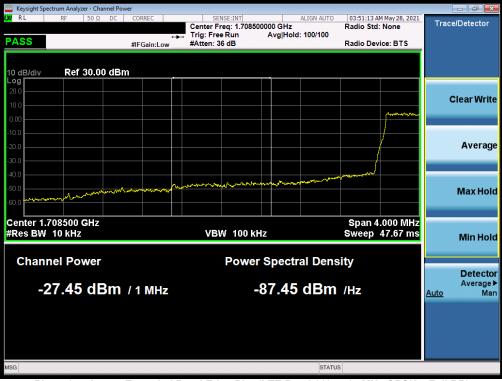


🔤 Keysight Spectrum Analyzer - Swept SA 🚽					
LX/ RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	03:50:50 AM May 28, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		Trig: Free Run #Atten: 36 dB			Auto Tune
10 dB/div Ref 25.00 dBm			Mkr1	1.709 956 GHz -33.68 dBm	Auto Tune
15.0 Trace 1 Pass		Ť			Center Freq
		~~~		n	1.710000000 GHz
5.00					<b>Start Freq</b> 1.708000000 GHz
-5.00					1.708000000 GH2
-15.0					<b>Stop Freq</b> 1.712000000 GHz
-25.0		<u> </u>			1.7 12000000 GH2
-35.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~		hanna ar	CF Step 400.000 kHz
-45.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				<u>Auto</u> Man
-55.0					Freq Offset 0 Hz
-65.0					
					Scale Type
Center 1.710000 GHz #Res BW 33 kHz	#VBW 1	10 kHz	Sweep 2	Span 4.000 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG			STATUS		

Plot 7-173. Lower Band Edge Plot (LTE Band 66/4 - 1.4MHz QPSK - Full RB)



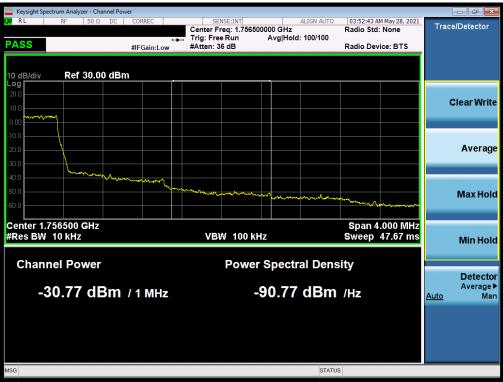
Plot 7-174. Lower Extended Band Edge Plot (LTE Band 66/4 – 1.4MHz QPSK – Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 af 045	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 109 of 215	
© 2021 PCTEST				V2 4/5/2021	



	rum Analyzer - Si	wept SA									
IXI RL	RF 50 9	Ω DC	CORREC	SE	SE:INT	#Avg Typ	ALIGN AUTO		May 28, 2021	F	requency
PASS			PNO: Wide ↔ IFGain:Low	Trig: Free #Atten: 3		#Avg Typ		TYP			Auto Tune
10 dB/div	Ref 25.00	dBm						-30.8	19 dBm		
Log Trace	1 Pass										<b>Center Freq</b> 5000000 GHz
-5.00										1.75	Start Freq 3000000 GHz
-15.0										1.75	<b>Stop Freq</b> 7000000 GHz
-35.0	~~~~				len er					<u>Auto</u>	<b>CF Step</b> 400.000 kHz Man
-55.0											Freq Offset 0 Hz
-65.0											Scale Type
Center 1.75 #Res BW 3		4	#VBV	V 110 kHz			Sweep 2	Span 4 2.000 ms (	.000 MHz 1001 pts)	Log	Lin
MSG							STATU				

Plot 7-175. Upper Band Edge Plot (LTE Band 4 – 1.4MHz QPSK – Full RB)



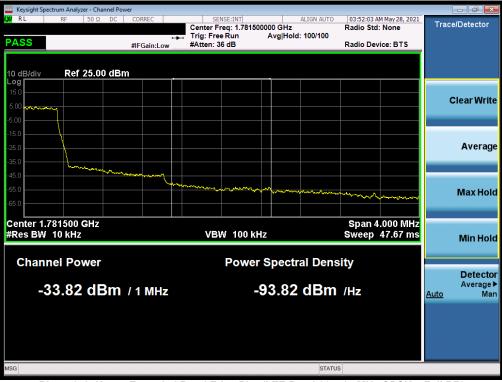
Plot 7-176. Upper Extended Band Edge Plot (LTE Band 4 – 1.4MHz QPSK – Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dama 440 af 045	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 110 of 215	
© 2021 PCTEST				V2 4/5/2021	



🔤 Keysight Spectrum Analyzer - Swept SA 🚽				
LXX RL RF 50Ω DC	CORREC SENSE:INT	ALIGN AUTO #Avg Type: RMS	03:51:46 AM May 28, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide +++ Trig: Free Run IFGain:Low #Atten: 36 dB		TYPE A WWWW DET A NNNNN 1.780 028 GHz	Auto Tune
10 dB/div Ref 25.00 dBm			-32.83 dBm	
15.0 Trace 1 Pass	······			Center Freq 1.78000000 GHz
-5.00				Start Fred 1.778000000 GHz
-15.0				<b>Stop Fred</b> 1.782000000 GH:
35.0		m		CF Step 400.000 kH <u>Auto</u> Mar
-65.0			·······	Freq Offse 0 H:
-65.0				Scale Type
Center 1.780000 GHz #Res BW 33 kHz	#VBW 110 kHz	Sweep 2	Span 4.000 MHz 2.000 ms (1001 pts)	Log <u>Lir</u>
MSG		STATU	5	

Plot 7-177. Upper Band Edge Plot (LTE Band 66 – 1.4MHz QPSK – Full RB)



Plot 7-178. Upper Extended Band Edge Plot (LTE Band 66 – 1.4MHz QPSK – Full RB)

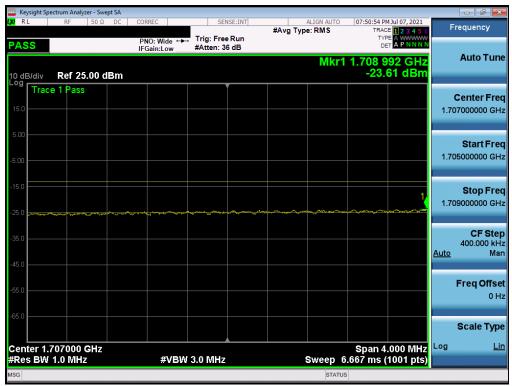
FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 111 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 111 of 215
© 2021 PCTEST	•			V2 4/5/2021



## NR Band n66



Plot 7-179. Lower Band Edge Plot (NR Band n66 - 40.0MHz - Full RB)



Plot 7-180. Lower Extended Band Edge Plot (NR Band n66 - 40.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 112 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset			
© 2021 PCTEST	•			V2 4/5/2021	

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🔤 Keysight Spe													
LXI RL	RF	50 Ω	DC	CORREC			NSE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	M Jul 07, 2021	Fre	quency
PASS				PNO: IFGain	Fast ↔ :Low	Trig: Fre #Atten: 3				DE			Auto Tune
10 dB/div Log	Ref 25	.00 d	Bm						Mk	r1 1.78 -26.	0 1 GHz 19 dBm	-	Auto Tune
15.0 Trace	e 1 Pass												e <b>nter Freq</b> 000000 GHz
5.00 -5.00		n providence i	ganer.		and a second								Start Freq 000000 GHz
-15.0						,	1						<b>Stop Freq</b> 000000 GHz
-35.0	arred .						from and the start	and a service and	and a second a			10.0 <u>Auto</u>	CF Step 000000 MH: Mar
-45.0									<u> </u>	Weenfer Werker Winge	สมารางสาราช	F	req Offsel 0 Hz
-65.0													cale Type
Center 1.7 #Res BW					#\/D\A	2.0 MHz			Swoon 1	Span 1	00.0 MHz 1001 pts)	Log	Lin
MSG	JTV KH2				#VDVV	2.0 19162			SWEED		Toor pls)		

Plot 7-181. Upper Band Edge Plot (NR Band n66 – 40.0MHz - Full RB)

🚾 Keysight Spectrum Analyzer - Swept SA 🚽					
<b>LXI</b> RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:55:04 PM Jul 07, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB		TYPE A WWWWW DET A P N N N N	
10 dB/div Ref 25.00 dBm			Mkr	1 1.781 184 GHz -23.39 dBm	Auto Tune
15.0 Trace 1 Pass					Center Freq 1.783000000 GHz
5.00					Start Freq 1.781000000 GHz
-15.0				Jan Umagagar - Ugaga Mungagarman - ugaga	Stop Freq 1.785000000 GHz
-35.0					CF Step 400.000 kHz Auto Mar
-55.0					Freq Offse 0 Hz
-65.0					Scale Type
Center 1.783000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 4.000 MHz 6.667 ms (1001 pts)	Log <u>Lin</u>
MSG			STAT		

Plot 7-182. Upper Extended Band Edge Plot (NR Band n66 – 40.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:		Page 113 of 215			
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	able Handset				
© 2021 PCTEST		•		V2 4/5/2021			



	ım Analyzer - Swej									
LXI RL	RF 50 Ω	DC C	ORREC		SENSE:INT	#Avg Typ	ALIGN AUTO e: RMS	08:05:36 PM Jul 07, 2 TRACE 1 2 3		Frequency
PASS			PNO: Fast FGain:Low		Free Run en: 36 dB	"ə)P		TYPE A WW DET A P N	N N N	
10 dB/div	tef 25.00 d	Bm					Mkr1	1.709 925 G -25.46 dl	Hz 3m	Auto Tune
Trace 1	Pass									Center Fred
15.0									1	.710000000 GH:
5.00						Burganyangalan Maran	Men Marina	and and and a second second	()	Start Free
-5.00									1	.672500000 GH
-15.0										01 E
					41				1	Stop Free 747500000 GH
-25.0		<b>~~</b> ***\A.		and and a second						05.01
-35.0		~~~~~	march	~					Aut	CF Step 7.500000 MH o Mar
-45.0	-									
-55.0										Freq Offse 0 H
-65.0										
										Scale Type
Center 1.710 #Res BW 47			#V	BW 1.8 N	/IHz		Sweep_1	Span 75.00 M .000 ms (1001	/IHz Log ots)	) <u>Liı</u>
ASG							STATUS			

Plot 7-183. Lower Band Edge Plot (NR Band n66 - 30.0MHz - Full RB)



Plot 7-184. Lower Extended Band Edge Plot (NR Band n66 – 30.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be part of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 114 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset			
© 2021 PCTEST	•			V2 4/5/2021	



Keysight Spect												-   #   -×
X/RL	RF	50 Ω DC	CORRE	C	SEI	NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Jul 07, 2021	Fre	quency
PASS			PN0 IFGai	:Fast ↔ n:Low	Trig: Free #Atten: 3				TYI Di			
	Ref 25.	00 dBm	ì					Mkr1	1.780 0 -21.	00 GHz 65 dBm		Auto Tune
15.0	1 Pass											enter Free D00000 GH
5.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	a press of the other	magana	and a start and a start and a start as a start	and an an and a star						1.700	
												Start Fre
-5.00												
-15.0					(	1						<b>Stop Fre</b> 500000 G⊢
25.0	~~					and save	mon					05.04
35.0							\ 	Jarra Marana	~~\~_		7.( <u>Auto</u>	CF Ste 500000 MH Ma
45.0									- There	mann	F	req Offs
55.0												0 +
65.0											S	cale Typ
enter 1.78 Res BW 4		z		#)/B)4/	1.8 MHz			Swoon 4	Span 7	3.00 IVII 12	Log	L
	7 U KHZ			#VBW	1.0 19182			Sweep 1		1001 pts)		
								STATUS				

Plot 7-185. Upper Band Edge Plot (NR Band n66 - 30.0MHz - Full RB)



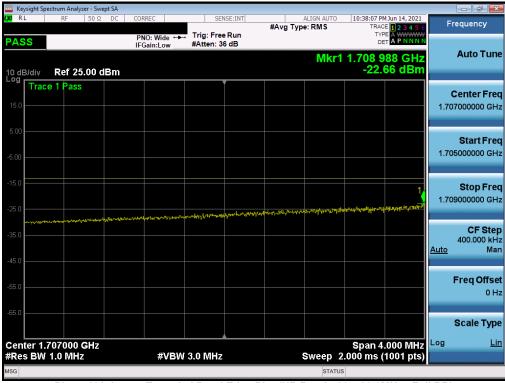
Plot 7-186. Upper Extended Band Edge Plot (NR Band n66 – 30.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 115 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 115 of 215
© 2021 PCTEST				V2 4/5/2021



🔤 Keysight Spect											
L <mark>XI</mark> RL	RF 5	0Ω DC	CORREC	SENSE		≴Avg Typ	ALIGN AUTO		1 Jun 14, 2021 E 1 2 3 4 5 6	Fre	quency
PASS			PNO: Fast ↔ IFGain:Low	Trig: Free F #Atten: 36 d	tun	, 18 i je		TYP DE			
	Ref 25.0	0 dBm					Mkr	1 1.709 -28.9	75 GHz 98 dBm		Auto Tune
15.0	1 Pass										enter Fred 000000 GH2
-5.00				ļ.	narra dan nar-a dire		hanna an	- marine and a second sec			Start Fred 000000 GHz
-15.0				1						1.735	Stop Fred 000000 GH:
-35.0			Muhanmand	www.mayorhin.highan					Munu	5. <u>Auto</u>	CF Step 000000 MH: Mar
55.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									F	r <b>eq Offse</b> 0 H
-65.0										s	Scale Type
Center 1.7′ #Res BW 2		2	#VBW	/ 820 kHz			Sweep 1	Span 5 .000 ms (	0.00 MHz 1001 pts)	Log	<u>Lir</u>
MSG							STATUS				

Plot 7-187. Lower Band Edge Plot (NR Band n66 - 20.0MHz - Full RB)



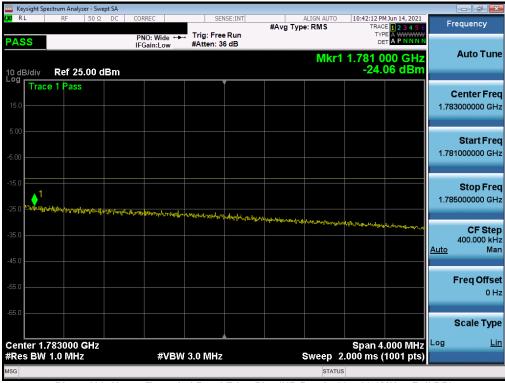
Plot 7-188. Lower Extended Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	Postest Provid to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 116 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 116 of 215
© 2021 PCTEST	•			V2 4/5/2021



	pectrum Analy											_	
X/RL	RF	50 Ω	DC	CORREC			INSE:INT	#Avg Ty	ALIGN AUTO	TRAC	M Jun 14, 2021	Fr	equency
PASS				PNO: I IFGain	Fast ↔ Low	Trig: Fre #Atten:				TYI Di			
10 dB/div	Ref 25	i.00 d	Bm						Mkr	1 1.780 -28.	05 GHz 79 dBm		Auto Tune
	ce 1 Pass						Ĭ						enter Free
15.0												1.780	000000 GH
5.00	~	way have	᠕ᠰᡣᡗᢇ	·v~~~~	an al an	America							Start Free
-5.00												1.75	5000000 GH
-15.0												4.000	Stop Free
-25.0							<b>↓</b> 1					1.80	5000000 GH
35.0	Monda						Language and a	2				5	CF Stej .000000 MH
45.0									-			<u>Auto</u>	Ма
-55.0										mm	Amouserwo	I	Freq Offse
.65.0													0 H
05.0													Scale Typ
	.78000 G / 240 kHz				#VBW	820 kH;	,		Sween_1	Span 5	0.00 MHz 1001 pts)	Log	<u>Lii</u>
ISG					<i></i> 0.514				STATUS		rect proj		

Plot 7-189. Upper Band Edge Plot (NR Band n66 - 20.0MHz - Full RB)



Plot 7-190. Upper Extended Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be part of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 117 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 117 of 215
© 2021 PCTEST	•			V2 4/5/2021



Keysight Spectrum A											
XIRL RF	50 Ω	DC COF	RREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		4 Jun 14, 2021 E 1 2 3 4 5 6	Fr	equency
PASS			NO: Wide ↔ Gain:Low	Trig: Free #Atten: 3		#/19 Jyp		TYF DE			
10 dB/div Ref	25.00 dB	m					Mkr1 1	.710 000 -30.4	0 0 GHz 47 dBm		Auto Tune
15.0 Trace 1 P	ass										Center Free
5.00						A	formente gazante.			1.69 [,]	Start Fre
25.0					í 1					1.728	<b>Stop Fre</b> 3750000 G⊢
45.0		_~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Jan	-mar wad					Munan	3 <u>Auto</u>	CF Ste .750000 MH Ma
55.0										ľ	F <b>req Offs</b> 0 H
65.0											Scale Typ
Center 1.7100			40/D14/	600 kU-				Span 3	7.50 MHz	Log	Li
Res BW 180	КПZ		#vBw	620 kHz					1001 pts)		
SG							STATUS	·			

Plot 7-191. Lower Band Edge Plot (NR Band n66 - 15.0MHz - Full RB)



Plot 7-192. Lower Extended Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	Post lo bo part of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 119 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 118 of 215
© 2021 PCTEST	•			V2 4/5/2021



Keysight Spectrum Analyzer - Swept SA					
X/RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	10:59:31 PM Jun 14, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide +++ IFGain:Low	Trig: Free Run #Atten: 36 dB		DET A P N N N N	
10 dB/div Ref 25.00 dBm			Mkr1 1	.780 037 5 GHz -28.54 dBm	Auto Tune
15.0					Center Fred 1.780000000 GH:
-5.00	940.00 ¹ 1111499999999999999999999999999999999				Start Fred 1.761250000 GH;
25.0		1			<b>Stop Fred</b> 1.798750000 GH:
-35.0		how			<b>CF Step</b> 3.750000 MH: <u>Auto</u> Mar
-55.0				man	Freq Offse 0 H:
-65.0					Scale Type
Center 1.78000 GHz #Res BW 180 kHz	#VBW 6	620 kHz	Sweep 1	Span 37.50 MHz .000 ms (1001 pts)	Log <u>Lir</u>
MSG			STATUS		

Plot 7-193. Upper Band Edge Plot (NR Band n66 - 15.0MHz - Full RB)



Plot 7-194. Upper Extended Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 110 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 119 of 215
© 2021 PCTEST				V2 4/5/2021



	ectrum Analy												
XI RL	RF	50 Ω	DC	CORREC		SEI	ISE:INT	#Avg Typ	ALIGN AUTO		MJun 14, 2021 CE 1 2 3 4 5 6	Fr	equency
PASS				PNO: W IFGain:	/ide ↔ ∟ow	Trig: Free #Atten: 3				TY			
10 dB/div	Ref 25	i.00 dl	Bm						Mkr1	1.709 9 -30.	975 GHz 97 dBm		Auto Tune
Log Trac	e 1 Pass											c	enter Fre
15.0												1.71	0000000 GH
5.00							مسمسر	mm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Start Fre
-5.00							<b>_</b>					1.69 [.]	7500000 GH
45.0													
15.0												1.72	Stop Fre 2500000 GH
25.0						(	í1						
35.0											man	2	CF Ste .500000 MH
45.0				^	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.						<u>Auto</u>	Ma
55.0 <b>~~~</b>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<b>v</b>									I	Freq Offs
													0 H
65.0													Scale Typ
Center 1.7	71000 G	Hz								Span 2	25.00 MHz	Log	Li
≮Res BW	120 kHz	z			#VBW	430 kHz			Sweep 1	.000 ms	(1001 pts)		
ISG									STATU	5			

Plot 7-195. Lower Band Edge Plot (NR Band n66 - 10.0MHz - Full RB)



Plot 7-196. Lower Extended Band Edge Plot (NR Band n66 – 10.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be part of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 120 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 120 of 215
© 2021 PCTEST	•			V2 4/5/2021



	pectrum Analy												
KI RL	RF	50 Ω [	DC 0	CORREC			SENSE:INT	#Avg Typ	ALIGN AUTO		1 Jun 14, 2021 E 1 2 3 4 5 6	Fre	equency
PASS				PNO: W IFGain:L	ide ↔ ow		Free Run n: 36 dB	#10g 1)		TYF DE			
0 dB/div	Ref 25	i.00 dB	m						Mkr1	1.780 0 -31.	00 GHz 37 dBm		Auto Tune
.og Trac	e 1 Pass						Ĭ					C	enter Fred
15.0													000000 GH
5.00													
5.00	m	~~~~~		nn	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\neg$						Start Free
5.00												1.767	500000 GH:
15.0													
												1.792	Stop Free
25.0							- <mark>₩</mark> 1						
35.0													CF Step 500000 MH
~~~~~	~~						man and a second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~			Auto 2	.500000 MH Mai
45.0										· ·····	m		
55.0												F	F req Offse 0 Ht
													U H
-65.0												5	Scale Type
Center 1.	78000-0	Hz								Snan 2	5.00 MHz	Log	Lir
Res BW				#	VBW	430 k	Hz		Sweep 1	.000 m <u>s (</u>	1001 pt <u>s)</u>		
ISG									STATUS				

