Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: JUKEBOX WITH CD PLAYER

Test Model: CRCD2860BT

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Bill Zhu
Supervised by:	Li Huan

A.1 20dB Emission Bandwidth

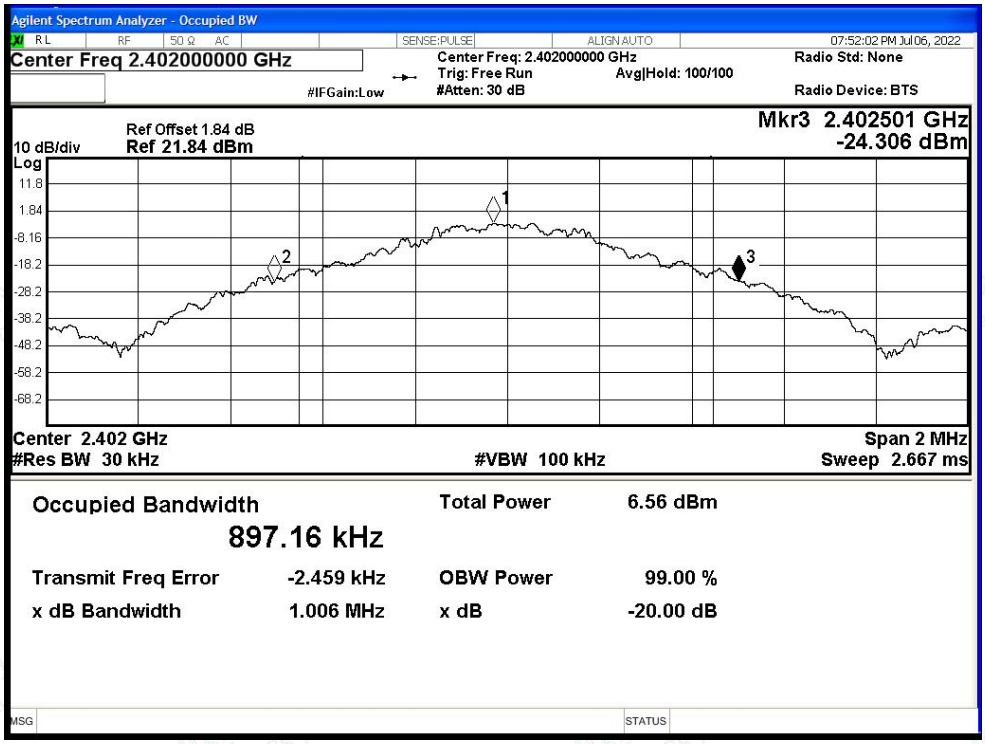
Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	1.006	2401.460	2402.498
		2441	1.021	2440.463	2441.492
		2480	1.022	2479.523	2480.498
2DH5	Ant1	2402	1.316	2401.361	2402.654
		2441	1.28	2440.334	2441.660
		2480	1.321	2479.361	2480.651
3DH5	Ant1	2402	1.299	2401.340	2402.657
		2441	1.297	2440.346	2441.651
		2480	1.294	2479.343	2480.657

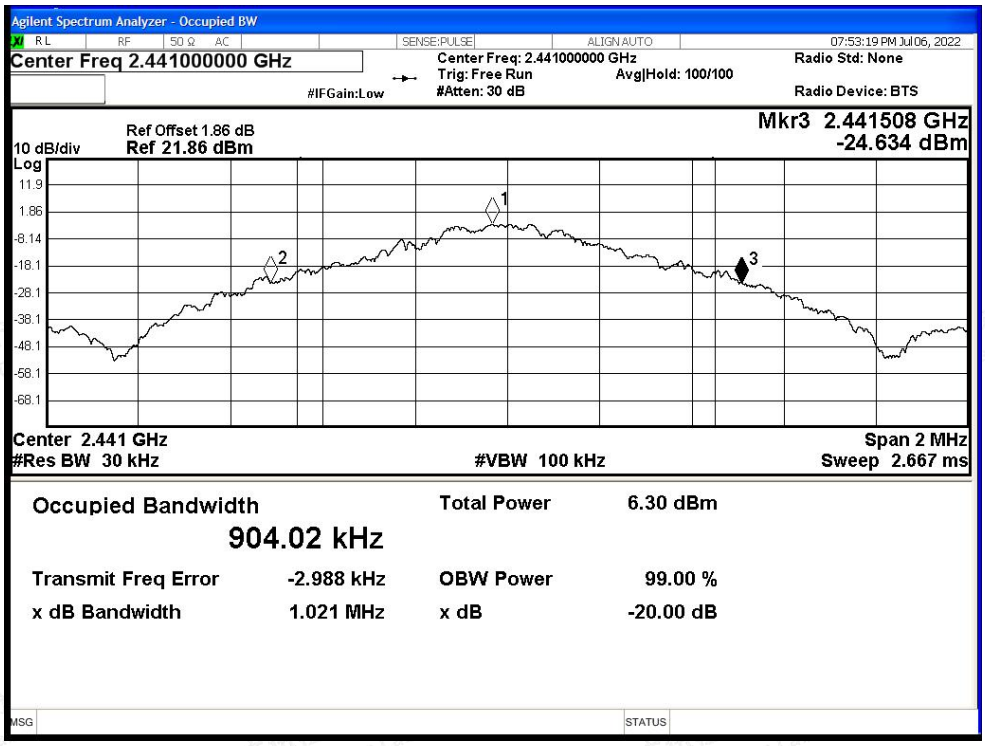
Test Graphs

Test Graphs

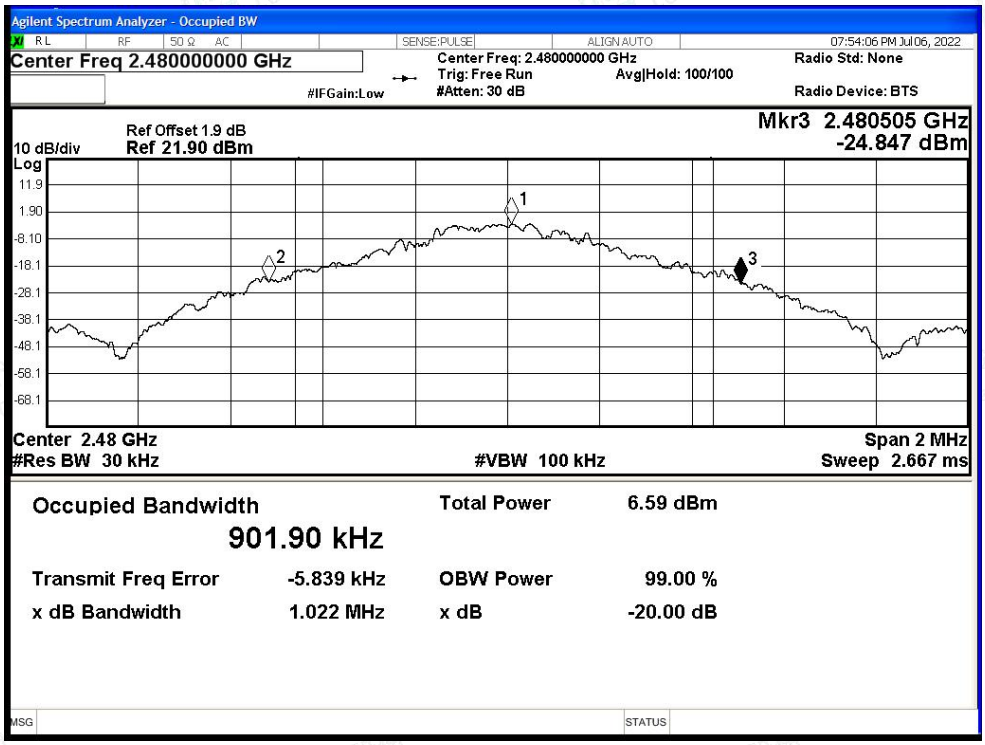
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



