

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: P334837

Luminaire Tested: **S124IP-S810U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IP-S810U840-4F0-1E-UDD-1  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT MOUNT, 810 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

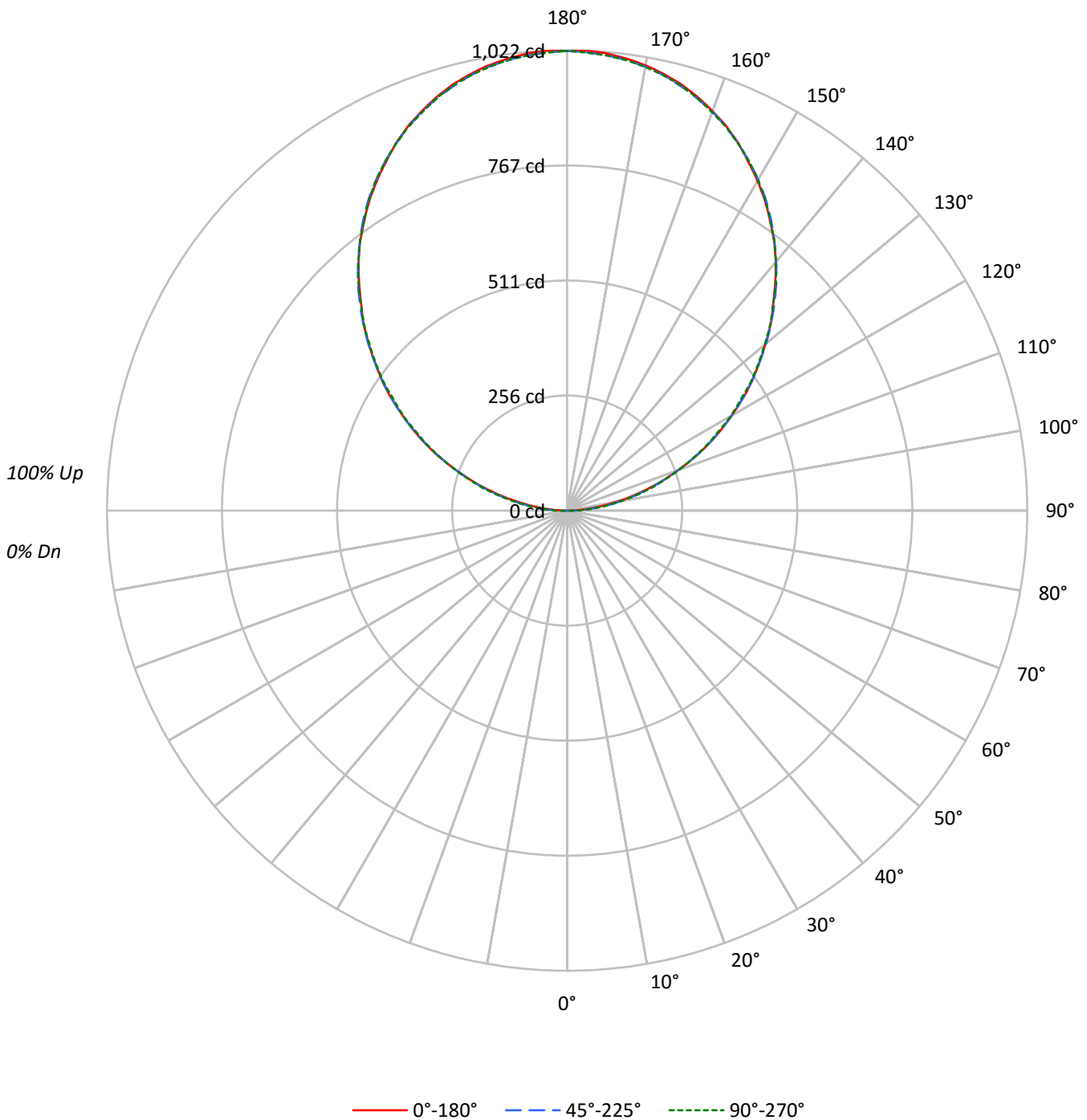
Lumens per Lamp: N/A  
Luminaire Lumens: 2834.6 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 26.4  
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°	2.2	0.1
90°-100°	66.5	2.3
100°-110°	199.3	7.0
110°-120°	338.6	11.9
120°-130°	446.5	15.8
130°-140°	501.5	17.7
140°-150°	492.9	17.4
150°-160°	414.6	14.6
160°-170°	275.8	9.7
170°-180°	96.6	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.2	0.1
90°-120°	604.4	21.3
90°-150°	2045.4	72.2
90°-180°	2832.0	99.9
0°-180°	2834.6	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°	2	11	17	22	24	3
95°	47	54	60	62	62	51
105°	184	185	188	190	193	195
115°	344	344	343	342	341	339
125°	501	501	500	499	497	447
135°	647	651	651	650	647	500
145°	786	789	790	789	786	492
155°	900	900	899	902	899	414
165°	980	977	976	981	977	276
175°	1019	1015	1014	1020	1014	97
180°	1021	1021	1021	1021	1021	



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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°	2.4	11.1	17.4	22.1	23.7
92.5°	20.5	30.8	34.7	37.1	37.9
95°	47.4	54.5	60.0	62.4	62.4
97.5°	75.8	82.1	88.4	91.6	91.6
100°	110.5	113.7	120.8	122.4	122.4
102.5°	146.8	147.6	154.0	156.3	157.1
105°	184.0	184.7	187.9	190.3	192.6
107.5°	222.6	223.4	224.2	227.4	226.6
110°	262.1	263.7	262.9	261.3	263.7



TEST NUMBER: P334837

CATALOG NUMBER: S124IP-S810U840-4F0-1E-UDD-1

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	303.2	303.2	301.6	301.6	301.6
115°	344.2	344.2	342.6	341.9	341.1
117.5°	382.9	382.9	382.1	379.7	377.4
120°	421.6	424.8	422.4	418.4	420.0
122.5°	461.9	462.6	461.9	459.5	455.5
125°	501.3	501.3	500.5	499.0	497.4
127.5°	536.9	539.2	537.6	536.1	535.3
130°	574.8	577.1	577.1	575.5	572.4
132.5°	613.4	615.0	614.2	612.7	611.9
135°	646.6	651.3	651.3	649.8	647.4
137.5°	683.7	686.1	687.7	685.3	686.1
140°	720.8	722.4	722.4	721.6	720.8
142.5°	754.8	756.3	755.6	755.6	755.6
145°	785.6	788.7	789.5	788.7	786.3
147.5°	817.1	821.1	820.3	819.5	818.7
150°	845.6	848.7	848.7	848.7	847.9
152.5°	872.4	874.0	874.8	877.1	874.8
155°	900.0	900.0	899.2	902.4	899.2
157.5°	923.7	922.1	922.1	924.5	922.1
160°	944.2	943.5	942.7	945.0	941.1
162.5°	963.2	960.8	960.0	964.8	960.8
165°	979.8	977.4	975.8	980.6	977.4
167.5°	993.2	990.0	990.0	994.8	990.0
170°	1004.2	1000.3	1001.1	1005.8	1000.3
172.5°	1012.1	1009.0	1009.0	1014.5	1009.0
175°	1019.2	1015.3	1014.5	1020.0	1014.5
177.5°	1022.4	1018.5	1018.5	1024.0	1017.7
180°	1020.8	1020.8	1020.8	1020.8	1020.8

(END OF REPORT)