

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: P1059017

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059017  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

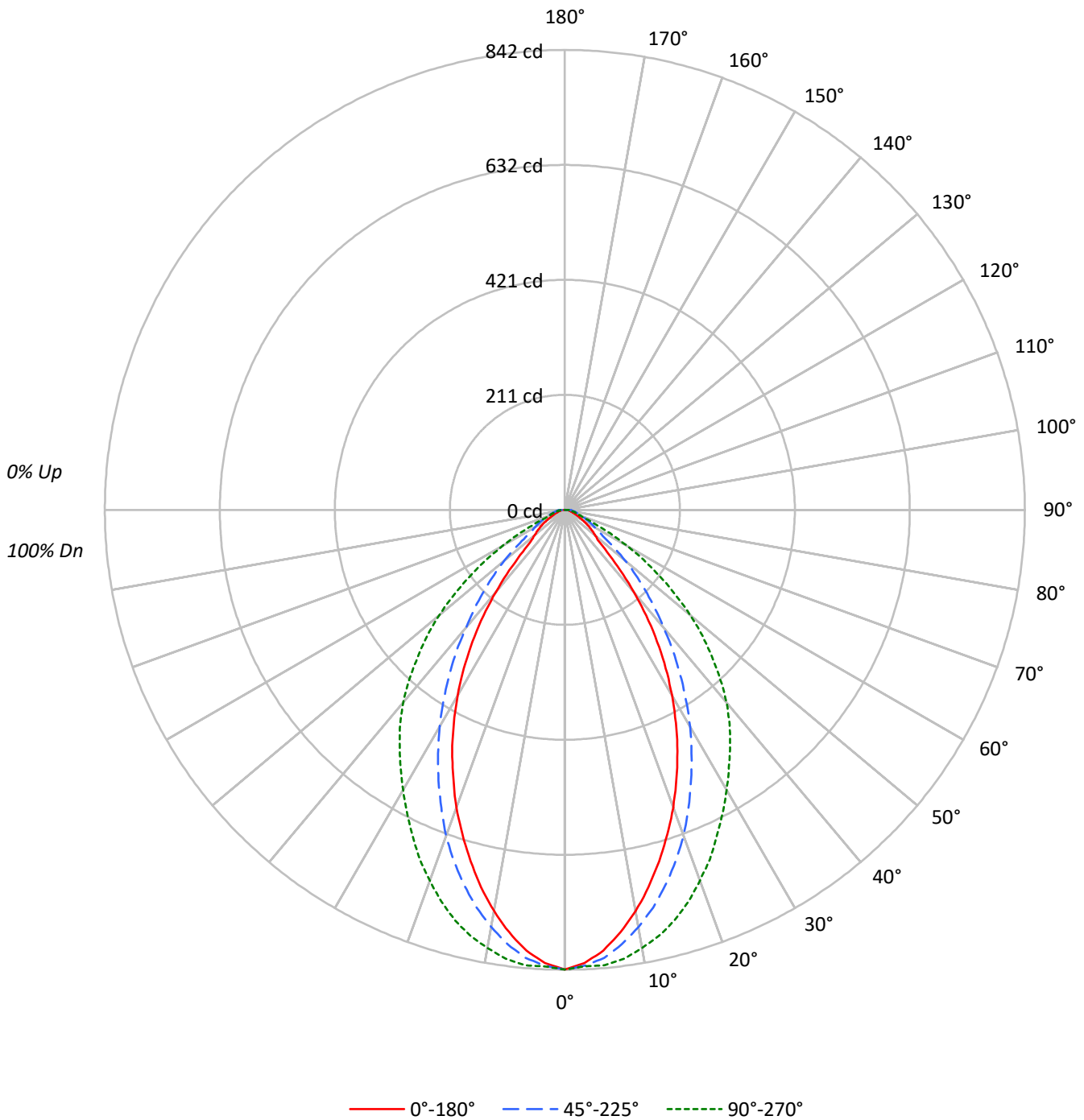
Lumens per Lamp: N/A  
Luminaire Lumens: 1127.2 lumens  
Efficiency: N/A  
Efficacy: 32.2 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	9882	9882	9882
5°	9544	9703	9862
10°	8893	9244	9713
15°	8095	8648	9454
20°	7246	7937	9027
25°	6320	7083	8533
30°	5314	6214	8030
35°	4227	5267	7556
40°	3014	4294	7062
45°	1795	3447	6325
50°	1324	2627	5477
55°	1108	1785	4352
60°	895	1473	3058
65°	717	1264	1639
70°	591	1095	1013
75°	558	1057	948
80°	582	1163	913
85°	822	1657	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6325 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	6.9
10°-20°	200.8	17.8
20°-30°	256.2	22.7
30°-40°	241.0	21.4
40°-50°	173.2	15.4
50°-60°	99.3	8.8
60°-70°	45.4	4.0
70°-80°	22.8	2.0
80°-90°	11.1	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°	534.3	47.4
0°-40°	775.3	68.8
0°-60°	1047.8	93.0
0°-90°	1127.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1127.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	810	826	823	829	837	75
15°	666	689	711	750	778	186
25°	488	510	547	606	659	223
35°	295	316	367	451	527	183
45°	108	132	208	306	381	91
55°	54	55	87	161	213	49
65°	26	36	46	50	59	26
75°	12	25	23	21	21	13
85°	6	12	12	11	9	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	841.6	841.6	841.6	841.6	841.6
2.5°	830.6	842.8	835.5	835.5	836.7
5°	809.7	825.6	823.2	829.3	836.7
7.5°	780.2	797.4	802.3	817.0	829.3
10°	745.8	765.4	775.3	798.6	814.6
12.5°	707.7	729.8	745.8	775.3	798.6
15°	665.9	689.3	711.4	749.5	777.7
17.5°	622.9	646.3	674.5	718.8	751.9
20°	579.9	603.3	635.2	681.9	722.4
22.5°	533.2	556.6	591.0	643.8	693.0
25°	487.8	509.9	546.7	605.7	658.6
27.5°	439.9	462.0	502.5	566.4	625.4
30°	391.9	414.1	458.3	527.1	592.2
32.5°	344.0	364.9	412.8	489.0	559.0
35°	294.9	315.8	367.4	450.9	527.1
37.5°	244.5	265.4	325.6	416.5	495.1
40°	196.6	219.9	280.1	382.1	460.7
42.5°	149.9	174.5	243.3	345.2	421.4
45°	108.1	131.5	207.6	305.9	380.9
47.5°	82.3	94.6	175.7	266.6	341.6
50°	72.5	73.7	143.8	231.0	299.8
52.5°	62.7	63.9	111.8	196.6	255.6
55°	54.1	55.3	87.2	161.0	212.6
57.5°	45.5	47.9	71.3	127.8	170.8
60°	38.1	43.0	62.7	97.1	130.2
62.5°	30.7	39.3	54.1	71.3	93.4
65°	25.8	35.6	45.5	50.4	59.0
67.5°	20.9	33.2	38.1	35.6	35.6
70°	17.2	29.5	31.9	29.5	29.5
72.5°	14.7	28.3	27.0	24.6	24.6
75°	12.3	24.6	23.3	20.9	20.9
77.5°	11.1	20.9	19.7	18.4	17.2
80°	8.6	17.2	17.2	16.0	13.5
82.5°	7.4	14.7	14.7	13.5	11.1
85°	6.1	12.3	12.3	11.1	8.6
87.5°	4.9	11.1	11.1	9.8	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)