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Report of Measurements
FCC Part 15, Subpart C, Section 15.223

On

Antenna Pedestal
Model Numbers Used for Testing: NP12 PRI/PAB, NP12 SAB

FCC ID: DO4NEO2PS

Customer Name:	Checkpoint Systems, Inc.
Customer P.O:	1101200342
Date of Report Rev.:	September 25, 2023
Test Report No:	R-3728P-2, Rev. B
Test Start Date:	June 12, 2023
Test Finish Date:	June 16, 2023

Certification and Signatures We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.

Richard J. Reitz Director of Engineering iNARTE Electromagnetic Compatibility Engineer EMC-050739-E	Scott Wentworth Branch Manager

Non-Warranty Provision
The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement
This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by ANAB or any agency of the U.S. Government.

Table of Contents

Revision History

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document.

Revision	Date	Pages Affected
-	August 22, 2023	Original Release
A	September 11, 2023	Global Changes: • Report No. R-3728P-2 changed to R-3728P-2, Rev. A • Removed Models: NP12 PRI/PAB/SAB RF ANT FRAME and LOWER BASE from report and test data
B	September 25, 2023	Global Changes: • Report No. R-3728P-2, Rev. A changed to R-3728P-2, Rev. B 1, 4: • Changed Model Numbers to Model Numbers Tested 5: • Added title *Model Variants* to the product family

Technical Information

Report Number:	R-3728P-2, Rev. B
Applicant:	Checkpoint Systems, Inc.
Address:	101 Wolf Drive
	Thorofare, New Jersey 08086
Manufacturer:	Checkpoint Systems, Inc.
Manufacturer Address:	Checkpoint System (Jiangsu) Co Ltd
	Haian Economic & Technical Development Zone
	No. 15 (East) Nan Hai Road
	Nantong Jiangsu, China
FRN:	0004326823
Test Sample:	Antenna Pedestal
Model Numbers Tested:	NP12 PRI/PAB, NP12 SAB
FCC ID:	DO4NEO2PS
Power Requirements:	120 VAC, 60 Hz
Frequency of Operation:	7.975, 8.125, 8.275, and 8.425 MHz
Equipment Class:	FAP
Equipment Use:	Fixed – Theft Deterrent System

Test Specification:
FCC Rules and Regulations Part 15, Subpart C, Section 15.223

Test Procedure:
ANSI C63.4:2014
ANSI C63.10:2013

Test Facility:
Retlif Testing Laboratories
3131 Detwiler Road
Harleysville, PA 19438

FCC Accreditation Designation Number: US2321

Tests Performed

The test methods performed on the Antenna Pedestal are shown in Table 1 below:

Table 1 – Test Methods

FCC Part 15, Subpart C	Test Method	Results
15.203	Antenna Requirements	Complied
15.207 (a)	Conducted Emissions	Complied
15.223 (a)	6 dB and 99% Bandwidth	Complied
15.223 (a)	Fundamental Field Strength	Complied
15.223 (b)	Field Strength of Harmonics and Spurious outside of band	Complied

Model Variants:
The Antenna Pedestal tested was provided as worst case configuration in accordance with Checkpoint Systems, Inc. The Neo v2.0 PAB/SAB family consists of the following versions:

- NP12 PRI/PAB
- NP12 SAB
- NP22 PRI/PAB
- NP22 SAB
- NG12 PRI/PAB RF PED
- NG12 SAB RF PED

All test methods listed above are included in Retlif Testing Laboratories ANSI National Accreditation Board (ANAB), ISO/IEC 17025 Scope of Accreditation, Certificate Number: L2320.02.

General Test Information

Part 15.31 Measurement Standards

- Testing was performed using the procedures specified in ANSI C63.10:2013 in accordance with 15.31(a)(3).
- Testing was performed with the transmitter continuously transmitting at the selected frequency in accordance with 15.31(c).
- Field strength measurements were made on an Open Area Test Site in accordance with 15.31(d).
- Field strength measurements were made at a distance closer than specified in the regulations. The results were extrapolated to the specified test distance by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

  Sample Calculation:
  - Extrapolation Factor (dB) = 40 Log (D_{Meas} / D_{Spec})

  Where:
  - D_{Meas} = Distance at which measurements were performed (10 Meters)
  - D_{Spec} = Distance at which the limit is specified (30 Meters)

  - Extrapolation Factor (dB) = 40 Log (10 / 30)
    = 40 Log (0.333)
    = 40 * -0.477
    = - 19.09

- The Device under test was positioned and adjusted to maximize the level of emissions in accordance with 15.31(g).
- The test sample operates at one discrete frequency under Part 15. All testing outlined herein was performed with the device under test operating at 120 VAC, 60 Hz.

Part 15.33 Frequency range of radiated measurements

- The radio frequency spectrum was investigated from 9 kHz to the 10th harmonic of the highest fundamental frequency as specified in 15.33(a)(1). In addition, the digital aspects of the device were evaluated under 15.109, over the frequency range of 30 MHz to 1 GHz. These results are contained with Retlif Testing Laboratories Report R-3728P-1.

Part 15.35 Measurement detector function and bandwidths

- On frequencies below or equal to 1000 MHz, measurements were made utilizing either a peak or quasi-peak detector and associated bandwidths with the exception of measurements in the frequency bands of 9 to 90 kHz and 110 to 490 kHz in which an average detector was utilized.

