

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	2401.818	2402.818	1	0.617	Pass
NVNT	1-DH1	2440.82	2441.82	1	0.624	Pass
NVNT	1-DH1	2478.82	2479.82	1	0.619	Pass
NVNT	2-DH1	2401.818	2402.82	1.002	0.804	Pass
NVNT	2-DH1	2440.818	2441.82	1.002	0.818	Pass
NVNT	2-DH1	2478.818	2479.818	1	0.827	Pass
NVNT	3-DH1	2401.82	2402.82	1	0.814	Pass
NVNT	3-DH1	2440.818	2441.818	1	0.806	Pass
NVNT	3-DH1	2478.818	2479.816	0.998	0.817	Pass

12.4 Test Result

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Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC	CFS NVNT 1-DH1	ALIGN AUTO	12:37:59 PM Apr 08, 2024
enter Freq 2.402500000 C	PNO: Wide Trig: Free Run IFGain:Low #Atten: 30 dB	#Avg Type: RMS Avg Hold:>100/100	TRACE 12345 TYPE MWWWW DET PNNNN
Ref Offset 0.5 dB 0 dB/div Ref 20.00 dBm og			Mkr1 2.401 818 GHz -0.637 dBm
10.0			
			×~~
20.0			
10.0			
60.0			
enter 2.402500 GHz			Span 2.000 MHz
Res BW 30 kHz	#VBW 100 kHz		eep 2.133 ms (1001 pts)
	Y FUNCTION 818 GHz -0.637 dBm 818 GHz -1.172 dBm	FUNCTION WIDTH	FUNCTION VALUE
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8			
G		STATUS	
20	CFS NVNT 1-DH1		
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC	SENSE:INT	2441MHz	ල ු ල ල ල 12:40:22 PM Apr08, 2024
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC	SHZ PNO: Wide Trig: Free Run	2441MHz	12:40:22 PM Apr 08, 2024 TRACE 12.345
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC enter Freq 2.441500000 C Ref Offset 0.5 dB	GHz SENSE:INT	2441MHz ALIGN AUTO #Avg Type: RMS Avg Hold:>100/100	12:40:22 PM Apr08, 202- TRACE 2 3 4 5 TYPE MWWWW DET P NNNN MKr1 2.440 820 GHz
Agilent Spectrum Analyzer - Swept SA RL RF 50 0 AC enter Freq 2.441500000 C Ref Offset 0.5 dB 0 dB/div Ref 20.00 dBm	SHZ PNO: Wide Trig: Free Run	2441MHz ALIGN AUTO #Avg Type: RMS Avg Hold:>100/100	12:40:22 PM Apr 08, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N
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Agilent Spectrum Analyzer - Swept SA RL RF 50 Q. AC enter Freq 2.441500000 C Ref Offset 0.5 dB 0 dB/div Ref 20.00 dBm 9 9 9 9 9 9 9 9 9 9 9 9 9	SHZ PNO: Wide IFGain:Low	2441MHz AvgType: RMS Avg[Hold:>100/100	12:40:22 PM Apr 08, 202 TRACE 1 2 3 4 5 TYPE DET P NNNN Mkr1 2.440 820 GHz -3.961 dBm Span 2.000 MHz 2ep 2.133 ms (1001 pts)
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No.: BCTC/RF-EMC-005



