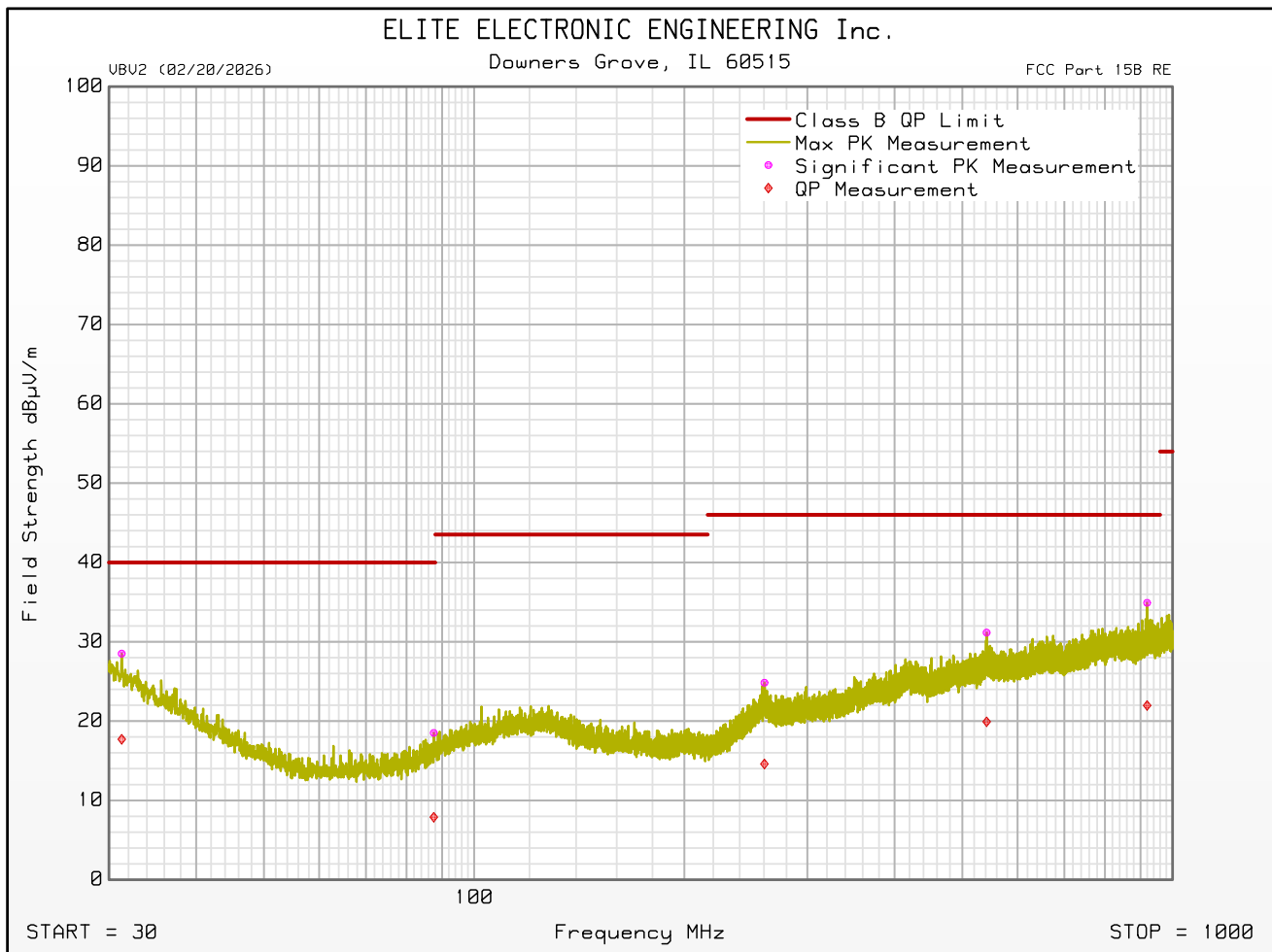


FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VBV2 (02/20/2026)

Manufacturer : MASTERLOCK
 Model : C410
 Serial Number : A
 DUT Mode : STANDBY
 Turntable Step Angle (°): 22.5
 Antenna Polarization : Horizontal
 Scan Type : FFT / Time Domain Scan
 Test RBW : 120 kHz
 Prelim Dwell Time (s) : 0.0001
 Notes :
 Test Engineer : T. Jozefczyk
 Test Date : Mar 06, 2026 02:30:26 PM

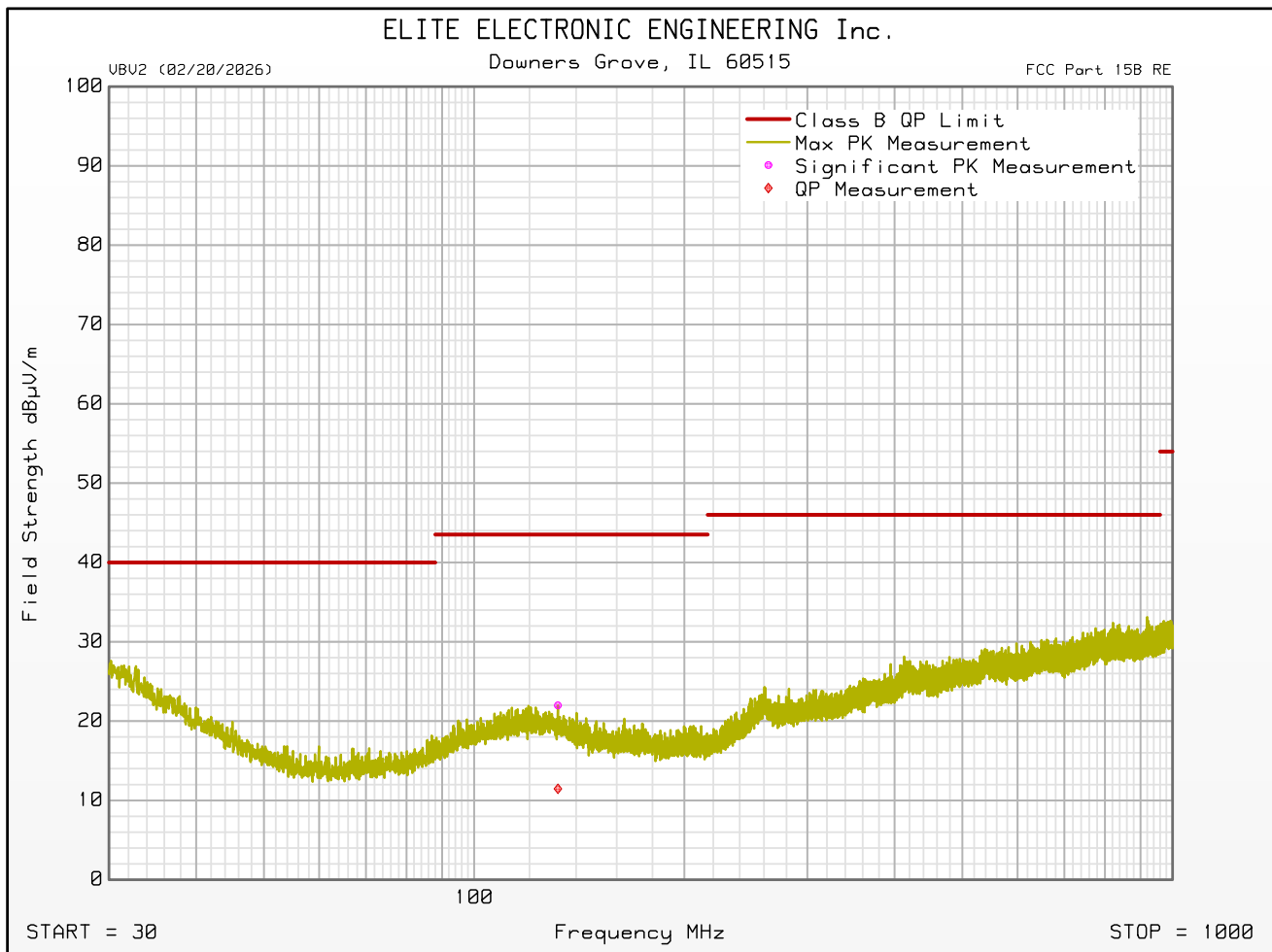


FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VB2 (02/20/2026)

Manufacturer : MASTERLOCK
 Model : C410
 Serial Number : A
 DUT Mode : STANDBY
 Turntable Step Angle (°): 22.5
 Antenna Polarization : Vertical
 Scan Type : FFT / Time Domain Scan
 Test RBW : 120 kHz
 Prelim Dwell Time (s) : 0.0001
 Notes :
 Test Engineer : T. Jozefczyk
 Test Date : Mar 06, 2026 02:30:26 PM





FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VBV2 (02/20/2026)

Manufacturer : MASTERLOCK
Model : C410
Serial Number : A
DUT Mode : STANDBY
Turntable Step Angle (°): 22.5
Scan Type : FFT / Time Domain Scan
Test RBW : 120 kHz
Prelim Dwell Time (s) : 0.0001
Notes :
Test Engineer : T. Jozefczyk
Test Date : Mar 06, 2026 02:30:26 PM

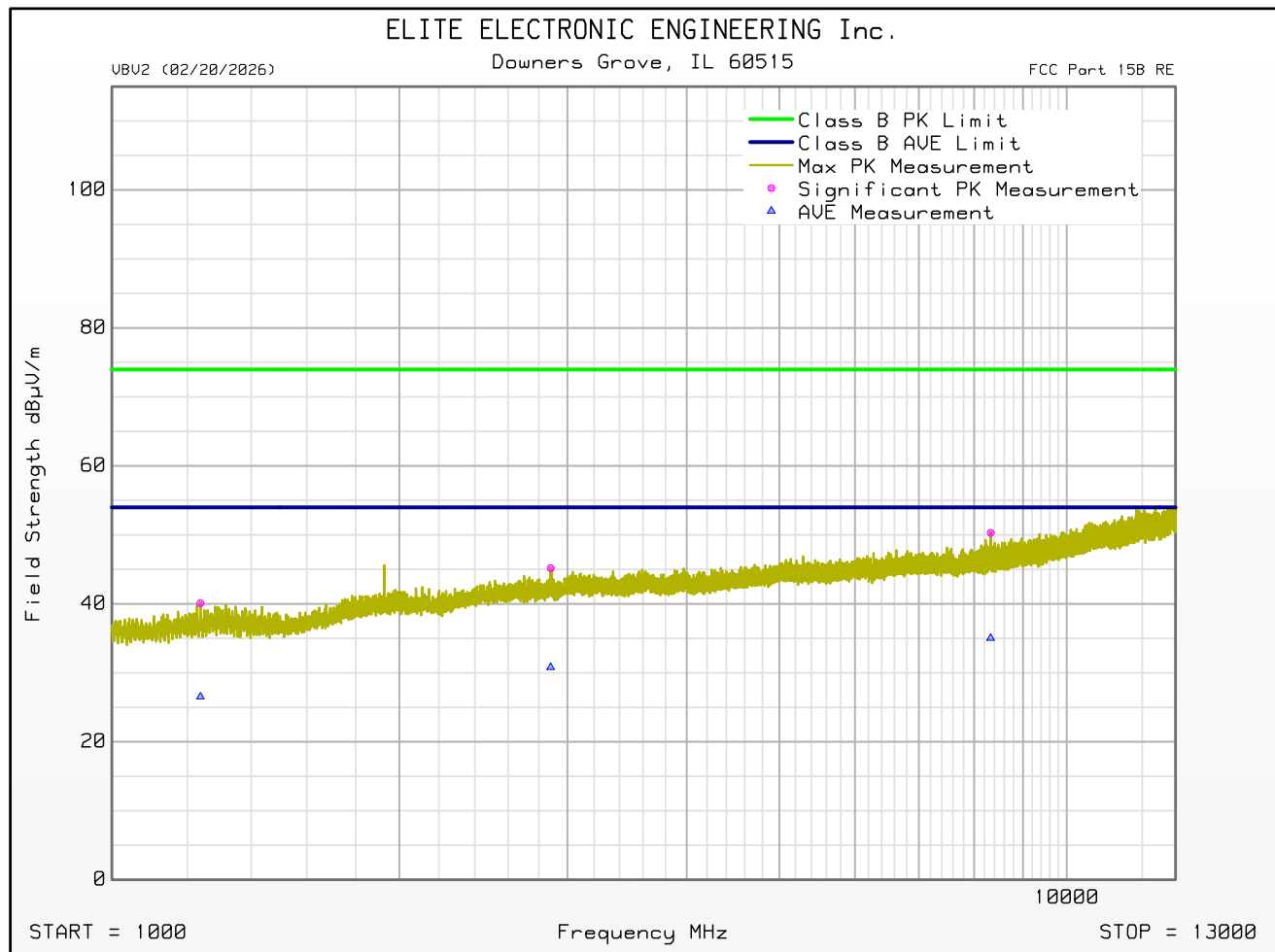
Frequency	Peak Mtr Rdg dBμV	QP Mtr Rdg dBμV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBμV/m	QP Total dBμV/m	QP Limit dBμV/m	QP Lim Mrg dB	Ant Pol	Mast Ht cm	Angle °	Excessive QP Level
31.29 MHz	4.8	-6.0	23.3	0.0	0.3	0.0	28.5	17.7	40.0	-22.3	Horizontal	120	292.5	
87.54 MHz	3.2	-7.4	14.7	0.0	0.6	0.0	18.5	7.9	40.0	-32.1	Horizontal	340	270	
131.8 MHz	3.0	-7.5	18.2	0.0	0.7	0.0	22.0	11.5	43.5	-32.1	Vertical	340	292.5	
260.4 MHz	3.8	-6.4	20.0	0.0	1.0	0.0	24.8	14.6	46.0	-31.4	Horizontal	200	67.5	
541.77 MHz	4.6	-6.6	25.2	0.0	1.4	0.0	31.2	19.9	46.0	-26.1	Horizontal	340	225	
919.62 MHz	6.4	-6.5	26.7	0.0	1.8	0.0	34.9	22.0	46.0	-24.0	Horizontal	200	22.5	

FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VBV2 (02/20/2026)

Manufacturer : MASTERLOCK
 Model : C410
 Serial Number : A
 DUT Mode : STANDBY
 Turntable Step Angle (°): 22.5
 Antenna Polarization : Horizontal
 Scan Type : FFT / Time Domain Scan
 Test RBW : 1 MHz
 Prelim Dwell Time (s) : 0.0001
 Notes :
 Test Engineer : T. Jozefczyk
 Test Date : Mar 06, 2026 11:05:07 AM

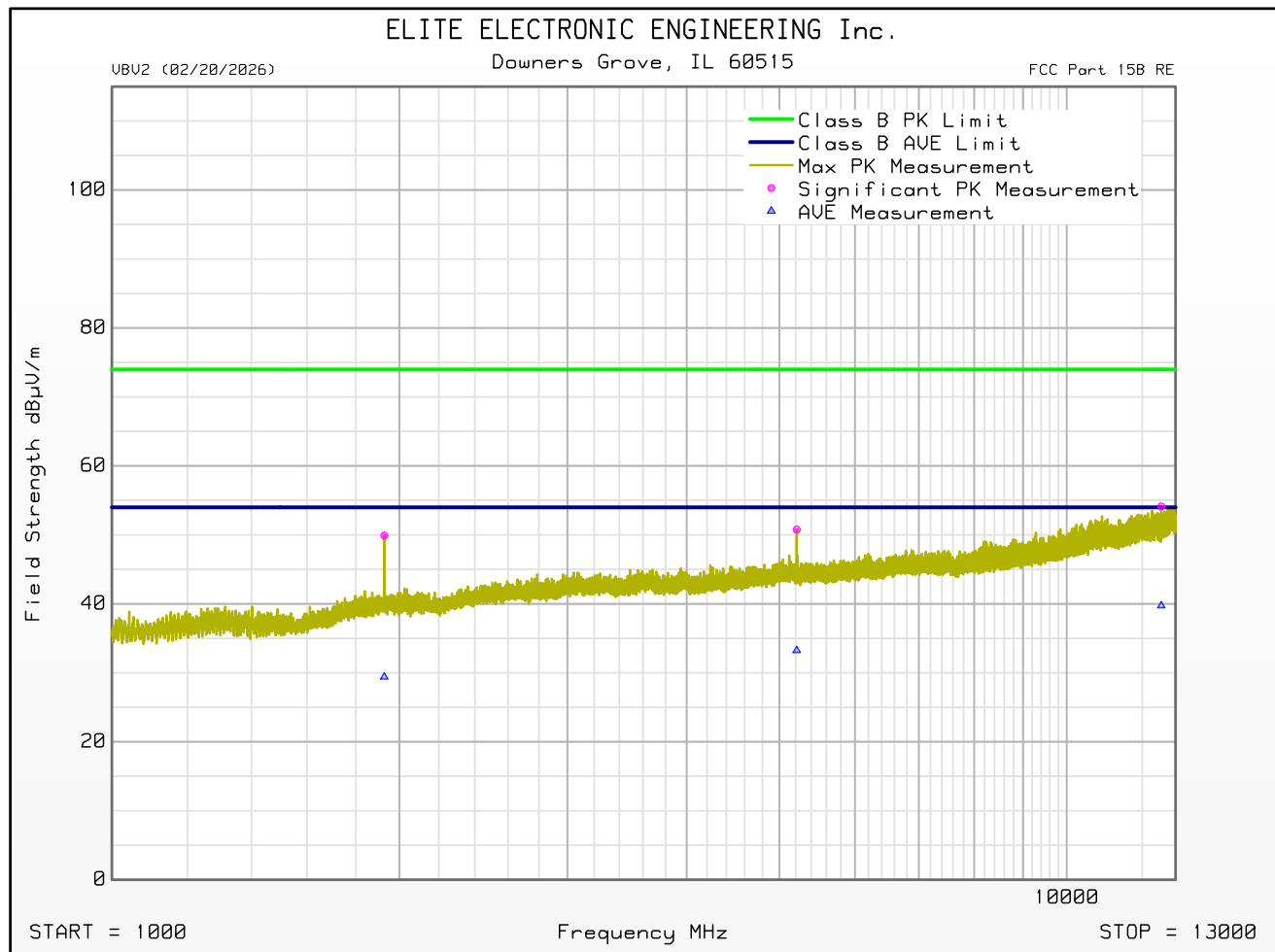


FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VBV2 (02/20/2026)

Manufacturer : MASTERLOCK
 Model : C410
 Serial Number : A
 DUT Mode : STANDBY
 Turntable Step Angle (°): 22.5
 Antenna Polarization : Vertical
 Scan Type : FFT / Time Domain Scan
 Test RBW : 1 MHz
 Prelim Dwell Time (s) : 0.0001
 Notes :
 Test Engineer : T. Jozefczyk
 Test Date : Mar 06, 2026 11:05:07 AM





FCC Part 15B Class B

Frequency Scan Summary

Software Revision: VBV2 (02/20/2026)

Manufacturer : MASTERLOCK
Model : C410
Serial Number : A
DUT Mode : STANDBY
Turntable Step Angle (°): 22.5
Scan Type : FFT / Time Domain Scan
Test RBW : 1 MHz
Prelim Dwell Time (s) : 0.0001
Notes :
Test Engineer : T. Jozefczyk
Test Date : Mar 06, 2026 11:05:07 AM

Frequency	Peak Mtr Rdg dBμV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBμV/m	Peak Limit dBμV/m	Peak Lim Mrg dB	Ant Pol	Mast Ht cm	Angle °	Excessive Peak Level
1.238 GHz	50.3	29.0	-41.3	2.1	0.0	40.1	74.0	-33.9	Horizontal	120	90	
1.929 GHz	57.1	31.4	-41.2	2.6	0.0	49.9	74.0	-24.1	Vertical	200	0	
2.881 GHz	50.0	32.6	-40.7	3.3	0.0	45.2	74.0	-28.8	Horizontal	120	180	
5.215 GHz	52.0	35.0	-40.6	4.3	0.0	50.8	74.0	-23.2	Vertical	120	225	
8.325 GHz	49.4	36.0	-40.6	5.5	0.0	50.3	74.0	-23.7	Horizontal	120	180	
12.561 GHz	48.2	39.0	-40.0	6.9	0.0	54.1	74.0	-19.9	Vertical	200	315	

Frequency	Ave. Mtr Rdg dBμV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Ave. Total dBμV/m	Ave. Limit dBμV/m	Ave. Lim Mrg dB	Ant Pol	Mast Ht cm	Angle °	Excessive Ave. Level
1.238 GHz	36.8	29.0	-41.3	2.1	0.0	26.5	54.0	-27.5	Horizontal	120	90	
1.929 GHz	36.6	31.4	-41.2	2.6	0.0	29.4	54.0	-24.6	Vertical	200	0	
2.881 GHz	35.6	32.6	-40.7	3.3	0.0	30.8	54.0	-23.2	Horizontal	120	180	
5.215 GHz	34.5	35.0	-40.6	4.3	0.0	33.2	54.0	-20.7	Vertical	120	225	
8.325 GHz	34.1	36.0	-40.6	5.5	0.0	35.0	54.0	-19.0	Horizontal	120	180	
12.561 GHz	33.8	39.0	-40.0	6.9	0.0	39.7	54.0	-14.3	Vertical	200	315	

21. Antenna Port Conducted Emissions

Test Information	
Manufacturer	Master Lock Company
Product	cLOTO Electronic Padlock
Model No.	C410
Serial No.	B
Mode	Tx

Test Setup Details	
Setup Format	Tabletop
Height of Support	N/A
Type of Test Site	EMC Bench
Note	None

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Occupied Channel Bandwidth	$\pm 224\text{kHz}$
Power Spectral Density	$\pm 0.372\text{Hz}$
RF Output Power, Conducted	$\pm 0.349\text{ dB}$
Unwanted Emissions, Conducted	$\pm 1.39\text{ dB}$
All Emissions Radiated Below 1GHz	$\pm 2.629\text{ dB}$
All Emissions Radiated Above 1GHz	$\pm 2.710\text{ dB}$
Temperature	$\pm 0.165^{\circ}\text{C}$
Humidity	$\pm 1.7\%\text{ RH}$
DC and Low Frequency Voltages	$\pm 0.115\text{ Volts}$
Time	$\pm 0.05\%$

DTS Requirements
<u>6dB Bandwidth (DTS Bandwidth):</u> Per FCC 15.247(a)(2) and ISSED RSS-247 Section 5.2(a), the minimum 6dB bandwidth shall be at least 500kHz for all systems using digital modulation techniques.
<u>99% Bandwidth:</u> RSS-Gen requires the measurement of the 99% bandwidth (Occupied Bandwidth).
<u>Peak Conducted Output Power:</u> Per FCC 15.247(b)(3) and ISSED RSS-247 Section 5.4(d), for systems using digital modulation, the maximum peak conducted output power shall not exceed 1W.
<u>Peak Power Spectral Density:</u> Per FCC 15.247(e) and ISSED RSS-247 Section 5.2(b), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission . If peak conducted output power was measured, the same method must be used to measure the power spectral density.
<u>Low Band Edge:</u> Per FCC 15.247(d) and ISSED RSS-247 Section 5.5, in any 100kHz bandwidth outside the frequency band in which the digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz 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. Attenuation below the general limits specified in FCC 15.209(a) and ISSED RSS-Gen is not required.
<u>Duty Cycle Correction Factor:</u> Per ANSI C63.10 Section 11.6, duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. When continuous transmission cannot be achieved, measurement of the duty cycle can be used to measure the average power.

DTS Procedures

6dB Bandwidth (DTS Bandwidth) (C63.10-2020 Section 11.8 Option 1):

- a) The following settings were employed on the EMI Test Receiver:
 - Center Frequency = Transmit Frequency of the EUT
 - Frequency Span = 2 x Occupied Channel Bandwidth
 - RBW = 100kHz
 - VBW = 3 x RBW
 - Detector Mode = Max Peak
 - Trace Mode = Max Hold
- b) Allow the trace to stabilize.
- c) Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- d) Determine the 6dB down amplitude.
- e) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope trace, such that each marker is at or slightly below the 6dB down amplitude determined in step d). If a marker is below this 6dB down amplitude value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers.

99% Bandwidth (C63.10-2020 Section 6.9.3):

- a) The following settings were employed on the EMI Test Receiver:
 - Center Frequency = Transmit Frequency of the EUT
 - Frequency Span = Between 1.5 and 5 times the OBW
 - RBW = Between 1% to 5% of the OBW
 - VBW = Approximately 3 x RBW
 - Detector Mode = Max Peak
 - Trace Mode = Max Hold
- b) Allow the trace to stabilize.
- c) Use the 99% power bandwidth function of the EMI receiver.

Peak Conducted Output Power (C63.10-2020 Section 11.9.1.1):

- a) The following settings were employed on the EMI Test Receiver:
 - Center Frequency = Transmit Frequency of the EUT
 - RBW = $\geq$ DTS Bandwidth
 - VBW = $\geq$ 3 x RBW
 - Span = $\geq$ 3 x RBW
 - Sweep Time = Auto couple
 - Detector Mode = Max Peak
 - Trace Mode = Max Hold
- b) Allow the trace to stabilize.
- c) Use the peak marker function to determine the peak amplitude level.

Peak Power Spectral Density (C63.10-2020 Section 11.10.2):

- a) The following settings were employed on the EMI Test Receiver:
 - Center Frequency = Transmit Frequency of the EUT
 - Frequency Span = At least 1.5 times the OBW

- RBW = 3kHz ≤ RBW ≤ 100kHz
- VBW = ≥ 3 x RBW
- Detector Mode = Max Peak
- Sweep Time = Auto Couple
- Trace Mode = Max Hold

- b) Allow the trace to stabilize.
- c) Use the peak marker function to determine the maximum amplitude level within the RBW.
- d) If measured value exceeds requirement, then reduce RBW (but no less than 3kHz) and repeat.

Low Band Edge (C63.10-2020 Section 11.11):

a) Reference Level Measurement

- Start Frequency = 2400MHz
- Stop Frequency = 2483.5MHz
- RBW = 100kHz
- VBW = ≥ 3 x RBW
- Detector Mode = Max Peak
- Trace Mode = Max Hold
- Sweep Time = Auto

- b) Allow the trace to stabilize and use the peak marker function to determine the maximum level.

c) Emission Level Measurement

- Start Frequency = 2310MHz
- Stop Frequency = 2400MHz
- RBW = 100kHz
- VBW = ≥ 3 x RBW
- Detector Mode = Max Peak
- Trace Mode = Max Hold
- Sweep Time = Auto

- d) Allow the trace to stabilize and use the peak marker function to determine the maximum level.
- e) The two sweeps were combined and plotted.
- f) Ensure that the amplitude of all unwanted emissions are attenuated by at least 20dB.

