

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: P334687

Luminaire Tested: **S123IW-S1030U830-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334687  
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-S1030U830-4F0-1E-UDD-1  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 1030 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3370.8 lumens  
Efficiency: N/A  
Efficacy: 172.0 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

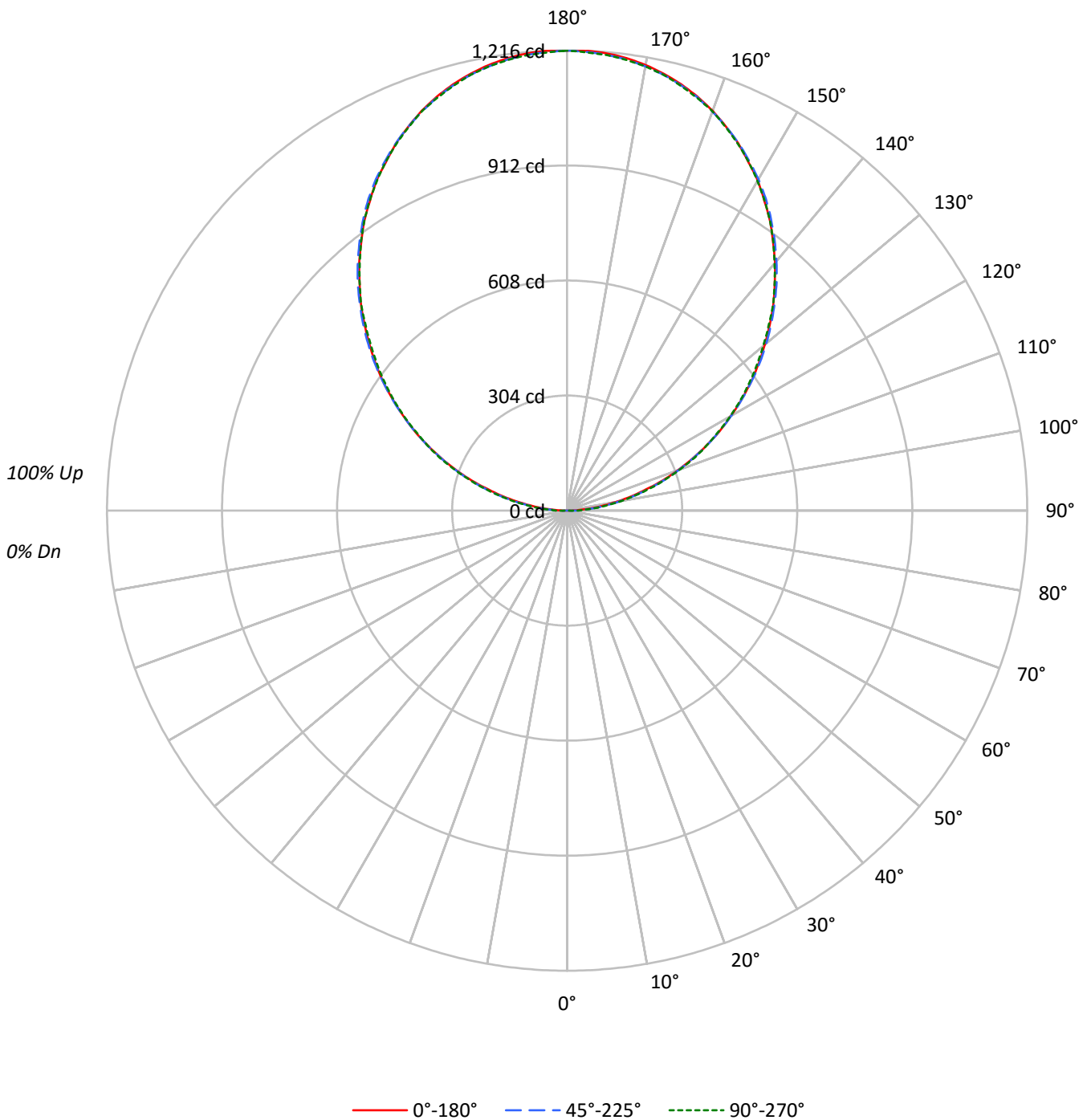
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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°	2.6	0.1
90°-100°	78.2	2.3
100°-110°	236.9	7.0
110°-120°	403.2	12.0
120°-130°	530.4	15.7
130°-140°	596.2	17.7
140°-150°	586.2	17.4
150°-160°	493.5	14.6
160°-170°	328.5	9.7
170°-180°	115.0	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.6	0.1
90°-120°	718.3	21.3
90°-150°	2431.1	72.1
90°-180°	3368.0	99.9
0°-180°	3370.8	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	10	23	27	29	4
95°	56	63	71	74	74	62
105°	215	217	225	225	227	230
115°	406	409	407	408	407	402
125°	594	597	595	591	587	530
135°	771	776	775	772	770	594
145°	935	937	940	939	935	584
155°	1070	1070	1071	1075	1068	493
165°	1166	1163	1163	1169	1162	329
175°	1213	1209	1209	1215	1208	115
180°	1216	1216	1216	1216	1216	



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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°	1.0	10.5	22.9	26.7	28.6
92.5°	28.6	34.4	40.1	43.0	41.1
95°	56.3	63.0	70.7	74.5	74.5
97.5°	92.6	97.4	103.1	107.9	106.9
100°	129.9	135.6	140.4	143.2	145.1
102.5°	172.8	175.7	182.4	185.3	184.3
105°	214.9	216.8	225.4	225.4	227.3
107.5°	264.5	265.5	269.3	272.1	271.2
110°	310.3	312.3	314.2	318.0	316.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	358.1	359.0	359.0	363.8	363.8
115°	405.8	408.7	406.8	407.7	406.8
117.5°	454.5	455.5	453.6	453.6	450.7
120°	499.4	505.1	500.4	499.4	497.5
122.5°	546.2	550.0	548.1	545.3	542.4
125°	594.0	596.8	594.9	591.1	587.3
127.5°	637.9	643.6	641.7	636.0	632.1
130°	681.8	689.4	686.6	682.8	676.1
132.5°	725.7	733.4	731.5	726.7	721.9
135°	770.6	776.3	775.4	771.6	769.7
137.5°	811.7	816.4	819.3	814.5	811.7
140°	854.6	859.4	860.4	859.4	852.7
142.5°	893.8	898.6	900.5	899.5	894.7
145°	934.9	936.8	939.6	938.7	934.9
147.5°	970.2	974.0	976.9	976.9	971.1
150°	1007.4	1009.3	1011.2	1011.2	1005.5
152.5°	1038.0	1040.8	1041.8	1043.7	1038.9
155°	1070.4	1070.4	1071.4	1075.2	1068.5
157.5°	1098.1	1097.2	1098.1	1102.0	1096.2
160°	1123.9	1122.0	1122.0	1126.8	1123.0
162.5°	1146.8	1144.0	1144.9	1149.7	1143.0
165°	1165.9	1163.1	1163.1	1168.8	1162.1
167.5°	1182.2	1178.4	1179.3	1185.0	1179.3
170°	1195.5	1191.7	1191.7	1198.4	1191.7
172.5°	1206.0	1202.2	1202.2	1208.0	1201.3
175°	1212.7	1208.9	1208.9	1214.6	1208.0
177.5°	1216.5	1212.7	1212.7	1218.5	1211.8
180°	1215.6	1215.6	1215.6	1215.6	1215.6

(END OF REPORT)