

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: P334612

Luminaire Tested: **S122IW-S970U940-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334612  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122IW-S970U940-4F0-1E-UDD  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 970 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

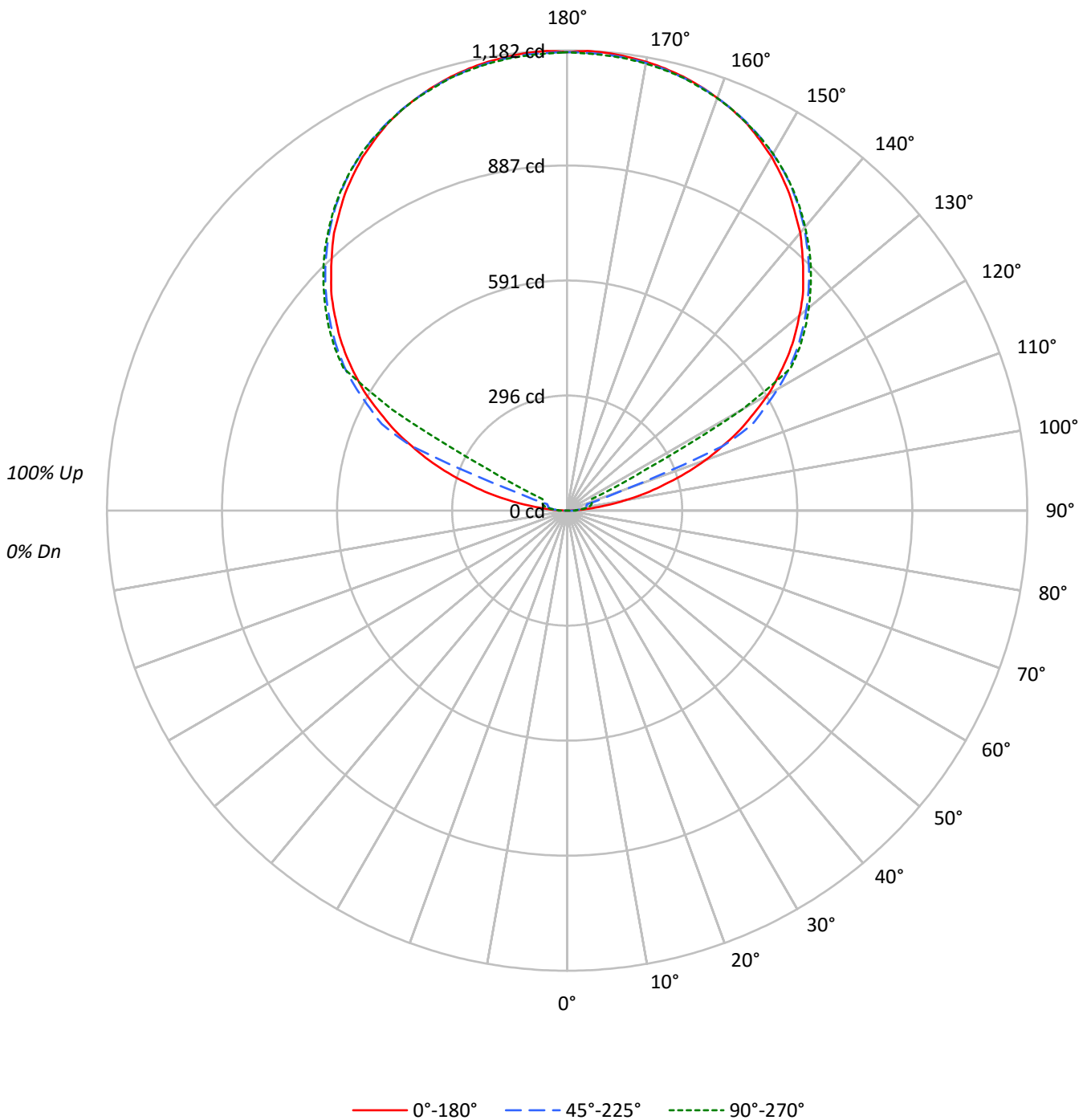
Lumens per Lamp: N/A  
Luminaire Lumens: 3454.2 lumens  
Efficiency: N/A  
Efficacy: 176.2 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 19.6  
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°	2.1	0.1
90°-100°	38.8	1.1
100°-110°	144.7	4.2
110°-120°	383.9	11.1
120°-130°	636.7	18.4
130°-140°	676.3	19.6
140°-150°	628.6	18.2
150°-160°	505.4	14.6
160°-170°	325.6	9.4
170°-180°	112.1	3.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.1	0.1
90°-120°	567.5	16.4
90°-150°	2509.1	72.6
90°-180°	3452.0	99.9
0°-180°	3454.2	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	10	17	21	23	3
95°	55	27	33	38	37	66
105°	259	285	52	61	65	277
115°	490	504	526	131	70	482
125°	693	704	720	726	728	618
135°	857	871	878	887	885	662
145°	994	994	1008	1014	1010	622
155°	1095	1087	1098	1103	1096	505
165°	1154	1149	1151	1157	1151	326
175°	1180	1174	1176	1182	1173	112
180°	1178	1178	1178	1178	1178	



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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°	0.9	10.2	17.0	21.3	23.0
92.5°	21.3	17.9	20.4	22.2	23.0
95°	55.4	27.3	33.2	37.5	36.6
97.5°	99.7	29.8	43.5	46.0	46.9
100°	150.8	34.1	48.6	55.4	57.1
102.5°	207.1	205.3	50.3	59.6	62.2
105°	259.0	284.6	52.0	61.3	64.8
107.5°	319.5	340.8	53.7	63.1	66.5
110°	377.5	395.4	149.1	63.9	67.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	432.0	447.3	432.8	65.6	68.2
115°	489.9	504.4	525.7	131.2	69.9
117.5°	540.2	557.2	571.7	449.9	226.6
120°	596.4	609.2	624.6	634.8	519.8
122.5°	644.2	657.8	674.8	679.9	680.8
125°	692.7	703.8	720.0	726.0	728.5
127.5°	737.0	749.0	761.7	770.3	771.1
130°	778.8	792.4	801.8	811.2	810.3
132.5°	821.4	832.5	841.8	849.5	848.6
135°	857.2	870.8	878.5	887.0	885.3
137.5°	894.7	904.9	913.4	921.9	919.4
140°	931.3	938.1	947.5	955.2	950.9
142.5°	962.0	967.9	979.0	985.8	981.6
145°	994.4	993.5	1008.0	1013.9	1009.7
147.5°	1022.5	1019.9	1034.4	1038.7	1035.3
150°	1049.7	1043.8	1057.4	1062.5	1058.3
152.5°	1072.7	1065.9	1078.7	1083.8	1077.9
155°	1094.9	1087.2	1097.5	1102.6	1095.7
157.5°	1112.8	1106.0	1113.6	1119.6	1112.8
160°	1128.1	1123.0	1128.1	1133.2	1127.3
162.5°	1141.8	1136.6	1140.9	1146.9	1139.2
165°	1153.7	1148.6	1151.1	1157.1	1151.1
167.5°	1163.1	1157.9	1160.5	1166.5	1158.8
170°	1170.7	1165.6	1167.3	1173.3	1165.6
172.5°	1175.8	1170.7	1172.4	1178.4	1170.7
175°	1180.1	1174.1	1175.8	1181.8	1173.3
177.5°	1181.8	1175.8	1176.7	1182.7	1175.0
180°	1177.5	1177.5	1177.5	1177.5	1177.5

(END OF REPORT)