	RF 50 Q	AC.	n Mask		SENSE:INT			12-10-21.0	M May 11, 2020	
optor Er	eq 2.546000		17	Cer		46000000 GHz		Radio Std		Frequency
	Gate: LO	000 G		Trig	: External1	Avg: 10	0.00% of 1			
PASS		IF	Gain:Low	#At	ten: 2 dB	Ext Gai	n: -46.90 d	B Radio De	vice: BTS	
0 dB/div	Ref 41.0 c	(Bro								
-09	Ker 41.0 C									
31.0										Center Fr
21.0			dama di	Li alla	يا و معر با الم	hala and the state of the state		a deservative di sono	Spectrum	2.546000000 G
11.0	MANAGE WAG	ALC: NO	THE A	n vivin n	a waara	M DAN HAVE	DI PLUE	YA WATERAT A		2.04000000 0
		11		1.11		a contration de la constante			14	
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Center 2.5								0.0.0.0	121 MHz	
senter 2.5	HO GHZ							span	121 WINZ	CF Ste
										12.100000 M
										Auto M
Total Powe	er Ref 37	.78 dBm	/ 100 M	HZ						
rotal Powe	er Ref 37	.78 dBm	/ 100 M	Hz						Adio M
					Lower		Peak →	Upper		
Start Freq	Stop Fre	q Inte	g BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	ΔLim(dB) F	Freq (Hz)	Freq Offs
Start Freq 50.50 MHz	Stop Fre z 51.50 MHz	a Inte z 1.000	g BW) MHz	dBm -33.07	ΔLim(dB) (-2.01)	Freq (Hz) -50.50 M	dBm -33.08	ΔLim(dB) F	50.51 M	Freq Offs
Start Freq 50.50 MHz 51.50 MHz	Stop Fre z 51.50 MHz z 55.50 MHz	q inte z 1.000 z 1.000	g BW) MHz) MHz	dBm -33.07 -35.98	ΔLim(dB) (-2.01) (-4.92)	Freq (Hz) -50.50 M -52.00 M	dBm -33.08 -35.03	ΔLim(dB) F (-2.02) (-3.97)	50.51 M 51.54 M	Freq Offs
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Fre z 51.50 MHz z 55.50 MHz z 60.50 MHz	rq inte z 1.000 z 1.000 z 1.000	g BW) MHz) MHz) MHz	dBm -33.07 -35.98 -37.49	ΔLim(dB) (-2.01) (-4.92) (-6.43)	Freq (Hz) -50.50 M	dBm -33.08 -35.03 -35.41	ΔLim(dB) F (-2.02) (-3.97) (-4.35)	50.51 M	Freq Offs
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Fre z 51.50 MHz z 55.50 MHz z 60.50 MHz z 8.000 MHz	q Inte z 1.000 z 1.000 z 1.000 z 1.000	g BW) MHz) MHz) MHz) MHz	dBm -33.07 -35.98 -37.49	ΔLim(dB) (-2.01) (-4.92) (-6.43) ()	Freq (Hz) -50.50 M -52.00 M	dBm -33.08 -35.03	ΔLim(dB) F (-2.02) (-3.97) (-4.35) ()	50.51 M 51.54 M	Freq Offs
50.50 MHz 51.50 MHz 55.50 MHz	Stop Fre z 51.50 MHz z 55.50 MHz z 60.50 MHz z 8.000 MHz z 12.50 MHz	rq Inte z 1.000 z 1.000 z 1.000 z 1.000 z 1.000 z 1.000	g BW) MHz) MHz) MHz	dBm -33.07 -35.98 -37.49	ΔLim(dB) (-2.01) (-4.92) (-6.43)	Freq (Hz) -50.50 M -52.00 M -55.53 M	dBm -33.08 -35.03 -35.41	ΔLim(dB) F (-2.02) (-3.97) (-4.35)	50.51 M 51.54 M	Freq Offs

5G 100MHz Data Channel Frequency 2546 MHz / Signal BW 100 MHz / TX1

Channel Frequency 2593 MHz / Signal BW 100 MHz / TX1

anter Fred	RF 50 Ω A q 2.5930050		Ce	SENSE:INT	93005000 GHz			8 PM May 11, 2020 Std: None	Frequency
	d 2.5930050 ate: LO	JUU GHZ	Trie Trie	g: External1		0.00% of 1		sta. None	
ASS	00120	IFGain:Lo	ow #At	ten: 2 dB	Ext Gai	n: -46.90 d	IB Radio D	Device: BTS	
) dB/div	Ref 41.0 dE								
	Rel 41.0 dE	5111						COMPANY OF A	
1.0									Center Fr
1.0		hat the same	ad the state	- Heller and the	6			Spectrum	2.593005000 G
	AN MICHING	CONTRACTOR	AN PACKIN	n an the second	Y PANAWA		n namerik		2.593005000 G
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9.0	13 GHz						Spa	an 121 MHz	05.01
9.0	03 GHz						Spa	an 121 MHz	
enter 2.59		5 dBm / 100) MHz				Spa	an 121 MHz	12.100000 M
enter 2.59		5 dBm / 100) MHz				Spa	an 121 MHz	12.100000 M
enter 2.59		5 dBm / 100) MHz	Lower	4	Deak ->	Spa	an 121 MHz	12.100000 M
enter 2.59		5 dBm / 100 Integ BW) MHz dBm	Lower ∆Lim(dB)	<- Freq (Hz)	Peak → dBm		an 121 MHz Freq (Hz)	12.100000 M <u>Auto</u> M
enter 2.59	r Ref 36.9						Upper		12.100000 M Auto M Freq Offs
enter 2.59 otal Power Start Freq	r Ref 36.9 Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	12.100000 M Auto M Freq Offs
enter 2.59 otal Power Start Freq 50.50 MHz	Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.90	ΔLim(dB) (-0.84)	Freq (Hz) -50.50 M	dBm -32.53	Upper ΔLim(dB) (-1.47)	Freq (Hz) 50.50 M	12.100000 Mi Auto Mi Freq Offs
enter 2.59 otal Power Start Freq 50.50 MHz 51.50 MHz	Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.90 -33.53	ΔLim(dB) (-0.84) (-2.47)	Freq (Hz) -50.50 M -51.68 M	dBm -32.53 -33.26	Upper ΔLim(dB) (-1.47) (-2.20)	Freq (Hz) 50.50 M 51.70 M	12.100000 Mi Auto Mi Freq Offs
enter 2.59 otal Power Start Freq 51.50 MHz 55.50 MHz	Ref 36.9 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.90 -33.53 -33.82	ΔLim(dB) (-0.84) (-2.47) (-2.76)	Freq (Hz) -50.50 M -51.68 M	dBm -32.53 -33.26 -33.46	Upper ΔLim(dB) (-1.47) (-2.20) (-2.40)	Freq (Hz) 50.50 M 51.70 M	12.100000 Mi Auto Mi Freq Offs
enter 2.59 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51,50 MHz 55,50 MHz 60,50 MHz 8,000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.90 -33.53 -33.82 	ΔLim(dB) (-0.84) (-2.47) (-2.76) ()	Freq (Hz) -50.50 M -51.68 M	dBm -32.53 -33.26 -33.46 	Upper ΔLim(dB) (-1.47) (-2.20) (-2.40) ()	Freq (Hz) 50.50 M 51.70 M	CF Ste 12.100000 Mi <u>Auto</u> M Freq Offs 0 I

	n Analyzer - Spectrum									
optor Frog	RF 50 Ω A 2.6400000		Cet	SENSE:INT	40000000 GHz		07:34:19 P Radio Std	MMay 11, 2020	Frequenc	:y
	2.6400000	00 GHz	Trip	g: External1	Avg: 10	0.00% of 1	0	. None		
ASS		IFGain:Lo	w #At	ten: 2 dB	Ext Gair	n: -46.20 dl	B Radio De	vice: BTS		
	D-6 44 0 45									
odB/div og	Ref 41.0 dE	um						STOCK AND STOCK		
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	ANN MARKED	MAL / 1944 144	Market	61. Y 17. KS	History .		an dahar dia	1 spectrum	2.64000000	0 GH
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enter 2.64	GHz						Span	121 MHz		
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otal Power	Ref 36.7	6 dBm / 100	MHz						Auto	Ma
	Ref 36.7	6 dBm / 100	MHz	Louise	~ 0	wak s	Honer			
otal Power				Lower ALim(dB)		eak ⇒ dBm	Upper ALim(dB)	Freg (Hz)	Auto	Ma
otal Power	Stop Freq	integ BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	ΔLim(dB) F	Freq (Hz)		Ma
otal Power Start Freq 50.50 MHz	Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.50	ΔLim(dB) (-0.44)	Freq (Hz) -50.50 M	dBm -33.04	ΔLim(dB) F (-1.98)	50.51 M ^	Auto	Ma
otal Power Start Freq 50.50 MHz 51.50 MHz	Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.50 -33.43	ΔLim(dB) (-0.44) (-2.37)	Freq (Hz) -50.50 M -52.98 M	dBm -33.04 -34.27	ΔLim(dB) F (-1.98) (-3.21)	50.51 M 51.66 M	Auto	Ma
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.50 -33.43 -33.70	ΔLim(dB) (-0.44) (-2.37) (-2.64)	Freq (Hz) -50.50 M	dBm -33.04	ΔLim(dB) F (-1.98) (-3.21) (-7.10)	50.51 M ^	Auto	Ma
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.50 -33.43	ΔLim(dB) (-0.44) (-2.37) (-2.64) ()	Freq (Hz) -50.50 M -52.98 M	dBm -33.04 -34.27	ΔLim(dB) F (-1.98) (-3.21) (-7.10) ()	50.51 M 51.66 M	Auto	Ma
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz 8.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz 12.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.50 -33.43 -33.70 	ΔLim(dB) (-0.44) (-2.37) (-2.64) () ()	Freq (Hz) -50.50 M -52.98 M -59.80 M	dBm -33.04 -34.27 -38.16 	ΔLim(dB) F (-1.98) (-3.21) (-7.10) () ()	50.51 M 51.66 M	Auto	Ma
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.50 -33.43 -33.70	ΔLim(dB) (-0.44) (-2.37) (-2.64) ()	Freq (Hz) -50.50 M -52.98 M	dBm -33.04 -34.27	ΔLim(dB) F (-1.98) (-3.21) (-7.10) ()	50.51 M 51.66 M	Auto	Ma

Keysight Spectrun									
							61.01		
			Con	SENSE:INT	46000000 GHz			7 PM May 11, 2020 Std: None	Frequency
	2.5460000	JUU GHZ		: External1		00.00% of 1		sta: None	
ASS Ga	ite: LO	IFGain:Low		en: 0 dB		n: -46.90 d		Device: BTS	
			_						
0 dB/div	Ref 41.0 dE	Bm						Second for Land	
og								101111101	
31.0									Center F
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	6 GHz						Sp	an 121 MHz	CF SI
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enter 2.54		91 dBm / 100 t	ИНz					an 121 MHz	12.100000
enter 2.54	Ref 36.9			Lower		Peak >	Upper		12.100000 M <u>Auto</u>
Center 2.54	Ref 36.9 Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	12.100000 M <u>Auto</u> M
enter 2.54	Ref 36.9						Upper		12.100000 / Auto Freq Off
otal Power	Ref 36.9 Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	12.100000 M Auto Freq Off
Start Freq	Ref 36.9 Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -32.43	ΔLim(dB) (-1.37)	Freq (Hz) -50.50 M	dBm -32.18	Upper ΔLim(dB) (-1.12)	Freq (Hz) 50.51 M	12.100000 M Auto Freq Off
Senter 2.54 Otal Power Start Freq 50.50 MHz 51.50 MHz	Ref 36.9 Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -32.43 -33.47	ΔLim(dB) (-1.37) (-2.41)	Freq (Hz) -50.50 M -51.86 M	dBm -32.18 -32.88	Upper ΔLim(dB) (-1.12) (-1.82) (-3.24)	Freq (Hz) 50.51 M 52.00 M	12.100000 M Auto Freq Off
enter 2.54 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Ref 36.9 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -32.43 -33.47 -36.73	ΔLim(dB) (-1.37) (-2.41) (-5.67) ()	Freq (Hz) -50.50 M -51.86 M	dBm -32.18 -32.88 -34.30	Upper ΔLim(dB) (-1.12) (-1.82) (-3.24) ()	Freq (Hz) 50.51 M 52.00 M	12.100000 M Auto Freq Off
50.50 MHz 51.50 MHz 55.50 MHz	Ref 36.9 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -32.43 -33.47 -36.73 	ΔLim(dB) (-1.37) (-2.41) (-5.67)	Freq (Hz) -50.50 M -51.86 M	dBm -32.18 -32.88 -34.30	Upper ΔLim(dB) (-1.12) (-1.82) (-3.24)	Freq (Hz) 50.51 M 52.00 M	12.100000

