FCC §15.247(a) (1) (iii) & RSS-247 § 5.1 (d) - TIME OF OCCUPANCY (DWELL TIME)

Applicable Standard

According to FCC §15.247(a) (1) (iii):

Frequency hopping systems in the 2400-2483.5 MHz 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.

According to RSS-247 § 5.1 (d):

Frequency hopping systems (FHSs) operating in the band 2400-2483.5 MHz shall use at least 15 hopping 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. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.4

- 1. The EUT was worked in channel hopping.
- 2. Set the RBW to: 1MHz.
- 3. Set the VBW \geq 3×RBW.
- 4. Set the span to 0Hz.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Recorded the time of single pulses



Attenuator

Note 1: A period time=0.4*79=31.6(S), Result=BurstWidth*Totalhops

Note 2: Totalhops=Hopping Number in 3.16s*10

Note 3: Hopping Number in 3.16s=Total of highest signals in 3.16s(Second high signals were other channel)

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	101 kPa

The testing was performed by Tom Tan on 2024-08-26 and 2024-08-27.

EUT operation mode: Transmitting

Test Result: Compliant. Please refer to the Appendix.

FCC §15.247(b) (1) & RSS-247§ 5.1(b) &§ 5.4(b) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to FCC §15.247(b) (1):

For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 nonoverlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

According to RSS-247§ 5.1(b) &§ 5.4(b):

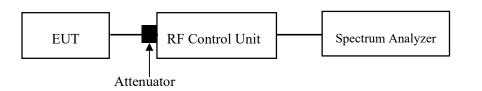
For frequency hopping systems (FHSs) operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W (see Section 5.4(e) for exceptions).

Frequency hopping systems (FHSs) 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, FHSs operating in the band 2400-2483.5 MHz 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 that the systems operate with an output power no greater than 0.125 W.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.5

- 1. Place the EUT on a bench and set in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- 3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	101 kPa

The testing was performed by Tom Tan on 2024-08-26.

EUT operation mode: Transmitting

Test Result: Compliant. Please refer to the Appendix.

FCC §15.247(d) & RSS-247 § 5.5 - BAND EDGES TESTING

Applicable Standard

According to FCC §15.247(d).

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

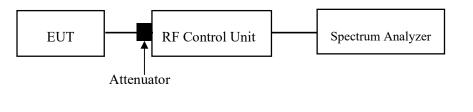
According to RSS-247 § 5.5.

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(e), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.6 & Clause 6.10

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.



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TR-EM-RF009
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Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	101 kPa

The testing was performed by Tom Tan on 2024-08-26 and 2024-08-27.

EUT operation mode: Transmitting

Test Result: Compliant. Please refer to the Appendix.

EUT PHOTOGRAPHS

Please refer to the attachment 2401V67572E-RF External photo and 2401V67572E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401V67572E-RFA Test Setup photo.

