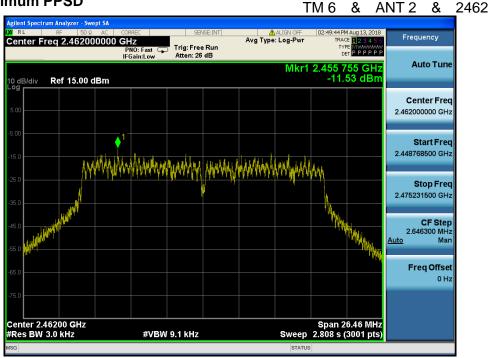
Dt&C

Maximum PPSD

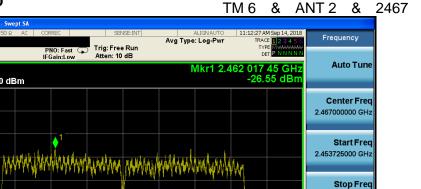


Maximum PPSD

10 dB/div

Center 2.46700 GHz #Res BW 3.0 kHz

Ref 0.00 dBm



Span 26.55 MHz Sweep 2.817 s (3001 pts) 2.480275000 GHz

CF Step 2.655000 MHz Man

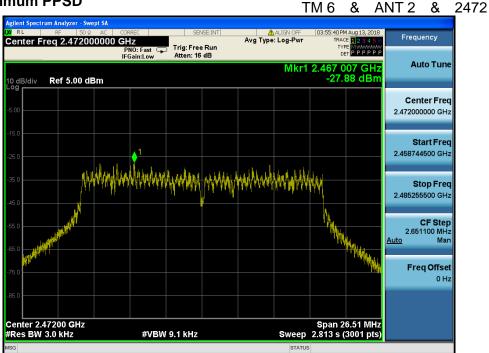
Freq Offset

<u>Auto</u>

#VBW 9.1 kHz

Dt&C

Maximum PPSD





8.4 Out of band emissions at the band edge / conducted spurious emissions

Test requirements and limit, §15.247(d)

§15.247(d) specifies that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

If **the peak output power procedure** is used to measure the fundamental emission power to demonstrate compliance to **15.247(b)(3)** requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated **by at least 20 dB** relative to the maximum measured in-band peak PSD level.

If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to **15.247(b)(3)** requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in band average PSD level. In either case, attenuation to levels below the general emission limits specified in §15.209(a) is not required.

Test Configuration:

Refer to the APPENDIX I.

Test Procedure

The transmitter output is connected to a spectrum analyzer.

- Measurement Procedure 1 – Reference Level of KDB558074 D01v04

- 1. Set instrument center frequency to DTS channel center frequency.
- 2. Set the span to \geq 1.5 times the DTS bandwidth.
- 3. Set the RBW = 100 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = Peak.
- 6. Sweep time = **Auto couple.**
- 7. Trace mode = **Max hold.**
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum PSD level.

- Measurement Procedure 2 - Unwanted Emissions of KDB558074 D01v04

- 1. Set the center frequency and span to encompass frequency range to be measured.
- 2. Set the RBW = 100 kHz. (Actual 1 MHz , See below note)
- 3. Set the VBW ≥ 3 x RBW. (Actual 3 MHz, See below note)
- 4. Detector = **Peak**.
- 5. Ensure that the number of measurement points \geq Span / RBW.
- 6. Sweep time = **Auto couple.**
- 7. Trace mode = **Max hold.**
- 8. Allow the trace to stabilize. (this may take some time, depending on the extent of the span)
- 9. Use the peak marker function to determine the maximum amplitude level.

Note : The conducted spurious emission was tested with below settings. Frequency range: 9 kHz ~ 30 MHz RBW = 100 kHz, VBW = 300 kHz, SWEEP TIME = AUTO, DETECTOR = PEAK, TRACE = MAX HOLD, SWEEP POINT : 40001

Frequency range: 30 MHz ~ 10 GHz, 10 GHz ~25 GHz RBW = 1 MHz, VBW = 3 MHz, SWEEP TIME = AUTO, DETECTOR = PEAK, TRACE = MAX HOLD, SWEEP POINT : 40001

LIMIT LINE = 20 dB below of the reference level of above measurement procedure Step 2. (RBW = 100 kHz, VBW = 300 kHz)

If the emission level with above setting was close to the limit (ie, less than 3 dB margin) then zoom scan is required using RBW = 100 kHz, VBW = 300 kHz, SPAN = 100 MHz and BINS = 2001 to get accurate emission level within 100 kHz BW.

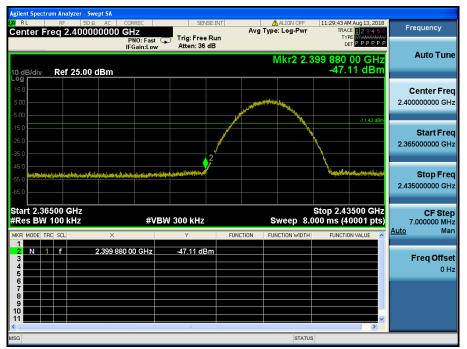
RESULT PLOTS

TM 1 & ANT 1 & 2412



Reference

Low Band-edge



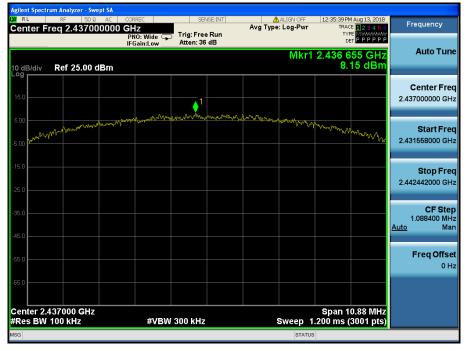
Ing R.L PF SD & ADC CORREC SENSE:INT ALIGN OFF 1128-51AM AUG13,2018 Frequency Center Freq 15.004500 MHz Frig: Free Run Avg Type: Log-Pwr Trace 12.315,2018 Frequency Image: Sense: Introduction of the sense: In
Image: Control of the contro
Wikr2 288.7 kHz Log -45.57 dBm 150 -45.57 dBm 500 -11.42486 150 -11.42486 250 -11.42486 250 -11.42486 250 -11.42486 250 -11.42486 250 -11.42486
150 Center F 500
-15.0 -25.0 -35.0 -27 -45.0
-55 0 Mandata Landara May Apart Adar May Apart Adar Market Adar Mandata Adar Adar Mandata Adar Man Adar Mandata Adar Ma
Start 9 kHz Stop 30.00 MHz CF S #Res BW 100 kHz #VBW 300 kHz Sweep 5.333 ms (40001 pts) 2.999100
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE Auto 1 N 1 f 283.7 kHz -45.57 dBm Auto
2 N 1 f 288.7 kHz -45.57 dBm Freq Off 3 - - - - - - - - - Freq Off 4 - <
MSG STATUS 1 DC Coupled

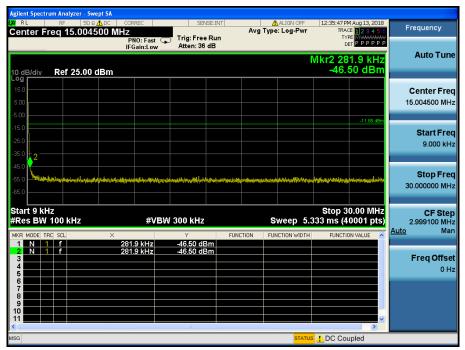
Agilent Spe															
Center			οΩ Α 50000		RREC		SENSE:IN	IT	Avg		IGN OFF	TRA	M Aug 13, 2018 CE 1 2 3 4 5 6	Frequ	ency
		1		Р	NO: Fast Gain:Low		ree Run :36 dB	י				T) [PE MWWWWWWW		
					oumieow						Mkr	5 6 280	44 GHz	Au	to Tune
10 dB/di	v	lef 25.0	0 dBi	n								-35.	98 dBm		
Log 15.0				⊘ 1										Com	tor From
5.00															ter Freq
-5.00														3.013000	5000 GH2
-15.0													-11.42 dBm		
-25.0															art Freq
-35.0								\Diamond	³ 🔶 ⁵					30.000	0000 MHz
-45.0	and the state of the	- Contraction	ي المراجع الم محمد المراجع ال	R of the second		Anna ta' a gangangan teopolo	and a second	anggagagalan (ja Jaharah sa Dalaha	denne fersere Versereter i vers	10 C 10 C 10 C	in Deutscherwapy datum et Antistane	and should be appropriately to			
-55.0	aadin, baddid		and set											St	op Freq
-65.0														10.00000	0000 GHz
Start 3 #Res B					<i>#</i> \ <i>1</i>	3W 3.0 M	u-,			C 111	oon 10	Stop 10).000 GHz 10001 pts)		CF Step
					#V		14					<u> </u>		997.000 Auto	0000 MHz Man
MKR MODE		f		× 2.412.8	3 GHz	۲ 14.09	dBm	FUNC	CTION	FUNCT	ION WIDTH	FUNCT	ION VALUE		
2 N 3 N	1	f f		6.275 4 5.864 1		-35.17 -35.70								Fre	q Offset
4 N	1	f		9.364 4	1 GHz	-35.93	dBm								0 Hz
5 N 6	1	f		6.280 4	4 GHz	-35.98	dBm						=		
7	\vdash														
9															
10													~		
<															
MSG											STATUS				



TM 1 & ANT 1 & 2437

Reference





gilent Spectrum Analyzer - S							
RL RF 50 Center Freq 5.0150		SENSE:INT	Avg	ALIGN OFF	12:35:55 PM Aug TRACE	3456	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 36 dB			TYPE MV DET P F	PPPP	
10 dB/div Ref 25.00	dBm			Mkr	5 7.452 91 -36.36 (GHz dBm	Auto Tun
-og 15.0 5.00 5.00							Center Fre 5.015000000 GH
15.0 25.0 35.0						1.85 dBm	Start Free 30.000000 MH
45.0 55.0 65.0			un an an Anna an Anna Anna Anna Anna Ann	a analisi si a shinkini ya a atabiki ta s	na madam <u>a - at an </u>		Stop Fre 10.000000000 GH
start 30 MHz Res BW 1.0 MHz	#VE	W 3.0 MHz		Sweep 18	Stop 10.000 .67 ms (4000	1 pts)	CF Ste 997.000000 M⊦
IKR MODE TRC SCL	× 2.436 01 GHz	ү 14.12 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VAL		<u>luto</u> Ma
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	7.191 20 GHz 8.390 84 GHz 5.947 44 GHz 7.452 91 GHz	-36.07 dBm -36.23 dBm -36.26 dBm -36.26 dBm -36.36 dBm					Freq Offse 0 ⊦
6 7 8 9 10							
						~	

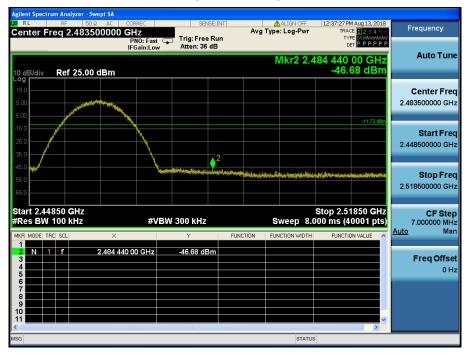
RF	r - Swept SA 50 Ω AC	CORREC	SENSE:IN	т	ALIGNAUTO	12:36:35 PM Aug 13, 20	18
TU	30 a AC	PNO: Fast C		Avg	Type: Log-Pwr	TRACE 1234 TYPE MANANA DET P N N N	Frequency
0 dB/div Ref 20	.00 dBm				Mkr4 1	8.991 000 GH -34.58 dBi	
0.00 10.0						-11.85.4	Center Fre 17.500000000 GH
20.0 30.0 40.0	1994 113 119 million 119 119 119 119 119 119 119 119 119 11			4		3 ♦ ¹	Start Fre 10.000000000 G⊢
50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0							Stop Fre 25.000000000 GH
tart 10.000 GHz Res BW 1.0 MHz	2	#VB	W 3.0 MHz		Sweep 40	Stop 25.000 GH .00 ms (40001 pt	S) 1.50000000 GH
KR MODE TRC SCL		4 125 GHz	۲ -31.37 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
2 N 1 f 3 N 1 f 4 N 1 f 5 6	21.86	7 375 GHz 5 750 GHz 1 000 GHz	-33.75 dBm -34.06 dBm -34.58 dBm				Freq Offs 0 H
7 8 9 10							
						>	—

