

RF EXPOSURE **EVALUATION 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

47CFR 2.1091

STANDARD(S)

KDB 447498 D01 General RF Exposure

Guidance v06

ISSUE DATE

2016-08-12

OMMUNICATIONS TECHNOLOGY Co., Ltd. SHENZHEN MORLA

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		Change History			
Issue	Issue Date Reason for change				
1.0	2016-08-12	First edition			
MORE	W.C.	3 RLAT MORE ME AB RLAT MORE			



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	47CFR 2.1091; KDB 447498 D01 General RF Exposure Guidance v06
Issue Date	2016-07-12

Tested by) <u> </u>	Chen Shengkui	
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1. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

1.1. Identification of Applicant

Company Name:	SHENZHEN ANTOP TECHNOLOGY., LTD.		
Address:	301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian Forest		
THORE MORE	Farm, Songgang Street, Baoan District, 518100 Shenzhen City,		
AE RLAD	Guang Dong Province, People's, Republic Of China		

1.2. Identification of Manufacturer

Company Name:	SHENZHEN ANTOP TECHNOLOGY., LTD.
Address:	301, No. 1 Workshop, Longqiaohua Industrial Zone, Luotian Forest
S MC LAB	Farm, Songgang Street, Baoan District, 518100 Shenzhen City,
SELAL MORLE W	Guang Dong Province, People's, Republic Of China

1.3. Equipment Under Test (EUT)

Model Name:	MV-9818/4G
Trade Name:	N/A
Brand Name:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Frequency Bands:	WCDMA Band II: 1850-1910MHz; WCDMA Band V: 1710-1755MHz; WCDMA Band V: 824-849 MHz; LTE Band 2: 1850-1910MHz; LTE Band 4: 1710-1755MHz; LTE Band 5: 824-849 MHz; LTE Band 17:706-714 MHz; Wifi802.11b/g/n20/n40:2412-2462MHz;
Modulation Mode:	WCDMA/HSDPA/HSUPA/HSPA+:QPSK; FDD-LTE:QPSK/16QAM; Wifi802.11b: DSSS; Wifi802.11g/n20/n40: OFDM;
Antenna type:	Dedicated Antenna
Development Stage:	Identical prototype



1.3.1. Photographs of the EUT

EUT side view



2. EUT top view





1.3.2. Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version		
1#	V1.0	V1.0	

1.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1 OPLAS	47 CFR§2.1091	Radiofrequency Radiation Exposure Evaluation: mobile devices
2	KDB 447498 D01v06	General RF Exposure Guidance



2. DEVICE CATEGORY AND RF EXPOSURE LIMIT

Per user manual, this device is a Wifi router. Based on 47CFR 2.1091, this device belongs to mobile device category with General Population/Uncontrolled exposure.

Mobile Devices:

47CFR 2.1091(b)

For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. In this context, the term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

GENERAL POPULATION / UNCONTROLLED EXPOSURE

The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(i	B) Limits for General	Population/Uncontro	lled Exposure	
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz



^{* =} Plane-wave equivalent power density



3. MEASUREMENT OF CONDUCTED PEAK OUTPUT POWER

LTE Conducted Average Output Power

Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Power
	Chamilei		Wodulation	RB Size	RB Offset	(dBm)
RL	More	In. OB	RILL	-10 ¹⁻ 1	0	22.10
MO.	LAF	ORL	Wo.	1 🕔	49	21.84
RLA	MOFE	lillo.	E RLA	1.0	99	21.50
Mo.	.0	LAB ORL	QPSK	50	0	21.05
AB .	el.A.	M	OB.	50	25	21.12
II.	10	LAB	ORL	50	49	20.49
O.B	QLA.	"OBT	NB NB	100	0	20.96
ORL	Mo.	1860	ORL	We 1	0	21.04
NIC AE	18700	MORE	We at	1 .01	49	21.82
ORL	WO.	0 0	E ORLE	1110	99	20.40
Mo	NB .	LAL	16-QAM	50	0	20.59
AB	ST. MO	S Mr.	AB	50	25	20.64
Mo	.0	QLA!	ORE MI	50	49	20.03
AB	ORLA	WO	AB	100	0	19.96
MORIE	W. B	all	*OF	1 0	0	21.47
W. VE	ORILIN.	MOL	S Mr. AS	1.081	49	21.42
ORL	MC	10 al	ORL	100	99	21.75
S. Mr.	, AB	Live MORE	QPSK	50	0	20.31
AL SO	ST. INC.	MO VE	alab ac	50	25	20.22
Z M	M	ORLA" N	of Oter Was	50	49	20.55
al Al	AOR IVI	MO AB	3LAB	100	0	20.39
20MHz	1880	Mo	1	0	20.68	
LAB	18900	Mo	a LA	1,010	49	20.61
MOLE	W.	AB GRL	MOL	0.1	99	20.93
.0	LAB	IIIO.	16-QAM	50	0	20.87
JA 110	lu di	AB	ali di iii	50 50	25	20.63
.0	LAB	ORL	D	50	49	19.34
ORLA.	Mole	W. OB	RLA	100	0	19.34
illo.	al he	10/2	W. C	1 1	0	21.89
RLA	MOFE	No.	BELA	110	49	21.71
Wo.	.0	LAB ORL	Wo.	S 1	99	21.89
AB .	LA MO	M	QPSK	50	0	20.72
MO	.0	OLAB	BELL S. OIL	50 50	25	20.72
AB	RLA	MOLE N	O.B	50 50	49	20.54
ORL	MORTH	LAB	ORL	A 17		
the Horlas	-QLA	1900	400	100	0	20.81
	19100	0 0	ORLA	1000	0	21.06
	AB .	LA	ME	- 10	49	20.84
	T. MO	De La	16-QAM	50	99	20.96
	, B	QLA!	10-QAIVI	50	0	20.56
	ORLIN	WOL THE	, AB	50	25	20.75
	4110	, Alb	ORIV.	50	49	20.36



Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Powe
Bana Watii	Charmer	1 16q.(IVII 12)	Modulation	RB Size	RB Offset	(dBm)
LAB C	310	. 6	Alb	RI 1 W	0	21.71
Mc		QLA!	OLY MI	1.0	37	21.23
A.A.B		MO	AB	OPT	74	21.54
ORL		QLA!	QPSK	36	0	21.01
AF		MOLO	a m	36	18	21.13
MORLE	nic.	S W	ORL	36	35	21.07
a liv	LAB -	1057.5	S 10.	75	0	21.05
AL		1857.5	alle ac	1 1/1	0.	21.03
0	18675	ORLA"	Or. S. M.	100	37	21.11
al Al		MC	2LAL	1011	74	21.08
POL		ORLAN	16-QAM	36	0	21.01
al Al		MIC	B SLA	36	18	20.58
More		AB ORL	MOL	36	35	20.68
9		MO		75	0	20.14
"IO	0	, Ale	JEL. M.	1.0	0	22.01
20		"OBT		21	37	21.98
RLIN		W. VE	ORL. III	410.	74	21.56
10	M 18900	, ORL	QPSK	36	0	21.05
ORL IV		S W.	Balling	36	18	21.36
MIC		1880	AE MO	36	35	21.08
450411				75	0	21.10
15MHz			1880 16-QAM	1.0	0	21.40
AB		WOL I		081	37	21.22
ORL		3LAP		Mr. 1	74	21.36
, AE		MOLO		36	0	21.51
ORI		a av		36	18	21.29
S. Du.		The Motor		36	35	21.04
.40		28		75	0	20.05
S. Un.	AB	ORL.	D	1000	0	21.40
2LAL		MIC AB	ALAB.	.0 ^R 1	37	21.61
Or		RLIN	More	1 . 9	74	21.52
alar		MIS	QPSK	36	0	20.81
MOL		AB GRL	MOL	36	18	21.03
•	LAB H MO	Mo	20	36	35	20.77
"10"	S MI	1000 5	RILL MO	75	0	20.79
MORLAB IN		1902.5	_0	1	0	20.66
	19125	W. VE	QRL.A.	110.	37	20.45
		ORL	16-QAM	1 21.1	74	20.78
		S Mr.		36	0	20.89
		MO	36	18	20.36	
AB OF		M	M. OB	36	35	20.03
", MO		PI. IIC	75	0	19.90	



Band Width	Channel	Freq.(MHZ)	Modulation	RB Cor	figuration	Average Powe
Band Widin	Chamilei	rieq.(IVII IZ)	Modulation	RB Size	RB Offset	(dBm)
LAP	ST. We	. 6	LAB	^{RL} 1 N	0	21.49
Mo	Q.B	QLA.	OLE MI	108	24	21.32
LAB	ORL	MO. B	LAB	OPI	49	21.02
MORE	ME	QLA.	QPSK	25	0	20.88
LAF	ORLIN	MOLO	e III	25	12	20.76
MORL	MIC	al al	ORL	25	24	20.69
. 6	18650	4055	. 6	50	0	20.97
LAT		1855	QL.M.	1 -	0	20.78
. 6		ORL	0, 8	-1.5	24	20.59
ZLA.	MORI	MC OF	QLA.	-10°1	49	20.67
MO.	The state	ORLAN	16-QAM	25	0.0	20.36
QLA.	NORL	Mo	e ala	25	12	20.42
Mor	B In.	AB ORL	3 CRL WOLL	25	24	20.26
NB.	E LAP MO	NII.	60	50	0 -	19.98
MO	MO S	LAR	ORL ME	1.0	0	21.99
0	AB RLAL	"Obr	NB NB	21	24	21.85
MORLAN MORLAN	W. A.B	QPSK	We 1	49	21.94	
	MORE		25	0	21.03	
	. 6	B ORLA	25	12	21.11	
	LAL	ME	25	24	21.07	
400411	ST. W. MO	4000	AB	50	0.	20.96
10MHz	N.B	1880	16-QAM	1.5	0	21.42
LAB	18900			OPI	24	21.31
NORL	M. C.			1 0	49	21.39
A.P.	ORLAN			25	0	21.44
MORI	Mo	al al		25	12	21.54
0	LAB	Erre More	S In.	25	24	21.23
AL	PHO PHIC		QLALO	50	0	19.97
6	AR	ORL	0	1.00	0	21.67
RLA	MORE	Mr. OB	QLA.	~10 P	24	21.54
NO.	LAF	ORLA	MO	1	49	21.66
QLA!	MORL	Win	QPSK	25	0	20.89
Mor	. 6	AB ORL	MO	25	12	20.78
O.B	LAN H MO	W. W.	o.B	25	24	20.96
MO	· · · · · · · · · · · · · · · · · · ·	1005	ORL MIC	50	0	20.69
A.B	RLA	1905	N.B	-0.1	0	20.37
ORL	19150	LAB	ORL	MO 1	24	20.41
M. O.B		MORIE	Mar We	1 -01.1	49	20.39
ORLAN			16-QAM	25	0	20.44
AE MON CLASE IN MOR	a A MORL	ME	25	12	20.36	
	De Line	A AE	25	24	20.01	
Mc	20	2LAL	DEL MIC	50	0	19.87



Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Powe
				RB Size	RB Offset	(dBm)
LAB	III.	. 6	A.A.B	² 1 4	0 4	22.05
ME		QLA!	OLET WE	1.3	12	22.11
LAB		MOL	AB	081	24	22.01
NORL		3 RIAL	QPSK	12	0	20.85
W.		MOLO		12	6	21.03
MORL	AR THE	S 0	MORL	12	∞ 11	20.96
0		4050.5	S (1)	25	0	20.89
AL		1852.5	al. R.	4 N	0	21.53
9	18625	ORLAN	Dr. S. W.	100	12	21.67
al Al		MC VE	2LAL	1011	24	21.66
NO.		RLIN	16-QAM	12	0	21.52
2LA		MIC	B	12	6	21.47
More		LAB ARI	Morra	12	11	21.03
OB.	al Al	IIIO.	.0	25	0	19.91
MO.	0,	LAB.	JEIL MC	1 4	0	21.96
.0	MORLAD	"OBT	, S	21	12	21.85
ORLAN		W. AE	ORL. III	WO. 1	24	21.74
No.		ORL	QPSK	12	0.0	21.04
ORLAN		S In.		12	6	21.63
MIC	M	LAL	MIC	√12	11	21.00
ENALL OF	The IVI	1880	AB	25	0	20.94
5MHz			16-QAM	1.0	0	20.78
AB	18900	"OF		081	12	20.45
ORL		3LAB		1 0	24	20.61
AB		MOL		12	0	20.98
10RI		A AV	ORL	12	<i>∞</i> 6	20.31
2 Mil		ETHE MORE	NI.	12	11	20.12
AL .O		3	al Alb	25	0	19.98
S Mr.	AB	ORL:	2.	10.6	0	22.01
3LAE		MO TE	3LAE	10 PC	12	21.95
VO.		RLA	MOL	1 . 9	24	21.85
ALAE		Mo	QPSK	12	0	20.90
Mor		AB ORL	MOL	12	6	20.66
.0	LAP H MO	Er Mo.	.9	12	11	20.54
"10	A William	4007.5	RILL MO	25	0	20.51
		1907.5	_0	1	0	21.17
RLA	19175	M. AB	RLA	40.1	12	21.24
W. Co		ORL	MO.	1 24	24	21.10
QRL.A.	MORL	du.	16-QAM	12	0	21.22
MO		LAB JORL	WO.	<i>№</i> 12	6	21.36
AB		In the	AB	12	11	21.02
MO		Ale	Br. MC	25	0	19.66



