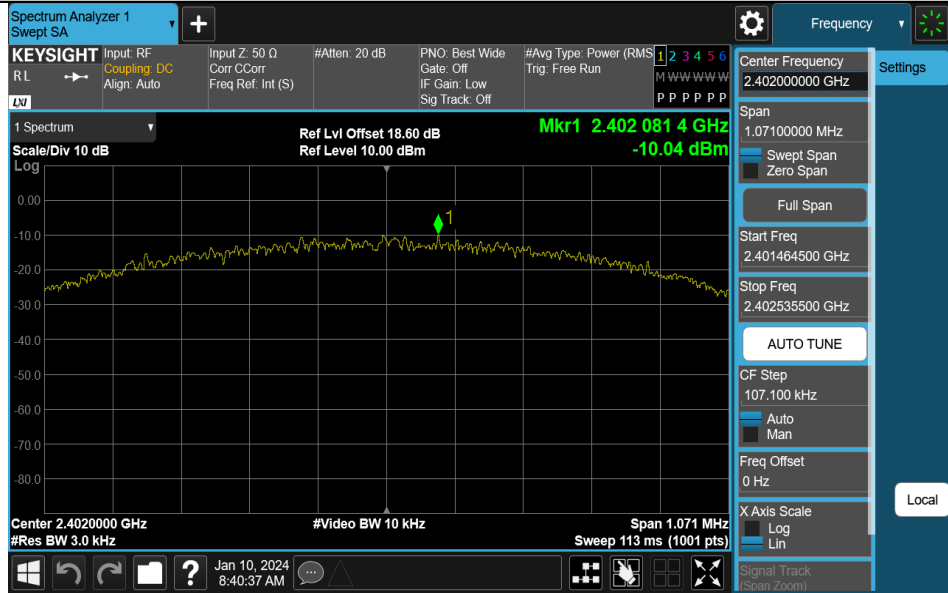


Appendix C: Maximum power spectral density Test Result

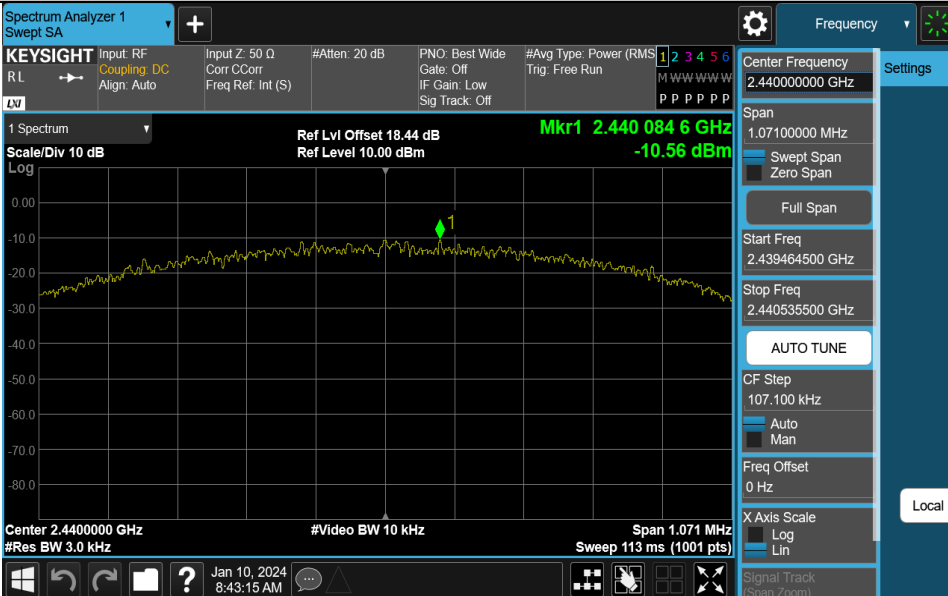
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.04	≤8.00	PASS
BLE_1M	Ant1	2440	-10.56	≤8.00	PASS
BLE_1M	Ant1	2480	-10.57	≤8.00	PASS
BLE_2M	Ant1	2402	-13.44	≤8.00	PASS
BLE_2M	Ant1	2440	-13.82	≤8.00	PASS
BLE_2M	Ant1	2480	-13.96	≤8.00	PASS