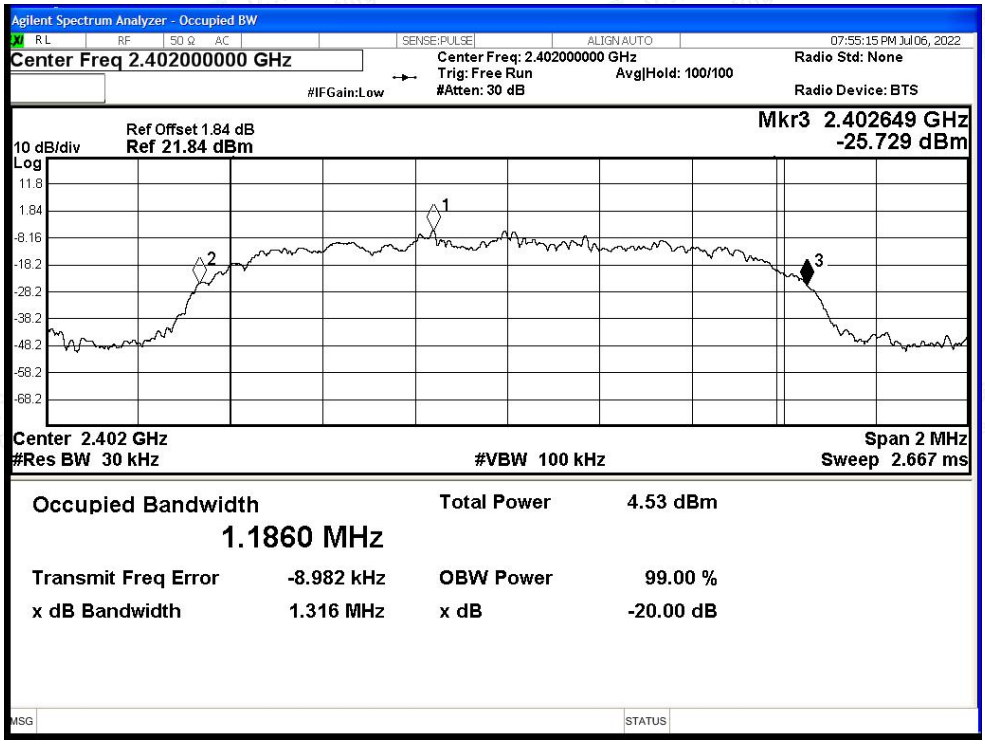
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



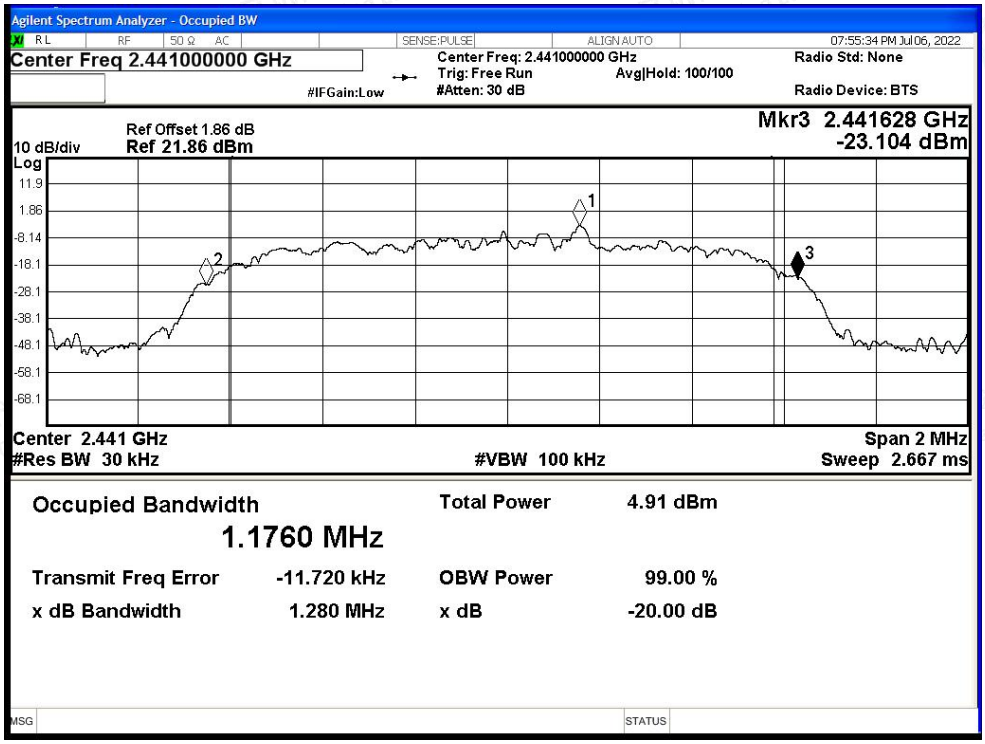
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



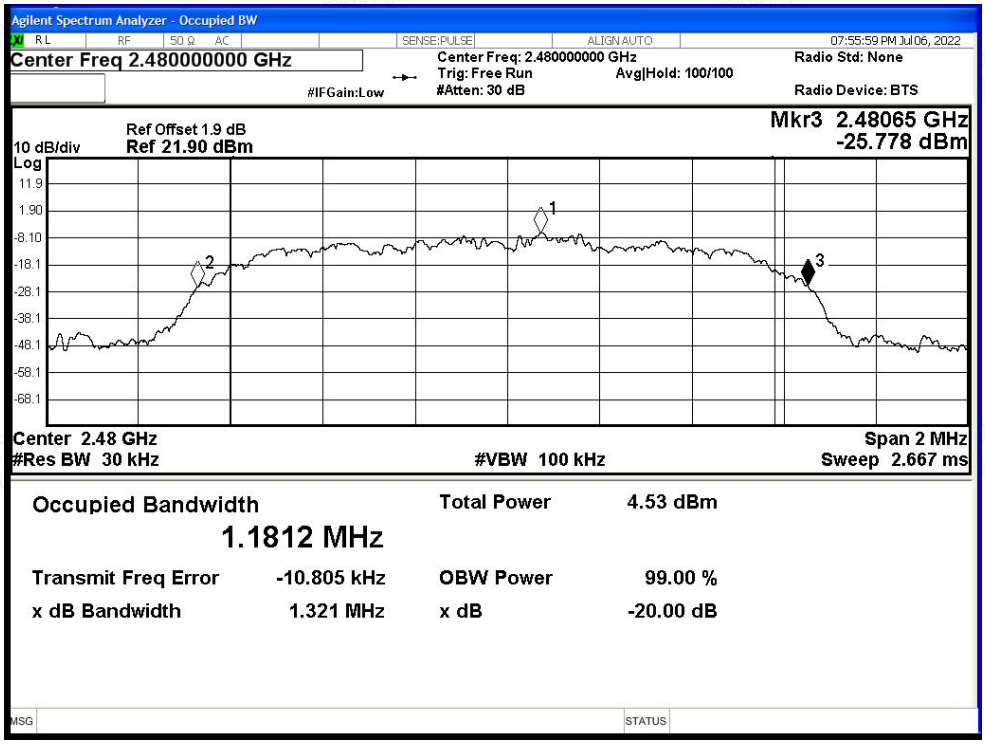
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



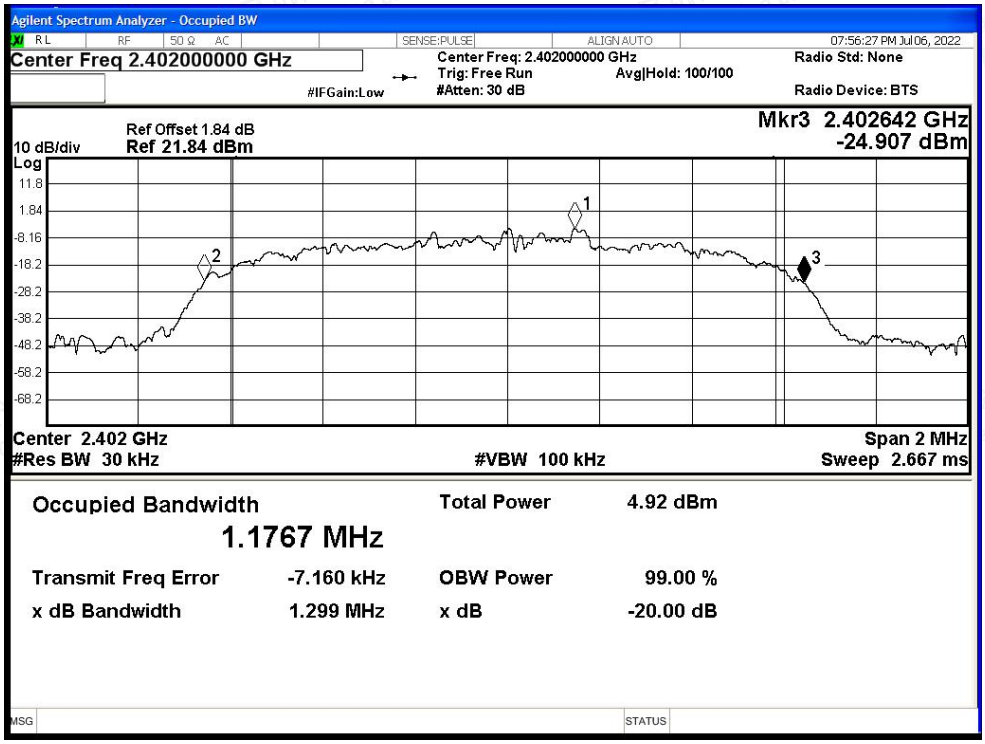
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



