

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: P334927

Luminaire Tested: **S124IP-S810U940-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334927  
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-S810U940-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 810 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2886.4 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

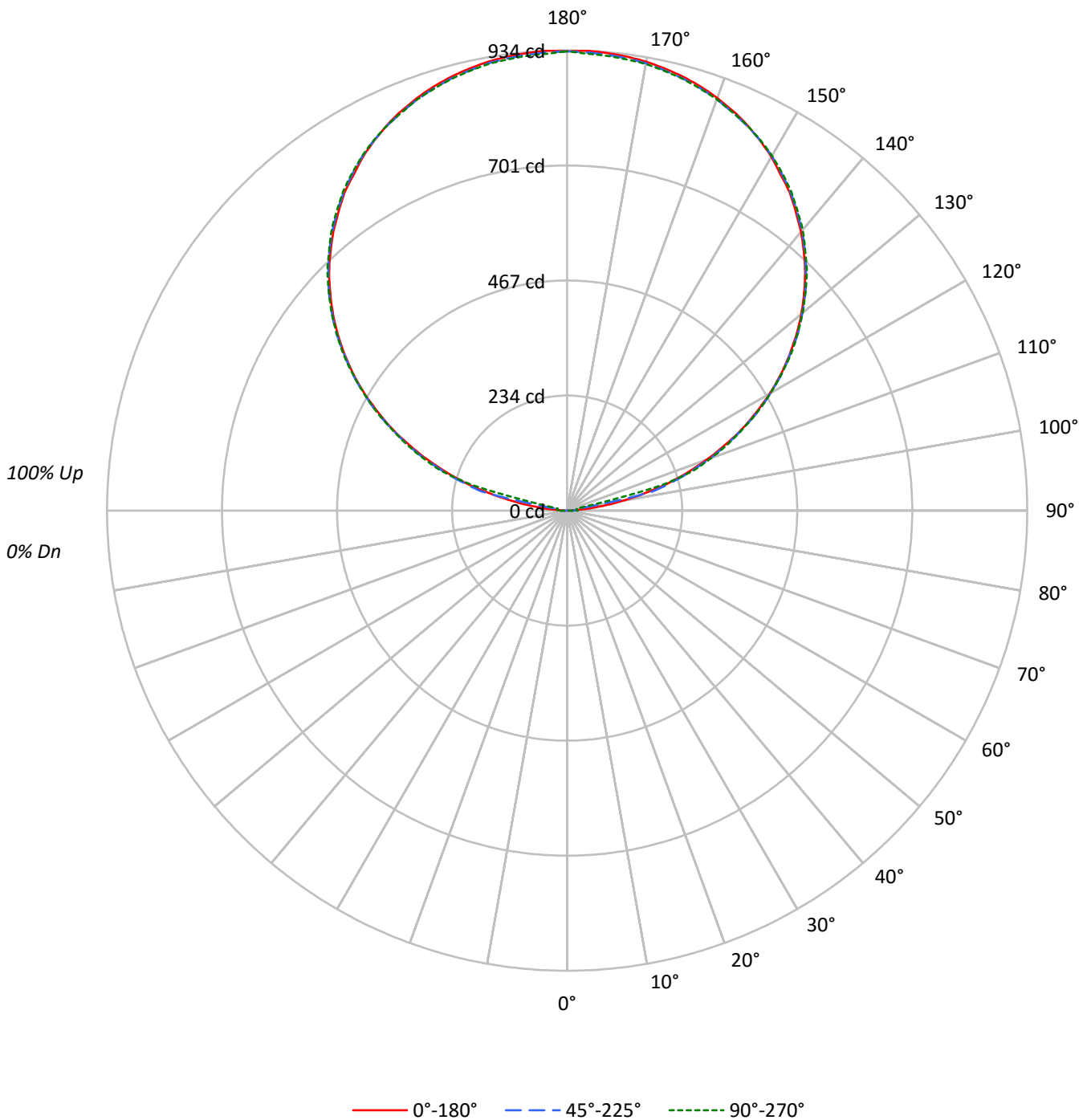
Input Watts (W): 26.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1.9	0.1
90°-100°	30.9	1.1
100°-110°	203.8	7.1
110°-120°	389.1	13.5
120°-130°	494.0	17.1
130°-140°	528.5	18.3
140°-150°	494.2	17.1
150°-160°	398.5	13.8
160°-170°	257.0	8.9
170°-180°	88.6	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.9	0.1
90°-120°	623.8	21.6
90°-150°	2140.4	74.2
90°-180°	2884.0	99.9
0°-180°	2886.4	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°	2	10	15	20	21	2
95°	38	15	15	20	20	47
105°	210	214	218	224	199	220
115°	392	394	393	395	395	386
125°	551	554	552	554	555	492
135°	683	683	685	687	688	527
145°	788	790	790	791	792	492
155°	864	865	862	865	863	398
165°	911	908	908	913	907	258
175°	932	928	929	935	927	89
180°	932	932	932	932	932	



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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°	2.1	9.8	15.3	19.5	20.9
92.5°	10.5	9.1	14.6	18.8	18.8
95°	38.3	14.6	15.3	19.5	20.2
97.5°	73.2	88.5	15.3	18.8	19.5
100°	114.3	126.9	30.7	18.8	19.5
102.5°	160.4	168.7	177.1	20.2	20.2
105°	209.9	214.0	217.5	223.8	198.7
107.5°	255.2	257.3	262.2	265.6	268.4
110°	301.2	303.3	307.5	308.9	311.0



TEST NUMBER: P334927

CATALOG NUMBER: S124IP-S810U940-4F0-1E-UDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	345.8	350.0	351.4	350.7	353.5
115°	391.8	393.9	393.2	394.6	394.6
117.5°	433.0	435.8	437.9	437.2	437.2
120°	474.8	477.6	476.9	478.3	476.9
122.5°	513.9	515.2	516.6	517.3	515.9
125°	550.8	553.6	552.2	554.3	555.0
127.5°	586.4	587.1	590.5	589.8	589.2
130°	620.5	621.2	623.3	624.0	624.0
132.5°	651.9	653.3	656.1	656.8	656.1
135°	683.3	682.6	685.4	686.8	688.2
137.5°	711.2	711.2	714.7	716.0	715.3
140°	738.4	739.8	741.1	743.2	743.9
142.5°	762.8	765.5	766.2	767.6	767.6
145°	787.9	790.0	790.0	790.6	792.0
147.5°	807.4	811.6	810.9	811.6	812.3
150°	829.0	831.8	831.1	831.1	831.8
152.5°	847.1	849.2	847.8	849.2	848.5
155°	863.9	864.6	862.5	865.3	863.2
157.5°	878.5	878.5	875.7	879.2	875.7
160°	891.0	889.0	888.3	892.4	888.3
162.5°	902.2	899.4	898.7	902.9	898.0
165°	911.3	907.8	907.8	913.4	907.1
167.5°	918.9	915.5	914.8	921.0	914.1
170°	925.2	921.0	921.7	927.3	920.3
172.5°	929.4	925.2	925.9	931.5	923.8
175°	932.2	928.0	928.7	935.0	926.6
177.5°	934.3	929.4	930.8	936.4	928.0
180°	932.2	932.2	932.2	932.2	932.2

(END OF REPORT)