

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: P334785

Luminaire Tested: **S123IW-S460U940-4F0-1E-UDD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334785
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: S123IW-S460U940-4F0-1E-UDD
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS
WALL MOUNT, 460 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

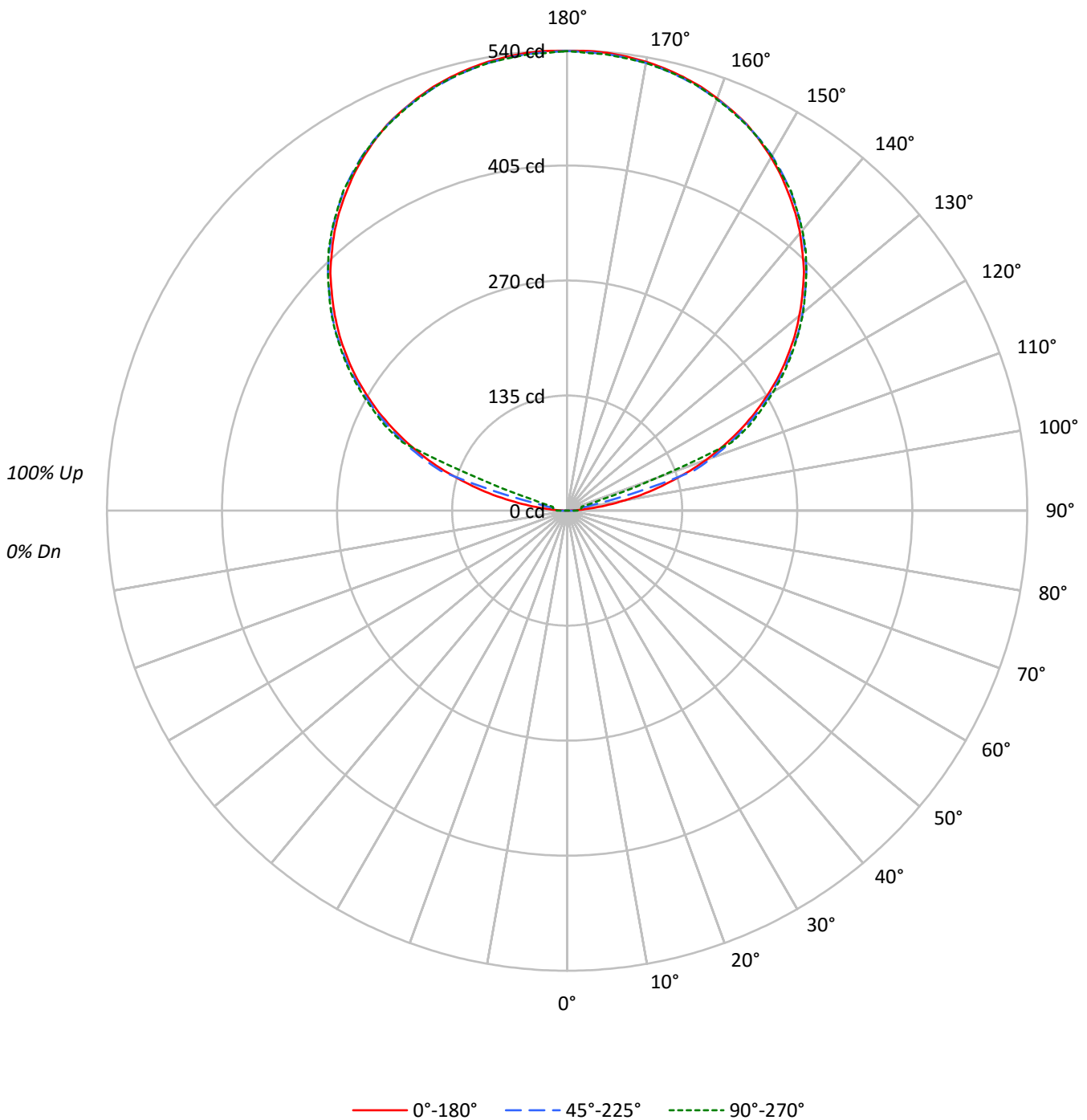
Lumens per Lamp: N/A
Luminaire Lumens: 1645.0 lumens
Efficiency: N/A
Efficacy: 189.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 8.7
Input Voltage (V): 120
Input Current (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°	1.1	0.1
90°-100°	19.0	1.2
100°-110°	91.9	5.6
110°-120°	225.3	13.7
120°-130°	286.0	17.4
130°-140°	305.5	18.6
140°-150°	285.7	17.4
150°-160°	230.5	14.0
160°-170°	148.7	9.0
170°-180°	51.2	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.1	0.1
90°-120°	336.2	20.4
90°-150°	1213.5	73.8
90°-180°	1644.0	99.9
0°-180°	1645.0	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	10	11	12	1
95°	24	8	12	15	15	29
105°	119	124	88	17	18	127
115°	224	226	230	234	236	221
125°	316	319	320	321	322	282
135°	393	395	397	398	397	303
145°	454	456	457	458	458	284
155°	500	499	499	501	499	230
165°	527	526	525	528	526	149
175°	539	537	538	540	537	51
180°	539	539	539	539	539	



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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	4.4	9.6	11.2	12.0
92.5°	9.2	6.8	10.4	13.2	13.6
95°	24.4	8.0	12.4	15.2	15.2
97.5°	44.5	33.3	12.8	16.0	16.4
100°	67.7	75.7	13.2	16.4	16.8
102.5°	94.1	99.4	29.6	16.4	17.2
105°	119.4	123.8	87.7	16.8	17.6
107.5°	146.2	149.8	155.8	94.1	41.7
110°	173.1	176.3	180.7	167.5	110.2



TEST NUMBER: P334785

CATALOG NUMBER: S123IW-S460U940-4F0-1E-UDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.7	201.5	205.9	209.5	208.7
115°	223.9	226.4	230.0	234.0	235.6
117.5°	248.8	251.6	253.6	256.8	257.2
120°	271.6	275.2	276.4	279.6	279.6
122.5°	294.9	297.7	299.3	301.3	301.7
125°	315.7	318.9	320.5	321.3	322.1
127.5°	336.5	339.7	341.7	342.9	342.1
130°	355.8	359.0	360.6	362.2	361.4
132.5°	374.2	377.4	378.6	380.2	379.0
135°	393.0	395.4	397.0	398.2	397.0
137.5°	409.0	412.2	413.0	415.0	414.2
140°	425.1	427.5	428.7	430.3	429.5
142.5°	439.9	442.3	443.5	444.7	443.5
145°	453.5	456.3	457.1	457.9	457.9
147.5°	466.7	468.7	469.5	470.3	468.3
150°	478.7	479.9	480.8	481.6	480.4
152.5°	489.6	490.0	490.4	492.0	490.0
155°	499.6	498.8	499.2	501.2	498.8
157.5°	507.6	507.6	507.2	509.6	506.4
160°	514.8	514.4	514.0	516.4	513.6
162.5°	521.6	520.4	520.0	522.8	520.4
165°	526.8	525.6	525.2	528.4	525.6
167.5°	531.2	529.6	529.6	532.8	529.6
170°	534.8	533.2	533.2	536.4	533.2
172.5°	537.2	535.2	535.6	538.8	535.2
175°	539.2	537.2	537.6	540.4	537.2
177.5°	540.0	538.0	538.4	541.6	537.6
180°	539.2	539.2	539.2	539.2	539.2

(END OF REPORT)