

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P334950

Luminaire Tested: **S124IW-S470U930-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334950  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IW-S470U930-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 470 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

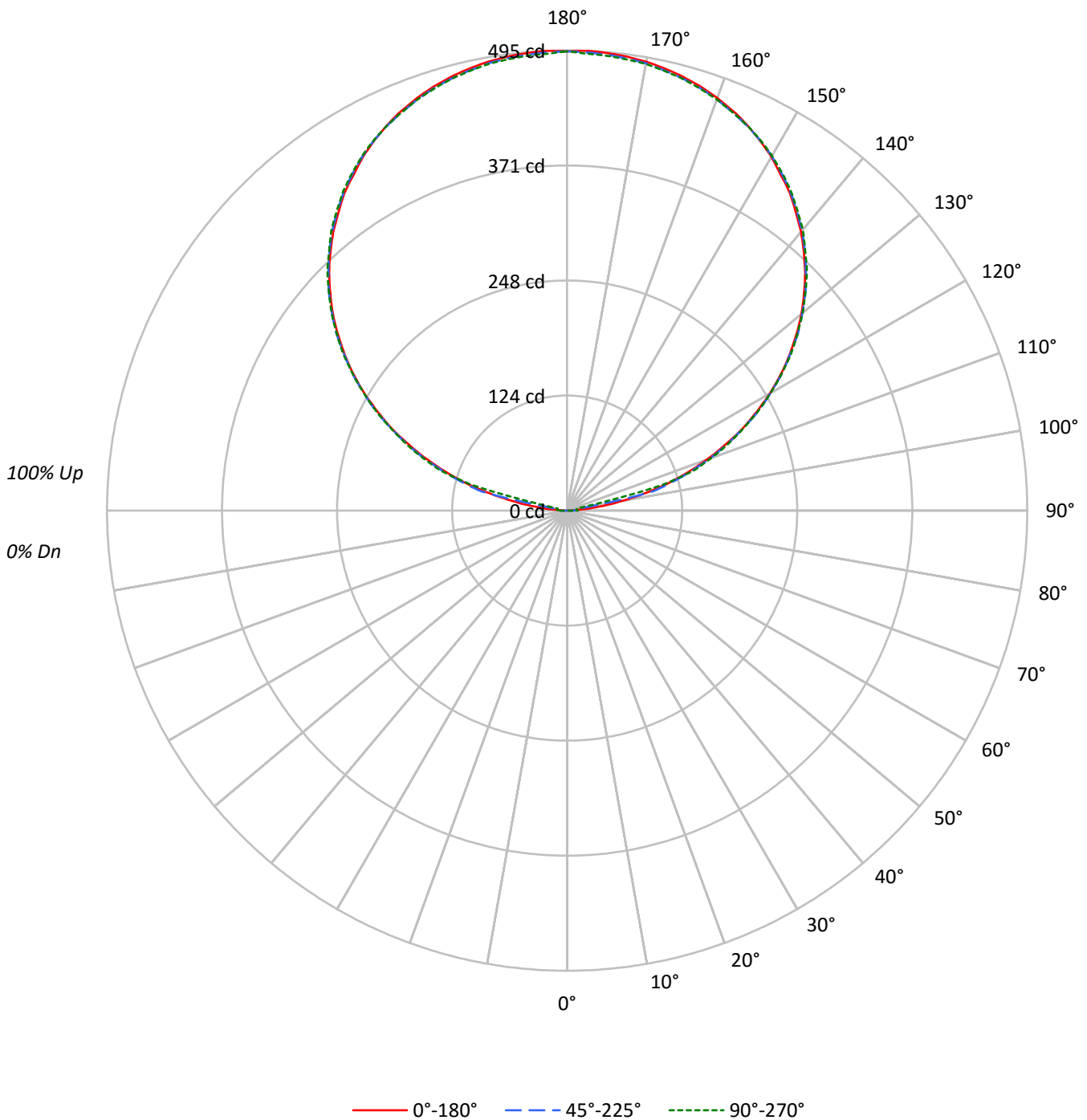
Lumens per Lamp: N/A  
Luminaire Lumens: 1529.6 lumens  
Efficiency: N/A  
Efficacy: 175.8 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 8.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	1.0	0.1
90°-100°	16.4	1.1
100°-110°	108.0	7.1
110°-120°	206.2	13.5
120°-130°	261.8	17.1
130°-140°	280.1	18.3
140°-150°	261.9	17.1
150°-160°	211.2	13.8
160°-170°	136.2	8.9
170°-180°	46.9	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.0	0.1
90°-120°	330.6	21.6
90°-150°	1134.3	74.2
90°-180°	1529.0	100.0
0°-180°	1529.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	5	8	10	11	1
95°	20	8	8	10	11	25
105°	111	113	115	119	105	116
115°	208	209	208	209	209	204
125°	292	293	293	294	294	261
135°	362	362	363	364	365	279
145°	418	419	419	419	420	261
155°	458	458	457	458	457	211
165°	483	481	481	484	481	136
175°	494	492	492	496	491	47
180°	494	494	494	494	494	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	1.1	5.2	8.1	10.3	11.1
92.5°	5.5	4.8	7.8	10.0	10.0
95°	20.3	7.8	8.1	10.3	10.7
97.5°	38.8	46.9	8.1	10.0	10.3
100°	60.6	67.2	16.3	10.0	10.3
102.5°	85.0	89.4	93.9	10.7	10.7
105°	111.2	113.4	115.3	118.6	105.3
107.5°	135.2	136.3	138.9	140.8	142.3
110°	159.6	160.7	162.9	163.7	164.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	183.3	185.5	186.2	185.9	187.3
115°	207.7	208.8	208.4	209.1	209.1
117.5°	229.5	230.9	232.0	231.7	231.7
120°	251.6	253.1	252.7	253.5	252.7
122.5°	272.3	273.1	273.8	274.2	273.4
125°	291.9	293.4	292.6	293.7	294.1
127.5°	310.7	311.1	313.0	312.6	312.2
130°	328.9	329.2	330.3	330.7	330.7
132.5°	345.5	346.2	347.7	348.1	347.7
135°	362.1	361.7	363.2	364.0	364.7
137.5°	376.9	376.9	378.7	379.5	379.1
140°	391.3	392.0	392.8	393.9	394.3
142.5°	404.2	405.7	406.1	406.8	406.8
145°	417.5	418.6	418.6	419.0	419.7
147.5°	427.9	430.1	429.7	430.1	430.5
150°	439.3	440.8	440.4	440.4	440.8
152.5°	448.9	450.0	449.3	450.0	449.7
155°	457.8	458.2	457.1	458.5	457.4
157.5°	465.6	465.6	464.1	465.9	464.1
160°	472.2	471.1	470.7	473.0	470.7
162.5°	478.1	476.6	476.3	478.5	475.9
165°	482.9	481.1	481.1	484.0	480.7
167.5°	487.0	485.1	484.8	488.1	484.4
170°	490.3	488.1	488.5	491.4	487.7
172.5°	492.5	490.3	490.7	493.6	489.6
175°	494.0	491.8	492.2	495.5	491.1
177.5°	495.1	492.5	493.3	496.2	491.8
180°	494.0	494.0	494.0	494.0	494.0

(END OF REPORT)