

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: P334932

Luminaire Tested: **S124IW-S1050U830-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334932  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IW-S1050U830-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 1050 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3953.4 lumens  
Efficiency: N/A  
Efficacy: 201.7 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

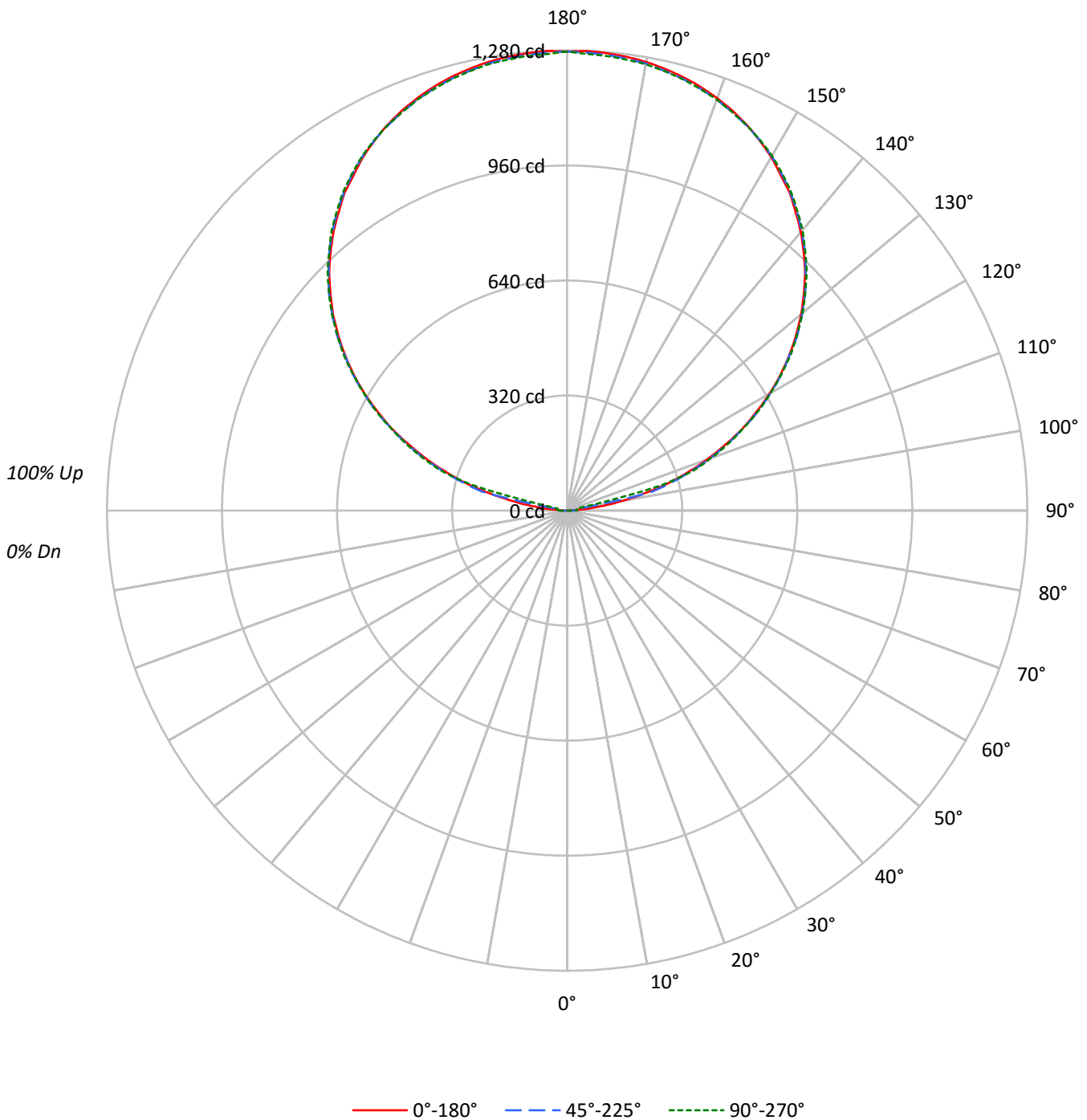
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2.6	0.1
90°-100°	42.4	1.1
100°-110°	279.1	7.1
110°-120°	533.0	13.5
120°-130°	676.6	17.1
130°-140°	723.8	18.3
140°-150°	676.8	17.1
150°-160°	545.8	13.8
160°-170°	352.0	8.9
170°-180°	121.3	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.6	0.1
90°-120°	854.5	21.6
90°-150°	2931.7	74.2
90°-180°	3951.0	99.9
0°-180°	3953.4	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°	3	13	21	27	29	3
95°	52	20	21	27	28	65
105°	287	293	298	306	272	301
115°	537	540	539	540	540	528
125°	754	758	756	759	760	674
135°	936	935	939	941	942	721
145°	1079	1082	1082	1083	1085	674
155°	1183	1184	1181	1185	1182	546
165°	1248	1243	1243	1251	1242	353
175°	1277	1271	1272	1281	1269	122
180°	1277	1277	1277	1277	1277	



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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°	2.9	13.4	21.0	26.7	28.6
92.5°	14.3	12.4	20.1	25.8	25.8
95°	52.5	20.1	21.0	26.7	27.7
97.5°	100.3	121.3	21.0	25.8	26.7
100°	156.6	173.8	42.0	25.8	26.7
102.5°	219.6	231.1	242.6	27.7	27.7
105°	287.4	293.2	297.9	306.5	272.2
107.5°	349.5	352.4	359.1	363.8	367.7
110°	412.5	415.4	421.1	423.0	425.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	473.7	479.4	481.3	480.3	484.2
115°	536.7	539.6	538.6	540.5	540.5
117.5°	593.0	596.9	599.7	598.8	598.8
120°	650.3	654.1	653.2	655.1	653.2
122.5°	703.8	705.7	707.6	708.6	706.7
125°	754.4	758.2	756.3	759.2	760.2
127.5°	803.1	804.1	808.9	807.9	806.9
130°	849.9	850.9	853.7	854.7	854.7
132.5°	892.9	894.8	898.6	899.6	898.6
135°	935.9	934.9	938.7	940.6	942.5
137.5°	974.1	974.1	978.8	980.7	979.8
140°	1011.3	1013.2	1015.1	1018.0	1018.9
142.5°	1044.7	1048.5	1049.5	1051.4	1051.4
145°	1079.1	1082.0	1082.0	1082.9	1084.8
147.5°	1105.8	1111.6	1110.6	1111.6	1112.5
150°	1135.5	1139.3	1138.3	1138.3	1139.3
152.5°	1160.3	1163.1	1161.2	1163.1	1162.2
155°	1183.2	1184.2	1181.3	1185.1	1182.2
157.5°	1203.3	1203.3	1199.4	1204.2	1199.4
160°	1220.4	1217.6	1216.6	1222.4	1216.6
162.5°	1235.7	1231.9	1230.9	1236.7	1230.0
165°	1248.1	1243.4	1243.4	1251.0	1242.4
167.5°	1258.6	1253.9	1252.9	1261.5	1252.0
170°	1267.2	1261.5	1262.5	1270.1	1260.6
172.5°	1273.0	1267.2	1268.2	1275.8	1265.3
175°	1276.8	1271.1	1272.0	1280.6	1269.1
177.5°	1279.7	1273.0	1274.9	1282.5	1271.1
180°	1276.8	1276.8	1276.8	1276.8	1276.8

(END OF REPORT)