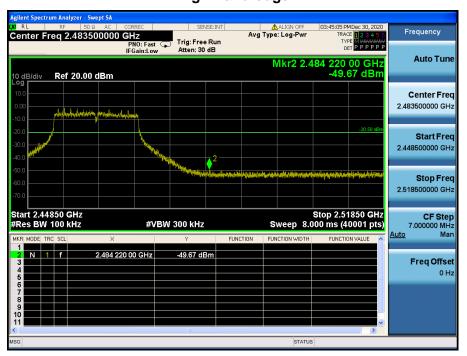
TM 2 & ANT 1 & 2462

lent Spectrum Analyzer - Swept Si 03:44:01 PMDec 30, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P P P P P Center Freq 2.462000000 GHz PN0: Fast C IFGain:Low Atten: 30 dB SENSE:INT ALIGN OFF Frequency Auto Tune Mkr1 2.463 285 GHz -0.58 dBm Ref 20.00 dBm 10 dB/div Center Freq 2.462000000 GHz **M** maham manager monthe Start Freq revoluge un manan 2.449725500 GHz Stop Freq 2.474274500 GHz CF Step 2.454900 MHz Man Auto Freq Offset 0 Hz Center 2.46200 GHz #Res BW 100 kHz Span 24.55 MHz Sweep 2.400 ms (3001 pts) #VBW 300 kHz

High Band-edge



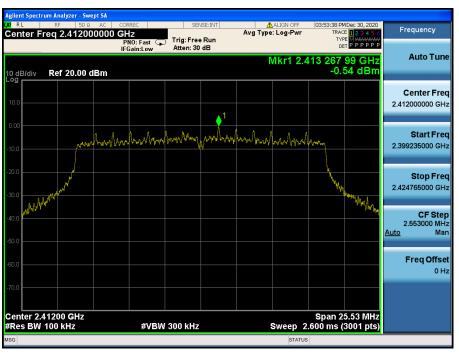
Reference

Center Fred 15.004300 MHZ PNO: Fast IFGain:Low Trig: Free Run Atten: 30 dB Mkr1 281.9 kHZ Auto 10 dB/div Ref 20.00 dBm -35.97 dBm -35.97 dBm -35.97 dBm -30.90 MHZ 10 dB/div Ref 20.00 dBm -30.95 dFm -30.95 dF	Agilent Spectrum Analyzer	- Swept SA 50 Ω ▲ DC CORREC	SENSE:INT	ALIGN OFF	03:45:12 PMDec 30, 2020	_
Nikri 281.9 kHz Ref 20.00 dBm -35.97 dBm Center 15.00450 Center 15.00450 100 -35.97 dBm 110 -35.97 dBm 120 -35.97 dBm 110 -35.97 dBm 110 -35.97 dBm 111 -35.97 dBm 111 <th35.97 dbm<="" th=""> 111</th35.97>	Center Freq 15.0	PNO: Fast		Avg Type: Log-Pwr	TRACE 123456 TYPE MWAWAWA DET P P P P P P	Frequency
100 Center	10 dB/div Ref 20.					Auto Tune
2000 1	10.0					Center Fre 15.004500 MH
BOD Non-which the second start of kHz WERN which the second start of kHz Stop 30.00000 Start of kHz #VBW 300 kHz Stop 30.00 MHz Stop 30.00 MHz Res BW 100 kHz #VBW 300 kHz Sweep 5.333 ms (400001 pts) Auto 1 N 1 1 281.9 kHz	30.0 1				-20.58 dBm	Start Fre 9.000 kH
KR MODE TAC Streep 5.333 ms (40001 pts) 2.99910 MKR MODE TAC Streep 5.333 ms (40001 pts) 2.99910 Auto 2.99910 Auto Auto Function Function </td <td>60.0</td> <td>herbishofun fan fan fan fan fan fan fan fan fan fa</td> <td>loidear ar in naisin dhuan nall si sa bardadh</td> <td>dhafangnan ar ar dan dan dan dan sarar sarar</td> <td>etidelipsiestyrens afgebrussendelingen ve</td> <td>Stop Fre 30.000000 MH</td>	60.0	herbishofun fan fan fan fan fan fan fan fan fan fa	loidear ar in naisin dhuan nall si sa bardadh	dhafangnan ar ar dan dan dan dan sarar sarar	etidelipsiestyrens afgebrussendelingen ve	Stop Fre 30.000000 MH
N 1 N 1 f 281.9 kHz 35.97 dBm 2 1 1 f 281.9 kHz 35.97 dBm Forction value <	Res BW 100 kHz	#VE	W 300 kHz	Sweep 5.3		CF Ste 2.999100 MH Auto Ma
	1 N 1 f 2 3 4 4			CTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offs 0 H
	7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9					
	J				>	

Agilent Spectrum Analyzer - Swept SA								
Center Er	RF 50 ຂ eq 5.01500		SENSE:		ALIGN OFF	03:45:21 PMDec 30, 2020 TRACE 1 2 3 4 5 (Frequency	
Contor In	04 0.0 1000	PNO: Fa: IFGain:Lo				DET P P P P P		
		IFGain:Lo	W Atten: 50 dB		Miler	5 3.140 14 GHz	Auto Tune	
10 dB/div Log	Ref 20.00	dBm				-36.80 dBm		
10.0							Center Freq	
0.00							5.015000000 GHz	
-10.0								
-20.0						-20.58 dBm		
-30.0		A A 5 3	3				Start Freq	
-40.0		L IY NY	de la constance	attentides in contrast locations in such	والمحافظ وال		30.000000 MHz	
diam'r a ferraid	and a set of the set o	ويرجلون المرجلين المرجلين	A second period of the second se			Contraction of the local division of the loc		
-60.0							Stop Freq	
-70.0							10.00000000 GHz	
-70.0								
Start 30 M						Stop 10.000 GHz		
#Res BW 1	1.0 MHz	#	VBW 3.0 MHz		Sweep 18	.67 ms (40001 pts)		
MKR MODE TRO	SCL	×	Y State		FUNCTION WIDTH	FUNCTION VALUE	Auto Man	
1 N 1 2 N 1	f	2.459 94 GHz 3.096 77 GHz	-35.48 dBm					
3 N 1 4 N 1	f	3.356 49 GHz 2.620 46 GHz	-36.77 dBm -36.78 dBm				Freq Offset	
5 N 1	f	3.140 14 GHz				=	0 Hz	
6 7								
8								
10								
11 <u> </u>			III			×		
MSG					STATUS			

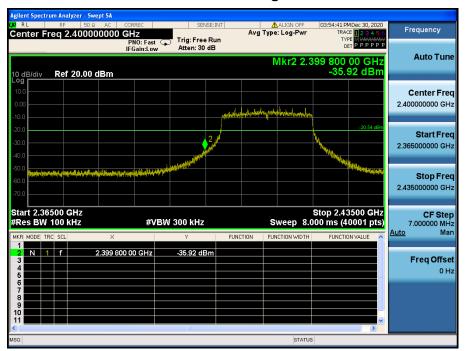


TM 3 & ANT 1 & 2412



Reference

Low Band-edge



Agilent Spectrum Analyzer - Swe					
x RL RF 50 Ω Center Freq 15.0045		SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	03:54:49 PMDec 30, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWW	Frequency
10 dB/div Ref 20.00 c	PNO: Fast (IFGain:Low	Atten: 30 dB		DET PPPPPP Mkr1 281.9 kHz -35.03 dBm	Auto Tune
					Center Fred 15.004500 MH:
-20.0 -30.0 -40.0				-20.54 dBm	Start Free 9.000 kH:
-50.0	ärten Henslengen yn Langer gefanne felsen gefan ster	ginghanslegislather ingerial jangin	lastallum taripatusi men kantuskat yinchen finandis	Multiplemetere af turktiftenet af	Stop Free 30.000000 MH
Start 9 kHz ¢Res BW 100 kHz	#VB	W 300 kHz	Sweep 5.	Stop 30.00 MHz 333 ms (40001 pts)	CF Ste 2.999100 MH
MKR MODE TRC SCL	× 281.9 kHz	ץ -35.03 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 3 4 5					Freq Offse 0 H
6 7 8 9					
9 10 11 11				×	
ISG			STATU	s 🚹 DC Coupled	

