

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: P334758

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334758  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5)  
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  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
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: 4976.4 lumens  
Efficiency: N/A  
Efficacy: 193.6 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

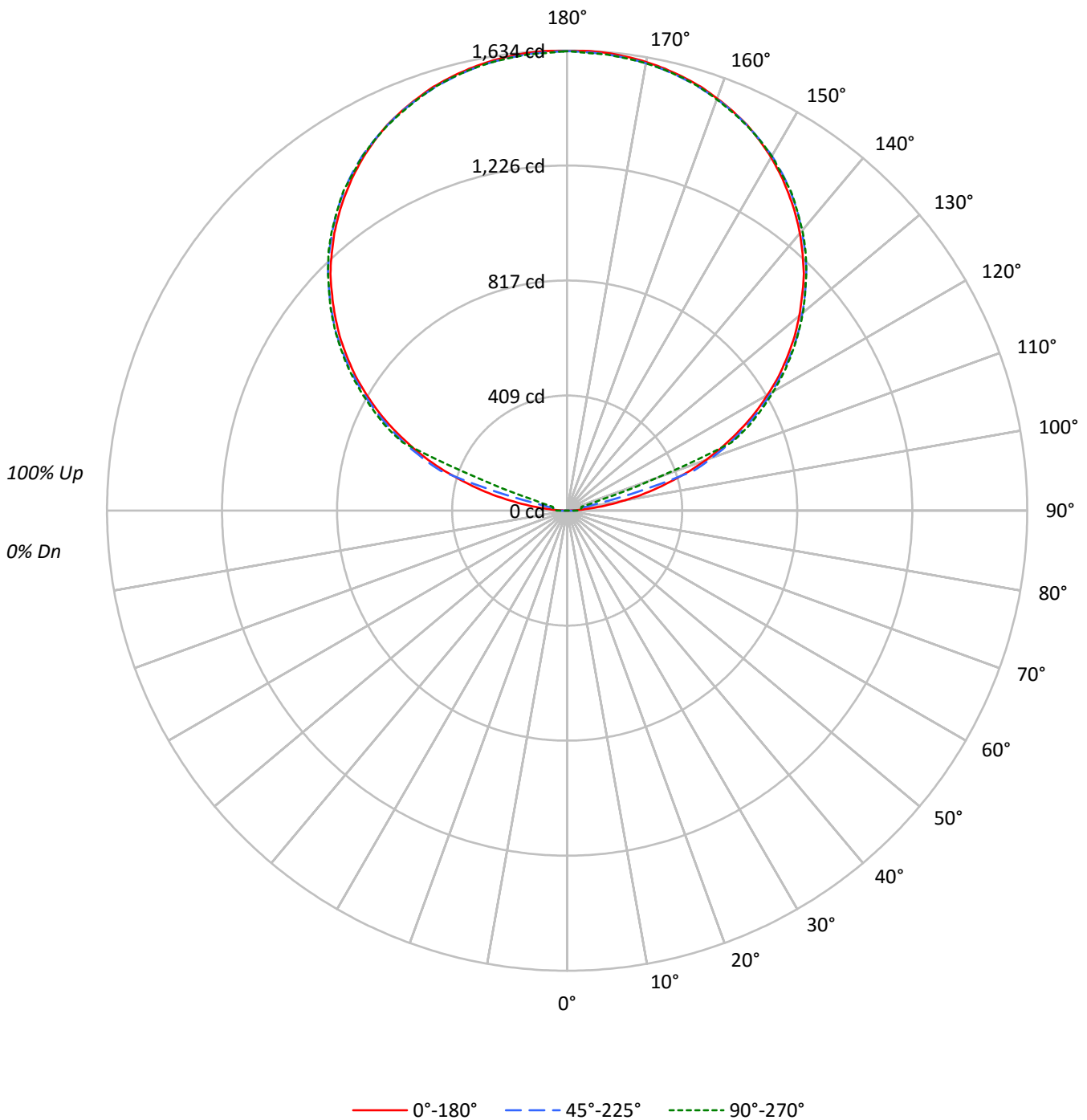
Input Watts (W): 25.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3.3	0.1
90°-100°	57.5	1.2
100°-110°	278.1	5.6
110°-120°	681.6	13.7
120°-130°	865.2	17.4
130°-140°	924.3	18.6
140°-150°	864.3	17.4
150°-160°	697.1	14.0
160°-170°	449.9	9.0
170°-180°	155.0	3.1
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°	1017.2	20.4
90°-150°	3671.0	73.8
90°-180°	4973.0	99.9
0°-180°	4976.4	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	13	29	34	36	4
95°	74	24	38	46	46	88
105°	361	374	265	51	53	383
115°	678	685	696	708	713	669
125°	955	965	970	972	974	853
135°	1189	1196	1201	1205	1201	915
145°	1372	1380	1383	1385	1385	859
155°	1511	1509	1510	1516	1509	696
165°	1594	1590	1589	1599	1590	450
175°	1631	1625	1626	1635	1625	155
180°	1631	1631	1631	1631	1631	



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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°	1.2	13.3	29.1	33.9	36.4
92.5°	27.9	20.6	31.5	40.0	41.2
95°	73.9	24.2	37.6	46.1	46.1
97.5°	134.5	100.6	38.8	48.5	49.7
100°	204.8	229.1	40.0	49.7	50.9
102.5°	284.8	300.6	89.7	49.7	52.1
105°	361.2	374.5	265.4	50.9	53.3
107.5°	442.4	453.3	471.4	284.8	126.0
110°	523.6	533.3	546.6	506.6	333.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	601.1	609.6	622.9	633.8	631.4
115°	677.5	684.8	695.7	707.8	712.6
117.5°	752.6	761.1	767.2	776.9	778.1
120°	821.7	832.6	836.2	845.9	845.9
122.5°	892.0	900.5	905.3	911.4	912.6
125°	955.0	964.7	969.6	972.0	974.4
127.5°	1018.0	1027.7	1033.8	1037.4	1035.0
130°	1076.2	1085.9	1090.8	1095.6	1093.2
132.5°	1132.0	1141.7	1145.3	1150.1	1146.5
135°	1188.9	1196.2	1201.0	1204.7	1201.0
137.5°	1237.4	1247.1	1249.5	1255.6	1253.2
140°	1285.9	1293.1	1296.8	1301.6	1299.2
142.5°	1330.7	1338.0	1341.6	1345.3	1341.6
145°	1371.9	1380.4	1382.8	1385.3	1385.3
147.5°	1411.9	1418.0	1420.4	1422.8	1416.8
150°	1448.3	1451.9	1454.3	1456.8	1453.1
152.5°	1481.0	1482.2	1483.4	1488.3	1482.2
155°	1511.3	1508.9	1510.1	1516.1	1508.9
157.5°	1535.5	1535.5	1534.3	1541.6	1531.9
160°	1557.4	1556.1	1554.9	1562.2	1553.7
162.5°	1578.0	1574.3	1573.1	1581.6	1574.3
165°	1593.7	1590.1	1588.9	1598.6	1590.1
167.5°	1607.0	1602.2	1602.2	1611.9	1602.2
170°	1617.9	1613.1	1613.1	1622.8	1613.1
172.5°	1625.2	1619.2	1620.4	1630.1	1619.2
175°	1631.3	1625.2	1626.4	1634.9	1625.2
177.5°	1633.7	1627.6	1628.9	1638.6	1626.4
180°	1631.3	1631.3	1631.3	1631.3	1631.3

(END OF REPORT)