

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: P334721

Luminaire Tested: **S123IP-S585U830-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334721  
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-S585U830-4F0-1E-UDD  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 585 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2207.4 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

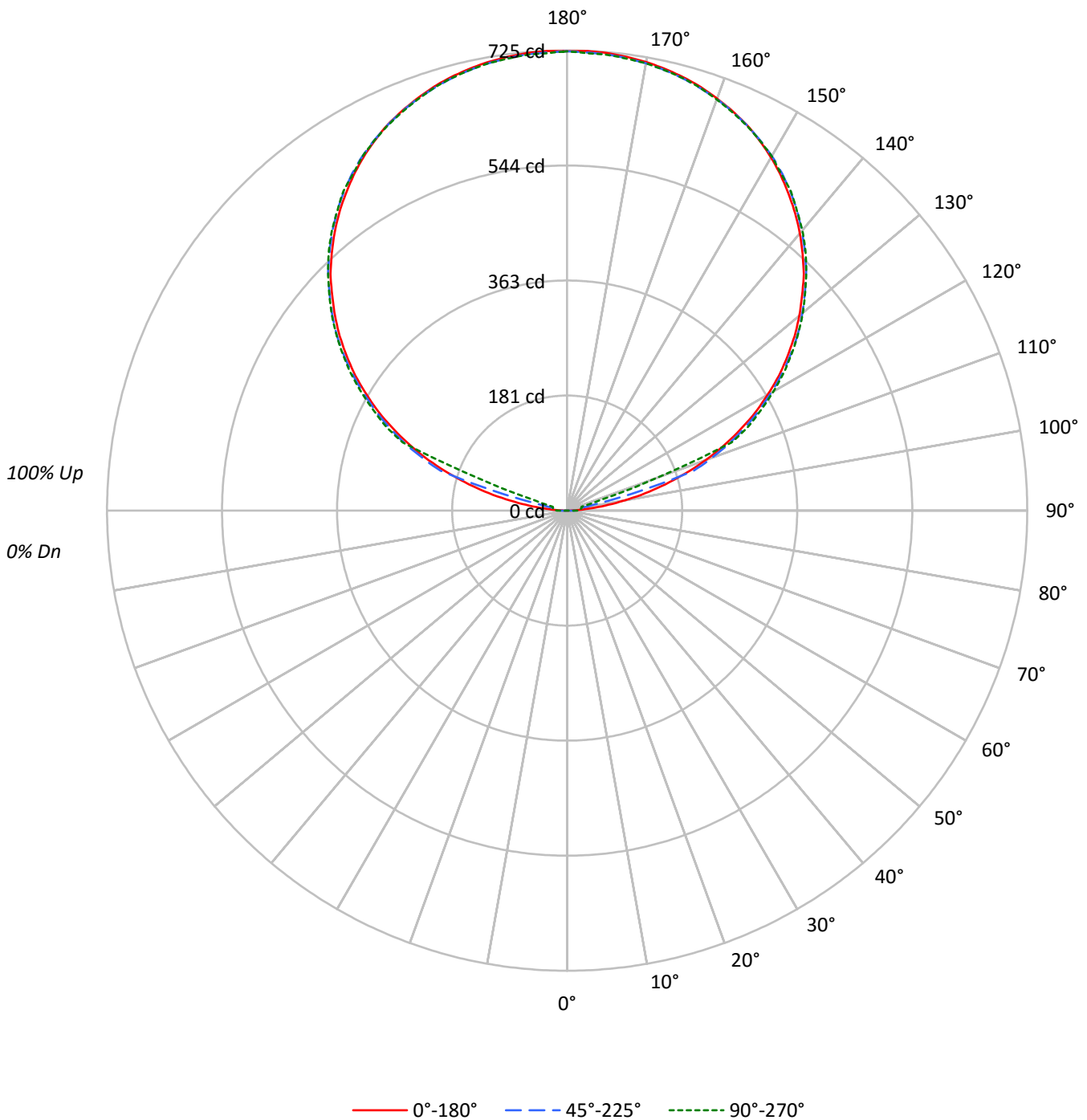
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P334721