Test Graphs

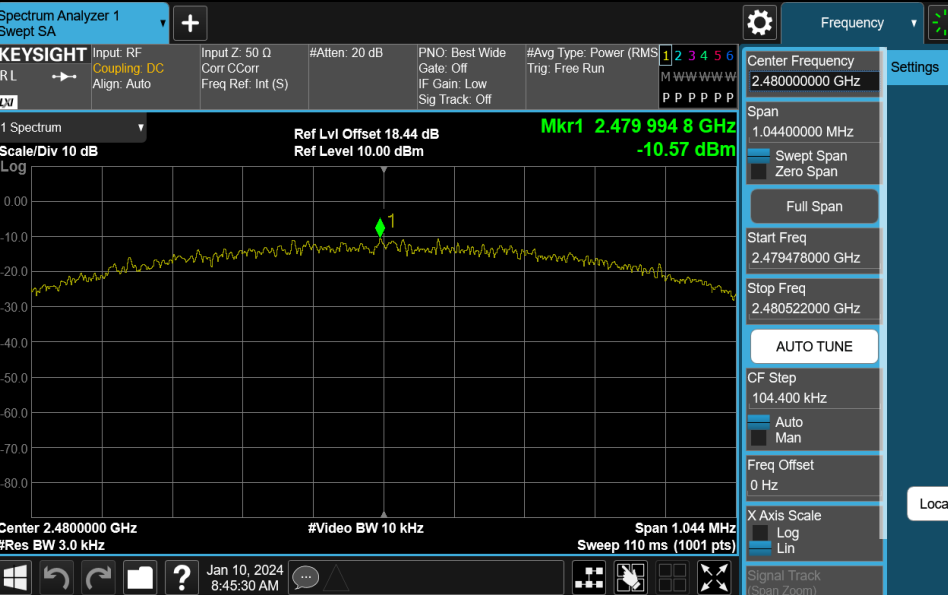
BLE_1M-Ant1-2402-PASS



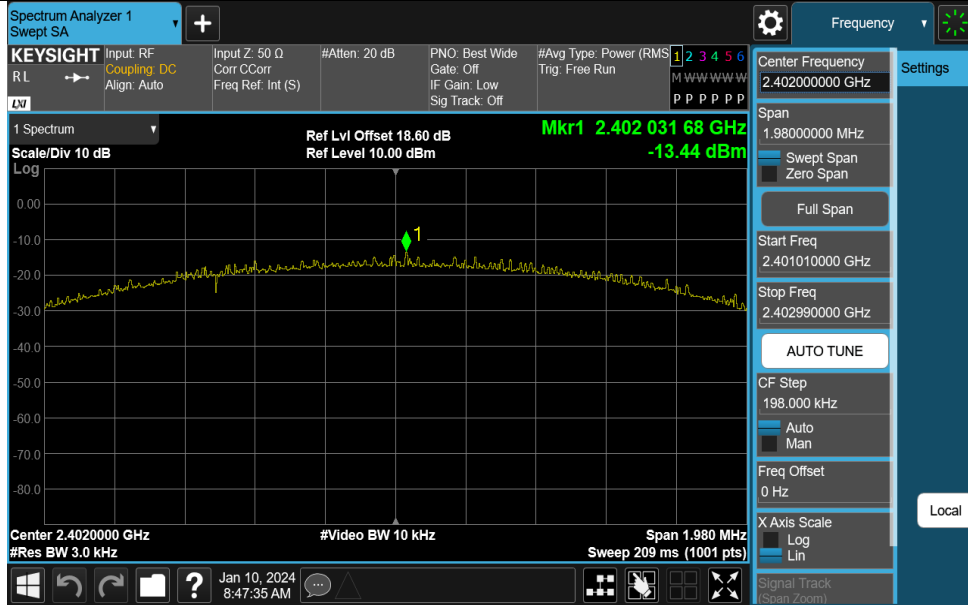
BLE_1M-Ant1-2440-PASS



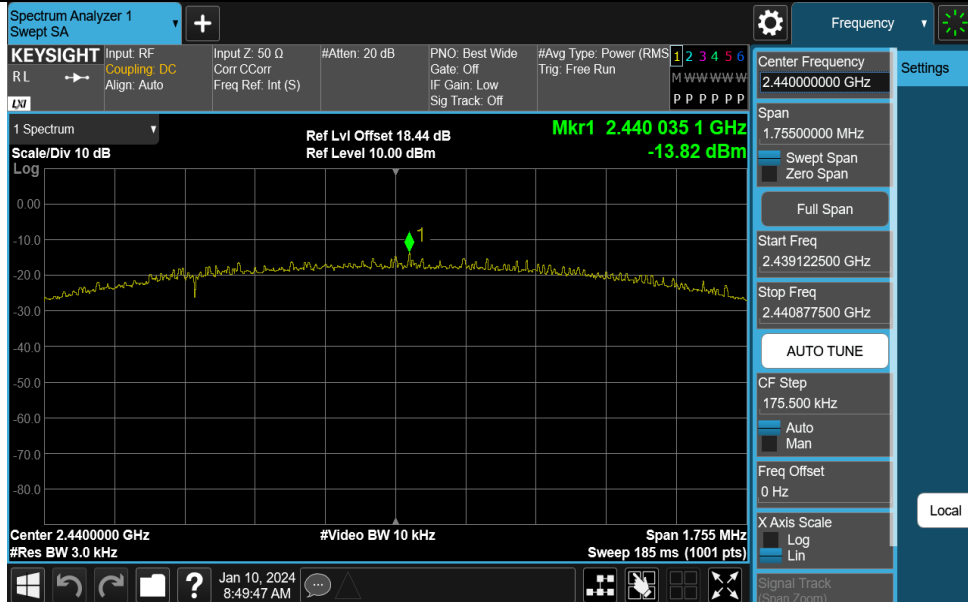
BLE_1M-Ant1-2480-PASS



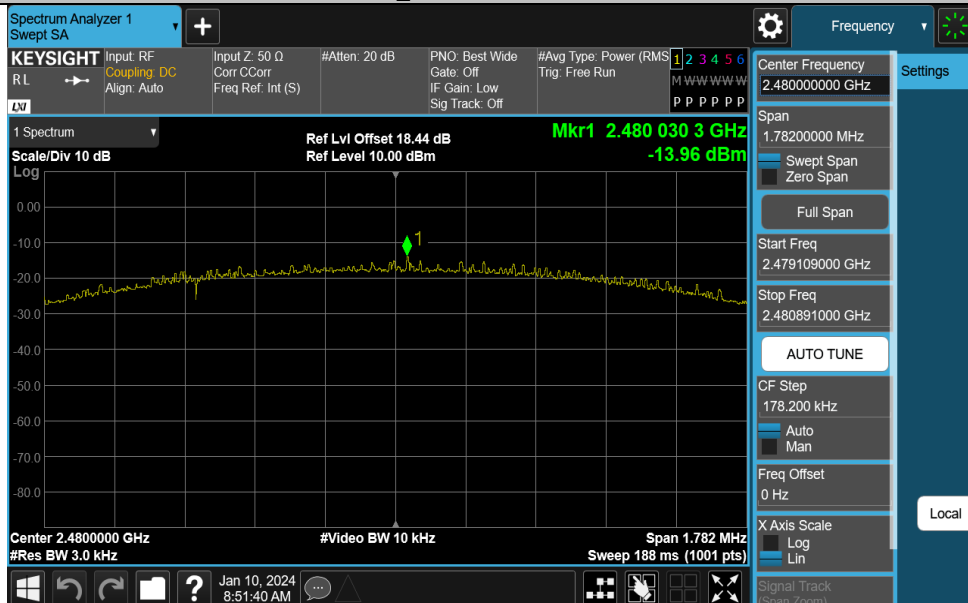
BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



BLE_2M-Ant1-2480-PASS



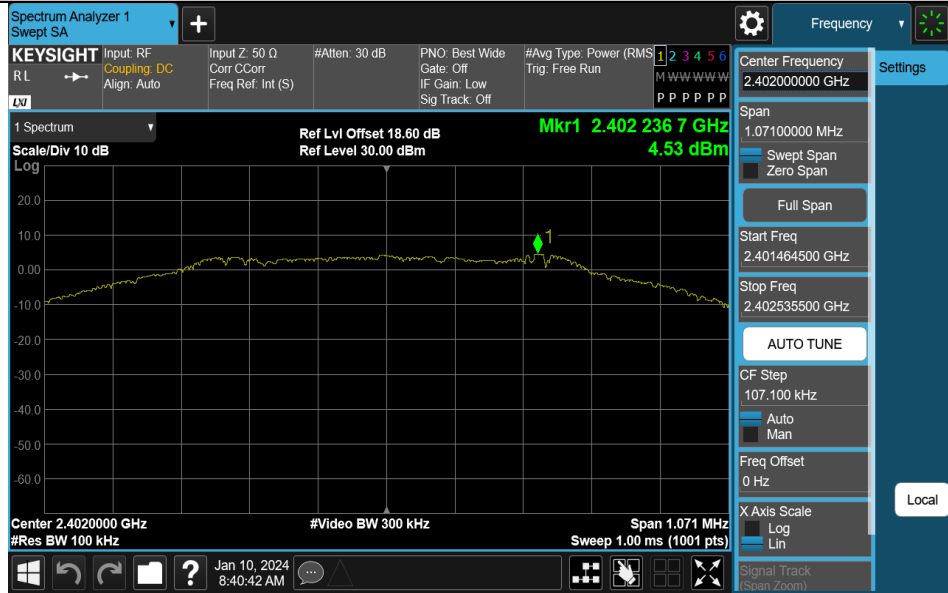
Appendix D: Reference level measurement

Test Result

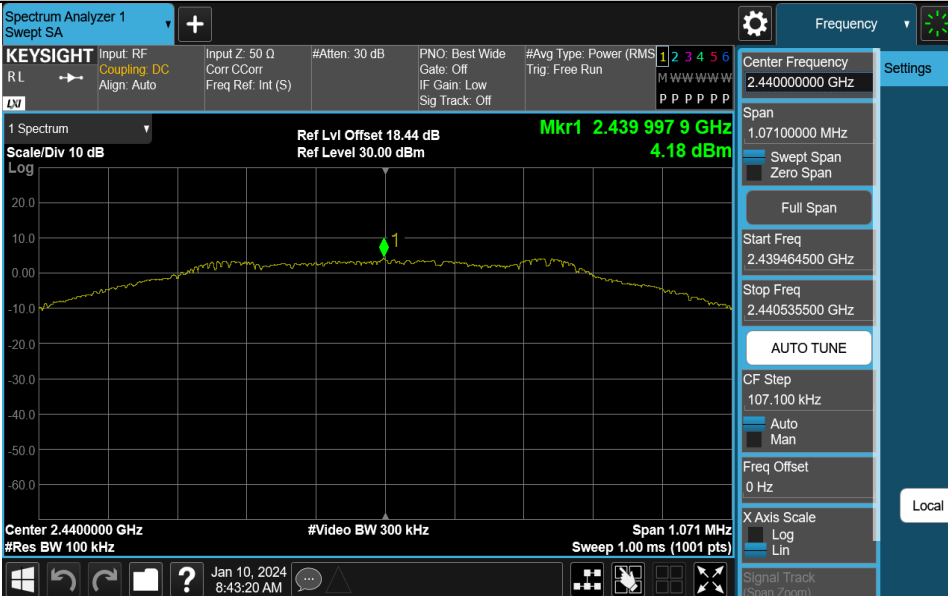
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2402.24	4.53
BLE_1M	Ant1	2440	2440.00	4.18
BLE_1M	Ant1	2480	2480.01	4.10
BLE_2M	Ant1	2402	2401.48	3.60
BLE_2M	Ant1	2440	2440.01	3.43
BLE_2M	Ant1	2480	2480.00	3.30

Test Graphs

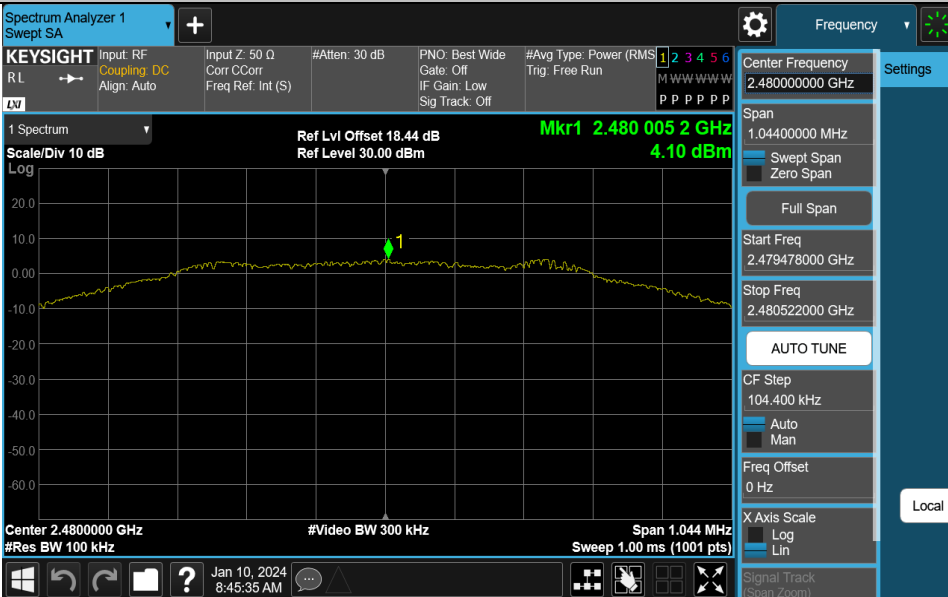
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS



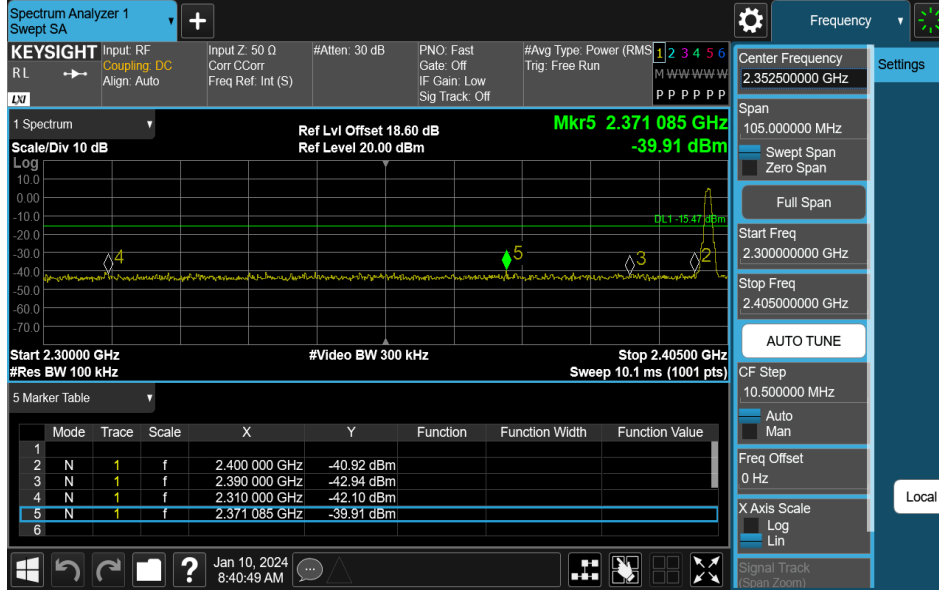
Appendix E: Band edge measurements

Test Result

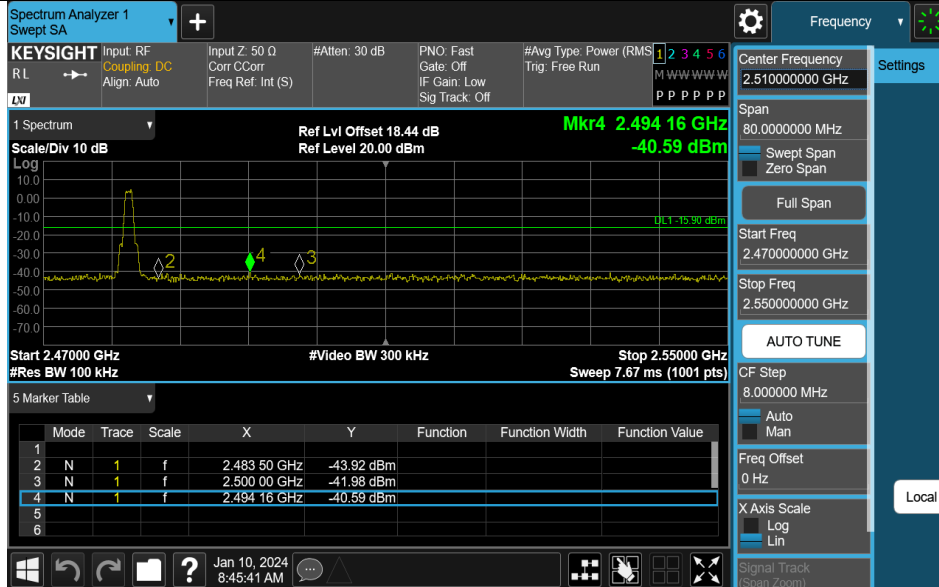
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	4.53	-39.91	≤ -15.47	PASS
BLE_1M	Ant1	High	2480	4.10	-40.59	≤ -15.9	PASS
BLE_2M	Ant1	Low	2402	3.60	-27.79	≤ -16.4	PASS
BLE_2M	Ant1	High	2480	3.30	-38.63	≤ -16.7	PASS

Test Graphs

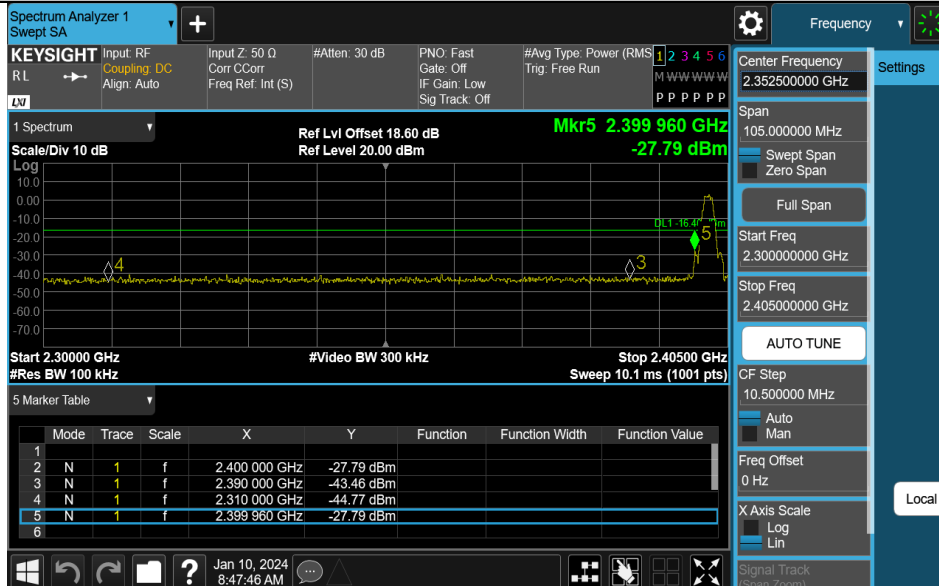
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS

Spectrum Analyzer 1
Swept SA

KEYSIGHT Input: RF Coupling: DC
RL → Align: Auto

Input Z: 50 Ω Corr: CCorr Freq Ref: Int (S)

#Atten: 30 dB PNO: Fast Gate: Off IF Gain: Low Sig Track: Off

#Avg Type: Power (RMS) Trig: Free Run

M WWW WWW W P P P P P P P

Frequency

Center Frequency: 2.510000000 GHz

Span: 80.00000000 MHz

Start Freq: 2.470000000 GHz

Stop Freq: 2.550000000 GHz

AUTO TUNE

CF Step: 8.000000 MHz

Freq Offset: 0 Hz

X Axis Scale: Log

Signal Track (Span Zoom)

1 Spectrum

Scale/Div 10 dB Ref Lvl Offset 18.44 dB Ref Level 20.00 dBm

Mkr4 2.534 80 GHz -38.63 dBm

Start 2.47000 GHz #Video BW 300 kHz Stop 2.55000 GHz

#Res BW 100 kHz Sweep 7.67 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1							
2	N	1	f	2.483 50 GHz	-43.03 dBm		
3	N	1	f	2.500 00 GHz	-43.17 dBm		
4	N	1	f	2.534 80 GHz	-38.63 dBm		
5							
6							

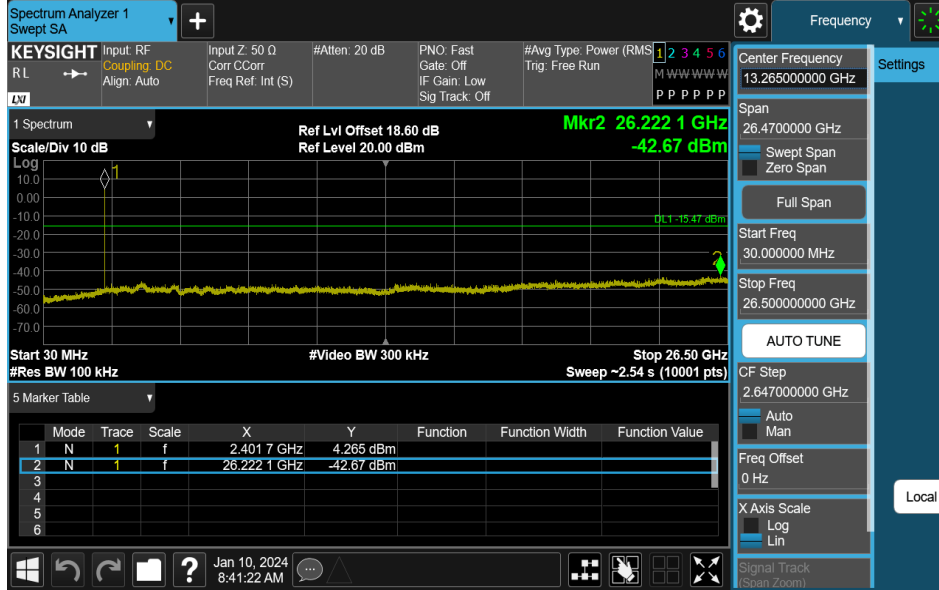
Windows Taskbar: Jan 10, 2024 8:51:51 AM

Appendix F: Conducted Spurious Emission Test Result

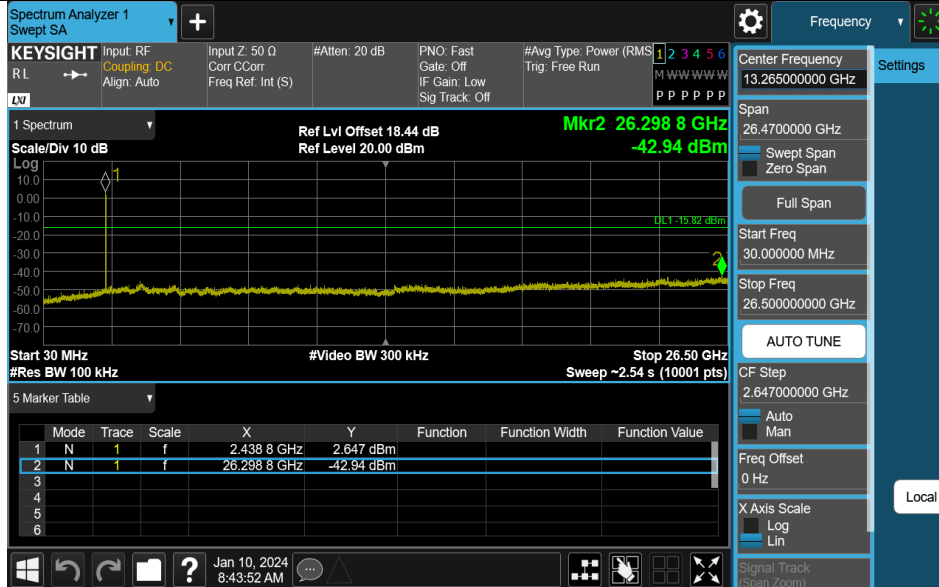
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~26500	4.53	-42.67	≤-15.47	PASS
BLE_1M	Ant1	2440	30~26500	4.18	-42.94	≤-15.82	PASS
BLE_1M	Ant1	2480	30~26500	4.10	-42.62	≤-15.9	PASS
BLE_2M	Ant1	2402	30~26500	3.60	-42.52	≤-16.4	PASS
BLE_2M	Ant1	2440	30~26500	3.43	-42.54	≤-16.57	PASS
BLE_2M	Ant1	2480	30~26500	3.30	-42.73	≤-16.7	PASS

