

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2022-01-17	2023-01-17
Block - DC	Fairview Microwave	SD3239	ANC	2022-03-02	2023-03-02
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of [-10*log(2)] dB to account for the device operation as a 2 port MIMO transmitter, as per FCC KDB 622911.

Multicarrier test cases are as shown below:

a) PCS Multicarrier Multiband Test Case: In the PCS band _Three WCDMA carriers using two carriers (with minimum spacing between carrier frequencies) at the lower band edge (1932.4 & 1937.4MHz) and a third carrier with maximum spacing between the other two carrier frequencies (1987.6MHz) at the upper band edge. In the AWS band _ Two WCDMA carriers at the band middle (2137.5 & 2142.5MHz). The carriers are operated at maximum power (~26.6W/PCS carrier and 20W/AWS carrier) with a total port power of 120 watts (80W for PCS band carriers + 40W for AWS band carriers). b) AWS Multicarrier Multiband Test Case: In the AWS band _Three WCDMA carriers using two carriers (with minimum spacing between the other two carrier frequencies) at the lower band edge (2112.4 & 2117.4MHz) and a third carrier with maximum spacing between the other two carrier frequencies (2167.6MHz) at the upper band edge. In the PCS band: Two WCDMA carriers at band middle (1957.5 & 1962.5MHz). The carriers are operated at maximum power (~26.6W/AWS carrier and 20W/PCS carrier) with a total port power of 120 watts (80W for AWS band carriers + 40W for PCS band carriers).

Per section 27.53(h)(1), RSS-139 6.6 and 24.238(a), RSS-133 6.5 (i), the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -16 dBm [-13 dBm -10 log (2)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 2 port MIMO transmitter.

The RBW to be used for these measurements are per 27.53(h)(3), RSS-139 6.6, 24.238(b), and RSS-133 6.5. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified).

RF conducted emissions testing was performed only on one port. The testing was performed on the same version of hardware (AHFII) as the original certification test. The AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in this certification testing) and antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraph 5.7.2i.



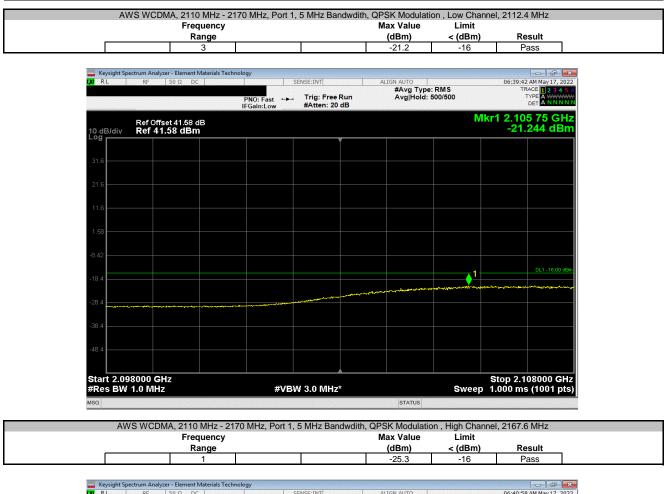
SED C2PC) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Power: 54 VDC Test Method ANSI C63.26:2015 RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	Temperature: Humidity: Barometric Pres.: Job Site:	16-May-22 22.9 °C 48.5% RH 1019 mbar TX05	
ons and Networks In Rattanavong obs ath were accounted for: attenuators, cables, DC bloc DARD	Test Method ANSI C63.26:2015 RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	Temperature: Humidity: Barometric Pres.: Job Site:	22.9 °C 48.5% RH 1019 mbar TX05	
ath were accounted for: attenuators, cables, DC bloc	Test Method ANSI C63.26:2015 RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	Humidity: Barometric Pres.: Job Site:	48.5% RH 1019 mbar TX05	
ath were accounted for: attenuators, cables, DC bloc	Test Method ANSI C63.26:2015 RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	Barometric Pres.: Job Site:	1019 mbar TX05	
ath were accounted for: attenuators, cables, DC bloc	Test Method ANSI C63.26:2015 RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c			
DARD	ANSI C63.26:2015 R5S-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	arriers were enabled at maximum powe	r (30 watts/carrier)	· · · · · · · · · · · · · · · · · · ·
DARD	RSS-133 Issue 6:2013+A1:2018 ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	arriers were enabled at maximum powe	r (30 watts/carrier)	L
DARD	ANSI C63.26:2015 RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	arriers were enabled at maximum powe	r (30 watts/carrier)	
DARD	RSS-139 Issue 3:2015 k and filter when in use. PCS Band II / AWS Band X c	arriers were enabled at maximum powe	r (30 watts/carrier)	L.
DARD	k and filter when in use. PCS Band II / AWS Band X c	arriers were enabled at maximum powe	r (30 watts/carrier)	l.
DARD	- Jan	arriers were enabled at maximum powe	r (30 watts/carrier)	
2	Frequency			
	Range	Max Value (dBm)	Limit < (dBm)	Result
ЛНz	Kailge	(dbiii)	(ubiii)	Nesun
5 MHz Bandwdith				
QPSK Modulation				
Low Channel, 2112.4 MHz	1	-26.0	-16	Pass
			-16	Pass
				Pass
				Pass
				Pass
High Channel, 2167.6 MHz	3	-24.4	-16	Pass
				_
				Pass
	3	-24.2	-16	Pass
	1	25.9	16	Pass
				Pass
Hz	5	-20.8	-10	1 833
5 MHz Bandwdith QPSK Modulation				
Low Channel, 1932.4 MHz	1	-26.2	-16	Pass
Low Channel, 1932.4 MHz	2	-18.6	-16	Pass
Low Channel, 1932.4 MHz	3	-20.7	-16	Pass
High Channel, 1987.6 MHz	1	-24.8	-16	Pass
High Channel, 1987.6 MHz		-18.9	-16	Pass
	3	-21.5	-16	Pass
	4	05.7	40	
	•			Pass
				Pass
				Pass
				Pass Pass
				Pass
	ى ى	-21.0	-10	r a55
	1	-25.5	-16	Pass
				Pass
•	Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz Low Channel, 2167.6 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2112.4 MHz Low Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz Low Channel, 1932.4 MHz	MHz 5 MHz Bandwdith QPSK Modulation Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz High Channel, 2167.6 MHz Cow Channel, 2112.4 MHz Low Channel, 2112.4 MHz Low Channel, 2112.4 MHz Cow Channel, 2112.4 MHz Cow Channel, 2112.4 MHz Cow Channel, 2112.4 MHz Cow Channel, 2167.6 MHz Cow Channel, 1932.4 MHz COW Channel,	MHz S MHz Bandwdith QPSK Modulation Low Channel, 2112 4 MHz Low Channel, 2112 4 MHz 2 -066, 0 Low Channel, 2112 4 MHz 2 -013, 0 -014, 0	MHz S M42 Bandwaith



AWS			/IHz, Port 1	, 5 MHz Band		PSK Modulatio	n, Low Chanr Limit	nel, 2112.4 MHz	
	Frequ	iency 1ge				(dBm)	< (dBm)	Result	
						-26.0	-16	Pass	
I		1				-20.0	-10	1 833	
Keysight Spectrur	n Analyzer - Element Ma	aterials Technology							J
	RF 50 Ω DC			SENSE:INT		ALIGN AUTO		06-28-00 AM Mov	17 2022
		PN	0: Wide 🔸	Trig: Free R	un	#Avg Type: Avg Hold: 5	00/500	TRACE 1 2 TYPE A DET A	3456 www.ww
		IFG	ain:Low	#Atten: 30 d	В				Carlo Carlo Carlo
Re	ef Offset 41.58 dE ef 41.58 dBm	3					Mkr	1 2.110 000	GHz
10 dB/div Re	ef 41.58 dBm							-25.948	aBm
31.6									
21.6									
11.6									
1.58									
-8.42					_/				
								DL1 -1	6.00 dBm
-18.4					/ 1				
				• • •					
-28.4									
-38.4									
-48.4									
Start 2.10900							_	Stop 2.111000	GHz
#Res BW 51	KHZ		#VB\	W 160 kHz*			Sweep	1.000 ms (100	1 pts)
						STATUS			
MSG									
MSG		MH 7 2170 M	/Hz Port 1	5 MHz Banc	wdith C	PSK Modulatio	n Low Chan	001 2112 4 MHz	
MSG			/Hz, Port 1	, 5 MHz Band	lwdith, C			nel, 2112.4 MHz	
MSG	Frequ	lency	/Hz, Port 1	, 5 MHz Banc	lwdith, C	Max Value	Limit		
ISG	Frequ Rar	lency nge	MHz, Port 1	, 5 MHz Banc	łwdith, C	Max Value (dBm)	Limit < (dBm)	Result	_
MSG	Frequ Rar	lency	/IHz, Port 1	, 5 MHz Band	lwdith, C	Max Value	Limit		
AWS \ AWS \ Keysight Spectrum	Frequ Rar 2 m Analyzer - Element Ma	iency nge 2	- Points: 1000, De	etector: Average (RM		Max Value (dBm) -18.6	Limit < (dBm)	Result Pass	<i>a</i> . X
MSG AWS \	Frequ Rar 2	iency nge 2	- Points: 1000, De	etector: Average (RM SENSE:INT	15)	Max Value (dBm) -18.6	Limit < (dBm) -16	Result Pass 06:38:50 AM May	
AWS \ AWS \ Keysight Spectrum	Frequ Rar 2 m Analyzer - Element Ma	Iency nge 2 aterials Technology	- Points: 1000, De	etector: Average (RM SENSE:INT] Center Freq: Trig: Free Ri	15) 2.108500 un	Max Value (dBm) -18.6	Limit < (dBm) -16	Result Pass 06:38:50 AM May Radio Std: None	
AWS \ AWS \ Keysight Spectrum	Frequ Rar 2 m Analyzer - Element Ma	Iency nge 2 aterials Technology	- Points: 1000, De	etector: Average (RM SENSE:INT] Center Freq:	15) 2.108500 un	Max Value (dBm) -18.6 ALIGN AUTO 000 GHz	Limit < (dBm) -16	Result Pass 06:38:50 AM May	J
AWS A AWS A Keysight Spectrum Of RL F	Frequ Rar 2 m Analyzer - Element Ma RF 50 Ω DC Ref Offset 41.58	aterials Technology #IFG	- Points: 1000, De	etector: Average (RM SENSE:INT] Center Freq: Trig: Free Ri	15) 2.108500 un	Max Value (dBm) -18.6 ALIGN AUTO 000 GHz	Limit < (dBm) -16	Result Pass 06:38:50 AM May Radio Std: None	J
AWS A AWS A Keysight Spectrum M RL F	Frequ Rar 2 m Analyzer - Element M. RF 50 Ω DC	aterials Technology #IFG	- Points: 1000, De	etector: Average (RM SENSE:INT] Center Freq: Trig: Free Ri	15) 2.108500 un	Max Value (dBm) -18.6 ALIGN AUTO 000 GHz	Limit < (dBm) -16	Result Pass 06:38:50 AM May Radio Std: None	J
AWS \ AWS \ Keysight Spectrum R F	Frequ Rar 2 m Analyzer - Element Ma RF 50 Ω DC Ref Offset 41.58	aterials Technology #IFG	- Points: 1000, De	etector: Average (RM SENSE:INT] Center Freq: Trig: Free Ri	15) 2.108500 un	Max Value (dBm) -18.6 ALIGN AUTO 000 GHz	Limit < (dBm) -16	Result Pass 06:38:50 AM May Radio Std: None	J

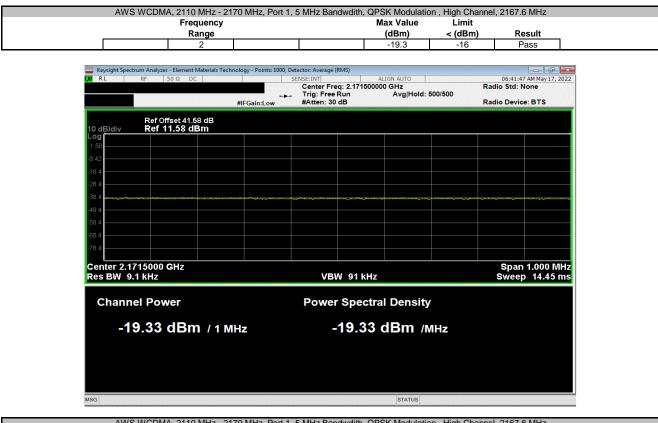
10 dB/div Ref	Offset 41.58 dB 11.58 dBm							
Log 1.58								
-8.42								
-18.4								
-28.4								
-38.4								
-48.4								
-58.4								
-68.4								
-78.4								
-7.0.4								
			VBV	V 91 kHz			Span Sweej	1.000 MHz 14.45 ms
Center 2.108500 Res BW 9.1 kHz Channel Pc					l Density	,	Span Sweep	1.000 MHz 0 14.45 ms
Res BW 9.1 kHz Channel Po		MHz	Power	Spectra	l Density dBm /M		Span Sweej	1.000 MHz 0 14.45 ms
Res BW 9.1 kHz Channel Po	ower	MHz	Power	Spectra	-		Span Sweep	1.000 MHz 5 14.45 ms
Res BW 9.1 kHz Channel Po	ower	MHz	Power	Spectra	-		Span Sweej	1.000 MHz
Res BW 9.1 kHz Channel Pc	ower	MHz	Power	Spectra	-		Span Sweej	1.000 MHz





