FCC Appendix RF Test Data

FCC ID	**:**	**2BGA5-DS310**
Company:	**:**	**Foshan Dashi Technology Co., Ltd.**
EUT	**:**	**Eye Massager**
Model Number	**:**	**DS-310**
Report No.	**:**	**CTA25051600501**
Reviewed By	**:**	**Eric Wang**

Appendix A: DTS Bandwidth

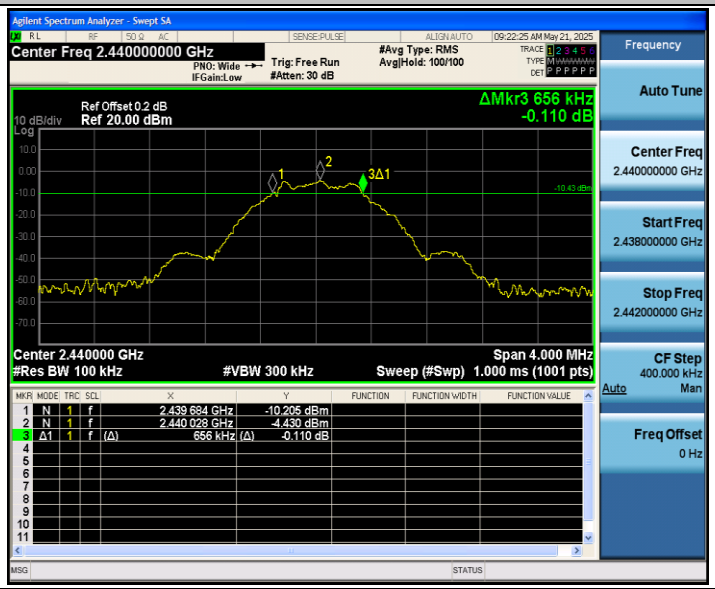
Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.640	2401.696	2402.336	0.5	PASS
		2440	0.656	2439.684	2440.340	0.5	PASS
		2480	0.644	2479.692	2480.336	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

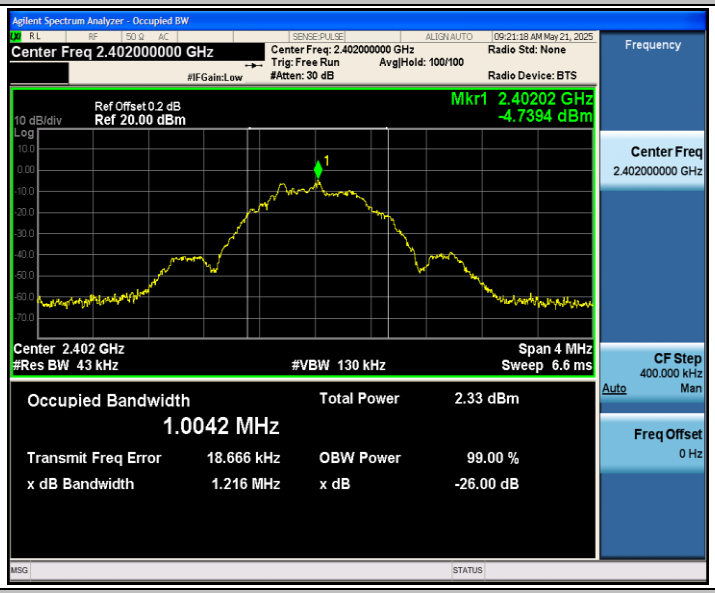
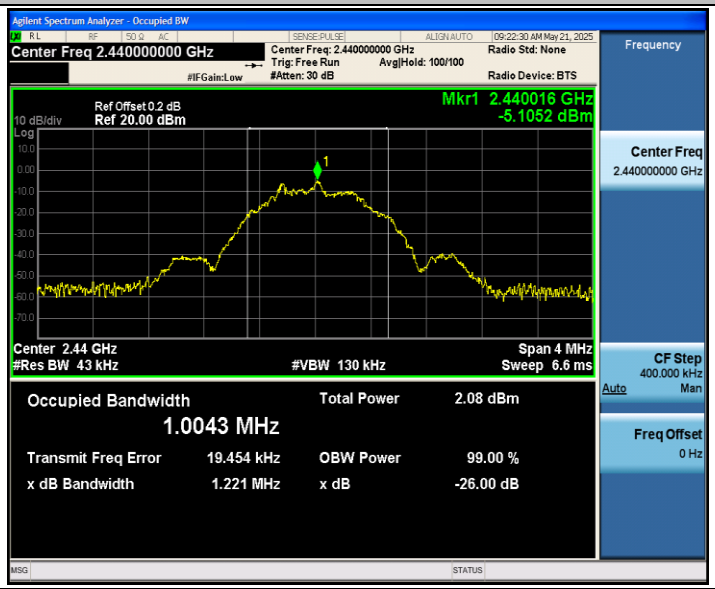

