



Plot 7-55. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel - Ant B)

FCC ID: A3LSMF731JPN		PART 27 MEASUREMENT REPORT				
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
		Low	30.0 - 2475.0	-39.28	-25	-14.28
		Low	2690.0 - 15000.0	-41.86	-25	-16.86
		Low	15000.0 - 27000.0	-41.04	-25	-16.04
LTE-B41		Mid	30.0 - 2496.0	-38.96	-25	-13.96
PC3	20MHz	Mid	2690.0 - 15000.0	-41.98	-25	-16.98
FCJ		Mid	15000.0 - 27000.0	-41.25	-25	-16.25
		High	30.0 - 2496.0	-37.55	-25	-12.55
		High	2715.0 - 15000.0	-41.92	-25	-16.92
		High	15000.0 - 27000.0	-40.80	-25	-15.80
		Low	30.0 - 2475.0	-37.25	-25	-12.25
		Low	2690.0 - 15000.0	-42.44	-25	-17.44
		Low	15000.0 - 27000.0	-39.81	-25	-14.81
ULCA	20MHz + 20MHz	Mid	30.0 - 2496.0	-37.85	-25	-12.85
LTE-B41		Mid	2690.0 - 15000.0	-42.18	-25	-17.18
PC3		Mid	15000.0 - 27000.0	-39.99	-25	-14.99
		High	30.0 - 2496.0	-37.21	-25	-12.21
		High	2715.0 - 15000.0	-41.71	-25	-16.71
		High	1500.0 - 27000.0	-38.18	-25	-13.18
		Low	30.0 - 2470.0	-40.58	-25	-15.58
		Low	2690.0 - 15000.0	-46.17	-25	-21.17
		Low	15000.0 - 27000.0	-45.81	-25	-20.81
NR-n41		Mid	30.0 - 2496.0	-40.75	-25	-15.75
PC3	100MHz	Mid	2690.0 - 15000.0	-45.85	-25	-20.85
FUJ		Mid	15000.0 - 27000.0	-46.36	-25	-21.36
		High	30.0 - 2496.0	-41.38	-25	-16.38
		High	2715.0 - 15000.0	-46.28	-25	-21.28
		High	15000.0 - 27000.0	-46.75	-25	-21.75

Table 7-9. Conducted Spurious Emission Results – Ant I

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# LTE Band 41(PC3) – Ant I

	ight Spectri	um Analy	zer - Swej	pt SA										
L <mark>XI</mark> RL		RF	50 Ω	AC	CORREC		SE	NSE:INT	#Avg Ty	ALIGN AUTO		M Jun 23, 2023	Frequ	iency
PASS	S				PNO: IFGain	Fast ↔ :Low	Trig: Fre Atten: 3				TYI DI		Δι	ito Tune
10 dB/ Log 🗖	/div	Ref 20	.00 d	Bm						MI	kr1 2.41 -37.5	7 5 GHz 51 dBm	AU	
-°°	Trace 1	Pass						Ĭ					Cen	ter Fred
10.0													1.26300	0000 GH:
0.00													St	artFree
-10.0													30.000	0000 MH:
-20.0													St	op Free
-30.0													2.49600	
-40.0														CF Ster
-40.0	nu ppine	11 Inputit	<u>pi a ta</u>					a da (I, Define) a j Predse og sjolet	an a	an bahad terpati kendi Kepanan perinter		ala basi kalangan kalangan Kalangan kalangan Kalangan kalangan kalangan	246.600 <u>Auto</u>	0000 MH Mai
-50.0	án Bilidi India	turi i fan i											Ero	qOffse
-60.0													FIE	0 H
-70.0														ale Tres
														ale Type
	0.030 BW 1.		z			#VBW	/ 3.0 MHz			Sweep 3	Stop 2 3.288 ms (	.496 GHz (4933 pts)	Log	Li
MSG										STATU				

Plot 7-56. Conducted Spurious Plot (LTE Band 41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel - Ant I)

Keysight Spectrum An									
X RL RF	P	RREC			#Avg Type	ALIGN AUTO E: RMS	TRAC	M Jun 23, 2023 DE 1 2 3 4 5 6 DE M WWWW A N N N N N	Frequency
10 dB/div Ref 2	∎ 20.00 dBm	Gain:Low	#Atten: 20	) dB		Mki	1 14.98	5 0 GHz 22 dBm	Auto Tun
10.0	SS								Center Fre 8.857500000 GH
10.0									<b>Start Fre</b> 2.715000000 G⊦
30.0									Stop Fre 15.000000000 G⊦
40.0	terre and the failure white come in	rtestlik, igelegelegelegile	<sup>nan</sup> tagi <sup>il</sup> Hejadawila	and the second	yah Hisaadalayk	NA AMERICAN AND AND AND AND AND AND AND AND AND A	A particle (A) (A) (A) (A)		CF Ste 1.228500000 GH <u>Auto</u> Ma
60.0		a Looky production (schoold), and		al (a configuration) de la fait		9 <b>9</b>			Freq Offse 0 ⊦
-70.0 Start 2.715 GHz #Res BW 1.0 M		#\/B\M	3.0 MHz			waan 24	Stop 15	.000 GHz 4571 pts)	Scale Typ
ISG	1/4	#VDVV	5.0 WHZ		3	statu:		457 T pts)	

Plot 7-57. Conducted Spurious Plot (LTE Band 41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel - Ant I)

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Plot 7-58. Conducted Spurious Plot (LTE Band 41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel – Ant I)

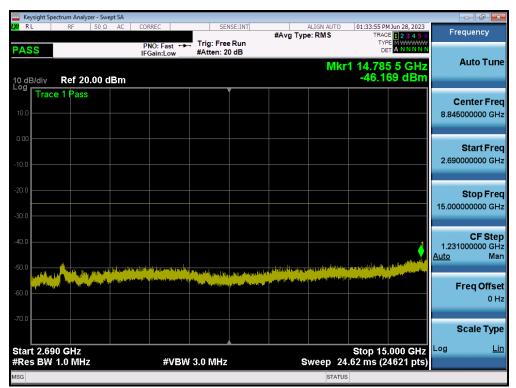
FCC ID: A3LSMF731JPN		PART 27 MEASUREMENT REPORT					
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# NR Band n41(PC3) - Ant I

RL	RF	yzer - Swe 50 Ω		CORREC	CE.	NSE:INT		ALIGN AUTO	01-22-22.01	1 Jun 28, 2023		d 💌
		00.35	AC	PNO: Fast ↔	Trig: Fre	e Run	#Avg Typ		TRAC	E 1 2 3 4 5 6 E M WWWWW T A N N N N N	Freque	ncy
PASS				IFGain:Low	Atten: 30	) dB					Auf	o Tun
0 dB/div	Ref 2	0.00 d	Bm					IVIR	r1 2.398 -40.5	84 dBm	,	o rai
Tr	ace 1 Pas	s				Í					Cent	er Fre
10.0											1.2500000	
0.00											Sta	rtFre
10.0											30.0000	000 MI
20.0											Sto	p Fr
30.0											2.4700000	)00 G
30.0										. 1		
40.0											244.0000	F Ste
day.	ومعترين والمراجع	n pari tin kel 11	and date		kenting and shipe				a she almontheater Transsinne and bh		Auto	M
50.0	الشرج ستحج الأرأن	سەر رىيىلى را	ter bi e fet same de			1 director						
60.0											Freq	
												0
70.0											0.00	
											Sca	е Ту
	030 GHz								Stop 2	47 V OI12	Log	L
Res B	W 1.0 MH	Z		#VBV	V 3.0 MHz			Sweep 3	.260 ms (	4891 pts)		