Band Width	Channel	Freq.(MHZ)	Modulation	RB Co	nfiguration	Average Power
Sand Width	Charine	1 16q.(IVII 12)	Woddiation	RB Size	RB Offset	(dBm)
AL	31.	.0	A.A.B	1	0 0	21.97
M		QLA.	OFF	1.0	7	21.88
LAB		Mo.	LAB	0.61	14	21.94
MOKE		AB	QPSK	8	0	21.63
LAF		MO	G LA	8	4	21.52
MORE		aB al	MORI	8	<i>ॐ</i> 7	21.34
. 45	LAB	1851.5	a Vi	15	0	21.22
A. O		1651.5	RIA	1	0.0	21.23
. 0	18615	ORL	0.	1.4.6	7	21.12
QL.A.		MIC OF	R.L.A.	011	14	21.10
No.		ORLIN	16-QAM	8	P O PL	21.47
QLA.		ME	E QLA	8	4	21.03
Mo.		LAP ORL	ORL MON	8	7	21.04
AB .	a LAL	Me	.0	15	0	20.18
, Mo		LAB	ORL MI	1 🐟	0	21.84
0B	MORLAN M	MORE	ORLAE	21	7	21.88
ORL		II. AE		4 ¹⁰ 1	14	21.82
ne al		MORL	QPSK	8 📣	0.01	21.89
ORL		. 6	E ORLIN	8	4	21.74
MILL		The Works	Me	∞ 8	7	21.65
3MHz	NIC.	1880	AR	15	0 🔊	20.92
SIVITIZ		1000	Ole. W.	1.3	0	21.25
LAB	18900	Mo. S.	16-QAM	1	7	21.36
OPL		QLA.		1	14	21.44
LAB		MO		8	0	21.21
MORE		al al		8	< 4 €	21.25
. 6		Er. MO.	. 6	8	7	21.03
ano'	HUE	3	al.A.	15	0.0	19.93
~ @	LAB	ORL	0	1000	0	21.66
RLA		M. O.B	RLA	0161	7	20.95
Vo.		ORL	Mor	1 .	14	20.51
allar		INC	QPSK	8	0	20.48
Mos		LAP ORL	Mor	8	4	20.36
AB .	LA H	lu lu	A.B	8	7	20.38
MO		1008 5	RI. III	15	0	20.51
AB.	1908.5 19185	1300.5	O.B	27 12.	0	20.53
ORL		LAB	ORL	41 ⁰ 1	7	20.61
n all		MORE	IN OF	1 📣	14	20.36
ORL		.0	16-QAM	8	0	20.16
M		SLAP NORL	ME		4	20.13
Ale of			ALAIP C	8	7	20.02
M		2LA	Dec. Hills	15	0	19.72



Band Width	Channel	Freq.(MHZ)	Modulation	RB Co	nfiguration	Average Pow
Dana Widin	Charmer	1 1eq.(IVII 12)	Wodulation	RB Size	RB Offset	(dBm)
LAP	350	.6	al Alb	1	0 0	21.94
. W		RLA	Okr. W	1.0	2	22.01
CLAB		MO. B	LAB	1	5	22.05
MOFE		AF	QPSK	3	0	22.01
LAF			e m	3	1/10	22.05
MORE	LLAE THE	all al	MORL	3	<i>ॐ</i> 2	22.09
. 6		1850.7	O ///	6	0	21.06
,A. ano		1630.7	P.L.A.	1	0.0	21.07
. 6	18607	ORL	0, 8	1.00	2	20.93
QLA.		MIC OF	2LAL	011	5	21.13
NO.		ORLAN	16-QAM	3	0 0	21.21
BLA.	M	Mo	B QLA	3	1/1/2	21.14
MOL		LAP ORL	MOL	3	2	21.36
OB.		MIC	S	6	9 m	20.33
" MO		AB	JRL M	1 💩	0	21.37
NB		"OBr	QPSK	21	2	21.31
ORLAN		W. AB		41 ⁰ 1	5	21.43
No Co		MORLE		3	0.0	21.52
ORLAN		8 60	IS ORLE	3	a 1	21.41
MIC		LALL	INC	ॐ 3	2	21.21
40411		4000	1880	6	0	30.32
1.4MHz		18900	16-QAM	1.0	0	20.11
AB	18900			0P1	2	19.87
ORL				Mr. 1	5	20.16
, AE		MOL		3	0	20.41
10RI		3 N		3	<i>∞</i> 2	20.23
S bu		Lin	N.	3	5	20.01
AL		.0	ALAB C	6	0.3	19.69
S bu	AB	ORL.	2.	10.6	0	20.55
QLA!		INC. SE	2LAB	1016	2	20.43
Or		RLA	MOL	1 .	5	21.72
ZLAE		Mo	QPSK	3000	0	21.89
MOL		AB ARL	MOL	3	AB 1	21.77
B	LAV H MO	INC	3	3	2	21.75
ano ano	S MI	1000.0	RLA	6	0	20.96
00		1909.3	.0	21	0	20.55
RLA	19193	W. WE	RLA	WO. 1	2	20.44
10		AORL	Mo	1 0	5.01	20.38
QRL.M.	TLAE MORL	J. Mr.	16-QAM	3	0	20.41
Mo		LAB III MOFLIE MORLY	Mo	<i>∞</i> 3	ala 1	20.36
A.B			AB	3	2	20.21
, Mo		LAB	JEL. MIC	6	0	19.93



LTE BAND 4

Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Powe
Danu Wiuiii	Challiel	rτeq.(Ινίπ <i>Δ)</i>	Modulation	RB Size	RB Offset	(dBm)
AF	ST. Me	. 6	LAB	R. 1 W	0 4	22.28
Mic	o.B	QLA!	ORL MI	1.3	49	22.21
LAB	ORLAN	MOL	LAB	081	99	21.82
MORE	ME	BLAL	QPSK	50	0	21.03
LAF	MORL	ORLA	S TA	50	25	21.05
MORE		al al	MORL	50	49	20.76
. 6	LAB -	1720.0	0	100	0	20.96
,A. ano	in the	1720.0	PILA.	1 1	0.	21.39
. 6	20050	ORL	0.	1.00	49	21.24
RLA	MORE	W. O.B.	QLA!	.40 ¹	99	20.89
NO.	LAF	ORLAN	16-QAM	50	0	20.74
RLAN	MORIE	MIC	B QLA	50	25	20.63
MO	0	LAB OPL	WOL.	50	49	20.34
AB	ALAL RO	ME	3	100	0	19.89
HO	.0	LAB	OFF	1 0	0	22.28
AB	RLE HORLE	MOR	ORLAB	21	49	21.84
ORL		I. A.B		WO.1	99	21.98
A.F		MORE	QPSK	50	0.01	20.73
ORL		-6	J. B. ORLIN	50	25	20.72
M		M 1732.5	MILE	5 0	49	20.70
20MHz	81. Mc		LAE C	100	0	20.71
ZOIVII IZ	- 02		16-QAM	1.0	0	21.84
LAB	20175			R	49	21.54
VOL.	IN OF	PLA.		III a	99	21.70
LAB	ORL	MO.		50	0	21.72
MORE	lill or	OB CEL	MORE	50	25	21.36
.0	LAB	Er. Wo.	0	50	49	20.51
10	U.S.	2	al.A. ac	100	0	19.74
-8	LAB	ORL	9	1	0	21.82
RLA	Mole	Mr. O.B	RLA	01	49	21.65
WO.	LAF	ORL	Mo.	1 . 8	99	21.84
RLA	MORE	M. T.	QPSK	50	0	20.77
MO.	.0	LAP ORL	Wo.	50	25	20.64
A.B	LA H	In the second	AB	50	49	20.76
MO	-6	1745.0	RI. MC	100	0	20.74
AB	20300	17 40.0	O.B	1	0	21.49
ORL		LAB	ORL	40°1	49	21.52
A.B		MOLE	all all	1 21.1	99	21.45
ORL		.0	16-QAM	50	0	21.31
M		OLLAB II HOELAB B HOEL	Me	<u> </u>	25	21.02
AP 40			CLAP C	50	49	21.11
M	20	2LA	Die. We	100	0	19.73