Agilent Spectrum Analyzer	- Swept SA 50 Ω AC	SENSE:I	NT	ALIGN AUTO		12:56:03	
enter Freq 2.40	2500000 GHz	NO: Wide 🕞 Tri	g: Free Run tten: 30 dB	#Avg Type Avg Hold:>	: RMS 100/100	TR	ACE 1 2 3 4 5 YPE MWWWW DET P NNNN
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Agilent Spectrum Analyzer R L RF	- Swept SA 50 Ω AC		3-DH1 2	2441MHz	·PMS	12:58:11 TR	R PM Δnr 08 20
Agilent Spectrum Analyzer R L RF	- Swept SA 50 Ω AC 1500000 GHz P	SENSE:I	3-DH1 2	2441MHz		TR	B PM Apr 08, 20
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	2441MHz Align Auto #Avg Type	100/100	TR. T 1 2.440	3 PM Apr 08, 203 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20.	- Swept SA 50 Ω AC 1500000 GHz IF	SENSE:I	3-DH1 2	2441MHz Align Auto #Avg Type	100/100	TR. T 1 2.440	3 PM Apr 08, 203 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
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Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse d dB/div Ref 20.	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR. T 1 2.440	3 PM Apr 08, 202 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20.	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR. T 1 2.440	3 PM Apr 08, 202 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
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Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR. T 1 2.440	3 PM Apr 08, 202 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR. T 1 2.440	3 PM Apr 08, 202 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20. 00 00 00 00 00 00 00 00 00	- Swept SA 50 Ω AC 1500000 GHz P IF st 0.5 dB	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR. T 1 2.440	3 PM Apr 08, 202 ACE 1 2 3 4 5 YPE MWWW DET PNNNN 818 GH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20. 9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	- Swept SA 50 Q AC 1500000 GHz P IF st 0.5 dB 00 dBm	SENSE:I	3-DH1 2	ALIGN AUTO #Avg Type Avg Hold:>	100/100	TR T 12.440 -2.*	2PM Apro8, 2020 PT Apro8, 2020 PYPE MARKAN PYPE MARKAN 818 GH 180 dBn
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Code/div Ref 20. Code/div Ref 20	- Swept SA 50 Q AC 1500000 GHz P IF st 0.5 dB 00 dBm	SENSE:I	3-DH1 2 nt g: Free Run ten: 30 dB	ALIGN AUTO #Avg Type Avg Hold:>	100/100 Mkr	TR 1 2.440 -2.'	2.000 MH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offs: 0 dB/div Ref 20. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- Swept SA 50.0 AC 1500000 GHz P IF et 0.5 dB 00 dBm 	SENSE: NO: Wide Tri Gain:Low #At	3-DH1 2 nt g: Free Run ten: 30 dB	ALIGN AUTO #Avg Type Avg Hold:>	100/100 Mkr	TR 1 2.440 -2.1	2.000 MH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offse 0 dB/div Ref 20. 0 d 0 d 0 d 0 d 0 d 0 d 0 d 0 d	-Swept SA 50 Q AC 1500000 GHz P if if if if if if if if if if	SENSE: NO: Wide Gain:Low Tri #A1	3-DH1 2 s: Free Run ten: 30 dB	2441MHz	100/100 Mkr	TR 1 2.440 -2.'	2.000 MH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offso 0 dB/div Ref 20. 0 d 0 dB/div Ref 20. 0 d 0 d 0 d 0 d 0 d 0 d 0 d 0 d	- Swept SA 50.0 AC 1500000 GHz P IF et 0.5 dB 00 dBm 	SENSE: NO: Wide Tri Gain:Low #At	3-DH1 2 s: Free Run ten: 30 dB	2441MHz	100/100 Mkr	TR 1 2.440 -2.'	2.000 MH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offso 0 dB/div Ref 20. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- Swept SA 50.0 AC 1500000 GHz P IF et 0.5 dB 00 dBm 	SENSE: NO: Wide Tri Gain:Low #At	3-DH1 2 s: Free Run ten: 30 dB	2441MHz	100/100 Mkr	TR 1 2.440 -2.'	2.000 MH
Agilent Spectrum Analyzer RL RF enter Freq 2.44 Ref Offs: 0 dB/div Ref 20. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- Swept SA 50.0 AC 1500000 GHz P IF et 0.5 dB 00 dBm 	SENSE: NO: Wide Tri Gain:Low #At	3-DH1 2 s: Free Run ten: 30 dB	2441MHz	100/100 Mkr	TR 1 2.440 -2.'	2.000 MH



	CFS NVNT 3-DH1 2	2480MHz	
	NO: Wide Trig: Free Run Gain:Low #Atten: 30 dB	ALIGN AUTO #Avg Type: RMS Avg Hold:>100/100	01:00:15 PM Apr 08, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N
Ref Offset 0.5 dB 10 dB/div Ref 20.00 dBm		Mkr	1 2.478 818 GH; -1.679 dBn
		\wedge^2	
-10.0			
-40.0			
Center 2.479500 GHz #Res BW 30 kHz	#VBW 100 kHz	Sweep	Span 2.000 MH 2.133 ms (1001 pts
MKR MODE TRC SCL X 1 N 1 f 2.478 818 GHz 2 N 1 f 2.479 816 GHz 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Y FUNCTION -1.679 dBm -1.498 dBm	FUNCTION WIDTH FUNC	TION VALUE
6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			
9 10 11 11 11 11 11 11 11 11 11 11 11 11			