RL	RF 50	DΩ DC		SENSE:INT		ALIGN AUTO		06:40	:58 AM May 17, 202
			IO: Wide ↔ Gain:Low		Run dB	#Avg Typ Avg Hold	: 500/500		TRACE 1 2 3 4 5 TYPE A WWWW DET A NNNN
) dB/div	Ref Offset Ref 41.5	41.58 dB 8 dBm					N	lkr1 2.17 -2	0 000 GH 5.315 dBr
1.6					<u> </u>				
1.6	~~~~~		 						
1.6									
58									
42									DL1 -16.00 d
.4					1				
.4									
.4									
	000 GHz							Stop 2	171000 GH ns (1001 pt
tes BW 5	1 kHz		#VI	3W 160 kHz	*		Swee	ep 1.000 r	ns (1001 pt





AWS WCDMA	A, 2110 MHz - 21	70 MHz, Port 1, 5	MHz Bandwdith,	QPSK Modulatio	on , High Channel	, 2167.6 MHz
	Frequency			Max Value	Limit	
	Range			(dBm)	< (dBm)	Result
	3			-24.4	-16	Pass

RL RF 50 Ω DC	echnology	ENSE:INT	ALIGN AUTO		06:42:37 AM May 17, 20
	PNO: Fast +++ IFGain:Low	Trig: Free Run #Atten: 20 dB	#Avg Type: RMS Avg Hold: 500/50		TRACE 2 3 4 5 TYPE A WWW DET A N N N
Ref Offset 41.58 dB dB/div Ref 41.58 dBm				Mkr1	2.172 44 GH -24.422 dBr
9					
1.6					
.6					
58					
42					
4					DL1 -16.00 c
.4		**** ********************************			
.4					
.4					
art 2.172000 GHz				Sto	op 2.182000 GH
Res BW 1.0 MHz	#VBV	V 3.0 MHz*		Sweep 1.0	00 ms (1001 pt



Frequ	•		Max Value	Limit	
Ran 1		1	(dBm) -25.8	< (dBm) -16	Result Pass
			-23.8	-10	Fd55
	erials Technology				
XIRL RF 50Ω DC		ENSE:INT	ALIGN AUTO		06:31:08 AM May 17, 202
	PNO: Wide ↔	Trig: Free Run	#Avg Type: Avg Hold: 5	i00/500	TRACE 1 2 3 4 5 TYPE A WWWW DET A N N N N
	IFGain:Low	#Atten: 30 dB		Mire4	2.110 000 GH
Ref Offset 41.58 dB 10 dB/div Ref 41.58 dBm				WIKI I /	-25.810 dBn
		Y			
31.6					
21.6					
11.6					
1.58					
-8.42					
-0.42					DL1 -16.00 dB
-18.4		/			DE1 -16.00 dB
		♦ '			
-28.4		$ \longrightarrow $			
20.4					
-38.4					
-48.4					
Start 2.109000 GHz		k		St	top 2.111000 GH
#Res BW 51 kHz	#VBV	V 160 kHz*		Sweep 1.0	000 ms (1001 pts
MSG			STATUS		
AWS WCDMA, 2110 M Frequ		5 MHz Bandwdith, 1	6-QAM Modulat Max Value	ion, Low Channel Limit	I, 2112.4 MHz
Ran			(dBm)	< (dBm)	Result
2			-18.6	-16	Pass
Keysight Spectrum Analyzer - Element Mat RL RF 50 Ω DC		tector: Average (RMS) ENSE:INT	ALIGN AUTO		06:31:59 AM May 17, 202
14 100 32 00		Center Freg: 2.10850		Ded	io Std: None

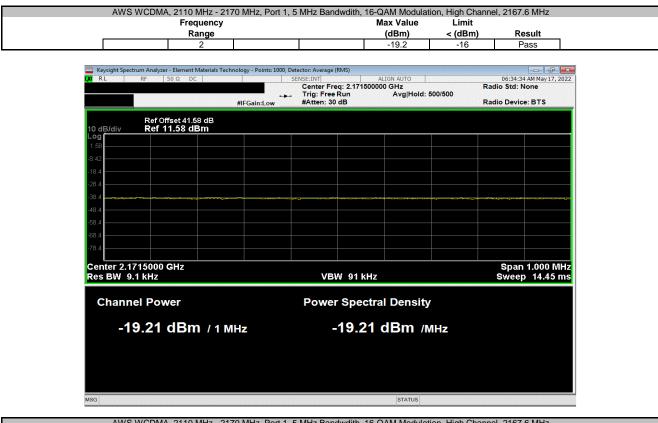
		+ + #IFGain:Low	Center Freq: 2.1085000	00 GHz Avg Hold: 500/500	Radio Std: None Radio Device: BTS	
0 dB/div .og	Ref Offset 41.58 dl Ref 11.58 dBm	3				
.58						
42 3.4						
.4						
3.4	······				······	
3.4						
3.4						
3.4					0	
enter 2.1 es BW 9	085000 GHz .1 kHz		VBW 91 kHz	Span 1.000 MI Sweep 14.45 n		
Chann	el Power		Power Spectra	al Density		
-1	8.59 dBm /	1 MHz	-18.59	dBm /мнz		
G				STATUS		



	Frequency			Max Value	Limit		
	Range			(dBm)	< (dBm)	Result	
	3			-21.5	-16	Pass	
	alyzer - Element Materials Techr 50 Ω DC		SENSE:INT	ALIGN AUTO		06:32:32 AM May	
	00 32 DC			#Avg Type:	RMS	TRACE	3456
		PNO: Fast +++	Trig: Free Run #Atten: 20 dB	Avg Hold: {	500/500	TRACE 1 2 TYPE A DET A	
		IFGain:Low	#Atten: 20 ab			kr1 2.106 27	
Ref O 10 dB/div Ref 4	offset 41.58 dB 41.58 dBm					-21.527	dBm
	+1.Jo uBili		•				
31.6							
21.6							
11.6							
1.58							
-8.42							
-0.42							
-18.4						11	6.00 dBm
10.1				and the second	·····	and warmen and a second	~~~~~~
-28.4							
-38.4							
-48.4							
Start 2.098000 (GHz			l	11	Stop 2.108000) GHz
#Res BW 1.0 MI		#VB	W 3.0 MHz*		Sweep	1.000 ms (100	
MSG				STATUS			
AWS WCD	DMA, 2110 MHz - 217	0 MHz, Port 1,	5 MHz Bandwdit			nnel, 2167.6 MHz	-
	Frequency			Max Value	Limit		
	Range			(dBm)	< (dBm)	Result	
	1			-24.8	-16	Pass	







AWS WCDMA	, 2110 MHz - 217	'0 MHz, Port 1, 5	MHz Bandwdith,	16-QAM Modulat	ion, High Channe	el, 2167.6 MHz	
	Frequency			Max Value	Limit		
Range				(dBm)	< (dBm)	Result	
	3			-24.2	-16	Pass	

RL RF	50 Ω DC	9	ENSE:INT	ALIGN AUTO		06:35:13	AM May 17, 20
		PNO: Fast +++ IFGain:Low	Trig: Free Run #Atten: 20 dB	#Avg Type: F Avg Hold: 50	0/500	TR/ T	ACE 1 2 3 4 YPE A DET A NNN
Ref Offs dB/div Ref 41.	et 41.58 dB .58 dBm				MI	r1 2.172 -24.2	2 44 GH 228 dB
.6							
6							
6							
8							
2							
4 4							DL1 -16.00 c
4							
4							
4							
art 2.172000 GH es BW 1.0 MHz		#\/B\	N 3.0 MHz*		Sweep	Stop 2.18 1.000 ms	2000 GI
		#VB1		STATUS	enecp		Arear bi



Freque Rang			Max Value (dBm)	Limit < (dBm)	Result
1	-		-25.8	-16	Pass
Keysight Spectrum Analyzer - Element Mater	rials Technology	SENSE:INT	ALIGN AUTO		06:24:01 AM May 17, 202
	PNO: Wide ↔		#Avg Type: Avg Hold: {	RMS 500/500	TRACE 1 2 3 4 5 TYPE A WWW DET A N N N
Ref Offset 41.58 dB 10 dB/div Ref 41.58 dBm				Mkr1	2.110 000 GH -25.831 dBr
	1	T Y			
31.6					
51.0					
21.6					
11.6					
1.58			/		
-8.42					
-18.4		/			DL1 -16.00 dE
-10.4		l l			
-28.4					
-38.4					
-48.4					
Start 2.109000 GHz #Res BW 51 kHz	#VF	⊥▲ 3W 160 kHz*			top 2.111000 GH 000 ms (1001 pts
MSG	<i></i>		STATUS	owep n	000 mo (100 i pr.
AWS WCDMA, 2110 MF		, 5 MHz Bandwdith,			l, 2112.4 MHz
Freque Rang	•		Max Value (dBm)	Limit < (dBm)	Result
2	-		-18.7	-16	Pass
Keysight Spectrum Analyzer - Element Mate	rials Technology - Points: 1000,	Detector: Average (RMS) SENSE:INT	ALIGN AUTO		06:24:40 AM May 17, 202

		+► #IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold: 500/500	Radio Device: BTS
) dB/div	Ref Offset 41.58 Ref 11.58 dB				
58					
42					
.4					
.4					
.4					· · · · · · · · · · · · · · · · · · ·
.4					
.4					
3.4					
enter 2.1 es BW 9	1085000 GHz 9.1 kHz		VBW 91 kH	z	Span 1.000 MI Sweep 14.45 n
Chanr	nel Power		Power Spect	ral Density	
-18.68 dBm / 1 мнz			-18.68		
3				STATUS	



	Frequency			Max Value	Limit	
	Range			(dBm)	< (dBm)	Result
	3			-21.7	-16	Pass
Keysight Spectre	um Analyzer - Element Materials Tech	nology				
LXI RL	RF 50 Ω DC		SENSE:INT	ALIGN AUTO		06:25:19 AM May 17, 20
			Trig: Free Run	#Avg Type Avg Hold:		TRACE 1 2 3 4 5 TYPE A DET A NNN
		PNO: Fast +++	#Atten: 20 dB			DET A NNN
					Mkr	1 2.106 25 GH
10 dB/div	Ref Offset 41.58 dB Ref 41.58 dBm					-21.738 dB
Log			Y			
31.6						
21.6						
11.6						
1.58						
-8.42						
						DL1 -16.00 dt
-18.4						1
				and a start and a start and a start and a		
-28.4						
-38.4						
-48.4						
Start 2.0980					S	top 2.108000 GF
#Res BW 1.	0 MHz	#VB	W 3.0 MHz*		Sweep 1	.000 ms (1001 pt
MSG				STATUS		
AWS	WCDMA, 2110 MHz - 217	0 MHz, Port 1,	5 MHz Bandwdit			el, 2167.6 MHz
	Frequency			Max Value	Limit	
	Range			(dBm)	< (dBm)	Result
	1			-24.9	-16	Pass







AWS WCDMA, 2110 MHz - 2170 MHz, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, High Channel, 2167.6 MHz									
	Frequency			Max Value	Limit				
	Range			(dBm)	< (dBm)	Result			
	3			-23.9	-16	Pass			

RL RF 50 Ω DC	SE	NSE:INT	ALIGN AUTO	06:28:3	6 AM May 17, 20
	PNO: Fast ↔ IFGain:Low	Trig: Free Run #Atten: 20 dB	#Avg Type: RMS Avg Hold: 500/500	T	TYPE A WWW DET A NNN
Ref Offset 41.58 dB dB/div Ref 41.58 dBm				Mkr1 2.17 -23	2 20 GH .943 dBr
		ľ			
6					
6					
6					
2					
4					DL1 -16.00 c
	······································				
4					
4					
4					
art 2.172000 GHz es BW 1.0 MHz	#VBW	/ 3.0 MHz*		Stop 2.1 veep 1.000 m	 82000 GH s (1001 pt



FC3 W	CDMA, 1930 MH: Frequen		, FORT, SIVINZ D	anuwulth, G	Max Value	Limit	1, 1002. 4 IVITIZ	
	Range	•			(dBm)	< (dBm)	Result	
	1				-26.2	-16	Pass	
	Analyzer - Element Materia	ls Technology						
LX/RL R	F 50 Ω DC		SENSE:INT		ALIGN AUTO #Avg Type	RMS	05:36:53 AM May 17, 2 TRACE 1 2 3 4	022
		PNO: Wi	ide 🛶 Trig: Fro	ee Run	Avg Hold:	500/500	TYPE A WWW DET A N N N	
		IFGain:L	ow #Atten:	30 dB		N.I.I.		
	f Offset 41.58 dB					MKL1	1.930 000 GI -26.202 dB	
10 dB/div Re	f 41.58 dBm			•			-20.202 GL	
31.6								
								~~
21.6								
11.6								
1.58								
1.56								
-8.42								
								a constant
-18.4				/			DE1-16.00	
				1				
-28.4				<u> </u>				
-38.4								
-48.4								
Start 1.92900							top 1.931000 G	
#Res BW 51 k	KHZ		#VBW 160 kH	lz*		Sweep 1	.000 ms (1001 p	ts)
MSG					STATUS			
DCCM	/CDMA, 1930 MH;	7 1000 MH-	Port 1 5 MH-P	anduidth C	DSK Modulati	on Low Channe		_
FC2 1/	Frequen		, FUILT, SIVINZ B	andwaith, G	Max Value	Limit	1, 1932.4 №ΠΖ	
	Range	•			(dBm)	< (dBm)	Result	
	2				-18.6	-16	Pass	
-	·	•	-					
Keysight Spectrum	Analyzer - Element Materia	ls Technology - Poir	nts: 1000, Detector: Averag	ge (RMS)			- 0	×
LXIRL R	F 50 Ω DC		SENSE:INT	Freq: 1.928500	ALIGN AUTO	Pa	05:37:30 AM May 17, 2 dio Std: None	022
			🛶 Trig: Fr	ee Run	Avg Hold:	500/500		
		#IFGain:L	.ow #Atten:	30 dB		Ra	dio Device: BTS	
	Ref Offset 41.58 dB							
10 dB/div	Ref 11.58 dBm							

