

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: P334867

Luminaire Tested: **S124IW-S1050U835-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334867  
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-S1050U835-4F0-1E-UDD-1  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 1050 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3637.2 lumens  
Efficiency: N/A  
Efficacy: 185.6 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

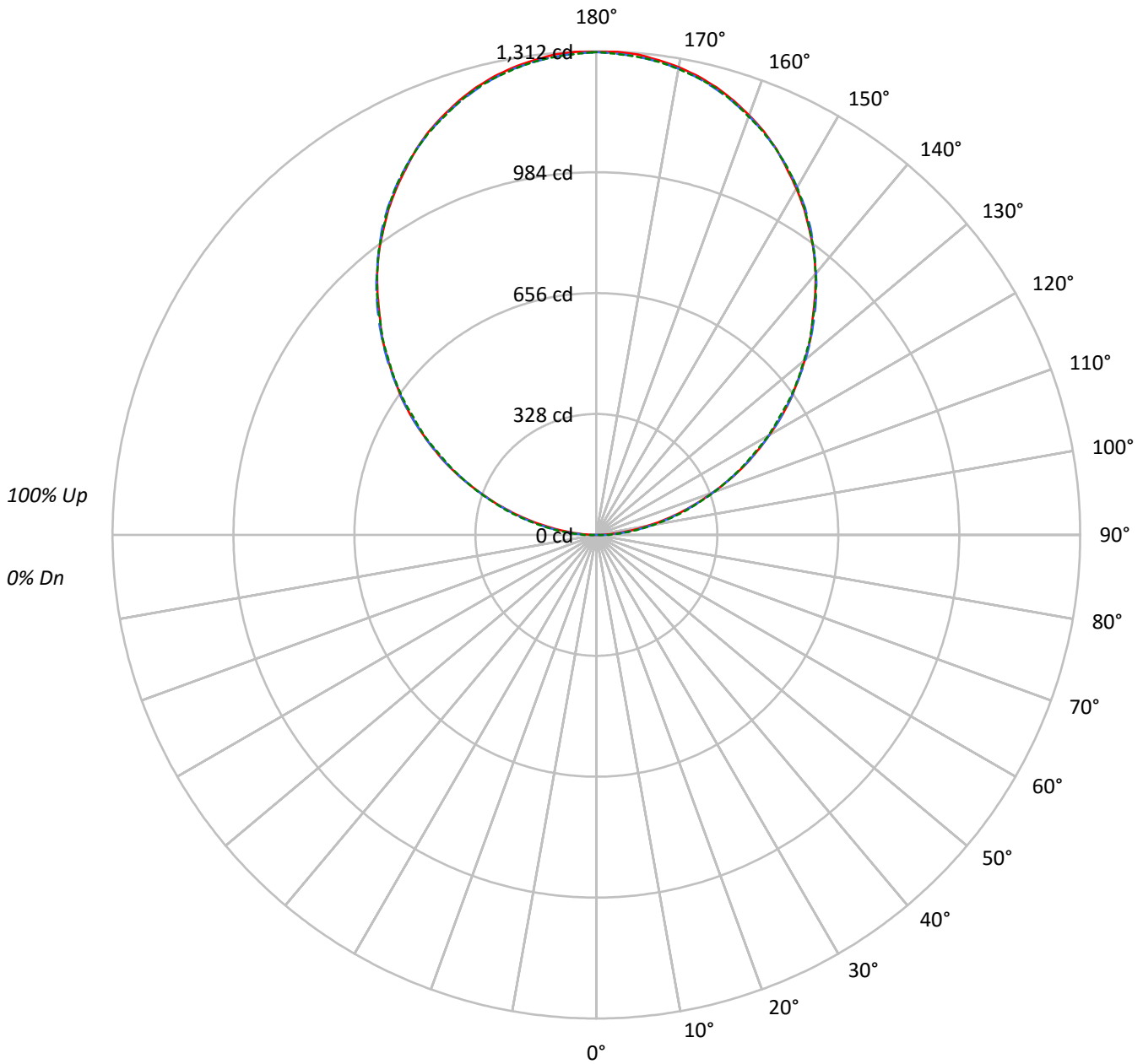
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°



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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°	2.8	0.1
90°-100°	85.4	2.3
100°-110°	255.7	7.0
110°-120°	434.4	11.9
120°-130°	572.9	15.8
130°-140°	643.5	17.7
140°-150°	632.5	17.4
150°-160°	532.0	14.6
160°-170°	354.0	9.7
170°-180°	123.9	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.8	0.1
90°-120°	775.6	21.3
90°-150°	2624.5	72.2
90°-180°	3634.0	99.9
0°-180°	3637.2	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°	3	14	22	28	30	4
95°	61	70	77	80	80	66
105°	236	237	241	244	247	250
115°	442	442	440	439	438	436
125°	643	643	642	640	638	573
135°	830	836	836	834	831	642
145°	1008	1012	1013	1012	1009	631
155°	1155	1155	1154	1158	1154	531
165°	1257	1254	1252	1258	1254	354
175°	1308	1303	1302	1309	1302	124
180°	1310	1310	1310	1310	1310	



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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°	3.0	14.2	22.3	28.4	30.4
92.5°	26.3	39.5	44.6	47.6	48.6
95°	60.8	69.9	77.0	80.0	80.0
97.5°	97.3	105.4	113.5	117.5	117.5
100°	141.8	145.9	155.0	157.0	157.0
102.5°	188.4	189.4	197.5	200.6	201.6
105°	236.0	237.1	241.1	244.1	247.2
107.5°	285.7	286.7	287.7	291.8	290.7
110°	336.3	338.4	337.3	335.3	338.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	389.0	389.0	387.0	387.0	387.0
115°	441.7	441.7	439.7	438.6	437.6
117.5°	491.3	491.3	490.3	487.3	484.2
120°	541.0	545.0	542.0	536.9	538.9
122.5°	592.6	593.6	592.6	589.6	584.5
125°	643.3	643.3	642.3	640.2	638.2
127.5°	688.9	691.9	689.9	687.9	686.8
130°	737.5	740.5	740.5	738.5	734.5
132.5°	787.1	789.2	788.1	786.1	785.1
135°	829.7	835.8	835.8	833.7	830.7
137.5°	877.3	880.3	882.4	879.3	880.3
140°	924.9	926.9	926.9	925.9	924.9
142.5°	968.5	970.5	969.5	969.5	969.5
145°	1008.0	1012.0	1013.0	1012.0	1009.0
147.5°	1048.5	1053.6	1052.6	1051.5	1050.5
150°	1085.0	1089.0	1089.0	1089.0	1088.0
152.5°	1119.4	1121.4	1122.5	1125.5	1122.5
155°	1154.9	1154.9	1153.9	1157.9	1153.9
157.5°	1185.3	1183.2	1183.2	1186.3	1183.2
160°	1211.6	1210.6	1209.6	1212.6	1207.5
162.5°	1235.9	1232.9	1231.9	1237.9	1232.9
165°	1257.2	1254.1	1252.1	1258.2	1254.1
167.5°	1274.4	1270.4	1270.4	1276.4	1270.4
170°	1288.6	1283.5	1284.5	1290.6	1283.5
172.5°	1298.7	1294.7	1294.7	1301.8	1294.7
175°	1307.8	1302.8	1301.8	1308.9	1301.8
177.5°	1311.9	1306.8	1306.8	1313.9	1305.8
180°	1309.9	1309.9	1309.9	1309.9	1309.9

(END OF REPORT)