

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: P334732

Luminaire Tested: **S123IP-S805U840-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123IP-S805U840-4F0-1E-UDD  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 805 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3241.8 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

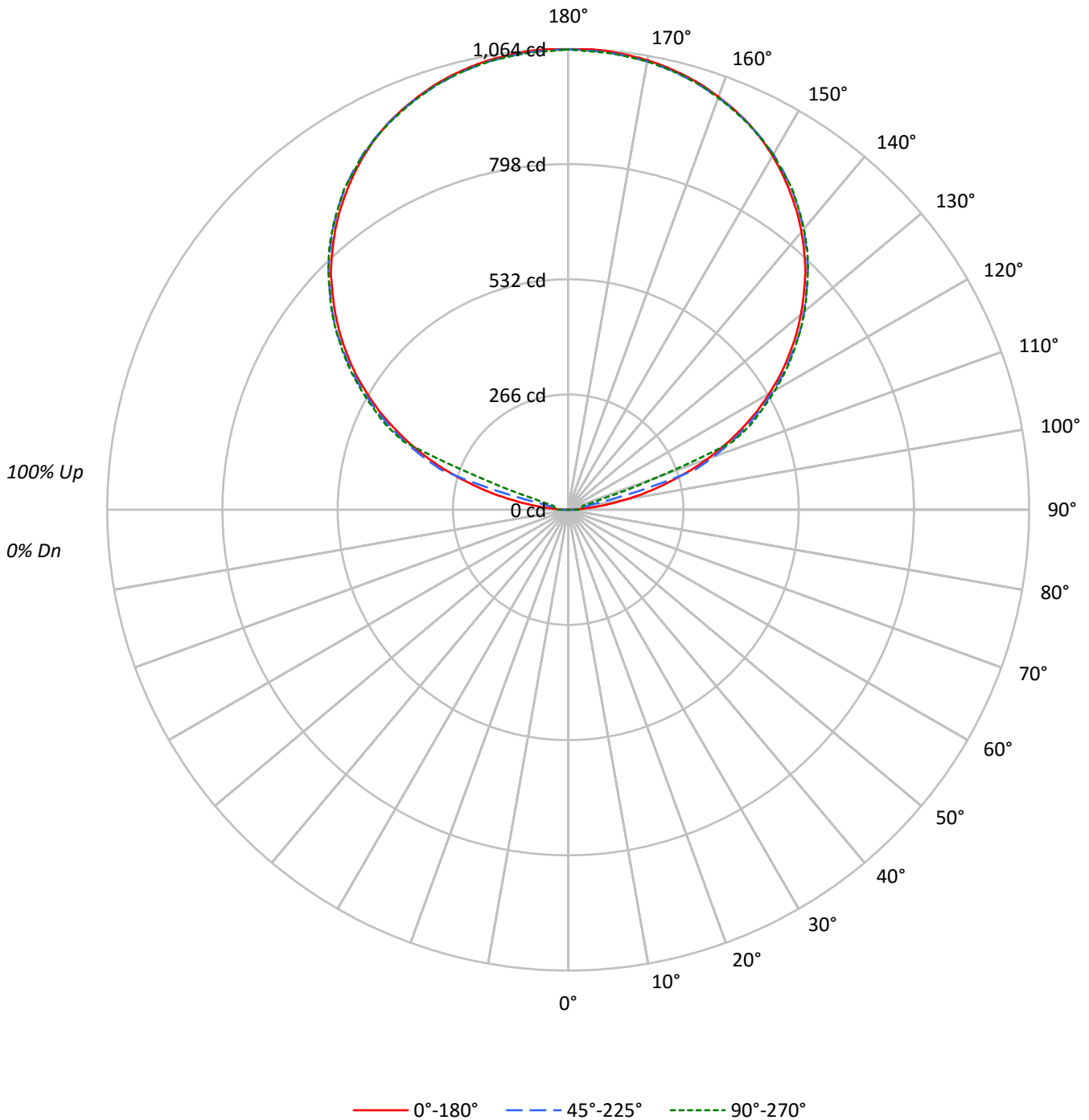
Input Watts (W): 26.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2.1	0.1
90°-100°	37.5	1.2
100°-110°	181.2	5.6
110°-120°	444.0	13.7
120°-130°	563.6	17.4
130°-140°	602.1	18.6
140°-150°	563.0	17.4
150°-160°	454.1	14.0
160°-170°	293.1	9.0
170°-180°	101.0	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.1	0.1
90°-120°	662.7	20.4
90°-150°	2391.4	73.8
90°-180°	3240.0	99.9
0°-180°	3241.8	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	9	19	22	24	3
95°	48	16	24	30	30	58
105°	235	244	173	33	35	249
115°	441	446	453	461	464	436
125°	622	628	632	633	635	556
135°	774	779	782	785	782	596
145°	894	899	901	902	902	560
155°	984	983	984	988	983	454
165°	1038	1036	1035	1041	1036	293
175°	1063	1059	1060	1065	1059	101
180°	1063	1063	1063	1063	1063	



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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°	0.8	8.7	18.9	22.1	23.7
92.5°	18.2	13.4	20.5	26.1	26.8
95°	48.2	15.8	24.5	30.0	30.0
97.5°	87.6	65.5	25.3	31.6	32.4
100°	133.4	149.2	26.1	32.4	33.2
102.5°	185.5	195.8	58.4	32.4	33.9
105°	235.3	244.0	172.9	33.2	34.7
107.5°	288.2	295.3	307.1	185.5	82.1
110°	341.1	347.4	356.1	330.0	217.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	391.6	397.1	405.8	412.9	411.3
115°	441.3	446.1	453.2	461.1	464.2
117.5°	490.3	495.8	499.8	506.1	506.9
120°	535.3	542.4	544.8	551.1	551.1
122.5°	581.1	586.6	589.8	593.7	594.5
125°	622.1	628.4	631.6	633.2	634.8
127.5°	663.2	669.5	673.4	675.8	674.2
130°	701.1	707.4	710.6	713.7	712.1
132.5°	737.4	743.7	746.1	749.2	746.9
135°	774.5	779.2	782.4	784.8	782.4
137.5°	806.1	812.4	814.0	817.9	816.4
140°	837.7	842.4	844.8	847.9	846.4
142.5°	866.9	871.6	874.0	876.4	874.0
145°	893.7	899.2	900.8	902.4	902.4
147.5°	919.8	923.7	925.3	926.9	922.9
150°	943.5	945.8	947.4	949.0	946.6
152.5°	964.8	965.6	966.4	969.5	965.6
155°	984.5	982.9	983.7	987.7	982.9
157.5°	1000.3	1000.3	999.5	1004.3	997.9
160°	1014.5	1013.7	1012.9	1017.7	1012.1
162.5°	1027.9	1025.6	1024.8	1030.3	1025.6
165°	1038.2	1035.8	1035.0	1041.4	1035.8
167.5°	1046.9	1043.7	1043.7	1050.0	1043.7
170°	1054.0	1050.8	1050.8	1057.1	1050.8
172.5°	1058.7	1054.8	1055.6	1061.9	1054.8
175°	1062.7	1058.7	1059.5	1065.0	1058.7
177.5°	1064.3	1060.3	1061.1	1067.4	1059.5
180°	1062.7	1062.7	1062.7	1062.7	1062.7

(END OF REPORT)