#### RF Exposure Analysis / Report

On

Antenna Pedestal Model Numbers: NP12 PRI/PAB, NP12 SAB FCC ID: DO4NEO2PS

**Customer Name:** Checkpoint Systems, Inc.

**Customer P.O:** 1101200342

**Date of Report:** September 21, 2023

Test Report No: R-3728P-6

**Test Start Date:** June 19, 2023

Test Finish Date: June 19, 2023

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**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

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Retlif Testing Laboratories

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Colleen T. Reitz

Chief of Documentation, Innovation and Compliance

Richard J. Reitz

**Director of Engineering** 

iNARTE Electromagnetic Compatibility Engineer EMC-050739-E

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### **Revision History**

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

Revision Date		Pages Affected	
-	September 21, 2023	Original Release	



**Retlif Testing Laboratories** 

#### **Test Program Summary**

Report Number: R-3728P-6

**Customer:** Checkpoint Systems, Inc.

**Address:** 101 Wolf Drive

Thorofare, NJ 08086

Manufacturer: Checkpoint Systems, Inc.

Manufacturer Address: 101 Wolf Drive

Thorofare, NJ 08086

**Test Sample:** Antenna Pedestal

FCC ID: DO4NEO2PS

#### **Test Specification:**

FCC Part 1.1310, Radiofrequency Radiation Exposure Limits

#### **Test Procedure**:

FCC OET Bulletin 65

#### **Test Facility:**

Retlif Testing Laboratories 3131 Detwiler Road Harleysville, PA 19438

FCC Accreditation Designation Number: US2321

#### **Family Certification:**

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



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#### RF Exposure - Requirements and Test Results

#### Requirement: 1.1310(d)(2), Radiofrequency Radiation Exposure Limits

For operations within the frequency range of 300 kHz and 6 GHz (inclusive), the limits for maximum permissible exposure (MPE), derived from whole-body SAR limits and listed in Table 1 in paragraph (e)(1) of this section, may be used instead of whole-body SAR limits as set forth in paragraphs (a) through (c) of this section to evaluate the environmental impact of human exposure to RF radiation as specified in § 1.1307(b) of this part, except for portable devices as defined in § 2.1093 of this chapter as these evaluations shall be performed according to the SAR provisions in § 2.1093.

Table 1 FCC § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)				
(i) Limits for Occupational/Controlled Exposure								
0.3-3.0	614	1.63	*(100)	≤6				
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6				
30-300	61.4	0.163	1.0	<6				
300-1,500			f/300	<6				
1,500-100,000			5	<6				
(ii) Limits for General Population/Uncontrolled Exposure								
0.3-1.34	614	1.63	*(100)	<30				
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30				
30-300	27.5	0.073	0.2	<30				
300-1,500			f/1500	<30				
1,500-100,000			1.0	<30				

f = frequency in MHz. \* = Plane-wave equivalent power density.

#### **Test Equipment:**

The details of the test equipment utilized during the performance of this test method are shown below:

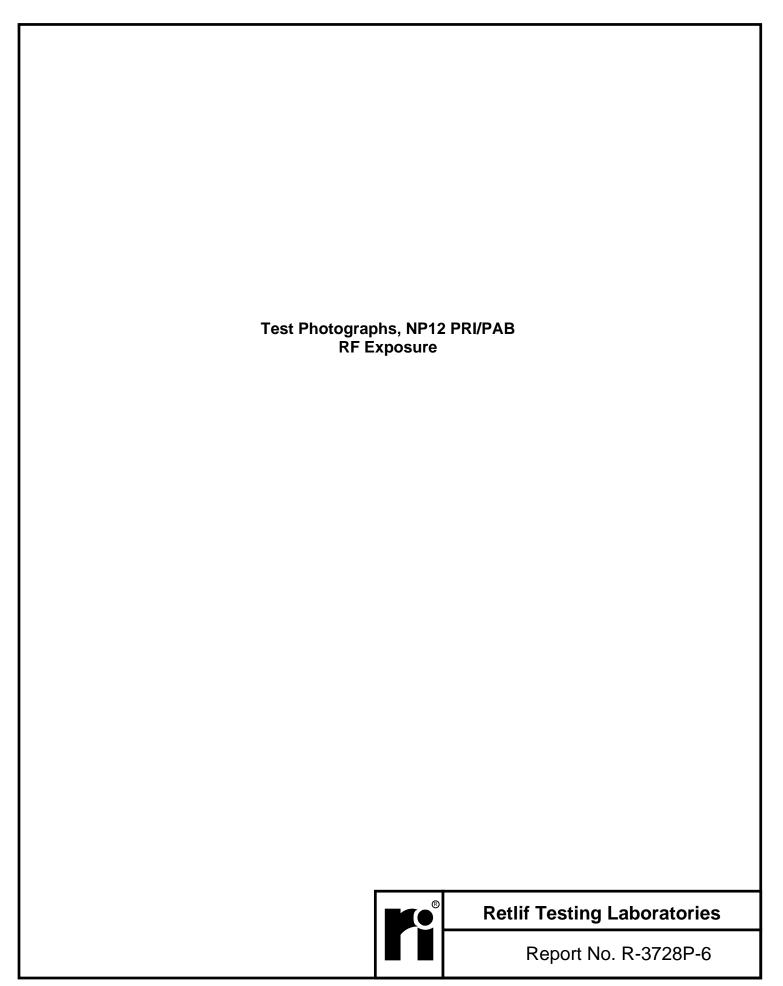
EN	Manufacturer	Model No.	Description	Serial No.	Due Date
8698	LENOVO	E73	COMPUTER, CONTROL	NSN	No Calibration Required
R849	NARDA	FHP-200A	ANALYZER FIELD STRENGTH 9 kHz - 30 MHz	1807X00616	11/25/2023