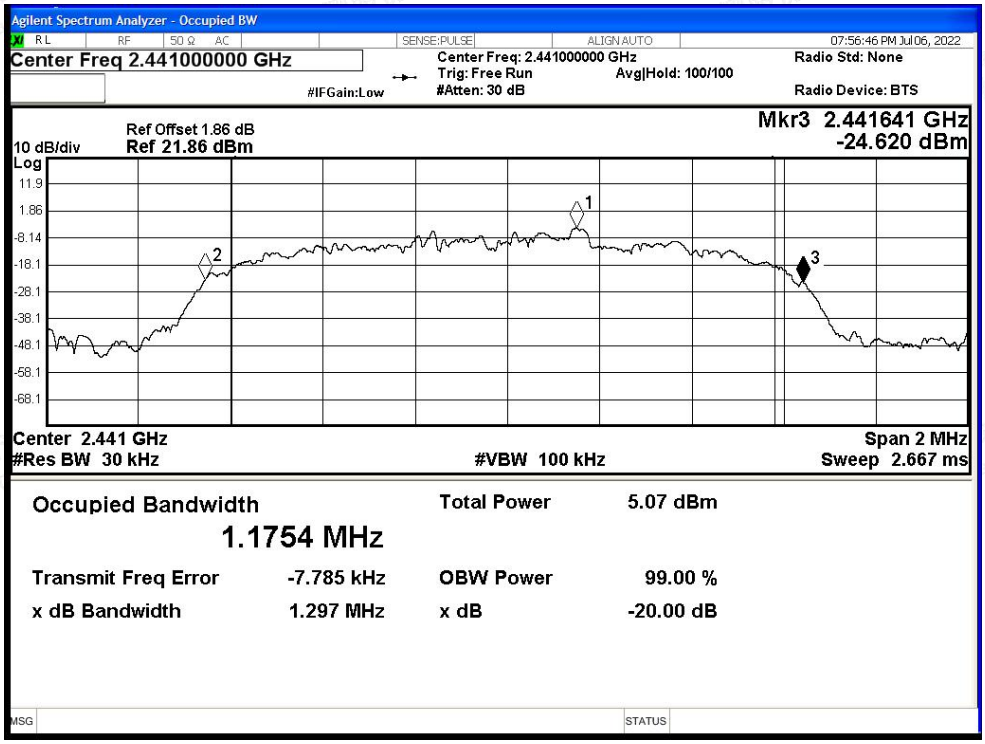
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



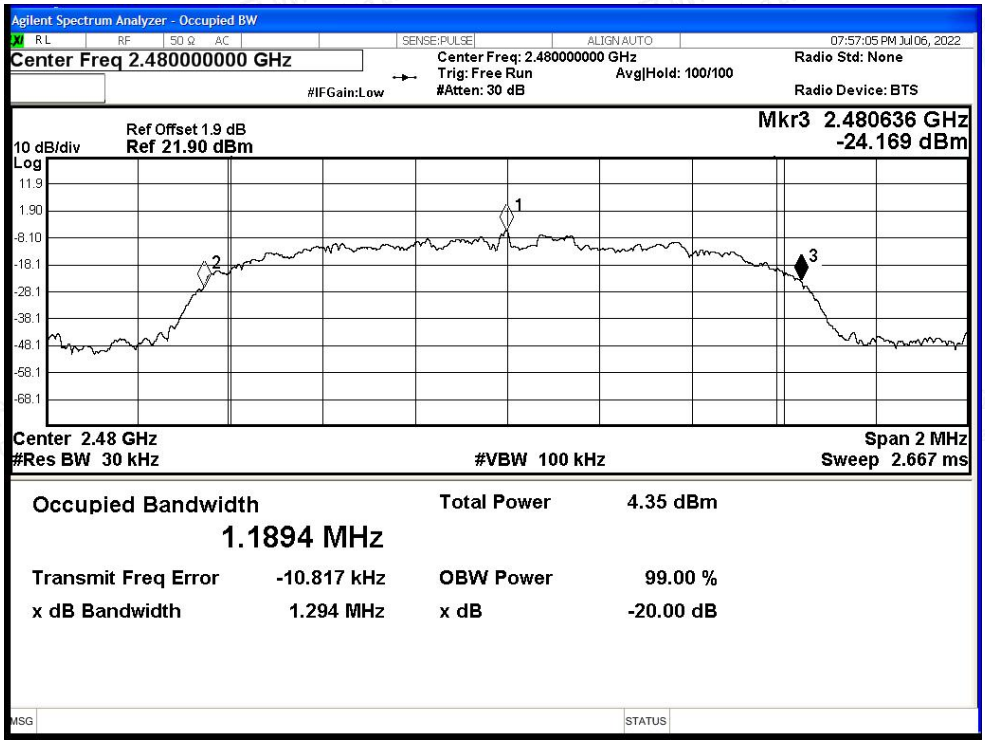
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1



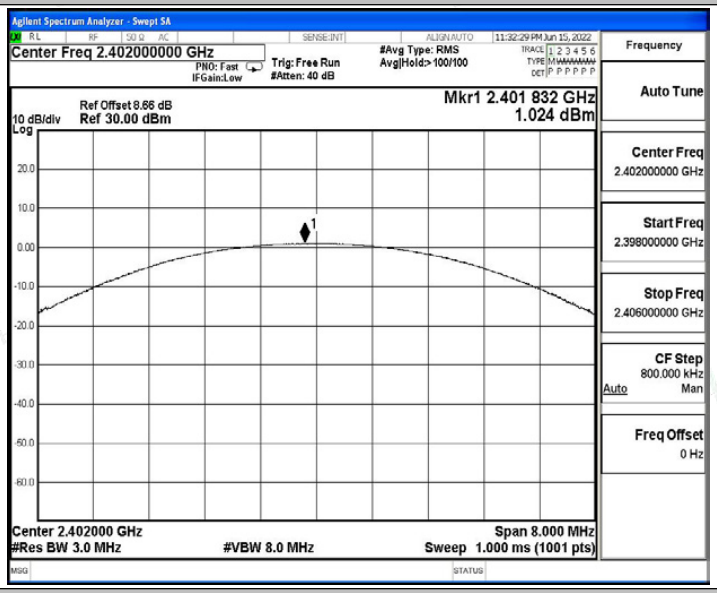
A.2 Maximum peak conducted output power

Test Result

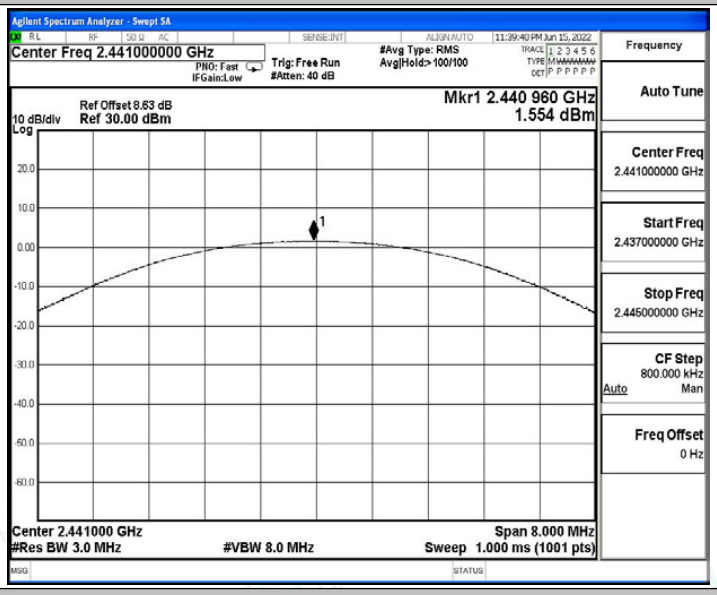
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.02	≤20.97	PASS
		2441	1.55	≤20.97	PASS
		2480	2.11	≤20.97	PASS
2DH5	Ant1	2402	0.69	≤20.97	PASS
		2441	1.41	≤20.97	PASS
		2480	1.99	≤20.97	PASS
3DH5	Ant1	2402	0.91	≤20.97	PASS
		2441	1.53	≤20.97	PASS
		2480	2.11	≤20.97	PASS