TM 1 & ANT 1 & 2462

Reference



High Band-edge

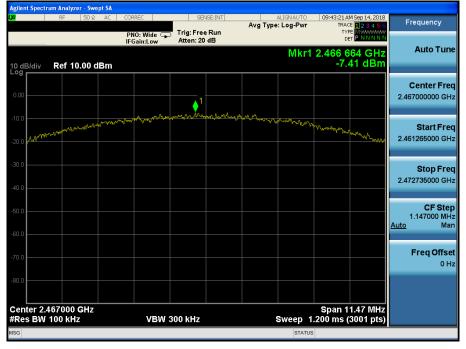


Agilent Spectrum Analyzer - Swept SA							
🗱 RL RF 50Ω 🚹 DC Center Freg 15.004500 M		SENSE:INT	Avg	ALIGN OFF	TRAC	4 Aug 13, 2018 E 1 2 3 4 5 6	Frequency
	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 36 dB			TYI DI	PE MWWWWWW PPPPPP	
					Vikr2 30	1.4 kHz	Auto Tune
10 dB/div Ref 25.00 dBm						16 dBm	
Log 15.0							Center Freq
5.00							15.004500 MHz
-5.00							
-15.0						-11.72 dBm	04
-25.0							Start Freq 9.000 kHz
-35.0 2							9.000 KHZ
-45.0							
-55.0	where the part of the state of	way to very the state of the st	duristicant surgery the	li içleçi ya rkı ga rketiyeketi	-	teristical and the state of the state	Stop Freq
-65.0							30.000000 MHz
Start 9 kHz					Stop 2	0.00 MHz	
#Res BW 100 kHz	#VBW	300 kHz		Sweep 5.3	33 ms (4	0001 pts)	CF Step 2.999100 MHz
MKR MODE TRC SCL X		Y	FUNCTION	FUNCTION WIDTH		IN VALUE	<u>Auto</u> Man
1 N 1 f 2 N 1 f	301.4 kHz 301.4 kHz	-45.16 dBm -45.16 dBm					
3	301.4 KHZ	-40.10 dBill					Freq Offset
4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6						8	0 Hz
6 7							
8							
10							
11 		Ш				×	
MSG				STATUS	LDC Cou	upled	

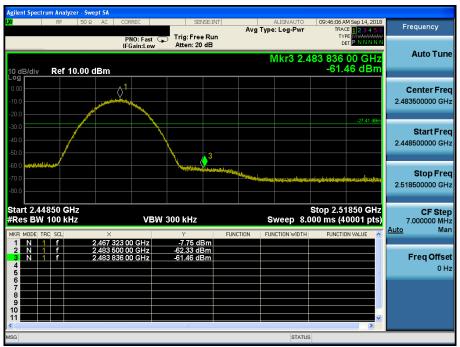
	Spect		nalyzer - Sv											
LXI RL Cent	er F	R rea	5.0150			RREC Z		SENSE:IN		Avg Ty	pe: Log-Pwr	TRA	M Aug 13, 2018 CE 1 2 3 4 5 6	Frequency
					Р	NO: Fast Gain:Low		ree Run : 36 dB	I			TY D	ET P P P P P P	
											Mkr		66 GHz	Auto Tune
10 dB Log r	/div	Re	ef 25.00									-36.	45 dBm	
15.0					<mark>∕1</mark>									Center Freq
5.00														5.015000000 GHz
-5.00													-11.72 dBm	
-15.0													-11.72 dbii	Start Freq
-25.0						4		3		5	2			30.000000 MHz
-35.0 -			and a them		and the state	And	فلو فعامله و بعد ال	and south		and the second s	weed the second later to t	and the strength of the streng	and the lawy	
-45.0		an tagai			la Hittan	a half a she want to a she		and a state of the	اغراد فأكذلك ور	alaria (padar	and the second secon	باللدا فالمرير بكالا كملادية		Stop Freq
-55.0 -														10.000000000 GHz
-65.0 -														
Start												Stop 10	.000 GHz	CF Step
#Res	BW	1.0	MHz			#VE	3W 3.0 M	Hz			Sweep 18	.67 ms (4	0001 pts)	997.000000 MHz Auto Man
MKR M	IODE T	RC SC	L	×		8 GHz	Y 1 / / /	dBm	FUNCTIO	N F	UNCTION WIDTH	FUNCTI	ON VALUE	Adto Mari
2	N I	1 f		7.	068.0	7 GHz	-36.29	dBm						Ener Offert
4	N N	1 T 1 f		3.	264 5	6 GHz 2 GHz	-36.35 -36.39	dBm						Freq Offset 0 Hz
5 6	N '	1 f		6.	.124 6	6 GHz	-36.45	dBm					=	0112
7														
9 10														
11													~	
K MSG											STATUS	i.	>	
mod		_									STATUS			

TM 1 & ANT 1 & 2467

Reference



High Band-edge



Agilent Spectrum Analyzer - Swept SA					
🕅 RF 50 Ω 🧥 DC	CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:52:07 AM Sep 14, 2018 TRACE 2 3 4 5 6	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 26 dB		TYPE MWWWWWW DET P N N N N N	
10 dB/div Ref 15.00 dBm				Vkr1 281.9 kHz -58.82 dBm	Auto Tune
5.00 -5.00 -15.0					Center Freq 15.004500 MHz
-25.0				27.41 dBm	Start Freq 9.000 kHz
-65.0 -65.0 -75.0	ومعروده بالرزاي إمرام الإلى والروان متواد	udurruðurup fyskupptnitsens höldur bj	Drigherikasi na tana Manadasi ili sanada ikada ya dalari	nayarin yanga kinganga kangi kina sebuah yang	Stop Freq 30.000000 MHz
Start 9 kHz #Res BW 100 kHz	VBW 3	00 kHz	Sweep 5.3	Stop 30.00 MHz 333 ms (40001 pts)	CF Step 2.999100 MHz
MKR MODE TRC SCL >	281.9 kHz	Y FU -58.82 dBm	NCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 3 4 5					Freq Offset 0 Hz
6 7 8 9					
10 11				×	
MSG			STATUS	DC Coupled	

Agilent Spectrum Analyzer - Swe	pt SA				
LXU RF 50 Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:51:31 AM Sep 14, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 🕞 IFGain:Low) Trig: Free Run Atten: 26 dB		TYPE MWWWWWW DET P N N N N N	
	IFGall.LOW	TRUE TO UD	Mkr	5 2.789 70 GHz	Auto Tune
10 dB/div Ref 15.00 d	IBm			-49.81 dBm	
5.00	1				Center Freq
-5.00	Y				5.015000000 GHz
-15.0					
-25.0				27.41 dBm	Start Freq
-35.0					30.000000 MHz
-45.0	↓ • • • • • • • • • •		$\left \begin{array}{c} \left \begin{array}{c} 2 \\ \end{array} \right ^2 \\ \left \begin{array}{c} 3 \\ \end{array} \right ^3 \\ \left \begin{array}{c} 2 \\ \end{array} \right ^3 \\ \left \left \begin{array}{c} 2 \\ \end{array} \right ^3 \\ \left \left \begin{array}{c} 2 \\ \end{array} \right ^3 \\ \left $		
-55.0					Stop Freq
-65.0					10.000000000 GHz
-75.0					
Start 30 MHz				Stop 10.000 GHz	CF Step
#Res BW 1.0 MHz	VBW	3.0 MHz	Sweep 18	.67 ms (40001 pts)	997.000000 MHz
MKR MODE TRC SCL	× 2.466 17 GHz	۲ F -1.48 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f	5.884 88 GHz	-48.69 dBm			En a Offerst
3 N 1 f 4 N 1 f	6.330 79 GHz 3.049 66 GHz	-49.39 dBm -49.74 dBm			Freq Offset 0 Hz
5 N 1 f	2.789 70 GHz	-49.81 dBm		=	0112
7					
9					
11				~	
K SG			STATUS		
			314103		

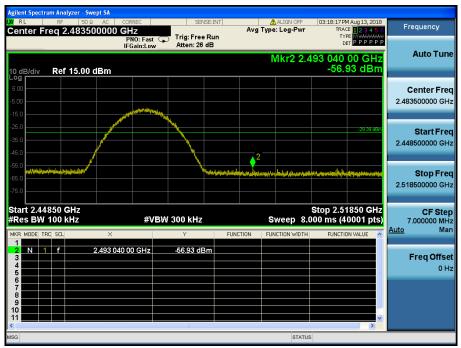


TM 1 & ANT 1 & 2472

Reference



High Band-edge



Agilent Spectrum A								
	RF 50 Ω 🦺 DO		SENSE:I		ALIGN OFF		4 Aug 13, 2018 E 1 2 3 4 5 6	Frequency
Center Freq	15.004500	PNO: Fast G	Trig: Free Ru		j Type: Log-Pwr	TYP	E MW	
		IFGain:Low	Atten: 26 dB			DE	T PPPPP	
						//kr2 28		Auto Tune
10 dB/div R	ef 15.00 dBr	n				-54.0	60 dBm	
Log								
5.00								Center Freq
-5.00								15.004500 MHz
-15.0								
-25.0							-29.39 dBm	Start Freq
-35.0								9.000 kHz
-45.0 + 2								5.000 KH2
-55.0								
-65.0	والمعارية المرقب	welling and all the terms of the second		. Internation	terrer of terrer of Anderson de	Marca and Carrier	the state of the s	Stop Freq
		and the plate of the state of the presents	an an an Alban San San Angaran an Angara		ana an			30.000000 MHz
-75.0								
Start 9 kHz						Stop 3	0.00 MHz	CF Step
#Res BW 10	0 kHz	#VBV	V 300 kHz		Sweep 5.3	133 ms (4	0001 pts)	2.999100 MHz
MKR MODE TRC S	a	×	Y	FUNCTION	FUNCTION WIDTH	ELINCTIC	IN VALUE	<u>Auto</u> Man
1 N 1 1		281.9 kHz	-54.60 dBm					
2 N 1 1	·	281.9 kHz	-54.60 dBm					Freq Offset
4								0 Hz
5								0112
7								
8								
10								
11							~	
MSG					STATUS	DC Cou		
					01/100	- 00 000	apiou -	

Agilent Spectrum Analyzer - Sw					
	AC CORREC	SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	03:18:33 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
Center Freq 5.01500	DUUUU GHZ PNO: Fast G IFGain:Low	Trig: Free Run Atten: 26 dB	Avg Type: Log-Pwr	TYPE MWWWWW DET PPPPP	
10 dB/div Ref 15.00	dBm		Mkr	5 3.024 24 GHz -46.42 dBm	Auto Tune
-15.00	1				Center Freq 5.015000000 GHz
-25.0				-29.39 dBm	Start Freq 30.000000 MHz
-55.0			- Middley far, Jonis X., or yn antor my'r Andfeined y son antorior y 	الانتيانية من مالاللة التي روي مكانية من مريطة العربي الانتيانية من مالية المالية الم المالية المالية	Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBV	V 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz
MKR MODE TRC SCL	× 2.472 65 GHz	⊻ -2.86 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Mar
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	7.250 77 GHz 2.637 16 GHz 6.995 54 GHz 3.024 24 GHz	-46.30 dBm -46.37 dBm -46.40 dBm -46.42 dBm			Freq Offset 0 Hz
6 7 8 9 9					
				×	
ISG			STATUS		

