166 South Carter, Genoa City, WI 53128

Company:	CompX Timberline
Model Tested:	TP-101
Project Number:	13118
Report Number:	28784 rev1.2

Code of Federal Regulations 47 Part 15 – Radio Frequency Devices

Subpart C – Intentional Radiators
Section 15.231
Periodic operation in the band 40.66 - 40.70 MHz
and above 70 MHz

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

FCC ID: VCRTP-101

(Handheld use with antenna distance to external surface of device < 5 mm)

Formal Name:	Stealth Lock Transmitter Pad
Kind of Equipment:	Wireless electronic lock DSC: Remote Control Transmitter
Frequency Range:	315 MHz
Test Configuration:	Table top, battery operated device tested in three orthogonal positions.
Model Number(s):	TP-101
Model(s) Tested:	TP-101
Serial Number(s):	PCB 05
Date of Tests:	August 20, 2024, September 9, 2024, and February 6, 2025
Test Conducted For:	CompX Timberline 715 Center Street Grayslake, IL 60030, USA

NOTICE: This report contains test data, and/or other information regarding only the sample provided by the client for testing and evaluation. This test report shall not be used to claim product approval or endorsement by any governmental, regulatory, or accrediting agency. Please see the "Description of Device" page listed inside of this report.

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SIGNATURE PAGE

Report By:

Craig Brandt
Test Engineer

Reviewed By:

Cory Bradshaw
Site Manager

Approved By:

Brian Mattson
General Manager

166 South Carter, Genoa City, WI 53128

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ANSI National Accreditation Board

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

DLS Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090
(and satellite locations as shown on the scope)

Fulfills the requirements of

ISO/IEC 17025:2017

and

U.S. Federal Communication Commission (FCC) EMC and Telecommunications (EC&T) Testing Designation Program

and

Recognition of Telecommunications Testing - Innovation, Science, and Economic Development (ISED) Canada

and

FDA Accreditation Scheme for Conformity Assessment (ASCA) Pilot Program -Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems, and Laboratory Medical Equipment

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at www.anab.org

Jason Stine, Vice President
Expiry Date: 23 April 2026
Certificate Number: AT-1859

ANSI National Accreditation Board

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).

SATELLITE SITE

DLS Electronic Systems, Inc. (OATS site)
166 South Carter
Genoa City, Wisconsin 53128
www.dlsemc.com

1.0 Summary of Test Report

It was determined that the Stealth Lock Transmitter Pad, model TP-101, complies with the requirements of Title 47 CFR Part 15, Subpart C, Section 15.231.

Subpart C Applicable Technical Requirements Tested:

Section	Description	Procedure	Note	Compliant?
15.231(c)	20 dB Emission Bandwidth	ANSI C63.10-2020 Section 6.9.2	1,2	Yes
15.231(a)(1)	Transmission Deactivation	ANSI C63.10-2020 Section 7.4(c)	1	Yes
15.35(c)	Duty Cycle Correction for Pulsed Operation	ANSI C63.10-2020 Section 7.5	1	Informative
15.231(b)	Field Strength of Emissions - Fundamental and Spurious -	ANSI C63.10-2020 Sections 7.6 & 6.4	1,2	Yes
15.31(e)	Supply Voltage Statement	N/A		Yes
15.230	Antenna Requirement Statement	N/A		Yes

Note 1: Radiated emission measurement.
Note 2: Tested in 3 orthogonal axes.

2.0 Introduction

On August 20, 2024, September 9, 2024, and February 6, 2025 the Stealth Lock Transmitter Pad, model TP-101, as provided by CompX Timberline was tested to the requirements of Title 47 CFR Part 15, Subpart C, Section 15.231. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S. Electronic Systems, Inc.

3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full-service EMC/Safety Testing Laboratory accredited to ISO 17025. ANAB Certificate and Scope can be viewed at http://www.dlsemc.com/certificate. Our facilities are registered with the FCC, ISED Canada, and VCCI.

Wisconsin Test Facility:
D.L.S. Electronic Systems, Inc.
166 S. Carter Street
Genoa City, Wisconsin 53128

Wheeling Test Facility:
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090

Test Firm Registration #: 497383

4.0 Description of Test Sample

Description:

The device is a remote control for a wireless electronic lock installed in a cabinet. It only transmits when manualy activated, and does not transmit at regular predetermined intervals.The user enters a PIN code into the tranmitter and presses unlock. Data is transmitted wirelessly to reciever. The reciever decodes the PIN code and, if correct, unlocks a cabinet. The device can similarily lock a cabinet by pressing lock after entering the PIN code.

Type of Equipment / Frequency Range:

DSC – periodic transmitter operating at 315 MHz

Hand-held / Benchtop / Cabinet mounted

Physical Dimensions of Equipment Under Test:

Length: 3.25 inches x Width: 1.5 inches x Height: 0.375 inches

Power Source:

3.0 Volts DC (single CR2032 3V lithium coin-cell battery)

4.0 Description of Test Sample (continued)

Internal Frequencies:

9.84375 MHz oscillator, 315 MHz transmitting

Transmit Frequencies Used For Test Purpose:

315 MHz

Type of Modulation(s)

ASK / On-Off Keying (OOK)

Antenna Type:

PCB Trace Loop

Antenna Gain:

Unknown

5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

D.L.S. Wisconsin – Radiated Emissions 30-1000 MHz – Site 2 – Test Equipment:

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz-40 GHz	3-14-24	3-14-25
Receiver	Rohde & Schwarz	ESW-44	103075	2 Hz-44 GHz	3-29-23	3-29-25
Antenna	EMCO	3104C	0005-4892	20 MHz-200 MHz	1-5-23	1-5-25
Antenna	EMCO	3146	1604	200 MHz-1 GHz	3-13-24	3-13-26
Cable	Coleman	991079	CBL-122	9 kHz-1 GHz	4-7-24	4-7-25
Cable	Beldin	9914	CBL-005	9 kHz-1 GHz	7-2-24	7-2-25
Cable	Pasternack Enterprises	PE3087-48	CBL-109	9 kHz-1 GHz	4-7-24	4-7-25
Cable	Pasternack Enterprises	PE3087-48	CBL-111	9 kHz-1 GHz	4-7-24	4-7-25
Test Software	Rohde & Schwarz	ESK1	V1.7.1	N/A	N/A	N/A