Duty Cycle Correction Factor (C63.10-2020 Section 7.5 and 11.6)

a) The following settings were employed on the EMI Test Receiver:

- Center Frequency = Transmit Frequency of the EUT
- Frequency Span = 0Hz
- RBW = ≥ OBW if possible; otherwise set RBW as large as possible
- VBW = ≥ RBW
- Detector Mode = Peak or RMS
- Number of Measurement Points ≥ 2 x span/RBW

b) Measure the ON and OFF times of the transmitted signal

$$Duty\ Cycle\ (D) = \frac{ON\ TIME}{(ON\ TIME + OFF\ TIME)}$$

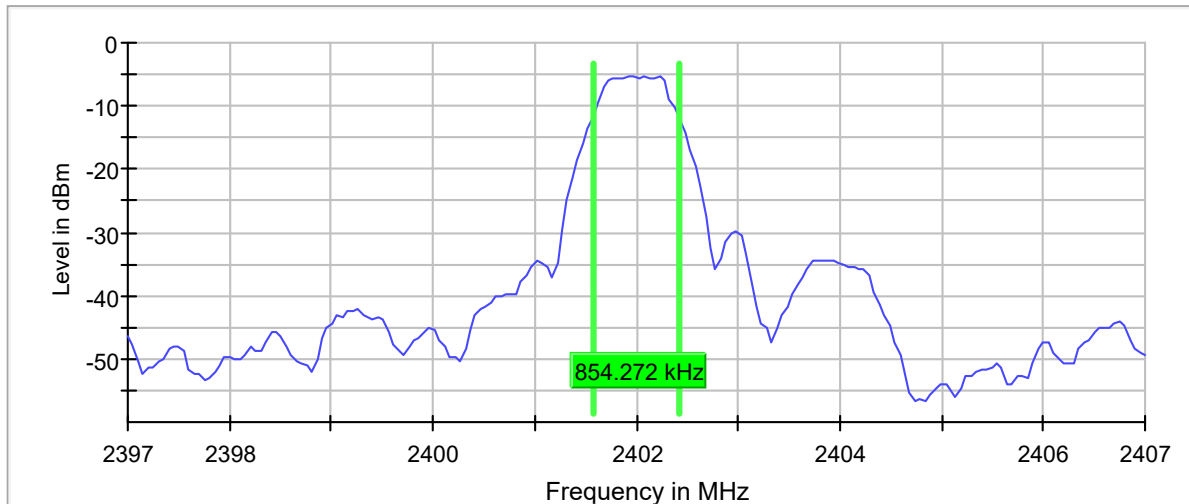
Minimum Emission Bandwidth 6dB

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

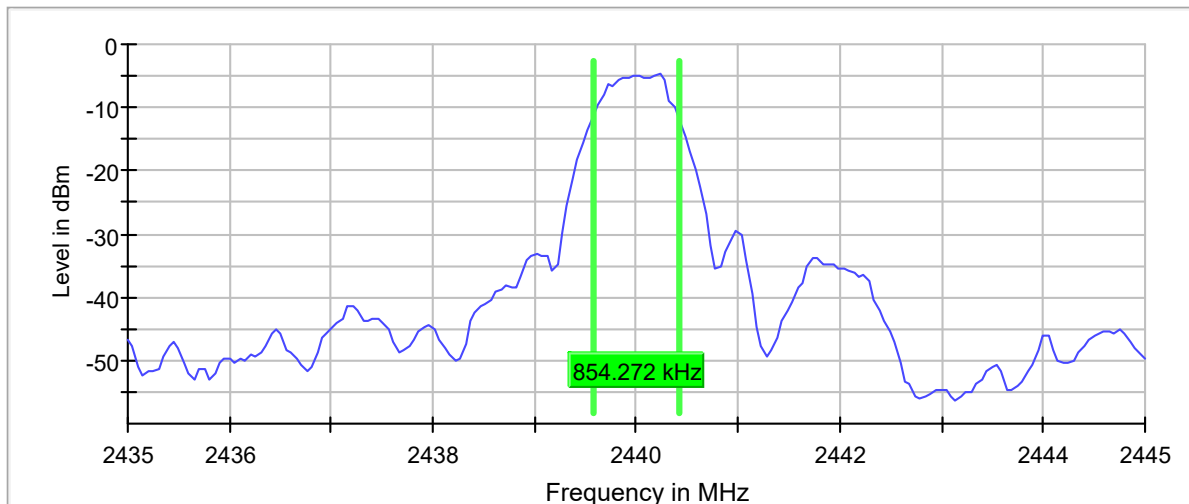
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2402.000000	0.854272	0.500000	---	2401.572864	2402.427136	-5.3	PASS

6 dB Bandwidth



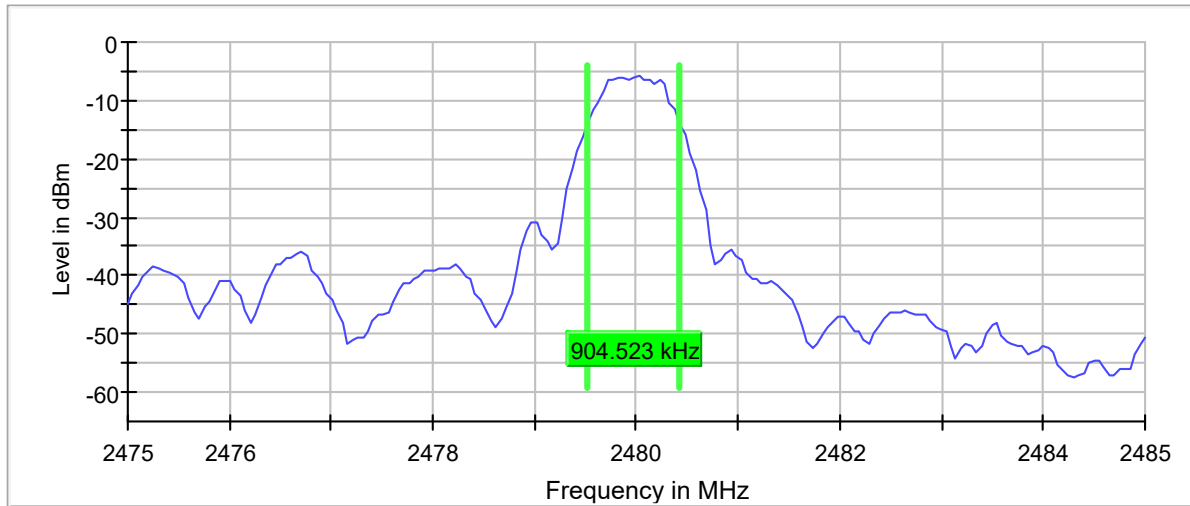
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2440.000000	0.854272	0.500000	---	2439.572864	2440.427136	-4.6	PASS

6 dB Bandwidth



DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2480.000000	0.904523	0.500000	---	2479.522613	2480.427136	-5.9	PASS

6 dB Bandwidth



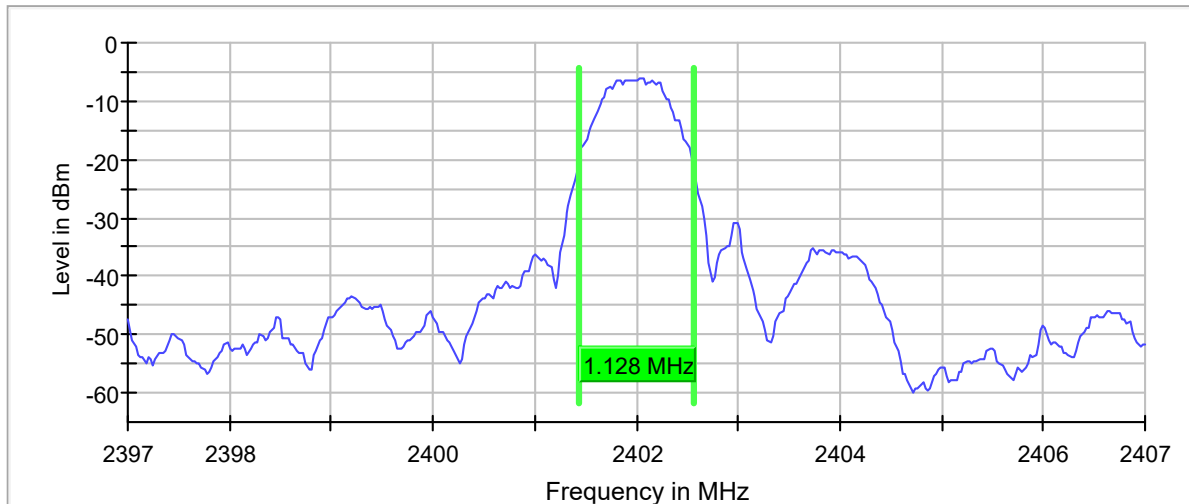
Occupied Channel Bandwidth 99%

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

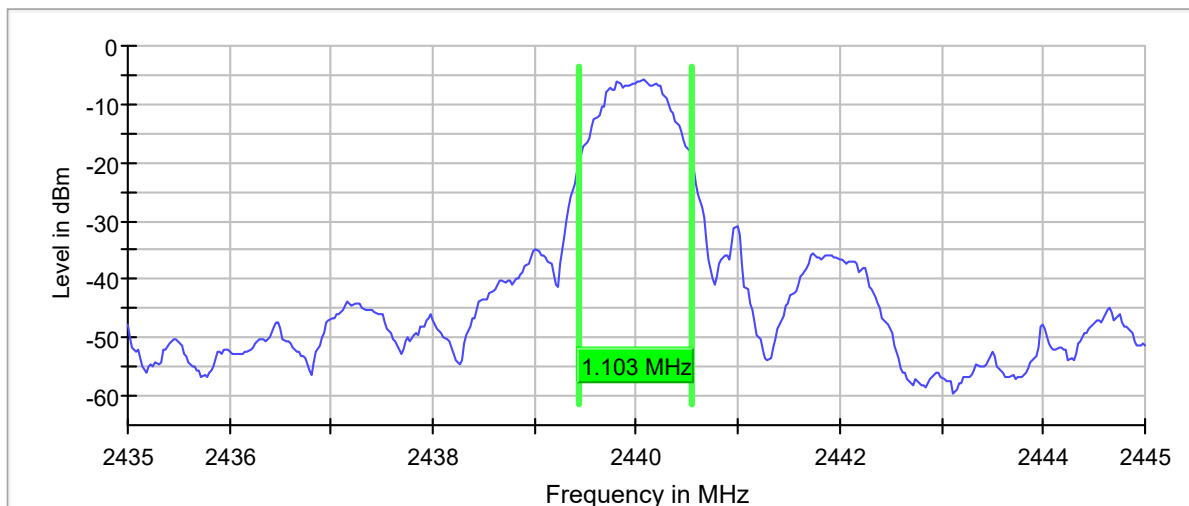
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
2402.000000	1.127820	---	---	2401.436090	2402.563910	PASS

99 % Bandwidth



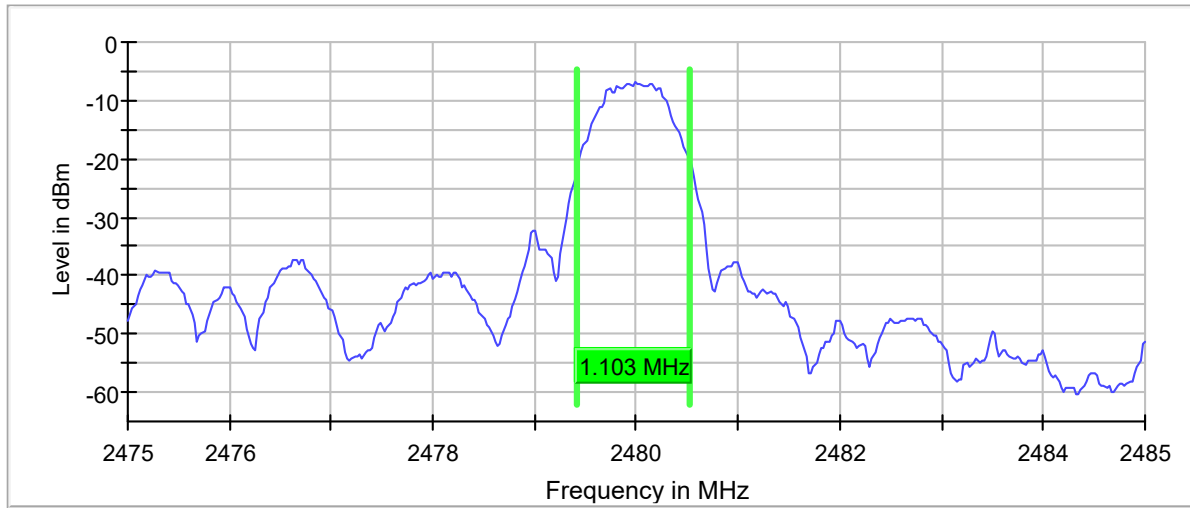
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
2440.000000	1.102757	---	---	2439.436090	2440.538847	PASS

99 % Bandwidth



DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
2480.000000	1.102756	---	---	2479.411028	2480.513784	PASS

