



element

Becton, Dickinson and Company

Pyxis Pro

FCC 15.225:2025

RSS-210 Issue 11:2024

RSS-Gen Issue 5:2018+A1:2019+A2:2021

13.56 MHz radio using RFID

Report: CRDN1144.0 Rev. 01, Issue Date: August 11, 2025



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CERTIFICATE OF TEST



Last Date of Test: June 12, 2025
Becton, Dickinson and Company
EUT: Pyxis Pro

Radio Equipment Testing

Standards

Specification	Method
FCC 15.225:2025	
RSS-210 Issue 11:2024	ANSI C63.10:2020
RSS-Gen Issue 5:2018+A1:2019+A2:2021	

Guidance

KDB 174176
Notice 2020 - DRS0023

Results

Test Description	Result	FCC Section(s)	RSS Section(s)	ANSI C63.10 Section(s)	Comments
Powerline Conducted Emissions	Pass	15.207	RSS-Gen 8.8	6.2	
Emissions Bandwidth	Pass	15.215(c)	N/A	6.9.2	
Field Strength of Fundamental	Pass	15.225(a)-(c)	RSS-210 B.6(a)(i.v)	6.4	
Field Strength of Spurious Emissions (Less Than 30 MHz)	Pass	15.225(d), 15.209	RSS-210 B.6(a)(i.v)	6.4	
Field Strength of Spurious Emissions (Greater Than 30 MHz)	Pass	15.225(d), 15.209	RSS-210 B.6(a)(i.v)	6.5	
Frequency Stability	Pass	15.225(e), 15.31(e), 15.215(c), 2.1055	RSS-210 B.6(b)	6.8	
Occupied Bandwidth	N/A	N/A	RSS-Gen 6.7	6.9.3	

Deviations From Test Standards

None

Approved By:

Chuck Heller, Operations Manager
Signed for and on behalf of Element

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY



Revision Number	Description	Date (yyyy-mm-dd)	Page Number
01	Updated test description to "FCC 15.225 Powerline Conducted Emissions.rtf"	2025-08-11	15
	Removed the Field Strength of Fundamental data with scan run 9.	2025-08-11	N/A
	Updated Field Strength of Spurious Emissions (Less Than 30 MHz) data to include the 9kHz-490kHz scans (No emissions within 10 dB of limits)	2025-08-11	41-46
	Frequency Range updated go up to 18 GHz. Prescans added.	2025-08-11	47-55

ACCREDITATIONS AND AUTHORIZATIONS



United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Each laboratory is accredited by A2LA to ISO / IEC 17025, and as a product certifier to ISO / IEC 17065 which allows Element to certify transmitters to FCC and IC specifications.

FDA - Recognized by the FDA as an Accreditation Scheme for Conformity Assessment (ASCA)-accredited testing laboratory for basic safety and essential performance.

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Recognized as an EU Notified Body validated for the EMCD and RED Directives.

United Kingdom

BEIS – Recognized by the UK as an Approved Body under the UK Radio Equipment and UK EMC Regulations.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIT / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:

[California](#)

[Minnesota](#)

[Oregon](#)

[Washington](#)

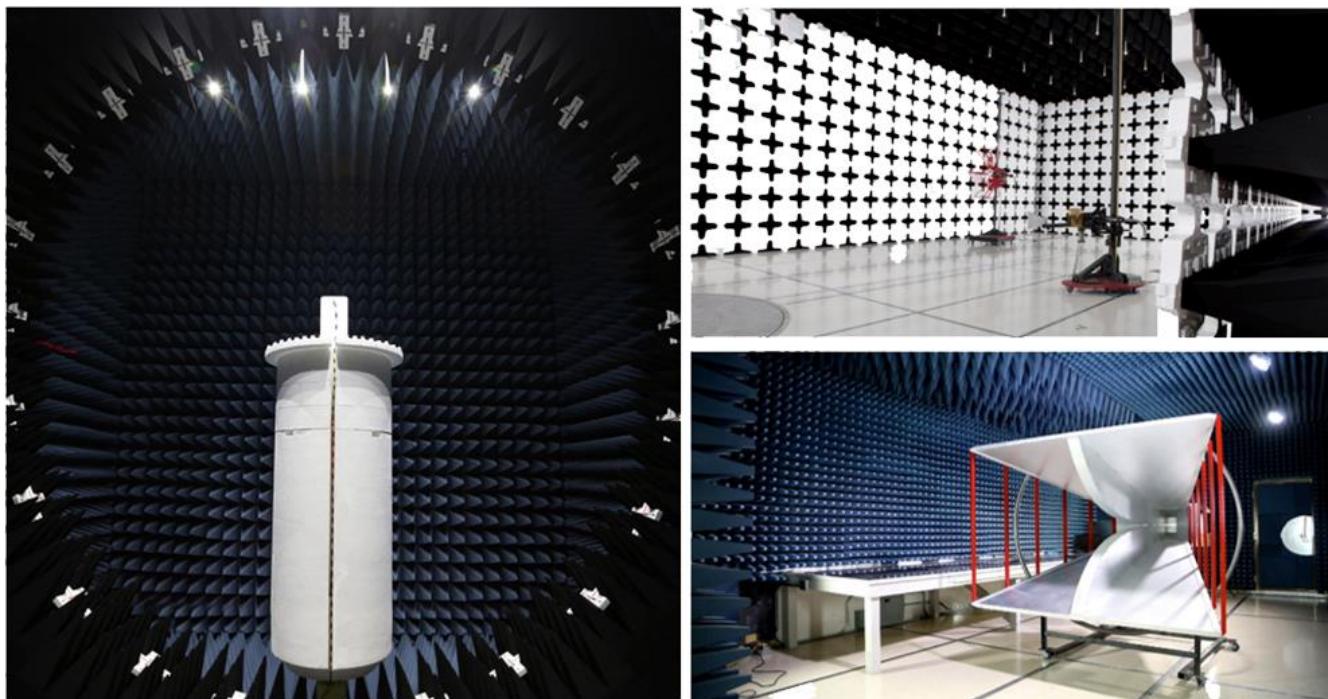
FACILITIES

Testing was performed at the following location(s)

Location	Labs ⁽¹⁾	Address	A2LA ⁽²⁾	ISED ⁽³⁾	BSMI ⁽⁴⁾	VCCI ⁽⁵⁾	CAB ⁽⁶⁾	FDA ⁽⁷⁾
<input checked="" type="checkbox"/> California	OC01-17	41 Tesla Irvine, CA 92618 (949) 861-8918	3310.04	2834B	SL2-IN-E-1154R	A-0029	US0158	TL-55
<input type="checkbox"/> Minnesota	MN01-11	9349 W Broadway Ave. Brooklyn Park, MN 55445 (612) 638-5136	3310.05	2834E	SL2-IN-E-1152R	A-0109	US0175	TL-57
<input type="checkbox"/> Oregon	EV01-12	6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	3310.02	2834D	SL2-IN-E-1017	A-0108	US0017	TL-56
<input type="checkbox"/> Washington	NC01-05	19201 120th Ave NE Bothell, WA 98011 (425) 984-6600	3310.06	2834F	SL2-IN-E-1153R	A-0110	US0157	TL-67
<input type="checkbox"/> Offsite	N/A	See Product Description	N/A	N/A	N/A	N/A	N/A	N/A

See data sheets for specific labs

- (1) The lab designations denote individual rooms within each location. (OC01, OC02, OC03, etc.)
- (2) A2LA Certificate No.
- (3) ISED Company No.
- (4) BSMI No.
- (5) VCCI Site Filing No.
- (6) CAB Identifier. Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MOC, NCC, OFCA
- (7) FDA ASCA No.



MEASUREMENT UNCERTAINTY

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation reported is based on statistical analysis that was performed by the laboratory. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty ($k=2$) can be found in the table below. A lab specific value may also be found in the applicable test description section. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable) and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Various Measurements

Test	All Labs (+/-)
Frequency Accuracy (%)	0.0007
Amplitude Accuracy (dB)	1.2
Conducted Power (dB)	1.2
Radiated Power via Substitution (dB)	0.7
Temperature (degrees C)	0.7
Humidity (% RH)	2.5
Voltage (AC) (%)	1
Voltage (DC) (%)	0.7
Near-field Measurement of E-Field (dB)	1.89
Near-field Measurement of H-Field (dB)	2.65

Field Strength Measurements (dB)

Range	OC08 (+/-)
10kHz-30MHz	1.8
30MHz-1GHz 10m	3.4

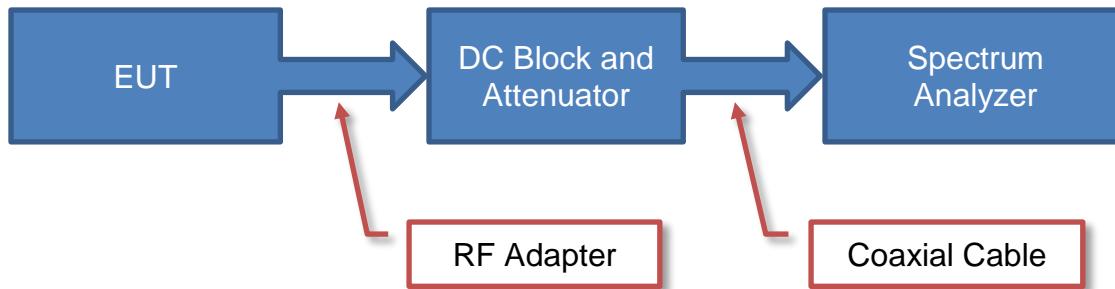
TEST SETUP BLOCK DIAGRAMS

Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Unless otherwise stated, measurements were made using the bandwidths and detectors specified. No video filter was used.

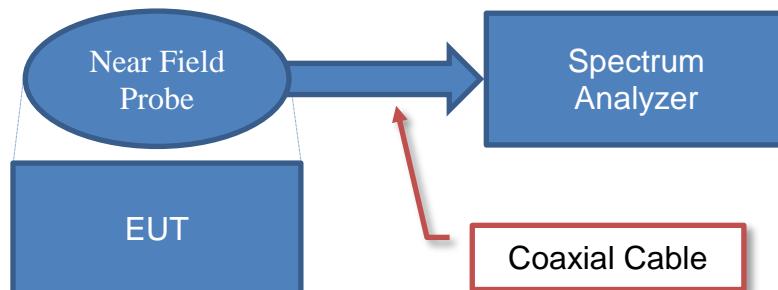
Antenna Port Conducted Measurements



Sample Calculation (logarithmic units)

$$\begin{array}{ccc} \text{Measured} & \text{Measured} & \text{Reference} \\ \text{Value} & = & \text{Level} \\ 71.2 & = & 42.6 \\ & & + \\ & & \text{Level} \\ & & \text{Offset} \\ & & 28.6 \end{array}$$

Near Field Test Fixture Measurements

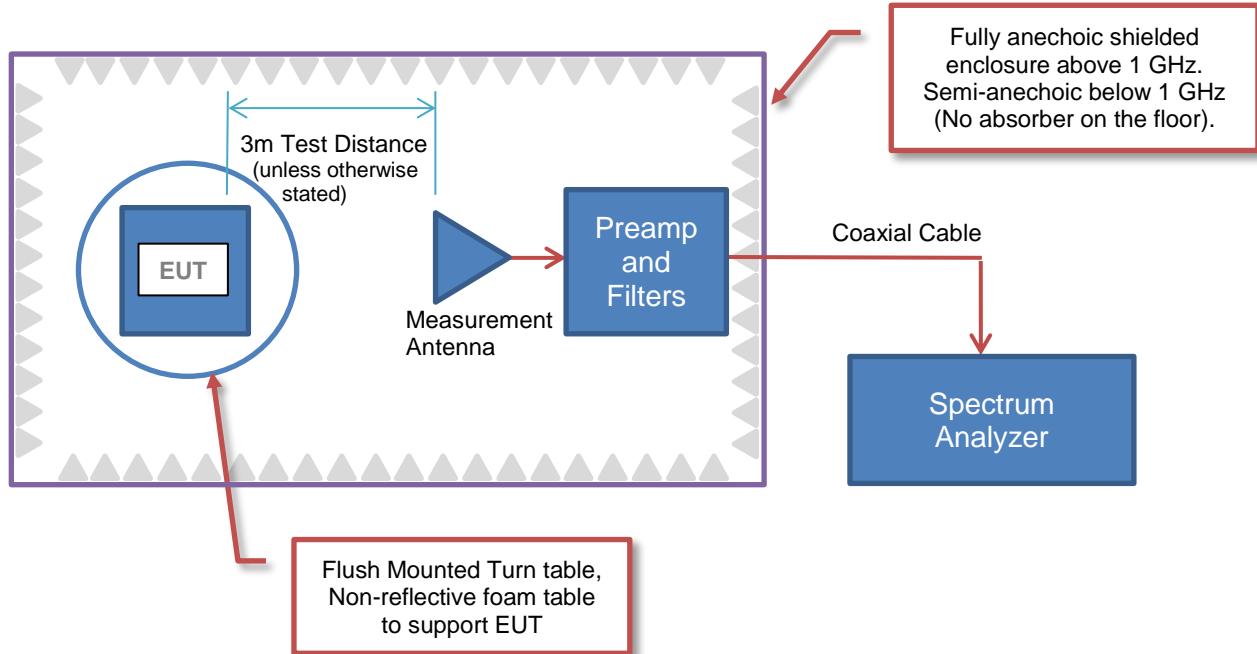


Sample Calculation (logarithmic units)

$$\begin{array}{ccc} \text{Measured} & \text{Measured} & \text{Reference} \\ \text{Value} & = & \text{Level} \\ 71.2 & = & 42.6 \\ & & + \\ & & \text{Level} \\ & & \text{Offset} \\ & & 28.6 \end{array}$$

TEST SETUP BLOCK DIAGRAMS

Emissions Measurements



Sample Calculation (logarithmic units)

Radiated Emissions:

		Factor								
Measured Level (Amplitude)	+	Antenna Factor	Cable Factor	Amplifier Gain	+	Distance Adjustment Factor	+	External Attenuation	=	Field Strength
42.6	+	28.6	+ 3.1	- 40.8	+	0.0	+	0.0	=	33.5

Conducted Emissions:

		Factor			
Measured Level (Amplitude)	+	Transducer Factor	Cable Factor	External Attenuation	Adjusted Level
26.7	+	0.3	+ 0.1	20.0	= 47.1

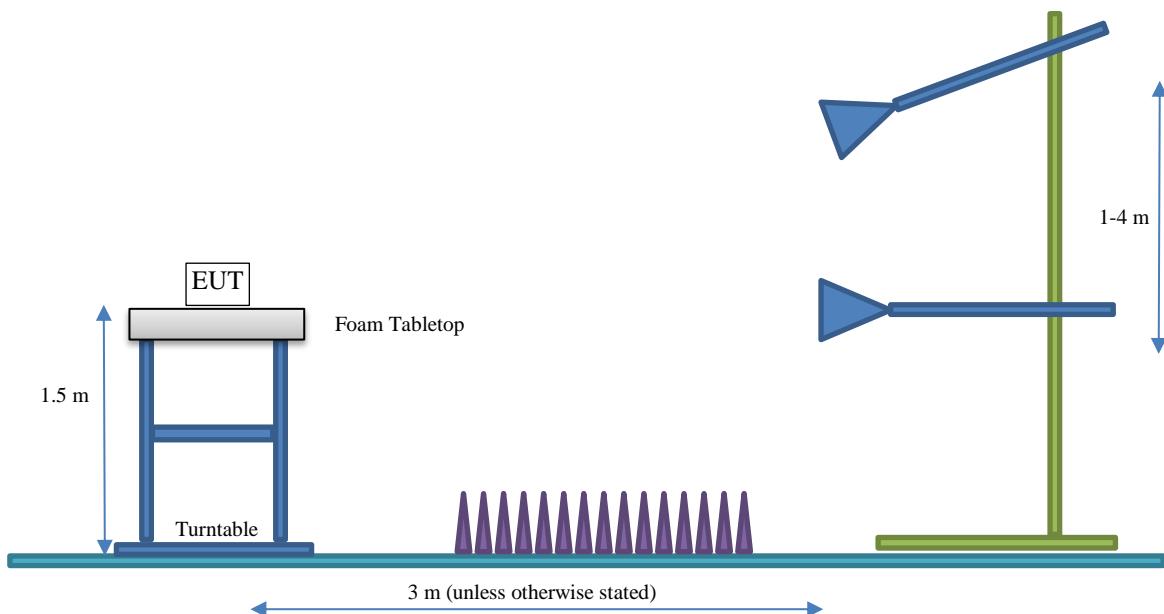
Radiated Power (ERP/EIRP) – Substitution Method:

Measured Level into Substitution Antenna (Amplitude dBm)	+	Substitution Antenna Factor (dBi)	-	EIRP to ERP (if applicable)	=	Measured power (dBm ERP/EIRP)
10.0	+	6.0	-	2.15	=	13.9/16.0

TEST SETUP BLOCK DIAGRAMS

Bore Sighting (>1GHz)

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.



