

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: P334522

Luminaire Tested: **S122IW-S970U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122IW-S970U840-4F0-1E-UDD-1
Description: DEFINE 2 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 970 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

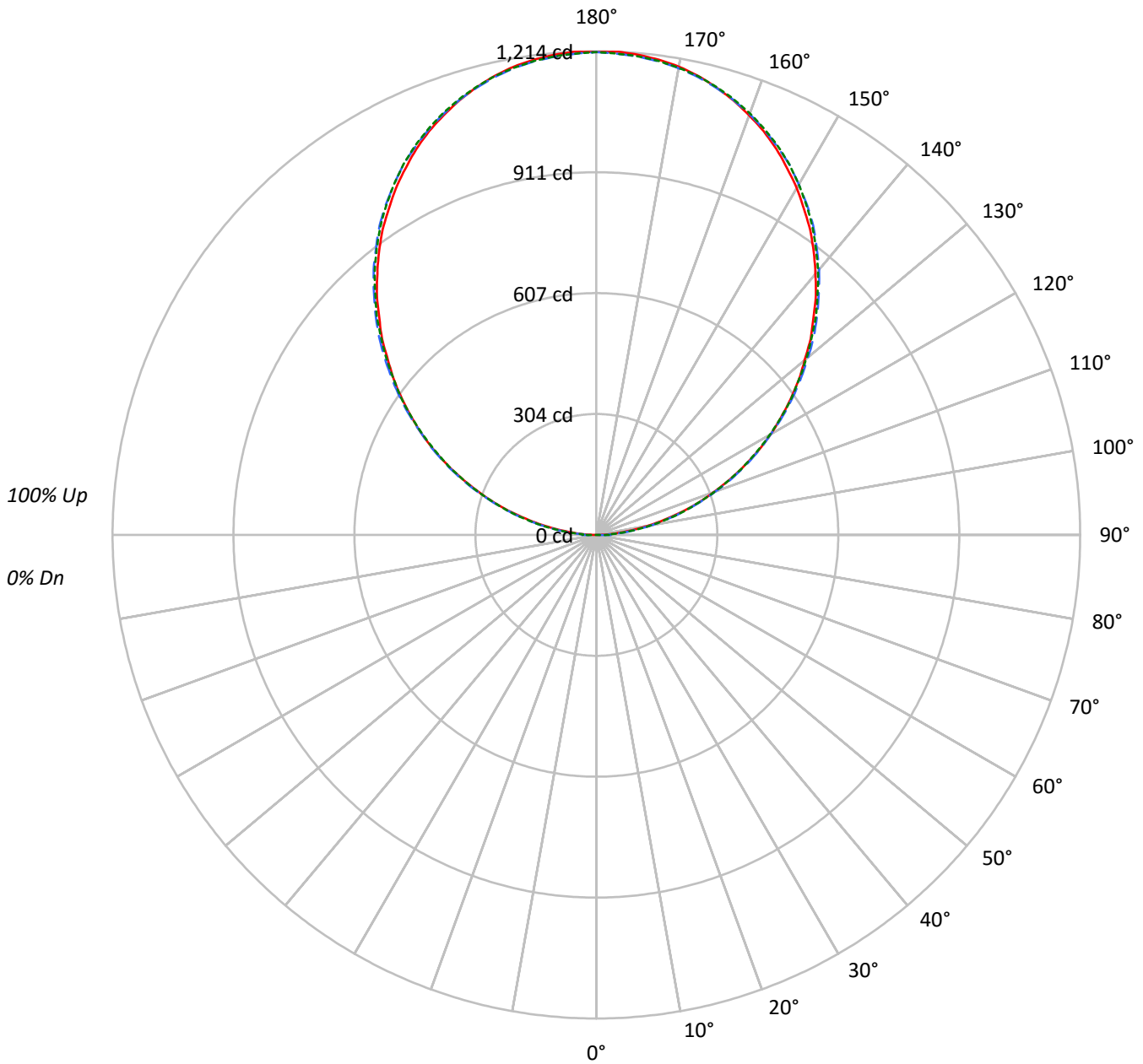
Lumens per Lamp: N/A
Luminaire Lumens: 3392.2 lumens
Efficiency: N/A
Efficacy: 173.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