5G 100MHz Data Channel Frequency 2546 MHz / Signal BW 100 MHz / TX17

Channel Frequency 2593 MHz / Signal BW 100 MHz / TX17

aptor Fro	RF 50 Ω AC		Cer	SENSE:INT	93005000 GHz		Radio St	PM May 11, 2020	Frequency
	Gate: LO		Trig	: External1	Avg: 10	0.00% of 1			
455		IFGain:Lo	w #At	ten: 0 dB	Ext Gai	n: -46.90 d	B Radio D	evice: BTS	
) dB/div	Ref 41.0 dB	m							
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enter 2.5	93 GHz						Spa	n 121 MHz	
									CF St
otal Powe	- D-6								12.100000 M
otal Powe	r Ref 30.00	5 dBm / 100	MHZ						Auto M
				Lower		Peak →	Upper		
		1-1 0144	dBm	ΔLim(dB)	Freg (Hz)	dBm	ΔLim(dB)	Freq (Hz)	Freq Off
Start Freq	Stop Freq	Integ BW							
							(-1.07)	50.54 M	
Start Freq 50.50 MHz 51.50 MHz	Stop Freq 51.50 MHz 55.50 MHz	1.000 MHz 1.000 MHz	-31.67 -32.89	(-0.61) (-1.83)	-50.50 M -51.84 M	-32.13	(-1.07) (-1.68)	50.54 M	C
50.50 MHz	51.50 MHz	1.000 MHz	-31.67	(-0.61)	-50.50 M	-32.13			C
50.50 MHz 51.50 MHz	51.50 MHz 55.50 MHz	1.000 MHz 1.000 MHz	-31.67 -32.89	(-0.61) (-1.83)	-50.50 M -51.84 M	-32.13 -32.74	(-1.68)	51.92 M	C
50.50 MHz 51.50 MHz 55.50 MHz	51.50 MHz 55.50 MHz 60.50 MHz	1.000 MHz 1.000 MHz 1.000 MHz	-31.67 -32.89 -33.91	(-0.61) (-1.83) (-2.85)	-50.50 M -51.84 M	-32.13 -32.74 -33.15	(-1.68) (-2.09)	51.92 M	C
50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	-31.67 -32.89 -33.91	(-0.61) (-1.83) (-2.85) ()	-50.50 M -51.84 M	-32.13 -32.74 -33.15	(-1.68) (-2.09) ()	51.92 M	C

ind a gene offection	n Analyzer - Spectrun	n Emission Mask		SENSE:INT			60-06-261	M May 11, 2020		•
optor Frod	2.6400000		Cer		0000000 GHz		Radio Ste		Frequer	ncy
	1te: LO		Trig	g: External1	Avg: 10	0.00% of 1	0			
ASS Ga		IFGain:Lo	ow #At	ten: 2 dB	Ext Gair	n: -46.20 d	B Radio De	vice: BTS		
) dB/div	Ref 41.0 dE	100								
og	Ref 41.0 di	2111								
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	Bof 26.7	6 dBm / 100							12.1000	
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otal Power	Kei 30.7	o ubiii/ Tou	/ 11/12						Auto	
otal Power	NCI 50.1		J MITZ	lower	~ 0	week a	Honer		Auto	
otal Power	Stop Freq	Integ BW	dBm	Lower ALim(dB)		eak.⇒ dBm	Upper ∆Lim(dB)	Freg (Hz)		Offs
Start Freq	Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	ΔLim(dB)	Freq (Hz)	Freq	
Start Freq 50.50 MHz	Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.86	ΔLim(dB) (-0.80)	Freq (Hz) -50.50 M	dBm -33.41	ΔLim(dB) (-2.35)	50.51 M		
Start Freq 50.50 MHz 51.50 MHz	Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.86 -33.61	ΔLim(dB) (-0.80) (-2.55)	Freq (Hz) -50.50 M -52.84 M	dBm -33.41 -34.65	ΔLim(dB) (-2.35) (-3.59)	50.51 M 51.58 M		
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.86 -33.61 -33.93	ΔLim(dB) (-0.80) (-2.55) (-2.87)	Freq (Hz) -50.50 M	dBm -33.41 -34.65 -38.62	ΔLim(dB) (-2.35) (-3.59) (-7.56)	50.51 M		
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.86 -33.61	ΔLim(dB) (-0.80) (-2.55) (-2.87) ()	Freq (Hz) -50.50 M -52.84 M	dBm -33.41 -34.65	ΔLim(dB) (-2.35) (-3.59) (-7.56) ()	50.51 M 51.58 M		
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz 8.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz 12.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.86 -33.61 -33.93 	ΔLim(dB) (-0.80) (-2.55) (-2.87) () ()	Freq (Hz) -50.50 M -52.84 M -59.70 M 	dBm -33.41 -34.65 -38.62	ΔLim(dB) (-2.35) (-3.59) (-7.56) () ()	50.51 M 51.58 M		
Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.86 -33.61 -33.93	ΔLim(dB) (-0.80) (-2.55) (-2.87) ()	Freq (Hz) -50.50 M -52.84 M	dBm -33.41 -34.65 -38.62	ΔLim(dB) (-2.35) (-3.59) (-7.56) ()	50.51 M 51.58 M		Offs 0 H

Center Fre	RF 50 Ω eq 2.54600	AC 0000 G	Hz			46000000 GHz		Radio	2 PM May 12, 2020 Std: None	Frequency
	Gate: LO				g: External1 tten: 0 dB		0.00% of 1 n: -46.90 c		Device: BTS	
0 dB/div	Ref 41.0	dBm								
.og 31.0									NO STATU	Center Fre
21.0		. hate		undi.	ي من الله	100 A. U.S.			Spectrum	2.54600000 GH
11.0	AN MARKA	in the second	ner a	an we	49 M A A A A	YTHNHW	hirin i	i na an tha a	11. L	2.546000000 GF
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9.00										
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enter 2.5	i46 GHz							Spa	an 121 MHz	CE Sta
Center 2.5								Sp	an 121 MHz	CF Ste
		7.43 dBm /	100 M	Ηz				Sp	an 121 MHz	CF Ste 12.100000 MH <u>Auto</u> Ma
Center 2.5		7.43 dBm /	100 M	Ηz					an 121 MHz	12.100000 MH
Center 2.5	er Ref 37				Lower		Peak →	Upper		12.100000 MH Auto Ma
Center 2.5	er Ref 37 Stop Fre	eq Inte	g BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	12.100000 MH Auto Ma Freq Offse
Center 2.5	er Ref 37 Stop Fre 51.50 MH	eq Inte z 1.000	g BW MHz	dBm -33.42	∆Lim(dB) (-2.36)	Freq (Hz) -50.50 M	dBm -33.17	Upper ΔLim(dB) (-2.11)	Freq (Hz) 50.51 M	12.100000 MH Auto Ma
Center 2.5	er Ref 37 Stop Fre 51.50 MH 55.50 MH	eq Inte z 1.000 z 1.000	g BW MHz MHz	dBm	ΔLim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	12.100000 MH Auto Ma Freq Offse
Center 2.5 Fotal Power Start Freq 50.50 MHz 51.50 MHz	Er Ref 37 Stop Fre 51.50 MH 55.50 MH 60.50 MH	z 1.000 z 1.000 z 1.000 z 1.000	g BW MHz MHz MHz	dBm -33.42 -35.92	ΔLim(dB) (-2.36) (-4.86)	Freq (Hz) -50.50 M -51.58 M	dBm -33.17 -34.92	Upper ΔLim(dB) (-2.11) (-3.86)	Freq (Hz) 50.51 M 51.70 M	12.100000 MH Auto Ma Freq Offse
Center 2.5 Total Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	er Ref 37 Stop Fre 51.50 MH 55.50 MH 60.50 MH 8.000 MH	eq Inte z 1.000 z 1.000 z 1.000 z 1.000 z 1.000	g BW MHz MHz MHz MHz MHz	dBm -33.42 -35.92 -38.46	ΔLim(dB) (-2.36) (-4.86) (-7.40)	Freq (Hz) -50.50 M -51.58 M	dBm -33.17 -34.92 -35.72	Upper ΔLim(dB) (-2.11) (-3.86) (-4.66)	Freq (Hz) 50.51 M 51.70 M	12.100000 MH Auto Ma Freq Offse
Center 2.5 Cotal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	er Ref 37 Stop Fre 51.50 MH 55.50 MH 60.50 MH 8.000 MH 12.50 MH	eq Inte z 1.000 z 1.000 z 1.000 z 1.000 z 1.000 z 1.000 z 1.000	g BW MHz MHz MHz MHz MHz MHz MHz	dBm -33.42 -35.92 -38.46 	ΔLim(dB) (-2.36) (-4.86) (-7.40) ()	Freq (Hz) -50.50 M -51.58 M	dBm -33.17 -34.92 -35.72	Upper ΔLim(dB) (-2.11) (-3.86) (-4.66) ()	Freq (Hz) 50.51 M 51.70 M	12.100000 MH Auto Ma Freq Offse

5G 100MHz Data Channel Frequency 2546 MHz / Signal BW 100 MHz / TX33

Channel Frequency 2593 MHz / Signal BW 100 MHz / TX33

	2.5930050	00 GHz		g: External1	93005000 GHz Avg: 10	0.00% of 1		Std: None	Frequency
ASS		IFGain:Lov	w #At	ten: 0 dB	Ext Gair	n: -46.90 c	B Radio D	Device: BTS	
odB/div	Ref 41.0 dB	m							
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enter 2.59							Spa	an 121 MHz	CF Ste
		5 dBm / 100 l	MHz				Spa	an 121 MHz	12.100000 MH
enter 2.59		5 dBm / 100 l	MHz					an 121 MHz	12.100000 MH
enter 2.59	Ref 37.35			Lower		Peak →	Upper		12.100000 MH Auto Ma
otal Power	Ref 37.35 Stop Freq	Integ BW	dBm	$\Delta Lim(dB)$	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	12.100000 MH Auto Ma Freq Offs
otal Power Start Freq 50.50 MHz	Ref 37.35 Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.85	ΔLim(dB) (-0.79)	Freq (Hz) -50.50 M	dBm -32.97	Upper ΔLim(dB) (-1.91)	Freq (Hz)	12.100000 Mi Auto Mi Freq Offs
Senter 2.59 Start Power Start Freq 50.50 MHz 51.50 MHz	Ref 37.35 Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.85 -33.88	ΔLim(dB) (-0.79) (-2.82)	Freq (Hz) -50.50 M -52.46 M	dBm -32.97 -34.02	Upper ΔLim(dB) (-1.91) (-2.96)	Freq (Hz) 50.53 M 52.66 M	12.100000 Mi Auto Mi Freq Offs
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Ref 37.35 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.85 -33.88 -34.84	ΔLim(dB) (-0.79) (-2.82) (-3.78)	Freq (Hz) -50.50 M -52.46 M -55.63 M	dBm -32.97 -34.02 -34.25	Upper ΔLim(dB) (-1.91) (-2.96) (-3.19)	Freq (Hz)	12.100000 MH Auto Ma
enter 2.59 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Ref 37.35 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.85 -33.88 -34.84	ΔLim(dB) (-0.79) (-2.82) (-3.78) ()	Freq (Hz) -50.50 M -52.46 M	dBm -32.97 -34.02 -34.25	Upper ∆Lim(dB) (-1.91) (-2.96) (-3.19) ()	Freq (Hz) 50.53 M 52.66 M	12.100000 MH Auto Ma Freq Offs
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Ref 37.35 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.85 -33.88 -34.84	ΔLim(dB) (-0.79) (-2.82) (-3.78)	Freq (Hz) -50.50 M -52.46 M -55.63 M	dBm -32.97 -34.02 -34.25	Upper ΔLim(dB) (-1.91) (-2.96) (-3.19)	Freq (Hz) 50.53 M 52.66 M	12.100000 MH Auto Ma Freq Offs

		Emission Mask							
	RF 50 Ω A		Cor	SENSE:INT	40000000 GHz		11:24:49 Radio St	AM May 12, 2020	Frequency
	2.6400000	00 GHZ	Trig	: External1	Avg: 10	0.00% of 1		a. None	
ASS Ga	10. 20	IFGain:Lot	w #At	ten: 0 dB	Ext Gai	n: -46.90 d	B Radio De	evice: BTS	
	D-6440-10								
) dB/div >g	Ref 41.0 dB	sm				_			
1.0									Center Fre
1.0				1.1				Spectrus	
	ANN AND AND A	MALL WINLIAM	WYYANW	WARA AN	Vitantesait		sa nuka ka sa	i steerer	2.640000000 GH
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enter 2.64 otal Power	Ref 37.0	Integ BW	dBm	ΔLim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	12.100000 MH Auto Ma Freq Offse
enter 2.64 otal Power Start Freq 50.50 MHz	Ref 37.0 Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.53	ΔLim(dB) (-0.47)	Freq (Hz) -50.50 M	dBm -33.26	Upper ΔLim(dB) (-2.20)	Freq (Hz) 50.51 M	12.100000 MH Auto Ma Freq Offse
enter 2.64 otal Power Start Freq 50.50 MHz 51.50 MHz	Ref 37.0 Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.53 -33.61	ΔLim(dB) (-0.47) (-2.55)	Freq (Hz) -50.50 M -52.62 M	dBm -33.26 -34.79	Upper ΔLim(dB) (-2.20) (-3.73)	Freq (Hz) 50.51 M 51.58 M	12.100000 MH Auto Ma Freq Offse
enter 2.64 otal Power Start Freq 51.50 MHz 55.50 MHz	Ref 37.01 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.53 -33.61 -34.24	ΔLim(dB) (-0.47) (-2.55) (-3.18)	Freq (Hz) -50.50 M	dBm -33.26 -34.79 -39.54	Upper ∆Lim(dB) (-2.20) (-3.73) (-8.48)	Freq (Hz) 50.51 M	12.100000 MH Auto Ma Freq Offse
enter 2.64 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Ref 37.01 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.53 -33.61	ΔLim(dB) (-0.47) (-2.55) (-3.18) ()	Freq (Hz) -50.50 M -52.62 M	dBm -33.26 -34.79	Upper ΔLim(dB) (-2.20) (-3.73) (-8.48) ()	Freq (Hz) 50.51 M 51.58 M	12.100000 MH Auto Ma Freq Offse
enter 2.64 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 8.000 MHz 8.000 MHz	Ref 37.0 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz 12.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.53 -33.61 -34.24 	ΔLim(dB) (-0.47) (-2.55) (-3.18) () ()	Freq (Hz) -50.50 M -52.62 M -57.08 M	dBm -33.26 -34.79 -39.54 	Upper ΔLim(dB) (-2 20) (-3.73) (-8.48) () ()	Freq (Hz) 50.51 M 51.58 M	12.100000 MH
enter 2.64 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Ref 37.01 Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.53 -33.61 -34.24	ΔLim(dB) (-0.47) (-2.55) (-3.18) ()	Freq (Hz) -50.50 M -52.62 M	dBm -33.26 -34.79 -39.54	Upper ΔLim(dB) (-2.20) (-3.73) (-8.48) ()	Freq (Hz) 50.51 M 51.58 M	12.100000 MH Auto Ma Freq Offse