Ref Offset 41.58 dB 0 dB/div Ref 11.58 dBm		
.58		
42		
3.4		
3.4		
4		
.4		
.4		
.4		
	· · · · ·	I
	VBW 91 kHz	Span 1.000 MI Sweep 14.45 n
es BW 9.1 kHz	VBW 91 kHz Power Spectral Density	Span 1.000 MI Sweep 14.45 n
es BW 9.1 kHz		Span 1.000 MI Sweep 14.45 n
es BW 9.1 kHz Channel Power	Power Spectral Density	Span 1.000 Mi Sweep 14.45 n
enter 1.9285000 GHz es BW 9.1 kHz Channel Power -18.64 dBm / 1 MHz	Power Spectral Density	Span 1.000 M Sweep 14.45 r
es BW 9.1 kHz Channel Power	Power Spectral Density	Span 1.000 MI Sweep 14.45 n



art 1.918000 GHz es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts		Frequency			ax Value	Limit		
Register Spectrum Analyzer - Element Materials Technology Sense:INT Altion Autro 053810 aM mVY2. 702 Ref Offset 41.58 dB Hirth 1.927 89 GH -20.645 dBm -20.645 dBm Ref Offset 41.58 dB -20.645 dBm -20.645 dBm Contract 1.918000 GHz WBW 3.0 MHz* Stop 1.928000 GHz Stop 0.042 #VBW 3.0 MHz* Stop 1.928000 GHz Stop 1.928000 GHz #VBW 3.0 MHz* Stop 1.928000 GHz								
RL RF 50 R OC SENSELIMI ALIGN 4170 05:38:10 AM May 17, 202 PNO: Fast Trig: Free Run #Avg Type: RMS Avg/Type: RMS <td< th=""><th></th><th>3</th><th></th><th></th><th>-20.7</th><th>-16</th><th>Pass</th><th></th></td<>		3			-20.7	-16	Pass	
RL RF 50 R OC SENSELIMI ALIGN 4170 05:38:10 AM May 17, 202 PNO: Fast Trig: Free Run #Avg Type: RMS Avg/Type: RMS <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
PRO: Fast Trig: Free Run #Atten: 20 dB #Avg Type: RMS Avg Hold: 500/500 Trace 2.2 a St Ver Ref Offset 41.58 dB Mkr1 1.927 89 GH -20.645 dBn Mkr1 1.927 89 GH -20.645 dBn GENdiv Ref offset 41.58 dB -20.645 dBn Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv Gendiv								
Ref Offset 41.58 dB Mkr1 1.927 89 GH dB/div Ref 41.58 dB dB/div Ref 41.58 d	XIRL R⊢	50 Ω DC	SENSE:IN	NI] AL		RMS	05:38:10 AM May 17 TRACE 2	7,2022
Ref Offset 41.58 dB Mkr1 1.927 89 GH dB/div Ref 41.58 dB dB/div Ref 41.58 d							TYPE A W	
CHI UINS 41.58 dBm -20.645 dBm CHI UINS 41.58			IFGain:Low #Att	ten: 20 dB				
Image: Note that is a second secon	Ref Offs	et 41.58 dB				M		
6	10 dB/div Ref 41.	.58 dBm					-20.645 0	БШ
6 6 7 7 7 7 7 7 7 7 7 7 7 7 7				Ĭ				
6 6 7 7 7 7 7 7 7 7 7 7 7 7 7	31.6							
6 6 7 7 7 7 7 7 7 7 7 7 7 7 7								
6 6 7 7 7 7 7 7 7 7 7 7 7 7 7	21.6							
38								
38	11.6							
2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4								
2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1.58							
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4								
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	-8.42							
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4								
4 4 4 4 4 4 4 4 4 4 4 4 4 4	-18.4						DE1-16.	
4 4 4 4 4 4 4 4 4 4 4 4 4 4							www.walkane.lagarene.com	
4 art 1.918000 GHz es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status	-28.4				and the second s			
4 art 1.918000 GHz es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status		ۥۥۥ ۥۥۥۥۥۥۥۥۥۥ؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞؞	*****					
art 1.918000 GHz es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status	-38.4							
art 1.918000 GHz es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status								
es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status	-48.4							
es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status								
es BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts status	Start 1.918000 GF	7		k			Stop 1,928000	GHZ
	#Res BW 1.0 MHz		#VBW 3.0	MHz*		Sweep		
DCS WCDMA 1020 MHz 1000 MHz Dort 1 5 MHz Randwdith ODSK Modulation High Channel 1007 6 MHz	MSG				STATUS			
PCS WCDMA 1930 MHz - 1990 MHz Port 1 5 MHz Bandwdith OPSK Modulation High Channel 1997 6 MHz								
	PCS WCDM		0 MHz, Port 1, 5 MH				nel, 1987.6 MHz	
Frequency Max Value Limit							_	
Range (dBm) < (dBm) Result 1 -24.8 -16 Pass								_

RL RF 50 Ω DC	S	ENSE:INT	ALIGN AUTO	05:39:02 AM May 17, 20
	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS Avg Hold: 500/500	TRACE 1 2 3 4 5 TYPE A DET A NNNN
Ref Offset 41.58 dB dB/div Ref 41.58 dBm				Mkr1 1.990 000 GH -24.774 dBi
1.6				
1.6				
.6				
58				
.4				DL1 -16.00 (
.4		1		
4				
.4				
art 1.989000 GHz es BW 51 kHz	#VB\	N 160 kHz*	Sw	Stop 1.991000 Gi /eep 1.000 ms (1001 pi
			STATUS	





PCS WCDM	A, 1930 MHz - 19	90 MHz, Port 1, 5	5 MHz Bandwdith	, QPSK Modulatio	on , High Channe	l, 1987.6 MHz
	Frequency			Max Value	Limit	
	Range			(dBm)	< (dBm)	Result
	3			-21.5	-16	Pass

RL	rum Analyzer - Elen RF 50 Ω			SENSE:IN	T	ALIGN AUTO			05:41:12 AM May 17, 20
	10 00 30	~	PNO: Fast IFGain:Low		: Free Run ten: 20 dB	#Avg Ty	pe:RMS d:500/500		TRACE 1 2 3 4 TYPE A WWW DET A NNN
dB/div	Ref Offset 41. Ref 41.58 d	58 dB IBm						Mkr1	1.992 12 GF -21.541 dB
.6									
.6									
58									
2									DL1 -16.00 c
.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····							
.4									**************************************
.4									
.4									
art 1.992 es BW 1			#	VBW 3.0	MHz*		Sw	Sto eep 1.00	p 2.002000 GH 00 ms (1001 pt
			"			STATUS			



PCS WCDMA,	Frequency			Max Value	Limit		
· · · · · ·	Range			(dBm)	< (dBm)	Result	
	1			-25.7	-16	Pass	
Keysight Spectrum Analyzer - 1	Ω DC	ology	SENSE:INT	ALIGN AUTO		05:27:52 AM May 17, 20	22
			T	#Avg Type:	RMS	TRACE 1 2 3 4 5 TYPE A DET A NNN	5 6
		PNO: Wide ++ IFGain:Low	_ Trig: Free Run #Atten: 30 dB	Avg Hold: 5	00/500	DETANNN	NN
Ref Offset 4	11 59 dB				Mkr1	1.930 000 GH	z
10 dB/div Ref 41.58	dBm					-25.743 dBi	m
Log			Ĭ Ĭ				
31.6							
51.0							
21.6							
11.6							
1.58							
-8.42							
			/			DL1 -16.00 dt	Bm
-18.4			<u>1</u>				
-28.4							
-20.4							
-38.4							
-48.4							
Start 1.929000 GHz			A		s	top 1.931000 GF	17
#Res BW 51 kHz		#VE	3W 160 kHz*		Sweep 1	.000 ms (1001 pt	s)
MSG				STATUS			
D00.000							
PCS WCDMA,	1930 MHz - 199 Frequency	U MHZ, Port 1	, 5 MHz Bandwdith	Max Value	on, Low Channe Limit	el, 1932.4 MHz	
	Range			(dBm)	< (dBm)	Result	
	2			-18.7	-16	Pass	
🔤 Keysight Spectrum Analyzer - I		ology - Points: 1000,					
LX RL RF 50	Ω DC		SENSE:INT Center Freg: 1.928	ALIGN AUTO	Ra	05:28:51 AM May 17, 20 dio Std: None	22
		→	🛶 Trig: Free Run	Avg Hold: 5	00/500	dio Device: BTS	
		#IFGain:Low	#Atten: 30 dB		Ra	ulo Device: D I S	_

		#IFGain:Low	#Atten: 30 dB			Radio Device: BTS		
	Ref Offset 41.58							
) dB/div	Ref 11.58 dBr	n						
58								
42								
.4								
.4								
.4	···							
.4								
3.4								
.4								
.4								
	9285000 GHz					Span 1.000 MI		
es BW 9	9.1 kHz		VBW 97		Sweep 14.45 n			
Chapr	nel Power		Bower Sp	ectral Densit				
Chann	lei Fower		Power Sp	ectral Densit	y			
-1	8.72 dBm	/ 1 MHz	-18					
		/ 1 101112						
3				STATUS				



Freque			Max Value	Limit	
Rang	e		(dBm)	< (dBm)	Result
3			-21.4	-16	Pass
Keysight Spectrum Analyzer - Element Mater	ials Technology	SENSE:INT	ALIGN AUTO		05:29:41 AM May 17, 2022
	PNO: Fast ↔ IFGain:Low		#Avg Type Avg Hold:	:RMS 500/500	TRACE 1 2 3 4 5 0 TYPE A WWWW DET A N N N N
Ref Offset 41.58 dB 10 dB/div Ref 41.58 dBm Log				M	kr1 1.927 68 GHz -21.410 dBm
Log		The second secon			
31.6					
21.6					
11.6					
1.58					
1.50					
-8.42					
					DL1 -16.00
-18.4					
					and the second s
-28.4		man an man an a			
-38.4					
-48.4					
Start 1.918000 GHz #Res BW 1.0 MHz	#VE	3W 3.0 MHz*		Sweep	Stop 1.928000 GHz 1.000 ms (1001 pts
MSG			STATUS	· ·	<u> </u>
PCS WCDMA, 1930 MH		, 5 MHz Bandwdith,			nnel, 1987.6 MHz
Freque			Max Value	Limit	Desult
Rang	e		(dBm) -24.8	< (dBm) -16	Result Pass

RL RF 50 Ω DC	ials Technology	ENSE:INT	ALIGN AUTO	05:32:34 AM May 17, 20
	PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS Avg Hold: 500/500	TRACE 1 2 3 4 1 TYPE A DET A NN N
Ref Offset 41.58 dB dB/div Ref 41.58 dBm				Mkr1 1.990 000 GF -24.796 dB
1.6				
.6				
.6				
58				
2				DL1 -16.00
.4		1		
.4				
.4				
.4				
art 1.989000 GHz tes BW 51 kHz	#VB\	↓ N 160 kHz*	Sw	Stop 1.991000 Gl eep 1.000 ms (1001 p
3			STATUS	





PCS WCDMA, 1930 MHz - 1990 MHz, Port 1, 5 MHz Bandwdith, 16-QAM Modulation, High Channel, 1987.6 MHz										
Frequency					Limit					
	Range	(dBm)	< (dBm)	Result						
	3			-21.8	-16	Pass				

RL	RF 50 Ω DC	S	ENSE:INT	ALIGN AUTO	05:34	51 AM May 17, 20
		PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 20 dB	#Avg Type: RMS Avg Hold: 500/500		TYPE A WWW DET A NNN
dB/div	Ref Offset 41.58 dB Ref 41.58 dBm				Mkr1 1.9 -2	93 02 GH I.788 dBi
-			Ĭ			
.6						
.6						
6						
8						
2						
	1					DL1 -16.00 c
4			*****			
4						
4						
4						
					0 46 2	000000
	2000 GHz 1.0 MHz	#VBV	V 3.0 MHz*	s	Stop 2. weep 1.000 n	002000 GH 1s (1001 p1



100	WCDMA, 1930 M Freq	uency		, 0 12 Duri	arraiti, e	Max Value	Limit	,	
		inge				(dBm)	< (dBm)	Result	
		1				-25.5	-16	Pass	
		_							
	um Analyzer - Element N RF 50 Ω DC		gy	SENSE:INT		ALIGN AUTO		05:20:11 AM May 17, 2	022
				Trig: Free	Run	#Avg Type Avg Hold:	: RMS 500/500	TRACE 1 2 3 4	5.6
			NO: Wide ↔ Gain:Low	#Atten: 30		, rightera.		TYPE A WWW DET A NNN	NN
F	Ref Offset 41.58 di	в					Mkr1	1.930 000 GI	
10 dB/div	Ref 41.58 dBm							-25.484 dB	m
					Ĭ				
31.6									
21.6									
11.6									
11.0									
1.58					/				
-8.42					\square				
					/			DL1 -16.00	:IBm
-18.4					1				
-28.4									
-38.4									
-48.4									
Start 1.9290			•					Stop 1.931000 G	
#Res BW 51	1 kHz		#VE	3W 160 kHz	*		Sweep 1	1.000 ms (1001 p	ts)
MSG						STATUS			
PCS	WCDMA, 1930 I	MHz - 1990	MHz, Port 1	. 5 MHz Ban	dwdith 64	I-QAM Modulat	tion, Low Chann	el. 1932.4 MHz	
100		uency	1411 12, 1 OIC 1	, 0 11112 Daily	awaiti, o	Max Value	Limit	101, 1002.111112	
	Ra	inge				(dBm)	< (dBm)	Result	
		2				-18.3	-16	Pass	
Keysight Spectru	um Analyzer - Element M RF 50 Ω DC		gy - Points: 1000,	Detector: Average (SENSE:INT	RMS)	ALIGN AUTO		05:20:56 AM May 17, 2	
				Center Fre	q: 1.928500			adio Std: None	
		#1	Gain:Low	#Atten: 30	dB	Avginoid: (adio Device: BTS	
	Ref Offset 41.58	And the second sec		And a second	Access of the second se				

