

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: P334890

Luminaire Tested: **S124IW-S470U940-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124IW-S470U940-4F0-1E-UDD-1
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 470 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1450.9 lumens
Efficiency: N/A
Efficacy: 166.8 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

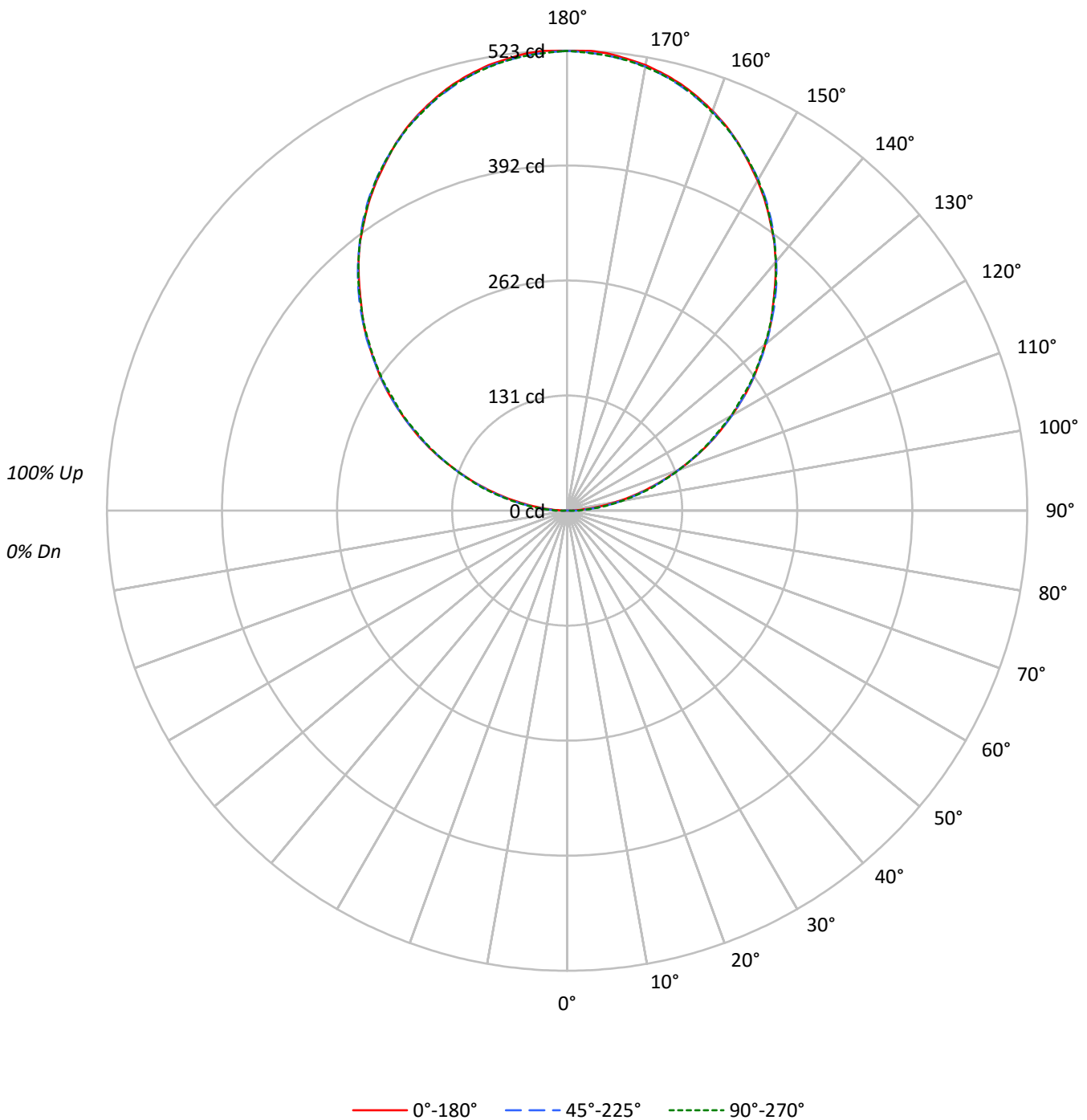
Input Watts (W): 8.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1.1	0.1
90°-100°	34.1	2.3
100°-110°	102.0	7.0
110°-120°	173.3	11.9
120°-130°	228.6	15.8
130°-140°	256.7	17.7
140°-150°	252.3	17.4
150°-160°	212.2	14.6
160°-170°	141.2	9.7
170°-180°	49.4	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°	309.4	21.3
90°-150°	1046.9	72.2
90°-180°	1450.0	99.9
0°-180°	1450.9	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	9	11	12	2
95°	24	28	31	32	32	26
105°	94	95	96	97	99	100
115°	176	176	175	175	175	174
125°	257	257	256	255	255	229
135°	331	333	333	333	331	256
145°	402	404	404	404	402	252
155°	461	461	460	462	460	212
165°	502	500	499	502	500	141
175°	522	520	519	522	519	50
180°	522	522	522	522	522	



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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°	1.2	5.7	8.9	11.3	12.1
92.5°	10.5	15.8	17.8	19.0	19.4
95°	24.2	27.9	30.7	31.9	31.9
97.5°	38.8	42.0	45.3	46.9	46.9
100°	56.6	58.2	61.8	62.6	62.6
102.5°	75.2	75.6	78.8	80.0	80.4
105°	94.1	94.6	96.2	97.4	98.6
107.5°	113.9	114.4	114.8	116.4	116.0
110°	134.2	135.0	134.6	133.7	135.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	155.2	155.2	154.4	154.4	154.4
115°	176.2	176.2	175.4	175.0	174.6
117.5°	196.0	196.0	195.6	194.4	193.1
120°	215.8	217.4	216.2	214.2	215.0
122.5°	236.4	236.8	236.4	235.2	233.1
125°	256.6	256.6	256.2	255.4	254.6
127.5°	274.8	276.0	275.2	274.4	274.0
130°	294.2	295.4	295.4	294.6	293.0
132.5°	314.0	314.8	314.4	313.6	313.2
135°	330.9	333.4	333.4	332.6	331.3
137.5°	349.9	351.1	351.9	350.7	351.1
140°	368.9	369.7	369.7	369.3	368.9
142.5°	386.3	387.1	386.7	386.7	386.7
145°	402.1	403.7	404.1	403.7	402.5
147.5°	418.2	420.2	419.8	419.4	419.0
150°	432.8	434.4	434.4	434.4	434.0
152.5°	446.5	447.3	447.7	448.9	447.7
155°	460.6	460.6	460.2	461.9	460.2
157.5°	472.8	472.0	472.0	473.2	472.0
160°	483.3	482.9	482.5	483.7	481.7
162.5°	493.0	491.8	491.3	493.8	491.8
165°	501.5	500.2	499.4	501.9	500.2
167.5°	508.3	506.7	506.7	509.1	506.7
170°	514.0	512.0	512.4	514.8	512.0
172.5°	518.0	516.4	516.4	519.2	516.4
175°	521.7	519.6	519.2	522.1	519.2
177.5°	523.3	521.3	521.3	524.1	520.8
180°	522.5	522.5	522.5	522.5	522.5

(END OF REPORT)