

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: P334826

Luminaire Tested: **S124IP-S590U830-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334826
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-S590U830-4F0-1E-UDD-1
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

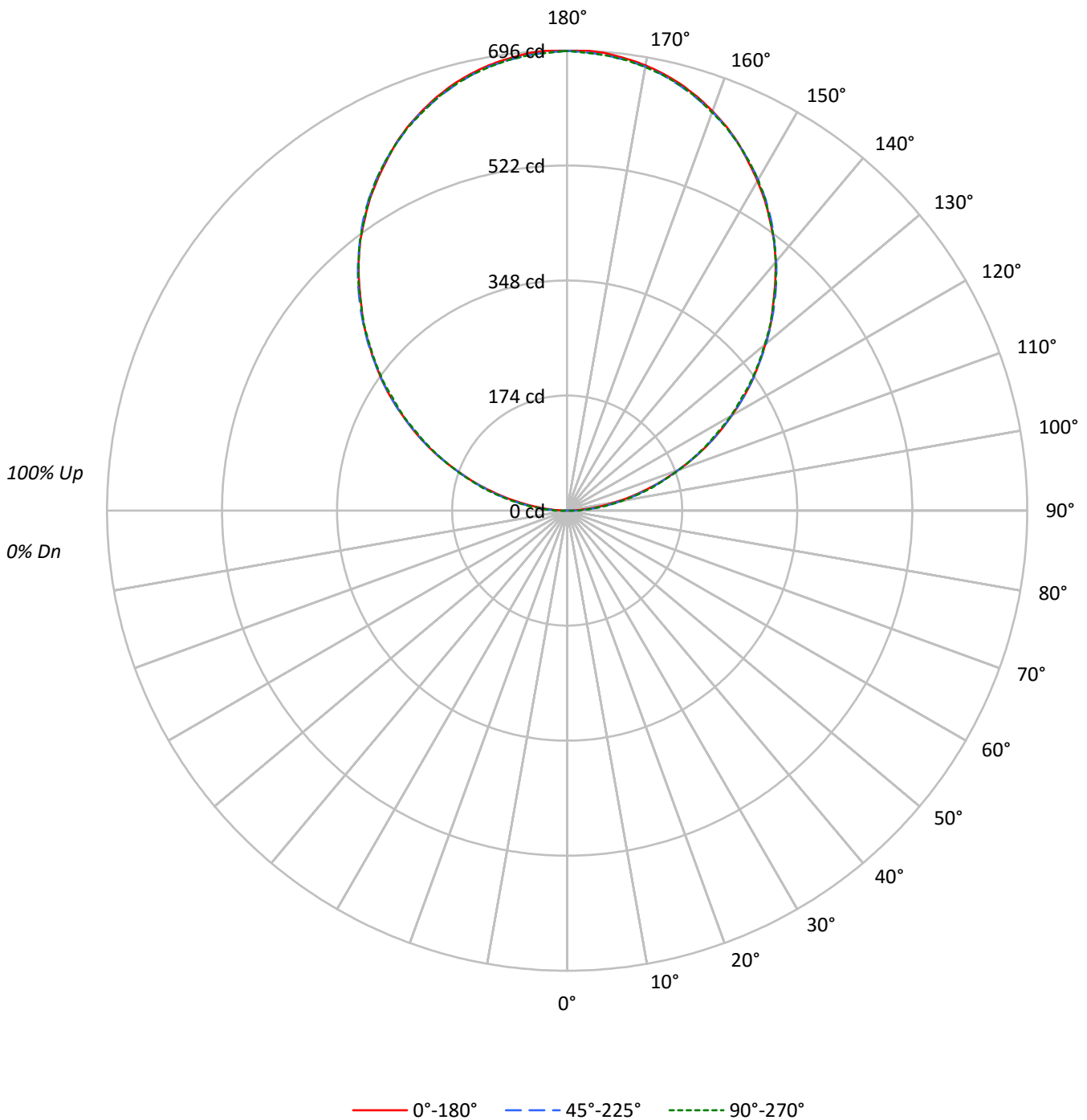
Lumens per Lamp: N/A
Luminaire Lumens: 1930.1 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