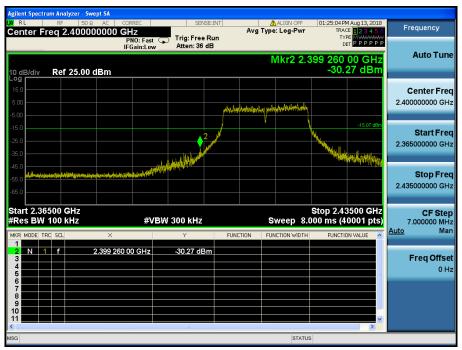


TM 2 & ANT 1 & 2412

Reference



Low Band-edge



Agilent Spectrum										
Center Fre			RREC		SE:INT		ALIGN OFF	TRAC	4 Aug 13, 2018 E 1 2 3 4 5 6	Frequency
	•	F	PNO:Fast G Gain:Low	Trig: Free Atten: 36				TYI DI		
								Vlkr2 29	0.9 kHz	Auto Tune
10 dB/div	Ref 25.00 d	lBm				_		-45.	11 dBm	
15.0										Center Fred
5.00										15.004500 MH
-5.00										
-15.0									-15.07 dBm	Start Free
-25.0										9.000 kH:
-35.0 2										
-45.0	Inc. if a starte							10. t	han and se	Stop Fred
-65.0	and an and an and a set of the set of	a an	al Manual Anna Anna Anna Anna Anna Anna Anna An	en an	in Anni Davini (Jag		artinet and a first		1.	30.000000 MH
Start 9 kHz #Res BW 10	00 kHz		#\/B\	N 300 kHz		s	weep 5.3	Stop 3 333 ms (4	0.00 MHz 0001 pts)	CF Stej 2.999100 MH
MKR MODE TRC		×	# CEA	Y	ELIN		NCTION WIDTH		IN VALUE	Auto Ma
1 N 1	f f	290	0.9 kHz 0.9 kHz	-45.11 dB -45.11 dB	m					
3		290	J.9 KH2	-40.11 UD						Freq Offse
4 5									=	0 H:
6										
9										
10									~	
<)				Ш					>	
ISG							STATUS	L DC Cou	upled	

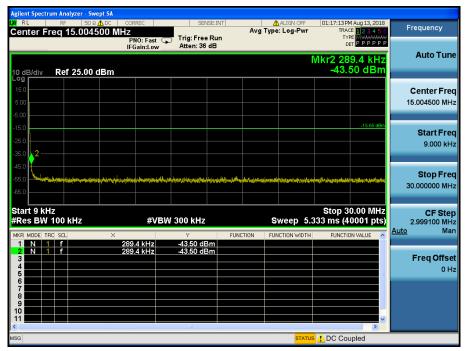
Agilent Spectrum Analyzer -	Swept SA				
Center Freq 5.015		SENSE:INT	ALIGN OFF	01:25:21 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
Center Freq 5.015	PNO: Fast IFGain:Low	Trig: Free Run Atten: 36 dB			
10 dB/div Ref 25.0	0 dBm		Mkr	5 7.655 06 GHz -36.27 dBm	Auto Tune
Log 15.0 5.00					Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0			Altheory Distantion of the paper in the	-15.07 dBm	Start Freq 30.000000 MHz
-45.0 -65.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VE	W 3.0 MHz	Sweep 18	Stop 10.000 GHz 67 ms (40001 pts)	CF Step 997.000000 MHz
MKR MODE TRC SCL	× 2.416 57 GHz	۲ FL 12.26 dBm	NCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 F 3 N 1 F 4 N 1 F 5 N 1 F	2.387 91 GHz 9.416 01 GHz 5.724 37 GHz 7.655 06 GHz	-34.97 dBm -35.68 dBm -35.86 dBm -36.27 dBm			Freq Offset 0 Hz
6 7 8 9 10					
11				~	
MSG			STATU	S	



TM 2 & ANT 1 & 2437

Reference





Agilent Spectrum Analyzer - S XI RL RF 50	Ω AC CORREC	SENSE:INT		ALIGN OFF	01:17:22 PM Aug 13, 2018	_
enter Freq 5.0150			Avg	Type: Log-Pwr	TRACE 123456 TYPE MWWWWWW	Frequency
	IFGain:Low	Atten: 36 dB			DETPPPP	Auto Tur
				Mkr	5 7.681 48 GHz	Auto Tune
10 dB/div Ref 25.00) dBm				-36.05 dBm	
15.0	\					Center Fre
5.00						5.015000000 GH
5.00						
15.0					-15.65 dBm	
25.0						Start Fre 30.000000 MH
35.0	$\diamond^4 \diamond^3$		Δ^2	∮ 5		30.000000 MH
45.0 constituent die ber officier			a na antara ang ang ang ang ang ang ang ang ang an	and the second secon	and a loss of a second s	
-55.0						Stop Fre
65.0						10.00000000 GH
Start 30 MHz Res BW 1.0 MHz	#\/B	W 3.0 MHz		Curson 19	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste
						997.000000 MH Auto Ma
MKR MODE TRC SCL	× 2.432 77 GHz	۲ 11.91 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	
2 N 1 f 3 N 1 f	5.943 21 GHz 3.258 29 GHz	-35.44 dBm -35.79 dBm				Freq Offse
4 N 1 f	2.624 69 GHz	-35.97 dBm				0 H
5 N 1 f	7.681 48 GHz	-36.05 dBm				
7						
9						
10					~	
		Ш			>	
SG				STATUS		

Agilent Spectrum Analyzer - Swept SA						
RF 50 Ω AC	CORREC	SENSE:INT	Avg T	ALIGNAUTO ype: Log-Pwr	01:17:56 PM Aug 13, 2018 TRACE 2 3 4 5 6	Frequency
	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 30 dB			DET P N N N N N	
10 dB/div Ref 20.00 dBm				Mkr4 1	6.688 125 GHz -36.35 dBm	Auto Tune
10.0 0.00 -10.0						Center Freq 17.500000000 GHz
-20.0 -30.0 -40.0		4	2	<mark>3</mark>	-15.65 dBm	Start Freq 10.000000000 GHz
-50.0 -60.0 -70.0						Stop Freq 25.000000000 GHz
Start 10.000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz		Sweep 40.	Stop 25.000 GHz 00 ms (40001 pts)	CF Step 1.50000000 GHz
MKR MODE TRC SCL X	1 625 GHz	Ƴ -31.50 dBm	UNCTION	FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f 19.08 3 N 1 f 21.31 4 N 1 f 16.68	5 500 GHz 9 000 GHz 3 125 GHz	-34.48 dBm -34.48 dBm -36.35 dBm				Freq Offset 0 Hz
6 7 8 9 10						
		m			~	
MSG				I o STATUS		

TM 2 & ANT 1 & 2462

Reference



High Band-edge



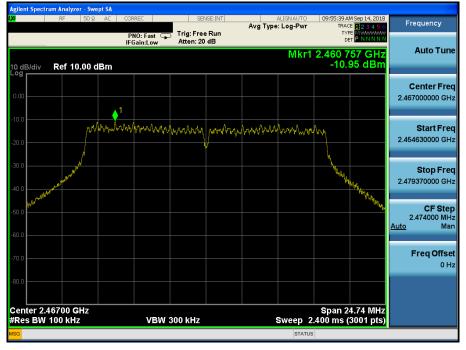
Agilent Spectrum Analyzer - Sw							
RL RF 503 Center Freq 15.004		SENSE:INT	Ava '	ALIGN OFF	01:21:06 PM Aug : TRACE	3456	Frequency
	PNO: Fast (IFGain:Low	Trig: Free Run Atten: 36 dB		.,,,	TYPE MW	PPPP	
10 dB/div Ref 25.00	dBm			ſ	44.69 vikr2 293.2		Auto Tuno
5.00							Center Fre 15.004500 MH
-15.0 -25.0 -35.0 2					-1	5.40 dBm	Start Free 9.000 kH
-45.0 	leaf sub-attaines activities for a statistical states	land Markington, Strangerffeld (Marindra), Ar	the state of the second se	and the state of the second	san an a	-	Stop Fre 30.000000 MH
Start 9 kHz #Res BW 100 kHz	#VB	W 300 kHz		Sweep 5.3	Stop 30.00 33 ms (4000	1 pts)	CF Ste 2.999100 MH
MKR MODE TRC SCL	× 293.2 kHz	۲ -44.69 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VAL		<u>uto</u> Ma
2 N 1 f 3 4 5	293.2 kHz	-44.69 dBm					Freq Offse 0 H
6 7 8 9							
						>	
SG				STATUS	DC Coupled		

Agilent Spectrum Analyzer - Swe	pt SA				
	AC CORREC	SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	01:21:15 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
Center Freq 5.01500	PNO: Fast G IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type. Log-Pwr	TYPE MWWWWW DET PPPPP	
10 dB/div Ref 25.00 c	iBm		Mkr	5 5.943 71 GHz -36.08 dBm	Auto Tune
Log 15.0 5.00					Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0	2		5 3		Start Freq 30.000000 MHz
-45.0 -55.0 -65.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBM	/ 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL	× 2.457 20 GHz	Y F 11.87 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	2.484 12 GHz 6.102 48 GHz 9.382 11 GHz 5.943 71 GHz	-31.57 dBm -35.82 dBm -35.84 dBm -36.08 dBm			Freq Offset 0 Hz
6 7 8 9 10					
11				×	
MSG			STATUS		



TM 2 & ANT 1 & 2467

Reference

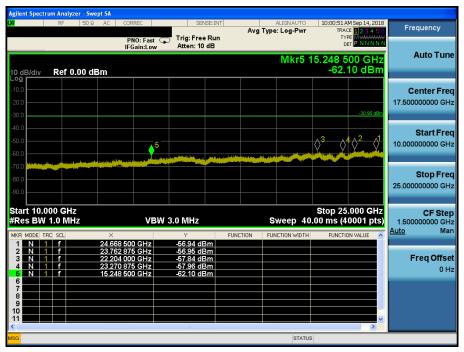


High Band-edge



RF	r - Swept SΛ 50 Ω <u>Λ</u> DC	CORREC	CENIC	E:INT		.IGN AUTO	00,50,00,4	M Sep 14, 2018	
I TAP	20 32 <mark>11</mark> DC	PNO: Fast		Run	Avg Type:		TRAC	E 1 2 3 4 5 6 E MAAAAAAA T P N N N N N	Frequency
dB/div Ref 10	.00 dBm	IFGain:Low	Atten: 20 C			-	Mkr1 28 -63.1	1.9 kHz 19 dBm	Auto Tun
og 0.00 0.0									Center Fre 15.004500 M⊦
0.0								-30.95 dBm	Start Fre 9.000 k⊦
	alerabate elasatina erte ár	juipeli jaczy witeria jace i deny en	iyaan dhifaan ahadard haybaa add	hytelinestyne i heferig fan se	derformation of the state of the	ile less openant of the	gill facons had at being software	ipafalqubl.an.junisysters	Stop Fre 30.000000 M⊦
tart 9 kHz Res BW 100 kHz		VBV	V 300 kHz		SW	/eep 5.3	Stop 3 33 ms (4	0.00 MHz 0001 pts)	CF Ste 2.999100 MH
							· · ·		
R MODE TRC SCL	×	281.9 kHz	ץ -63.19 dBı	FUNCTION		TION WIDTH		IN VALUE	
KR MODE TRC SCL 1 N 1 f 2		281.9 kHz				TION WIDTH			Auto Ma Freq Offs
KR MODE TRC SCL 1 N 1 f 2 3 4 5 5 7 8 9		281.9 kHz				TION WIDTH			Auto Ma Freq Offs
KR MODE TRC SCL 1 N 1 f 2 3 - - 3 - - - 4 - - - 5 - - - 6 - - - 7 - - -		281.9 kHz				TION WIDTH			