PRODUCT DESCRIPTION

Client and Equipment under Test (EUT) Information

Company Name:	Becton, Dickinson and Company
Address:	c/o Becton, Dickinson and Company
City, State, Zip:	Rantoul, IL 61866-5200
Test Requested By:	Celiflora Palma
EUT:	Pyxis Pro
First Date of Test:	May 29, 2025
Last Date of Test:	June 12, 2025
Receipt Date of Samples:	May 29, 2025
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

Medical device containing two Bluetooth Acc Det FCC ID, one Bluetooth Barcode Scanner FCC ID UZ7CR6080PC, and UZ7CS6080, Wi-Fi 802.11 a/b/g/n/ac FCC ID TX2-RTL8852BE, RFID Card Reader FCC ID M9MRNA0200 and 13.56 MHz smart card reader (HID Omnikey 5122)

Testing Objective:

To demonstrate compliance of the 13.56 MHz radio to FCC 15.225 requirements. and RSS-210 Annex B.6 specifications.

POWER SETTINGS AND ANTENNAS



The power settings, antenna gain value(s) and cable loss (if applicable) used for the testing contained in this report were provided by the customer and will affect the validity of the results. Element assumes no responsibility for the accuracy of this information. The power settings below reflect the maximum power that the EUT is allowed to transmit at during normal operation.

ANTENNA INFORMATION

Type	Provided by:	Frequency	Dimensions (Length x Width)	Number of Turns
PCB	HID	13.56 MHz	54.3 x 62.0 mm	2

The EUT was tested using the power settings provided by the manufacturer which were based upon:

Test software settings Software / firmware used for testing: [SpringCard PCSC diag \(HID\) v2.09](#)
 Rated power settings

SETTINGS FOR ALL TESTS IN THIS REPORT

Radio	Modulation	Protocol	Power Setting (mW)
RFID	ASK	ISO 14443A/B	1

CONFIGURATIONS



Configuration CRDN1144-2

Software/Firmware Running During Test	
Description	Version
BT Regulatory Test App (BT Zebra)	1.3.8.1
AX Series MP Toolkit (Wi-Fi)	mp_v1.0.33
pcProxConfig (RFID)	5.3.3
SpringCard PCSC diag (HID)	2.09

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Pyxis Pro Main	BD	Pyxis Pro Main	6DM-015
HID Card Reader	HID	OK5122	IM-10471656-2444-000134

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Barcode Scanner	Zebra	CR6080 & CS6080	24157525101547
RFID Card 14443A	HID	MIFARE DESFire EV1 8K SE	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	3m	No	Pyxis Pro Main	AC Mains
USB Cable	Yes	1.4m	Yes	HID Card Reader	Pyxis Pro Main

Configuration CRDN1144-4

Software/Firmware Running During Test	
Description	Version
pcProxConfig (RFID)	5.3.3
SpringCard PCSC diag (HID)	2.09

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
HID Card Reader	HID	OK5122	IM-10471656-2444-000134
Pyxis Pro Main	BD	Pyxis Pro Main	6DM-034

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Barcode Scanner	Zebra	CR6080 & CS6080	24157525101547

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	3m	No	Pyxis Pro Main	AC Mains

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2025-05-29	Field Strength of Fundamental	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	2025-06-09	Field Strength of Spurious Emissions (Less Than 30 MHz)	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	2025-06-10	Emissions Bandwidth	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	2025-06-10	Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	2025-06-10	Occupied Bandwidth	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	2025-06-10	Frequency Stability	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
7	2025-06-12	Field Strength of Spurious Emissions (Greater Than 30 MHz)	Modified from delivered Configuration.	Adding a Ferrite [FairRite P/N: 0431164281] with ½ turn to the cable next to the HID card *Authorized by Celiflora Palma.	Scheduled testing was completed.

CONDUCTED EMISSIONS



TEST DESCRIPTION

The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT.

The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10.

In the event that the operating frequency of 13.56 MHz is causing the product to fail the FCC 15.207 limits, the following guidance can be used:

FCC KDB 174176 D01 AC Conducted FAQ v01r01, June 3, 2015 Section Q5:

For a device with a permanent or detachable antenna operating at or below 30 MHz, the FCC will accept measurements performed with a suitable dummy load in lieu of the antenna under the following conditions:

- (1) perform the AC power-line conducted tests with the antenna connected to determine compliance with Section 15.207 limits outside the transmitter's fundamental emission band;
- (2) retest with a dummy load in lieu of the antenna to determine compliance with Section 15.207 limits within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network which simulates the antenna in the fundamental frequency band.

All measurements must be performed as specified in clause 6.2 of ANSI C63.10-2013.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Receiver	Gauss Instruments	TDEMI 30M	ARO	2025-05-20	2026-05-20
LISN	Solar Electronics	9252-50-24-BNC	LIA	2024-09-12	2025-09-12
Cable - Conducted Cable Assembly	Northwest EMC	OCP, HFP, AWC	OCPA	2025-03-04	2026-03-04
Power Supply	Pacific Power	3120AFX-2L	SMT	NCR	NCR

CONFIGURATIONS INVESTIGATED

CRDN1144-4

MODES INVESTIGATED

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	23.4°C
Attendees:	Celiflora Palma	Relative Humidity:	58.5%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	4	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

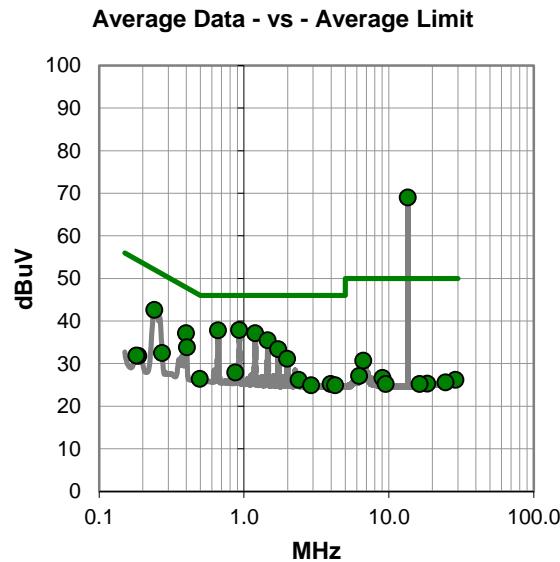
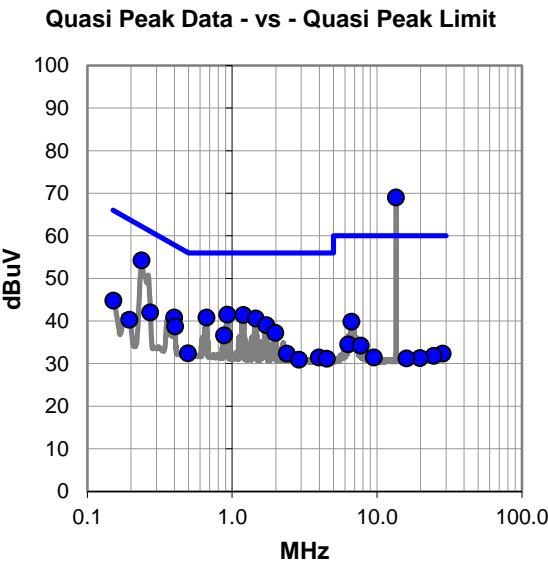
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS

RESULTS - Run #4

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	48.0	21.0	69.0	60.0	9.0
0.237	34.1	20.1	54.2	62.2	-8.0
0.928	21.3	20.2	41.5	56.0	-14.5
1.194	21.2	20.2	41.4	56.0	-14.6
0.664	20.6	20.2	40.8	56.0	-15.2
1.455	20.4	20.2	40.6	56.0	-15.4
1.720	18.8	20.2	39.0	56.0	-17.0
0.397	20.7	20.1	40.8	57.9	-17.1
1.986	16.9	20.3	37.2	56.0	-18.8
0.272	21.9	20.1	42.0	61.1	-19.1
0.403	18.6	20.1	38.7	57.8	-19.1
0.881	16.4	20.2	36.6	56.0	-19.4
6.674	19.2	20.6	39.8	60.0	-20.2
0.152	24.6	20.2	44.8	65.9	-21.1
0.196	20.2	20.1	40.3	63.8	-23.5
0.496	12.3	20.1	32.4	56.1	-23.7
2.391	11.9	20.4	32.3	56.0	-23.7
3.963	10.9	20.5	31.4	56.0	-24.6
4.506	10.6	20.5	31.1	56.0	-24.9
2.896	10.5	20.4	30.9	56.0	-25.1
6.334	14.0	20.5	34.5	60.0	-25.5
7.723	13.6	20.6	34.2	60.0	-25.8
28.496	9.8	22.5	32.3	60.0	-27.7
24.625	9.8	22.0	31.8	60.0	-28.2
9.538	10.6	20.8	31.4	60.0	-28.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	48.0	21.0	69.0	50.0	19.0
0.928	17.7	20.2	37.9	46.0	-8.1
0.663	17.6	20.2	37.8	46.0	-8.2
1.194	16.9	20.2	37.1	46.0	-8.9
0.240	22.5	20.1	42.6	52.1	-9.5
1.455	15.3	20.2	35.5	46.0	-10.5
0.397	17.0	20.1	37.1	47.9	-10.8
1.720	13.2	20.2	33.4	46.0	-12.6
0.403	13.7	20.1	33.8	47.8	-14.0
1.986	10.8	20.3	31.1	46.0	-14.9
0.872	7.7	20.2	27.9	46.0	-18.1
0.272	12.4	20.1	32.5	51.1	-18.6
6.656	10.1	20.6	30.7	50.0	-19.3
0.496	6.3	20.1	26.4	46.1	-19.7
2.384	5.8	20.4	26.2	46.0	-19.8
3.963	4.7	20.5	25.2	46.0	-20.8
2.910	4.5	20.4	24.9	46.0	-21.1
4.273	4.4	20.5	24.9	46.0	-21.1
0.187	11.6	20.2	31.8	54.2	-22.4
0.181	11.7	20.2	31.9	54.5	-22.6
6.253	6.6	20.5	27.1	50.0	-22.9
9.073	5.9	20.7	26.6	50.0	-23.4
28.948	3.6	22.6	26.2	50.0	-23.8
24.609	3.6	22.0	25.6	50.0	-24.4
18.434	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Evaluation



Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	23.4°C
Attendees:	Celiflora Palma	Relative Humidity:	58.5%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	5	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

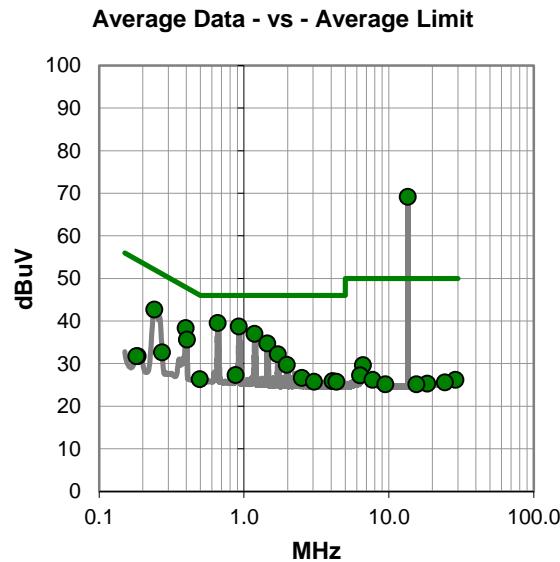
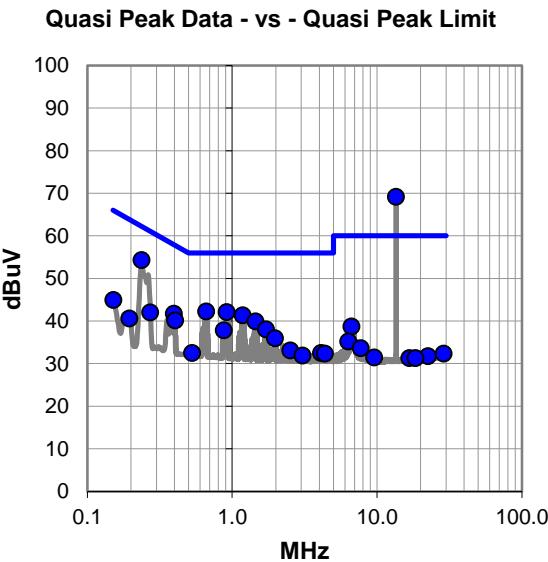
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS

RESULTS - Run #5

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	48.1	21.0	69.1	60.0	9.1
0.237	34.2	20.1	54.3	62.2	-7.9
0.661	22.0	20.2	42.2	56.0	-13.8
0.919	21.9	20.2	42.1	56.0	-13.9
1.184	21.1	20.2	41.3	56.0	-14.7
1.450	19.7	20.2	39.9	56.0	-16.1
0.396	21.6	20.1	41.7	57.9	-16.2
0.403	20.0	20.1	40.1	57.8	-17.7
1.719	17.8	20.2	38.0	56.0	-18.0
0.875	17.6	20.2	37.8	56.0	-18.2
0.272	21.9	20.1	42.0	61.1	-19.1
1.979	15.6	20.3	35.9	56.0	-20.1
0.152	24.7	20.2	44.9	65.9	-21.0
6.679	18.1	20.6	38.7	60.0	-21.3
2.527	12.7	20.4	33.1	56.0	-22.9
0.196	20.5	20.1	40.6	63.8	-23.2
0.528	12.4	20.1	32.5	56.0	-23.5
4.106	12.0	20.5	32.5	56.0	-23.5
4.367	11.8	20.5	32.3	56.0	-23.7
3.058	11.5	20.4	31.9	56.0	-24.1
6.330	14.7	20.5	35.2	60.0	-24.8
7.727	13.0	20.6	33.6	60.0	-26.4
28.940	9.7	22.6	32.3	60.0	-27.7
22.527	9.9	21.8	31.7	60.0	-28.3
9.563	10.6	20.8	31.4	60.0	-28.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	48.1	21.0	69.1	50.0	19.1
0.658	19.3	20.2	39.5	46.0	-6.5
0.922	18.5	20.2	38.7	46.0	-7.3
1.184	16.8	20.2	37.0	46.0	-9.0
0.240	22.6	20.1	42.7	52.1	-9.4
0.396	18.2	20.1	38.3	47.9	-9.6
1.450	14.5	20.2	34.7	46.0	-11.3
0.403	15.5	20.1	35.6	47.8	-12.2
1.711	12.0	20.2	32.2	46.0	-13.8
1.976	9.4	20.3	29.7	46.0	-16.3
0.272	12.5	20.1	32.6	51.1	-18.5
0.875	7.1	20.2	27.3	46.0	-18.7
2.507	6.2	20.4	26.6	46.0	-19.4
0.495	6.2	20.1	26.3	46.1	-19.8
4.091	5.4	20.5	25.9	46.0	-20.1
3.049	5.3	20.4	25.7	46.0	-20.3
4.343	5.2	20.5	25.7	46.0	-20.3
6.629	9.0	20.6	29.6	50.0	-20.4
0.185	11.5	20.2	31.7	54.3	-22.6
0.181	11.5	20.2	31.7	54.5	-22.8
6.328	6.7	20.5	27.2	50.0	-22.8
7.718	5.6	20.6	26.2	50.0	-23.8
28.934	3.6	22.6	26.2	50.0	-23.8
24.455	3.6	22.0	25.6	50.0	-24.4
18.432	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Evaluation



Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-11
Customer:	Becton, Dickinson and Company	Temperature:	24.1°C
Attendees:	Celiflora Palma	Relative Humidity:	52.5%
Customer Project:	None	Bar. Pressure (PMSL):	1012 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	28	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

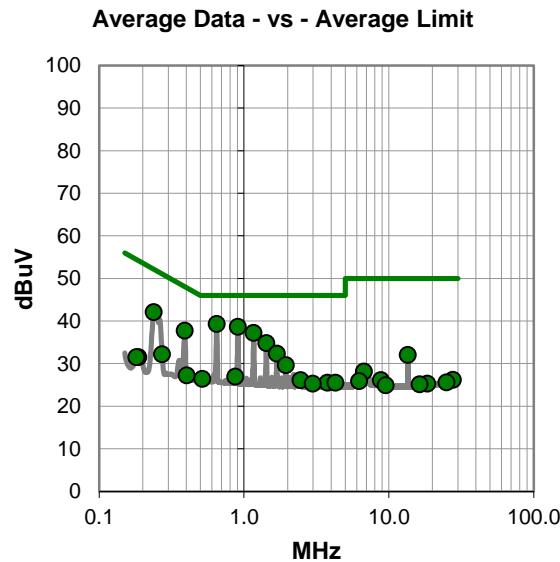
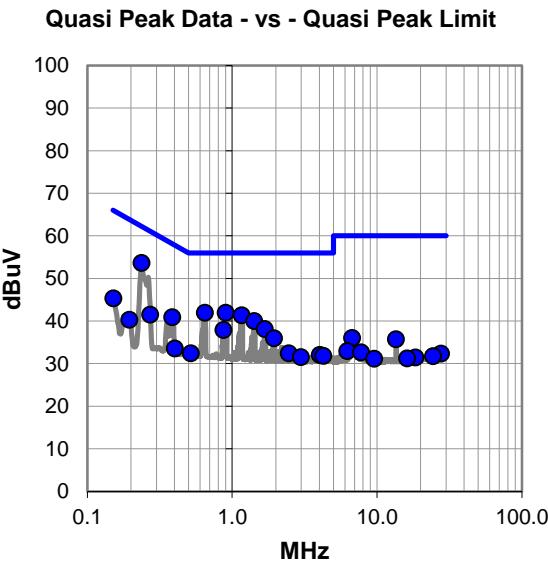
50 Ohm dummy load added to antenna