Band Width	Channel	Freq.(MHZ)	Modulation	RB Cor	figuration	Average Powe
sand widin	Channel	Freq.(IVITZ)	Modulation	RB Size	RB Offset	(dBm)
AB	Ser. Mo	0,	AB	R.L. 1 W	0 4	22.53
MIC		3LAP	ORL	1.0	37	22.50
AB		MOLO	AB	0°1	74	21.80
NORL	IE MORLAE	2LAL	QPSK	36	0	21.80
II.		MOLE		36	18	21.77
MORLE	ME	3 0	NORTH NORTH	36	35	21.63
0	LAE - OF	4747.5	S Dir	75	0	21.71
AL		1717.5	al.h	1 N	0	21.74
. 6	20025	ORLA	0, 2	1.00	37	21.45
QL.A.		MC	al.Al	1011	74	21.36
110°		ORLAN	16-QAM	36	0	21.71
QLA.		MIC	B QLA	36	18	21.26
MOL	RILLE HO HORLES HORLES	AP ORL	Mor	36	35	21.32
AB .		W.	3	75	0 411.	20.78
" MO		A.A.B	ORL MC	1.0	0	22.25
NB		MORE	N.B	27	37	21.50
ORL		II. AE	ORLAN	WO.1	74	21.73
n of		MORL	QPSK	36	0.0	20.82
ORLAN		.6	G ORLA	36	18	20.45
MILE		LANDER	MILE	36	35	20.36
15MHz		1732.5	AB	75	0	20.70
13IVII IZ		A Die. W.	1.3	0	21.40	
LAB	20175	20175	16-QAM	- P1	37	21.13
VOE .		RLA		1	74	21.36
LAP		MO.		36	0	21.47
"IOFE"		OB CL	MORE	36		21.24
.6		IIIO.	. 6	36	35	20.29
ALC:	e. We	.0	al Au	75	0	19.87
		ORL	9.	1	0	21.88
RLA		Mr. O.B	RLA	.01	37	22.62
VO.		ORL	Mo.	1	74	22.67
RLA		M	QPSK	36	0	21.26
Mo		LAB	MO.	36	18	21.17
AB A	LA H	HIL	AB	36	35	21.75
MO		1747.5	RI. MO	75	0	21.62
AB	20325	101111.5	O.B	1	0	20.99
ORL		ALAB.	ORL	4 ⁰ 1	37	20.85
N. A.B		MOLE	a line of	1	74	21.74
ORL		Mor B III	16-QAM	36	0	20.36
W.		'B' MORL	III.	<i>∞</i> 36	18	20.41
AP 40		- B	CLAP CO	36	35	20.39
M		al.A.	Die We	75	0	20.71



Band Width	Channel	Freq.(MHZ)	Modulation	RB Size	RB Offset	Average Powe (dBm)
MORLAE MORLAE	MORLAE	MORL	O. AB	. 40		
HORLAR HORLAR		INC RLAE	D.P.	44 .3	0	22.49
HOR HORLAR		RLA		.011	24	22.64
LAE MORLAS			MOL	1 . 0	49	22.02
LAE MON		INC	QPSK	25	0	21.70
LAB		AB ORL	Morr	25	12	21.54
The World	LAL	MICH	.3	25	24	21.36
	- M	4745.0	SELLE MIC	50	0	21.72
20		1715.0	.0	1	0	21.70
RLL	20000	M. AE	QRL.M.	40.	24	21.48
MC		ORL	MO.	1 1	49	21.40
ORL A		III.	16-QAM	25	0	21.36
MO		LAB	W.	25	12	21.25
AB A	OKLAL MO	du.	AB	25	24	21.31
Mo		2LAB	ORI. MC	50	0	20.71
AB	-RL	10.	O.B.	1	0	21.66
ORL	Mor	LAB	ORL	110	24	21.36
AE GLA	MOL	NA OF	1 281	49	21.15	
ORL		-0	QPSK	25	<i>→</i> 0	20.70
P.T.		ru.	Miles	25	12	21.03
Ale Of	M	. 6	ALAES C	25	24	21.08
Me	IVI	RI.A.	ORE	50	0	20.65
10MHz		1732.5	T. D.E.	1	0	21.14
OR	20175		G MORE LAF	1 . 0	24	21.04
LAB				1,082	49	20.59
NOR		of al	16-QAM	25	0	20.59
0 10.		rice More	10 97 1111	25 25	12	20.96
AL		AB	al Al			A W
6		ORLAN	Dr. 111.	25 50	24 0	20.36 19.82
QLA.	10°F	4. 6	all	1	0	
NOT		QRL. A.	Mor	1 24	- A-V	22.47
2LAE		Mo	B BLAN	140	24	22.64 22.71
Mor		AB GRL	QPSK	25	49	
B		Mo	Q, Oi	25 25	0 12	21.61 21.54
	Ing.	AB	RILL MC	25 25	24	21.54
20	HB	*OBL	23	50	0	704
RLA	20350	1750.0	ART IN	1		21.69
No.		ORL	We The	1	0	21.12
RLA		S Mr.	BULLA		24	21.44
Me		AP ORL	16-QAM	1	49	21.42
AB T		M	10-QAW	25	0	21.39
MO		LAB	PET. MC	25	12	21.30
NB NB		"Ote" N	NB	25 50	24 0	21.23 20.72



Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Powe
				RB Size	RB Offset	(dBm)
AF	11/6	0	LAB	er 1 4	0	22.73
ME		QLA!	ORL MI	1.3	12	22.78
AB		MOLO	AB	OP!	24	22.72
MORLE		3 RLAID	QPSK	12	0	21.64
A.F		MOLO	2 m.	12	6	21.53
MORIE	LAB LICE	TARE LO STORI	NORTH NORTH	12	11	21.58
B In.			8 111	25	0	21.61
AL		1712.5	al. R.	4 N	0	22.15
0 10.	19975	ORL.	0,0	100	12	22.23
QLA!		MC VE	2LAL	,01°1	24	22.08
VOI.		RLIN	16-QAM	12	0	22.04
ZLA!		MIC	B SLA	12	6	22.08
MOL		LAB SRI	IE MOIL	12	11	21.58
B	LAB	IIIO.		25	0	20.61
M _O	6	, A.B	JEIL ME	1 4	0	21.82
20	M	"OBT		21	12	21.22
ORL M		W. AE	QPSK	WO. 1	24	21.74
NO SE		ORL		12	0.0	20.51
ORLAN		0 10		12	6	21.36
MIC		LAL	MIC	√12	11	20.69
5.411	The IVI	1732.5	AB	25	0	20.47
5MHz			16-QAM	1.0	0	21.38
AB	20175				12	21.12
ORI				III 1	24	21.31
AE		MOL		12	0	21.20
10RI		A AV		12	<i>∞</i> 6	21.36
S. U.		ETH MOL	NI.	12	11	21.01
AL		3	aLAB .C	25	0	19.69
S Mr.	AB	ORL:	2.	10.6	0	22.59
al Al		ME	2LAE	10 FE	12	22.61
OF		RLA	Morris	1 . 9	24	21.85
al.At		Me	QPSK	12	0	21.66
MOL		AB ARL	MOL	12	6	21.42
B	LAP H MO	luc.		12	11	21.36
"IO"	S W	4750.5	RILL MO	25	0	21.64
NB T		1752.5	.0	21	0	21.91
ORLAN	20375	M. VE	RLL	41° 1	12	21.62
10		*ORL	MIC	1 21.0	24	21.58
RLA		d W	16-QAM	12	0	21.45
Mes		LAP JORL	W.C.	<i>№</i> 12	6	21.37
AB A		W.	AB	12	11	21.31
MO		LAB	JEL HIC	25	0	20.63



Band Width	Channel	Freq.(MHZ)	Modulation	RB Co	nfiguration	Average Pow
Sand Width	Charine	rieq.(IVII IZ)	Wodulation	RB Size	RB Offset	(dBm)
AL	11/6	. 6	AAB	1	0 0	22.41
MIC		QLA.	Obr. III	1.0	7	22.45
LAB		MO. B	LAB	1	14	22.43
OFF		QLA!	QPSK	8	0	22.05
LAF	LIE LOUIS ATAL FROM	MOL	LIE III	8	4	22.34
MORE		S W		8	<i>ॐ</i> 7	22.11
. 6		4744 F	D In.	15	0	21.62
AL ANO		1711.5	QLA.	1	0.0	21.68
. 63	19965	ORLAN	0, 2	1,000	7	21.36
QLA.		W. CE	2LAL	1011	14	21.54
VO.		ORLA	16-QAM	8	O OFFI	21.18
al Al	HORLAL LAE HORL	MO	B ZLA	8.0	4	21.02
MOL		LAB SEL	MOL	8	7	21.01
B		MO	.5	15	0	20.66
"IO	۵.	, Ale	JEL W	1.6	0	22.22
20	MORLAN	"OBT		21	7	21.96
ORL M.		W. AE	RLL	410.1	14	22.09
No CB		ORL	QPSK	8	0.0	22.03
ORL M.		S. Bu	I GRLL	8	4	22.07
MIC	M	LALL	Mo	<i>№</i> 8	7	21.56
ON ALL	The IN	4700.5	AB	15	0	21.28
3MHz		1732.5	Oles Mi	1.3	0	21.73
AB	20175	401	, AB	0.51	7	21.48
ORL		2LAB	ORL	Mr. 1	14	21.57
A.B		"IOF	16-QAM	8	0	21.41
ORL		- N		8	.	21.53
J. Mr.		ELIA MORE	NI NI	8	7 1	21.49
AL TO		-6	ALAB C	15	0	20.50
J. Illi	AB	ORL.	2.	1000	0	22.53
QLAE		Mo.	2LAB	1016	7	22.56
OF		RLA	MOL	1	14	22.54
2LAP		Mo.	QPSK	8	0	22.34
MOLE		AB CRL	Mole	8	4	22.12
0	LAB H MO	E. MO.		8	7 11	21.78
	M	4750.4	RLA M	15	0	21.59
.0		1753.4	-0	21	0	21.34
RLA	20384	M. O.B.	RLA	41 ⁰	7	21.22
.0		ORL	Mo.	1 📣	14	21.04
RLA		W.	16-QAM	8	0	21.17
Mo.		LAP ORL	MOL	8	4	21.17
AB		HUT	AB	8	7	21.08
· 110		AB	are all	15	0	20.56



Band Width	Channel	Freq.(MHZ)	Modulation	RB Co	nfiguration	Average Powe
Baria Wiatri	Charine	1 1eq.(IVII 12)	Wodulation	RB Size	RB Offset	(dBm)
AL	Ser. Mc		A.A.B	1	0 0	22.39
M	Q.B	RLA.	Okr. W	1.0	2	22.13
LAB	ORL	Mo.	LAB	0.61	5	22.17
MOFE	Mar O.F	BLAN	QPSK	3	0	22.29
LAF		TORLY AB MO.	e " LA	3	1110	21.08
MORE			MORL	3	ॐ 2	22.15
.0	LAB	1710.7	G. W.	6	0	21.41
,A. ano	in the	1710.7	P.L.A.	1	0.0	21.04
. 6	19957	ORL	0, 8	1.4.6	2	20.85
RLAN	MORE	INC. OB	RLA	011	5	21.06
NO.	LAF	ORLAN	16-QAM	3	0 0	21.14
QLA.	MORI	MILE	B QLA	3	1	21.03
MO.	· 6	OF LAD MORL	NORL NORL	3	2	21.21
AB .	ALAL RO			6	9 Jan	20.33
MO	. 6	T.A.B	ORL M	1 🐟	0	21.76
NB NB	MORLAN MORLAN	MORE		21	2	21.83
ORLIN		I.A.B	ORL	4 ¹⁰ 1	5	21.79
N. O.E		MORL	QPSK	3	0.0	21.92
ORL		.6	G ORLE	3	a 1	21.84
MIC		LA MORE	Mc	3	2	21.99
1.4MHz	W. MO	1732.5	AB	6	0 🔊	20.84
1.4IVITZ	68	20175	16-QAM	1.3	0	20.28
LAB	20175			1	2	20.36
ORI	M. O.F.	S. C.L.A.		1	5 4	20.49
LAB	ORLAN	MO		3	0	20.36
MORE	MILE	all al		3	<i>№</i> 2	20.41
. 6	LAB	Er. Mor		3	5 W	20.31
AL	in the	3	al.A.	6	0.0	19.87
. 6	LAB	ORL	3.	10.6	0	21.83
RLA	MORE	ME	QLA.	4011	2	21.91
NO.	LAF	ORLAN	MOL	1	5	21.82
RLA	MORE	Mc	QPSK	3	0	21.96
MO	. 6	LAB ORL	MOL	3	A 1	21.87
AB .	LAT H MO	lu lu	o.B	3	2	21.94
, MO	G M	1754.2	RI. M	6	0	20.97
AB	21.0	17 04.2	a B	27 12.	0	20.32
ORL	20392	T. AB	ORLA	40°1	2	20.52
N. O.B		MORE	Mr. "	1 🔊	5	20.46
ORLAN		.0	16-QAM	3	0	20.56
W		AE LAP ORL	MIC	.	al. 1	20.09
AB		D W.	LAB	3	2	20.14
Me	.0	2LAL	Per In	6	0	20.11