D.L.S. Wisconsin – Radiated Emissions 1-4 GHz – Site 2 – Test Equipment:

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
Receiver	Rohde & Schwarz	ESW-44	103075	2 Hz-44 GHz	3-29-23	3-29-25
Horn Antenna	Com-Power	AH-118	071127	1 GHz-18 GHz	9-7-23	9-7-25
Cable	Micro-Coax	UFB311A	CBL-094	1 GHz-18 GHz	5-16-24	5-16-25
High Pass Filter	Q Microwave	100460	1	1 GHz-18 GHz	5-16-24	5-16-25
Preamplifier	Miteq	AMF-7D-01001800-22-10P	1809602	1 GHz-18 GHz	7-12-24	7-12-25
Test Software	ETS Lindgren	TILE	V7.8.1.7	N/A	N/A	N/A

5.0 Test Equipment – continued

D.L.S. Wisconsin – Radiated Emissions 9 kHz - 30 MHz – Site 2 – Test Equipment:

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
Receiver	Rohde & Schwarz	ESW-44	103075	2 Hz-44 GHz	3-29-23	3-29-25
Antenna	Electro-Metrics	6502	0005-4892	20 MHz-200 MHz	1-3-25	1-3-27
Cable	Coleman	991079	CBL-122	9 kHz-1 GHz	4-7-24	4-7-25
Cable	Beldin	9914	CBL-005	9 kHz-1 GHz	7-2-24	7-2-25
Cable	Pasternack Enterprises	PE3087-48	CBL-109	9 kHz-1 GHz	4-7-24	4-7-25
Cable	Pasternack Enterprises	PE3087-48	CBL-111	9 kHz-1 GHz	4-7-24	4-7-25
Test Software	ETS Lindgren	TILE	V7.8.1.7	N/A	N/A	N/A

6.0 Test Arrangements

Radiated Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.10-2020, unless otherwise noted. Descriptions of procedures and measurements can be found in Section A – Measurement Data. See Section B for measurement uncertainty. See separate exhibit for photos of the test set up.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

7.0 Test Conditions

Temperature and Humidity:

72 °F at 46% RH

Battery Voltage:

3.0 Volts (new CR2032 battery)

8.0 Modifications Made to EUT For Compliance

Value of C13 changed to 6.8 pF
Value of R14 changed to 1.00 kΩ

9.0 Additional Descriptions

The EUT was rotated through three orthogonal axes to find the worst-case emissions. The EUT was tested with a new battery. Each function (mode) of the transmitter was tested for the worst-case duty cycle and emission levels. Emission levels were found to be identical for each mode.

10.0 FCC 15.31(e) Supply Voltage Requirement statement

FCC 15.31(e) - For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Compliance Statement: This device complies with the requirements of Part 15.31(e):

☒ This device is battery operated. All tests were performed using a new (or fully charged) battery.

☐ This device provides a constant regulated voltage to the RF circuitry regardless of supply voltage (see schematic diagrams).

☐ This device does not provide a constant regulated voltage to the RF circuitry regardless of supply voltage. Data has been supplied in this test report that supports compliance. Details:

11.0 FCC 15.203 Antenna Requirement statement

SECTION 15.203 ANTENNA REQUIREMENT

FCC 15.203 - An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device…. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, 15.221, or 15.236.

Statement: This wireless device (Intentional Radiator) meets the requirements of FCC Part 15.203:

☒ The antenna is permanently attached

☐ The antenna has a unique coupling to the intentional radiator.
Description of coupling:

☐ This intentional radiator is professionally installed

☐ This intentional radiator, in accordance with Section 15.31(d), must be measured at the installation site.

12.0 Results

Measurements were performed in accordance with ANSI C63.10-2020. Graphical and tabular data can be found in Section A of this report.

13.0 Conclusion

The Stealth Lock Transmitter Pad, model TP-101, as provided by CompX Timberline, tested on August 20, 2024, September 9, 2024, and February 6, 2025 **meets** the requirements of Title 47 CFR Part 15, Subpart C, Section 15.231.

Section A – Measurement Data

1.0 Emission Bandwidth – 20 dB

Rule Part:

Part 15.231(c)

Test Procedure:

ANSI C63.10-2020, Section 6.9.2
Occupied bandwidth – relative measurement procedure

Limit:

Section 15.231(c):
The bandwidth of the emission shall be no wider than 0.25% of the center frequency.
0.25% of 315 MHz is **787.5 kHz**.

Results:

Compliant:
20 dB bandwidth: **7.72 kHz**

Notes:

This was a radiated emissions measurement. The maximum field strength of the emission was determined, and the bandwidth was measured from the points 20 dB down from the modulated carrier.