99 % Bandwidth



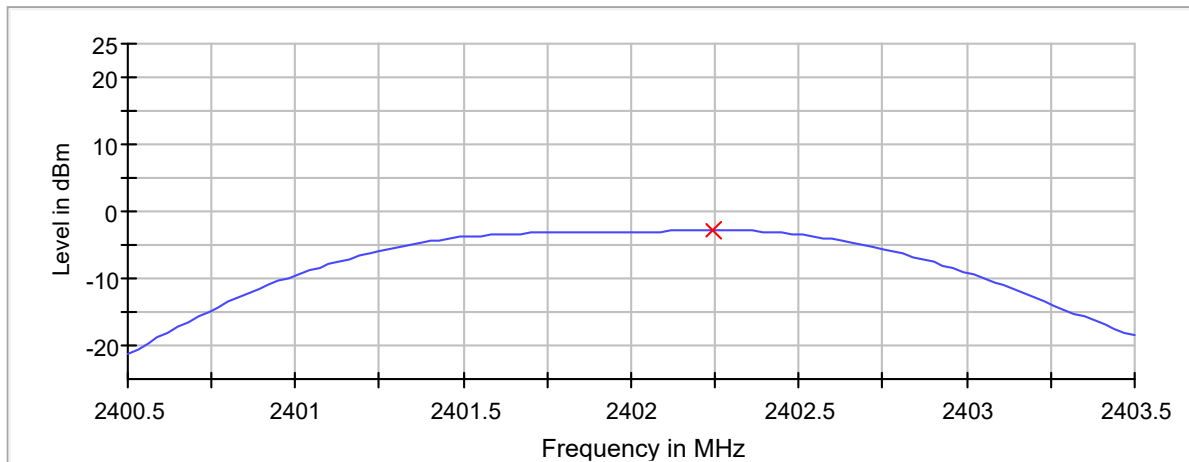
Peak Output Power (Sweep)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2402.000000	-2.8	30.0	PASS

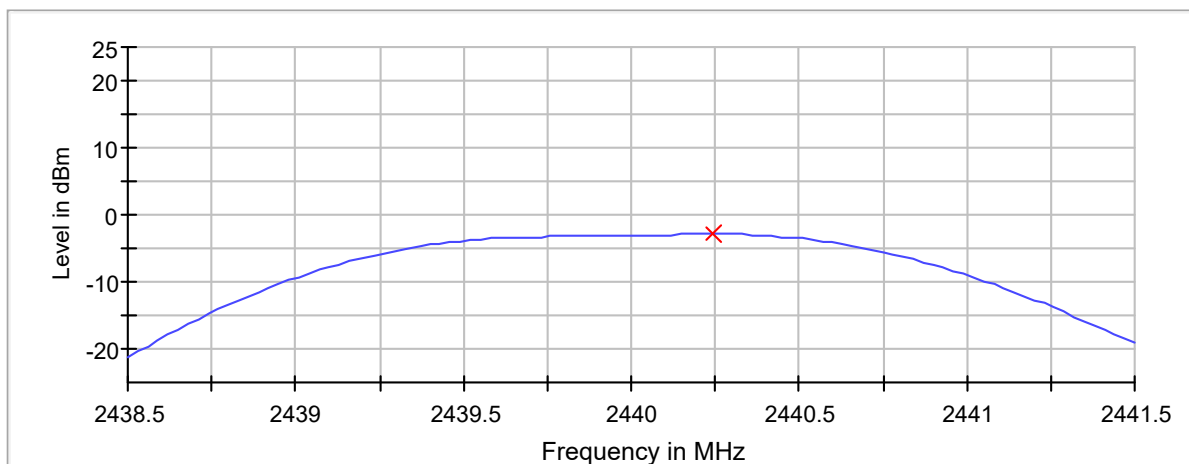
Peak Power



— Connector 1 × Peak Connector 1

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2440.000000	-2.9	30.0	PASS

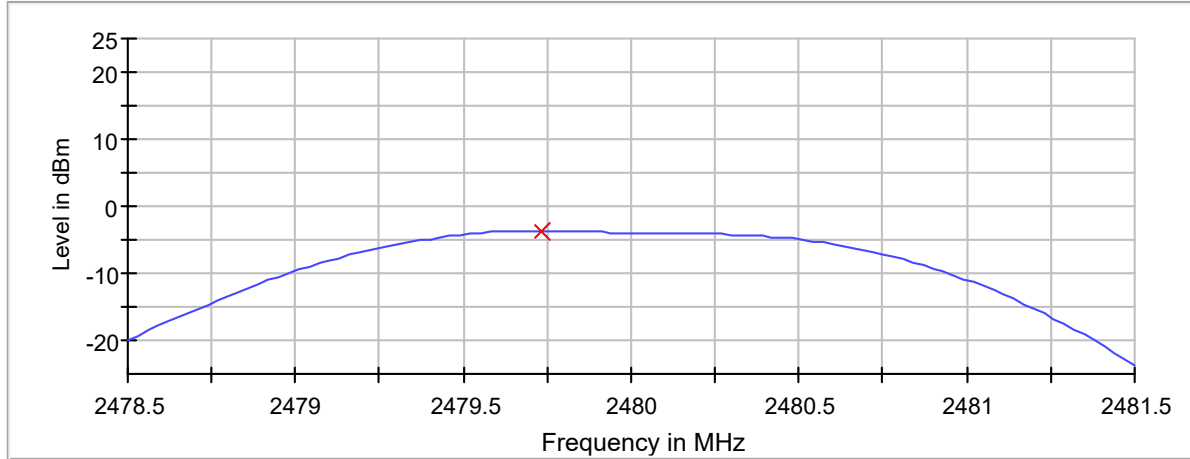
Peak Power



— Connector 1 × Peak Connector 1

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	-3.7	30.0	PASS

Peak Power



Connector 1 X Peak Connector 1

Peak Power Spectral Density

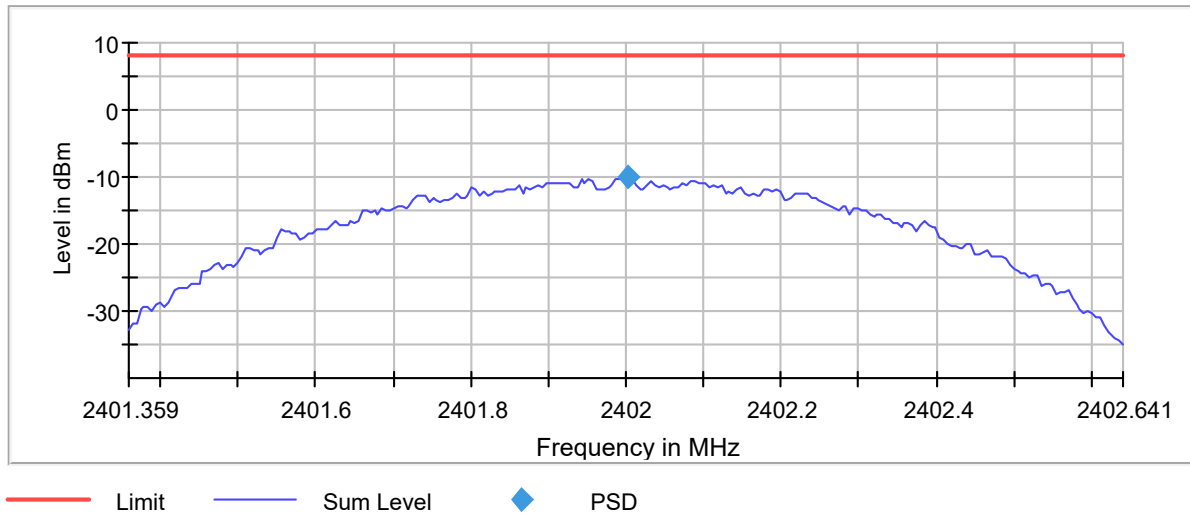
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v05r02 F and ANSI C63.10-2020

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

Expanded Uncertainty (K=2) < 1.3 dB

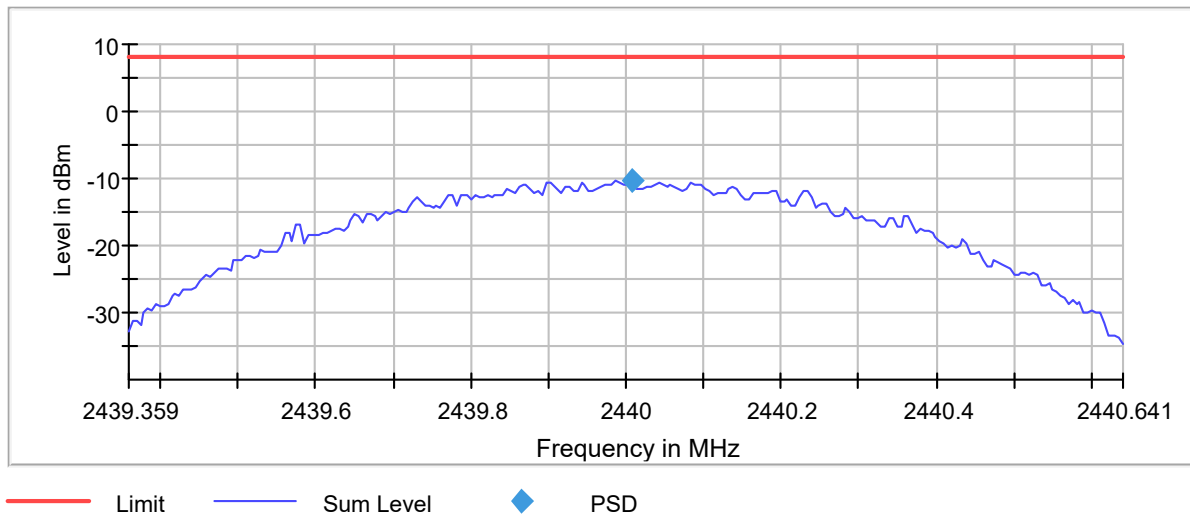
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2402.002513	-10.146	8.0	PASS

Peak Power Spectral Density



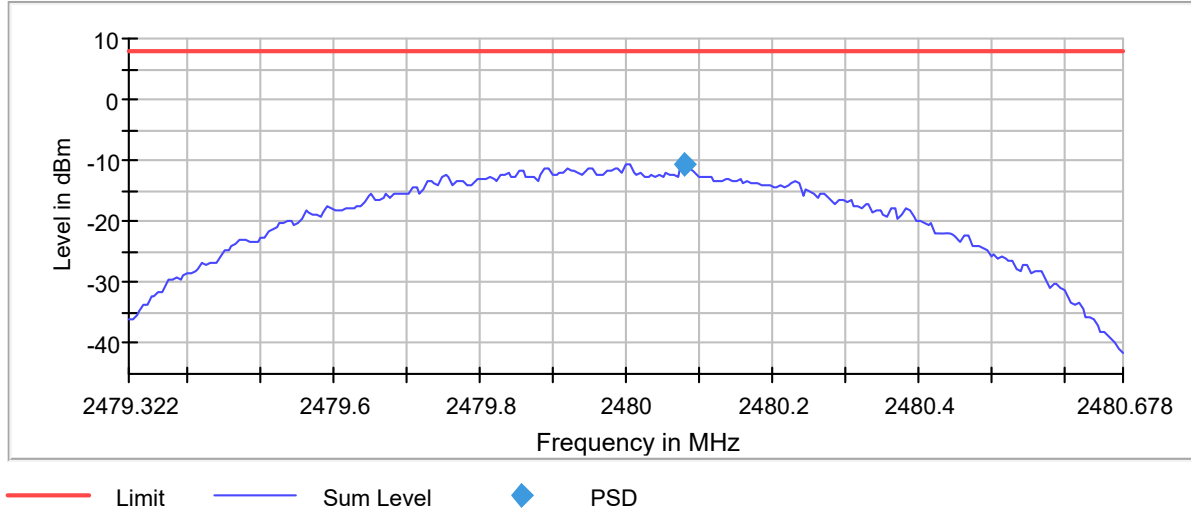
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2440.007538	-10.361	8.0	PASS

Peak Power Spectral Density



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2480.080402	-10.652	8.0	PASS

Peak Power Spectral Density



Band Edge Low

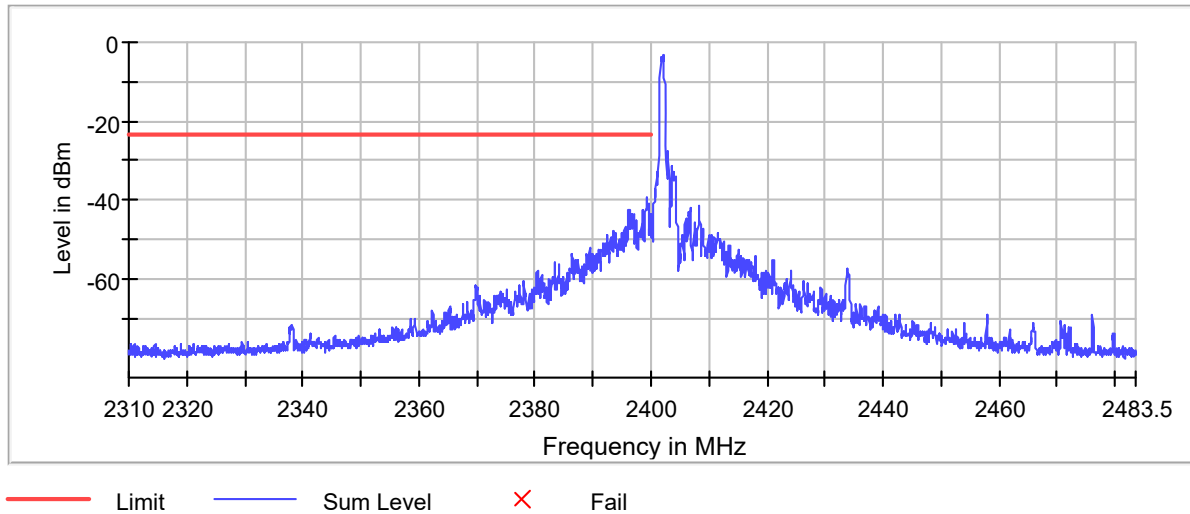
Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v05r02 8.7 and ANSI C63.10-2020

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

Expanded Uncertainty (K=2) < 0.8 dB

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.249583	-39.5	16.3	-23.2	PASS
2399.199555	-39.6	16.5	-23.2	PASS
2399.499722	-40.9	17.8	-23.2	PASS
2399.299611	-41.3	18.1	-23.2	PASS
2399.449694	-41.4	18.2	-23.2	PASS
2399.149528	-41.5	18.3	-23.2	PASS
2399.549750	-42.0	18.8	-23.2	PASS
2399.099500	-42.1	19.0	-23.2	PASS
2399.349639	-42.2	19.1	-23.2	PASS
2396.197888	-42.4	19.3	-23.2	PASS
2396.247916	-42.6	19.4	-23.2	PASS
2398.499166	-42.6	19.5	-23.2	PASS
2399.399666	-42.7	19.6	-23.2	PASS
2399.049472	-43.1	19.9	-23.2	PASS
2398.449138	-43.1	20.0	-23.2	PASS

Band Edge



22. Tx Radiated Emissions

EUT Information	
Manufacturer	Master Lock Company
Product	cLOTO Electronic Padlock
Model No.	C410, C406
Serial No.	A, C
Mode	Tx

Test Setup Details	
Setup Format	Tabletop
Height of Support	N/A
Type of Test Site	Semi-Anechoic Chamber
Test Site Used	R29 and R21F
Antenna Types Used	1 – 18GHz: Double-Ridged Waveguide (or equivalent) Above 18GHz: Horn (or equivalent)
Notes	N/A

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1
Radiated disturbance (electric field strength on an open area test site or alternative test site) (6 GHz – 18 GHz)	3.2
Radiated disturbance (electric field strength on an open area test site or alternative test site) (18 GHz – 26.5 GHz)	3.3

DTS RequirementsPeak EIRP:

Per FCC 15.247(b)(3) and ISSED RSS-247 Section 5.4(d), for systems using digital modulation, the maximum peak conducted output power shall not exceed 1W.

