21.87
	MOL	Q In.	LAB		25	24	21.34
	6		Oler.	-B	50	0	20.76



.0	2LAP	4081	MO	₹ 8	DD C	figuration	Averege Day		
Band	Band Width	Channel	Freq.(MHz)	Modulation		figuration	Average Power		
N	\$ 0	Ar	ORV	W. C.	RB Size	RB Offset	(dBm)		
	Mo	.6	ZLAB	10RL	10	0	23.21		
	LAB	ORLA	MOL	S W	№ 1	12	23.10		
	OPL	A. C.	S - C	AL	1	24	23.15		
	2LAB	ORL	Wo.	QPSK	12	0	21.89		
	Morra	C MI	AB	ORLA	12	6	21.45		
	E 21	L	ORL	MC AE	12	11	21.90		
	Wo.	.6	706.5	ORL	25	0	21.91		
	AB	23755	7 00.0	S M	1	0	22.60		
	ORL	23733	S 0	AL	1 🐠	12	22.07		
	2LAB	ORL	Mo.	-0	. 1	24	22.45		
	Mole	S M	AB	16-QAM	12	0	22.31		
	9 0	AL	ORL	MC OF	12	6	22.43		
	MOIN	-6	ALAB	ORLA	12	11	22.02		
	, AB	RLA	MORL	M	25	0	21.93		
	ORL	No.	9 4	AB NOR	1 🖷	0	22.73		
	LAB	ORL	Mor	S Pri	. 1	12	22.91		
	MORE	MILE	AB	AB	AB	RLAL	1	24	22.89
	9 2	A.D.	ORL	QPSK	12	0	21.92		
	MOL	0	LAB	ORLAN	12	6	21.37		
4175	N.B	М	MORE	AE MON	12	11	21.92		
LTE	ORL	,	710		25	0	21.82		
	5MHz		710	S W	. 1	0	21.16		
Band 17	MORLA	23790	AB	, AB	RLAL	1	12	21.28	
	0	A ^D	ORL	10°	1	24	21.73		
	MOK	0.10	AB	16-QAM	12	0	21.56		
	o.B	QLAD.	MORL	Mo	12	6	21.34		
	ORLE	VO.	3 11	AE OR	12	11.0	20.47		
	AB	QRL.	"IOF	M	25	0	20.88		
	MORL	Illo	68	ala	OFE 1	0	22.87		
	8	A.D	ORLAN	WOL.	1 1	12	22.71		
	MOFE	4	QB.	RLA	1	24	22.43		
	A	al.Ab	ORL	QPSK	12	al. 100 a	21.86		
	ORLIN	lo,	8 4.	AB ORI	12	6	21.37		
	N.B	L.R.L.	"IOR	MIL	12	11	21.60		
	MORL	Horas	- V	QLAB.	25	0	21.76		
	8 W.	N.E	713.5	10.	1	0.00	21.16		
	MORE	23825	AB	R.L.A.L	1	12	21.13		
	1	QLAB	OPL	Wo.	. 1	24	20.89		
	ORLAN	OF	S bu	16-QAM	12	0	20.56		
	NB	al.P	MORI	Mo	12	6	20.34		
	ORL	More	70	LAB	12	11	20.30		
	44	, C	RLA	Vole	25	0	21.73		



2.2 Occupied Bandwidth

2.2.1 Definition

According to FCC section 2.1049 and 27.53(g), the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as the 99% emission bandwidth.

2.2.2 Test Description

See section 2.1.2 of this report.

