

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: P334705

Luminaire Tested: **S123IW-S460U930-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334705  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123IW-S460U930-4F0-1E-UDD-1  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 460 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1304.2 lumens  
Efficiency: N/A  
Efficacy: 149.9 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

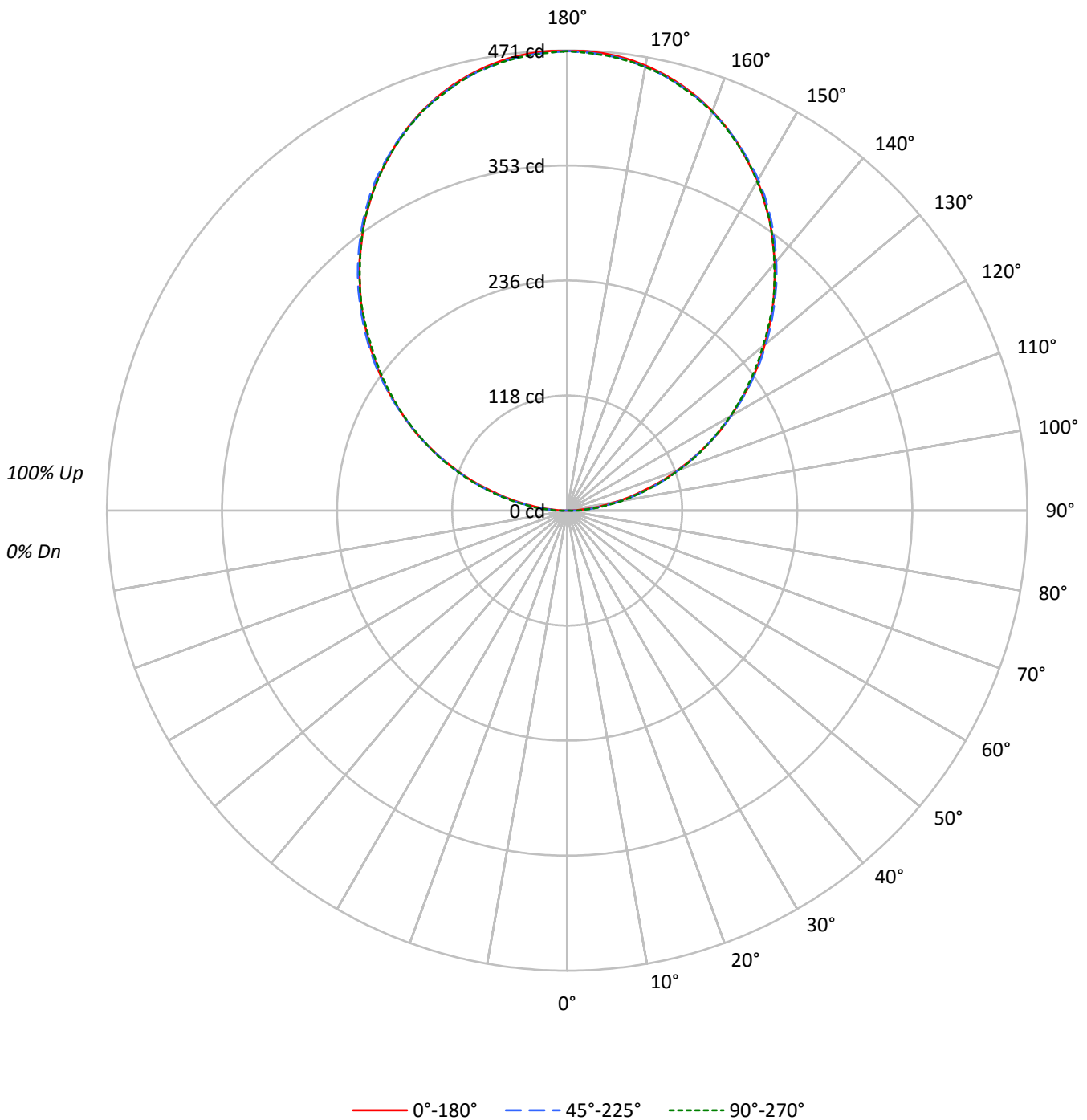
Input Watts (W): 8.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1.0	0.1
90°-100°	30.3	2.3
100°-110°	91.6	7.0
110°-120°	156.0	12.0
120°-130°	205.2	15.7
130°-140°	230.7	17.7
140°-150°	226.8	17.4
150°-160°	190.9	14.6
160°-170°	127.1	9.7
170°-180°	44.5	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.0	0.1
90°-120°	277.9	21.3
90°-150°	940.7	72.1
90°-180°	1303.0	99.9
0°-180°	1304.2	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	4	9	10	11	2
95°	22	24	27	29	29	24
105°	83	84	87	87	88	89
115°	157	158	157	158	157	155
125°	230	231	230	229	227	205
135°	298	300	300	298	298	230
145°	362	362	364	363	362	226
155°	414	414	414	416	413	191
165°	451	450	450	452	450	127
175°	469	468	468	470	467	45
180°	470	470	470	470	470	



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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°	0.4	4.1	8.9	10.3	11.1
92.5°	11.1	13.3	15.5	16.6	15.9
95°	21.8	24.4	27.3	28.8	28.8
97.5°	35.8	37.7	39.9	41.8	41.4
100°	50.2	52.5	54.3	55.4	56.2
102.5°	66.9	68.0	70.6	71.7	71.3
105°	83.1	83.9	87.2	87.2	87.9
107.5°	102.3	102.7	104.2	105.3	104.9
110°	120.1	120.8	121.6	123.0	122.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	138.6	138.9	138.9	140.8	140.8
115°	157.0	158.1	157.4	157.8	157.4
117.5°	175.9	176.2	175.5	175.5	174.4
120°	193.2	195.5	193.6	193.2	192.5
122.5°	211.3	212.8	212.1	211.0	209.9
125°	229.8	230.9	230.2	228.7	227.2
127.5°	246.8	249.0	248.3	246.1	244.6
130°	263.8	266.8	265.7	264.2	261.6
132.5°	280.8	283.8	283.0	281.2	279.3
135°	298.2	300.4	300.0	298.5	297.8
137.5°	314.1	315.9	317.0	315.2	314.1
140°	330.7	332.5	332.9	332.5	329.9
142.5°	345.8	347.7	348.4	348.0	346.2
145°	361.7	362.5	363.6	363.2	361.7
147.5°	375.4	376.9	378.0	378.0	375.8
150°	389.8	390.5	391.3	391.3	389.1
152.5°	401.6	402.7	403.1	403.8	402.0
155°	414.2	414.2	414.5	416.0	413.4
157.5°	424.9	424.5	424.9	426.4	424.2
160°	434.9	434.1	434.1	436.0	434.5
162.5°	443.7	442.6	443.0	444.8	442.3
165°	451.1	450.0	450.0	452.2	449.6
167.5°	457.4	455.9	456.3	458.5	456.3
170°	462.6	461.1	461.1	463.7	461.1
172.5°	466.6	465.2	465.2	467.4	464.8
175°	469.2	467.8	467.8	470.0	467.4
177.5°	470.7	469.2	469.2	471.4	468.9
180°	470.3	470.3	470.3	470.3	470.3

(END OF REPORT)