

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: P334764

Luminaire Tested: **S123IW-S1535U835-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334764  
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-S1535U835-4F0-1E-UDD  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 1535 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6138.5 lumens  
Efficiency: N/A  
Efficacy: 200.6 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

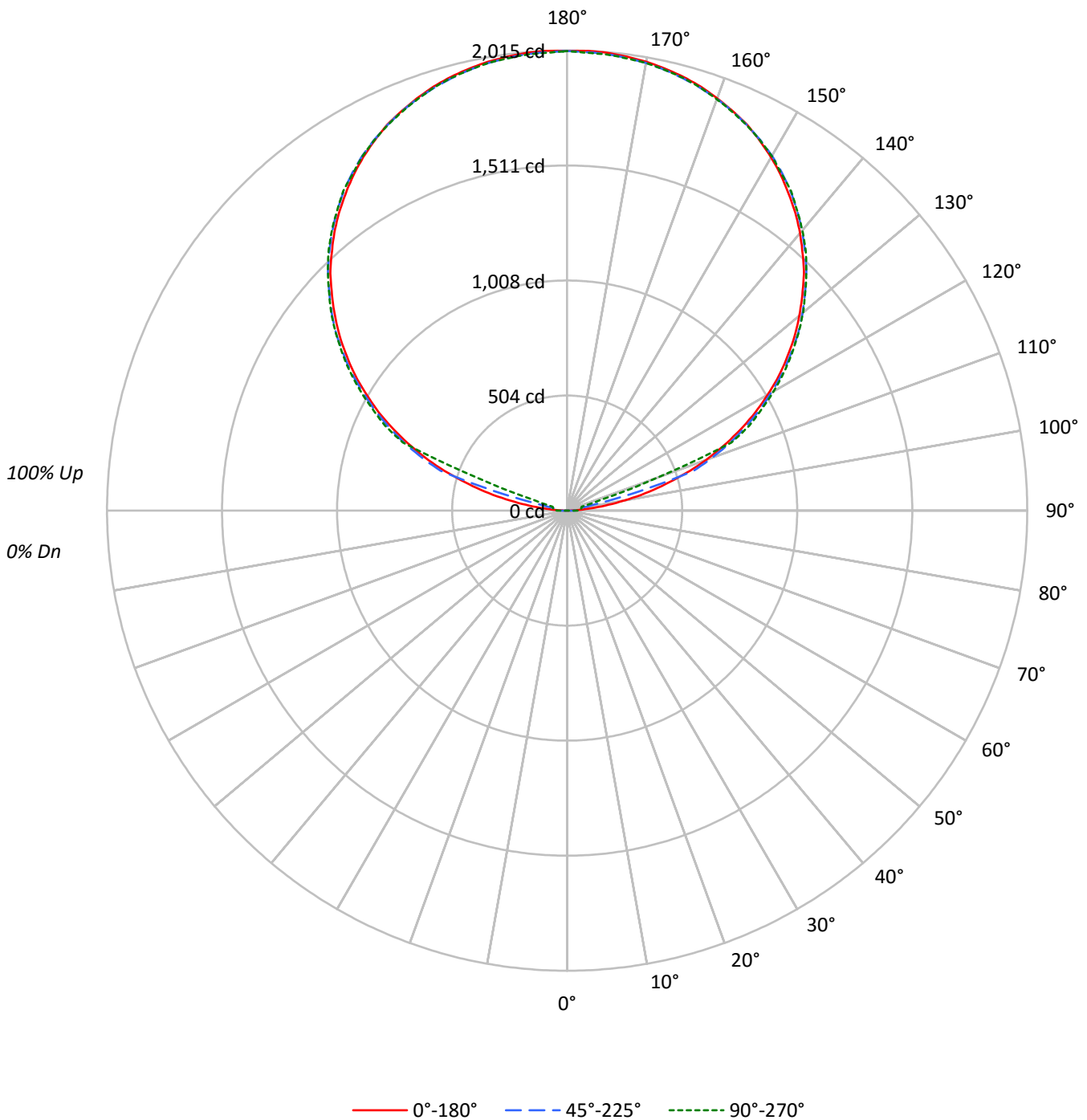
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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°	4.0	0.1
90°-100°	71.0	1.2
100°-110°	343.1	5.6
110°-120°	840.7	13.7
120°-130°	1067.3	17.4
130°-140°	1140.1	18.6
140°-150°	1066.2	17.4
150°-160°	860.0	14.0
160°-170°	555.0	9.0
170°-180°	191.2	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	4.0	0.1
90°-120°	1254.8	20.4
90°-150°	4528.3	73.8
90°-180°	6134.0	99.9
0°-180°	6138.5	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°	2	16	36	42	45	5
95°	91	30	46	57	57	109
105°	446	462	327	63	66	472
115°	836	845	858	873	879	825
125°	1178	1190	1196	1199	1202	1053
135°	1467	1476	1482	1486	1482	1129
145°	1692	1703	1706	1709	1709	1059
155°	1864	1861	1863	1870	1861	859
165°	1966	1961	1960	1972	1961	555
175°	2012	2005	2006	2017	2005	192
180°	2012	2012	2012	2012	2012	