Test Graphs

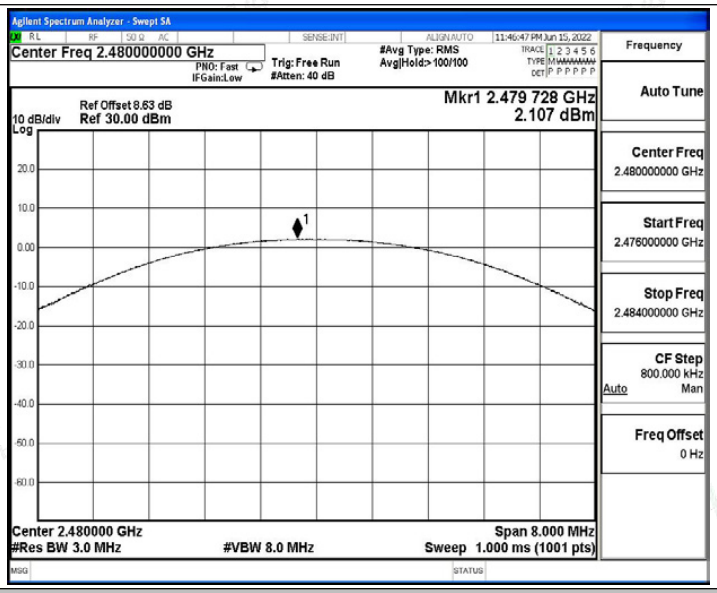
DH5_Ant1_2402



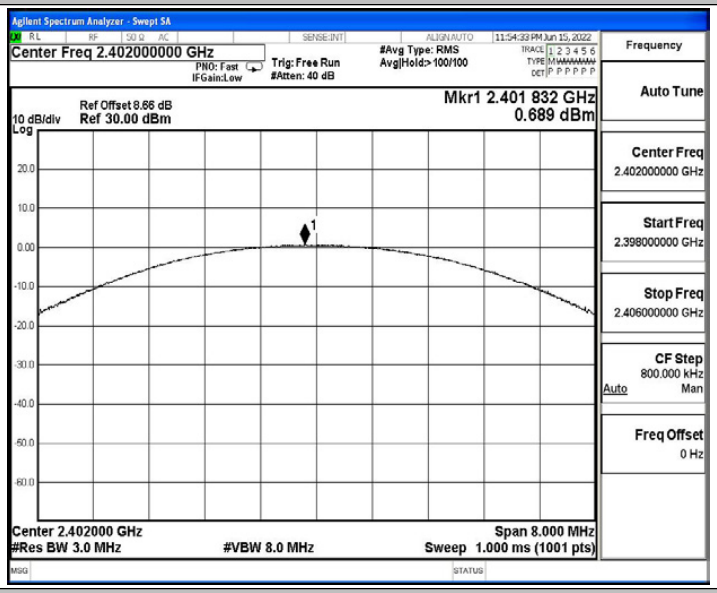
DH5_Ant1_2441



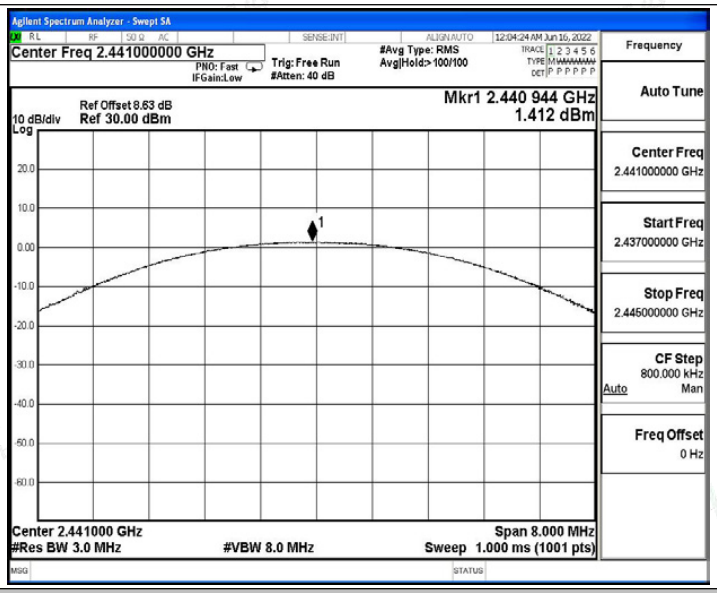
DH5_Ant1_2480



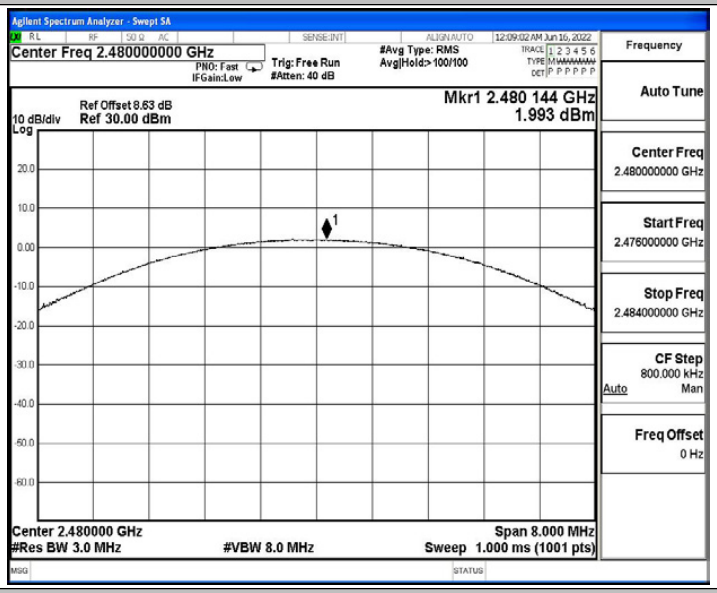
2DH5_Ant1_2402



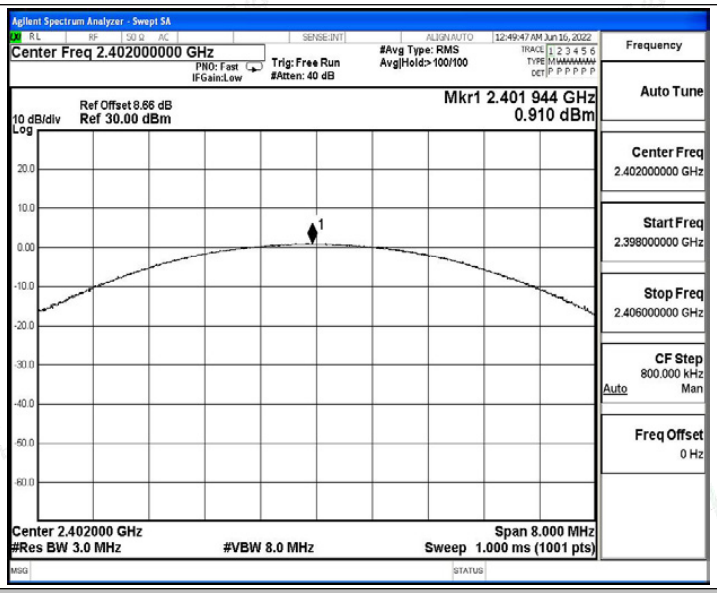
2DH5_Ant1_2441



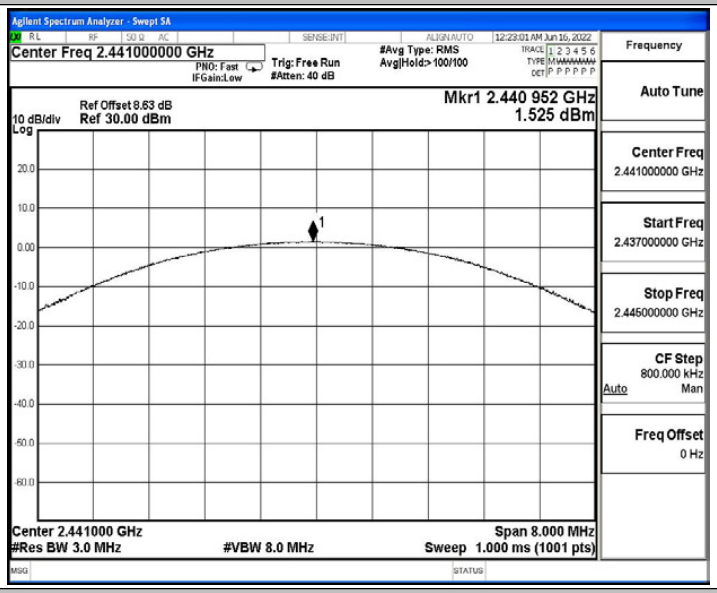
2DH5_Ant1_2480



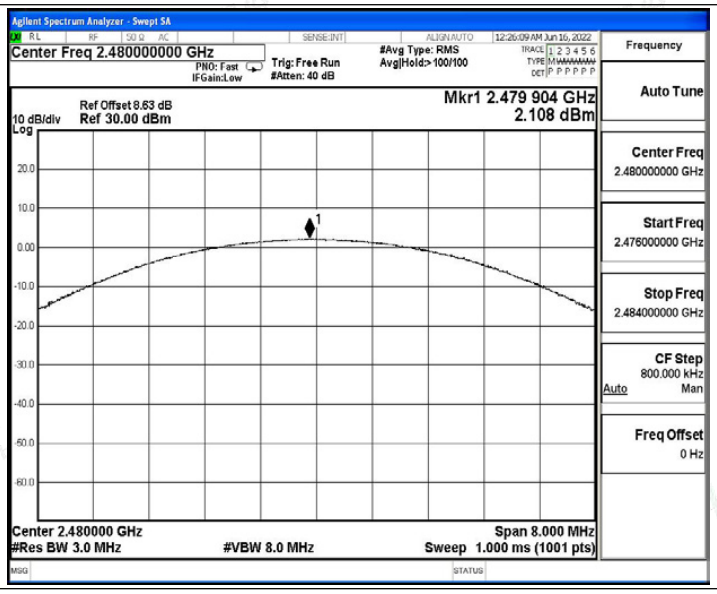
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold:>100/100
12:26:09 AM Jun 16, 2022
Ref Offset 8.63 dB
10 dB/div Ref 30.00 dBm
Log
Mkr1 2.479 904 GHz
2.108 dBm
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 8.000 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.484000000 GHz
CF Step
800.000 kHz
Auto Man
Freq Offset
0 Hz