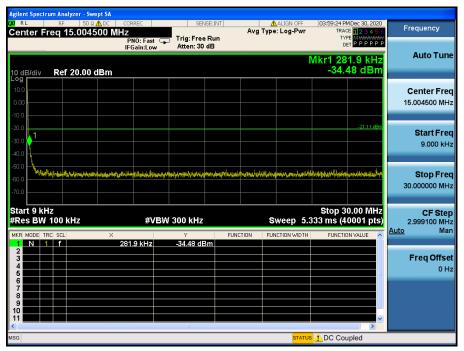
Agilent Spectrum Analyzer -						
Center Freq 5.015	000000 GHz	SENSE:INT	Avg Typ	ALIGN OFF e: Log-Pwr	03:54:57 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast (IFGain:Low	Trig: Free Run Atten: 30 dB				
	IF Gall.cow	TREE OF UB		Mkr	5 3.152 85 GHz	Auto Tune
10 dB/div Ref 20.0	0 dBm			IVINI	-37.39 dBm	
Log 10.0						Center Freq
0.00	¥					5.015000000 GHz
-10.0						0.01000000000112
-20.0					-20.54 dBm	
-30.0	A 32 A 5					Start Freq
-40.0		L. Un doil	an a characterite constants	و ب الم الم الم		30.000000 MHz
-50.0 entropy and the antion of the	and the second data and the second data and the	And the plantic strategies and the plant	1	Sector and She Lat. of Strike Street	No. of Concession, Name of Street, or other	
-60.0						Stop Freq
-70.0						10.00000000 GHz
-70.0						
Start 30 MHz					Stop 10.000 GHz	CF Step
#Res BW 1.0 MHz	#VB	W 3.0 MHz	8	weep 18	.67 ms (40001 pts)	997.000000 MHz
MKR MODE TRC SCL	Х	Y	FUNCTION FU	NCTION WIDTH	FUNCTION VALUE	Auto Man
1 N 1 f 2 N 1 f	2.409 84 GHz 2.699 47 GHz	5.41 dBm -37.05 dBm				
3 N 1 f	2.534 71 GHz 3.223 39 GHz	-37.26 dBm -37.31 dBm				Freq Offset
5 N 1 f	3.152 85 GHz	-37.39 dBm				0 Hz
6						
8						
10						
11					~	
MSG				STATUS		



TM 3 & ANT 1 & 2437



Reference



Agilent Spectrum Ana XI RL RF Center Freg 5	llyzer - Swept SA 50 Ω AC CORREC 5.015000000 GHz	SENSE:INT	ALIGN OFF	TRACE 123456	Frequency
10 dB/div Ref	PNO: Fast IFGain:Low 20.00 dBm	Trig: Free Run Atten: 30 dB	M	түре Милини рет Р Р Р Р Р Р kr5 2.992 83 GHz -37.45 dBm	Auto Tune
10.0 0.00 -10.0	1				Center Fred 5.015000000 GHz
-20.0	and a second		100-100() and balance in the second sec	-21.11.0Bm	Start Free 30.000000 MHz
-50.0 -50.0					Stop Fred 10.000000000 GH;
Start 30 MHz #Res BW 1.0 M	Х	3W 3.0 MHz Y	Sweep	Stop 10.000 GHz 18.67 ms (40001 pts) TH FUNCTION VALUE	CF Stej 997.000000 MH <u>Auto</u> Ma
1 N 1 f 2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f 6	2.437 01 GHz 2.621 95 GHz 3.155 84 GHz 2.760 28 GHz 2.992 83 GHz	4.74 dBm -36.36 dBm -37.31 dBm -37.38 dBm -37.45 dBm			Freq Offse 0 H
7 8 9 10 11				×	
ISG			STA	TUS	

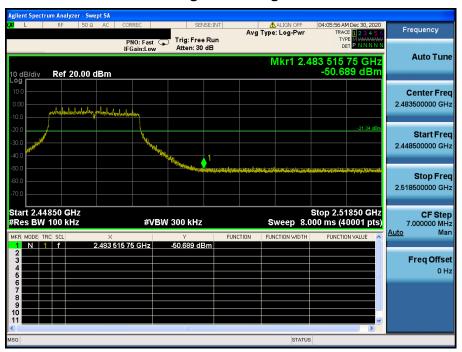


TM 3 & ANT 1 & 2462

ilent Spectrum Analyzer - Swept SA Zenter Freq 2.462000000 GHz PN0: Fast C IFGain:Low Atten: 30 dB ALIGN OFF 04:01:25 AM De TRACE Frequency TYPE MUMUUM DET P N N N N Auto Tune Mkr1 2.463 275 96 GHz -1.341 dBm Ref 20.00 dBm 10 dB/div Center Freq 2.462000000 GHz Muhanhanhan Start Freq mbruh mm man 2.448980000 GHz Stop Freq 2.475020000 GHz , tet Al MM CF Step 2.604000 MHz Man Auto Freq Offset 0 Hz Center 2.46200 GHz #Res BW 100 kHz Span 26.04 MHz Sweep 2.600 ms (3001 pts) #VBW 300 kHz

Reference

High Band-edge



L RF	er-SweptSA 50 Ω <u>A</u> DC 0	ORREC	SENSE:I	NT	ALIGN OFF	04:06:58 AM Dec 30, 2020	
		PNO: Fast 🕞 FGain:Low	Trig: Free Ru Atten: 30 dB		Type: Log-Pwr	TRACE 123456 TYPE MWWWWW DET PINNNN	Frequency
0 dB/div Ref 2	0.00 dBm	FGain:Low	Atten: 30 dB			Mkr1 287.2 kHz -32.65 dBm	Auto Tune
.0g 10.0 0.00 10.0							Center Fred 15.004500 MH;
20.0						-21.34 dBm	Start Fred 9.000 kH:
50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0	utta jakota taina taina taina taina	ek ye karan Mangi shari	y beta a por a sector de la posta de la Internet de la posta de la p	aliying din yang yang yang din san tang	rhahaltikaringgabianinikarit	g juinen yn i'r ynde fyd yn en yn ddinyr	Stop Free 30.000000 MH
Start 9 kHz Res BW 100 kH	z	#VBV	V 300 kHz		Sweep 5.3	Stop 30.00 MHz 333 ms (40001 pts)	CF Stej 2.999100 MH Auto Ma
MKR MODE TRC SCL	× 28	7.2 kHz	∨ -32.65 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto
2 3 4 5							Freq Offse 0 H
6 7 8							
9							
9 10						~	



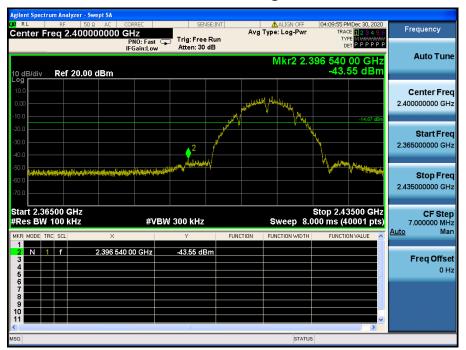


TM 1 & ANT 2 & 2412



Reference

Low Band-edge



gilent Spectrum Analyzer - Swe						
RL RF 50 Ω. Center Freq 15.0045		SENSE:INT		ALIGN OFF	04:10:03 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 30 dB			DET P P P P P	
10 dB/div Ref 20.00 d				[//kr1 281.9 kHz -34.99 dBm	Auto Tune
						Center Fre 15.004500 MH
20.0 30.0 40.0					-14.87 dBm	Start Fre 9.000 kH
50.0 4 60.0	engrapeting)จากร่างๆปการไป	randlinenn addinasystemperiten networ	endyterityddytugondytiaed	Riddeni den de	jkingtura proportion of the date of the state of the second state of the second state of the second state of the	Stop Fre 30.000000 M⊦
tart 9 kHz Res BW 100 kHz	#VE	W 300 kHz	s	weep 5.3	Stop 30.00 MHz 33 ms (40001 pts)	2.999100 M
IKR MODE TRC SCL	× 281.9 kHz	⊻ -34.99 dBm	FUNCTION FUI	NCTION WIDTH	FUNCTION VALUE	Auto Ma
						Freq Offs 0 F
6						
10					~	
11		110			>	

