

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: P1059058

Luminaire Tested: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059058  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

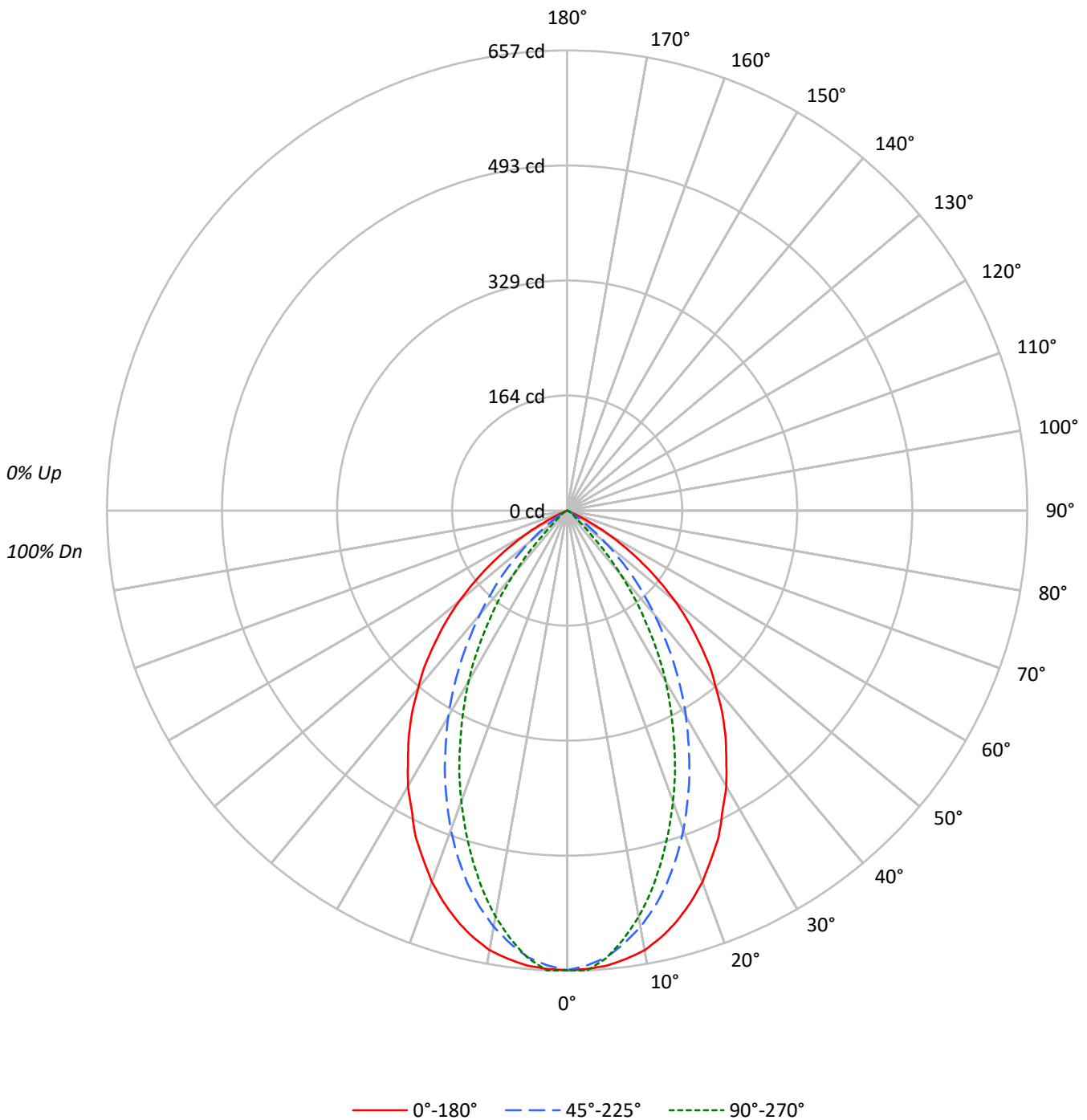
Lumens per Lamp: N/A  
Luminaire Lumens: 748.8 lumens  
Efficiency: N/A  
Efficacy: 21.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P1059058

CATALOG NUMBER: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059058

CATALOG NUMBER: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

**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	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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69					69			
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63					63			
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46					46			
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42					42			

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

	0°	45°	90°
0°	7705	7705	7705
5°	7685	7547	7560
10°	7598	7193	7018
15°	7373	6692	6307
20°	7052	6061	5520
25°	6640	5354	4668
30°	6161	4599	3811
35°	5649	3802	2833
40°	5069	2980	1813
45°	4422	2175	754
50°	3668	1293	289
55°	2704	540	217
60°	1637	200	124
65°	439	117	58
70°	0	38	38
75°	0	0	50
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4422 cd/sqm