	RF 50.Ω	AC		SENSE:IN	*		62-22-14	PM May 12, 2020	
enter Fre	a 2.546000		7	Center Freq: 2.	546000000 GHz		Radio St		Frequency
	iate: LO		-+	Trig: External1		0.00% of 1			
A33		IFG	ain:Low	#Atten: 0 dB	Ext Gair	n: -46.90 d	B Radio De	evice: BTS	
0 dB/div	Ref 41.0 (1Bm							
og	1101							5010A0101	
31.0									Center Fre
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39.0 49.0 Center 2.54		.08 dBm /	100 MHz				Spa	n 121 MHz	12.100000 M
39.0 49.0 Center 2.54		.08 dBm /	100 MHz				Spa	n 121 MHz	CF Ste 12.100000 MI <u>Auto</u> Mi
Center 2.54	r Ref 38			Lower		Peak ->	Upper		12.100000 Mi <u>Auto</u> Mi
Center 2.54	r Ref 38 Stop Fre	q integ	BW dBm	n ∆Lim(dB)	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	12.100000 M
Center 2.54	r Ref 38 Stop Fre 51.50 MH	iq Integ z 1.000 N	BW dBm MHz -33.2	n ∆Lim(dB) 24 (-2.18)	Freq (Hz) -50.50 M	dBm -32.72	Upper ΔLim(dB) (-1.66)	Freq (Hz) 50.51 M	12.100000 Mi <u>Auto</u> Mi
Start Freq 50.50 MHz 51.50 MHz	r Ref 38 Stop Fre 51.50 MH 55.50 MH	rq Integ z 1.000 M z 1.000 M	BW dBm MHz -33.2 MHz -36.0	n ∆Lim(dB) 24 (-2.18) 05 (-4.99)	Freq (Hz) -50.50 M -51.66 M	dBm -32.72 -34.81	Upper ΔLim(dB) (-1.66) (-3.75)	Freq (Hz) 50.51 M 52.22 M	12.100000 Mi Auto Mi Freq Offs
330 0 Center 2.54 Total Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Fre 51.50 MH 55.50 MH 60.50 MH	q Integ z 1.000 M z 1.000 M z 1.000 M	BW dBm MHz -33. MHz -36.0 MHz -37.5	n ∆Lim(dB) 24 (-2.18) 05 (-4.99) 56 (-6.50)	Freq (Hz) -50.50 M	dBm -32.72	Upper ΔLim(dB) (-1.66) (-3.75) (-4.12)	Freq (Hz) 50.51 M	12.100000 Mi Auto Mi Freq Offs
200 Center 2.54 Total Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 55.50 MHz	r Ref 38 Stop Fre 51.50 MH; 55.50 MH; 60.50 MH; 8.000 MH;	q Integ z 1.000 M z 1.000 M z 1.000 M z 1.000 M	BW dBn MHz -33.2 MHz -36.0 MHz -37.5 MHz	h ΔLim(dB) 24 (-2.18) 05 (-4.99) 56 (-6.50) ()	Freq (Hz) -50.50 M -51.66 M	dBm -32.72 -34.81	Upper ΔLim(dB) (-1.66) (-3.75) (-4.12) ()	Freq (Hz) 50.51 M 52.22 M	12.100000 M Auto M Freq Offs
330 0 Center 2.54 Total Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Fre 51.50 MH 55.50 MH 60.50 MH	rq Integ z 1.000 M z 1.000 M z 1.000 M z 1.000 M z 1.000 M	BW dBm MHz -332 MHz -36.0 MHz -37.5 MHz MHz MHz	n ∆Lim(dB) 24 (-2.18) 05 (-4.99) 56 (-6.50)	Freq (Hz) -50.50 M -51.66 M	dBm -32.72 -34.81 -35.18	Upper ΔLim(dB) (-1.66) (-3.75) (-4.12)	Freq (Hz) 50.51 M 52.22 M	12.100000 Mi Auto Mi Freq Offs

5G 100MHz Data Channel Frequency 2546 MHz / Signal BW 100 MHz / TX49

Channel Frequency 2593 MHz / Signal BW 100 MHz / TX49

	RF 50 Ω AC 2.59300500		Cer	SENSE:INT	93005000 GHz		04:23:18 F	MMay 12, 2020	Frequency
	2.59500500 te: L0	IFGain:Lo	Trig	: External1 ten: 0 dB	Avg: 10	0.00% of 1 n: -46.90 d	0		
0 dB/div	Ref 41.0 dBi	m							
og 31.0									Center Fre
1.0	hahamininini	M. While	U rikolan	di kan kin	Uninstantial.	i alimi di	And a state of the st	Spectrum	2.593005000 G
1.0		is left of the second	al of the set	1. 19 1 . 1	t okulai likka a	1.1.1.1	, Andala e tái cli	1	
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enter 2.59	3 GHz						Spar	121 MHz	
									CF Ste
otal Power	Ref 37.00	dBm / 100	MHz						12.100000 Mi Auto Mi
Start Freq	Stop Freq	Integ BW	dBm	Lower ∆Lim(dB)	<- F Freg (Hz)	^{leak} ⇔ dBm	Upper	Freq (Hz)	FregOffs
50.50 MHz	51.50 MHz	1 000 MHz	-32.33	(-1.27)	-50.50 M	-32.90	(-1.84)	50.50 M	Prequis
51.50 MHz	55.50 MHz	1.000 MHz	-32.33	(-1.27)	-50.50 M	-32.90	(-1.64)	52.38 M	01
	60.50 MHz	1.000 MHz	-34.85	(-3.79)	-56.80 M	-34.08	(-3.02)	56.25 M	
55.50 MHz		1.000 MHz		()			()		
55.50 MHz 4.000 MHz	8.000 MHz								
		1.000 MHz		()			()		
4.000 MHz				() ()			() ()		

enter Fred	RF 50 Ω A q 2.6400000	c 100 GHz			40000000 GHz		Radio St	PM May 12, 2020 d: None	Frequency
	ate: LO	IFGain:L		g: External1 tten: 0 dB		0.00% of 1 n: -46.20 d		evice: BTS	
0 dB/div	Ref 41.0 dE	3m						Sector of the	
og 11.0									Center Fre
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enter 2.64		4 dBm / 10	0 MHz				Spa	n 121 MHz	12.100000 MH
enter 2.64		4 dBm / 10	0 MHz					n 121 MHz	12.100000 MH
enter 2.64 otal Power	r Ref 36.4			Lower		Peak →	Upper		12.100000 MH <u>Auto</u> Ma
Start Freq	r Ref 36.4 Stop Freq	Integ BW	dBm	∆Lim(dB)	Freq (Hz)	dBm	Upper ∆Lim(dB)	Freq (Hz)	Freq Offse
Start Freq 50.50 MHz	Stop Freq 51.50 MHz	Integ BW 1.000 MHz	dBm -31.61	ΔLim(dB) (-0.55)	Freq (Hz) -50.50 M	dBm -33.08	Upper ΔLim(dB) (-2.02)	Freq (Hz) 50.51 M	12.100000 MH <u>Auto</u> Ma Freq Offse
Senter 2.64 Start Power Start Freq 50.50 MHz 51.50 MHz	r Ref 36.4 Stop Freq 51.50 MHz 55.50 MHz	Integ BW 1.000 MHz 1.000 MHz	dBm -31.61 -33.10	ΔLim(dB) (-0.55) (-2.04)	Freq (Hz) -50.50 M -52.46 M	dBm -33.08 -34.22	Upper ΔLim(dB) (-2.02) (-3.16)	Freq (Hz) 50.51 M 2 51.58 M	12.100000 MH <u>Auto</u> Ma Freq Offse
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.61 -33.10 -33.80	ΔLim(dB) (-0.55) (-2.04) (-2.74)	Freq (Hz) -50.50 M	dBm -33.08	Upper ΔLim(dB) (-2.02) (-3.16) (-8.37)	Freq (Hz) 50.51 M	12.100000 MH <u>Auto</u> Ma
enter 2.64 otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz 4.000 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz 8.000 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.61 -33.10	ΔLim(dB) (-0.55) (-2.04) (-2.74) ()	Freq (Hz) -50.50 M -52.46 M	dBm -33.08 -34.22	Upper ΔLim(dB) (-2.02) (-3.16) (-8.37) ()	Freq (Hz) 50.51 M 1 51.58 M	12.100000 MH <u>Auto</u> Ma Freq Offse
otal Power Start Freq 50.50 MHz 51.50 MHz 55.50 MHz	Stop Freq 51.50 MHz 55.50 MHz 60.50 MHz	Integ BW 1.000 MHz 1.000 MHz 1.000 MHz	dBm -31.61 -33.10 -33.80	ΔLim(dB) (-0.55) (-2.04) (-2.74)	Freq (Hz) -50.50 M -52.46 M	dBm -33.08 -34.22	Upper ΔLim(dB) (-2.02) (-3.16) (-8.37)	Freq (Hz) 50.51 M 1 51.58 M	12.100000 MH <u>Auto</u> Ma Freq Offse

5. FCC Section 2.1051 - Spurious Emissions at Transmit Antenna Port

5.1 Measurement of Spurious Emissions at Transmit Antenna Port

Spurious Emissions at the transmit-antenna terminals were investigated over the frequency range of 10 MHz to beyond the 10th harmonic of the specific transmit band. Carrier Bandwidth is exempt. For this band of operation, the measurements were performed up to 10 GHz. Measurements were made using a Keysight MXA Signal Analyzer. The RF output from the transmitter was reduced (to an amplitude usable by the receivers) using calibrated attenuators. The RF power level was continuously monitored via a coupled RF Power Meter.

The required emission limitation is specified as appropriate in 27.53. The measured spurious emission levels were plotted for the frequency range as specified in 2.1057. There were no reportable emissions. Data below documents performance up to 27 GHz. The limit is derived using the 10 Log (n) rule for limits with n=64

5.1.1 Spurious Emissions at Tx Port - Plots

NOTE: Only a sample of the plots are used in this report. The full suite of raw data resides at the MH, New Jersey location.

- K - 110					_1X6_LIE_0	10_50	
LXI	RF 5	- Spurious Emissions 50 Ω <u>A</u> DC 8000000 GHz IFGain:1	Center Free Trig: Exter		Radio Sto >25/25		Frequency
15 dB/div	Ref 2	0.00 dBm				018 kHz 66 dBm	
5.00 -10.0							Center Freq 2.593000000 GHz
-25.0 -40.0 1 -55.0							
-70.0					ม ^า นรรณการแนวที่สุดการเหตุสุดไปเหตุลัง	n ny si ha ni history da	
-100 -115							
Start 9 ki	Hz				Sto	p 30 MHz FFT	CF Step 4.020000 MH;
Spur	Range	Frequency	Amplitude	Limit	Δ Limit		<u>Auto</u> Mar
1 2	1 1	<mark>99.02 kHz</mark> 144.0 kHz	-45.36 dBm -50.60 dBm	-31.06 dBr -31.06 dBr		-	Freq Offset
3	1	189.0 kHz	-53.57 dBm	-31.06 dBr		=	0 Hz
4	1	219.0 kHz	-57.06 dBm	-31.06 dBr			
5	1	249.0 kHz	-57.12 dBm	-31.06 dBr	n -26.06 dB		
6	1	364.1 kHz	-61.08 dBm	-31.06 dBr	n -30.02 dB		
7	1	319.1 kHz	-62.32 dBm	-31.06 dBr	n -31.26 dB	-	
мsg 🔱 File ·	<spurious_1< td=""><td>FM1_1_1C_20MBW</td><td>/_2593_TX6_LTE_0</td><td>_to_30.png> saved</td><td>🚺 STATUS 🧜 DC Co</td><td>upled</td><td></td></spurious_1<>	FM1_1_1C_20MBW	/_2593_TX6_LTE_0	_to_30.png> saved	🚺 STATUS 🧜 DC Co	upled	

LTE 1C Data Spurious TM1 1 1C 20MBW 2593 TX6 LTE 0 to 30

Keysight Sp	ectrum Analyzer	- Spurious Emissions							- 0
	RF !	50 Ω AC 3000000 GHz IFGain:	Center Fre Trig: Exte		l: 25/25 : -40.90 dB	03:01:56 P Radio Std Radio Dev		Ra	nge Table Rang
5 dB/div	Ref 0	.00 dBm					.41 MHz 55 dBm	<u>On</u>	C
.og 15.0 30.0 45.0								30	Start Fre
io.0 75.0								1.00	Stop Fr 0000000 G
105 120 135								Auto	Res B 100.00 k <u>M</u>
tart 30	MHz					St	op 1 GHz		Video E 300.00 k
Spur	Range	Frequency	Amplitude	Limit	L	Limit		Auto	M
1 2	1 1	286.4 MHz 794.9 MHz	-51.76 dBm -52.71 dBm	-31.06 dB -31.06 dB	m -2'	0.70 dB 1.65 dB	^	F	Filter Type Gaussia
3 4	1 1	335.7 MHz 524.0 MHz	-53.01 dBm -53.02 dBm	-31.06 dB -31.06 dB		1.95 dB 1.96 dB	E		Gaussia
5 6	1 1	771.3 MHz 917.7 MHz	-53.42 dBm -53.46 dBm	-31.06 dB -31.06 dB		2.36 dB 2.40 dB			M o 1 o
7	1	593.8 MHz	-53.49 dBm	-31.06 dB	m -2	2.43 dB	*		
c Eilo	<spurious 1<="" td=""><td>TM1 1 1C 20MB</td><td>N 2593 TX6 LTE</td><td>30 to 1000.png> sa</td><td></td><td>2</td><td></td><td></td><td></td></spurious>	TM1 1 1C 20MB	N 2593 TX6 LTE	30 to 1000.png> sa		2			

