

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: P334961

Luminaire Tested: **S124IW-S770U940-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334961  
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-S770U940-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
WALL MOUNT, 770 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

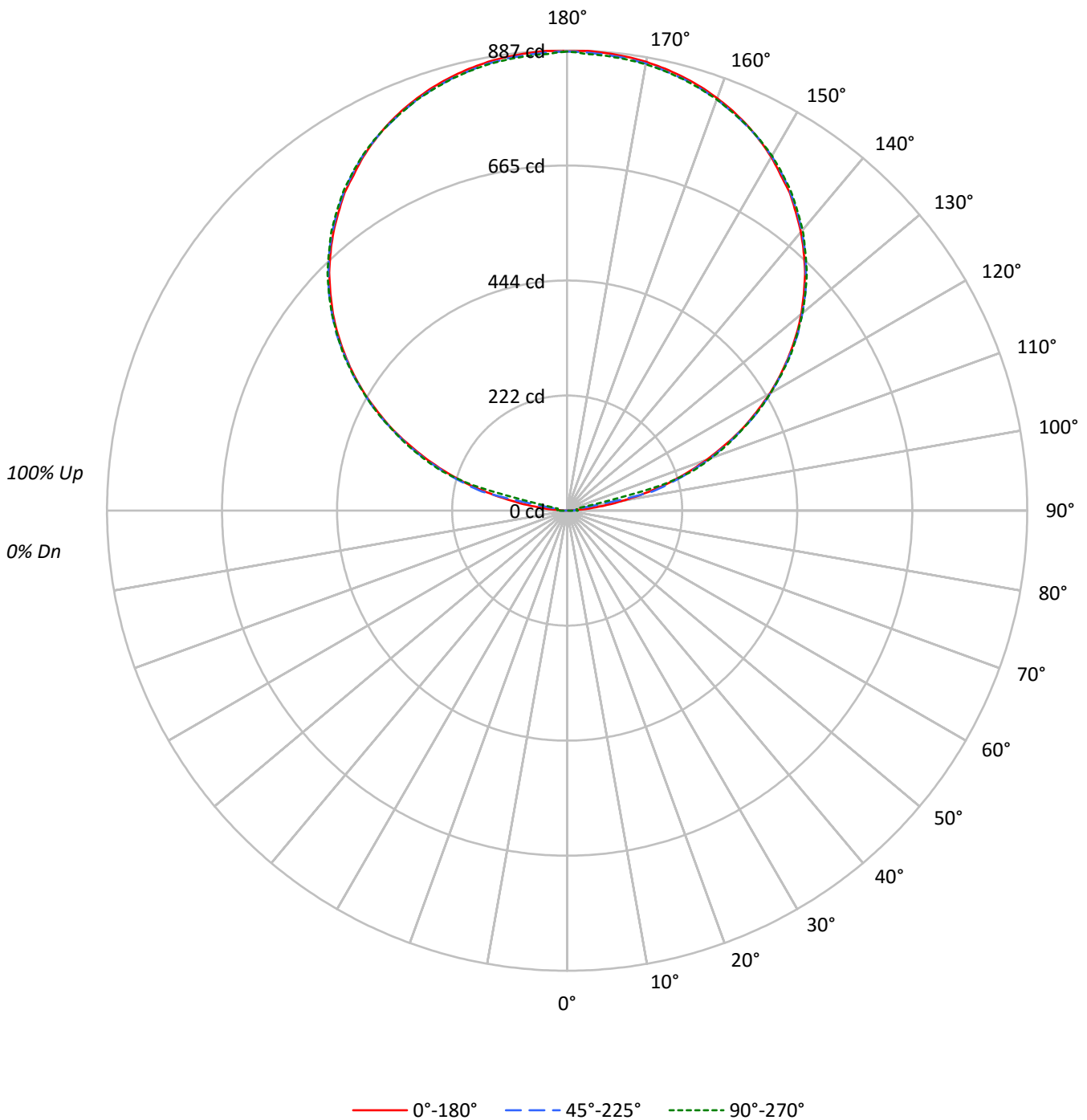
Lumens per Lamp: N/A  
Luminaire Lumens: 2740.2 lumens  
Efficiency: N/A  
Efficacy: 195.7 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 14  
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°	1.8	0.1
90°-100°	29.4	1.1
100°-110°	193.5	7.1
110°-120°	369.4	13.5
120°-130°	469.0	17.1
130°-140°	501.7	18.3
140°-150°	469.1	17.1
150°-160°	378.3	13.8
160°-170°	244.0	8.9
170°-180°	84.1	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.8	0.1
90°-120°	592.3	21.6
90°-150°	2032.0	74.2
90°-180°	2738.0	99.9
0°-180°	2740.2	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°	2	9	15	18	20	2
95°	36	14	15	18	19	45
105°	199	203	206	212	189	208
115°	372	374	373	375	375	366
125°	523	526	524	526	527	467
135°	649	648	651	652	653	500
145°	748	750	750	751	752	467
155°	820	821	819	821	819	378
165°	865	862	862	867	861	244
175°	885	881	882	888	880	84
180°	885	885	885	885	885	



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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°	2.0	9.3	14.6	18.5	19.9
92.5°	9.9	8.6	13.9	17.9	17.9
95°	36.4	13.9	14.6	18.5	19.2
97.5°	69.5	84.1	14.6	17.9	18.5
100°	108.6	120.5	29.1	17.9	18.5
102.5°	152.2	160.2	168.1	19.2	19.2
105°	199.2	203.2	206.5	212.5	188.6
107.5°	242.3	244.2	248.9	252.2	254.8
110°	285.9	287.9	291.9	293.2	295.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	328.3	332.3	333.6	332.9	335.6
115°	372.0	374.0	373.3	374.6	374.6
117.5°	411.0	413.7	415.7	415.0	415.0
120°	450.8	453.4	452.7	454.1	452.7
122.5°	487.8	489.1	490.5	491.1	489.8
125°	522.9	525.6	524.2	526.2	526.9
127.5°	556.7	557.3	560.6	560.0	559.3
130°	589.1	589.8	591.7	592.4	592.4
132.5°	618.9	620.2	622.9	623.5	622.9
135°	648.7	648.0	650.7	652.0	653.3
137.5°	675.1	675.1	678.5	679.8	679.1
140°	701.0	702.3	703.6	705.6	706.3
142.5°	724.1	726.8	727.4	728.8	728.8
145°	748.0	749.9	749.9	750.6	751.9
147.5°	766.5	770.5	769.8	770.5	771.1
150°	787.0	789.7	789.0	789.0	789.7
152.5°	804.2	806.2	804.9	806.2	805.5
155°	820.1	820.8	818.8	821.4	819.4
157.5°	834.0	834.0	831.4	834.7	831.4
160°	845.9	843.9	843.3	847.2	843.3
162.5°	856.5	853.9	853.2	857.2	852.5
165°	865.1	861.8	861.8	867.1	861.1
167.5°	872.4	869.1	868.4	874.4	867.8
170°	878.3	874.4	875.0	880.3	873.7
172.5°	882.3	878.3	879.0	884.3	877.0
175°	885.0	881.0	881.7	887.6	879.7
177.5°	887.0	882.3	883.6	888.9	881.0
180°	885.0	885.0	885.0	885.0	885.0

(END OF REPORT)