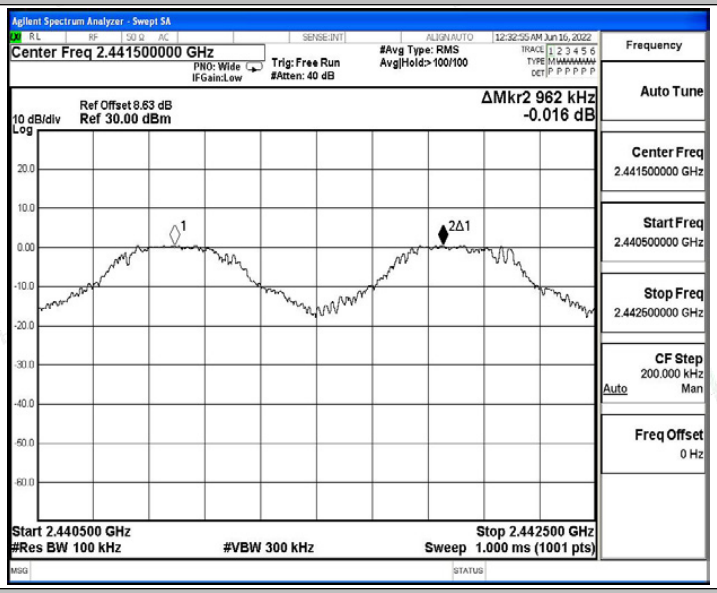
A.3 Carrier frequency separation

Test Result

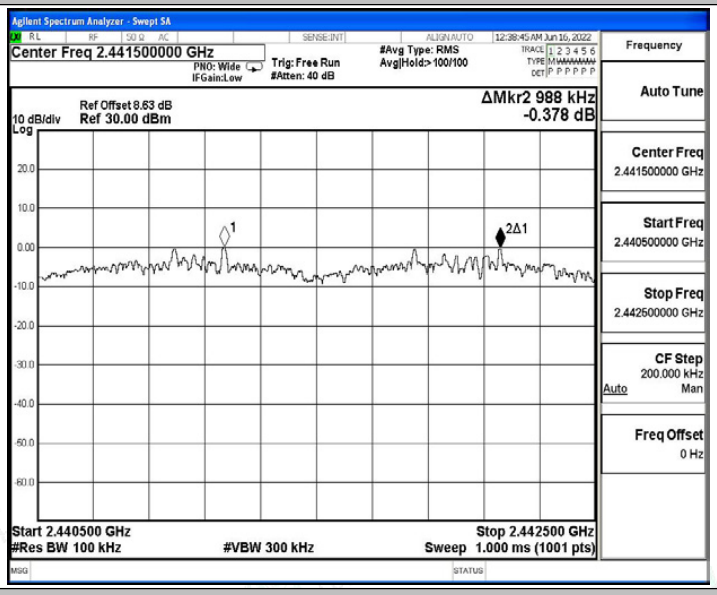
TestMode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.962	≥0.692	PASS
2DH5	Ant1	Hop	0.988	≥0.884	PASS
3DH5	Ant1	Hop	1.24	≥0.878	PASS

Test Graphs

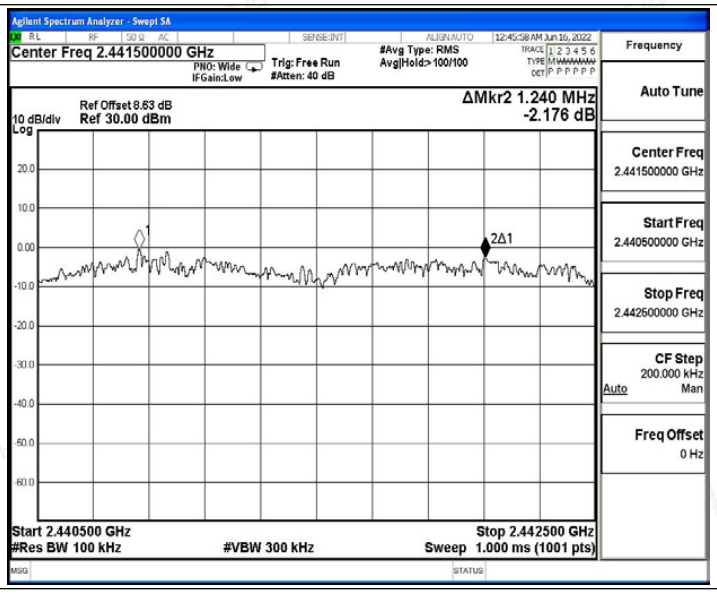
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441500000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold:>100/100
12:45:58 AM Jun 16, 2022
Ref Offset 8.63 dB
10 dB/div Ref 30.00 dBm
Log
ΔMkr2 1.240 MHz
-2.176 dB
Start 2.440500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.442500 GHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.440500000 GHz
Stop Freq
2.442500000 GHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz

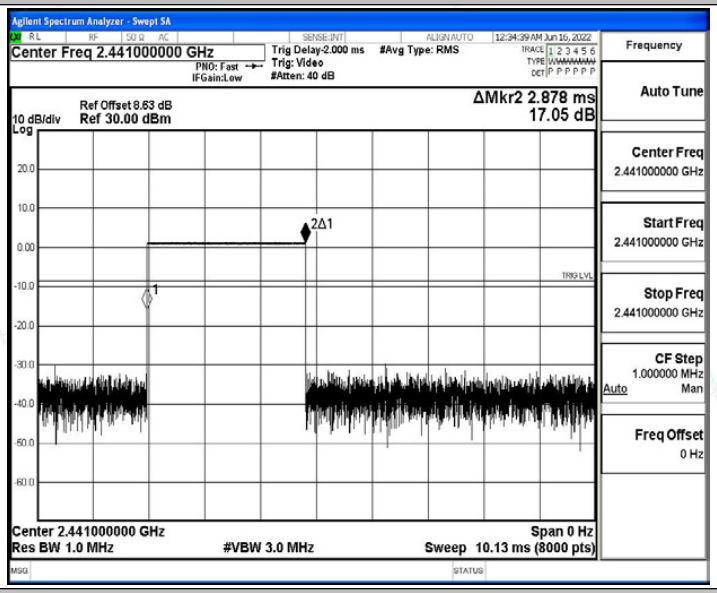
A.4 Time of occupancy

Test Result

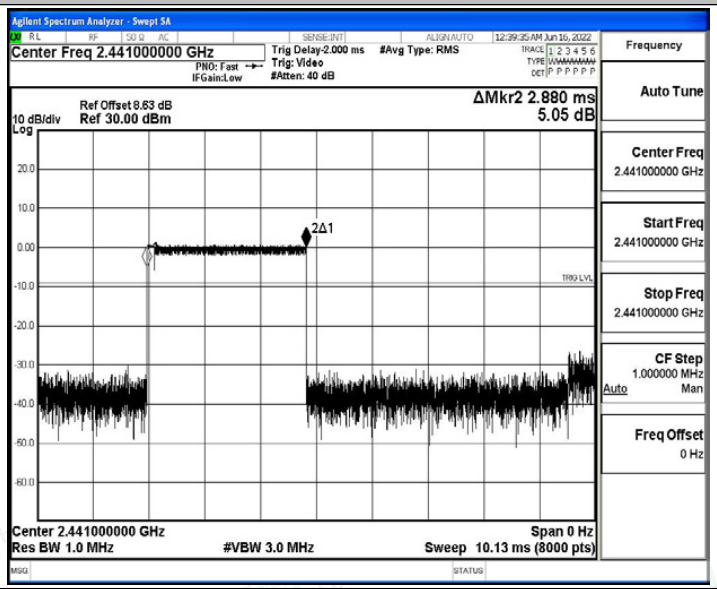
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
3DH5	Ant1	Hop	2.88	106.67	0.308	≤0.4	PASS

