

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: P334902

Luminaire Tested: **S124IP-S810U835-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334902  
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: S124IP-S810U835-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 810 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3237.0 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

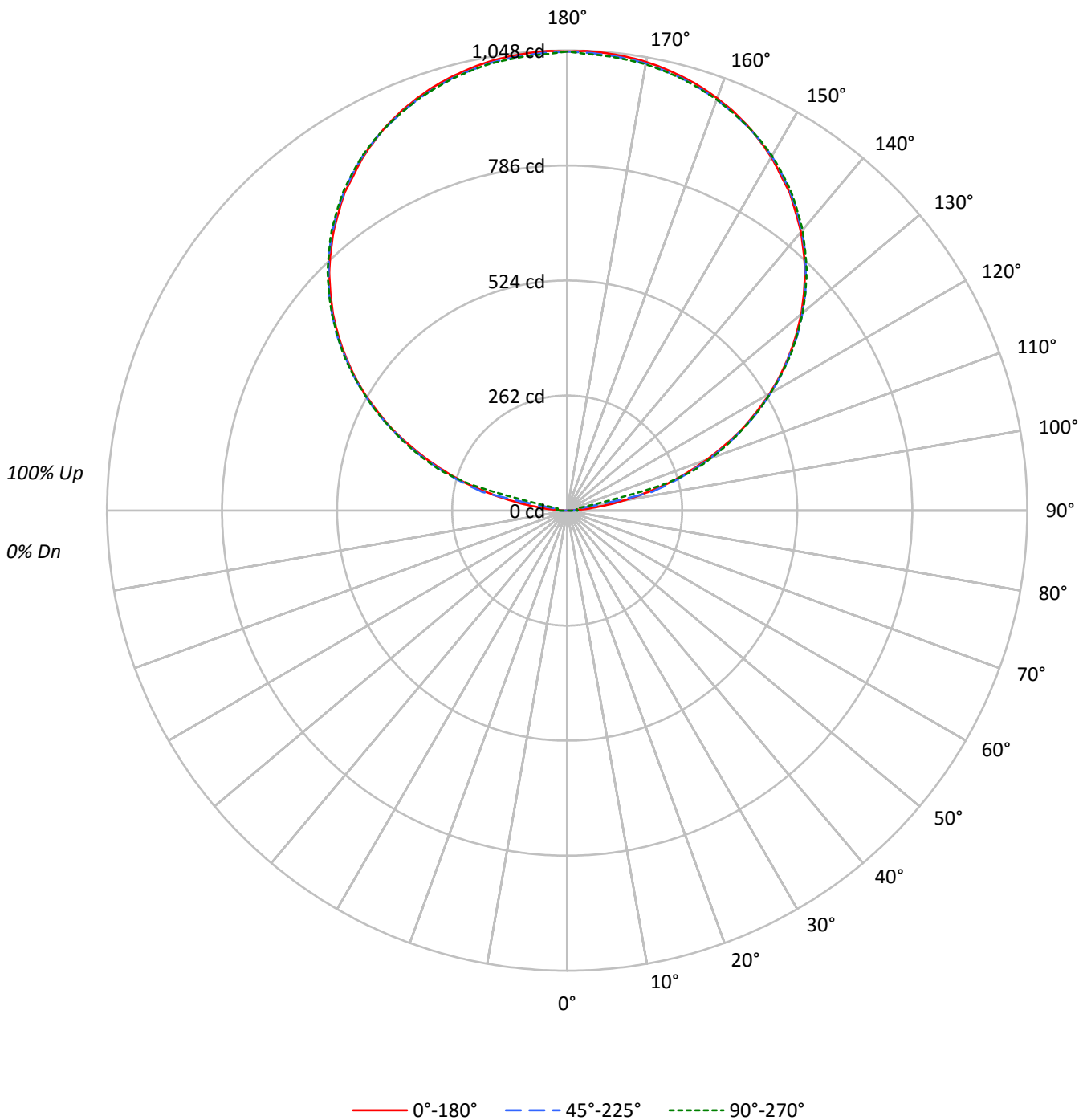
Input Watts (W): 26.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	34.7	1.1
100°-110°	228.5	7.1
110°-120°	436.4	13.5
120°-130°	554.0	17.1
130°-140°	592.6	18.3
140°-150°	554.2	17.1
150°-160°	446.9	13.8
160°-170°	288.2	8.9
170°-180°	99.3	3.1
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°	699.6	21.6
90°-150°	2400.4	74.2
90°-180°	3235.0	99.9
0°-180°	3237.0	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	2
95°	43	16	17	22	23	53
105°	235	240	244	251	223	246
115°	439	442	441	443	443	433
125°	618	621	619	622	622	552
135°	766	766	769	770	772	590
145°	884	886	886	887	888	552
155°	969	970	967	970	968	447
165°	1022	1018	1018	1024	1017	289
175°	1045	1041	1042	1048	1039	100
180°	1045	1045	1045	1045	1045	



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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°	2.3	10.9	17.2	21.9	23.5
92.5°	11.7	10.2	16.4	21.1	21.1
95°	43.0	16.4	17.2	21.9	22.7
97.5°	82.1	99.3	17.2	21.1	21.9
100°	128.2	142.3	34.4	21.1	21.9
102.5°	179.8	189.2	198.6	22.7	22.7
105°	235.3	240.0	243.9	251.0	222.8
107.5°	286.2	288.5	294.0	297.9	301.0
110°	337.8	340.1	344.8	346.4	348.7



TEST NUMBER: P334902

CATALOG NUMBER: S124IP-S810U835-4F0-1E-UDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	387.8	392.5	394.1	393.3	396.4
115°	439.4	441.8	441.0	442.6	442.6
117.5°	485.6	488.7	491.0	490.2	490.2
120°	532.5	535.6	534.8	536.4	534.8
122.5°	576.3	577.8	579.4	580.2	578.6
125°	617.7	620.8	619.3	621.6	622.4
127.5°	657.6	658.4	662.3	661.5	660.7
130°	695.9	696.7	699.0	699.8	699.8
132.5°	731.1	732.6	735.8	736.5	735.8
135°	766.3	765.5	768.6	770.2	771.7
137.5°	797.5	797.5	801.4	803.0	802.2
140°	828.0	829.6	831.1	833.5	834.3
142.5°	855.4	858.5	859.3	860.9	860.9
145°	883.5	885.9	885.9	886.7	888.2
147.5°	905.4	910.1	909.3	910.1	910.9
150°	929.7	932.8	932.0	932.0	932.8
152.5°	950.0	952.3	950.8	952.3	951.6
155°	968.8	969.5	967.2	970.3	968.0
157.5°	985.2	985.2	982.1	986.0	982.1
160°	999.3	996.9	996.1	1000.8	996.1
162.5°	1011.8	1008.6	1007.9	1012.5	1007.1
165°	1021.9	1018.0	1018.0	1024.3	1017.2
167.5°	1030.5	1026.6	1025.8	1032.9	1025.1
170°	1037.6	1032.9	1033.7	1039.9	1032.1
172.5°	1042.3	1037.6	1038.4	1044.6	1036.0
175°	1045.4	1040.7	1041.5	1048.5	1039.1
177.5°	1047.7	1042.3	1043.8	1050.1	1040.7
180°	1045.4	1045.4	1045.4	1045.4	1045.4

(END OF REPORT)