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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

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Agilent Spectrum Analyzer - Swa RL RF 50 0	ept SA	NG NO. NVNT	ALIGN AUTO		01:04:10 PM Apr 08, 20
enter Freq 2.4417	PNO	: Fast Trig: Free n:Low #Atten: 30	Run Avg H	Type: RMS old:>100/100	TRACE 12345 TYPE MWWWW DET PNNN
Ref Offset 0. dB/div Ref 20.00				Mkr1 2	.402 004 0 GH -0.198 dBn
ant 2.40000 GHz Res BW 100 kHz	x	#VBW 300 kHz	Z		Stop 2.48350 GH .000 ms (1001 pts
1 1 f 2 N 1 f 3 - - - 4 - - - 5 - - - 7 - - - 8 - - - 9 - - - 1 - - -	2.402 004 0 GHz 2.479 993 0 GHz	-0.198 dBm 0.549 dBm			
3		III	STAT	JS	Þ
		ng No. NVNT	2-DH1 2441	MHz	
Agilent Spectrum Analyzer - Swe RL RF 50 S enter Freq 2.4417	2 AC 50000 GHz PN0	SENSE:INT Fast Trig: Free n:Low #Atten: 30	Run Avg H	Type: RMS lold:>100/100	01:08:25 PM Apr 08, 20 TRACE 1 2 3 4 5 TYPE MWWWW DET P NNNN
Ref Offset 0. dB/div Ref 20.00	5 dB	n.cow		Mkr1 2	.401 837 0 GH -0.989 dBn
		M. W.	MMMMMMM	avaatoonaa	10010000000000000000000000000000000000
tart 2.40000 GHz Res BW 100 kHz		#VBW 300 kHz	2	Sweep 8	Stop 2.48350 GH .000 ms (1001 pts
R MODE TRC SCL 1 1 f 1 f 3 1 f 1 f 5 1 f 1 f 6 1 1 f 1 8 1 1 f 1 9 1 1 1 1	X 2.401 837 0 GHz 2.480 494 0 GHz	Y FUN -0.989 dBm -6.658 dBm	NCTION FUNCTION WIDTI	H FUNCT	ION VALUE



	trum Analyzer - S								
RL		Ω AC 750000 GHz	SI	ENSE:INT	AL	IGN AUTO	RMS		3 PM Apr 08, 20
critor r			PNO: Fast 🖵 FGain:Low	Trig: Free R #Atten: 30 d		Avg Hold:>	100/100		
) dB/div	Ref Offset Ref 20.0						Mkr	1 2.401 6 -3.	70 0 GH 436 dBi
og 0.0									
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	000 GHz 100 kHz		#VBV	V 300 kHz			Swee	Stop 2. 8.000 ms	48350 GH (1001 pt
KR MODE TR	RC SCL	X	Y	FUNC	TION FUNC	TION WIDTH	F	UNCTION VALUE	
1 N 1 2 N 1		2.401 670 0 GHz 2.480 494 0 GHz	-3.436 d	IBm IBm					
3		2.480 494 0 GHZ	-0.900 0						
4 5									
6									
8									

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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).

14.4 Test Result

DH5 Packet permit maximum 1600 / 79 / 6 hops per second in each channel (5 time slots RX, 1 time slot TX).

DH3 Packet permit maximum 1600 / 79 / 4 hops per second in each channel (3 time slots RX, 1 time slot TX).

DH1 Packet permit maximum 1600 / 79 /2 hops per second in each channel (1 time slot RX, 1 time slot TX). So, the Dwell Time can be calculated as follows:

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Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.383	122.177	319	31600	400	Pass
NVNT	1-DH3	2441	1.639	272.074	166	31600	400	Pass
NVNT	1-DH5	2441	2.887	297.361	103	31600	400	Pass
NVNT	2-DH1	2441	0.391	123.947	317	31600	400	Pass
NVNT	2-DH3	2441	1.644	253.176	154	31600	400	Pass
NVNT	2-DH5	2441	2.892	309.444	107	31600	400	Pass
NVNT	3-DH1	2441	0.392	125.44	320	31600	400	Pass
NVNT	3-DH3	2441	1.643	243.164	148	31600	400	Pass
NVNT	3-DH5	2441	2.893	318.23	110	31600	400	Pass