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
09:23:19 AM May 21, 2025
Ref Offset 0.2 dB
10 dB/div
Ref 20.00 dBm
ΔMkr3 644 kHz
0.013 dB
-10.18 dBm
Center 2.480000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4.000 MHz
Sweep (#Swp) 1.000 ms (1001 pts)
1 N 1 f 2.479 692 GHz -10.014 dBm
2 N 1 f 2.480 020 GHz -4.179 dBm
3 Δ1 1 f (Δ) 644 kHz (Δ) 0.013 dB
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.478000000 GHz
Stop Freq
2.482000000 GHz
CF Step
400.000 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

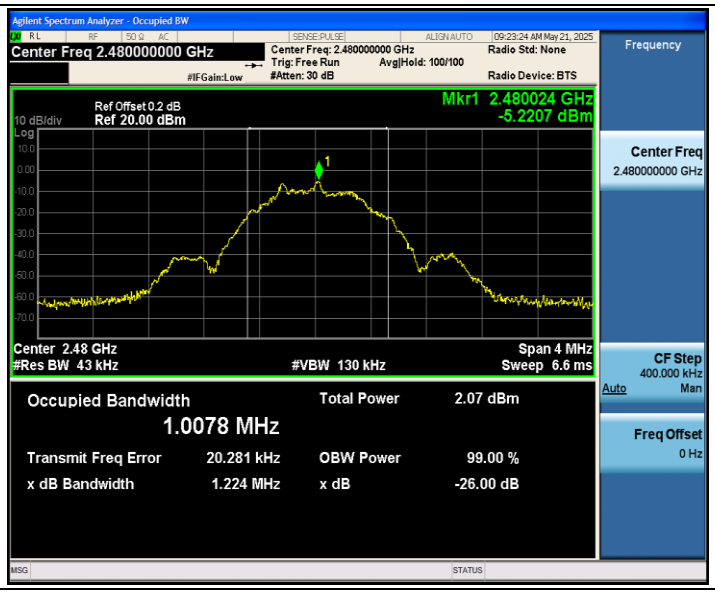
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0042	2401.5166	2402.5208	---	---
		2440	1.0043	2439.5173	2440.5216	---	---
		2480	1.0078	2479.5164	2480.5242	---	---

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
09:23:24 AM May 21, 2025
Frequency
Ref Offset 0.2 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.480024 GHz
-5.2207 dBm
Center 2.48 GHz
#Res BW 43 kHz
#VBW 130 kHz
Span 4 MHz
Sweep 6.6 ms
Occupied Bandwidth
1.0078 MHz
Total Power 2.07 dBm
Transmit Freq Error 20.281 kHz
OBW Power 99.00 %
x dB Bandwidth 1.224 MHz
x dB -26.00 dB
Center Freq
2.480000000 GHz
CF Step
400.000 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Appendix C: Maximum conducted output power

