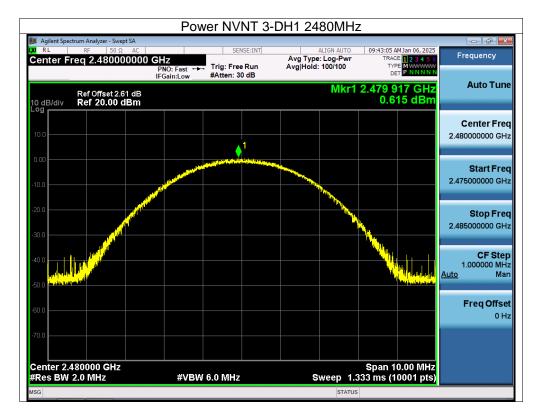


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12. Hopping Channel Separation

12.1 Block Diagram Of Test Setup



12.2 Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 0.125W.

12.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.

2. Set the spectrum analyzer: RBW = 30kHz. VBW = 100kHz , Span = 2.0MHz. Sweep = auto; Detector Function = Peak. Trace = Max hold.

3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	2401.836	2402.838	1.002	0.583	Pass
NVNT	1-DH1	2440.834	2441.834	1	0.573	Pass
NVNT	1-DH1	2478.832	2479.834	1.002	0.584	Pass
NVNT	2-DH1	2402.026	2403.026	1	0.85	Pass
NVNT	2-DH1	2441.028	2442.026	0.998	0.836	Pass
NVNT	2-DH1	2479.028	2480.028	1	0.849	Pass
NVNT	3-DH1	2402.026	2403.028	1.002	0.811	Pass
NVNT	3-DH1	2441.028	2442.028	1	0.81	Pass
NVNT	3-DH1	2479.026	2480.028	1.002	0.806	Pass

12.4 Test Result



	CI	Test G S NVNT 1-I	iraphs DH1 2402MHz		
Agilent Spectrum Analyzer - Sv RL RF 50 Center Freq 2.402	Ω AC	SENSE:INT Trig: Free Run #Atten: 30 dB	ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100	09:29:24 AMJan 06, 2025 TRACE 123456 TYPE MWWWWW DET PNNNNN	Frequency
Ref Offset: 10 dB/div Ref 20.00	2.59 dB		Mkr1	2.401 836 GHz 0.513 dBm	Auto Tun
10 dB/div Ref 20.00 10.0 .000 .10.0			2		Center Fre 2.402500000 GH
-20.0					Start Fre 2.401500000 G⊦
-60.0					Stop Fre 2.403500000 GH
Center 2.402500 GH #Res BW 30 kHz	#VBV	V 100 kHz	· · ·	Span 2.000 MHz .133 ms (1001 pts)	CF Ste 200.000 kH <u>Auto</u> Ma
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3	× 2.401 836 GHz 2.402 838 GHz	Y FL 0.513 dBm 0.380 dBm	NCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offse 0 H
8 9 10 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1		III	STATUS		
	CI	S NVNT 1-I	DH1 2441MHz		
Agilent Spectrum Analyzer - Sv RL RF 50 Center Freq 2.441	Ω AC	SENSE:INT	ALIGN AUTO	09:32:49 AM Jan 06, 2025	
	PNO: Wide G	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	Frequency
Ref Offset : 10 dB/div Ref 20.00	PNO: Wide G		Avg Hold:>100/100	TYPE M MAAAAAAAAAA	
Ref Offset: 10 dB/div Ref 20.00 10.0 0.00 -10.0	PNO: Wide G		Avg Hold:>100/100	2.440 834 GHz	Auto Tun Center Fre
10 dB/div Ref 20.00 0 dB 10.0 0.00 -10.0 -20.0 -30.0 -40.0	PNO: Wide G		Avg Hold:>100/100	2.440 834 GHz	Auto Tun Center Fre 2.441500000 GH Start Fre 2.440500000 GH
10 alloliv Ref 20.00 9 alloliv Ref 20.00 10 0 10 0 -10 0 -20 0 -20 0 -40 0 -50 0 -60 0 -70	2.6 dB 0 dBm		Avg Hold:>100/100	2.440 834 GHz 0.840 dBm	Start Fre 2.441500000 GH 2.440500000 GH 2.440500000 GH Start Fre 2.442500000 GH
10 aB/div Ref 20.00 9 000 10 0 -10 0 -20	PNO: Wide FGain:Low	#Atten: 30 dB	Avg Hold:>100/100	2.440 834 GHz 0.840 dBm	Auto Tun Center Fre 2.441500000 GH Start Fre 2.440500000 GH Stop Fre 2.442500000 GH
10 aB/div Ref 20.00 10 0 10	PNO: Wide G IFGain:Low 7 2.6 dB 1 1	#Atten: 30 dB	Avg Hold:>100/100	2.440 834 GHz 0.840 dBm	Auto Tun Center Fre 2.441500000 GH Start Fre 2.440500000 GH Stop Fre 2.442500000 GH



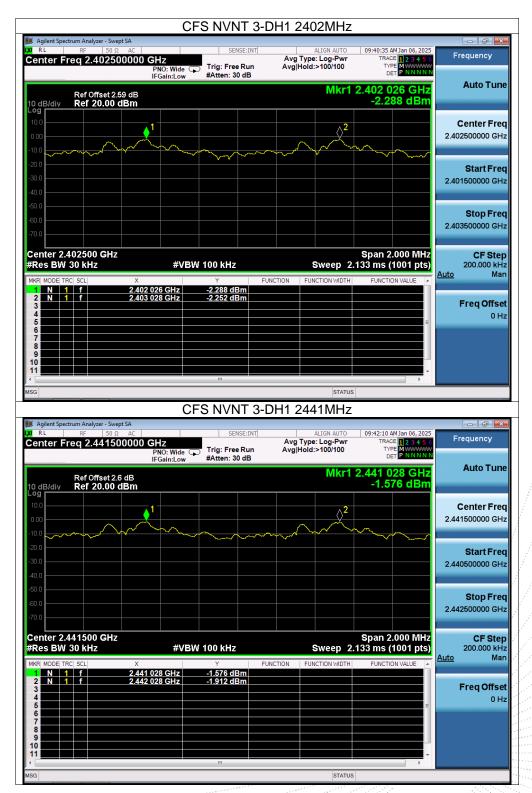


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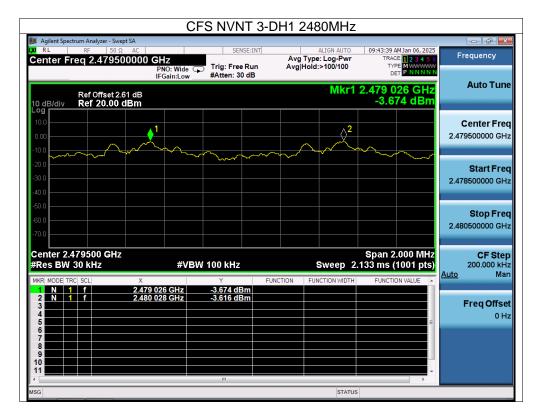