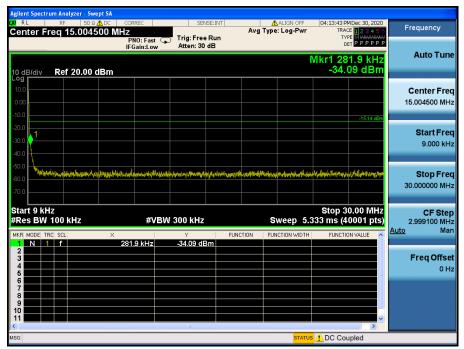
Agilent Spectrum Analyzer - Swept SA					
M RL RF 50 Ω AC CORR Center Freq 5.015000000 GH			ALIGN OFF	04:10:11 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
PN	0: Fast 🕞 Trig: Free Ru ain:Low Atten: 30 dB	in – – – –	-	TYPE MWWWWW DET PPPPP	
IFG	ain:Low Atten: 50 dD		MiceS	5.663 30 GHz	Auto Tune
10 dB/div Ref 20.00 dBm			WIKIO	-37.14 dBm	
10.0					Center Freq
0.00					5.015000000 GHz
-10.0				-14.87 dBm	
-20.0					Start Freq
-30.0	×2 ³	⁵			30.000000 MHz
-40.0	The second s	artika ¹ aakoo oo ahaa oo ahaa	1, 1997 - J. 199	nining in the second	
-50.0	Constitution of the Consti			and the second difference of the second differ	
-60.0					Stop Freq
-70.0					10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz	<i>u</i>		Stop 10.000 GHz 7 ms (40001 pts)	CF Step 997.000000 MHz
			-		Auto Man
MKR MODE TRC SCL X 1 N 1 f 2.412.08	GHz 9.01 dBm		ICTION WIDTH	FUNCTION VALUE	
2 N 1 f 3.133 91 3 N 1 f 3.285 45	GHz -36.36 dBm				Freq Offset
4 N 1 f 5.644 11	GHz -36.86 dBm				0 Hz
5 N 1 f 5.663 30	GHz -37.14 dBm				0112
7					
8					
10					
<				>	
MSG			STATUS		



TM 1 & ANT 2 & 2437

Reference





lgilent Spectrum Analyzer - S					
RL RF 50 Center Freq 5.0150		SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	04:13:52 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
Senter Fred 5.0150	PNO: Fast C IFGain:Low	Trig: Free Run Atten: 30 dB	Avg Type. Log-t wi	TYPE MWWWWW DET P P P P P P	
10 dB/div Ref 20.00) dBm		Mkr	5 3.144 38 GHz -37.04 dBm	Auto Tun
10.0 .000				-15.14 dBm	Center Fre 5.015000000 GH
20.0 30.0 40.0	and the second sec				Start Fre 30.000000 MH
-50.0					Stop Fre 10.000000000 G⊦
Start 30 MHz #Res BW 1.0 MHz	#VBI	№ 3.0 MHz	Sweep 18	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste 997.000000 M⊦
MKR MODE TRC SCL	× 2.437 01 GHz	ү ғ 8.28 dBm	JNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 N 1 f 3 N 1 f 4 N 1 f 5 N 1 f	3.172 54 GHz 3.123 19 GHz 3.217 41 GHz 3.144 38 GHz	-36.86 dBm -36.95 dBm -37.01 dBm -37.04 dBm		=	Freq Offse 0 H
7 8 9 10					
11				×	
SG			STATUS		

Agilent Spectrum									
LXI RL			RREC	SENSE		ALIGN OFF		1Dec 30, 2020 E 1 2 3 4 5 6	Frequency
Center Fre	q 17.500	F	SHZ PNO: Fast G Gain:Low	Trig: Free R Atten: 30 di	un	g Type: Log-Pwr	TYF	E MWAWAAA T P P P P P P	
	Ref 20.00	dDae				Mkr3 2	23.246 1	25 GHz 62 dBm	Auto Tune
10 dB/div Log	Rei 20.00	авт					200	72 GIDIN	
10.0									Center Freq
0.00									17.50000000 GHz
-10.0								-15.14 dBm	
-20.0									
-30.0							l 🕺		Start Freq
	المرامين معرور والم	واللغ والأحمر والمتعاد			دوله مربعا الأسور والأثناء ويورد الم مالا مرواناً أن وسائلاً المربع مسالاً		r den eg negen i releger Disk av delanistisk i statisk	and the settlers	10.00000000 GHz
-40.0 Manual Man	and the state of the second	and a second second second							
-50.0									Stop Freq
-60.0									25.000000000 GHz
-70.0									23.000000000 8112
Start 10.000 #Res BW 1.			#VBV	V 3.0 MHz		Sweep 40	Stop 25. .00 ms (4	.000 GHz 0001 pts)	CF Step 1.50000000 GHz
MKR MODE TRC	SCL	×		Y	FUNCTION	FUNCTION WIDTH	FUNCTIO	N VALUE	<u>Auto</u> Man
1 N 1 2 N 1	f	23.917 75		-26.64 dBm -26.65 dBm					
3 N 1	f	23.246 12	25 GHz	-27.62 dBm					Freq Offset
4 5									0 Hz
6								=	
7 8									
9									
10								~	
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MSG						STATUS	5		

TM 1 & ANT 2 & 2462

Reference



High Band-edge



Agilent Spectrum Analyzer - Swe					
X RL RF 50 Ω, Center Freq 15.0045	CORREC CORREC CORREC PNO: Fast	SENSE:INT	ALIGN OFF	04:17:03 PMDec 30, 2020 TRACE 123456 TYPE MWWWW	Frequency
10 dB/div Ref 20.00 c	IFGain:Low	Atten: 30 dB		^{рет} РРРРРР Mkr1 288.7 kHz -34.21 dBm	Auto Tune
10.0 0.00					Center Free 15.004500 MH
-20.0				-14.77 dBm	Start Free 9.000 kH:
-50.0	nfanninfarsonaattiistaa Paylii fahiisaanna	sathirelainsinsiksekseksikinsik	len feðanhað trí úðstafa fra Ísrafindina í varinnar s	ntalianna) comogeliant consistenti anno anno anno anno anno anno anno ann	Stop Fre 30.000000 MH
Start 9 kHz ¢Res BW 100 kHz	#VE	W 300 kHz	Sweep 5.3	Stop 30.00 MHz 333 ms (40001 pts)	CF Ste 2.999100 MH
MKR MODE TRC SCL	× 288.7 kHz	Y F -34.21 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 3 4 5					Freq Offse 0 H
6 6 7					
9 10 11				×	

Agilent Spectrum Analyzer - Swept SA					
M RL RF 50 Ω AC CORREC Center Freq 5.015000000 GHz	SENSE:II		ALIGN OFF	04:17:12 PMDec 30, 2020 TRACE 1 2 3 4 5	Frequency
	Fast 🕞 Trig: Free Ru	n		DET PPPP	
ir Gai	LEOW TREEL OF WE		Mke	5 6.250 28 GHz	Auto Tune
10 dB/div Ref 20.00 dBm			IVINI	-37.29 dBm	
Log 11.0					Center Freq
0.00					5.015000000 GHz
-10.0					0.01000000000112
-20.0				-14.77 dBm	
-30.0	2	5			Start Freq 30.00000 MHz
-40.0	The second	An and a second state of the second state of t	ور و و و و و و و و و و	and the state of the last of the second state of the second state of the second state of the second state of the	30.000000 MHz
-50.0 House and a state of the	and the second states are been as the second states of	and the survey of matching of the strength of the survey o	a de la contra de la		
-60.0					Stop Freq
-70.0					10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz	S	weep 18.	Stop 10.000 GHz 67 ms (40001 pts	
MKR MODE TRC SCL X	Y		ICTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
1 N 1 f 2.461 18 G 2 N 1 f 3.166 31 G					
3 N 1 f 2.692 24 G	Hz -36.94 dBm				Freq Offset
4 N 1 f 3.001 31 G 5 N 1 f 6.250 28 G					0 Hz
6					
8					
10					
11				×	
MSG			STATUS		



TM 2 & ANT 2 & 2412



Reference

Low Band-edge

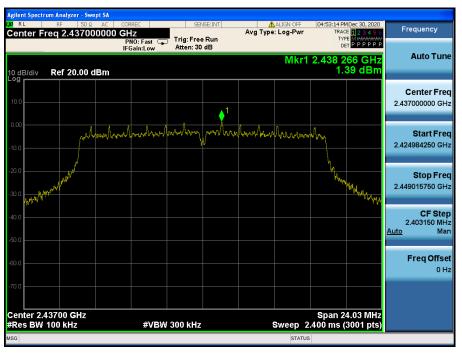


Agilent Spectrum Analyzer - Swept SA						
RL RF 50 Ω ▲ DC Center Freq 15.004500 M	CORREC H7	SENSE:INT	Avg	ALIGN OFF Type: Log-Pwr	04:49:19 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 30 dB			TYPE MWWWWW DET PPPPP	
10 dB/div Ref 20.00 dBm				1	Vkr1 281.9 kHz -36.27 dBm	
10.0 0.00						Center Fre 15.004500 MH
-10.0					-18.03 dBm	
-30.0 1						Start Free 9.000 kH
50.0	ytechentarywetristyn	New Politic States and States and States	untriden of Systems of St	alfenneskinaarriikkaarri	yahtimetlerentityvelmethtyinni)	Stop Fre 30.000000 MH
Start 9 kHz Res BW 100 kHz	#VBW	300 kHz		Sweep 5.3	Stop 30.00 MHz 333 ms (40001 pts)	2.999100 MH
IKR MODE TRC SCL X	281.9 kHz	ץ -36.27 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	Auto Ma
2 3 4 5						Freq Offse 0 H
6 7 8 9						
					×	
SG				STATUS	DC Coupled	