Test Result Peak

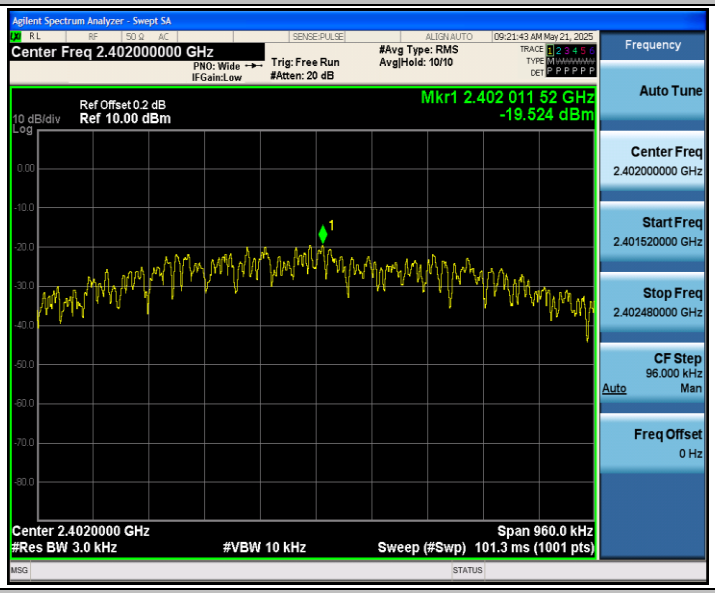
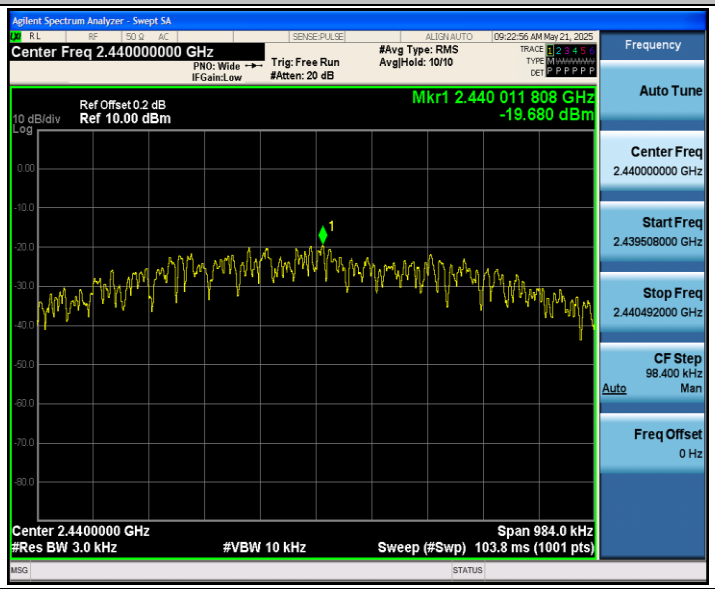
TestMode	Antenna	Freq(MHz)	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.69	≤30	PASS
		2440	-3.95	≤30	PASS
		2480	-4.05	≤30	PASS

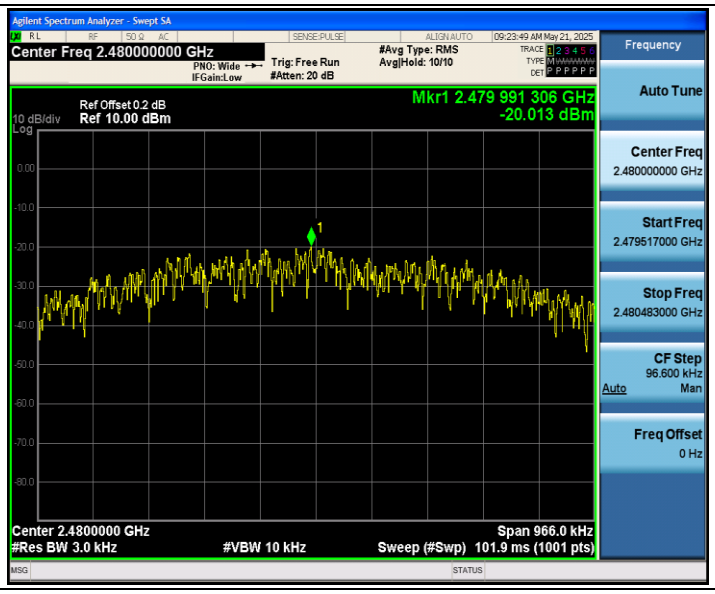
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.52	≤8.00	PASS
		2440	-19.68	≤8.00	PASS
		2480	-20.01	≤8.00	PASS