LTE BAND 5

Band Width	Channel	Freq.(MHZ)	Modulation	RB Configuration		Average Pow
banu widin	Chamilei	rieq.(IVIDZ)	Modulation	RB Size	RB Offset	(dBm)
LAB	W.	. 6	LAB	R. 1 W	0 4	22.53
M		QLAL	OKE	1.3	24	22.58
LAB		MOL	AB	081	49	22.54
ORL		al.All	QPSK	25	0	21.45
AF		More	a Mi	25	12	21.36
MORL	nno.	al al	ORL	25	24	21.47
. 6	LAB -	000	0	50	0	21.51
AL		829	all all	1 4	0.	20.96
6	20450	ORLAN	Or S III.	1.00	24	20.95
al Al		ME	2LAL	,01°1	49	21.43
VO.		ORLIN	16-QAM	25	0	21.31
al.A.		INC	B aLA	25	12	21.25
Morra		AE ORL	More	25	24	21.06
.0	LAB OF	MO		50	0	20.51
"IO	3	, Ale	JEL. MC	1 0	0	22.47
20	M M	*OBT	QPSK	21	24	22.29
RLIN		E TAB		410.1	49	21.03
NO.		AORL		25	0.0	21.36
RLA		S In.		25	12	21.27
MO		LAP ORL	Mo	25	24	21.09
10141		836.5 20525	AB	50	0	21.49
10MHz			16-QAM	1.0	0	21.92
A.B	20525			-81	24	21.78
ORL				Me 1 a	49	20.89
, AE				25	0	20.36
ORL		3 N		25		20.14
J. Mil.		A.A. MOR	M	25	24	20.22
ALC AC		.0	al Ab	50	0	20.64
J. Miles	AB	ORL.	2.	100	0	22.61
LAB		WO.	ZLAB	40 ¹⁵ 1	24	22.36
OF		RLA	MOK	1 0	49	22.25
LAB		Mo	QPSK	25	0	21.41
MOLE		AB GRL	MOK	25	12	21.36
0	LAP H MO	WO.		25	24	21.36
	M		ARLA MO	50	0	21.35
.0	20600	844	_0	21	0	21.37
RLA		M. A.B	RLA	40.1	24	21.23
.0		ORL	Mo.	1 21	49	21.29
RLA		MORE MO	16-QAM	25	0	21.10
MO.		LAB IN HOP AND HOPE IN	W.	25	12	21.14
AB (AB .	25	24	21.31
. <u>"</u>		D.F.	RL MO	50	0	20.49



Band Width	Channel	Freq.(MHZ)	Modulation	RB Con	figuration	Average Pow
Jana Wiath	Charmer	1 16q.(IVII 12)	Modulation	RB Size	RB Offset	(dBm)
AL	310	. 4	Alb	R ¹ 1 W	0	21.70
M		QLA	OLY MI	1.0	12	21.41
A.A.B		MOL	AB	081	24	21.36
ORI		QLA!	QPSK	12	0	20.27
AF		RIMOR		12	6	20.31
MORIE	allo	al al	ORL	12	એ 11	20.25
Co Mr.	AB L	000 5	S 10.	25	0	20.43
AL		826.5	alle ac	1 1/1	0.	21.17
S. Mr.	20425	ORLAN	Or. S. M.	100	12	21.01
ZLA!		MP VB	2LAL	1011	24	21.14
lor		ORLAN	16-QAM	12	0	21.03
ZLA!		INC	B SLA	12	6	21.01
MOLO		AB ORL	E MOR	12	11	21.06
B	al Al	MO.		25	0	19.57
W _O	RLAE MORLES	AB	SEL. MC	1 0	0	21.22
.0		"OBT	QPSK	21	12	20.61
ORL. IV		To AE		WO. 1	24	20.99
20		, ORL		12	0.0	19.77
ORL M		. 6		12	6	20.03
MIC		LAP JORE	ME	√12	11	19.85
ENALL OF		000 5	AB	25	0	19.74
5MHz		836.5 525	16-QAM	189	0	20.07
AB	20525			P.I	12	20.01
ORL				III 1	24	20.03
, AB		MOL		12	0	19.85
, ORL		3 al		12	∞ 6	19.46
S W.		Street WOL		12	11	19.64
40		20		25	0	18.91
S U	AB	OPIL.	2.	100	0	22.01
al.Al		MIL TE	2LAB	10 FE	12	22.03
OF		CRLA	MOL	1 . 9	24	21.95
al.Ar		MIS	QPSK	12	0	20.72
MOL		AB SEL	MOL	12	6	21.69
9	LAP H MO	Mo	20	12	11	21.36
"IO	S W	040.5	RILL MO	25	0	20.45
NB T		846.5		21	0	21.51
ORLAN	20625	W. AE	ORL. M.	41° 1	12	21.43
.6		JORL	MO	1 21.0	24	21.36
ORLA		S In	16-QAM	12	0	21.38
Mo		AR ORL		<i>№</i> 12	6	21.03
AB A		II.	AB	12	11	20.58
MO		LAB	ORIL MC	25	0	19.67



Band Width Channel		Freq.(MHZ)	Modulation	RB Con	Average Powe	
Danu Wiulii	Charmer	rīeq.(IVI⊓∠)	Modulation	RB Size	RB Offset	(dBm)
LAB	110	. 60	LAB	²¹ 1 W	0 4	21.60
HIC		QLA.	OLE III.	1.0	7	21.56
LAB		WO. B	LAB	1	14	21.74
"OE"		QLA!	QPSK	8	0	21.68
LAF		MOLO	G III	8	4	20.51
MORE	allo	al al	MORLE	8	<i>ॐ</i> 7	20.75
.0	LAB -	925 F	0	15	0	20.68
,A. ano		825.5	Pl.M.	1 1	0	21.04
. 6	20415	ORL	0,	1.00	7	21.07
R.L.A.		ME	QLA!	012	14	21.11
NO.		ORLA	16-QAM	8	0	21.36
QLA.		Mo	G QLA	8	4	21.21
Mor		LAP ORL	Mor	8	7	21.03
AB .	LA RO	luc.	.3	15	0 411	19.77
MO	. 6	LAB	OBT. HIC	1 4	0	21.28
AB		MORL LAB N	ORLAB	21	7	21.03
ORL				WO.1	14	21.11
ORLAR MORLAR	S MOFF	QPSK	8	0.01	21.23	
			8	4	21.30	
MIC	M M	836.5	NAC	<i>∞</i> 8	7	20.10
3MHz			A.A.B	15	0 4	20.13
SIVII IZ	O.B		NOR MORLAGE IN	1.0	0	20.72
LAB	20525			1	7	20.50
OFF		RLA		Ma 1	14	20.56
LAB		WO.	16-QAM	8	0	20.41
Moke		all all	MORE	8	<i>№</i> 4	20.24
.0		Er. Mo.	.0	8	7	20.23
Ollo	e. We	.0	al.A. ac	15	0	19.33
.0		ORL	D	1000	0	21.87
RLA		W. OB	RLA	011	7	21.35
W. "G		10RL	Mo.	1	14	21.24
RLA		th.	QPSK	8	0	21.13
Mo		LAP ORL	WO.	8	4	21.05
AB A	LA H	the state of the s	AB	8	7	20.74
Mo		847.5	JEL MO	15	0	20.69
AB	20635	0.017.0	, AB	1	0	20.84
ORL		ALAB	ORL	41 ⁰ 1	7	20.67
a.B		MOK	a In	1 21.	14	20.52
ORLE	- N	16-QAM	8	0	20.31	
July 1		A Physical Physics of the Physics of	W.	<i>ॐ</i> 8	4	20.37
AT AO		.0	ALAID .O	8	7	20.26
Mi	AB	al.h.	Die. We	15	0	19.89



