

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: P334836

Luminaire Tested: **S124IP-S590U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334836
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-S590U840-4F0-1E-UDD-1
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2067.9 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

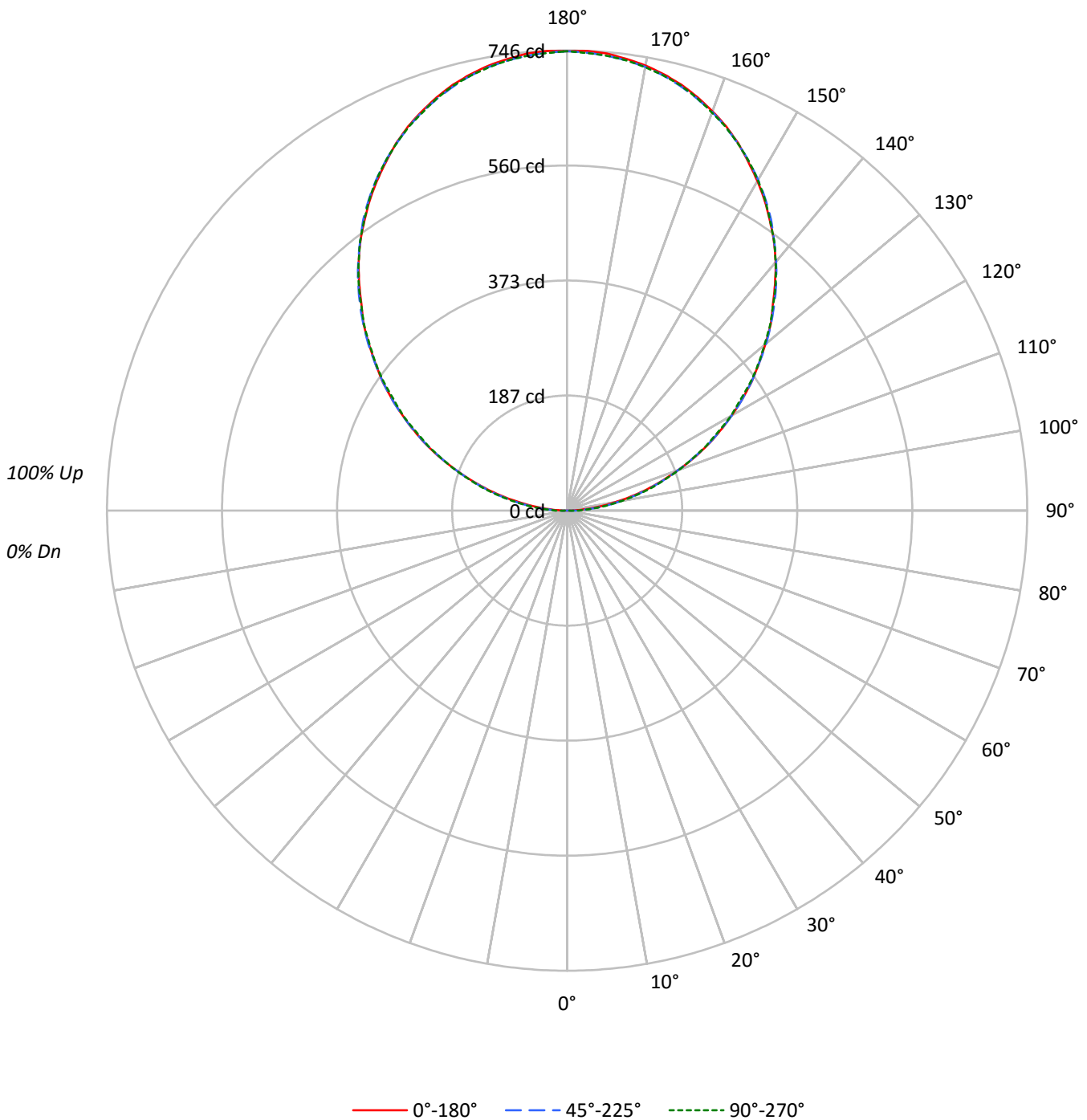
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1.6	0.1
90°-100°	48.5	2.3
100°-110°	145.4	7.0
110°-120°	247.0	11.9
120°-130°	325.7	15.8
130°-140°	365.9	17.7
140°-150°	359.6	17.4
150°-160°	302.5	14.6
160°-170°	201.2	9.7
170°-180°	70.5	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.6	0.1
90°-120°	440.9	21.3
90°-150°	1492.2	72.2
90°-180°	2066.0	99.9
0°-180°	2067.9	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	8	13	16	17	3
95°	35	40	44	46	46	37
105°	134	135	137	139	140	142
115°	251	251	250	249	249	248
125°	366	366	365	364	363	326
135°	472	475	475	474	472	365
145°	573	575	576	575	574	359
155°	657	657	656	658	656	302
165°	715	713	712	715	713	202
175°	744	741	740	744	740	71
180°	745	745	745	745	745	



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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°	1.7	8.1	12.7	16.1	17.3
92.5°	15.0	22.5	25.3	27.1	27.6
95°	34.6	39.7	43.8	45.5	45.5
97.5°	55.3	59.9	64.5	66.8	66.8
100°	80.6	82.9	88.1	89.3	89.3
102.5°	107.1	107.7	112.3	114.0	114.6
105°	134.2	134.8	137.1	138.8	140.5
107.5°	162.4	163.0	163.6	165.9	165.3
110°	191.2	192.4	191.8	190.6	192.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.2	221.2	220.0	220.0	220.0
115°	251.1	251.1	250.0	249.4	248.8
117.5°	279.3	279.3	278.8	277.0	275.3
120°	307.6	309.9	308.1	305.3	306.4
122.5°	336.9	337.5	336.9	335.2	332.3
125°	365.7	365.7	365.2	364.0	362.9
127.5°	391.7	393.4	392.2	391.1	390.5
130°	419.3	421.0	421.0	419.9	417.6
132.5°	447.5	448.7	448.1	447.0	446.4
135°	471.7	475.2	475.2	474.0	472.3
137.5°	498.8	500.5	501.7	499.9	500.5
140°	525.9	527.0	527.0	526.4	525.9
142.5°	550.6	551.8	551.2	551.2	551.2
145°	573.1	575.4	576.0	575.4	573.7
147.5°	596.1	599.0	598.4	597.9	597.3
150°	616.9	619.2	619.2	619.2	618.6
152.5°	636.5	637.6	638.2	639.9	638.2
155°	656.6	656.6	656.0	658.3	656.0
157.5°	673.9	672.7	672.7	674.5	672.7
160°	688.9	688.3	687.7	689.4	686.6
162.5°	702.7	701.0	700.4	703.8	701.0
165°	714.8	713.1	711.9	715.4	713.1
167.5°	724.6	722.3	722.3	725.7	722.3
170°	732.6	729.8	730.3	733.8	729.8
172.5°	738.4	736.1	736.1	740.1	736.1
175°	743.6	740.7	740.1	744.2	740.1
177.5°	745.9	743.0	743.0	747.0	742.4
180°	744.7	744.7	744.7	744.7	744.7

(END OF REPORT)