

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059036

Luminaire Tested: S123RDR-S1000D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059036  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D850-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

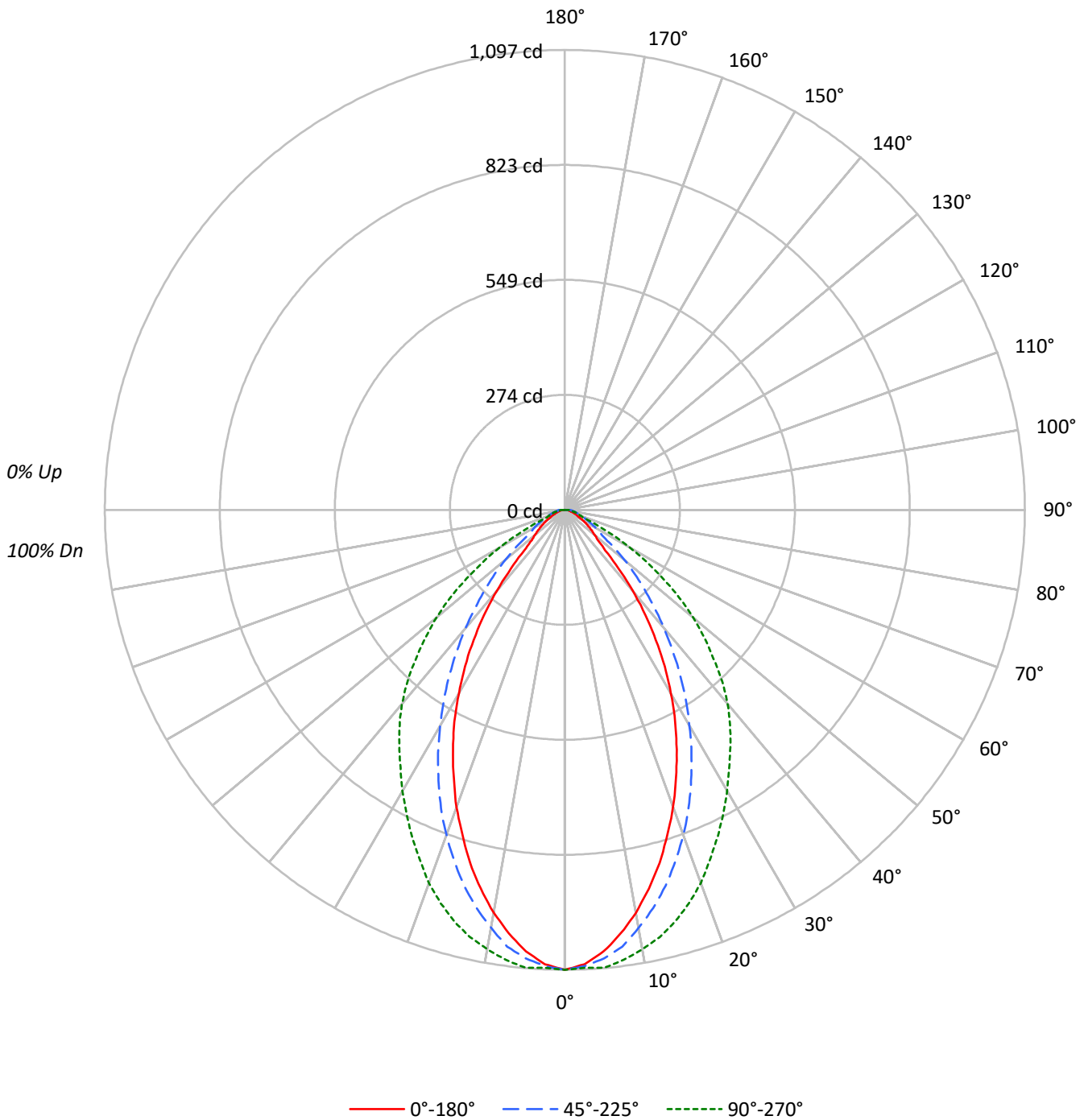
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1472.8 lumens  
Efficiency: N/A  
Efficacy: 42.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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: 24 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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12883	12883	12883
5°	12466	12660	12917
10°	11635	12074	12691
15°	10604	11283	12360
20°	9435	10320	11836
25°	8175	9235	11159
30°	6855	8057	10496
35°	5431	6858	9867
40°	3844	5641	9255
45°	2263	4459	8328
50°	1693	3387	7294
55°	1423	2289	5859
60°	1153	1952	4162
65°	909	1667	2195
70°	797	1449	1356
75°	744	1361	1298
80°	737	1474	1292
85°	916	2210	1657

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8328 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	6.9
10°-20°	262.4	17.8
20°-30°	334.2	22.7
30°-40°	314.4	21.3
40°-50°	226.4	15.4
50°-60°	130.7	8.9
60°-70°	59.8	4.1
70°-80°	29.8	2.0
80°-90°	14.1	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	697.6	47.4
0°-40°	1011.9	68.7
0°-60°	1369.1	93.0
0°-90°	1472.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1472.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1097	1097	1097	1097	1097	
5°	1058	1075	1074	1085	1096	98
15°	872	904	928	980	1017	243
25°	631	664	713	792	861	289
35°	379	412	478	589	688	235
45°	136	170	268	403	502	115
55°	70	72	112	213	286	62
65°	33	46	60	67	79	34
75°	16	31	30	29	29	17
85°	7	15	16	15	12	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1097.1	1097.1	1097.1	1097.1	1097.1
2.5°	1084.9	1098.5	1088.9	1090.3	1093.0
5°	1057.6	1075.3	1074.0	1084.9	1095.8
7.5°	1019.4	1039.9	1050.8	1067.1	1082.1
10°	975.8	999.0	1012.6	1042.6	1064.4
12.5°	925.4	955.4	973.1	1012.6	1044.0
15°	872.3	903.6	928.1	979.9	1016.7
17.5°	812.3	846.4	877.7	939.0	984.0
20°	755.0	787.8	825.9	892.7	947.2
22.5°	692.3	727.8	771.4	842.3	903.6
25°	631.0	663.7	712.8	791.8	861.3
27.5°	569.7	602.4	654.2	741.4	817.7
30°	505.6	539.7	594.2	691.0	774.1
32.5°	442.9	475.6	537.0	641.9	729.1
35°	378.9	411.6	478.4	588.8	688.3
37.5°	316.2	350.3	421.1	545.2	647.4
40°	250.8	287.6	368.0	500.2	603.8
42.5°	189.4	229.0	314.8	453.8	556.1
45°	136.3	170.4	268.5	403.4	501.5
47.5°	106.3	124.0	226.2	351.6	451.1
50°	92.7	95.4	185.4	303.9	399.3
52.5°	80.4	83.1	145.8	258.9	344.8
55°	69.5	72.2	111.8	212.6	286.2
57.5°	58.6	62.7	92.7	169.0	230.3
60°	49.1	54.5	83.1	129.5	177.2
62.5°	39.5	49.1	70.9	95.4	126.7
65°	32.7	46.3	60.0	66.8	79.0
67.5°	27.3	42.2	50.4	47.7	46.3
70°	23.2	38.2	42.2	38.2	39.5
72.5°	19.1	35.4	35.4	32.7	32.7
75°	16.4	31.3	30.0	28.6	28.6
77.5°	13.6	27.3	25.9	24.5	23.2
80°	10.9	21.8	21.8	20.4	19.1
82.5°	9.5	17.7	17.7	17.7	15.0
85°	6.8	15.0	16.4	15.0	12.3
87.5°	5.5	13.6	13.6	12.3	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)