

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: P334688

Luminaire Tested: **S123IW-S1320U830-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334688
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-S1320U830-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 1320 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4315.2 lumens
Efficiency: N/A
Efficacy: 167.9 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

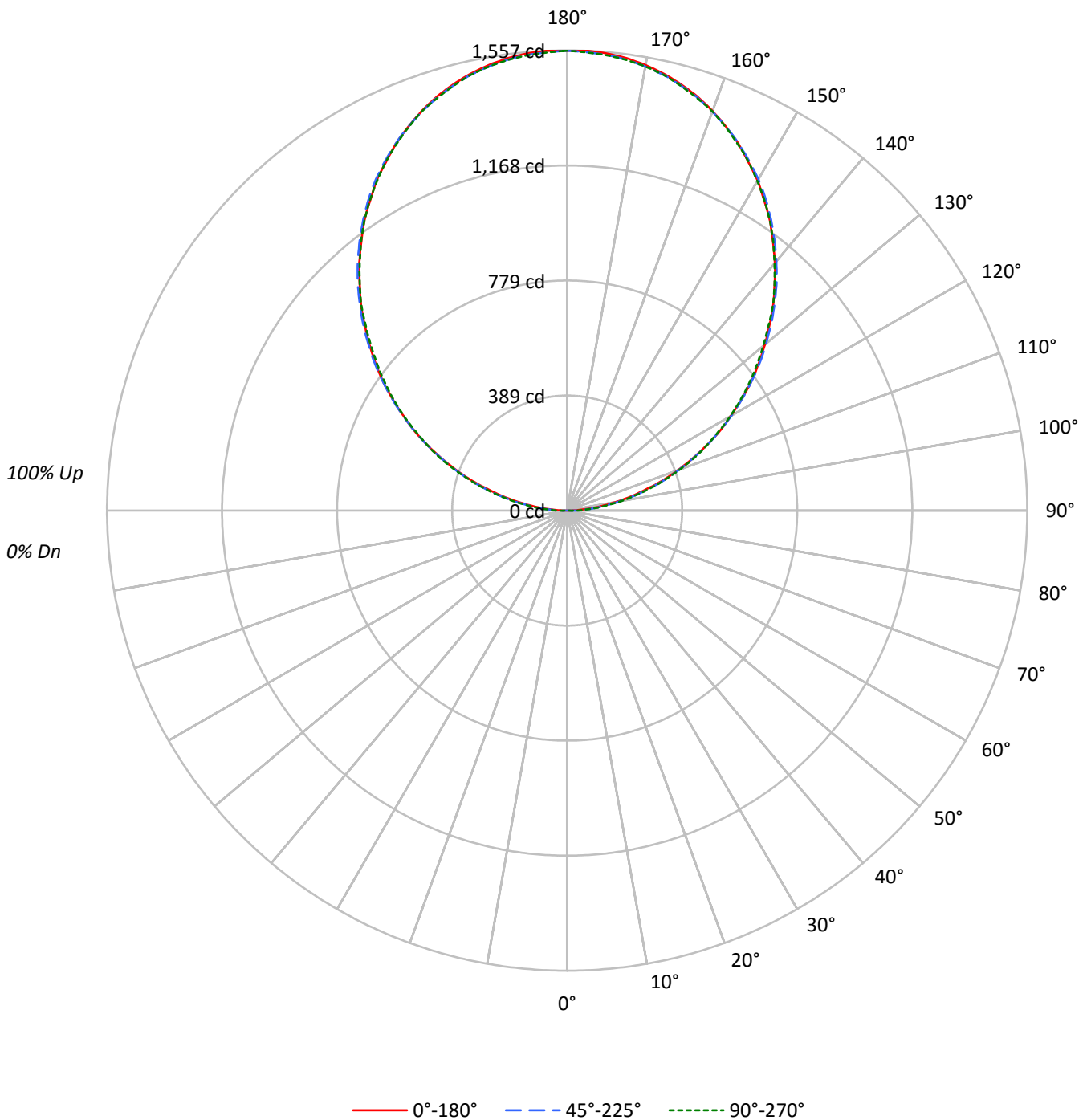
Input Watts (W): 25.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P334688