APPENDIX

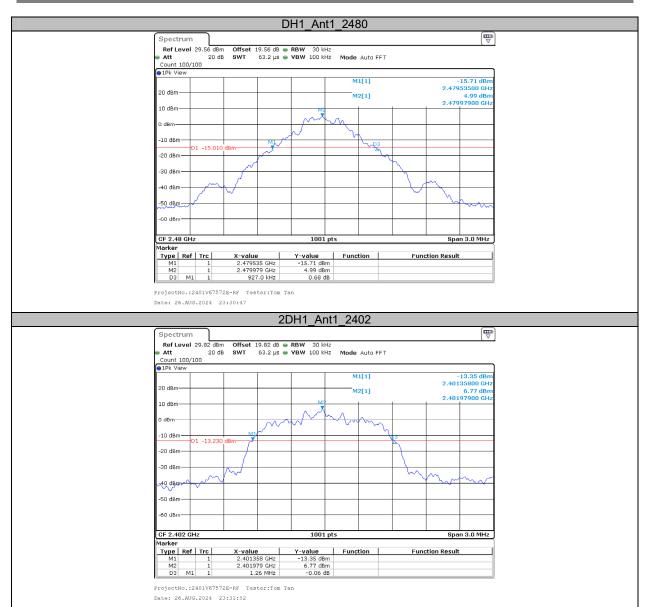
Appendix A: 20dB Emission Bandwidth

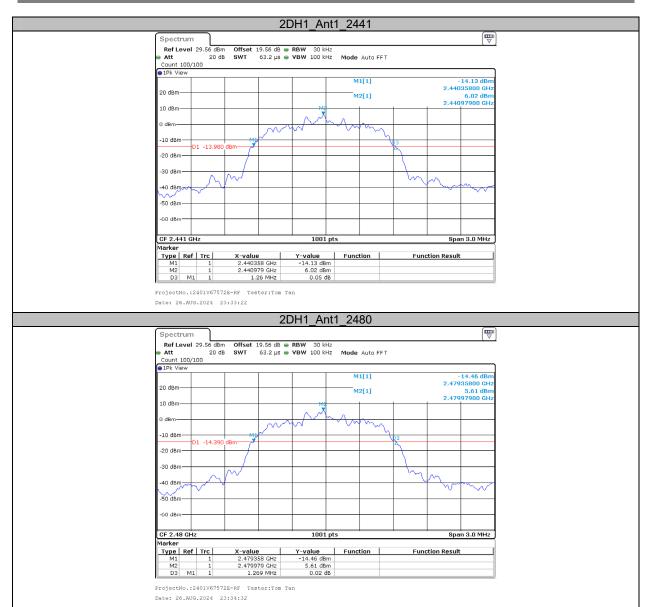
Test Result

Test Mode	Antenna	Channel	20dB EBW[MHz]	Limit[MHz]	Verdict
		2402	0.906		
DH1	Ant1	2441	0.906		
		2480	0.927		
		2402	1.260		
2DH1	Ant1	2441	1.260		
		2480	1.269		
		2402	1.233		
3DH1	Ant1	2441	1.230		
			1.233		

Test Graphs











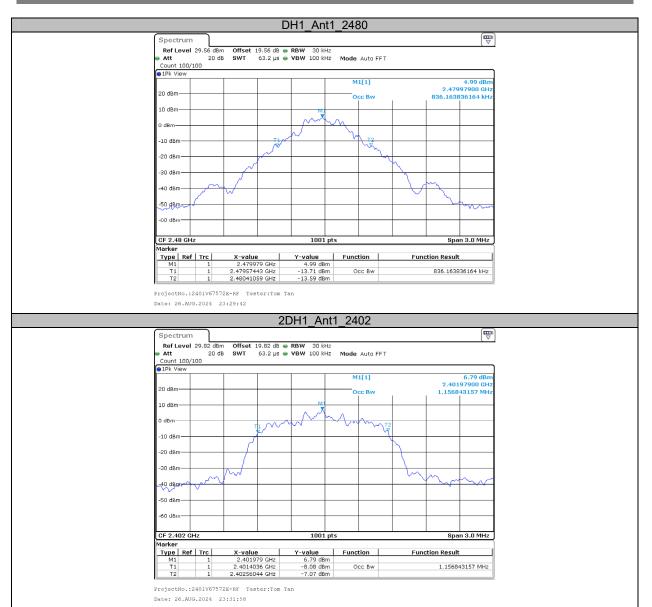
Appendix B: Occupied Channel Bandwidth

Test Result

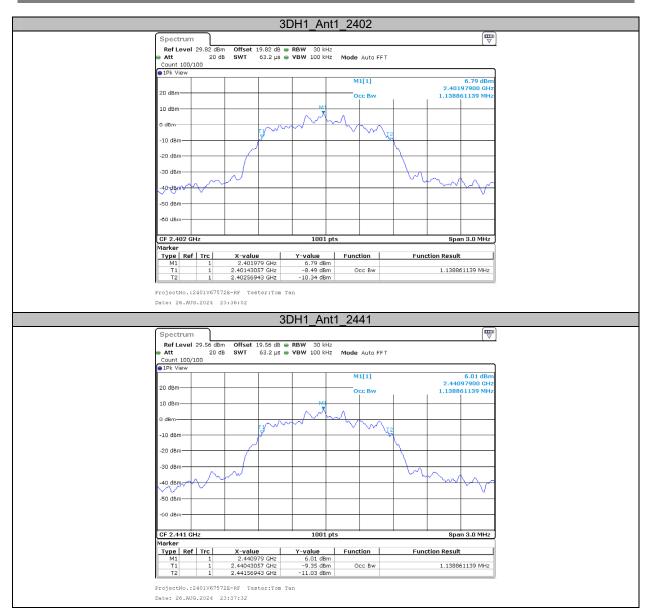
Test Mode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
		2402	0.836		
DH1	Ant1	2441	0.839		
		2480	0.836		
		2402	1.157		
2DH1	Ant1	2441	1.157		
		2480	1.160		
		2402	1.139		
3DH1	3DH1 Ant1	2441	1.139		
		2480	1.145		

Test Graphs











Appendix C: Maximum Conducted Peak Output Power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	EIRP[dBm]	EIRP Limit [dBm]	Verdict
		2402	9.28	≤20.97	9.49	≤36	PASS
DH1	Ant1	2441	8.51	≤20.97	8.72	≤36	PASS
		2480	8.09	≤20.97	8.30	≤36	PASS
		2402	11.07	≤20.97	11.28	≤36	PASS
2DH1	Ant1	2441	10.31	≤20.97	10.52	≤36	PASS
		2480	9.90	≤20.97	10.11	≤36	PASS
		2402	11.91	≤20.97	12.12	≤36	PASS
3DH1	Ant1	2441	11.19	≤20.97	11.40	≤36	PASS
		2480	10.80	≤20.97	11.01	≤36	PASS