Per FCC 15.247(b)(4), and ISSED RSS-247 Section 5.4(d), the conducted output power limit is based on the use of antennas with directional gains that do not exceed 6dBi. If transmitting antennas of directional gain greater than 6dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values, by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Radiated Emissions in Non-Restricted Bands:

Per FCC 15.247(d) and ISSED RSS-247 Section 5.5, in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated emissions measurement. Attenuation below the general limits specified in §15.209(a) is not required.

Radiated Emissions in Restricted Bands:

Per 15.247(d), radiated emissions which fall in the restricted bands, as defined in FCC 15.205(a), must comply with the radiated emission limits specified in FCC 15.209(a).

Per ISSED RSS-247 Section 3.3, radiated emissions which fall in the restricted bands, as defined in ISSED RSS-Gen Section 8.10, must comply with the radiated emission limits specified in RSS-Gen Section 8.9.

High Band Edge:

Per 15.247(d), radiated emissions which fall in the restricted band beginning at 2483.5MHz, as defined in FCC 15.205(a), must comply with the radiated emission limits specified in FCC 15.209(a).

Per ISSED RSS-247 Section 3.3, radiated emissions which fall in the restricted band beginning at 2483.5MHz, as defined in ISSED RSS-Gen Section 8.10, must comply with the radiated emission limits specified in RSS-Gen Section 8.9.

DTS Procedures**Peak EIRP (C63.10-2020 Annex G and Section 11.9.1.1):**

The EUT was placed on a 1.5 meter high non-conductive stand and set to transmit. A double ridged waveguide antenna was placed at a test distance of 3 meters from the EUT.

a) The following settings were employed on the EMI Test Receiver:

- Center Frequency =	Transmit frequency of EUT
- Span =	$\geq 3 \times \text{RBW}$
- RBW =	$\geq \text{DTS Bandwidth}$
- VBW =	$\geq 3 \times \text{RBW}$
- Number of points in sweep =	$\geq (2 \times \text{span} / \text{RBW})$
- Sweep time =	Auto
- Detector =	Peak
- Trace =	Max hold

b) Allow trace to stabilize and use peak marker function to determine the peak amplitude level.

c) The equivalent power was determined using equation G.1 in C63.10 to convert field intensity levels measured at 3 meters into EIRP readings.

Radiated Emissions in Non-Restricted Bands (C63.10-2020 Section 11.11):

Radiated measurements were performed in a 32ft. x 20ft. x 14ft. high shielded enclosure. The shielded enclosure prevents emissions from other sources, such as radio and TV stations, from interfering with the measurements. All power lines and signal lines entering the enclosure pass through filters on the enclosure wall. The powerline filters prevent extraneous signals from entering the enclosure on these leads.

Preliminary radiated emissions tests were performed to determine the emission characteristics of the EUT. For the preliminary test, a broadband measuring antenna was positioned at a 3 meter distance from the EUT. The entire frequency range from 1 – 26.5GHz was investigated using a peak detector function. The final radiated emission tests were then manually performed over the frequency range of 1 – 26.5GHz.

1) The field strength of the fundamental was measured using a double ridged waveguide antenna positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand and set to transmit. A peak detector with a resolution bandwidth of 100kHz was used on the spectrum analyzer.

2) The field strengths of all of the harmonics not in the restricted band were then measured using a double-ridged waveguide antenna positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand and set to transmit. A peak detector with a resolution bandwidth of 100kHz was used on the spectrum analyzer.

3) To ensure that maximum or worst case emission levels at the fundamental and harmonics were measured, the following steps were taken when measuring the fundamental emissions and the spurious emissions:

a) The EUT was rotated so that all of its sides were exposed to the receiving antenna.

b) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.

c) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.

d) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer, the measuring antenna was not raised or lowered to ensure maximized readings. Instead, the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT.

4) All harmonics not in the restricted bands must be at least 20dB below levels measured at the fundamental. However, attenuation below the general limits specified in §15.209(a) is not required.

Radiated Emissions in Restricted Bands (C63.10-2020 Section 11.12):

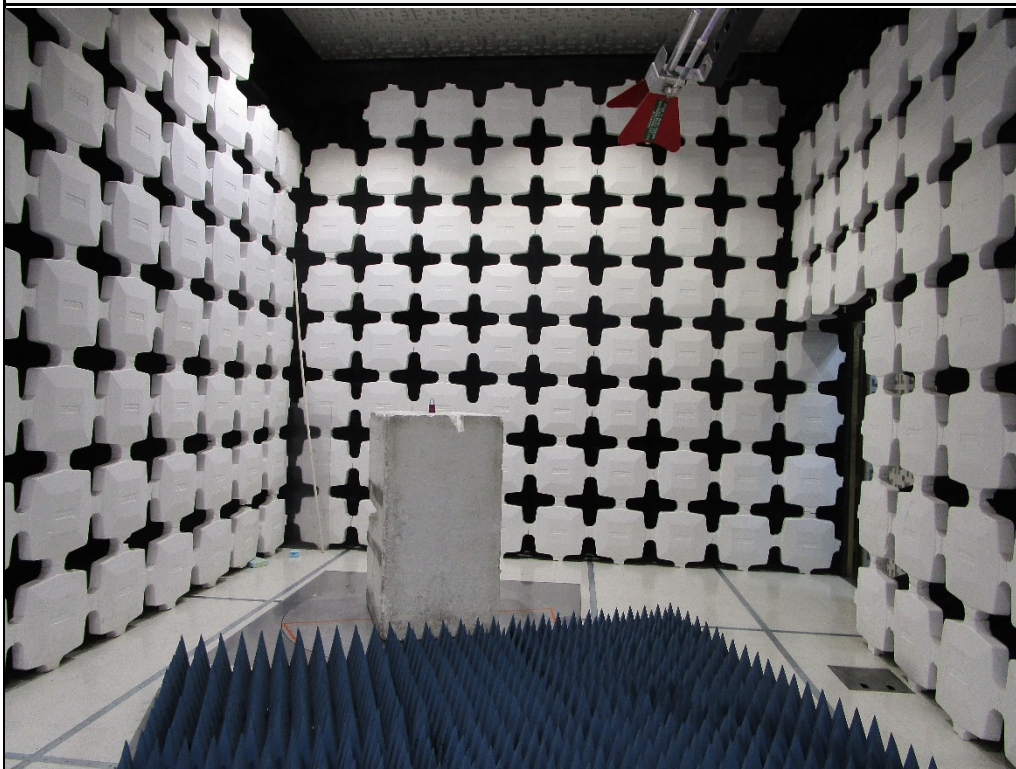
- 1) The field strengths of all emissions above 1GHz were measured using a double-ridged waveguide antenna positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand and set to transmit. A peak detector with a resolution bandwidth of 1MHz was used on the spectrum analyzer.
- 2) To ensure that maximum or worst case emission levels were measured, the following steps were taken when taking all measurements:
 - a) The EUT was rotated so that all of its sides were exposed to the receiving antenna.
 - b) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
 - c) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.
 - d) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer, the measuring antenna was not raised or lowered to ensure maximized readings. Instead, the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT.
- 3) For all radiated emissions measurements above 1GHz, the peak readings must comply with the §15.35(b) limits. §15.35(b) states that when average radiated emissions measurements are specified, there also is a limit on the peak level of the radiated emissions. The limit on the peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. Therefore, all peak readings above 1GHz must be no greater than 20dB above the limits specified in §15.209(a).
- 4) Next, for all radiated emissions measurements above 1GHz, the resolution bandwidth was set to 1MHz. The analyzer was set to linear mode with a 10Hz video bandwidth in order to simulate an average detector. An average reading was taken.

High Band Edge (C63.10-2020 Section 6.10.5):

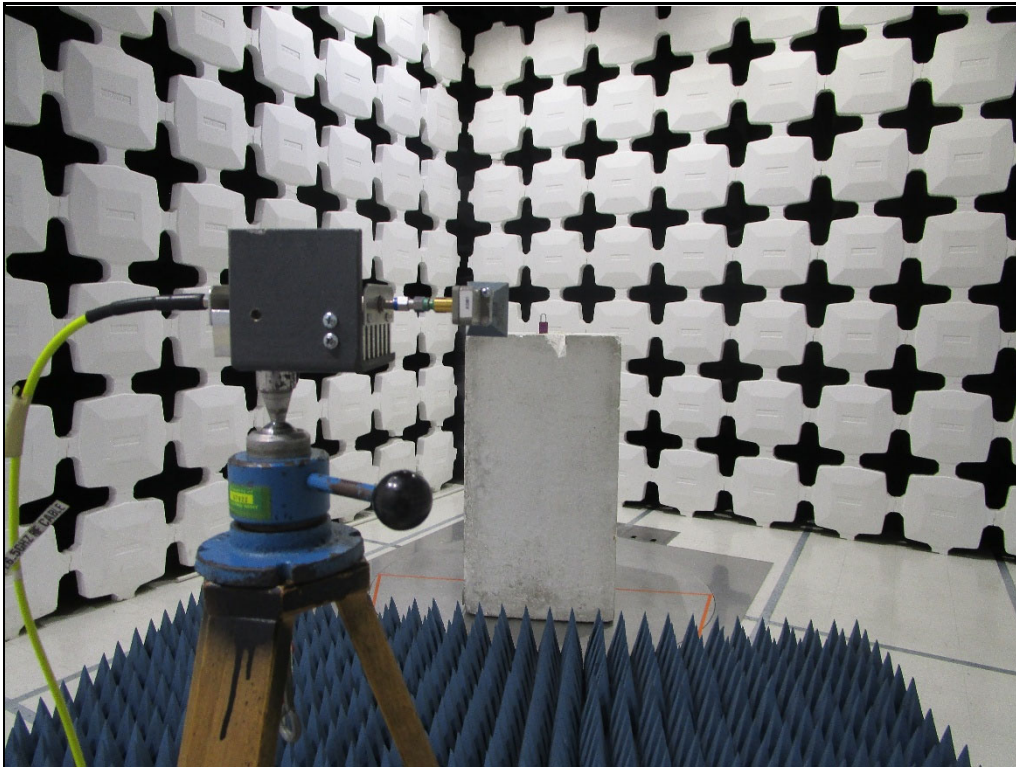
- 1) The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand and set to transmit continuously at the channel closest to the high band-edge. A peak detector with a resolution bandwidth of 1MHz was used on the spectrum analyzer.
- 2) To ensure that maximum or worst case emission levels were measured, the following steps were taken when taking all measurements:
 - a) The EUT was rotated so that all of its sides were exposed to the receiving antenna.
 - b) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
 - c) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.
- 3) The peak readings must comply with the §15.35(b) limits. §15.35(b) states that when average radiated emissions measurements are specified, there also is a limit on the peak level of the radiated emissions. The limit on the peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. Therefore, all peak readings above 1 GHz must be no greater than 20dB above the limits specified in §15.209(a).
- 4) Next, the resolution bandwidth was set to 1MHz. The analyzer was set to linear mode with a 10Hz video bandwidth in order to simulate an average detector. An average reading was taken.