Spurious_TM1_1_1C_20MBW_2593_TX6_LTE_30_to_1000

Spurious_TM1_1_1C_20MBW_2593_TX6_LTE_1000_to_2496

Keysight Sp		- Spurious Emissions					
Center F		0 Ω AC 600000 GHz	Center Fr	vse:INT req: 2.593000000 GHz	Radio	07 PM May 21, 2020 Std: None	Range Table
PASS	Gate: LO	IFGain	:Low Trig: Exte			Device: BTS	Range
15 dB/div	Ref 0.	00 dBm				1374 GHz).388 dBm	_1 <u>On</u> Off
-15.0 -30.0 -45.0					1		Start Freq 1.000000000 GHz
-60.0 -75.0 -90.0							Stop Freq 2.496000000 GHz
-105 -120 -135							Res BW 1.0000 MHz Auto <u>Man</u>
Start 1 G	Hz				Sto	p 2.496 GHz	Video BW 3.0000 MHz Auto Man
Spur	Range	Frequency	Amplitude	Limit	Δ Limit		Auto <u>Man</u>
1 2 3	1 1 1	2.137 GHz 1.933 GHz 2.493 GHz	-46.04 dBm -46.09 dBm -46.17 dBm	-31.06 dBr -31.06 dBr -31.06 dBr	n -15.03 di n -15.11 di	3 3 ≞	Filter Type Gaussian
4 5 6 7	1 1 1 1	2.399 GHz 2.372 GHz 2.466 GHz 2.439 GHz	-46.70 dBm -46.77 dBm -46.96 dBm -47.06 dBm	-31.06 dBr -31.06 dBr -31.06 dBr -31.06 dBr	n -15.71 di n -15.90 di	3	More 1 of 3
				_1000_to_2496.png> s		Ť	

enter F	RF 5	- Spurious Emissions 50 Ω AC 30000000 GHz			ld:>25/25	03:02:10 F Radio Std	2M May 21, 2020 I: None	Ra	nge Table
ASS	Guic. EO	IFGain:	Low #Atten: 6	dB Ext Gai	n: -41.20 dB	Radio Dev	vice: BTS		Rang
5 dB/div	Ref 0	.00 dBm					026 GHz 46 dBm	<u>On</u>	(
og 5.0									Start Fr
0.0 5.0 	1							2.49	6000000 G
D.0	And and an and a second second	way he was a start of the second	anne mar an	mane water the state of the sta	man from the star	hannahanna hanna ya	Mart and and a start of the sta		Oton Er
5.0								2.57	Stop Fr 3000000 G
0.0								2.07	
05									Res E
20									200.00
135								Auto	N
tart 2.4	96 GH7					Stop 2	2.573 GHz		
									Video E 620.00
Spur	Range	Frequency	Amplitude	Limit		∆ Limit		Auto	N
1	1	2.503 GHz	-44.86 dBm	-38.05 di	3m -6	.810 dB	<u>^</u>		
2	1	2.553 GHz	-46.12 dBm	-38.05 di		.072 dB		F	ilter Typ Gaussia
3	1	2.570 GHz	-46.30 dBm	-38.05 dl		.251 dB	E		Gaussia
4	1	2.571 GHz	-46.47 dBm	-38.05 dl		.420 dB			
5 6	1 1	2.534 GHz 2.536 GHz	-46.58 dBm -46.89 dBm	-38.05 dl -38.05 dl		.526 dB .841 dB			Me
7	1	2.569 GHz	-47.08 dBm	-38.05 di		.030 dB			1 0
				00100 01			-		

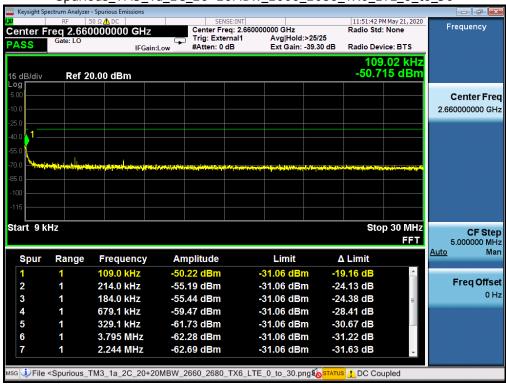
Spurious_TM1_1_1C_20MBW_2593_TX6_LTE_2613_to_2690

Keysight Sp		- Spurious Emissions							
Center F		50 Ω AC 8000000 GHz	Center F	NSE:INT req: 2.59300000		Radio Std	MMay 21, 2020 None	Ran	ge Table
PASS	Gate: LO	IFGair	:Low Trig: Exten: 6		vg Hold:>25/2 xt Gain: -41.20		ice: BTS		Range
15 dB/div	Ref 0.	.00 dBm					47 GHz 23 dBm	<u>On</u>	ິ1 Off
Log -15.0 -30.0 -45.0									Start Free 000000 GH
-60.0			947. In 2017 Sec. 10 2017 (2017)	**************************************	~x~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Manaula Alla Alla Canada and Andrean An	*	2.690	Stop Fre 000000 GH
-105 -120 -135								Auto	Res BV 200.00 kH <u>Ma</u>
Start 2.6	13 GHz					Stop	2.69 GHz	A	Video BV 620.00 kH
Spur	Range	Frequency	Amplitude		Limit	∆ Limit		Auto	<u>Ma</u>
1 2	1 1	<mark>2.615 GHz</mark> 2.626 GHz	-43.09 dBm -43.94 dBm		. <mark>05 dBm</mark> .05 dBm	-5.886 dB	~	Fi	lter Type
3 4	1 1	2.617 GHz 2.614 GHz	-43.95 dBm -44.32 dBm		.05 dBm .05 dBm	-5.903 dB -6.271 dB	=		Gaussian
5 6	1 1	2.613 GHz 2.628 GHz	-44.68 dBm -45.35 dBm	-38	.05 dBm .05 dBm	-6.635 dB -7.298 dB			Mor 1 of
7	1	2.668 GHz	-45.58 dBm		.05 dBm	-7.530 dB	-		
sg 💛 File	<spurious_1< td=""><td>IM1_1_1C_20MB</td><td>W_2593_TX6_LTE_</td><td>_2613_to_269</td><td>0.png> sav</td><td>STATUS</td><td></td><td></td><td></td></spurious_1<>	IM1_1_1C_20MB	W_2593_TX6_LTE_	_2613_to_269	0.png> sav	STATUS			

enter F	RF 5	- Spurious Emissions 50 Ω AC 8000000 GHz	Center Fre Trig: Exter		Hold: 25/25	Radio Std		Ra	nge Table
ASS 5 dB/div		IFGain: .00 dBm	Low #Atten: 6 d	B Ext	Gain: -42.10 dl	3.18	vice: BTS 895 GHz 50 dBm	<u>On</u>	Rang
og 5.0 0.0	1							2.69	Start Fre
0.0 5.0 0.0								10.00	Stop Fr 0000000 G
105 120 135								Auto	Res B 1.0000 M <u>M</u>
tart 2.6							op 10 GHz	Auto	Video E 3.0000 M
Spur	Range	Frequency	Amplitude		mit	∆ Limit			
1	1	3.190 GHz	-43.93 dBm			-12.87 dB	Â	F	ilter Type
2	1	5.782 GHz	-44.14 dBm			-13.08 dB			Gaussia
3 4	1 1	6.312 GHz 3.177 GHz	-44.17 dBm -44.54 dBm			-13.11 dB -13.48 dB	=		
5	1	3.146 GHz	-44.54 dBm			-13.48 dB -13.48 dB			
6	1	5.300 GHz	-44.55 dBm			-13.49 dB			Mo
7	1	5.271 GHz	-44.62 dBm			-13.56 dB	-		1 0

Spurious_TM1_1_1C_20MBW_2593_TX6_LTE_10000_to_27000

X	RF 5	- Spurious Emissions 50 Ω AC 8000000 GHz		SENSE:INT			03:07:00 F Radio Std	PM May 21, 2020 I: None	Ra	inge Table
PASS	Gate: LO	IFGai		: External1 en: 6 dB	Avg Hold: 2 Ext Gain: -4		Radio Dev	vice: BTS		Range
15 dB/div	Ref 0.	.00 dBm						638 GHz 76 dBm	<u>On</u>	-1 Of
-15.0 -30.0 -45.0								1	10.00	Start Free
60.0 75.0 90.0									27.00	Stop Fre 00000000 GH
-105 -120 -135									Auto	Res BV 1.0000 MH <u>Ma</u>
Start 10	GHz						Sto	op 27 GHz		Video BI 3.0000 MH
Spur	Range	Frequency	Amplitu	Ide	Limit	Δ	Limit		Auto	Ma
1	1	25.64 GHz	-33.91 d	Bm	-31.06 dBm	-2.8	848 dB	^		
2	1	26.16 GHz	-35.30 d	Bm	-31.06 dBm	-4.2	242 dB			Filter Type
3	1	25.09 GHz	-35.30 d	Bm	-31.06 dBm	-4.2	245 dB	=		Gaussian
4	1	24.88 GHz	-36.24 d		-31.06 dBm		81 dB			
5	1	24.57 GHz	-36.56 d		-31.06 dBm		501 dB			Мо
6	1	26.83 GHz	-36.76 d		-31.06 dBm		700 dB			1 of
7	1	20.55 GHz	-37.32 d	Bm	-31.06 dBm	-6.2	257 dB	~		
	<spurious 1<="" td=""><td>FM1 1 1C 20ME</td><td>W 2593 TY6</td><td>LTE 10000</td><td>to 27000 ppg></td><td>STATUS</td><td></td><td></td><td></td><td></td></spurious>	FM1 1 1C 20ME	W 2593 TY6	LTE 10000	to 27000 ppg>	STATUS				



LTE 2C Data Spurious TM3 1a 2C 20+20MBW 2660 2680 TX6 LTE 0 to 30

Spurious_TM3_1a_2C_20+20MBW_2660_2680_TX6_LTE_30_to_1000

🔤 Keysight Sp	ectrum Analyzer	- Spurious Emissions						_	
<mark>w</mark> Center F	req 2.660	ο Ω AC 0000000 GH2		SENSE:INT nter Freq: 2.66 g: External1	0000000 GHz Avg Hold:	Radi	52:56 PM May 21, 2020 o Std: None	Ra	nge Table
PASS	Gate: LO	IFGa		ten: 0 dB	Ext Gain:		o Device: BTS		Range
15 dB/div	Ref 0.	00 dBm					107.55 MHz 57.093 dBm	<u>On</u>	1 Off
Log -15.0 -30.0 -45.0	1							3(Start Freq 0.000000 MHz
-60.0 -75.0 -90.0								1.00	Stop Freq 0000000 GHz
-105 -120 -135								Auto	Res BW 100.00 kHz <u>Man</u>
Start 30	MHz						Stop 1 GHz	Auto	Video BW 300.00 kHz Man
Spur	Range	Frequency	Amplit	ude	Limit	Δ Lim	it	Auto	Man
1 2	1 1	107.6 MHz 662.8 MHz	- <mark>52.36 (</mark> -52.90 (lBm	-31.06 dBn -31.06 dBn	n -21.84 (dB	i	Filter Type
3	1 1	804.6 MHz 348.3 MHz	-52.98 c -52.98 c		-31.06 dBn -31.06 dBn				Gaussian
5	1	380.7 MHz	-52.98 (-31.06 dBn				More
6 7	1 1	234.1 MHz	-53.07 (-31.06 dBn				1 of 3
		780.9 MHz	-53.22 (-31.06 dBn	n -22.16 (·		
мsg 🧼 File	<spurious_t< td=""><td>M3_1a_2C_20+</td><td>+20MBW_2660_</td><td>_2680_TX6_L</td><td>_TE_30_to_100</td><td>0.</td><td></td><td></td><td></td></spurious_t<>	M3_1a_2C_20+	+20MBW_2660_	_2680_TX6_L	_TE_30_to_100	0.			

			C_20+20ME	3W_2660_26	80_IX	6_LIE_	<u>1000_</u> t	0_24	
Keysight Spe		- Spurious Emissions 50 Ω AC							
Center F		50 Ω AC D000000 GHz		GE:INT g: 2.660000000 GHz		Radio Std	M May 21, 2020 : None	Ra	nge Table
PASS	Gate: LO		Trig: Exter	nal1 Avg Hold					Dame
TASS		IFGain:	Low #Atten: 0 d	IB Ext Gain:	-41.20 dB	Radio Dev			Range
							30 GHz	<u>On</u>	Off
15 dB/div Log	Ref 0.	.00 dBm				-45.7	25 dBm		
-15.0									Start Free
-30.0								1.00	0000000 GHz
-45.0								1.00	000000000
-40.0									
-75.0									Stop Free
								2.49	6000000 GHz
-90.0									
-105									Res BW
-120									1.0000 MH
-135								Auto	Mar
Start 1 G	H7					Stop 2	2.496 GHz		
	112					Grop 2			Video BW 3.0000 MH;
								Auto	3.0000 MAA
Spur	Range	Frequency	Amplitude	Limit		Limit			
1	1	2.493 GHz	-43.39 dBm	-31.06 dB		2.33 dB	Â		litor Turce
2	1	2.152 GHz	-45.59 dBm	-31.06 dB		4.53 dB			Gaussian
3	1	2.455 GHz	-46.04 dBm	-31.06 dB		4.98 dB	=		Gaussian
4	1	2.346 GHz	-46.42 dBm	-31.06 dB		5.36 dB			
5	1	2.473 GHz	-46.82 dBm	-31.06 dB		5.76 dB			More
6	1	2.114 GHz	-47.02 dBm	-31.06 dB		5.96 dB			1 of 3
7	1	2.441 GHz	-47.04 dBm	-31.06 dB	m -1:	5.98 dB	+		
					4.054	-			
MSG 🥹 File ·	<spurious_1< td=""><td>IM3_1a_2C_20+20</td><td>MBW_2660_2680_</td><td>TX6_LTE_1000_to_2</td><td></td><td>5</td><td></td><td></td><td></td></spurious_1<>	IM3_1a_2C_20+20	MBW_2660_2680_	TX6_LTE_1000_to_2		5			