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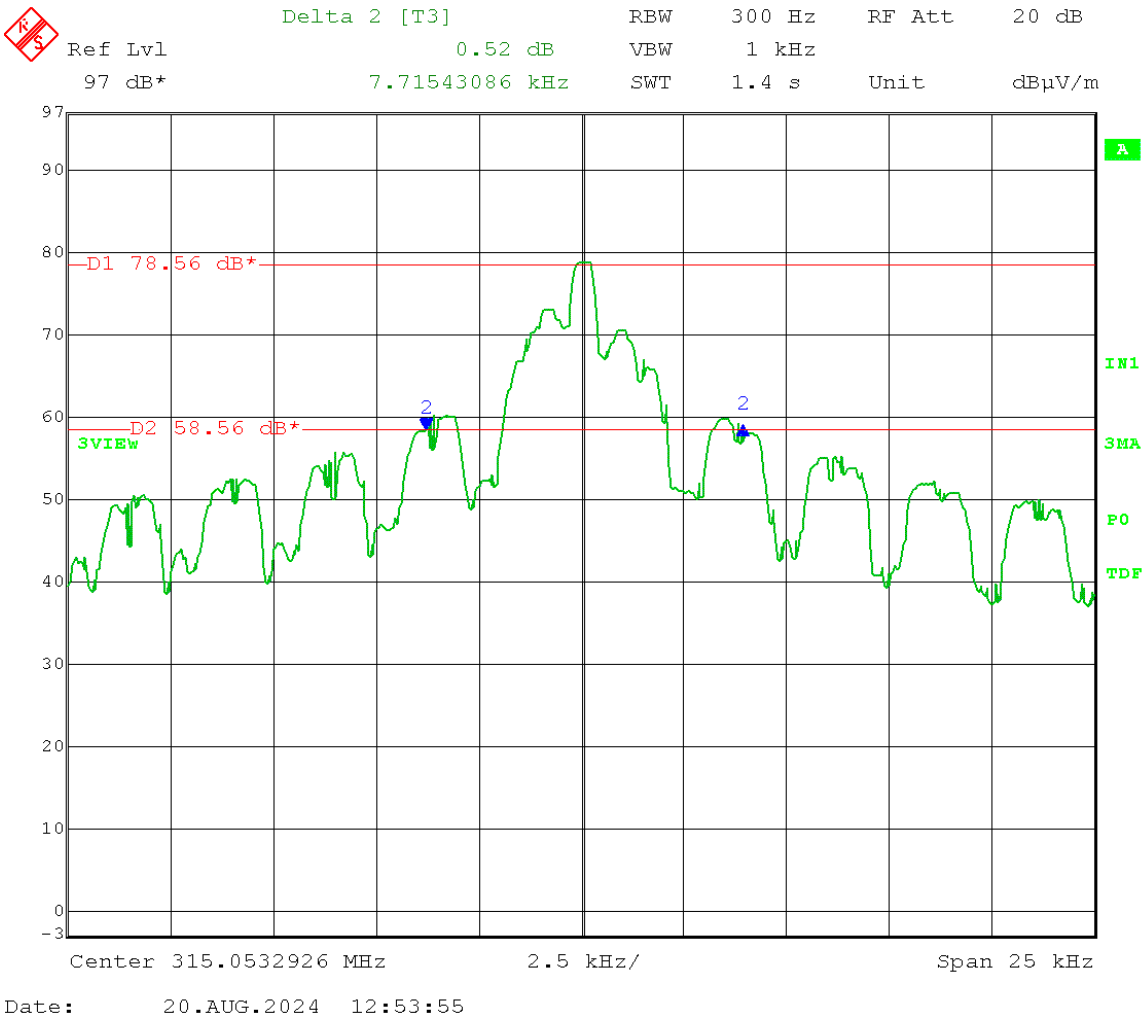
Section A

Test Date:	08-20-2024
Company:	CompX
EUT:	Stealth Lock Transmitter Pad, Model: TP-101
Test:	**Emission Bandwidth (20 dB)**
Operator:	cbrandt

Comment: RBW = 1-5% of EBW
VBW ≥ 3 x RBW
Detector = Peak
Sweep = auto couple

20 dB Emission Bandwidth = **7.72 kHz**



2.0 Transmission Deactivation

Rule Part:

Section 15.231(a)(1)

Test Procedure:

ANSI C63.10-2020, Section 7.4(c)
Procedure for determining compliance of unlicensed wireless devices having periodic operation.

Limit:

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Results:

Compliant
Deactivation time: **2.02 seconds**

Notes:

Transmission deactivates within five seconds of touchpad key being released.

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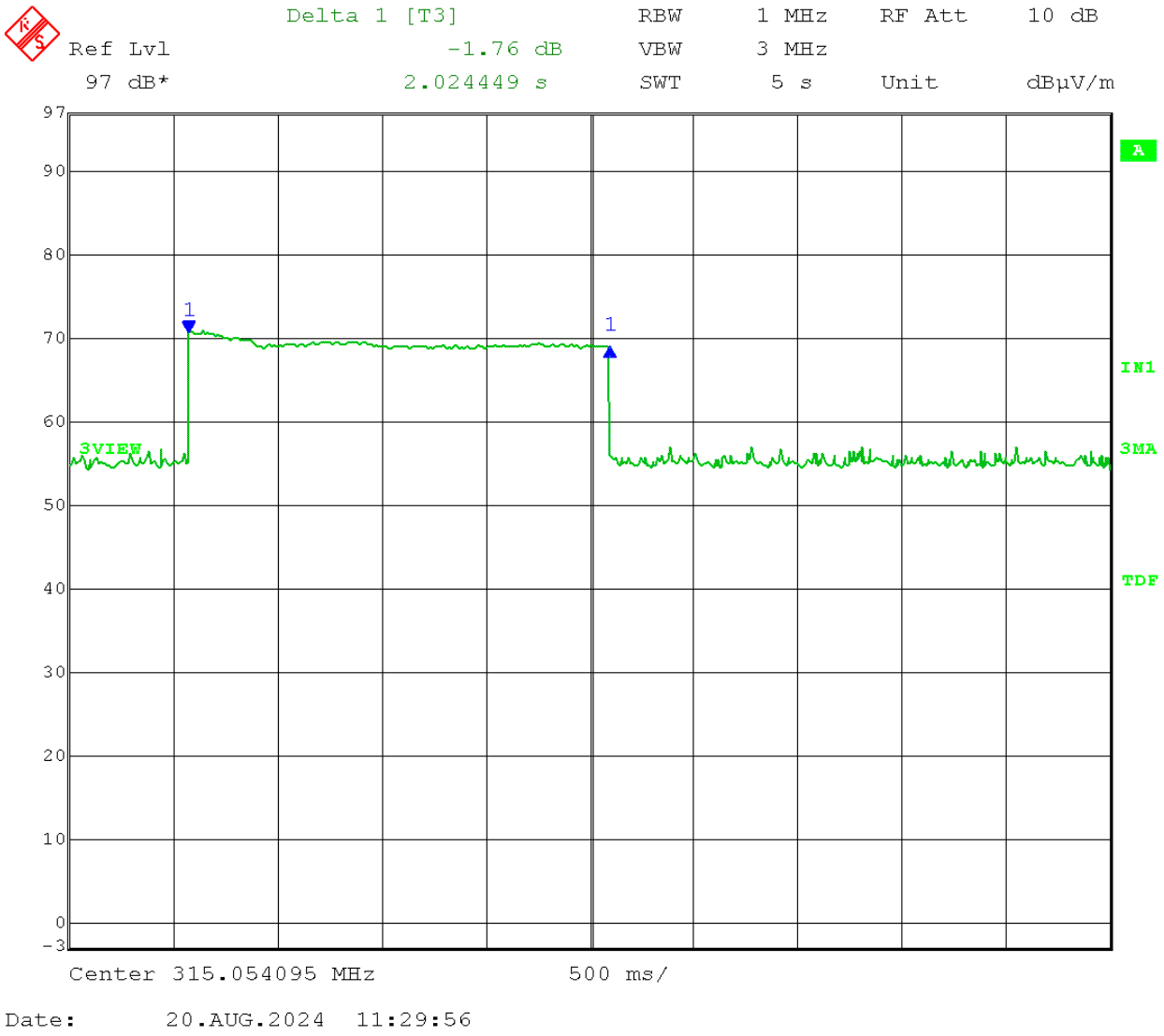
Company:	CompX Timberline
Model Tested:	TP-101
Project Number:	13118
Report Number:	28784 rev1.2

