

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: P334940

Luminaire Tested: **S124IW-S470U840-4F0-1E-UDD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124IW-S470U840-4F0-1E-UDD
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS
WALL MOUNT, 470 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

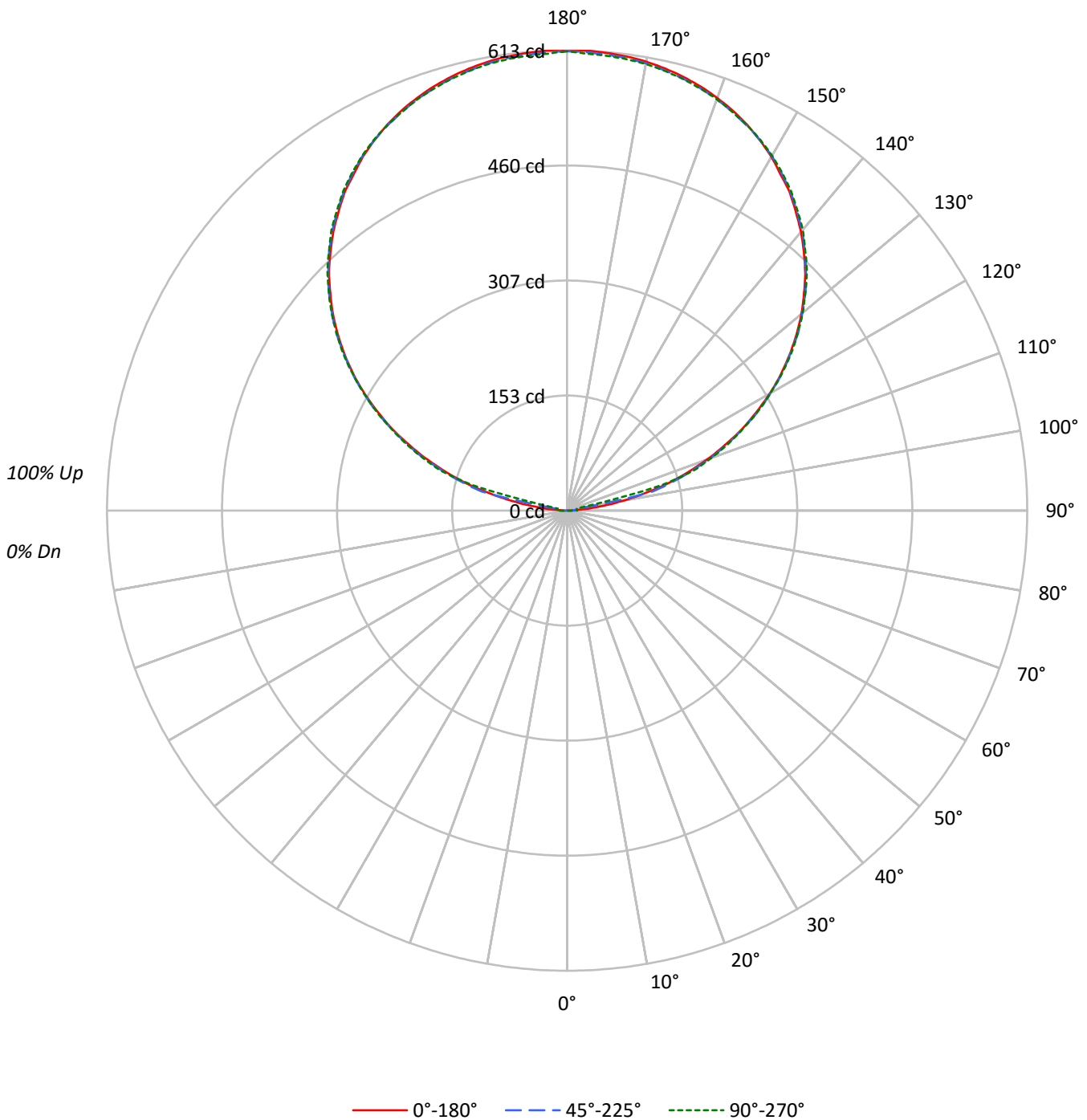
Lumens per Lamp: N/A
Luminaire Lumens: 1894.7 lumens
Efficiency: N/A
Efficacy: 217.8 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

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°	1.3	0.1
90°-100°	20.3	1.1
100°-110°	133.8	7.1
110°-120°	255.4	13.5
120°-130°	324.3	17.1
130°-140°	346.9	18.3
140°-150°	324.4	17.1
150°-160°	261.6	13.8
160°-170°	168.7	8.9
170°-180°	58.1	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.3	0.1
90°-120°	409.5	21.6
90°-150°	1405.0	74.2
90°-180°	1893.0	99.9
0°-180°	1894.7	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°	1	6	10	13	14	1
95°	25	10	10	13	13	31
105°	138	140	143	147	130	144
115°	257	259	258	259	259	253
125°	362	363	362	364	364	323
135°	448	448	450	451	452	346
145°	517	518	518	519	520	323
155°	567	568	566	568	567	261
165°	598	596	596	600	595	169
175°	612	609	610	614	608	58
180°	612	612	612	612	612	



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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°	1.4	6.4	10.1	12.8	13.7
92.5°	6.9	5.9	9.6	12.4	12.4
95°	25.2	9.6	10.1	12.8	13.3
97.5°	48.1	58.1	10.1	12.4	12.8
100°	75.1	83.3	20.1	12.4	12.8
102.5°	105.3	110.8	116.2	13.3	13.3
105°	137.8	140.5	142.8	146.9	130.4
107.5°	167.5	168.9	172.1	174.4	176.2
110°	197.7	199.1	201.8	202.7	204.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	227.0	229.8	230.7	230.2	232.0
115°	257.2	258.6	258.1	259.0	259.0
117.5°	284.2	286.0	287.4	287.0	287.0
120°	311.7	313.5	313.0	314.0	313.0
122.5°	337.3	338.2	339.1	339.6	338.7
125°	361.6	363.4	362.5	363.8	364.3
127.5°	384.9	385.4	387.6	387.2	386.7
130°	407.3	407.8	409.2	409.6	409.6
132.5°	427.9	428.8	430.7	431.1	430.7
135°	448.5	448.1	449.9	450.8	451.7
137.5°	466.8	466.8	469.1	470.0	469.6
140°	484.7	485.6	486.5	487.9	488.3
142.5°	500.7	502.5	503.0	503.9	503.9
145°	517.2	518.5	518.5	519.0	519.9
147.5°	530.0	532.7	532.3	532.7	533.2
150°	544.2	546.0	545.5	545.5	546.0
152.5°	556.1	557.4	556.5	557.4	557.0
155°	567.1	567.5	566.1	568.0	566.6
157.5°	576.7	576.7	574.8	577.1	574.8
160°	584.9	583.5	583.1	585.8	583.1
162.5°	592.2	590.4	589.9	592.7	589.5
165°	598.2	595.9	595.9	599.6	595.4
167.5°	603.2	600.9	600.5	604.6	600.0
170°	607.3	604.6	605.0	608.7	604.1
172.5°	610.1	607.3	607.8	611.5	606.4
175°	611.9	609.2	609.6	613.7	608.2
177.5°	613.3	610.1	611.0	614.7	609.2
180°	611.9	611.9	611.9	611.9	611.9

(END OF REPORT)