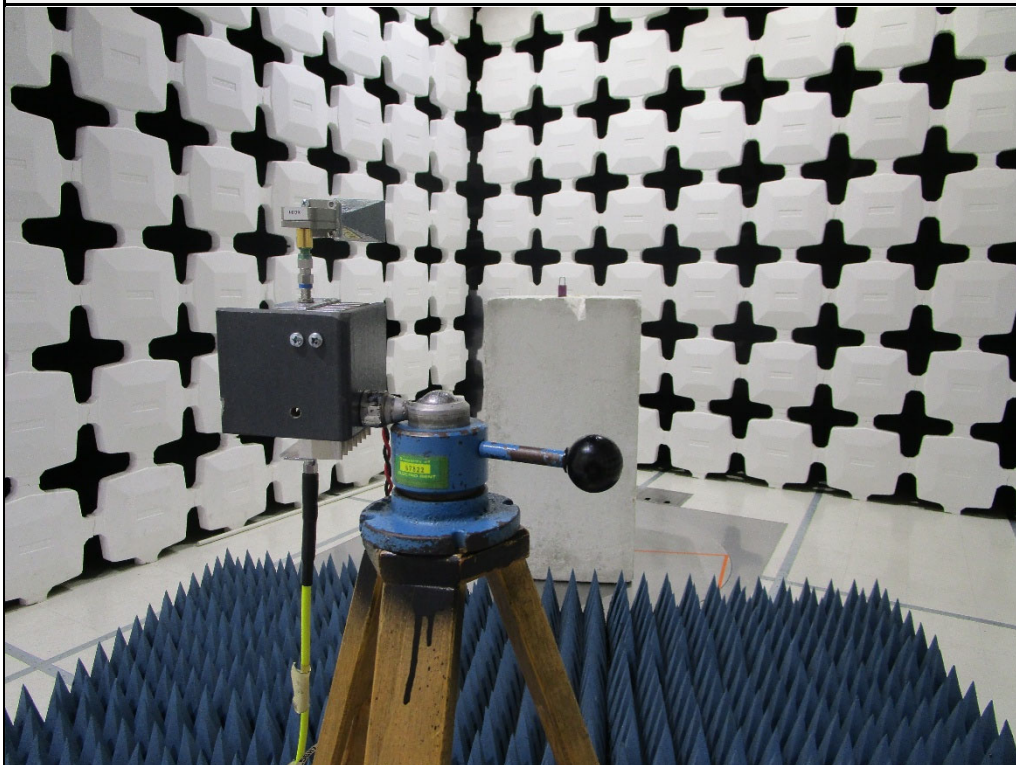
Test Setup for Spurious Radiated Emissions, 1 – 18GHz – Antenna Polarization Horizontal



Test Setup for Spurious Radiated Emissions, 1 – 18GHz – Antenna Polarization Vertical



Test Setup for Spurious Radiated Emissions, Above 18GHz – Antenna Polarization Horizontal



Test Setup for Spurious Radiated Emissions, Above 18GHz – Antenna Polarization Vertical

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test Date	March 16, 2026
Mode	Tx
Result	Max EIRP = 0.0012W (0.91dBm)
Notes	

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBμV)	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total (dBμV/m)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2402.00	H	59.89	3.38	32.57	0.00	95.84	0.54	36.00	-35.46
	V	55.53	3.38	32.57	0.00	91.48	-3.82	36.00	-39.82
2440.00	H	59.47	3.39	32.75	0.00	95.61	0.31	36.00	-35.69
	V	54.99	3.39	32.75	0.00	91.13	-4.17	36.00	-40.17
2480.00	H	59.88	3.40	32.93	0.00	96.21	0.91	36.00	-35.09
	V	55.56	3.40	32.93	0.00	91.89	-3.41	36.00	-39.41

Peak Total (dBμV/m) = Meter Reading (dBμV) + CBL Fac (dB) + Ant Fac (dB/m) + Pre Amp (dB)

EIRP (dBm) = Peak Total (dBμV/m) – 95dB

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4804.00	H	53.62		4.82	34.74	-39.31	53.87	493.85	5000.00	-20.11
	V	51.14		4.82	34.74	-39.31	51.39	371.19	5000.00	-22.59
12010.00	H	49.67	Ambient	6.87	39.02	-39.16	56.40	661.05	5000.00	-17.57
	V	49.68	Ambient	6.87	39.02	-39.16	56.41	661.81	5000.00	-17.56
19216.00	H	39.26	Ambient	1.97	40.38	-28.22	53.39	467.04	5000.00	-20.59
	V	39.30	Ambient	1.97	40.38	-28.22	53.43	469.20	5000.00	-20.55

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Average Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4804.00	H	43.42		4.82	34.74	-39.31	0.00	43.67	152.61	500.00	-10.31
	V	37.88		4.82	34.74	-39.31	0.00	38.13	80.65	500.00	-15.85
12010.00	H	34.09	Ambient	6.87	39.02	-39.16	0.00	40.82	109.96	500.00	-13.15
	V	34.27	Ambient	6.87	39.02	-39.16	0.00	41.00	112.26	500.00	-12.97
19216.00	H	24.31	Ambient	1.97	40.38	-28.22	0.00	38.44	83.53	500.00	-15.54
	V	24.18	Ambient	1.97	40.38	-28.22	0.00	38.31	82.29	500.00	-15.67

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Non-Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2402.00	H	58.09		3.38	32.57	0.00	94.04	50360.45		
	V	52.90		3.38	32.57	0.00	88.85	27707.01		
7206.00	H	39.20	Ambient	5.89	35.75	-39.42	41.42	117.71	5036.05	-32.63
	V	39.51	Ambient	5.89	35.75	-39.42	41.73	121.99	5036.05	-32.32
9608.00	H	38.24	Ambient	6.27	36.68	-39.27	41.92	124.75	5036.05	-32.12
	V	38.86	Ambient	6.27	36.68	-39.27	42.54	133.98	5036.05	-31.50
14412.00	H	38.37	Ambient	7.43	39.89	-38.30	47.39	234.22	5036.05	-26.65
	V	37.80	Ambient	7.43	39.89	-38.30	46.82	219.34	5036.05	-27.22
16814.00	H	37.78	Ambient	7.72	42.66	-37.49	50.67	341.52	5036.05	-23.37
	V	37.66	Ambient	7.72	42.66	-37.49	50.55	336.83	5036.05	-23.49
21618.00	H	27.32	Ambient	2.15	40.56	-28.49	41.54	119.34	5036.05	-32.51
	V	26.73	Ambient	2.15	40.56	-28.49	40.95	111.50	5036.05	-33.10
24020.00	H	27.88	Ambient	2.29	40.62	-29.27	41.52	119.19	5036.05	-32.52
	V	27.25	Ambient	2.29	40.62	-29.27	40.89	110.85	5036.05	-33.15

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4880.00	H	52.93		5.01	34.58	-39.33	53.19	456.57	5000.00	-20.79
	V	51.44		5.01	34.58	-39.33	51.70	384.60	5000.00	-22.28
7320.00	H	49.40	Ambient	5.84	35.74	-39.42	51.56	378.44	5000.00	-22.42
	V	50.04	Ambient	5.84	35.74	-39.42	52.20	407.38	5000.00	-21.78
12200.00	H	48.60	Ambient	7.25	39.10	-39.09	55.86	620.98	5000.00	-18.12
	V	48.68	Ambient	7.25	39.10	-39.09	55.94	626.73	5000.00	-18.04
19520.00	H	39.58	Ambient	2.05	40.39	-27.76	54.26	516.44	5000.00	-19.72
	V	38.90	Ambient	2.05	40.39	-27.76	53.58	477.55	5000.00	-20.40

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Average Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4880.00	H	42.47		5.01	34.58	-39.33	0.00	42.73	136.93	500.00	-11.25
	V	40.81		5.01	34.58	-39.33	0.00	41.07	113.11	500.00	-12.91
7320.00	H	34.37	Ambient	5.84	35.74	-39.42	0.00	36.53	67.07	500.00	-17.45
	V	34.21	Ambient	5.84	35.74	-39.42	0.00	36.37	65.84	500.00	-17.61
12200.00	H	33.11	Ambient	7.25	39.10	-39.09	0.00	40.37	104.37	500.00	-13.61
	V	33.28	Ambient	7.25	39.10	-39.09	0.00	40.54	106.43	500.00	-13.44
19520.00	H	23.82	Ambient	2.05	40.39	-27.76	0.00	38.50	84.14	500.00	-15.48
	V	23.79	Ambient	2.05	40.39	-27.76	0.00	38.47	83.85	500.00	-15.51

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Non-Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2440.00	H	57.11		3.39	32.75	0.00	93.25	45959.43		
	V	51.40		3.39	32.75	0.00	87.54	23816.32		
9760.00	H	38.86	Ambient	6.37	36.92	-39.25	42.89	139.50	4595.94	-30.36
	V	37.59	Ambient	6.37	36.92	-39.25	41.62	120.53	4595.94	-31.63
14640.00	H	38.04	Ambient	7.32	40.17	-38.23	47.31	232.03	4595.94	-25.94
	V	37.97	Ambient	7.32	40.17	-38.23	47.24	230.17	4595.94	-26.01
17080.00	H	38.51	Ambient	7.64	41.87	-37.55	50.47	333.99	4595.94	-22.77
	V	37.49	Ambient	7.64	41.87	-37.55	49.45	296.99	4595.94	-23.79
21960.00	H	27.10	Ambient	2.13	40.58	-28.88	40.93	111.30	4595.94	-32.32
	V	27.27	Ambient	2.13	40.58	-28.88	41.10	113.50	4595.94	-32.15
24400.00	H	27.47	Ambient	2.14	40.63	-29.29	40.95	111.59	4595.94	-32.29
	V	28.40	Ambient	2.14	40.63	-29.29	41.88	124.20	4595.94	-31.36

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4960.00	H	52.20		5.21	34.43	-39.35	52.49	421.13	5000.00	-21.49
	V	50.82		5.21	34.43	-39.35	51.11	359.27	5000.00	-22.87
7440.00	H	49.92	Ambient	5.90	35.72	-39.43	52.11	403.34	5000.00	-21.87
	V	49.85	Ambient	5.90	35.72	-39.43	52.04	400.10	5000.00	-21.94
12400.00	H	49.43	Ambient	7.29	38.88	-39.01	56.58	674.92	5000.00	-17.39
	V	49.25	Ambient	7.29	38.88	-39.01	56.40	661.07	5000.00	-17.57
19840.00	H	39.42	Ambient	1.95	40.40	-28.04	53.73	485.96	5000.00	-20.25
	V	38.93	Ambient	1.95	40.40	-28.04	53.24	459.30	5000.00	-20.74
22320.00	H	37.97	Ambient	1.93	40.59	-28.84	51.65	382.28	5000.00	-22.33
	V	37.90	Ambient	1.93	40.59	-28.84	51.58	379.21	5000.00	-22.40

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Average Measurements in the Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4960.00	H	42.08		5.21	34.43	-39.35	0.00	42.37	131.35	500.00	-11.61
	V	37.00		5.21	34.43	-39.35	0.00	37.29	73.18	500.00	-16.69
7440.00	H	34.31	Ambient	5.90	35.72	-39.43	0.00	36.50	66.86	500.00	-17.48
	V	34.08	Ambient	5.90	35.72	-39.43	0.00	36.27	65.11	500.00	-17.71
12400.00	H	33.91	Ambient	7.29	38.88	-39.01	0.00	41.06	113.04	500.00	-12.91
	V	33.97	Ambient	7.29	38.88	-39.01	0.00	41.12	113.83	500.00	-12.85
19840.00	H	23.96	Ambient	1.95	40.40	-28.04	0.00	38.27	81.96	500.00	-15.71
	V	23.77	Ambient	1.95	40.40	-28.04	0.00	38.08	80.19	500.00	-15.90
22320.00	H	23.06	Ambient	1.93	40.59	-28.84	0.00	36.74	68.69	500.00	-17.24
	V	23.03	Ambient	1.93	40.59	-28.84	0.00	36.71	68.45	500.00	-17.27

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	Peak Measurements in the Non-Restricted Bands
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2480.00	H	57.30		3.40	32.93	0.00	93.63	48027.89		
	V	52.04		3.40	32.93	0.00	88.37	26211.60		
9920.00	H	38.46	Ambient	6.46	37.06	-39.24	42.74	137.07	4802.79	-30.89
	V	38.25	Ambient	6.46	37.06	-39.24	42.53	133.80	4802.79	-31.10
14880.00	H	38.32	Ambient	7.40	40.09	-38.16	47.65	241.40	4802.79	-25.98
	V	38.52	Ambient	7.40	40.09	-38.16	47.85	247.02	4802.79	-25.78
17360.00	H	38.66	Ambient	7.65	41.71	-37.73	50.28	326.68	4802.79	-23.35
	V	38.32	Ambient	7.65	41.71	-37.73	49.94	314.14	4802.79	-23.69
24800.00	H	28.79	Ambient	2.34	40.64	-29.32	42.45	132.58	4802.79	-31.18
	V	27.78	Ambient	2.34	40.64	-29.32	41.44	118.03	4802.79	-32.19

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test Date	August 13, 2026
Mode	Tx
Result	Max EIRP = 0.0012W (0.8dBm)
Notes	

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBμV)	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total (dBμV/m)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2402.00	H	58.5	3.4	32.0	0.0	93.9	-1.4	36.0	-37.4
	V	57.4	3.4	32.0	0.0	92.8	-2.5	36.0	-38.5
2440.00	H	58.8	3.5	32.2	0.0	94.5	-0.8	36.0	-36.8
	V	56.4	3.5	32.2	0.0	92.1	-3.2	36.0	-39.2
2480.00	H	60.3	3.5	32.2	0.0	96.1	0.8	36.0	-35.2
	V	58.4	3.5	32.2	0.0	94.2	-1.1	36.0	-37.1

Peak Total (dBμV/m) = Meter Reading (dBμV) + CBL Fac (dB) + Ant Fac (dB/m) + Pre Amp (dB)

EIRP (dBm) = Peak Total (dBμV/m) – 95dB

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4804.00	H	49.1	Ambient	4.8	34.1	-40.6	47.5	238.2	5000.0	-26.4
	V	50.3	Ambient	4.8	34.1	-40.6	48.7	273.8	5000.0	-25.2