2.2.3 Test Results

LTE Band 2

Low channel:

С	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Band	99% Bandwidth (MHz)		Frequency	99% Bandy	width(MHz)
Charmer	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
18607	1850.7	1.1043	1.1003	18615	1851.5	2.7139	2.7103
Channel Bandwidth: 1.4MHz							
C	hannel Band	dwidth: 1.4N	1Hz		Channel Ban	dwidth: 3M	Hz
	Frequency		IHz Iwidth (MHz)		Frequency	dwidth: 3Ml 26dB Band	
Channel				Channel			

	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	width(MHz)
Charmer	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
18625	1852.5	4.5168	4.5137	18650	1855.0	8.9576	8.9644
Channel Bandwidth: 5MHz							
	Channel Ban	dwidth: 5M	Hz	C	hannel Ban	dwidth: 10M	Hz
	Channel Ban Frequency		Hz Iwidth (MHz)		Frequency	dwidth: 10M 26dB Band	
Channel				Channel			

C	Channel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz				
Channal	Frequency	99% Band	99% Bandwidth (MHz)		Frequency	99% Bandy	width(MHz)	
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM	
18675	1857.5	13.435	13.459	18700	1860.0	17.949	17.961	
C	Channel Bandwidth: 15MHz				Channel Bandwidth: 20MHz			
Channal	Frequency		lwidth (MHz)	Channal	Frequency	26dB Band		
Channel				Channel	Frequency (MHz)	26dB Band QPSK		



Middle channel:

С	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	vidth(MHz)
Chamilei	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
18900	1880.0	1.0998	1.1033	18900	1880.0	2.7167	2.7234
С	hannel Band	dwidth: 1.4N	1Hz		Channel Ban	dwidth: 3MI	Нz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
Channel	(MHz)	QPSK	QPSK 16QAM		(MHz)	QPSK	16QAM
18900	1880.0	1.317	1.334	18900	1880.0	3.048	3.080

	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channal	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandv	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
18900	1880.0	4.5267	4.5162	18900	1880.0	8.9962	8.9804
	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
Channel	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
18900	, ,			18900	1880.0	10.01	9.924

C	hannel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	width(MHz)
Channel	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
18900	1880.0	13.502	13.480	18900	1880.0	17.979	18.012
C	hannel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz			
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
Channel	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
18900	1880.0	5.11	14.88	18900	1880.0	19.75	19.80



High channel:

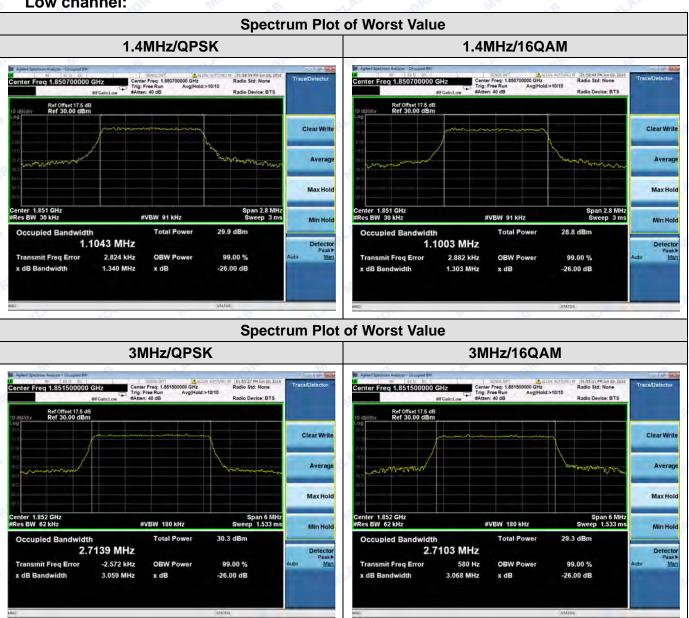
C	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	width(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
19192	1909.2	1.0991	1.1068	19184	1908.4	2.7137	2.7171
С	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
Channal	Frequency	26dB Band	lwidth (MHz)	Channal	Frequency	26dB Band	width(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
19192	1909.2	1.316	1.346	19184	1908.4	3.064	3.084

	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channal	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandv	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
19175	1907.5	4.5237	4.5223	19150	1905.0	9.0123	8.9998
	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
Channel	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
19175	1907.5	5.057	5.066	19150	1905.0	10.04	10.04