Agilent Spectrum Analyzer - Sw					
<mark>LXI</mark> RF 50 Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:59:55 AM Sep 14, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 20 dB	Avg Type: Log-Pwr		
10 dB/div Ref 10.00	dBm		Mkr	5 9.599 95 GHz -55.52 dBm	Auto Tune
-10.0					Center Freq 5.015000000 GHz
-30.0			$3 \qquad 2 \qquad 4$	-30.95 dBm	Start Freq 30.000000 MHz
-60.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	VBV	V 3.0 MHz	Sweep 18	Stop 10.000 GHz 67 ms (40001 pts).	CF Step 997.000000 MHz
MKR MODE TRC SCL	× 2.462 43 GHz	Y FL -3.01 dBm	INCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	6.253 27 GHz 5.636 38 GHz 7.456 40 GHz 9.599 95 GHz	-54.86 dBm -55.29 dBm -55.38 dBm -55.52 dBm			Freq Offset 0 Hz
6 7 8 9 10					
		ш		>	
MSG			STATU	6	

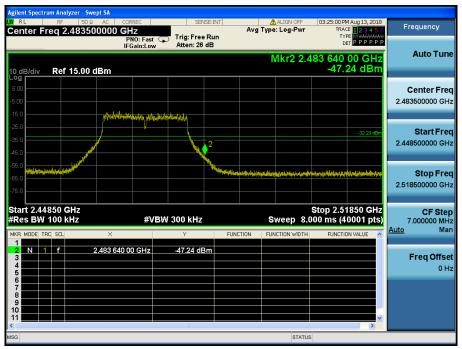


TM 2 & ANT 1 & 2472

Reference



High Band-edge



WRK 2281.9 KHz Center Fr 0 dB/div Ref 15.00 dBm -55.84 dBm -55.84 dBm 500 -	Agilent Spectrum Analyze							
Center Freq 15.004500 MHZ Trig: Free Run Atten: 26 dB Mkr2 281.9 kHZ Auto Tu 10 dB/div Ref 15.00 dBm -55.84 dBm -55.84 dBm - 500 -			SENSE:I					Frequency
INKR 2281.9 KHz 10 dB/div Ref 15.00 dBm -55.84 dBm 500 -55.84 dBm -55.84 dBm 500 -50.00 dBm -55.84 dBm 510 -50.00 dBm -55.84 dBm 10 -55.84 dBm -55.84 dBm	Center Freq 15.0	PNO: Fa			e: Log-Pwr	TYPE M M	WWWWWW	
500 5	10 dB/div Ref 15	.00 dBm			Γ			Auto Tune
360 300 300 300 300 300 300 30000 8 450 2 300 400 100	-5.00							Center Freq 15.004500 MHz
650	-35.0					-3;	2.23 dBm	Start Freq 9.000 kHz
#Res BW 100 kHz #VBW 300 kHz Sweep 5.333 ms (40001 pts) 2.999100 M MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE Auto MU 1 N 1 f 281.9 kHz 55.84 dBm Function width Function value Freq Offs 3 1 f 281.9 kHz 55.84 dBm Freq Offs 0 4 -	-65.0	nanniyorashayayaandolliyoonna Maxadaa aariida	pessionaliterisations apparent the Post	epfortal-raid calessilarethymes	hproduction of the state	antheness negatives	aparateles	Stop Freq 30.000000 MHz
MAR MODE IRC SEL X Y FORCHON FUNCTION WIDTH FUNCTION WALLS 2 N 1 f 2819 KHz 55.84 dBm 3 I f 2819 kHz 55.84 dBm 5 I Freq Offs 6 I I I I I I I I I I I I I I I I I I I		: #	VBW 300 kHz	Į.	Sweep 5.3	Stop 30.00 33 ms (4000	i pts)	CF Step 2.999100 MHz
3 FreqOffs 4 0 6 0 7 8 8 2 4 9 2 4 9 2 4 10 4 11 4 1		281.9 kH	z -55.84 dBm	FUNCTION FL	JNCTION WIDTH	FUNCTION VAL	JE A	<u>uto</u> Man
	3 4 5	281.9 kH	z -55.84 dBm					Freq Offset 0 Hz
11	7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9							
	11						~	
ISG STATUS 1 DC Coupled					STATUS	1 DC Counled	_	

Agilent Spectrum Analyzer - Sw XM RL RF 50 ល Center Freq 5.01500	AC CORREC	SENSE:INT Trig: Free Run Atten: 26 dB	ALIGN OFF Avg Type: Log-Pwr	03:25:16PM Aug 13, 2018 TRACE 123456 TYPE MWWWWW DET PPPPP	Frequency
10 dB/div Ref 15.00	dBm		Mkr	5 6.875 15 GHz -46.19 dBm	Auto Tune
-5.00 -5.00 -15.0	1 				Center Freq 5.015000000 GHz
-25.0 -35.0 -45.0			5 Nifeesieski pitakini a setitivi pitaralim,	-32.23 dBm	Start Freq 30.000000 MHz
-55.0				, et a antida, et a a a anna e prosta difficie a anna an Anna anna anna anna anna anna	Stop Freq 10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBV	/ 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz <u>Auto</u> Man
1 N 1 F 2 N 1 F 3 N 1 F 4 N 1 F 5 N 1 F 6 7	2.468 16 GHz 2.596 53 GHz 3.201 71 GHz 5.349 74 GHz 6.875 15 GHz	-4.52 dBm -46.10 dBm -46.12 dBm -46.13 dBm -46.19 dBm			Freq Offset 0 Hz
8 9 9 10 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1			STATUS	~	

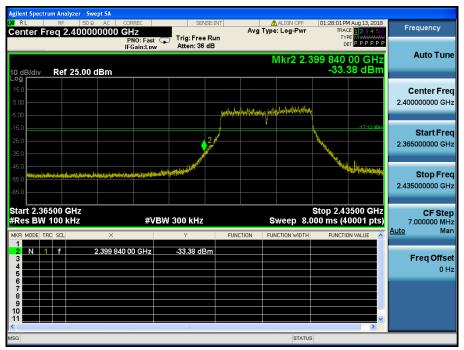


TM 3 & ANT 1 & 2412

Reference



Low Band-edge



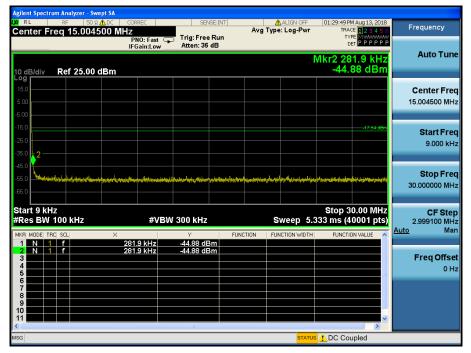
Avg Type: Log-Pwr Trace Avg Type: Log-Pwr Trace Bad start 0 dB/div Ref 25.00 dBm -45.24 dBm	Agilent Spectr											
Pho: Fast IFGaintLaw Trig: Free Run Atten: 36 dB Trig: Free Run Atten: 36 dB Auto Tune 00 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 0 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 10 dB/div Ref 25.00 dBm -45.24 dBm -45.24 dBm 20 day 20 day -45.24 dBm -45.24 dBm 21 day 21 day -45.24 dBm -45.24 dBm 11 N 1 1 23.19 kHz -45.24 dBm 21 N 1 1 -45.24 dBm -45.24 dBm 11 N 1 1 -45.24 dBm -45.24 dBm 12 N 1 -45.24 dBm -45.24 dBm -45.24 dBm 14 day 1 1 -45.24 dBm -45.24 dBm -45.24 dB	LXIRL Constant				ic	SEN	SE:INT					Frequency
WK72 281.9 KHz KHz -45.24 dBm -45.24 dBm -09 -45.24 dBm -09 -45.24 dBm -09 -45.24 dBm -00 -17.1248 -00 -17.1248 -01 -17.1248 -02 -17.1248 -030 -17.1248 -040 -17.1248 -040 -17.1248 -040 -17.1248 -040 -17.1248 -150 -17.1248 -160 -17.1248 -200 -17.1248 -210 -17.1248 -210 -17.1248 -210 -17.1248 -210 -17.1248 -210 -17.1248 -210 -17.1248 -210 -17.1248 -210 -210 -211 -210 -211 -210 -221 -210 -221 -210 -221 -210 -221 -210 -221 -210 -221 <td< td=""><td>Center F</td><td>req 15.0</td><td>04500</td><td>PNO</td><td>:Fast 🕞 in:Low</td><td></td><td></td><td>-19 I JP</td><td>e. Log-i wi</td><td>TYP</td><td>E M WAANAAAAAA</td><td></td></td<>	Center F	req 15.0	04500	PNO	:Fast 🕞 in:Low			-19 I JP	e. Log-i wi	TYP	E M WAANAAAAAA	
150 1	10 dB/div	Ref 25	.00 dBr	m								Auto Tune
All of a start Freq 9.000 kHz All of a start of the sta	15.0											
550	-25.0 -35.0										-17.12 dBm	
#RR BW 100 kHz #VBW 300 kHz Sweep 5.333 ms (40001 pts) 2.999100 MHz MKR MODE TC SKIL X Y FUNCTION FUNCTION VIDTH FUNC	-55.0	l/mturnen.jungtet	Jagi i tala ang a	tanat de terre a san la ria	linternet hardet	hraeffe tarriteritedeler	odaertoon adde	harystrokardajst	alkininen, ekyteettä tee	dhormand Mari	ginadan (angkariyiyi)	
MAR MODE THE SEL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 2 N 1 f 2819 kHz 4524 dBm 3 4 f 2819 kHz 4524 dBm 5 6 6 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8			2		#VBW	/ 300 kHz		s	weep 5.3	Stop 3 333 ms (4	0.00 MHz 0001 pts)	2.999100 MHz
3 S Freq Offset 5 S S 6 S S 9 S 10 S 11 S	1 N 1	f		281.9	kHz	-45.24 dB	m	CTION FU	NCTION WIDTH	FUNCTIO	IN VALUE	<u>Auto</u> Mar
	3 4 5			281.9	KHZ	-45.24 dB	-m				=	
	7 8 9											
ISG STATUS / DC Coupled	MSG								STATUS	DC Cou	upled	

Agilent Spectrum										
Center Fred	RF 50Ω		RREC	SEN	E:INT	Ava -	ALIGN OFF		Aug 13, 2018	Frequency
Center Fred	15.015000	F	NO: Fast Gain:Low	Trig: Free Atten: 36			Type: Log I m	TYF De		
10 dB/div R	lef 25.00 di	3m					Mkr	5 9.390 -36.3	09 GHz 31 dBm	Auto Tune
Log 15.0 5.00		1								Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0							l have highly and highly any set of an order of the	on teach contractions		Start Freq 30.000000 MHz
-45.0 -55.0 -65.0		n an an an Anna an Anna Anna Anna Anna								Stop Freq 10.000000000 GHz
Start 30 MH; #Res BW 1.0			#VB	W 3.0 MHz			Sweep 18	Stop 10 .67 ms (4	000 GHz 0001 pts)	CF Step 997.000000 MHz
MKR MODE TRC S	SCL f	× 2.417 (07 GHz	ץ 9.23 dB		ICTION	FUNCTION WIDTH	FUNCTIO	N VALUE	<u>Auto</u> Man
5 N 1	f f f f	5.979 3.527	55 GHz 50 GHz 48 GHz 09 GHz	-35.82 dB -36.25 dB -36.29 dB -36.31 dB	m m m					Freq Offset 0 Hz
6 7 8 9 10										
11				Ш					>	
MSG							STATUS			