Plot 7-197. Upper Band Edge Plot (NR Band n66 - 10.0MHz - Full RB)



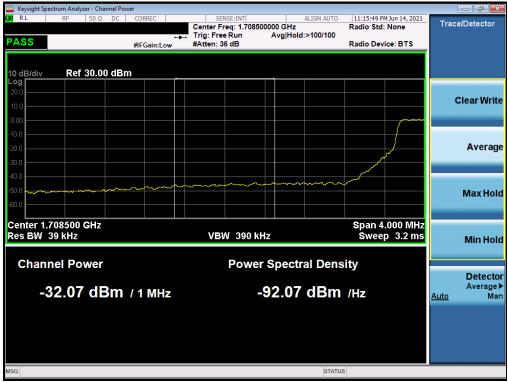
Plot 7-198. Upper Extended Band Edge Plot (NR Band n66 – 10.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 101 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 121 of 215
© 2021 PCTEST				V2 4/5/2021



🚾 Keysight Spectrum Analyzer - Swept SA					
X/RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	11:14:31 PM Jun 14, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB			
10 dB/div Ref 25.00 dBm			Mkr1 1	.709 987 5 GHz -26.74 dBm	Auto Tune
15.0 Trace 1 Pass					Center Fred 1.710000000 GHz
-5.00					Start Fred 1.703750000 GH;
-15.0					Stop Fred 1.716250000 GH:
-35.0					CF Step 1.250000 MH: Auto Mar
55.0					Freq Offse 0 H
-65.0					Scale Type
Center 1.710000 GHz #Res BW 62 kHz	#VBW	220 kHz	Swe <u>ep 1</u>	Span 12.50 MHz .400 ms (1001 pts)	Log <u>Lir</u>
MSG			STATUS		

Plot 7-199. Lower Band Edge Plot (NR Band n66 - 5.0MHz - Full RB)



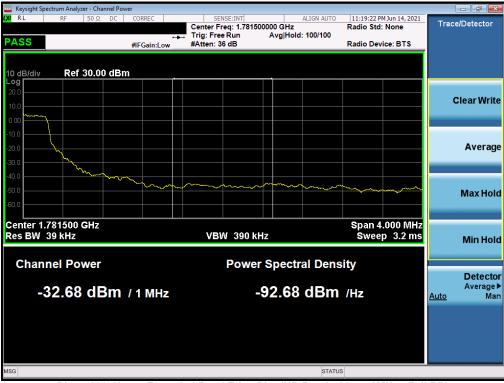
Plot 7-200. Lower Extended Band Edge Plot (NR Band n66 – 5.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995		PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 122 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 122 of 215	
© 2021 PCTEST	•			V2 4/5/2021	



	ctrum Analyzer							
LXI RL	RF !	50Ω DC	CORREC	SENSE:IN	T #Avg Ty	ALIGN AUTO	11:17:55 PM Jun 14, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS			PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB			DET A WWWWW	
10 dB/div Log	Ref 25.0	10 dBm				Mkr1 1	.780 012 5 GHz -29.29 dBm	Auto Tune
15.0	1 Pass							Center Freq 1.780000000 GHz
-5.00			v					Start Fred 1.773750000 GHz
-15.0				1				Stop Fred 1.786250000 GHz
-35.0	~				Marine A	Arr m	- Martin	CF Step 1.250000 MH: <u>Auto</u> Mar
-55.0								Freq Offse 0 H:
-65.0								Scale Type
Center 1.7		Hz					Span 12.50 MHz	Log <u>Lir</u>
#Res BW (62 kHz		#VBW	220 kHz		Sweep 1	.400 ms (1001 pts)	
MSG						STATUS		

Plot 7-201. Upper Band Edge Plot (NR Band n66 - 5.0MHz - Full RB)



Plot 7-202. Upper Extended Band Edge Plot (NR Band n66 – 5.0MHz - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Demo 102 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 123 of 215
© 2021 PCTEST	•	•		V2 4/5/2021



7.6 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 5.7.1

Test Settings

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW ≥ OBW or specified reference bandwidth
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-5. Test Instrument & Measurement Setup

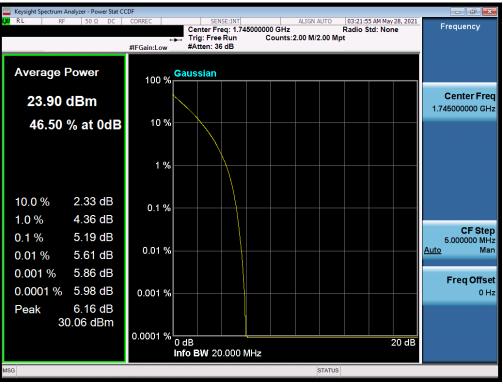
Test Notes

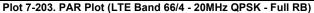
None.