RL RF 5 Center Freq 2.441	PNO: Wide	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100	09:37:34 AMJan 06, 2025 TRACE 1 2 3 4 5 6 TYPE M	Frequency
Ref Offset 0 dB/div Ref 20.0	IFGain:Low	#Atten: 30 dB	Mkr1	2.441 028 GHz -1.507 dBm	Auto Tun
				~	Center Fre 2.441500000 G⊢
20.0					Start Fre 2.440500000 G⊦
50.0					Stop Fre 2.442500000 G⊦
Center 2.441500 GH Res BW 30 kHz		W 100 kHz	Sweep 2	Span 2.000 MHz 133 ms (1001 pts)	CF Ste 200.000 kH Auto Ma
MKR MODE TRC SCL 1 1 f 2 N 1 f 3	X 2.441 028 GHz 2.442 026 GHz	Y Fl -1.507 dBm -1.888 dBm	INCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Ma Freq Offs 0 H
9 9 10 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STATUS		
Agilent Spectrum Analyzer - S		FS NVNT 2-I	DH1 2480MHz	09:38:56 AM Jan 06, 2025	
enter Freq 2.479		Trin Free Day	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 6 TYPE M WWWWW DET P NNNN	Frequency
Ref Offset 0 dB/div Ref 20.0			Mkr1	2.479 028 GHz -3.698 dBm	Auto Tur
10.0				~~~~	Center Fre 2.479500000 G⊦
20.0 30.0 40.0					Start Fre 2.478500000 G⊦
50.0					Stop Fre 2.480500000 G⊦
Center 2.479500 GH Res BW 30 kHz	#VB	W 100 kHz		Span 2.000 MHz 133 ms (1001 pts)	CF Ste 200.000 kH <u>Auto</u> Ma
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 4 5 6 6 7	X 2.479 028 GHz 2.480 028 GHz	Y FI -3.698 dBm -3.629 dBm	INCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offs 0 ⊦









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13. Number Of Hopping Frequency

13.1 Block Diagram Of Test Setup



13.2 Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

13.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.

2. Set the spectrum analyzer: RBW = 100kHz. VBW = 300kHz. Sweep = auto; Detector Function = Peak. Trace = Max hold.

3. Allow the trace to stabilize. It may prove necessary to break the span up to sections. in order to clearly show all of the hopping frequencies. The limit is specified in one of the subparagraphs of this Section.
4. Set the spectrum analyzer: Start Frequency = 2.4GHz, Stop Frequency = 2.4835GHz. Sweep=auto;

13.4 Test Result

Condition	Mode	Hopping Number	Limit	Verdict
NVNT	1-DH1	79	15	Pass
NVNT	2-DH1	79	15	Pass
NVNT	3-DH1	79	15	Pass