Test Graphs

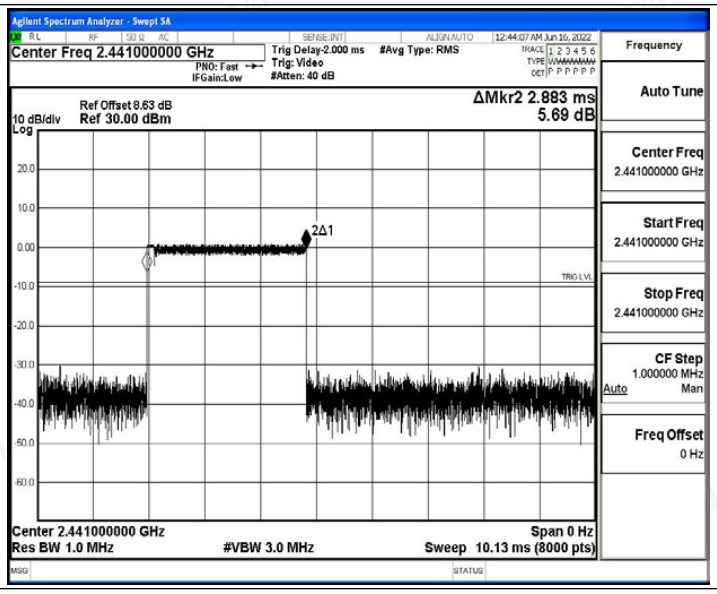
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
Trig Delay-2.000 ms
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
Ref Offset 8.63 dB
10 dB/div Ref 30.00 dBm
Log
ΔMkr2 2.883 ms
5.69 dB
2Δ1
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.13 ms (8000 pts)
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
Freq Offset
0 Hz

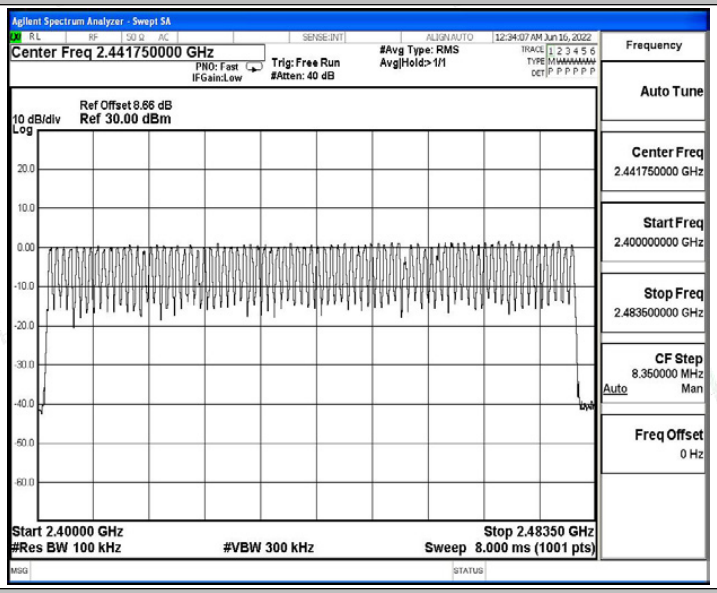
A.5 Number of hopping channels

Test Result

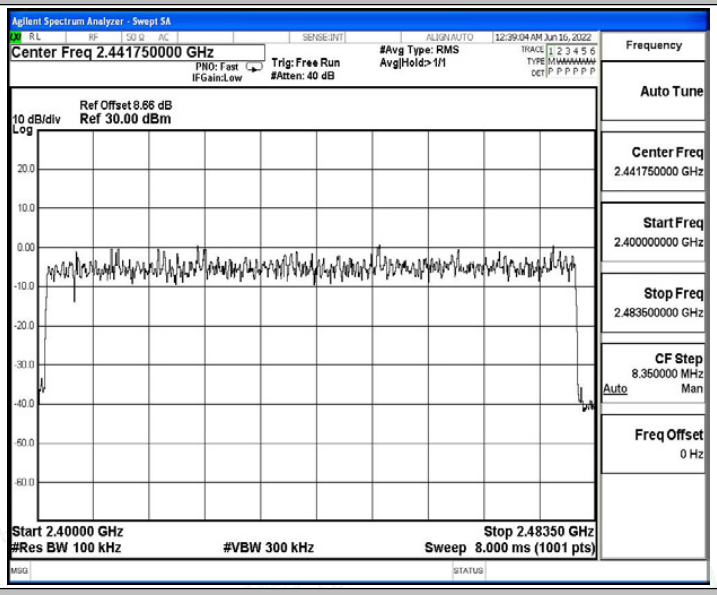
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

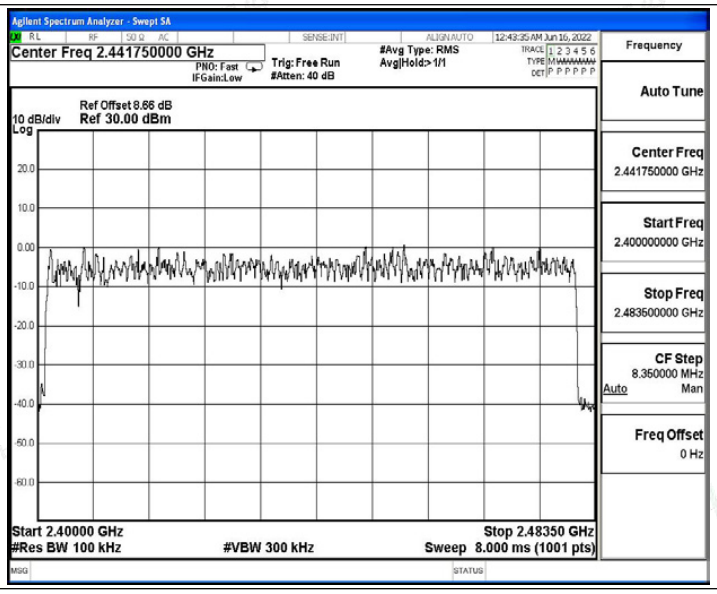
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold:>1/1
12:43:35 AM Jun 16, 2022
Ref Offset 8.66 dB
10 dB/div Ref 30.00 dBm
Log
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto Man
Freq Offset
0 Hz

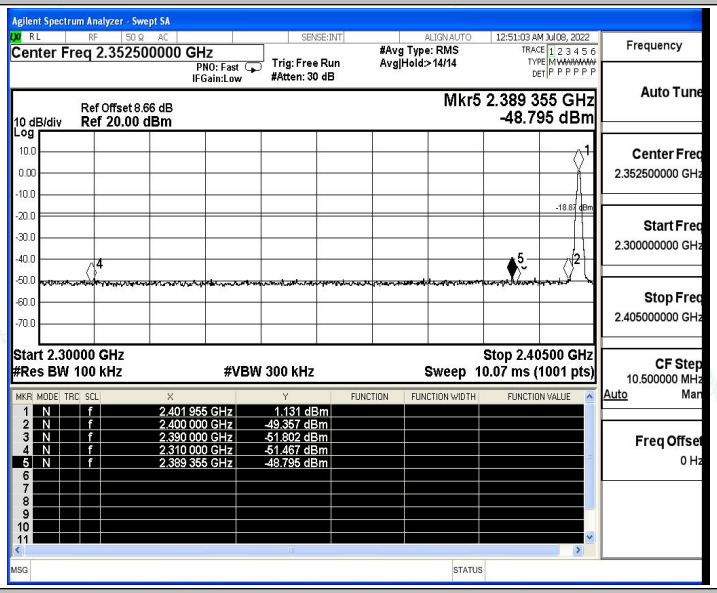
A.6 Band edge measurements

Test Result

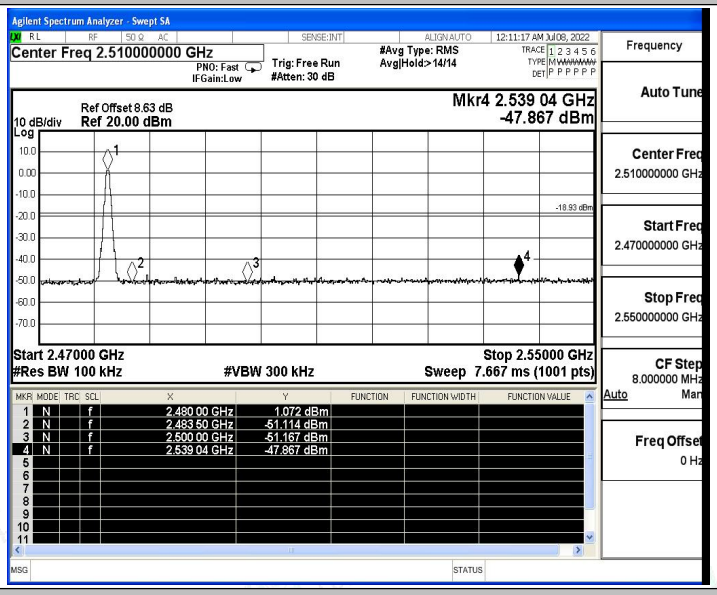
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.13	-48.8	≤-18.87	PASS
		High	2480	1.07	-47.87	≤-18.93	PASS
		Low	Hop_2402	0.03	-49.22	≤-19.97	PASS
		High	Hop_2480	0.85	-47.97	≤-19.15	PASS
2DH5	Ant1	Low	2402	0.34	-48.23	≤-19.66	PASS
		High	2480	-0.16	-48.17	≤-20.16	PASS
		Low	Hop_2402	-3.20	-49.23	≤-23.2	PASS
		High	Hop_2480	0.27	-47.6	≤-19.73	PASS
3DH5	Ant1	Low	2402	0.37	-48.92	≤-19.63	PASS
		High	2480	0.20	-47.87	≤-19.8	PASS
		Low	Hop_2402	-1.16	-48.77	≤-21.16	PASS
		High	Hop_2480	-0.21	-47.72	≤-20.21	PASS

