

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: P334864

Luminaire Tested: **S124IW-S1560U830-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IW-S1560U830-4F0-1E-UDD-1  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 1560 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5102.6 lumens  
Efficiency: N/A  
Efficacy: 166.8 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

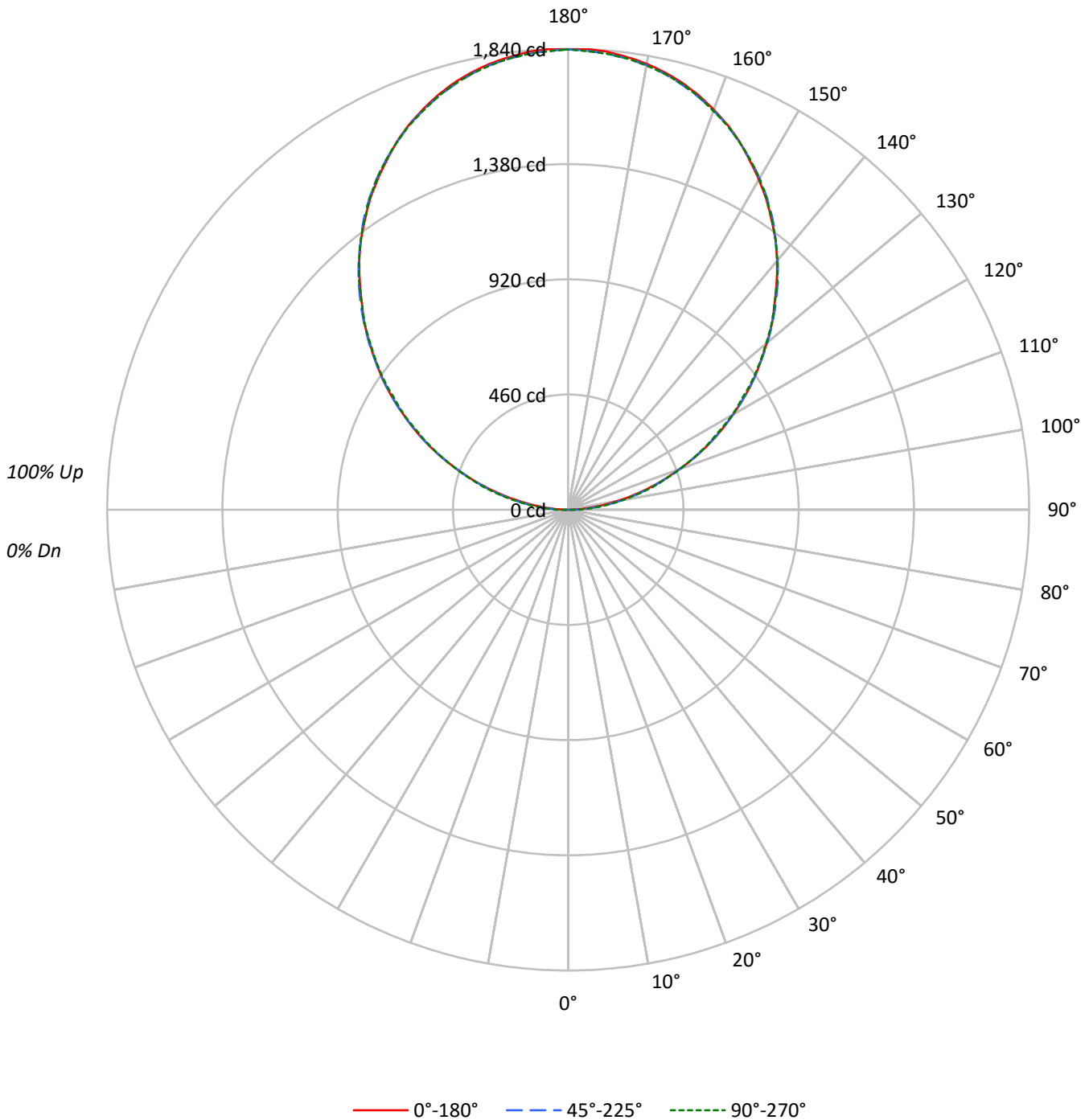
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3.9	0.1
90°-100°	119.8	2.3
100°-110°	358.8	7.0
110°-120°	609.5	11.9
120°-130°	803.8	15.8
130°-140°	902.8	17.7
140°-150°	887.3	17.4
150°-160°	746.3	14.6
160°-170°	496.6	9.7
170°-180°	173.9	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.9	0.1
90°-120°	1088.0	21.3
90°-150°	3682.0	72.2
90°-180°	5099.0	99.9
0°-180°	5102.6	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°	4	20	31	40	43	6
95°	85	98	108	112	112	92
105°	331	333	338	342	347	351
115°	620	620	617	615	614	611
125°	902	902	901	898	895	804
135°	1164	1172	1172	1170	1165	900
145°	1414	1420	1421	1420	1416	885
155°	1620	1620	1619	1624	1619	746
165°	1764	1759	1757	1765	1759	497
175°	1835	1828	1826	1836	1826	174
180°	1838	1838	1838	1838	1838	



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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°	4.3	19.9	31.3	39.8	42.6
92.5°	37.0	55.4	62.5	66.8	68.2
95°	85.3	98.1	108.0	112.3	112.3
97.5°	136.4	147.8	159.2	164.9	164.9
100°	199.0	204.7	217.4	220.3	220.3
102.5°	264.3	265.8	277.1	281.4	282.8
105°	331.1	332.6	338.2	342.5	346.8
107.5°	400.8	402.2	403.6	409.3	407.9
110°	471.8	474.7	473.3	470.4	474.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	545.7	545.7	542.9	542.9	542.9
115°	619.6	619.6	616.8	615.4	614.0
117.5°	689.3	689.3	687.9	683.6	679.3
120°	758.9	764.6	760.3	753.2	756.1
122.5°	831.4	832.8	831.4	827.1	820.0
125°	902.5	902.5	901.0	898.2	895.4
127.5°	966.4	970.7	967.8	965.0	963.6
130°	1034.6	1038.9	1038.9	1036.1	1030.4
132.5°	1104.3	1107.1	1105.7	1102.9	1101.4
135°	1164.0	1172.5	1172.5	1169.6	1165.4
137.5°	1230.8	1235.0	1237.9	1233.6	1235.0
140°	1297.6	1300.4	1300.4	1299.0	1297.6
142.5°	1358.7	1361.5	1360.1	1360.1	1360.1
145°	1414.1	1419.8	1421.2	1419.8	1415.5
147.5°	1470.9	1478.0	1476.6	1475.2	1473.8
150°	1522.1	1527.8	1527.8	1527.8	1526.4
152.5°	1570.4	1573.3	1574.7	1579.0	1574.7
155°	1620.2	1620.2	1618.7	1624.4	1618.7
157.5°	1662.8	1660.0	1660.0	1664.2	1660.0
160°	1699.8	1698.3	1696.9	1701.2	1694.1
162.5°	1733.9	1729.6	1728.2	1736.7	1729.6
165°	1763.7	1759.4	1756.6	1765.1	1759.4
167.5°	1787.9	1782.2	1782.2	1790.7	1782.2
170°	1807.8	1800.7	1802.1	1810.6	1800.7
172.5°	1822.0	1816.3	1816.3	1826.2	1816.3
175°	1834.8	1827.7	1826.2	1836.2	1826.2
177.5°	1840.5	1833.4	1833.4	1843.3	1831.9
180°	1837.6	1837.6	1837.6	1837.6	1837.6

(END OF REPORT)