	Нор	Test C ping No. NVN	Graphs T 1-DH1 2441N	ЛНz	
Agilent Spectrum Analyze X RL RF		SENSE:INT	ALIGN AUTO	09:47:58 AM Jan 06, 2025	
Center Freq 2.44		Trig: Free Run	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	Frequency
D.(05	IFGain:Low		Mkr1 2	.401 837 0 GHz	Auto Tune
	set 2.6 dB).00 dBm			0.845 dBm	
10.0				2	Center Free
0.00	INDAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	ARMANANANANA	ATTA TATA A A A A A A A A A A A A A A A	MANAAAAAAA	2.441750000 GH
-20.0	<u>nhahilahahahihaha</u> lah	Ardinalı Dahikatarı	<u>ABIADADADAAAAAAAAAA</u>	AAAAAAAAAAA	Start Free
-30.0					2.400000000 GH
-50.0					Oton From
-60.0				brun.	Stop Free 2.483500000 GH
-70.0					
Start 2.40000 GH #Res BW 100 kHz		BW 300 kHz		Stop 2.48350 GHz .000 ms (1001 pts)	CF Step 8.350000 MH
MKR MODE TRC SCL	× 2.401 837 0 GHz	۲ F 0.845 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Mar
2 N 1 f	2.480 160 0 GHz	-0.485 dBm			Freq Offse
4 5				=	0 Н
6 7 8					
9 10					
11				-	
				Þ	
ISG					
📕 Agilent Spectrum Analyze	er - Swept SA	ping No. NVN	status T 2-DH1 2441N		
Agilent Spectrum Analyze RL RF	r - Swept SA 50 Ω AC	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr	09:51:56 AM Jan 06, 2025	Frequency
Agilent Spectrum Analyze RL RF	r - Swept SA 50 Ω AC	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr AvgjHoid:>100/100	09:51:56 AMJan 06, 2025 TRACE 2 34 5 6 TYPE 2 34 5 6 TYPE 2 34 5 6	Frequency
Agilent Spectrum Analyze RL RF Center Freq 2.44 Ref Offs	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr AvgjHoid:>100/100	09:51:56 AM Jan 06, 2025 TRACE 2 3 4 5 6 TIPE MUNITOR DET PINNIN N 401 753 5 GH2	Frequency
Agilent Spectrum Analyze R RL RF Center Freq 2.44 Ref Offs 10 dB/div Ref 20 Log	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr AvgjHoid:>100/100	09:51:56 AMJan 06, 2025 TRACE 2 34 5 6 TYPE 2 34 5 6 TYPE 2 34 5 6	Frequency Auto Tun
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs 10 dB/div Ref 20 10.0	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100 MKr1 2	MHz 09:51:56 AM Jan 06, 2025 TRACE 19 2 4 5 6 TYPE 10 2 4 5 6 OFT PUNN N 00 1753 5 GHz -5.373 dBm	Frequency Auto Tun Center Free
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs 10 dB/div Ref 20 10.0 10	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr AvgjHoid:>100/100	MHz 09:51:56 AM Jan 06, 2025 TRACE 19 2 4 5 6 TYPE 10 2 4 5 6 OFT PUNN N 00 1753 5 GHz -5.373 dBm	Frequency Auto Tun Center Free
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs O dB/div Ref 20 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100 MKr1 2	MHz 09:51:56 AM Jan 06, 2025 TRACE 19 2 4 5 6 TYPE 10 2 4 5 6 OFT PUNN N 00 1753 5 GHz -5.373 dBm	Frequency Auto Tune Center Free 2.441750000 GH
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs 10 dB/div Ref 20 10.0 10.0 -0.0 -20.0	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100 MKr1 2	MHz 09:51:56 AM Jan 06, 2025 TRACE 19 2 4 5 6 TYPE 10 2 4 5 6 OFT PUNN N 00 1753 5 GHz -5.373 dBm	Frequency Auto Tune Center Free 2.441750000 GH
Agilent Spectrum Analyze RL RF Center Freq 2.44 Ref Offs 10 dB/div Ref 20 10 0 1 20 0 1 30 0 1 -40 0 -50 0	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100 MKr1 2	MHz 09:51:56 AM Jan 06, 2025 TRACE 19 2 4 5 6 TYPE 10 2 4 5 6 OFT PUNN N 00 1753 5 GHz -5.373 dBm	Frequency Auto Tune Center Free 2.441750000 GH Start Free 2.400000000 GH
Ref Offra Ref Offra Center Freq 2.44 Ref Offra Ref Offra Ref Offra Ref Offra Ref 0 Ref 0 Re	r-Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm	SENSE:INT	T 2-DH1 2441N ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100 MKr1 2	401753 5 GHz -5.373 dBm	Frequency Auto Tune Center Free 2.441750000 GH Start Free 2.400000000 GH
Ref Offic 10 dB/div Ref Offic 10 dB/div Ref 20 10 dB/div	r - Swept SA 50 Ω AC 41750000 GHz PN0: Fast IFGain:Low set 2.6 dB 0.00 dBm WMM/W/W/W/W/W/W/W/ 2	SENSE:INT Trig: Free Run #Atten: 30 dB (T 2-DH1 2441N	AHz 9:51:56 AM Jan 06, 2025 TRACE 12 24 5 6 TYPE 10 24 5 6 TYPE 10 10 10 10 10 10 10 10 10	Frequency Auto Tum Center Frequency 2.441750000 GH Start Frequency 2.400000000 GH Stop Frequency 2.483500000 GH CF Step
Ref Office Ref Office 10 dB/div Ref 20 10 dB/div Ref 20 1	r - Swept SA 50 Ω AC 41750000 GHz PN0: Fast IFGain:Low set 2.6 dB .00 dBm .00	SENSE:INT Trig: Free Run #Atten: 30 dB	T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8	AHz 9:51:56 AM Jan 06, 2025 TRACE 12 24 5 6 TYPE MANNANA 2017 753 5 GHz -5.373 dBm 2100 AM AMANANA 2100 AMANANANANANANANANANANANANANANANANANANA	Frequency Auto Tune Center Free 2.441750000 GH Start Free 2.400000000 GH Stop Free 2.483500000 GH
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs 10 dB/div Ref 20 10 dB/div Ref 20 10 dB/div Ref 20 20 dB/div Ref 20 30.0 1 40.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 50.0 2 60.0 3 70.0 2 8 8 100 8 100 1 9 1 1 1	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm .00	SENSE:INT	T 2-DH1 2441N	AHz 9:51:56 AM Jan 06, 2025 TRACE 12 24 5 6 TYPE 10 24 5 6 TYPE 10 10 10 10 10 10 10 10 10	Frequency Auto Tun Center Frequency 2.441750000 GH Start Frequency 2.400000000 GH Stop Frequency 2.483500000 GH CF Step 8.350000 MH Auto Main
Agilent Spectrum Analyze Ref Ref Center Freq 2.44 Ref Offf 10 dB/div Ref 20 10 0 1 30 0 1 40 0 1 50 0 1 60 0 1 70 0 1 Start 2.40000 GH #Res BW 100 kHz	r - Swept SA 50 Ω AC 41750000 GHz PN0: Fast IFGain:Low set 2.6 dB 0.00 dBm WMM/W/W/W/M/W/ 2 4 2 #V	SENSE:INT	T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8	AHz 9:51:56 AM Jan 06, 2025 TRACE 12 24 5 6 TYPE MANNANA 2017 753 5 GHz -5.373 dBm 2100 AM AMANANA 2100 AMANANANANANANANANANANANANANANANANANANA	Frequency Auto Tune Center Free 2.441750000 GH Start Free 2.400000000 GH Stop Free 2.48350000 GH CF Step 8.350000 MH Auto Man
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs Conter Freq 2.44 Ref Offs 10 dB/div Ref 20 0.00 1 -10.0 -1 -30.0 -1 -40.0 -1 -70.0 -1 Start 2.40000 GH; #Res BW 100 kH; MkR MODE TRC SCL 1 1 1 1 2 N 1 1 3 4 -1 -1 6 -1 1 1 1	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm .00	SENSE:INT	T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8	AHz 9:51:56 AM Jan 06, 2025 TRACE 12 24 5 6 TYPE MANNANA 2017 753 5 GHz -5.373 dBm 2100 AM AMANANA 2100 AMANANANANANANANANANANANANANANANANANANA	Frequency Auto Tune Center Free 2.441750000 GH: Start Free 2.400000000 GH: Stop Free 2.48350000 GH: CF Step 8.350000 MH:
Agilent Spectrum Analyze Ref Offs Center Freq 2.44 Ref Offs 10 dB/div Ref 20 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 0.00 1 70.0 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 <th< td=""><td>r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm .00 dBm .00</td><td>SENSE:INT</td><td>T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8</td><td>AHz 09:51:56 AM Jan 06, 2025 TRACE 02:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C 0:100 2:34 3: C</td><td>Frequency Auto Tun Center Freq 2.441750000 GH Start Freq 2.400000000 GH Stop Freq 2.483500000 GH B.350000 MH Auto Mato Freq Offsee</td></th<>	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm .00	SENSE:INT	T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8	AHz 09:51:56 AM Jan 06, 2025 TRACE 02:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C 0:100 2:34 3: C	Frequency Auto Tun Center Freq 2.441750000 GH Start Freq 2.400000000 GH Stop Freq 2.483500000 GH B.350000 MH Auto Mato Freq Offsee
Image: Agilent Spectrum Analyze X RL RF Center Freq 2.44 10 dB/div Ref 20 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 10 0 1 11 0 1 12 0 1 13 0 1 14 0 1 15 0 1 16 0 1 17 0 1	r - Swept SA 50 Ω AC 41750000 GHz PNO: Fast IFGain:Low set 2.6 dB .00 dBm .00	SENSE:INT	T 2-DH1 2441N Aug Type: Log-Pwr Avg Type: Log-Pwr Avg Type: Log-Pwr MKr1 2 MKr1 2 MKr1 4 Sweep 8	AHz 09:51:56 AM Jan 06, 2025 TRACE 02:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C TYPE 0:100 2:34 3: C 0:100 2:34 3: C	Frequency Auto Tun Center Freq 2.441750000 GH Start Freq 2.400000000 GH Stop Freq 2.483500000 GH B.350000 MH Auto Mato Freq Offsee