Section A

Test Date:	08-20-2024
Company:	CompX
EUT:	Stealth Lock Transmitter Pad, Model: TP-101
Test:	**Deactivation Time**
Operator:	cbrandt

Comment: A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Duration of transmission: **2.02 seconds**



3.0 Duty Cycle Correction

Rule Part:

Section 15.35(c)

Test Procedure:

ANSI C63.10-2020, Section 7.5
Procedure for determining the average value of pulsed emissions.

Limit:

Informative

Results:

Duty Cycle Correction Factor = **-4.65 dB**

Sample Equation(s):

ON time of wide pulses: 64 pulses x 0.801603206 ms = 51.3026 ms
ON time of narrow pulses = 18 pulses x 0.400801603 ms = 7.2144 ms
Total ON time during 100 ms = 58.5170 ms
Duty Cycle Correction Factor = 20 log (58.5170/100) = -4.65 dB

Notes:

Compliance with the Average Limit is determined by comparing Peak detector data, minus the duty cycle correction factor, to the average limit.

Measurement was made during a 100 ms period containing the maximum “ON” time.

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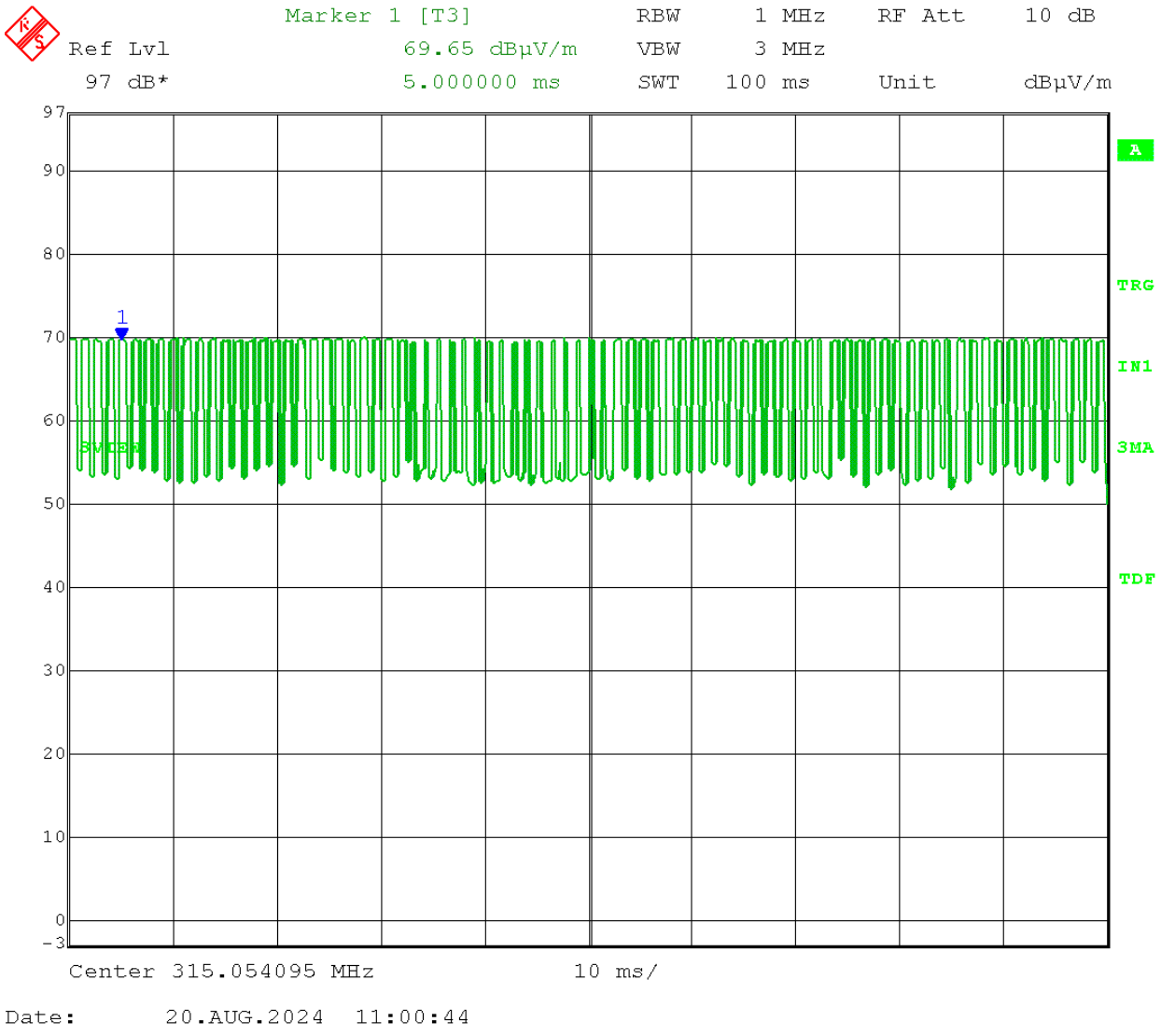
Company:	CompX Timberline
Model Tested:	TP-101
Project Number:	13118
Report Number:	28784 rev1.2

Section A

Test Date:	08-20-2024
Company:	CompX
EUT:	Stealth Lock Transmitter Pad, Model: TP-101
Test:	**Duty Cycle – normal operation**
Operator:	cbrandt

Comment: ON time of wide pulses: 64 x 0.801603206 ms = 51.3026 ms
ON time of narrow pulses = 18 x 0.400801603 ms = 7.2144 ms
Total ON time during 100 ms = 58.5170 ms
Duty Cycle correction = 20 log (58.5170/100) = **-4.65 dB**

100 ms pulse train:



