

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: P334767

Luminaire Tested: **S123IW-S1030U840-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334767  
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-S1030U840-4F0-1E-UDD  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 1030 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

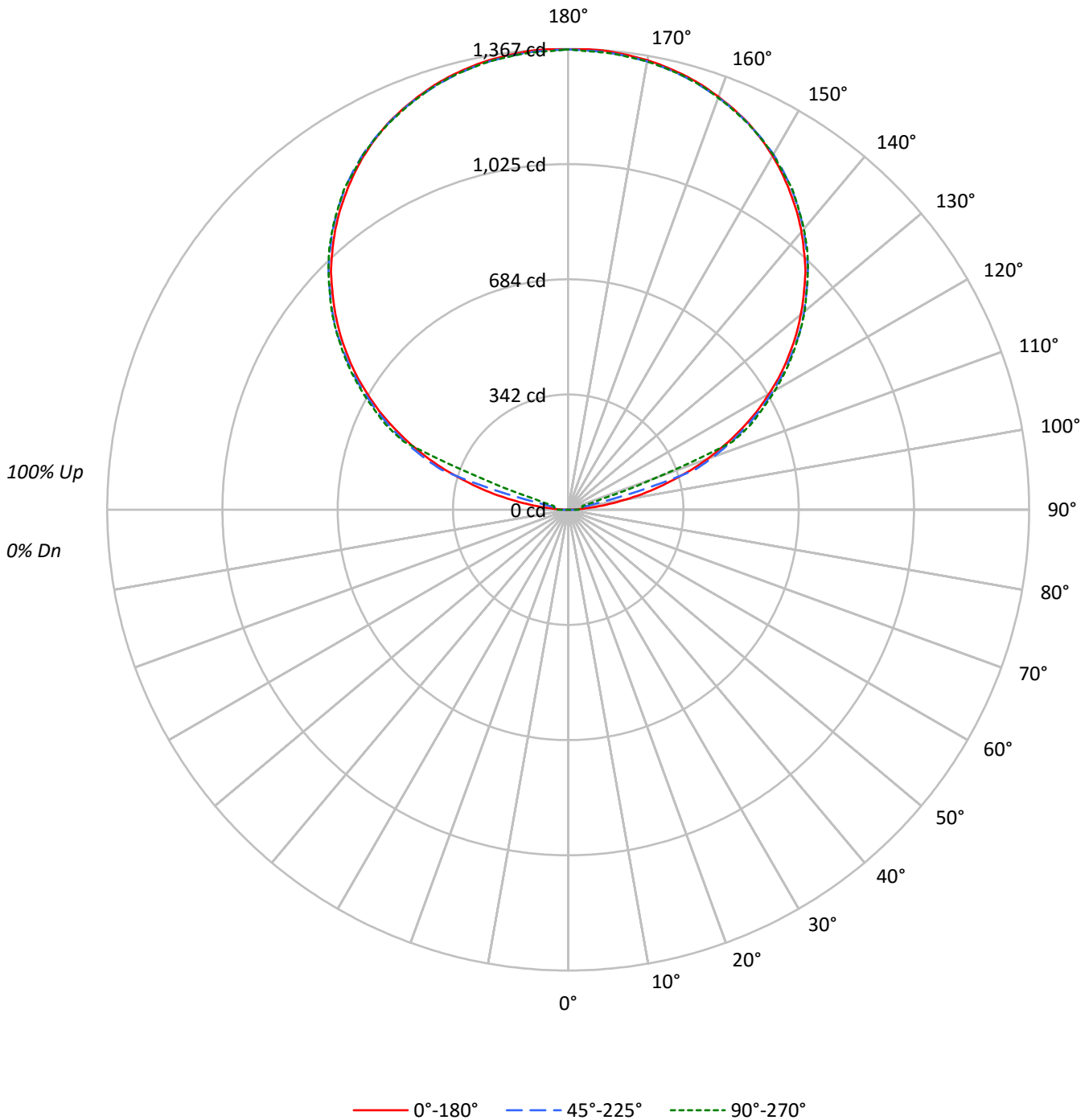
Lumens per Lamp: N/A  
Luminaire Lumens: 4164.9 lumens  
Efficiency: N/A  
Efficacy: 212.5 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

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°	48.1	1.2
100°-110°	232.8	5.6
110°-120°	570.4	13.7
120°-130°	724.1	17.4
130°-140°	773.6	18.6
140°-150°	723.4	17.4
150°-160°	583.5	14.0
160°-170°	376.5	9.0
170°-180°	129.8	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°	851.4	20.4
90°-150°	3072.4	73.8
90°-180°	4162.0	99.9
0°-180°	4164.9	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	11	24	28	30	3
95°	62	20	31	38	38	74
105°	302	313	222	43	45	320
115°	567	573	582	592	596	560
125°	799	807	812	814	816	714
135°	995	1001	1005	1008	1005	766
145°	1148	1155	1157	1159	1159	719
155°	1265	1263	1264	1269	1263	583
165°	1334	1331	1330	1338	1331	377
175°	1365	1360	1361	1368	1360	130
180°	1365	1365	1365	1365	1365	



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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	11.2	24.3	28.4	30.4
92.5°	23.3	17.2	26.4	33.5	34.5
95°	61.9	20.3	31.4	38.5	38.5
97.5°	112.6	84.2	32.5	40.6	41.6
100°	171.4	191.7	33.5	41.6	42.6
102.5°	238.4	251.5	75.1	41.6	43.6
105°	302.3	313.4	222.1	42.6	44.6
107.5°	370.2	379.4	394.6	238.4	105.5
110°	438.2	446.3	457.5	424.0	278.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	503.1	510.2	521.4	530.5	528.5
115°	567.0	573.1	582.2	592.4	596.4
117.5°	629.9	637.0	642.1	650.2	651.2
120°	687.7	696.8	699.9	708.0	708.0
122.5°	746.5	753.6	757.7	762.8	763.8
125°	799.3	807.4	811.5	813.5	815.5
127.5°	852.0	860.1	865.2	868.3	866.2
130°	900.7	908.8	912.9	916.9	914.9
132.5°	947.4	955.5	958.5	962.6	959.5
135°	995.0	1001.1	1005.2	1008.2	1005.2
137.5°	1035.6	1043.7	1045.8	1050.8	1048.8
140°	1076.2	1082.3	1085.3	1089.4	1087.3
142.5°	1113.7	1119.8	1122.8	1125.9	1122.8
145°	1148.2	1155.3	1157.3	1159.4	1159.4
147.5°	1181.7	1186.7	1188.8	1190.8	1185.7
150°	1212.1	1215.1	1217.2	1219.2	1216.2
152.5°	1239.5	1240.5	1241.5	1245.6	1240.5
155°	1264.8	1262.8	1263.8	1268.9	1262.8
157.5°	1285.1	1285.1	1284.1	1290.2	1282.1
160°	1303.4	1302.4	1301.4	1307.5	1300.4
162.5°	1320.6	1317.6	1316.6	1323.7	1317.6
165°	1333.8	1330.8	1329.8	1337.9	1330.8
167.5°	1345.0	1340.9	1340.9	1349.0	1340.9
170°	1354.1	1350.1	1350.1	1358.2	1350.1
172.5°	1360.2	1355.1	1356.1	1364.3	1355.1
175°	1365.3	1360.2	1361.2	1368.3	1360.2
177.5°	1367.3	1362.2	1363.2	1371.4	1361.2
180°	1365.3	1365.3	1365.3	1365.3	1365.3

(END OF REPORT)