Нор	ping No. NVNT	3-DH1 2441N	ЛНz	
Ji Agilent Spectrum Analyzer - Swept SA				- 6 -
Center Freg 2.441750000 GHz	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	09:56:12 AM Jan 06, 2025 TRACE 1 2 3 4 5 6	Frequency
PNO: Fas FGain:Lo		Avg Hold:>100/100	DET PNNNN	
		Mkr1 2	401 837 0 GHz	Auto Tune
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm			-0.417 dBm	
				Center Freg
			A2	2.441750000 GHz
	MMAAAAAAAAAAAAAA	WWWWWWW	\mathcal{W}	
-20.0				Otort From
-30.0				Start Freq 2.40000000 GHz
-40.0				2.400000000000
-50.0				
-60.0			પ,	Stop Freq 2.483500000 GHz
-70.0				2.483500000 GH2
Start 2.40000 GHz			Stop 2.48350 GHz	CF Step
	/BW 300 kHz		000 ms (1001 pts)	8.350000 MHz
MKR MODE TRC SCL X		CTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
1 N 1 f 2.401 837 0 GHz 2 N 1 f 2.480 494 0 GHz				
				FreqOffset
5			E	0 Hz
6				
8				
10				
•			•	
MSG		STATUS		

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14. Dwell Time

14.1 Block Diagram Of Test Setup



14.2 Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

14.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.

2. Set spectrum analyzer span = 0. Centred on a hopping channel;

3. Set RBW = 1MHz and VBW = 3MHz.Sweep = as necessary to capture the entire dwell time per hopping channel. Set the EUT for DH5, DH3 and DH1 packet transmitting.

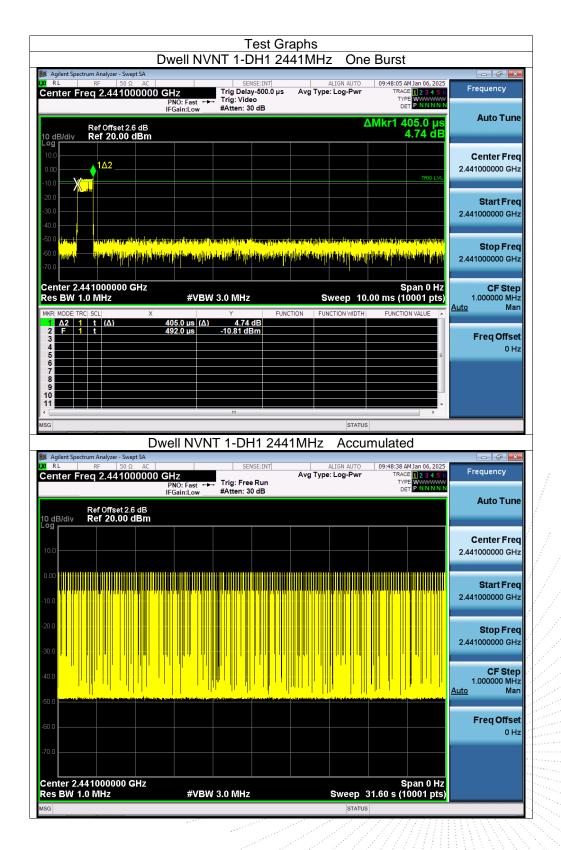
4. Use the marker-delta function to determine the dwell time. If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s).

			·.				2 1 2 2 2	
Condition	Mode	Fre- quency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.405	129.195	319	31600	400	Pass
NVNT	1-DH3	2441	1.662	284.202	171	31600	400	Pass
NVNT	1-DH5	2441	2.91	349.2	120	31600	400	Pass
NVNT	2-DH1	2441	0.399	126.483	317	31600	400	Pass
NVNT	2-DH3	2441	1.65	249.15	151	31600	400	Pass
NVNT	2-DH5	2441	2.898	315.882	109	31600	400	Pass
NVNT	3-DH1	2441	0.397	126.246	318	31600	400	Pass
NVNT	3-DH3	2441	1.646	276.528	168	31600	400	Pass
NVNT	3-DH5	2441	2.898	298.494	103	31600	400	Pass