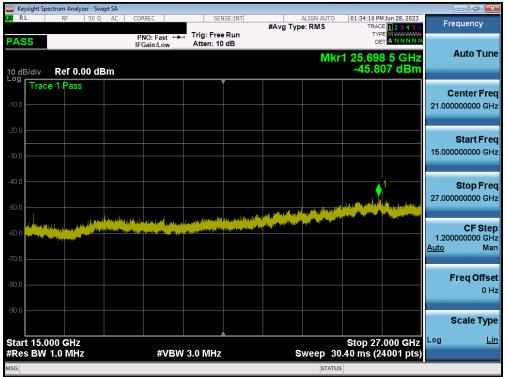
Plot 7-59. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel - Ant I)



Plot 7-60. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel – Ant I)

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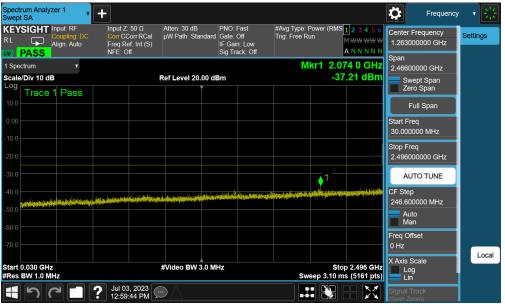


Plot 7-61. Conducted Spurious Plot (NR Band n41 - 100MHz QPSK - RB Size 1, RB Offset 0 - Low Channel - Ant I)

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# ULCA - LTE B41(PC3) - Ant I



Plot 7-62. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel – Ant I)

Swept			+					Frequency	· · · <del> </del> ※
RL	Sight PASS	Input: RF Coupling: DC Align: Auto	Input Z: 50 Ω Corr CCorr RCal Freq Ref: Int (S) NFE: Off	#Atten: 20 dB µW Path: Standard	PNO: Fast Gate: Off IF Gain: Low Sig Track: Off		23456  \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Center Frequency 8.857500000 GHz	Settings
1 Spe Scale		<b>▼</b> B	- Fr 21	Ref Level 20.00 dl	ļ	Mkr1 14.63 -41.	7 0 GHz 71 dBm	Span 12.2850000 GHz Swept Span	
Log 10.0	Trace	1 Pass						Zero Span Full Span	
0.00 -10.0								Start Freq 2.715000000 GHz	
-20.0								Stop Freq 15.00000000 GHz	
-40.0		lla la constante	at an family of the st	March 1997 Strategy and Strategy	د. دوراندو کروندو کروندو در اندو در اندو در ا	den billeren Niedzelden [141] zu geschere eine eine stateren (144	1 decleated lites	AUTO TUNE CF Step 1.228500000 GHz	
-50.0 -60.0	and the set of the second s				فاطر بطالف على والسر <sub>ملك</sub> مينيه	in deben for an and the second se		Auto Man	
-70.0								Freq Offset 0 Hz X Axis Scale	Local
	2.715 GH: BW 1.0 M		<b>?</b> Jul 03, 2023 1:00:07 PM	#Video BW 3.0 Mi	Hz	Stop ~ Sweep ~22.7 ms	15.000 GHz (24571 pts)	Log Lin Signal Track (Span Zoom)	

Plot 7-63. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel – Ant I)

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Plot 7-64. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - High Channel - Ant I)

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### 7.5 Band Edge Emissions at Antenna Terminal

### **Test Overview**

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates 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.

### The minimum permissible attenuation level for Band 41 is as noted in the Test Notes on the following page.

### Test Procedure Used

ANSI C63.26-2015 - Section 5.7.3

### Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- 4. VBW  $\geq$  3 x RBW
- 5. Detector = RMS
- 6. Number of sweep points  $\geq 2 \times \text{Span/RBW}$
- 7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize

### Test Setup

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



Figure 7-4. Test Instrument & Measurement Setup

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### Test Notes

- Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.
- 2. 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.

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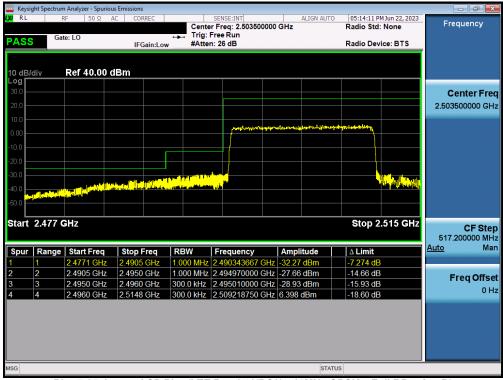
Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
	20 MHz	Low	Band Edge	-36.75	-25	-11.75
	20 MHZ	High	Band Edge	-42.03	-25	-17.03
	15 MHz 10 MHz	Low	Band Edge	-32.27	-25	-7.27
LTE B41		High	Band Edge	-37.33	-25	-12.33
PC3		Low	Band Edge	-36.91	-25	-11.91
		High	Band Edge	-39.90	-25	-14.90
	5 MHz	Low	Band Edge	-39.93	-25	-14.93
		High	Band Edge	-39.66	-25	-14.66
ULCA	20 MHz +	Low	Band Edge	-38.77	-25	-13.77
LTE-B41 PC3	20 MHz	High	Band Edge	-37.16	-25	-12.16

Table 7-10. Conducted Spurious Emission Results – Ant B

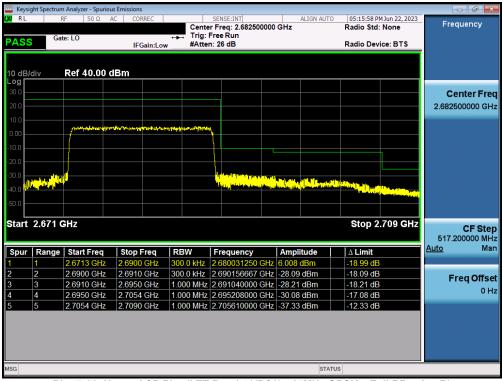
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## LTE Band 41(PC3) – Ant B



Plot 7-65. Lower ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB – Ant B)



Plot 7-66. Upper ACP Plot (LTE Band 41(PC3) - 15MHz QPSK - Full RB - Ant B)

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# ULCA LTE Band 41(PC3) – Ant B



Plot 7-67. Lower ACP Plot (LTE Band 41(PC3) – 20+20MHz QPSK – Full RB – Ant B)