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

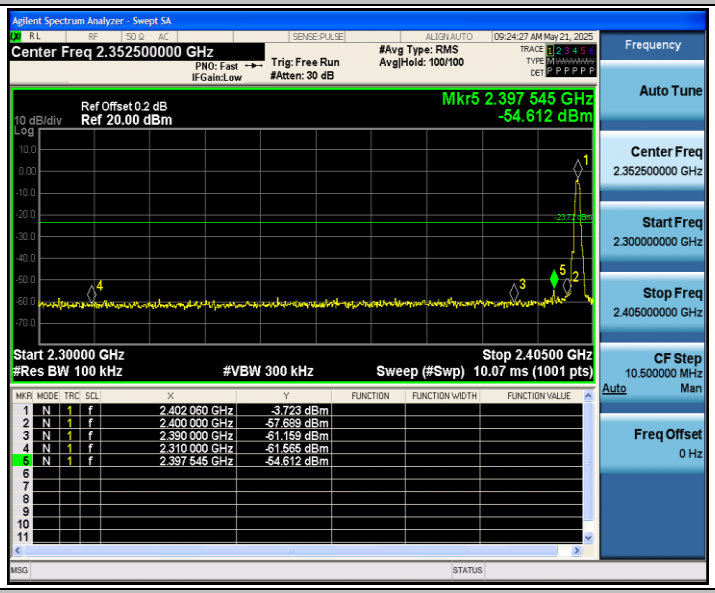
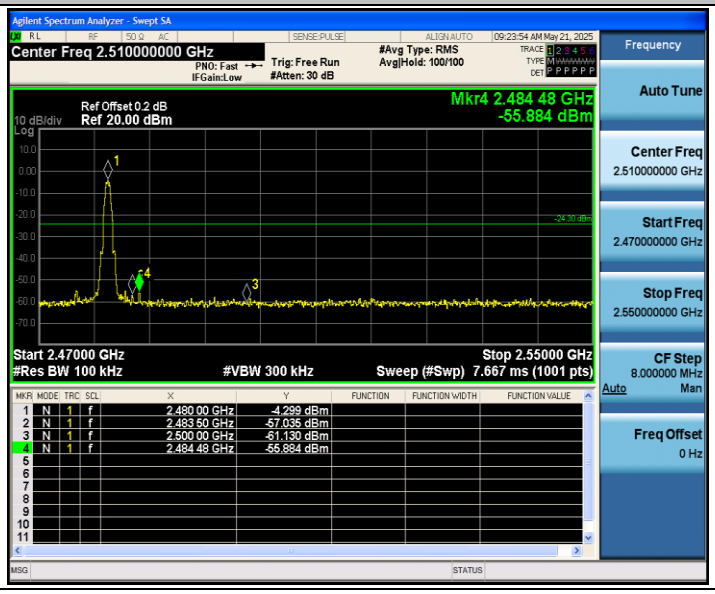

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 10/10
09:23:49 AM May 21, 2025
Ref Offset 0.2 dB
10 dB/div
Ref 10.00 dBm
Log
Mkr1 2.479 991 306 GHz
-20.013 dBm
Center 2.4800000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 966.0 kHz
Sweep (#Swp) 101.9 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.479517000 GHz
Stop Freq
2.480483000 GHz
CF Step
96.600 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.72	-54.61	≤-23.72	PASS
		High	2480	-4.30	-55.88	≤-24.3	PASS

