

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: P334930

Luminaire Tested: **S124IW-S470U830-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334930  
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-S470U830-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 470 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

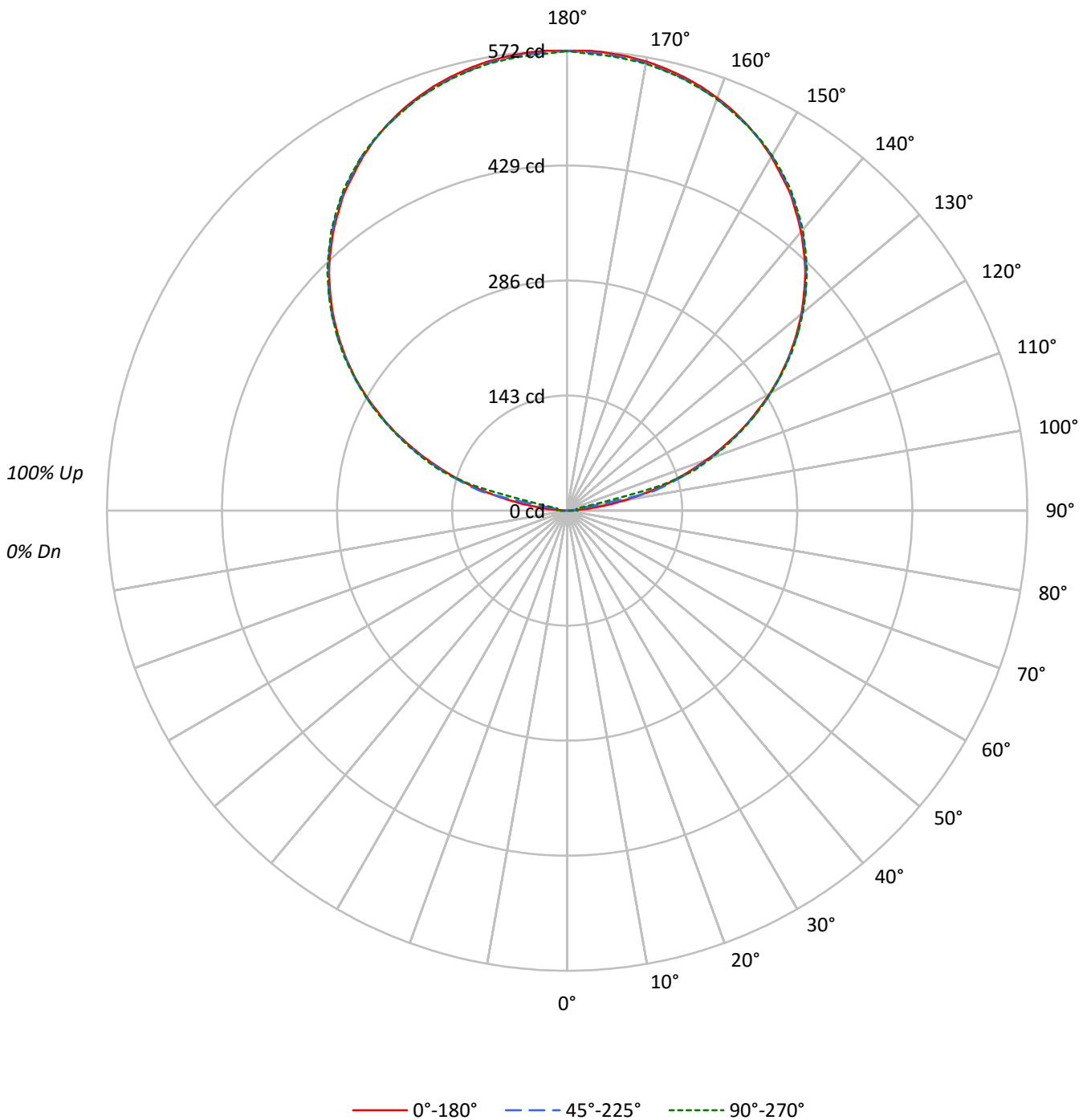
Lumens per Lamp: N/A  
Luminaire Lumens: 1768.4 lumens  
Efficiency: N/A  
Efficacy: 203.3 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 8.7  
Input Voltage (V): 120  
Input Current (Ain): 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