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Average Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4804.00	H	42.2	Ambient	4.8	34.1	-40.6	0.0	40.6	107.5	500.0	-13.4
	V	42.0	Ambient	4.8	34.1	-40.6	0.0	40.4	104.3	500.0	-13.6

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Non-Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2402MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2402.00	H	57.2		3.4	32.0	0.0	92.6	42829.6		
	V	58.0		3.4	32.0	0.0	93.5	47070.0		
7206.00	H	48.9	Ambient	6.1	35.6	-40.8	49.9	312.4	4707.0	-23.6
	V	48.7	Ambient	6.1	35.6	-40.8	49.7	303.9	4707.0	-23.8

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4880.00	H	49.9	Ambient	4.9	34.1	-40.6	48.3	259.5	5000.0	-25.7
	V	49.6	Ambient	4.9	34.1	-40.6	48.1	253.1	5000.0	-25.9
7320.00	H	48.8	Ambient	6.2	35.8	-40.8	50.0	316.6	5000.0	-24.0
	V	48.9	Ambient	6.2	35.8	-40.8	50.1	320.6	5000.0	-23.9

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Average Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4880.00	H	42.8	Ambient	4.9	34.1	-40.6	0.0	41.2	114.6	500.0	-12.8
	V	42.3	Ambient	4.9	34.1	-40.6	0.0	40.7	108.7	500.0	-13.3
7320.00	H	42.2	Ambient	6.2	35.8	-40.8	0.0	43.4	147.9	500.0	-10.6
	V	42.2	Ambient	6.2	35.8	-40.8	0.0	43.4	148.4	500.0	-10.5

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Non-Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2440MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2440.00	H	54.4		3.5	32.2	0.0	90.1	32019.9		
	V	52.0		3.5	32.2	0.0	87.7	24345.5		

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
4960.00	H	49.7		4.9	34.1	-40.6	48.1	254.6	5000.0	-25.9
	V	49.5		4.9	34.1	-40.6	48.0	251.2	5000.0	-26.0
7440.00	H	49.0	Ambient	6.2	36.1	-40.8	50.5	334.9	5000.0	-23.5
	V	49.0	Ambient	6.2	36.1	-40.8	50.4	333.0	5000.0	-23.5

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Average Measurements in the Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
4960.00	H	42.6		4.9	34.1	-40.6	0.0	41.0	112.6	500.0	-13.0
	V	43.0		4.9	34.1	-40.6	0.0	41.5	118.7	500.0	-12.5
7440.00	H	42.3	Ambient	6.2	36.1	-40.8	0.0	43.8	155.6	500.0	-10.1
	V	42.0	Ambient	6.2	36.1	-40.8	0.0	43.5	149.4	500.0	-10.5

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C406
Serial No.	C
Test	Peak Measurements in the Non-Restricted Bands
Test Date	August 13, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2480.00	H	50.9		3.5	32.2	0.0	86.6	21380.2		
	V	48.8		3.5	32.2	0.0	84.5	16846.6		

Test Details	
Manufacturer	Master Lock Company
EUT	cLOTO Electronic Padlock
Model No.	C410
Serial No.	A
Test	High Band-Edge – Peak and Average Readings
Test Date	March 16, 2026
Mode	Tx
Frequency Tested	2480MHz
Notes	

Spurious Emissions in the Restricted Bands - Peak

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBμV/m)	Peak Total at 3m (μV/m)	Peak Limit at 3m (μV/m)	Margin (dB)
2483.50	H	24.68	Ambient	3.40	32.95	0.00	61.03	1125.45	5000.00	-12.95
	V	24.07	Ambient	3.40	32.95	0.00	60.42	1049.13	5000.00	-13.56

Spurious Emissions in the Restricted Bands - Average

Freq (MHz)	Ant Pol	Meter Reading (dBμV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBμV/m)	Average Total at 3m (μV/m)	Average Limit at 3m (μV/m)	Margin (dB)
2483.50	H	12.86	Ambient	3.40	32.95	0.00	0.00	49.21	288.62	500.00	-4.77
	V	11.86	Ambient	3.40	32.95	0.00	0.00	48.21	257.23	500.00	-5.77

23. Scope of Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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Email: reking@elitetest.com
Website: www.elitetest.com

ELECTRICAL

Valid To: June 30, 2027

Certificate Number: 1786.01

In recognition of the successful completion of the A2LA Accreditation Program evaluation process, accreditation is granted to this laboratory at the location listed above, as well as the satellite location listed below, to perform the following automotive electromagnetic compatibility and other electrical tests:

Test Technology:**Test Method(s)¹:**

Transient Immunity
(Max Voltage 1500 V/Max current 1000 A)

ISO 7637-2 (including emissions); ISO 7637-3; ISO 7637-4;
ISO 16750-2, Sections 4.6.3 and 4.6.4;
ISO 21498-1; ISO 21498-2;
CS.00054, Section 5.9; CS.00244 Section 5.2.15 through 5.2.21; CS.00245; CS.00246 Section 5.2.4;
EMC-CS-2009.1 (CI220); FMC1278 (CI220, CI221, CI222);
GMW 3097, Section 3.5; SAE J1113-11; SAE J1113-12;
ECE Regulation 10.06 Annex 10

Electrostatic Discharge (ESD)
(Up to +/-25 kV)

ISO 10605 (2001, 2008); ISO 10605;
CS.00054, Section 5.10; CS.00244 Section 5.5;
EMC-CS-2009.1 (CI 280); FMC1278 (CI280); SAE J1113-13;
GMW 3097 Section 3.6

Conducted Emissions

CISPR 25 (2002, 2008), Sections 6.2 and 6.3;
CISPR 25 (2016), Sections 6.3 and 6.4; CISPR 25;
CS.00054, Sections 5.6.1 and 5.6.2;
CS.00244 Sections 5.4.2 and 5.4.3; GMW 3097, Section 3.3.2;
EMC-CS-2009.1 (CE 420); FMC1278 (CE420, CE421, CE 430, CE440)

(A2LA Cert. No. 1786.01) 08/14/2025



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5202 Presidents Court, Suite 220 | Frederick, MD 21703-8398 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

Test Technology:
Test Method(s)¹:

Radiated Emissions Anechoic
(Up to 6 GHz)

CISPR 25 (2002, 2008), Section 6.4;
CISPR 25 (2016), Section 6.5; CISPR 25;
CS.00054, Section 5.6.3; CS.00244 Section 5.4.4;
GMW 3097, Section 3.3.1;
EMC-CS-2009.1 (RE 310); FMC1278 (RE310, RE320)

Vehicle Radiated Emissions

CISPR 12; CISPR 36; ICES-002;
ECE Regulation 10.06 Annex 4;
ECE Regulation 10.06 Annex 5

Bulk Current Injection (BCI)
(1 to 400MHz 500mA)

ISO 11452-4; CS.00054, Section 5.8.1;
CS.00244 Section 5.3.2;
GMW 3097, Section 3.4.1; SAE J1113-4;
EMC-CS-2009.1 (RI112); FMC1278 (RI112);
ECE Regulation 10.06 Annex 9

Radiated Immunity Anechoic
(Up to 6GHz and 200V/m)
(Including Radar Pulse 600V/m)

ISO 11452-2;
CS.00054, Section 5.8.2; CS.00244 Section 5.3.3;
GMW 3097, Section 3.4.2;
EMC-CS-2009.1 (RI114); FMC1278 (RI114); SAE J1113-21;
ECE Regulation 10.06 Annex 9

Radiated Immunity Magnetic Field

ISO 11452-8; FMC 1278 (RI140); CS.00244 Section 5.3.4

Radiated Immunity Reverb
(360MHz to 6GHz and 100V/m)

ISO/IEC 61000-4-21; GMW 3097, Section 3.4.3;
EMC-CS-2009.1 (RI114); FMC1278 (RI114);
ISO 11452-11

Radiated Immunity
(Portable Transmitters)
(Up to 6GHz and 20W)

ISO 11452-9;
CS.00244 Section 5.3.5;
EMC-CS-2009.1 (RI115); FMC1278 (RI115);
GMW 3097, Sec 3.4.4

Vehicle Radiated Immunity (ALSE)

ISO 11451-2; ECE Regulation 10.06 Annex 6

Vehicle Product Specific EMC Standards

EN 14982; EN ISO 13309; ISO 13766; EN 50498;
EC Regulation No. 2015/208; EN 55012

Electrical Loads

ISO 16750-2

Stripline

ISO 11452-5

Emissions

Radiated and Conducted
(3m Semi-anechoic chamber,
up to 40 GHz)

47 CFR, FCC Part 15 B (using ANSI C63.4:2014);
47 CFR, FCC Part 18 (using FCC MP-5:1986);
ICES-001; ICES-003; ICES-005;
IEC/CISPR 11, Ed. 4.1 (2004-06); AS/NZS CISPR 11 (2004);
IEC/CISPR 11 Ed 5 (2009-05) + A1 (2010);
KN 11 (2008-5) with RRL Notice No. 2008-3 (May 20, 2008);
CISPR 11; EN 55011; KS C 9811; CNS 13803 (1997, 2003);
CISPR 14-1; EN 55014-1; AS/NZS CISPR 14.1;

Test Technology:

Radiated and Conducted (cont'd)
(3m Semi-anechoic chamber,
up to 40 GHz)

Test Method(s)¹:

CISPR 16-2-1 (2008); CISPR 16-2-1; KS C 9814-1; KN 14-1;
IEC/CISPR 22 (1997);
EN 55022 (1998) + A1(2000);
EN 55022 (1998) + A1(2000) + A2(2003); EN 55022 (2006);
IEC/CISPR 22 (2008-09); AS/NZS CISPR 22 (2004);
AS/NZS CISPR 22, 3rd Edition (2006); KN 22 (up to 6 GHz);
CNS 13438 (up to 6 GHz); VCCI V-3 (up to 6 GHz);
CISPR 32; EN 55032; KS C 9832; KN 32;
ECE Regulation 10.06 Annex 7 (Broadband);
ECE Regulation 10.06 Annex 8 (Narrowband);
ECE Regulation 10.06 Annex 13 (Conducted);
ECE Regulation 10.06 Annex 14 (Conducted)

Cellular Radiated Spurious Emissions

ETSI TS 151 010-1 GSM; 3GPP TS 51.010-1, Sec 12;
ETSI TS 134 124 UMTS; 3GPP TS 34.124;
ETSI TS 136 124 LTE; E-UTRA; 3GPP TS 36.124

Current Harmonics

IEC 61000-3-2; IEC 61000-3-12;
EN 61000-3-2; KN 61000-3-2;
KS C 9610-3-2; ECE Regulation 10.06 Annex 11

Flicker and Fluctuations

IEC 61000-3-3; IEC 61000-3-11;
EN 61000-3-3; KN 61000-3-3;
KS C 9610-3-3; ECE Regulation 10.06 Annex 12

Immunity

Electrostatic Discharge

IEC 61000-4-2, Ed. 1.2 (2001);
IEC 61000-4-2 (1995) + A1(1998) + A2(2000);
EN 61000-4-2 (1995); EN 61000-4-2 (2009-05);
KN 61000-4-2 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-2; EN 61000-4-2; KN 61000-4-2;
KS C 9610-4-2; IEEE C37.90.3 2001

Radiated Immunity

IEC 61000-4-3 (1995) + A1(1998) + A2(2000);
IEC 61000-4-3, Ed. 3.0 (2006-02);
IEC 61000-4-3, Ed. 3.2 (2010);
KN 61000-4-3 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-3; EN 61000-4-3; KN 61000-4-3;
KS C 9610-4-3; IEEE C37.90.2 2004

Electrical Fast Transient/Burst

IEC 61000-4-4, Ed. 2.0 (2004-07);
IEC 61000-4-4, Ed. 2.1 (2011);
IEC 61000-4-4 (1995) + A1(2000) + A2(2001);
KN 61000-4-4 (2008-5);
RRL Notice No. 2008-5 (May 20, 2008);
IEC 61000-4-4; EN 61000-4-4; KN 61000-4-4;
KS C 9610-4-4; ECE Regulation 10.06 Annex 15

Test Technology:

Test Method(s)¹:

Surge

IEC 61000-4-5 (1995) + A1(2000);
IEC 61000-4-5, Ed 1.1 (2005-11);
EN 61000-4-5 (1995) + A1(2001);
KN 61000-4-5 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-5; EN 61000-4-5; KN 61000-4-5;
KS C 9610-4-5;
IEEE C37.90.1 2012; IEEE STD C62.41.2 2002;
ECE Regulation 10.06 Annex 16

Conducted Immunity

IEC 61000-4-6 (1996) + A1(2000);
IEC 61000-4-6, Ed 2.0 (2006-05);
IEC 61000-4-6 Ed. 3.0 (2008);
KN 61000-4-6 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
EN 61000-4-6 (1996) + A1(2001); IEC 61000-4-6;
EN 61000-4-6; KN 61000-4-6; KS C 9610-4-6

Power Frequency Magnetic Field
Immunity (*Down to 3 A/m*)

IEC 61000-4-8 (1993) + A1(2000); IEC 61000-4-8 (2009);
EN 61000-4-8 (1994) + A1(2000);
KN 61000-4-8 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-8; EN 61000-4-8; KN 61000-4-8; KS C 9610-4-8

Voltage Dips, Short Interrupts, and Line
Voltage Variations

IEC 61000-4-11, Ed. 2 (2004-03);
KN 61000-4-11 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-11; EN 61000-4-11; KN 61000-4-11;
KS C 9610-4-11

Ring Wave

IEC 61000-4-12, Ed. 2 (2006-09);
EN 61000-4-12:2006;
IEC 61000-4-12; EN 61000-4-12; KN 61000-4-12;
IEEE STD C62.41.2 2002

