

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: P334691

Luminaire Tested: **S123IW-S755U835-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334691  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123IW-S755U835-4F0-1E-UDD-1  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 755 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2620.1 lumens  
Efficiency: N/A  
Efficacy: 187.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

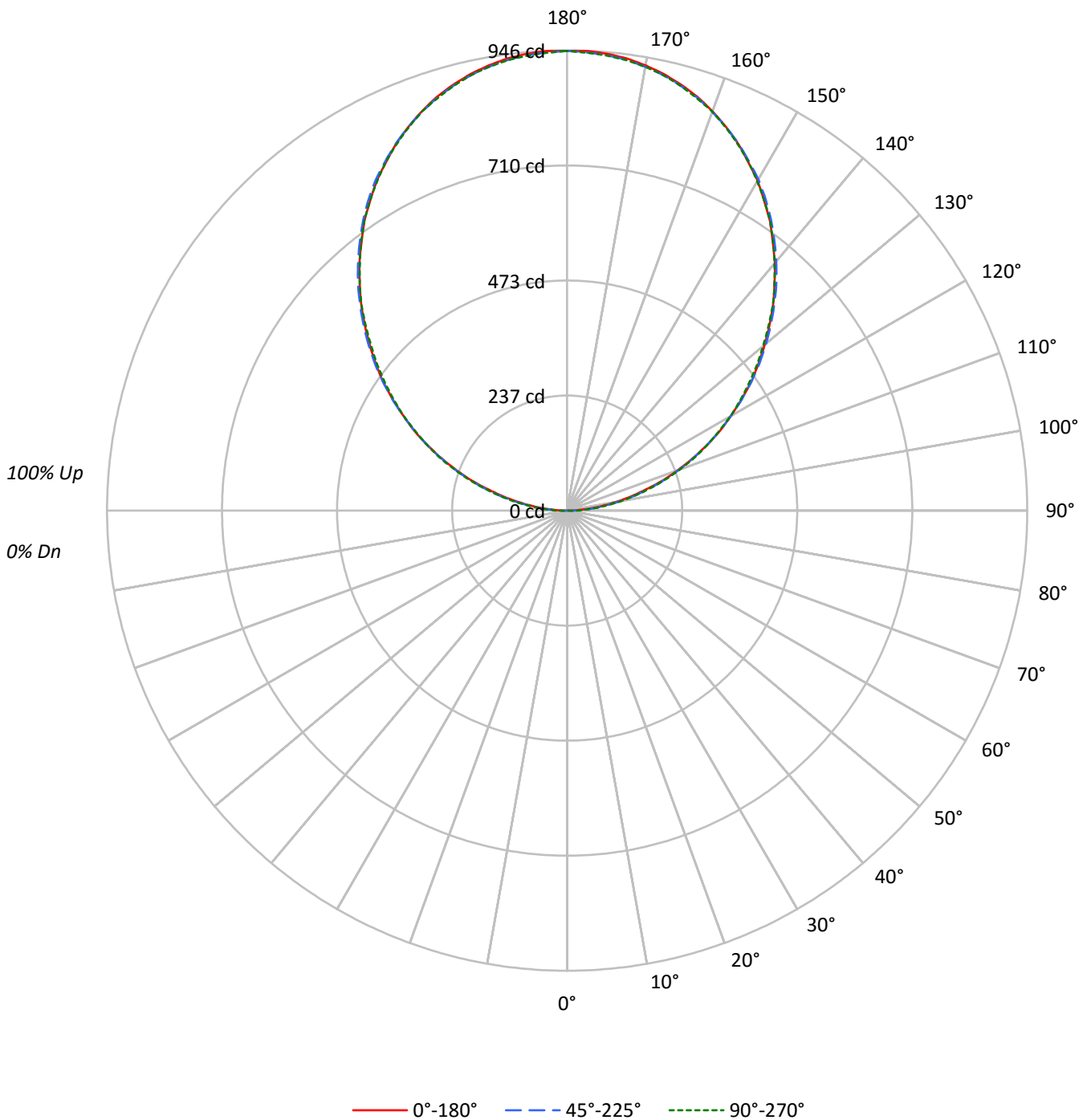
Input Watts (W): 14  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2.0	0.1
90°-100°	60.8	2.3
100°-110°	184.1	7.0
110°-120°	313.4	12.0
120°-130°	412.3	15.7
130°-140°	463.4	17.7
140°-150°	455.6	17.4
150°-160°	383.6	14.6
160°-170°	255.4	9.7
170°-180°	89.4	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.0	0.1
90°-120°	558.3	21.3
90°-150°	1889.7	72.1
90°-180°	2618.0	99.9
0°-180°	2620.1	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	8	18	21	22	3
95°	44	49	55	58	58	48
105°	167	168	175	175	177	179
115°	316	318	316	317	316	312
125°	462	464	462	459	456	412
135°	599	603	603	600	598	462
145°	727	728	730	730	727	454
155°	832	832	833	836	831	383
165°	906	904	904	908	903	256
175°	943	940	940	944	939	90
180°	945	945	945	945	945	



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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°	0.7	8.2	17.8	20.8	22.3
92.5°	22.3	26.7	31.2	33.4	31.9
95°	43.8	49.0	54.9	57.9	57.9
97.5°	72.0	75.7	80.2	83.9	83.1
100°	100.9	105.4	109.1	111.3	112.8
102.5°	134.3	136.6	141.8	144.0	143.3
105°	167.0	168.5	175.2	175.2	176.7
107.5°	205.6	206.3	209.3	211.5	210.8
110°	241.2	242.7	244.2	247.2	245.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	278.3	279.1	279.1	282.8	282.8
115°	315.5	317.7	316.2	316.9	316.2
117.5°	353.3	354.0	352.6	352.6	350.3
120°	388.2	392.6	388.9	388.2	386.7
122.5°	424.6	427.5	426.0	423.8	421.6
125°	461.7	463.9	462.4	459.4	456.5
127.5°	495.8	500.3	498.8	494.3	491.4
130°	530.0	535.9	533.7	530.7	525.5
132.5°	564.1	570.0	568.6	564.8	561.1
135°	599.0	603.4	602.7	599.7	598.2
137.5°	630.9	634.6	636.8	633.1	630.9
140°	664.3	668.0	668.8	668.0	662.8
142.5°	694.7	698.4	699.9	699.2	695.5
145°	726.7	728.1	730.4	729.6	726.7
147.5°	754.1	757.1	759.3	759.3	754.9
150°	783.1	784.5	786.0	786.0	781.6
152.5°	806.8	809.0	809.8	811.3	807.6
155°	832.1	832.1	832.8	835.8	830.6
157.5°	853.6	852.8	853.6	856.5	852.1
160°	873.6	872.1	872.1	875.8	872.9
162.5°	891.4	889.2	889.9	893.7	888.5
165°	906.3	904.0	904.0	908.5	903.3
167.5°	918.9	915.9	916.7	921.1	916.7
170°	929.3	926.3	926.3	931.5	926.3
172.5°	937.5	934.5	934.5	938.9	933.7
175°	942.6	939.7	939.7	944.1	938.9
177.5°	945.6	942.6	942.6	947.1	941.9
180°	944.9	944.9	944.9	944.9	944.9

(END OF REPORT)