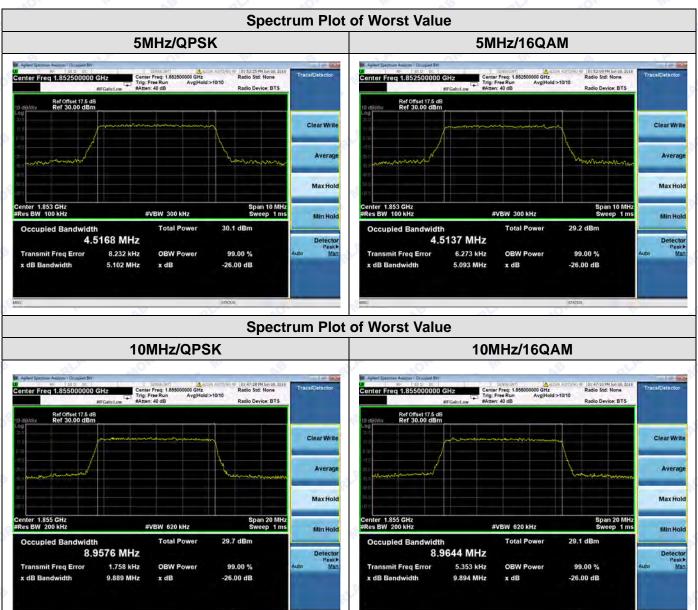
C	hannel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz			
Channal	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
19125	1902.5	13.524	13.488	19100	1900.0	17.981	18.045
C	Channel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz			
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
Charmer	(MHz)	QPSK	16QAM	Chamilei	(MHz)	QPSK	16QAM
19125	1902.5	15.09	15.01	19100	1900.0	19.72	19.65



Low channel:





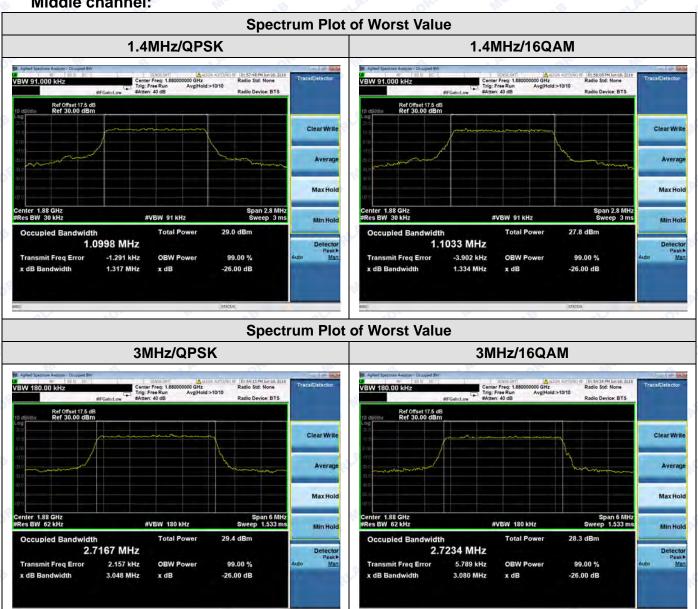








Middle channel:



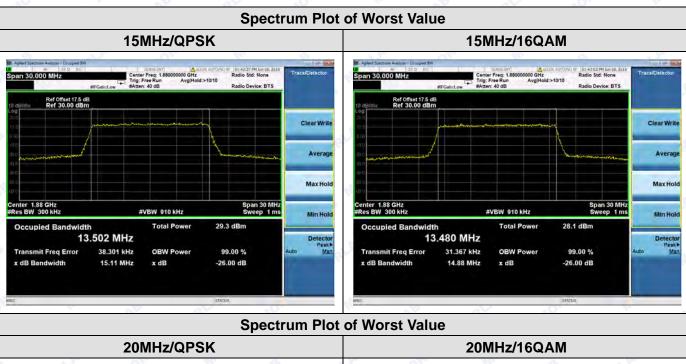


Spectrum Plot of Worst Value 5MHz/QPSK 5MHz/16QAM Center Freq: 1.880000000 GHz Trig: Free Run Avg|Hold:>10/10 #Atten: 40 dB Clear Write Clear Write Center 1.88 GHz #Res BW 100 kHz Center 1.88 GHz Res BW 100 kHz #VBW 300 kHz #VBW 300 kHz Occupied Bandwidth Occupied Bandwidth 4.5267 MHz 4.5162 MHz Detector Peak! Detector Peak Man 9.919 kHz smit Freq Error 5.065 kHz 99.00 % **Spectrum Plot of Worst Value** 10MHz/QPSK 10MHz/16QAM