TM 3 & ANT 1 & 2437

Reference m Analyzer - Swept Si nt Sp Aguenneges von AC Conversion AC Conversion AC Conversion AC Conversion AC Conversion AC Conversion Action Action 26 dB 01:29:42 PM Aug 13, 201 TRACE 1 2 3 4 5 ALIGN OFF Frequency TYPE MWWWWWW DET P P P P P Auto Tune Mkr1 2.432 013 GHz 2.46 dBm Ref 25.00 dBm 10 dB/div **Center Freq** 2.437000000 GHz 1 and make the stand on the man and the strategic and the stand of the s Start Freq 2.423759500 GHz Stop Freq 2.450240500 GHz CF Step 2.648100 MHz Man Auto Freq Offset 0 Hz Center 2.43700 GHz #Res BW 100 kHz Span 26.48 MHz Sweep 2.600 ms (3001 pts) #VBW 300 kHz



RL RF 50:	wept SA Ω AC CORREC	SENSE:INT		ALIGN OFF	01:29:57 PM Aug 13, 2018	-
Center Freq 5.0150	000000 GHz PNO: Fast	Trig: Free Run	Avg	Type: Log-Pwr	TRACE 2 3 4 5 6 TYPE MWWWWW	Frequency
	IFGain:Low	Atten: 36 dB			DETPPPPP	A
10 dB/div Ref 25.00	dBm			Mkr	5 9.358 93 GHz -35.85 dBm	Auto Tun
- og 15.0 5.00	1					Center Fre 5.015000000 GH
5.00					-17.54 dBm	
25.0	\$ ² } ⁴		∂ ³	un and an and a state of a state.	5	Start Fre 30.000000 M⊦
45.0 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1				and the second state	need to far you and the property of the first sector of the first sector of the first sector of the first sector of the property of th	Stop Fre
65.0						10.00000000 GH
tart 30 MHz Res BW 1.0 MHz	#VB	W 3.0 MHz		Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste 997.000000 MH
KR MODE TRC SCL	× 2.442 24 GHz	ү 9.12 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 f	3.018 51 GHz	-35.38 dBm				
3 N 1 f	5.710 16 GHz 3.267 51 GHz	-35.68 dBm -35.84 dBm				Freq Offs 0 F
5 N 1 f	9.358 93 GHz	-35.85 dBm			=	UF
7 8						
9					~	
		Ш			>	
G				STATUS		

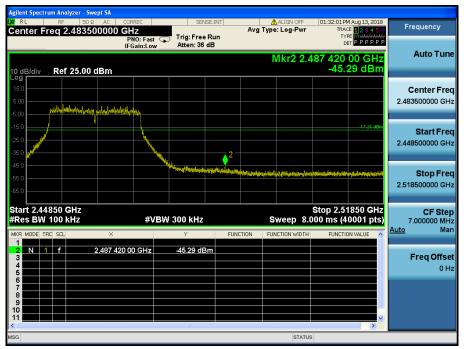
Agilent Spectrum Analyzer - Swe	pt SA				
LXI RF 50 Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	01:29:27 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 30 dB	ing type. Log i wi		
10 dB/div Ref 20.00 d	Bm		Mkr4 ′	l6.438 375 GHz -35.85 dBm	Auto Tune
Log 10.0 0.00 -10.0					Center Freq 17.50000000 GHz
-20.0		4		-17.54 dBm 2 1	Start Freq 10.000000000 GHz
-50.0 -60.0 -70.0					Stop Freq 25.00000000 GHz
Start 10.000 GHz #Res BW 1.0 MHz	#VB	W 3.0 MHz	Sweep 40	Stop 25.000 GHz .00 ms (40001 pts)	CF Step 1.50000000 GHz
MKR MODE TRC SCL	× 24.017 875 GHz	Ƴ -31.18 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 F 3 N 1 F 4 N 1 F	21.900 250 GHz 19.036 375 GHz 16.438 375 GHz	-34.52 dBm -34.94 dBm -35.85 dBm			Freq Offset 0 Hz
6 7 8 9 10					
11		m		×	
MSG				3	

TM 3 & ANT 1 & 2462

Reference



High Band-edge



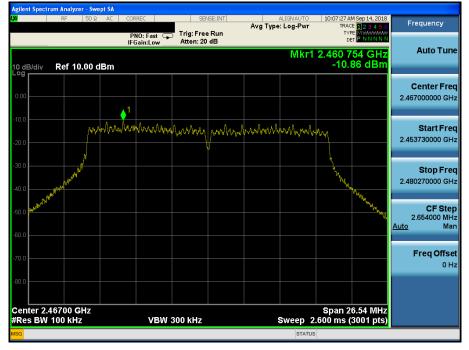
Agilent Spectrum Analyzer - Swej					
LXIRL RF 50Ω		SENSE:INT	ALIGN OFF	01:32:09 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
Center Freq 15.0045	PNO: Fast C IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type. Log-t wi		
10 dB/div Ref 25.00 d				Mkr2 287.2 kHz -44.95 dBm	Auto Tune
15.0 5.00					Center Freq 15.004500 MHz
-15.0 -25.0 -35.0				47.31.dBm	Start Freq 9.000 kHz
-45.0 -55.0 -65.0	essidenska filozofi and taxa taxtud	ipey hat that to go and the outroution	มปู <u>ปสุขัตรุป</u> สามารถใหญ่ข้างส่วนสามารถกับรามหรือหังสา	Aristoppendiksteriersziethetkonen	Stop Freq 30.000000 MHz
Start 9 kHz #Res BW 100 kHz	#VB	W 300 kHz	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	CF Step 2.999100 MHz
MKR MODE TRC SCL	× 287.2 kHz	-44.95 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	287.2 kHz	-44.95 dBm			Freq Offset 0 Hz
6 7 8 9 10					
11				~	
MSG			STAT	S DC Coupled	

Agilent Spectrum Analyzer - Swe					
RL RF 50 Ω Center Freq 5.01500		SENSE:INT	ALIGN OFF	01:32:18 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type. Loga wi		
10 dB/div Ref 25.00 d	dBm		Mkr	5 3.580 82 GHz -36.33 dBm	Auto Tune
15.0 5.00					Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0			and the sector of the sector o	17.31-dBm	Start Freq 30.000000 MHz
-46.0 -55.0 -66.0			rinn find hilfe a conf la sinn fa dinn daine conf false, a		Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz
MKR MODE TRC SCL	× 2.456 95 GHz	Y FUN 9.92 dBm	TION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Mar
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	5.351 49 GHz 5.714 89 GHz 3.291 69 GHz 3.580 82 GHz	-36.15 dBm -36.16 dBm -36.31 dBm -36.33 dBm			Freq Offsel 0 Hz
6 7 8 9 10					
11 <				>	
MSG			STATUS		



TM 3 & ANT 1 & 2467

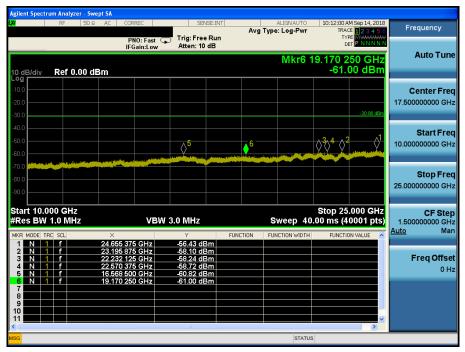
Reference





RF	50 Ω 🧥 DC	CORREC	SE	NSE:INT	ALIGNAUTO	10:10:01 AM Sep 14, 2018	
		PNO: Fast IFGain:Lov	t 🖵 Trig: Fre		Avg Type: Log-Pwr	TRACE 12345 (TYPE MWWWW DET PNNNN	#
dB/div Ref 10).00 dBm					Mkr1 319.4 kHz -65.69 dBm	
9 9 00 0.0 0.0							Center Fre 15.004500 MH
0.0 0.0 0.0						-30.86 dBm	Start Fro 9.000 ki
1.0 \ 1							
مروسام ومدين المروم الم	papetings of a feature the set of	aben fi Lind fi di na jaran per	zinesteiningkaandel kaatstelening	fey, yan dawi siyi ay dawi da da da	Netzania and and a standard and	Musich which it get a strangenessed bit	
art 9 kHz			BW 300 kHz	ก็ขุดราวอาสุรงหรังที่มีสรารไม่เหรือได้		Stop 30.00 MHz 333 ms (40001 pts)	30.000000 M CF Sto 2.999100 M
art 9 kHz Res BW 100 kHz R MODE TRC SCL	z		300 kHz Y	FUNCTI	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	30.000000 M CF Sto 2.999100 M
art 9 kHz Res BW 100 kH; R MODE TRC SCL 2 1 f 3 4	z	VE	300 kHz Y	FUNCTI	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	2.999100 M
art 9 kHz Res BW 100 kH; Res C scl.	z	VE	300 kHz Y	FUNCTI	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	30.000000 Mi CF Ste 2.999100 Mi <u>Auto</u> Mi Freq Offs
art 9 kHz les BW 100 kHz N 1 f	z	VE	300 kHz Y	FUNCTI	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	30.00000 M CF Sto 2.999100 M <u>Auto</u> M Freq Offs 0

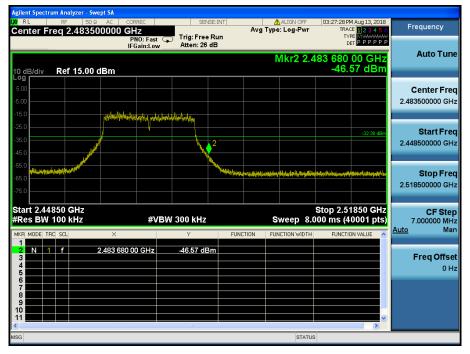
Agilent Spectrum Analyzer - Swe	pt SA				
ιχι RF 50 Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	10:11:00 AM Sep 14, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 🖵	Trig: Free Run	Avg Type. Log-t wi	TYPE MWWWWWWW	
	IFGain:Low	Atten: 20 dB			Auto Tune
			Mkr	6 7.647 83 GHz	Auto Tulle
10 dB/div Ref 10.00 c	lBm			-56.22 dBm	
0.00					Center Freq
-10.0					5.015000000 GHz
-20.0					0.01000000000112
-20.0				-30.86 dBm	
					Start Freq
-40.0	.5 . 2		∧3 ∧4 ▲6		30.000000 MHz
-50.0	$\wedge^5 \wedge^2$				
-60.0					Stop Freq
-70.0					10.000000000 GHz
-80.0					10.000000000 GH2
Start 30 MHz				Oten 10 000 Otta	
#Res BW 1.0 MHz	VBW	3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz
MKR MODE TRC SCL	X	Y F	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
1 N 1 f 2 N 1 f	2.461 68 GHz	-2.90 dBm			
2 N 1 F	3.136 65 GHz 5.874 91 GHz	-55.28 dBm -55.53 dBm			Freq Offset
4 N 1 f 5 N 1 f	6.974 35 GHz 2.794 93 GHz	-55.74 dBm -55.99 dBm			0 Hz
6 N 1 f	7.647 83 GHz	-56.22 dBm			
8					
9					
10				~	
<		illi -			
MSG			STATUS		