TEST NUMBER: P334930  
CATALOG NUMBER: S124IW-S470U830-4F0-1E-UDD

### Luminous Intensity Polar Plot





TEST NUMBER: P334930

CATALOG NUMBER: S124IW-S470U830-4F0-1E-UDD

**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



TEST NUMBER: P334930

CATALOG NUMBER: S124IW-S470U830-4F0-1E-UDD

**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°	1.2	0.1
90°-100°	19.0	1.1
100°-110°	124.8	7.1
110°-120°	238.4	13.5
120°-130°	302.7	17.1
130°-140°	323.8	18.3
140°-150°	302.8	17.1
150°-160°	244.1	13.8
160°-170°	157.5	8.9
170°-180°	54.3	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.2	0.1
90°-120°	382.2	21.6
90°-150°	1311.4	74.2
90°-180°	1767.0	99.9
0°-180°	1768.4	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	6	9	12	13	1
95°	24	9	9	12	12	29
105°	129	131	133	137	122	135
115°	240	241	241	242	242	236
125°	338	339	338	340	340	301
135°	419	418	420	421	422	323
145°	483	484	484	484	485	302
155°	529	530	528	530	529	244
165°	558	556	556	560	556	158
175°	571	569	569	573	568	54
180°	571	571	571	571	571	



TEST NUMBER: P334930

CATALOG NUMBER: S124IW-S470U830-4F0-1E-UDD

**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°	1.3	6.0	9.4	12.0	12.8
92.5°	6.4	5.6	9.0	11.5	11.5
95°	23.5	9.0	9.4	12.0	12.4
97.5°	44.9	54.2	9.4	11.5	12.0
100°	70.1	77.7	18.8	11.5	12.0
102.5°	98.2	103.4	108.5	12.4	12.4
105°	128.6	131.1	133.3	137.1	121.7
107.5°	156.3	157.6	160.6	162.7	164.5
110°	184.5	185.8	188.4	189.2	190.5



TEST NUMBER: P334930

CATALOG NUMBER: S124IW-S470U830-4F0-1E-UDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	211.9	214.4	215.3	214.9	216.6
115°	240.1	241.3	240.9	241.8	241.8
117.5°	265.3	267.0	268.3	267.8	267.8
120°	290.9	292.6	292.2	293.0	292.2
122.5°	314.8	315.7	316.5	317.0	316.1
125°	337.5	339.2	338.3	339.6	340.0
127.5°	359.2	359.7	361.8	361.4	361.0
130°	380.2	380.6	381.9	382.3	382.3
132.5°	399.4	400.3	402.0	402.4	402.0
135°	418.6	418.2	419.9	420.8	421.6
137.5°	435.7	435.7	437.8	438.7	438.3
140°	452.4	453.2	454.1	455.4	455.8
142.5°	467.3	469.0	469.5	470.3	470.3
145°	482.7	484.0	484.0	484.4	485.3
147.5°	494.7	497.2	496.8	497.2	497.6
150°	507.9	509.6	509.2	509.2	509.6
152.5°	519.0	520.3	519.4	520.3	519.9
155°	529.3	529.7	528.4	530.1	528.8
157.5°	538.2	538.2	536.5	538.7	536.5
160°	545.9	544.6	544.2	546.8	544.2
162.5°	552.7	551.0	550.6	553.2	550.2
165°	558.3	556.2	556.2	559.6	555.7
167.5°	563.0	560.9	560.4	564.3	560.0
170°	566.8	564.3	564.7	568.1	563.9
172.5°	569.4	566.8	567.3	570.7	566.0
175°	571.1	568.6	569.0	572.8	567.7
177.5°	572.4	569.4	570.3	573.7	568.6
180°	571.1	571.1	571.1	571.1	571.1

(END OF REPORT)