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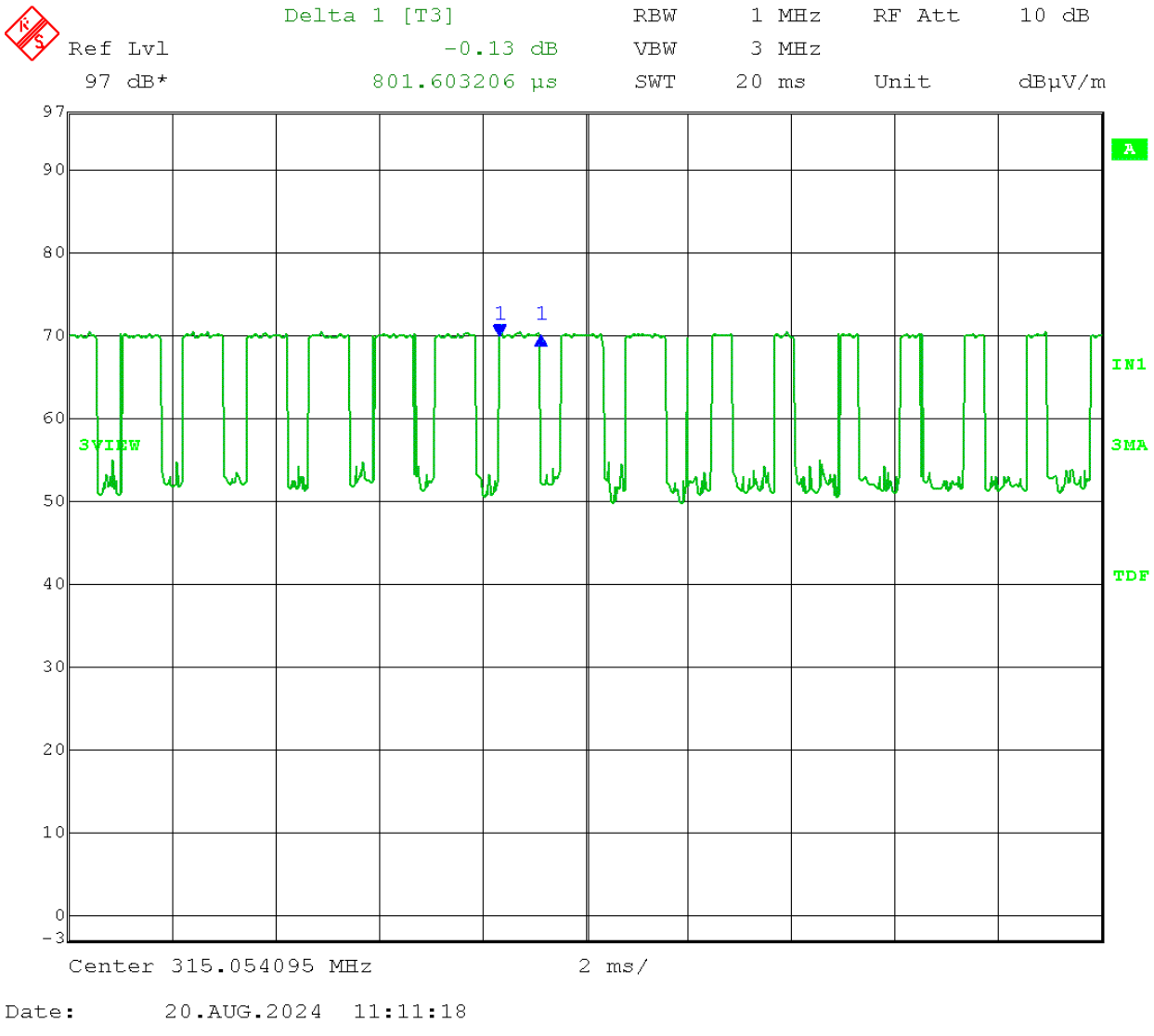
Company:	CompX Timberline
Model Tested:	TP-101
Project Number:	13118
Report Number:	28784 rev1.2

Section A

Test Date:	08-20-2024
Company:	CompX
EUT:	Stealth Lock Transmitter Pad, Model: TP-101
Test:	**Duty Cycle – normal operation**
Operator:	cbrandt

Comment: ON time of wide pulses: 64 x 0.801603206 ms = 51.3026 ms
ON time of narrow pulses = 18 x 0.400801603 ms = 7.2144 ms
Total ON time during 100 ms = 58.5170 ms
Duty Cycle correction = 20 log (58.5170/100) = **-4.65 dB**