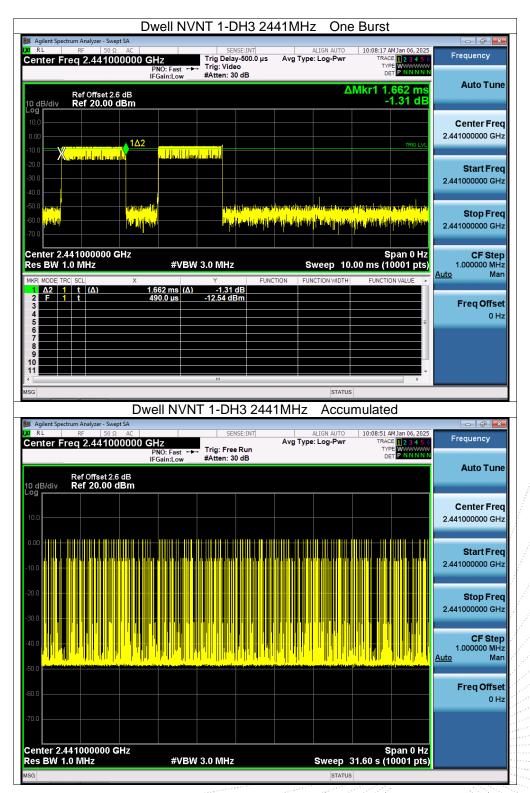
14.4 Test Result

Note: Total Dwell Time (ms) = Pulse Time (ms)*Burst Count











DWe	ell NVNT 1-DH5 2	2441MHz On	e Burst	
J Agilent Spectrum Analyzer - Swept SA	SENSE:INT	ALIGN AUTO	09:59:25 AM Jan 06, 2025	
Center Freq 2.441000000 GHz			TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P NNNNN	Frequency
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm		l	∆Mkr1 2.910 ms 0.91 dB	Auto Tune
10.0 0.00 10.0 10.0	1Δ2		TRIO LVL	Center Freq 2.441000000 GHz
-20.0				Start Freq 2.441000000 GHz
-50.0 (approp) -60.0 (approp) -70.0	in distant in the second s			Stop Freq 2.441000000 GHz
Center 2.441000000 GHz Res BW 1.0 MHz	#VBW 3.0 MHz	-	Span 0 Hz).00 ms (10001 pts)	CF Step 1.000000 MHz <u>Auto</u> Man
	0 ms (Δ) 0.91 dB 0 μs -3.70 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz
6 7 8 9 10 11				
	III			
MSG		STATU	s	
	I NVNT 1-DH5 24	41MHz Accu	Imulated	
M gilent Spectrum Analyzer - Swept SA N RL RF 50 Ω AC Center Freq 2.441000000 GHz	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	09:59:58 AM Jan 06, 2025 TRACE 1 2 3 4 5 6 TYPE	Frequency
M gilent Spectrum Analyzer - Swept SA N RL RF 50 Ω AC Center Freq 2.441000000 GHz	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	
Agilent Spectrum Analyzer - Swept SA IM RL RF 50.0. AC Center Freq 2.441000000 GHz PN PN Image: Second Secon	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	Frequency
Agilent Spectrum Analyzer - Swept SA IX RF 50 Ω AC Center Freq 2.441000000 GHz PN PN PR I0 dB/div Ref Offset 2.6 dB Ref 20.00 dBm 0 10.0	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	Frequency Auto Tune Center Freq
Agilent Spectrum Analyzer - Swept SA RL RF 50.0. AC Center Freq 2.441000000 GHz PN PN PN IG0 dB/div Ref Offset 2.6 dB 0 dB/div Ref 20.00 dBm 0 0 0	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
Agilent Spectrum Analyzer - Swept SA IX RF 50 Ω AC Center Freq 2.441000000 GHz PN PN PI I0 dB/div Ref Offset 2.6 dB Ref 20.00 dBm PI 10 dB/div Ref 20.00 dBm PI PI -10.0 PI PI PI PI -20.0 PI PI PI PI	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	Frequency Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz Stop Freq
Agilent Spectrum Analyzer - Swept SA RL RE 50 & AC Center Freq 2.441000000 GHz PN IC dB/div Ref 20.00 dBm Cog 10 dB/div Ref 20.00 dBm Cog 10.0 -10.	SENSE:INT	ALIGN AUTO	09:59:58 AM Jan 06, 2025	Start Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
Agilent Spectrum Analyzer - Swept SA IX RL RF 50 Q AC Center Freq 2.441000000 GHz PN PN IFGa I0 dB/div Ref Offset 2.6 dB G Interference 10 dB/div Ref 20.00 dBm Interference Interference 100	SENSE:INT	ALIGN AUTO	99:59:58 AM Jan 06, 2025 TRACE 12.3.45 TYPE WWWWWWW DET PINININN	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz CF Step 1.000000 MHz Auto Man
Agilent Spectrum Analyzer - Swept SA RL RF 50.0. AC Center Freq 2.441000000 GHz PN Ref Offset 2.6 dB Ref 20.00 dBm 0 dB/div Ref 20.00 dBm 0 00 Addition of the second of the	SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	09:59:58 AM Jan 06, 2025	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz CF Step 1.000000 MHz Auto Man



	ell NVNT 2-DH1 2	441MHz O	ne Burst	
Magilent Spectrum Analyzer - Swept SA	SENSE:INT	ALIGN AUT	09:52:02 AM Jan 06, 2025	e e 💌
Center Freq 2.441000000 GH				Frequency
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm			ΔMkr1 399.0 μs -0.02 dB	Auto Tune
10.0 0.00 1∆2			TRIG LVL	Center Freq 2.441000000 GHz
-10.0 -20.0 -30.0				Start Freq 2.441000000 GHz
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Center 2.441000000 GHz			Span 0 Hz	CF Step
Res BW 1.0 MHz MKR MODE TRC SCL X 1 Δ2 1 t (Δ) 399	#VBW 3.0 MHz γ FI 9.0 μs (Δ) -0.02 dB		10.00 ms (10001 pts) TH FUNCTION VALUE	1.000000 MHz <u>Auto</u> Man
3 4 5	0.0 µs -13.39 dBm			Freq Offset 0 Hz
6 7 8 9 10				
11 •		51/	TUS	
	II NVNT 2-DH1 24			
JWC Majlent Spectrum Analyzer - Swept SA	II INVINT Z-DHT Z4	4 I MHZ ACC	cumulated	- đ ×
X RL RF 50 Ω AC Center Freq 2.441000000 GH PN PN PN	Z IO: Fast +++ ain:Low #Atten: 30 dB	ALIGN AUT Avg Type: Log-Pv		Frequency
IFG			DET P IN IN IN IN	
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm			DET	Auto Tune
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm				Auto Tune Center Freq 2.44100000 GHz
10 dB/div Ref 20.00 dBm				Center Freq
10 dB/div Ref 20.00 dBm				Center Freq 2.44100000 GHz Start Freq
10 dB/div Ref 20.00 dBm				Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq
10 dB/div Ref 20.00 dBm				Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Freq Offset
10 dB/div Ref 20.00 dBm 10.0 0.00 10.0 -20.0 -30.0 -40.0 -50.0				Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz 1.000000 MHz Auto Man
10 dB/div Ref 20.00 dBm		Swee		Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Freq Offset