Test Graphs

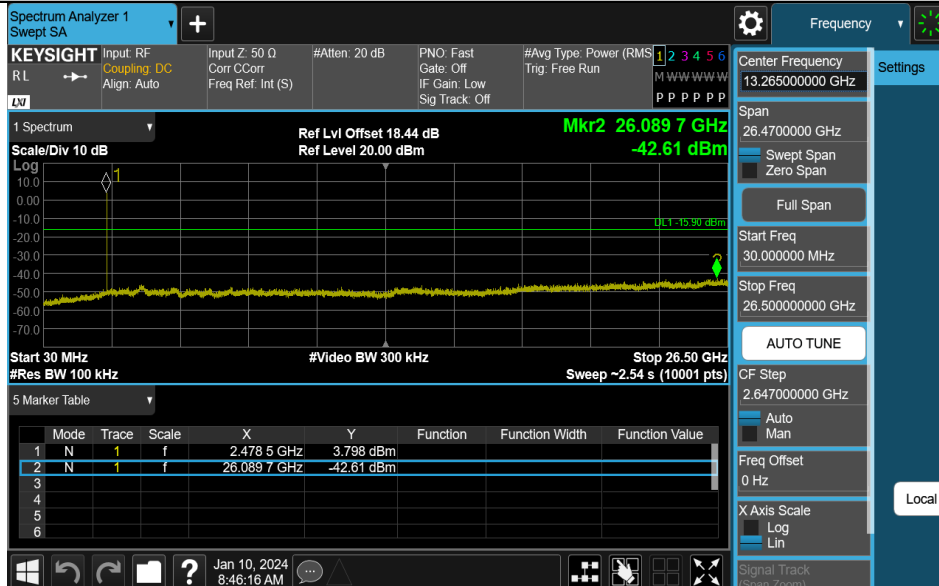
BLE_1M-Ant1-2402-30~26500-PASS



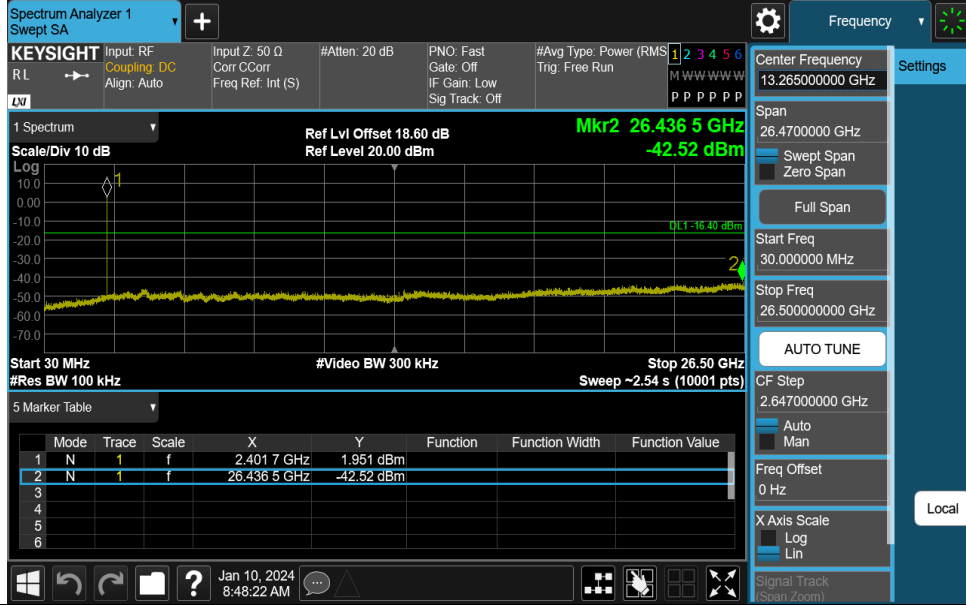
BLE_1M-Ant1-2440-30~26500-PASS



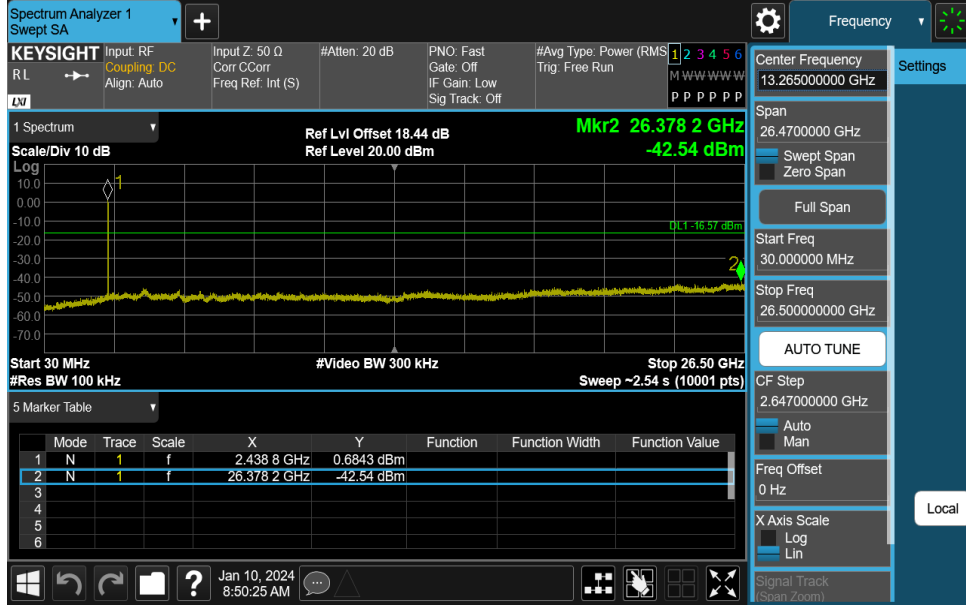
BLE_1M-Ant1-2480-30~26500-PASS



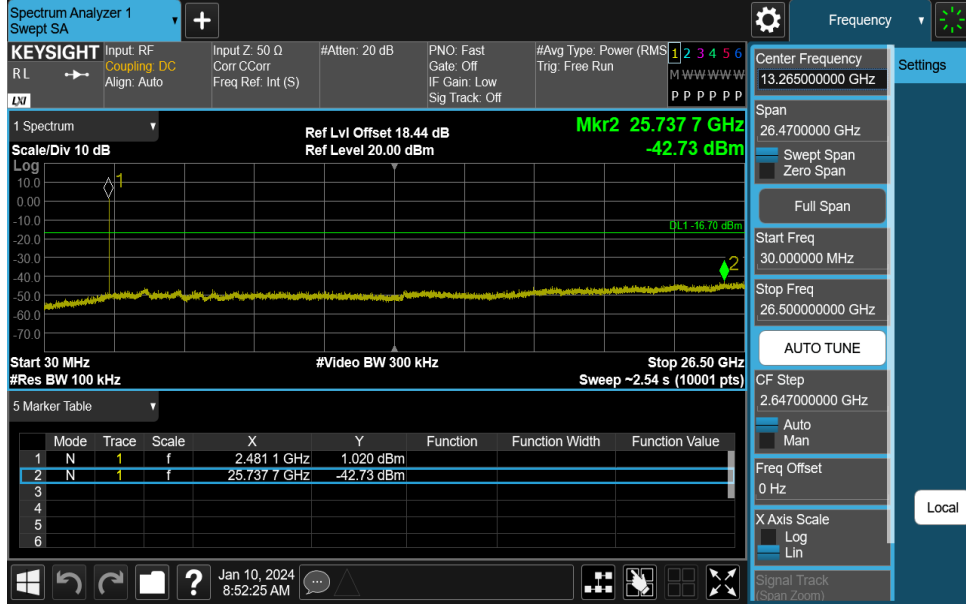
BLE_2M-Ant1-2402-30~26500-PASS



BLE_2M-Ant1-2440-30~26500-PASS



BLE_2M-Ant1-2480-30~26500-PASS

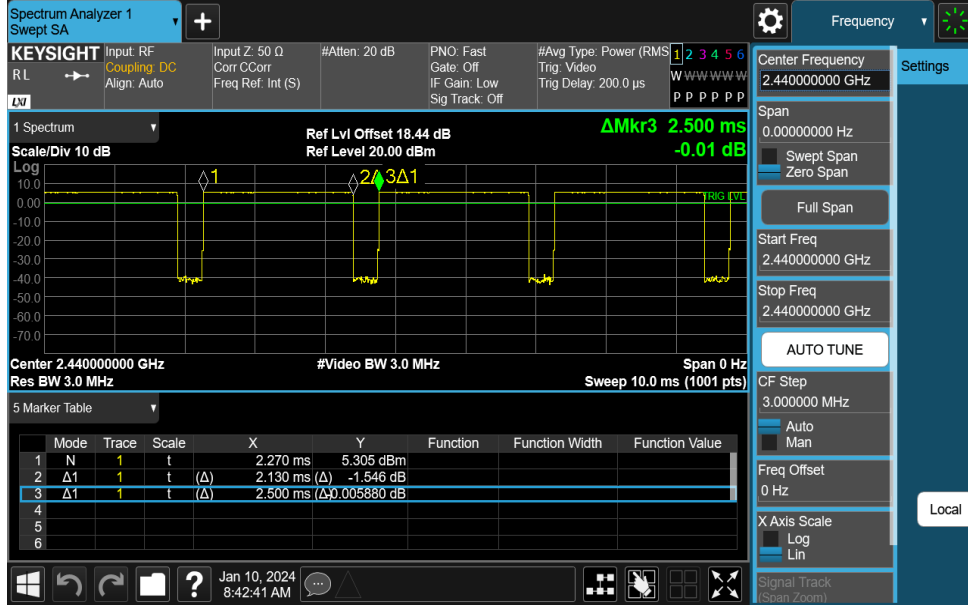


Appendix G: Duty Cycle Test Result

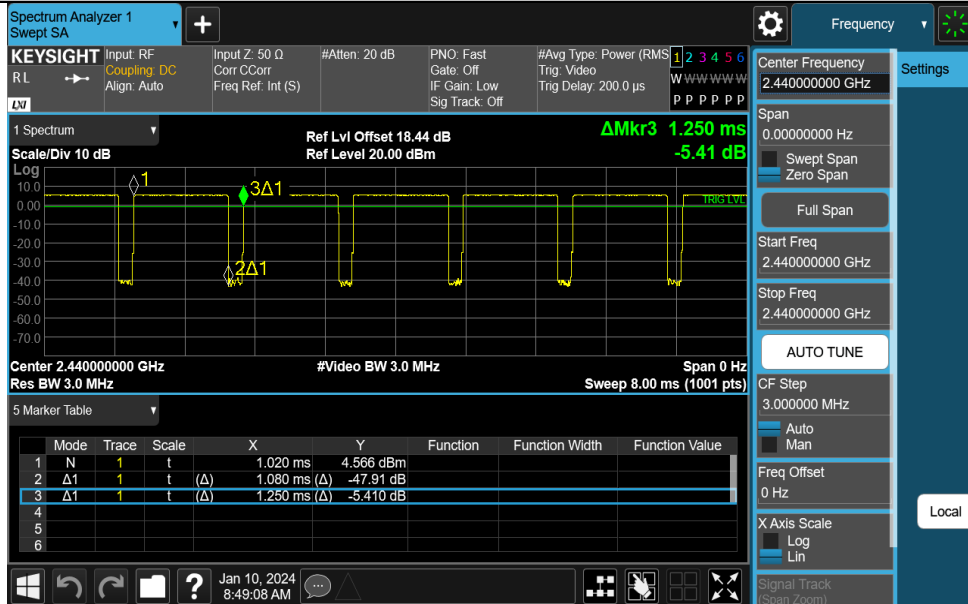
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2440	2.13	2.50	85.20	0.70
BLE_2M	Ant1	2440	1.08	1.25	86.40	0.63

Test Graphs

NTNV-BLE_1M-Ant1-2440



NTNV-BLE_2M-Ant1-2440

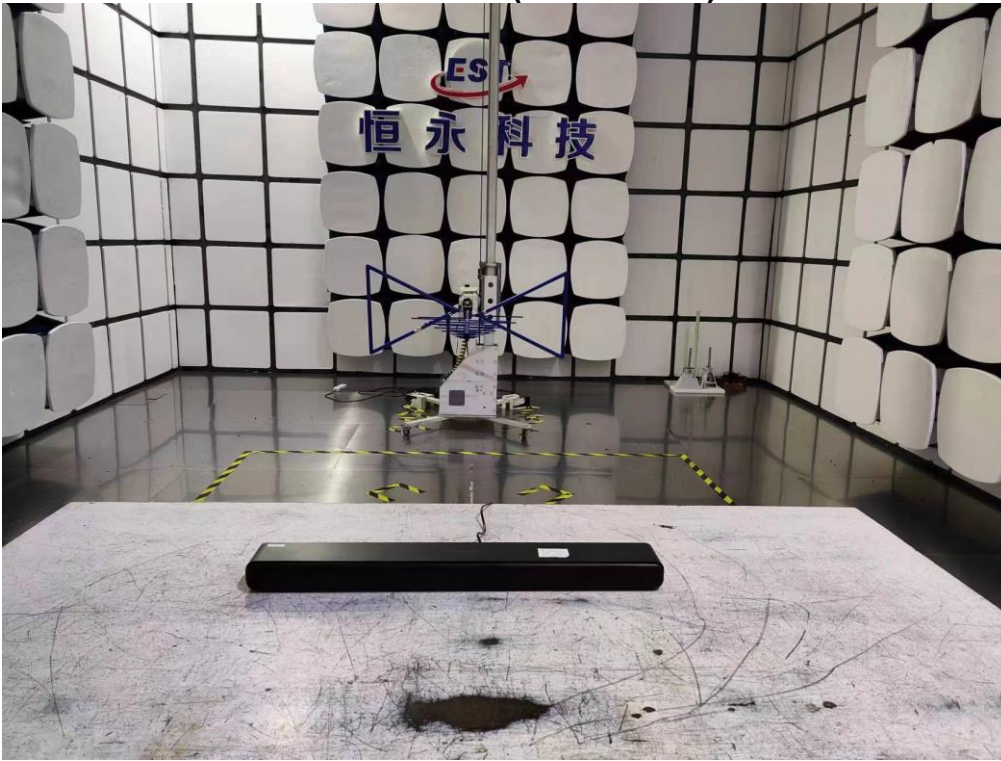


12. TEST SETUP PHOTO

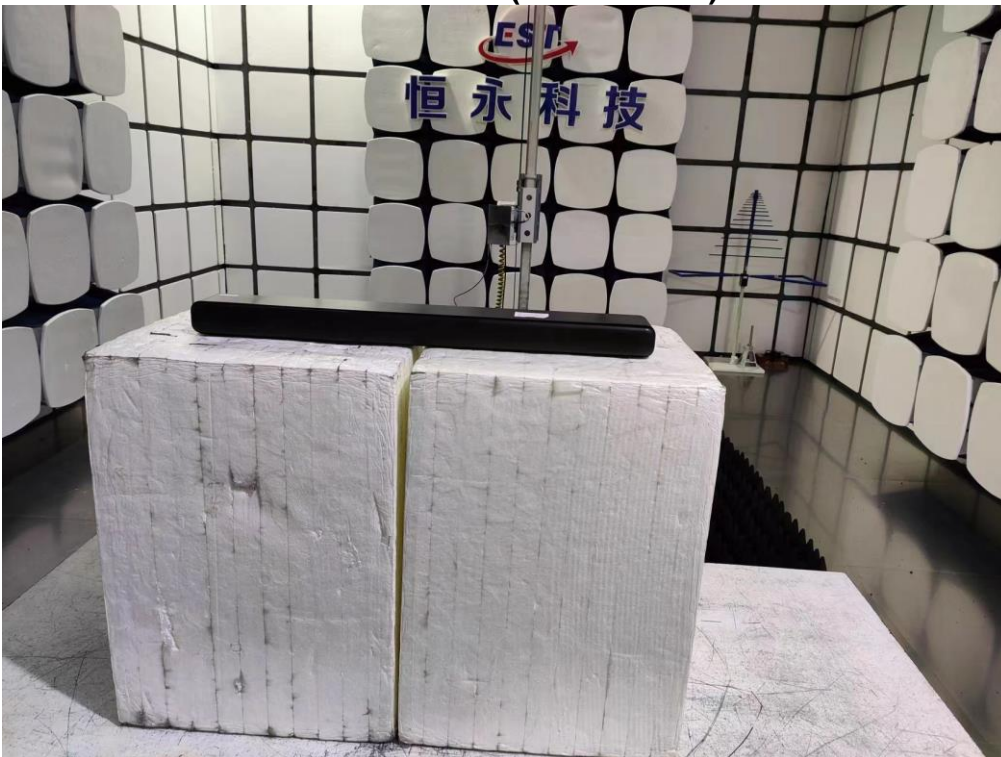
Conducted Test



Radiated Test (Below 1GHz)



Radiated Test (Above 1GHz)