Test Graphs

BLE_1M_Ant1_Low_2402

BLE_1M_Ant1_High_2480


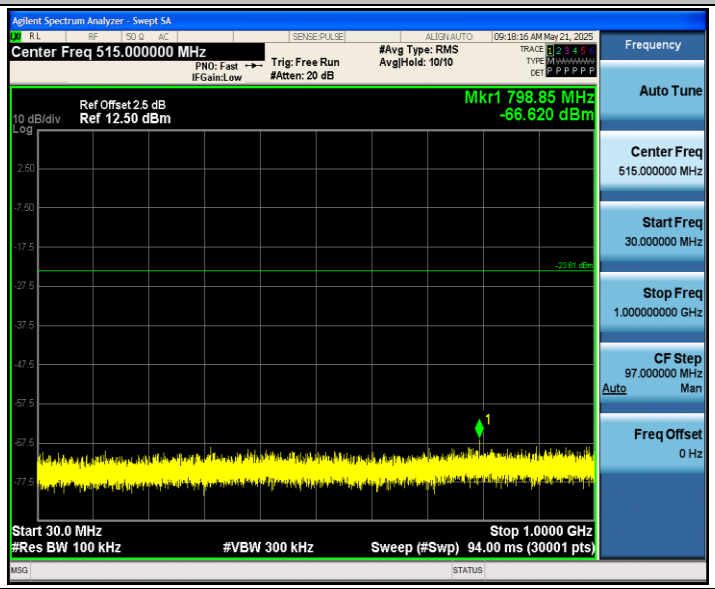
Appendix F: Conducted Spurious Emission

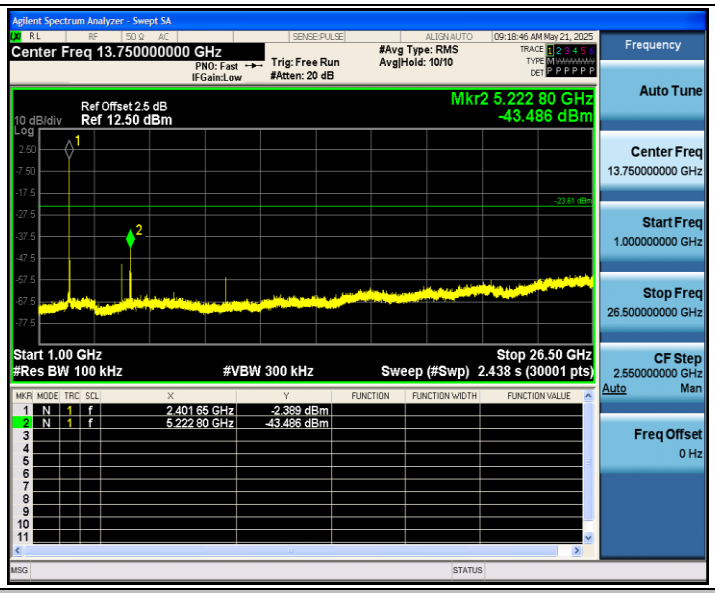
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.61	-3.61	---	PASS
			30~1000	-3.61	-66.62	≤-23.61	PASS
			1000~26500	-3.61	-43.49	≤-23.61	PASS
		2440	Reference	-3.31	-3.31	---	PASS
			30~1000	-3.31	-67.47	≤-23.31	PASS
			1000~26500	-3.31	-40.66	≤-23.31	PASS
		2480	Reference	-1.98	-1.98	---	PASS
			30~1000	-1.98	-67.36	≤-21.98	PASS
			1000~26500	-1.98	-50.16	≤-21.98	PASS