Dwell	Te NVNT 1-DH	st Graphs 11 2441M		Burst		
	PNO: Fast Ti	::INT rig Delay-500.0 μs rig: Video Atten: 30 dB	ALIGN AUTO 5 #Avg Typ	e: RMS	TF	6 PM Apr 08, 202 ACE 1 2 3 4 5 TYPE W DET P NNNN
Ref Offset 0.5 dB					ΔMkr1	383.0 με 1.66 dE
• 9 10 0 0 00 10 0 20 0 30 0 40 0						TRIG LVL
50.0 <mark>Handis and Analysia and Analysia Analysia and Analysia and Analysia</mark>		alastika perteka perteka perteka 2014 - Angen Den Perteka pertek 2014 - Angen Den Perteka pertek	district of the second s	alina secola a distant Ni Ingenia ingenia	an de ante ante a fére Pande a tip de ante a fére Pande a tip de ante a fére de a	ing the state of the
60.0 100 100 100 100 100 100 100 100 100	1.00	о MHz	district and a second secon The second se	and the particular large large large	ուներին <mark>Իրինիսին</mark> 10.00 ms	Span 0 Hz (10001 pts
4 1 <th1< th=""> <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<></th1<>	#VBW 3	FUNCTION		Sweep	an the first of the state of th	Span 0 Hz (10001 pts

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	Dwell N	VNT 1-DH	3 2441N	IHz One	e Burst		
Agilent Spectrum Analyzer - Swept SA CRL RF 50 Ω AC Center Freq 2.4410000	00 GHz	0 East →→ Tri	INT ig Delay-500.0 μ ig: Video tten: 30 dB	ALIGN AUTO S #Avg T	ype: RMS	TRA TY	PM Apr 08, 20 CCE 1 2 3 4 5 /PE WW 3 4 5 /PE P NNNN
Ref Offset 0.5 dB 10 dB/div Ref 20.00 dBn						ΔMkr1 1	.639 m 1.53 dl
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0.0							
0.0 <mark>Alifetianen (</mark> 0.0 <mark>Alifetianen (</mark> 0.0	A CONTRACTOR OF	<mark>Ata kan kan baadaat</mark> Ata kan kan baadaat	A REAL PROPERTY AND A REAL	(1) A.	and the second sec	indenin di selahi ni Rateji separa perat	- 1 - T
enter 2.441000000 GHz es BW 1.0 MHz		#VBW 3.	0 MHz		Sweep	ء 10.00 ms (1	Span 0 H 10001 pt
KR MODE TRC SCL 1 Δ2 1 t (Δ) 2 F 1 t 3	× <u>1.639 ms</u> (/ 481.0 µs	Υ Δ) <u>1.53 dB</u> -12.83 dBm	FUNCTION	FUNCTION WIDTH	FL	UNCTION VALUE	
4 5 6 7 8							
9 0 1							
			III		;		· ·

	Dwell N	IVNT 1-DH	15 244 110	1Hz One	Duisi	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC enter Freq 2.44100000	P	NO East Tr	int ig Delay-500.0 μ ig: Video tten: 30 dB	ALIGN AUTO IS #Avg Typ	e: RMS	01:19:21 PM Apr 08, 2 TRACE 1 2 3 4 TYPE WWWW DET PNNN
Ref Offset 0.5 dB 0 dB/div Ref 20.00 dBm						ΔMkr1 2.887 m 5.58 d
og 0.0						
		1Δ2				TRIG L
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0.0 0.0	2.887 ms (481.0 µs	<mark>الباسية المالية المعام المع</mark> #VBW 3. ۲	O MHz	i waada halaa ka ahaa ka baar	Sweep	Span 0 H 10.00 ms (10001 pt
0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.887 ms	<mark>⊪∲ ынний/М</mark> ини #VBW 3. (Δ) 5.58 dB	O MHz	i waada halaa ka ahaa ka baar	Sweep	Span 0 H 10.00 ms (10001 pt
30.0 N/M/M 50.0 N/M/M center 2.441000000 GHz cestes BW 1.0 MHz KR MODE TRC SCL 1 Δ2 1 t 2 F 1 t 3 - 4 - 5 - 6 - 7 - 8 -	2.887 ms	<mark>⊪∲ ынний/М</mark> ини #VBW 3. (Δ) 5.58 dB	O MHz	i waada halaa ka ahaa ka baar	Sweep	Span 0 H 10.00 ms (10001 pt
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	Dwell NVNT 2	2-DH1 2441N	1Hz One	Burst	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.44100000	0 GHz PNO: Fast ↔ IFGain:Low	SENSE:INT Trig Delay-500.0 µ → Trig: Video #Atten: 30 dB	ALIGN AUTO s #Avg Typ	e: RMS	01:08:31 PM Apr 08, 2 TRACE 2 3 4 TYPE WWWW DET P N N N
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-40.0					
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60.0 0	<mark>μιμαμαίματα ματί #V() 391.0 μs (Δ) -1</mark>	BW 3.0 MHz	int dati punda di bari	Sweep	Span 0 I 10.00 ms (10001 p