	Dwell NV	<u>'NT 2-DH3 2</u>	2441MHz	One Bur	st	
Agilent Spectrum Analyzer - Swep						- F ×
Center Freq 2.44100		SENSE:INT Trig Delay-500.0 µ , Trig: Video #Atten: 30 dB			25 AM Jan 06, 2025 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P NNNN	Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 d	6 dB			ΔMkr1	1.650 ms -0.32 dB	Auto Tune
10.0						Center Freq 2.44100000 GHz
-10.0	142				TRIG LVL	Start Freq
-30.0						2.441000000 GHz
-50.0 0000000000000000000000000000000000	tanahan tang bertakan tang Tang bertakan tang bertakan Tang bertakan tang bertakan	til han besterer af heler og er Heler som state som	a state of a state	and a second and the production of the second s Second second	alan ing Kang Sang Sang Kang Kang Sang Sang	Stop Freq 2.441000000 GHz
Center 2.441000000 C Res BW 1.0 MHz	#VBW	V 3.0 MHz		eep 10.00 ms		CF Step 1.000000 MHz <u>Auto</u> Man
MKR MODE TRC SCL 1 Δ2 1 t (Δ) 2 F 1 t 3	× <u>1.650 ms</u> (Δ) 475.0 μs		FUNCTION FUNCT	ION WIDTH FU	NCTION VALUE	Freq Offset
4 5 6 7					E	0 Hz
8 9 10 11						
MSG				STATUS	•	
		IT 2-DH3 24	441MHZ	Accumula	ited	
Agilent Spectrum Analyzer - Swep X RL RF 50 Ω Center Freq 2.44100	AC 00000 GHz PNO: Fast	SENSE:INT	ALI Avg Type: L		:58 AM Jan 06, 2025 TRACE 1 2 3 4 5 6 TYPE WWWWW DET P N N N N N	Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 d		#Atten: 30 dB			DET	Auto Tune
Log						
10.0						Center Freq 2.441000000 GHz
0.00 ++++++++++++++++++++++++++++++++++						2.441000000 GHz
0.00						2.441000000 GHz Start Freq
0.00 						2.44100000 GHz Start Freq 2.44100000 GHz Stop Freq 2.44100000 GHz CF Step 1.00000 MHz
0.00 -10.0 -20.0 -30.0 -40.0 -40.0 -50.0						2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step
0.00 + + + + + + + + + + + + + + + + + +						2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man
0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 Center 2.441000000 G					Span 0 Hz	2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man Freq Offset
0.00 -10.0 -20.0 -40.0 -60.0 -70.0 -70.0		V 3.0 MHz	S	weep 31.60 s		2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man Freq Offset



	well NVNT 2-DH5	2441MHZ Or	ne Burst	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC	SENSE:INT	ALIGN AUTO	10:03:01 AM Jan 06, 2025	- F X
Center Freq 2.441000000 G				Frequency
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm			ΔMkr1 2.898 ms -0.87 dB	Auto Tune
10.0 0.00 X2	1Δ2		TRIG LVL	Center Freq 2.441000000 GHz
-10.0				Start Freq 2.441000000 GHz
-40.0 -50.0 approx		true of the set of the prime set of the	भूम् पित्यो केन्त्र स्वर्थ्व हे मुंद्र प्रधाने क्रायेन्द्र से स्वर्थन स्वर्थन स्वर्थन स्वर्थन स्वर्थन स्वर्थन स	Stop Freq
-60.0 1000 1000 1000 1000 1000 1000 1000		line of equal to be a set of the		2.441000000 GHz
Center 2.441000000 GHz Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 1	Span 0 Hz 0.00 ms (10001 pts)	CF Step 1.000000 MHz <u>Auto</u> Man
	898 ms (Δ) -0.87 dB 98.0 μs -0.29 dBm			Freq Offset 0 Hz
5 6 7 8			E	
9 10 11 •	m		• •	
MSG		STAT	US	
Dwe	ell NVNT 2-DH5 24	441MHz Acc	umulated	
Agilent Spectrum Analyzer - Swept SA X RL RF 50 Ω AC	SENSE:INT			
Center Freq 2.441000000 G	HZ PNO: Fast +++ Trig: Free Run	ALIGN AUTO Avg Type: Log-Pw	TRACE 1 2 3 4 5 6	Frequency
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm	Hz			Frequency Auto Tune
Ref Offset 2.6 dB	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	Auto Tune Center Freq
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	Auto Tune Center Freq 2.441000000 GHz Start Freq
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0 0.00 + 11 + 11 + 11 + 11 + 11 + 11 + 11	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	Auto Tune Center Freq 2.44100000 GHz Start Freq 2.441000000 GHz Stop Freq
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Man
No.000 Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0	HZ PNO: Fast +++ Trig: Free Run		TRACE 1 2 3 4 5 6	Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man
No. Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0	HZ PNO: Fast +++ Trig: Free Run	Avg Type: Log-Pwi	TRACE 1123 4 5 6 TYPE WENNINN DET PINNINN TRACE 123 4 5 6 TYPE WENNINN DET PINNINN TRACE 123 4 5 6 TYPE WENNINN DET PINNINN TRACE 123 4 5 6 TYPE WENNIN TRACE 123 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz 3.441000000 GHz 2.441000000 GHz 0.00000 MHz 1.000000 MHz Auto Man