General Requirements FCC

Spectrum Analyzer Desensitization Considerations

Due to the nature of the emissions being measured, a pulse desensitization calculation was utilized in order to provide accurate peak measurements. The following formula was utilized:

τ_{eff} = Minimum Pulse Width = 4.08 µS

K = 1.5

B = Bandwidth utilized for measurement = 10 kHz

$$Pulse\ Desensitization\ Factor\ (dB) = \ 20\log_{10}\tau_{eff}\ \times K \times B$$

$$Pulse\ Desensitization\ Factor\ (dB) = \ 20\log_{10} 4.08\mu S \times 1.5 \times 10kHz$$

$$Pulse\ Desensitization\ Factor\ (dB) = \ 24.437$$

Duty Cycle Correction for Average Reading

In accordance with ANSI C63.10 Paragraph 7.5, the below equation was utilized in order to determine the Average value of a pulsed emission:

Transmitter On Time = 0.261 milliseconds (maximum per cycle)

Transmitter Cycle Time = 9.46 milliseconds (100 ms maximum)

Transmitter Duty Cycle = 2.76 %

CALCULATION

64 pulses of 4.08 µs = 261 µs

Duty Cycle (0.261/9.46) = 2.76 %

Correction Factor =20 log (0.0276) = -31.18 dB

Requirements and Test Results

FCC Part 15.203, Antenna Requirements

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

- Results:
  In accordance with Checkpoint Systems, Inc the antenna is permanently installed.

Requirements and Test Results

FCC Part 15.207(a), Conducted Emissions

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits shown in Table 2, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of the paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Table 2 - Conducted Emission Limits

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-Peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50
*Decreases due to logarithm of the frequency		

- Results:
  The conducted emissions observed did not exceed the limits specified in Table 2.

Equipment List:

EN	Manufacturer	Model No.	Description	Serial No.	Due Date
8079	ROHDE &	ESH3	RECEIVER, EMI, 9 kHz - 30 MHz	861742/012	6/30/2023
8366A	RETLIF	20' BNC	CABLE, COAXIAL, 10 KHz - 1 GHz	n/a	5/31/2024
8496	NARDA MICROWAVE	768-10	ATTENUATOR, COAXIAL, 10 dB, DC - 11 GHz, 20 W	04105	6/30/2023
8633	SOLAR ELECTRONICS	21106-50-BP-25-BNC	LISN, 50 uH, 150 kHz - 30 MHz	21106141201	9/30/2023
8634	SOLAR ELECTRONICS	21106-50-BP-25-BNC	LISN, 50 uH, 150 kHz - 30 MHz	21106141202	9/30/2023
8662	DIGI-SENSE	20250-30	HYGROMETER, 0 - 50 deg. c, 10 - 90 % RH	151210305	10/31/2023
8749	RIGOL	DSA832E	ANALYZER, SPECTRUM, 9 kHz - 3.2 GHz	DSA8G201800133	5/31/2024

EMISSIONS TEST DATA SHEET

Test Specification:	FCC Part 15, Subpart C, Section 15.207
Method:	ANSI C63.10, Section 6.2, AC power-line conducted emission measurements
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	K. Stroman
Date(s):	6/13/2023
Temperature:	22.5ºC
Relative Humidity:	50%
Lead Tested:	120 VAC, 60 Hz, Hot

The frequency range was scanned from 0.15 MHz to 30 MHz.
The six highest emissions relative to the limit are presented.
The emissions observed from the EUT do not exceed the specified limits.

Frequency	Detector	Meter Reading	Total Correction Factor	Corrected Reading	Limit	Margin
MHz	–	dBµV	dB	dBµV	dBµV	dB
0.2419	Peak	34.3	10.2	44.5*	–	–
0.2419	Quasi-Peak	23.5	10.2	33.7	62.0	28.3
0.2419	Average	14.4	10.2	24.6	52.0	27.4
0.3947	Peak	31.2	10.2	41.4*	–	–
0.3947	Quasi-Peak	18.1	10.2	28.3	58.0	29.7
0.3947	Average	-7.6	10.2	2.6	48.0	45.4
7.9080	Peak	31.6	10.4	42.0*	–	–
7.9080	Quasi-Peak	25.2	10.4	35.6	60.0	24.4
7.9080	Average	16.2	10.4	26.6	50.0	23.4
8.4520	Peak	34.7	10.4	45.1*	–	–
8.4520	Quasi-Peak	28.1	10.4	38.5	60.0	21.5
8.4520	Average	20.5	10.4	30.9	50.0	19.1
22.5840	Peak	24.6	10.6	35.2*	–	–
22.5840	Quasi-Peak	11.5	10.6	22.1	60.0	37.9
22.5840	Average	1.0	10.6	11.6	50.0	38.4
24.4300	Peak	25.1	10.6	35.7*	–	–
24.4300	Quasi-Peak	16.2	10.6	26.8	60.0	33.2
24.4300	Average	3.3	10.6	13.9	50.0	36.1

* Peak measurements are recorded for informational purposes only.

