

































11.7. APPENDIX G: DUTY CYCLE 11.7.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
SRD 1.4MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01
SRD 3MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01
SRD 5MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
SRD 10MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01
SRD 20MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01
SRD 40MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01
SRD 60MHZ	100.00	100.00	1.0000	100.00	0.00	N/A	0.01

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used. If the EUT is configured to transmit with duty cycle \geq 98%, set VBW \leq RBW/100 (i.e., 10 kHz) but not less than 10 Hz.

All the modes and antennas had been tested, but only the worst data was recorded in the report.



11.7.2. Test Graphs

	Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω DC SENSE::INT	ALIGN AUTO 10:53:38 AM May 14, 2024	Frequency	
	Center Freq 2.40350000 GHz NFE PRO: Fast +	ALIGN AUTO 10:53:38 AM May 14, 2024 #Avg Type: RMS TRACE 12:34:56 TYPE DET P P P P P	Frequency	
		DETIFFFFF	Auto Tune	
	Ref Offset 21.73 dB 10 dB/div Ref 40.00 dBm			
	30.0		Contex From	
	20.0		Center Freq 2.403500000 GHz	
	10.0	TRO LVL		
	0.00		Start Freq	
	-10.0		2.403500000 GHz	
	-20.0			
	-40.0		Stop Freq	
	-50.0		2.403500000 GHz	
	Center 2.403500000 GHz	Span 0 Hz	CF Step	
	Res BW 8 MHz #VBW 8.0 MHz	Sweep 100.0 ms (1001 pts)	8.000000 MHz Auto Man	
	MICR MODE TRC SCL X Y FUNCT	TION FUNCTION WIDTH FUNCTION VALUE	Mart	
	2 3		FreqOffset	
	4		0 Hz	
	4 5 6 7 8			
	9		Scale Type	
	10 11		Log <u>Lin</u>	
	I ≪ [STATUS		
				_
	SRD 1.4MHZ_/	ant0_2403.5		
	Keysight Spectrum Analyzer - Swept SA RF 50 Ω DC SENSE:INT	ALIGN AUTO 111:31:58 AM May 14 2024		
	Cepter Freq 2 405500000 GHz Trig Delay-2.000 ms	ALIGN AUTO 11:31:58 AM May 14, 2024 #Avg Type: RMS TRACE 1 2.3.4.5 6 TYPE WWWWW DET P P P P P	Frequency	
		DETPPPPP	Auto Tune	
	Ref Offset 21.73 dB 10 dB/div Ref 40.00 dBm		Suto rune	
	Log			
	30.0		Center Freq 2.405500000 GHz	
	10.0	TROLUC	2.40550000 GH2	
	0.00	180 LVL	Start Freq	
	-10.0		2.405500000 GHz	
	-20.0			
	-30.0		Stop Freq	
	-40.0		2.405500000 GHz	
	Center 2.405500000 GHz			
	Res BW 8 MHz #VBW 8.0 MHz	Span 0 Hz Sweep 100.0 ms (1001 pts)	8.000000 MHz	
	MKR MODE TRC SCL X Y FUNCT	TION FUNCTION WIDTH FUNCTION VALUE	Auto Man	
	2		Freq Offset	
	3 4		0 Hz	
	6 6 7	1		
	8		Scale Type	
	10 11		Log Lin	
	< [1.		
	MSG	STATUS		
	SRD 3MHZ_A	nt0 2405.5		
	Evisight Spectrum Analyzer - Swept SA			
	M RL RF 50 Ω SENSEINT Center Freq 2.404500000 GHz Trig Delay-2.000 ms Trig Delay-2.000 ms NFE PNO: Fast Trig: Video IFGain:Low #Atten: 30 dB	ALIGN AUTO 01:47:36 PM May 14, 2024 #Avg Type: RMS TRACE 1 2 3 4 5 6 TYPE Wwwww DET P P P P P	Frequency	
	NFE PNO: Fast Trig: Video IFGain:Low #Atten: 30 dB	DET P P P P P		
	Ref Offset 21.73 dB		Auto Tune	
	Log4			
	30.0		Center Freq	
	20.0		2.404500000 GHz	
	10.0	LVL CRT		
	-10.0		Start Freq 2.404500000 GHz	
	-20.0			
	-30.0		Stop Freq	
	-40.0		2.404500000 GHz	
	-50.0			
	Center 2.404500000 GHz Res BW 8 MHz #VBW 8.0 MHz	Span 0 Hz Sweep 100.0 ms (1001 pts)	CF Step 8.000000 MHz	
			Auto Man	
	2			
	3 4		Freq Offset 0 Hz	
	5 6	-		
	4 6 7 8 9 9 10		Scale Type	
	9 10		Log Lin	
	11 m	-		
	MSG	STATUS		
	SRD 5MHZ_A	pt0 2404 E		