KEYSIGH	Coupling: Align: Au	DC Contro Free	it Ζ: 50 Ω CCorr RCal Ref: Int (S) : Off	Atten: 36 dB µW Path: Star	ndard Ga	g: Free Run ate: LO Gain: Low	Center Freq: Radio Std: N	2.680000000 one	GHz	Center Frequent 2.680000000 G CF Step	Setunds
3 All Range Gr	aph 🔹	,								517.200000 MF	iz
cale/Div 10.	0 dB			Ref Value 40.	00 dBm					Auto	
_og 30.0										Man	
20.0										Freq Offset 0 Hz	
	(	an a	a providence	minimum						L	
10.0											
20.0											
40.0			N								
50.0											
itart 2.640 G								Ct	0 740 011-		
								Stop	2.740 GHz		
All Range Ta	ole v					Measure Tra			Trace 1		
						Trace Type		Trace Averag			
Spur	Range	Start Freg	Stop Freg	RBW		quency	Amplitude	∆Limit	- (* ******)		
1	1 1			390.0 kHz			1.906 dBm	-23.09	dB		
2		2.6900 GHz	2.6910 GHz	390.0 kHz	2.6900	60000 GHz	-38.36 dBm	-28.36	dB		
3				1.000 MHz			-35.37 dBm	-25.37			Loca
4				1.000 MHz			-35.16 dBm	-22.16			
5	5	2.7100 GHz	2.7400 GHz	1.000 MHz	2.7109	00000 GHz	-37.16 dBm	-12.16	dB		

Plot 7-68. Upper ACP Plot (LTE Band 41(PC3) – 20+20MHz QPSK – Full RB – Ant B)

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Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
	20 MHz	Low	Band Edge	-26.99	-25	-1.99
		High	Band Edge	-26.87	-13	-13.87
	15 MHz	Low	Band Edge	-27.12	-25	-2.12
LTE B41		High	Band Edge	-20.31	-10	-10.31
PC3	10 MHz	Low	Band Edge	-29.29	-25	-4.29
		High	Band Edge	-22.95	-10	-12.95
	5 MHz	Low	Band Edge	-21.38	-13	-8.38
		High	Band Edge	-19.58	-10	-9.58
ULCA	20 MHz +	Low	Band Edge	-27.09	-25	-2.09
LTE-B41 PC3	20 MHz	High	Band Edge	-30.14	-25	-5.14
	100 MHz	Low	Band Edge	-34.74	-25	-9.74
		High	Band Edge	-33.83	-13	-20.83
	90 MHz	Low	Band Edge	-35.26	-25	-10.26
	90 WIT IZ	High	Band Edge	-36.02	-13	-23.02
	80 MHz	Low	Band Edge	-36.60	-25	-11.60
		High	Band Edge	-32.80	-10	-22.80
	70 MHz	Low	Band Edge	-33.62	-25	-8.62
		High	Band Edge	-32.06	-13	-19.06
		Low	Band Edge	-33.87	-25	-8.87
	60 MHz	High	Band Edge	-24.05	-10	-14.05
NR-n41	50 MHz	Low	Band Edge	-30.79	-25	-5.79
PC3		High	Band Edge	-28.02	-13	-15.02
	40 1411-	Low	Band Edge	-33.60	-25	-8.60
	40 MHz	High	Band Edge	-28.77	-13	-15.77
		Low	Band Edge	-32.60	-25	-7.60
	30 MHz	High	Band Edge	-28.91	-13	-15.91
		Low	Band Edge	-31.07	-25	-6.07
	20 MHz	High	Band Edge	-41.16	-25	-16.16
	45 1411	Low	Band Edge	-32.21	-25	-7.21
	15 MHz	High	Band Edge	-31.36	-13	-18.36
	40.041	Low	Band Edge	-32.40	-25	-7.40
	10 MHz	High	Band Edge	-27.60	-10	-17.60

Table 7-11. Conducted Spurious Emission Results – Ant I

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## LTE Band 41(PC3) – Ant I



Plot 7-69. Lower ACP Plot (LTE Band 41(PC3) - 20MHz QPSK - Full RB - Ant I)

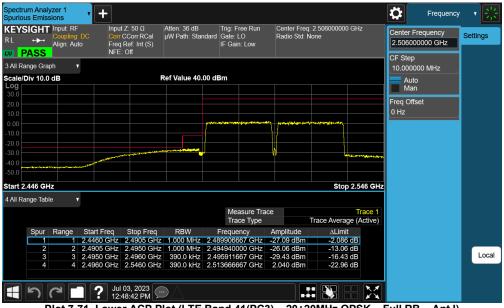


Plot 7-70. Upper ACP Plot (LTE Band 41(PC3) - 5MHz QPSK - Full RB - Ant I)

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# ULCA LTE Band 41(PC3) – Ant I



Plot 7-71. Lower ACP Plot (LTE Band 41(PC3) – 20+20MHz QPSK – Full RB – Ant I)



Plot 7-72. Upper ACP Plot (LTE Band 41(PC3) – 20+20MHz QPSK – Full RB – Ant I)

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# NR Band n41 – Ant I

30.00 dBm	IFGain:Low	, #Atter	n: 32 dB		Radio De	wice: BTS	<b>Center Fr</b> 2.521020000 G
30.00 dBm							
30.00 dBm							
							2.521020000 G
						Same 104-Carrier Stage	
					Stop 2	2.559 GHz	
							CF Ste 5.000000 M
Freq St	op Freq	RBW	Frequency	Amplitude	∆ Limit		Auto M
	905 GHz			GHz -30.79 dBm	-5.788 d	R	
	950 GHz				-17.86 d		
							Freq Offs
0 GHz 2.5	585 GHz	560.0 kHz	2.538792793	GHz 0.755 dBm	-24.24 dl	В	0
					STATUS		
	0 GHz 2.4	0 GHz 2.4960 GHz	0 GHz 2.4960 GHz 560.0 kHz	0 GHz 2.4960 GHz 560.0 kHz 2.495980000	0 GHz 2.4960 GHz 560.0 kHz 2.495980000 GHz -34.29 dBm 0 GHz 2.5585 GHz 560.0 kHz 2.538792793 GHz 0.755 dBm	0 GHz 2.4960 GHz 560.0 kHz 2.495980000 GHz -34.29 dBm -21.29 d	0 GHz 2.4960 GHz 560.0 kHz 2.495980000 GHz -34.29 dBm -21.29 dB 0 GHz 2.5585 GHz 560.0 kHz 2.538792793 GHz 0.755 dBm -24.24 dB

Plot 7-73. Lower ACP Plot (NR Band n41 - 50MHz DFT-s-OFDM-BPSK - Full RB - Ant I)

Keysigk X RL	F	n Analyzer - Spuri F 50 Ω re: LO	AC CO	s RREC   Gain:Low	+++ Trig:	SENSE:INT SOUR Freq: 2.66001 Free Run n: 32 dB		ALIGN AUTO	04:10:20 F Radio Std Radio Dev		-	auency
10 dB/d	liv	Ref 30.00	dBm									
20.0			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~						enter Fred 010000 GH
0.00												
-30.0 -40.0	<u> </u>					- Description	and the second	- marken				
-60.0	2.615 (	Hz							Stop 2	.765 GHz		CF Ster
											5.0 Auto	000000 MH Ma
_		Start Freq	Stop		RBW	Frequency		litude	∆ Limit		Auto	inta
•	1	2.6150 GHz				2.635625000			-21.29 dE			
	2 3	2.6900 GHz				2.690001667			-14.05 dE		F	req Offse
-	3 4	2.6910 GHz 2.6950 GHz	2.6950			2.691226667			-21.25 dE			он
	4 5	2.6950 GHZ 2.7500 GHZ				2.704075000			-21.04 dE			
ISG								STA	rus			

Plot 7-74. Upper ACP Plot (NR Band n41 - 60MHz DFT-s-OFDM-QPSK - Full RB - Ant I)

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### 7.6 Radiated Power (EIRP)

### **Test Overview**

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements are performed using vertically 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

ANSI C63.26-2015 - Section 5.2.4.4

### **Test Settings**

- Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used
- 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". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration.
- 8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power.
- 9. Trace mode = trace averaging (RMS) over 100 sweeps
- 10. The trace was allowed to stabilize.