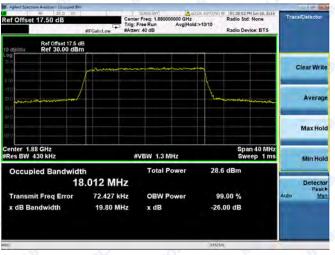










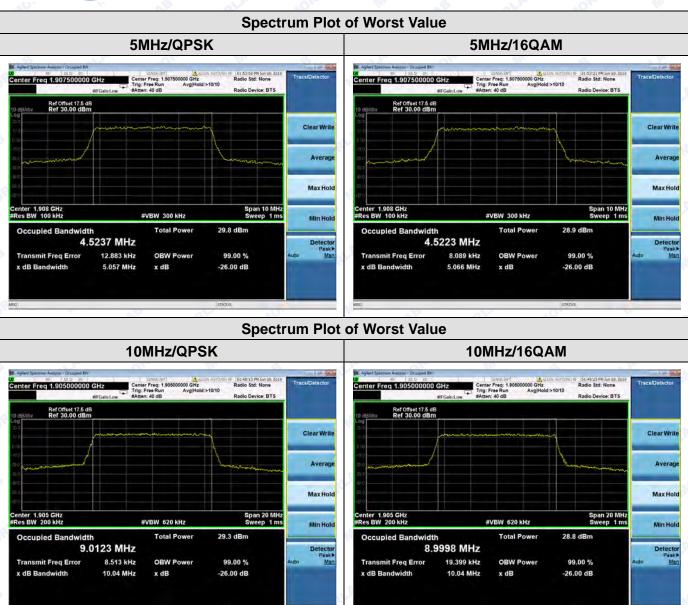




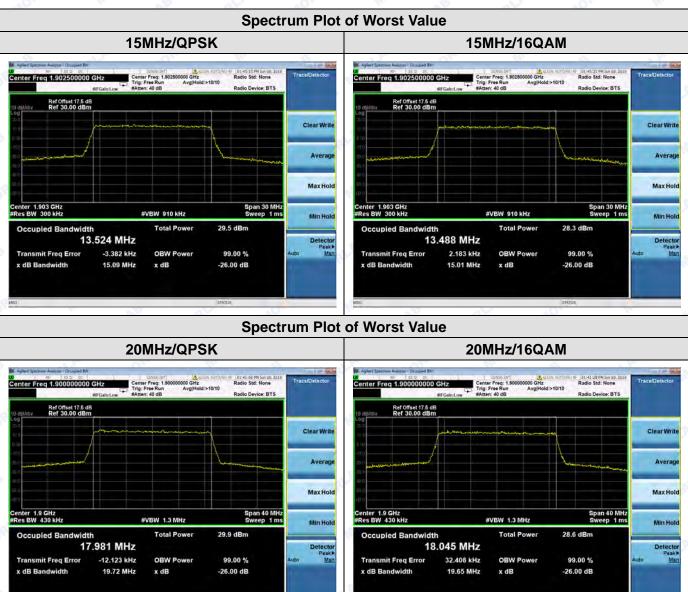
High channel:













LTE Band 4 Low channel:

C	hannel Band	lwidth: 1.4N	lHz	Channel Bandwidth: 3MHz			
Channal	Frequency 99% Bandy		width (MHz)	Channal	Frequency	99% Bandv	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
19957	1710.7	1.1050	1.1039	19965	1711.5	2.7169	2.7072
C	hannel Band	dwidth: 1.4N	lHz		Channel Ban	dwidth: 3MH	łz
	Frequency 26dB Band						
Channel		26dB Band	lwidth (MHz)	Channel	Frequency	26dB Bandy	width(MHz)
Channel	Frequency (MHz)	26dB Band QPSK	width (MHz)	Channel	Frequency (MHz)	26dB Bandy QPSK	width(MHz)