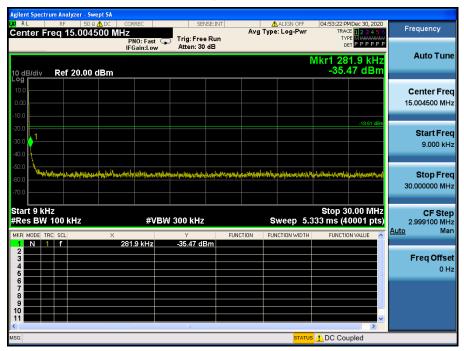
Agilent Spectrum Ana					
	50 Ω AC CORREC 5.015000000 GHz	SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	04:49:28 PMDec 30, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 30 dB		TYPE MWWWWW DET P P P P P P	
10 dB/div Ref	20.00 dBm		Mkr	5 2.638 90 GHz -37.40 dBm	Auto Tune
Log 10.0 0.00					Center Freq 5.015000000 GHz
-20.0 -30.0 -40.0	2 ▲ 5 - 3 - 3 - 5 - - - - - - - - - - - - -			-18.03 oBm	Start Freq 30.000000 MHz
-50.0 -60.0 -70.0					Stop Freq 10.00000000 GHz
Start 30 MHz #Res BW 1.0 N	/Hz #VE	3W 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 6 N 1 F 6 N 1 F 9	× 2.412 83 GHz 2.398 62 GHz 3.141 89 GHz 3.595 02 GHz 2.638 90 GHz	Y 793 dBm -25.54 dBm -38.74 dBm -37.04 dBm -37.40 dBm	INCTION FUNCTION VIOTH	FUNCTION VALUE	Freq Offset 0 Hz
MSG			STATUS		



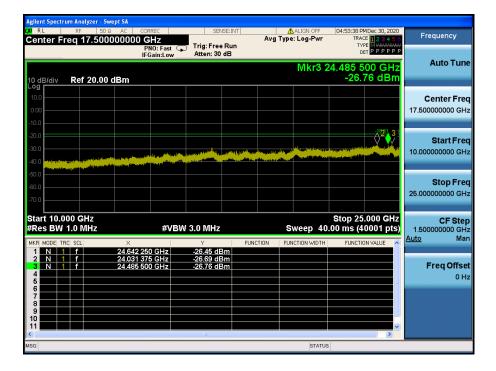
TM 2 & ANT 2 & 2437



Reference



	wept SA Ω AC CORREC	SENSE:INT	ALIGN OFF	04:53:30 PMDec 30, 2020	
Center Freq 5.0150	000000 GHz		Avg Type: Log-Pwr	TRACE 123456 TYPE MWAWAWA	Frequency
	PNO: Fast C IFGain:Low	Atten: 30 dB		DET PPPPP	
			Mkr	5 3.222 39 GHz	Auto Tune
10 dB/div Ref 20.00				-37.40 dBm	
10.0	\Q1				Center Fre
0.00					5.015000000 GH
10.0					
-20.0				-18.61 dBm	Otout Fra
-30.0					Start Fre 30.000000 MH
-40.0		the sector stress and sector densities	والمتحد والمتحد والمتحد والمحافظ والمحتر والمحافظ والمحاف	and a standard standard and stand	30.000000 MIH
-50.0 sum advisition of a statistical sector	and the state of t	ala la se desenanti fi desta de la se	and a little state of the second s	an and a state of the second state of the seco	
-60.0					Stop Fre
-70.0					10.000000000 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
MKR MODE TRC SCL	X	Y	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
1 N 1 f	2.438 75 GHz 3.171 05 GHz	8.28 dBm -36.69 dBm			
3 N 1 f	3.148 62 GHz	-36.71 dBm			Freq Offse
4 N 1 f 5 N 1 f	3.574 58 GHz 3.222 39 GHz	-36.99 dBm -37.40 dBm		=	0 F
6					
8					
9					
11		111		×	
			STATUS		

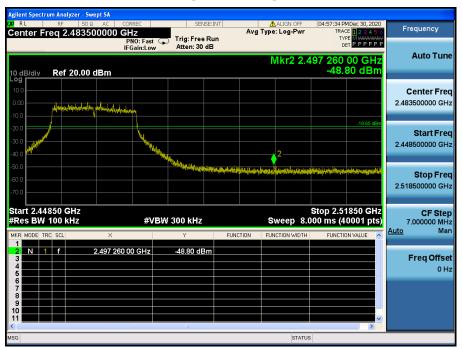


TM 2 & ANT 2 & 2462

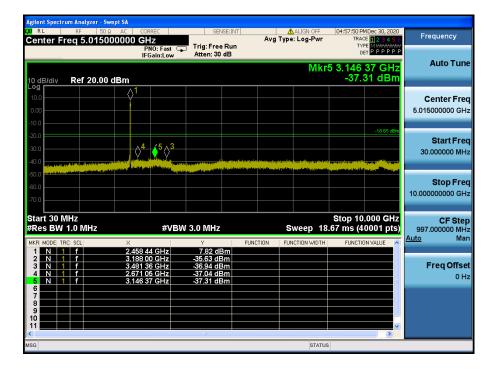


Reference

High Band-edge



Agilent Spectrum Analyzer - Swept SA					
x RL RF 50 Ω ▲ DC Center Freq 15.004500 I	WHZ PNO: Fast	Trig: Free Run	Avg Type: Log-Pwr	04:57:42 PM Dec 30, 2020 TRACE 2 3 4 5 6 TYPE M WANNAME DET P P P P P P	Frequency
10 dB/div Ref 20.00 dBm	IFGain:Low	Atten: 30 dB		Mkr1 281.9 kHz -33.25 dBm	Auto Tune
					Center Free 15.004500 MH
20.0				-18.65 dBm	Start Free 9.000 kH
50.0 Vinteijan junion (11/1) 60.0 70.0	her her freezen an f	Latertängnycholdegangattyte, fan Dy	bd Ayntha Tairan Hillion a tair hab na mar an tair tair t	hithailthputerangthaugtholaastuskeleyt	Stop Fre 30.000000 MH
itart 9 kHz Res BW 100 kHz	#VBW	300 kHz	Sweep 5.3	Stop 30.00 MHz 333 ms (40001 pts)	CF Ste 2.999100 M⊦ Auto Ma
MKR MODE TRC SCL X	281.9 kHz	ץ -33.25 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Ma
2 3 4 5				=	Freq Offs 0 ⊦
6 7 8 9 10					
				×	
SG				DC Coupled	





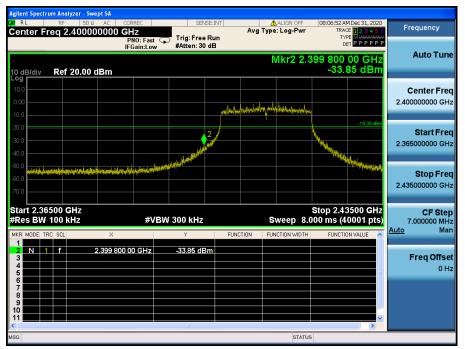
	2 AC CORREC	SENSE:INT	\Lambda ALIGN OFF	04:57:58 PMDec 30, 2020	Frequency
enter Freq 17.500	000000 GHz PNO: Fast IFGain:Low	➡ Trig: Free Run Atten: 30 dB	Avg Type: Log-Pwr	TRACE 123456 TYPE MWAWAWA DET PPPPP	
0 dB/div Ref 20.00	dBm		Mkr3 2	23.827 000 GHz -27.27 dBm	Auto Tun
.0g 10.0 0.00 10.0					Center Fre 17.500000000 GH
20.0 30.0 40.0			Manager (Magazeraport) Program	3 IS dBm	Start Fre 10.000000000 G⊦
50.0 70.0					Stop Fre 25.00000000 GF
				Stop 25.000 GHz	
	#VB	W 3.0 MHz	Sweep 40	.00 ms (40001 pts)	1.50000000 GH
tart 10.000 GHz Res BW 1.0 MHz KR MODE TRC SCL 1 N 1 f	× 23.984 875 GHz	۲ -25.83 dBm	Sweep 40	.00 ms (40001 pts)	CF Ste 1.500000000 GH <u>Auto</u> Ma
Res BW 1.0 MHz	X	Y		.00 ms (40001 pts)	1.50000000 GH
Res BW 1.0 MHz KR MODE TRC SCL 1 N 1 f 2 N 1 f 3 N 1 f 4	× 23.984 875 GHz 23.956 750 GHz	-25.83 dBm -26.64 dBm		.00 ms (40001 pts)	1.500000000 GF <u>Auto</u> Ma Freq Offs