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### <u>Test Setup</u>

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

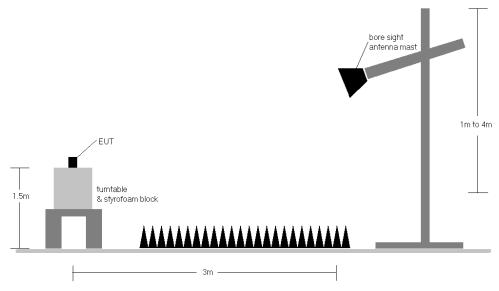


Figure 7-5. Radiated Test Setup >1GHz

### 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) 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.

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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	EUT Config	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
N	QPSK	2506.0	н	Half	117	194	4.91	1 / 99	14.03	18.94	0.078	33.01	-14.07
H	QPSK	2593.0	н	Half	109	197	4.97	1 / 99	13.27	18.24	0.067	33.01	-14.77
20 MHz	QPSK	2680.0	н	Half	123	194	5.15	1/0	13.07	18.22	0.066	33.01	-14.79
2	16-QAM	2506.0	Н	Half	117	194	4.91	1 / 99	13.27	18.18	0.066	33.01	-14.83
N	QPSK	2503.5	Н	Half	117	194	4.92	1/0	14.11	19.03	0.080	33.01	-13.98
MHz	QPSK	2593.0	Н	Half	109	197	4.97	1/0	13.49	18.46	0.070	33.01	-14.55
15 1	QPSK	2682.5	Н	Half	123	194	5.14	1 / 37	13.42	18.56	0.072	33.01	-14.45
-	16-QAM	2503.5	Н	Half	117	194	4.92	1/0	13.48	18.40	0.069	33.01	-14.61
N	QPSK	2501.0	Н	Half	117	194	4.93	1 / 25	14.29	19.22	0.084	33.01	-13.79
MHz	QPSK	2593.0	Н	Half	109	197	4.97	1/0	13.09	18.06	0.064	33.01	-14.95
101	QPSK	2685.0	Н	Half	123	194	5.14	1/0	13.51	18.65	0.073	33.01	-14.36
_	16-QAM	2501.0	Н	Half	117	194	4.93	1 / 25	13.80	18.73	0.075	33.01	-14.28
N	QPSK	2498.5	Н	Half	117	194	4.89	1 / 12	14.27	19.17	0.083	33.01	-13.84
MHz	QPSK	2593.0	Н	Half	109	197	4.97	1/0	13.45	18.42	0.070	33.01	-14.59
2 2	QPSK	2687.5	Н	Half	123	194	5.13	1/0	13.33	18.47	0.070	33.01	-14.54
47	16-QAM	2498.5	Н	Half	117	194	4.89	1/0	13.34	18.23	0.067	33.01	-14.78
	QPSK (Opposite pol.)	2506.0	V	Half	133	274	4.91	1 / 99	11.78	16.69	0.047	33.01	-16.32
20 MHz	QPSK (WCP)	2506.0	Н	Half	110	184	4.91	1 / 99	13.87	18.78	0.075	33.01	-14.23
	QPSK	2506.0	Н	Open	115	197	4.91	1/0	13.46	18.37	0.069	33.01	-14.64

Table 7-12. EIRP Data (LTE Band 41(PC3) – Ant B)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	EUT config	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
N	QPSK	2506.0	н	Open	111	203	4.91	1 / 99	17.53	22.44	0.175	33.01	-10.57
MHz	QPSK	2593.0	н	Open	125	195	4.97	1 / 99	20.33	25.30	0.339	33.01	-7.71
20 N	QPSK	2680.0	н	Open	117	199	5.15	1 / 50	20.25	25.40	0.347	33.01	-7.61
5	16-QAM	2680.0	Н	Open	117	199	5.15	1 / 50	19.01	24.16	0.261	33.01	-8.85
N	QPSK	2503.5	н	Open	111	203	4.92	1/0	17.69	22.60	0.182	33.01	-10.41
MHz	QPSK	2593.0	н	Open	125	195	4.97	1 / 37	20.47	25.44	0.350	33.01	-7.57
15 1	QPSK	2682.5	Н	Open	117	199	5.14	1/0	20.50	25.65	0.367	33.01	-7.36
-	16-QAM	2682.5	Н	Open	117	199	5.14	1/0	19.23	24.37	0.274	33.01	-8.64
N	QPSK	2501.0	Н	Open	111	203	4.93	1 / 25	17.82	22.74	0.188	33.01	-10.27
H	QPSK	2593.0	Н	Open	125	195	4.97	1 / 49	20.53	25.49	0.354	33.01	-7.52
10 MHz	QPSK	2685.0	Н	Open	117	199	5.14	1 / 49	20.76	25.90	0.389	33.01	-7.12
	16-QAM	2685.0	Н	Open	117	199	5.14	1 / 25	19.14	24.27	0.268	33.01	-8.74
N	QPSK	2498.5	Н	Open	111	203	4.89	1 / 12	17.88	22.77	0.189	33.01	-10.24
MHz	QPSK	2593.0	Н	Open	125	195	4.97	1/0	20.52	25.49	0.354	33.01	-7.52
5 N	QPSK	2687.5	Н	Open	117	199	5.13	1 / 24	20.09	25.23	0.333	33.01	-7.78
	16-QAM	2593.0	н	Open	125	195	4.97	1 / 12	19.33	24.30	0.269	33.01	-8.71
	QPSK (Opposite Pol.)	2680.0	V	Oepn	311	276	5.15	1/0	18.85	24.00	0.251	33.01	-9.01
20 MHz	QPSK (WCP)	2680.0	Н	Open	118	193	5.15	1/0	20.00	25.15	0.327	33.01	-7.86
	QPSK	2680.0	н	Half	245	306	5.15	1 / 99	17.04	22.19	0.166	33.01	-10.82

Table 7-13. EIRP Data (LTE Band 41(PC3) – Ant I)