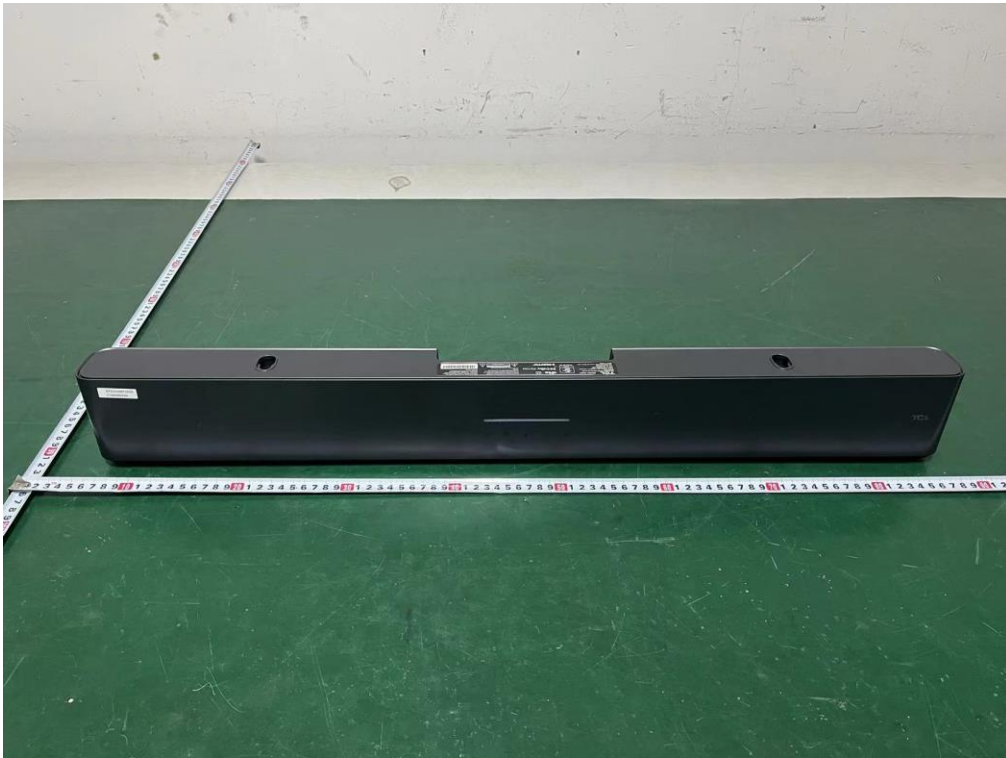
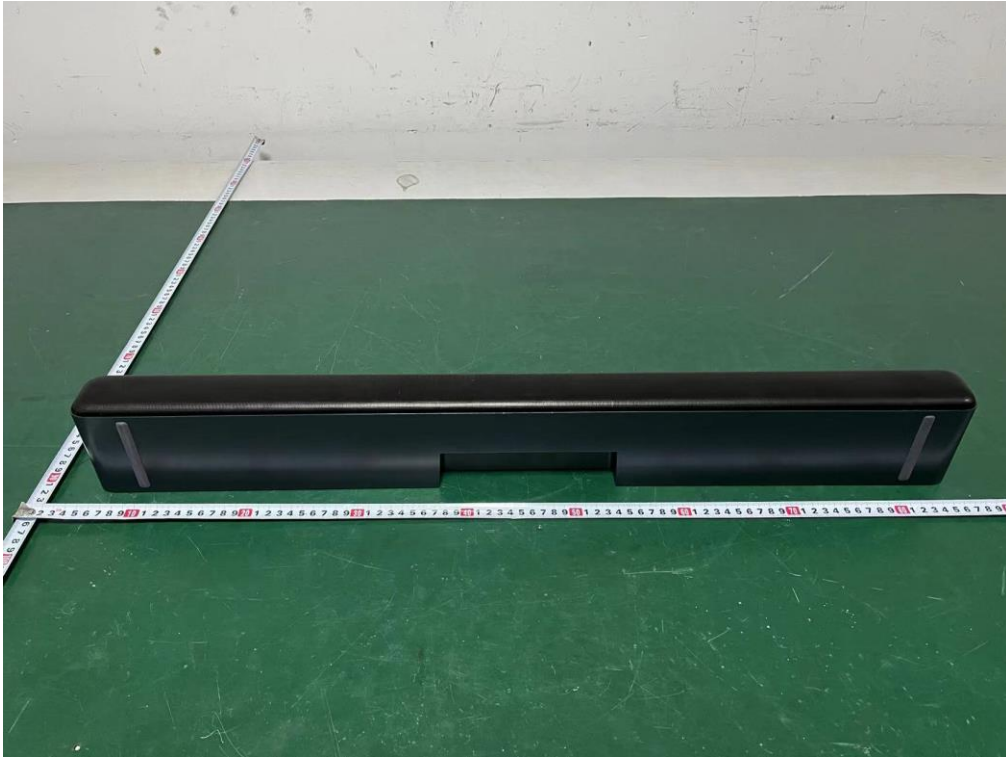