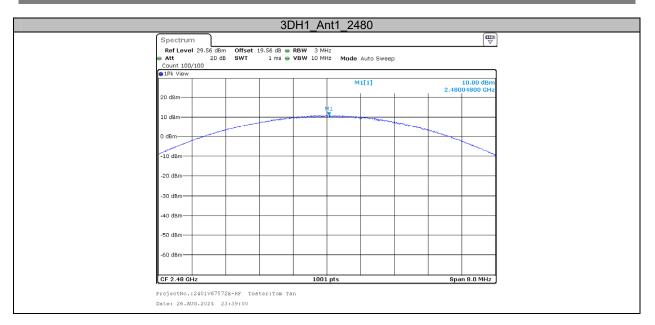
Test Graphs

	DH1_Ar	t1_2402			
Spectrum		1-			
Att 20 dB S ¹	Mfset 19.82 dB ● RBW 3 M WT 1 ms ● VBW 10 M	iz I z Mode Auto Sweep			
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20 dBm				100 012	
10 dBm	N	1			
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-10 dBm				\geq	
00.40-					
-20 dBm					
-30 dBm					
-40 dBm					
-50 dBm					
500 dBill					
-60 dBm-					
			Snand	3.0 MHz	
CF 2.402 CHz ProjectNo.:2401v67572E-Ri Date: 26.AUG.2024 23:27:	:43	t1_2441			
ProjectNo.:2401V67572E-RI Date: 26.AUG.2024 23:27 Spectrum Ref Level 29.56 dBm O	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441			_
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB St Count 100/100	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441			
 ProjectNo.:2401v67572E-RH Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB S	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep			
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB St Count 100/100 1Pk View	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441		.51 dBm	-
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S' Count 100/100 100/100 91Pk View 20 dBm 91	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	_
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB St Count 100/100 1Pk View	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S' Count 100/100 100/100 91Pk View 20 dBm 91	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB St Count 100/100 1Pk View 20 dBm 10 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB St Count 100/100 1Pk View 20 dBm 10 dBm 10 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
 ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S Count 100/100 ● 1Pk View 20 dBm 10 dBm 10 dBm 20 dBm 20 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB St Count 100/100 1Pk View 20 dBm 10 dBm 10 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S Count 100/100 ● 1Pk View 20 dBm 10 dBm 10 dBm 20 dBm 20 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S Count 100/100 ● 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
ProjectNo.:2401V675728-RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.56 dBm O Att 20 dB S Count 100/100 10 dBm 0 10 dBm 0 10 dBm 0 -20 dBm 0 -30 dBm 0 -30 dBm 0 -50 dBm 0	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	
Projectivo ::2401V675728RI Date: 26.AUG.2024 23:27: Spectrum Ref Level 29.55 dBm O Att 20 dB S Count 100/100 ● 1Pk View 20 dBm 10 dBm 10 dBm -20 dBm -30 dBm -40 dBm	F Tester:Tom Tan :43 DH1_Ar #fset 19.56 dB • RBW 3 M	t1_2441 ¹² ¹² Mode Auto Sweep	3	.51 dBm	

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	-60 dBm-										1	
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	Date: 26.	AUG.2024	23:30:55	21	DH1_A		02				-	_
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	Date: 26. Spectru Ref Lev Att Count 10	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	1Hz 1Hz Mode	Auto Sweep		2.402			
	Date: 26. Spectru Ref Lev Att Count 10 • 1Pk View	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		
	Date: 26. Spectru Ref Lev Att Count 10 • 1Pk View	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	1Hz 1Hz Mode	Auto Sweep		2.402	11.07 dBm		
	Spectru Ref Lev Att Count 11 10 dBm-	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		_
	Date: 26. Spectru Ref Lex Att Count 10 1Pk View 20 dBm—	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		
	Spectru Ref Lev Att Count 11 10 dBm-	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		
	Date: 26. Spectru Ref Lev Att Count II 91Pk Viev 20 dBm— 0 dBm— 0 dBm— -10 dBm—	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.405	11.07 dBm		
	Date: 26. Spectru Ref Lev Att Count 10 PIR View 20 dBm- 0 dBm- 0 dBm-	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.405	11.07 dBm		
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	Date: 26. Spectru Ref Lev Att Count II 91Pk Viev 20 dBm 10 dBm 20 dBm 20 dBm	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		
	Date: 26. Spectru Ref Lev Att Count II 9 IPk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.405	11.07 dBm		
	Date: 26.	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.405	11.07 dBm		
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	Date: 26. Spectru Ref Lev Att Count II 9 IPk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	AUG.2024 JITT Vel 29.82 df 20 00/100	23:30:55 Bm Offset	21	DH1_A	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		
	Date: 26. Spectrr. Ref Lev ▲ Att Count 11 ● 1Pk Viev 20 dBm 10 dBm 10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm	AUG.2024	23:30:55 Bm Offset	21	DH1_A RBW 3 M VBW 10 M	MHz MHZ Mode	Auto Sweep		2.402	11.07 dBm		

