

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 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: S123RDRP-S1000D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
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: S123RDRP-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**

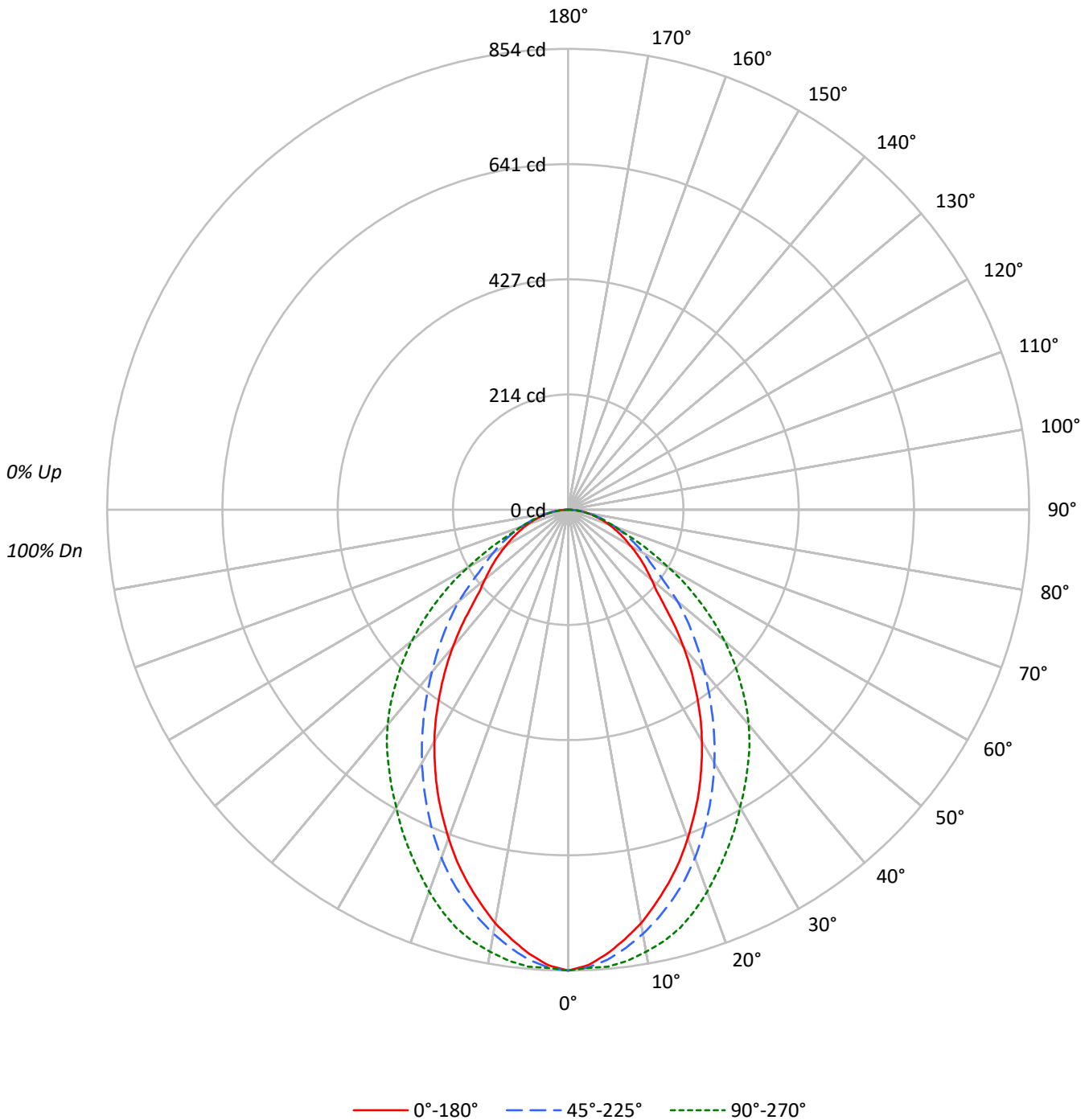
Lumens per Lamp: N/A  
Luminaire Lumens: 1542.7 lumens  
Efficiency: N/A  
Efficacy: 44.1 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (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: 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	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



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.80	16.28	15.16	16.59	16.91	17.55	19.04	17.92	19.35	19.66
	3H	16.51	17.83	16.88	18.16	18.53	18.57	19.90	18.95	20.23	20.59
	4H	17.17	18.41	17.57	18.76	19.14	18.94	20.18	19.34	20.53	20.91
	6H	17.67	18.82	18.08	19.18	19.58	19.19	20.34	19.61	20.71	21.10
	8H	17.85	18.94	18.27	19.33	19.73	19.26	20.36	19.69	20.75	21.15
	12H	17.97	19.02	18.40	19.40	19.83	19.30	20.35	19.73	20.73	21.16
4H	2H	15.57	16.82	15.97	17.17	17.55	17.82	19.07	18.22	19.42	19.80
	3H	17.50	18.53	17.91	18.93	19.33	19.08	20.11	19.49	20.51	20.91
	4H	18.31	19.24	18.74	19.65	20.09	19.56	20.49	20.00	20.91	21.35
	6H	18.95	19.76	19.41	20.20	20.66	19.95	20.75	20.40	21.20	21.66
	8H	19.18	19.93	19.64	20.38	20.84	20.06	20.81	20.52	21.26	21.72
	12H	19.35	20.02	19.83	20.50	20.97	20.13	20.80	20.61	21.28	21.75
8H	4H	18.63	19.38	19.09	19.83	20.30	19.76	20.51	20.22	20.96	21.42
	6H	19.42	20.05	19.92	20.54	21.02	20.24	20.87	20.74	21.36	21.84
	8H	19.75	20.31	20.26	20.82	21.31	20.42	20.98	20.93	21.49	21.98
	12H	20.02	20.52	20.53	21.01	21.58	20.55	21.05	21.06	21.54	22.11
12H	4H	18.65	19.33	19.13	19.81	20.28	19.77	20.45	20.25	20.92	21.40
	6H	19.47	20.04	19.99	20.55	21.03	20.28	20.84	20.80	21.35	21.84
	8H	19.87	20.36	20.38	20.86	21.42	20.51	21.01	21.02	21.50	22.06