13. EUT PHOTO

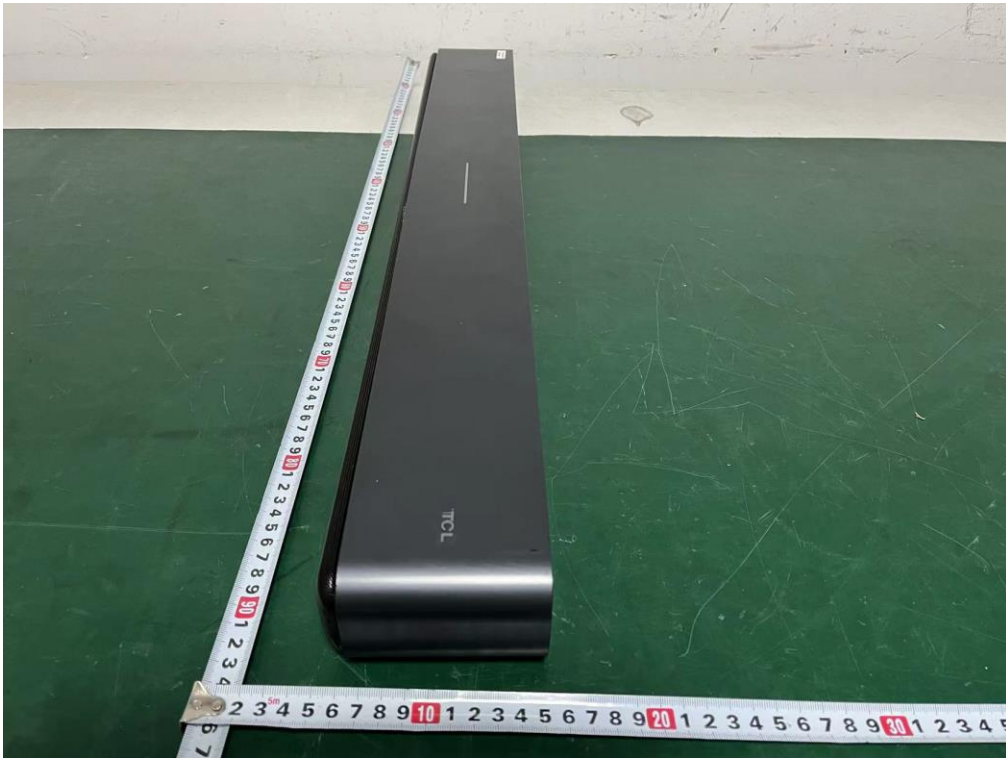
External Photos
M/N: S45H



External Photos
M/N: S45H



External Photos
M/N: S45H



External Photos
M/N: S45H

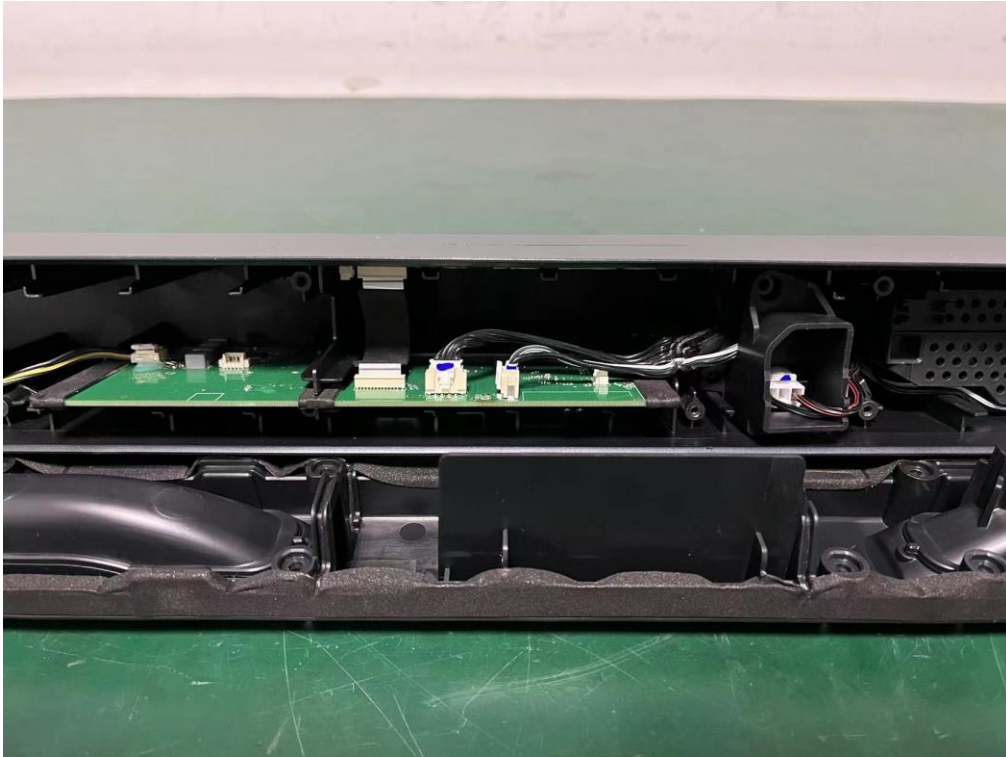


Internal Photos
M/N: S45H