	Dweii r	NVNT 2-DI	TS 244 II	VIAZ ONE	e Burst	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.44100000	00 GHz	NO East ↔ T	E:INT Frig Delay-500.0 Frig: Video Atten: 30 dB	ALIGN AUTO µs #Avg T	ype: RMS	01:20:13 PM Apr 08, 2 TRACE 1 2 3 4 TYPE WWWW DET P.N.N.
Ref Offset 0.5 dB 0 dB/div Ref 20.00 dBm						ΔMkr1 1.644 m 0.29 d
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enter 2.441000000 GHz es BW 1.0 MHz	y day bed along a	Y <mark>htµ⊅nn∺tho</mark> uno #VBW 3	3.0 MHz		Sweep	Name (Span 0 F
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DWC	II NVNT 2-DH5 24	41MHz One	Burst	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.441000000 GHz	SENSE:INT Trig Delay PNO: Fast IFGain:Low #Atten: 30)	pe: RMS	01:21:05 PM Apr 08, 2024 TRACE 2 3 4 5 C TYPE WWWWWW DET P NNNN
Ref Offset 0.5 dB 10 dB/div Ref 20.00 dBm Log				ΔMkr1 2.892 ms -2.31 dB
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0.0 0.0 <td>0000 GHz z</td> <td>392.0 µs</td> <td>#VBW</td> <td>V 3.0 MHz</td> <td>alt of a state of a st</td> <td>nd Active Active</td> <td>Sweep</td> <td>10.00 ms</td> <td>Span 0 I</td>	0000 GHz z	392.0 µs	#VBW	V 3.0 MHz	alt of a state of a st	nd Active Active	Sweep	10.00 ms	Span 0 I



	Dwell N	IVNT 3-DH	IS 244 HV	ITZ ONE	Burst		
RL RF 50 Ω A enter Freq 2.4410000	AC DOO GHZ PN	IO:East ⊶ Tri	ուլ g Delay-500.0 μs g: Video tten: 30 dB	ALIGN AUTO s #Avg Ty	/pe: RMS	TR T	6 PM Apr 08, 20 ACE 1 2 3 4 YPE WWWW DET PNNN
Ref Offset 0.5 dE 0 dB/div Ref 20.00 dBi						∆Mkr1 ′	1.643 m 4.38 d
	1Δ2						
0.0 X2							TRIG L
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0.0 19941 0.0 19941 enter 2.441000000 GHz			neska (jällen og had kal) Di ja		h fan kir fa fan Handelan an H	<mark>ny, and plant, all plants In the second second</mark>	Span 0 H
00 070000 00 0 enter 2.441000000 GHz es BW 1.0 MHz sq MoDel TRC ScL 1 A2 1 t (A) 2 F 1 t		тыцаранана #VBW 3.	o MHz		Sweep	<mark>n (</mark> , and () () () () () () () () () (Span 0 H
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	z 1.643 ms (/	#VBW 3.	o MHz		Sweep	10.00 ms (Span 0 H
0.0 μμμ enter 2.441000000 GHz es BW 1.0 MHz 1 Δ2 1 t Δ2 1 1 Δ2 3 - 5 - 6 - 7 - 8 - 9 -	z 1.643 ms (/	#VBW 3.	o MHz		Sweep	10.00 ms (Span 0 H
0.0 μ 0.0 μ 0.0 μ enter 2.441000000 GHz es BW 1.0 MHz RR MODE TRCI SCI 1 Δ2 1 1 Δ2 1 2 F 1 3 4 4 5 6 6 7 8 9	z 1.643 ms (/	#VBW 3.	o MHz		Sweep	10.00 ms (Span 0 H