	Channel Ban	dwidth: 5MI	Hz	Channel Bandwidth: 10MHz			
Channal	Frequency 99% Bandwidth (MHz)		Channal	Frequency		width(MHz)	
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
19975	1712.5	4.5291	4.5206	20000	1715.0	8.9718	8.9783
	Channel Ban	dwidth: 5MI	Hz	C	Channel Ban	dwidth: 10M	Hz
Channel	annell ' 'I		width (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM
19975	1712.5	5.166	5.127	20000	1715.0	9.885	9.882

C	Channel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz			
Channel	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Band	width(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20025	1717.5	13.419	13.435	20050	1720.0	17.923	17.943
C	Channel Band	dwidth: 15M	lHz	C	hannel Ban	dwidth: 20M	lHz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK 16QAM			(MHz)	QPSK	16QAM
20025	1717.5	14.85	14.91	20050	1720.0	19.69	19.77



Middle channel:

С	hannel Band	dwidth: 1.4N	lHz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandy	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20175	1732.5	1.0935	1.1031	20175	1732.5	2.7178	2.7189
С	hannel Band	dwidth: 1.4N	lHz	(Channel Ban	dwidth: 3MI	-lz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM
20175	1732.5	1.300	1.344	20175	1732.5	3.026	3.104

(Channel Ban	dwidth: 5Ml	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandy	width(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20175	1732.5	4.5265	4.5211	20175	1732.5	9.0052	9.0035
	Channel Ban	dwidth: 5Ml	Hz	C	hannel Ban	dwidth: 10M	Hz
Channel	nannel (MHz)	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
		QPSK	16QAM		(MHz)	QPSK	16QAM
20175	1732.5	5.099	5.156	20175	1732.5	9.865	9.860

C	hannel Band	dwidth: 15M	Hz	Channel Bandwidth: 20MHz			
Channel	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandy	width(MHz)
Charmer	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20175	1732.5	13.485	13.480	20175	1732.5	17.984	18.034
C	hannel Band	dwidth: 15M	Hz	C	hannel Ban	dwidth: 20M	Hz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM
20175	1732.5	15.01	14.88	20175	1732.5	19.64	19.82



High channel:

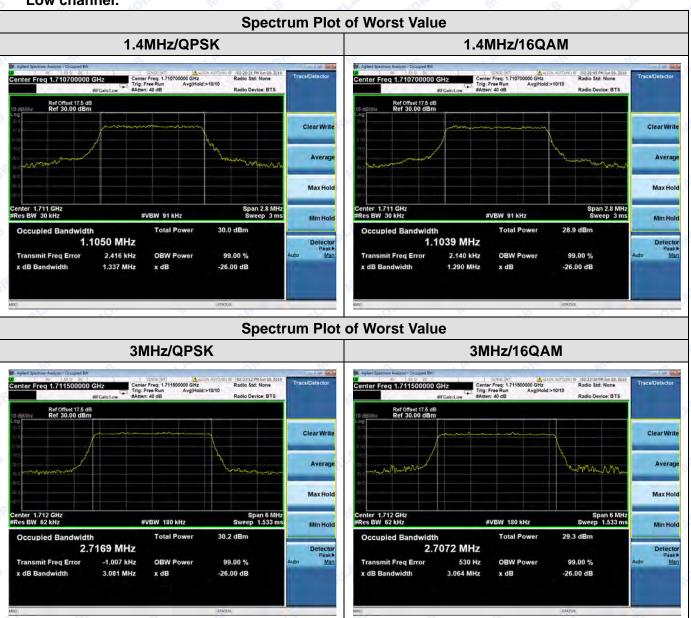
С	hannel Band	dwidth: 1.4N	lHz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	width(MHz)
Chamilei	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20392	1754.2	1.0983	1.1053	20384	1753.4	2.7111	2.7237
С	hannel Band	dwidth: 1.4N	lHz	(Channel Ban	dwidth: 3MI	Hz
Channel	annel I i i i I		width (MHz)	Channel	Frequency	26dB Band	width(MHz)
Onamici	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM
20392	1754.2	1.308	1.326	20384	1753.4	3.037	3.077