		#IFGain:Low	#Atten: 30 dB		Radio Device: B15
	Ref Offset 41.58 dB				
dB/div	Ref 11.58 dBm				
58					
42					
.4					
.4					
.4					
4					
.4					
.4					
.4					
enter 1.9	285000 GHz			Span 1.000 M	
es BW 9	.1 kHz		VBW 91 kH	Sweep 14.45	
CI			D		
Cnann	el Power		Power Spect	ral Density	
-1	8.32 dBm /	1 MHz	-18.32	2 dBm /мнz	
1				STATUS	



	Frequency			Max Value	Limit	
	Range			(dBm)	< (dBm)	Result
	3			-20.9	-16	Pass
Keysight Spectrum Analyzer - E		nology				- F
RL RF 50	Ω DC		SENSE:INT	ALIGN AUTO #Avg Type:	RMS	05:21:35 AM May 17, 20
		PNO: Fast ↔ IFGain:Low	. Trig: Free Run #Atten: 20 dB	Avg Hold:	500/500	TRACE 1 2 3 4 TYPE A MANN DET A NNN
Ref Offset 4 10 dB/div Ref 41.58	1.58 dB dBm				Mkr	1 1.927 86 GH -20.938 dB
Log			l Y			
31.6						
21.6						
21.6						
11.6						
11.0						
1.58						
1.00						
8.42						
						DL1 -16.00 d
-18.4						
						man and the second second second
-28.4						
-38.4						
-48.4						
Start 1.918000 GHz			· · · · · · · · · · · · · · · · · · ·			Stop 1.928000 GI
≇Res BW 1.0 MHz		#VB	W 3.0 MHz*		Sweep 1	1.000 ms (1001 pt
MSG				STATUS		
PCS WCDMA, 1		0 MHz, Port 1,	5 MHz Bandwdith,			el, 1987.6 MHz
	Frequency			Max Value	Limit	
[]	Range 1	r	1	(dBm) -25.2	< (dBm) -16	Result Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	0	5:22:51 AM May 17, 20
	PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS Avg Hold: 500/500	I	TRACE 1 2 3 4 1 TYPE A DET A NNNI
Ref Offset 41.58 dB dB/div Ref 41.58 dBm				Mkr1 1.	990 000 GH -25.219 dB
1.6					
.6					
.6					
58					
12					DL1 -16.00
.4					
.4		<u> </u>			
4					
art 1.989000 GHz tes BW 51 kHz	#VB	N 160 kHz*		Stop Sweep 1.00	o 1.991000 G 0 ms (1001 p





PCS WCDMA, 1930 MHz - 1990 MHz, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, High Channel, 1987.6 MHz										
	Frequency	Max Value	Limit							
	Range	(dBm)	< (dBm)	Result						
	3			-21.1	-16	Pass				

RL	RF 50 Ω DC	SI	ENSE:INT	ALIGN AUTO	05:24:18 AM May 17, 20
		PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 20 dB	#Avg Type: RMS Avg Hold: 500/500	TRACE 1 2 3 4 5 TYPE A WANN DET A N N N
dB/div	Ref Offset 41.58 dB Ref 41.58 dBm				Mkr1 1.992 91 GH -21.079 dBr
-			Ĭ		
.6					
.6					
6					
8					
2					
4					DL1 -16.00 c
·····		·····	Westerne and the second se		
4					
4					
4					
	2000 GHz				Stop 2.002000 GF
es BW	1.0 MHz	#VBV	V 3.0 MHz*	Sv	/eep 1.000 ms (1001 pt



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Block - DC	Fairview Microwave	SD3239	ANC	2022-03-02	2023-03-02
Block - DC	Fairview Microwave	SD3379	AMT	2021-09-14	2022-09-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2022-01-17	2023-01-17
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 4 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 22 GHz. The conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below.

The measurement methods are detailed in KDB 971168 D01v03 section 6 and ANSI C63.26-2015.

Per FCC 2.1057(a)(1) and RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

These measurements are for the frequency band after the first 1.0 MHz bands immediately outside and adjacent to the frequency block.

RF conducted emissions testing was performed only on one port. The AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in output power testing) and antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i, and 6.4.

Per section FCC 24.238(a), FCC 27.53(h)(1), RSS 133 6.5 (ii), and RSS-139 6.6 - the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -16 dBm [-13 dBm -10 log (2)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 2 port MIMO transmitter.

The limit for the 9kHz to 150kHz frequency range was adjusted to -46dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 1MHz [i.e.: -46dBm = -16dBm -10log(1MHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to -36dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 1MHz [i.e.: - 36dBm = -16dBm -10log(1MHz/1kHz)]. The required limit of -16dBm with a RBW of \geq 1MHz was used for all other frequency ranges. (See ANSI C63.26-2015 paragraph 5.7.2a for details on the Limit/RBW scaling method)



						TbtTx 2022.05.02.0	XMit 2022
	AHFII (FCC/ISED C2PC)				Work Order:		
Serial Number:						16-May-22	
	Nokia Solutions and Ne				Temperature:		
	David Le, John Rattana	vong			Humidity:		
Project:	None		Damage 54 MDO			1018 mbar	
EST SPECIFICATI	Brandon Hobbs		Power: 54 VDC Test Method		Job Site:	1705	
CC 24E:2022			ANSI C63.26:2015				
SS-133 Issue 6:20	113 + ∆1·2018		RSS-133 Issue 6:2013+A1:201	8			
CC 27:2022	10141.2010		ANSI C63.26:2015	0			
SS-139 Issue 3:20	015		RSS-139 Issue 3:2015				
OMMENTS							
All losses in the me	easurement path were ac	ccounted for: attenuators, cables, DC block and	filter when in use. PCS Band II / AWS B	and X carriers were simulta	aneously enabled a	t maximum power	(30 watts/car
	M TEST STANDARD						
one		T	~				
onfiguration #	1,2,3,4	1	1-1				
		Signature	Frequency	Measured	Max Value	Limit	
			Range	Freq (MHz)	(dBm)	< (dBm)	Result
CS WCDMA, 1930					· ·	· ·	
	Port 1 5 MHz Band	dwdith					
		QPSK Modulation					
		Mid Channel, 1960 MHz	9 kHz - 150 kHz	0.01	-56.58	-46	Pass
		Mid Channel, 1960 MHz	150 kHz - 20 MHz	0.15	-58.49	-36	Pass
		Mid Channel, 1960 MHz	20 MHz - 3.5 GHz	3155.05	-22.39	-16	Pass
		Mid Channel, 1960 MHz	1.9 GHz - 2.2 GHz	1996.19	-25.34	-16	Pass
		Mid Channel, 1960 MHz Mid Channel, 1960 MHz	2.2 GHz - 13 GHz 13 GHz - 22 GHz	4027.25 20132.05	-42.64 -23.9	-16 -16	Pass Pass
		16-QAM Modulation	13 GHZ - 22 GHZ	20132.05	-23.9	- 10	Pass
		Mid Channel, 1960 MHz	9 kHz - 150 kHz	0.01	-56.9	-46	Pass
		Mid Channel, 1960 MHz	150 kHz - 20 MHz	0.15	-57.76	-36	Pass
		Mid Channel, 1960 MHz	20 MHz - 3.5 GHz	3223.78	-22.3	-16	Pass
		Mid Channel, 1960 MHz	1.9 GHz - 2.2 GHz	1996.98	-26	-16	Pass
		Mid Channel, 1960 MHz	2.2 GHz - 13 GHz	4031.05	-42.41	-16	Pass
		Mid Channel, 1960 MHz	13 GHz - 22 GHz	20094.7	-23.85	-16	Pass
		64-QAM Modulation					
		Mid Channel, 1960 MHz	9 kHz - 150 kHz	0.01	-56.63	-46	Pass
		Mid Channel, 1960 MHz	150 kHz - 20 MHz	0.15	-56.95	-36	Pass
		Mid Channel, 1960 MHz	20 MHz - 3.5 GHz	3145.48	-22.75	-16	Pass
		Mid Channel, 1960 MHz	1.9 GHz - 2.2 GHz	1998.59	-26.53	-16	Pass
		Mid Channel, 1960 MHz	2.2 GHz - 13 GHz	4002.55	-42.64	-16	Pass
	MULE 0470 MULE	Mid Channel, 1960 MHz	13 GHz - 22 GHz	20117.2	-23.82	-16	Pass
WS WCMA, 2110	MHz - 2170 MHz Port 1						
	5 MHz Band						
		QPSK Modulation Mid Channel, 2140 MHz	9 kHz - 150 kHz	0.01	-57.08	-46	Pass
		Mid Channel, 2140 MHz	9 KHZ - 150 KHZ 150 kHz - 20 MHz	0.01	-57.97	-46 -36	Pass
		Mid Channel, 2140 MHz	20 MHz - 3.5 GHz	3250.31	-22.28	-16	Pass
		Mid Channel, 2140 MHz	1.9 GHz - 2.2 GHz	1997.01	-22.28	-16	Pass
		Mid Channel, 2140 MHz	2.2 GHz - 13 GHz	3982.6	-43.27	-16	Pass
		Mid Channel, 2140 MHz	13 GHz - 22 GHz	21961.75	-24.49	-16	Pass
		16-QAM Modulation					
		Mid Channel, 2140 MHz	9 kHz - 150 kHz	0.01	-57.82	-46	Pass
		Mid Channel, 2140 MHz	150 kHz - 20 MHz	0.15	-57.63	-36	Pass
		Mid Channel, 2140 MHz	20 MHz - 3.5 GHz	3187.24	-22.63	-16	Pass
		Mid Channel, 2140 MHz	1.9 GHz - 2.2 GHz	1995.14	-26.37	-16	Pass
		Mid Channel, 2140 MHz	2.2 GHz - 13 GHz	4019.18	-43.17	-16	Pass
		Mid Channel, 2140 MHz 64-QAM Modulation	13 GHz - 22 GHz	21545.05	-23.96	-16	Pass
		Mid Channel, 2140 MHz	9 kHz - 150 kHz	0.01	-56.94	-46	Pass
		Mid Channel, 2140 MHz	150 kHz - 20 MHz	0.15	-57.79	-36	Pass
				0.10			
			20 MHz - 3.5 GHz	3254.23	-22.16	-16	Pass
		Mid Channel, 2140 MHz	20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz	3254.23 1996.71	-22.16 -25.68	-16 -16	Pass Pass
			20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz	3254.23 1996.71 4016.33	-22.16 -25.68 -42.44	-16 -16 -16	Pass Pass Pass