	ell NVNT 3-DF		z Onel	Durot	
Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC Center Freq 2.441000000 GH		:INT ig Delay-500.0 μs ig: Video	ALIGN AUTO #Avg Type	e: RMS	01:23:17 PM Apr08, 2 TRACE 1 2 3 4 TYPE WWWW DET P NNN
Ref Offset 0.5 dB		Atten: 30 dB			ΔMkr1 2.893 m -0.51 d
0 dB/div Ref 20.00 dBm					
					TRIG L
	dak dalah la mu	sell to a second de la face a termanade	e tale at t di tutal a	I. Beards on Lt. Laborates	a na shi ya ya na fanda dha na shi ta ana a shi ta ana angal
					and had been a sublemented as a second to be
Philip in the second	hin d'hri	alders per per per a des		hilliopologich	
enter 2.441000000 GHz	#VBW 3.				Span 0 H 10.00 ms (10001 pt
70.0 Content of the second sec	#VBW 3.	0 MHz		Sweep	Span 0 H 10.00 ms (10001 pt JNCTION VALUE
•••••• ••••• enter 2.441000000 GHz es BW 1.0 MHz κε MODE TRC SCL X 1 Δ2 Δ1 t (Δ) 2.85	#VBW 3.	0 MHz		Sweep	10.00 ms (10001 pt
0.0 44/f enter 2.441000000 GHz es BW 1.0 MHz KR MODE TRC SCL 2 F 1 t 2 F 4 5 6	#VBW 3. γ 93 ms (Δ) -0.51 dB	0 MHz		Sweep	10.00 ms (10001 pt
A A Column 1 X RR <mode< td=""> TCC SCL X 1 A2 1 t (A) 2.88 2 F 1 t 35 35 3 4 - - 5 - - 6 - - - - - -</mode<>	#VBW 3. γ 93 ms (Δ) -0.51 dB	0 MHz		Sweep	10.00 ms (10001 pt



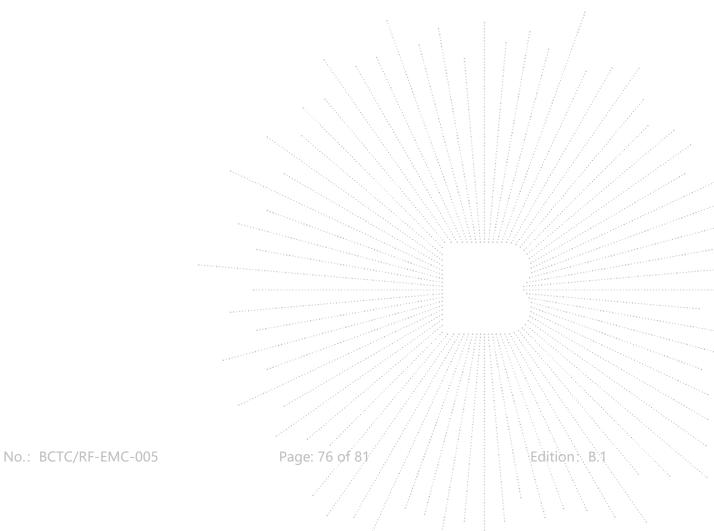
15. Antenna Requirement

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

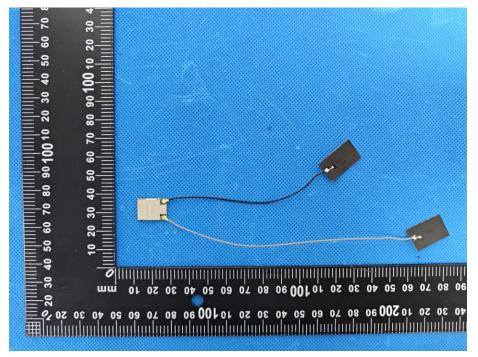
The EUT antenna is FPC antenna, fulfill the requirement of this section.



