

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: P334693

Luminaire Tested: **S123IW-S1320U835-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334693
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-S1320U835-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 1320 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4578.3 lumens
Efficiency: N/A
Efficacy: 178.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

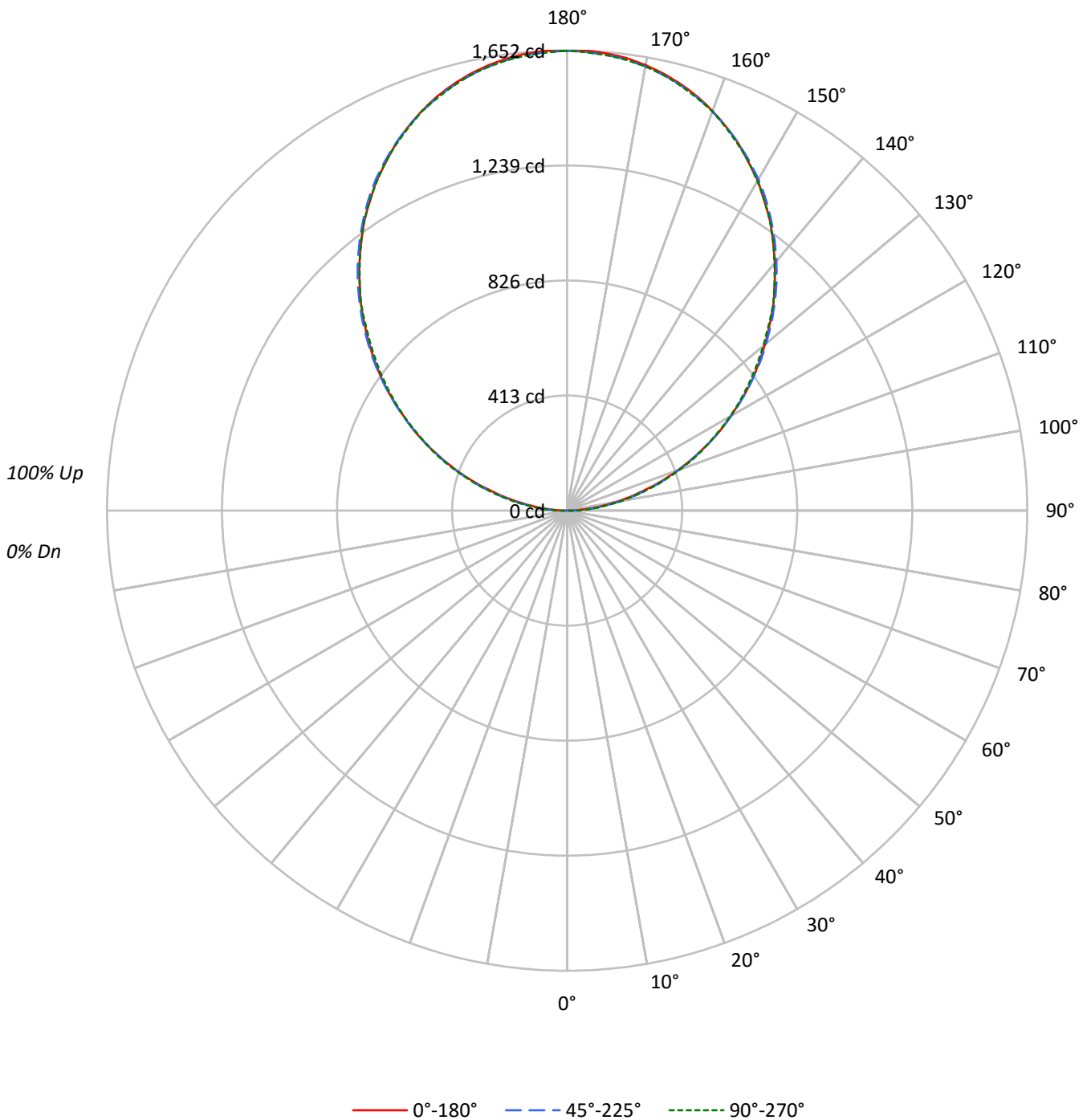
Input Watts (W): 25.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	106.3	2.3
100°-110°	321.7	7.0
110°-120°	547.6	12.0
120°-130°	720.5	15.7
130°-140°	809.8	17.7
140°-150°	796.1	17.4
150°-160°	670.3	14.6
160°-170°	446.2	9.7
170°-180°	156.2	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°	975.6	21.3
90°-150°	3302.0	72.1
90°-180°	4575.0	99.9
0°-180°	4578.3	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	36	39	6
95°	76	86	96	101	101	84
105°	292	294	306	306	309	312
115°	551	555	552	554	552	546
125°	807	811	808	803	798	719
135°	1047	1054	1053	1048	1045	806
145°	1270	1272	1276	1275	1270	793
155°	1454	1454	1455	1460	1451	669
165°	1584	1580	1580	1588	1578	447
175°	1647	1642	1642	1650	1641	156
180°	1651	1651	1651	1651	1651	



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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	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.5	85.6	96.0	101.2	101.2
97.5°	125.8	132.3	140.1	146.6	145.3
100°	176.4	184.2	190.7	194.5	197.1
102.5°	234.8	238.6	247.7	251.6	250.3
105°	291.8	294.4	306.1	306.1	308.7
107.5°	359.3	360.6	365.7	369.6	368.3
110°	421.5	424.1	426.7	431.9	429.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.4	487.7	487.7	494.1	494.1
115°	551.2	555.1	552.5	553.8	552.5
117.5°	617.4	618.7	616.1	616.1	612.2
120°	678.3	686.1	679.6	678.3	675.7
122.5°	741.9	747.1	744.5	740.6	736.7
125°	806.7	810.6	808.0	802.8	797.6
127.5°	866.4	874.2	871.6	863.8	858.6
130°	926.0	936.4	932.5	927.3	918.3
132.5°	985.7	996.1	993.5	987.0	980.5
135°	1046.7	1054.4	1053.1	1048.0	1045.4
137.5°	1102.4	1108.9	1112.8	1106.3	1102.4
140°	1160.8	1167.3	1168.6	1167.3	1158.2
142.5°	1214.0	1220.5	1223.0	1221.8	1215.3
145°	1269.7	1272.3	1276.2	1274.9	1269.7
147.5°	1317.7	1322.9	1326.8	1326.8	1319.0
150°	1368.3	1370.9	1373.5	1373.5	1365.7
152.5°	1409.8	1413.7	1415.0	1417.6	1411.1
155°	1453.9	1453.9	1455.2	1460.4	1451.3
157.5°	1491.5	1490.2	1491.5	1496.7	1488.9
160°	1526.5	1523.9	1523.9	1530.4	1525.2
162.5°	1557.7	1553.8	1555.1	1561.6	1552.5
165°	1583.6	1579.7	1579.7	1587.5	1578.4
167.5°	1605.7	1600.5	1601.8	1609.5	1601.8
170°	1623.8	1618.6	1618.6	1627.7	1618.6
172.5°	1638.1	1632.9	1632.9	1640.7	1631.6
175°	1647.2	1642.0	1642.0	1649.8	1640.7
177.5°	1652.3	1647.2	1647.2	1654.9	1645.9
180°	1651.1	1651.1	1651.1	1651.1	1651.1

(END OF REPORT)