Frequence		Max Value	Limit	Burnit
Range 9 kHz - 150		(dBm) -56.58	< (dBm) -46	Result Pass
9 KHZ - 150	0.01	-30.38	-40	F d 55
Keysight Spectrum Analyzer - Element Material				
Keysight Spectrum Analyzer - Element Material Keysight Spectrum Analyzer - Element Material	SENSE:INT	ALIGN AUTO		08:57:24 AM May 17, 202
		#Avg Type		TRACE 1 2 3 4 5
	PNO: Wide +++ Trig: Free Run IFGain:Low #Atten: 16 dB	Avg Hold:	100/100	
Ref Offset 19.2 dB				Mkr1 9.000 kH
10 dB/div Ref 17.20 dBm				-56.579 dBn
	The second se			
7.00				
7.20				
2.00				
-2.80				
42.0				
-12.8				
~~~				
-22.8				
-32.8				
-52.0				
-42.8				
42.0				DL1 -46.00 dBr
-52.8 1				
-62.8				Λ
-72.8	- man from man		Λ	
			1 mm	mand have
Start 9.00 kHz				Stop 150.00 kHz
#Res BW 1.0 kHz	VBW 3.0 kHz*		Sweep 5	6.00 ms (8001 pts
MSG		STATUS		

PCS WCDMA, 1930 MHz - 1990 MHz, Port 1,	5 MHz Bandwdit	h, QPSK Modulat	ion , Mid Channe	l, 1960 MHz
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-58.49	-36	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	09:08:41 AM May 17, 20
	PNO: Fast ↔→ IFGain:Low	. Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE A WWW DET A NNNN
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 150.0 kH -58.488 dBi
0				
0				
0				
0				
0				DL1 -36.00 dl
0				
0.1				
0				
a and an interesting of the second and the first of the second second second second second second second second	anlywysyn a baran a ba	hide-farser-frontynheidertersfeldter fan het litter fan geve	urine of any of any of the set of	and a transferration and any map that with a provide start place to
art 150 kHz es BW 10 kHz	VBM	∜ 30 kHz*	Swe	Stop 20.000 MH ep 79.47 ms (8001 pt



	Frequency Range		Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
	20 MHz - 3.5 GHz		3155.05	-22.39	-16	Pass
•						
	nalyzer - Element Materials Techr	ology				
LX RL RF	50 Ω DC		SENSE:INT	ALIGN AUTO #Avg Type	RMS	09:10:45 AM May 17, 202 TRACE 1 2 3 4 5
		PNO: Fast ↔ IFGain:Low	→ Trig: Free Run #Atten: 24 dB	Avg Hold:		
Ref C	Offset 41.7 dB				Mk	r1 3.155 0 GH
10 dB/div Ref	41.70 dBm					-22.390 dBn
			Ĭ			
31.7						
21.7						
11.7						
1.70						
1.70						
-8.30						
						DL1 -16.00 dB
-18.3						1
				And the Designation of the Party of the Part		And the second second second second
-28.3		and the second				
-38.3						
-48.3						
40.0						
Start 20 MHz						Stop 3.500 GH
#Res BW 1.0 M	Hz	VB	W 3.0 MHz*		Sweep 4.	.800 ms (8001 pts
MSG				STATUS		
PCS W	CDMA, 1930 MHz - 1	990 MHz, Por	t 1, 5 MHz Bandwditl	n, QPSK Modulat	ion , Mid Channe	l, 1960 MHz
	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	1.9 GHz - 2.2 GH	2	1996.19	-25.34	-16	Pass
Keysight Spectrum An	nalyzer - Element Materials Techr	alami				

KL	R⊢   50 Ω DC	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 24 dB	#Avg Type: RMS Avg Hold: 100/100	09:11:51 AM May 17, 2022 TRACE 1 2 3 4 5 0 TYPE A WWWW DET A N N N N
I0 dB/div	Ref Offset 41.4 dB Ref 41.40 dBm			Mk	r1 1.996 187 5 GHz -25.339 dBm
31.4					₼
21.4					
11.4					
1.40					
8.60					
18.6					DL1 -16.00 dBr
28.6	altranov altranovaria	And person and a person of the	nanadaring paral paraterian	nalaladalay) nagongta pinan karantifan yana nagongtan signaga	and and have been and the stand of the stand
38.6					
48.6					
Start 1.90					Stop 2.2000 GHz
	1.0 MHz	VBW	3.0 MHz*		ep 1.067 ms (8001 pts
SG				STATUS	



	Frequency		Measured	Max Value	Limit	Desert	
-	Range 2.2 GHz - 13 GHz		Freq (MHz) 4027.25	(dBm)	< (dBm) -16	Result	
	2.2 GHZ - 13 GHZ		4027.25	-42.64	-16	Pass	
Keysight Spectrum Analy	yzer - Element Materials Technology 50 Ω DC		raice tard	ALIGN AUTO		09:20:48 AM May 17	
	30.35 DC		ENSE:INT	#Avg Type	RMS	TRACE 1 2 3	4 5 6
		0: Fast 🔸	Trig: Free Run	Avg Hold:	100/100	TYPE A WW DET A N	
	IFG	ain:Low	#Atten: 16 dB				10000010010
Ref Off	set 26.7 dB				INIK	r1 4.027 250 0	HZ
10 dB/div Ref 32	2.70 dBm					-42.641 d	ыш
			Ť				
22.7							
12.7							
2.70							
-7.30							
-17.3						DL1 -16.	00 dBm
-27.3							
-37.3 1							
• • • • • • • • • • • • • • • • • • •							
-47.3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and the second s	the state of the s	State of the second			
-57.3							
Start 3.500 GHz	_	VDW			Succes	Stop 13.000	
#Res BW 1.0 MH	2	VBW	3.0 MHz*		Sweep	16.00 ms (20001	pis)
ISG				STATUS			

PCS WCDMA, 1930 MHz - 1990 MHz, Port 1,	5 MHz Bandwdit	h, QPSK Modulat	tion , Mid Channe	l, 1960 MHz
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	20132.05	-23.9	-16	Pass

RL RF 50 Ω DC	SENSE:INT	ALIGN AUTO		09:28:04 AM May 17, 20
	PNO: Fast 🛶 Trig: Fr IFGain:Low #Atten:	#Avg Type ee Run Avg Hold:		TRACE 1 2 3 4 TYPE A WWW DET A NNN
Ref Offset 44.6 dB dB/div Ref 50.60 dBm			Mkr1	20.132 05 GH -23.895 dB
.6				
.6				
00				
				DL1 -16.00
4			<b>1</b> −	
4				
.4				
art 13.000 GHz es BW 1.0 MHz	VBW 3.0 MH	7*	Sween 1	Stop 22.000 Gi 6.00 ms (20001 p



	Frequency		Measured	Max Value	Limit	Desult
	Range 9 kHz - 150 kHz		Freq (MHz) 0.01	(dBm) -56.9	< (dBm) -46	Result Pass
	9 KHZ - 150 KHZ		0.01	-56.9	-40	P855
Keysight Spectrum	n Analyzer - Element Materials Techno	ology				
LXIRL R	RF 50 Ω DC	5	SENSE:INT	ALIGN AUTO	- 5446	09:00:48 AM May 17, 2022
		PNO: Wide +++ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type Avg Hold:	100/100	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN
Re 10 dB/div Re	ef Offset 19.2 dB ef 17.20 dBm					Mkr1 9.000 kHz -56.897 dBm
			Y			
7.20						
-2.80						
-12.8						
-22.8						
-32.8						
-42.8						
-42.0						DL1 -46.00 dBm
-52.8 1						
- 32.0 K						
-62.8			Δ			Α
-72.8		man and a second	- long		Λ	
					- · · · · · · · · · · · · · · · · · · ·	mand have
Start 9.00 kHz #Res BW 1.0		VBW	/ 3.0 kHz*		Sweep	Stop 150.00 kHz 56.00 ms (8001 pts)
MSG				STATUS		

	o miniz Danawaian		ation, who orian it	51, 1000 Mil 12
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-57.76	-36	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO #Avg Type: R	MS	09:06:58 AM May 17, 20 TRACE 1 2 3 4
	PNO: Fast ++ IFGain:Low	<ul> <li>Trig: Free Run #Atten: 16 dB</li> </ul>	Avg Hold: 100		TYPE A WWW DET A NNN
Ref Offset 19 dB dB/div Ref 15.00 dBm				Ν	/kr1 150.0 kl -57.762 dB
00					
0					
0					
0					
0					DL1 -36.00
0					
1					
o					
And a first of the state of the	gistensetensetentet	^{นนา} สมาร์สารที่ในเหตุลังกรุงไป <mark>ไปสู่สารกรุงไ</mark> ปเล	***	nidefilie/Branchastanite.com	an an fright an air an
art 150 kHz es BW 10 kHz		N 30 kHz*			Stop 20.000 M 9.47 ms (8001 p



	Frequency	/	Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	20 MHz - 3.5 (	GHz	3223.78	-22.3	-16	Pass
	lyzer - Element Materials Te 50 Ω DC	chnology	anne met			<b>-</b>
KA RL RF	50 12 DC		SENSE:INT	ALIGN AUTO #Avg Type:	RMS	09:13:54 AM May 17, 2022 TRACE 1 2 3 4 5
		PNO: Fast ++ IFGain:Low	_ Trig: Free Run #Atten: 24 dB	Avg Hold: 1	00/100	TYPE A WWWWW DET A N N N N
Ref Of 10 dB/div Ref 4	fset 41.7 dB 1.70 dBm				Mki	r1 3.223 8 GHz -22.303 dBm
10 dB/div Ref 4				1		
31.7						
21.7						
11.7						
1.70						
-8.30						
						DI 1 -16.00 dBm
-18.3						
-28.3			an a	warness and the second s		
20.0						
-38.3						
-48.3						
Start 20 MHz				-		Stop 3.500 GHz
#Res BW 1.0 MH	z	VBI	N 3.0 MHz*		Sweep 4.	800 ms (8001 pts
MSG				STATUS		
DCCMC		- 1000 MHz . Dor	t 1, 5 MHz Bandwdith	16-OAM Modul	ation Mid Chann	al 1960 MHz
F03 WC	Frequency	,	Measured	Max Value	Limit	
	Range	,	Freq (MHz)	(dBm)	< (dBm)	Result
	1.9 GHz - 2.2	GHz	1996.98	-26	-16	Pass

RL	ctrum Analyzer - Eleme RF 50 Ω		connoiogy	SENSE:INT	ALIGN AUTO		09:14:54 AM May 17, 202
	10 30 32		PNO: Fast ↔ IFGain:Low		#Avg Type: RM Avg Hold: 100/		TRACE 1 2 3 4 5 TYPE A WWW DET A NNNN
0 dB/div	Ref Offset 41.4 Ref 41.40 de					Mkr1	1.996 975 0 GH -26.003 dBn
31.4		<u> </u>				Å	
:1.4							
1.4							
.40							
.60							DL1 -16.00 dB
8.6	an farmer and the second	n language		100-10 ma Minikati. Tu at Ju uma ika di siPakki at	14-19;15:14:19;15:14:19;16:14:16:16:14:16:16:16:16:16:16:16:16:16:16:16:16:16:	webuch to the second	Land and a state of the state o
8.6							
tart 1.900							Stop 2.2000 GH
Res BW 1			VB	W 3.0 MHz*		Sweep	1.067 ms (8001 pts
G					STATUS		



	equency	Measured	Max Value	Limit	
	Range	Freq (MHz)	(dBm)	< (dBm)	Result
2.2 GH	lz - 13 GHz	4031.05	-42.41	-16	Pass
Keysight Spectrum Analyzer - Element	t Materials Technology				
<mark>X RL</mark> RF 50Ω D	C	SENSE:INT	ALIGN AUTO		09:22:45 AM May 17, 202
	DNO: E-	et 🛻 Trig: Free Run	#Avg Type Avg Hold:		TRACE 1 2 3 4 5 TYPE A WWWW DET A NNNN
	PNO: Fa IFGain:Lo				DET A NNNN
D-608-14007				Mkr'	1 4.031 050 GH
Ref Offset 26.7 of 10 dB/div Ref 32.70 dBi	1B m				-42.412 dBn
		Y			
22.7					
12.7					
2.70					
-7.30					
-17.3					DL1 -16.00 dBr
-27.3					
-37.3 1					
-47.3	$\sim$	and the second second second	at the second design of the second design of the	and the second	and the second
-57.3					
Start 3.500 GHz					Stop 13.000 GH
#Res BW 1.0 MHz		VBW 3.0 MHz*		Sweep 1	6.00 ms (20001 pts
MSG			STATUS		

Frequency	Measured	Max Value	Limit	,
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	20094.7	-23.85	-16	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	09:30:13 AM May 17, 202
	PNO: Fast ↔ IFGain:Low	T	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE A WWW DET A NNNN
Ref Offset 44.6 dB 0 dB/div Ref 50.60 dBm			MI	(r1 20.094 70 GH -23.853 dBr
		Ĭ		
0.6				
.6				
00				
10				
				DL1 -16.00 c
.4				
.4				
art 13.000 GHz				Stop 22.000 GH
tes BW 1.0 MHz	VBW	V 3.0 MHz*	Sweep	16.00 ms (20001 pt



	Frequency		Measured	Max Value	Limit	<b>D</b>	
	Range		Freq (MHz)	(dBm)	< (dBm)	Res	
	9 kHz - 150 kHz		0.01	-56.63	-46	Pas	SS
	- Element Materials Technolog	y					- 6
LXI RL RF 5	50 Ω DC	S	ENSE:INT	ALIGN AUTO #Avg Type	DMC	09:03:55 A	M May 17, 2022
	D	IO: Wide 🔸	Trig: Free Run	Avg Hold:		TY	PE A WWWWW ET A NNNNN
	IFO	Gain:Low	#Atten: 16 dB			D	ET A NNNNN
D-605						Mkr1 9.	000 kHz
10 dB/div Ref 0ffset	0 dBm						25 dBm
Log			Y				
7.20							
-2.80							
-12.8							
-22.8							
-22.0							
-32.8							
-42.8							DL1 -46.00 dBm
-52.8							
-62.8	~ · /		Λ			Λ	
	have have a		$\Lambda$				
-72.8		$\sim$	howing	~~~~	Α		
						m	hom
			<b>k</b>			04am 44	
Start 9.00 kHz #Res BW 1.0 kHz		VRM	3.0 kHz*		Swoon	56.00 ms	50.00 kHz
			ON KINZ		Gweep	30.00 ms	(000 i prs)
MSG				STATUS			

Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-56.95	-36	Pass

RL RF 50 Ω DC	SE	ENSE:INT	ALIGN AUTO		09:05:23 AM May 17, 20
	PNO: Fast ↔ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: F Avg Hold: 10		TRACE 1 2 3 4 TYPE A WWW DET A N N N
Ref Offset 19 dB dB/div Ref 15.00 dBm					Mkr1 150.0 kł -56.947 dB