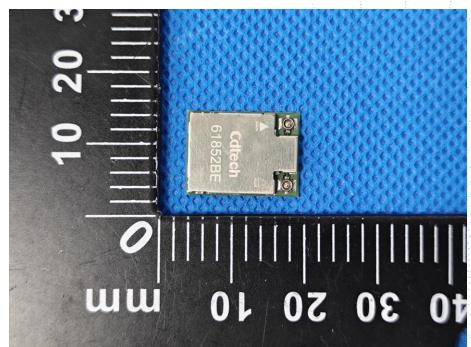


16. EUT Photographs

EUT Photo 1



EUT Photo 2



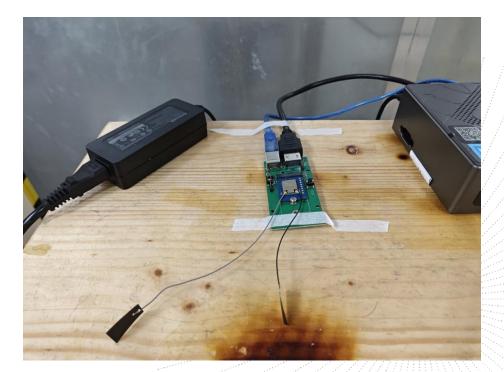
NOTE: Appendix-Photographs Of EUT Constructional Details.



17. EUT Test Setup Photographs

Conducted Measurement Photo



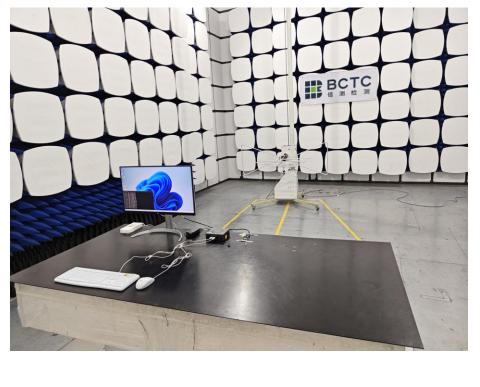


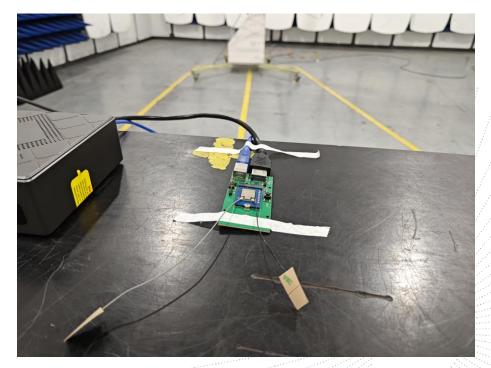
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Radiated Measurement Photos

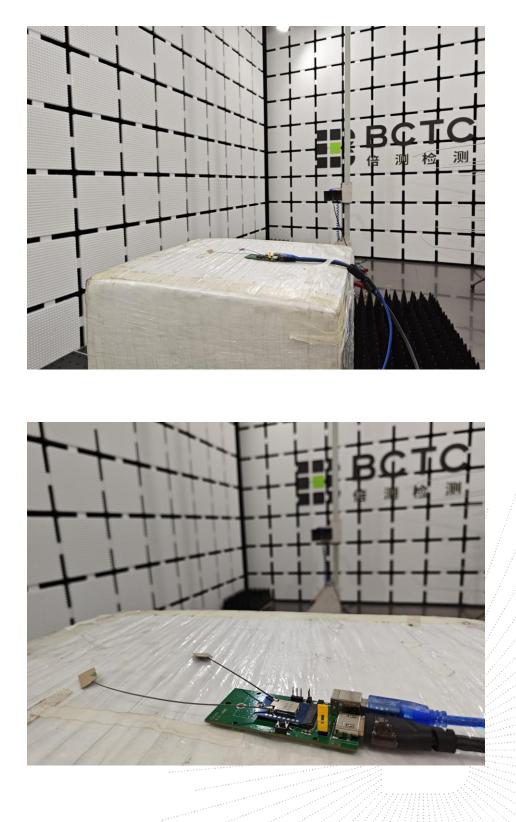




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STATEMENT

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.

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***** END *****

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