Test Graphs

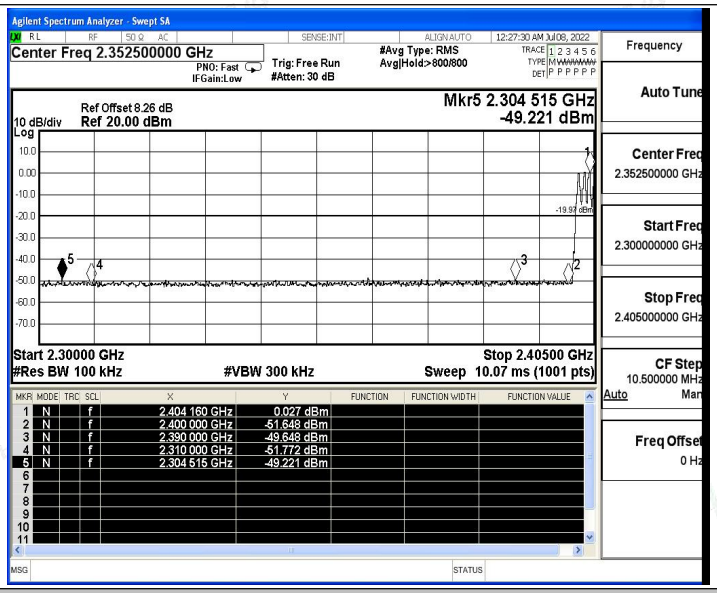
DH5_Ant1_Low_2402



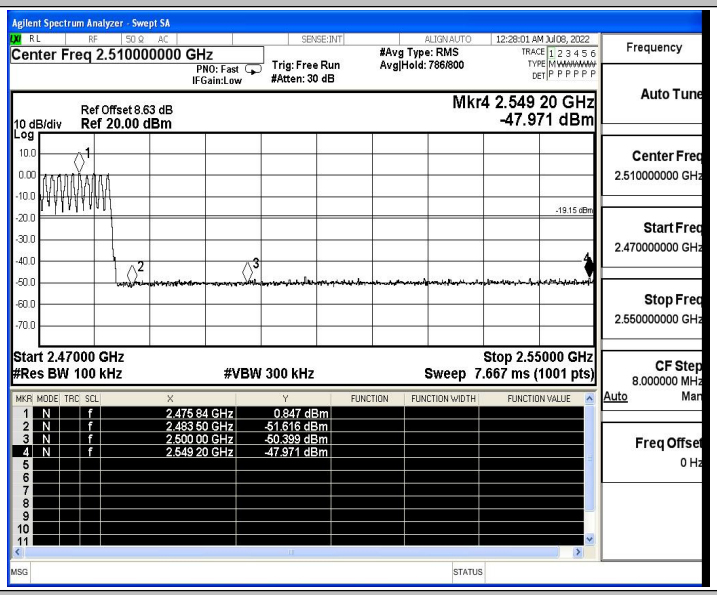
DH5_Ant1_High_2480



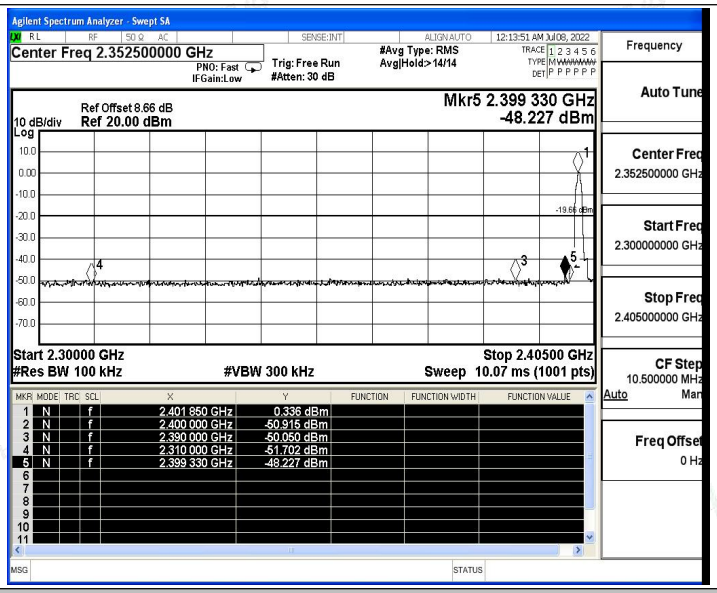
DH5_Ant1_Low_Hop_2402



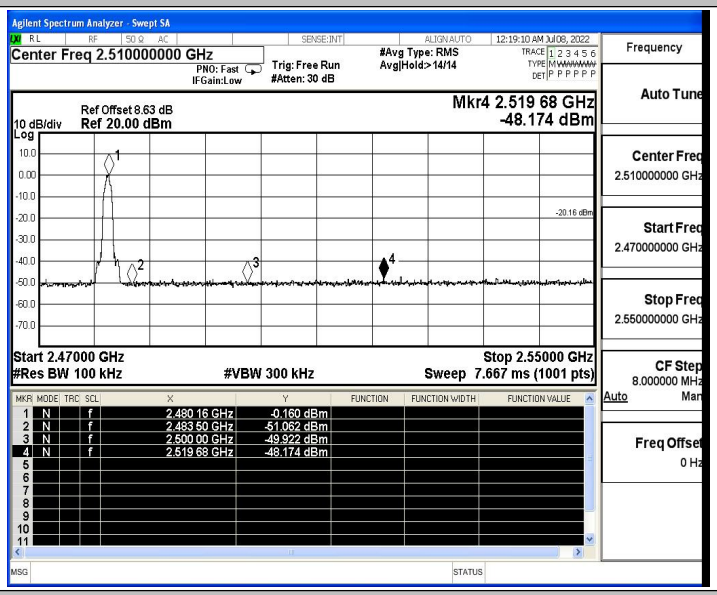
DH5_Ant1_High_Hop_2480



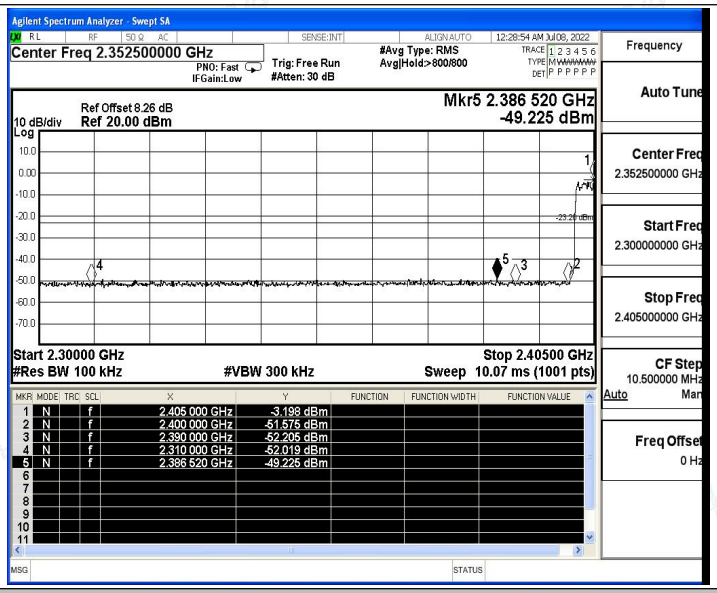
2DH5_Ant1_Low_2402



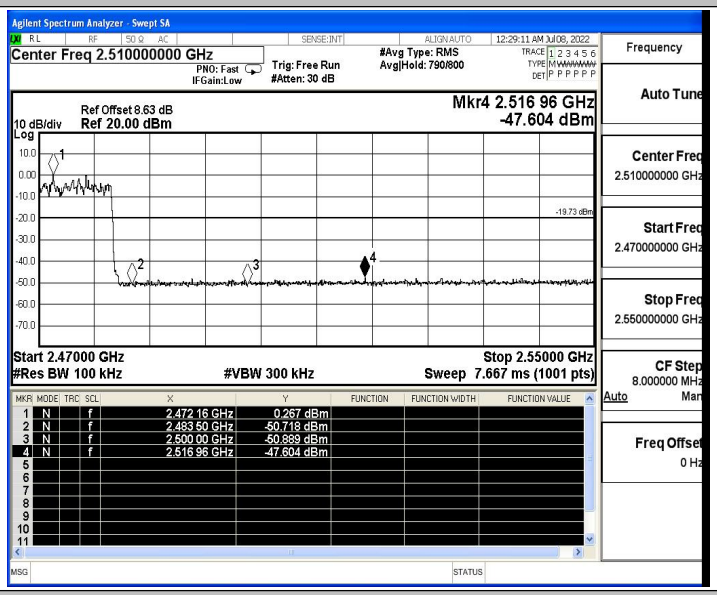
2DH5_Ant1_High_2480



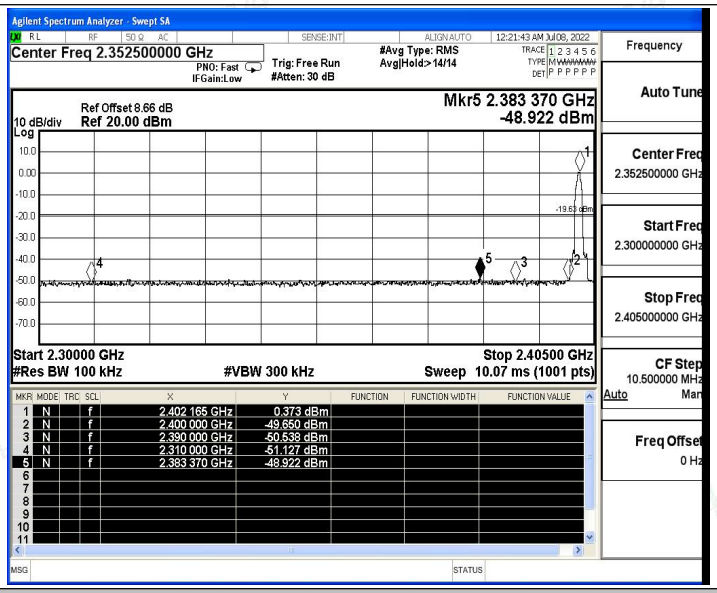
2DH5_Ant1_Low_Hop_2402



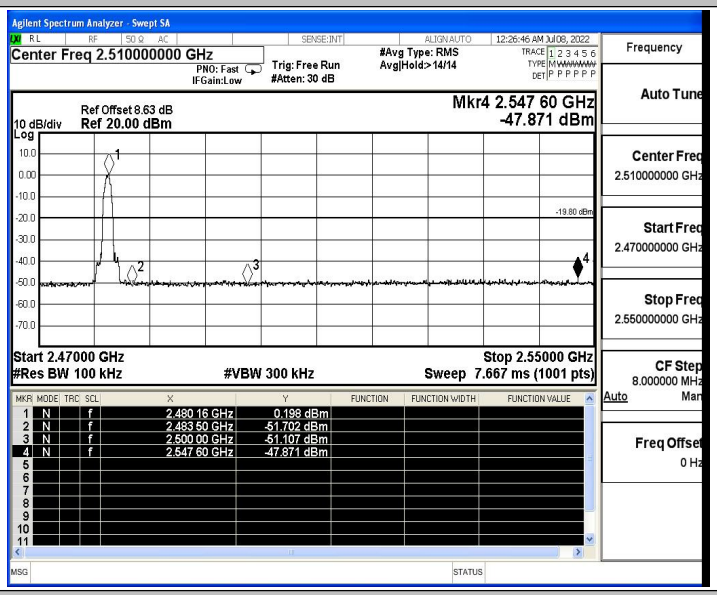
2DH5_Ant1_High_Hop_2480



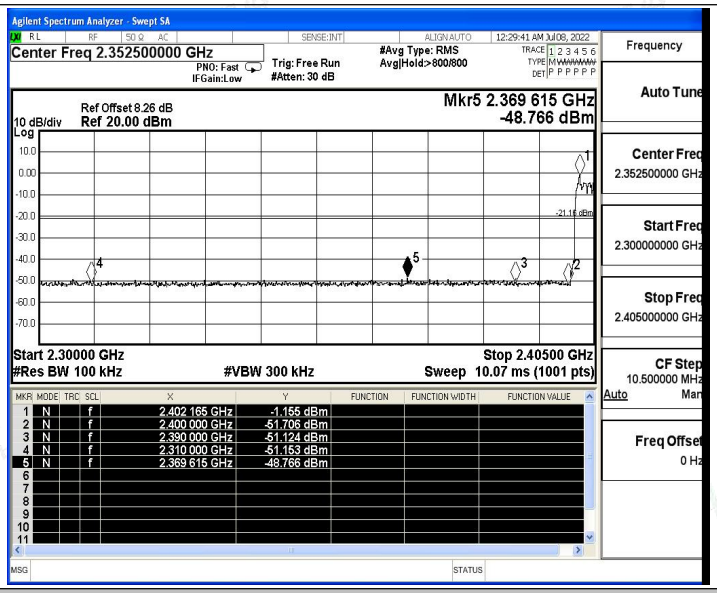
3DH5_Ant1_Low_2402



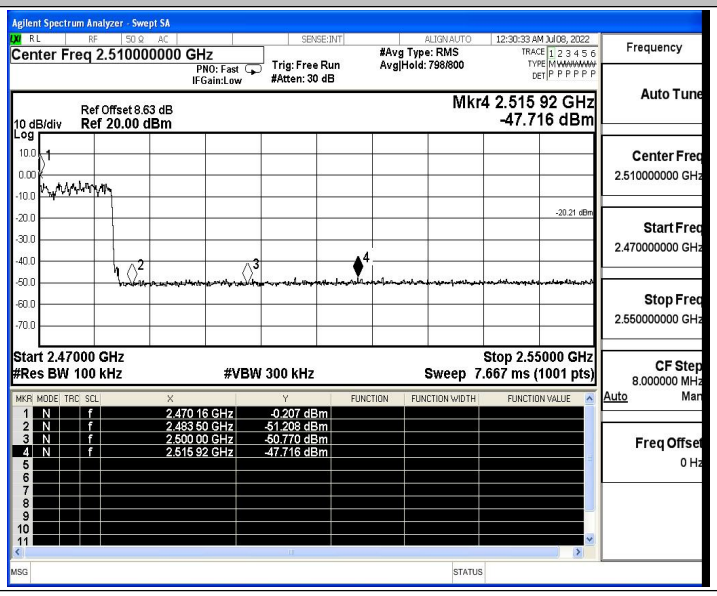
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



A.7 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.16	1.16	---	PASS
			30~1000	1.16	-60.54	≤-18.84	PASS
			1000~26500	1.16	-46.14	≤-18.84	PASS
		2441	Reference	1.11	1.11	---	PASS