Band Width Channel		Freq.(MHZ) Mod	Modulation	RB Cor	figuration	Average Powe	
		rieq.(IVII IZ)	Wodulation	RB Size	RB Offset	(dBm)	
A.P	NI WILL	. 6	AL	RI 1 W	0	21.44	
M		QLA.	OB. M.	1.0	2	21.34	
LAB		WO.	AB	081	5	21.22	
MORLE		ala	QPSK	3	0	21.50	
I. A.F		MOLO	a m	3	1/10	21.47	
MORL	allo	d a	MORL	3	∞ 2	21.36	
0	LAB -	004.7	2 ///	6	0	20.53	
AL		824.7	al. A.	1 1/1	0.	20.71	
G Mr.	20407	ORLAN	Or William	100	2	20.34	
al Al		MC VE	2LAL	011	5	20.47	
NOW		RLA	16-QAM	3	0	20.31	
al Al		MO	B SLA	3	1	20.22	
MOL		AB ARL	MOL	3	2	20.10	
3		MO.	A	6	0	19.63	
110	40	AB	SEL. ME	1	0	21.10	
28		ORL		21	2	20.97	
RLL		TLAE IN NORLAE	QPSK	Mo.	5	21.04	
INC.	M			3	0.0	21.04	
RLA		A III	B ORLL	3	1	21.04	
MIC		836.5	AE MO	<i>№</i> 3	2	21.09	
ANALL S	11/1 1/1			6	0	20.14	
1.4MHz				Oles W	1.0	0	20.03
AB	20525	MOL	AB	OR!	2	20.11	
ORL		ZLAB.	16-QAM	Ma 1	5 5	20.06	
AE AE		"IOF"		3	0	20.12	
ORL		as The	ORL	3	∞ 2	20.31	
M		ET-TAL MORE	W	3	5	20.05	
AB 10		.0	A.A.B	6	0	19.27	
lu.	AB	all	2. (0)	100	0	21.38	
2LAB		W. B	ZLAB	*OFF	2	21.24	
NOW		RLA	Mole	1 0	5	21.34	
3LAE		WO.	QPSK	3	0	21.28	
MOL		AB CAL	"IOK"	3	1 -	21.31	
A	LAP H MO	Mo.	20	3	2 111	21.22	
J. MO	II W	, A.B.	all all	6	0	20.51	
~	20643 84	848.3	0	1	0	20.43	
RLA		Mr. OB	RLA	Mos	2	20.34	
W. C		ORL	Mo.	1 1	5	20.37	
RLA	RLA.	Mo	16-QAM	3	0	20.35	
Mor		LAP ORL	WO.	<i>3</i> 3	1 1	20.37	
AB		HUZ	O.B	3	2	20.01	
- ANO		AF	AL. MC	6	0	19.78	



Band Width	Channel	Freq.(MHZ)	Modulation	RB Con	Average Powe	
Danu Wiulii	Chamber	ı⁻ıeq.(IVI⊓∠)	Modulation	RB Size	RB Offset	(dBm)
LAB	W.	. 6	AB	R. 1 W	0 4	23.04
Mc		QLAL	ORL III	1.3	24	22.96
LAB		MOL	LAB	1	49	22.81
MORE		QLA!	QPSK	25	0	21.79
LAF		MOL	a M	25	12	21.67
MORE		all al	MORIE	25	24	21.83
. 6	LAP L	700	0	50	0	21.75
_AC	23780	709	-RILA	1 1	0	22.45
. 6		ORL	0,	1.00	24	22.34
R.L.A.		ME	QLA.	011	49	22.33
NO.		ORLAN	16-QAM	25	0	22.21
QLA.		Mo	G QLA	25	12	22.41
More		AB ORL	MO	25	24	22.01
NB .	LA .no	Me	S	50) be 0 M	20.77
", Mo	. 6	LAB	ORL ME	1 0	0	22.88
AB		MORL	ORLAG	21	24	22.87
ORL				WO.1	49	22.85
MORLAE MORLAL	TE HOLL BY	QPSK	25	0.01	21.86	
		G ORL	25	12	21.73	
		Me	25	24	21.71	
10MHz	M	AB MO. SELAB W MORLAB	AB	50	0 4	21.79
TUIVIEZ	23790		NOR NORIAE IN	1.3	0	21.19
LAB				1	24	21.33
"Ober				INIT 1	49	21.16
LAB			16-QAM	25	0	21.13
MOFE			MORE	25	№12	21.05
.0			. 6	25	24	21.01
A. MO	er Mic	20	QLALC	50	0	20.75
.0		ORL	D	1010	0	22.93
RLA		ME OF	RLA	.014	24	22.75
Mo.		ORL	Wo.	1 .	49	22.34
RLA		HILL	QPSK	25	0	21.83
Mor		AP ORL	Mo.	25	12	21.67
AB -	A H	HU	AB .	25	24	21.78
Mo		711	Rr. Mc	50	0	21.77
A.B	23800	MOKE III W	QB.	1	0	21.30
ORL		LAB	ORL	1 1	24	21.22
ALAB ALAB	MORL	" WE	1 24	49	21.94	
ORL		. B . W	16-QAM	25	0	21.77
M		LAL	Wes	25	12	21.87
AP 40		10 In.	ALAP C	25	24	21.34
Mo	HIC VE	2LAL	Die Hue	50	0	20.76