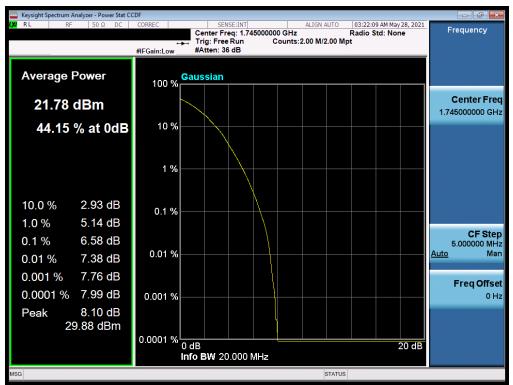
FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 124 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 124 of 215
© 2021 PCTEST				V2 4/5/2021



LTE Band 66/4



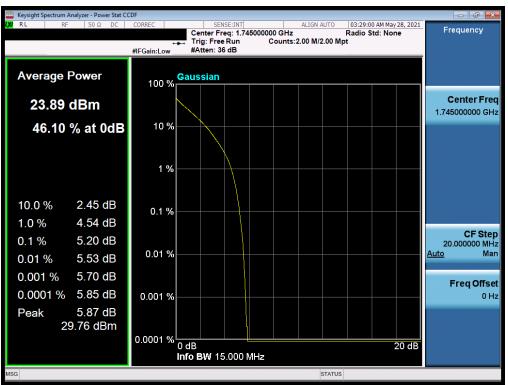




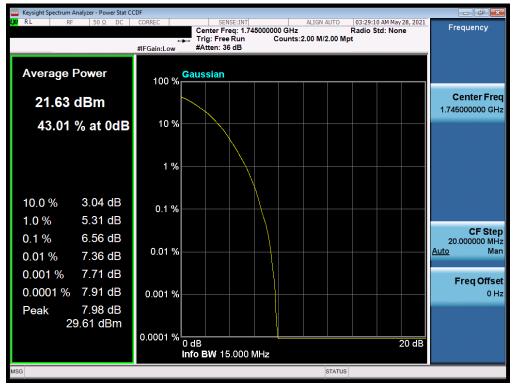
Plot 7-204. PAR Plot (LTE Band 66/4 - 20MHz 64-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 125 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 125 of 215	
© 2021 PCTEST	•			V2 4/5/2021	





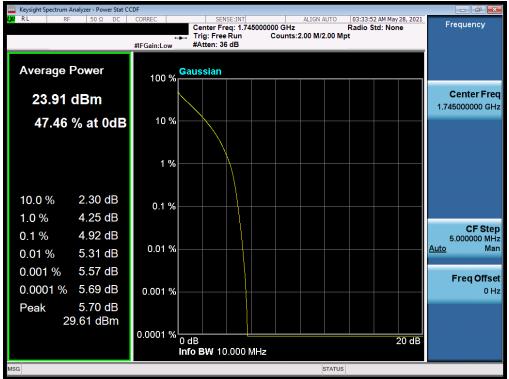
Plot 7-205. PAR Plot (LTE Band 66/4 - 15MHz QPSK - Full RB)

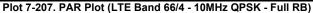


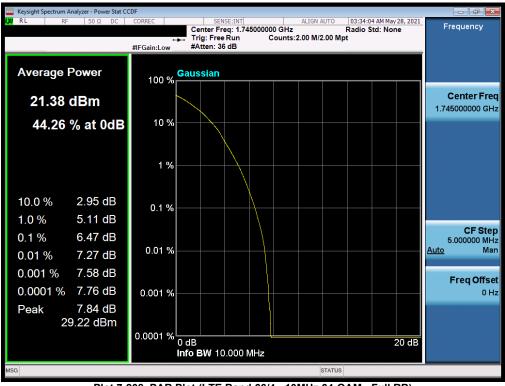
Plot 7-206. PAR Plot (LTE Band 66/4 - 15MHz 64-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 106 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 126 of 215
© 2021 PCTEST				V2 4/5/2021





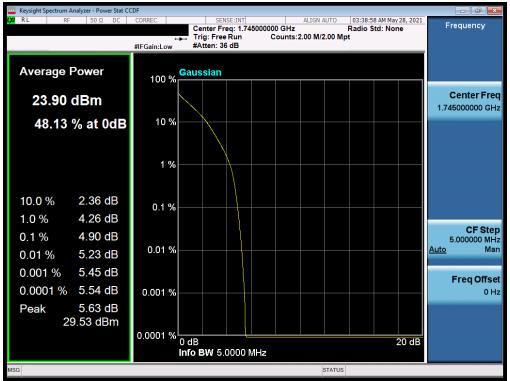




Plot 7-208. PAR Plot (LTE Band 66/4 - 10MHz 64-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 107 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 127 of 215
© 2021 PCTEST		•		V2 4/5/2021





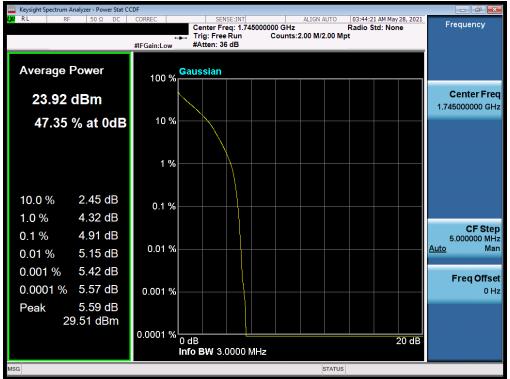


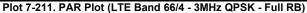


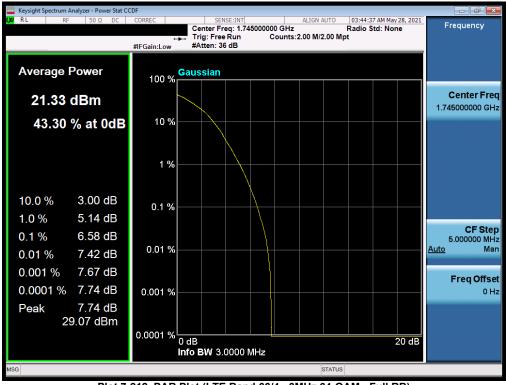
Plot 7-210. PAR Plot (LTE Band 66/4 - 5MHz 64-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995		PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Demo 129 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 128 of 215	
© 2021 PCTEST	•	•		V2 4/5/2021	





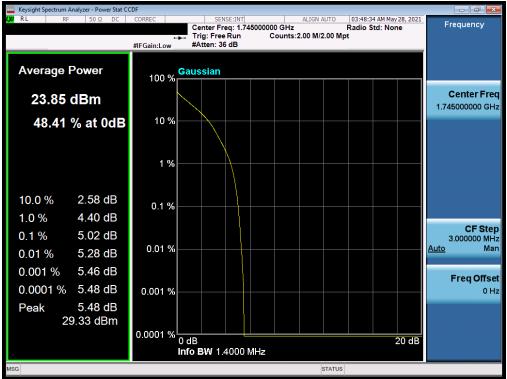


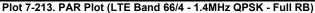


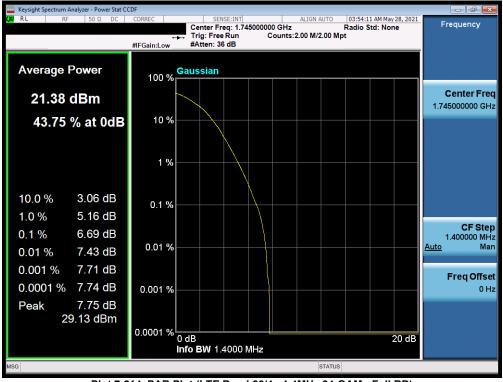
Plot 7-212. PAR Plot (LTE Band 66/4 - 3MHz 64-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 af 045
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 129 of 215
© 2021 PCTEST				V2 4/5/2021







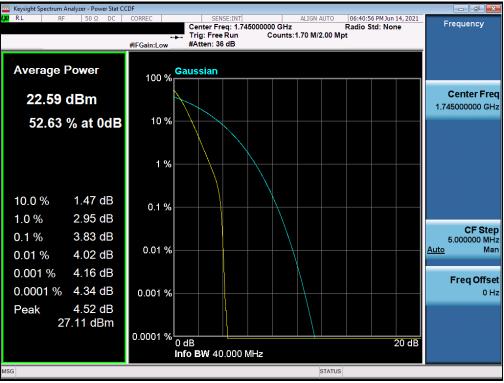


Plot 7-214. PAR Plot (LTE Band 66/4 - 1.4MHz 64-QAM - Full RB)

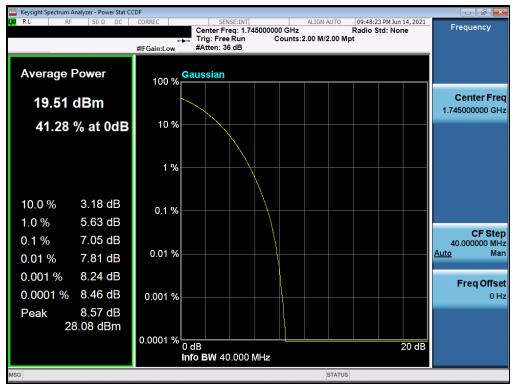
FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pred of @relement	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 130 of 215	
1M2105200048-04-R1.C3K	C3K 05/25/2021 - 08/18/2021 Portable Handset				
© 2021 PCTEST				V2 4/5/2021	



NR Band n66



Plot 7-215. PAR Plot (NR Band n66 - 40.0MHz DFT-s-OFDM BPSK - Full RB)

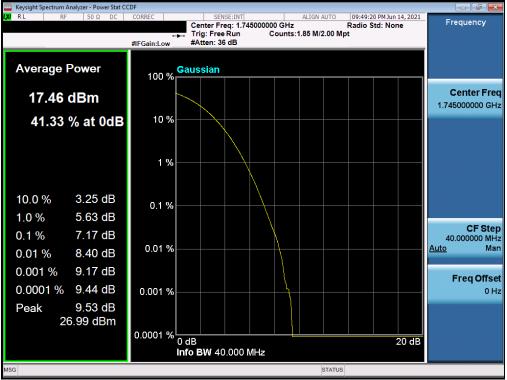


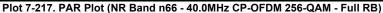
Plot 7-216. PAR Plot (NR Band n66 - 40.0MHz CP-OFDM QPSK - Full RB)

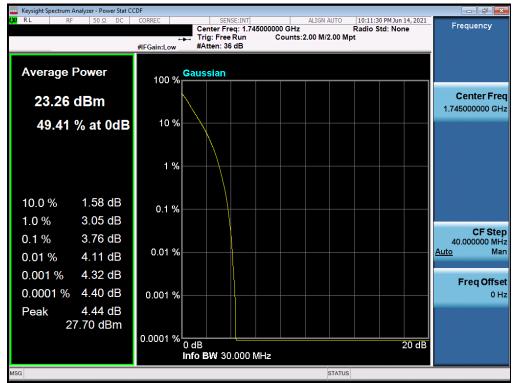
FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 121 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 131 of 215	
© 2021 PCTEST		•		V2 4/5/2021

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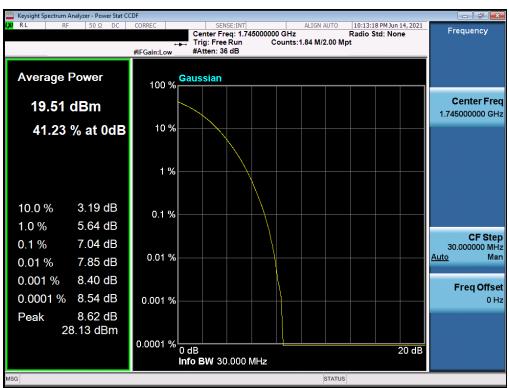




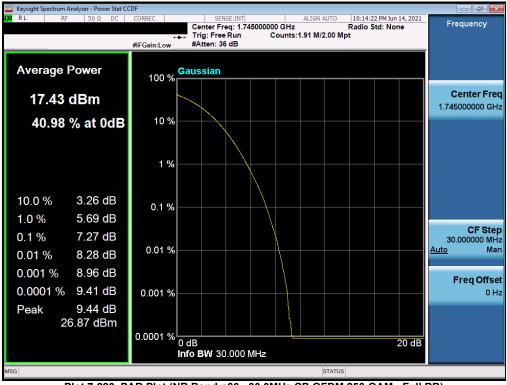
Plot 7-218. PAR Plot (NR Band n66 - 30.0MHz DFT-s-OFDM BPSK - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 of 045	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 132 of 215		
© 2021 PCTEST				V2 4/5/2021	









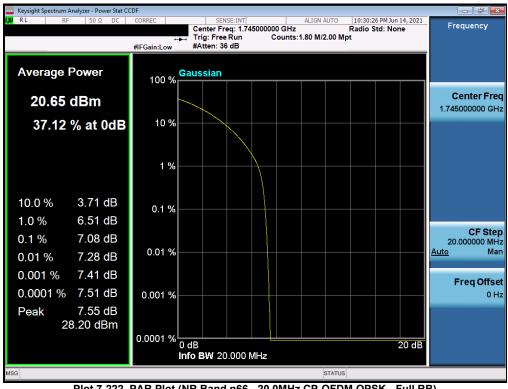
Plot 7-220. PAR Plot (NR Band n66 - 30.0MHz CP-OFDM 256-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 122 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 133 of 215	
© 2021 PCTEST				V2 4/5/2021	





Plot 7-221. PAR Plot (NR Band n66 - 20.0MHz DFT-s-OFDM BPSK - Full RB)



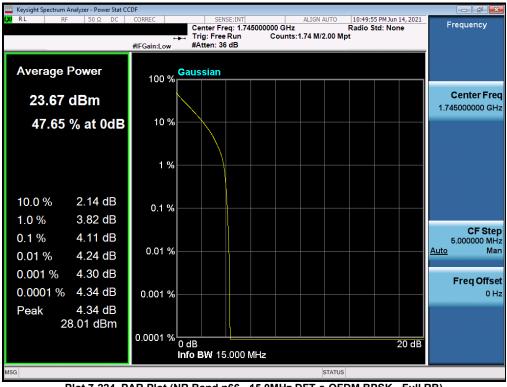
Plot 7-222. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM QPSK - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 124 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 134 of 215	
© 2021 PCTEST		•		V2 4/5/2021





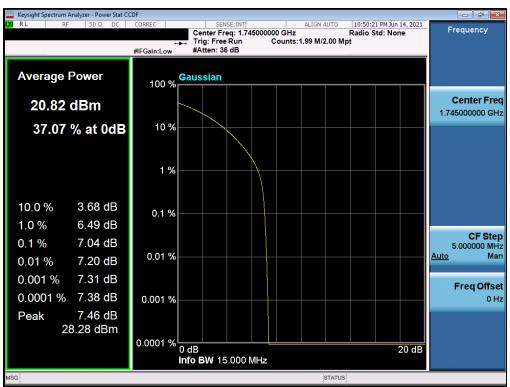
Plot 7-223. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM 256-QAM - Full RB)