EUT OPERATING MODES

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #28

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.237	33.5	20.1	53.6	62.2	-8.6
0.647	21.7	20.2	41.9	56.0	-14.1
0.905	21.7	20.2	41.9	56.0	-14.1
1.165	21.1	20.2	41.3	56.0	-14.7
1.424	19.8	20.2	40.0	56.0	-16.0
0.386	20.8	20.1	40.9	58.1	-17.2
1.682	17.9	20.2	38.1	56.0	-17.9
0.872	17.7	20.2	37.9	56.0	-18.1
0.272	21.4	20.1	41.5	61.1	-19.6
1.946	15.6	20.3	35.9	56.0	-20.1
0.152	25.1	20.2	45.3	65.9	-20.6
0.196	20.2	20.1	40.3	63.8	-23.5
0.518	12.3	20.1	32.4	56.0	-23.6
2.463	12.0	20.4	32.4	56.0	-23.6
4.029	11.5	20.5	32.0	56.0	-24.0
6.754	15.4	20.6	36.0	60.0	-24.0
4.274	11.3	20.5	31.8	56.0	-24.2
0.402	13.4	20.1	33.5	57.8	-24.3
13.560	14.7	21.0	35.7	60.0	-24.3
2.986	11.1	20.4	31.5	56.0	-24.5
6.238	12.4	20.5	32.9	60.0	-27.1
7.773	12.0	20.6	32.6	60.0	-27.4
27.734	9.8	22.5	32.3	60.0	-27.7
24.419	9.7	22.0	31.7	60.0	-28.3
18.434	10.0	21.4	31.4	60.0	-28.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.647	19.1	20.2	39.3	46.0	-6.7
0.907	18.4	20.2	38.6	46.0	-7.4
1.168	17.0	20.2	37.2	46.0	-8.8
0.238	22.0	20.1	42.1	52.1	-10.0
0.390	17.6	20.1	37.7	48.1	-10.4
1.426	14.6	20.2	34.8	46.0	-11.2
1.685	12.1	20.2	32.3	46.0	-13.7
1.943	9.3	20.3	29.6	46.0	-16.4
13.560	11.0	21.0	32.0	50.0	-18.0
0.272	12.1	20.1	32.2	51.1	-18.9
0.872	6.7	20.2	26.9	46.0	-19.1
0.516	6.3	20.1	26.4	46.0	-19.6
2.463	5.7	20.4	26.1	46.0	-19.9
3.765	5.0	20.5	25.5	46.0	-20.5
4.277	5.0	20.5	25.5	46.0	-20.5
0.402	7.1	20.1	27.2	47.8	-20.6
2.985	4.9	20.4	25.3	46.0	-20.7
6.740	7.5	20.6	28.1	50.0	-21.9
0.187	11.3	20.2	31.5	54.2	-22.7
0.181	11.3	20.2	31.5	54.5	-23.0
27.729	3.7	22.5	26.2	50.0	-23.8
8.832	5.4	20.7	26.1	50.0	-23.9
6.238	5.4	20.5	25.9	50.0	-24.1
25.056	3.6	22.0	25.6	50.0	-24.4
18.432	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Pass



Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-11
Customer:	Becton, Dickinson and Company	Temperature:	24.1°C
Attendees:	Celiflora Palma	Relative Humidity:	52.5%
Customer Project:	None	Bar. Pressure (PMSL):	1012 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	29	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

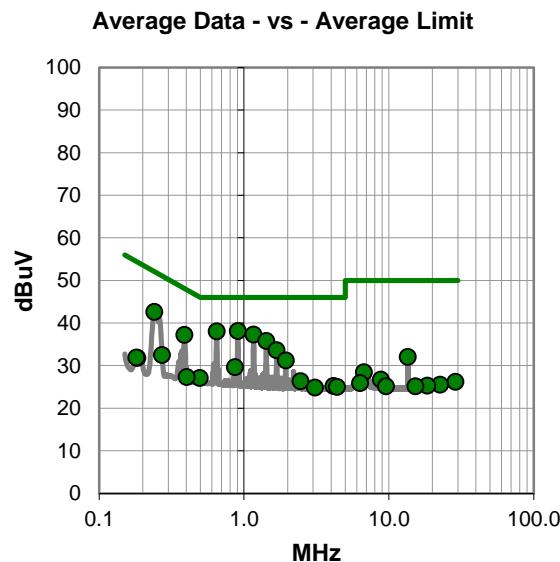
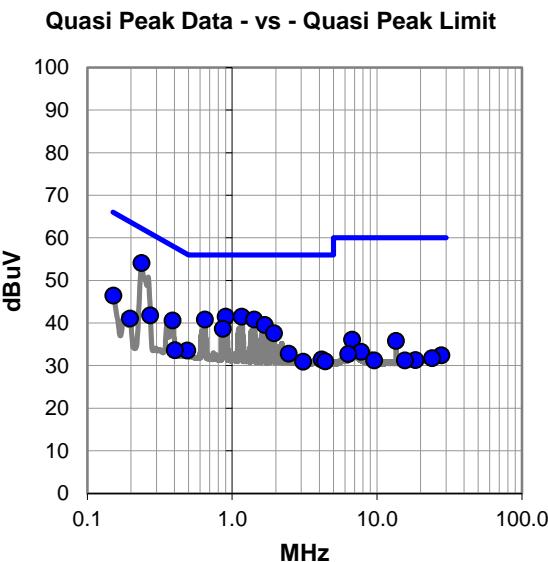
50 Ohm dummy load added to antenna

EUT OPERATING MODES

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #29

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.237	34.0	20.1	54.1	62.2	-8.1
0.905	21.3	20.2	41.5	56.0	-14.5
1.163	21.3	20.2	41.5	56.0	-14.5
0.647	20.6	20.2	40.8	56.0	-15.2
1.421	20.6	20.2	40.8	56.0	-15.2
1.679	19.3	20.2	39.5	56.0	-16.5
0.861	18.4	20.2	38.6	56.0	-17.4
0.388	20.5	20.1	40.6	58.1	-17.5
1.943	17.3	20.3	37.6	56.0	-18.4
0.272	21.7	20.1	41.8	61.1	-19.3
0.152	26.2	20.2	46.4	65.9	-19.5
0.197	20.9	20.1	41.0	63.7	-22.7
0.490	13.4	20.1	33.5	56.2	-22.7
2.463	12.4	20.4	32.8	56.0	-23.2
6.740	15.5	20.6	36.1	60.0	-23.9
0.402	13.5	20.1	33.6	57.8	-24.2
13.560	14.8	21.0	35.8	60.0	-24.2
4.152	10.9	20.5	31.4	56.0	-24.6
4.396	10.5	20.5	31.0	56.0	-25.0
3.099	10.5	20.4	30.9	56.0	-25.1
7.765	12.6	20.6	33.2	60.0	-26.8
6.330	12.2	20.5	32.7	60.0	-27.3
27.880	9.9	22.5	32.4	60.0	-27.6
24.043	9.8	21.9	31.7	60.0	-28.3
18.435	9.9	21.4	31.3	60.0	-28.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.907	17.9	20.2	38.1	46.0	-7.9
0.647	17.8	20.2	38.0	46.0	-8.0
1.166	17.1	20.2	37.3	46.0	-8.7
0.240	22.5	20.1	42.6	52.1	-9.5
1.426	15.6	20.2	35.8	46.0	-10.2
0.388	17.1	20.1	37.2	48.1	-10.9
1.682	13.4	20.2	33.6	46.0	-12.4
1.943	10.9	20.3	31.2	46.0	-14.8
0.866	9.4	20.2	29.6	46.0	-16.4
13.560	11.0	21.0	32.0	50.0	-18.0
0.272	12.4	20.1	32.5	51.1	-18.6
0.495	7.0	20.1	27.1	46.1	-19.0
2.457	5.9	20.4	26.3	46.0	-19.7
0.402	7.2	20.1	27.3	47.8	-20.5
4.152	4.7	20.5	25.2	46.0	-20.8
4.404	4.5	20.5	25.0	46.0	-21.0
3.089	4.4	20.4	24.8	46.0	-21.2
6.748	7.8	20.6	28.4	50.0	-21.6
0.184	11.6	20.2	31.8	54.3	-22.5
0.181	11.7	20.2	31.9	54.5	-22.6
8.832	6.0	20.7	26.7	50.0	-23.3
28.934	3.6	22.6	26.2	50.0	-23.8
6.325	5.4	20.5	25.9	50.0	-24.1
22.601	3.7	21.8	25.5	50.0	-24.5
18.434	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Pass

Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	23.4°C
Attendees:	Celiflora Palma	Relative Humidity:	58.5%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	6	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

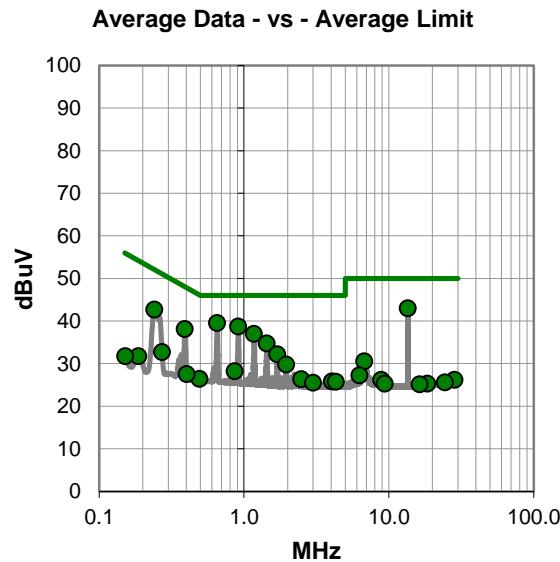
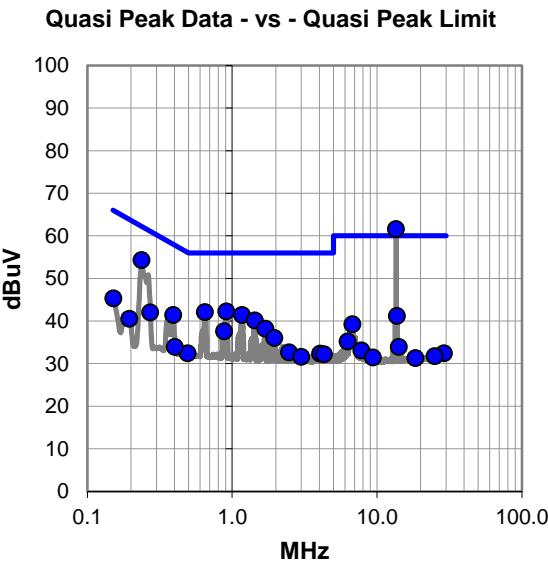
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #6

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	40.6	21.0	61.6	60.0	1.6
0.237	34.2	20.1	54.3	62.2	-7.9
0.913	22.0	20.2	42.2	56.0	-13.8
0.650	21.9	20.2	42.1	56.0	-13.9
1.172	21.2	20.2	41.4	56.0	-14.6
1.436	19.9	20.2	40.1	56.0	-15.9
0.393	21.3	20.1	41.4	58.0	-16.6
1.696	18.0	20.2	38.2	56.0	-17.8
0.881	17.4	20.2	37.6	56.0	-18.4
13.772	20.2	21.0	41.2	60.0	-18.8
0.272	21.9	20.1	42.0	61.1	-19.1
1.955	15.7	20.3	36.0	56.0	-20.0
0.152	25.1	20.2	45.3	65.9	-20.6
6.780	18.6	20.6	39.2	60.0	-20.8
0.196	20.4	20.1	40.5	63.8	-23.3
2.480	12.2	20.4	32.6	56.0	-23.4
0.492	12.3	20.1	32.4	56.1	-23.7
4.047	11.8	20.5	32.3	56.0	-23.7
4.303	11.7	20.5	32.2	56.0	-23.8
0.402	13.8	20.1	33.9	57.8	-23.9
3.006	11.2	20.4	31.6	56.0	-24.4
6.282	14.7	20.5	35.2	60.0	-24.8
14.195	12.9	21.0	33.9	60.0	-26.1
7.823	12.5	20.6	33.1	60.0	-26.9
29.056	9.9	22.5	32.4	60.0	-27.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.652	19.3	20.2	39.5	46.0	-6.5
13.560	22.0	21.0	43.0	50.0	-7.0
0.913	18.5	20.2	38.7	46.0	-7.3
1.174	16.8	20.2	37.0	46.0	-9.0
0.240	22.6	20.1	42.7	52.1	-9.4
0.391	18.0	20.1	38.1	48.0	-9.9
1.435	14.5	20.2	34.7	46.0	-11.3
1.696	12.0	20.2	32.2	46.0	-13.8
1.961	9.5	20.3	29.8	46.0	-16.2
0.863	8.0	20.2	28.2	46.0	-17.8
0.272	12.6	20.1	32.7	51.1	-18.4
6.786	9.9	20.6	30.5	50.0	-19.5
0.492	6.3	20.1	26.4	46.1	-19.7
2.481	5.9	20.4	26.3	46.0	-19.7
4.048	5.3	20.5	25.8	46.0	-20.2
0.402	7.4	20.1	27.5	47.8	-20.3
4.305	5.2	20.5	25.7	46.0	-20.3
3.008	5.1	20.4	25.5	46.0	-20.5
0.187	11.5	20.2	31.7	54.2	-22.5
6.281	6.7	20.5	27.2	50.0	-22.8
8.867	5.5	20.7	26.2	50.0	-23.8
28.509	3.7	22.5	26.2	50.0	-23.8
0.152	11.5	20.2	31.7	55.9	-24.2
24.445	3.6	22.0	25.6	50.0	-24.4
9.404	4.5	20.8	25.3	50.0	-24.7

CONCLUSION

Evaluation

Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	23.4°C
Attendees:	Celiflora Palma	Relative Humidity:	58.5%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	7	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

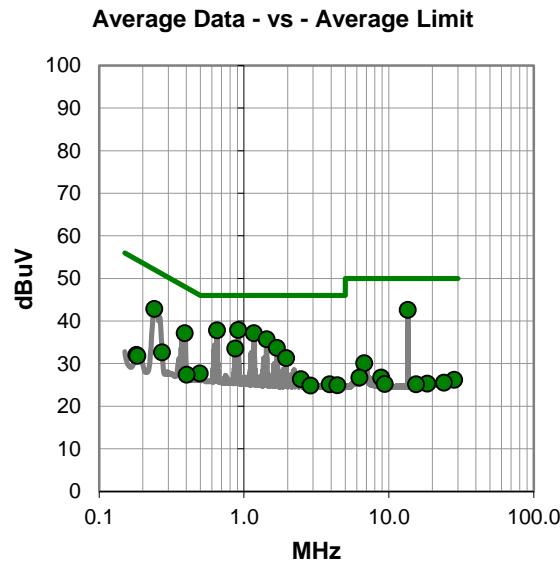
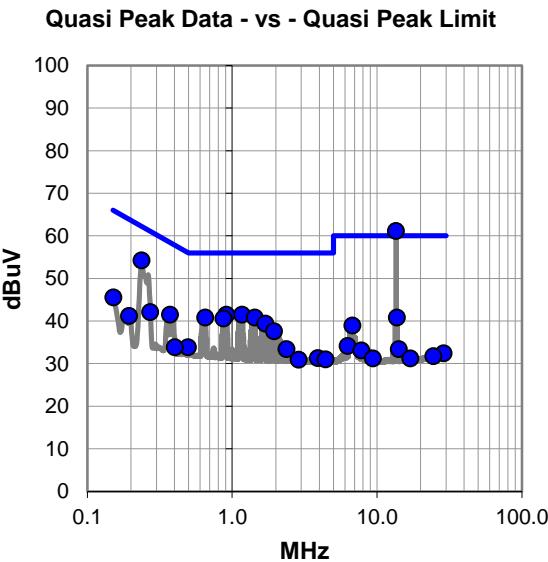
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	40.1	21.0	61.1	60.0	1.1
0.237	34.1	20.1	54.2	62.2	-8.0
1.171	21.3	20.2	41.5	56.0	-14.5
0.911	21.3	20.2	41.5	56.0	-14.5
1.433	20.6	20.2	40.8	56.0	-15.2
0.652	20.6	20.2	40.8	56.0	-15.2
0.872	20.4	20.2	40.6	56.0	-15.4
1.694	19.2	20.2	39.4	56.0	-16.6
0.373	21.4	20.1	41.5	58.4	-16.9
1.949	17.3	20.3	37.6	56.0	-18.4
0.272	22.0	20.1	42.1	61.1	-19.0
13.772	19.8	21.0	40.8	60.0	-19.2
0.152	25.3	20.2	45.5	65.9	-20.4
6.784	18.3	20.6	38.9	60.0	-21.1
0.496	13.7	20.1	33.8	56.1	-22.3
2.373	13.0	20.4	33.4	56.0	-22.6
0.194	21.1	20.1	41.2	63.9	-22.7
0.402	13.7	20.1	33.8	57.8	-24.0
3.907	10.8	20.5	31.3	56.0	-24.7
4.427	10.5	20.5	31.0	56.0	-25.0
2.881	10.5	20.4	30.9	56.0	-25.1
6.276	13.6	20.5	34.1	60.0	-25.9
14.195	12.4	21.0	33.4	60.0	-26.6
7.819	12.5	20.6	33.1	60.0	-26.9
28.953	9.8	22.6	32.4	60.0	-27.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	21.6	21.0	42.6	50.0	-7.4
0.911	17.7	20.2	37.9	46.0	-8.1
0.652	17.6	20.2	37.8	46.0	-8.2
1.171	16.9	20.2	37.1	46.0	-8.9
0.240	22.7	20.1	42.8	52.1	-9.3
1.432	15.5	20.2	35.7	46.0	-10.3
0.391	17.0	20.1	37.1	48.0	-10.9
1.693	13.5	20.2	33.7	46.0	-12.3
0.872	13.3	20.2	33.5	46.0	-12.5
1.954	11.0	20.3	31.3	46.0	-14.7
0.496	7.6	20.1	27.7	46.1	-18.4
0.272	12.5	20.1	32.6	51.1	-18.5
2.477	5.9	20.4	26.3	46.0	-19.7
6.780	9.5	20.6	30.1	50.0	-19.9
0.402	7.3	20.1	27.4	47.8	-20.4
3.908	4.6	20.5	25.1	46.0	-20.9
4.421	4.4	20.5	24.9	46.0	-21.1
2.881	4.4	20.4	24.8	46.0	-21.2
0.181	11.8	20.2	32.0	54.5	-22.5
0.184	11.6	20.2	31.8	54.3	-22.5
6.267	6.2	20.5	26.7	50.0	-23.3
8.865	6.0	20.7	26.7	50.0	-23.3
28.361	3.7	22.5	26.2	50.0	-23.8
23.994	3.6	21.9	25.5	50.0	-24.5
18.432	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Evaluation

Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-11
Customer:	Becton, Dickinson and Company	Temperature:	24.1°C
Attendees:	Celiflora Palma	Relative Humidity:	52.5%
Customer Project:	None	Bar. Pressure (PMSL):	1012 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	26	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

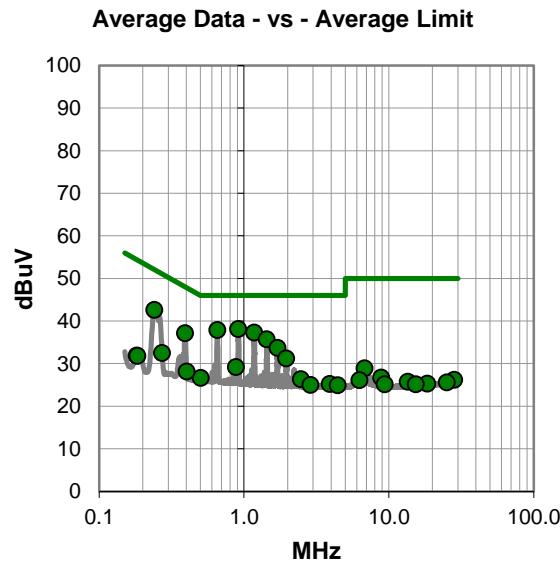
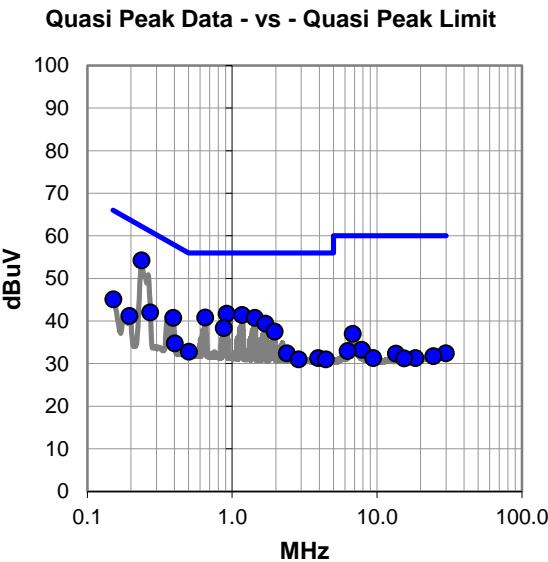
50 Ohm dummy load added to antenna

EUT OPERATING MODES

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #26

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.237	34.1	20.1	54.2	62.2	-8.0
0.916	21.5	20.2	41.7	56.0	-14.3
1.174	21.2	20.2	41.4	56.0	-14.6
0.654	20.6	20.2	40.8	56.0	-15.2
1.436	20.5	20.2	40.7	56.0	-15.3
1.697	19.2	20.2	39.4	56.0	-16.6
0.393	20.6	20.1	40.7	58.0	-17.3
0.878	18.1	20.2	38.3	56.0	-17.7
1.966	17.2	20.3	37.5	56.0	-18.5
0.272	21.9	20.1	42.0	61.1	-19.1
0.152	24.9	20.2	45.1	65.9	-20.8
0.196	21.1	20.1	41.2	63.8	-22.6
6.806	16.4	20.6	37.0	60.0	-23.0
0.402	14.6	20.1	34.7	57.8	-23.1
0.502	12.7	20.1	32.8	56.0	-23.2
2.393	12.0	20.4	32.4	56.0	-23.6
3.934	10.8	20.5	31.3	56.0	-24.7
2.881	10.6	20.4	31.0	56.0	-25.0
4.441	10.5	20.5	31.0	56.0	-25.0
7.855	12.6	20.6	33.2	60.0	-26.8
6.290	12.4	20.5	32.9	60.0	-27.1
29.879	9.9	22.5	32.4	60.0	-27.6
13.560	11.3	21.0	32.3	60.0	-27.7
24.598	9.7	22.0	31.7	60.0	-28.3
9.439	10.5	20.8	31.3	60.0	-28.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.914	17.9	20.2	38.1	46.0	-7.9
0.655	17.7	20.2	37.9	46.0	-8.1
1.175	17.1	20.2	37.3	46.0	-8.7
0.240	22.5	20.1	42.6	52.1	-9.5
1.436	15.5	20.2	35.7	46.0	-10.3
0.393	17.0	20.1	37.1	48.0	-10.9
1.703	13.5	20.2	33.7	46.0	-12.3
1.958	10.9	20.3	31.2	46.0	-14.8
0.882	9.0	20.2	29.2	46.0	-16.8
0.272	12.4	20.1	32.5	51.1	-18.6
0.502	6.5	20.1	26.6	46.0	-19.4
0.402	8.0	20.1	28.1	47.8	-19.7
2.480	5.9	20.4	26.3	46.0	-19.7
3.920	4.7	20.5	25.2	46.0	-20.8
2.881	4.6	20.4	25.0	46.0	-21.0
4.436	4.4	20.5	24.9	46.0	-21.1
6.796	8.3	20.6	28.9	50.0	-21.1
0.182	11.7	20.2	31.9	54.4	-22.5
0.184	11.6	20.2	31.8	54.3	-22.5
8.861	6.0	20.7	26.7	50.0	-23.3
28.300	3.7	22.5	26.2	50.0	-23.8
6.285	5.6	20.5	26.1	50.0	-23.9
13.559	4.7	21.0	25.7	50.0	-24.3
25.114	3.6	22.0	25.6	50.0	-24.4
18.432	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Pass

Tested By

CONDUCTED EMISSIONS



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-11
Customer:	Becton, Dickinson and Company	Temperature:	24.1°C
Attendees:	Celiflora Palma	Relative Humidity:	52.5%
Customer Project:	None	Bar. Pressure (PMSL):	1012 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	27	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

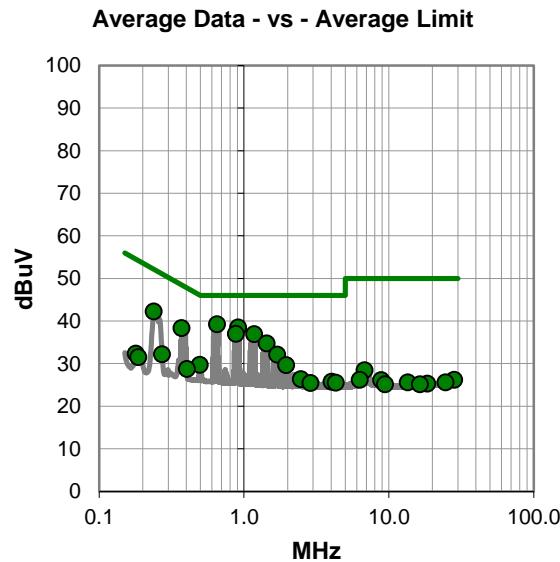
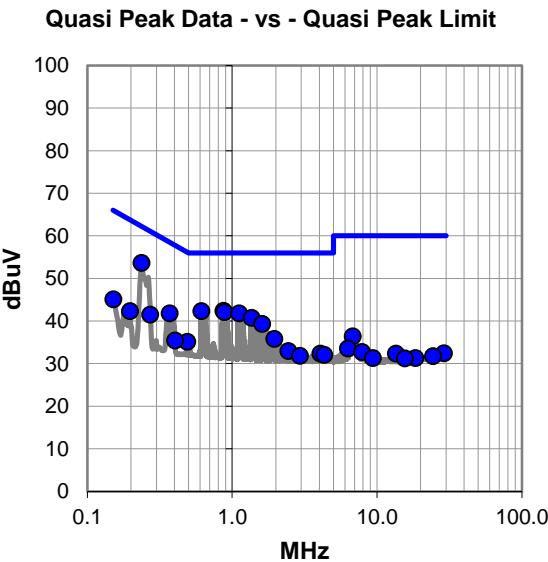
50 Ohm dummy load added to antenna

EUT OPERATING MODES

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None



CONDUCTED EMISSIONS



RESULTS - Run #27

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.237	33.5	20.1	53.6	62.2	-8.6
0.870	22.2	20.2	42.4	56.0	-13.6
0.614	22.1	20.2	42.3	56.0	-13.7
0.884	21.9	20.2	42.1	56.0	-13.9
1.117	21.6	20.2	41.8	56.0	-14.2
1.365	20.5	20.2	40.7	56.0	-15.3
1.616	19.1	20.2	39.3	56.0	-16.7
0.371	21.7	20.1	41.8	58.5	-16.7
0.272	21.4	20.1	41.5	61.1	-19.6
1.954	15.5	20.3	35.8	56.0	-20.2
0.152	24.9	20.2	45.1	65.9	-20.8
0.490	15.0	20.1	35.1	56.2	-21.1
0.197	22.2	20.1	42.3	63.7	-21.4
0.403	15.3	20.1	35.4	57.8	-22.4
2.454	12.5	20.4	32.9	56.0	-23.1
6.795	15.8	20.6	36.4	60.0	-23.6
4.065	11.8	20.5	32.3	56.0	-23.7
4.326	11.5	20.5	32.0	56.0	-24.0
2.948	11.4	20.4	31.8	56.0	-24.2
6.313	13.0	20.5	33.5	60.0	-26.5
7.887	12.0	20.7	32.7	60.0	-27.3
29.003	9.8	22.6	32.4	60.0	-27.6
13.560	11.3	21.0	32.3	60.0	-27.7
24.375	9.7	22.0	31.7	60.0	-28.3
9.401	10.5	20.8	31.3	60.0	-28.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.652	19.0	20.2	39.2	46.0	-6.8
0.914	18.3	20.2	38.5	46.0	-7.5
0.879	16.8	20.2	37.0	46.0	-9.0
1.175	16.7	20.2	36.9	46.0	-9.1
0.238	22.1	20.1	42.2	52.1	-9.9
0.371	18.2	20.1	38.3	48.5	-10.2
1.436	14.5	20.2	34.7	46.0	-11.3
1.697	11.9	20.2	32.1	46.0	-13.9
0.495	9.6	20.1	29.7	46.1	-16.4
1.957	9.3	20.3	29.6	46.0	-16.4
0.272	12.1	20.1	32.2	51.1	-18.9
0.403	8.6	20.1	28.7	47.8	-19.1
2.478	5.9	20.4	26.3	46.0	-19.7
4.041	5.2	20.5	25.7	46.0	-20.3
4.302	5.0	20.5	25.5	46.0	-20.5
2.884	5.0	20.4	25.4	46.0	-20.6
6.795	7.8	20.6	28.4	50.0	-21.6
0.179	12.1	20.2	32.3	54.5	-22.2
0.187	11.3	20.2	31.5	54.2	-22.7
6.294	5.7	20.5	26.2	50.0	-23.8
28.355	3.7	22.5	26.2	50.0	-23.8
8.856	5.4	20.7	26.1	50.0	-23.9
13.560	4.6	21.0	25.6	50.0	-24.4
24.671	3.6	22.0	25.6	50.0	-24.4
18.434	3.9	21.4	25.3	50.0	-24.7

CONCLUSION

Pass

Tested By

EMISSIONS BANDWIDTH (20 DB)



TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

As defined in FCC 15.215 Part (c), intentional radiators must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designed in the rule section under which the equipment is operated.

The 20 dB bandwidth must be contained within the band 13.110-14.010 MHz. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) of the spectrum analyzer was set to the range of 1% to 5% of the emissions bandwidth (EBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto and a peak detector was used.

Per ANSI C63.10a:2024, Clause 6.9.2 b) The nominal IF filter bandwidth shall be within 1-5% of the OBW without going below the values in Clause 6.9.1. In this frequency range (9 kHz – 30 MHz) the minimum RBW is 0.1 kHz.

The spectrum analyzer bandwidth measurement function was used to measure the 20 dB bandwidth.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2025-03-03	2026-03-03
Attenuator	Fairview Microwave	SA18H-20	UAX	2024-07-11	2025-07-11
Cable	Element	None	OC5	2024-10-02	2025-10-02
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR

EMISSIONS BANDWIDTH (20 DB)



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	23°C
Attendees:	Celiflora Palma	Relative Humidity:	58.3%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mbar
Tested By:	Nolan De Ramos	Job Site:	OC13
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

COMMENTS

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

Tested By

TEST RESULTS

	20 dB Emission BW (kHz)	Value (MHz)	Limit (MHz)	Result
13.56 MHz RFID, ISO 14443A/B				
20 dB Emission Bandwidth (Peak Marker)	434	13.560	N/A	N/A
20 dB Emission Bandwidth (Left Marker)	434	13.344	> 13.110	Pass
20 dB Emission Bandwidth (Right Marker)	434	13.778	< 14.010	Pass

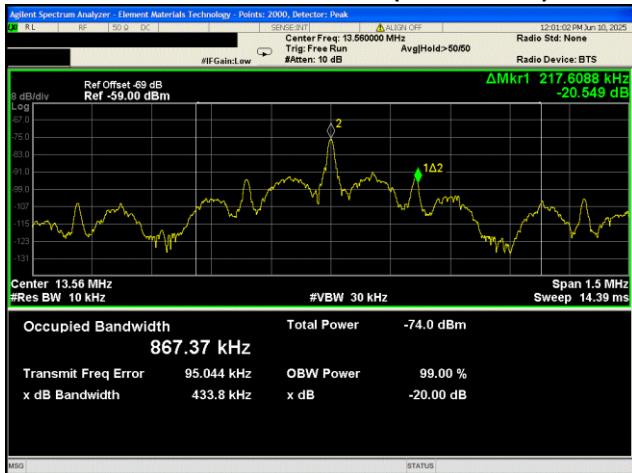
EMISSIONS BANDWIDTH (20 DB)



**13.56 MHz RFID, ISO 14443A/B
20 dB Emission Bandwidth (Peak Marker)**



**13.56 MHz RFID, ISO 14443A/B
20 dB Emission Bandwidth (Left Marker)**



**13.56 MHz RFID, ISO 14443A/B
20 dB Emission Bandwidth (Right Marker)**

FIELD STRENGTH OF FUNDAMENTAL



TEST DESCRIPTION

The fundamental carrier of the EUT was maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Antenna - Loop	EMCO	6502	AZB	2023-09-06	2025-09-06
Cable	Northwest EMC	3kHz - 1GHz RE Cables	OCB	2025-05-01	2026-05-01
Receiver	Rohde & Schwarz	ESCI	ARG	2024-09-19	2025-09-19

FREQUENCY RANGE INVESTIGATED

490 kHz TO 30 MHz

POWER INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

CRDN1144-2

MODES INVESTIGATED

Transmitting RFID 13.56 MHz with HID Card
Transmitting RFID 13.56 MHz without HID Card