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart C, Section 15.207
Method:	ANSI C63.10, Section 6.2, AC power-line conducted emission measurements
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	K. Stroman
Date(s):	6/13/2023
Temperature:	22.5ºC
Relative Humidity:	50%
Lead Tested:	120 VAC, 60 Hz, Neutral

The frequency range was scanned from 0.15 MHz to 30 MHz.
The six highest emissions relative to the limit are presented.
The emissions observed from the EUT do not exceed the specified limits.

Frequency	Detector	Meter Reading	Total Correction Factor	Corrected Reading	Limit	Margin
MHz	–	dBµV	dB	dBµV	dBµV	dB
0.4480	Peak	29.1	10.2	39.3*	–	–
0.4480	Quasi-Peak	17.2	10.2	27.4	56.9	29.5
0.4480	Average	-7.6	10.2	2.6	46.9	53.4
2.5800	Peak	29.4	10.2	39.6*	–	–
2.5800	Quasi-Peak	24.4	10.2	34.6	56.0	21.4
2.5800	Average	20.9	10.2	31.1	46.0	14.9
8.2590	Peak	28.5	10.4	38.9*	–	–
8.2590	Quasi-Peak	24.6	10.4	35.0	60.0	25.0
8.2590	Average	18.0	10.4	28.4	50.0	21.6
12.5300	Peak	27.8	10.4	38.2*	–	–
12.5300	Quasi-Peak	23.8	10.4	34.2	60.0	25.8
12.5300	Average	18.3	10.4	28.7	50.0	21.3
21.9400	Peak	29.7	10.6	40.3*	–	–
21.9400	Quasi-Peak	22.4	10.6	33.0	60.0	27.0
21.9400	Average	13.5	10.6	24.1	50.0	25.9
24.6200	Peak	26.7	10.6	37.3*	–	–
24.6200	Quasi-Peak	17.0	10.6	27.6	60.0	32.4
24.6200	Average	4.1	10.6	14.7	50.0	35.3

* Peak measurements are recorded for informational purposes only.

Requirements and Test Results

FCC Part 15.223 (a), 6 dB and 99% Occupied Bandwidth

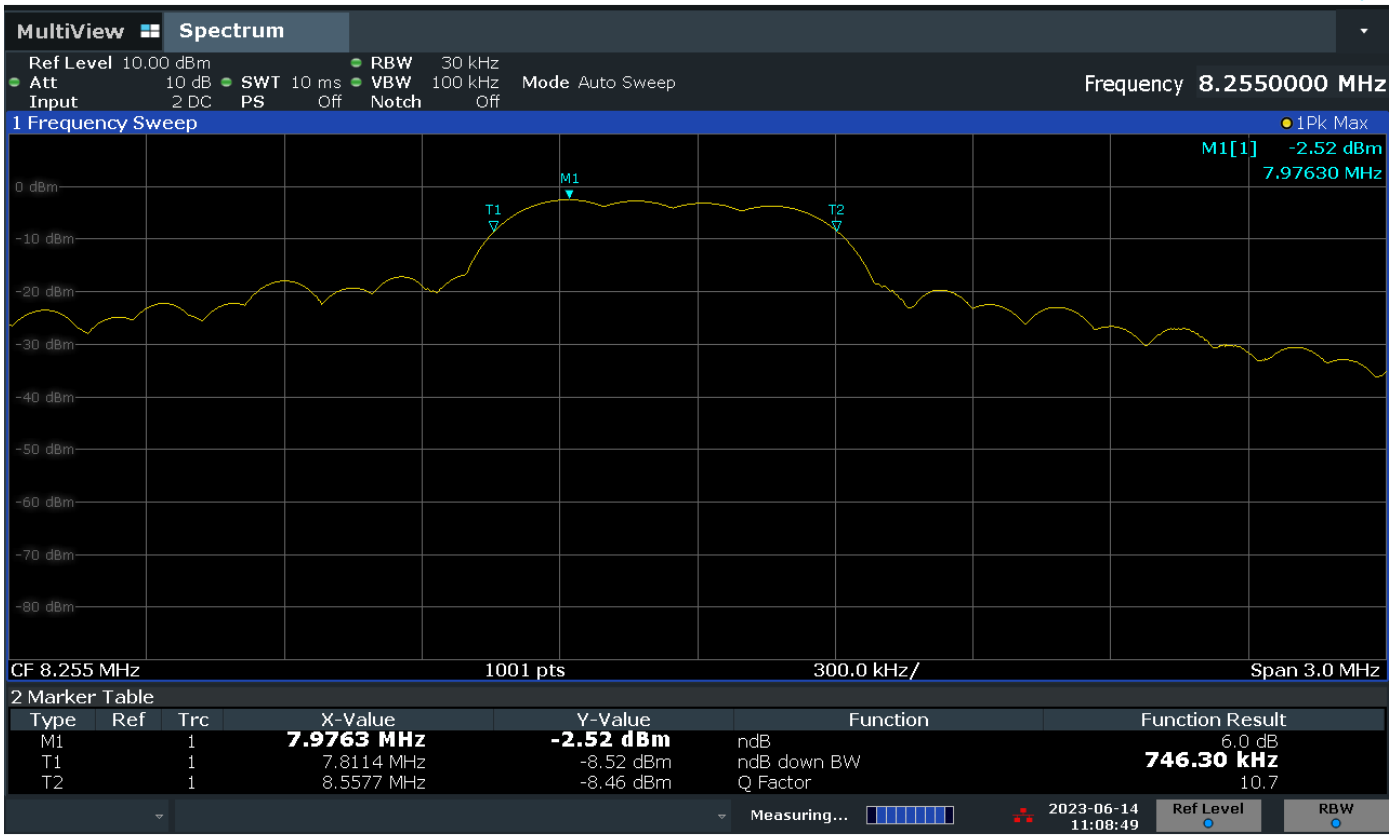
If the bandwidth of the emission is less than 10% of the center frequency, the field strength shall not exceed 15 microvolts/meter or (the bandwidth of the device in kHz) divided by (the center frequency of the device in MHz) microvolts/meter at a distance of 30 meters, whichever is the higher level. For the purposes of this section, bandwidth is determined at the points 6 dB down from the modulated carrier.