		Ť			
0					
0					
0					
0					
0					DL1 -36.00
0					
1					
Manufagenet and an and a start of the start	water	****	aaroo Jadayahaaraharaa karaada	ter two providences	100000 jan and and a string of a standard of a
art 150 kHz es BW 10 kHz					Stop 20.000 M 79.47 ms (8001 p



	CDMA, 1930 MHz - 19/ Frequency			sured	Max Value	Limit	
	Range		Freq	(MHz)	(dBm)	< (dBm)	Result
	20 MHz - 3.5 GHz		314	5.48	-22.75	-16	Pass
Keysight Spectrum A	nalyzer - Element Materials Techno 50 Ω DC		ENSE:INT		ALIGN AUTO		09:16:34 AM May 17, 2022
	50 12 DC	3			#Ava Type: F	RMS	TRACE 1 2 3 4 5 (
		PNO: Fast +++	Trig: Free I #Atten: 24		Avg Hold: 10	0/100	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNN
		II Guilleon				Mk	r1 3.145 5 GHz
Ref 0 10 dB/div Ref Log	Offset 41.7 dB <b>41.70 dBm</b>						-22.752 dBm
Log					1		
24.7							
31.7							
21.7							
2.0.0							
11.7							
1.70							
-8.30							
							DL1 -16.00 dBm
-18.3				ļ			
-28.3	an an air an	a la complete Martin Martin Martin	i de la gland de pert	and the state of t			
-38.3							
-48.3							
Start 20 MHz							Stop 3.500 GHz
#Res BW 1.0 M	IHz	VBW	3.0 MHz*			Sweep 4	800 ms (8001 pts)
MSG					STATUS		
DCCM	/CDMA, 1930 MHz - 19			o duudit-	64 OAM Madula	tion Mid Char	
PCS W	Frequency	90 MHZ, POR		inawaith, sured	Max Value	Limit	iei, 1960 IVIHZ
	Range			(MHz)	(dBm)	< (dBm)	Result
	1.9 GHz - 2.2 GHz	,		8.59	-26.53	-16	Pass

RL	RF 50 Ω DC	terials Technology	S	ENSE:INT	Δ	GN AUTO		09:17:36	AM May 17, 20
NE 1	-	PNO: IFGair	Fast ++-	Trig: Free Run #Atten: 24 dB		#Avg Type: Avg Hold: 1		TR. T	ACE 1 2 3 4 5 YPE A WWW DET A NNN
dB/div	Ref Offset 41.4 dB Ref 41.40 dBm						Mkr1	1.998 58 -26.	87 5 GH 526 dBr
9	۸.			Ť			Δ		
.4									
.4									
.4									
10									
50									
									DL1 -16.00 c
.6	When the state of	Ware and the states of the	1	hall the state of the		\	مودر به (الدوما الازوار ال	her alter a state in a state of	t spy here i st
.6									
.6									
art 1.90	00 GHz 1.0 MHz		VBW	3.0 MHz*			Sween	Stop 2 1.067 ms	.2000 GH
CS DW			4 10 44	5.0 191112			oweep	1.007 Illis	(000 I h



	quency	Measured	Max Value	Limit	
	ange	Freq (MHz)	(dBm)	< (dBm)	Result
2.2 GH	z - 13 GHz	4002.55	-42.64	-16	Pass
🔤 Keysight Spectrum Analyzer - Element	Materials Technology				
<b>LXI</b> RL RF 50 Ω D(		SENSE:INT	ALIGN AUTO #Avg Type	DMC	09:24:49 AM May 17, 202
	PNO: Fast	🛶 Trig: Free Run	Avg Hold:	100/100	TRACE 1 2 3 4 5 TYPE A WWWW
	IFGain:Lov	w #Atten: 16 dB			DET A NNNN
Ref Offset 26.7 dl	8			Mkr1	4.002 550 GHz
10 dB/div Ref 32.70 dBn	n				-42.644 dBm
Log		The second secon			
22.7					
12.7					
2.70					
-7.30					
					DL1 -16.00 dBn
-17.3					
-27.3					
-37.3					
-47.3	$\sim$		Constant in the second se		
-57.3					
Start 3.500 GHz					Stop 13.000 GHz
#Res BW 1.0 MHz		VBW 3.0 MHz*		Sweep 16	.00 ms (20001 pts
MSG			STATUS	- Anoop no	and the second pre-
Dom -			STATUS		

Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	20117.2	-23.82	-16	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO		09:34:34 AM May 17, 2
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: R Avg Hold: 100	MS 0/100	TRACE 1 2 3 4 TYPE A WWW DET A NNN
Ref Offset 44.6 dB 0 dB/div Ref 50.60 dBm				MI	(r1 20.117 20 G -23.815 dE
		ľ			
0.6					
0.6					
.6					
40					
					DL1 -16.00
.4				¢	
.4					
.4					
art 13.000 GHz					Stop 22.000 G
tes BW 1.0 MHz	VBW	/ 3.0 MHz*		Sweep	16.00 ms (20001 p



	Frequency		Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result	
Г	Range 9 kHz - 150 kHz	T	0.01	-57.08	< (автт) -46	N/A	٦
	3 KHZ - 150 KHZ		0.01	-57.00	-40	11/7	
Keysight Spectrum Analyzer	- Element Materials Technology					- F	
LXIRL RF 5	50 Ω DC	SENS	E:INT	ALIGN AUTO #Avg Type	DMC	09:45:02 AM May 17,	2022
	PNC IFG8		rig: Free Run Atten: 16 dB	Avg Hold:	100/100	TRACE 1 2 3 TYPE A WW DET A N N	4 5 6 WWW N N N
Ref Offset	: 19.2 dB 0 dBm					Mkr1 10.851 k -57.083 dl	
Log			Y				
7.20							
-2.80							
-12.8							
-12.0							
-22.8							
-32.8							
-42.8						DL1 -46.0	0 dBm
-52.8							
-62.8						<u>_</u>	
-02.0	mon						
-72.8		mil	$\sim$		Δ		
					hum	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~
Start 9.00 kHz #Res BW 1.0 kHz		VBW 3.0	0 kHz*		Sweep	Stop 150.00 I 56.00 ms (8001	kHz pts)
MSG				STATUS			

Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-57.97	-36	N/A

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	09:46:38 AM May 17, 2
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A N N N
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 150.0 kł -57.972 dB
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0				
0				
0				DL1 -36.00 (
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art 150 kHz es BW 10 kHz	)(B)0	/ 30 kHz*		Stop 20.000 M veep 79.47 ms (8001 p



	Frequency		Measured	Max Value	Limit	Bernik
	Range 20 MHz - 3.5 G	·U-7	Freq (MHz) 3250.31	(dBm) -22.28	< (dBm) -16	Result Pass
	20 10112 0.0 0	112	5250.51	22.20	10	1 435
Keysight Spectrum /	Analyzer - Element Materials Teo 50 Ω DC		ENSE:INT	ALIGN AUTO		09:57:30 AM May 17, 2022
		PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 24 dB	#Avg Type:   Avg Hold: 10	RMS	TRACE 2 3 4 5 6 TYPE A WWWW DET A NNNNN
Ref 10 dB/div Ref Log	Offset 41.7 dB f <b>41.70 dBm</b>				Mkr1	3.250 3 GHz -22.275 dBm
			Ĭ,			
31.7						
21.7						
11.7						
1.70						
-8.30						
-18.3						DL1 -16.00 dBm
				and the second	. Leven and the second seco	
-28.3						
-38.3						
-48.3						
Start 20 MHz #Res BW 1.0 M	۹Hz	VBW	3.0 MHz*		Sweep 4.80	Stop 3.500 GHz 00 ms (8001 pts)
MSG				STATUS		
AWS	S WCMA, 2110 MHz -	2170 MHz, Port	1, 5 MHz Bandwdit	h, QPSK Modulati	on, Mid Channel,	2140 MHz
	Frequency Range		Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result

	m Analyzer - Elemen RF 50 Ω D	C		SENSE:INT	AL	IGN AUTO		09:58:54	AM May 17, 20
			PNO: Fast IFGain:Low	→ Trig: Free #Atten: 24	Run	#Avg Type: Avg Hold: 1	00/100	TF	TYPE A WWW DET A NNN
	ef Offset 41.4 c ef 41.40 dBi						Mkr1	1.997 0 -26.	12 5 GF 136 dB
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60									DL1 -16.00 d
.6			<b>1</b>						
6 <b>///////////////</b> /////////////////////	adicenter transformed	www.cliptologia	*******	ningini kanala	kutannyarahannyhapatan	analystic Bridgey frank	ryaised and an	when the state of the	an a
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art 1.9000	GHz							Stop 2	2.2000 GH
tes BW 1.0			V	BW 3.0 MHz*			Sweep	1.067 ms	s (8001 pi
						STATUS			



Freque		Measured	Max Value	Limit	
Rang		Freq (MHz)	(dBm)	< (dBm)	Result
2.2 GHz - 1	3 GHz	3982.6	-43.27	-16	Pass
🔤 Keysight Spectrum Analyzer - Element Mater	ials Technology				
XI RL RF 50Ω DC		SENSE:INT	ALIGN AUTO #Avg Type		10:08:21 AM May 17, 202
	PNO: Fast 🔸	. Trig: Free Run	Avg Hold:		TRACE 1 2 3 4 5 TYPE A WWW DET A NNNN
	IFGain:Low	#Atten: 16 dB			DET A NNNN
Ref Offset 26.7 dB				Mkr1	3.982 600 GH
10 dB/div Ref 32.70 dBm					-43.273 dBn
		Y			
22.7					
12.7					
2.70					
-7.30					
					DL1 -16.00 dBr
-17.3					
-27.3					
-37.3					
			-		
-47.3			States of the second		
-57.3					
Start 3.500 GHz		· · · · · ·			Stop 13.000 GHz
#Res BW 1.0 MHz	VB	N 3.0 MHz*		Sweep 16	.00 ms (20001 pts
MSG			STATUS		

AWS WCMA, 2110 MHz - 2170 MHz, Port 1	, 5 MHz Bandwditł	n, QPSK Modulat	ion , Mid Channel	, 2140 MHz
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	21961.75	-24.49	-16	Pass

RL RF 50 Ω DC	SENSE:INT	ALIGN AUTO	10:17:52 AM May 17, 20
	PNO: Fast Trig: Free Run IFGain:Low #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A N N N
Ref Offset 44.6 dB dB/div Ref 50.60 dBm		N	lkr1 21.961 75 GF -24.493 dBi
6			
6			
6			
6			
0			
0			DL1 -16.00 c
4			
4			
4			
art 13.000 GHz es BW 1.0 MHz	VBW 3.0 MHz*		Stop 22.000 GF 16.00 ms (20001 pt



	Frequency	Measured	Max Value	Limit	Desult
	Range kHz - 150 kHz	Freq (MHz) 0.01	(dBm) -57.82	< (dBm) -46	Result N/A
91		0.01	-57.82	-40	N/A
Keysight Spectrum Analyzer - Ele	ment Materials Technology				
	DC	SENSE:INT	ALIGN AUTO		09:48:15 AM May 17, 2022
	PNO: Wid	🚬 🛶 Trig: Free Run	#Avg Type: Avg Hold: 1		TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N
	IFGain:Lo				
Ref Offset 19	0.2 dB				/kr1 9.000 kHz
10 dB/div Ref 17.20 d	dBm		1	,	-57.818 dBm
7.20					
-2.80					
-12.8					
-22.8					
-22.0					
-32.8					
-42.8					DL1 -46.00 dBm
-52.8 1					
-62.8					
-02.0	~~~~				
-72.8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	molin		Δ	
		· · · · · · · · · · · · · · · · · · ·	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	· ······	m hann
Start 9.00 kHz					Stop 150.00 kHz
#Res BW 1.0 kHz		VBW 3.0 kHz*		Sweep 5	6.00 ms (8001 pts)
MSG			STATUS		

Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-57.63	-36	N/A

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	09:50:01 AM May 17, 20
	PNO: Fast ↔ IFGain:Low	→ Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A N N N
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 150.0 kł -57.628 dB
9		Ĭ		
0				
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0				DL1 -36.00+
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and the second s	an far an	ter anje verse der bestigtet etter angesetter bestigtet der	ydenesy ^t ani istaaringeneendi gestafd ^{ani} teisperinisietataasiye	lan an a
art 150 kHz es BW 10 kHz	)/B)	W 30 kHz*		Stop 20.000 Mi ep 79.47 ms (8001 p



AWS	S WCMA, 2110 MHz - Frequency		1, 5 MHz Band Measu		6-QAM Modula Max Value	tion, Mid Cha Limit	nnel, 2140 MHz	
	Range		Freq (N		(dBm)	< (dBm)	Result	
	20 MHz - 3.5 G	Hz	3187.		-22.63	-16	Pass	
	n Analyzer - Element Materials Teo RF 50 Ω DC		SENSE:INT		ALIGN AUTO		10:00:37 AM May 17,	
	1   50 H DC	PNO: Fast ↔→ IFGain:Low		n	#Avg Type: I Avg Hold: 10		TRACE 1 2 3 TYPE A WW DET A NN	4 5 6
Re 10 dB/div Re Log	ef Offset 41.7 dB ef 41.70 dBm					M	lkr1 3.187 2 G -22.630 dl	iHz Bm
			ľ		1			
31.7								
21.7								
2.1.7								
11.7								
1.70								
-8.30								
							DL1 -16.0	0 dBm
-18.3							↓ ¹	
-28.3		en la la company di se di Alami e dalle di a		A DESCRIPTION OF THE OWNER OF THE	the second s			
-38.3								
-48.3								
Start 20 MHz #Res BW 1.0		VBW	/ 3.0 MHz*			Sweep	Stop 3.500 C 4.800 ms (8001	
MSG					STATUS			
A \ A / A	S WCMA, 2110 MHz -			hudith 4		tion Mid Cha	anal 2140 MH-	
AW	5 WCMA, 2110 MHZ - Frequency		I, 5 MHZ Band Measu		D-QAM Modula Max Value	tion, Mid Cha Limit	nnei, 2140 MHZ	
	Range		Freq (M		(dBm)	< (dBm)	Result	
	1.9 GHz - 2.2 G	GHz	1995.		-26.37	-16	Pass	

RL		50 Ω DC	rials Technology	SENSE:INT	ALIGN AUTO	10:01:49 AM May 17, 20	
κι   RF   50 Ω		50 32 DC		SENSE.INT	#Avg Type: RMS	TRACE 1 2 3 4 5	