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Projecti Date: 28 Ref Le • Att Count • 1Pk Vii 20 dBm-	rum avel 29 100/100 ew	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	2p		9.90 dE
Projecti Date: 20 Specto Ref Le • Att Count • 1Pk Vii	rum avel 29 100/100 ew	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	2p		9.90 dE
Projecti Date: 28 Ref Le • Att Count • 1Pk Vii 20 dBm-	rum avel 29 100/100 ew	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	2p		9.90 dE
ProjectJ Date: 24 SpectL RefL Att Count IPk Vin 20 dBm- 0 dBm-	No.::240 5.AUG.2 rum avel 29 100/100 BW	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 20 Ref Lt Att Count I 0 dBm 10 dBm	No.::240 5.AUG.2 rum avel 29 100/100 BW	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	ab		9.90 dE
Project Date: 24 Spectr Ref Li Att Count 10 dBm- 10 dBm- 10 dBm-	rum evel 29 100/100 ev	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	ab		9.90 dE
ProjectJ Date: 24 SpectL RefL Att Count IPk Vin 20 dBm- 0 dBm-	rum evel 29 100/100 ev	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Project Date: 24 Spectr Ref Li Att Count 10 dBm- 10 dBm- 10 dBm-	rum 100/100 100/100 ew	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр 		9.90 dE
Project Date: 24 Spectr Ref Li Att Count 10 dBm- 10 dBm- 10 dBm- -20 dBm -30 dBm	Inc.:2400	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 24 Spectu Ref Li Att Count 10 dBm- 10 dBm- 10 dBm- -10 dBm-	Inc.:2400	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 24 Specto Ref Li Att Count 10 dBm- 10 dBm- 10 dBm- -20 dBm -30 dBm -40 dBm	Re.:240 G.2 S.AUG.2 Frum avel 29 100/100 Bw	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Project Date: 24 Spectr Ref Li Att Count 10 dBm- 10 dBm- 10 dBm- -20 dBm -30 dBm	Re.:240 G.2 S.AUG.2 Frum avel 29 100/100 Bw	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 24 Specto Ref Li Att Count 10 dBm- 10 dBm- 10 dBm- -20 dBm -30 dBm -40 dBm	rum 100.1240 100.100 100100 100100 100100 100100 100100 100100	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 24 Spect Ref Li Att Count O dBm- 10 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	rum 100.1240 100.100 100100 100100 100100 100100 100100 100100	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	nt1_24 ² Z Mode	Auto Swee	эр		9.90 dE
Projecti Date: 24 Specti Att Count 10 dBm- 10 dBm- 10 dBm- -20 dBm -30 dBm -30 dBm -50 dBm	rum rum svel 29 svel 29 sv	1V67572 2024 23 .56 dBm 20 dB	0ffset	19.56 df	2DH	l1_Ar wг змн	p p	Auto Swee	эр 	2.48	9.90 dE

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s	pectrum									
	Ref Level	29.82 dBm			RBW 3 M					(-
•	Att ount 100/1	20 dB	SWT	1 ms 👄	VBW 10 M	Hz Mode	Auto Swee	р		
	1Pk View	.00								
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						M1				
10) dBm					A STORE ST	and the second second			
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1	D dD a									
-1	.0 dBm									
-2	0 dBm									
-3	0 dBm					-		-		
-4	0 dBm									1
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Pro		2401V67572		ter:Tom Ta		1 pts			spa	IN 6.0 MH2
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Pro	jectNo.:2	2401V67572			an		41		spa	III 6.0 MH2
Pro Dat	jectNo.:2 e: 26.AUC	2401V67572 3.2024 23			an	nt1_24	41		spa	
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Pro Dat	pectrum Ref Level	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	Spa	
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Pro Dat	pectrum Ref Level Att	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
Pro Dat	pectrum Ref Level Att IPk View	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
Pro Dat	pectrum Ref Level Att IPk View	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
Pro Dat	pectrum Ref Level Att IPk View	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
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Production Productina Productina Productina Productina Productina Productina	pectrum pectrum Ref Level Att Att 100/1 IPk View 0 dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	P	_	(₩ ⊽
Pro Dat	pectrum pectrum Ref Level Att D dBm D dBm dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	P	_	(₩ ⊽
Pro Dat	pectrum Ref Level Att 0 dBm dBm dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
From 24	pjectNo.:22 pectrum Ref Level Att 100/J D dBm 0 dBm 0 dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
From 24	pectrum pectrum Ref Level Att D dBm D dBm dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
Pro Dat	pjectNo.:22 pectrum Ref Level Att 100/J D dBm 0 dBm 0 dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	P	_	(₩ ⊽
Propation 21	pectrum pectrum Ref Level Att D dBm D	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	P	_	(₩ ⊽
Propation 21	pectrum pectrum Ref Level Att ount 100/1 LPk View 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm 0 dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	p	_	(₩ ⊽
Front S Date 20 10 0 11 0 0 12 12 10 0 11 12 12 12 12 12 12 12 12 12 12 12 12	pectrum Ref Level Att Count 100/j Pk View O dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee	P	_	(₩ ⊽
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Front S Date 20 10 0 11 0 0 12 12 10 0 11 12 12 12 12 12 12 12 12 12 12 12 12	pectrum Ref Level Att Count 100/j Pk View O dBm	2401V67572 3.2024 2: 29.56 dBm 20 dB	0ffset ::	3[19.56 dB •	^{an} DH1_A квж зм	nt1_24	Auto Swee		_	(₩ ⊽
Front S Det 24 11 0 -1 -2 -3 -4 -4 -5 -5	pectrum Ref Level Att Count 100/j Pk View O dBm	2401V675722 3.2024 23 29.56 dBm 20 dB 100	0ffset ::	3[19.56 dB •	an DH1_A RBW 3 M VBW 10 M	nt1_24	Auto Swee		2.443	(₩ ⊽