TM 3 & ANT 2 & 2412

Reference



Low Band-edge



	vept SA					
RL RF 50 S Center Freq 15.004	2 ADC CORREC	SENSE:IN	Avg Type: L	og-Pwr Tf	AM Dec 31, 2020 RACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB			DET PPPPP	
0 dB/div Ref 20.00	dBm				81.9 kHz 3.27 dBm	Auto Tun
og 10.0 0.00						Center Fre 15.004500 MH
20.0 1 30.0 40.0					-19.38 dBm	Start Fre 9.000 k⊦
50.0 ******************************** 50.0 ****************************** 70.0	radulety returned and a film fighted	where the second se	entitecturedanityi.cn/signalaisissadais	utolynalysteryddiaegolaegolaegol	a saliha ang tilaya palas	Stop Fre 30.000000 Mi
tart 9 kHz Res BW 100 kHz	#VI	3W 300 kHz	Swe	Stop eep 5.333 ms		CF Ste 2.999100 MI Auto M
KR MODE TRC SCL	× 281.9 kHz	۲ -33.27 dBm	FUNCTION FUNCT	ION WIDTH FUNC	TION VALUE	<u>Auto</u> M
2						Freq Offs
4					_	· · · · · · · · · · · · · · · · · · ·
5 4 5 6 7 8 9					=	
4 5 6 7 8						0 F

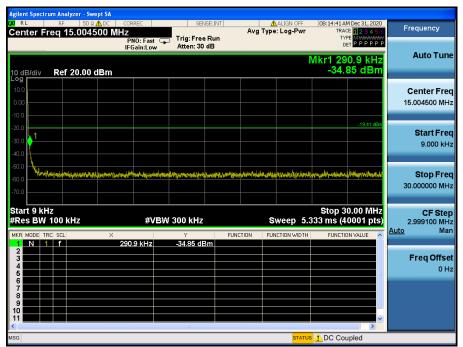
Agilent Spectrum Analyzer - Swept						
RL RF 50 Ω Center Freq 5.015000		SENSE:INT	Avg T	ALIGN OFF	08:07:08 AM Dec 31, 2020 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast G	Trig: Free Run #Atten: 30 dB			DET PPPPP	
	II GUIILEON			Mkr	5 3.097 27 GHz	Auto Tune
10 dB/div Ref 20.00 dE	3m				-37.24 dBm	
Log						Center Freq
0.00						5.015000000 GHz
-10.0	2					
-20.0					-19.38 dBm	
-30.0	▲5}		<mark>4</mark>			Start Freq
-40.0	and the state of the			litter og statister og stater		30.000000 MHz
-50 D phone in the birth of the		and the second se	Contraction of the local data		the state of the line of the second state of t	
-60.0						Stop Freq
-70.0						10.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#\/B\	V 3.0 MHz		Ourson 19	Stop 10.000 GHz 67 ms (40001 pts)	CF Step
						997.000000 MHz Auto Man
MKR MODE TRC SCL	× 2.409 09 GHz	∀ 6.59 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	
2 N 1 f	2.400 12 GHz 3.199 96 GHz	-18.74 dBm -36.41 dBm				Freq Offset
4 N 1 f	5.791 16 GHz	-37.14 dBm				0 Hz
<mark>5 N 1 f</mark>	3.097 27 GHz	-37.24 dBm			=	
7 8						
9						
10					×	
<					>	
MSG				STATUS		

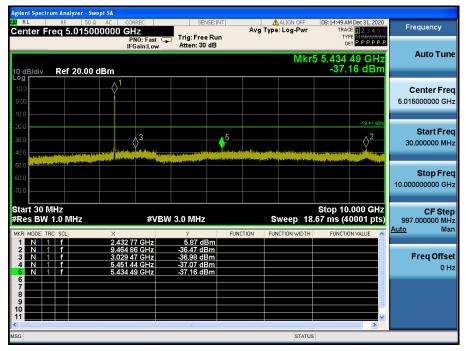


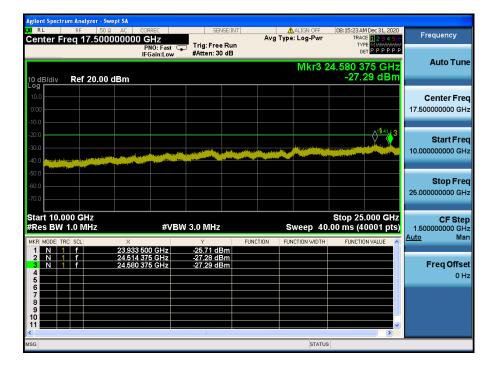
TM 3 & ANT 2 & 2437

lent Spectrum Analyzer - Swept SA Allentary (M) RL RF SOR AC LUMAN Center Freq 2.437000000 GHz PN0: Fast IFGain:Low Atten: 30 dB 08:14:32 AM Dec 31, 2020 TRACE 1 2 3 4 5 6 TYPE M SENSE:INT ALIGN OFF Frequency Auto Tune Mkr1 2.438 280 GHz 0.59 dBm Ref 20.00 dBm 10 dB/div **Center Freq** 2.437000000 GHz under have been worken montantant Start Freq MAN MANY where a 2.424285250 GHz Stop Freq 2.449714750 GHz WW CF Step 2.542950 MHz Man Auto Freq Offset 0 Hz Center 2.43700 GHz #Res BW 100 kHz Span 25.43 MHz Sweep 2.600 ms (3001 pts) #VBW 300 kHz

Reference







TM 3 & ANT 2 & 2462



Reference

High Band-edge



Agilent Spectrum Analyzer - Swej M RL RF 50 Ω Δ Center Freq 15.0045	DC CORREC	SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	08:19:14 AM Dec 31, 2020 TRACE 1 2 3 4 5 6 TYPE MWAAAAAAA DET P P P P P P	Frequency
10 dB/div Ref 20.00 d	IFGain:Low	Atten: 30 dB		Mkr1 281.9 kHz -36.22 dBm	Auto Tune
10.00					Center Fred 15.004500 MHz
-10.0 -20.0 -30.0 -40.0				-19.52 dBm	Start Fred 9.000 kHz
-50.0 -60.0 -70.0	^ม สระว่าใ _{นประวัติ (1) กระบบริษัทที่หนู}	haardhalardaaddhir yaaa Dalaagayya oha	medaninainen metajahiku den den er	ingretten begrennen der Statiske Betratenen in der	Stop Fred 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 MH Auto Mar
1 N 1 f 2 3 3 4 5 9	281.9 kHz	-36.22 dBm			Freq Offse 0 Hi
6 7 8 9 10 11					
K MSG			STATU	S DC Coupled	

	m Analyzer - Swept SA						
Center Er	RF 50 Q AC eq 5.015000000		SENSE:INT		ALIGN OFF e: Log-Pwr	08:19:22 AM Dec 31, 202 TRACE 1 2 3 4 5	
Contor III	eq 3.01300000	PNO: Fast 🗔	Trig: Free Run Atten: 30 dB			TYPE M WAAAAAA DET P P P P	***
		IFGain:Low	Atten. 30 dB		Milen	5 0 072 44 CU	Auto Tune
10 dB/div Log	Ref 20.00 dBm				IVIKI	5 8.873 14 GH -37.30 dBr	
10.0		1					Center Freq
0.00	Ĭ						5.015000000 GHz
-10.0		2					
-20.0		<u>, </u>				-19.52 dE	
-30.0		A3				5	Start Freq 30.000000 MHz
-40.0	time in the second s	W.	No. of Concession, Name	and the second second second	والمحمد المراجع المراجع الم		30.00000 WH2
-50.0		a hand a start which a second	interesting of the second second		وي المراجع ومعالمة التي وقد ال	and the state of the	-
-60.0							Stop Freq
-70.0							10.00000000 GHz
Start 30 M #Res BW 1		#)(B)A	3.0 MHz		woon 19	Stop 10.000 GH .67 ms (40001 pt	
		#0.599			· ·	· · ·	997.000000 MHz Auto Man
MKR MODE TRO		457 70 GHz	۲ 6.24 dBm	FUNCTION FU	NCTION WIDTH	FUNCTION VALUE	
2 N 1		474 64 GHz 168 81 GHz	-20.04 dBm -36.39 dBm				Freq Offset
4 N 1	f 3.0	019 01 GHz	-36.70 dBm				0 Hz
5 N 1 6	<u>f 8.</u>	373 14 GHz	-37.30 dBm				3
7 8							
9							
10							~
<						>	
MSG					STATUS		





8.5 Radiated spurious emissions

Test Requirements and limit, §15.247(d), §15.205, §15.209

In any 100 kHz bandwidth outside the operating frequency band, the radio frequency power that is produced by the radiator shall be at least 20 dB below that in the 100 KHz bandwidth within the band. In case the emission fall within the restricted band specified on 15.205(a) and (b), then the 15.209(a) limit in the table below has to be followed.