TEST NUMBER: P1059058

CATALOG NUMBER: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.4	8.1
10°-20°	155.9	20.8
20°-30°	194.3	25.9
30°-40°	173.7	23.2
40°-50°	109.6	14.6
50°-60°	45.9	6.1
60°-70°	8.6	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	410.6	54.8
0°-40°	584.3	78.0
0°-60°	739.9	98.8
0°-90°	748.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	748.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	652	651	640	642	641	62
15°	606	592	550	527	519	170
25°	512	471	413	377	360	235
35°	394	337	265	218	198	246
45°	266	207	131	70	45	205
55°	132	91	26	11	11	118
65°	16	12	4	2	2	22
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1059058

CATALOG NUMBER: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	656.2	656.2	656.2	656.2	656.2
2.5°	655.1	656.2	649.8	656.2	657.2
5°	652.0	650.9	640.3	642.4	641.4
7.5°	645.6	642.4	623.4	619.2	617.1
10°	637.2	628.7	603.3	592.8	588.6
12.5°	623.4	611.8	579.0	562.1	555.8
15°	606.5	591.7	550.5	527.3	518.8
17.5°	586.4	565.3	518.8	493.5	480.8
20°	564.3	534.7	485.0	454.4	441.7
22.5°	537.8	505.1	449.1	416.3	402.6
25°	512.5	471.3	413.2	377.2	360.3
27.5°	480.8	437.5	375.1	338.1	320.2
30°	454.4	404.7	339.2	298.0	281.1
32.5°	422.7	370.9	302.2	256.8	240.9
35°	394.1	337.1	265.2	217.7	197.6
37.5°	363.5	304.3	228.2	178.6	159.6
40°	330.7	271.6	194.4	139.5	118.3
42.5°	301.1	238.8	160.6	103.6	82.4
45°	266.3	207.1	131.0	69.7	45.4
47.5°	234.6	177.5	99.3	39.1	24.3
50°	200.8	146.9	70.8	20.1	15.8
52.5°	165.9	117.3	46.5	13.7	12.7
55°	132.1	90.9	26.4	10.6	10.6
57.5°	99.3	65.5	13.7	8.5	7.4
60°	69.7	43.3	8.5	6.3	5.3
62.5°	40.2	25.4	6.3	4.2	4.2
65°	15.8	11.6	4.2	2.1	2.1
67.5°	1.1	3.2	2.1	1.1	1.1
70°	0.0	0.0	1.1	1.1	1.1
72.5°	0.0	0.0	1.1	1.1	1.1
75°	0.0	0.0	0.0	0.0	1.1
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°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059058  
 CATALOG NUMBER: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-B

**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	12.28	13.46	12.65	13.77	14.09	0.00	0.00	0.00	0.00	0.00
	3H	12.12	13.15	12.50	13.49	13.85	0.00	0.00	0.00	0.00	0.00
	4H	12.04	12.99	12.44	13.34	13.73	0.00	0.00	0.00	0.00	0.00
	6H	11.94	12.82	12.36	13.19	13.59	0.00	0.00	0.00	0.00	0.00
	8H	11.89	12.72	12.33	13.11	13.52	0.00	0.00	0.00	0.00	0.00
	12H	11.84	12.63	12.28	13.01	13.44	0.00	0.00	0.00	0.00	0.00
4H	2H	12.04	13.00	12.45	13.35	13.73	0.00	0.00	0.00	0.00	0.00
	3H	11.88	12.65	12.29	13.05	13.46	0.00	0.00	0.00	0.00	0.00
	4H	11.77	12.45	12.21	12.88	13.32	0.00	0.00	0.00	0.00	0.00
	6H	11.68	12.26	12.14	12.71	13.18	0.00	0.00	0.00	0.00	0.00
	8H	11.61	12.16	12.08	12.60	13.08	0.00	0.00	0.00	0.00	0.00
	12H	11.55	12.03	12.04	12.52	12.99	0.00	0.00	0.00	0.00	0.00
8H	4H	11.61	12.16	12.08	12.61	13.08	0.00	0.00	0.00	0.00	0.00
	6H	11.49	11.93	12.00	12.44	12.92	0.00	0.00	0.00	0.00	0.00
	8H	11.42	11.82	11.95	12.34	12.83	0.00	0.00	0.00	0.00	0.00
	12H	11.37	11.72	11.89	12.22	12.79	0.00	0.00	0.00	0.00	0.00
12H	4H	11.55	12.03	12.04	12.52	12.99	0.00	0.00	0.00	0.00	0.00
	6H	11.42	11.82	11.95	12.34	12.83	0.00	0.00	0.00	0.00	0.00
	8H	11.37	11.72	11.89	12.22	12.79	0.00	0.00	0.00	0.00	0.00