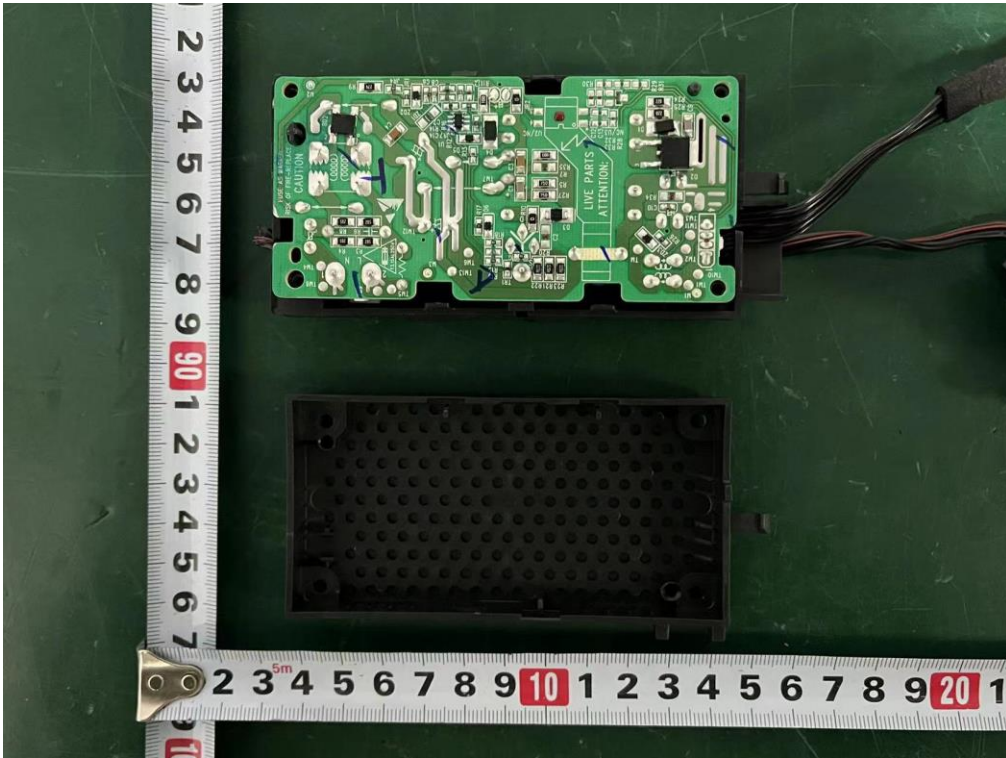


Internal Photos

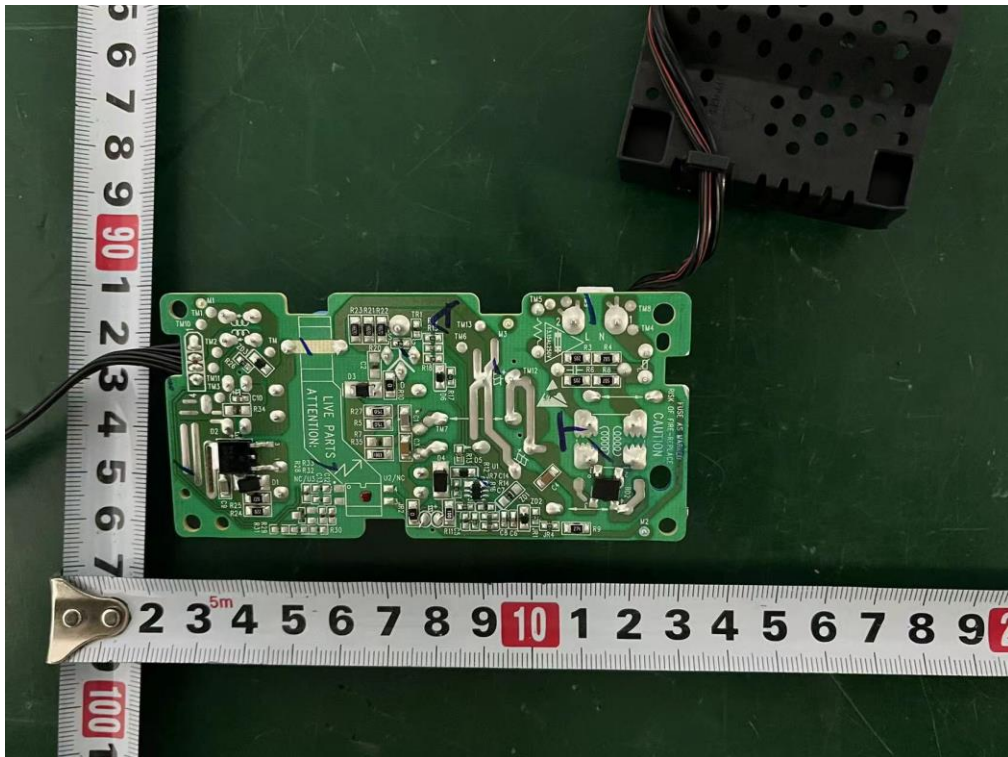
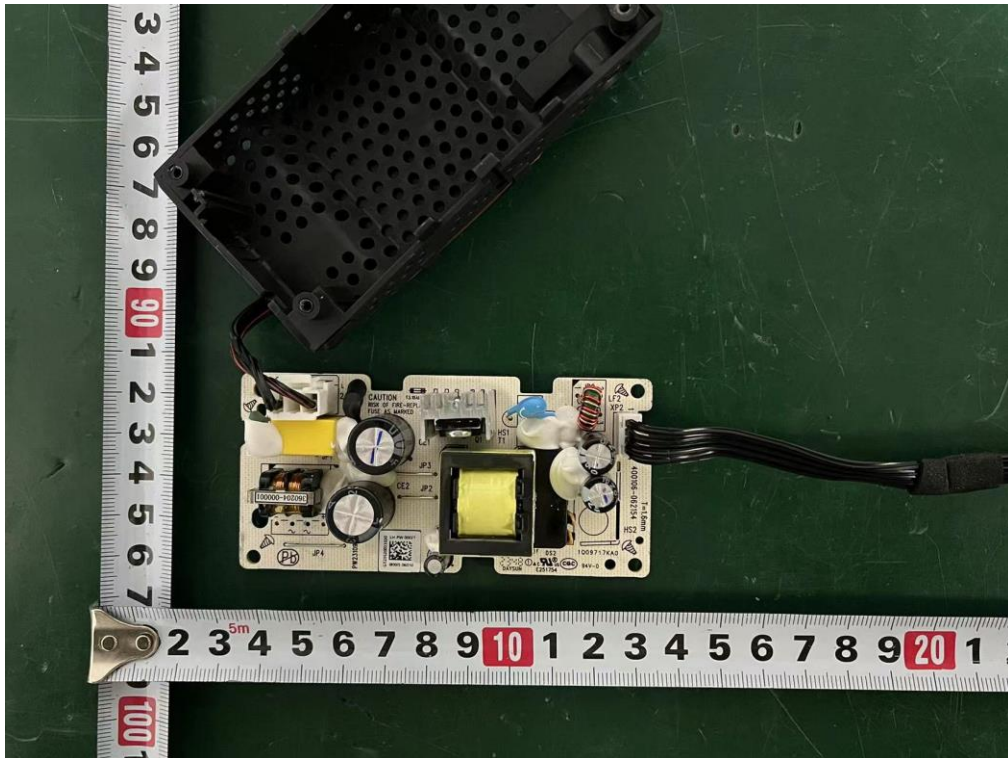
M/N: S45H



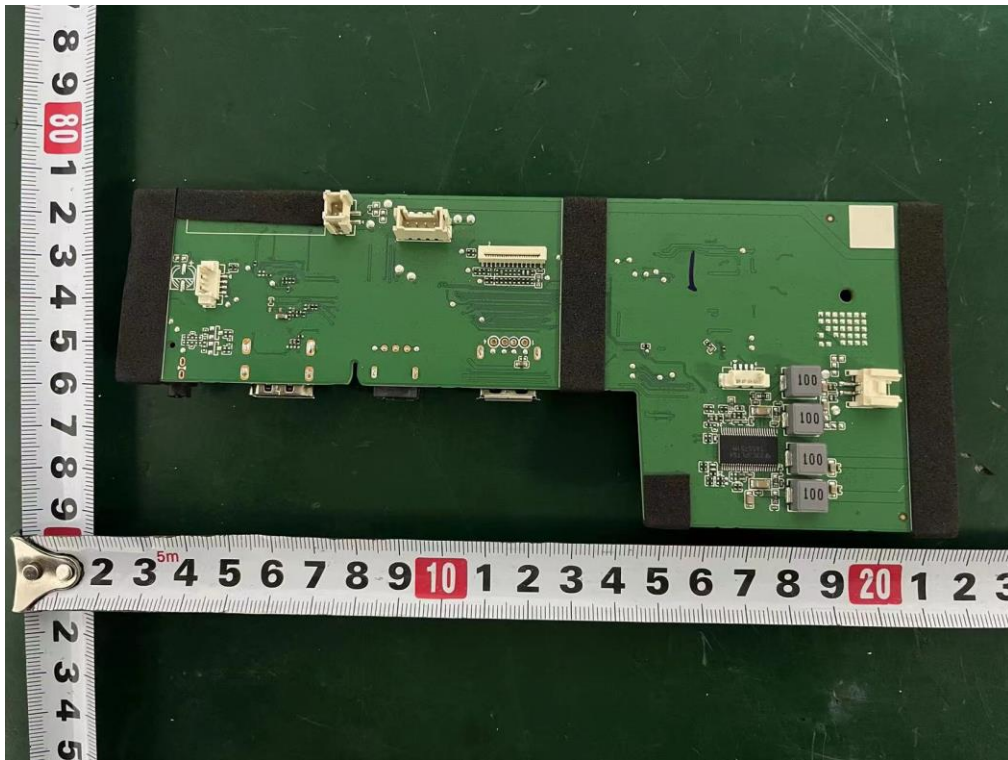
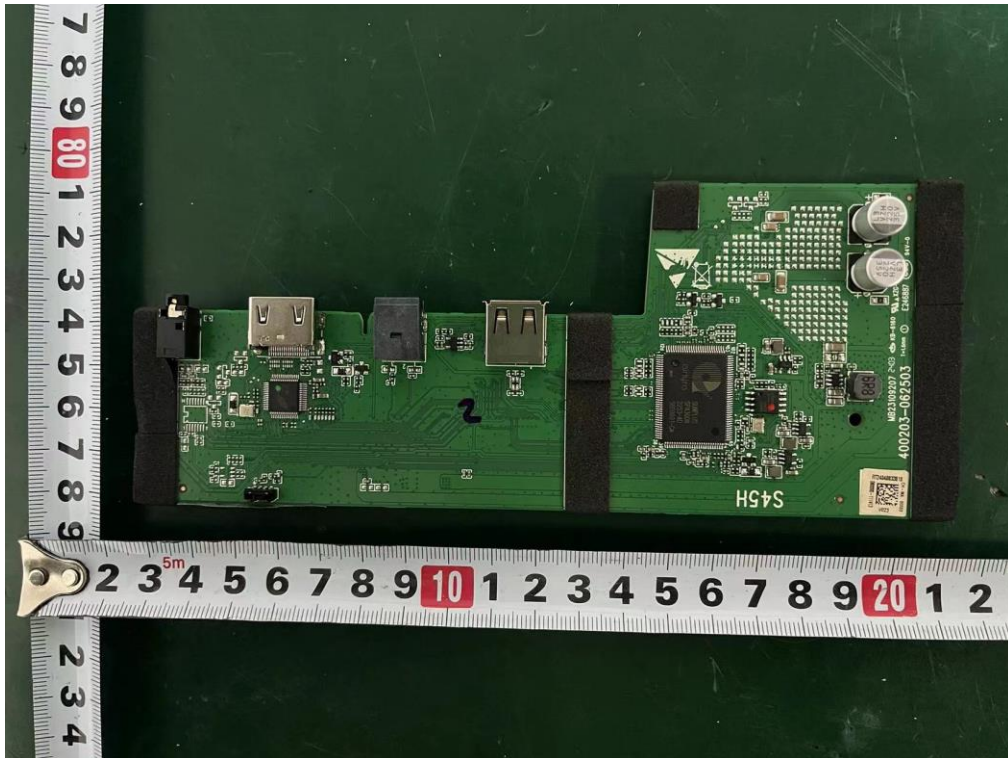
Internal Photos
M/N: S45H