Test Graphs

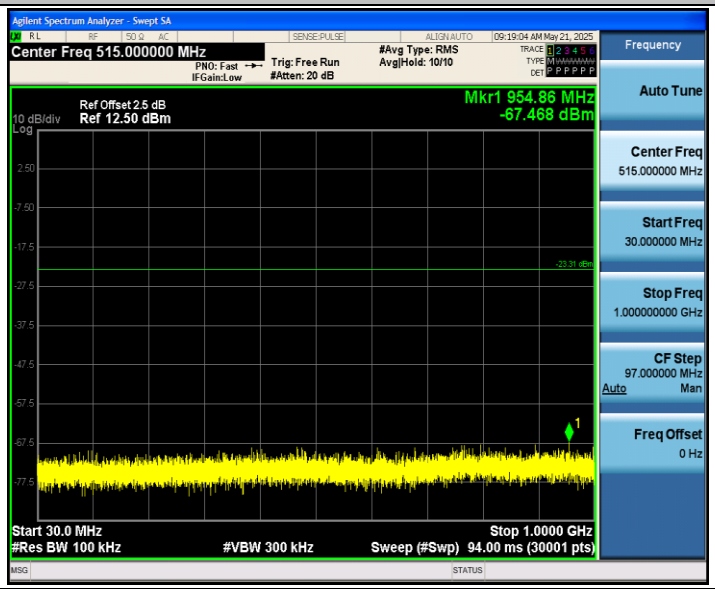
BLE_1M_Ant1_2402_0~Reference

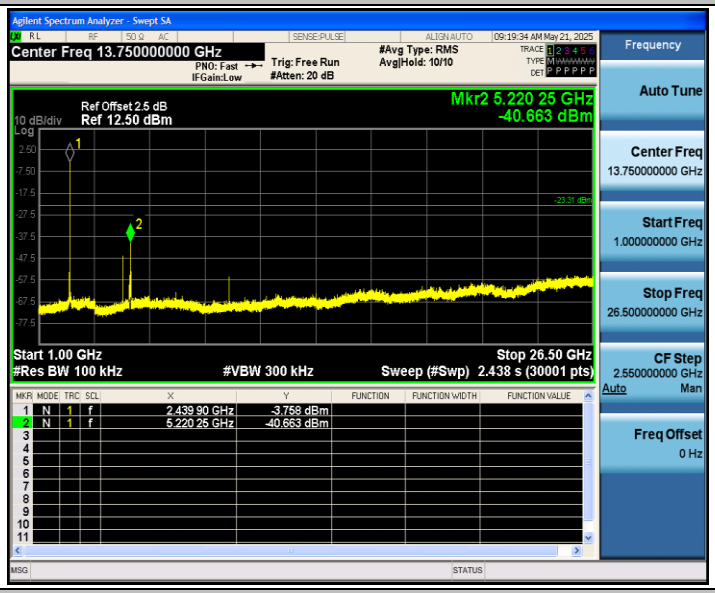
BLE_1M_Ant1_2402_30~1000

BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

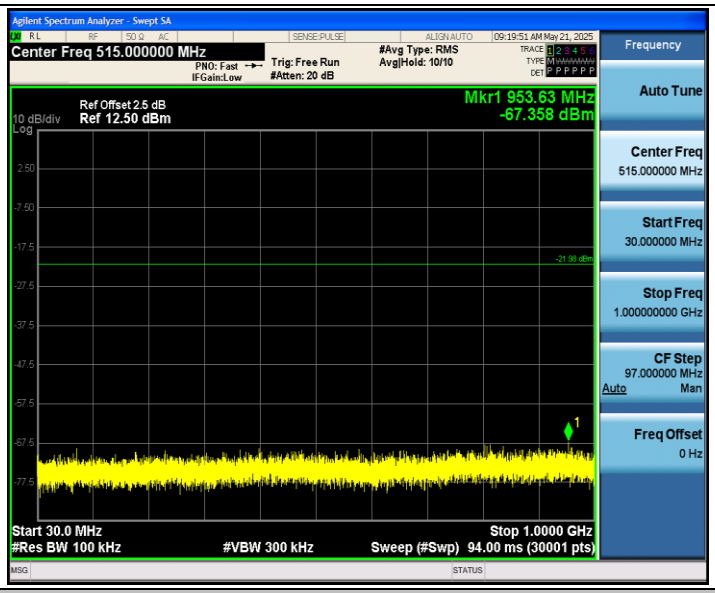
BLE_1M_Ant1_2440_30~1000



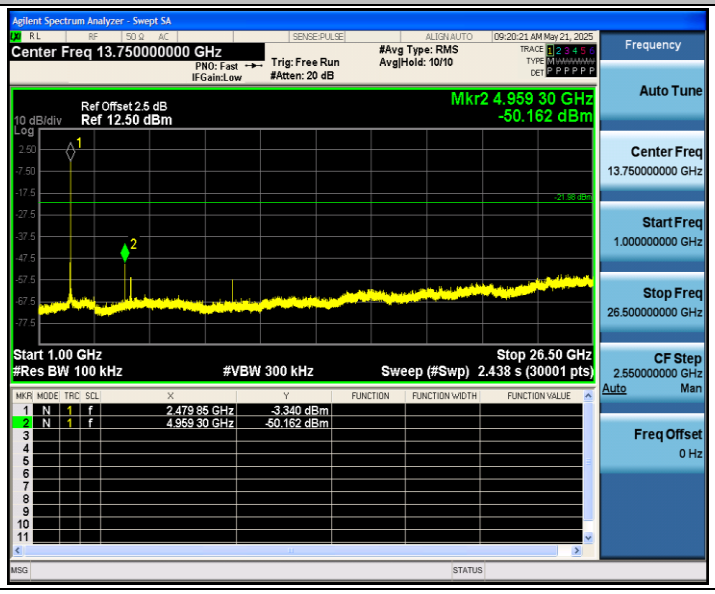
BLE_1M_Ant1_2440_1000~26500


BLE_1M_Ant1_2480_0~Reference


BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



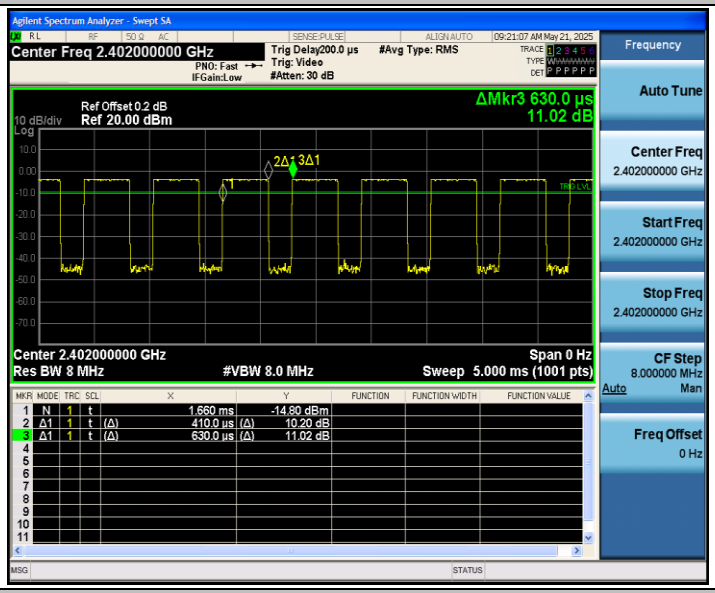
Appendix G: Duty Cycle

Test Result

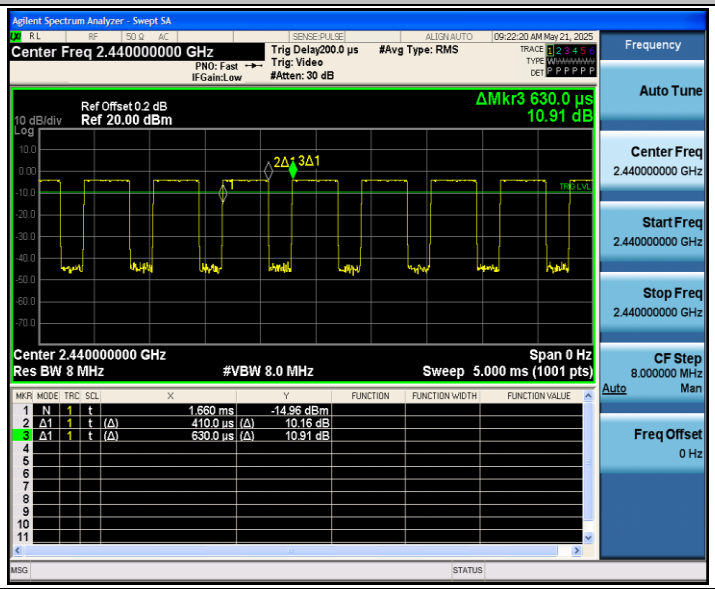
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