FIELD STRENGTH OF FUNDAMENTAL



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-015	Date:	2025-06-09
Customer:	Becton, Dickinson and Company	Temperature:	22.8°C
Attendees:	Celiflora Palma	Relative Humidity:	56.1%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC08
Power:	110VAC/60Hz	Configuration:	CRDN1144-2

TEST PARAMETERS

Run #:	4	Test Distance (m):	10	Ant. Height(s) (m):	1(m)
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COMMENTS

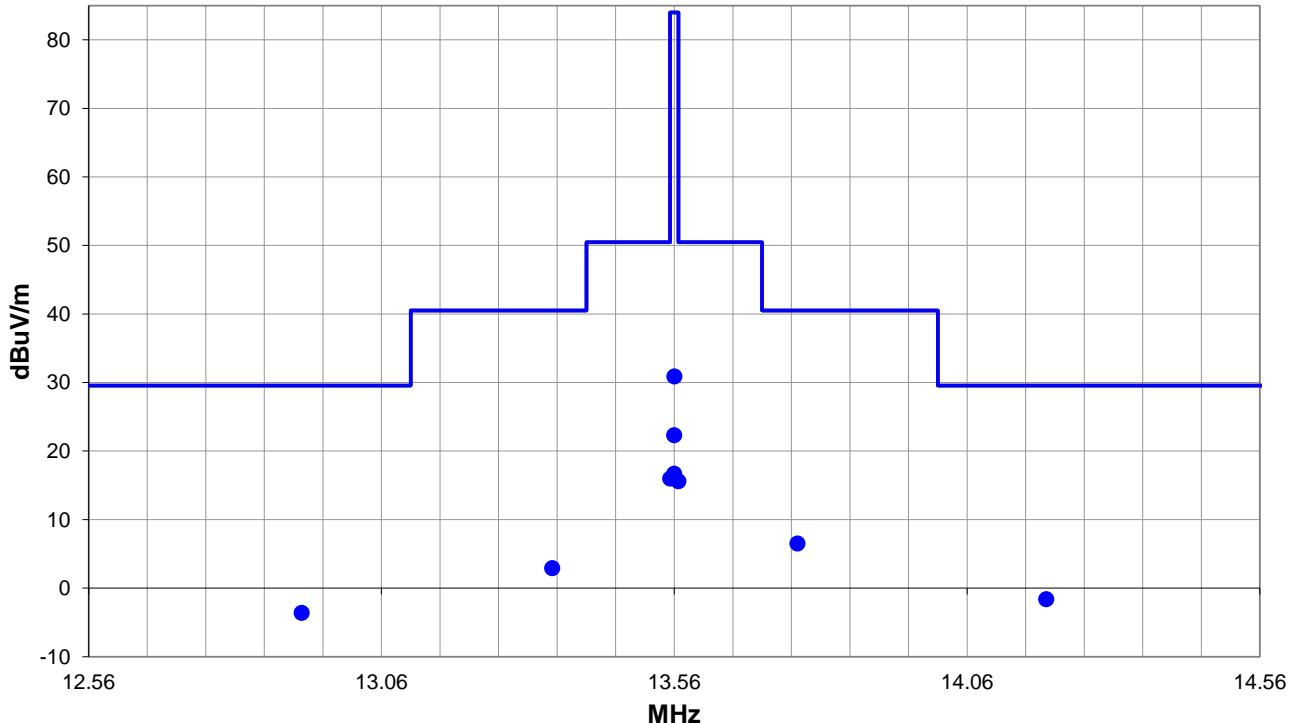
HID Card Reader

EUT OPERATING MODES

Transmitting RFID 13.56 MHz with HID Card

DEVIATIONS FROM TEST STANDARD

None



Run #: 4

■ PK ♦ AV ● QP

FIELD STRENGTH OF FUNDAMENTAL



RESULTS - Run #4

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
14.195	6.5	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.6	29.5	-31.1	Tx 13.56 MHz
12.924	4.5	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	-3.6	29.5	-33.1	Tx 13.56 MHz
13.771	14.6	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	6.5	40.5	-34.0	Tx 13.56 MHz
13.553	24.1	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	16.0	50.5	-34.5	Tx 13.56 MHz
13.567	23.7	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	15.6	50.5	-34.9	Tx 13.56 MHz
13.352	11.0	11.0	0.99	251.0	10.0	0.0	Perp to EUT	QP	-19.1	2.9	40.5	-37.6	Tx 13.56 MHz
13.560	39.0	11.0	0.99	226.0	10.0	0.0	Perp to EUT	QP	-19.1	30.9	84.0	-53.1	Tx 13.56 MHz
13.560	30.4	11.0	0.99	354.0	10.0	0.0	Par to GND	QP	-19.1	22.3	84.0	-61.7	Tx 13.56 MHz
13.560	24.8	11.0	0.99	140.0	10.0	0.0	Par to EUT	QP	-19.1	16.7	84.0	-67.3	Tx 13.56 MHz

CONCLUSION

Pass

Tested By

FIELD STRENGTH OF FUNDAMENTAL



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-015	Date:	2025-06-09
Customer:	Becton, Dickinson and Company	Temperature:	22.8°C
Attendees:	Celiflora Palma	Relative Humidity:	56.1%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC08
Power:	110VAC/60Hz	Configuration:	CRDN1144-2

TEST PARAMETERS

Run #:	6	Test Distance (m):	10	Ant. Height(s) (m):	1(m)
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COMMENTS

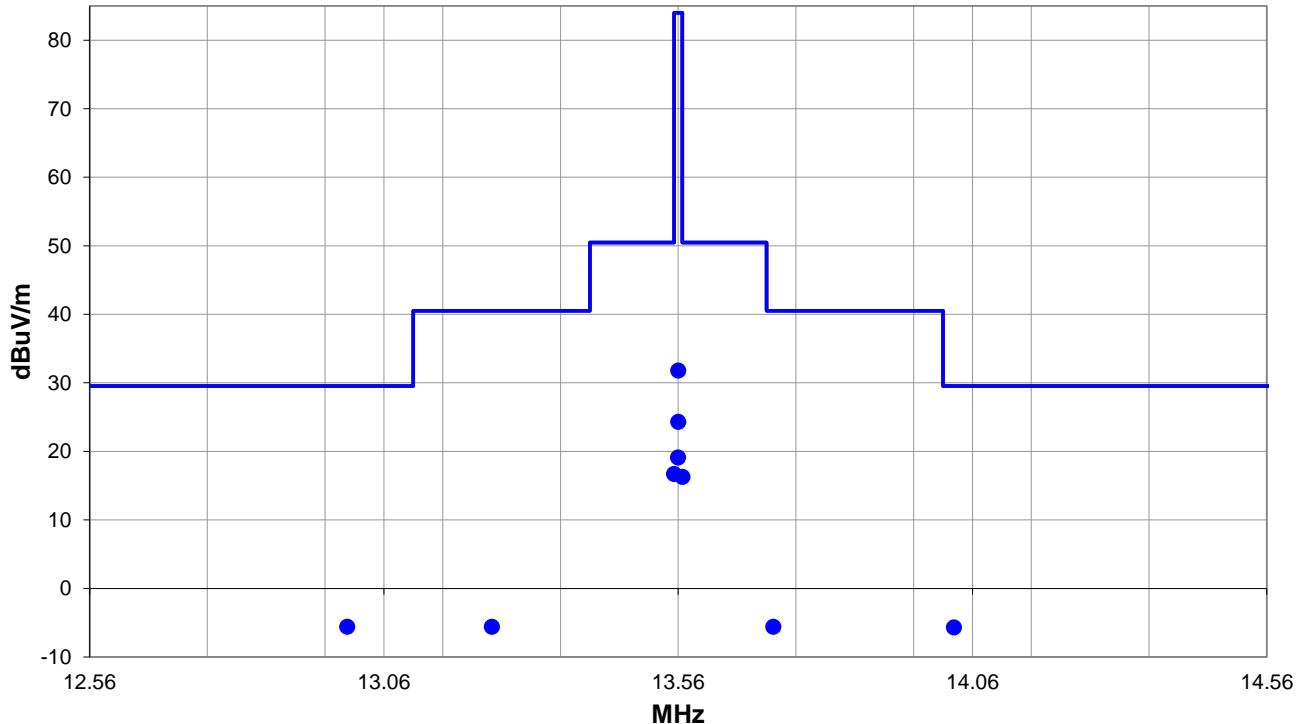
HID Card Reader

EUT OPERATING MODES

Transmitting RFID 13.56 MHz without HID Card

DEVIATIONS FROM TEST STANDARD

None



Run #: 6

■ PK ♦ AV ● QP

FIELD STRENGTH OF FUNDAMENTAL



RESULTS - Run #6

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
13.553	24.8	11.0	1.0	281.0	10.0	0.0	Perp to EUT	QP	-19.1	16.7	50.5	-33.8	Tx 13.56 MHz
13.567	24.4	11.0	1.0	281.0	10.0	0.0	Perp to EUT	QP	-19.1	16.3	50.5	-34.2	Tx 13.56 MHz
12.998	2.5	11.0	1.0	280.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.6	29.5	-35.1	Tx 13.56 MHz
14.028	2.4	11.0	1.0	281.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.7	29.5	-35.2	Tx 13.56 MHz
13.244	2.5	11.0	1.0	281.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.6	40.5	-46.1	Tx 13.56 MHz
13.721	2.5	11.0	1.0	281.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.6	40.5	-46.1	Tx 13.56 MHz
13.560	39.9	11.0	1.0	280.0	10.0	0.0	Perp to EUT	QP	-19.1	31.8	84.0	-52.2	Tx 13.56 MHz
13.560	32.4	11.0	1.0	327.0	10.0	0.0	Par to GND	QP	-19.1	24.3	84.0	-59.7	Tx 13.56 MHz
13.560	27.2	11.0	1.0	166.0	10.0	0.0	Par to EUT	QP	-19.1	19.1	84.0	-64.9	Tx 13.56 MHz

CONCLUSION

Pass

Tested By

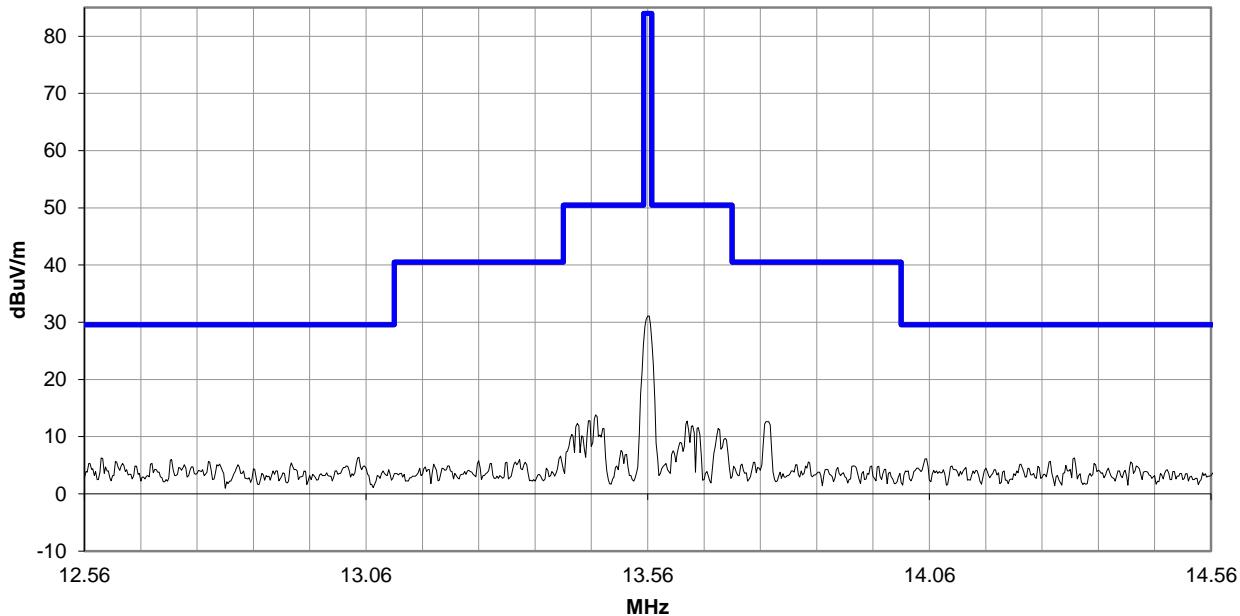
FIELD STRENGTH OF FUNDAMENTAL



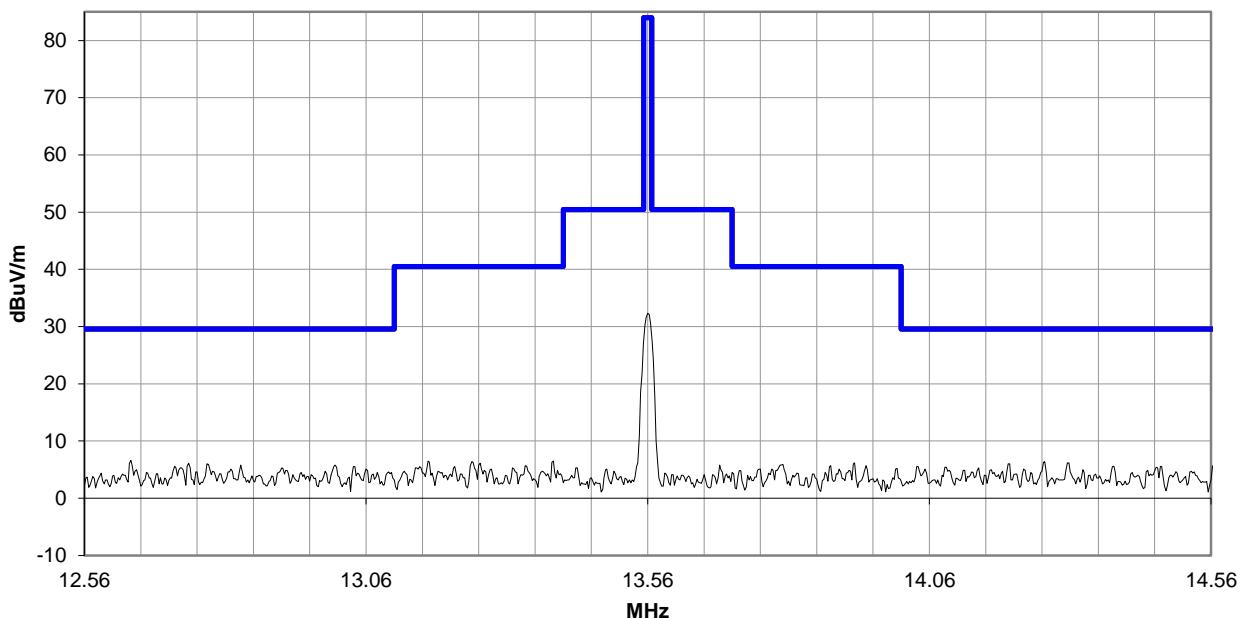
PRESCAN DATA

Radiated spurious emissions from the EUT are initially reviewed with Pre-scans (Preview scans). Pre-scans are performed, with the EUT transmitting on the lowest applicable data rate, for both vertical and horizontal polarizations. The Pre-scan plots below are shown with a peak detector and RBW for the following frequency ranges: 9 kHz RBW (< 30 MHz); 120 kHz RBW (30 - 1000 MHz); 1 MHz RBW (> 1 GHz). In the case where unintentional emissions are observed, an ambient or idle pre-scan with the radio off, will be shown for comparison.