Spurious_TM3_1a_2C_20+20MBW_2660_2680_TX6_LTE_1000_to_2496

Spurious_TM3_1a_2C_20+20MBW_2660_2680_TX6_LTE_2496_to_2640

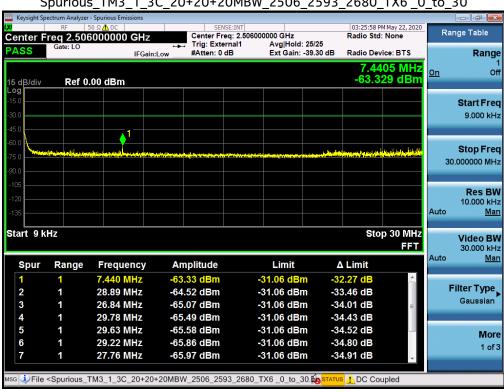
Keysight Sp		- Spurious Emissions						a X
X Contor F		0 Ω AC 0000000 GHz		VSE:INT reg: 2.660000000 GHz		D PM May 21, 2020	Range Ta	ible
PASS	Gate: LO		Trig: Exte	ernal1 Avg Hole	d:>25/25			_
PA55		IFGain	:Low #Atten: 0	dB Ext Gain	: -41.20 dB Radio D	evice: BTS	F	Range
						5397 GHz	On	Of
15 dB/div	Ref 0.	.00 dBm			-44.	542 dBm		
Log -15.0							0 1	
								tFre
-30.0							2.4960000	JU GH
-45.0		and a second and a second second	and a start of the	and the second and the second second	and and the second second	an far ar stad an funder i		
-60.0							Stor	Fre
-75.0						_	2.6400000	
-90.0								
-105								- 51
-120								es BV 00 kH
-135							Auto	Mai
Start 2.4	96 GHz				Sto	p 2.64 GHz	Vide	eo BV
								00 kH
Spur	Range	Frequency	Amplitude	Limit	Δ Limit		Auto	Ma
1	1	2.640 GHz	-40.58 dBm	-38.05 dE	-2.534 dB	~		
2	1	2.636 GHz	-42.69 dBm	-38.05 dE	-4.635 dB		Filter	Гуре
3	1	2.633 GHz	-42.99 dBm	-38.05 dE	-4.940 dB	=	Gau	ssian
4	1	2.623 GHz	-43.19 dBm	-38.05 dE	m -5.137 dB			
5	1	2.521 GHz	-43.33 dBm	-38.05 dE				Mor
6	1	2.634 GHz	-43.39 dBm	-38.05 dE	m -5.338 dB			1 of
7	1	2.625 GHz	-43.65 dBm	-38.05 dE	-5.600 dB	-		TOT
isg 🤳 File 🕯	<spurious_t< td=""><td>FM3_1a_2C_20+2</td><td>0MBW_2660_2680</td><td>_TX6_LTE_2496_to_</td><td>264 status</td><td></td><td></td><td></td></spurious_t<>	FM3_1a_2C_20+2	0MBW_2660_2680	_TX6_LTE_2496_to_	264 status			

Start 2.7 GHz Stor Hz		RF 5	- Spurious Emissions 50 Ω AC DOOOOOO GHz	z	Center Fr Trig: Exte		Avg Hold:		Radio Std		Ra	nge Table
5 dB/div Ref 0.00 dBm -49.098 dBm 000 1 0 1 1 1 0	ASS	Guior 20	IFGa	in:Low	#Atten: 0	dB	Ext Gain:	-42.10 dB				Ran
50 1		Ref 0.	.00 dBm								<u>On</u>	
0.0 Stop F 1.00	5.0 0.0			1							2.70	Start Fr 0000000 G
20 Auto 235 Stop 10 GHz tart 2.7 GHz Stop 10 GHz 5 1 1 1 5 1 3 1 6 1 5 1 3 5.750 GHz -44.37 dBm -31.06 dBm -31.06 dBm -13.31 dB 6 1 5 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB 1	0.0 5.0										10.00	Stop Fr 0000000 G
Spur Range Frequency Amplitude Limit Δ Limit 1 1 5.307 GHz -43.79 dBm -31.06 dBm -12.73 dB Auto 2 1 3.064 GHz -44.19 dBm -31.06 dBm -13.13 dB Filter Ty 3 1 6.687 GHz -44.35 dBm -31.06 dBm -13.29 dB E 4 1 9.552 GHz -44.37 dBm -31.06 dBm -13.31 dB E 5 1 3.577 GHz -44.37 dBm -31.06 dBm -13.31 dB M 6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB 1	120										Auto	Res E 1.0000 M <u>M</u>
Spur Range Frequency Amplitude Limit Δ Limit 1 1 5.307 GHz -43.79 dBm -31.06 dBm -12.73 dB - 2 1 3.064 GHz -44.19 dBm -31.06 dBm -13.13 dB - 3 1 6.687 GHz -44.35 dBm -31.06 dBm -13.29 dB - 4 1 9.552 GHz -44.37 dBm -31.06 dBm -13.31 dB - 5 1 3.577 GHz -44.37 dBm -31.06 dBm -13.31 dB - 6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB -	tart 2.7	GHz							Sto	p 10 GHz		Video E 3.0000 M
2 1 3.064 GHz -44.19 dBm -31.06 dBm -13.13 dB Filter Ty 3 1 6.687 GHz -44.35 dBm -31.06 dBm -13.29 dB E 4 1 9.552 GHz -44.37 dBm -31.06 dBm -13.31 dB E Gaussi 5 1 3.577 GHz -44.37 dBm -31.06 dBm -13.31 dB M 6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB 1		Range	Frequency	Ar	nplitude		Limit	L	Limit		Auto	N
2 1 5.004 GHz -44.15 GBm -51.06 dBm -10.15 dB Gaussi 3 1 6.687 GHz -44.35 dBm -31.06 dBm -13.29 dB E Gaussi 4 1 9.552 GHz -44.37 dBm -31.06 dBm -13.31 dB E Gaussi 5 1 3.577 GHz -44.43 dBm -31.06 dBm -13.31 dB M 6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB 1	Spur		5 307 CH7	-43	.79 dBm	-	31.06 dBr	n -1:	2.73 dB	<u>^</u>		
3 1 6.087 GHZ -44.35 dBm -31.06 dBm -13.29 dB Image: Constraint of the second	_ <u> </u>		0.001 GHZ								E	ilter Typ
5 1 3.577 GHz -44.37 dBm -31.06 dBm -13.31 dB 6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB	1	1			.19 dBm		31.06 d <u>Br</u>	n <u>-1</u> :	3.13 dB			
6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB	1 2	-	3.064 GHz	-44						E		Gaussia
6 1 5.750 GHz -44.41 dBm -31.06 dBm -13.35 dB	1 2 3	1	3.064 GHz 6.687 GHz	-44 -44	.35 dBm	-	31.06 dBr	n -1:	3.29 dB	E		Gaussia
7 1 5.405 GHz -44.43 dBm -31.06 dBm -13.37 dB	1 2 3 4	1 1	3.064 GHz 6.687 GHz 9.552 GHz 3.577 GHz	-44 -44 -44	.35 dBm .37 dBm .37 dBm	* * *	31.06 dBr 31.06 dBr 31.06 dBr	n -1: n -1: n -1:	3.29 dB 3.31 dB 3.31 dB	Е		Gaussia Mo
	1 2 3 4 5 6	1 1 1 1	3.064 GHz 6.687 GHz 9.552 GHz 3.577 GHz 5.750 GHz	-44 -44 -44 -44	.35 dBm .37 dBm .37 dBm .41 dBm	4 4 4 Y	31.06 dBr 31.06 dBr 31.06 dBr 31.06 dBr	n -1: n -1: n -1: n -1:	3.29 dB 3.31 dB 3.31 dB 3.35 dB	Е		

Spurious_TM3_1a_2C_20+20MBW_2660_2680_TX6_LTE_2700_to_10000

Spurious_TM3_1a_2C_20+20MBW_2660_2680_TX6_LTE_10000_to_27000

Keysight Specific Activity		- Spurious Emissions			une mure					_	
Center F		50 Ω AC D000000 GH	z	Center Fr		000000 GHz		Radio Std	M May 21, 2020 : None	Ra	nge Table
PASS	Gate: LO		ain:Low	Trig: Ext #Atten: 0		Avg Hold: Ext Gain: -		Radio Dev	vice: BTS		Range
15 dB/div	Ref 0.	.00 dBm							576 GHz 54 dBm	<u>On</u>	Of
- og 15.0 30.0 45.0									<u>_</u> 1	10.00	Start Free
60.0 75.0 90.0										27.00	Stop Fre 00000000 GH
-105 -120 -135										Auto	Res BV 1.0000 MH <u>Ma</u>
itart 10	GHz							Sto	p 27 GHz		Video B
Spur	Range	Frequency	An	nplitude		Limit	1	Limit		Auto	<u>Ma</u>
1 2 3	1 1 1	25.68 GHz 25.59 GHz 26.28 GHz	-33 -35	. <mark>05 dBm</mark> .56 dBm .41 dBm		-31.06 dBm -31.06 dBm -31.06 dBm	-2 -4	. <mark>987 dB</mark> .500 dB .354 dB	* E	I	Filter Type Gaussian
4 5 6 7	1 1 1 1	25.11 GHz 20.61 GHz 21.18 GHz 22.94 GHz	-37 -37	.49 dBm .65 dBm .83 dBm .16 dBm		-31.06 dBm -31.06 dBm -31.06 dBm -31.06 dBm	-6 -6	.426 dB .586 dB .774 dB .098 dB			Moi 1 of
	•	TM3_1a_2C_20-			_TX6_LT				*		



LTE 3C Data Spurious TM3 1 3C 20+20+20MBW 2506 2593 2680 TX6 0 to 30

Spurious_TM3_1_3C_20+20+20MBW_2506_2593_2680_TX6_30_to_1000

Keysight Spe		- Spurious Emissions									
Center Fr		50 Ω AC 5000000 GH	z	Center Fr	NSE:INT eq: 2.50600			03:27:12 P Radio Std	M May 22, 2020 None	Rar	nge Table
PASS	Gate: LO		⊶⊶ ain:Low	Trig: Ext #Atten: 0		Avg Hold Ext Gain:	: 25/25 -40.90 dB	Radio Dev	ice: BTS		Range
15 dB/div	Ref 0.	.00 dBm						32.0 -54.6	00 MHz 11 dBm	<u>On</u>	-1 Off
-15.0 -30.0 -45.0										30	Start Freq .000000 MHz
-60.0										1.000	Stop Freq
-105 -120 -135										Auto	Res BW 100.00 kHz <u>Man</u>
Start 30 I	VIHz							St	op 1 GHz	Auto	Video BW 300.00 kHz Man
Spur	Range	Frequency	An	nplitude		Limit	4	Limit		Auto	IVIAII
1	1	32.00 MHz		.61 dBm		31.06 dB		3.55 dB	<u>^</u>	F	ilter Type
23	1	74.70 MHz 30.10 MHz		.91 dBm .17 dBm		31.06 dBi 31.06 dBi		3.85 dB 4.11 dB	-		Gaussian
4	1	30.95 MHz		.44 dBm		31.06 dB		4.38 dB	-		
5	1	33.35 MHz	-55.	.47 dBm	-	31.06 dB	m -24	4.41 dB			More
6	1	35.00 MHz		.01 dBm		31.06 dB		4.95 dB			1 of 3
7	1	69.85 MHz	-56	.01 dBm	-	31.06 dB	m -24	4.95 dB	*		
мsg 🗼 File <	<spurious_1< td=""><td>FM3_1_3C_20+2</td><td>20+20MBW</td><td>/_2506_25</td><td>93_2680_1</td><td>FX6 _30_to</td><td>_10 statu</td><td>S</td><td></td><td></td><td></td></spurious_1<>	FM3_1_3C_20+2	20+20MBW	/_2506_25	93_2680_1	FX6 _30_to	_10 statu	S			

enter F	RF	- Spurious Emissions 50 Ω AC 6000000 GHz		NSE:INT req: 2.506000000 GHz ernal1 Avg Hol	d: 25/25	03:27:22 P Radio Std	M May 22, 2020 : None	Ra	nge Table
PASS	Gate: LO	IFGai	n:Low #Atten: 0		: -41.20 dB	Radio Dev	rice: BTS		Rang
15 dB/div	Ref 0	.00 dBm					83 dBm	<u>On</u>	C
- og 15.0 30.0							1	1.00	Start Fre
45.0 60.0 75.0 90.0								2.48	Stop Fre 6000000 Gł
105 120 135								Auto	Res B 1.0000 MI <u>M</u>
start 1 G	Hz					Stop 2	.486 GHz		Video B 3.0000 Mi
Spur	Range	Frequency	Amplitude	Limit		∆ Limit		Auto	<u>M</u>
1	1	2.486 GHz	-47.58 dBm	-31.06 dE	3m -1	6.52 dB		F	F ilter Type Gaussiar
									Мо 1 о
			0+20MBW 2506 25		STATU				

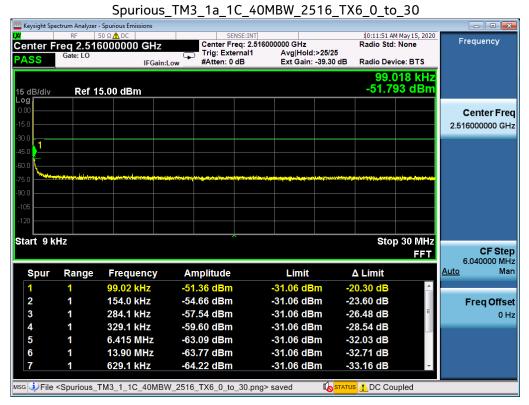
Spurious TM3 1 3C 20+20+20MBW 2506 2593 2680 TX6 1000 to 2486

Spurious_TM3_1_3C_20+20+20MBW_2506_2593_2680_TX6_2700_to_10000

🔤 Keysight Spe		- Spurious Emissions				_	_	
Center Fr		οΩ AC 5000000 GHz	Center Fr	ISE:INT eq: 2.506000000 GHz	Radio S	2 PM May 22, 2020 td: None	Ra	nge Table
PASS	Gate: LO	IFGair	Trig: Exte			evice: BTS		Range
15 dB/div	Ref 0.	00 dBm			2.7 -46.	7725 GHz 201 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0							2.70	Start Freq 0000000 GHz
-60.0 -75.0 -90.0							10.00	Stop Freq 0000000 GHz
-105 -120 -135							Auto	Res BW 1.0000 MHz <u>Man</u>
Start 2.7	GHz				S	top 10 GHz		Video BW 3.0000 MHz
Spur	Range	Frequency	Amplitude	Limit	Δ Limit		Auto	Man
1	1	2.773 GHz	-46.20 dBm	-31.06 dBr	n -15.14 dB		F	Filter Type Gaussian
								More 1 of 3
wsg 🔱 File <	<spurious_t< td=""><td>M3_1_3C_20+20</td><td>)+20MBW_2506_25</td><td>93_2680_TX6</td><td>STATUS</td><td></td><td></td><td></td></spurious_t<>	M3_1_3C_20+20)+20MBW_2506_25	93_2680_TX6	STATUS			