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



— 0°-180° - - 45°-225° - - - 90°-270°



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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°	3.5	0.1
90°-100°	75.0	2.2
100°-110°	238.4	7.0
110°-120°	407.9	12.0
120°-130°	536.4	15.8
130°-140°	602.1	17.7
140°-150°	590.5	17.4
150°-160°	495.3	14.6
160°-170°	328.5	9.7
170°-180°	114.8	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.5	0.1
90°-120°	721.2	21.3
90°-150°	2450.2	72.2
90°-180°	3389.0	99.9
0°-180°	3392.2	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	13	36	34	35	3
95°	53	63	66	66	63	59
105°	220	223	225	227	227	232
115°	409	415	413	412	409	405
125°	595	604	601	598	597	532
135°	770	782	784	782	779	595
145°	935	942	948	949	945	584
155°	1069	1072	1075	1080	1077	492
165°	1163	1162	1162	1169	1164	328
175°	1210	1207	1205	1212	1206	115
180°	1212	1212	1212	1212	1212	



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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	13.3	35.8	33.8	34.8
92.5°	22.5	30.7	31.7	32.7	32.7
95°	53.2	63.4	65.5	65.5	63.4
97.5°	89.0	98.2	102.3	102.3	102.3
100°	129.9	138.1	141.2	141.2	140.1
102.5°	172.9	179.0	183.1	184.1	183.1
105°	219.9	223.0	225.0	227.1	227.1
107.5°	267.0	271.1	271.1	272.1	267.0
110°	312.0	318.1	318.1	318.1	315.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	361.1	367.2	366.2	<i>363.1</i>	361.1
115°	409.1	415.3	413.2	<i>412.2</i>	409.1
117.5°	457.2	465.4	460.3	<i>457.2</i>	454.1
120°	505.3	513.5	505.3	<i>505.3</i>	502.2
122.5°	549.3	559.5	554.4	<i>551.3</i>	549.3
125°	595.3	604.5	601.4	<i>598.4</i>	597.3
127.5°	640.3	651.6	647.5	<i>643.4</i>	640.3
130°	682.2	695.5	693.5	<i>691.4</i>	687.4
132.5°	729.3	739.5	740.5	<i>735.4</i>	732.4
135°	770.2	781.5	783.5	<i>782.5</i>	779.4
137.5°	815.2	824.4	826.5	<i>825.4</i>	821.3
140°	855.1	864.3	869.4	<i>869.4</i>	865.3
142.5°	896.0	905.2	908.3	<i>909.3</i>	905.2
145°	934.9	942.0	948.2	<i>949.2</i>	945.1
147.5°	969.7	978.9	983.0	<i>985.0</i>	980.9
150°	1005.5	1011.6	1015.7	<i>1018.8</i>	1015.7
152.5°	1037.2	1043.3	1048.4	<i>1052.5</i>	1048.4
155°	1068.9	1071.9	1075.0	<i>1080.1</i>	1077.1
157.5°	1096.5	1098.5	1100.6	<i>1107.7</i>	1102.6
160°	1121.0	1123.1	1124.1	<i>1130.2</i>	1126.2
162.5°	1143.5	1143.5	1144.6	<i>1151.7</i>	1146.6
165°	1163.0	1162.0	1162.0	<i>1169.1</i>	1164.0
167.5°	1180.4	1177.3	1177.3	<i>1184.5</i>	1179.3
170°	1193.7	1190.6	1189.6	<i>1196.7</i>	1190.6
172.5°	1202.9	1199.8	1198.8	<i>1205.9</i>	1199.8
175°	1210.0	1207.0	1204.9	<i>1212.1</i>	1205.9
177.5°	<i>1214.1</i>	<i>1211.1</i>	<i>1209.0</i>	<i>1215.1</i>	<i>1209.0</i>
180°	1212.1	1212.1	1212.1	<i>1212.1</i>	1212.1

(END OF REPORT)