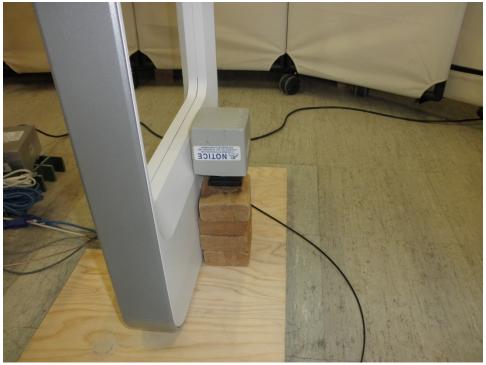
#### **Test Results:**

The calculated power density based on the manufacturers specified antenna gain and maximum measured output power did not exceed the specified MPE limits at a distance of 0 cm for both General Population/Uncontrolled Exposure and for Occupational/Controlled Exposure.



### **Retlif Testing Laboratories**





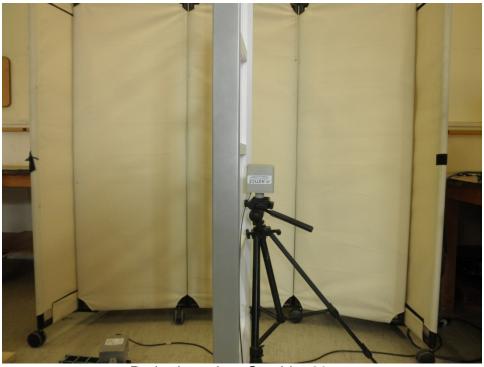
Probe Location, Outside, 30 cm



Probe Location, Outside, 60 cm



## **Retlif Testing Laboratories**



Probe Location, Outside, 90 cm



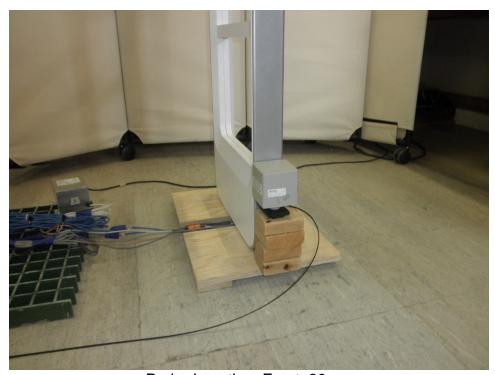
Probe Location, Outside, 120 cm



## **Retlif Testing Laboratories**



Probe Location, Outside, 165 cm



Probe Location, Front, 30 cm



## **Retlif Testing Laboratories**



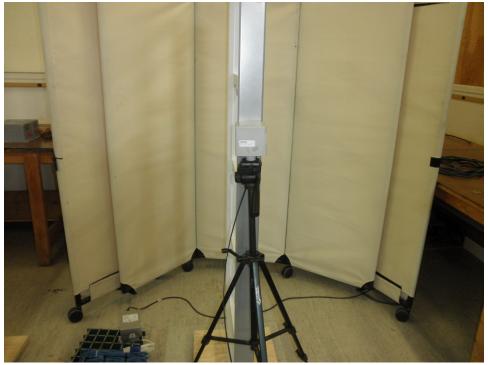
Probe Location, Front, 60 cm



Probe Location, Front, 90 cm



## **Retlif Testing Laboratories**



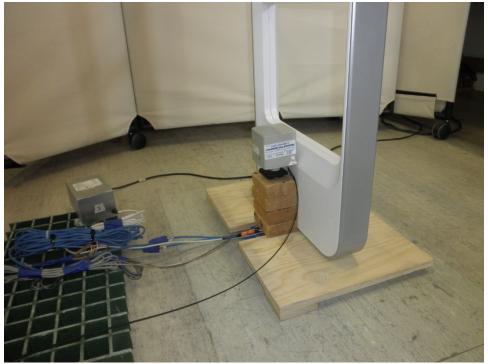