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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	EUT Config	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
	π/2 BPSK	2546.0	н	Open	124	204	4.64	1 / 204	20.36	25.00	0.316	33.01	-8.01
₽	π/2 BPSK π/2 BPSK	2593.0 2640.0	H H	Open Open	109 109	195 194	4.97 4.97	1 / 204	21.12 21.28	26.09 26.23	0.406	33.01 33.01	-6.92 -6.78
100 MHz	QPSK	2546.0	н	Open	124	204	4.64	1 / 204	20.33	24.97	0.314	33.01	-8.04
00	QPSK	2593.0	н	Open	109	195	4.97	1 / 204	21.14	26.11	0.408	33.01	-6.90
	QPSK	2640.0	н	Open	109	194	4.97	1 / 138	21.23	26.20	0.417	33.01	-6.81
	16-QAM	2593.0	Н	Open	109	195	4.97	1/204	20.09	25.06	0.321	33.01	-7.95
	π/2 BPSK	2541.0	н	Open	124	204	4.64	1 / 243	20.48	25.12	0.325	33.01	-7.89
N	π/2 BPSK	2593.0	н	Open	109	195	4.97	1 / 243	21.14	26.11	0.408	33.01	-6.90
MHz	π/2 BPSK QPSK	2645.0 2541.0	H	Open	109 124	194 204	5.00 4.64	1/1 1/121	21.23 20.38	26.23 25.00	0.420	33.01 33.01	-6.78 -8.01
901	QPSK	2593.0	н	Open Open	124	195	4.97	1 / 243	20.30	28.10	0.407	33.01	-6.91
	QPSK	2845.0	н	Open	109	194	5.00	1/1	21.23	26.23	0.420	33.01	-6.78
	16-QAM	2593.0	H	Open	109	195	4.97	1/243	20.57	25.54	0.358	33.01	-7.47
	π/2 BPSK	2536.0	н	Open	124	204	4.64	1/215	20.36	25.00	0.316	33.01	-8.01
	π/2 BPSK	2593.0	н	Open	109	195	4.97	1/215	21.14	26.11	0.408	33.01	-6.90
Ŧ	π/2 BPSK	2650.0	н	Open	109	194	5.03	1/1	21.32	26.35	0.432	33.01	-6.66
80 MHz	QPSK	2536.0	н	Open	124	204	4.64	1 / 108	20.23	24.87	0.307	33.01	-8.14
õ	QPSK	2593.0	н	Open	109	195	4.97	1 / 215	21.13	26.10	0.407	33.01	-6.91
	QPSK 16-QAM	2650.0 2593.0	H	Open	109	194 195	5.03 4.97	1/1 1/215	21.23	26.26 25.58	0.423	33.01	-8.75 -7.43
		2593.0	н	Open	109	204	4.97	1 / 215	20.81	25.58	0.301	33.01 33.01	-7.43
	π <sup>12</sup> BPSK π/2 BPSK	2593.0	н	Open Open	124	195	4.04	1 / 180	20.20	26.07	0.404	33.01	-6.94
	π/2 BPSK	2655.0	н	Open	109	195	5.03	1/1	21.10	26.35	0.432	33.01	-6.66
MHz	QPSK	2531.0	н	Open	124	204	4.64	1/90	20.15	24.79	0.301	33.01	-8.22
2	QPSK	2593.0	н	Open	109	195	4.97	1 / 180	21.14	26.11	0.408	33.01	-6.90
	QPSK	2655.0	н	Open	109	194	5.03	1/1	21.23	26.26	0.423	33.01	-6.75
	16-QAM	2593.0	н	Open	109	195	4.97	1 / 180	20.61	25.58	0.361	33.01	-7.43
	π/2 BPSK	2526.0	н	Open	124	204	4.66	1 / 160	20.52	25.18	0.330	33.01	-7.83
N	π/2 BPSK	2593.0	H	Open	109	195	4.97	1 / 160	21.16	26.13	0.410	33.01	-6.88
MHz	π/2 BPSK	2660.0	н	Open	109	194	5.09	1/1	21.18	26.27	0.424	33.01	-6.74
60 N	QPSK QPSK	2526.0	н	Open	124	204	4.66 4.97	1 / 160	20.52	25.18	0.330	33.01 33.01	-7.83
9	QPSK	2593.0 2660.0	H H	Open Open	109	195 194	4.97	1/160	21.15 21.14	26.12 26.23	0.409	33.01	-6.89 -6.78
	16-QAM	2593.0	н	Open	109	195	4.97	1 / 160	20.83	25.80	0.380	33.01	-7.21
	π/2 BPSK	2521.0	н	Open	124	204	4.69	1 / 131	20.53	25.22	0.333	33.01	-7.79
	π/2 BPSK	2593.0	H	Open	109	195	4.97	1 / 131	21.12	28.09	0.406	33.01	-6.92
Hz	π/2 BPSK	2665.0	н	Open	109	194	5.10	1/1	21.20	26.30	0.427	33.01	-6.71
50 MHz	QPSK	2521.0	н	Open	124	204	4.69	1 / 131	20.40	25.09	0.323	33.01	-7.92
20	QPSK	2593.0	н	Open	109	195	4.97	1 / 131	21.10	26.07	0.404	33.01	-6.94
	QPSK	2665.0	н	Open	109	194	5.10	1/1	21.04	26.14	0.411	33.01	-6.87
	16-QAM	2593.0	н	Open	109	195	4.97	1 / 131	20.59	25.58	0.380	33.01	-7.45
	π/2 BPSK	2516.0	н	Open	124	204	4.78	1/1	20.51	25.29	0.338	33.01	-7.72
N	π/2 BPSK π/2 BPSK	2593.0 2670.0	H H	Open Open	109 109	195 194	4.97 5.10	1 / 104	21.09 21.09	26.06 26.19	0.404	33.01 33.01	-6.95 -6.82
MHz	QPSK	2516.0	н	Open	124	204	4.78	1/1	20.34	25.12	0.325	33.01	-7.89
40	QPSK	2593.0	н	Open	109	195	4.97	1 / 104	21.16	26.13	0.410	33.01	-6.88
	QPSK	2670.0	н	Open	109	194	5.10	1 / 104	22.07	27.17	0.521	33.01	-5.84
	16-QAM	2593.0	Н	Open	109	195	4.97	1 / 104	20.88	25.85	0.384	33.01	-7.16
	π/2 BPSK	2511.0	н	Open	124	204	4.87	1/1	20.30	25.18	0.330	33.01	-7.83
	π/2 BPSK	2593.0	н	Open	109	195	4.97	1 / 76	21.13	26.10	0.407	33.01	-6.91
TH I	π/2 BPSK	2675.0	н	Open	109	194	5.13	1/1	21.13	26.26	0.423	33.01	-6.75
30 MHz	QPSK QPSK	2511.0	н	Open	124	204	4.87	1/1	20.14	25.02	0.318	33.01	-7.99
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	QPSK QPSK	2593.0 2675.0	H	Open Open	109 109	195 194	4.97 5.13	1/76	21.12 21.10	26.09 26.23	0.406	33.01 33.01	-6.92 -6.78
	16-QAM	2593.0	н	Open	109	194	4.97	1/1	20.58	25.55	0.420	33.01	-0.78
	π/2 BPSK	2506.0	н	Open	124	204	4.91	1/1	20.38	25.29	0.338	33.01	-7.72
	π/2 BPSK	2593.0	н	Open	109	195	4.97	1 / 50	21.09	26.06	0.404	33.01	-6.95
IHz	π/2 BPSK	2680.0	н	Open	109	194	5.15	1 / 50	21.04	26.19	0.416	33.01	-6.82
2	QPSK	2506.0	н	Open	124	204	4.91	1/1	20.21	25.12	0.325	33.01	-7.89
20	QPSK	2593.0	н	Open	109	195	4.97	1 / 50	21.16	26.13	0.410	33.01	-6.88
	QPSK	2680.0	н	Open	109	194	5.15	1 / 50	22.02	27.17	0.521	33.01	-5.84
	16-QAM	2593.0	н	Open	109	195	4.97	1/50	20.88	25.85	0.384	33.01	-7.16
	π/2 BPSK	2503.5	H	Open	124	204	4.91	1/1	20.31	25.22	0.333	33.01	-7.79
N	π/2 BPSK	2593.0	H H	Open	109	195	4.97 5.15	1/38	21.05	26.02	0.400	33.01	-6.99 -6.84
15 MHz	π/2 BPSK QPSK	2682.5 2503.5	H	Open Open	109 124	194 204	5.15 4.91	1/1	21.02 20.16	26.17 25.07	0.414	33.01 33.01	-0.84
151	QPSK	2593.0	н	Open	109	195	4.97	1/38	21.07	26.04	0.402	33.01	-6.97
	QPSK	2682.5	н	Open	109	194	5.15	1/1	20.86	26.01	0.399	33.01	-7.00
	16-QAM	2593.0	н	Open	109	195	4.97	1/38	20.61	25.58	0.361	33.01	-7.43
	π/2 BPSK	2501.0	н	Open	124	204	4.91	1/1	20.21	25.12	0.325	33.01	-7.89
	π/2 BPSK	2593.0	н	Open	109	195	4.97	1/22	20.99	25.96	0.394	33.01	-7.05
MHz	π/2 BPSK	2685.0	н	Open	109	194	5.15	1/1	21.00	26.15	0.412	33.01	-6.86
10 M	QPSK	2501.0	н	Open	124	204	4.91	1/1	20.15	25.06	0.321	33.01	-7.95
÷	QPSK	2593.0	н	Open	109	195	4.97	1/22	21.06	26.03	0.401	33.01	-6.98
	QPSK 18 OAM	2685.0	н	Open	109	194	5.15	1/1	20.84	25.99	0.397	33.01	-7.02
	16-QAM QPSK (CP-OFDM)	2593.0 2640.0	H	Open Open	109 109	195 194	4.97 4.97	1/22	20.60	25.57 24.68	0.380	33.01 33.01	-7.44 -8.33
	QPSK (Opposite Pol.)	2640.0	v	Open	242	270	4.97	1 / 138	20.60	24.08	0.254	33.01	-0.55
100 MHz	QPSK (WCP)	2640.0	н	Open	141	200	4.97	1 / 138	19.70	24.67	0.293	33.01	-8.34
	QPSK	2640.0	н	Half	245	306	5.15	1 / 99	17.04	22.19	0.166	33.01	-10.82
								41/PC3)		-			_