- Results:
  The 6dB bandwidth of the device was 746.3 kHz.

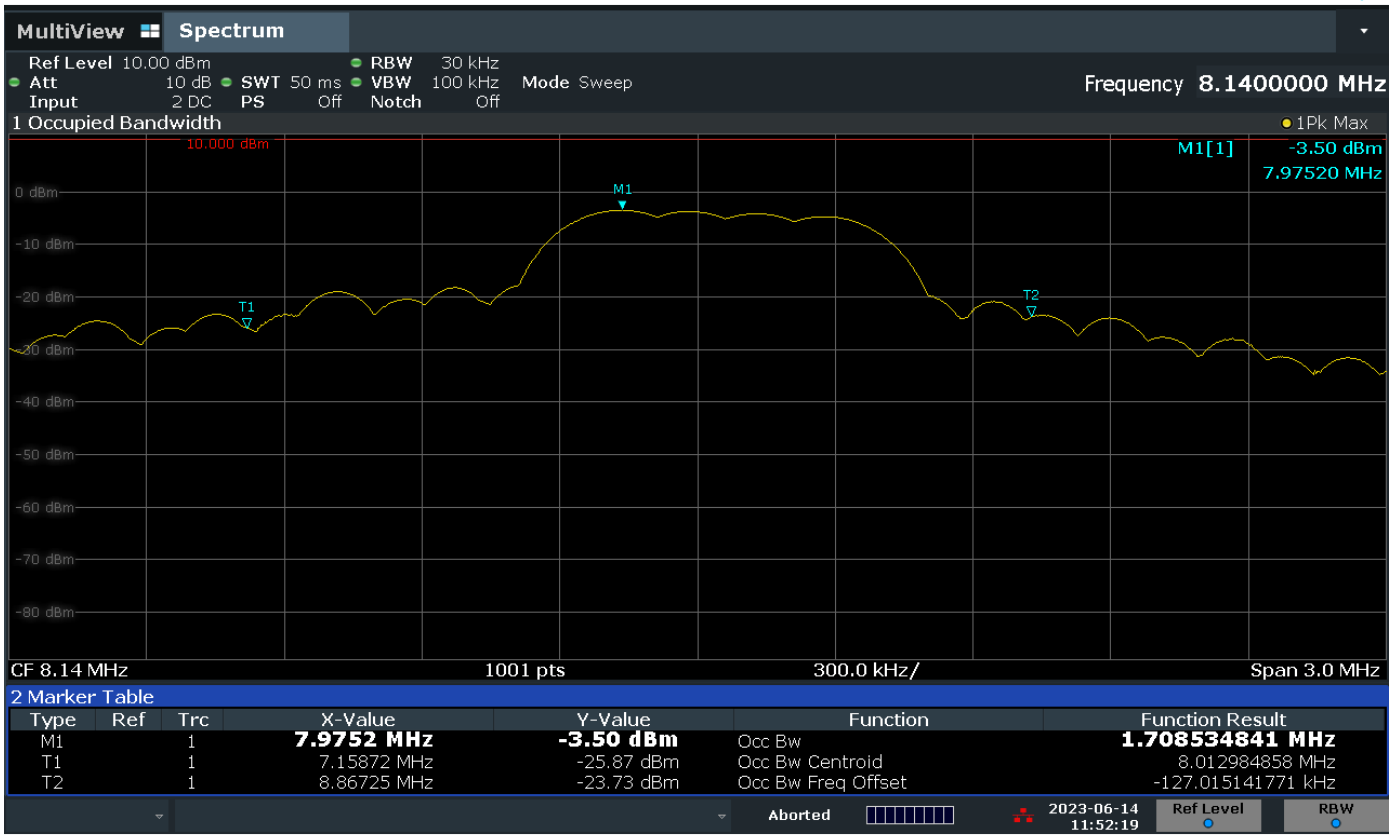
Equipment List:

EN	Manufacturer	Model No.	Description	Serial No.	Due Date
3207	ETS / EMCO	6502	ANTENNA, ACTIVE LOOP, 9 kHz - 30 MHz	1033	5/31/2024
8816	ROHDE &	ESW26	RECEIVER, EMI, 1 Hz - 26 GHz	103087	8/31/2023
8820	AMPHENOL	CO-058BNCX200-010	CABLE, COAXIAL, DC - 1 GHz	NSN	12/31/2023

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Occupied Bandwidth
Method:	Occupied Bandwidth, 6dB
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date:	6/14/2023
6 dB Occupied Bandwidth:	746.3 kHz



EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Occupied Bandwidth
Method:	Occupied Bandwidth, 99%
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date:	6/14/2023
99% Occupied Bandwidth:	1.7085 MHz



Requirements and Test Results

FCC Part 15.223 (a), Fundamental Field Strength and Duty Cycle

The field strength of any emission within the band 1.705-10.0 MHz shall not exceed 100 microvolts/meter at a distance of 30 meters. The emission limits in this paragraph are based on measurement instrumentation employing an average detector. The provisions in §15.35(b) for limiting peak emissions apply.