TM 3 & ANT 1 & 2472

Reference





igilent Spectrum Analyzer - XI RL RF 5	Swept SA 0 Ω Δ DC CORREC		VSE:INT	ALIGN OFF	00/07/05 DM	Aug 13, 2018	
Center Freq 15.00	4500 MHz	ast 😱 Trig: Free	₽ Run	vg Type: Log-Pwr	TRAC	E 1 2 3 4 5 6 E MWWWWW T P P P P P P	Frequency
10 dB/div Ref 15.0	IFGain: 10 dBm	Low Atten: 26	dB		Mkr2 28		Auto Tune
5.00 -5.00							Center Fred 15.004500 MH:
-25.0 -35.0 -45.0 2						-32.38 dBm	Start Fred 9.000 kH:
65.0 65.0 75.0	ertestadharan naturalan katina ka	ereenintationeeninteeneeleine	hannagaran yang bada	ului di gi unali unui ni terse dalar sance	d _{energy} tergytetee _{re} genee	مرادر و مراد ال اوليد	Stop Free 30.000000 MH
start 9 kHz Res BW 100 kHz		#VBW 300 kHz		Sweep 5.	Stop 30 333 ms (40		CF Ste 2.999100 MH Auto Ma
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 4 4 5	× 288.7 kl 288.7 kl	Hz -55.23 df Hz -55.23 df		FUNCTION WIDTH	FUNCTIO	N VALUE	Freq Offse
6 7 8 9 10							
						>	
SG				07.071	s 🦺 DC Cou	un la al	

Agilent Spectrum Analyzer - Swep (X RL RF 50Ω Center Freq 5.015000	AC CORREC 0000 GHz PN0: Fast	⊃ Trig: Free Run Atten: 26 dB	ALIGN OFF Avg Type: Log-Pwr	03:27:44 PM Aug 13, 2018 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P P P P P P	Frequency
10 dB/div Ref 15.00 d	IFGain:Low	Atten: 20 dB	Mkr	5 6.274 21 GHz -46.20 dBm	Auto Tune
5.00 -5.00					Center Freq 5.015000000 GHz
-25.0 -35.0 -45.0	ang para dan kana dan			-32.38 dBm	Start Freq 30.000000 MHz
-55.0			AMM (her title senter provide the literative provide the file of the senter of the senter provide the senter of the		Stop Freq 10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz		V 3.0 MHz		Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL 1 N 1 F 2 N 1 F 3 N 1 F 4 N 1 F 5 N 1 F 6 - - - 7 - - - 8 - - -	× 2.477 64 GHz 5.620 43 GHz 5.883 89 GHz 7.079 54 GHz 6.274 21 GHz	Y FU -4.69 dBm -45.63 dBm -45.97 dBm -46.04 dBm -46.20 dBm	FUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz
9 10 11 C MSG		and a second sec	STATUS	×	





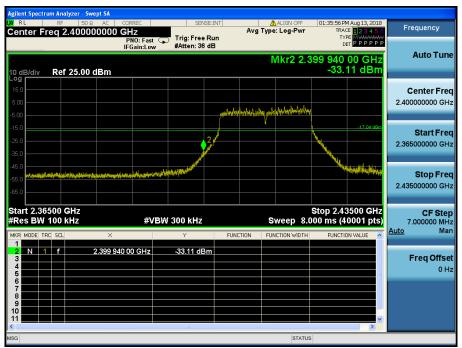


TM 4 & ANT 1 & 2412

Reference



Low Band-edge



Agilent Spectrum A									
Center Freq	F 50 Ω 🚹 D0		SENS			ALIGN OFF		4 Aug 13, 2018	Frequency
Center Freq	15.004500	PNO: Fast IFGain:Low	Trig: Free F #Atten: 36 d	Run			TYP		
10 dB/div R	ef 25.00 dBr	n					Mkr2 28 -44.1	1.9 kHz 81 dBm	Auto Tune
15.0 5.00 -5.00									Center Freq 15.004500 MHz
-15.0 -25.0 -35.0 + 2								-17.04 dBm	Start Freq 9.000 kHz
-45.0 -55.0	nettin nykone osodornak	y Manur yani dari yi Yaaf dayi birey	artijskopen offen verskalder om site, mede	n alifiyyyy y dagadariy	p konstratelet	gernen betaan	i tayi di seliteti (14). M	entutturaeyyyetä	Stop Freq 30.000000 MHz
Start 9 kHz #Res BW 100) kHz	#VE	SW 300 kHz		s	weep 5.3	Stop 3 333 ms (4	0.00 MHz 0001 pts)	CF Step 2.999100 MHz
MKR MODE TRC SI		× 281.9 kHz	-44.81 dBr	FUNCTION	N FUN	ICTION WIDTH	FUNCTIO	IN VALUE	<u>Auto</u> Man
2 N 1 f 3 4 4 4 4		281.9 kHz	-44.81 dBr	n					Freq Offset 0 Hz
6 7 8 9									
10								<u>~</u>	
MSG						STATUS	DC Cou	pled	

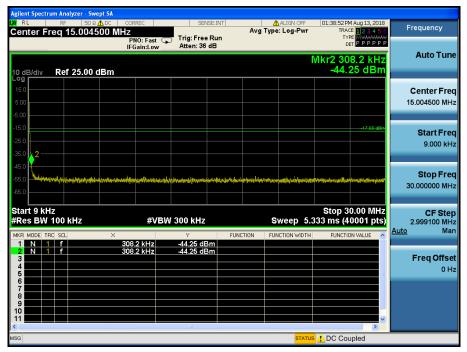
Agilent Spectrum Analyzer - Swep LM RF 50 Ω Center Freq 5.015000	AC CORREC	⊃ Trig: Free Run #Atten: 36 dB	ALIGN OFF Avg Type: Log-Pwr	01:36:12 PM Aug 13, 2018 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P P P P P P	Frequency
10 dB/div Ref 25.00 d	Bm		Mki	r5 5.925 26 GHz -36.48 dBm	Auto Tune
Log 15.0 5.00	1				Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0				Contract of Manual Annual Contract	Start Freq 30.000000 MHz
-45.0 -55.0 -65.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	×		Sweep 11	Stop 10.000 GHz 3.67 ms (40001 pts)	CF Step 997.000000 MHz <u>Auto</u> Man
1 N 1 F 2 N 1 F 3 N 1 F 4 N 1 F 5 N 1 F 6 7	2.419 81 GHz 9.361 17 GHz 3.125 93 GHz 7.119 67 GHz 5.925 26 GHz	10.02 dBm -36.02 dBm -36.19 dBm -36.28 dBm -36.48 dBm			Freq Offset 0 Hz
8 9 10 11 4 MKSG		TH CONTRACT	STATI	×	



TM 4 & ANT 1 & 2437

Reference





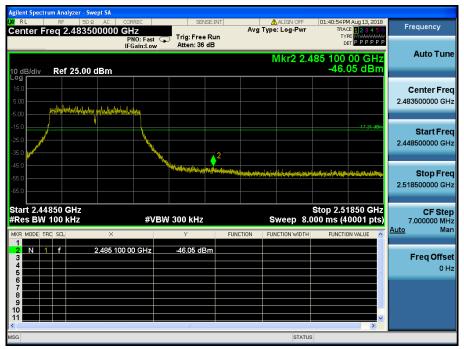
Agilent Spectrum Analyzer - S						
RE SO Center Freq 5.0150		SENSE:INT	Avg Ty	ALIGN OFF	01:39:00 PM Aug 13, 2018 TRACE 12345 6	Frequency
	PNO: Fast C IFGain:Low	Trig: Free Run Atten: 36 dB			DET P P P P P	
10 dB/div Ref 25.00	dBm			Mkr	5 7.240 05 GHz -36.49 dBm	Auto Tune
5.00	¹					Center Fre 5.015000000 GH
-15.0	A.		y a til Milling Michild Hargsong	5	-17.65 dBm	Start Free 30.000000 MH
45.0 44.000 44.000 44.000 45.0 55.0				ndenk störktikk liferet er földet och	ala da se a	Stop Fre 10.000000000 GH
Start 30 MHz #Res BW 1.0 MHz	#VBI	N 3.0 MHz		Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste 997.000000 MH
IKR MODE TRC SCL	× 2.444 73 GHz	ү 9.12 dBm	FUNCTION F	FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	9.415 51 GHz 3.114 22 GHz 3.141 89 GHz 7.240 05 GHz	-35.57 dBm -35.80 dBm -36.35 dBm -36.49 dBm				Freq Offse 0 H
6						
					~	
SG				STATUS		

Agilent Spectrum Analyzer -	Swept SA							
L <mark>XI</mark> RF 51	DΩ AC	CORREC	SENSE:		ALIGNAUTO	01:39:44 PM	Aug 13, 2018	Frequency
		PNO: Fast IFGain:Low	Trig: Free Ri Atten: 30 dE	un	Type. Log-Fwi	TYPE	PNNNN PNNNNN	
10 dB/div Ref 20.0	0 dBm				Mkr3 1	9.043 87 -34.5	′5 GHz 5 dBm	Auto Tune
10.0 0.00 -10.0								Center Freq 17.50000000 GHz
-20.0 -30.0 -40.0				3			-17.65 dBm	Start Freq 10.000000000 GHz
-50.0 -60.0 -70.0								Stop Freq 25.000000000 GHz
Start 10.000 GHz #Res BW 1.0 MHz		#VE	3W 3.0 MHz		Sweep 40	Stop 25.0 .00 ms (40	000 GHz 001 pts)	CF Step 1.50000000 GHz
MKR MODE TRC SCL	× 24.28	8 250 GHz	۲ -32.12 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION	VALUE	<u>Auto</u> Man
2 N 1 F 3 N 1 F 4 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	21.34 19.04	7 875 GHz 3 875 GHz	-33.70 dBm -34.55 dBm					Freq Offset 0 Hz
6 7 8 9 10								
11			10				>	
MSG						1		

TM 4 & ANT 1 & 2462

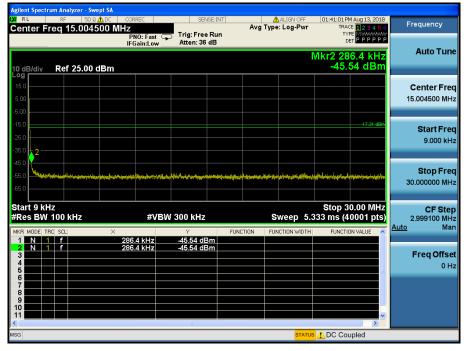
Reference







Conducted Spurious Emissions



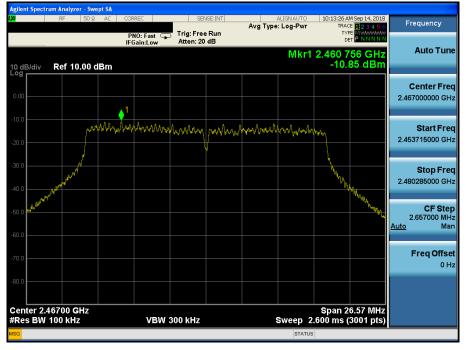
Agilent Spectrum Analyzer - Swe					
Center Freq 5.01500		SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	01:41:10 PM Aug 13, 2018 TRACE 123456	Frequency
	PNO: Fast G IFGain:Low	Trig: Free Run Atten: 36 dB		DET PPPPP	
10 dB/div Ref 25.00 d	dBm		Mkr	5 3.139 14 GHz -36.29 dBm	Auto Tune
Log 15.0 -5.00					Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0	5 The later from the		4 2	17.31 dBm	Start Freq 30.000000 MHz
-45.0 -65.0					Stop Freq 10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBV	V 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL	× 2.455 95 GHz	Y FU 10.09 dBm	JNCTION FUNCTION WIDTH	FUNCTION VALUE	
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	7.193 20 GHz 9.325 28 GHz 5.752 53 GHz 3.139 14 GHz	-36.15 dBm -36.21 dBm -36.29 dBm -36.29 dBm			Freq Offset 0 Hz
7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9					
11 <		and the second s		×	
MSG			STATUS	\$	