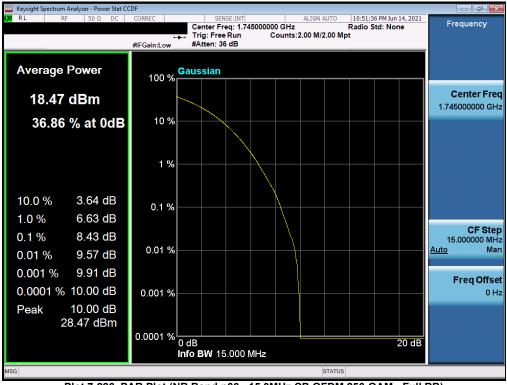
Plot 7-224. PAR Plot (NR Band n66 - 15.0MHz DFT-s-OFDM BPSK - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 135 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	/18/2021 Portable Handset			
© 2021 PCTEST		•		V2 4/5/2021	









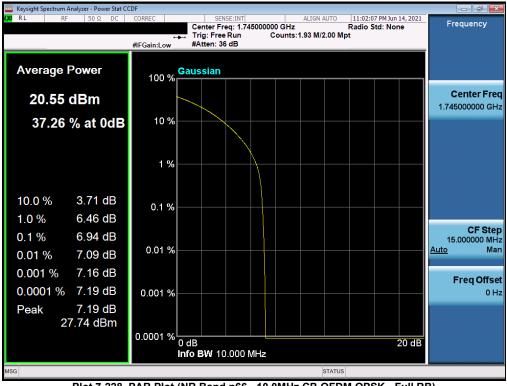
Plot 7-226. PAR Plot (NR Band n66 - 15.0MHz CP-OFDM 256-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	Potest Contest	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 136 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	08/18/2021 Portable Handset			
© 2021 PCTEST				V2 4/5/2021	





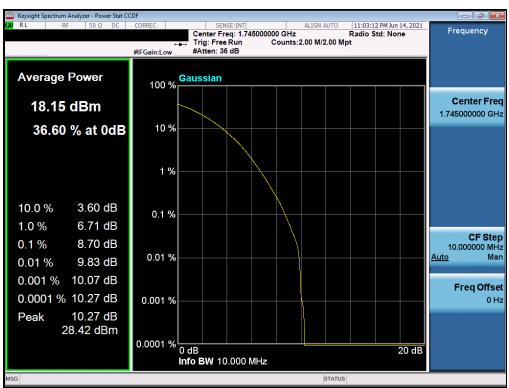


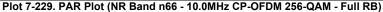


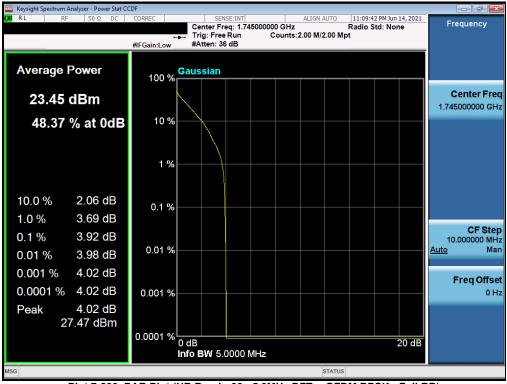
Plot 7-228. PAR Plot (NR Band n66 - 10.0MHz CP-OFDM QPSK - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 127 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 137 of 215	
© 2021 PCTEST				V2 4/5/2021





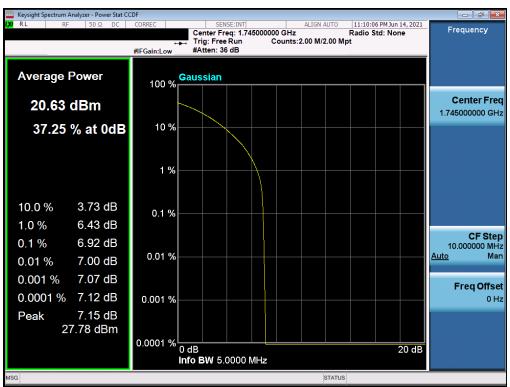


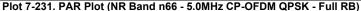


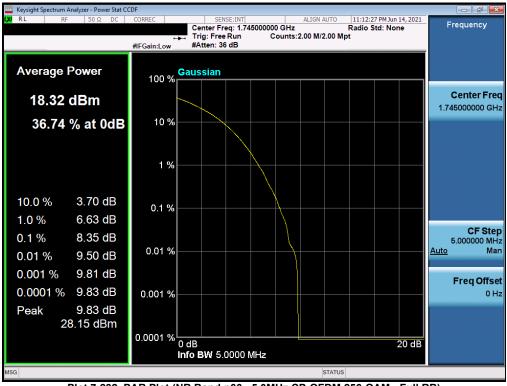
Plot 7-230. PAR Plot (NR Band n66 - 5.0MHz DFT-s-OFDM BPSK - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 af 045
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Page 138 of 215		
© 2021 PCTEST				V2 4/5/2021









Plot 7-232. PAR Plot (NR Band n66 - 5.0MHz CP-OFDM 256-QAM - Full RB)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 120 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 139 of 215	
© 2021 PCTEST				V2 4/5/2021



7.7 Uplink Carrier Aggregation Radiated Measurements

Test Overview

The EUT is set up to transmit two contiguous LTE channels. Conducted power and spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device. The worst case (highest) powers were found while operating with QPSK modulation with both carriers set to transmit using 1RB.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-6. Test Instrument & Measurement Setup

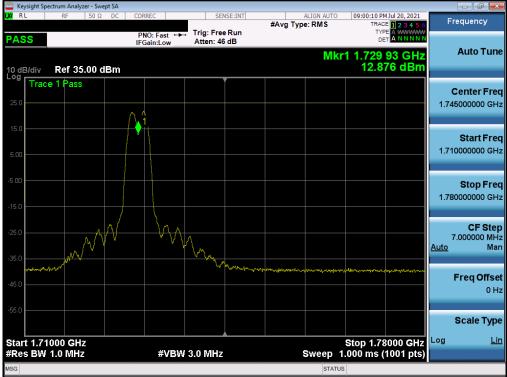
Power	Power Bandwidth		PCC			scc				ULCA TX.					
State	Band (PCC + SCC)	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Power [dBm]			
		QPSK		132072	1720.0	1	99		132270	1739.8	1	0	24.02		
			QPSK	132322	1745.0	1	99	QPSK	132520	1764.8	1	0	24.37		
Mox	Max LTE B66 20MHz + 20MHz	LTE B66 20MHz			132572	1770.0	1	0	1	132374	1750.2	1	99	24.28	
IVIAX						QPSK	132322	1745	100	0	QPSK	132520	1764.8	100	0
		16-QAM	132322	1745	100	0	16-QAM	132520	1764.8	100	0	22.89			
			64-QAM	132322	1745	100	0	64-QAM	132520	1764.8	100	0	21.98		

Table 7-4. Conducted Powers (Uplink CA LTE Band 66B/C)

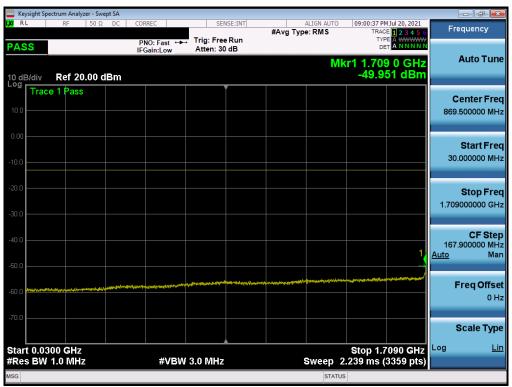
FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be part of @ eliment	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 140 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 140 of 215	
© 2021 PCTEST				V2 4/5/2021



Uplink CA LTE Band 66B/C



Plot 7-233. Conducted Spurious Plot (ULCA LTE Band 66 Low Channel)



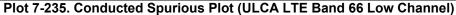
Plot 7-234. Conducted Spurious Plot (ULCA LTE Band 66 Low Channel)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 141 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 141 of 215
© 2021 PCTEST	•	•		V2 4/5/2021

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Keysight Spectrum Analyzer - Swept SA			
XI RL RF 50Ω DC	PNO: Fast +++ Trig: Free Run	ALIGN AUTO 09:00:59 PM Jul 20, 202: #Avg Type: RMS TRACE 1 2 3 4 9 TYPE A	6 Frequency
10 dB/div Ref 20.00 dBm	IFGain:Low Atten: 30 dB	^{Бет} А́№№№ Мkr1 9.786 5 GH -45.713 dBr	Z Auto Tune
10.0 Trace 1 Pass			Center Free 5.890000000 GH
.0.00			Start Fre 1.780000000 GH
-20.0			Stop Fre 10.000000000 GH
-40.0			CF Ste 822.000000 M⊢ <u>Auto</u> Ma
.60.0			Freq Offse 0 ⊢
-70.0			Scale Typ
Start 1.780 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Stop 10.000 GH Sweep 14.25 ms (16441 pt	z ^{Log <u>Li</u> s)}
ASG		STATUS	





Plot 7-236. Conducted Spurious Plot (ULCA LTE Band 66 Low Channel)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 142 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 142 of 215
© 2021 PCTEST				V/2 4/5/2021



Keysight Spectrum Ana R L RF	llyzer - Swept SA 50 Ω DC	CORREC	SENSE:INT	ALIGN AUTO	09:02:36 PM Jul 20, 2021	
ASS		PNO: Fast +++	Trig: Free Run Atten: 46 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Frequency
dB/div Ref 3	5.00 dBm			Mki	1 1.755 00 GHz 12.893 dBm	Auto Tur
5.0 Trace 1 Pas	S					Center Fre 1.745000000 GH
.00						Start Fr 1.710000000 GI
5.0						Stop Fr 1.780000000 G
5.0			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			CF Sto 7.000000 M <u>Auto</u> M
5.0	9482444474747497484998	an a	and the second second		al Placement and a second second	Freq Offs 0
5.0						Scale Ty
tart 1.71000 Gi Res BW 1.0 Mi		#VBW	3.0 MHz	Sweep 1	Stop 1.78000 GHz I.000 ms (1001 pts)	Log <u>l</u>

Plot 7-237. Conducted Spurious Plot (ULCA LTE Band 66 Mid Channel)



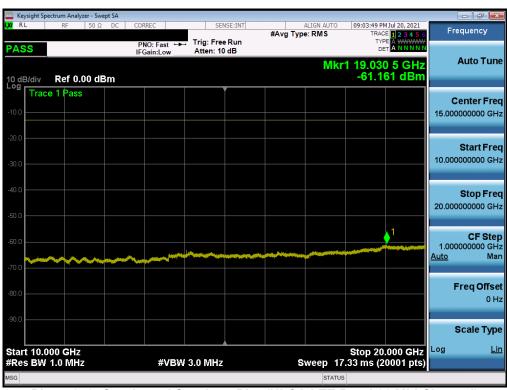
Plot 7-238. Conducted Spurious Plot (ULCA LTE Band 66 Mid Channel)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @ element			Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 142 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 143 of 215
© 2021 PCTEST				V2 4/5/2021



🔤 Keysight Spectrum Analy						
LXI R L RF	50 Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	09:03:11 PM Jul 20, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS		PNO: Fast +++	Trig: Free Run Atten: 30 dB	• •		
10 dB/div Ref 20).00 dBm			MI	(r1 9.780 5 GHz -46.038 dBm	Auto Tune
10.0 Trace 1 Pass						Center Fred 5.89000000 GHz
-10.0						Start Fred 1.780000000 GH;
-20.0						Stop Fred 10.000000000 GHz
-40.0		~~~~				CF Step 822.000000 MH: <u>Auto</u> Mar
-60.0						Freq Offse 0 H:
-70.0						Scale Type
Start 1.780 GHz #Res BW 1.0 MH	2	#VBW	3.0 MHz	Sweep 14	Stop 10.000 GHz I.25 ms (16441 pts)	Log <u>Lir</u>
MSG				STATU	5	

Plot 7-239. Conducted Spurious Plot (ULCA LTE Band 66 Mid Channel)



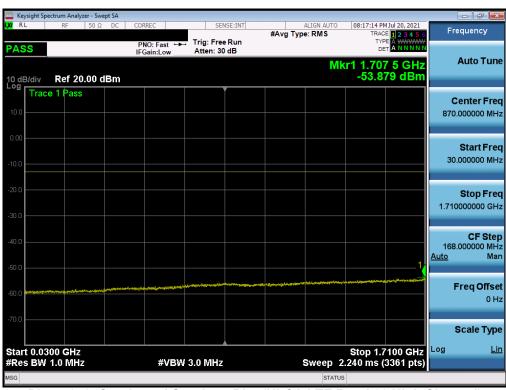
Plot 7-240. Conducted Spurious Plot (ULCA LTE Band 66 Mid Channel)

FCC ID: C3K1995 IC: 3048A-1995				Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 144 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 144 of 215
© 2021 PCTEST	•			V2 4/5/2021