			PNO: Fast IFGain:Low	→ Trig: Free Run #Atten: 24 dB	Avg Hold: 100/100	TYPE A WWW DET A NNN	
dB/div	Ref Offse Ref 41.4	t 41.4 dB I0 dBm			Mkr	1 1.995 137 5 GH -26.372 dBi	
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	00 GHz 1.0 MHz			BW 3.0 MHz*	Swee	Stop 2.2000 GF p   1.067 ms (8001 pt	
	INV MILLIZ		•	BW 3.3 WI12	Swee	p 1.001 ms (0001 pi	



	Frequency		Measured	Max Value	Limit	_	
	Range		Freq (MHz)	(dBm)	< (dBm)		esult
	2.2 GHz - 13 GHz		4019.18	-43.17	-16	F	Pass
	lyzer - Element Materials Techr	nology					
LXIRL RF	50 Ω DC		SENSE:INT	ALIGN AUTO		10:11:4	6 AM May 17, 2022
		PNO: Fast ↔→	Trig: Free Run	#Avg Type Avg Hold:			RACE 1 2 3 4 5 6 TYPE A WWWW
		IFGain:Low	#Atten: 16 dB				
<b>D</b> 4 6 6					Mk	r1 4.019	175 GHz
10 dB/div Ref 3	fset 26.7 dB <b>2.70 dBm</b>					-43	.168 dBm
Log	2.1 0 0.011		<b>V</b>				
22.7							
12.7							
2.70							
2.70							
7.00							
-7.30							
							DL1 -16.00 dBm
-17.3							
-27.3							
-37.3							
	all and the second s						
-47.3							
-57.3							
Start 3.500 GHz	-	10010			0		13.000 GHz
#Res BW 1.0 MH	2	VBW	3.0 MHz*		sweep	10.00 ms	(20001 pts)
MSG				STATUS			

AWS WCMA, 2110 MHZ - 2170 MHZ, POR 1, 5	NIHZ Bandwaith	, 16-QAM Modula	ation, Mid Channe	I, 2140 MHZ
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	21545.05	-23.96	-16	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	10:23:20 AM May 17, 20
	PNO: Fast ↔→ IFGain:Low		#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE A WWW DET A N N N
Ref Offset 44.6 dB dB/div Ref 50.60 dBm			Μ	kr1 21.545 05 GH -23.955 dBi
		Ť		
0.6				
.6				
10				
.4				DL1 -16.00 0
.4				
.4				
art 13.000 GHz es BW 1.0 MHz	VBIA	/ 3.0 MHz*	Sween	Stop 22.000 GF 16.00 ms (20001 p



Frequ		Measured	Max Value	Limit	
Rar		Freq (MHz)	(dBm)	< (dBm)	Result
9 kHz - 1	ISU KHZ	0.01	-56.94	-46	N/A
Keysight Spectrum Analyzer - Element Ma	terials Technology				
X RL RF 50Ω DC		SENSE:INT	ALIGN AUTO #Avg Type:	RMS	09:52:28 AM May 17, 2022 TRACE 1 2 3 4 5 6
	PNO: Wide + IFGain:Low	<ul> <li>Trig: Free Run #Atten: 16 dB</li> </ul>	Avg Hold:		TYPE A WWWWW DET A N N N N N
Ref Offset 19.2 dB					Mkr1 9.018 kHz -56.935 dBm
10 dB/div Ref 17.20 dBm				,	-30.935 uBm
7.20					
-2.80					
-12.8					
-22.8					
-32.8					
-42.8					DL1 -46.00 dBm
-52.8 1					
£					
-62.8	<u></u>	Λ			∧
<b>,</b>	m			٨	
-72.8			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
				· · · · · ·	~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Start 9.00 kHz		<b>A</b>			Stop 150.00 kHz
#Res BW 1.0 kHz	VE	3W 3.0 kHz*		Sweep :	56.00 ms (8001 pts)
MSG			STATUS		

Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
150 kHz - 20 MHz	0.15	-57.79	-36	N/A

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	09:53:33 AM May 17, 20
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A NNN
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 150.0 kH -57.792 dB
0				
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art 150 kHz es BW 10 kHz		▲ / 30 kHz*		Stop 20.000 Mi ep   79.47 ms (8001 p



	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	20 MHz - 3.5 G	Ηz	3254.23	-22.16	-16	Pass
	m Analyzer - Element Materials Tech	nology				
LXI RL	RF 50 Ω DC		SENSE:INT	ALIGN AUTO #Avg Type: I		10:03:53 AM May 17, 2022
		PNO: Fast ++	. Trig: Free Run #Atten: 24 dB	Avg Hold: 10		TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N
B	ef Offset 41.7 dB				Mkr1	3.254 2 GHz
10 dB/div R	ef 41.70 dBm					-22.158 dBm
			Ĭ Ĭ I			
31.7						
21.7						
11.7						
1.70						
-8.30						
-18.3						DL1 -16.00 dBm
-10.3					والمراجع	
-28.3	and the second		an a			
and all the set if the set						
-38.3						
-48.3						
Start 20 MHz						Stop 3.500 GHz
#Res BW 1.0	MHz	VBI	N 3.0 MHz*		Sweep 4.8	00 ms (8001 pts)
MSG				STATUS		
۸۱۸/	S WCMA, 2110 MHz - 2		1 5 MHz Bandwdith	64-OAM Modulo	tion Mid Channel	2140 MHz
Avv	Frequency		Measured	Max Value	Limit	, Z 140 IVINZ
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	1.9 GHz - 2.2 G	47	1996.71	-25.68	-16	Pass

RL	RF 50 Ω DC	A STATE OF A	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	SE	ENSE:INT	AL	IGN AUTO		10:05:03	7 AM May 17, 20
			NO: Fast Gain:Low		Trig: Free R #Atten: 24 d	un	#Avg Type: Avg Hold: 1		TF	TYPE A WWW DET A NNN
dB/div	Ref Offset 41.4 dB Ref 41.40 dBm							Mkr1	1.996 7 -25.	12 5 GH 677 dB
8	h ال				Ĭ			M		
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art 1.900	DO GHZ								Ston	2.2000 GH
	1.0 MHz		v	вw	3.0 MHz*			Sweep	1.067 ms	



	equency	Measured	Max Value	Limit	Desult
	Range Hz - 13 GHz	Freq (MHz) 4016.33	(dBm) -42.44	< (dBm) -16	Result Pass
2.2 GF	12 - 13 GHZ	4010.33	-42.44	-10	FdSS
Keysight Spectrum Analyzer - Elemen	t Materials Technology				
4 RL RF 50Ω D	DC O	SENSE:INT	ALIGN AUTO		10:14:20 AM May 17, 2022
	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: Avg Hold: 1		TRACE 1 2 3 4 5 TYPE A WWWW DET A N N N N
Ref Offset 26.7 o 0 dB/div Ref 32.70 dB	IB m			Mkr1	4.016 325 GHz -42.439 dBm
^{og}		Y			
22.7					
12.7					
2.70					
7.30					
					DL1 -16.00 dBm
17.3					
27.3					
37.3					
47.3			متاثر ومقالي وينهيها التروية الت		State of the state
57.3					
Start 3.500 GHz					Stop 13.000 GHz
Res BW 1.0 MHz	v	BW 3.0 MHz*		Sweep 16.	00 ms (20001 pts
SG			STATUS		

	, 5 min 12 Danawaith		ation, who onarine	7, 2140 MI12
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
13 GHz - 22 GHz	19963.3	-23.92	-16	Pass

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO		10:25:36 AM May 17, 2
	PNO: Fast +++ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: RM Avg Hold: 100		TRACE 1 2 3 4 TYPE A WWW DET A NNN
Ref Offset 44.6 dB 0 dB/div Ref 50.60 dBm				Mk	r1 19.963 30 G -23.916 dE
8		Ĭ			
).6					
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40					
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		there is a second s		<b>•</b>	
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art 13.000 GHz					Stop 22.000 G
Res BW 1.0 MHz	VBW	3.0 MHz*		Sweep	16.00 ms (20001 p



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

#### **TEST EQUIPMENT**

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Block - DC	Fairview Microwave	SD3379	AMT	2021-09-14	2022-09-14
Block - DC	Fairview Microwave	SD3239	ANC	2022-03-02	2023-03-02
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2022-01-17	2023-01-17
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

#### **TEST DESCRIPTION**

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 4 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 22 GHz. The conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below.

The measurement methods are detailed in KDB 971168 D01v03 section 6 and ANSI C63.26-2015.

Per FCC 2.1057(a)(1) and RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

These measurements are for the frequency band after the first 1.0 MHz bands immediately outside and adjacent to the frequency block.

RF conducted emissions testing was performed only on one port. The AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in output power testing) and antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i, and 6.4.

Multicarrier test cases were developed and tested as shown below:

a) PCS Multicarrier Multiband Test Case: In the PCS band _Three WCDMA carriers using two carriers (with minimum spacing between carrier frequencies) at the lower band edge (1932.4 & 1937.4MHz) and a third carrier with maximum spacing between the other two carrier frequencies (1987.6MHz) at the upper band edge. In the AWS band _ Two WCDMA carriers at the band middle (2137.5 & 2142.5MHz). The carriers are operated at maximum power (~26.6W/PCS carrier and 20W/AWS carrier) with a total port power of 120 watts (80W for PCS band carriers + 40W for AWS band carriers). b) AWS Multicarrier Multiband Test Case: In the AWS band _Three WCDMA carriers using two carriers (with minimum spacing between the other two carrier frequencies) at the lower band edge (2112.4 & 2117.4MHz) and a third carrier with maximum spacing between the other two carrier frequencies (2167.6MHz) at the upper band edge. In the PCS band: Two WCDMA carriers at band middle (1957.5 & 1962.5MHz). The carriers are operated at maximum power (~26.6W/AWS carrier and 20W/PCS carrier) with a total port power of 120 watts (80W for AWS band carriers + 40W for PCS band: Two WCDMA carriers at band middle (1957.5 & 1962.5MHz). The carriers are operated at maximum power (~26.6W/AWS carrier and 20W/PCS carrier) with a total port power of 120 watts (80W for AWS band carriers + 40W for PCS band carriers).

Per section FCC 24.238(a), FCC 27.53(h)(1), RSS 133 6.5 (ii), and RSS-139 6.6 - the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -16 dBm [-13 dBm -10 log (2)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 2 port MIMO transmitter.

The limit for the 9kHz to 150kHz frequency range was adjusted to -46dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 1MHz [i.e.: -46dBm = -16dBm -10log(1MHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to -36dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 1MHz [i.e.: -36dBm = -16dBm -10log(1MHz/10kHz)]. The required limit of -16dBm with a RBW of  $\geq$  1MHz was used for all other frequency ranges. (See ANSI C63.26-2015 paragraph 5.7.2a for details on the Limit/RBW scaling method)



	AHFII (FCC/ISED C2PC)				Work Order:		
Serial Number:						16-May-22	
	Nokia Solutions and Net				Temperature:		
	David Le, John Rattanav	rong			Humidity:		
Project:			-46		Barometric Pres.:		
	: Brandon Hobbs		Power: 54 VDC		Job Site:	TX05	
EST SPECIFICAT	TIONS		Test Method				
C 24E:2022			ANSI C63.26:2015				
S-133 Issue 6:2	2013+A1:2018		RSS-133 Issue 6:2013+A1:207	18			
C 27:2022			ANSI C63.26:2015				
SS-139 Issue 3:2	2015		RSS-139 Issue 3:2015				
OMMENTS			•				
	M TEST STANDARD						
one							
one			1.				
one	1,2,3,4	Signature	Jan				
	1,2,3,4	Signature	Frequency	Measured	Max Value	Limit	
onfiguration #		Signature	Frequency Range	Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
onfiguration #	NDS	Signature					Result
nfiguration #	NDS Port 1						Result
onfiguration #	NDS Port 1 5 MHz Band	wdith					Result
onfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation	Range	Freq (MHz)	(dBm)	< (dBm)	