- FCC Part 15.209(a) and (b)

Frequency (MHz)	Limit (uV/m)	Measurement Distance (meter)
0.009 - 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 – 30.0	30	30
30 ~ 88	100 **	3
88 ~ 216	150 **	3
216 ~ 960	200 **	3
Above 960	500	3

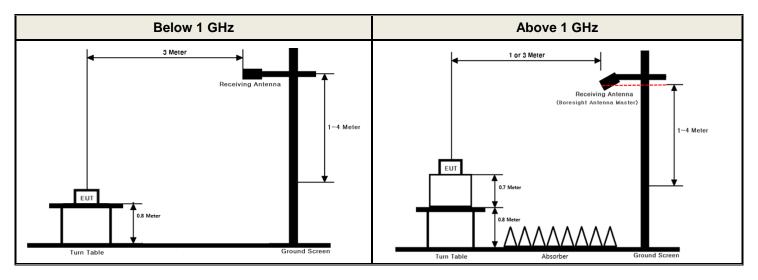
** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 MHz - 72 MHz, 76 MHz - 88 MHz, 174 MHz - 216 MHz or 470 MHz -806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

• FCC Part 15.205 (a): Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.414 25 ~ 8.414 75	108 ~ 121.94	1 300 ~ 1 427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1 435 ~ 1 626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.173 5 ~ 2.190 5	12.519 75 ~ 12.520 25	149.9 ~ 150.05	1 645.5 ~ 1 646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.576 75 ~ 12.577 25	156.524 75 ~ 156.525 25	1 660 ~ 1 710	8.025 ~ 8.5	22.01 ~ 23.12
4.177 25 ~ 4.177 75	13.36 ~ 13.41	156.7 ~ 156.9	1 718.8 ~ 1 722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.207 25 ~ 4.207 75	16.42 ~ 16.423	162.0125 ~ 167.17	2 200 ~ 2 300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.694 75 ~ 16.695 25	167.72 ~ 173.2	2 310 ~ 2 390	10.6 ~ 12.7	36.43 ~ 36.5
6.267 75 ~ 6.268 25	16.804 25 ~ 16.804 75	240 ~ 285	2 483.5 ~ 2 500	13.25 ~ 13.4	Above 38.6
6.311 75 ~ 6.312 25	25.5 ~ 25.67	322 ~ 335.4	2 690 ~ 2 900		
8.291 ~ 8.294	37.5 ~ 38.25	399.90 ~ 410	3 260 ~ 3 267		
8.362 ~ 8.366	73 ~ 74.6	608 ~ 614	3 332 ~ 3 339		
8.376 25 ~ 8.386 75	74.8 ~ 75.2	960 ~ 1 240	3 345.8 ~ 3 358		
			3 600 ~ 4 400		

• FCC Part 15.205(b): The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1 000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1 000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

Test Configuration



Test Procedure

- 1. The EUT is placed on a non-conductive table, emission measurements at below 1 GHz, the table height is 80 cm and above 1 GHz, the table height is 1.5 m.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 1 m or 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.



Measurement Instrument Setting for Radiated Emission Measurements.

The radiated emission was tested according to the section 6.3, 6.4, 6.5 and 6.6 of the ANSI C63.10-2013 with following settings.

Peak Measurement

RBW = As specified in below table, VBW \ge 3 x RBW, Sweep = Auto, Detector = Peak, Trace mode = Max Hold until the trace stabilizes.

Average Measurement:

- 1. RBW = 1 MHz (unless otherwise specified).
- 2. VBW \geq 3 x RBW.
- 3. Detector = RMS (Number of points \ge 2 x Span / RBW)
- 4. Averaging type = power. (i.e., RMS)
- 5. Sweep time = auto.
- 6. Perform a trace average of at least 100 traces.

7. A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

1) If power averaging (RMS) mode was used in step 4, then the applicable correction factor is 10 log(1 / D), where x is the duty cycle.

2) If linear voltage averaging mode was used in step 4, then the applicable correction factor is 20 log(1 / D), where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

Duty Cycle Correction factor

Test Mode	Date rate	T _{on} (ms)	T _{on+off} (ms)	$D = T_{on} / (T_{on+off})$	DCCF = 10 log(1/D) (dB)
TM 1	1 Mbps	12.210	12.310	0.991 9	NA
TM 2	18 Mbps	0.692	0.729	0.949 0	0.23
TM 3	MCS 2	0.656	0.693	0.946 3	0.24

Note1: Where, T= Transmission duration / D= Duty cycle Note2: Please refer to the appendix I for duty cycle plots.

Test Results: Comply

Please refer to next page for data table and the appendix I for worst data plots.



Test Notes.

- 1. The radiated emissions were investigated 9 kHz to 25 GHz. And no other spurious and harmonic emissions were found below listed frequencies.
- 2. Sample Calculation.

Margin = Limit – Result / Result = Reading + T.F + DCCF + DCF / T.F = AF + CL – AG Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain, DCCF = Duty Cycle Correction Factor, DCF = Distance Correction Factor

3. Information of Distance Factor

For finding emissions, measurements may be performed at a distance closer than that specified in the regulations.

- In this case, the distance correction factor is applied to the result.
- Calculation of distance correction factor

At frequencies below 30 MHz = 40 log(tested distance / specified distance)

At frequencies at or above 30 MHz = 20 log(tested distance / specified distance)

When distance factor is "N/A", the measurements were performed at the specified distance and distance factor is not applied.

Radiated Spurious Emissions data(9 kHz ~ 25 GHz) : TM & ANT 2

Tested Frequency (MHz)	Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
	2 389.54	V	Y	PK	50.44	4.79	N/A	N/A	55.23	74.00	18.77
	2 389.61	V	Y	AV	40.86	4.79	N/A	N/A	45.65	54.00	8.35
0.440	4 823.94	V	Х	PK	44.35	1.96	N/A	N/A	46.31	74.00	27.69
2 412	4 824.02	V	Х	AV	40.17	1.96	N/A	N/A	42.13	54.00	11.87
	9 647.81	V	Х	PK	44.06	10.11	N/A	N/A	54.17	74.00	19.83
	9 648.17	V	Х	AV	37.93	10.11	N/A	N/A	48.04	54.00	5.96
	4 873.77	V	Х	PK	42.75	2.06	N/A	N/A	44.81	74.00	29.19
2 437	4 873.93	V	Х	AV	39.12	2.06	N/A	N/A	41.18	54.00	12.82
2 437	9 747.72	V	Х	PK	44.61	10.43	N/A	N/A	55.04	74.00	18.96
	9 748.08	V	Х	AV	37.66	10.43	N/A	N/A	48.09	54.00	5.91
	2 483.75	V	Y	PK	50.57	5.74	N/A	N/A	56.31	74.00	17.69
	2 483.82	V	Y	AV	40.42	5.74	N/A	N/A	46.16	54.00	7.84
2 462	4 923.95	V	Х	PK	44.42	2.10	N/A	N/A	46.52	74.00	27.48
	4 924.02	V	Х	AV	40.69	2.10	N/A	N/A	42.79	54.00	11.21
	9 848.14	V	Х	PK	43.90	10.65	N/A	N/A	54.55	74.00	19.45
	9 848.06	V	Х	AV	36.36	10.65	N/A	N/A	47.01	54.00	6.99