			30~1000	1.11	-60.28	≤-18.89	PASS
			1000~26500	1.11	-44.53	≤-18.89	PASS
		2480	Reference	1.06	1.06	---	PASS
			30~1000	1.06	-59.91	≤-18.94	PASS
			1000~26500	1.06	-45.59	≤-18.94	PASS
2DH5	Ant1	2402	Reference	0.15	0.15	---	PASS
			30~1000	0.15	-60.29	≤-19.85	PASS
			1000~26500	0.15	-46.03	≤-19.85	PASS
		2441	Reference	0.14	0.14	---	PASS
			30~1000	0.14	-60.75	≤-19.86	PASS
			1000~26500	0.14	-45.37	≤-19.86	PASS
		2480	Reference	0.20	0.20	---	PASS
			30~1000	0.20	-59.99	≤-19.8	PASS
			1000~26500	0.20	-45.92	≤-19.8	PASS
3DH5	Ant1	2402	Reference	0.29	0.29	---	PASS
			30~1000	0.29	-60.4	≤-19.71	PASS
			1000~26500	0.29	-45.68	≤-19.71	PASS
		2441	Reference	0.05	0.05	---	PASS
			30~1000	0.05	-60.01	≤-19.95	PASS
			1000~26500	0.05	-45.25	≤-19.95	PASS
		2480	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-60.36	≤-20.21	PASS
			1000~26500	-0.21	-45.6	≤-20.21	PASS