🔤 Keysight Spe														
X/RL	RF	50 Ω	DC	CORREC			NSE:INT	#Avg Ty	ALIGN .		TRA	M Jul 20, 2021	F	requency
PASS				PNO: Fa	ast ↔	Trig: Free Atten: 46					TY D	PE A WWWWW ET A N N N N N		
				I Guille						Mkr	1 1.760	00 GHz		Auto Tune
10 dB/div Log	Ref 35	.00 dl	Bm								13.1	89 dBm		
Trace	e 1 Pass													Center Freq
25.0														5000000 GHz
									∆ î					
15.0									11					Start Freq
5.00													1.71	0000000 GHz
-5.00														Stop Freq
-15.0													1.78	0000000 GHz
10.0														
-25.0								A AL		-N				CF Step 7.000000 MHz
								\mathcal{N}			M.		<u>Auto</u>	Man
-35.0	-			a harring and the	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	زمېرونو موانور يو ا	-					mon		
45.0														Freq Offset 0 Hz
														U Hz
-55.0														Scale Type
Start 1.71 #Res BW	000 GH2	Z		4	//D1//	3.0 MHz			Swo	on 4	Stop 1.7	8000 GHz (1001 pts)	Log	Lin
ISG				#		J.V WINZ				STATUS		(Toor pis)		

Plot 7-241. Conducted Spurious Plot (ULCA LTE Band 66 High Channel)



Plot 7-242. Conducted Spurious Plot (ULCA LTE Band 66 High Channel)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 145 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 145 of 215
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🔤 Keysight Spectrum Analyzer - Swept S					
L <mark>X/</mark> RL RF 50ΩD	C CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	08:17:35 PM Jul 20, 2021 TRACE 1 2 3 4 5 6	Frequency
PASS	PNO: Fast ↔ IFGain:Low	Trig: Free Run Atten: 30 dB		TYPE A WWWW DET A NNNNN	
10 dB/div Ref 20.00 dBr	m		Mł	r1 9.771 5 GHz -45.977 dBm	Auto Tune
10.0					Center Freq 5.890500000 GHz
-10.0					Start Freq 1.781000000 GHz
-20.0					Stop Freq 10.000000000 GHz
-40.0	~~~~			¹	CF Step 821.900000 MHz <u>Auto</u> Mar
-60.0					Freq Offset 0 Hz
-70.0					Scale Type
Start 1.781 GHz #Res BW 1.0 MHz	#VBW :	3.0 MHz	Sweep 14	Stop 10.000 GHz .25 ms (16441 pts)	Log <u>Lin</u>
MSG			STATUS	6	

Plot 7-243. Conducted Spurious Plot (ULCA LTE Band 66 High Channel)



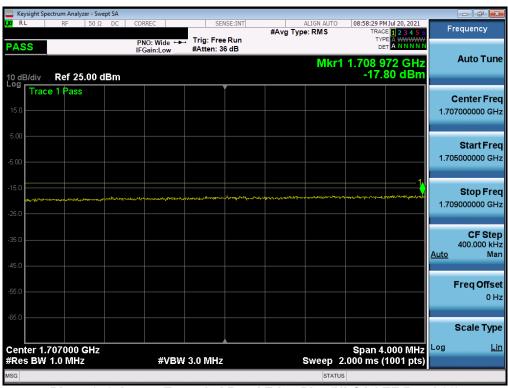
Plot 7-244. Conducted Spurious Plot (ULCA LTE Band 66 High Channel)

FCC ID: C3K1995 IC: 3048A-1995		PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Demo 146 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 146 of 215
© 2021 PCTEST	•			V2 4/5/2021



	ctrum Analyzer -										
LXI RL	RF 50	Ω DC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		M Jul 20, 2021	Fr	equency
PASS			PNO: Fast	Trig: Free #Atten: 36				TYI Di			
10 dB/div Log	Ref 25.00) dBm					Mk	(r1 1.70) -21.	8 4 GHz 65 dBm		Auto Tune
15.0 Trace	e 1 Pass										Center Freq 0000000 GHz
-5.00					per	and the state of t		Jana and Coloradore		1.66	Start Freq 0000000 GHz
-15.0			للمميانير	water market	 		и.		the book of the good	1.76	Stop Freq
-35.0			and a second sec							10 <u>Auto</u>	CF Step 0.000000 MHz Mar
-33.0	mudmentadian	N. Com M. C. C.									F req Offse l 0 Hz
-65.0											Scale Type
Center 1.7 #Res BW 3			#VBW	1.2 MHz			Sweep 1	Span 1 .000 ms (00.0 MHz 1001 pts)	Log	Lin
MSG							STATUS				

Plot 7-245. Lower Band Edge Plot (ULCA LTE Band 66)



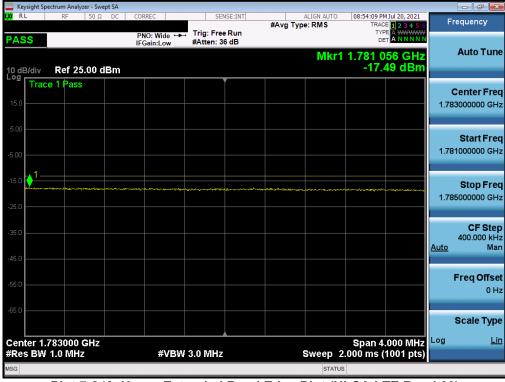
Plot 7-246. Lower Extended Band Edge Plot (ULCA LTE Band 66)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Pexal to be paid of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 147 of 015
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 147 of 215
© 2021 PCTEST		•		V2 4/5/2021



	ectrum Analyze										, ,
LXI RL	RF	50 Ω DC	CORREC	SE	NSE:INT	#Avg Typ	ALIGN AUTO		M Jul 20, 2021 E 1 2 3 4 5 6	Frequ	uency
PASS			PNO: Fast IFGain:Low	Trig: Fre #Atten: 3				TYI Di			
10 dB/div Log	Ref 25.	00 dBm					Mk	(r1 1.78 -21.	0 2 GHz 52 dBm	AL	uto Tune
15.0 Trac	e 1 Pass										n ter Freq 0000 GHz
-5.00	, ingen	2000 AND		had the second lar							tart Freq 0000 GHz
-15.0 -25.0	wood		¥		1	Marriage Marriage					top Freq 0000 GHz
-35.0							and have been a	N.			CF Step 0000 MHz Man
-55.0								WWWWWW	Hungapater Lynders	Fre	e q Offset 0 Hz
-65.0										Sc	ale Type
Center 1. #Res BW		İz	#VE	SW 1.2 MHz			Sweep 1	Span 1 .000 ms (00.0 MHz (1001 pts)	Log	<u>Lin</u>
MSG							STATUS				

Plot 7-247. Upper Band Edge Plot (ULCA LTE Band 66)



Plot 7-248. Upper Extended Band Edge Plot (ULCA LTE Band 66)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be part of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 149 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 148 of 215
© 2021 PCTEST	•			V2 4/5/2021



7.8 Radiated Power (ERP/EIRP)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 - Section 5.2.1

ANSI/TIA-603-E-2016 - Section 2.2.17

Test Settings

- 1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
- 2. RBW = 1 5% of the expected OBW, not to exceed 1MHz
- 3. VBW \geq 3 x RBW
- 4. Span = 1.5 times the OBW
- 5. No. of sweep points \geq 2 x span / RBW
- 6. Detector = RMS
- 7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
- 8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
- 9. Trace mode = trace averaging (RMS) over 100 sweeps
- 10. The trace was allowed to stabilize

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 140 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 149 of 215
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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

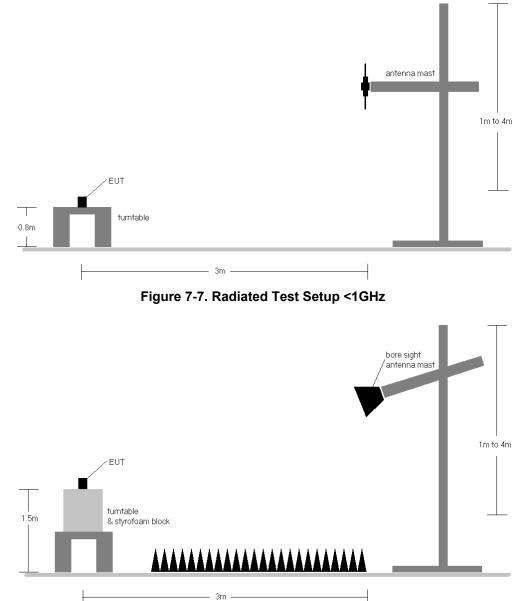


Figure 7-8. Radiated Test Setup >1GHz

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proud to be peat of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 150 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 150 of 215
© 2021 PCTEST	•	•		V2 4/5/2021



Test Notes

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.
- 4) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Provid to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 151 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 151 of 215
© 2021 PCTEST		•		V2 4/5/2021



Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
N		673.0	Н	159	70	2.99	1 / 50	18.65	21.64	0.146	36.99	-15.35	19.49	0.089	34.77	-15.28
MHz	QPSK	680.5	Н	135	74	3.09	1 / 99	19.08	22.17	0.165	36.99	-14.82	20.02	0.100	34.77	-14.76
20 M		688.0	Н	140	76	3.08	1 / 50	19.34	22.42	0.175	36.99	-14.57	20.27	0.106	34.77	-14.50
2	16-QAM	688.0	Н	140	76	3.08	1 / 50	18.57	21.65	0.146	36.99	-15.34	19.50	0.089	34.77	-15.27
N		670.5	Н	159	70	2.96	1/0	18.65	21.61	0.145	36.99	-15.38	19.46	0.088	34.77	-15.32
MHz	QPSK	680.5	Н	135	74	3.09	1/0	18.67	21.76	0.150	36.99	-15.23	19.61	0.091	34.77	-15.16
5		690.5	Н	140	76	3.11	1 / 37	19.17	22.28	0.169	36.99	-14.71	20.13	0.103	34.77	-14.64
~	16-QAM	680.5	Н	135	74	3.09	1/0	18.55	21.63	0.146	36.99	-15.36	19.48	0.089	34.77	-15.29
N		668.0	Н	159	70	2.92	1/0	18.79	21.71	0.148	36.99	-15.28	19.56	0.090	34.77	-15.21
MHz	QPSK	680.5	Н	135	74	3.09	1 / 25	18.74	21.83	0.152	36.99	-15.16	19.68	0.093	34.77	-15.10
101		693.0	Н	140	76	3.14	1 / 49	19.30	22.45	0.176	36.99	-14.54	20.30	0.107	34.77	-14.48
-	16-QAM	693.0	Н	140	76	3.14	1 / 49	18.33	21.47	0.140	36.99	-15.52	19.32	0.085	34.77	-15.45
N		665.5	Н	159	70	2.94	1/0	18.73	21.67	0.147	36.99	-15.32	19.52	0.090	34.77	-15.25
MHz	QPSK	680.5	Н	135	74	3.09	1/0	18.93	22.01	0.159	36.99	-14.98	19.86	0.097	34.77	-14.91
2 2		695.5	Н	140	76	3.18	1/0	19.25	22.42	0.175	36.99	-14.57	20.27	0.106	34.77	-14.50
	16-QAM	695.5	Н	140	76	3.18	1/0	18.75	21.92	0.156	36.99	-15.07	19.77	0.095	34.77	-15.00
20 MHz	QPSK(Opposite Pol.)	688.0	V	106	86	3.08	1/99	17.65	20.73	0.118	36.99	-16.26	18.58	0.072	34.77	-16.19
20 10112	QPSK(Half)	688.0	Н	145	79	3.08	1/50	17.86	20.94	0.124	36.99	-16.05	18.79	0.076	34.77	-15.98

Table 7-5. ERP Data (LTE Band 71 – North - Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
N		673.0	Н	137	116	2.99	1 / 99	18.50	21.49	0.141	36.99	-15.50	19.34	0.086	34.77	-15.43
MHz	QPSK	680.5	Н	135	111	3.09	1 / 99	18.62	21.71	0.148	36.99	-15.28	19.56	0.090	34.77	-15.22
20 1		688.0	Н	147	112	3.08	1 / 50	19.19	22.27	0.169	36.99	-14.72	20.12	0.103	34.77	-14.65
2	16-QAM	688.0	Н	147	112	3.08	1 / 99	18.41	21.49	0.141	36.99	-15.50	19.34	0.086	34.77	-15.43
N		670.5	Н	137	116	2.96	1 / 37	18.49	21.45	0.139	36.99	-15.54	19.30	0.085	34.77	-15.48
MHz	QPSK	680.5	Н	135	111	3.09	1/0	18.50	21.59	0.144	36.99	-15.40	19.44	0.088	34.77	-15.34
S		690.5	Н	147	112	3.11	1 / 74	19.20	22.31	0.170	36.99	-14.68	20.16	0.104	34.77	-14.61
-	16-QAM	690.5	Н	147	112	3.11	1/0	18.19	21.30	0.135	36.99	-15.69	19.15	0.082	34.77	-15.62
N		668.0	Н	137	116	2.92	1 / 25	18.65	21.57	0.144	36.99	-15.42	19.42	0.088	34.77	-15.35
MHz	QPSK	680.5	Н	135	111	3.09	1/0	18.38	21.47	0.140	36.99	-15.52	19.32	0.085	34.77	-15.45
101		693.0	Н	147	112	3.14	1 / 49	19.14	22.29	0.169	36.99	-14.70	20.14	0.103	34.77	-14.63
~	16-QAM	693.0	Н	147	112	3.14	1 / 25	18.02	21.16	0.131	36.99	-15.83	19.01	0.080	34.77	-15.76
N		665.5	Н	137	116	2.94	1/0	18.55	21.49	0.141	36.99	-15.50	19.34	0.086	34.77	-15.43
MHz	QPSK	680.5	Н	135	111	3.09	1/0	18.59	21.68	0.147	36.99	-15.31	19.53	0.090	34.77	-15.24
2 2		695.5	Н	147	112	3.18	1 / 24	19.15	22.32	0.171	36.99	-14.66	20.17	0.104	34.77	-14.60
	16-QAM	695.5	Н	147	112	3.18	1/0	18.26	21.44	0.139	36.99	-15.55	19.29	0.085	34.77	-15.49
20 MHz	QPSK(Opposite Pol.)	688.0	V	100	29	3.08	1/50	17.28	20.36	0.109	36.99	-16.63	18.21	0.066	34.77	-16.56
20-10112	QPSK(Half)	688.0	Н	131	108	3.08	1/0	17.36	20.44	0.111	36.99	-16.55	18.29	0.067	34.77	-16.48