0.49-30 MHz, Run 5 (with HID card)



0.49-30 MHz, Run 6 (without HID card)



FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)



TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. A reference preview scan (pre-scan) is included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). An active loop antenna was used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector

PK = Peak Detector

AV = RMS Detector

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Antenna - Loop	EMCO	6502	AZB	2023-09-06	2025-09-06
Cable	Northwest EMC	3kHz – 1GHz RE Cables	OCB	2025-05-01	2026-05-01
Receiver	Rohde & Schwarz	ESCI	ARG	2024-09-19	2025-09-19

FREQUENCY RANGE INVESTIGATED

9 kHz TO 30 MHz

POWER INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

CRDN1144-2

MODES INVESTIGATED

Transmitting RFID 13.56 MHz with HID Card

Transmitting RFID 13.56 MHz without HID Card

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-015	Date:	2025-06-09
Customer:	Becton, Dickinson and Company	Temperature:	22.8°C
Attendees:	Celiflora Palma	Relative Humidity:	56.1%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC08
Power:	110VAC/60Hz	Configuration:	CRDN1144-2

TEST PARAMETERS

Run #:	7	Test Distance (m):	10	Ant. Height(s) (m):	1(m)
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COMMENTS

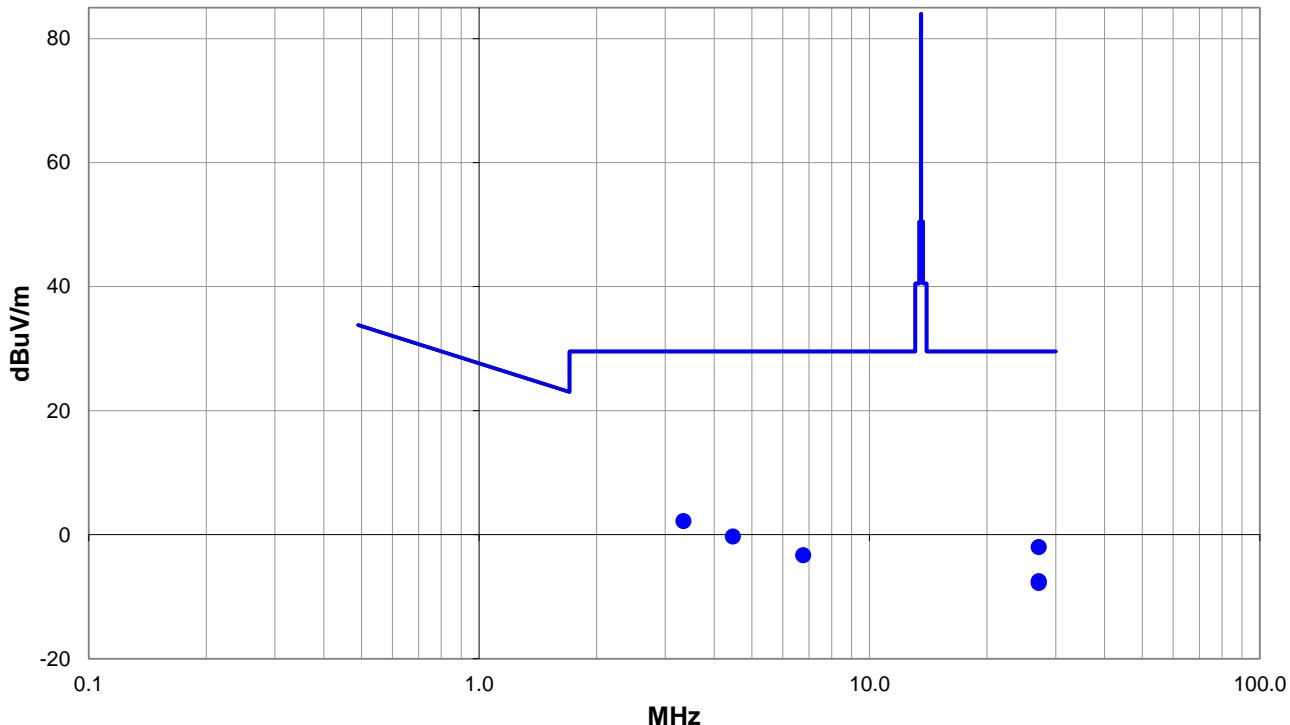
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz without HID Card

DEVIATIONS FROM TEST STANDARD

None



Run #: 7

■ PK ♦ AV ● QP

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)



RESULTS - Run #7

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
3.339	10.9	10.4	1.0	14.0	10.0	0.0	Perp to EUT	QP	-19.1	2.2	29.5	-27.3	Tx 13.56 MHz
4.464	8.3	10.5	1.0	123.0	10.0	0.0	Perp to EUT	QP	-19.1	-0.3	29.5	-29.8	Tx 13.56 MHz
27.121	7.8	9.3	1.0	0.0	10.0	0.0	Perp to EUT	QP	-19.1	-2.0	29.5	-31.5	Tx 13.56 MHz
6.764	5.4	10.4	1.0	360.0	10.0	0.0	Perp to EUT	QP	-19.1	-3.3	29.5	-32.8	Tx 13.56 MHz
27.126	2.3	9.3	1.0	131.0	10.0	0.0	Par to EUT	QP	-19.1	-7.5	29.5	-37.0	Tx 13.56 MHz
27.146	2.0	9.3	1.0	59.0	10.0	0.0	Par to EUT	QP	-19.1	-7.8	29.5	-37.3	Tx 13.56 MHz

CONCLUSION

Pass

Tested By

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-015	Date:	2025-06-09
Customer:	Becton, Dickinson and Company	Temperature:	22.8°C
Attendees:	Celiflora Palma	Relative Humidity:	56.1%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mb
Tested By:	Nolan De Ramos	Job Site:	OC08
Power:	110VAC/60Hz	Configuration:	CRDN1144-2

TEST PARAMETERS

Run #:	8	Test Distance (m):	10	Ant. Height(s) (m):	1(m)
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COMMENTS

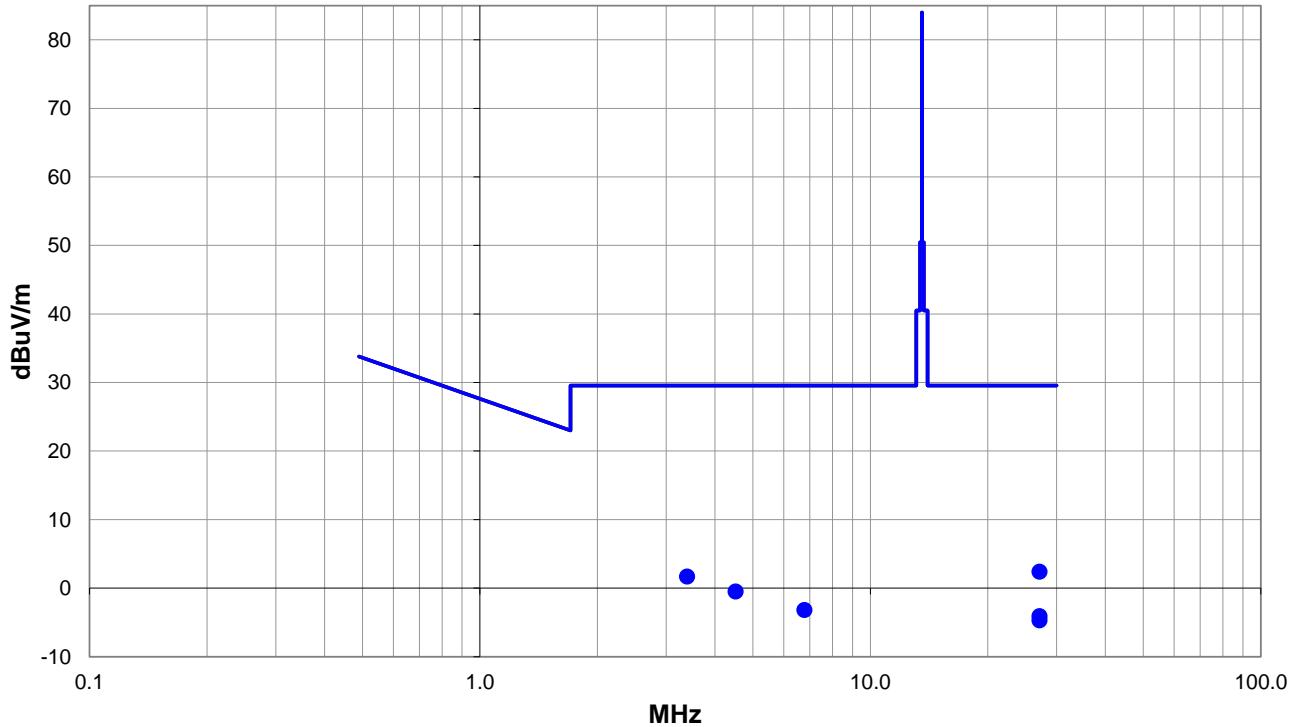
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz with HID Card

DEVIATIONS FROM TEST STANDARD

None



Run #: 8

■ PK ♦ AV ● QP

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)



RESULTS - Run #8

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
27.121	12.2	9.3	1.0	44.0	10.0	0.0	Perp to EUT	QP	-19.1	2.4	29.5	-27.1	Tx 13.56 MHz
3.391	10.4	10.4	1.0	32.0	10.0	0.0	Perp to EUT	QP	-19.1	1.7	29.5	-27.8	Tx 13.56 MHz
4.516	8.1	10.5	1.0	352.0	10.0	0.0	Perp to EUT	QP	-19.1	-0.5	29.5	-30.0	Tx 13.56 MHz
6.776	5.5	10.4	1.0	28.0	10.0	0.0	Perp to EUT	QP	-19.1	-3.2	29.5	-32.7	Tx 13.56 MHz
27.121	5.7	9.3	1.0	0.0	10.0	0.0	Par to GND	QP	-19.1	-4.1	29.5	-33.6	Tx 13.56 MHz
27.121	5.1	9.3	1.0	361.0	10.0	0.0	Par to EUT	QP	-19.1	-4.7	29.5	-34.2	Tx 13.56 MHz

CONCLUSION

Pass

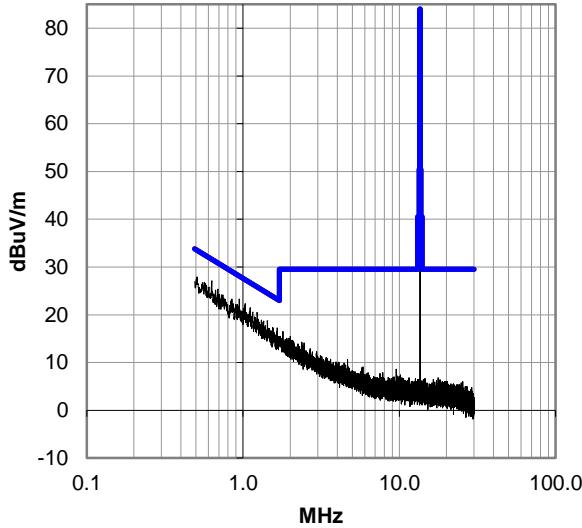
Tested By

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHz)

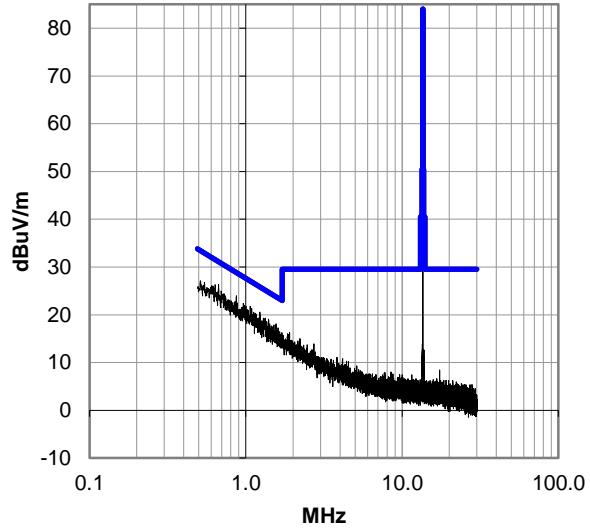
PRESCAN DATA

Radiated spurious emissions from the EUT are initially reviewed with Pre-scans (Preview scans). Pre-scans are performed, with the EUT transmitting on the lowest applicable data rate, for both vertical and horizontal polarizations. The Pre-scan plots below are shown with a peak detector and RBW for the following frequency ranges: 9 kHz RBW (< 30 MHz); 120 kHz RBW (30 - 1000 MHz); 1 MHz RBW (> 1 GHz). In the case where unintentional emissions are observed, an ambient or idle pre-scan with the radio off, will be shown for comparison.

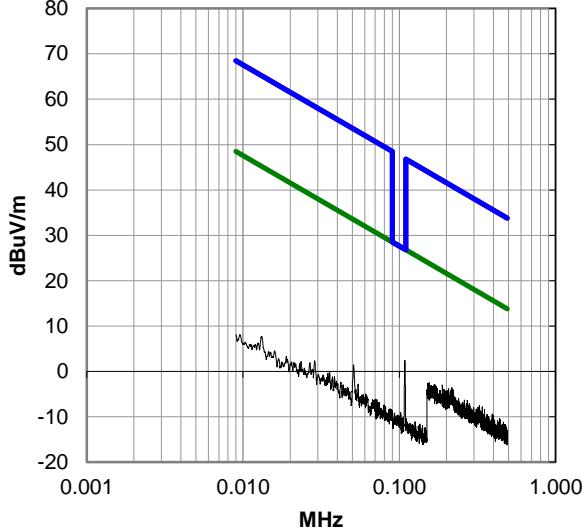
0.49-30 MHz, Run 6 (without HID card)



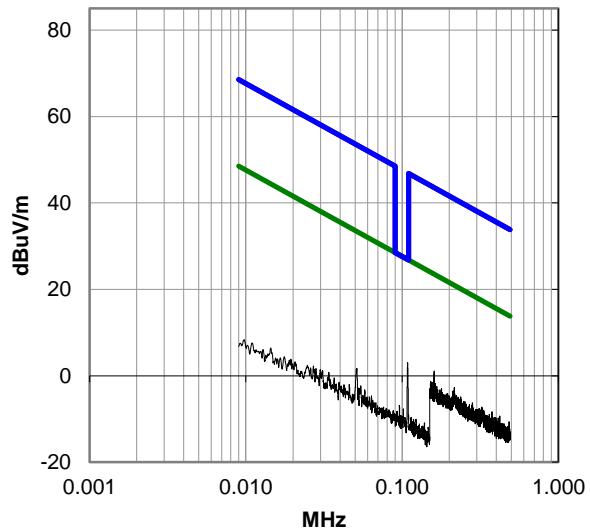
0.49-30 MHz, Run 8 (with HID card)



0.009-0.49 MHz, Run 5 (with HID card)



0.009-0.49 MHz, Run 6 (without HID card)



FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)



TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting while set at the operating channel.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These "pre-scans" are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector

PK = Peak Detector

AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Antenna - Double Ridge	ETS Lindgren	3115	AIR	2024-07-23	2026-07-23
Cable	Northwest EMC	1-8GHz RE Cables	OCJ	2025-04-30	2026-04-30
Amplifier - Pre-Amplifier	Cernex	CBL01084020-xx	PAX	2025-04-30	2026-04-30
Antenna - Standard Gain	ETS Lindgren	3160-07	AHR	2024-12-03	2025-12-03
Cable	Northwest EMC	8-18GHz RE Cables	OCO	2025-03-18	2026-03-18
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOE	2025-03-18	2026-03-18
Antenna - Standard Gain	ETS Lindgren	3160-08	AHT	2024-12-03	2025-12-03
Amplifier - Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AOF	2025-03-18	2026-03-18
Antenna - Biconilog	Teseq	CBL 6141A	AYE	2023-08-08	2025-08-08
Cable	Northwest EMC	10kHz-1GHz RE Cables	OCH	2025-05-01	2026-05-01
Amplifier - Pre-Amplifier	Miteq	AM-1402	AOZ	2025-05-01	2026-05-01
Filter - Low Pass	Micro-Tronics	LPM50004	LFT	2024-12-17	2025-12-17
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2025-03-03	2026-03-03

FREQUENCY RANGE INVESTIGATED

30 MHz TO 18 GHz

POWER INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

CRDN1144-4

MODES INVESTIGATED

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHz)



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-12
Customer:	Becton, Dickinson and Company	Temperature:	22.6°C
Attendees:	Celiflora Palma	Relative Humidity:	53.2%
Customer Project:	None	Bar. Pressure (PMSL):	1011 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	67	Test Distance (m):	3	Ant. Height(s) (m):	1 to 4(m)
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COMMENTS

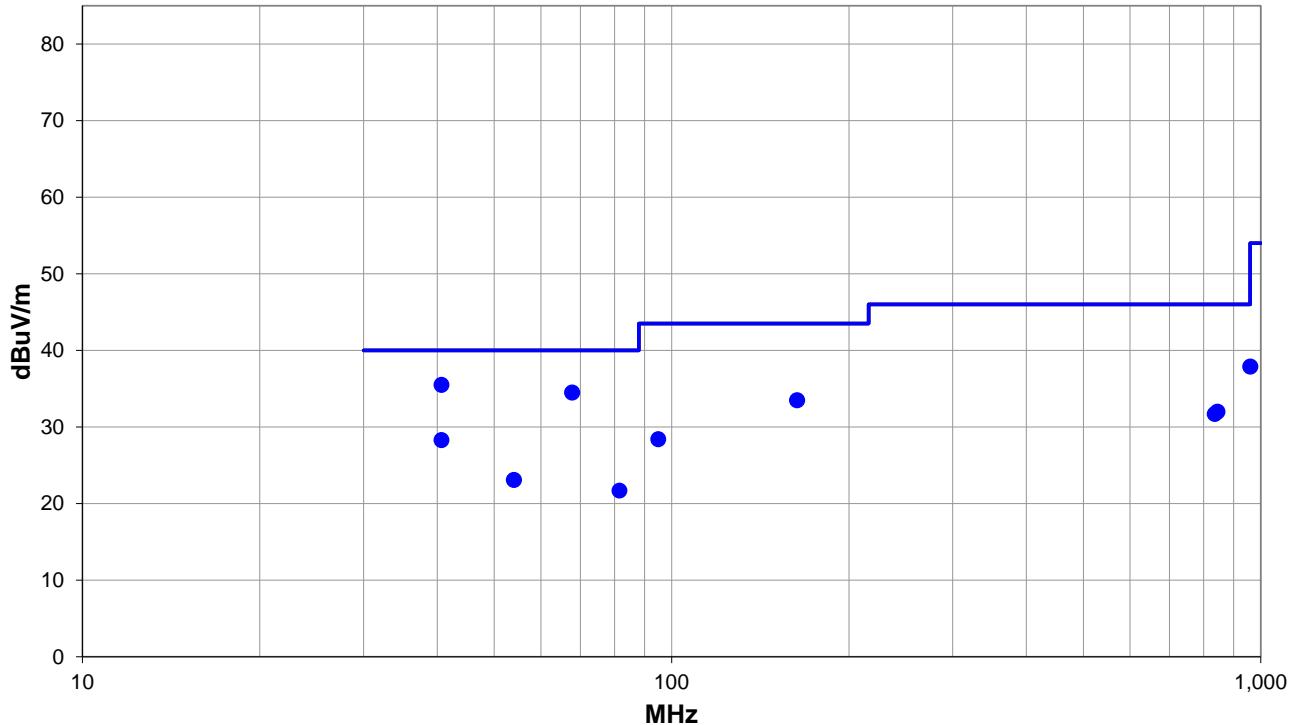
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None