Tested Frequency (MHz)	Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
	2 389.94	V	Y	PK	56.71	4.79	N/A	N/A	61.50	74.00	12.50
	2 389.87	V	Y	AV	45.15	4.79	0.23	N/A	50.17	54.00	3.83
0.440	4 823.15	V	Х	PK	52.41	1.95	N/A	N/A	54.36	74.00	19.64
2 412	4 823.07	V	Х	AV	42.67	1.95	0.23	N/A	44.85	54.00	9.15
	9 648.37	V	Х	PK	43.70	10.11	N/A	N/A	53.81	74.00	20.19
	9 648.02	V	Х	AV	36.50	10.11	0.23	N/A	46.84	54.00	7.16
	4 874.08	V	Х	PK	52.98	2.06	N/A	N/A	55.04	74.00	18.96
0.407	4 873.96	V	Х	AV	43.35	2.06	0.23	N/A	45.64	54.00	8.36
2 437	9 748.05	V	Х	PK	44.15	10.43	N/A	N/A	54.58	74.00	19.42
	9 747.97	V	Х	AV	37.81	10.43	0.23	N/A	48.47	54.00	5.53
	2 483.82	V	Y	PK	51.38	5.74	N/A	N/A	57.12	74.00	16.88
	2 483.55	V	Y	AV	41.80	5.74	0.23	N/A	47.77	54.00	6.23
2 462	4 923.97	V	Х	PK	52.27	2.10	N/A	N/A	54.37	74.00	19.63
	4 923.38	V	Х	AV	42.20	2.10	0.23	N/A	44.53	54.00	9.47
	9 848.13	V	Х	PK	44.65	10.65	N/A	N/A	55.30	74.00	18.70
	9 848.00	V	Х	AV	39.44	10.65	0.23	N/A	50.32	54.00	3.68

Radiated Spurious Emissions data(9 kHz ~ 25 GHz) : TM 2 & 2TX(CDD)

Radiated Spurious Emissions data(9 kHz ~ 25 GHz) : TM 3 & 2TX(CDD)

Tested Frequency (MHz)	Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
	2 389.76	V	Y	PK	52.96	4.79	N/A	N/A	57.75	74.00	16.25
	2 389.91	V	Y	AV	41.81	4.79	0.24	N/A	46.84	54.00	7.16
0.440	4 820.66	V	Х	PK	50.75	1.94	N/A	N/A	52.69	74.00	21.31
2 412	4 820.19	V	Х	AV	41.11	1.94	0.24	N/A	43.29	54.00	10.71
	9 648.17	V	Х	PK	42.43	10.11	N/A	N/A	52.54	74.00	21.46
	9 648.08	V	Х	AV	35.44	10.11	0.24	N/A	45.79	54.00	8.21
	4 871.56	V	Х	PK	51.14	2.06	N/A	N/A	53.20	74.00	20.80
0 407	4 872.76	V	Х	AV	41.45	2.06	0.24	N/A	43.75	54.00	10.25
2 437	9 748.00	V	Х	PK	43.24	10.43	N/A	N/A	53.67	74.00	20.33
	9 747.98	V	Х	AV	36.60	10.43	0.24	N/A	47.27	54.00	6.73
	2 483.58	V	Y	PK	48.38	5.74	N/A	N/A	54.12	74.00	19.88
	2 483.62	V	Y	AV	39.70	5.74	0.24	N/A	45.68	54.00	8.32
2 462	4 925.55	V	Х	PK	51.43	2.10	N/A	N/A	53.53	74.00	20.47
	4 924.13	V	Х	AV	40.59	2.10	0.24	N/A	42.93	54.00	11.07
	9 847.98	V	Х	PK	44.23	10.65	N/A	N/A	54.88	74.00	19.12
	9 848.12	V	Х	AV	36.53	10.65	0.24	N/A	47.42	54.00	6.58

8.6 Power-line conducted emissions

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 uH/50 ohm line impedance stabilization network (LISN).

Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Conducted Limit (dBuV)					
	Quasi-Peak	Average				
0.15 ~ 0.5	66 to 56 *	56 to 46 *				
0.5 ~ 5	56	46				
5 ~ 30	60	50				

* Decreases with the logarithm of the frequency

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Procedure

- 1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
- 2. The EUT is connected via LISN to the test power supply.
- 3. The measurement results are obtained as described below:
- 4. Detectors Quasi Peak and Average Detector.

Test Results: Comply(Refer to next page.)

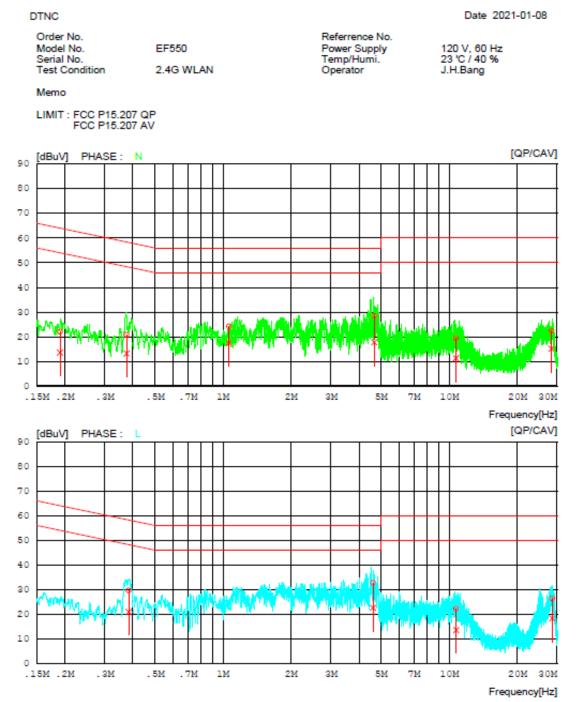
The worst data was reported.

RESULT PLOTS

AC Line Conducted Emissions (Graph)

TM 2 & Highest

Results of Conducted Emission



AC Line Conducted Emissions (List)

TM 2 & Highest

Results of Conducted Emission

Date 2021-01-08

Order No. Model No.	EF550	Referrence No. Power Supply	120 V, 60 Hz
Serial No.	21000	Temp/Humi.	23 'C / 40 %
Test Condition	2.4G WLAN	Operator	J.H.Bang

Memo

DTNC

LIMIT : FCC P15.207 QP FCC P15.207 AV

NC) FREQ	READING QP CAV	C.FACTOR	RESULT QP CAV	LIMIT QP CAV	MARGIN QP CAV	PHASE
	[MHz]	[dBuV] [dBuV] [dB]	[dBuV] [dBuV] [dBuV][dBuV] [dBuV][dBuV	7]
1	0.19046	12.12 3.64	9.94	22.0613.58	64.02 54.02	41.96 40.44	Ν
2	0.37516	10.78 3.28	9.97	20.7513.25	58.39 48.39	37.64 35.14	N
3	1.06281	14.28 7.40	9.98	24.2617.38	56.00 46.00	31.74 28.62	N
4	4.65874	18.31 7.61	10.14	28.4517.75	56.00 46.00	27.5528.25	N
5	10.70083	9.11 0.92	10.34	19.4511.26	60.00 50.00	40.5538.74	N
6	28.31949	11.74 4.54	10.65	22.3915.19	60.00 50.00	37.6134.81	N
7	0.38285	19.6311.02	9.95	29.58 20.97	58.22 48.22	28.6427.25	L
8	4.60042	22.5312.45	10.13	32.66 22.58	56.00 46.00	23.3423.42	L
9	10.72613	11.92 3.25	10.33	22.2513.58	60.00 50.00	37.7536.42	L
10	28.50965	15.81 7.69	10.59	26.40 18.28	60.00 50.00	33.60 31.72	L