ON time of wide pulse: 0.801603206 ms



166 South Carter, Genoa City, WI 53128

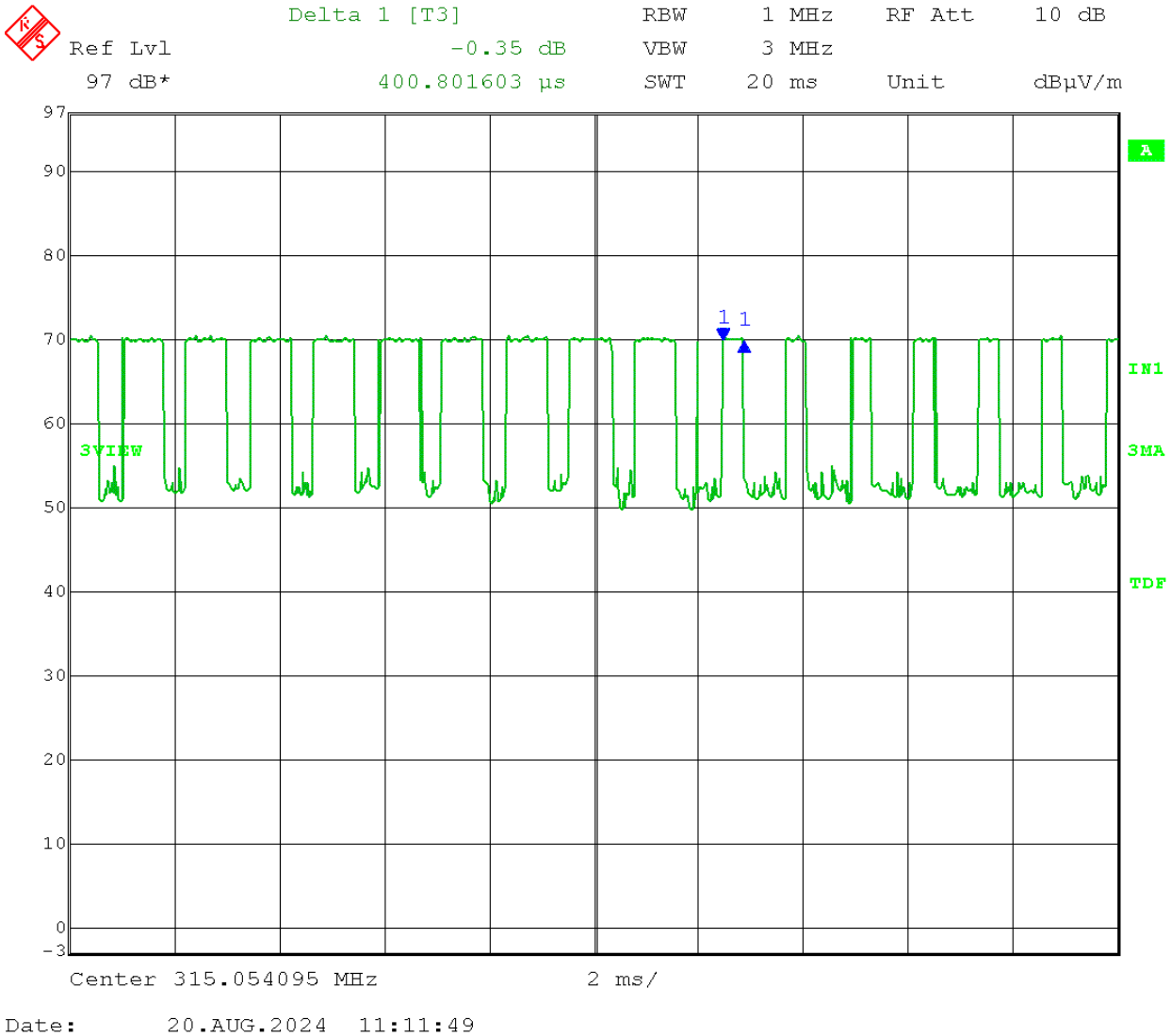
Company:	CompX Timberline
Model Tested:	TP-101
Project Number:	13118
Report Number:	28784 rev1.2

Section A

Test Date:	08-20-2024
Company:	CompX
EUT:	Stealth Lock Transmitter Pad, Model: TP-101
Test:	**Duty Cycle – normal operation**
Operator:	cbrandt

Comment: ON time of wide pulses: 64 x 0.801603206 ms = 51.3026 ms
ON time of narrow pulses = 18 x 0.400801603 ms = 7.2144 ms
Total ON time during 100 ms = 58.5170 ms
Duty Cycle correction = 20 log (58.5170/100) = **-4.65 dB**

ON time of narrow pulse: 0.400801603 ms



Section A

4.0 Field Strength of Emissions – 30 MHz to 4 GHz

Rule Part:

Section 15.231(b) including section 15.205 (restricted bands)

Test Procedure:

ANSI C63.10-2020, Section 7.6
Determination of spurious and fundamental emissions.

Limit:

Limit table in Part 15.231(b) (linear interpolation)
Limit is based on the average value of the measured emission.
Fundamental (F) limit: µV/m at 3 meters = 41.6667(F) – 7083.3333
The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

There is also a limit on Peak radio frequency emissions that is 20 dB above the maximum permitted Average emission limit.

Results:

Compliant

Sample Equation(s): Y = MX + C; (C = Y – MX); M = Y2 - Y1 / X2 - X1

Amplitude (µV/m): Y1 = 3750
Y2 = 12500
Frequency (MHz): X1 = 260
X2 = 470
Solve for 315 MHz: M = (12500 - 3750) / (470 - 260) = 41.66667
C = 3750 - (41.66667 x 260) = -7083.33
Y = (41.66667 x 315) + (-7083.33) = 6041.667 µV/m
20 x log (6041.667) = **75.62** dBµV/m at 3 meters (Average emission limit)

Limit on Peak emission = 75.62 dBµV/m + 20 dB = **95.62** dBµV/m

Notes:

The fundamental and spurious emissions were measured at a distance of 3 meters between the EUT and the measuring antenna. The EUT was rotated in 3 orthogonal axes and the highest emissions were recorded. Compliance with the Average Limit is determined by comparing Peak detector data, minus the duty cycle correction factor, to the average limit.

Radiated Fundamental and Spurious Emissions – 30 MHz to 4 GHz
Tested at a 3 Meter Distance

EUT: Stealth Lock Transmitter Pad, Model: TP-101
Manufacturer: CompX
Temp. / Humidity: 72 deg F; 46% R.H.
Test Site: OATS Site 2
Operator: cbrandt; DLS Proj. #13118
Test Specification: FCC Part 15.231(b)
Comment: Continuous transmit – 315 MHz
Date: 09-09-2024
Detector: Max Peak
Note: All other emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Duty Cycle Correction (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
315.06	Max Peak	Vert	59.09	14.8	0.03	0	73.92	95.62	21.7	1.54	265	Fundamental
315.06	Average	Vert		14.8	0.03	-4.65	69.27	75.62	6.35	1.54	265	Fundamental
315.06	Max Peak	Horz	60.68	14.8	0.03	0	75.51	95.62	20.11	1.00	315	Fundamental
315.06	Average	Horz		14.8	0.03	-4.65	70.86	75.62	4.76	1.00	315	Fundamental
630.12	Max Peak	Vert	noise floor									Harmonic
630.12	Average	Vert										Harmonic
630.12	Max Peak	Horz	noise floor									Harmonic
630.12	Average	Horz										Harmonic
945.18	Max Peak	Vert	32.41	23.2	0.14	0	55.75	75.62	19.87	1.00	0	Harmonic
945.18	Average	Vert		23.2	0.14	-4.65	51.10	55.62	4.52	1.00	0	Harmonic
945.18	Max Peak	Horz	32.72	23.2	0.14	0	56.06	75.62	19.56	1.18	0	Harmonic
945.18	Average	Horz		23.2	0.14	-4.65	51.41	55.62	**4.21**	1.18	0	Harmonic
1260.24	Max Peak	Vert	86.50	25.2	-55.65	0	56.01	75.62	19.61	1.68	180	Harmonic
1260.24	Average	Vert		25.2	-55.65	-4.65	51.36	55.62	4.26	1.68	180	Harmonic
1260.24	Max Peak	Horz	86.44	25.2	-55.65	0	55.95	75.62	19.67	1.54	175	Harmonic
1260.24	Average	Horz		25.2	-55.65	-4.65	51.30	55.62	4.32	1.54	175	Harmonic
1575.30	Max Peak	Vert	76.44	25.3	-55.03	0	46.71	74	27.29	2.02	170	Restricted Band
1575.30	Average	Vert		25.3	-55.03	-4.65	42.06	54	11.94	2.02	170	Restricted Band
1575.30	Max Peak	Horz	76.46	25.3	-55.03	0	46.73	74	27.27	1.68	180	Restricted Band
1575.30	Average	Horz		25.3	-55.03	-4.65	42.08	54	11.92	1.68	180	Restricted Band