Probe Location, Front, 120 cm



Probe Location, Front, 165 cm



## **Retlif Testing Laboratories**



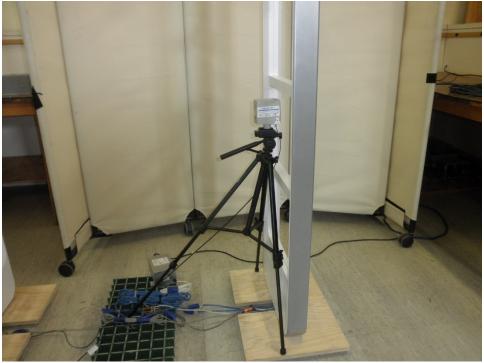
Probe Location, Inside, 30 cm



Probe Location, Inside, 60 cm



## **Retlif Testing Laboratories**



Probe Location, Inside, 90 cm



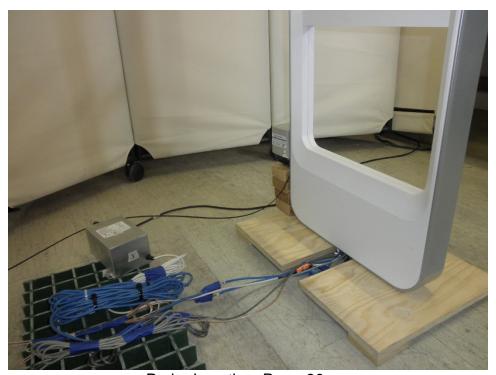
Probe Location, Inside, 120 cm



## **Retlif Testing Laboratories**



Probe Location, Inside, 165 cm



Probe Location, Rear, 30 cm



## **Retlif Testing Laboratories**



Probe Location, Rear, 60 cm



Probe Location, Rear, 90 cm



## **Retlif Testing Laboratories**



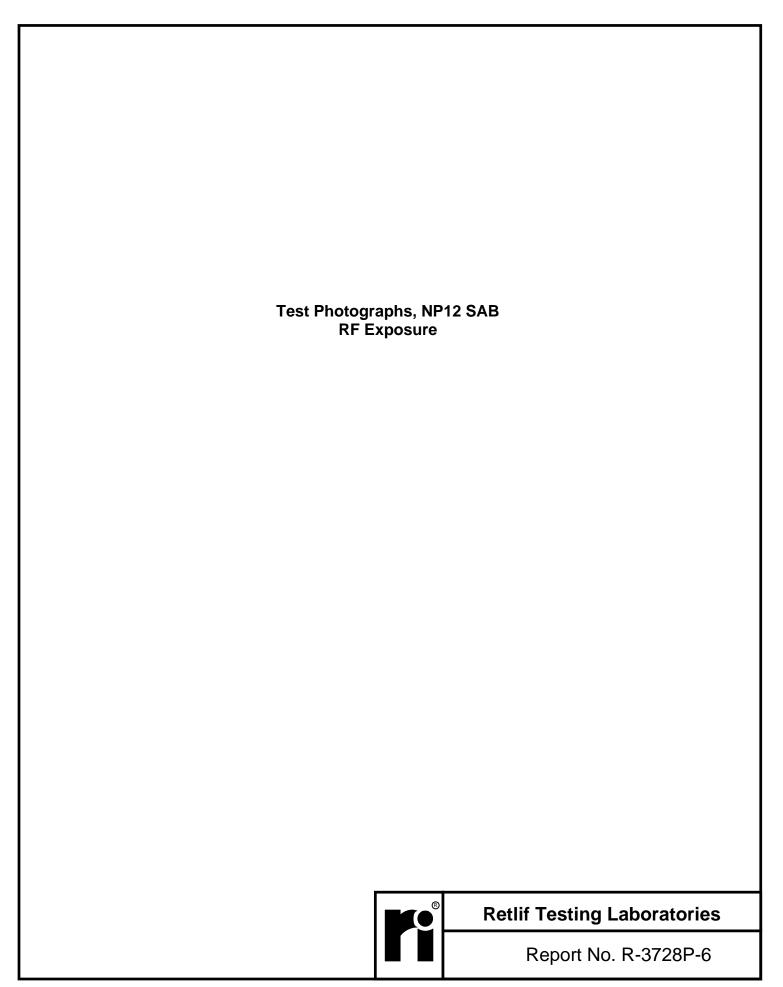
Probe Location, Rear, 120 cm

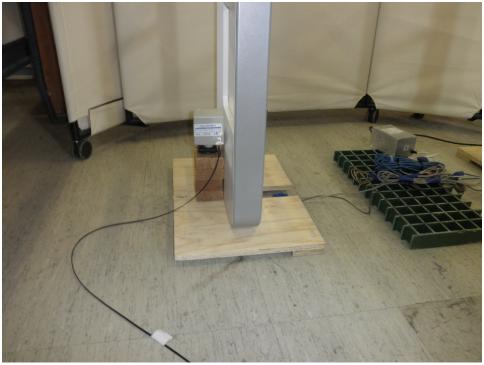


Probe Location, Rear, 165 cm



## **Retlif Testing Laboratories**





Probe Location, Outside, 30 cm



Probe Location, Outside, 60 cm



## **Retlif Testing Laboratories**



Probe Location, Outside, 90 cm



Probe Location, Outside, 120 cm



## **Retlif Testing Laboratories**