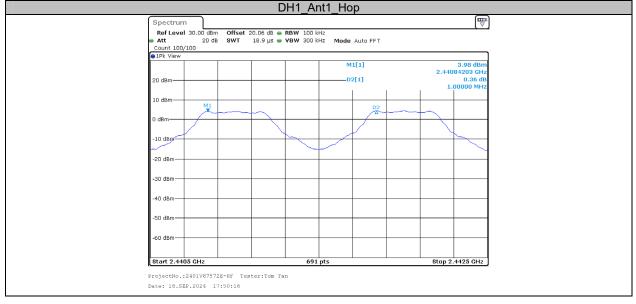


Appendix D: Carrier Frequency Separation

Test Result

Test Mode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Нор	1.000	≥0.846	PASS
Note: Only the BD	R (GFSK) mode re	sult is reported sind	ce EDR (π/4-DQPSK) and EDR (8	BDPSK) modes I	have the
exact same chann	el plan, and the lin	nit is the maximum	20dB bandwidth *2/3	-	

Test Graphs



Appendix E: Time of Occupancy

Test Result

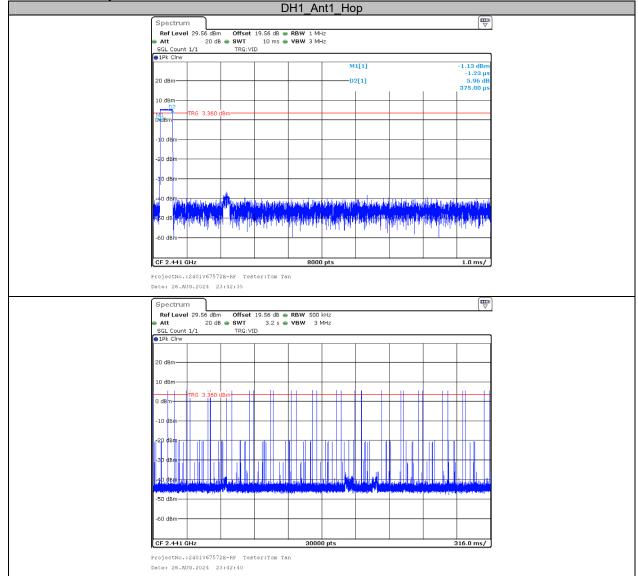
Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Нор	0.375	320	0.120	≤0.4	PASS
DH3	Ant1	Нор	1.623	160	0.260	≤0.4	PASS
DH5	Ant1	Нор	2.863	130	0.372	≤0.4	PASS
2DH1	Ant1	Нор	0.385	310	0.119	≤0.4	PASS
2DH3	Ant1	Нор	1.629	150	0.244	≤0.4	PASS
2DH5	Ant1	Нор	2.870	130	0.373	≤0.4	PASS
3DH1	Ant1	Нор	0.385	310	0.119	≤0.4	PASS
3DH3	Ant1	Нор	1.626	150	0.244	≤0.4	PASS
3DH5	Ant1	Нор	2.870	130	0.373	≤0.4	PASS

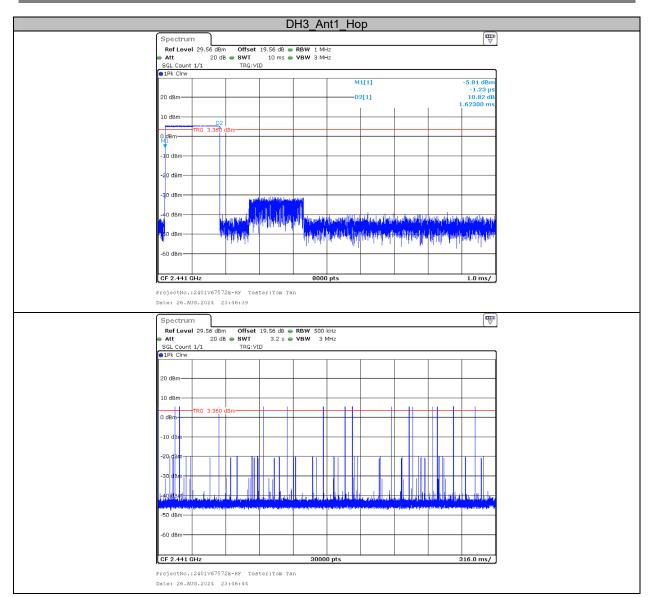
Note 1: A period time=0.4*79=31.6(S), Result=BurstWidth*Totalhops