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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°	1.5	16.4	35.9	41.9	44.8
92.5°	34.4	25.4	38.9	49.3	50.8
95°	91.2	29.9	46.3	56.8	56.8
97.5°	165.9	124.1	47.8	59.8	61.3
100°	252.7	282.6	49.3	61.3	62.8
102.5°	351.3	370.8	110.6	61.3	64.3
105°	445.5	461.9	327.4	62.8	65.8
107.5°	545.7	559.1	581.5	351.3	155.5
110°	645.8	657.8	674.2	624.9	411.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	741.5	752.0	768.4	781.9	778.9
115°	835.7	844.7	858.1	873.1	879.1
117.5°	928.4	938.8	946.3	958.3	959.8
120°	1013.6	1027.1	1031.5	1043.5	1043.5
122.5°	1100.3	1110.8	1116.8	1124.2	1125.7
125°	1178.0	1190.0	1196.0	1199.0	1202.0
127.5°	1255.8	1267.7	1275.2	1279.7	1276.7
130°	1327.5	1339.5	1345.5	1351.5	1348.5
132.5°	1396.3	1408.3	1412.8	1418.7	1414.3
135°	1466.6	1475.5	1481.5	1486.0	1481.5
137.5°	1526.4	1538.3	1541.3	1548.8	1545.8
140°	1586.2	1595.1	1599.6	1605.6	1602.6
142.5°	1641.5	1650.5	1654.9	1659.4	1654.9
145°	1692.3	1702.8	1705.8	1708.8	1708.8
147.5°	1741.7	1749.1	1752.1	1755.1	1747.6
150°	1786.5	1791.0	1794.0	1797.0	1792.5
152.5°	1826.9	1828.4	1829.9	1835.8	1828.4
155°	1864.2	1861.3	1862.7	1870.2	1861.3
157.5°	1894.1	1894.1	1892.6	1901.6	1889.7
160°	1921.1	1919.6	1918.1	1927.0	1916.6
162.5°	1946.5	1942.0	1940.5	1951.0	1942.0
165°	1965.9	1961.4	1959.9	1971.9	1961.4
167.5°	1982.3	1976.4	1976.4	1988.3	1976.4
170°	1995.8	1989.8	1989.8	2001.8	1989.8
172.5°	2004.8	1997.3	1998.8	2010.8	1997.3
175°	2012.2	2004.8	2006.3	2016.7	2004.8
177.5°	2015.2	2007.8	2009.3	2021.2	2006.3
180°	2012.2	2012.2	2012.2	2012.2	2012.2

(END OF REPORT)