

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: P334765

Luminaire Tested: **S123IW-S460U840-4F0-1E-UDD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334765
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-S460U840-4F0-1E-UDD
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS
WALL MOUNT, 460 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

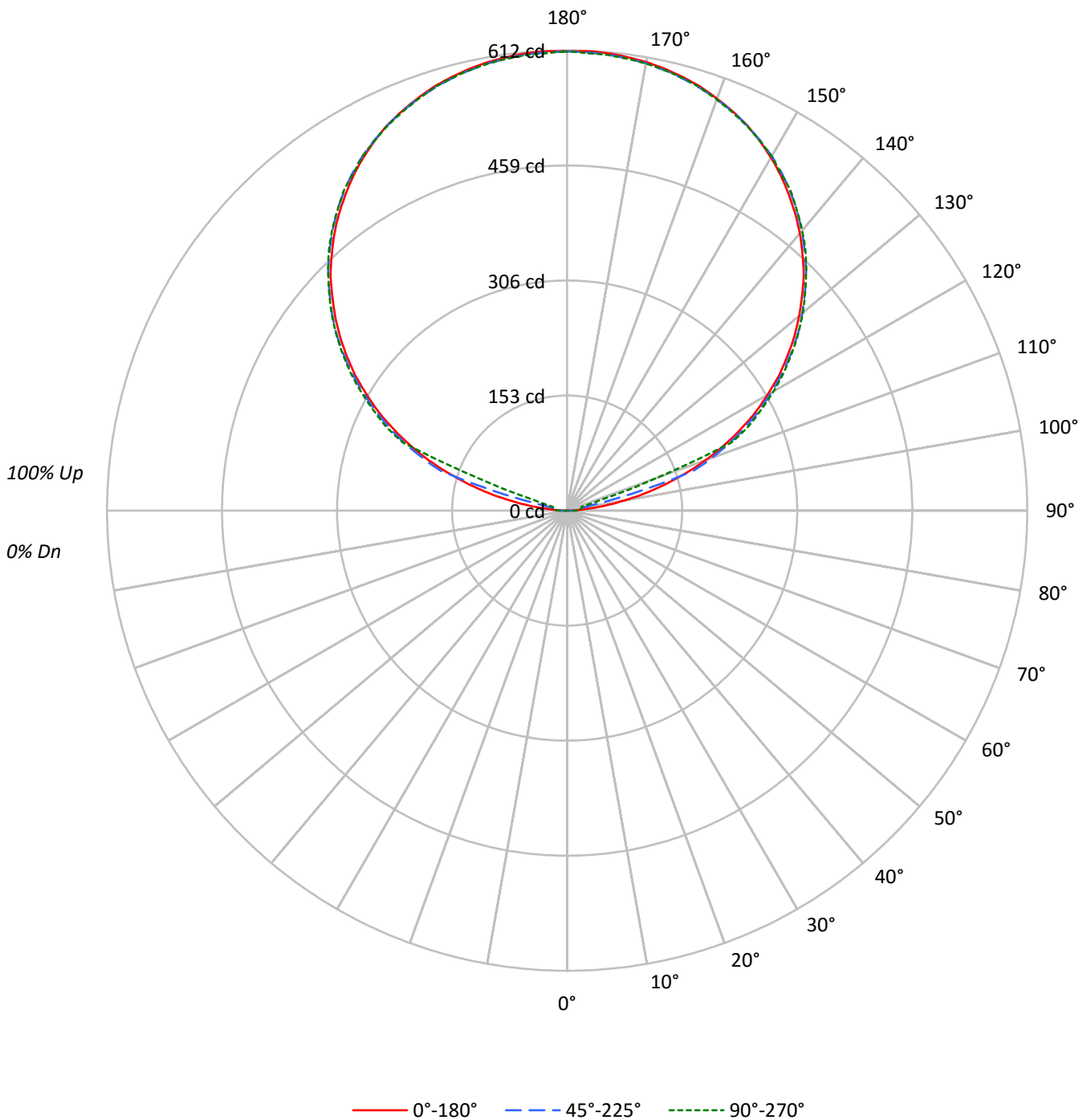
Lumens per Lamp: N/A
Luminaire Lumens: 1863.0 lumens
Efficiency: N/A
Efficacy: 214.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

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°	1.2	0.1
90°-100°	21.5	1.2
100°-110°	104.1	5.6
110°-120°	255.1	13.7
120°-130°	323.9	17.4
130°-140°	346.0	18.6
140°-150°	323.6	17.4
150°-160°	261.0	14.0
160°-170°	168.4	9.0
170°-180°	58.0	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.2	0.1
90°-120°	380.8	20.4
90°-150°	1374.3	73.8
90°-180°	1862.0	99.9
0°-180°	1863.0	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	5	11	13	14	2
95°	28	9	14	17	17	33
105°	135	140	99	19	20	143
115°	254	256	260	265	267	250
125°	358	361	363	364	365	319
135°	445	448	450	451	450	343
145°	514	517	518	519	519	322
155°	566	565	565	568	565	261
165°	597	595	595	598	595	169
175°	611	608	609	612	608	58
180°	611	611	611	611	611	



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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°	0.5	5.0	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.2	17.2
97.5°	50.4	37.7	14.5	18.1	18.6
100°	76.7	85.8	15.0	18.6	19.1
102.5°	106.6	112.5	33.6	18.6	19.5
105°	135.2	140.2	99.4	19.1	20.0
107.5°	165.6	169.7	176.5	106.6	47.2
110°	196.0	199.6	204.6	189.7	124.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.0	228.2	233.2	237.3	236.4
115°	253.6	256.3	260.4	265.0	266.8
117.5°	281.8	284.9	287.2	290.8	291.3
120°	307.6	311.7	313.1	316.7	316.7
122.5°	333.9	337.1	338.9	341.2	341.6
125°	357.5	361.2	363.0	363.9	364.8
127.5°	381.1	384.7	387.0	388.4	387.5
130°	402.9	406.5	408.3	410.2	409.2
132.5°	423.8	427.4	428.8	430.6	429.2
135°	445.1	447.8	449.6	451.0	449.6
137.5°	463.2	466.9	467.8	470.0	469.1
140°	481.4	484.1	485.5	487.3	486.4
142.5°	498.2	500.9	502.3	503.6	502.3
145°	513.6	516.8	517.7	518.6	518.6
147.5°	528.6	530.8	531.7	532.7	530.4
150°	542.2	543.5	544.5	545.4	544.0
152.5°	554.4	554.9	555.3	557.2	554.9
155°	565.8	564.9	565.3	567.6	564.9
157.5°	574.9	574.9	574.4	577.1	573.5
160°	583.0	582.6	582.1	584.8	581.7
162.5°	590.7	589.4	588.9	592.1	589.4
165°	596.6	595.3	594.8	598.4	595.3
167.5°	601.6	599.8	599.8	603.4	599.8
170°	605.7	603.9	603.9	607.5	603.9
172.5°	608.4	606.2	606.6	610.2	606.2
175°	610.7	608.4	608.9	612.1	608.4
177.5°	611.6	609.3	609.8	613.4	608.9
180°	610.7	610.7	610.7	610.7	610.7

(END OF REPORT)