Table 7-6. ERP Data (LTE Band 71 – South - Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
N		704.0	Н	140	116	3.48	1/0	17.98	21.46	0.140	36.99	-15.53	19.31	0.085	34.77	-15.46
MHz	QPSK	707.5	Н	126	104	3.52	1 / 25	18.15	21.67	0.147	36.99	-15.32	19.52	0.090	34.77	-15.25
101		711.0	Н	129	110	3.57	1 / 25	17.52	21.09	0.128	36.99	-15.90	18.94	0.078	34.77	-15.83
-	16-QAM	707.5	Н	126	104	3.52	1 / 25	17.54	21.06	0.128	36.99	-15.93	18.91	0.078	34.77	-15.86
N		701.5	Н	140	116	3.45	1 / 12	18.19	21.64	0.146	36.99	-15.35	19.49	0.089	34.77	-15.28
MHz	QPSK	707.5	Н	126	104	3.52	1/0	18.25	21.77	0.150	36.99	-15.22	19.62	0.092	34.77	-15.15
2 2		713.5	Н	129	110	3.70	1/0	17.34	21.03	0.127	36.99	-15.96	18.88	0.077	34.77	-15.89
	16-QAM	707.5	Н	126	104	3.52	1 / 12	17.60	21.12	0.129	36.99	-15.87	18.97	0.079	34.77	-15.80
N		700.5	Н	140	116	3.39	1 / 14	18.19	21.58	0.144	36.99	-15.41	19.43	0.088	34.77	-15.34
MHz	QPSK	707.5	Н	126	104	3.52	1/0	18.30	21.83	0.152	36.99	-15.16	19.68	0.093	34.77	-15.10
3 4		714.5	Н	129	110	3.71	1/0	17.37	21.08	0.128	36.99	-15.91	18.93	0.078	34.77	-15.84
	16-QAM	707.5	Н	126	104	3.52	1 / 14	17.44	20.96	0.125	36.99	-16.03	18.81	0.076	34.77	-15.96
Z		699.7	Н	140	116	3.33	1/3	17.89	21.22	0.132	36.99	-15.77	19.07	0.081	34.77	-15.71
MHz	QPSK	707.5	Н	126	104	3.52	1/3	18.03	21.55	0.143	36.99	-15.44	19.40	0.087	34.77	-15.37
4		715.3	Н	129	110	3.72	1/5	17.02	20.74	0.119	36.99	-16.25	18.59	0.072	34.77	-16.18
<u>.</u>	16-QAM	699.7	Н	140	116	3.33	1/5	17.50	20.83	0.121	36.99	-16.16	18.68	0.074	34.77	-16.09
10 MHz	QPSK(Opposite Pol.)	707.5	V	100	151	3.62	1/0	16.43	20.05	0.101	36.99	-16.94	17.90	0.062	34.77	-16.87
TO WINZ	QPSK(Half)	707.5	Н	132	112	3.52	1 / 49	17.20	20.72	0.118	36.99	-16.27	18.57	0.072	34.77	-16.20
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Table 7-7. ERP Data (LTE Band 12 – North - Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be part of @riterand	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 152 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Fage 152 01 215
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		[MHz]	Ant. Pol. [H/V]	Height [cm]	Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
N		704.0	Н	159	112	3.48	1 / 25	17.76	21.24	0.133	36.99	-15.75	19.09	0.081	34.77	-15.68
MHz	QPSK	707.5	Н	127	101	3.52	1 / 25	17.93	21.45	0.140	36.99	-15.54	19.30	0.085	34.77	-15.47
10		711.0	Н	134	107	3.57	1 / 25	17.01	20.58	0.114	36.99	-16.41	18.43	0.070	34.77	-16.34
-	16-QAM	707.5	Н	127	101	3.52	1 / 25	16.93	20.45	0.111	36.99	-16.54	18.30	0.068	34.77	-16.47
N		701.5	Н	159	112	3.45	1 / 12	17.76	21.20	0.132	36.99	-15.78	19.05	0.080	34.77	-15.72
MHz	QPSK	707.5	Н	127	101	3.52	1/0	17.97	21.50	0.141	36.99	-15.49	19.35	0.086	34.77	-15.42
22		713.5	Н	134	107	3.70	1/0	17.03	20.73	0.118	36.99	-16.26	18.58	0.072	34.77	-16.19
	16-QAM	701.5	Н	159	112	3.45	1 / 12	17.12	20.57	0.114	36.99	-16.42	18.42	0.070	34.77	-16.35
N		700.5	Н	159	112	3.39	1/7	17.65	21.04	0.127	36.99	-15.95	18.89	0.077	34.77	-15.88
MHz	QPSK	707.5	Н	127	101	3.52	1/7	17.93	21.45	0.140	36.99	-15.54	19.30	0.085	34.77	-15.47
3≤		714.5	Н	134	107	3.71	1/7	16.87	20.58	0.114	36.99	-16.41	18.43	0.070	34.77	-16.34
	16-QAM	707.5	Н	127	101	3.52	1 / 14	16.92	20.45	0.111	36.99	-16.54	18.30	0.068	34.77	-16.47
N		699.7	Н	159	112	3.33	1/5	17.53	20.86	0.122	36.99	-16.13	18.71	0.074	34.77	-16.06
MHz	QPSK	707.5	Н	127	101	3.52	1/3	17.92	21.44	0.139	36.99	-15.55	19.29	0.085	34.77	-15.48
4		715.3	Н	134	107	3.72	1/3	16.72	20.44	0.111	36.99	-16.55	18.29	0.067	34.77	-16.48
, i	16-QAM	707.5	Н	127	101	3.52	1/3	16.75	20.28	0.107	36.99	-16.71	18.13	0.065	34.77	-16.64
10 MHz	PSK(Opposite Pol.)	707.5	V	100	144	3.62	1/49	16.39	20.01	0.100	36.99	-16.98	17.86	0.061	34.77	-16.91
TO MHZ	QPSK(Half)	707.5	Н	131	108	3.52	1/49	17.38	20.90	0.123	36.99	-16.09	18.75	0.075	34.77	-16.02

Table 7-8. ERP Data (LTE Band 12 – South - Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
MHz	QPSK	782.0	н	252	88	6.09	1 / 25	18.89	24.98	0.315	36.99	-12.01	22.83	0.192	34.77	-11.94
10 M	16-QAM	782.0	н	252	88	6.09	1 / 25	17.53	23.62	0.230	36.99	-13.37	21.47	0.140	34.77	-13.30
N		779.5	Н	240	86	5.97	1 / 24	18.18	24.15	0.260	36.99	-12.84	22.00	0.158	34.77	-12.78
MHz	QPSK	782.0	Н	246	87	6.09	1 / 24	18.16	24.25	0.266	36.99	-12.74	22.10	0.162	34.77	-12.67
2 1		784.5	Н	244	80	6.17	1 / 24	18.37	24.54	0.285	36.99	-12.45	22.39	0.173	34.77	-12.38
	16-QAM	784.5	Н	244	80	6.17	1 / 12	17.78	23.95	0.248	36.99	-13.04	21.80	0.151	34.77	-12.97
10 MHz	QPSK(Opposite Pol.)	782.0	V	144	132	5.99	1 / 24	17.47	23.46	0.222	36.99	-13.53	21.31	0.135	34.77	-13.46
	QPSK(Half)	782.0	Н	103	92	6.09	1 / 12	16.62	22.71	0.187	36.99	-14.28	20.56	0.114	34.77	-14.21
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Table 7-9. ERP Data (LTE Band 13 – North -Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
лНz	QPSK	782.0	Н	236	112	6.09	1 / 25	18.05	24.14	0.260	36.99	-12.85	21.99	0.158	34.77	-12.78
10 M	16-QAM	782.0	н	236	112	6.09	1 / 25	17.16	23.25	0.212	36.99	-13.74	21.10	0.129	34.77	-13.67
N		779.5	Н	236	112	5.97	1 / 24	18.02	23.98	0.250	36.99	-13.01	21.83	0.153	34.77	-12.94
MHz	QPSK	782.0	Н	236	112	6.09	1 / 12	17.82	23.91	0.246	36.99	-13.08	21.76	0.150	34.77	-13.01
2 1		784.5	Н	236	112	6.17	1 / 12	17.87	24.04	0.254	36.99	-12.95	21.89	0.155	34.77	-12.88
47	16-QAM	782.0	Н	236	112	6.09	1 / 12	17.42	23.51	0.224	36.99	-13.48	21.36	0.137	34.77	-13.41
10 MHz	QPSK(Opposite Pol.)	782.0	V	145	129	5.99	1/25	16.95	22.94	0.197	36.99	-14.05	20.79	0.120	34.77	-13.98
	QPSK(Half)	782.0	Н	100	112	6.09	1/25	17.01	23.10	0.204	36.99	-13.89	20.95	0.125	34.77	-13.82

Table 7-10. ERP Data (LTE Band 13 – South -Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be pret of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 152 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 153 of 215
© 2021 PCTEST				V2 4/5/2021



20 MHz	TT/2 BPSK QPSK	673.0 680.5 688.0	H H	144	67									[Watts]	[dBm]	
20 MHz		688.0	Н		07	2.99	1 / 79	14.81	17.80	0.060	36.99	-19.19	15.65	0.037	34.77	-19.12
20 MHz	QPSK			142	62	3.09	1 / 26	14.97	18.06	0.064	36.99	-18.93	15.91	0.039	34.77	-18.87
20 MHz	QPSK		Н	142	65	3.08	1 / 79	15.19	18.27	0.067	36.99	-18.72	16.12	0.041	34.77	-18.65
	QPSK	673.0	н	144	67	2.99	1 / 79	14.77	17.76	0.060	36.99	-19.23	15.61	0.036	34.77	-19.16
		680.5	н	142	62	3.09	1 / 26	14.97	18.06	0.064	36.99	-18.93	15.91	0.039	34.77	-18.87
		688.0	Н	142	65	3.08	1 / 79	15.13	18.21	0.066	36.99	-18.78	16.06	0.040	34.77	-18.71
	16-QAM	688.0	Н	142	65	3.08	1 / 79	14.53	17.61	0.058	36.99	-19.38	15.46	0.035	34.77	-19.31
		670.5	Н	144	67	2.96	1 / 39	14.83	17.79	0.060	36.99	-19.20	15.64	0.037	34.77	-19.14
	π/2 BPSK	680.5	н	142	62	3.09	1 / 20	14.98	18.06	0.064	36.99	-18.93	15.91	0.039	34.77	-18.86
		690.5	Н	142	65	3.11	1 / 58	15.20	18.31	0.068	36.99	-18.68	16.16	0.041	34.77	-18.61
15 MHz		670.5	Н	144	67	2.96	1 / 39	14.55	17.51	0.056	36.99	-19.48	15.36	0.034	34.77	-19.41
	QPSK	680.5	Н	142	62	3.09	1 / 20	15.09	18.18	0.066	36.99	-18.81	16.03	0.040	34.77	-18.74
		690.5	Н	142	65	3.11	1 / 58	15.09	18.21	0.066	36.99	-18.78	16.06	0.040	34.77	-18.72
	16-QAM	690.5	Н	142	65	3.11	1 / 58	14.74	17.85	0.061	36.99	-19.14	15.70	0.037	34.77	-19.07
		668.0	Н	144	67	2.92	1 / 26	14.68	17.60	0.058	36.99	-19.39	15.45	0.035	34.77	-19.32
	π/2 BPSK	680.5	н	142	62	3.09	1 / 13	15.10	18.19	0.066	36.99	-18.80	16.04	0.040	34.77	-18.74
		693.0	Н	142	65	3.14	1 / 38	15.22	18.36	0.069	36.99	-18.63	16.21	0.042	34.77	-18.56
10 MHz		668.0	н	144	67	2.92	1 / 26	14.80	17.73	0.059	36.99	-19.26	15.58	0.036	34.77	-19.19
	QPSK	680.5	н	142	62	3.09	1 / 13	15.04	18.12	0.065	36.99	-18.87	15.97	0.040	34.77	-18.80
		693.0	Н	142	65	3.14	1 / 38	15.15	18.29	0.067	36.99	-18.70	16.14	0.041	34.77	-18.63
	16-QAM	693.0	Н	142	65	3.14	1 / 38	14.70	17.84	0.061	36.99	-19.15	15.69	0.037	34.77	-19.08
		665.5	Н	144	67	2.94	1/6	14.82	17.76	0.060	36.99	-19.22	15.61	0.036	34.77	-19.16
	π/2 BPSK	680.5	Н	142	62	3.09	1/6	14.96	18.05	0.064	36.99	-18.94	15.90	0.039	34.77	-18.87
		695.5	н	142	65	3.18	1/6	15.31	18.49	0.071	36.99	-18.50	16.34	0.043	34.77	-18.43
5 MHz		665.5	н	144	67	2.94	1/6	14.93	17.87	0.061	36.99	-19.12	15.72	0.037	34.77	-19.05
	QPSK	680.5	Н	142	62	3.09	1/6	15.00	18.09	0.064	36.99	-18.90	15.94	0.039	34.77	-18.83
		695.5	н	142	65	3.18	1/6	15.18	18.36	0.068	36.99	-18.63	16.21	0.042	34.77	-18.56
	16-QAM	695.5	Н	142	65	3.18	1/6	14.63	17.81	0.060	36.99	-19.18	15.66	0.037	34.77	-19.11
	QPSK (CP-OFDM)	688.0	Н	142	64	3.08	1/79	14.52	17.60	0.058	36.99	-19.39	15.45	0.035	34.77	-19.32
20 MHz	QPSK (Opposite Pol.)	688.0	V	100	67	3.28	1/53	14.79	18.07	0.064	36.99	-18.92	15.92	0.039	34.77	-18.85
	QPSK (HALF-OPEN)	688.0	V	100	77	3.28	1/79	14.49	17.77	0.060	36.99	-19.22	15.62	0.036	34.77	-19.15

