

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: P334906

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334906
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-S590U840-4F0-1E-UDD
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS
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: 2384.8 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

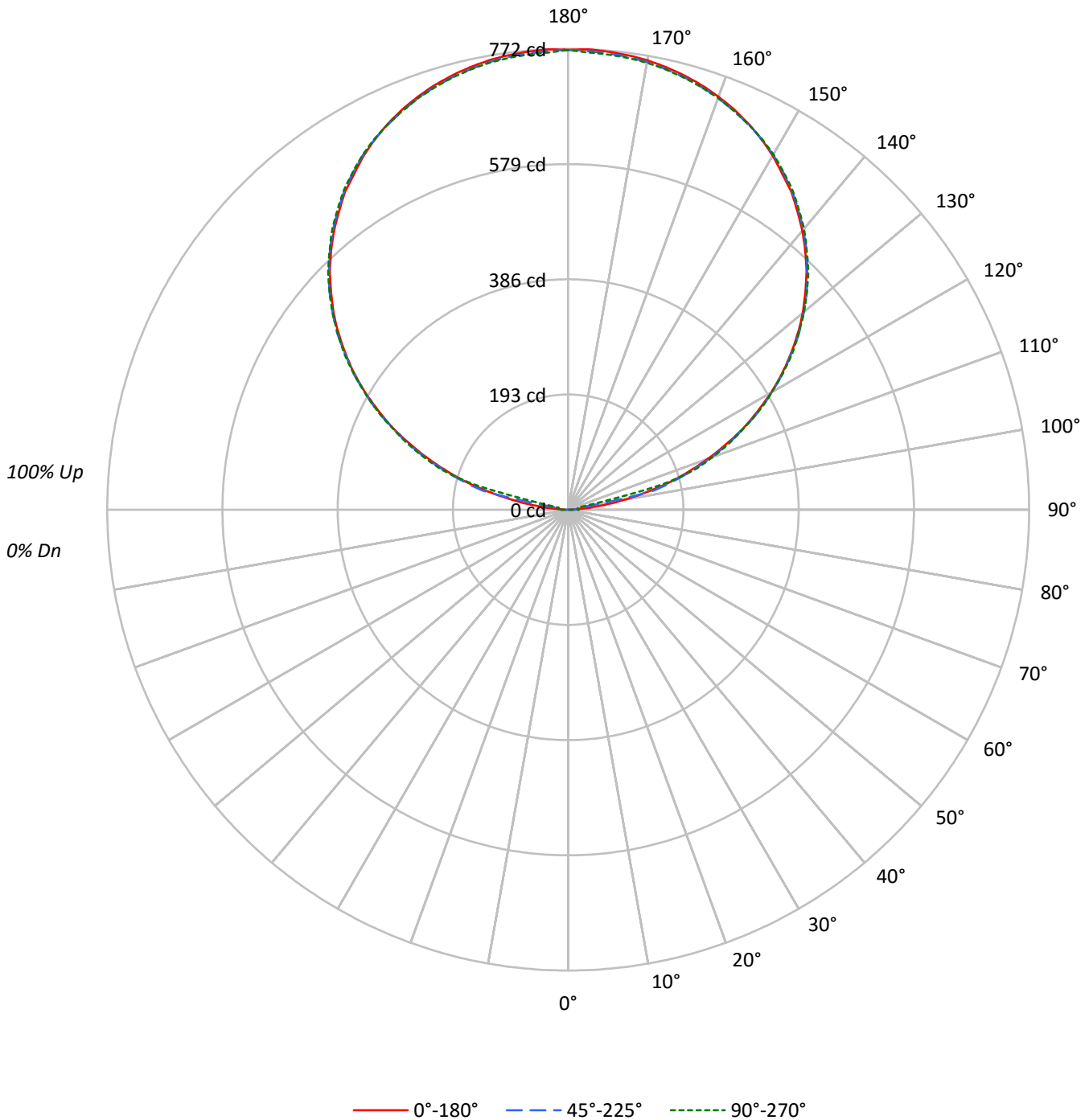
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1.6	0.1
90°-100°	25.6	1.1
100°-110°	168.4	7.1
110°-120°	321.5	13.5
120°-130°	408.1	17.1
130°-140°	436.6	18.3
140°-150°	408.3	17.1
150°-160°	329.2	13.8
160°-170°	212.3	8.9
170°-180°	73.2	3.1
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°	515.4	21.6
90°-150°	1768.5	74.2
90°-180°	2383.0	99.9
0°-180°	2384.8	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°	2	8	13	16	17	2
95°	32	12	13	16	17	39
105°	173	177	180	185	164	181
115°	324	326	325	326	326	319
125°	455	457	456	458	458	406
135°	564	564	566	567	569	435
145°	651	653	653	653	654	407
155°	714	714	713	715	713	329
165°	753	750	750	755	749	213
175°	770	767	767	772	766	73
180°	770	770	770	770	770	



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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°	8.6	7.5	12.1	15.6	15.6
95°	31.7	12.1	12.7	16.1	16.7
97.5°	60.5	73.2	12.7	15.6	16.1
100°	94.5	104.8	25.3	15.6	16.1
102.5°	132.5	139.4	146.3	16.7	16.7
105°	173.4	176.8	179.7	184.9	164.2
107.5°	210.8	212.6	216.6	219.5	221.8
110°	248.9	250.6	254.0	255.2	256.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	285.7	289.2	290.3	289.8	292.1
115°	323.7	325.5	324.9	326.0	326.0
117.5°	357.7	360.0	361.8	361.2	361.2
120°	392.3	394.6	394.0	395.2	394.0
122.5°	424.6	425.7	426.9	427.4	426.3
125°	455.1	457.4	456.2	458.0	458.5
127.5°	484.5	485.0	487.9	487.3	486.8
130°	512.7	513.3	515.0	515.6	515.6
132.5°	538.6	539.8	542.1	542.6	542.1
135°	564.5	564.0	566.3	567.4	568.6
137.5°	587.6	587.6	590.5	591.6	591.0
140°	610.0	611.2	612.3	614.1	614.6
142.5°	630.2	632.5	633.1	634.2	634.2
145°	650.9	652.7	652.7	653.2	654.4
147.5°	667.1	670.5	669.9	670.5	671.1
150°	684.9	687.2	686.7	686.7	687.2
152.5°	699.9	701.6	700.5	701.6	701.1
155°	713.7	714.3	712.6	714.9	713.2
157.5°	725.8	725.8	723.5	726.4	723.5
160°	736.2	734.5	733.9	737.3	733.9
162.5°	745.4	743.1	742.5	746.0	742.0
165°	752.9	750.0	750.0	754.6	749.4
167.5°	759.2	756.4	755.8	761.0	755.2
170°	764.4	761.0	761.5	766.2	760.4
172.5°	767.9	764.4	765.0	769.6	763.3
175°	770.2	766.7	767.3	772.5	765.6
177.5°	771.9	767.9	769.0	773.6	766.7
180°	770.2	770.2	770.2	770.2	770.2

(END OF REPORT)