

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: P334607

Luminaire Tested: **S122IW-S970U935-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334607  
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-S970U935-4F0-1E-UDD  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 970 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

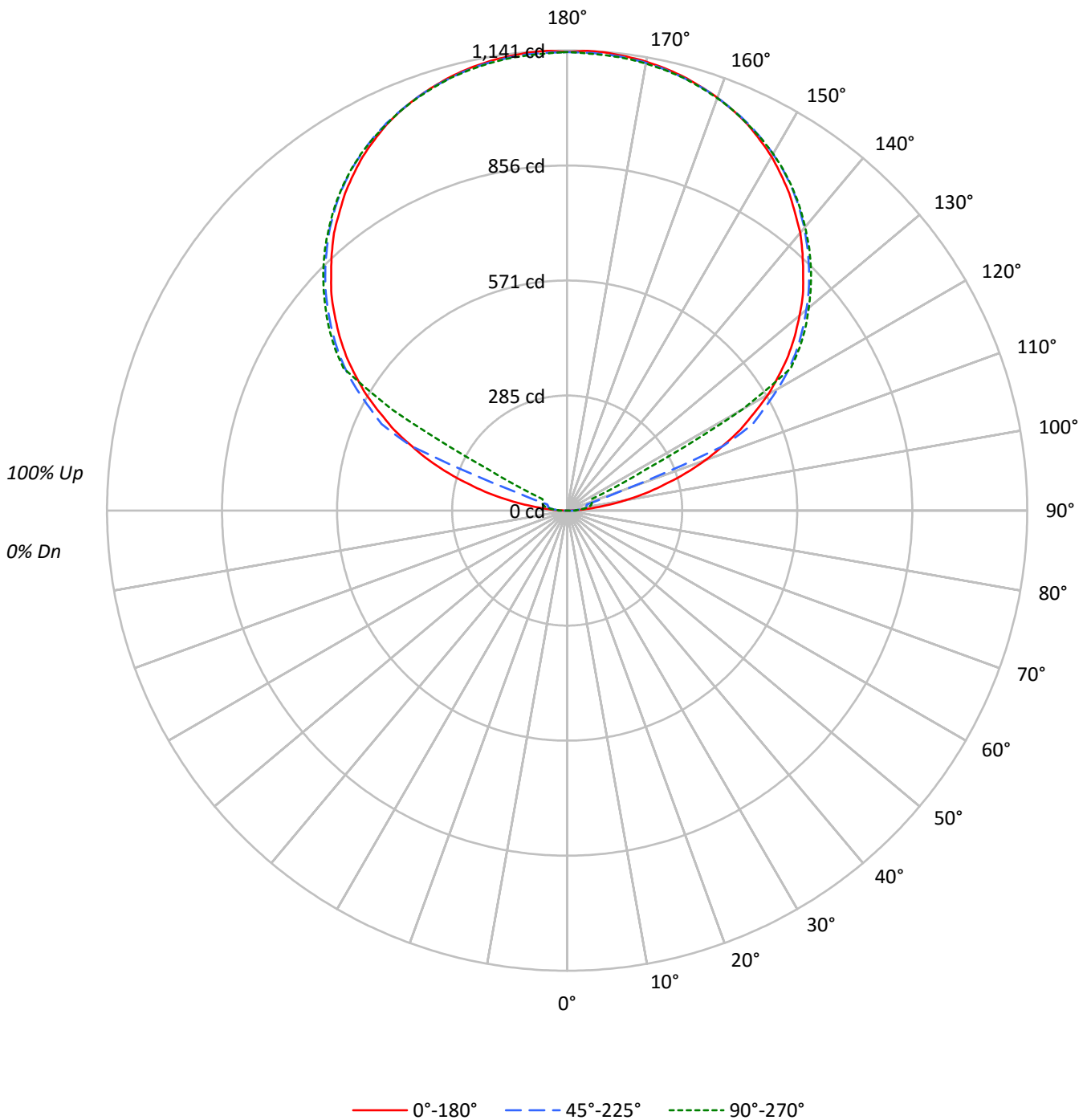
Lumens per Lamp: N/A  
Luminaire Lumens: 3335.2 lumens  
Efficiency: N/A  
Efficacy: 170.2 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (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°	2.0	0.1
90°-100°	37.5	1.1
100°-110°	139.8	4.2
110°-120°	370.7	11.1
120°-130°	614.8	18.4
130°-140°	653.0	19.6
140°-150°	606.9	18.2
150°-160°	488.0	14.6
160°-170°	314.4	9.4
170°-180°	108.2	3.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.0	0.1
90°-120°	547.9	16.4
90°-150°	2422.7	72.6
90°-180°	3333.0	99.9
0°-180°	3335.2	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	16	21	22	3
95°	54	26	32	36	35	63
105°	250	275	50	59	62	267
115°	473	487	508	127	68	466
125°	669	680	695	701	703	597
135°	828	841	848	856	855	639
145°	960	959	973	979	975	600
155°	1057	1050	1060	1065	1058	487
165°	1114	1109	1112	1117	1112	315
175°	1140	1134	1135	1141	1133	108
180°	1137	1137	1137	1137	1137	



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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°	0.8	9.9	16.5	20.6	22.2
92.5°	20.6	17.3	19.7	21.4	22.2
95°	53.5	26.3	32.1	36.2	35.4
97.5°	96.3	28.8	42.0	44.4	45.2
100°	145.6	32.9	46.9	53.5	55.1
102.5°	199.9	198.3	48.5	57.6	60.1
105°	250.1	274.8	50.2	59.2	62.5
107.5°	308.5	329.1	51.8	60.9	64.2
110°	364.5	381.7	144.0	61.7	65.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.1	431.9	417.9	63.3	65.8
115°	473.1	487.0	507.6	126.7	67.5
117.5°	521.6	538.1	552.0	434.4	218.8
120°	575.9	588.2	603.0	612.9	501.9
122.5°	622.0	635.1	651.6	656.5	657.3
125°	668.9	679.6	695.2	701.0	703.4
127.5°	711.6	723.2	735.5	743.7	744.6
130°	752.0	765.1	774.2	783.2	782.4
132.5°	793.1	803.8	812.8	820.2	819.4
135°	827.6	840.8	848.2	856.4	854.8
137.5°	863.8	873.7	881.9	890.2	887.7
140°	899.2	905.8	914.9	922.3	918.1
142.5°	928.8	934.6	945.3	951.9	947.8
145°	960.1	959.3	973.3	979.0	974.9
147.5°	987.3	984.8	998.8	1002.9	999.6
150°	1013.6	1007.8	1021.0	1025.9	1021.8
152.5°	1035.8	1029.2	1041.6	1046.5	1040.7
155°	1057.2	1049.8	1059.7	1064.6	1058.0
157.5°	1074.5	1067.9	1075.3	1081.0	1074.5
160°	1089.3	1084.3	1089.3	1094.2	1088.4
162.5°	1102.4	1097.5	1101.6	1107.4	1100.0
165°	1114.0	1109.0	1111.5	1117.2	1111.5
167.5°	1123.0	1118.1	1120.5	1126.3	1118.9
170°	1130.4	1125.5	1127.1	1132.9	1125.5
172.5°	1135.3	1130.4	1132.1	1137.8	1130.4
175°	1139.5	1133.7	1135.3	1141.1	1132.9
177.5°	1141.1	1135.3	1136.2	1141.9	1134.5
180°	1137.0	1137.0	1137.0	1137.0	1137.0

(END OF REPORT)