Band Width	Channel	Freq.(MHZ)	Modulation	RB Con	Average Powe	
Danu Wiulii	Charifie	i⁻ieq.(ivi⊓∠)	เขเบนนเสแบบ	RB Size	RB Offset	(dBm)
LAB	We We	. 60	AB	R. 1 W	0	23.21
Mc		QLA.	OKE	1.3	12	23.10
LAB		MO. B	LAB	1	24	23.15
MORE		2LA	QPSK	12	0	21.89
LAF		MOL	G WAS	12	6	21.45
MORE		aB al	MORL	12	№ 11	21.90
-0	LAE L	706.5	0	25	(File 0	21.91
, And	23755	700.5	RLA	1 1	0.	22.60
-0		ORL	0,	1	12	22.07
RLA		NI O.B	RLA	011	24	22.45
110.		ORL	16-QAM	12	O OFFILE	22.31
RLA		P. P.	B QLA	12	6	22.43
Mo.		LAB	Mo.	12	11	22.02
AB _	LIA MO	ME	.3	25	0	21.93
W _O	-0	LAR	ORL MC	1 4	0	22.73
N.B	RLAI	MOFFE TLAB N	ORLAE	21	12	22.91
ORL				41 ⁰ 1	24	22.89
MORLAR	AE MORE	QPSK	12	0	21.92	
			12	6	21.37	
M	EMILE M	710	710 16-QAM	12	11	21.92
5MHz				25	0	21.82
SIVII IZ	23790			1.0	0	21.16
LAB				1	12	21.28
MOL				1 8	24	21.73
LAB				12	0	21.56
MOL		AB ORL		12	<i>∞</i> 6	21.34
.0		INO.		12	11	20.47
, m	W	, S		25	0	20.88
28		*OPT	20	100	0	22.87
ORLAN		W. AB	ORLA	1012	12	22.71
No.		, ORL	We The	1	24	22.43
RLA		S W	QPSK	12	0	21.86
Me		LAL JORL	Me	12	6	21.37
AE ~	The WO	S W	, AB	12	11	21.60
MIC	H 23825	713.5	SEL MC	25	0	21.76
AB		MOLT 10.0	AB	1	0	21.16
ORL		3LAP	"OBT	1	12	21.13
A.E		MORL	3 M. AE	1,01	24	20.89
MORI		OB OL	16-QAM	12	0	20.56
S In.		The Most	O W	12	6	20.34
AL			alat .o	12	11	20.30
la.	NB	QLA.	Dr. Hu	25	0	21.73



1. WCDMA mode conducted output power values

							200			237
	band	W	CDMA 8	50	W	CDMA 1	700	W	CDMA 19	000
Item	ARFCN	4132	4175	4233	1312	1412	1513	9262	9400	9538
	subtest		dBm			dBm				
5.2(WCDMA)	non	23.57	23.61	23.48	22.96	23.47	23.23	23.20	23.47	23.54
AE ORLAN	1,01	23.65	23.48	23.73	22.82	23.28	23.16	22.81	23.49	23.23
LICDDA	№ 2	23.64	23.46	23.71	22.79	23.26	23.13	22.80	22.47	22.21
HSDPA	3	23.13	22.97	23.22	22.31	22.77	22.64	22.30	22.98	22.72
MC AB	4	23.12	22.95	23.21	22.28	22.75	22.62	22.29	21.96	21.70
MORE	1	23.64	23.49	23.75	22.68	23.48	23.19	22.99	23.56	23.29
AB RLAB	2	21.63	21.48	21.76	20.67	21.47	21.18	21.00	21.57	21.27
HSUPA	3	22.65	22.49	22.73	21.66	22.46	22.17	22.98	22.55	22.28
-RLAB MO	4	21.64	21.48	21.76	20.68	21.46	21.19	22.97	21.58	21.29
MO. DE	5	23.63	23.44	23.74	22.69	23.50	23.17	23.01	23.58	23.28
HSPA+	1 1	23.73	23.61	23.80	22.86	23.27	23.18	23.03	23.70	23.45
Note:	les in the second	The Conducted RF Output Power test of WCDMA /HSDPA /HSUPA/HSPA+ was ested by power meter.				/as				



2. Wifi 2.4G Conducted Average Output Power

ANT 1

		. Frequency		Output Power(dBm)		
Band	Channel	(MHz)	802.11b	802.11g		
		(=)	(DSSS)	(OFDM)		
AB .	AB 1 NO	2412	16.81	17.82		
WiFi 2.4G	6	2437	16.91	18.05		
QLAB	11	2462	17.36	18.18		

ANT 2

		Frequency	Output Power(dBm)		
Band	d Channel	(MHz)	802.11b	802.11g	
		(2)	(DSSS)	(OFDM)	
IN LAB	1 _{RL}	2412	15.77	17.21	
WiFi 2.4G	6	2437	15.32	16.99	
AB OR	11 10	2462	15.69	17.42	

Band	Antenna	Channel	Frequency	Output Power(dBm)
			(MHz)	802.11n20
AORLA	MO.	1,LAB	2412	17.54
	ANT1	6	2437	17.23
	B	11	2462	17.12
W:E: 0.40	ORLA MON	1	2412	16.74
WiFi 2.4G	ANT2	6	2437	16.48
(MIMO)	MORE	11	2462	16.89
AN	AE ORLA	<u>"</u> 9	2412	20.17
	ANT1+ANT2	ANT1+ANT2 6		19.88
	ORLAL	11	2462	20.01



Band	Band Antenna		Frequency	Output Power(dBm)
			(MHz)	802.11n40
ME AB	ORLAN	3	2422	16.52
MORL	ANT1	6	2437	16.79
AB GRI		9	2452	16.46
M:E: 0.40	0.0	3	2422	15.76
WiFi 2.4G	ANT2	6	2437	15.64
(MIMO)	RLAB	9	2452	15.73
MORL	We WE	3	2422	19.17
of all	ANT1+ANT2	6	2437	19.26
	NB N	9 .00	2452	19.12

Note: Only 802.11n20 and 802.11n40 support MIMO 2X2.



4. RF EXPOSURE EVALUATION

Standalone transmission MPE evaluation

Bands	Frequency (MHz)	Antenna Gain (dBi)	Conducted Average Power (dBm)	Time-averaging EIRP (mW)	Power density (mW/cm²)	Limit for MPE (mW/cm²)
802.11n20 (MIMO)	2412	8.01	20.17	657.66	0.13	1.0
WCDMA Band II	1907.6	0	23.54	225.94	0.05	1.0
WCDMA Band IV	1732.6	0	23.47	222.33	0.05	1.0
WCDMA Band V	835.0	0	23.61	229.61	0.05	0.56
LTE Band 2 (BW-20M)	1860.0	0	22.01	158.85	0.03	1.0
LTE Band 4 (BW-20M)	1720.0	0	22.28	169.04	0.03	1.0
LTE Band 5 (BW-10M)	829.0	0.00	22.58	181.13	0.04	0.55
LTE Band 17 (BW-10M)	709.0	0,10	23.04	201.37	0.04	0.47

Note:

1. MPE calculation method

Power Density = EIRP/ 4π R²

Where: EIRP = P⋅G

P = Peak out power

G = Antenna gain

R = Separation distance (20cm)



ANNEX C GENERAL INFORMATION

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang
	Road, Block 67, BaoAn District, ShenZhen, GuangDong
	Province, P. R. China

***** END OF REPORT *****

