

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: P334715

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334715
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-S460U940-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 460 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

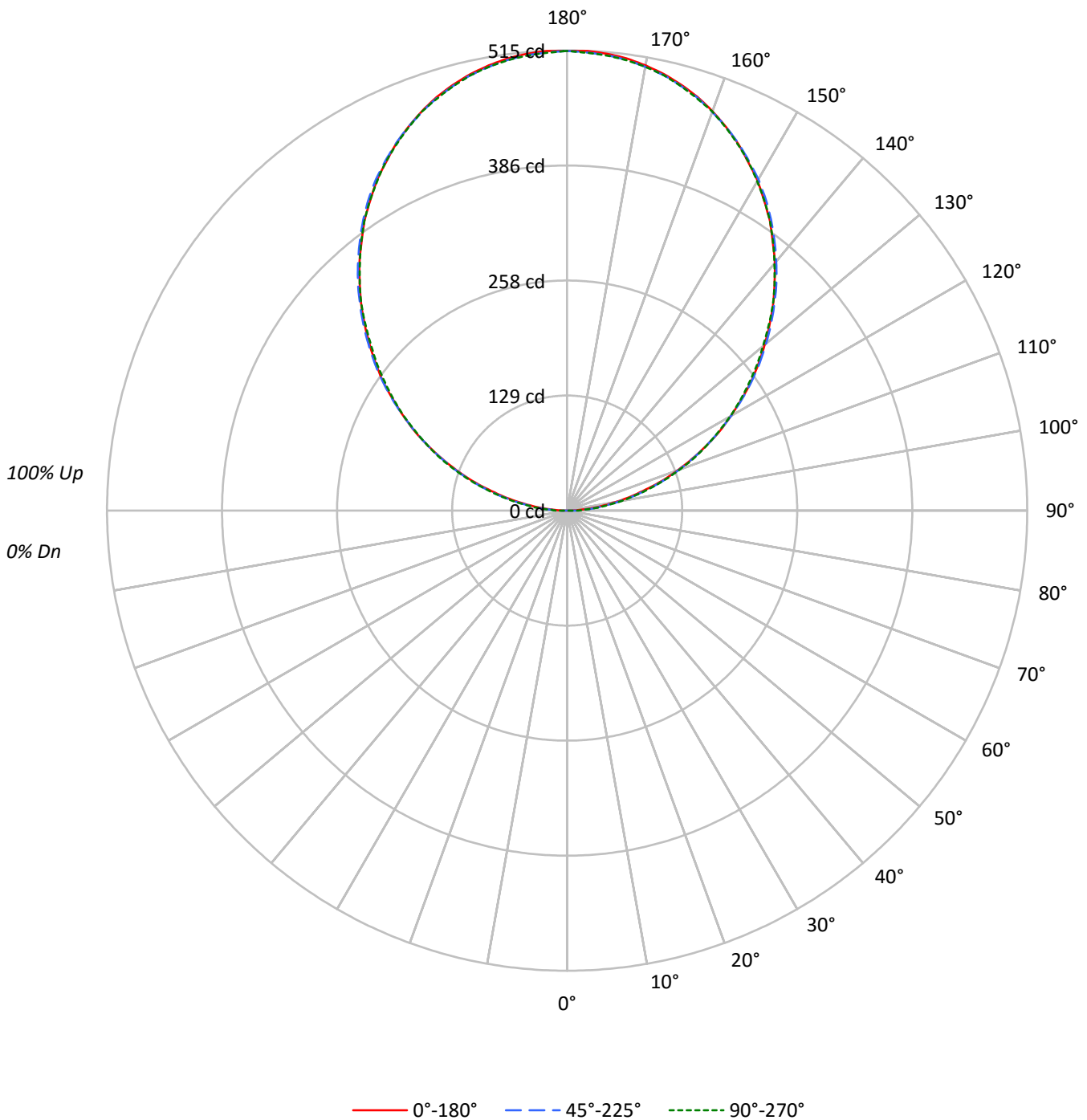
Lumens per Lamp: N/A
Luminaire Lumens: 1426.4 lumens
Efficiency: N/A
Efficacy: 164.0 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 8.7
Input Voltage (V): 120
Input Current (A_{in}): 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: P334715
CATALOG NUMBER: S123IW-S460U940-4F0-1E-UDD-1