	Channel Ban	dwidth: 5Ml	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	99% Band	width (MHz)	Channal	Frequency		width(MHz)
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
20375	1752.5	4.5291	4.5235	20350	1750.0	8.9795	8.9818
	Channel Ban	dwidth: 5Ml	Hz	C	hannel Ban	dwidth: 10M	Hz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK	16QAM	(MHz)		QPSK	16QAM
20375	1752.5	5.051	5.130	20350	1750.0	9.945	9.885

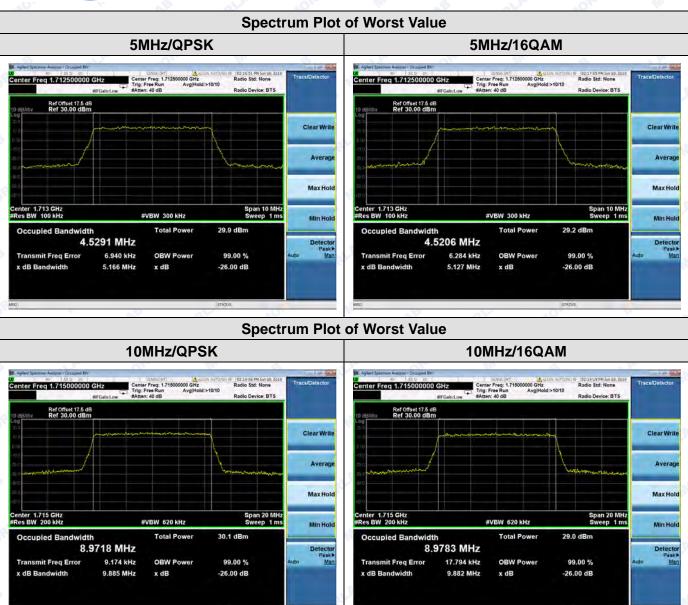
C	Channel Band	dwidth: 15M	lHz	Channel Bandwidth: 20MHz				
Channel	Frequency	99% Bandwidth (MHz)		Channal	Frequency	99% Bandy	dwidth(MHz)	
Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM	
20325	1747.5	13.460	13.458	20300	1745.0	17.969	17.999	
	Channel Band	dwidth: 15M	lHz	C	hannel Ban	dwidth: 20M	Hz	
	mannor Bank							
	Frequency		lwidth (MHz)	Channel	Frequency	26dB Band		
Channel				Channel	Frequency (MHz)	26dB Band		



Low channel:





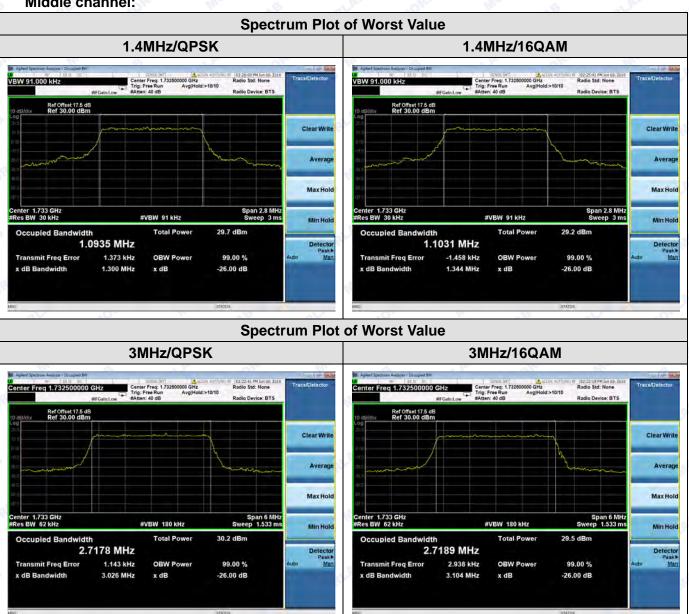




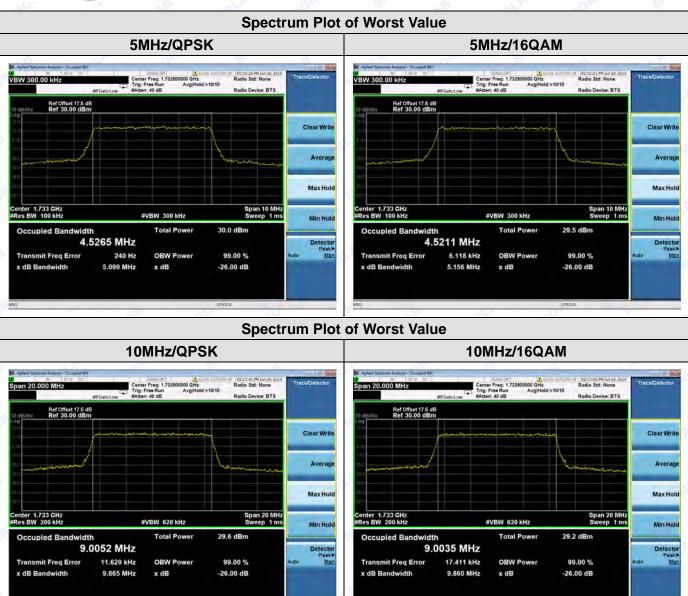




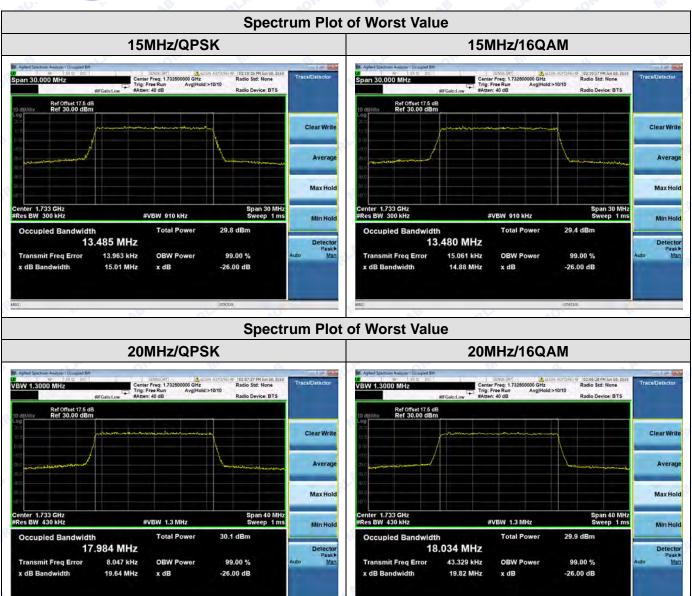
Middle channel:





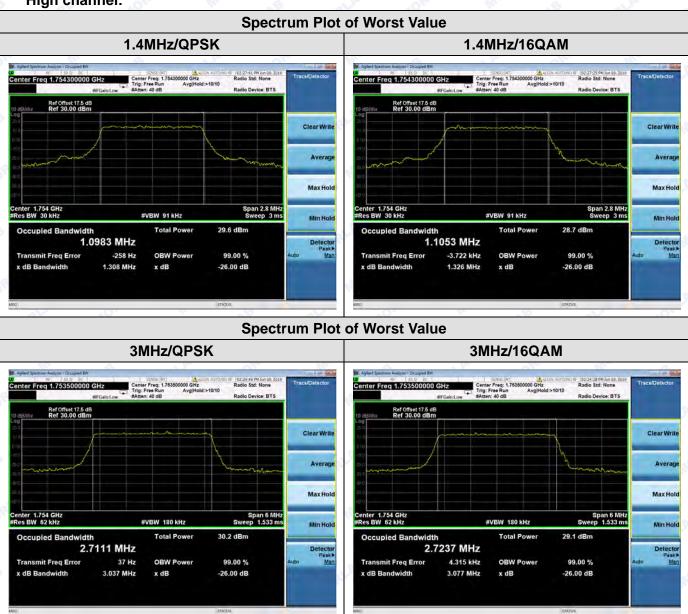








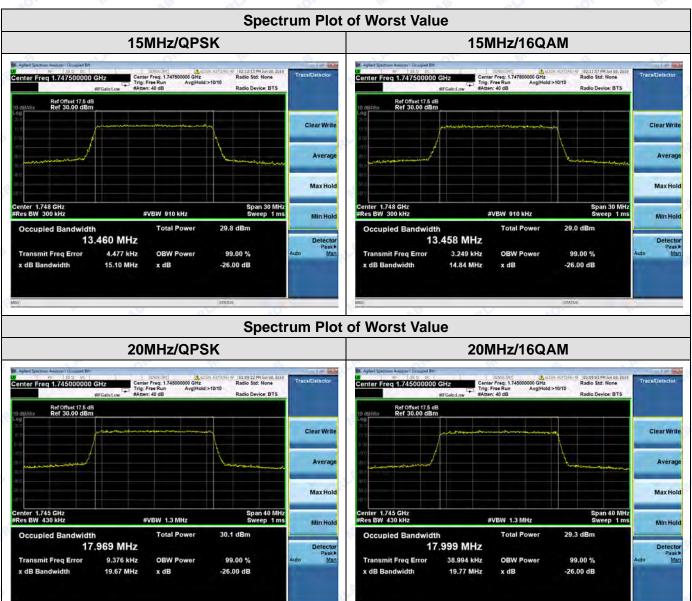
High channel:













LTE Band 5 Low channel:

С	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
Channel	Frequency	99% Bandwidth (MHz)		Channel	Frequency	99% Bandy	vidth(MHz)
Channel	(MHz)	QPSK	16QAM	16QAM Channel	(MHz)	QPSK	16QAM
20407	824.7	1.1010	1.1000	20415	825.5	2.7053	2.7005
С	hannel Band	dwidth: 1.4N	1Hz		Channel Ban	dwidth: 3M	-lz
Channel	Frequency	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM
20407	824.7	1.330	1.281	20415	825.5	3.071	3.026

	Channel Ban	dwidth: 5M	Hz	Channel Bandwidth: 10MHz			
Channel	Frequency	99% Band	width (MHz)	Channel	Frequency	99% Bandy	width(MHz)
Channel	(MHz)	(MHz) QPSK 16QAM	16QAM	Chamilei	(MHz)	QPSK	16QAM
20425	826.5	4.5226	4.5175	20450	829.0	8.9868	8.9857
	Channel Ban	dwidth: 5M	Hz	C	hannel Ban	dwidth: 10M	Hz
Channel	annel Frequency (MHz)	26dB Band	lwidth (MHz)	Channel	Frequency	26dB Band	width(MHz)
		QPSK	16QAM		(MHz)	QPSK	16QAM
20425	826.5	5.132	5.134	20450	829.0	9.940	8.254

Middle channel:

_		0.	Y AT			4. 4"		
8	С	hannel Band	dwidth: 1.4N	1Hz	Channel Bandwidth: 3MHz			
	Channal	Frequency 99% Bandwidth (M		width (MHz)	Channal	Frequency	99% Bandy	vidth(MHz)
	Channel	(MHz)	QPSK	16QAM	Channel	(MHz)	QPSK	16QAM
8	20525	836.5	1.0968	1.0958	20525	836.5	2.7108	2.7223
	С	hannel Band	dwidth: 1.4N	1Hz		Channel Ban	dwidth: 3MH	-lz
P	Channel	annel Frequency 26dB Bandwidth (MHz) (MHz) QPSK 16QAM		lwidth (MHz)	Channel	Frequency	26dB Bandy	width(MHz)
	Onamoi			16QAM		(MHz)	QPSK	16QAM
	20525	836.5	1.302	1.309	20525	836.5	3.042	3.074