Keysight Spe		- Spurious Emissio	ns							_	
Center Fr		50 Ω AC 6000000 G	Hz	Center Fr		00000 GHz		Radio Std	M May 22, 2020 : None	Rai	nge Table
PASS	Gate: LO		Gain:Low	 Trig: Externant #Atten: 0 		Avg Hold: Ext Gain:		Radio Dev	rice: BTS		Range
15 dB/div Log	Ref 0.	.00 dBm						25.6 -35.7	49 GHz 89 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0									<u>1</u>	10.000	Start Freq
-60.0 -75.0 -90.0										27.000	Stop Freq
-105 -120 -135										Auto	Res BW 1.0000 MHz <u>Man</u>
Start 10 (GHz							Sto	p 27 GHz		Video BW 3.0000 MHz
Spur	Range	Frequen	cy Ar	nplitude		Limit		Limit		Auto	Man
1	1	25.65 GH	z -35	i.79 dBm		-31.06 dBn	n -4	.729 dB		F	ilter Type Gaussian
											More 1 of 3
мsg 🧼 File <	Spurious_1	TM3_1_3C_20)+20+20MB\	W_2506_25	93_2680_	TX6	I STATU	s			

Spurious_TM3_1_3C_20+20+20MBW_2506_2593_2680_TX6_10000_to_27000



5G 40MHz Data

Spurious_TM3_1a_1C_40MBW_2516_TX6_30_to_1000

🔤 Keysight Spe	ctrum Analyzer -	Spurious Emissio	ns								
I,XI		i0 Ω AC			SENSE:INT				M May 15, 2020	Ra	nge Table
		000000 G	iHz		er ⊢req: 2.5 External1	16000000 GHz Avg Hold	1: 25/25	Radio Std	: None		nge rabie
PASS	Gate: LO	I	FGain:Low		n:0dB		: -40.90 dE	Radio Dev	rice: BTS		Range
								860	94 MHz	_	1
15 dB/div	Dof ()	00 dBm							26 dBm	<u>On</u>	Off
Log	Ker v.										
-15.0											Start Freq
-30.0										30	0.000000 MHz
-45.0								<u>-</u> 1-			
-60.0											
-75.0											Stop Freq
-90.0										1.00	0000000 GHz
-105											
											Res BW
-120											100.00 kHz
-135										Auto	<u>Man</u>
Start 30	MHz							St	op 1 GHz		
Start 00									opronz		Video BW
											300.00 kHz
Spur	Range	Frequen	су	Amplitu	de	Limit		∆ Limit		Auto	<u>Man</u>
1	1	860.9 MH	z	-51.12 d	Bm	-31.06 dE	3m	-20.06 dB	<u>^</u>		
2	1	181.0 MH	z	-52.74 d	Bm	-31.06 dE	3m	-21.68 dB		F	ilter Type
3	1	952.7 MH	z	-52.94 d	Bm	-31.06 dE	3m	-21.88 dB	=		Gaussian
4	1	765.6 MH	z	-53.10 d	Bm	-31.06 dE	3m	-22.04 dB			
5	1	807.8 MH	z	-53.27 d	Bm	-31.06 dE	3m	-22.21 dB			
6	1	899.8 MH	z	-53.27 d	Bm	-31.06 dE	3m	-22.21 dB			More
7	1	502.0 MH	z	-53.41 d	Bm	-31.06 dE	3m	-22.35 dB	~		1 of 3
							4				
MSG 🤳 File ·	<spurious_t< td=""><td>M3_1_1C_4</td><td>0MBW_2</td><td>2516_TX6_</td><td>30_to_100</td><td>0.png> saved</td><td>I STA</td><td>rus</td><td></td><td></td><td></td></spurious_t<>	M3_1_1C_4	0MBW_2	2516_TX6_	30_to_100	0.png> saved	I STA	rus			

	5	purious_TM	13_1a_1C_4	OMRM	_2516	_1X6_	1000_t	0_2486		
Keysight Spe		- Spurious Emissions							_	- • •
X/ Contor E		50 Ω AC 6000000 GHz		NSE:INT eq: 2.51600	0000 GHz		10:13:33 A Radio Std	M May 15, 2020	Rai	nge Table
	Gate: LO	5000000 GHZ	Trig: Exte	rnal1	Avg Hold:					_
PASS		IFGain:l	_ow #Atten: 0	dB	Ext Gain:	-41.20 dB	Radio Dev	/ice: BTS		Rang
								30 GHz	On	Ot
15 dB/div	Ref 0	.00 dBm					-49.8	90 dBm		
Log -15.0										Other at East
-30.0									4.00	Start Fre
-45.0								1	1.00	0000000 GH
-45.0	····		······							
										Stop Fre
-75.0									2.48	6000000 GH
-90.0										
-105										Res B
-120										1.0000 MH
-135									Auto	Ma
Start 1 G	Hz						Stop 2	.486 GHz		
										Video B
0			A		1 1		A 1 inv 14		Auto	3.0000 Mi Mi
Spur	Range	Frequency	Amplitude		Limit		∆ Limit		Auto	1410
1	1	2.453 GHz	-45.96 dBm		31.06 dB		4.90 dB	<u></u>		
2	1	2.443 GHz	-46.13 dBm		31.06 dB		5.07 dB	-	F	ilter Type
3	1	2.362 GHz	-46.25 dBm		31.06 dB		5.19 dB	=		Gaussiar
4	1	2.103 GHz	-46.32 dBm		31.06 dB		5.26 dB			
5	1	2.430 GHz	-46.38 dBm		31.06 dB		5.32 dB			Мо
6	1	2.142 GHz	-46.50 dBm		31.06 dB		5.44 dB			1 of
7	1	2.485 GHz	-46.76 dBm		31.06 dB	m - 1	5.70 dB	Ψ.		
ISG 🕕 File	<spurious< td=""><td>TM3_1_1C_40MBV</td><td>V 2516 TX6 1000</td><td>) to 2486.</td><td>png> saved</td><td></td><td>s</td><td></td><td></td><td></td></spurious<>	TM3_1_1C_40MBV	V 2516 TX6 1000) to 2486.	png> saved		s			

Spurious_TM3_1a_1C_40MBW_2516_TX6_1000_to_2486

Spurious_TM3_1a_1C_40MBW_2516_TX6_2546_to_2690

Keysight Spe		Spurious Emissions		SENSE:INT			10:13:35 A	M May 15, 2020	_	
Center F	req 2.516 Gate: LO	000000 GH	Trig: I	r Freq: 2.516 External1	Avg Hold:		Radio Std	: None	Rai	nge Table
PASS		IFGa	in:Low #Atter	n: 0 dB	Ext Gain:	-41.20 dB	Radio Dev			Range
15 dB/div	Ref 0.	00 dBm						97 GHz 27 dBm	<u>On</u>	Off
-15.0 -30.0 -45.0	monun		and the second		Lormansh	en en allale av A	1	ter al Jestion	2.54	Start Freq 6000000 GHz
-60.0 -75.0 -90.0						anifeda nas Alillas a			2.69	Stop Freq 0000000 GHz
-105 -120 -135									Auto	Res BW 390.00 kHz <u>Man</u>
Start 2.54	46 GHz						Stop	2.69 GHz		Video BW
Spur	Range	Frequency	Amplitu	le	Limit		∆ Limit		Auto	Man
1	1	2.660 GHz	-42.25 d	m	-35.04 dB	m -7	.206 dB	^		
2	1	2.678 GHz	-42.25 dE	Sm	-35.04 dBr	m -7	.207 dB		F	ilter Type
3	1	2.551 GHz	-42.41 dE	m	-35.04 dBi	m -7	.372 dB	=		Gaussian
4	1	2.631 GHz	-42.81 dE	sm	-35.04 dBi	m -7	.769 dB			
5	1	2.682 GHz	-42.82 dE	Bm	-35.04 dBr	m -7	.781 dB			
6	1	2.655 GHz	-42.84 dE		-35.04 dBr		.797 dB			More
7	1	2.634 GHz	-43.27 dE	Bm	-35.04 dBi	m -8	.234 dB	~		1 of 3
мsg 🔱 File ·	<spurious_t< td=""><td>M3_1_1C_40M</td><td>BW_2516_TX6_2</td><td>546_to_269</td><td>0.png> saved</td><td>STATU</td><td>3</td><td></td><td></td><td></td></spurious_t<>	M3_1_1C_40M	BW_2516_TX6_2	546_to_269	0.png> saved	STATU	3			

	Sp	urious_IM:	3_1a_1C_40№	1BW_2516_T)	(6_2690_to_	10000
E Keysight Spe		- Spurious Emissions				- • •
<mark>X</mark> Contor F		50 Ω AC 5000000 GHz	Center Freq:	2.516000000 GHz	10:14:30 AM M Radio Std: N	
PASS	Gate: LO	5000000 GHZ	Trig: External	11 Avg Hold: 25/2	25	
PASS		IFGain:L	.ow #Atten: 0 dB	Ext Gain: -42.1	10 dB Radio Device	BTS Range
					2.691	
15 dB/div	Ref 0.	.00 dBm			-45.731	dBm
Log -15.0						Start Free
-30.0 • 1						2.690000000 GH
-45.0						2.69000000 GH
-60.0						
-75.0						Stop Fre
						10.00000000 GH
-90.0						
-105						Res B
-120						1.0000 MH
-135						Auto <u>Ma</u>
Start 2.6	9 GHz				Stop 7	IO GHZ
						Video BV
•			A	1 1 14	A 1 i	3.0000 MH Auto Ma
Spur	Range	Frequency	Amplitude	Limit	∆ Limit	Auto <u>Ma</u>
1	1	2.692 GHz	-42.75 dBm	-31.06 dBm	-11.69 dB	
2	1	6.099 GHz	-43.20 dBm	-31.06 dBm	-12.14 dB	Filter Type
3	1	3.140 GHz	-43.82 dBm	-31.06 dBm	-12.76 dB	Gaussian
4	1	7.213 GHz	-44.04 dBm	-31.06 dBm	-12.98 dB	
5	1	7.293 GHz	-44.06 dBm	-31.06 dBm	-13.00 dB	Mor
6	1	5.813 GHz	-44.31 dBm	-31.06 dBm	-13.25 dB	1 of
7	1	3.148 GHz	-44.38 dBm	-31.06 dBm	-13.32 dB	
	<spurious 1<="" td=""><td>EM3 1 1C 40MBW</td><td>/ 2516 TX6 2690 to</td><td>10000.png> saved 🕻</td><td>STATUS</td><td></td></spurious>	EM3 1 1C 40MBW	/ 2516 TX6 2690 to	10000.png> saved 🕻	STATUS	
71110	opanodo_				3	

Spurious_TM3_1a_1C_40MBW_2516_TX6_2690_to_10000

Spurious_TM3_1a_1C_40MBW_2516_TX6_10000_to_27000

Keysight Spe		Spurious Emissions	SE	NSE:INT		10:18:22 A	M May 15, 2020		- • ×
Center F	req 2.516	000000 GHz		req: 2.516000000 GHz	d: 25/25	Radio Std		Ra	nge Table
PASS	Gate: LO	IFGain:			: -42.60 dB	Radio Dev	vice: BTS		Range
15 dB/div	Ref 0.	00 dBm					76 GHz 00 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0								10.00	Start Freq 0000000 GHz
-60.0 -75.0 -90.0								27.00	Stop Freq 0000000 GHz
-105 -120 -135								Auto	Res BW 1.0000 MHz <u>Man</u>
Start 10	GHz					Sto	p 27 GHz		Video BW 3.0000 MHz
Spur	Range	Frequency	Amplitude	Limit		∆ Limit		Auto	3.0000 MH2 <u>Man</u>
1	1	25.68 GHz	-34.21 dBm	-31.06 dl	3m -	3.153 dB	^		
2	1	26.19 GHz	-35.02 dBm	-31.06 dl	3m -3	3.964 dB		F	ilter Type
3	1	25.09 GHz	-35.18 dBm			l.117 dB	=		Gaussian
4	1	26.46 GHz	-36.39 dBm			5.325 dB			
5	1	24.28 GHz	-36.53 dBm			5.465 dB			More
6	1	20.67 GHz	-37.66 dBm			600 dB			1 of 3
7	1	21.24 GHz	-38.13 dBm	-31.06 dl	3m -7	.072 dB	Ŧ		1013
MSG 🕹 File	<spurious_t< td=""><td>M3_1_1C_40MB</td><td>W_2516_TX6_1000</td><td>00_to_27000.png> sa</td><td>aved ostatu</td><td>s</td><td></td><td></td><td></td></spurious_t<>	M3_1_1C_40MB	W_2516_TX6_1000	00_to_27000.png> sa	aved ostatu	s			

Keysight Spe	ctrum Analyzer -	Spurious Emissions		2_0011010_25		-		X
		0 Ω <u>∧</u> DC 0000000 GHz		NSE:INT eq: 2.593000000 GHz ernal1 Avg Hold	Radio	7 PM May 18, 2020 Std: None	Ra	nge Table
PASS	Gale: LO	IFGain:				Device: BTS		Range
15 dB/div Log	Ref 0.	00 dBm				.824 MHz 057 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0								Start Freq 9.000 kHz
-60.0 -75.0 -90.0	francisk ských kraditer Pranciský poverský filozofie Pranciský filozofie	n y an Harris an	and a standard part of the standard part of the	and fillings be group of a trial of the days		all yeal and a start of the start	30	Stop Freq 0.000000 MHz
-105 -120 -135							Auto	Res BW 10.000 kHz <u>Man</u>
Start 9 kl	Hz				S	top 30 MHz FFT		Video BW 30.000 kHz
Spur	Range	Frequency	Amplitude	Limit	∆ Limit		Auto	<u>Mar</u>
1	1	22.82 MHz	-63.06 dBm	-31.06 dE	-32.00 dl	3		
2	1	28.26 MHz	-63.35 dBm	-31.06 dE	3m -32.29 di	3	F	ilter Type
3	1	26.48 MHz	-63.87 dBm	-31.06 dE	3m -32.81 di	3		Gaussian
4	1	28.58 MHz	-64.37 dBm	-31.06 dE	3m -33.31 dl	3		
5	1	27.07 MHz	-64.41 dBm	-31.06 dE				
6	1	19.75 MHz	-64.54 dBm	-31.06 dE				More 1 of 3
7	1	28.80 MHz	-64.63 dBm	-31.06 dE	3m -33.57 dl	3		1 of 3
мsg 🔱 File •	<spurious_1< td=""><td>M3_2_1C_60MB</td><td>N_2593_TX6_0_to</td><td>_30.png> saved</td><td>🕼 <mark>status</mark> 🤔 DC 🕯</td><td>Coupled</td><td></td><td></td></spurious_1<>	M3_2_1C_60MB	N_2593_TX6_0_to	_30.png> saved	🕼 <mark>status</mark> 🤔 DC 🕯	Coupled		

