

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: P1059056

Luminaire Tested: S123RDR-S1000D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D930-X4F0-XX-UDD-WVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

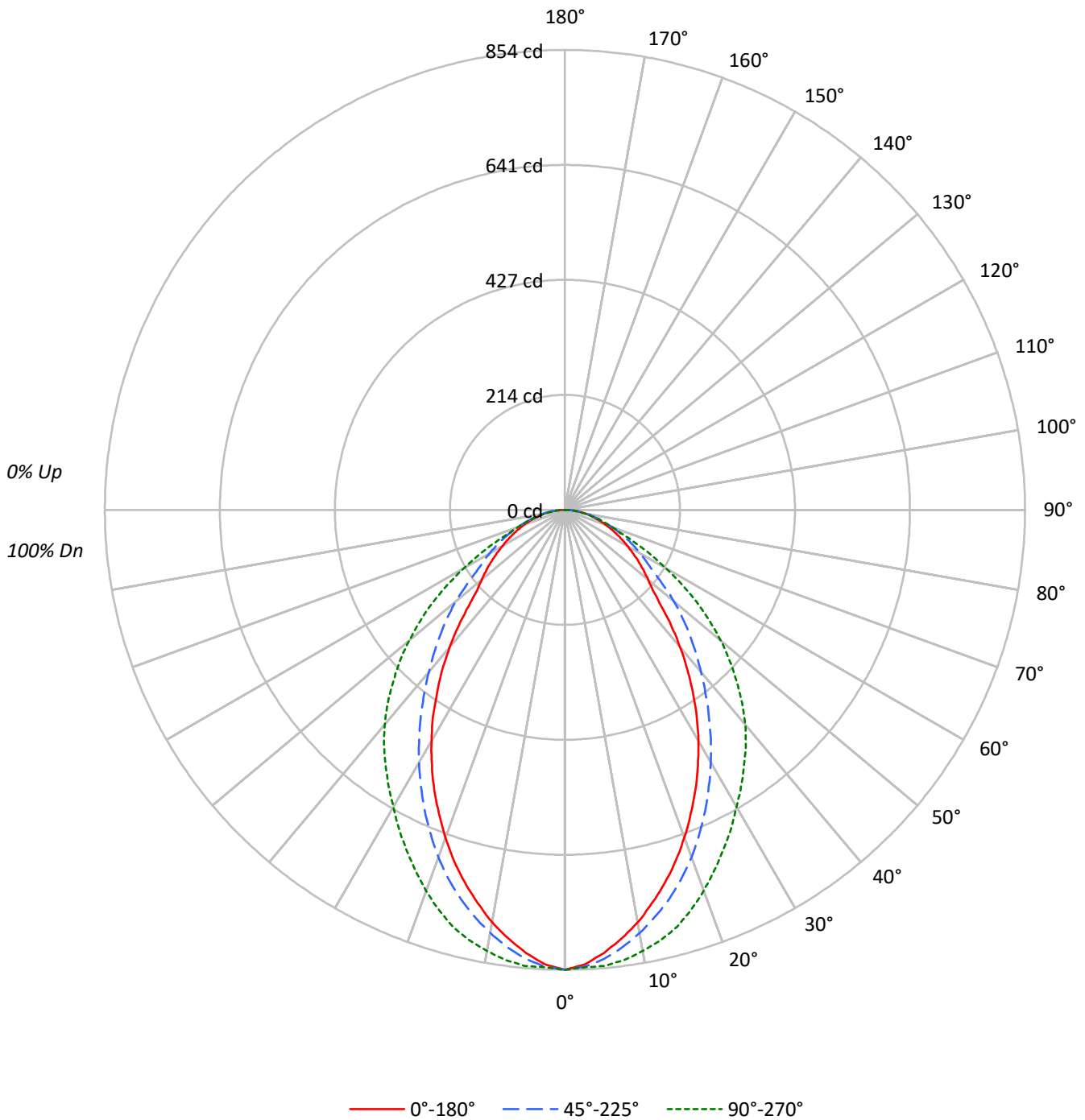
Lumens per Lamp: N/A  
Luminaire Lumens: 1542.7 lumens  
Efficiency: N/A  
Efficacy: 44.1 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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				
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

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

	0°	45°	90°
0°	10029	10029	10029
5°	9736	9866	10019
10°	9277	9515	9920
15°	8715	9092	9750
20°	8095	8582	9408
25°	7433	7979	9016
30°	6720	7345	8634
35°	5927	6674	8310
40°	5095	6016	7980
45°	4190	5420	7483
50°	3676	4828	6896
55°	3402	4119	6109
60°	3128	3786	5056
65°	2920	3479	3979
70°	2750	3162	3162
75°	2591	2908	2727
80°	2434	2637	2299
85°	2290	2560	1751

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7483 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	5.1
10°-20°	211.7	13.7
20°-30°	287.0	18.6
30°-40°	300.1	19.5
40°-50°	260.3	16.9
50°-60°	193.6	12.6
60°-70°	124.2	8.1
70°-80°	66.6	4.3
80°-90°	20.1	1.3
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°	577.7	37.4
0°-40°	877.8	56.9
0°-60°	1331.7	86.3
0°-90°	1542.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	826	840	837	843	850	77
15°	717	734	748	778	802	201
25°	574	592	616	657	696	263
35°	414	434	466	525	580	258
45°	252	271	326	396	451	199
55°	166	170	201	258	298	149
65°	105	114	125	133	143	105
75°	57	66	64	61	60	60
85°	17	21	19	16	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	854.1	854.1	854.1	854.1	854.1
2.5°	845.0	857.1	849.0	849.0	850.0
5°	826.0	840.0	837.0	843.0	850.0
7.5°	803.0	818.0	819.0	833.0	843.0
10°	778.0	793.0	798.0	818.0	832.0
12.5°	747.9	764.9	774.0	799.0	819.0
15°	716.9	733.9	747.9	778.0	802.0
17.5°	683.8	700.9	718.9	752.9	779.0
20°	647.8	665.8	686.8	720.9	752.9
22.5°	610.8	629.8	651.8	688.9	724.9
25°	573.7	591.7	615.8	656.8	695.9
27.5°	534.7	553.7	578.7	623.8	667.8
30°	495.6	514.6	541.7	589.7	636.8
32.5°	455.6	474.6	503.6	557.7	608.8
35°	413.5	433.5	465.6	524.6	579.7
37.5°	373.5	392.5	428.5	493.6	551.7
40°	332.4	352.4	392.5	462.6	520.6
42.5°	292.4	312.4	359.4	429.5	486.6
45°	252.3	271.3	326.4	396.5	450.6
47.5°	221.3	235.3	295.4	361.4	415.5
50°	201.2	206.3	264.3	327.4	377.5
52.5°	183.2	187.2	230.3	293.4	338.4
55°	166.2	170.2	201.2	258.3	298.4
57.5°	149.2	154.2	179.2	222.3	258.3
60°	133.2	139.2	161.2	190.2	215.3
62.5°	119.1	126.2	143.2	161.2	178.2
65°	105.1	114.1	125.2	133.2	143.2
67.5°	92.1	102.1	108.1	110.1	111.1
70°	80.1	90.1	92.1	92.1	92.1
72.5°	68.1	79.1	77.1	76.1	75.1
75°	57.1	66.1	64.1	61.1	60.1
77.5°	46.1	54.1	51.1	49.1	46.1
80°	36.0	42.1	39.0	37.0	34.0
82.5°	27.0	31.0	28.0	26.0	23.0
85°	17.0	21.0	19.0	16.0	13.0
87.5°	9.0	12.0	10.0	9.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)