	Dwell NV	NT 3-D	H1 24	41MHz	z One	e Burst	
Jacob Agilent Spectrum Analyzer - Swep		SENS	SE:INT	/	LIGN AUTO	09:56:17 AM Jan 06, 2025	
Center Freq 2.44100		Trig Delay	-500.0 µs	Avg Type	Log-Pwr	TRACE 2 3 4 5 6 TYPE WWWWW DET P N N N N	Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 c	dB				4	∆Mkr1 397.0 µs -0.28 dB	Auto Tune
						TRIG LVL	Center Freq 2.441000000 GHz
-20.0							Start Freq 2.441000000 GHz
	المراجع والمراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والم				and a second second	and the second	Stop Freq
-70.0		istration in the first sport	ullala. Atean	nan find, de tan bul	an after a state	Span 0 Hz	2.441000000 GHz CF Step
		/ 3.0 MHz	FUNC		veep 10	.00 ms (10001 pts)	1.000000 MHz Auto Man
1 Δ2 1 t (Δ) 2 F 1 t 3 3 4 3 4 3 4 3 4 <td><u>397.0 μs</u> (Δ) 351.0 μs</td> <td>-0.28 d -13.58 dBi</td> <td>в</td> <td></td> <td></td> <td></td> <td>Freq Offset 0 Hz</td>	<u>397.0 μs</u> (Δ) 351.0 μs	-0.28 d -13.58 dBi	в				Freq Offset 0 Hz
5 6 7 8 9						=	
10 11 11		III				•	
MSG					STATUS		
	Dwell NVN	T 3-DH	1 244	1MHz	Accu	mulated	
Agilent Spectrum Analyzer - Swep RL RF 50 Ω Center Freq 2.44100	AC	SENS	SE:INT		LIGN AUTO	09:56:51 AM Jan 06, 2025	
	PNO: Fast +++	. Trig: Free		Avg Type	: Log-Pwr		Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 d	PNO: Fast ++ IFGain:Low	. Trig: Free #Atten: 30		Avg Type	: Log-Pwr	TRACE 123456 TYPE WWWWW DET PNNNN	Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 d	PNO: Fast ++ IFGain:Low			Avg Type	: Log-Pwr	TRACE 12 23 4 5 6 TYPE WWWWWWW DET PNNNNN	Frequency
10 dB/div Ref 20.00 d	PNO: Fast ++ IFGain:Low			Avg Type	: Log-Pwr		Auto Tune Center Freq
10 dB/div Ref 20.00 d	PNO: Fast ++ IFGain:Low			Avg Type	: Log-Pwr		Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq
10.0 dB/div Ref 20.00 d	PNO: Fast ++ IFGain:Low	#Atten: 30	dB				Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz Stop Freq 2.441000000 GHz
10 dB/div Ref 20.00 d	PNO: Fast IFGain:Low Bm	#Atten: 30	dB				Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man
10.0 Beldiv Ref 20.00 d 10.0	PNO: Fast IFGain:Low Bm	#Atten: 30	dB				Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz
10.0 Bef 20.00 d 10.0	BM BM BM BM BM BM BM BM BM BM BM BM BM B	#Atten: 30	dB				Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man Freq Offset
10.0 Beldiv Ref 20.00 d 10.0	PNO: Fast IFGain:Low dB IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	#Atten: 30	dB			Span 0 Hz 31.60 s (10001 pts)	Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 1.000000 MHz Auto Man Freq Offset 0 Hz



	Dwell NV	NT 3-DH3 2	441MHz	One Bur	st	
Agilent Spectrum Analyzer - Swe						
ເx RL RF 50Ω Center Freq 2.44100		SENSE:INT Trig Delay-500.0 μs Trig: Video #Atten: 30 dB		og-Pwr ⊺	ACE 1 2 3 4 5 6 TYPE WWWWWW DET P NNNNN	Frequency
Ref Offset 2.0 10 dB/div Ref 20.00	5 dB			ΔMkr1	1.646 ms -0.64 dB	Auto Tune
10.0	▲1∆2					Center Freq
0.00 X 2					TRIG LVL	2.441000000 GHz
-20.0						Start Freq 2.441000000 GHz
-40.0						
-60.0 align		<mark>a la fa da an an</mark>			<mark>it olda da p</mark>	Stop Freq 2.441000000 GHz
Center 2.441000000 C Res BW 1.0 MHz		/ 3.0 MHz	Swe	ep 10.00 ms	Span 0 Hz (10001 pts)	CF Step 1.000000 MHz
MKR MODE TRC SCL	× 1.646 ms (Δ)					<u>Auto</u> Man
2 F 1 t 3 4	498.0 µs	-0.24 dBm				Freq Offset 0 Hz
5 6 7					=	
8 9 10						
11 MSG		m		STATUS	•	
jji Agilent Spectrum Analyzer - Swe	pt SA	T 3-DH3 24	41MHz	Accumula	ted	
ເ <mark>¤</mark> RL RF 50 Ω Center Freq 2.44100		Trig: Free Run #Atten: 30 dB	ALIC Avg Type: Lo	og-Pwr ⊺	AM Jan 06, 2025 RACE 1 2 3 4 5 6 TYPE WWWWWW DET P NNNNN	Frequency
Ref Offset 2.6 10 dB/div Ref 20.00 d	dB					Auto Tune
10.0						Center Freq 2.441000000 GHz
0.00						Start Freq
-10.0						2.441000000 GHz
-20.0						Stop Freq
						2 441000000 CU-
-30.0						
-30.0						CF Step 1.000000 MHz
						CF Step 1.000000 MHz <u>Auto</u> Man
-40.0						1.000000 MHz
-40.0 						CF Step 1.000000 MHz <u>Auto</u> Man Freq Offset
-40.0 -50.0 -60.0		1 3.0 MHz	<u></u>	weep 31.60 s	Span 0 Hz (10001 pts)	CF Step 1.000000 MHz <u>Auto</u> Man Freq Offset