Run #: 67

■ PK ♦ AV ● QP

FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)



RESULTS - Run #67

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
40.681	27.7	7.8	1.0	117.0	3.0	0.0	Vert	QP	0.0	35.5	40.0	-4.5	Tx 13.56 MHz
67.795	36.7	-2.2	1.0	70.0	3.0	0.0	Vert	QP	0.0	34.5	40.0	-5.5	Tx 13.56 MHz
959.998	17.8	20.1	2.52	96.0	3.0	0.0	Vert	QP	0.0	37.9	46.0	-8.1	Tx 13.56 MHz
163.321	31.8	1.7	1.0	354.0	3.0	0.0	Vert	QP	0.0	33.5	43.5	-10.0	Tx 13.56 MHz
40.681	20.5	7.8	3.12	70.0	3.0	0.0	Horz	QP	0.0	28.3	40.0	-11.7	Tx 13.56 MHz
844.203	15.0	17.0	1.38	174.0	3.0	0.0	Vert	QP	0.0	32.0	46.0	-14.0	Tx 13.56 MHz
835.610	15.0	16.7	2.0	258.0	3.0	0.0	Vert	QP	0.0	31.7	46.0	-14.3	Tx 13.56 MHz
94.914	29.2	-0.8	1.0	353.0	3.0	0.0	Vert	QP	0.0	28.4	43.5	-15.1	Tx 13.56 MHz
53.993	21.5	1.6	1.0	64.0	3.0	0.0	Vert	QP	0.0	23.1	40.0	-16.9	Tx 13.56 MHz
81.556	24.1	-2.4	1.0	356.0	3.0	0.0	Vert	QP	0.0	21.7	40.0	-18.3	Tx 13.56 MHz

CONCLUSION

Pass

Tested By

FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHz)



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-12
Customer:	Becton, Dickinson and Company	Temperature:	22.6°C
Attendees:	Celiflora Palma	Relative Humidity:	53.2%
Customer Project:	None	Bar. Pressure (PMSL):	1011 mb
Tested By:	Nolan De Ramos	Job Site:	OC06
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

TEST PARAMETERS

Run #:	73	Test Distance (m):	3	Ant. Height(s) (m):	1 to 4(m)
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COMMENTS

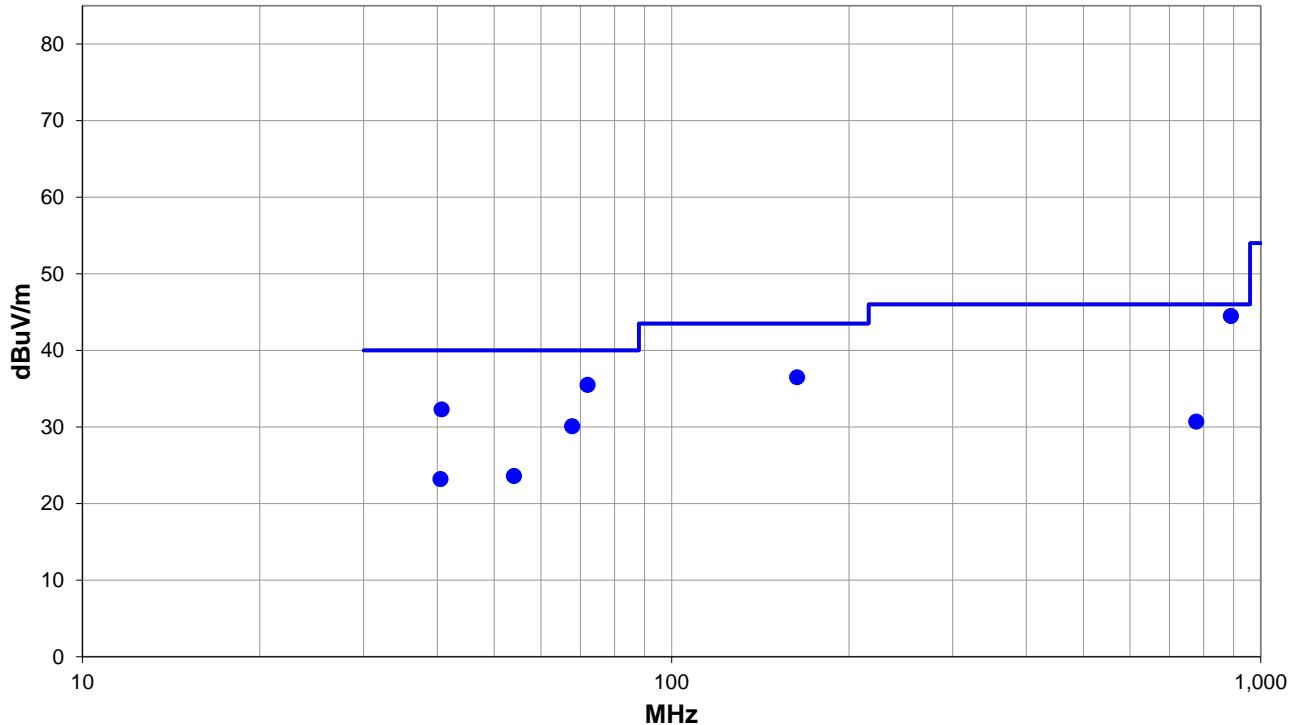
None

EUT OPERATING MODES

Transmitting RFID 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None



Run #: 73

■ PK ♦ AV ● QP

FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)



RESULTS - Run #73

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
890.106	27.1	17.4	1.0	60.0	3.0	0.0	Vert	QP	0.0	44.5	46.0	-1.5	Tx 13.56 MHz
72.005	38.1	-2.6	1.0	65.0	3.0	0.0	Vert	QP	0.0	35.5	40.0	-4.5	Tx 13.56 MHz
163.306	34.8	1.7	2.8	232.0	3.0	0.0	Vert	QP	0.0	36.5	43.5	-7.0	Tx 13.56 MHz
40.684	24.5	7.8	1.55	51.0	3.0	0.0	Vert	QP	0.0	32.3	40.0	-7.7	Tx 13.56 MHz
67.803	32.3	-2.2	1.0	92.0	3.0	0.0	Vert	QP	0.0	30.1	40.0	-9.9	Tx 13.56 MHz
777.529	15.1	15.6	3.37	354.0	3.0	0.0	Horz	QP	0.0	30.7	46.0	-15.3	Tx 13.56 MHz
53.998	22.0	1.6	1.04	43.0	3.0	0.0	Vert	QP	0.0	23.6	40.0	-16.4	Tx 13.56 MHz
40.516	15.3	7.9	1.44	155.0	3.0	0.0	Horz	QP	0.0	23.2	40.0	-16.8	Tx 13.56 MHz

CONCLUSION

Pass

Tested By

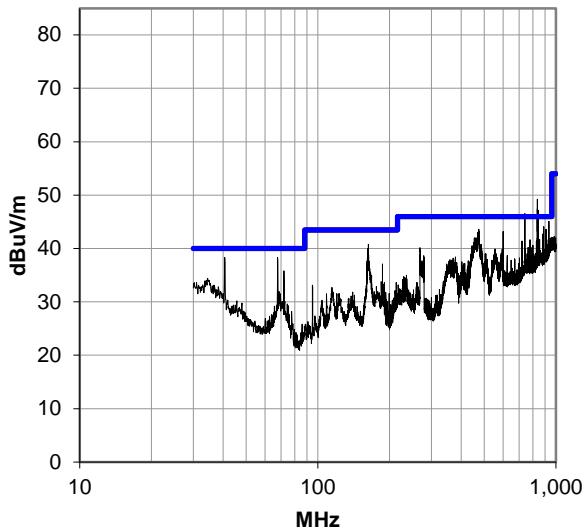
FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)



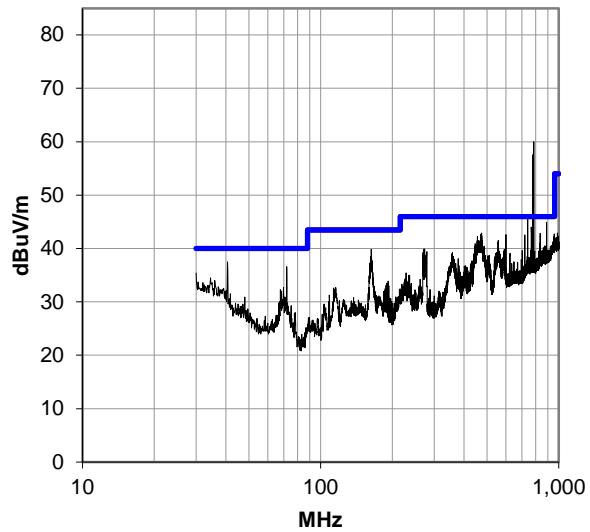
PRESCAN DATA

Radiated spurious emissions from the EUT are initially reviewed with Pre-scans (Preview scans). Pre-scans are performed, with the EUT transmitting on the lowest applicable data rate, for both vertical and horizontal polarizations. The Pre-scan plots below are shown with a peak detector and RBW for the following frequency ranges: 9 kHz RBW (< 30 MHz); 120 kHz RBW (30 - 1000 MHz); 1 MHz RBW (> 1 GHz). In the case where unintentional emissions are observed, an ambient or idle pre-scan with the radio off, will be shown for comparison.

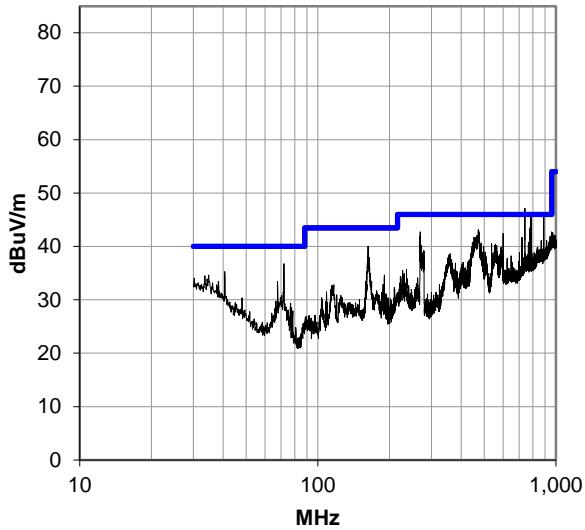
30-1000 MHz, Run 67 (with HID card)



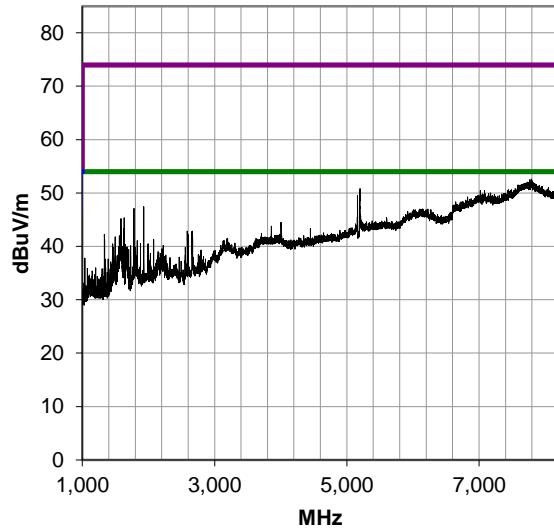
30-1000 MHz, Run 72 (without HID Card)



30-1000 MHz, Run 74 (Radio OFF)



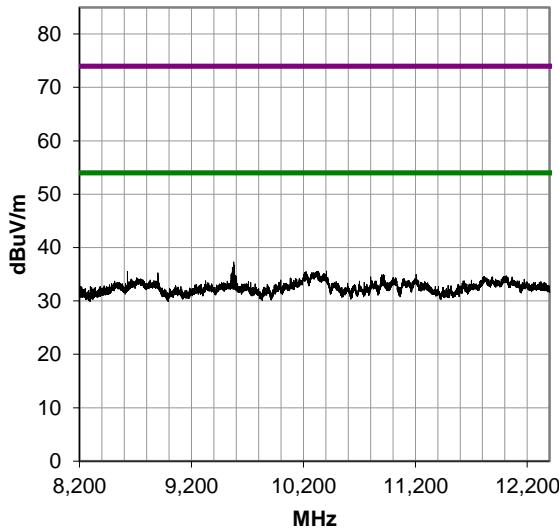
1000-8200 MHz, Run 73 (with HID Card)



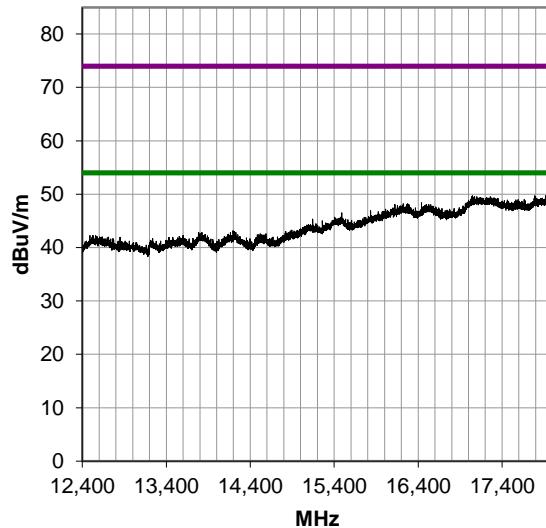
FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHz)



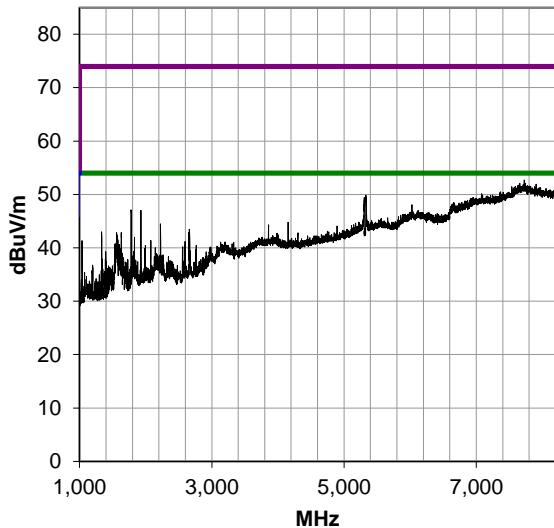
8200-12400 MHz, Run 74 (with HID Card)



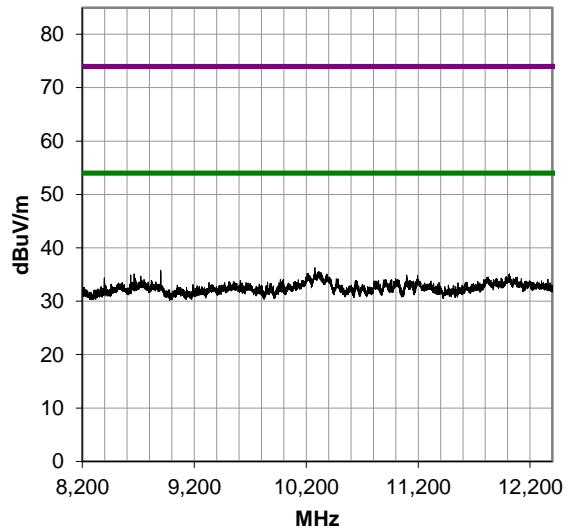
12400-18000 MHz, Run 75 (with HID Card)



1000-8200 MHz, Run 76 (without HID Card)



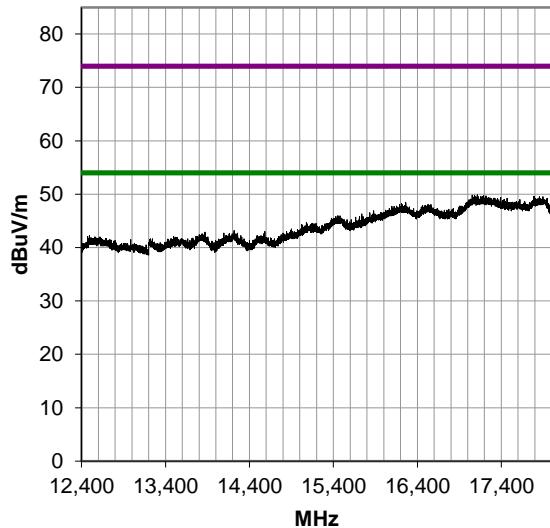
8200-12400 MHz, Run 77 (without HID Card)



FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)



12400-18000 MHz, Run 78(without HID Card)



FREQUENCY STABILITY



TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

Measurements were made on the single transmit frequency as called out on the data sheets. Testing was done while the EUT was continuously polling.