Table 7-11. EIRP Data (NR Band n71 – North -Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
		673.0	Н	147	100	2.99	1 / 79	13.15	16.14	0.041	36.99	-20.85	13.99	0.025	34.77	-20.78
	TT/2 BPSK	680.5	Н	148	96	3.09	1 / 79	13.66	16.75	0.047	36.99	-20.24	14.60	0.029	34.77	-20.18
		688.0	Н	145	99	3.08	1 / 79	14.11	17.19	0.052	36.99	-19.80	15.04	0.032	34.77	-19.73
20 MHz		673.0	Н	147	100	2.99	1 / 79	13.18	16.17	0.041	36.99	-20.82	14.02	0.025	34.77	-20.75
	QPSK	680.5	Н	148	96	3.09	1 / 79	13.69	16.78	0.048	36.99	-20.21	14.63	0.029	34.77	-20.15
		688.0	Н	145	99	3.08	1 / 79	14.06	17.14	0.052	36.99	-19.85	14.99	0.032	34.77	-19.78
	16-QAM	688.0	Н	145	99	3.08	1 / 79	13.74	16.82	0.048	36.99	-20.17	14.67	0.029	34.77	-20.10
		670.5	Н	147	100	2.96	1 / 39	13.40	16.36	0.043	36.99	-20.63	14.21	0.026	34.77	-20.56
	π/2 BPSK	680.5	Н	148	96	3.09	1 / 20	13.84	16.92	0.049	36.99	-20.06	14.77	0.030	34.77	-20.00
		690.5	Н	145	99	3.11	1 / 58	14.02	17.14	0.052	36.99	-19.85	14.99	0.032	34.77	-19.78
15 MHz		670.5	Н	147	100	2.96	1 / 39	13.32	16.28	0.042	36.99	-20.71	14.13	0.026	34.77	-20.64
	QPSK	680.5	Н	148	96	3.09	1 / 20	13.43	16.51	0.045	36.99	-20.48	14.36	0.027	34.77	-20.41
		690.5	Н	145	99	3.11	1 / 58	14.05	17.16	0.052	36.99	-19.83	15.01	0.032	34.77	-19.76
	16-QAM	690.5	Н	145	99	3.11	1 / 58	13.86	16.97	0.050	36.99	-20.02	14.82	0.030	34.77	-19.95
		668.0	Н	147	100	2.92	1 / 38	13.19	16.12	0.041	36.99	-20.87	13.97	0.025	34.77	-20.80
	π/2 BPSK	680.5	Н	148	96	3.09	1 / 26	13.50	16.59	0.046	36.99	-20.40	14.44	0.028	34.77	-20.33
		693.0	H	145	99	3.14	1 / 26	14.02	17.16	0.052	36.99	-19.83	15.01	0.032	34.77	-19.76
10 MHz		668.0	Н	147	100	2.92	1 / 38	13.09	16.02	0.040	36.99	-20.97	13.87	0.024	34.77	-20.90
	QPSK	680.5	Н	148	96	3.09	1 / 26	13.28	16.37	0.043	36.99	-20.62	14.22	0.026	34.77	-20.55
		693.0	Н	145	99	3.14	1 / 26	14.11	17.26	0.053	36.99	-19.73	15.11	0.032	34.77	-19.66
	16-QAM	693.0	Н	145	99	3.14	1 / 26	13.83	16.98	0.050	36.99	-20.01	14.83	0.030	34.77	-19.94
		665.5	Н	147	100	2.94	1/6	13.25	16.20	0.042	36.99	-20.79	14.05	0.025	34.77	-20.73
	π/2 BPSK	680.5	Н	148	96	3.09	1/6	13.49	16.58	0.045	36.99	-20.41	14.43	0.028	34.77	-20.34
		695.5	Н	145	99	3.18	1/6	14.02	17.20	0.052	36.99	-19.79	15.05	0.032	34.77	-19.72
5 MHz		665.5	Н	147	100	2.94	1/6	13.28	16.22	0.042	36.99	-20.77	14.07	0.026	34.77	-20.70
	QPSK	680.5	Н	148	96	3.09	1/6	13.59	16.67	0.046	36.99	-20.32	14.52	0.028	34.77	-20.25
		695.5	Н	145	99	3.18	1/6	13.93	17.11	0.051	36.99	-19.88	14.96	0.031	34.77	-19.81
	16-QAM	695.5	Н	145	99	3.18	1/6	13.81	16.99	0.050	36.99	-20.00	14.84	0.030	34.77	-19.93
	QPSK (CP-OFDM)	688.0	Н	149	100	2.89	1 / 53	12.01	14.90	0.031	36.99	-22.09	12.75	0.019	34.77	-22.02
20 MHz	QPSK (Half-Open)	688.0	Н	116	105	2.89	1 / 53	13.76	16.65	0.046	36.99	-20.34	14.50	0.028	34.77	-20.27
	QPSK (Opposite Pol.)	688.0	V	169	38	2.89	1 / 53	13.44	16.33	0.043	36.99	-20.66	14.18	0.026	34.77	-20.59
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Table 7-12. EIRP Data (NR Band n71 – South -Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST: Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 154 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 154 of 215
© 2021 PCTEST	•			\/2 4/5/2021



Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
Z		1720.0	Н	137	211	9.47	1/0	15.54	25.01	0.317	30.00	-4.99
Ŧ	QPSK	1745.0	Н	216	212	9.48	1 / 50	14.48	23.96	0.249	30.00	-6.04
20 MHz		1770.0	Н	162	225	9.39	1 / 50	14.34	23.73	0.236	30.00	-6.27
2	16-QAM	1720.0	Н	137	211	9.47	1/0	14.79	24.26	0.267	30.00	-5.74
N		1717.5	Н	137	211	9.49	1/0	15.60	25.10	0.323	30.00	-4.90
H	QPSK	1745.0	Н	216	212	9.48	1 / 74	14.61	24.09	0.257	30.00	-5.91
15 MHz		1772.5	Н	162	225	9.36	1/0	14.38	23.75	0.237	30.00	-6.25
-	16-QAM	1717.5	Н	137	211	9.49	1/0	14.99	24.48	0.281	30.00	-5.52
N		1715.0	Н	137	211	9.52	1/0	15.50	25.02	0.318	30.00	-4.98
H	QPSK	1745.0	Н	216	212	9.48	1/0	14.62	24.10	0.257	30.00	-5.90
10 MHz		1775.0	Н	162	225	9.34	1 / 25	14.33	23.67	0.233	30.00	-6.33
~	16-QAM	1715.0	Н	137	211	9.52	1/0	14.84	24.36	0.273	30.00	-5.64
N		1712.5	Н	137	211	9.54	1 / 24	15.49	25.03	0.319	30.00	-4.97
MHz	QPSK	1745.0	Н	216	212	9.48	1 / 24	14.73	24.21	0.264	30.00	-5.79
5 N		1777.5	Н	162	225	9.31	1/0	14.62	23.93	0.247	30.00	-6.07
	16-QAM	1712.5	Н	137	211	9.54	1 / 24	14.73	24.27	0.267	30.00	-5.73
N		1711.5	Н	137	211	9.55	1/7	15.60	25.15	0.327	30.00	-4.85
Ë	QPSK	1745.0	Н	216	212	9.48	1/7	14.48	23.96	0.249	30.00	-6.04
3 MHz		1778.5	Н	162	225	9.30	1 / 14	14.48	23.78	0.239	30.00	-6.22
	16-QAM	1711.5	Н	137	211	9.55	1/7	14.73	24.29	0.268	30.00	-5.71
보		1710.7	Н	137	211	9.56	1/0	15.46	25.03	0.318	30.00	-4.97
Ň	QPSK	1745.0	Н	216	212	9.48	1/3	14.44	23.92	0.246	30.00	-6.08
1.4 MHz		1779.3	Н	162	225	9.29	1/0	14.58	23.87	0.244	30.00	-6.13
÷-	16-QAM	1710.7	Н	137	211	9.56	1/0	14.63	24.19	0.262	30.00	-5.81
20 MHz	QPSK(Opposite Pol.)	1720.0	V	342	263	9.03	1/50	15.00	24.03	0.253	30.00	-5.97
20 10112	QPSK(Half)	1720.0	Н	235	359	9.48	1/0	14.24	23.72	0.236	30.00	-6.28

Table 7-13. EIRP Data (LTE Band 66/4 –North - Open)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
Z		1720.0	Н	181	208	9.47	1/0	16.11	25.58	0.361	30.00	-4.42
Ŧ	QPSK	1745.0	Н	133	211	9.48	1 / 50	15.01	24.49	0.281	30.00	-5.51
20 MHz		1770.0	Н	168	213	9.39	1 / 50	15.19	24.58	0.287	30.00	-5.42
2	16-QAM	1720.0	Н	181	208	9.47	1/0	15.54	25.01	0.317	30.00	-4.99
N		1717.5	Н	181	208	9.49	1 / 37	16.16	25.65	0.367	30.00	-4.35
15 MHz	QPSK	1745.0	Н	133	211	9.48	1 / 37	15.12	24.60	0.289	30.00	-5.40
5		1772.5	Н	168	213	9.36	1/0	15.36	24.73	0.297	30.00	-5.27
-	16-QAM	1717.5	Н	181	208	9.49	1 / 74	15.52	25.02	0.317	30.00	-4.98
N		1715.0	Н	181	208	9.52	1/0	15.97	25.49	0.354	30.00	-4.51
10 MHz	QPSK	1745.0	Н	133	211	9.48	1 / 25	15.04	24.52	0.283	30.00	-5.48
0		1775.0	Н	168	213	9.34	1 / 25	15.33	24.66	0.293	30.00	-5.34
	16-QAM	1715.0	Н	181	208	9.52	1/0	15.60	25.11	0.325	30.00	-4.89
N		1712.5	Н	181	208	9.54	1 / 12	16.11	25.65	0.367	30.00	-4.35
5 MHz	QPSK	1745.0	Н	133	211	9.48	1 / 12	15.01	24.49	0.281	30.00	-5.51
2 2		1777.5	Н	168	213	9.31	1 / 12	15.48	24.80	0.302	30.00	-5.20
	16-QAM	1712.5	Н	181	208	9.54	1 / 24	15.76	25.30	0.339	30.00	-4.70
N		1711.5	Н	181	208	9.55	1/7	16.27	25.82	0.382	30.00	-4.18
3 MHz	QPSK	1745.0	Н	133	211	9.48	1/0	15.06	24.54	0.285	30.00	-5.46
3 4		1778.5	Н	168	213	9.30	1/7	15.38	24.68	0.294	30.00	-5.32
	16-QAM	1711.5	Н	181	208	9.55	1/7	15.35	24.90	0.309	30.00	-5.10
우		1710.7	Н	181	208	9.56	1 / 0	15.93	25.49	0.354	30.00	-4.51
μ.	QPSK	1745.0	Н	133	211	9.48	1/5	14.99	24.47	0.280	30.00	-5.53
1.4 MHz		1779.3	Н	168	213	9.29	1/5	15.20	24.49	0.281	30.00	-5.51
_	16-QAM	1710.7	Н	181	208	9.56	1/3	15.43	24.99	0.316	30.00	-5.01
20 MHz	QPSK(Opposite Pol.)	1720.0	V	361	310	9.33	1/0	14.89	24.22	0.264	30.00	-5.78
	QPSK(Half)	1720.0	Н	135	208	9.47	1/0	15.80	25.27	0.336	30.00	-4.73