Luminous Intensity Polar Plot





TEST NUMBER: P334715

CATALOG NUMBER: S123IW-S460U940-4F0-1E-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: P334715

CATALOG NUMBER: S123IW-S460U940-4F0-1E-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°	1.1	0.1
90°-100°	33.1	2.3
100°-110°	100.2	7.0
110°-120°	170.6	12.0
120°-130°	224.5	15.7
130°-140°	252.3	17.7
140°-150°	248.1	17.4
150°-160°	208.8	14.6
160°-170°	139.0	9.7
170°-180°	48.7	3.4
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°	304.0	21.3
90°-150°	1028.8	72.1
90°-180°	1425.0	99.9
0°-180°	1426.4	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	4	10	11	12	2
95°	24	27	30	32	32	26
105°	91	92	95	95	96	97
115°	172	173	172	173	172	170
125°	251	253	252	250	248	224
135°	326	328	328	326	326	251
145°	396	396	398	397	396	247
155°	453	453	453	455	452	209
165°	493	492	492	495	492	139
175°	513	512	512	514	511	49
180°	514	514	514	514	514	



TEST NUMBER: P334715

CATALOG NUMBER: S123IW-S460U940-4F0-1E-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°	0.4	4.4	9.7	11.3	12.1
92.5°	12.1	14.5	17.0	18.2	17.4
95°	23.8	26.7	29.9	31.5	31.5
97.5°	39.2	41.2	43.6	45.7	45.3
100°	55.0	57.4	59.4	60.6	61.4
102.5°	73.1	74.4	77.2	78.4	78.0
105°	90.9	91.7	95.4	95.4	96.2
107.5°	111.9	112.3	114.0	115.2	114.8
110°	131.3	132.1	132.9	134.6	133.8



TEST NUMBER: P334715

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.5	151.9	151.9	154.0	154.0
115°	171.7	173.0	172.1	172.6	172.1
117.5°	192.4	192.8	191.9	191.9	190.7
120°	211.3	213.8	211.7	211.3	210.5
122.5°	231.1	232.8	232.0	230.7	229.5
125°	251.3	252.6	251.8	250.1	248.5
127.5°	269.9	272.4	271.6	269.1	267.5
130°	288.5	291.8	290.5	288.9	286.1
132.5°	307.1	310.3	309.5	307.5	305.5
135°	326.1	328.5	328.1	326.5	325.7
137.5°	343.5	345.5	346.7	344.7	343.5
140°	361.7	363.7	364.1	363.7	360.9
142.5°	378.2	380.3	381.1	380.7	378.6
145°	395.6	396.4	397.6	397.2	395.6
147.5°	410.6	412.2	413.4	413.4	411.0
150°	426.3	427.1	427.9	427.9	425.5
152.5°	439.3	440.5	440.9	441.7	439.7
155°	453.0	453.0	453.4	455.0	452.2
157.5°	464.7	464.3	464.7	466.3	463.9
160°	475.6	474.8	474.8	476.8	475.2
162.5°	485.3	484.1	484.5	486.5	483.7
165°	493.4	492.2	492.2	494.6	491.8
167.5°	500.3	498.7	499.1	501.5	499.1
170°	505.9	504.3	504.3	507.1	504.3
172.5°	510.4	508.8	508.8	511.2	508.4
175°	513.2	511.6	511.6	514.0	511.2
177.5°	514.8	513.2	513.2	515.6	512.8
180°	514.4	514.4	514.4	514.4	514.4

(END OF REPORT)