Κργίαμή Spectrum Avalyzer - Swept SA
M NFE State State State Trig Video State State Frequency NFE PRO: Fast ++ Trig Video State + Frequency IFGaintow RFGaintow RFGaintow State + Frequency
Ref Offset 21.73 dB Auto Tune
10 dB/div Ref 35.00 dBm
15.0 2.407500000 GHz
5.00
15.0 2.407500000 GHz
43.0 45.0
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.3 ms (8000 pts) 8.000000 MHz
MRV MODELTRE SELL X Y FURCTION VIDIT FUNCTION VIDIT
2 3 4 9 0 Hz
8 9 9 10 Log Lin
SRD 10MHZ_Ant0_2407.5
Gryphyl Spettum Audyrer Swege SA Server SA Se
Center Freq 2.412500000 GHz Trig Delay-200.0 µs #Avg Type: RMS Trade E[] □ = 0.5 x Frequency NFE PNO: Fast ++ Trig: Video #Atten: 40 dB Del P P P P P P
Ref Offset 22.12 dB
10 dB/div Ref 35.00 dBm
15.0 2.412500000 GHz
5.00
4.00 Start Freq 15.0 2.412500000 GHz
45 0 2.412500000 GHz
Center 2.412500000 GHz Span 0 Hz CF Step
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.3 ms (8000 pts) 8.000000 MHz
5 Freq Offset
8 Scale Type 9 10 Log Lin
10 11
450 STATUS
SRD 20MHZ_Ant0_2412.5
Krydight Spectrum Analyzer - Swept SA Control - Swept SA R R B S 30 C SENSE-INT ALION AUTO [91:4515 PH May 15, 2024] Control - Fond 2 A 225 C00000 CHz Trid Delay-200.0 us #Ava Type: RMS TRACE [12:3:4:5.6]
NFE PROFERS
Ref Offset 22 18 dB Auto Tune
10 dB/di/v Ref 35.00 dBm
15.0 2.422500000 GHz
500
150 Count Teg
45 0 2.42250000 GHz
Center 2.422500000 GHz Span 0 Hz CF Step Res BW 8 MHz #VBW 8.0 MHz Sweep 100.3 ms (8000 pts) 8.00000 MHz
2 3 4 9 0 Hz
Scale Type
MSG STATUS
SRD 40MHZ_Ant0_2422.5



		rum Analyzer - Swept	SA							
	enter Fre	RF 50 Ω 9q 2.432500	000 GHz	Trig Delay-2 Trig: Video	:INT :00.0 µs	#Avg Type	RMS	TRAC	May 15, 2024 E 1 2 3 4 5 6 WWWWWWW T P P P P P P	Frequency
r		Ref Offset 21.74	IFGain:Low	#Atten: 40 d	В			DE	TPPPPP	Auto Tune
	10 dB/div	Ref 35.00 dB	Sm							
	25.0 15.0				nii Antoni	ter, onerstvierel	the data and	sitt	distant and	Center Freq 2.432500000 GHz
	5.00								TRIC LVL	Start Freq
	-15.0									2.432500000 GHz
	-35.0									Stop Freq
	-55.0									2.432500000 GHz
	Center 2.43 Res BW 8 I	32500000 GH MHz		V 8.0 MHz		5	weep 1	S 00.3 ms (pan 0 Hz 8000 pts)	CF Step 8.000000 MHz Auto Man
	MKR MODE TRC	SCL	×	Y	FUNC	TION FUN	CTION WIDTH	FUNCTION	N VALUE	<u>Auto</u> Man
	3 4									Freq Offset 0 Hz
	6 7 8								- 1	Scale Type
	9 10 11									Log <u>Lin</u>
li M	e la			m			STATUS		•	
			SRI	D 60MF	17 /	Ant0	2432	.5		

END OF REPORT