Mara .	well NVNT 3-DH5		e Burst	
Magilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.4410000000 C	SENSE:INT CH7 Trig Delay-500.0	ALIGN AUTO	10:05:34 AM Jan 06, 2025 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast +++ Trig: Video IFGain:Low #Atten: 30 dB		TYPE WWWWWW DET PNNNN	Auto Turo
Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm		1	∆Mkr1 2.898 ms 2.49 dB	Auto Tune
10 dB/div Ref 20.00 dBm				Center Freq
	μημετα 1Δ2		TRIG LVL	2.441000000 GHz
				Otort From
-30.0				Start Freq 2.441000000 GHz
-40.0 -50.0	the second like planting for the light of a foregreet term	for the start of the	a continentine de la contracta	
-60.0 10km		han na ting na antini a iki di ana ni bereten ta sa sa sa		Stop Freq 2.441000000 GHz
			On on 0 Hz	05.04.4
Center 2.441000000 GHz Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 1	Span 0 Hz 0.00 ms (10001 pts)	CF Step 1.000000 MHz <u>Auto</u> Man
MKR MODE TRC SCL X 1 Δ2 1 t (Δ) 2 F 1 t	Υ 2.898 ms (Δ) 2.49 dB 358.0 μs -14.81 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	
3 4	-14.61 αbm			Freq Offset 0 Hz
5 6 7			E	
8 9 10				
	III			
MSG		STATU	IS	
	vell NVNT 3-DH5 2	441MHz Acci	umulated	
Agilent Spectrum Analyzer - Swept SA			indiated	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.4410000000 C	GHz SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency
LX/RL RF 50Ω AC		ALIGN AUTO	10:06:08 AM Jan 06, 2025	Frequency
RL RF 50.0 AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB Ref Offset 20.00 dBm	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency
RE RE 50 Q AC Center Freq 2.441000000 C	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune
RL RF 50.0 AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune
RL RF 50 Ω AC Center Freq 2.441000000 (Ref 0ffset 2.6 dB Ref 0ffset 2.6 dB Ref 20.00 dBm	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz
RL RF 50.0 AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq
KI RF 50 Ω AC Center Freq 2.441000000 (C C C 10 dE/div Ref Offset 2.6 dB C C 10 dE/div Ref 20.00 dBm C C 0 00 10.0 10.0 10.0 10.0	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz
KI RF 50.0 AC Center Freq 2.441000000 (C C C 10 dB/div Ref Offset 2.6 dB C C 10 dB/div Ref 20.00 dBm C C 20 dB/div Ref 20.00 dBm C C	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz
M RF 50.0 AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm 10.0	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
XH RF 50 Ω AC Center Freq 2.441000000 (C C C 10 dB/div Ref Offset 2.6 dB C C 10 dB/div Ref 20.00 dBm C C 10 0 C C C C C 20 0 C C C C C C	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz
XI RF 50 Ω AC Center Freq 2.441000000 (10 dB/div Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 000	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Man
RL RF 50 Ω AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm 0 00 Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm 10 0 Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm 20 0 Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Stop Freq 1.000000 MHz
RL RF 50 Ω AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm 10 0	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:06:08 AM Jan 06, 2025 TRACE 12 3 4 5 6	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Man
X RF 50 Ω AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm 000	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO	10:00:08 AM Jan 06, 2025 TRACE 12 2 3 45 TYPE WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Man
KI PF 50.0 AC Center Freq 2.441000000 (Ref Offset 2.6 dB Ref Offset 2.6 dB Ref Offset 2.6 dB 10 dB/div Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm Ref 20.00 dBm 000	GHZ PNO: Fast ↔ Trig: Free Run	ALIGN AUTO Avg Type: Log-Pwr	10:05:08 AM Jan 06, 2025 TRACE 12 3 15 0 TYPE WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Man



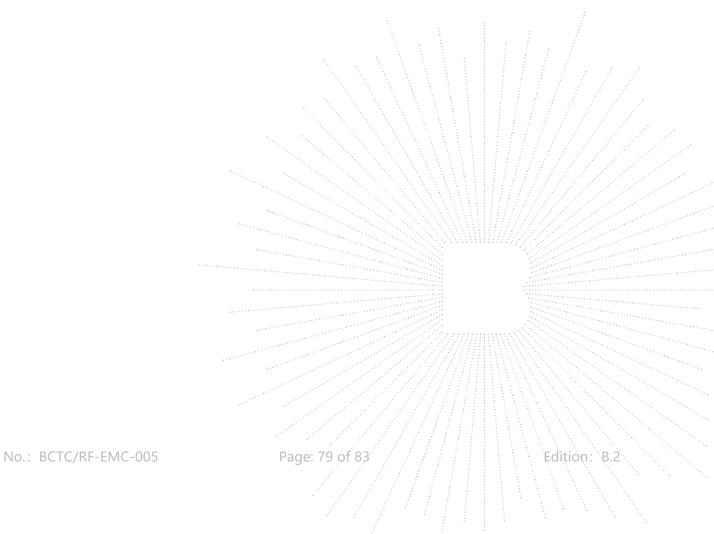
15. Antenna Requirement

15.1 Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

15.2 Test Result

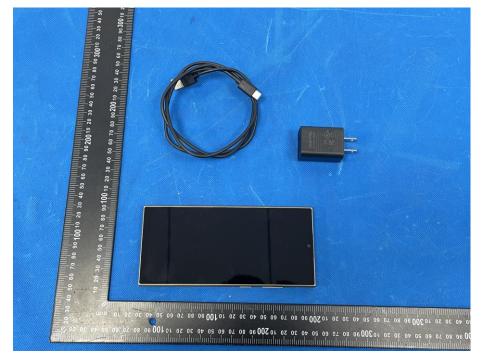
The EUT antenna is Internal antenna, fulfill the requirement of this section.





16. EUT Photographs

EUT Photo 1



EUT Photo 2



NOTE: Appendix-Photographs Of EUT Constructional Details.

No.: BCTC/RF-EMC-005

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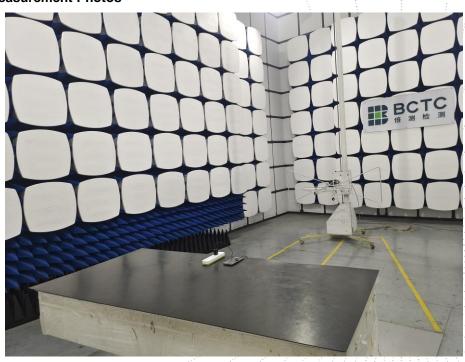


17. EUT Test Setup Photographs

Conducted Emissions Photo



Radiated Measurement Photos



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No.: BCTC/RF-EMC-005

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STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

Consultation E-mail: bctc@bctc-lab.com.cn.

Complaint/Advice E-mail: advice@bctc-lab.com.cn

***** END *****

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