CATALOG NUMBER: S123IP-S585U830-4F0-1E-UDD

### Luminous Intensity Polar Plot





TEST NUMBER: P334721

CATALOG NUMBER: S123IP-S585U830-4F0-1E-UDD

**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: P334721

CATALOG NUMBER: S123IP-S585U830-4F0-1E-UDD

**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°	1.4	0.1
90°-100°	25.5	1.2
100°-110°	123.4	5.6
110°-120°	302.3	13.7
120°-130°	383.8	17.4
130°-140°	410.0	18.6
140°-150°	383.4	17.4
150°-160°	309.2	14.0
160°-170°	199.6	9.0
170°-180°	68.8	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.4	0.1
90°-120°	451.2	20.4
90°-150°	1628.3	73.8
90°-180°	2206.0	99.9
0°-180°	2207.4	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°	0	6	13	15	16	2
95°	33	11	17	20	20	39
105°	160	166	118	23	24	170
115°	300	304	309	314	316	297
125°	424	428	430	431	432	379
135°	527	531	533	534	533	406
145°	608	612	613	614	614	381
155°	670	669	670	672	669	309
165°	707	705	705	709	705	200
175°	724	721	721	725	721	69
180°	724	724	724	724	724	



TEST NUMBER: P334721

CATALOG NUMBER: S123IP-S585U830-4F0-1E-UDD

**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°	0.5	5.9	12.9	15.1	16.1
92.5°	12.4	9.1	14.0	17.7	18.3
95°	32.8	10.8	16.7	20.4	20.4
97.5°	59.7	44.6	17.2	21.5	22.0
100°	90.9	101.6	17.7	22.0	22.6
102.5°	126.3	133.3	39.8	22.0	23.1
105°	160.2	166.1	117.7	22.6	23.7
107.5°	196.2	201.1	209.1	126.3	55.9
110°	232.2	236.5	242.5	224.7	147.8



TEST NUMBER: P334721

CATALOG NUMBER: S123IP-S585U830-4F0-1E-UDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	266.6	270.4	276.3	281.2	280.1
115°	300.5	303.7	308.6	313.9	316.1
117.5°	333.8	337.6	340.3	344.6	345.1
120°	364.5	369.3	370.9	375.2	375.2
122.5°	395.7	399.4	401.6	404.3	404.8
125°	423.6	427.9	430.1	431.1	432.2
127.5°	451.6	455.9	458.6	460.2	459.1
130°	477.4	481.7	483.8	486.0	484.9
132.5°	502.1	506.4	508.0	510.2	508.6
135°	527.4	530.6	532.7	534.4	532.7
137.5°	548.9	553.2	554.2	556.9	555.9
140°	570.4	573.6	575.2	577.4	576.3
142.5°	590.3	593.5	595.1	596.7	595.1
145°	608.5	612.3	613.4	614.5	614.5
147.5°	626.3	629.0	630.0	631.1	628.4
150°	642.4	644.0	645.1	646.2	644.6
152.5°	656.9	657.5	658.0	660.2	657.5
155°	670.4	669.3	669.8	672.5	669.3
157.5°	681.1	681.1	680.6	683.8	679.5
160°	690.8	690.3	689.7	692.9	689.2
162.5°	699.9	698.3	697.8	701.5	698.3
165°	706.9	705.3	704.8	709.1	705.3
167.5°	712.8	710.7	710.7	715.0	710.7
170°	717.7	715.5	715.5	719.8	715.5
172.5°	720.9	718.2	718.8	723.1	718.2
175°	723.6	720.9	721.4	725.2	720.9
177.5°	724.7	722.0	722.5	726.8	721.4
180°	723.6	723.6	723.6	723.6	723.6

(END OF REPORT)