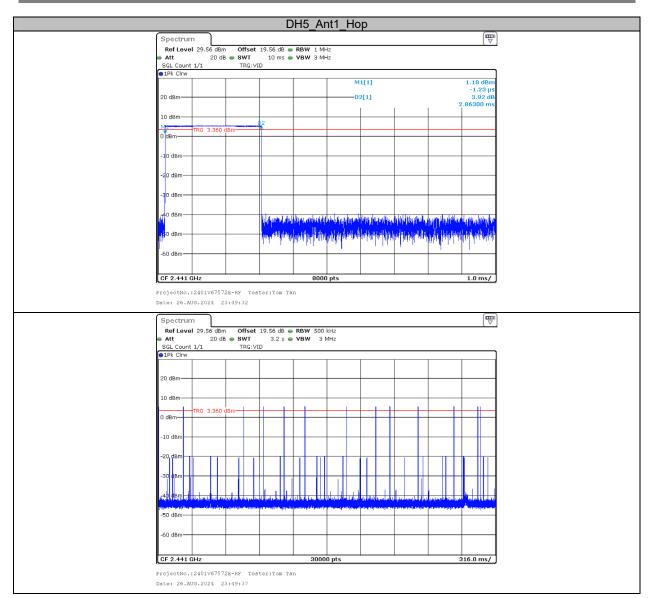
Note 2: Totalhops=Hopping Number in 3.16s*10

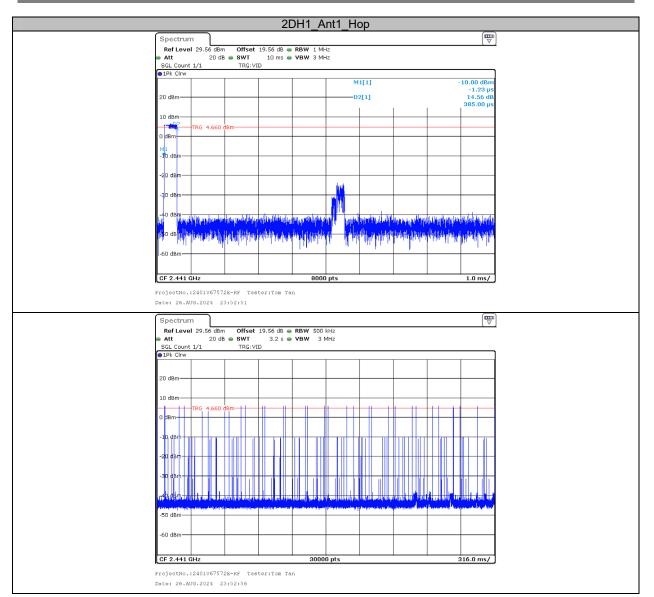
Note 3: Hopping Number in 3.16s=Total of highest signals in 3.16s(Second high signals were other channel)