TM 4 & ANT 1 & 2467

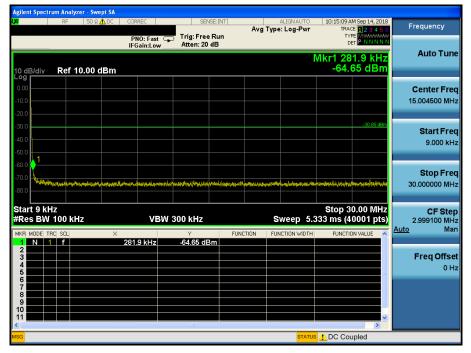
Reference

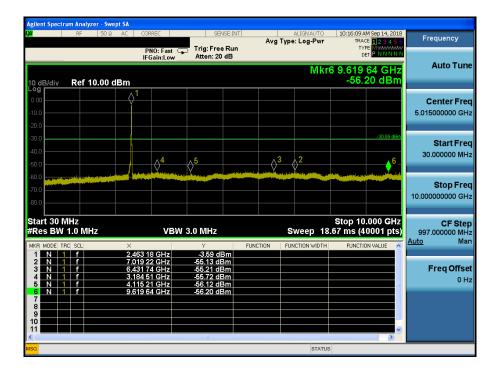














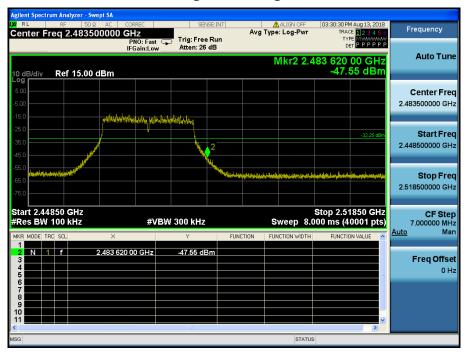




TM 4 & ANT 1 & 2472



Reference



Agilent Spectrum A									
X RL F Center Freq	⊧ 50 Ω <u>Λ</u> DC 15.004500	MHz	Trig: Free R			ALIGN OFF	TRAC	4 Aug 13, 2018 26 1 2 3 4 5 6 PE MWWWWWW T P P P P P P	Frequency
10 dB/div R	ef 15.00 dBn	PNO: Fast ⊂ IFGain:Low	Atten: 26 d			1	Mkr2 28		Auto Tuno
-5.00									Center Fred 15.004500 MH
-25.0 -35.0 -45.0								-32.25 dBm	Start Free 9.000 kH:
-65.0 -65.0	shadoo hataa hataa	dan din kana kana kana kana kana kana kana ka	n tariyin tarihir aristikara	aanta Waxaa	n comptee het to be the	N ina di manangai	k _{in y} ertinderstation	talaan a ta baalaa ay	Stop Free 30.000000 MH
Start 9 kHz #Res BW 100) kHz	#VBI	N 300 kHz		s	weep 5.3	Stop 3 33 ms (4	0.00 MHz 0001 pts)	CF Ste 2.999100 MH
MKR MODE TRC SC 1 N 1 f 2 N 1 f 3 4 5		× 287.9 kHz 287.9 kHz	√ -55.86 dBn -55.86 dBn		TION FU	NCTION WIDTH	FUNCTIO	DN VALUE	Auto Ma Freq Offse 0 H
6 7 8 9 10									
11			m					>	
SG						STATUS	LDC Cou	upled	

Agilent Spectrum Analyzer - Swe	AC CORREC	SENSE: INT	ALIGN OFF	03:30:46 PM Aug 13, 2018	
Center Freq 5.01500			Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P P P P P P	Frequency
10 dB/div Ref 15.00 c	lBm		Mkr	5 2.367 22 GHz -46.41 dBm	Auto Tune
5.00 -5.00 -15.0	1				Center Freq 5.015000000 GHz
-25.0	5 4	and the state of t	2 a bite shunda i titer buiete il correcte		Start Freq 30.000000 MHz
-66.0 -75.0				التروية التكليلي مناتب من التروي المثلثين من التروي التي التروي التي التروي التي التروي التي التروي التي التروي التروي التروي	Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBV	V 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	× 2.475 89 GHz 6.063 59 GHz 9.435 20 GHz 3.102 50 GHz 2.367 22 GHz	4.36 dBm 45.29 dBm 45.90 dBm 46.28 dBm 46.41 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz
6 7 8 9 10 11				~	
MSG			STATUS		

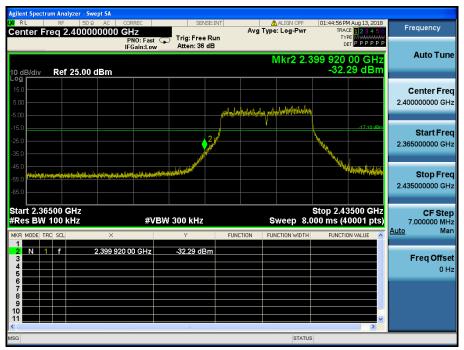


TM 5 & ANT 1 & 2412

Reference



Low Band-edge



Agilent Spectrum Analyzer - !					
	Ω 🚹 DC CORREC	SENSE:INT	ALIGN OF Avg Type: Log-Py		Frequency
Center Freq 15.00	4500 MHZ PNO: Fast IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type: Log-Pv	TYPE MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	
10 dB/div Ref 25.0				Mkr2 281.9 kHz -45.94 dBm	Auto Tune
16.0 5.00 -5.00					Center Freq 15.004500 MHz
-15.0 -25.0 -35.0					Start Fred 9.000 kHz
-45.0	Salarstadio de la constantia de la constant	ngtalitygeligityffyr dillinau fiffigityfgrydina	winghtyn thich an thick and a start	ningen gehelmen en en en gege pal her en melmerene	Stop Free 30.000000 MHz
Start 9 kHz #Res BW 100 kHz	#VE	W 300 kHz	Sweep	Stop 30.00 MHz 5.333 ms (40001 pts)	CF Step 2.999100 MH
MKR MODE TRC SCL	× 281.9 kHz	-45.94 dBm	FUNCTION FUNCTION WIE	TH FUNCTION VALUE	Auto Mar
2 N 1 f 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	281.9 kHz	-45.94 dBm			Freq Offse 0 Hi
6 7 8 9					
10 1111 11111111 1111 11				×	
ISG			ST	TUS LDC Coupled	

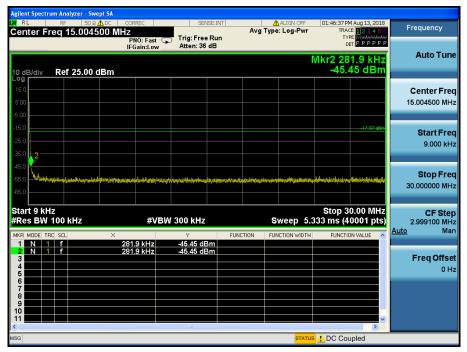
Agilent Spectrum Analyz (X) RL RF Center Freq 5.0	50 Ω AC CORREC	SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	01:45:12 PM Aug 13, 2018 TRACE 23456	Frequency
10 dB/div Ref 2	PNO: Fast IFGain:Low 5.00 dBm	Atten: 36 dB	Mkr	5 6.712 64 GHz -36.54 dBm	Auto Tune
Log 15.0 5.00	↓				Center Freq 5.015000000 GHz
-5.00 -15.0 -25.0 -35.0			<u>v v v</u>	-17.10.dBm	Start Freq 30.000000 MHz
-45.0			nthine a long data calan a su su dina nta data data data data data data dat		Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MH	Iz #VE	SW 3.0 MHz	Sweep 18	Stop 10.000 GHz 67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MMAR Mube FHC Str 1 N 1 f 2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f 6 7 7 7 8 7 7 7	2.418 31 GHz 6.969 87 GHz 7.387 11 GHz 5.582 29 GHz 6.712 64 GHz	10.98 dBm -35.78 dBm -35.95 dBm -36.43 dBm -36.54 dBm	INCTION FUNCTION WIDTH		Freq Offset 0 Hz
9 10 11 11		m	STATU		



TM 5 & ANT 1 & 2437

Reference





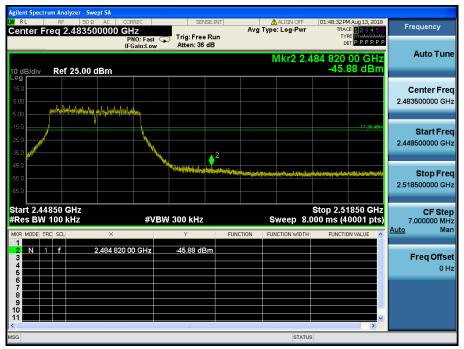
RL RF 50	wept SA Ω AC CORREC	SENSE:INT		ALIGN OFF	01:46:46 PM Aug 13, 2018	
Center Freq 5.0150	PNO: Fast	Trig: Free Run	Avg	Type: Log-Pwr	TRACE 123456 TYPE MWWWWWW	Frequency
	IFGain:Low	Atten: 36 dB			DETPPPP	Auto Tune
0 dB/div Ref 25.00	dBm			Mkr	5 5.868 93 GHz -36.61 dBm	
- og 15.0	^1					Center Free
5.00						5.015000000 GH
25.0					-17.57 dBm	Start Fre
35.0	$\langle \rangle^2 \rangle^3$	and the second secon	5 almillion (Alamadare		an manifest statement and a statement of the	30.000000 MH
45.0 55.0			and the second	and a second second second second	and a state of the second s	Stop Fre
65.0						10.00000000 GH
Start 30 MHz Res BW 1.0 MHz	#VB	W 3.0 MHz		Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste 997.000000 MH
IKR MODE TRC SCL	×	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
1 N 1 f 2 N 1 f	2.441 74 GHz 2.680 52 GHz	9.51 dBm -36.00 dBm				
3 N 1 f	3.153 10 GHz 7.825 79 GHz	-36.40 dBm -36.45 dBm				Freq Offs
5 N 1 f	5.868 93 GHz	-36.61 dBm			-	0 H
7 8						
9						
					×	
5G				STATUS		

Agilent Spect			ept SA										
<mark>,X</mark>	RF	50 ג	2 AC	CORREC			ISE:INT	Avg		ALIGNAUTO : Log-Pwr	TRA	M Aug 13, 2018 CE <mark>1 2 3 4 5</mark> 6	Frequency
				PNO: IFGain	Fast 🖵 :Low	Trig: Free Atten: 30					TY D		
										Mkr4 1	9.575 6	25 GHz	Auto Tun
10 dB/div	Re	f 20.00	dBm								-35.	47 dBm	
10.0													Center Fre
0.00													17.50000000 GH
-10.0												-17.57 dBm	
-20.0	=							. 2	4	. 2		_17.57 dBm	Start Fre
-30.0								<mark>}³</mark> ♦	4		and the second states	- Y	10.000000000 GH
-40.0													
-50.0													Stop Fre
-70.0													25.00000000 GH
Start 10.0 #Res BW					#VBW	/ 3.0 MHz			s	ween 40	Stop 25	.000 GHz 0001 pts)	CF 518
MKR MODE T			×		<i>«</i> • = 1 •	Y	EL	NCTION		ICTION WIDTH		DN VALUE	1.500000000 GH Auto Ma
1 N 2 N	f		24.30	02 125 G		-31.88 dE	3m				Tonoria		
3 N (18.69	18 500 G 99 625 G	Hz	-34.14 dE -34.62 dE	3m						Freq Offs
4 N ′	f		19.5	75 625 G	Hz	-35.47 dE	sm					=	0+
6 7													
8													
10												~	
<						Ш				1		>	
MSG													