Generic and Product Specific EMC
Standards

IEC/EN 61000-6-1; AS/NZS 61000-6-1; KN 61000-6-1;
KS C 9610-6-1; IEC/EN 61000-6-2; AS/NZS 61000-6-2;
KN 61000-6-2; KS C 9610-6-2; IEC/EN 61000-6-3;
AS/NZS 61000-6-3; KN 61000-6-3; KS C 9610-6-3;
IEC/EN 61000-6-4; AS/NZS 61000-6-4; KN 61000-6-4;
KS C 9610-6-4; EN 50130-4; EN 61326-1; EN 50121-3-2;
EN 12895; EN 50270; EN 50491-1; EN 50491-2; EN 50491-3;
EN 55015; EN 60730-1; EN 60945; IEC 60533;
EN 61326-2-6; EN 61800-3; IEC/CISPR 14-2; EN 55014-2;
AS/NZS CISPR 14.2; KN 14-2; KS C 9814-2;
IEC/CISPR 24; AS/NZS CISPR 24; EN 55024; KN 24;
IEC/CISPR 35; AS/NZS CISPR 35; EN 55035; KN 35;
KS C 9835; IEC 60601-1-2; JIS T0601-1-2; ANSI C63.27

Test Technology:
Test Method(s)¹:
TxRx EMC Requirements

EN 301 489-1; EN 301 489-3; EN 301 489-9;
EN 301 489-17; EN 301 489-19; EN 301 489-20

European Radio Test Standards

ETSI EN 300 086-1; ETSI EN 300 086-2;
ETSI EN 300 113-1; ETSI EN 300 113-2;
ETSI EN 300 220-1; ETSI EN 300 220-2;
ETSI EN 300 220-3-1; ETSI EN 300 220-3-2;
ETSI EN 300 330-1; ETSI EN 300 330-2;
ETSI EN 300 440-1; ETSI EN 300 440-2;
ETSI EN 300 422-1; ETSI EN 300 422-2;
ETSI EN 300 328; ETSI EN 301 893;
ETSI EN 301 511; ETSI EN 301 908-1;
ETSI EN 908-2; ETSI EN 908-13;
ETSI EN 303 413; ETSI EN 302 502;
EN 303 340; EN 303 345-2; EN 303 345-3; EN 303 345-4

Canadian Radio Tests

RSS-102; RSS-102.NS.MEAS;
SPR-002; RSS-111; RSS-112; RSS-117; RSS-119; RSS-123;
RSS-125; RSS-127; RSS-130; RSS-131; RSS-132; RSS-133;
RSS-134; RSS-135; RSS-137; RSS-139; RSS-140; RSS-141;
RSS-142; RSS-170; RSS-181; RSS-182; RSS-192; RSS-194;
RSS-195; RSS-196; RSS-197; RSS-198; RSS-199;
RSS-210 (up to 40 GHz); RSS-211 (up to 40 GHz);
RSS-213; RSS-215; RSS-216 (up to 40 GHz);
RSS-220 (up to 40 GHz); RSS-222; RSS-236; RSS-238;
RSS-243; RSS-244; RSS-247; RSS-248; RSS-252; RSS-287;
RSS-288; RSS-310; RSS-GEN

Mexico Radio Tests

IFT-008-2015; NOM-208-SCFI-2016

Japan Radio Tests

Radio Law No. 131, Ordinance of MPT No. 37, 1981,
MIC Notification No. 88:2004, Table No. 22-11;
ARIB STD-T66, Regulation 18

Taiwan Radio Tests

LP-0002 (February 6, 2024)

Australia/New Zealand Radio Tests

AS/NZS 4268; Radiocommunications (Short Range Devices)
Standard (2014)

Hong Kong Radio Tests

HKCA 1039 Issue 6; HKCA 1042; HKCA 1033 Issue 7;
HKCA 1061; HKCA 1008; HKCA 1043; HKCA 1057;
HKCA 1073

Korean Radio Test Standards

KN 301 489-1; KN 301 489-3; KN 301 489-9;
KN 301 489-17; KN 301 489-52; KS X 3124; KS X 3125;
KS X 3130; KS X 3126; KS X 3129

Vietnam Radio Test Standards

QCVN 47:2015/BTTTT; QCVN 54:2020/BTTTT;
QCVN 55:2011/BTTTT; QCVN 65:2013/BTTTT;
QCVN 73:2013/BTTTT; QCVN 74:2020/BTTTT;
QCVN 112:2017/BTTTT; QCVN 117:2020/BTTTT

Test Technology:
Test Method(s)¹:
Vietnam EMC Test Standards

QCVN 18:2014/BTTTT; QCVN 86:2019/BTTTT;
QCVN 96:2015/BTTTT; QCVN 118:2018/BTTTT

Unlicensed Radio Frequency Devices
(3 Meter Semi-Anechoic Room)

47 CFR FCC Part 15C, 15D, 15E, 15F, 15G, 15H
(using ANSI C63.10:2020, ANSI C63.17:2013 and
FCC KDB 905462 D02 (v02))

Licensed Radio Service Equipment

47 CFR FCC Parts 20, 22, 24, 25, 27, 30, 73, 74, 80, 87,
90, 95, 96, 97, 101 (using ANSI/TIA-603-E,
TIA-102.CAAA-E, ANSI C63.26:2015); ANSI/TIA-603-F

OTA (Over the Air) Performance

GSM, GPRS, EGPRS
UMTS (W-CDMA)
LTE Cat 0+, M1, NB1
A-GNSS for UMTS/GSM, LTE
Large Device/Laptop/Tablet Testing
Integrated Device Testing
WiFi 802.11 a/b/g/n/ac

CTIA Test Plan for Wireless Device Over-the-Air
Performance (Method for Measurement for Radiated Power
and Receiver Performance) V6.0²;
CTIA Test Plan for RF Performance Evaluation of WiFi
Mobile Converged Devices V4.0²
***Electrical Measurements and
Simulation***

AC Voltage / Current
(1mV to 5kV) 60 Hz
(0.1V to 250V) up to 500 MHz
(1μA to 150A) 60 Hz

FAA AC 150/5345-10;
FAA AC 150/5345-43;
FAA AC 150/5345-44;
FAA AC 150/5345-46;
FAA AC 150/5345-47;
FAA EB 67

DC Voltage / Current
(1mV to 15 kV) / (1μA to 10A)

Power Factor / Efficiency / Crest Factor
(Power to 30kW)

Resistance
(1mΩ to 4000MΩ)

Surge
(Up to 10 kV / 5 kA) (Combination
Wave and Ring Wave)

West Annex
1524 Centre Circle
Downers Grove, IL 60515

Test Technology:

Test Method(s)²:

Transient Immunity

ISO 7637-2 (including emissions); ISO 7637-3; ISO 7637-4;
ISO 16750-2, Sections 4.6.3 and 4.6.4;
ISO 21498-1; ISO 21498-2;
CS.00054, Section 5.9; CS.00244 Section 5.2.15 through
5.2.21; CS.00245; CS.00246 Section 5.2.4; EMC-CS-2009.1
(CI220); FMC1278 (CI220, CI221, CI222); GMW 3097,
Section 3.5; SAE J1113-11; SAE J1113-12;
ECE Regulation 10.06 Annex 10

***Transverse Electromagnetic (TEM)
Cell***

ISO 11452-3

Emissions

Current Harmonics

IEC 61000-3-2; IEC 61000-3-12;
EN 61000-3-2; KN 61000-3-2;
KS C 9610-3-2; ECE Regulation 10.06 Annex 11

Flicker and Fluctuations

IEC 61000-3-3; IEC 61000-3-11;
EN 61000-3-3; KN 61000-3-3;
KS C 9610-3-3; ECE Regulation 10.06 Annex 12

Immunity

Electrical Fast Transient/Burst

IEC 61000-4-4, Ed. 2.0 (2004-07);
IEC 61000-4-4, Ed. 2.1 (2011);
IEC 61000-4-4 (1995) + A1(2000) + A2(2001);
KN 61000-4-4 (2008-5);
RRL Notice No. 2008-5 (May 20, 2008);
IEC 61000-4-4; EN 61000-4-4; KN 61000-4-4;
KS C 9610-4-4; ECE Regulation 10.06 Annex 15

Surge

IEC 61000-4-5 (1995) + A1(2000);
IEC 61000-4-5, Ed 1.1 (2005-11);
EN 61000-4-5 (1995) + A1(2001);
KN 61000-4-5 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-5; EN 61000-4-5; KN 61000-4-5;
KS C 9610-4-5; IEEE C37.90.1 2012;
IEEE STD C62.41.2 2002; ECE Regulation 10.06 Annex 16

Conducted Immunity

IEC 61000-4-6 (1996) + A1(2000);
IEC 61000-4-6, Ed 2.0 (2006-05);
IEC 61000-4-6 Ed. 3.0 (2008);
KN 61000-4-6 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
EN 61000-4-6 (1996) + A1(2001); IEC 61000-4-6;

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Test Technology:
Test Method(s)²:

Power Frequency Magnetic Field Immunity (*Down to 3 A/m*)

EN 61000-4-6; KN 61000-4-6; KS C 9610-4-6
IEC 61000-4-8 (1993) + A1(2000); IEC 61000-4-8 (2009);
EN 61000-4-8 (1994) + A1(2000);
KN 61000-4-8 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-8; EN 61000-4-8; KN 61000-4-8; KS C 9610-4-8

Voltage Dips, Short Interrupts, and Line Voltage Variations

IEC 61000-4-11, Ed. 2 (2004-03);
KN 61000-4-11 (2008-5);
RRL Notice No. 2008-4 (May 20, 2008);
IEC 61000-4-11; EN 61000-4-11; KN 61000-4-11;
KS C 9610-4-11

Ring Wave

IEC 61000-4-12, Ed. 2 (2006-09);
EN 61000-4-12:2006;
IEC 61000-4-12; EN 61000-4-12; KN 61000-4-12;
IEEE STD C62.41.2 2002

Electrical Measurements and Simulation
AC Voltage / Current

(1mV to 5kV) 60 Hz
(0.1V to 250V) up to 500 MHz
(1μA to 150A) 60 Hz

FAA AC 150/5345-10;
FAA AC 150/5345-43;
FAA AC 150/5345-44;
FAA AC 150/5345-46;
FAA AC 150/5345-47;
FAA EB 67

DC Voltage / Current

(1mV to 15 kV) / (1μA to 10A)

Power Factor / Efficiency / Crest Factor

(Power to 30kW)

Resistance

(1mΩ to 4000MΩ)

Surge

(Up to 10 kV / 5 kA) (Combination
Wave and Ring Wave)

On the following products and materials:

Telecommunications Terminal Equipment (TTE), Radio Equipment, Network Equipment, Information Technology Equipment (ITE), Automotive Electronic Equipment, Automotive Hybrid Electronic Devices, Maritime Navigation and Radio Communication Equipment and Systems, Vehicles, Boats and Internal Combustion Engine Driven Devices, Automotive, Aviation, and General Lighting Products, Medical Electrical Equipment, Motors, Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment, Household Appliances, Electric Tools, Low-voltage Switchgear and Control gear, Programmable Controllers, Electrical Equipment for Measurement, Control and Laboratory Use, Base Materials, Power and Data Transmission Cables and Connectors

¹ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - General Requirements- Accreditation of Conformity Assessment Bodies.

² Accreditation to the requirements of the CTIA Certification Test Plan does not imply authorization by the CTIA Certification program. Please see the CTIA website <https://ctiacertification.org/test-labs/> for a listing of Authorized Test Labs (ATLs).

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
<u>Unintentional Radiators</u> Part 15B	ANSI C63.4:2014	40000
<u>Industrial, Scientific, and Medical Equipment</u> Part 18	FCC MP-5 (February 1986)	40000
<u>Intentional Radiators</u> Part 15C	ANSI C63.10:2013	40000
<u>Unlicensed Personal Communication Systems Devices</u> Part 15D	ANSI C63.17:2013	40000
<u>U-NII without DFS Intentional Radiators</u> Part 15E	ANSI C63.10:2013	40000
<u>U-NII with DFS Intentional Radiators</u> Part 15E	FCC KDB 905462 D02 (v02)	40000
<u>UWB Intentional Radiators</u> Part 15F	ANSI C63.10:2013	40000
<u>BPL Intentional Radiators</u> Part 15G	ANSI C63.10:2013	40000
<u>White Space Device Intentional Radiators</u> Part 15H	ANSI C63.10:2013	40000
<u>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000

General Mobile Radio Services (FCC Licensed Radio Service Equipment)

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Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
Parts 22 (non-cellular), 90 (below 3 GHz), 95, 97, and 101 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
<u>Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)</u> Part 96	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
<u>Maritime and Aviation Radio Services</u> Parts 80 and 87	ANSI/TIA-603-E; ANSI C63.26:2015	40000
<u>Microwave and Millimeter Bands Radio Services</u> Parts 25, 30, 74, 90 (above 3 GHz), 97 (above 3 GHz), and 101	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
<u>Broadcast Radio Services</u> Parts 73 and 74 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
<u>Signal Boosters</u> Part 20 (Wideband Consumer Signal Boosters, Provider-specific signal boosters, and Industrial Signal Boosters) Section 90.219	ANSI C63.26:2015	40000

Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (<https://apps.fcc.gov/oetcf/eas/>) for a listing of FCC approved laboratories.



Accredited Laboratory

A2LA has accredited

ELITE ELECTRONIC ENGINEERING INC.

Downers Grove, IL

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 14th day of August 2025.

A handwritten signature in blue ink, appearing to read 'Trace McInturff'.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1786.01
Valid to June 30, 2027

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.