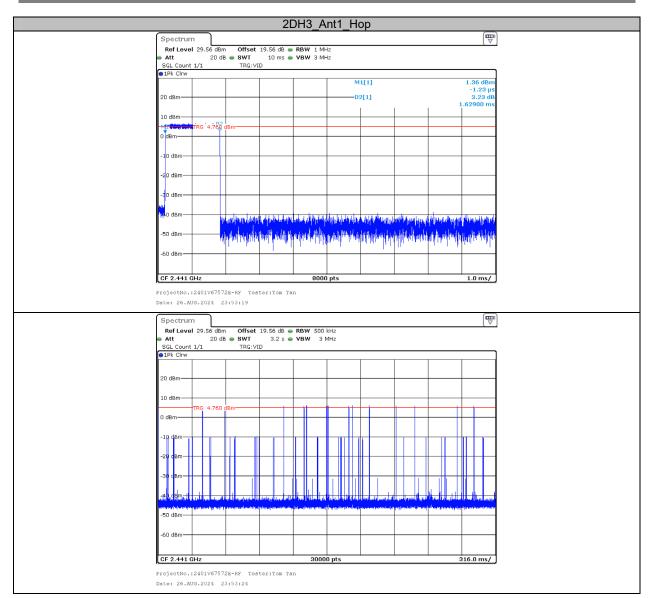
Test Graphs

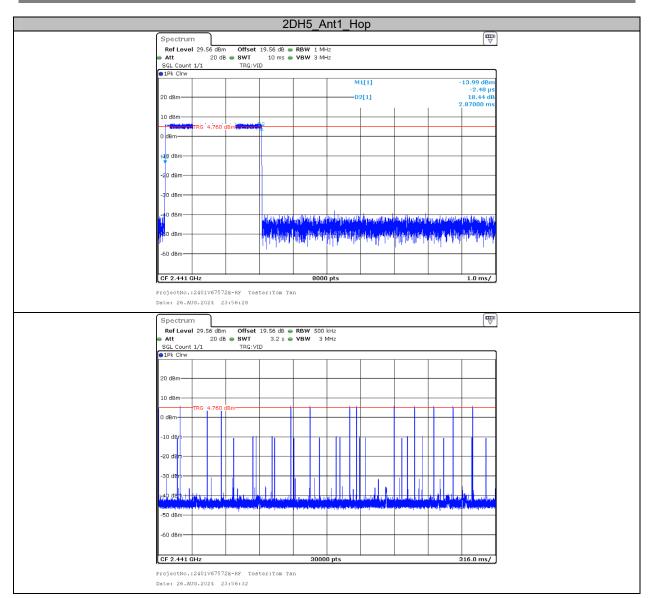


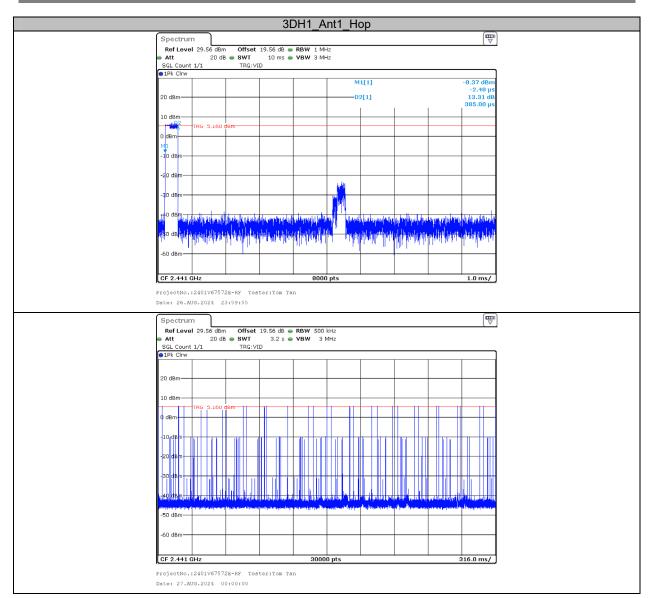


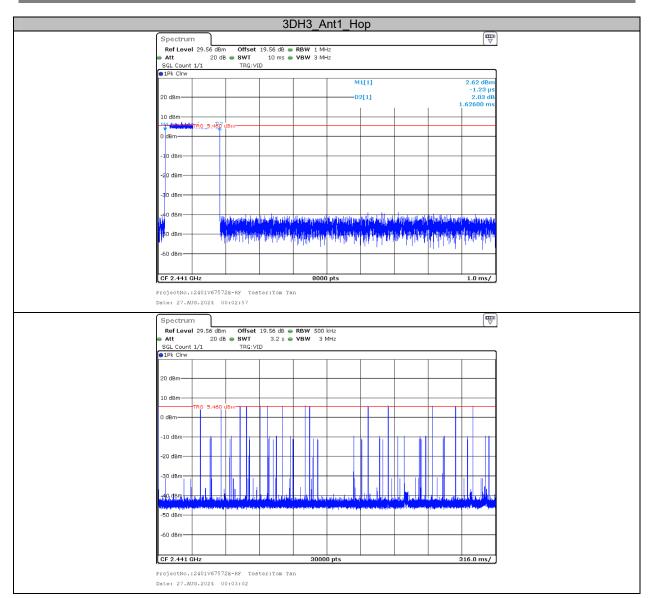


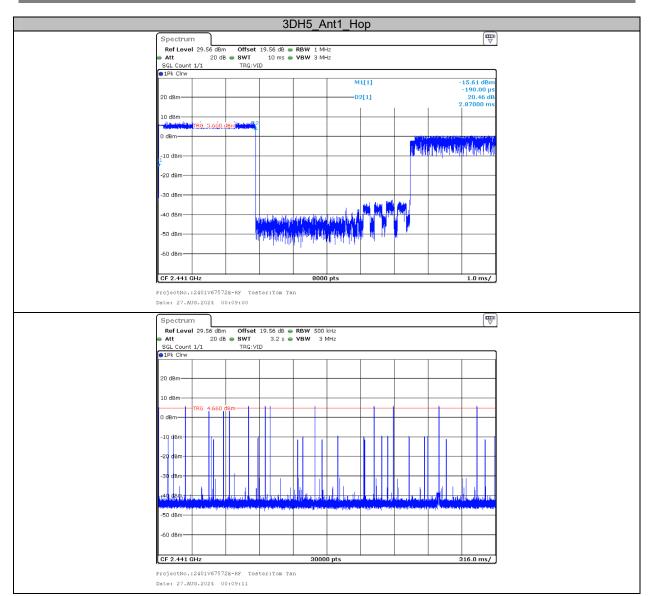












Appendix F: Number of Hopping Channels

Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Нор	79	≥15	PASS
2DH1	Ant1	Нор	79	≥15	PASS
3DH1	Ant1	Нор	79	≥15	PASS