Radiated Fundamental and Spurious Emissions – 30 MHz to 4 GHz
Tested at a 3 Meter Distance

EUT: Stealth Lock Transmitter Pad, Model: TP-101
Manufacturer: CompX
Temp. / Humidity: 72 deg F; 46% R.H.
Test Site: OATS Site 2
Operator: cbrandt; DLS Proj. #13118
Test Specification: FCC Part 15.231(b)
Comment: Continuous transmit – 315 MHz
Date: 09-09-2024
Detector: Max Peak
Note: All other emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Duty Cycle Correction (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
1890.36	Max Peak	Vert	71.58	27.2	-54.85	0	43.91	75.62	31.71	1.79	180	Harmonic
1890.36	Average			27.2	-54.85	-4.65	39.26	55.62	16.36	1.79	180	Harmonic
1890.36	Max Peak	Horz	72.25	27.2	-54.85	0	44.58	75.62	31.04	1.74	190	Harmonic
1890.36	Average			27.2	-54.85	-4.65	39.93	55.62	15.69	1.74	190	Harmonic
2205.42	Max Peak	Vert	65.23	28.5	-54.55	0	39.16	74	34.84	1.87	260	Restricted Band
2205.42	Average			28.5	-54.55	-4.65	34.51	54	19.49	1.87	260	Restricted Band
2205.42	Max Peak	Horz	66.41	28.5	-54.55	0	40.34	74	33.66	2.14	215	Restricted Band
2205.42	Average			28.5	-54.55	-4.65	35.69	54	18.31	2.14	215	Restricted Band
2520.48	Max Peak	Vert	noise floor									Harmonic
2520.48	Average											Harmonic
2520.48	Max Peak	Horz	noise floor									Harmonic
2520.48	Average											Harmonic
2835.54	Max Peak	Vert	70.45	29.8	-54.30	0	45.94	74	28.06	1.93	90	Restricted Band
2835.54	Average			29.8	-54.30	-4.65	41.29	54	12.71	1.93	90	Restricted Band
2835.54	Max Peak	Horz	71.42	29.8	-54.30	0	46.91	74	27.09	1.70	190	Restricted Band
2835.54	Average			29.8	-54.30	-4.65	42.26	54	11.74	1.70	190	Restricted Band
3150.60	Max Peak	Vert	72.42	30.5	-54.46	0	48.43	75.62	27.19	1.65	185	Harmonic
3150.60	Average			30.5	-54.46	-4.65	43.78	55.62	11.84	1.65	185	Harmonic
3150.60	Max Peak	Horz	73.04	30.5	-54.46	0	49.05	75.62	26.57	1.74	190	Harmonic
3150.60	Average			30.5	-54.46	-4.65	44.40	55.62	11.22	1.74	190	Harmonic

5.0 Field Strength of Emissions – 9 kHz to 30 MHz

Rule Part:

Section 15.231(b) including section 15.209

Test Procedure:

ANSI C63.10-2020, Section 6.4 – Radiated emissions below 30 MHz
FCC Part 15.31(f)(2) – Measurements at closer distances

Limit:

Limit table in Part 15.209(a)

Results:

Compliant

Sample Equation(s):

Limit at 9 MHz = 30 µV/m at 30 meters
20 log 30 µV/m = 29.54 dBµV/m at 30 meters

Conversion from 30 meters to 3 meters using 40 dB/decade per FCC 15.31(f)(2)
40 log (30 m / 3 m) = 40 dB

Limit at 9 MHz = 29.54 + 40 dB = 69.54 dBµV/m at 3 meters

Notes:

No emissions from the TP-101 were found within 20 dB of the limit in the frequency range 9 kHz to 30 MHz.

DLS Electronic Systems, Inc.