9. LIST OF TEST EQUIPMENT

Туре	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9020A	20/12/16	21/12/16	MY46471096
Spectrum Analyzer	Agilent Technologies	N9020A	20/12/16	21/12/16	MY48011700
Spectrum Analyzer	Agilent Technologies	N9020A	20/06/24	21/06/24	US47360812
DC Power Supply	Agilent Technologies	66332A	20/06/24	21/06/24	MY43001172
Multimeter	FLUKE	17B+	20/12/16	21/12/16	3630701WS
Signal Generator	Rohde Schwarz	SMBV100A	20/12/16	21/12/16	255571
Signal Generator	ANRITSU	MG3695C	20/12/16	21/12/16	173501
Thermohygrometer	BODYCOM	BJ5478	20/12/16	21/12/16	120612-1
Thermohygrometer	BODYCOM	BJ5478	20/12/16	21/12/16	120612-2
Thermohygrometer	BODYCOM	BJ5478	20/07/01	21/07/01	N/A
Loop Antenna	ETS-Lindgren	6502	20/04/24	22/04/24	203480
BILOG ANTENNA	Schwarzbeck	VULB 9160	19/04/23	21/04/23	9160-3362
Horn Antenna	ETS-Lindgren	3117	20/10/23	21/10/23	00143278
PreAmplifier	tsj	MLA-0118-B01-40	20/12/16	21/12/16	1852267
PreAmplifier	tsj	MLA-1840-J02-45	20/06/24	21/06/24	16966-10728
PreAmplifier	H.P	8447D	20/12/16	21/12/16	2944A07774
High Pass Filter	Wainwright Instruments	WHKX12-935-1000- 15000-40SS	20/06/24	21/06/24	8
High Pass Filter	Wainwright Instruments	WHKX10-2838- 3300-18000-60SS	20/06/24	21/06/24	1
High Pass Filter	Wainwright Instruments	WHNX8.0/26.5-6SS	20/06/24	21/06/24	3
Attenuator	Hefei Shunze	SS5T2.92-10-40	20/06/24	21/06/24	16012202
Attenuator	SRTechnology	F01-B0606-01	20/06/24	21/06/24	13092403
Attenuator	Aeroflex/Weinschel	56-3	20/06/24	21/06/24	Y2370
Attenuator	SMAJK	SMAJK-2-3	20/06/24	21/06/24	2
Attenuator	Hefei Shunze	SS5T2.92-10-40	20/06/24	21/06/24	16012202
Attenuator	SMAJK	SMAJK-50-10	20/06/24	21/06/24	15081903
Power Meter & Wide Bandwidth Sensor	Anritsu	ML2488B MA2491A	20/12/16	21/12/16	0910025 0845333
EMI Test Receiver	ROHDE&SCHWARZ	ESU	20/01/20	21/01/20	100538
PULSE LIMITER	Rohde Schwarz	ESH3-Z2	20/08/25	21/08/25	101333
LISN	SCHWARZBECK	NSLK 8128 RC	20/10/23	21/10/23	8128 RC-387
Cable	Junkosha	MWX241	20/01/13	21/01/13	G-04
Cable	Junkosha	MWX241	20/01/13	21/01/13	G-07
Cable	DT&C	Cable	20/01/13	21/01/13	G-13
Cable	DT&C	Cable	20/01/13	21/01/13	G-14
Cable	HUBER+SUHNER	SUCOFLEX 104	20/01/13	21/01/13	G-15
Cable	DT&C	Cable	21/01/08	22/01/08	M-01
Cable	DT&C	Cable	21/01/08	22/01/08	M-02
Cable	DT&C	Cable	21/01/08	22/01/08	M-03
Cable	DT&C	Cable	21/01/08	22/01/08	M-07
Cable	DT&C	Cable	21/01/08	22/01/08	M-09
Cable	Radiall	TESTPRO3	20/01/16	21/01/16	RF-82
Test Software	tsj	Raidated Emission Measurement	NA	NA	Version 2.00.0177
Test Software	tsj	Noise Terminal Measurement	NA	NA	Version 2.00.0170

Note 1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017 Note 2: The cable is not a regular calibration item, so it has been calibrated by DT & C itself.



APPENDIX I

Duty cycle plots

Test Procedure

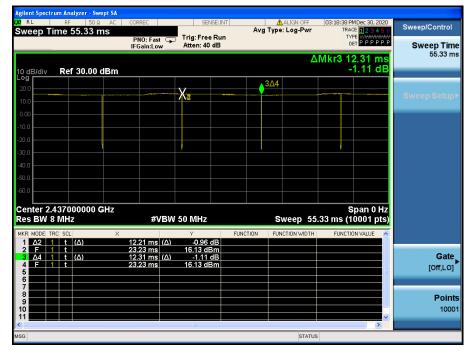
Duty Cycle was measured using section 6.0 b) of KDB558074 D01v05r02 :

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW \geq OBW if possible; otherwise, set RBW to the largest available value. Set VBW \geq RBW. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are > 50 / T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T \leq 16.7 microseconds.)

Duty Cycle

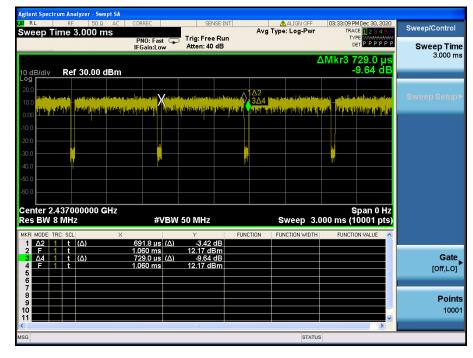
TM 1 & ANT 1 & 2 437 MHz & 1 Mbps





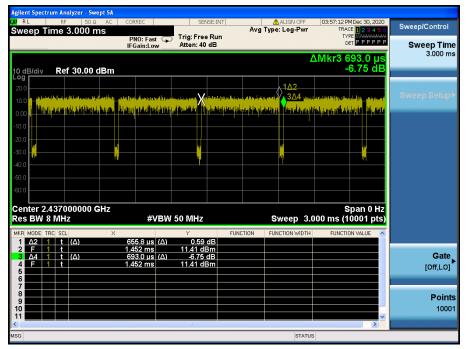
Duty Cycle

TM 2 & ANT 1 & 2 437 MHz & 18 Mbps



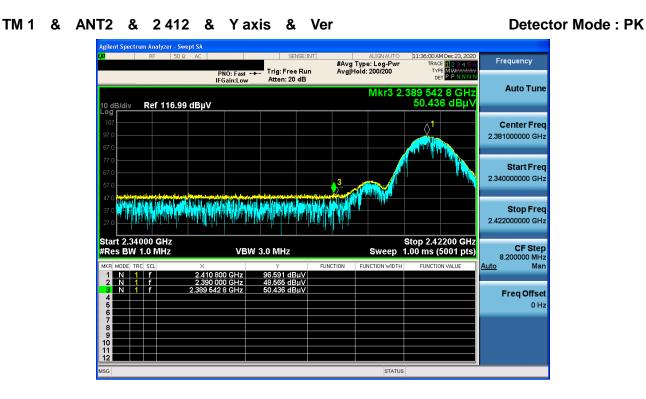
Duty Cycle

TM 3 & ANT 1 & 2 437 MHz & MCS 2



APPENDIX II

Unwanted Emissions (Radiated) Test Plot



TM 1 & ANT2 & 2412 & Yaxis & Ver





TM 1 & ANT2 & 2462 & Yaxis & Ver



TM 1 & ANT2 & 2462 & Yaxis & Ver



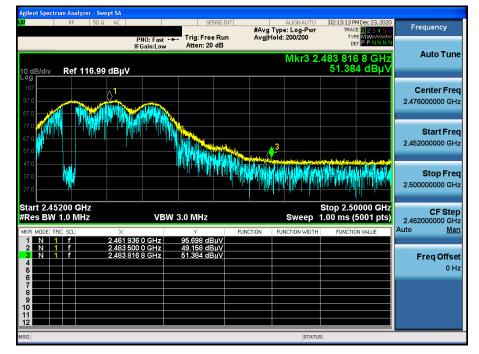
TM 2 & 2412 & Yaxis & Ver



TM 2 & 2412 & Yaxis & Ver



TM 2 & 2462 & Yaxis & Ver

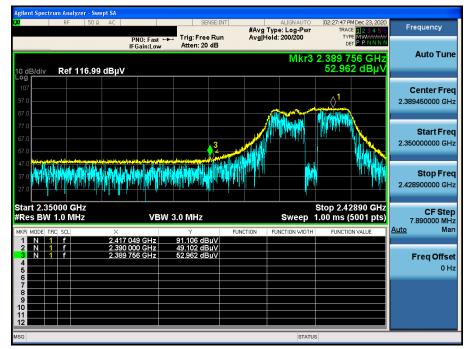








TM 3 & 2412 & Yaxis & Ver



TM 3 & 2412 & Yaxis & Ver



Detector Mode : AV

Pages: 106 / 109



TM 3 & 2462 & Yaxis & Ver



TM 3 & 2462 & Yaxis & Ver

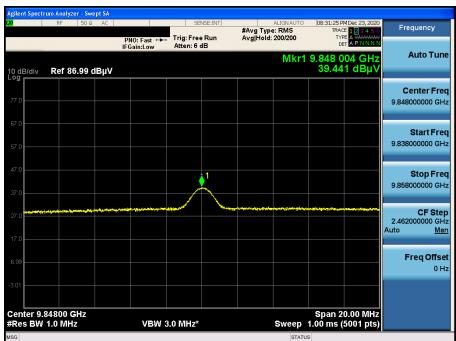


Detector Mode : AV

TM 1 & 2 437 & X axis & Ver



TM 2 & 2462 & X axis & Ver





TM 3 & 2 437 & X axis & Ver