- Results:
  The device was operated at a frequency of 8.255 MHz. The maximum Peak reading was 687.86 µV/m. The maximum average reading was 18.99 µV/m.

Table 3 - Field Strength of Emissions Limits

Fundamental Frequency	Peak Field Strength Limit	Average Field Strength Limit
8.255 MHz	904 µV/m	90.4 µV/m

Equipment List:

EN	Manufacturer	Model No.	Description	Serial No.	Due Date
3207	ETS / EMCO	6502	ANTENNA, ACTIVE LOOP, 9 kHz - 30 MHz	1033	5/31/2024
5272	ROHDE &	ESPC	RECEIVER, EMI, 150 kHz - 1 GHz	843820/023	4/30/2024
8300C	UNKNOWN	3 METER CABLE	CABLE, COAXIAL, 3/10 METER	N/A	8/31/2023
8644	AGILENT / HP	85662A	ANALYZER, SPECTRUM, 100 Hz - 22 GHz	2848A18175	9/30/2023
8644A	AGILENT / HP	8566B	ANALYZER, SPECTRUM, 100 Hz - 22.5 GHz	2937A06124	9/30/2023
8668	DIGI-SENSE	20250-31	HYGROMETER, 0 - 50 deg. c, 10 - 90 % RH	140908984	10/31/2023

15.223(a)
Fundamental Field Strength
Test Data

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Fundamental Field Strength
Method:	ANSI C63.10, Section 6.4, Radiated Emission From Unlicensed <30 MHz
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/15/2023
Temperature:	23.7 ºC
Relative Humidity:	43 %
Detector:	Peak
Test Distance:	10m
Notes:	

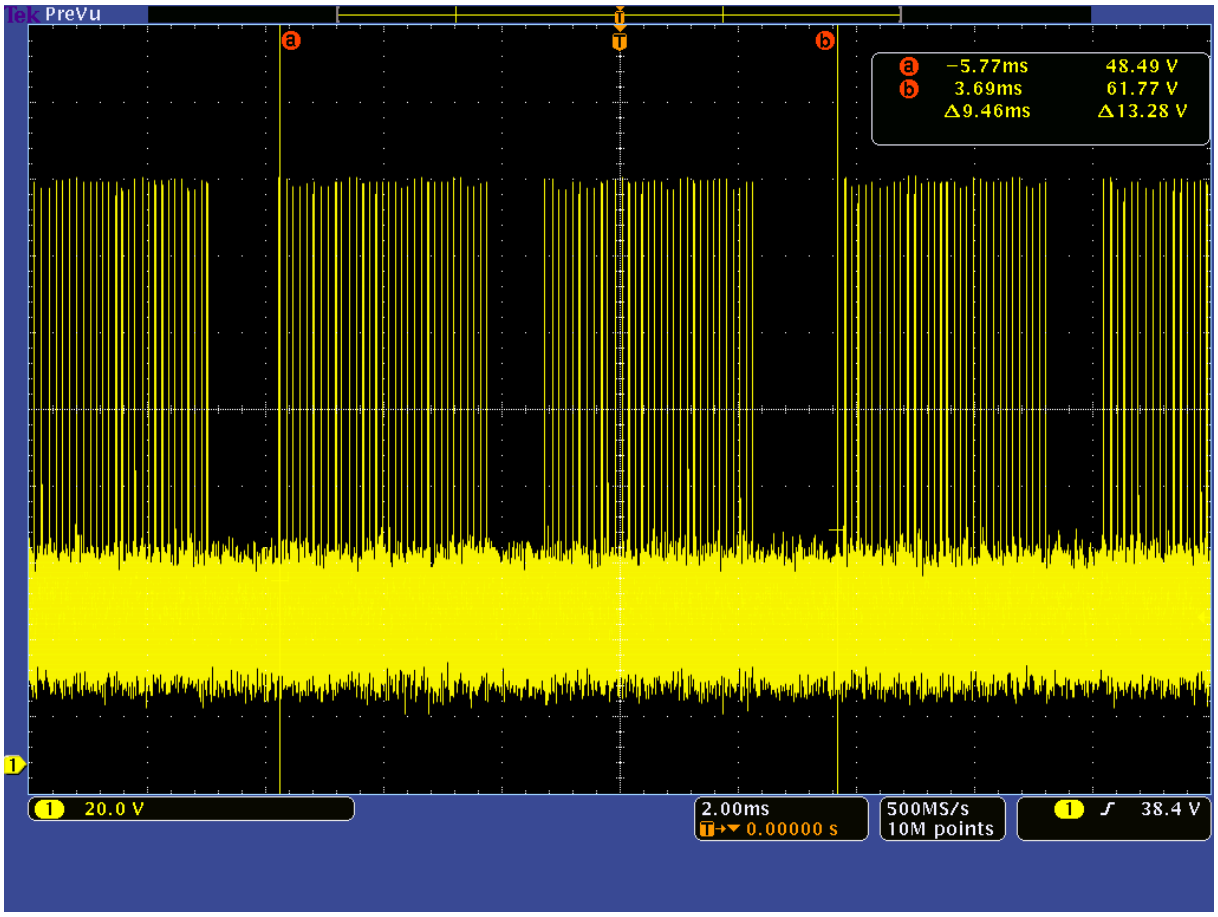
Frequency	Antenna Orientation / Height	EUT Orientation	Meter Reading @10m	Correction Factor	Pulse Desensitization Factor	Distance Correction	Corrected Reading @ 30m	Converted Reading @ 30m	Limit @ 30m
MHz		Degrees	dBuV	dB		dB	dBuV/m	uV/m	uV/m
8.255	Perpendicular / 1.00	180.0	39.4	12.0	24.44	-19.09	56.75	687.86	904
8.255	Parallel / 1.00	270.0	37.2	12.0	24.44	-19.09	54.55	533.95	904
8.255	Parallel to Ground / 1.00	270.0	27.9	12.0	24.44	-19.09	45.25	183.02	904