Table 7-14. EIRP Data (LTE Band 66/4 –South - Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Pexal to be paid of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 155 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021		Page 155 of 215	
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
		1730.0	Н	174	324	9.48	1 / 161	15.66	25.14	0.327	30.00	-4.86
	π/2 BPSK	1745.0	Н	180	320	9.48	1 / 161	15.77	25.25	0.335	30.00	-4.75
		1760.0	Н	171	320	9.44	1 / 108	15.58	25.02	0.318	30.00	-4.98
40 MHz		1730.0	Н	174	324	9.48	1 / 161	15.67	25.15	0.328	30.00	-4.85
	QPSK	1745.0	Н	180	320	9.48	1 / 161	15.79	25.27	0.337	30.00	-4.73
		1760.0	Н	171	320	9.44	1 / 108	15.67	25.11	0.325	30.00	-4.89
	16-QAM	1745.0	Н	180	320	9.48	1 / 161	15.22	24.70	0.295	30.00	-5.30
		1725.0	Н	174	324	9.48	1 / 40	15.86	25.34	0.342	30.00	-4.66
	π/2 BPSK	1745.0	Н	180	320	9.48	1 / 119	16.04	25.52	0.356	30.00	-4.48
		1765.0	Н	171	320	9.42	1 / 40	15.62	25.03	0.319	30.00	-4.97
30 MHz		1725.0	Н	174	324	9.48	1 / 40	15.11	24.59	0.288	30.00	-5.41
	QPSK	1745.0	Н	180	320	9.48	1 / 40	15.29	24.77	0.300	30.00	-5.23
		1765.0	Н	171	320	9.42	1 / 40	16.10	25.51	0.356	30.00	-4.49
	16-QAM	1765.0	Н	171	320	9.42	1 / 40	15.34	24.76	0.299	30.00	-5.24
		1720.0	Н	174	324	9.47	1 / 26	15.79	25.25	0.335	30.00	-4.75
	π/2 BPSK	1745.0	Н	180	320	9.48	1 / 79	15.90	25.38	0.345	30.00	-4.62
		1770.0	Н	171	320	9.39	1 / 26	14.89	24.27	0.268	30.00	-5.73
20 MHz		1720.0	H	174	324	9.47	1 / 26	14.92	24.39	0.275	30.00	-5.61
	QPSK	1745.0	Н	180	320	9.48	1 / 79	16.33	25.81	0.381	30.00	-4.19
		1770.0	Н	171	320	9.39	1 / 26	15.19	24.57	0.287	30.00	-5.43
	16-QAM	1745.0	Н	180	320	9.48	1 / 79	15.95	25.43	0.349	30.00	-4.57
		1717.5	H	174	324	9.49	1 / 58	15.79	25.28	0.337	30.00	-4.72
	π/2 BPSK	1745.0	H	180	320	9.48	1 / 58	16.19	25.67	0.369	30.00	-4.33
		1772.5	Н	171	320	9.36	1 / 58	15.14	24.51	0.282	30.00	-5.49
15 MHz	0.001/	1717.5	Н	174	324	9.49	1 / 58	15.62	25.11	0.325	30.00	-4.89
	QPSK	1745.0	Н	180	320	9.48	1 / 58	16.40	25.88	0.387	30.00	-4.12
	40.0414	1772.5	Н	171	320	9.36	1 / 58	15.36	24.72	0.297	30.00	-5.28
	16-QAM	1745.0 1715.0	H	180 174	320	9.48	1 / 58	15.92	25.40	0.347	30.00	-4.60
					324	9.52	1 / 26	15.83	25.34		30.00	
	π/2 BPSK	1745.0	Н	180	320	9.48	1/38	15.64	25.12	0.325	30.00	-4.88 -5.50
10 MHz		1775.0 1715.0	H	171 174	320 324	9.34 9.52	1 / 38 1 / 26	15.16 14.59	24.50 24.11	0.282	30.00 30.00	-5.89
	QPSK	1745.0	H	174	324	9.32	1 / 38	14.59	24.11	0.238	30.00	-4.63
	QPON	1745.0	Н	171	320	9.40	1/38	15.69	25.57	0.344	30.00	-4.03
	16-QAM	1745.0	Н	180	320	9.48	1 / 38	15.13	24.61	0.302	30.00	-5.39
	10-02/4101	1745.0	Н	174	320	9.48	1 / 38	15.78	24.01	0.289	30.00	-4.68
	π/2 BPSK	1745.0	Н	174	324	9.48	1 / 18	15.58	25.06	0.341	30.00	-4.00
	II/2 DF SK	1743.0	Н	171	320	9.40	1 / 12	15.61	23.00	0.320	30.00	-4.94
5 MHz		1712.5	Н	174	320	9.54	1 / 18	14.89	24.92	0.278	30.00	-5.56
5 11112	QPSK	1745.0	Н	174	324	9.48	1 / 12	14.89	25.28	0.337	30.00	-4.72
	GION	1743.0	Н	171	320	9.40	1 / 12	15.73	25.05	0.337	30.00	-4.95
	16-QAM	1745.0	Н	180	320	9.48	1 / 12	15.31	25.05	0.320	30.00	-4.95
	QPSK (CP-OFDM)	1745.0	Н	177	318	9.48	1/108	14.70	24.13	0.262	30.00	-5.82
40 MHz	QPSK (Opposite Pol.)	1745.0	V	297	92	9.40	1/54	13.20	24.10	0.202	30.00	-7.77
40 10112	QPSK (HALF-OPEN)	1745.0	H	180	335	9.48	1/34	13.45	22.23	0.107	30.00	-7.07
								orth - Ope		0.100	00.00	1.01

Table 7-15. EIRP Data (NR Band n66 – North - Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Provid to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 156 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 156 of 215	
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
		1730.0	Н	177	299	9.48	1 / 161	13.77	23.25	0.212	30.00	-6.75
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 108	13.97	23.45	0.221	30.00	-6.55
		1760.0	Н	180	315	9.44	1 / 54	13.86	23.30	0.214	30.00	-6.70
40 MHz		1730.0	Н	177	299	9.48	1 / 161	13.77	23.25	0.212	30.00	-6.75
	QPSK	1745.0	Н	180	313	9.48	1 / 108	13.99	23.47	0.222	30.00	-6.53
		1760.0	Н	180	315	9.44	1 / 54	13.84	23.28	0.213	30.00	-6.72
	16-QAM	1745.0	Н	180	313	9.48	1 / 108	13.44	22.92	0.196	30.00	-7.08
		1725.0	Н	177	299	9.48	1 / 119	13.94	23.42	0.220	30.00	-6.58
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 119	13.98	23.46	0.222	30.00	-6.54
		1765.0	Н	180	315	9.42	1 / 80	13.93	23.34	0.216	30.00	-6.66
30 MHz		1725.0	Н	177	299	9.48	1 / 119	13.69	23.17	0.208	30.00	-6.83
	QPSK	1745.0	Н	180	313	9.48	1 / 119	14.41	23.89	0.245	30.00	-6.11
		1765.0	Н	180	315	9.42	1 / 80	13.75	23.16	0.207	30.00	-6.84
	16-QAM	1745.0	Н	180	313	9.48	1 / 119	13.68	23.16	0.207	30.00	-6.84
		1720.0	Н	177	299	9.47	1 / 79	14.00	23.47	0.223	30.00	-6.53
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 79	14.09	23.57	0.227	30.00	-6.43
		1770.0	Н	180	315	9.39	1 / 26	13.72	23.11	0.205	30.00	-6.89
20 MHz		1720.0	Н	177	299	9.47	1 / 79	14.04	23.51	0.225	30.00	-6.49
	QPSK	1745.0	Н	180	313	9.48	1 / 53	12.96	22.44	0.175	30.00	-7.56
		1770.0	Н	180	315	9.39	1 / 26	13.51	22.90	0.195	30.00	-7.10
	16-QAM	1720.0	Н	177	299	9.47	1 / 79	13.37	22.84	0.192	30.00	-7.16
		1717.5	Н	177	299	9.49	1 / 20	14.01	23.50	0.224	30.00	-6.50
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 58	13.95	23.43	0.220	30.00	-6.57
		1772.5	Н	180	315	9.36	1 / 58	13.88	23.25	0.211	30.00	-6.75
15 MHz		1717.5	Н	177	299	9.49	1 / 20	13.78	23.27	0.212	30.00	-6.73
	QPSK	1745.0	Н	180	313	9.48	1 / 58	13.94	23.42	0.220	30.00	-6.58
		1772.5	Н	180	315	9.36	1 / 58	13.09	22.45	0.176	30.00	-7.55
	16-QAM	1717.5	Н	177	299	9.49	1 / 20	13.41	22.90	0.195	30.00	-7.10
		1715.0	Н	177	299	9.52	1 / 13	13.92	23.44	0.221	30.00	-6.56
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 38	13.93	23.41	0.219	30.00	-6.59
		1775.0	Н	180	315	9.34	1 / 38	14.13	23.47	0.222	30.00	-6.53
10 MHz		1715.0	Н	177	299	9.52	1 / 13	13.32	22.83	0.192	30.00	-7.17
	QPSK	1745.0	Н	180	313	9.48	1 / 38	13.40	22.88	0.194	30.00	-7.12
		1775.0	Н	180	315	9.34	1 / 38	13.27	22.61	0.182	30.00	-7.39
	16-QAM	1715.0	Н	177	299	9.52	1 / 13	13.01	22.53	0.179	30.00	-7.47
		1712.5	Н	177	299	9.54	1 / 12	13.94	23.48	0.223	30.00	-6.52
	π/2 BPSK	1745.0	Н	180	313	9.48	1 / 18	13.89	23.37	0.217	30.00	-6.63
		1777.5	Н	180	315	9.31	1 / 12	14.23	23.54	0.226	30.00	-6.46
5 MHz		1712.5	Н	177	299	9.54	1 / 12	13.17	22.71	0.187	30.00	-7.29
	QPSK	1745.0	Н	180	313	9.48	1 / 18	13.31	22.79	0.190	30.00	-7.21
		1777.5	Н	180	315	9.31	1 / 12	13.18	22.49	0.177	30.00	-7.51
	16-QAM	1712.5	Н	177	299	9.54	1 / 12	12.76	22.31	0.170	30.00	-7.69
	QPSK (CP-OFDM)	1745.0	Н	182	312	9.48	1 / 108	12.91	22.39	0.173	30.00	-7.61
40 MHz	QPSK (Opposite Pol.)	1745.0	V	177	88	9.03	1 / 54	12.21	21.24	0.133	30.00	-8.76
	QPSK (Half)	1745.0	Н	101	307	9.48	1 / 108	13.34	22.82	0.191	30.00	-7.18
		Tab	0 7-16		Jata /NI	P Band	n66 - 50	uth - Ope	n)			

Table 7-16. EIRP Data (NR Band n66 – South - Open)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Provid to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 157 of 015	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 157 of 215	
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7.9 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 - Section 5.8

ANSI/TIA-603-E-2016 - Section 2.2.12

Test Settings

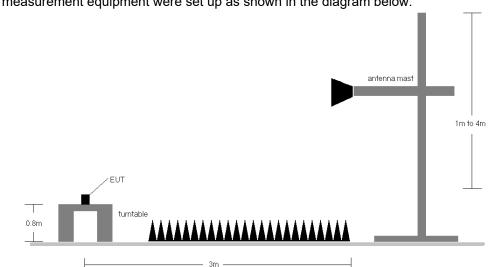
- 1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
- 2. VBW \geq 3 x RBW
- 3. Span = 1.5 times the OBW
- 4. No. of sweep points \geq 2 x span / RBW
- 5. Detector = RMS
- 6. Trace mode = Average (Max Hold for pulsed emissions)
- 7. The trace was allowed to stabilize

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Proved to be past of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 159 of 215
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset	Page 158 of 215	
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Test Setup



The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-9. Test Instrument & Measurement Setup

Test Notes

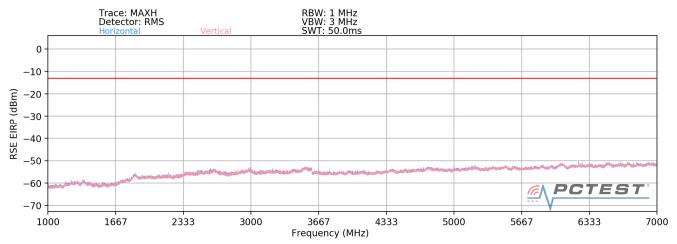
- Field strengths are calculated using the Measurement quantity conversions in KDB 971168 Section 5.8.4.
 b) E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
 d) EIRP (dBm) = E(dBµV/m) + 20logD 104.8; where D is the measurement distance in meters.
- 2) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 3) This unit was tested with its standard battery.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 7) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.
- 8) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device, is subject to the rules under which the NR carrier operates. Spurious emission caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

FCC ID: C3K1995 IC: 3048A-1995	Post to be part of @element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 159 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021				
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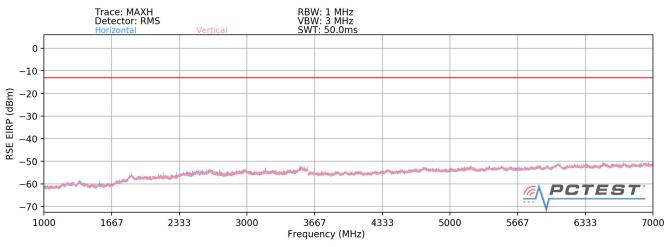
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LTE Band 71 – North









Bandwidth (MHz):	20
Frequency (MHz):	673.0
RB / Offset:	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1346.0	Н	229	354	-75.89	-1.14	29.97	-65.28	-13.00	-52.28
2019.0	Н	188	332	-76.47	0.78	31.31	-63.95	-13.00	-50.95
2692.0	Н	-	-	-77.63	2.22	31.59	-63.67	-13.00	-50.67
3365.0	Н	-	-	-77.87	2.32	31.45	-63.80	-13.00	-50.80

Table 7-17. Radiated Spurious Data (LTE Band 71 – Low Channel – North -Closed)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Pound to be post of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT	Microsoft	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 160 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset		Page 160 of 215	
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Bandwidth (MHz):	20
Frequency (MHz):	680.5
RB / Offset:	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1361.0	Н	306	4	-75.75	-1.52	29.73	-65.53	-13.00	-52.53
2041.5	Н	-	-	-77.52	0.71	30.19	-65.07	-13.00	-52.07
2722.0	Н	-	-	-77.55	2.02	31.47	-63.79	-13.00	-50.79

Table 7-18. Radiated Spurious Data (LTE Band 71 – Mid Channel – North -Closed)

Bandwidth (MHz):	20
Frequency (MHz):	688.0
RB / Offset:	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1376.0	Н	328	244	-76.70	-1.74	28.56	-66.69	-13.00	-53.69
2064.0	Н	-	-	-77.49	0.46	29.97	-65.28	-13.00	-52.28
2752.0	Н	-	-	-77.51	1.61	31.10	-64.16	-13.00	-51.16

Table 7-19. Radiated Spurious Data (LTE Band 71 – High Channel – North -Closed)

FCC ID: C3K1995 IC: 3048A-1995	PCTEST Pound to be part of @ element	PART 27 / RSS-130 / RSS-139 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 161 of 215	
1M2105200048-04-R1.C3K	05/25/2021 - 08/18/2021	Portable Handset			
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