

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: P334698

Luminaire Tested: **S123IW-S1320U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123IW-S1320U840-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 1320 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4623.4 lumens
Efficiency: N/A
Efficacy: 179.9 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

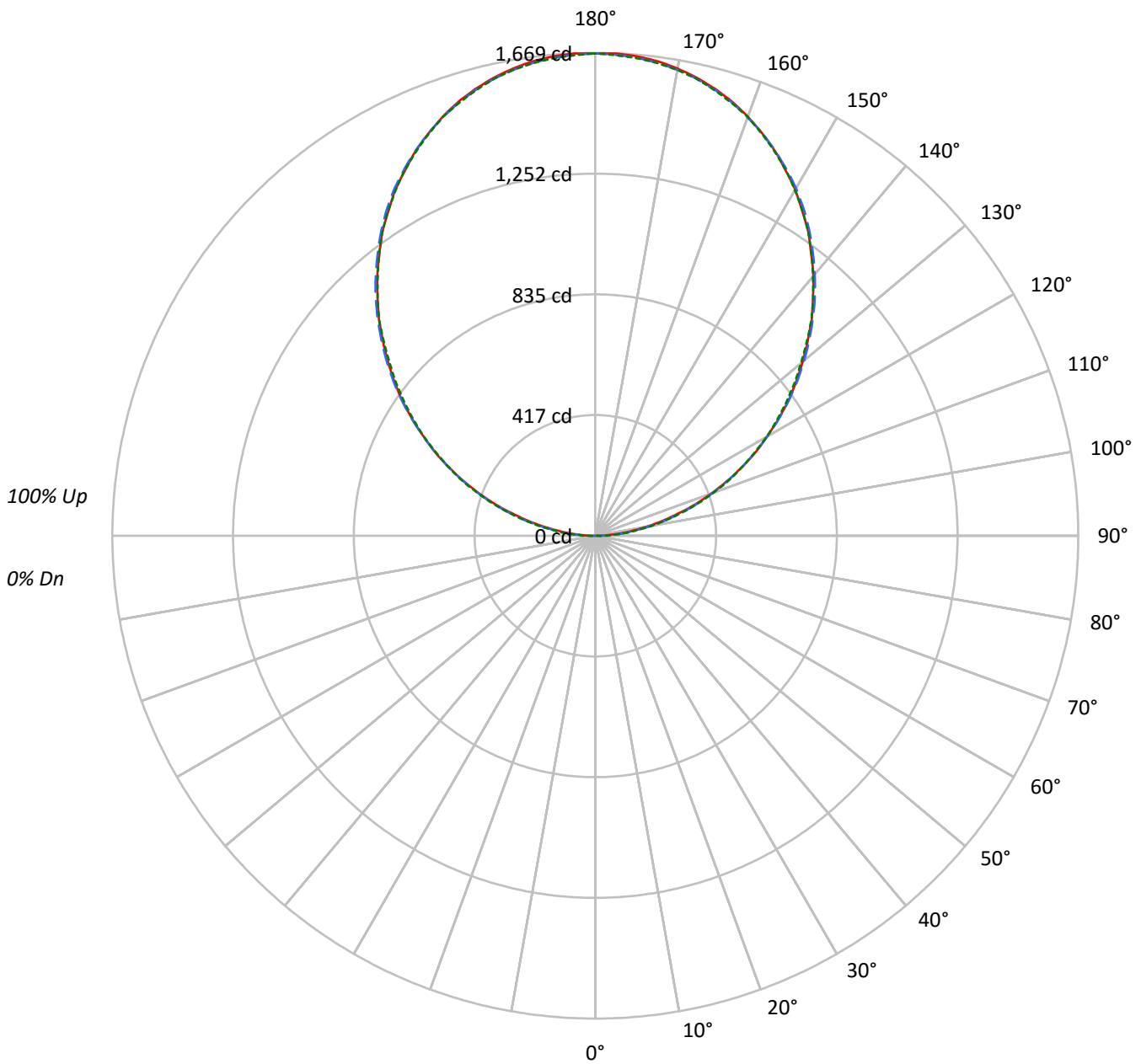
Input Watts (W): 25.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	107.3	2.3
100°-110°	324.9	7.0
110°-120°	553.1	12.0
120°-130°	727.6	15.7
130°-140°	817.8	17.7
140°-150°	804.0	17.4
150°-160°	676.9	14.6
160°-170°	450.6	9.7
170°-180°	157.8	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°	985.3	21.3
90°-150°	3334.6	72.1
90°-180°	4620.0	99.9
0°-180°	4623.4	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	14	31	37	39	6
95°	77	86	97	102	102	85
105°	295	297	309	309	312	315
115°	557	561	558	559	558	551
125°	815	819	816	811	806	727
135°	1057	1065	1064	1058	1056	814
145°	1282	1285	1289	1288	1282	801
155°	1468	1468	1470	1475	1466	676
165°	1599	1595	1595	1603	1594	451
175°	1663	1658	1658	1666	1657	158
180°	1667	1667	1667	1667	1667	



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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°	1.3	14.4	31.4	36.7	39.3
92.5°	39.3	47.2	55.0	58.9	56.3
95°	77.3	86.4	96.9	102.2	102.2
97.5°	127.0	133.6	141.5	148.0	146.7
100°	178.1	186.0	192.5	196.5	199.1
102.5°	237.1	241.0	250.2	254.1	252.8
105°	294.7	297.3	309.1	309.1	311.7
107.5°	362.8	364.1	369.4	373.3	372.0
110°	425.7	428.3	430.9	436.2	433.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	491.2	492.5	492.5	499.0	499.0
115°	556.7	560.6	558.0	559.3	558.0
117.5°	623.5	624.8	622.1	622.1	618.2
120°	685.0	692.9	686.3	685.0	682.4
122.5°	749.2	754.4	751.8	747.9	744.0
125°	814.7	818.6	816.0	810.7	805.5
127.5°	874.9	882.8	880.2	872.3	867.1
130°	935.2	945.7	941.7	936.5	927.3
132.5°	995.4	1005.9	1003.3	996.7	990.2
135°	1057.0	1064.8	1063.5	1058.3	1055.7
137.5°	1113.3	1119.9	1123.8	1117.2	1113.3
140°	1172.2	1178.8	1180.1	1178.8	1169.6
142.5°	1225.9	1232.5	1235.1	1233.8	1227.3
145°	1282.3	1284.9	1288.8	1287.5	1282.3
147.5°	1330.7	1336.0	1339.9	1339.9	1332.0
150°	1381.8	1384.4	1387.0	1387.0	1379.2
152.5°	1423.7	1427.7	1429.0	1431.6	1425.0
155°	1468.3	1468.3	1469.6	1474.8	1465.6
157.5°	1506.2	1504.9	1506.2	1511.5	1503.6
160°	1541.6	1539.0	1539.0	1545.5	1540.3
162.5°	1573.0	1569.1	1570.4	1577.0	1567.8
165°	1599.2	1595.3	1595.3	1603.2	1594.0
167.5°	1621.5	1616.3	1617.6	1625.4	1617.6
170°	1639.8	1634.6	1634.6	1643.8	1634.6
172.5°	1654.2	1649.0	1649.0	1656.9	1647.7
175°	1663.4	1658.2	1658.2	1666.0	1656.9
177.5°	1668.6	1663.4	1663.4	1671.3	1662.1
180°	1667.3	1667.3	1667.3	1667.3	1667.3

(END OF REPORT)