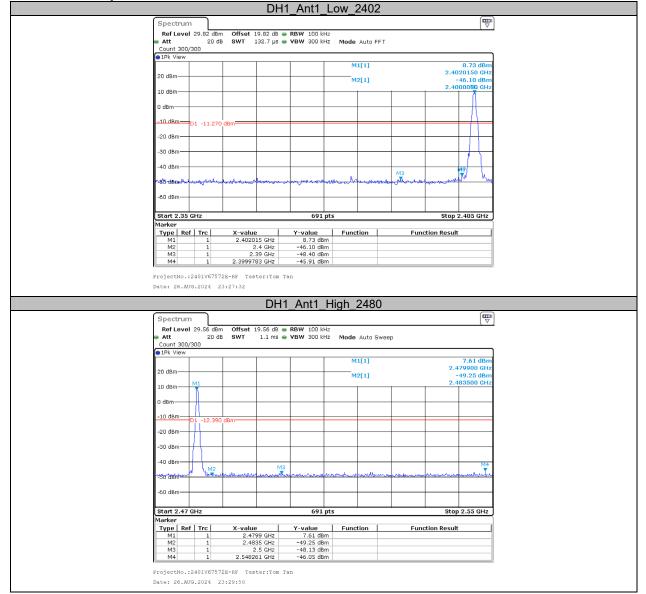
Test Graphs

DH1_Ant1_Hop
Spectrum 🕎
RefLevel 29.75 dBm Offset 19.75 dB ● RBW 100 kHz ● Att 20 dB SWT 1 ms ● VBW 300 kHz Mode Auto Sweep
Count 1000/1000
20 dBm
o dam
-10 36m
-20 dBm
-30 d8m-
-40 dBm-
-50 dBm
-60 dBm-
Start 2.4 GHz 691 pts Stop 2.4835 GHz
ProjectNo.:2401V67572E-RF Tester:Tom Tan
Date: 26.AUG.2024 23:42:21
2DH1_Ant1_Hop
Spectrum 🕎
RefLevel 29.75 dBm Offset 19.75 dB RBW 100 kHz Att 20 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep
Count 1000/1000
20 dBm
10 dBm
10 dBm
or and a second an
10 dBm

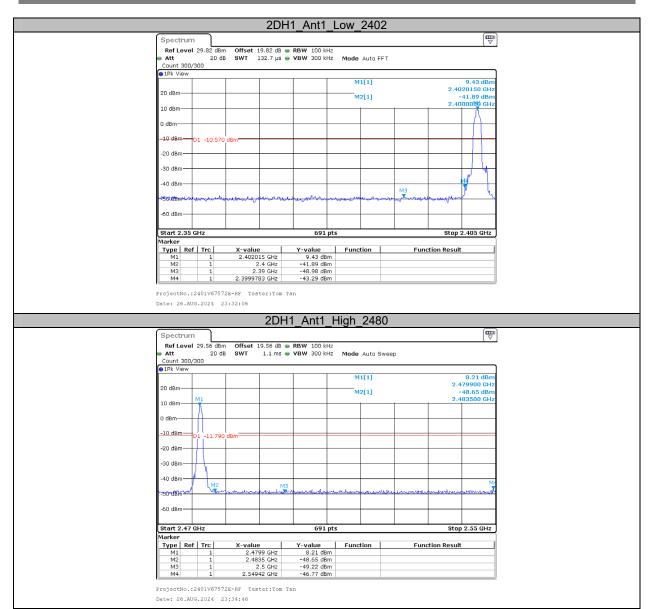
	_	3[DH1_A	nt1_H	эр				_
Spectrum	ן							([₩
Ref Level 29.		19.75 dB 👄							
e Att	20 dB SWT	1 ms 😑	VBW 300 k	Hz Mode	Auto Swee	p			
Count 1000/100	JU								
		1	1						
20 dBm									
10 dBm									
NANAANAAN	WARAMAAN	INAAAAAA	NULANAN	MINAMAA	IAAAAAAA	INANANANA	MAAAAAA	IANANA	
0 dBm		· · · · · · · · · · · · · · · · · · ·	1			100.8886.	00000000	0 * * * * 6	1
-10 dBm									
-20 dBm									
-30 dBm									
40 dBm									$\left\{ \right\}$
-50 dBm									١
-60 dBm									
Start 2.4 GHz			691	pts			Stop 2.	4835 G	Hz

Appendix G: Band Edge Measurements

Test Graphs











Report No.: 2401V67572E-RFA



***** END OF REPORT *****