Table 7-14. EIRP Data (NR Band n41(PC3) – Ant I)

FCC ID: A3LSMF731JPN		PART 27 MEASUREMENT REPORT					
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### 7.7 Radiated Spurious Emissions Measurements

### **Test Overview**

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) 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**

ANSI C63.26-2015 - Section 5.5.4

### 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 > 2 x span / RBW
- 5. Detector = RMS
- 6. Trace mode = Average (Max Hold for pulsed emissions)
- 7. The trace was allowed to stabilize

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

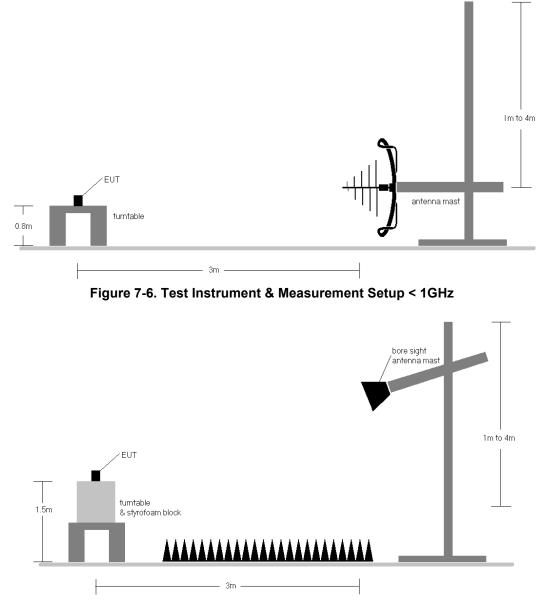


Figure 7-7. Test Instrument & Measurement Setup >1 GHz

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### Test Notes

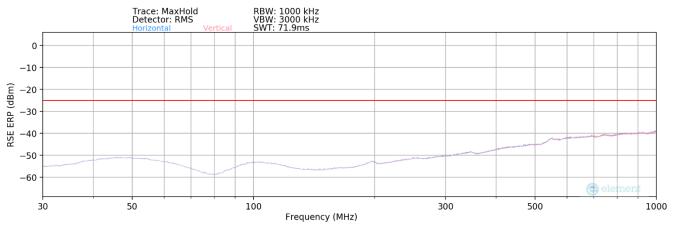
- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
  - a)  $E(dB\mu V/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m) b) EIRP (dBm) = E(dB\mu V/m) + 20logD 104.8; where D is the measurement distance in meters.$
- 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) ULCA 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.
- 8) 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.
- 9) Spurious emission in EN-DC Operating mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor) has been checked. The EUT was configured through software to transmit in a standalone mode as this was found to produce the worst case emissions.

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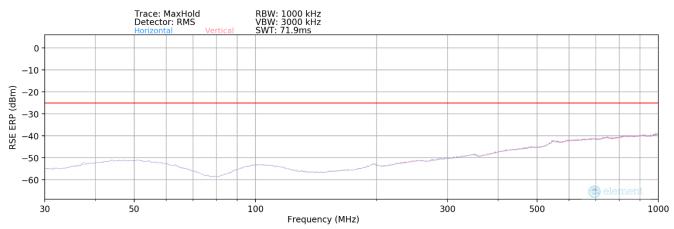
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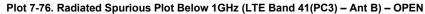