TM 5 & ANT 1 & 2462

Reference





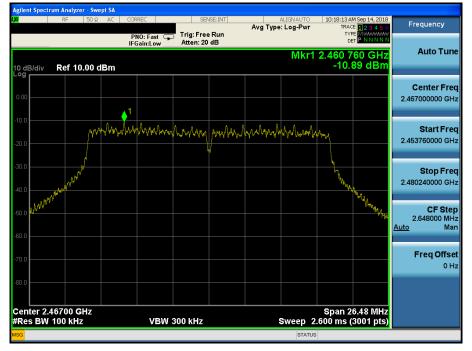
Center Freq 15.004500 MHz Trig: Freq Run IFGain:Low Avg Type: Log-Pwr Trig: Freq Uency Auto Tune 0 dB/div Ref 25.00 dBm -45.18 dBm -45.18 dBm -45.18 dBm Center Freq 15.004500 MHz Center Freq 15.004500 MHz Center Freq 15.004500 MHz Start Freq 9.000 kHz Start Freq 9.000 kHz Stop Stop 30.00 MHz Stop Stop 30.00 MHz Stop Stop 30.00 MHz 2.999100 MHz 10 1 1 1 2.99212 kHz 45.18 dBm -45.18 dBm -45	Agilent Spectre										
Center Pred 15.004500 Minz Trig: Free Run Atter: 36 dB Trig: Free Run Atter: 36 dB Auto Tune MKr2 293.2 KHz -45.18 dBm -45.18 dBm -45.18 dBm Center Freq 15.004500 Minz 10 dB/div Ref 25.00 dBm -45.18 dBm -45.18 dBm -45.18 dBm Center Freq 15.004500 Minz 10 dB/div Ref 25.00 dBm -45.18 dBm -45.18 dBm -45.18 dBm -45.18 dBm 250 -2 -45.19 kHz -45.18 dBm -45.18 dBm -45.18 dBm -45.18 dBm 250 -2 -45.18 dBm	(XIRL	RF	50 Ω 🧘 DC	CORREC	SENS	E:INT					Frequency
WKP 229.5.2 KHz 160 -45.18 dBm 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 160 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.60 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70 1758.70	Center Fr	eq 15.u	04500 N	PNO: Fast C			Avg type	Log-F wi	TYP	E MWWWWWW	
110 1	10 dB/div	Ref 25	00 dBm					ſ			Auto Tune
250 2 350 2 350 360 MHz Start 9 kHz Start 9 kHz Stop 7 req 30.00000 MHz 350 30.00000 MHz 2.999100 MHz 2.999100 MHz 2.999100 MHz 2.999100 MHz 2.999100 MHz 2.999100 MHz 400 Man Freq Offset 0 Hz 1 <td< td=""><td>15.0 5.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	15.0 5.00										
550	-25.0 -35.0 2 —									-17.36 dBm	
#Res BW 100 kHz #VBW 300 kHz Sweep 5.333 ms (40001 pts) MKR MODE TC SCL X Y FUNCTION FUNCTION VIDTH FU	-55.0	hritten สิมค์ก็เลของก่	efficien deservation	Accession of the second states	ning series and series	ha al an	y parlang ayahadi	anttel da ante da fasar	een Auswigth are	ient pada parta si acett	
MRR MODE THE SEL X Y Y FUNCTION VIDIA FUNCTION VIDI				#VB	W 300 kHz		s	weep 5.3	Stop 3 33 ms (4	0.00 MHz 0001 pts)	2.999100 MHz
3 3 5 5 5 5 5 6 7 6 6 6 6 6 6 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 <td>1 N 1</td> <td>f</td> <td>×</td> <td></td> <td>-45.18 dBn</td> <td>n</td> <td>ION FUN</td> <td>ICTION WIDTH</td> <td>FUNCTIO</td> <td>IN VALUE</td> <td><u>Auto</u> Man</td>	1 N 1	f	×		-45.18 dBn	n	ION FUN	ICTION WIDTH	FUNCTIO	IN VALUE	<u>Auto</u> Man
	3 4 5			293.2 KHz	-45.18 dBn	n					
	7 8 9										
	MSG							STATUS	DC Cou	upled	

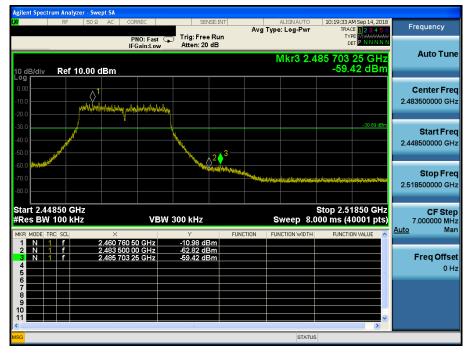
Agilent Spectrum Analyzer - Swe					
Center Freq 5.01500		SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	01:48:48 PM Aug 13, 2018 TRACE 2 3 4 5 6	Frequency
	PNO: Fast G IFGain:Low	Atten: 36 dB		TYPE MWWWWW DET PPPPP	A
10 dB/div Ref 25.00 d	IBm		Mkr	5 6.801 87 GHz -36.39 dBm	Auto Tune
15.00					Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0			5 Description of the second	17.36 dBm	Start Freq 30.000000 MHz
-45.0 4000 Million Million Annual Annua			n de différence plans historiel en antere en antere en antere de la consecutario de		Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VB\	V 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz
MKR MODE TRC SCL	× 2.455 45 GHz	ү 9.63 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
1 N 1 F 3 N 1 F 4 N 1 F 5 N 1 F	9.386 60 GHz 3.094 03 GHz 3.150 86 GHz 6.801 87 GHz	-35.67 dBm -36.25 dBm -36.35 dBm -36.39 dBm			Freq Offset 0 Hz
10				~	
MSG			STATUS	\$	



TM 5 & ANT 1 & 2467

Reference



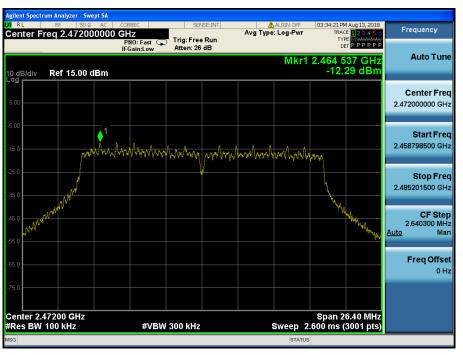


gilent Spectrum Analyzer - Swept S						
🖌 RF 50 Ω 🧘 D	C CORREC	SENSE:INT		ALIGNAUTO Type: Log-Pwr	10:19:58 AM Sep 14, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast ⊂ IFGain:Low	Trig: Free Run Atten: 20 dB			TYPE MWWWWWW DET PNNNNN	
	IFGain:Low	Atten: 20 db			Vkr1 281.9 kHz	Auto Tune
10 dB/div Ref 10.00 dB	m				-63.65 dBm	
						Center Fred
-10.0						15.004500 MH;
-20.0						13.004300 WH2
-30.0					-30.89 dBm	
-40.0						Start Fred
						9.000 kHz
-50.0						
-60.0						Stop Fred
-70.0	وارجع ورائيا الرجام والرجور والرجار الروادية	Annalise Indexed March 2014	والمرجلة المرجلة المحاجرة	والمعاجلية المحاجة والمحاجا والمحاجة	national the construction of the constant of	30.00000 MHz
-80.0						
Start 9 kHz					Stop 30.00 MHz	CF Step
#Res BW 100 kHz	VBW	300 kHz		Sweep 5.3	333 ms (40001 pts)	2.999100 MHz
MKR MODE TRC SCL	×	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto Man
1 N 1 f	281.9 kHz	-63.65 dBm				
3						Freq Offset
5						0 Hz
6						
8						
10						
					~	
ISG					DC Coupled	

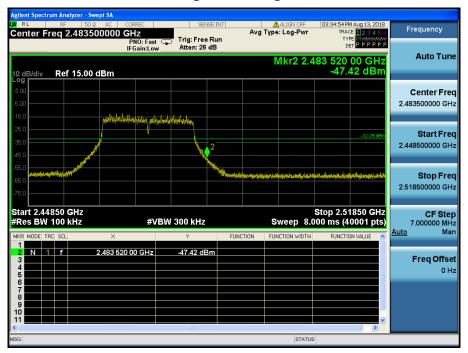
Agilent Spectrum Analyzer - Swej	pt SA				
L <mark>XI</mark> RF 50 Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	10:21:25 AM Sep 14, 2018 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 🕞 IFGain:Low	Trig: Free Run Atten: 20 dB	Avg Type: Log-Pwr	TYPE MWWWWW DET P N N N N N	
10 dB/div Ref 10.00 d	Bm		Mkr	6 3.621 19 GHz -55.80 dBm	Auto Tune
-10.0	¹				Center Freq 5.015000000 GHz
-30.0			\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow	-30.89 dBm	Start Freq 30.000000 MHz
-60.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	VBW	3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL	× 2.470 41 GHz	Y FUN -3.76 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	Auto Mari
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	7.533 67 GHz 5.570 08 GHz 6.290 91 GHz 3.146 37 GHz	-54.99 dBm -55.17 dBm -55.35 dBm -55.41 dBm			Freq Offset 0 Hz
7 8 9 10	3.621 19 GHz	-55.80 dBm			
11		m		×	
MSG			STATUS	•	



TM 5 & ANT 1 & 2472



Reference



RL RF	- Swept SA 50 Ω 🚹 DC 🔋 CORREC 📔	SENSE: IN	т 🛛 🖊	ALIGN OFF	03:35:01 PM	Aug 13, 2018	-
Center Freq 15.00	D4500 MHz PNO: Fast IFGain:Lov	Trig: Free Run		: Log-Pwr	TRACI TYP DE	123456 MWWWWWWW PPPPPP	Frequency
0 dB/div Ref 15.0				ſ	/lkr2 28 -54.2	1.9 kHz 4 dBm	Auto Tune
-og 5.00 5.00 15.0							Center Free 15.004500 MH
25.0 35.0 45.0 2						-32.29 dBm	Start Free 9.000 kH
55.0 65.0 75.0	elinetretteren ander en ettereter hat	untrespectants, the name of the terms	Pologiniau (htilgoudi othlogono)	entrative, i Aleigane	ldaran shakirina digilar	phinopole ^{ta} dano ⁿ	Stop Fre 30.000000 MH
start 9 kHz Res BW 100 kHz	#V	BW 300 kHz	s	weep 5.3			CF Ste 2.999100 MH
MKR MODE TRC SCL 1 N 1 F 2 N 1 F	× 281.9 kHz 281.9 kHz	-54.24 dBm -54.24 dBm	FUNCTION FUN	ICTION WIDTH	FUNCTIO	N VALUE	<u>Auto</u> Ma
3 4 5 6							Freq Offse 0 H
6 7 8 9							
						~	

Agilent Spectrum Analyzer - Swept SA	L. C.				
(XI RL RF 50Ω AC		SENSE:INT	ALIGN OFF	03:35:10 PM Aug 13, 2018 TRACE 1 2 3 4 5 6	Frequency
Center Freq 5.0150000	DU GHZ PNO: Fast IFGain:Low	Trig: Free Run Atten: 26 dB	Avg Type: Log-Pwr	TYPE MWWWWWW DET PPPPP	
10 dB/div Ref 15.00 dBm	1		Mkr	5 6.744 30 GHz -46.06 dBm	Auto Tune
5.00 -5.00 -15.0	≬ 1				Center Freq 5.015000000 GHz
-25.0			a management of the second stranger of the second	-32.29 dBm	Start Freq 30.000000 MHz
-65.0 -75.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz
	× 2.477 64 GHz	Y FUN -5.82 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f	5.826 31 GHz 9.410 03 GHz 5.774 96 GHz 5.744 30 GHz	-45.47 dBm -46.01 dBm -46.04 dBm -46.06 dBm			Freq Offset 0 Hz
6 7 8 9 10					
11				×	
MSG			STATUS		

