

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: P334703

Luminaire Tested: **S123IW-S1320U927-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334703  
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-S1320U927-4F0-1E-UDD-1  
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 1320 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3626.8 lumens  
Efficiency: N/A  
Efficacy: 141.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Indirect

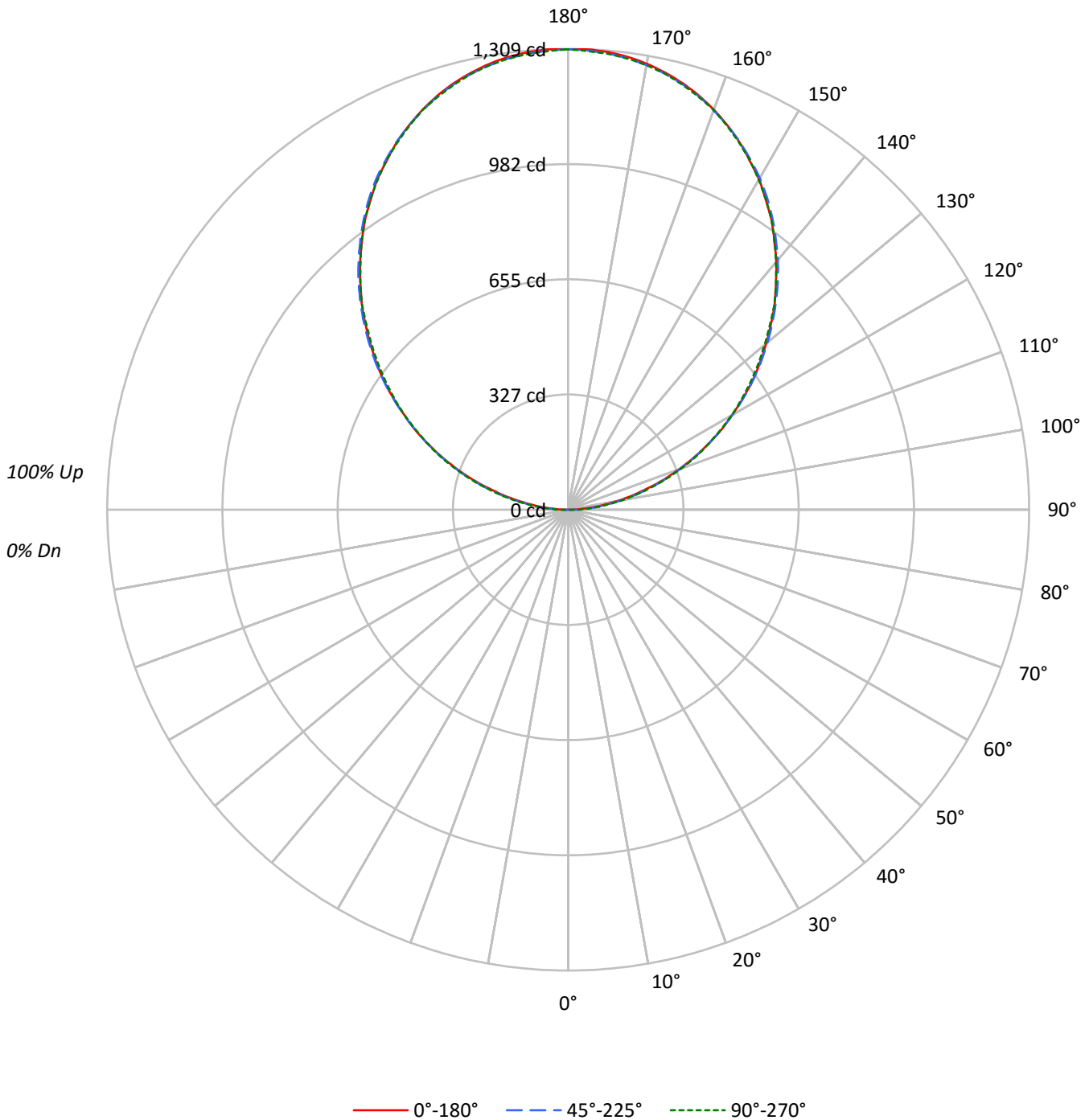
Input Watts (W): 25.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2.8	0.1
90°-100°	84.2	2.3
100°-110°	254.8	7.0
110°-120°	433.8	12.0
120°-130°	570.7	15.7
130°-140°	641.5	17.7
140°-150°	630.7	17.4
150°-160°	531.0	14.6
160°-170°	353.5	9.7
170°-180°	123.8	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.8	0.1
90°-120°	772.8	21.3
90°-150°	2615.8	72.1
90°-180°	3624.0	99.9
0°-180°	3626.8	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	11	25	29	31	4
95°	61	68	76	80	80	67
105°	231	233	242	242	244	247
115°	437	440	438	439	438	432
125°	639	642	640	636	632	570
135°	829	835	834	830	828	639
145°	1006	1008	1011	1010	1006	628
155°	1152	1152	1153	1157	1150	530
165°	1254	1251	1251	1258	1250	354
175°	1305	1301	1301	1307	1300	124
180°	1308	1308	1308	1308	1308	



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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°	1.0	11.3	24.7	28.8	30.8
92.5°	30.8	37.0	43.2	46.2	44.2
95°	60.6	67.8	76.0	80.1	80.1
97.5°	99.7	104.8	111.0	116.1	115.1
100°	139.7	145.9	151.0	154.1	156.2
102.5°	186.0	189.0	196.2	199.3	198.3
105°	231.2	233.2	242.5	242.5	244.5
107.5°	284.6	285.6	289.7	292.8	291.8
110°	333.9	336.0	338.0	342.1	340.1



TEST NUMBER: P334703

CATALOG NUMBER: S123IW-S1320U927-4F0-1E-UDD-1

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	385.3	386.3	386.3	391.5	391.5
115°	436.7	439.7	437.7	438.7	437.7
117.5°	489.1	490.1	488.0	488.0	485.0
120°	537.4	543.5	538.4	537.4	535.3
122.5°	587.7	591.8	589.8	586.7	583.6
125°	639.1	642.2	640.1	636.0	631.9
127.5°	686.3	692.5	690.4	684.3	680.2
130°	733.6	741.8	738.7	734.6	727.4
132.5°	780.9	789.1	787.0	781.9	776.7
135°	829.1	835.3	834.3	830.2	828.1
137.5°	873.3	878.5	881.5	876.4	873.3
140°	919.6	924.7	925.7	924.7	917.5
142.5°	961.7	966.8	968.9	967.9	962.7
145°	1005.9	1007.9	1011.0	1010.0	1005.9
147.5°	1043.9	1048.0	1051.1	1051.1	1044.9
150°	1084.0	1086.0	1088.1	1088.1	1081.9
152.5°	1116.8	1119.9	1120.9	1123.0	1117.9
155°	1151.8	1151.8	1152.8	1156.9	1149.7
157.5°	1181.6	1180.5	1181.6	1185.7	1179.5
160°	1209.3	1207.2	1207.2	1212.4	1208.3
162.5°	1234.0	1230.9	1231.9	1237.0	1229.8
165°	1254.5	1251.4	1251.4	1257.6	1250.4
167.5°	1272.0	1267.9	1268.9	1275.1	1268.9
170°	1286.4	1282.2	1282.2	1289.4	1282.2
172.5°	1297.7	1293.5	1293.5	1299.7	1292.5
175°	1304.9	1300.7	1300.7	1306.9	1299.7
177.5°	1309.0	1304.9	1304.9	1311.0	1303.8
180°	1307.9	1307.9	1307.9	1307.9	1307.9

(END OF REPORT)