Internal Photos
M/N: S45H

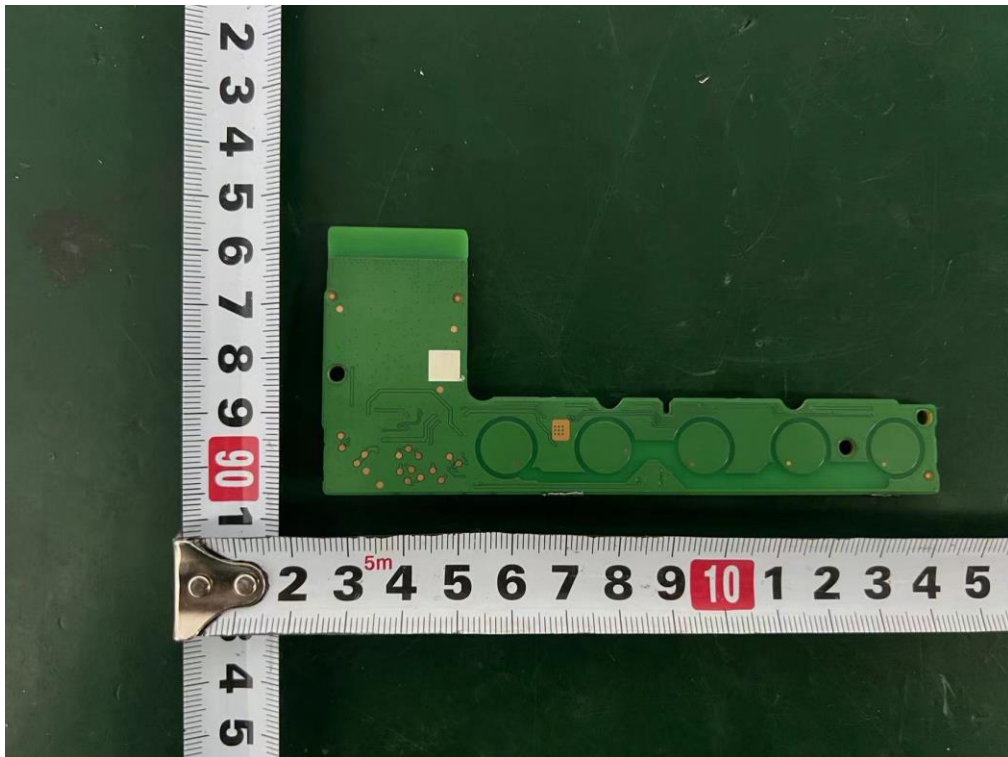
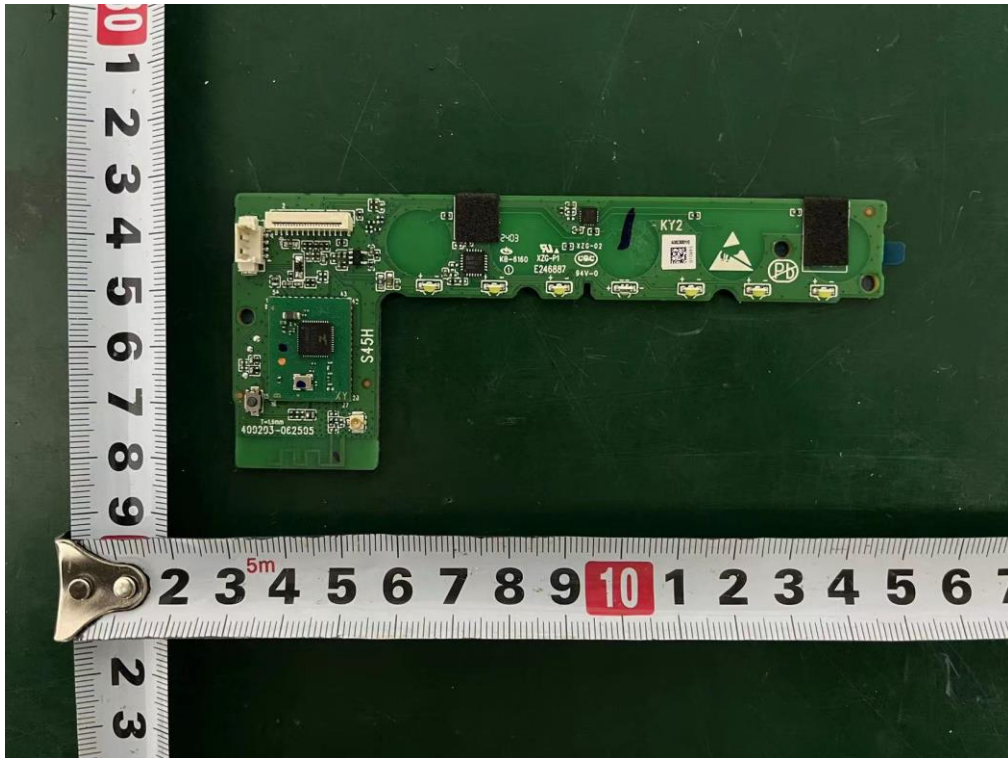


Internal Photos
M/N: S45H



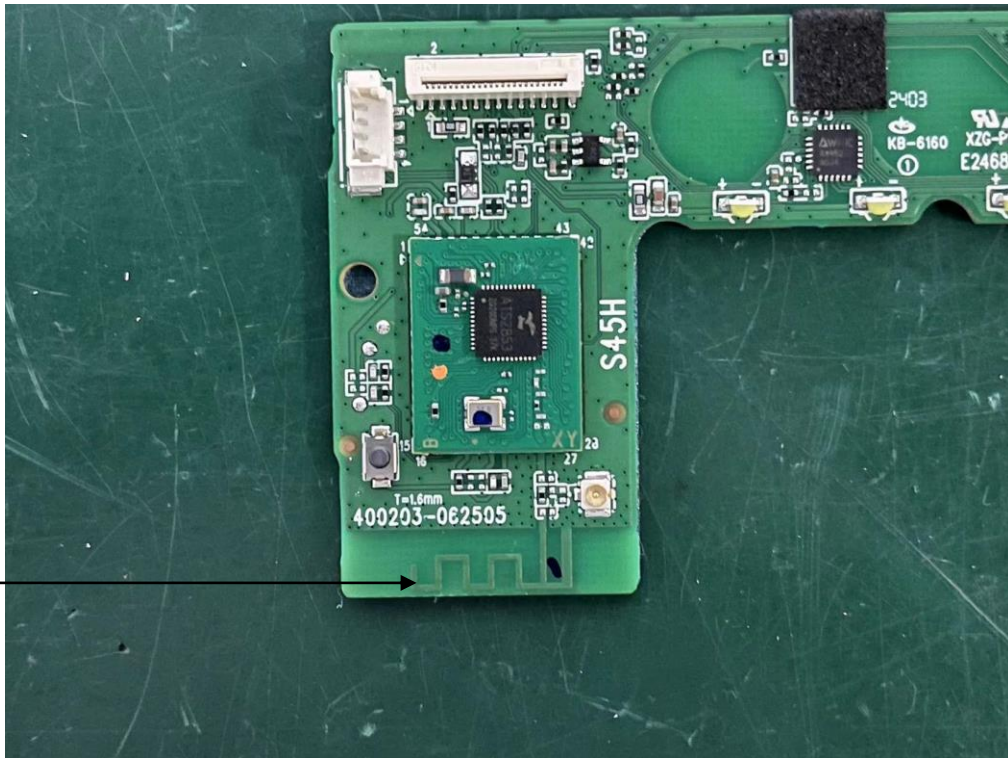
Internal Photos

M/N: S45H



Internal Photos

M/N: S45H



Bluetooth
Antenna

End of Test Report