The primary supply voltage was varied from 85 % to 115% of the nominal voltage while at ambient temperature. Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range of -20 ° to +50° C and at 10°C intervals.

The requirement of a frequency tolerance of $\pm 0.01\%$ is equivalent to 100 ppm
The formula to check for compliance is:

$$\text{ppm} = (\text{Measured Frequency} / \text{Measured Nominal Frequency} - 1) * 1,000,000$$

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2025-03-03	2026-03-03
Attenuator	Fairview Microwave	SA18H-20	UAX	2024-07-11	2025-07-11
Cable	Element	None	OC5	2024-10-02	2025-10-02
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR
Chamber - Temperature/Humidity	Cincinnati Sub Zero (CSZ)	ZPHS-32-3.5-SCT/AC	TBE	NCR	NCR
Data Logger	Extech Instruments	SD700	SLE	2025-03-03	2026-03-03

FREQUENCY STABILITY



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-09
Customer:	Becton, Dickinson and Company	Temperature:	22.3°C
Attendees:	Celiflora Palma	Relative Humidity:	56.6%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mbar
Tested By:	Nolan De Ramos	Job Site:	OC13
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

COMMENTS

Transmitting 13.56 MHz CW via HID Card Reader without HID card

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

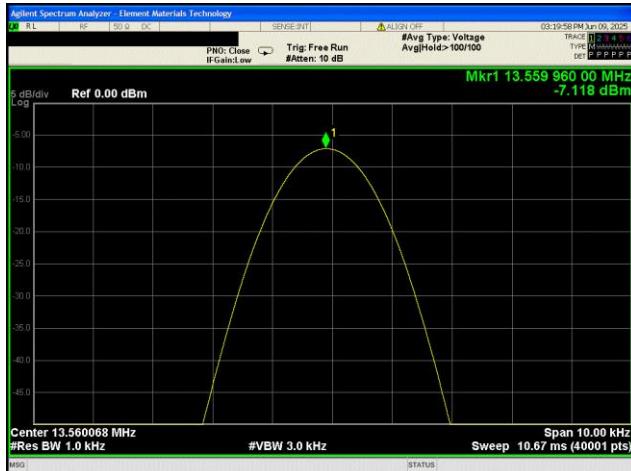
Pass

Tested By

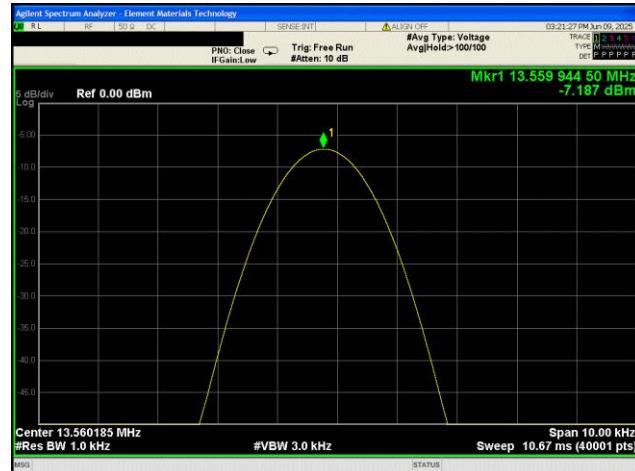
TEST RESULTS

	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
13.56 MHz RFID, ISO 14443A/B					
Normal Conditions	13.55996000	13.55996	0.00	100	Pass
Extreme Voltage 115%	13.55994450	13.55996	1.14	100	Pass
Extreme Voltage 85%	13.55994050	13.55996	1.44	100	Pass
Extreme Temperature +50°C	13.55985900	13.55996	7.45	100	Pass
Extreme Temperature +40°C	13.55987875	13.55996	5.99	100	Pass
Extreme Temperature +30°C	13.55992275	13.55996	2.75	100	Pass
Extreme Temperature +20°C	13.55999175	13.55996	2.34	100	Pass
Extreme Temperature +10°C	13.56003100	13.55996	5.24	100	Pass
Extreme Temperature +0°C	13.56007375	13.55996	8.39	100	Pass
Extreme Temperature -10°C	13.56009950	13.55996	10.29	100	Pass
Extreme Temperature -20°C	13.56010525	13.55996	10.71	100	Pass

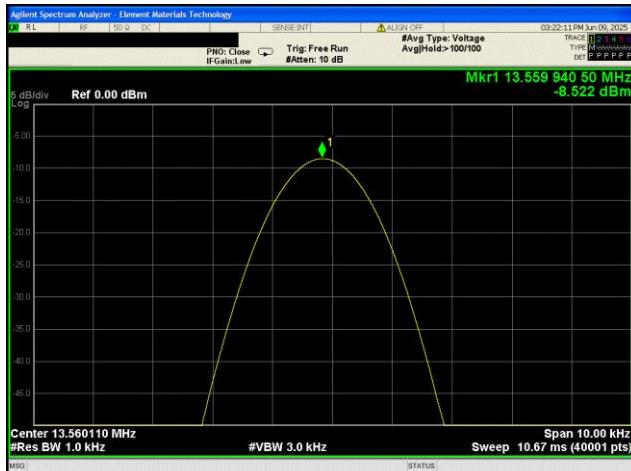
FREQUENCY STABILITY



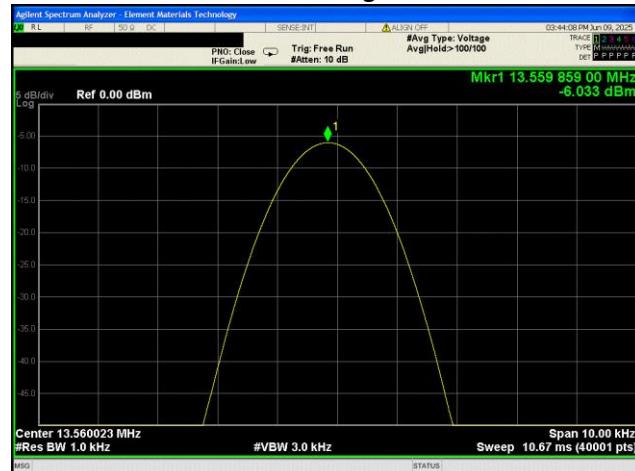
**13.56 MHz RFID, ISO 14443A/B
Normal Conditions**



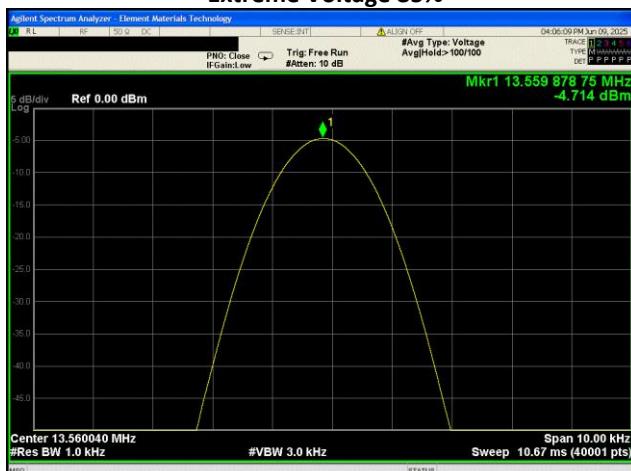
**13.56 MHz RFID, ISO 14443A/B
Extreme Voltage 115%**



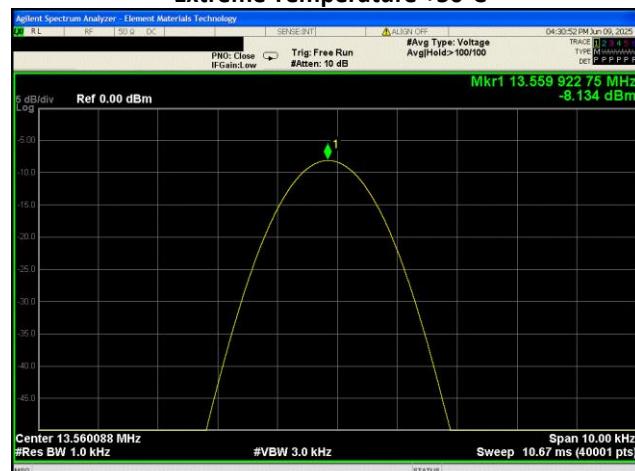
**13.56 MHz RFID, ISO 14443A/B
Extreme Voltage 85%**



**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +50°C**

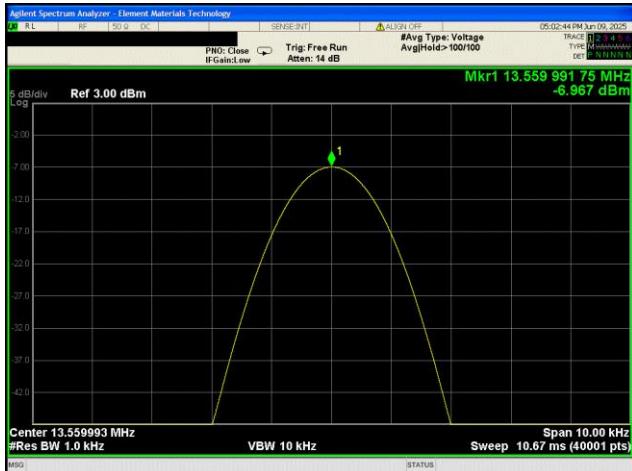


**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +40°C**

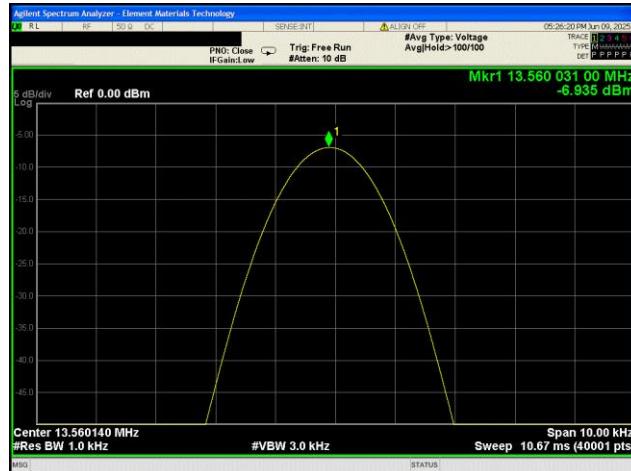


**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +30°C**

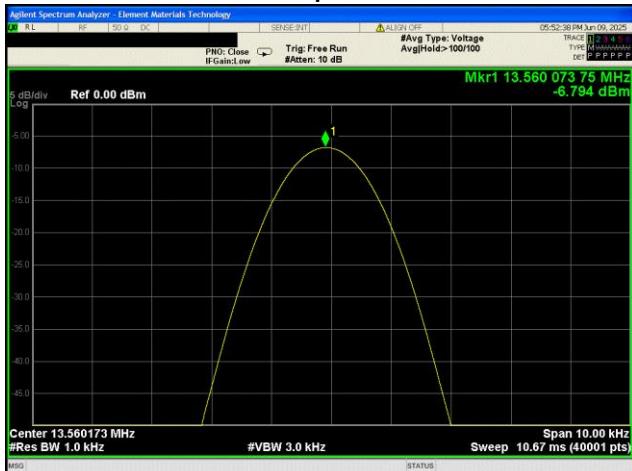
FREQUENCY STABILITY



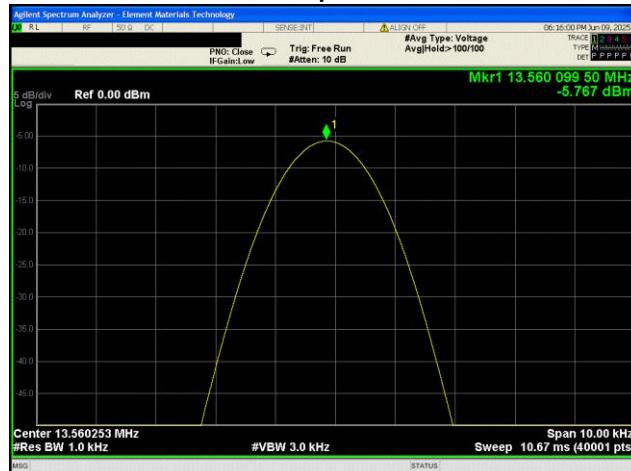
**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +20°C**



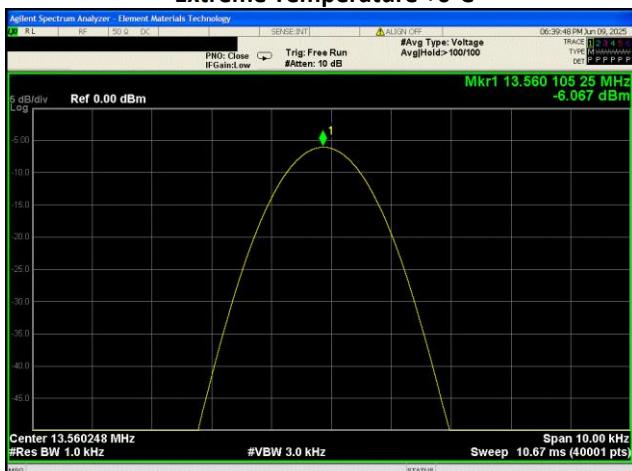
**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +10°C**



**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature +0°C**



**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature -10°C**



**13.56 MHz RFID, ISO 14443A/B
Extreme Temperature -20°C**

OCCUPIED BANDWIDTH



TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth as defined in RSS-Gen.

The 99% occupied bandwidth was measured with the EUT configured for continuous modulated operation.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) of the spectrum analyzer was set to the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto to prevent video filtering or averaging. A sample detector was used unless the device was not able to be operated in a continuous transmit mode, in which case a peak detector was used.

The spectrum analyzer occupied bandwidth measurement function was used to sum the power of the transmission in linear terms to obtain the 99% bandwidth.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2025-03-03	2026-03-03
Attenuator	Fairview Microwave	SA18H-20	UAX	2024-07-11	2025-07-11
Cable	Element	None	OC5	2024-10-02	2025-10-02
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR

OCCUPIED BANDWIDTH



EUT:	Pyxis Pro	Work Order:	CRDN1144
Serial Number:	6DM-034	Date:	2025-06-10
Customer:	Becton, Dickinson and Company	Temperature:	22.7°C
Attendees:	Celiflora Palma	Relative Humidity:	57.9%
Customer Project:	None	Bar. Pressure (PMSL):	1014 mbar
Tested By:	Nolan De Ramos	Job Site:	OC13
Power:	110VAC/60Hz	Configuration:	CRDN1144-4

COMMENTS

Transmitting RFID 13.56 MHz via HID Card Reader with HID card

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

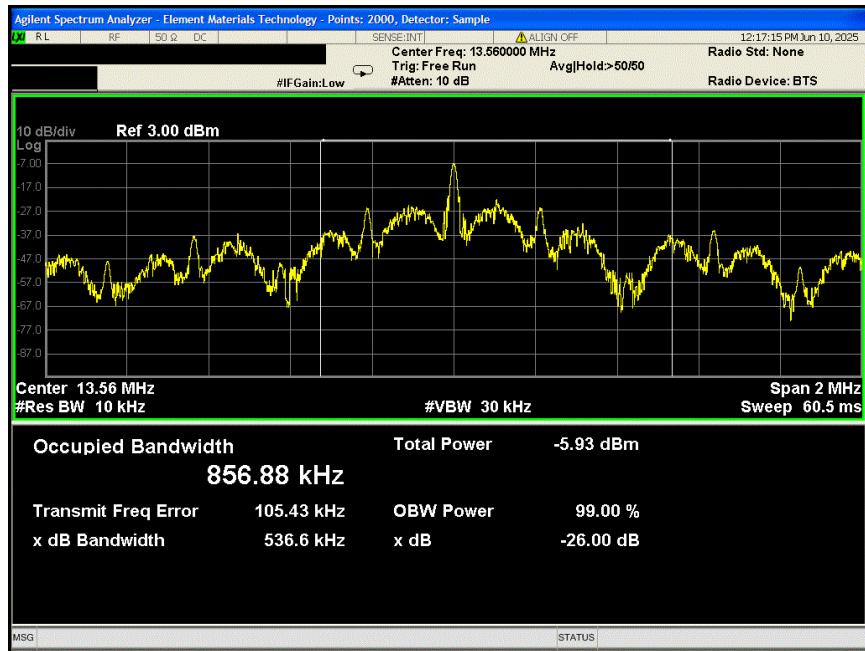
N/A

Tested By

TEST RESULTS

	Value	Limit	Result
13.56 MHz RFID, ISO 14443A/B	Normal Conditions 856.88 kHz	N/A	N/A

OCCUPIED BANDWIDTH



13.56 MHz RFID, ISO/IEC 14443

Normal Conditions

End of Test Report