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Fundamental Field Strength
Method:	ANSI C63.10, Section 6.4, Radiated Emission From Unlicensed <30 MHz
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/15/2023
Temperature:	23.7 ºC
Relative Humidity:	43 %
Detector:	Peak (converted to average via Duty Cycle correction)
Test Distance:	10m
Notes: Duty Cycle = 2.76%, -31.18dB	

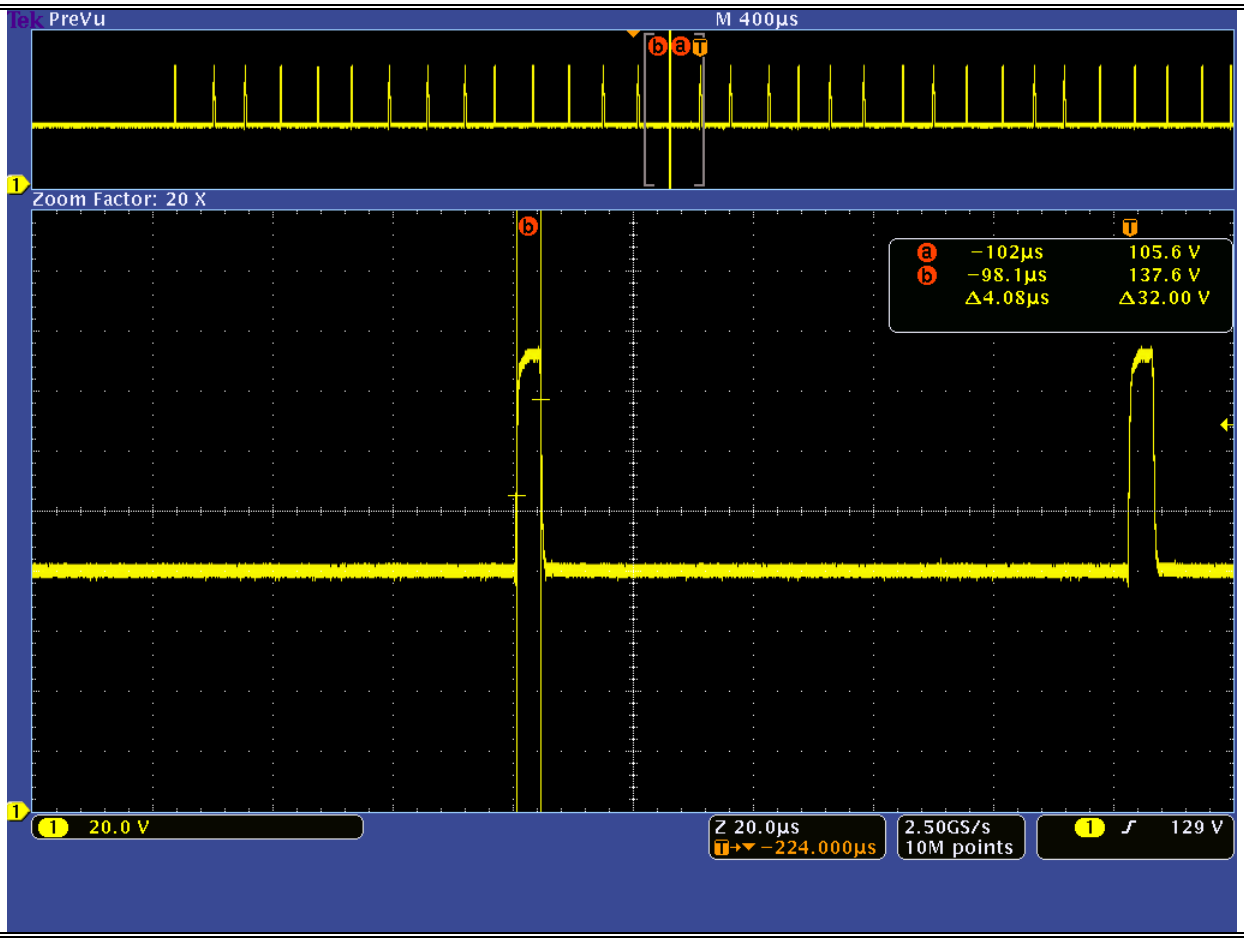
Frequency	Antenna Orientation / Height	EUT Orientation	Corrected Peak Meter Reading	Duty Cycle Correction Factor	Corrected Reading @ 30m	Converted Reading @ 30m	Limit @ 30m
MHz		Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
8.255	Perpendicular / 1.00	250.0	56.75	-31.18	25.57	18.99	90.4
8.255	Parallel / 1.00	190.0	54.55	-31.18	23.37	14.74	90.4
8.255	Parallel to Ground / 1.00	320.0	45.25	-31.18	14.07	5.05	90.4