Radiated Emissions - OATS

Quasi-Peak Graph

Limit/Distance - FCC Part 15.231 / 15.209 / 3-meter distance

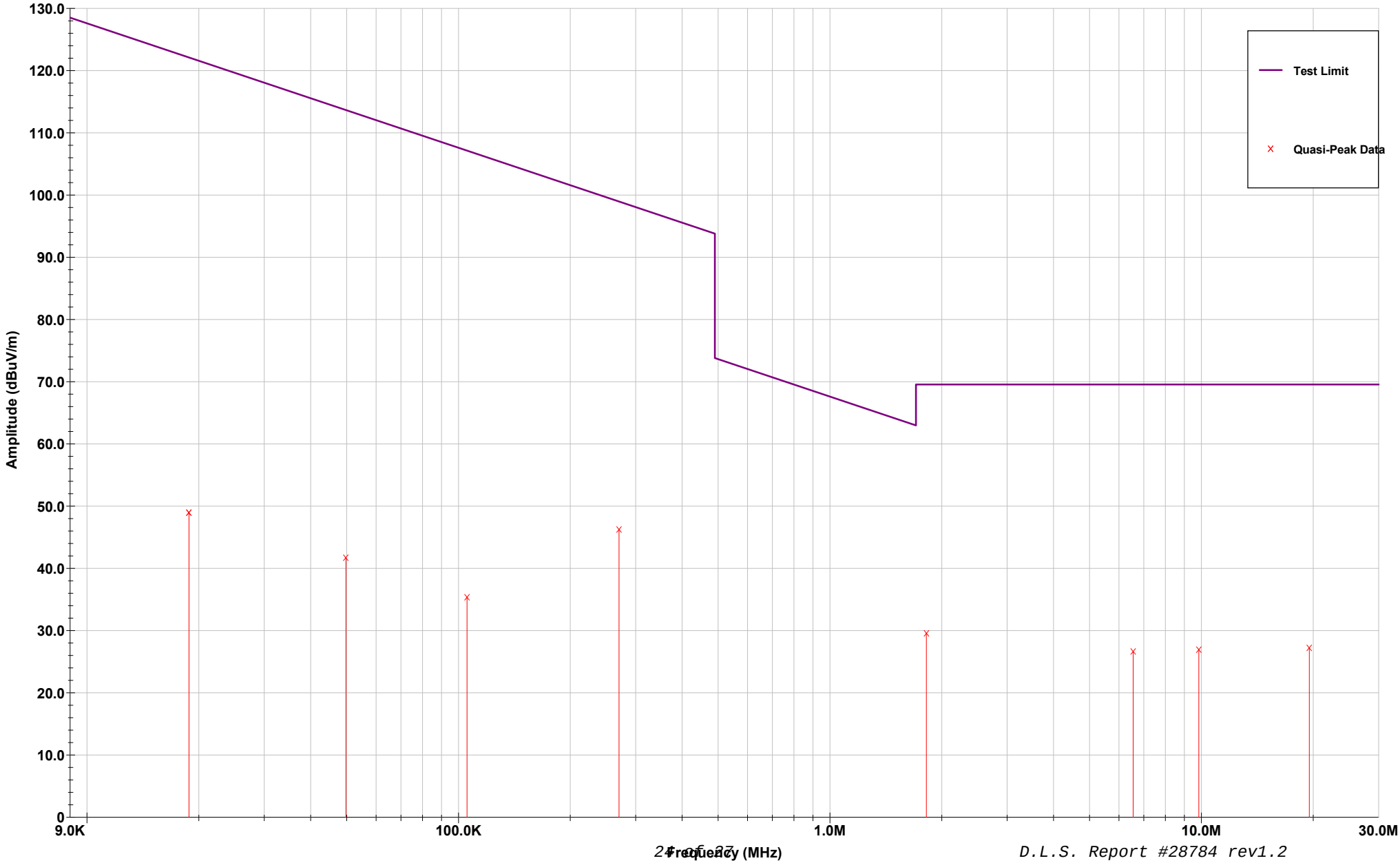
Customer - CompX

EUT Info - Stealth Lock Transmitter Pad, Model: TP-101

Voltage/Site - Battery Powered / Site 2; 64 deg. F; 23% R.H.

Engineer - cbrandt; DLS Proj. #13118

Notes - Continuous transmit mode (315 MHz)



D.L.S. Report #28784 rev1.2

Last Data Update 12:47:56 PM, Thursday, February 06, 2025

DLS Electronic Systems, Inc.
Limit
Quasi-Peak Data Table

12:47:56 PM, Thursday, February 06, 2025

Limit/Distance: FCC Part 15.231 / 15.209 / 3-meter distance

Frequency (MHz)	Limit (dBuV/m)	Raw QP (dBuV/m)	Correction Factor (dB)	Corrected QP (dBuV/m)	Margin QP (dB)	Tower (cm)	Turntable (Degrees)	Comments
0.019	122.098	34.274	14.69	48.960	73.14	1.000	0.000	Noise Floor
0.050	113.655	30.530	11.15	41.681	71.97	1.000	0.000	Noise Floor
0.105	107.139	25.052	10.32	35.369	71.77	1.000	0.000	Noise Floor
0.271	98.958	36.173	10.06	46.229	52.73	1.000	0.000	Noise Floor
1.819	69.540	18.986	10.57	29.555	39.99	1.000	0.000	Noise Floor
6.553	69.540	15.801	10.82	26.624	42.92	1.000	0.000	Noise Floor
9.844	69.540	15.822	11.11	26.933	42.61	1.000	0.000	Noise Floor
19.524	69.540	16.244	10.94	27.180	42.36	1.000	0.000	Noise Floor

Limit/Distance - FCC Part 15.231 / 15.209 / 3-meter distance
Customer - CompX
EUT Info - Stealth Lock Transmitter Pad, Model: TP-101
Voltage/Site - Battery Powered / Site 2; 64 deg. F; 23% R.H.
Engineer - cbrandt; DLS Proj. #13118
Notes - Continuous transmit mode (315 MHz)

166 South Carter, Genoa City, WI 53128

Company: CompX Timberline
Model Tested: TP-101
Project Number: 13118
Report Number: 28784 rev1.2

Section B – Measurement Uncertainty

Compliance with the limits in this standard are based on the results of the compliance measurement. Our calculated measurement uncertainty including the measurement instrumentation, associated connections between the various instruments in the measurement chain, and other contributions, are provided in this section of the test report.

Radiated Emission 9 kHz to 30 MHz Uncertainty

		Uncertainty (+ / - dB)	**Uncertainty (+ / - dB)**
Contribution	Probability Distribution	3M	3M
		9 kHz - 150 kHz	150 kHz - 30 MHz
Combined Standard Uncertainty	Normal	1.60	1.60
Expanded Uncertainty	**Normal (k=2)**	**3.19**	**3.19**

Radiated Emission 30 MHz to 18 GHz Uncertainty

		Uncertainty (+ / - dB)	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**	**Uncertainty (+ / - dB)**
Contribution	Probability Distribution	3M	3M	3M	3M	3M	3M	10M	10M	10M
		30-100MHz.	100-700MHz	700-1000MHz.	1- 4.5Ghz	4.5 - 7Ghz	7 - 18Ghz	30-100MHz.	100-700MHz.	700-1000MHz.
Combined Standard Uncertainty	Normal	1.70	1.62	1.66	2.13	2.48	2.85	1.64	1.58	1.66
Expanded Uncertainty	**Normal (k=2)**	**3.40**	**3.23**	**3.33**	**4.26**	**4.95**	**5.69**	**3.29**	**3.16**	**3.31**

166 South Carter, Genoa City, WI 53128

Company: CompX Timberline
Model Tested: TP-101
Project Number: 13118
Report Number: 28784 rev1.2

END OF REPORT

Revision #	Date	Comments	By
1.0	10-08-2024	Initial Release	CB
1.1	01-20-2025	Changed Model Name from TP-100 to TP-101	CB
1.2	02-12-2025	Added 9 kHz to 30 MHz test data and test equipment	CB