# LTE Band 41(PC3) – Ant B







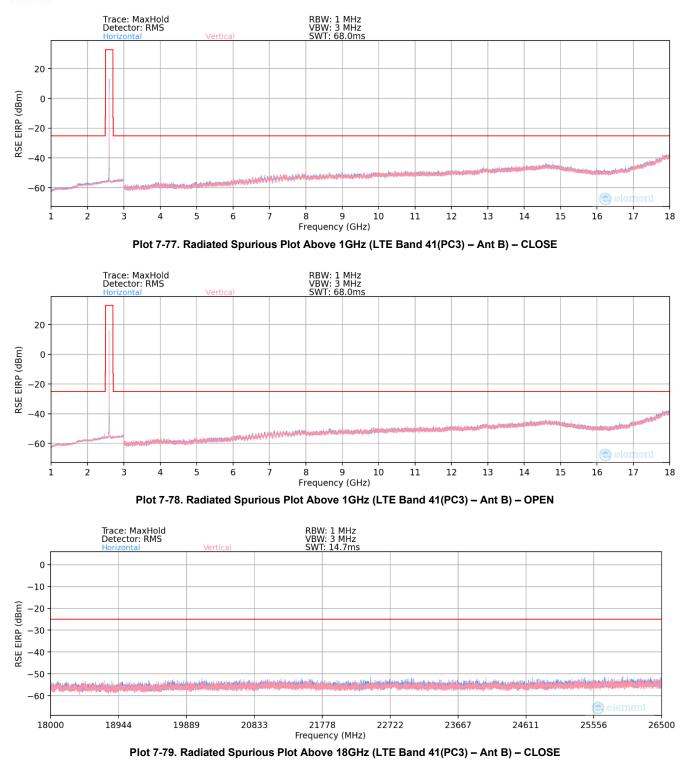


Bandwidth (MHz):	20								
Frequency (MHz):		2593.0							
RB / Offset: 1/0									
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
282.82	н	-	-	-82.52	20.12	44.60	-52.81	-25.00	-27.81
282.82 567.35	H H	-	-	-82.52 -81.68	20.12 25.56	44.60 50.88	-52.81 -46.53	-25.00 -25.00	-27.81 -21.53

Table 7-15. Radiated Spurious Data Below 1GHz (LTE Band 41(PC3) – Ant B) – CLOSE

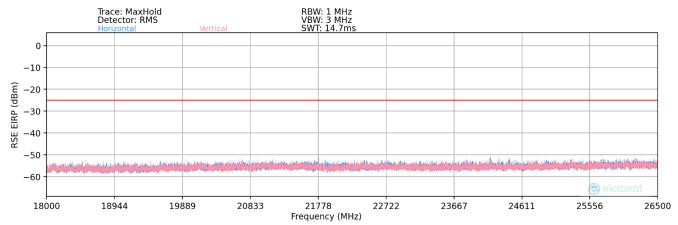
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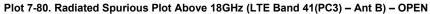




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Bandwidth (MHz):		20							
Frequency (MHz):		2506.0							
RB / Offset:	RB / Offset: 1/0								
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5012.00	Н	315	231	-62.65	1.33	45.68	-49.58	-25.00	-24.58
7518.00	н	-	-	-69.10	6.53	44.43	-50.82	-25.00	-25.82
10024.00	н	-	-	-70.27	11.03	47.76	-47.50	-25.00	-22.50
12530.00	н	-	-	-71.48	13.55	49.07	-46.19	-25.00	-21.19
15036.00	Н	-	-	-72.75	16.99	51.24	-44.02	-25.00	-19.02
17542.00	Н	-	-	-73.85	20.97	54.12	-41.14	-25.00	-16.14

Table 7-16. Radiated Spurious Data (LTE Band 41(PC3) – Low Channel – Ant B) – CLOSE

Bandwidth (MHz):		20							
Frequency (MHz):		2593.0							
RB / Offset:		1/0							
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]
5186.00	н	301	228	-60.96	1.63	47.67	-47.59	-25.00	-22.59
7779.00	н	-	-	-68.75	7.28	45.53	-49.73	-25.00	-24.73
10372.00	н	-	-	-71.83	11.50	46.67	-48.59	-25.00	-23.59
12965.00	н	-	-	-71.95	14.99	50.04	-45.22	-25.00	-20.22
15558.00	H	-	-	-72.67	14.94	49.27	-45.99	-25.00	-20.99

Table 7-17. Radiated Spurious Data (LTE Band 41(PC3) – Mid Channel – Ant B) – CLOSE

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Bandwidth (MHz):	20
Frequency (MHz):	2680.0
RB / Offset:	1/0

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]
5360.00	Н	309	234	-62.42	2.31	46.89	-48.37	-25.00	-23.37
8040.00	Н	-	-	-70.30	7.97	44.67	-50.59	-25.00	-25.59
10720.00	н	-	-	-72.40	12.02	46.62	-48.64	-25.00	-23.64
13400.00	Н	-	-	-71.23	15.28	51.05	-44.21	-25.00	-19.21
16080.00	Н	-	-	-73.39	14.10	47.71	-47.54	-25.00	-22.54

Table 7-18. Radiated Spurious Data (LTE Band 41(PC3) – High Channel – Ant B) – CLOSE

Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	20
Frequency (MHz):	2593.0
RB / Offset:	1/0

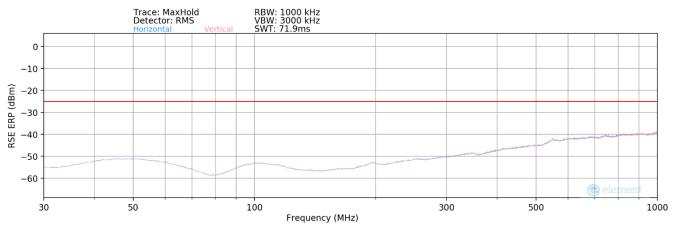
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	н	291	237	-61.44	1.63	47.19	-48.07	-25.00	-23.07
7779.00	н	384	242	-67.56	7.28	46.72	-48.54	-25.00	-23.54
10372.00	н	-	-	-71.77	11.50	46.73	-48.53	-25.00	-23.53
12965.00	Н	-	-	-71.35	14.99	50.64	-44.62	-25.00	-19.62
15558.00	н	-	-	-72.88	14.94	49.06	-46.20	-25.00	-21.20

Table 7-19. Radiated Spurious Data (LTE Band 41(PC3) – Mid Channel – Ant B) – WCP – CLOSE

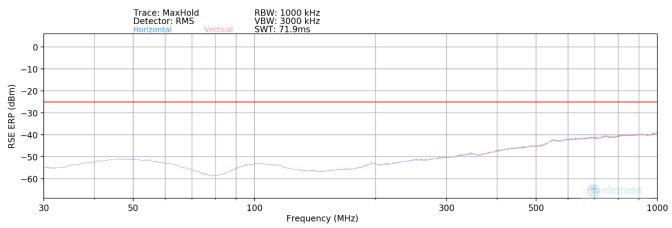
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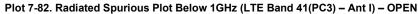