CATALOG NUMBER: S123IW-S1320U830-4F0-1E-UDD-1

Luminous Intensity Polar Plot





TEST NUMBER: P334688

CATALOG NUMBER: S123IW-S1320U830-4F0-1E-UDD-1

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



TEST NUMBER: P334688

CATALOG NUMBER: S123IW-S1320U830-4F0-1E-UDD-1

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°	3.3	0.1
90°-100°	100.2	2.3
100°-110°	303.2	7.0
110°-120°	516.2	12.0
120°-130°	679.1	15.7
130°-140°	763.3	17.7
140°-150°	750.4	17.4
150°-160°	631.8	14.6
160°-170°	420.6	9.7
170°-180°	147.3	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.3	0.1
90°-120°	919.6	21.3
90°-150°	3112.3	72.1
90°-180°	4312.0	99.9
0°-180°	4315.2	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	29	34	37	5
95°	72	81	90	95	95	79
105°	275	278	288	288	291	294
115°	520	523	521	522	521	514
125°	760	764	762	757	752	678
135°	986	994	993	988	985	760
145°	1197	1199	1203	1202	1197	748
155°	1370	1370	1372	1376	1368	631
165°	1493	1489	1489	1496	1488	421
175°	1552	1548	1548	1555	1546	148
180°	1556	1556	1556	1556	1556	



TEST NUMBER: P334688

CATALOG NUMBER: S123IW-S1320U830-4F0-1E-UDD-1

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°	1.2	13.4	29.3	34.2	36.7
92.5°	36.7	44.0	51.3	55.0	52.6
95°	72.1	80.7	90.5	95.4	95.4
97.5°	118.6	124.7	132.0	138.1	136.9
100°	166.3	173.6	179.7	183.4	185.8
102.5°	221.3	224.9	233.5	237.2	235.9
105°	275.1	277.5	288.5	288.5	290.9
107.5°	338.6	339.8	344.7	348.4	347.2
110°	397.3	399.7	402.2	407.1	404.6



TEST NUMBER: P334688

CATALOG NUMBER: S123IW-S1320U830-4F0-1E-UDD-1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	458.4	459.6	459.6	465.8	465.8
115°	519.5	523.2	520.8	522.0	520.8
117.5°	581.9	583.1	580.7	580.7	577.0
120°	639.3	646.7	640.6	639.3	636.9
122.5°	699.2	704.1	701.7	698.0	694.4
125°	760.4	764.0	761.6	756.7	751.8
127.5°	816.6	823.9	821.5	814.2	809.3
130°	872.8	882.6	878.9	874.1	865.5
132.5°	929.1	938.8	936.4	930.3	924.2
135°	986.5	993.9	992.6	987.7	985.3
137.5°	1039.1	1045.2	1048.9	1042.8	1039.1
140°	1094.1	1100.2	1101.4	1100.2	1091.7
142.5°	1144.2	1150.3	1152.8	1151.6	1145.4
145°	1196.8	1199.2	1202.9	1201.7	1196.8
147.5°	1242.0	1246.9	1250.6	1250.6	1243.2
150°	1289.7	1292.1	1294.6	1294.6	1287.2
152.5°	1328.8	1332.5	1333.7	1336.1	1330.0
155°	1370.4	1370.4	1371.6	1376.5	1367.9
157.5°	1405.8	1404.6	1405.8	1410.7	1403.4
160°	1438.8	1436.4	1436.4	1442.5	1437.6
162.5°	1468.2	1464.5	1465.7	1471.8	1463.3
165°	1492.6	1489.0	1489.0	1496.3	1487.7
167.5°	1513.4	1508.5	1509.7	1517.1	1509.7
170°	1530.5	1525.6	1525.6	1534.2	1525.6
172.5°	1544.0	1539.1	1539.1	1546.4	1537.8
175°	1552.5	1547.6	1547.6	1555.0	1546.4
177.5°	1557.4	1552.5	1552.5	1559.9	1551.3
180°	1556.2	1556.2	1556.2	1556.2	1556.2

(END OF REPORT)