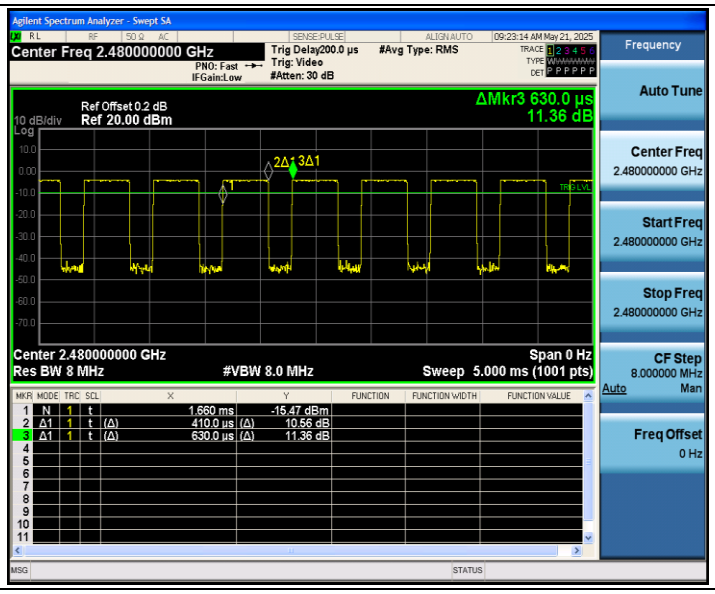
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig Delay 200.0 µs
Trig: Video
#Atten: 30 dB
#Avg Type: RMS
09:23:14 AM May 21, 2025
Frequency
Auto Tune
Ref Offset 0.2 dB
10 dB/div
Ref 20.00 dBm
ΔMkr3 630.0 µs
11.36 dB
2Δ1 3Δ1
Center 2.480000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 5.000 ms (1001 pts)
1 N 1 t 1.660 ms -15.47 dBm
2 Δ1 1 t (Δ) 410.0 µs (Δ) 10.56 dB
3 Δ1 1 t (Δ) 630.0 µs (Δ) 11.36 dB
Center Freq
2.480000000 GHz
Start Freq
2.480000000 GHz
Stop Freq
2.480000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS