

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: P334762

Luminaire Tested: **S123IW-S1030U835-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334762  
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-S1030U835-4F0-1E-UDD  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 1030 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4124.2 lumens  
Efficiency: N/A  
Efficacy: 210.4 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

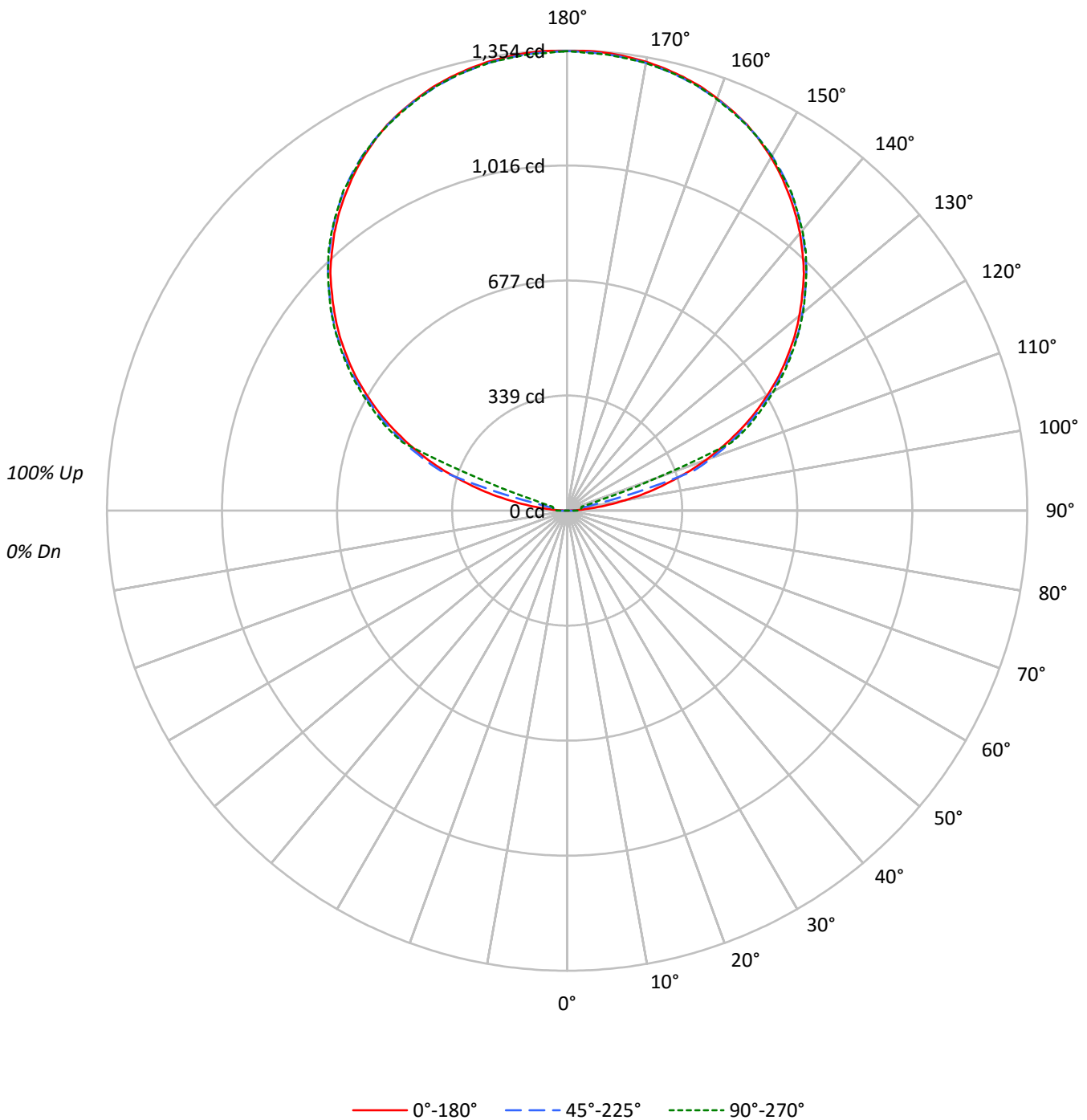
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2.7	0.1
90°-100°	47.7	1.2
100°-110°	230.5	5.6
110°-120°	564.8	13.7
120°-130°	717.0	17.4
130°-140°	766.0	18.6
140°-150°	716.3	17.4
150°-160°	577.8	14.0
160°-170°	372.9	9.0
170°-180°	128.5	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.7	0.1
90°-120°	843.0	20.4
90°-150°	3042.4	73.8
90°-180°	4121.0	99.9
0°-180°	4124.2	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°	1	11	24	28	30	3
95°	61	20	31	38	38	73
105°	299	310	220	42	44	317
115°	562	568	576	587	591	555
125°	792	800	804	806	808	707
135°	985	991	995	998	995	759
145°	1137	1144	1146	1148	1148	712
155°	1252	1250	1252	1256	1250	577
165°	1321	1318	1317	1325	1318	373
175°	1352	1347	1348	1355	1347	129
180°	1352	1352	1352	1352	1352	



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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	11.0	24.1	28.1	30.1
92.5°	23.1	17.1	26.1	33.1	34.1
95°	61.3	20.1	31.1	38.2	38.2
97.5°	111.5	83.4	32.1	40.2	41.2
100°	169.7	189.8	33.1	41.2	42.2
102.5°	236.0	249.1	74.3	41.2	43.2
105°	299.3	310.4	220.0	42.2	44.2
107.5°	366.6	375.6	390.7	236.0	104.5
110°	433.9	441.9	453.0	419.8	276.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	498.2	505.2	516.3	525.3	523.3
115°	561.5	567.5	576.5	586.6	590.6
117.5°	623.7	630.8	635.8	643.8	644.8
120°	681.0	690.0	693.0	701.1	701.1
122.5°	739.2	746.3	750.3	755.3	756.3
125°	791.5	799.5	803.5	805.5	807.5
127.5°	843.7	851.7	856.8	859.8	857.8
130°	891.9	899.9	904.0	908.0	906.0
132.5°	938.1	946.2	949.2	953.2	950.2
135°	985.3	991.3	995.4	998.4	995.4
137.5°	1025.5	1033.5	1035.5	1040.6	1038.6
140°	1065.7	1071.7	1074.7	1078.7	1076.7
142.5°	1102.8	1108.9	1111.9	1114.9	1111.9
145°	1137.0	1144.0	1146.0	1148.0	1148.0
147.5°	1170.1	1175.2	1177.2	1179.2	1174.2
150°	1200.3	1203.3	1205.3	1207.3	1204.3
152.5°	1227.4	1228.4	1229.4	1233.4	1228.4
155°	1252.5	1250.5	1251.5	1256.5	1250.5
157.5°	1272.6	1272.6	1271.6	1277.6	1269.6
160°	1290.7	1289.7	1288.7	1294.7	1287.6
162.5°	1307.7	1304.7	1303.7	1310.7	1304.7
165°	1320.8	1317.8	1316.8	1324.8	1317.8
167.5°	1331.8	1327.8	1327.8	1335.9	1327.8
170°	1340.9	1336.9	1336.9	1344.9	1336.9
172.5°	1346.9	1341.9	1342.9	1350.9	1341.9
175°	1351.9	1346.9	1347.9	1354.9	1346.9
177.5°	1353.9	1348.9	1349.9	1358.0	1347.9
180°	1351.9	1351.9	1351.9	1351.9	1351.9

(END OF REPORT)