5G 60MHz Data Spurious_TM3_2_1C_60MBW_2593_TX6_0_to_30

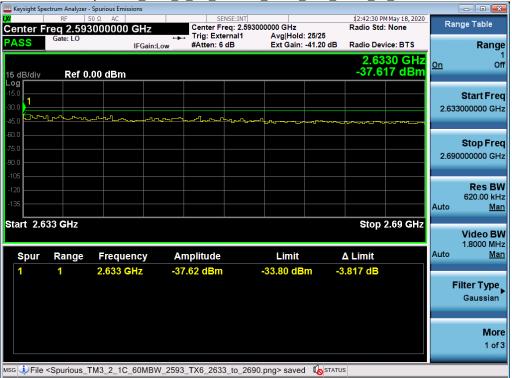
Spurious_TM3_2_1C_60MBW_2593_TX6_1000_to_2496

E Keysight Spe		Spurious Emissions			_				_		
Center F		50 Ω AC 8000000 GH	17		NSE:INT eq: 2.59300	0000 GHz		12:42:27 P Radio Std	M May 18, 2020 I: None	Ra	nge Table
PASS	Gate: LO		ain:Low	Trig: Exte #Atten: 6		Avg Hold: Ext Gain:		Radio Dev	vice: BTS		Range
15 dB/div	Ref 0.	.00 dBm)30 GHz 81 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0										1.00	Start Freq 0000000 GHz
-60.0 -75.0 -90.0										2.49	Stop Freq 6000000 GHz
-105 -120 -135										Auto	Res BW 1.0000 MHz <u>Man</u>
Start 1 G	Hz							Stop 2	.496 GHz		Video BW 3.0000 MHz
Spur	Range	Frequenc	y Am	plitude		Limit		∆ Limit		Auto	Man
1	1	2.493 GHz	-44.:	88 dBm		31.06 dB	m -1	3.82 dB		F	Gaussian
							1				More 1 of 3
MSG 🥹 File 🕯	<spurious_1< td=""><td>FM3_2_1C_60</td><td>MBW_2593_</td><td>TX6_1000</td><td>_to_2496.</td><td>png> saved</td><td>I 🚺 STATU</td><td>S</td><td></td><td></td><td></td></spurious_1<>	FM3_2_1C_60	MBW_2593_	TX6_1000	_to_2496.	png> saved	I 🚺 STATU	S			

	Sp	purious_1	13_2_1C_6	OMBW_2593	_1X6_2	2496_to	0_2553		
Keysight Spectr		urious Emissions						_	
2enter Fre	RF 50 9	Ω AC 00000 GHz		NSE:INT eq: 2.593000000 GHz		Radio Std	M May 18, 2020 : None	Ra	nge Table
	Gate: LO	IFGain:L	→→ Trig: Exte		1: 25/25 : -41.20 dB	Radio Dev	vice: BTS		Rang
		IFGalli:L	ow writen: o		. 41.20 dB		83 GHz		Kang
15 dB/div	Ref 0.00	0 dBm					96 dBm	<u>On</u>	С
- og 15.0									
30.0					1			0.40	Start Fre
45.0							~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2.49	6000000 GH
19.0 			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
75.0									Stop Fr
90.0								2.55	3000000 GI
105									
.120									Res B
.135								Auto	620.00 kl M
								Auto	<u>IVI</u>
itart 2.496	6 GHz					Stop 2	.553 GHz		Video B
									1.8000 M
Spur	Range	Frequency	Amplitude	Limit		∆ Limit		Auto	<u>M</u>
1	1	2.538 GHz	-39.90 dBm	-33.80 di	3m -(6.096 dB			
								F	ilter Type
									Gaussiar
									Мо
									1 0
sg 🗼 File <s< td=""><td>Spurious_TM</td><td>13_2_1C_60MBW</td><td></td><td>5_to_2553.png> save</td><td>d 🚺 STATL</td><td>JS</td><td></td><td></td><td></td></s<>	Spurious_TM	13_2_1C_60MBW		5_to_2553.png> save	d 🚺 STATL	JS			

Spurious_TM3_2_1C_60MBW_2593_TX6_2496_to_2553

Spurious_TM3_2_1C_60MBW_2593_TX6_2633_to_2690



	Sp	ourious_	IM3_2	_1C_60	MRM	2593_	1 X6_20	590_to	_10000		
Keysight Spec		Spurious Emissions									- • ×
		000000 GH	łz →		NSE:INT eq: 2.59300 ernal1	0000 GHz Avg Hold:	25/25	12:43:27 PI Radio Std	May 18, 2020 None	Rai	nge Table
PASS	Gale. LO	IFG	ain:Low	#Atten: 6		Ext Gain:	-42.10 dB	Radio Dev	ice: BTS		Range
15 dB/div	Ref 0.	00 dBm						2.69 -43.6	25 GHz 61 dBm	<u>On</u>	Of
Log -15.0 -30.0 1										2.690	Start Free
-60.0 -75.0 -90.0										10.000	Stop Fre 0000000 GH
-105 -120 -135										Auto	Res B 1.0000 M⊢ <u>Ma</u>
Start 2.69	GHz							Sto	p 10 GHz		Video BI 3.0000 MH
Spur	Range	Frequency	y A	mplitude		Limit		∆ Limit		Auto	<u>Ma</u>
1	1	2.693 GHz	-4	3.66 dBm		·31.06 dB	m -1	2.60 dB		F	ilter Type Gaussian
											Mor 1 of
мsg 🔱 File <	Spurious_T	M3_2_1C_60	MBW_2593	3_ T X6_2690	_to_10000).png> save	d 🕼 statu	s			

Spurious_TM3_2_1C_60MBW_2593_TX6_2690_to_10000

Spurious_TM3_2_1C_60MBW_2593_TX6_10000_to_27000



AEHC

RF 50 Q AD C SENSE:INT 12:26:35 PM May 13, 2020 enter Freq 2,640000000 GHz Center Freq: 2,640000000 GHz Radio Std: None ASS Gate: LO IFGain:Low Hetter: 0 dB Avg[Hold: 26/25 Gate: LO IFGain:Low #Atten: 0 dB Ext Gain: -39.30 dB Radio Device: BTS S GB/div Ref 0.00 dBm -61.255 dBm On S0 Ifficial control co	_			<u></u>		0.10_17.0_0_		_	
Enter Freq 2.64000000 GHz Center Freq: 2.6400000 GHz Radio Std: None Radio Std: None ASS Gate: LO IFGaintLow Trig: External 1 AvgiHdid: 28/26 Radio Device: BTS Radio Std: None Std: None <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>								-	
Start Frequency Amplitude Limit Δ Limit 1 3.795 MHz -61.25 dBm -61.25 dBm -61.25 dBm 300000 MHz -61.25 dBm -61.25 dBm -61.25 dBm -61.25 dBm 50 -	<mark>X</mark> Contor E							Rang	e Table
ASS Mill Col IFGain:Low #Atten: 0 dB Ext Gain: -39.30 dB Radio Device: BTS Range 3.7948 MHz 3.7948 MHz -61.255 dBm -61.256 dBm -31.066 dBm -31.06			000000 GHZ				u. None		
Start Free Start Free 00 1	PASS	Outc. LO	IFGain	Low #Atten: 0	dB Ext Gain:	-39.30 dB Radio De	evice: BTS		Range
Start Free Start Free 00 1						37	948 MHZ	_	1
Start Teor ordo data 00 1		Dof 0						<u>On</u>	Of
50 1	Log	Rei U	.00 uBill						
0.0 1	-15.0							•	tart Fre
5.0 1	-30.0							•	
Stop Free Stop Stop Free Stop Stop Stop Stop Stop Stop Stop Stop									9.000 KH
50 Image of the state o									
30.000000 MH 30.000000 MH 100 1	-60.0		1 	and the second					ton Fre
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4 1 7.435 MHz -67.12 dBm -31.06 dBm -36.06 dB 5 1 9.746 MHz -67.56 dBm -31.06 dBm -36.50 dB 6 1 13.77 MHz -67.80 dBm -31.06 dBm -36.74 dB 7 1 3.410 MHz -67.84 dBm -31.06 dBm -36.78 dB 1 of	2	1	5.475 MHz	-65.73 dBm	-31.06 dB	m -34.67 dB		Filt	er Type
5 1 9.746 MHz -67.56 dBm -31.06 dBm -36.50 dB 6 1 13.77 MHz -67.80 dBm -31.06 dBm -36.74 dB 7 1 3.410 MHz -67.84 dBm -31.06 dBm -36.78 dB -	3	1	5.130 MHz	-66.62 dBm	-31.06 dB	m -35.56 dB	E	(Gaussian
6 1 13.77 MHz -67.80 dBm -31.06 dBm -36.74 dB Mor 7 1 3.410 MHz -67.84 dBm -31.06 dBm -36.78 dB 1 of	4	1	7.435 MHz	-67.12 dBm	-31.06 dB	m -36.06 dB			
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5G 100MHz Data



Spurious_TM3_1a_1C_100MBW_2640_TX6_30_to_1000

		Spurious Emissions				<u></u>			-		-
	req 2.640	0Ω AC 10000000 GH	z	Center Fr	NSE:INT eq: 2.64000	00000 GHz AvalHold	25/25	12:28:23 P Radio Std	M May 13, 2020 : None	Rai	nge Table
PASS	Gate: LO	IFG	ain:Low	#Atten: 0		Ext Gain:		Radio Dev	vice: BTS		Range
15 dB/div Log	Ref 0.	00 dBm							53 MHz 26 dBm	<u>On</u>	1 Off
-15.0 -30.0 -45.0	1									30	Start Freq .000000 MHz
-60.0 -75.0 -90.0										1.000	Stop Freq 0000000 GHz
-120										Auto	Res BW 100.00 kHz <u>Man</u>
Start 30	VIHZ							SI	op 1 GHz		Video BW 300.00 kHz
Spur	Range	Frequency	/ An	nplitude		Limit		∆ Limit		Auto	<u>Man</u>
1	1	79.55 MHz	-53	.63 dBm		-31.06 dB	m -2	2.57 dB	^		
2	1	66.15 MHz	-54	.33 dBm		-31.06 dB	m -2	3.27 dB		F	ilter Type
3	1	83.00 MHz	-54	.51 dBm		-31.06 dB	m -2	3.45 dB	E		Gaussian
4	1	63.50 MHz	-54	.77 dBm		-31.06 dB	m -2	3.71 dB			
5	1	90.35 MHz	-54	.79 dBm		-31.06 dB	m -2	3.73 dB			
6	1	86.75 MHz		.82 dBm		-31.06 dB		3.76 dB			More
7	1	87.45 MHz	-54	.91 dBm		-31.06 dB	m -2	3.85 dB	Ŧ		1 of 3
мsg 🔱 File	<spurious_t< td=""><td>M3_1a_1C_10</td><td>00MBW_264</td><td>40_TX6_30</td><td>)_to_1000.</td><td>png> savec</td><td>ι 🚺 στατυ</td><td>s</td><td></td><td></td><td></td></spurious_t<>	M3_1a_1C_10	00MBW_264	40_TX6_30)_to_1000.	png> savec	ι 🚺 στατυ	s			

	Sp	ourious_	IM3_1	a_1C_1	OOWBA	V_2640	_IX6_	1000_1	to_2580)	
		- Spurious Emissior	ns							_	- • ×
<mark>X</mark> Center Fi		50 Ω AC 0000000 G	Hz		NSE:INT eq: 2.64000	0000 GHz		12:28:35 PI Radio Std	MMay 13, 2020	Ra	nge Table
PASS	Gate: LO		+	🛌 Trig: Exte	rnal1	Avg Hold: Ext Gain:		De die De			Dana
T ABB		IF	Gain:Low	#Atten: 0	aв	Ext Gain:	-41.20 dB	Radio Dev			Rang
	D-F A	00 dBm							45 GHz 67 dBm	<u>On</u>	Of
15 dB/div Log	Rer U	.00 dBm						-00.0			
-15.0									1		Start Fre
-30.0										1.00	0000000 GH
-45.0											
-60.0											Stop Fre
-75.0										2.58	0000000 GH
-90.0										2.00	
-105											Res BV
-120											1.0000 MH
-135										Auto	<u>Ma</u>
Start 1 G	Hz							Stop	2.58 GHz		
											Video BV 3.0000 MH
Spur	Range	Frequen	cy A	Amplitude		Limit		Δ Limit		Auto	3.0000 MA <u>Ma</u>
1	1	2.574 GH	-	35.57 dBm		31.06 dB	m -4	.507 dB			
										F	ilter Type
											Gaussian
											Mor 1 of
											1 Of
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4						1 3	<u> </u>				

Sourious TM3 1a 1C 100MBW 2640 TX6 1000 to 2580

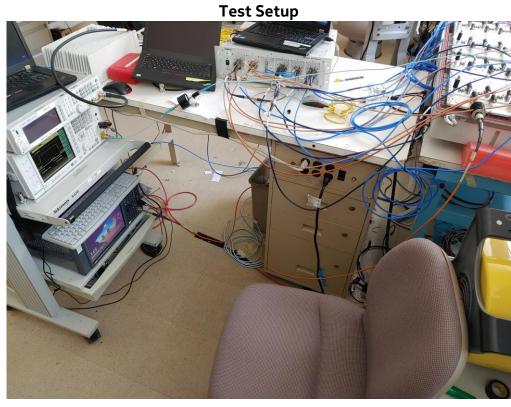
Spurious_TM3_1a_1C_100MBW_2640_TX6_2700_to_10000