# LTE Band 41(PC3) – Ant I







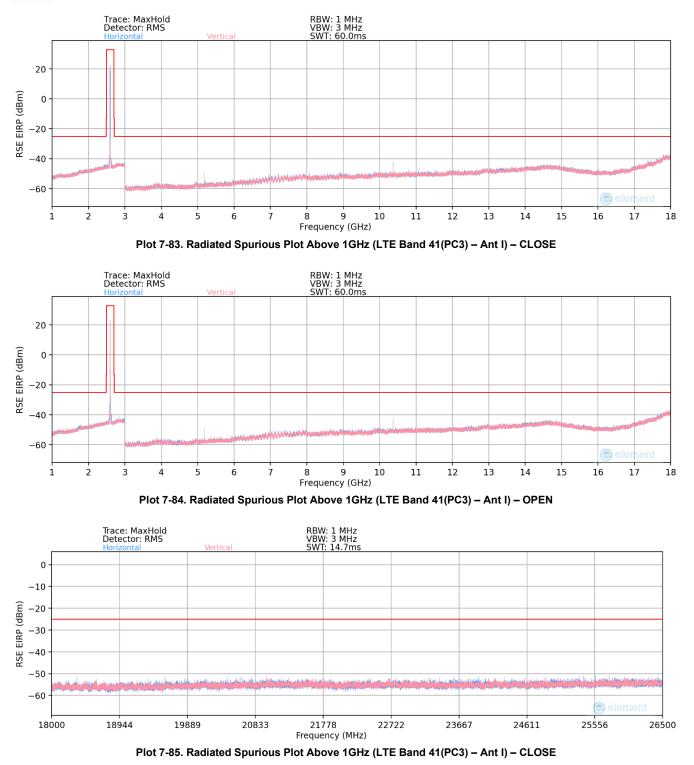


Bandwidth (MHz):	20								
Frequency (MHz):	2680.0								
<b>RB / Offset:</b> 1 / 50									
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
196.96	V	-	-	-80.44	18.49	45.05	-52.36	-25.00	-27.36
637.33	V	-	-	-77.59	26.65	56.06	-41.34	-25.00	-16.34
829.21	V	-	-	-78.47	29.68	58.21	-39.19	-25.00	-14.19

Table 7-20. Radiated Spurious Data Below 1GHz (LTE Band 41(PC3) - Ant I) - CLOSE

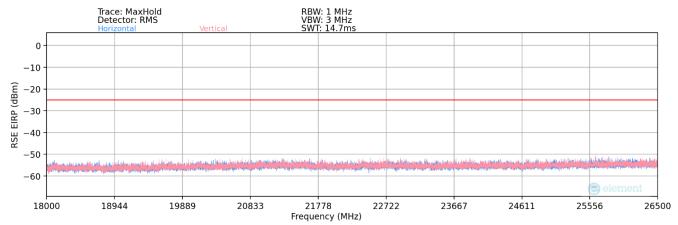
FCC ID: A3LSMF731JPN		PART 27 MEASUREMENT REPORT			
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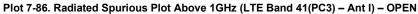




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Bandwidth (MHz):	20								
Frequency (MHz):		2506.0							
RB / Offset:	<b>RB / Offset:</b> 1 / 50								
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5012.00	V	122	134	-62.86	1.33	45.47	-49.79	-25.00	-24.79
7518.00	V	118	130	-66.20	6.53	47.33	-47.92	-25.00	-22.92
10024.00	V	110	144	-68.01	11.03	50.02	-45.24	-25.00	-20.24
12530.00	V	-	-	-73.02	13.55	47.53	-47.73	-25.00	-22.73
15036.00	V	-	-	-73.56	16.99	50.43	-44.83	-25.00	-19.83
17542.00	V	-	-	-74.71	20.97	53.26	-42.00	-25.00	-17.00

Table 7-21. Radiated Spurious Data (LTE Band 41(PC3) – Low Channel – Ant I) – CLOSE

Bandwidth (MHz):	20
Frequency (MHz):	2593.0
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]
5186.00	V	107	137	-58.69	1.63	49.94	-45.32	-25.00	-20.32
7779.00	V	-	-	-69.43	7.28	44.85	-50.41	-25.00	-25.41
10372.00	V	122	130	-66.85	11.50	51.65	-43.61	-25.00	-18.61
12965.00	V	-	-	-72.44	14.99	49.55	-45.71	-25.00	-20.71
15558.00	V	-	-	-73.60	14.94	48.34	-46.92	-25.00	-21.92
18151.00	V	-	-	-58.12	1.51	50.38	-54.42	-25.00	-29.42

Table 7-22. Radiated Spurious Data (LTE Band 41(PC3) – Mid Channel – Ant I) – CLOSE

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Bandwidth (MHz):	20
Frequency (MHz):	2680.0
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]
5360.00	V	112	136	-52.42	2.31	56.89	-38.37	-25.00	-13.37
8040.00	V	110	132	-68.86	7.97	46.11	-49.15	-25.00	-24.15
10720.00	V	110	146	-63.24	12.02	55.78	-39.48	-25.00	-14.48
13400.00	V	110	160	-71.82	15.28	50.46	-44.80	-25.00	-19.80
16080.00	V	-	-	-72.90	14.10	48.20	-47.05	-25.00	-22.05
18760.00	V	-	-	-57.91	1.79	50.88	-53.92	-25.00	-28.92
21440.00	V	-	-	-59.78	4.00	51.22	-53.58	-25.00	-28.58

Table 7-23. Radiated Spurious Data (LTE Band 41(PC3) – High Channel – Ant I) – CLOSE

Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	20
Frequency (MHz):	2680.0
RB / Offset:	1 / 50

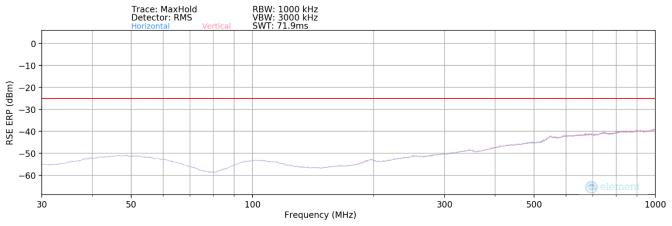
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5360.00	V	132	205	-56.18	2.31	53.13	-42.13	-25.00	-17.13
8040.00	V	147	210	-67.91	7.97	47.06	-48.20	-25.00	-23.20
10720.00	V	162	203	-63.52	12.02	55.50	-39.76	-25.00	-14.76
13400.00	V	153	196	-72.16	15.28	50.12	-45.14	-25.00	-20.14
16080.00	V	-	-	-71.31	14.10	49.79	-45.46	-25.00	-20.46
18760.00	V	-	-	-58.41	1.79	50.38	-54.42	-25.00	-29.42
21440.00	V	-	-	-59.12	4.00	51.88	-52.92	-25.00	-27.92

Table 7-24. Radiated Spurious Data (LTE Band 41(PC3) – Mid Channel – Ant I) – WCP – CLOSE

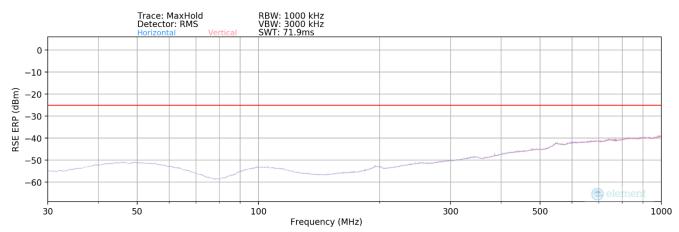
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# ULCA LTE Band 41(PC3) – Ant B









PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	2593.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	2612.8
SCC RB / Offset:	1/0

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
283.31	V	-	-	-82.63	20.14	44.51	-52.90	-25.00	-27.90
608.15	V	-	-	-80.86	26.62	52.76	-44.65	-25.00	-19.65
816.64	V	-	-	-82.16	29.41	54.25	-43.16	-25.00	-18.16

Table 7-25. Radiated Spurious Data Below 1GHz (ULCA LTE Band 41 - Ant B) - CLOSE

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