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



TEST NUMBER: P334826
CATALOG NUMBER: S124IP-S590U830-4F0-1E-UDD-1

Luminous Intensity Polar Plot





TEST NUMBER: P334826

CATALOG NUMBER: S124IP-S590U830-4F0-1E-UDD-1

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



TEST NUMBER: P334826

CATALOG NUMBER: S124IP-S590U830-4F0-1E-UDD-1

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°	1.5	0.1
90°-100°	45.3	2.3
100°-110°	135.7	7.0
110°-120°	230.5	11.9
120°-130°	304.0	15.8
130°-140°	341.5	17.7
140°-150°	335.6	17.4
150°-160°	282.3	14.6
160°-170°	187.8	9.7
170°-180°	65.8	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.5	0.1
90°-120°	411.6	21.3
90°-150°	1392.8	72.2
90°-180°	1929.0	99.9
0°-180°	1930.1	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	12	15	16	2
95°	32	37	41	42	42	35
105°	125	126	128	130	131	133
115°	234	234	233	233	232	231
125°	341	341	341	340	339	304
135°	440	444	444	442	441	341
145°	535	537	538	537	535	335
155°	613	613	612	614	612	282
165°	667	666	664	668	666	188
175°	694	691	691	695	691	66
180°	695	695	695	695	695	



TEST NUMBER: P334826

CATALOG NUMBER: S124IP-S590U830-4F0-1E-UDD-1

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°	1.6	7.5	11.8	15.1	16.1
92.5°	14.0	21.0	23.7	25.3	25.8
95°	32.3	37.1	40.9	42.5	42.5
97.5°	51.6	55.9	60.2	62.4	62.4
100°	75.3	77.4	82.2	83.3	83.3
102.5°	100.0	100.5	104.8	106.4	107.0
105°	125.3	125.8	127.9	129.6	131.2
107.5°	151.6	152.1	152.7	154.8	154.3
110°	178.5	179.6	179.0	177.9	179.6



TEST NUMBER: P334826

CATALOG NUMBER: S124IP-S590U830-4F0-1E-UDD-1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.4	206.4	205.4	205.4	205.4
115°	234.4	234.4	233.3	232.8	232.2
117.5°	260.7	260.7	260.2	258.6	257.0
120°	287.1	289.2	287.6	284.9	286.0
122.5°	314.5	315.0	314.5	312.9	310.2
125°	341.4	341.4	340.8	339.7	338.7
127.5°	365.6	367.2	366.1	365.0	364.5
130°	391.4	393.0	393.0	391.9	389.7
132.5°	417.7	418.8	418.2	417.2	416.6
135°	440.3	443.5	443.5	442.4	440.8
137.5°	465.5	467.2	468.2	466.6	467.2
140°	490.8	491.9	491.9	491.3	490.8
142.5°	513.9	515.0	514.5	514.5	514.5
145°	534.9	537.0	537.6	537.0	535.4
147.5°	556.4	559.1	558.5	558.0	557.5
150°	575.7	577.9	577.9	577.9	577.4
152.5°	594.0	595.1	595.6	597.3	595.6
155°	612.8	612.8	612.3	614.5	612.3
157.5°	629.0	627.9	627.9	629.5	627.9
160°	642.9	642.4	641.9	643.5	640.8
162.5°	655.8	654.2	653.7	656.9	654.2
165°	667.1	665.5	664.4	667.7	665.5
167.5°	676.3	674.1	674.1	677.3	674.1
170°	683.8	681.1	681.7	684.9	681.1
172.5°	689.2	687.0	687.0	690.8	687.0
175°	694.0	691.3	690.8	694.6	690.8
177.5°	696.2	693.5	693.5	697.2	692.9
180°	695.1	695.1	695.1	695.1	695.1

(END OF REPORT)