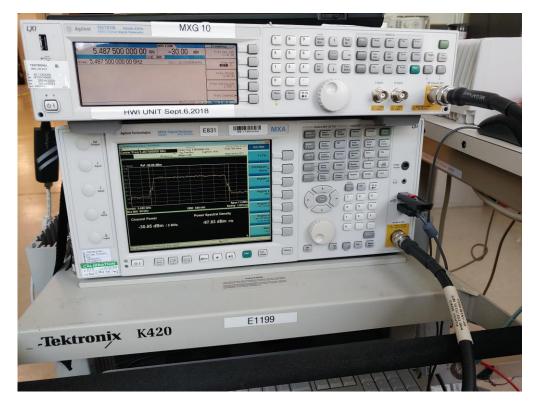


	Spu	irious_TN	13_1a_	<u>1C_10</u>	0MBW_	_2640_	_TX6_1	0000_1	to_270(0C	
Keysight Spectr	rum Analyzer -	Spurious Emissions									- • ×
		Ω AC	1		NSE:INT eq: 2.64000	0000 CH-		12:33:22 P	M May 13, 2020	Ra	nge Table
	eq 2.640 Gate: LO	0000000 GH	lZ ↔			Avg Hold	: 25/25	Radio Std	: None		
PASS	Oate. LO	IFG	ain:Low	#Atten: 0	dB	Ext Gain:	-42.60 dB	Radio Dev	rice: BTS		Range
								25.6	62 GHz	On	1 Off
15 dB/div	Ref 0.	00 dBm						-35.6	78 dBm		01
Log											
-15.0									1		Start Freq
-30.0						_				10.00	0000000 GHz
-45.0											
-60.0											Oton Eron
-75.0										07.00	Stop Freq
-90.0										27.00	0000000 GHZ
-105											
-120											Res BW
-135										Auto	1.0000 MHz Man
										Auto	<u>Iviai i</u>
Start 10 G	Hz							Sto	p 27 GHz		
											Video BW 3.0000 MHz
Spur	Range	Frequency	y A	mplitude		Limit		∆ Limit		Auto	Man
1	1	25.66 GHz	-3	5.68 dBm		31.06 dB	m -4	1.618 dB			
										F	ilter Type
											Gaussian
											Cudoolan
											More
											1 of 3
мsg 🧼 File <s< td=""><td>Spurious_T</td><td>M3_1a_1C_10</td><td>00MBW_26</td><td>640_TX6_10</td><td>0000_to_27</td><td>7000.png> s</td><td></td><td>IS</td><td></td><td></td><td></td></s<>	Spurious_T	M3_1a_1C_10	00MBW_26	640_TX6_10	0000_to_27	7000.png> s		IS			

Spurious_TM3_1a_1C_100MBW_2640_TX6_10000_to_27000

Photographs





Asset ID	Manufacturer	Туре	Description	Model	Serial	Calibration Date	Calibration Due
E831	Agilent Technologies	MXA Signal Analyzer	20Hz-26.5GHz	N9020A	MY48011791	2018-02-15	2020-06-15
E896	Agilent Technologies	Network Analyzer	10 MHz - 40 GHz	N5230C	MY49000897	2019-01-31	2021-01-31
E1344	Macom	Attenuator	3 dB, DC - 4 GHz, 2 watt	2082-6171- 03	N/A	CNR-V	CNR-V
E1237	Weinschel	Attenuator	10dB 25 Watt	46-10-34	BH8105	CNR-V	CNR-V
E1155	Weinschel	Attenuator	10dB 25Watt 0.05GHz - 26GHz	74-10-12	1068	CNR-V	CNR-V
E1154	Weinschel	Attenuator	30dB 25W 0.05GHz-26GHz	74-30-12	1065	CNR-V	CNR-V
Customer Provided		Attenuator	dc-6ghz 10w 30db		zsj30-10rs- 6ta	CNR-V	CNR-V
Customer Provided	Mini Circuits		Modular Test System	ZTM53		CNR-V	CNR-V

Test Equipment

CNR: Calibration Not Required

CNR-V: Calibration Not Required, must be Verified

6. FCC Section 2.1053 - Field strength of spurious radiation

6.1 Section 2.1053 Field Strength of Spurious Emissions

Field strength measurements of radiated spurious emissions were made in an FCC registered 3m Semi-Anechoic Chamber which is maintained by Nokia Bell Labs in Murray Hill, New Jersey. A complete description and full measurement data for the site is on file with the Commission (Site Registration Number: 515091).

The spectrum from 30 MHz to beyond the tenth harmonic of the carrier, 10 GHz, was searched for spurious radiation. Measurements were made using both horizontally and vertically polarized broadband antennas. Per FCC regulations, the comparison of out of band spurious emissions directly to the limit is appropriately made using the substitution method. However, when the emissions are more than 20 dB below the specification limit, the use of field strength measurements for compliance determination is acceptable and those emissions are considered not reportable (Section 2.1053 and the FCC Interpretive database for 2.1053). For this case the evaluation of acceptable radiated field strength is as follows.

6.2 Field Strength of Spurious Emissions - Limits

Sections 2.1053 and 27.53 contain the requirements for the levels of spurious radiation as a function of the level of the unmodulated carrier. The reference level for the unmodulated carrier is calculated as the field produced by an ideal dipole excited by the transmitter output power according to the following relation taken from Reference Data for Radio Engineers, page 676, 4th edition, IT&T Corp.

E= [(30*P)^{1/2}]/R

20 log (E*10⁶) – (43 + 10 log P) = 82.23 dBµV/meter

Where:E = Field Intensity in Volts/meterP = Transmitted Power in WattsR = Measurement distance in meters = 3 m

The Part 27 Limit is 82.23 dBuV/m at 3m and 91.77 dBuV/m at 1m The Part 27 non-report level is 62.23 dBuV/m at 3m.

The calculated emission levels were found by:

Measured level (dB μ V) + Cable Loss(dB)+Antenna Factor(dB) = Field Strength (dB μ V/m)

RESULTS:

For compliance with 47CFR Parts 2 and 27, the field strength of any spurious radiation, measured at 3m, is required to be less than 82.23 dB μ V/meter (82.23 @ 3m). Emissions equal to or less than 62.23 dB μ V/meter at 3m are not reportable and may be verified using field strength measurements and broadband antennas. Over the out of band spectrum investigated from 30 MHz to beyond the tenth harmonic of the carrier (up to 10 GHz), no reportable spurious emissions were detected.

7. FCC Section 2.1055 - Measurement of Frequency Stability

Transmit Frequency Deviation at +25	°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-11.118
0.5	+4.4688
1.0	+36.626
1.5	-3.0926
2.0	+28.377
2.5	+8.4454
3.0	-24.502
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Frequency Block Tested: AEHC 2.6GHz RADIO (CF = 2593MHz)

Transmit Frequency Deviation at +50	°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+17.935
0.5	-27.356
1.0	-59.690
1.5	+15.441
2.0	+50.126
2.5	+11.4050
3.0	-2.4003
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +40	°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+28.269
0.5	-18.653
1.0	+4.5020
1.5	+22.583
2.0	-18.343
2.5	-34.392
3.0	+16.713
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +30	°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+39.486
0.5	+0.67930
1.0	-46.311
1.5	+30.657
2.0	-11.474
2.5	+5.7231
3.0	+35.458
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +20	°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-17.232
0.5	+21.331
1.0	+0.5568
1.5	+11.867
2.0	-13240
2.5	-40.280
3.0	+3.7750
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +10	0°C at 100% of Nominal Voltage, -48VDC
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-35.088
0.5	+11.140
1.0	+0.23575
1.5	-23.231
2.0	-9.7646
2.5	+22.951
3.0	+5.9934
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at 0°C at 100% of Nominal Voltage, -48VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+16.862
0.5	-10.414
1.0	+41.977
1.5	+9.5530
2.0	-17.548
2.5	+8.5091
3.0	-7.5303
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at -10°C at 100% of Nominal Voltage, -48VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+40.480
0.5	-14.522
1.0	-31.393
1.5	+18.279
2.0	+2.4699
2.5	+0.99479
3.0	+23.559
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at -20°C at 100% of Nominal Voltage, -48VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+0.13430
0.5	-31.002
1.0	-8.0462
1.5	+18.830
2.0	-35.213
2.5	+4.0198
3.0	+38.653
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Transmit Frequency Deviation at -30°C at 100% of Nominal Voltage, -48VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+19.332
0.5	-20.759
1.0	+15.557
1.5	-5.0704
2.0	-30.099
2.5	+17.771
3.0	+24.988
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Upon return to +25°C, vary voltage to +15% and -15% of nominal and record frequency difference. Result will be 12 readings for each voltage (nominal, +15%, and nominal, -15%).

Transmit Frequency Deviation at +25°C at 100% of Nominal Voltage, -48VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+13.800
0.5	-5.6363
1.0	+24.532
1.5	+11.628
2.0	+5.8689
2.5	-12.644
3.0	+6.3749
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 103% of Nominal Voltage, -49.44VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+2.7770
0.5	-30.365
1.0	+6.2207
1.5	-34.512
2.0	+6.4703
2.5	-12.814
3.0	+4.4332
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 106% of Nominal Voltage, -50.88VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+18.211
0.5	-17.024
1.0	+9.3805
1.5	+44.329
2.0	-20.725
2.5	-45.292
3.0	+29.870
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 109% of Nominal Voltage, -52.32VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+8.0003
0.5	+14.114
1.0	-9.4836
1.5	+33.168
2.0	-26.189
2.5	+39.914
3.0	+29.614
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 112% of Nominal Voltage, -53.76VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	+16.486
0.5	-32.557
1.0	+0.7549
1.5	+24.806
2.0	+11.012
2.5	-22.333
3.0	+13.984
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 115% of Nominal Voltage, -55.20VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-6.0343
0.5	+19.885
1.0	+38.262
1.5	-3.4112
2.0	-51.733
2.5	+6.6647
3.0	-13.748
FCC SPECIFICATION	2593MHz (±0.05ppm)
	± 0.05 ppm = ± 129.65 Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at 100% of Nominal Voltage, -48.0VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-9.8441
0.5	+43.303
1.0	-19.779
1.5	+6.3610
2.0	+1.9958
2.5	-24.432
3.0	-26.499
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at -3% of Nominal Voltage, -46.56VDC	
Time	Transmit Carrier Deviation
(minutes)	(Hz)
0	-0.1922
0.5	+14.440
1.0	-1.9646
1.5	-10.041
2.0	-36.035
2.5	+11.019
3.0	-0.6074
FCC SPECIFICATION	2593MHz (±0.05ppm)
	±0.05ppm = ±129.65Hz
FCC RESULT	PASS

Transmit Frequency Deviation at +25°C at -6% of Nominal Voltage, -45.12VDC					
Time	Transmit Carrier Deviation				
(minutes)	(Hz)				
0	+23.876				
0.5	-16.472				
1.0	-2.5009				
1.5	+17.911				
2.0	-15.386				
2.5	-49.179				
3.0	+25.053				
FCC SPECIFICATION	2593MHz (±0.05ppm)				
	± 0.05 ppm = ± 129.65 Hz				
FCC RESULT	PASS				

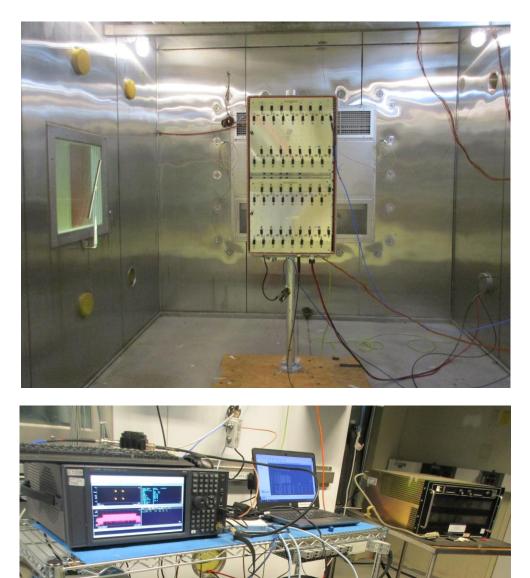
Transmit Frequency Deviation at +25°C at -9% of Nominal Voltage, -43.68VDC					
Time	Transmit Carrier Deviation				
(minutes)	(Hz)				
0	+19.639				
0.5	-46.487				
1.0	-16.248				
1.5	+0.78520				
2.0	-24.311				
2.5	+11.225				
3.0	+29.728				
FCC SPECIFICATION	2593MHz (±0.05ppm)				
	±0.05ppm = ±129.65Hz				
FCC RESULT	PASS				

Transmit Frequency Deviation at +25°C at -12% of Nominal Voltage, -42.24VDC					
Time	Transmit Carrier Deviation				
(minutes)	(Hz)				
0	+5.6887				
0.5	+22.456				
1.0	-12.161				
1.5	-9.7767				
2.0	-21.746				
2.5	-11.410				
3.0	-56.891				
FCC SPECIFICATION	2593MHz (±0.05ppm)				
	±0.05ppm = ±129.65Hz				
FCC RESULT	PASS				

Transmit Frequency Deviation at +25°C at -15% of Nominal Voltage, -40.80VDC					
Time	Transmit Carrier Deviation				
(minutes)	(Hz)				
0	-20.105				
0.5	+25.922				
1.0	-36.949				
1.5	-25.404				
2.0	+56.053				
2.5	+15.776				
3.0	-3.1975				
FCC SPECIFICATION	2593MHz (±0.05ppm)				
	± 0.05 ppm = ± 129.65 Hz				
FCC RESULT	PASS				

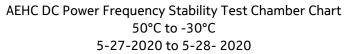
Global Product Compliance Laboratory Report No.: TR-2020-0060-FCC2-27 Product: AirScale MAA 64T64R 192AE B41 320W AEHC

Photographs



Asset ID	Manufacturer	Туре	Description	Model	Serial	Calibration Date	Calibration Due
TH534-T13	Envirotronics	Controller		Envirotronics SPPCM	SP000638	2019-05-22	2021-05-226
TH-T13	Envirotronics	Thermal Chamber		N/A	0999-4722	2018-09-20	2020-09-20
TH069	Extech	Data Logger	Barometric Pressure/Humidity/Te mperature	SD700	Q690305	2019-06-26	2021-06-26
TH054	Yokogawa	Recorder	MobileCorder Paperless Videographic Recorder	MV2048	S5JC04076	2019-02-26	2021-02-26
TH073	Fluke	Multimeter	Digital	87V	25910080	2020-02-25	2022-02-25
E1338	KeySight Technologies	MXA Signal Analyzer		N9020B	MY5743092 7	2019-11-14	2021-11-14

Test Equipment





8. NVLAP Certificate of Accreditation