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz	Freq (MHz) 0.01	(dBm) -57.0	< (dBm) -46	Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz 150 kHz - 20 MHz	Freq (MHz) 0.01 0.15	(dBm) -57.0 -57.8	< (dBm) -46 -36	Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz	0.01 0.15 3171.58	(dBm) -57.0 -57.8 -21.9	< (dBm) -46 -36 -16	Pass Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz	0.01 0.15 3171.58 1996.19	(dBm) -57.0 -57.8 -21.9 -24.7	< (dBm) -46 -36 -16 -16	Pass Pass Pass Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz	Freq (MHz) 0.01 0.15 3171.58 1996.19 4011.58	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5	< (dBm) -46 -36 -16 -16 -16 -16	Pass Pass Pass Pass Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 35 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz	0.01 0.15 3171.58 1996.19 4011.58 21534.7	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9	< (dBm) -46 -36 -16 -16 -16 -16	Pass Pass Pass Pass Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 3.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz 9 kHz - 150 kHz	0.01 0.15 3171.58 1996.19 4011.58 21534.7 0.01	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9 -56.7	< (dBm) -46 -36 -16 -16 -16 -16 -16 -46	Pass Pass Pass Pass Pass Pass Pass Pass
nfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz 9 kHz - 150 kHz 150 kHz - 20 MHz	Freq (MHz) 0.01 0.15 3171.58 1996.19 4011.58 21534.7 0.01 0.15	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9 -56.7 -56.7	< (dBm) -46 -36 -16 -16 -16 -16 -46 -36	Pass Pass Pass Pass Pass Pass Pass Pass
onfiguration #	NDS Port 1 5 MHz Band	wdith 64-DAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 35 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz	0.01 0.15 3171.58 1996.19 4011.58 21534.7 0.01 0.15 3209.86	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9 -56.7 -56.7 -22.4	< (dBm) -46 -36 -16 -16 -16 -16 -46 -36 -36 -16	Pass Pass Pass Pass Pass Pass Pass Pass
onfiguration #	NDS Port 1 5 MHz Band	wdith 64-QAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz 1.9 GHz - 2.2 GHz	Freq (MHz) 0.01 0.15 3171.58 1996.19 4011.58 21534.7 0.01 0.15	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9 -56.7 -56.7	< (dBm) -46 -36 -16 -16 -16 -46 -36 -16 -16	Pass Pass Pass Pass Pass Pass Pass Pass
onfiguration #	NDS Port 1 5 MHz Band	wdith 64-DAM Modulation Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 2 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1 Multicarrier Multband Test Case 1	Range 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 35 GHz 1.9 GHz - 2.2 GHz 2.2 GHz - 13 GHz 1.9 GHz - 2.2 GHz 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 3.5 GHz	0.01 0.15 3171.58 1996.19 4011.58 21534.7 0.01 0.15 3209.86	(dBm) -57.0 -57.8 -21.9 -24.7 -42.5 -23.9 -56.7 -56.7 -22.4	< (dBm) -46 -36 -16 -16 -16 -16 -46 -36 -36 -16	Pass Pass Pass Pass Pass Pass Pass Pass



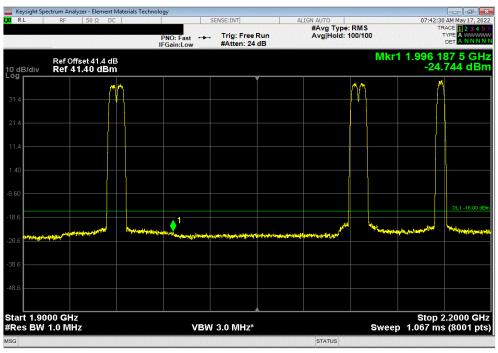
Frequer Range		Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Ro	sult
9 kHz - 15		0.01	-56.97	-46		ass
Keysight Spectrum Analyzer - Element Materi	als Technology					
<b>μ</b> RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO		07:35:00	AM May 17, 2022
	PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type Avg Hold:			ACE 1 2 3 4 5 6 YPE A WWWWW DET A NNNNN
Ref Offset 19.2 dB 10 dB/div Ref 17.20 dBm						.000 kHz 968 dBm
		Ĭ				
7.20						
-2.80						
-12.8						
-22.8						
-32.8						
-42.8						DL1 -46.00 dBm
-52.8						
		4				
-62.8						
72.8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			•		
-72.8			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\Lambda_{m}$	~~	han
Start 9.00 kHz #Res BW 1.0 kHz	VBW	/ 3.0 kHz*		Sweep		150.00 kHz (8001 pts)
MSG			STATUS			

AWS and PCS BANDS, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, Multicarrier Multband Test Case 2								
Frequency Measured Max Value Limit								
Range	Freq (MHz)	(dBm)	< (dBm)	Result				
150 kHz - 20 MHz	0.15	-57.84	-36	Pass				

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	07:36:05 AM May 17, 20
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A NNNI
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 155.0 kH -57.840 dBi
00				
0				
0				
0				DL1 -36.00 (
0				
.0				
The American	antina ang pangang ang pangang bagang ba	agipelyblickerse president after a president president	างขัน ^{เป} ็นของการใช้สี่วามของการสารการและเป็นของสารสาร	rates:py-realized-last-menta-meta-
art 150 kHz tes BW 10 kHz		/ 30 kHz*	Swo	Stop 20.000 Mi ep 79.47 ms (8001 pt



	Frequency		Measured	Max Value	Limit	
-	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	20 MHz - 3.5 GHz		3171.58	-21.9	-16	Pass
Keysight Spectru	ım Analyzer - Element Materials Techr	iology				
(XIRL	RF 50 Ω DC		SENSE:INT	ALIGN AUTO		07:39:56 AM May 17, 2022
		PNO: Fast +++	Trig: Free Run #Atten: 24 dB	#Avg Type Avg Hold:		TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN
R 10 dB/div R Log	tef Offset 41.7 dB Ref 41.70 dBm				Mk	r1 3.171 6 GHz -21.896 dBm
Log						
31.7						
21.7						
11.7						
1.70						
1.70						
-8.30						안.1 -16.00 dBm
-18.3						1
-28.3		ala kang kanang tanang tang tang tang kang kang kang kang kang kang kang k		The second se		
-38.3						
-48.3						
Start 20 MHz #Res BW 1.0		VBW	/ 3.0 MHz*		Sweep 4.	Stop 3.500 GHz 800 ms (8001 pts)
MSG				STATUS		
AV	VS and PCS BANDS, Po	rt 1, 5 MHz Bar				est Case 2
	Frequency Range		Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
	1.9 GHz - 2.2 GH	7	1996.19	-24.74	-16	Pass





Frequenc Range	у	Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result	
2.2 GHz - 13	<u>сп-</u>	4011.58	-42.53	-16	Pass	٦
	0.12	1011100	12100		1 400	
Keysight Spectrum Analyzer - Element Materials  Ku RL RF 50 Ω DC	Technology	SENSE:INT	ALIGN AUTO		07:46:28 AM May 17	, 2022
	PNO: Fast + IFGain:Low	<ul> <li>Trig: Free Run #Atten: 16 dB</li> </ul>	#Avg Type: Avg Hold: 1		TRACE 2 2 TYPE A WY DET A N	456 ////////////////////////////////////
Ref Offset 26.7 dB 10 dB/div Ref 32.70 dBm				Mk	r1 4.011 575 ( -42.534 d	
Log						
22.7						
12.7						
2.70						
-7.30						
-17.3					DL1 -16.	00 dBm
-27.3						
-37.3						
-47.3						in activity
-57.3						
Start 3.500 GHz					Stop 13.000	CHZ
#Res BW 1.0 MHz	VE	3W 3.0 MHz*		Sweep	16.00 ms (20001	pts)
MSG			STATUS			

AWS and PCS BANDS, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, Multicarrier Multband Test Case 2							
Frequency Measured Max Value Limit							
Range	Freq (MHz)	(dBm)	< (dBm)	Result			
1.9 GHz - 2.2 GHz	21534.7	-23.88	-16	Pass			

RL RF 50 Ω DC	SENSE:INT	ALIGN AUTO	08:23:59 AM May 17, 20
	PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 TYPE A WWW DET A NNN
Ref Offset 44.6 dB dB/div Ref 50.60 dBm		M	kr1 21.534 70 GF -23.879 dB
-			
.6			
.6			
.6			
0			
			DL1 -16.00 c
4			
4			
4			
art 13.000 GHz tes BW 1.0 MHz	VBW 3.0 MHz*	Sween	Stop 22.000 GF 16.00 ms (20001 pt



Freque		Measured	Max Value	Limit	
Rang		Freq (MHz)	(dBm)	< (dBm)	Result
9 kHz - 15	50 kHz	0.01	-56.71	-46	Pass
					_
Keysight Spectrum Analyzer - Element Mate	rials Technology	SENSE:INT	ALIGN AUTO		08:34:02 AM May 17, 20
<b>N</b> 552 DC	PNO: Wide IFGain:Low		#Avg Type Avg Hold:		TRACE 1 2 3 4 TYPE A WWWA DET A NNN
Ref Offset 19.2 dB 10 dB/div Ref 17.20 dBm	Gameon			М	kr1 10.005 kH -56.711 dB
Log		The second secon			
7.00					
7.20					
-2.80					
-2.00					
-12.8					
-22.8					
-32.8					
-42.8					DL1 -46.00 d
-52.8 🔺 1					
-62.8		Λ			A
	~~				
-72.8		~ human		Λ	
			m	m	men from
Start 9.00 kHz #Res BW 1.0 kHz	v	BW 3.0 kHz*		Sweep 5	Stop 150.00 kH 6.00 ms (8001 pt

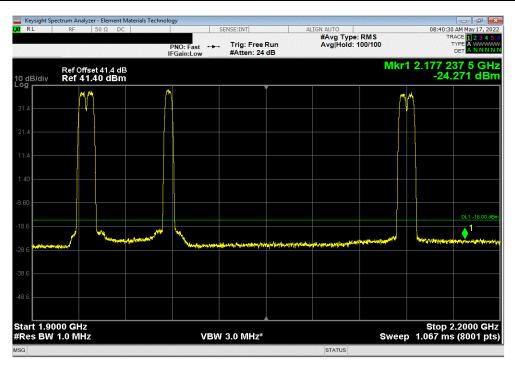
AWS and PCS BANDS, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, Multicarrier Multband Test Case 1							
Frequency	Measured	Max Value	Limit				
Range	Freq (MHz)	(dBm)	< (dBm)	Result			
150 kHz - 20 MHz	0.15	-56.68	-36	Pass			

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	08:36:03 AM May 17, 20
	PNO: Fast ↔→ IFGain:Low	Trig: Free Run #Atten: 16 dB	#Avg Type: RMS Avg Hold: 100/100	TRACE 2 3 4 TYPE A WWW DET A NNNI
Ref Offset 19 dB dB/div Ref 15.00 dBm				Mkr1 150.0 kH -56.677 dBi
0				
0				
0				
0				
0				DL1 -36.00 c
0				
0				
0				
· · · · · · · · · · · · · · · · · · ·	Manager and Manager Street Street and a street of the	and the state of t	*****	
art 150 kHz es BW 10 kHz		/ 30 kHz*		Stop 20.000 Mł ep   79.47 ms (8001 pl



Frequency		Measured	Max Value	Limit	
Range		Freq (MHz)	(dBm)	< (dBm)	Result
20 MHz - 3.5 G	Hz	3209.86	-22.37	-16	Pass
Keysight Spectrum Analyzer - Element Materials Te     K     RL     RF     50 Ω DC		SENSE:INT	ALIGN AUTO		08:38:58 AM May 17, 202
10 30 32 00			#Avg Type:		TRACE 1 2 3 4 5
	PNO: Fast +++ IFGain:Low	Trig: Free Run #Atten: 24 dB	Avg Hold: 1	00/100	TYPE A WWWW DET A N N N N
Ref Offset 41.7 dB				Mk	r1 3.209 9 GH -22.367 dBn
Log		Ť i	1		
31.7					
21.7		(			
11.7					
1.70					
1.70					
-8,30					
-0.50					
-18.3					DI 1 -16.00 dB
-10.5					
-28.3	an at should be a store of the state of the state of the		Participation of the second se		
-20.3					
-38.3					
-48.3					
-40.3					
Start 20 MHz					Stop 3.500 GH
#Res BW 1.0 MHz	VBW	/ 3.0 MHz*		Sweep 4.	800 ms (8001 pts
MSG			STATUS		
			land the second s		

AWS and PCS BANDS, Port 1, 5 MHZ Bandwalth, 64-QAM Modulation, Multicarrier Multband Test Case 1						
Frequency	Measured	Max Value	Limit			
Range	Freq (MHz)	(dBm)	< (dBm)	Result		
1.9 GHz - 2.2 GHz	2177.24	-24.27	-16	Pass		





Frequen	ey 🛛	Measured	Max Value	Limit	
Range		Freq (MHz)	(dBm)	< (dBm)	Result
2.2 GHz - 13	GHz	3987.83	-42.96	-16	Pass
Keysight Spectrum Analyzer - Element Material	s Technology				
K RL RF 50Ω DC		NSE:INT	ALIGN AUTO		08:43:48 AM May 17, 202
	PNO: Fast +++	Trig: Free Run #Atten: 16 dB	#Avg Type: Avg Hold: 1		TRACE 1 2 3 4 5 TYPE A WWW DET A N N N N
Ref Offset 26.7 dB 10 dB/div Ref 32.70 dBm				Mkr1	3.987 825 GH -42.960 dBr
10 dB/div Ref 32.70 dBm					-42.900 UBI
5		Ť			
22.7					
12.7					
1 da - 1					
2.70					
2.70					
7.00					
-7.30					
					DL1 -16.00 dB
-17.3					
-27.3					
-37.3					
-47.3		the state of the s	No. of Concession, Name	and the second s	
-47.3					روی و با الله الوال الله الله الله الله الله ال
-57.3					
Start 3.500 GHz					Stop 13.000 GH
#Res BW 1.0 MHz	VBW	3.0 MHz*		Sweep 16.	00 ms (20001 pt
MSG			STATUS		

AWS and PCS BANDS, Port 1, 5 MHz Bandwdith, 64-QAM Modulation, Multicarrier Multband Test Case 1					
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
1.9 GHz - 2.2 GHz	21591.4	-23.92	-16	Pass	

RL RF 50 Ω DC		SENSE:INT	ALIGN AUTO	08:47:52 AM May 17, 20
	PNO: Fast		#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE A WWW DET A NNN
Ref Offset 44.6 dB dB/div Ref 50.60 dBm			M	r1 21.591 40 GF -23.917 dB
		Ĭ		
.6				
.6				
6				
0				
				DL1 -16.00 c
4				<b>↓</b> ¹
4				
4				
art 13.000 GHz es BW 1.0 MHz	VBW	/ 3.0 MHz*	Sweep	Stop 22.000 GF 16.00 ms (20001 pt



End of Test Report