15.223(a)
Fundamental Field Strength – Duty Cycle
Test Data

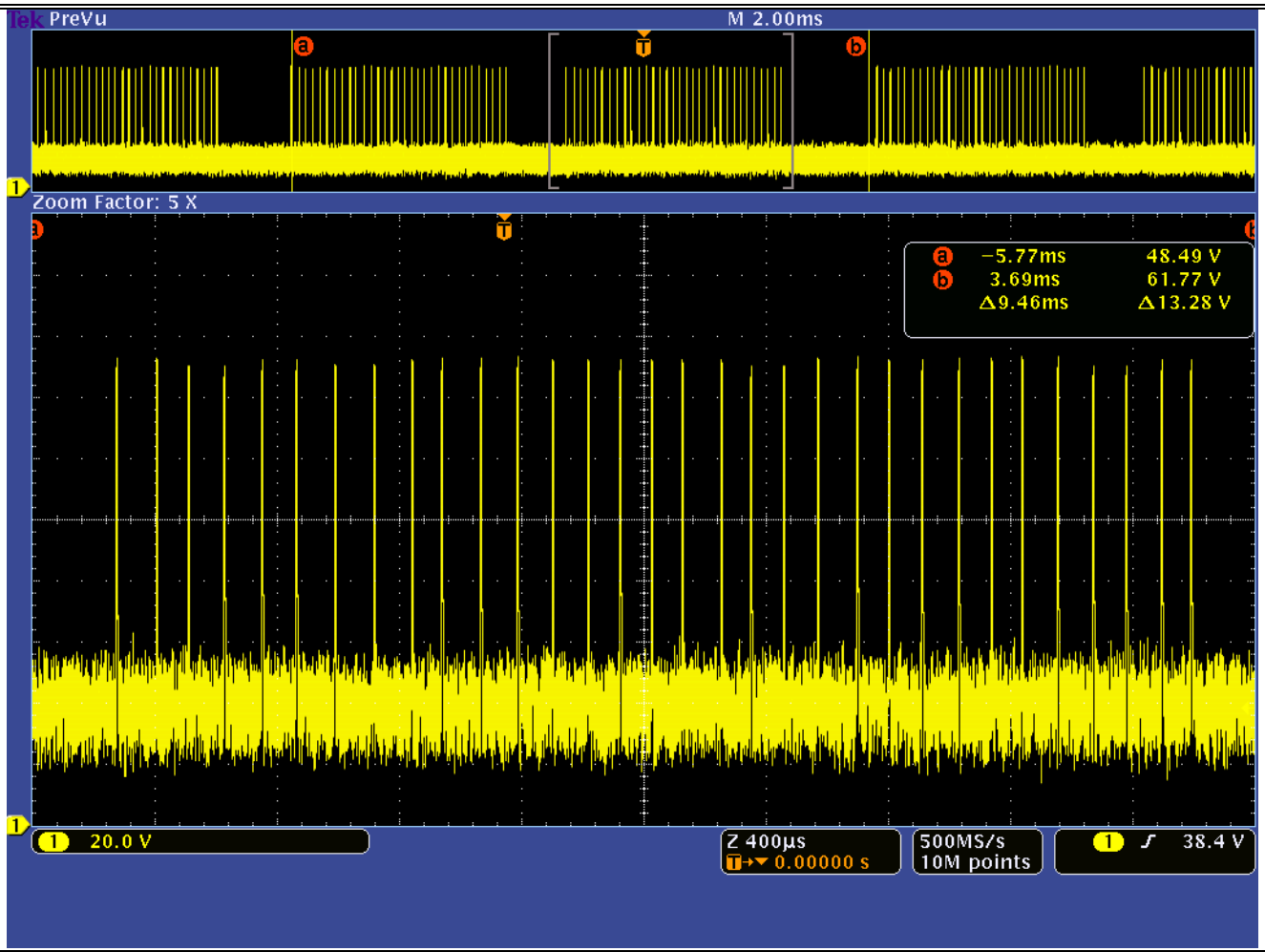
EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Fundamental Field Strength – Duty Cycle
Method:	ANSI C63.10, Section 6.4, Radiated Emission From Unlicensed <30 MHz
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/14/2023
Temperature:	22.0 ºC
Relative Humidity:	55 %
Notes: Total Pulse Time 9.46 ms	



EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Fundamental Field Strength – Duty Cycle
Method:	ANSI C63.10, Section 6.4, Radiated Emission From Unlicensed <30 MHz
Job	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/14/2023
Temperature:	22.0 ºC
Relative Humidity:	55 %
Notes: Total Pulse Duration 4.08µs	



EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart B, Section 15.223(a), Fundamental Field Strength – Duty Cycle
Method:	ANSI C63.10, Section 6.4, Radiated Emission From Unlicensed <30 MHz
Job	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/14/2023
Temperature:	22.0 ºC
Relative Humidity:	55 %
Notes: Total number of pulses 64 (32 per "block")	



Requirements and Test Results

FCC Part 15.223 (b), Harmonics and Spurious Emissions

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in Table 4.

Table 4 - Radiated Emission Limits

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 to 88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960	500	3

- Results:
  The field strength of spurious radiated emissions did not exceed the limits specified in Table 4.

Equipment List:

EN	Manufacturer	Model No.	Description	Serial No.	Due Date
127A	ETS / EMCO	3104	ANTENNA, BICONICAL, 20 - 200 MHz	2319	12/31/2023
3207	ETS / EMCO	6502	ANTENNA, ACTIVE LOOP, 9 kHz - 30 MHz	1033	5/31/2024
5272	ROHDE &	ESPC	RECEIVER, EMI, 150 kHz - 1 GHz	843820/023	4/30/2024
8300	RETLIF	RPA	OPEN AREA TEST SITE, ATTENUATION, 3/10 Meter OATS	N/A	5/31/2024
8300C	UNKNOWN	3 METER CABLE	CABLE, COAXIAL, 3/10 METER	N/A	8/31/2023
8644	AGILENT / HP	85662A	ANALYZER, SPECTRUM, 100 Hz - 22 GHz	2848A18175	9/30/2023
8644A	AGILENT / HP	8566B	ANALYZER, SPECTRUM, 100 Hz - 22.5 GHz	2937A06124	9/30/2023
8644B	AGILENT / HP	85685A	ANALYZER, RF PRESELECTOR, 20 Hz - 2 GHz	2724A00532	9/30/2023
8668	DIGI-SENSE	20250-31	HYGROMETER, 0 - 50 deg. c, 10 - 90 % RH	140908984	10/31/2023

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart C, Section 15.223(b), Harmonics and Spurious Emissions
Method:	ANSI C63.10, Section 6.4 and 6.5.
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/15/2023
Temperature:	23.7 ºC
Relative Humidity:	43 %
Detector:	Quasi-peak
Test Distance:	3m

Notes: The frequency range was scanned from 9 kHz to 30 MHz
The emissions observed from the EUT do not exceed the specified limits. The two highest readings relative to the limit are presented.
*Noise floor measurement, minimum sensitivity of measurement system.

Frequency	Antenna Position	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted to 300m	Converted Reading	Limit at 300m
MHz	(Par/Perp) / Height	Degrees	dBuV	dB	dBuV/m	dBuV/m	uV/m	uV/m
0.009								266.67
|								|
0.490								4.89

Frequency	Antenna Position	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted to 30m	Converted Reading	Limit at 30m
MHz	(Par/Perp) / Height	Degrees	dBuV	dB	dBuV/m	dBuV/m	uV/m	uV/m
0.490								48.98
|								|
1.705								14.08
1.705								30.00
|								|
*12.59	Par / 1.00	180.0	6.1	11.7	17.8	-	7.77	|
|								|
*20.00	Par / 1.00	180.0	6.8	10.6	17.4	-	7.42	|
|								|
30.00								30.00

EMISSIONS TEST DATA SHEET	
Test Specification:	FCC Part 15, Subpart C, Section 15.223(b), Harmonics and Spurious Emissions
Method:	ANSI C63.10, Section 6.4 and 6.5.
Job Number/Customer:	R- 3728P-2 / Checkpoint Systems, Inc
Test Sample:	Antenna Pedestal
Model Number:	NP12 PRI/PAB, NP12 SAB
Serial Number:	1003722700E1383006 (PRI/PAB lower base), 1003722900E1153003 (SAB lower base)
Operating Mode:	TX=31, RX=31, ST BT, LM Wi-Fi, Visiplus, I/O cables on GPIO's
Technician:	M. Nowak
Date(s):	6/15/2023
Temperature:	23.7 ºC
Relative Humidity:	43 %
Detector:	Quasi-peak
Test Distance:	3m

Notes: The frequency range was scanned from 30 MHz to 100 MHz
The emissions observed from the EUT do not exceed the specified limits. Two highest readings relative to the limit are presented.
*Noise floor measurement, minimum sensitivity of measurement system.

Frequency	Antenna Pol /Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit
MHz	(V/H) / (m)	Degrees	dBuV	dB	dBuV/m	uV/m	uV/m
30.00							100
I							I
*38.00	H / 1.00	180.0	6.3	12.9	19.2	9.13	I
I							I
*80.00	H / 1.00	180.0	12.1	8.4	20.5	10.60	I
I							I
88.00							100
88.00							150
I							I
100.00							150