

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: P1059143

Luminaire Tested: S123RDRP-S1165D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059143
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: S123RDRP-S1165D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

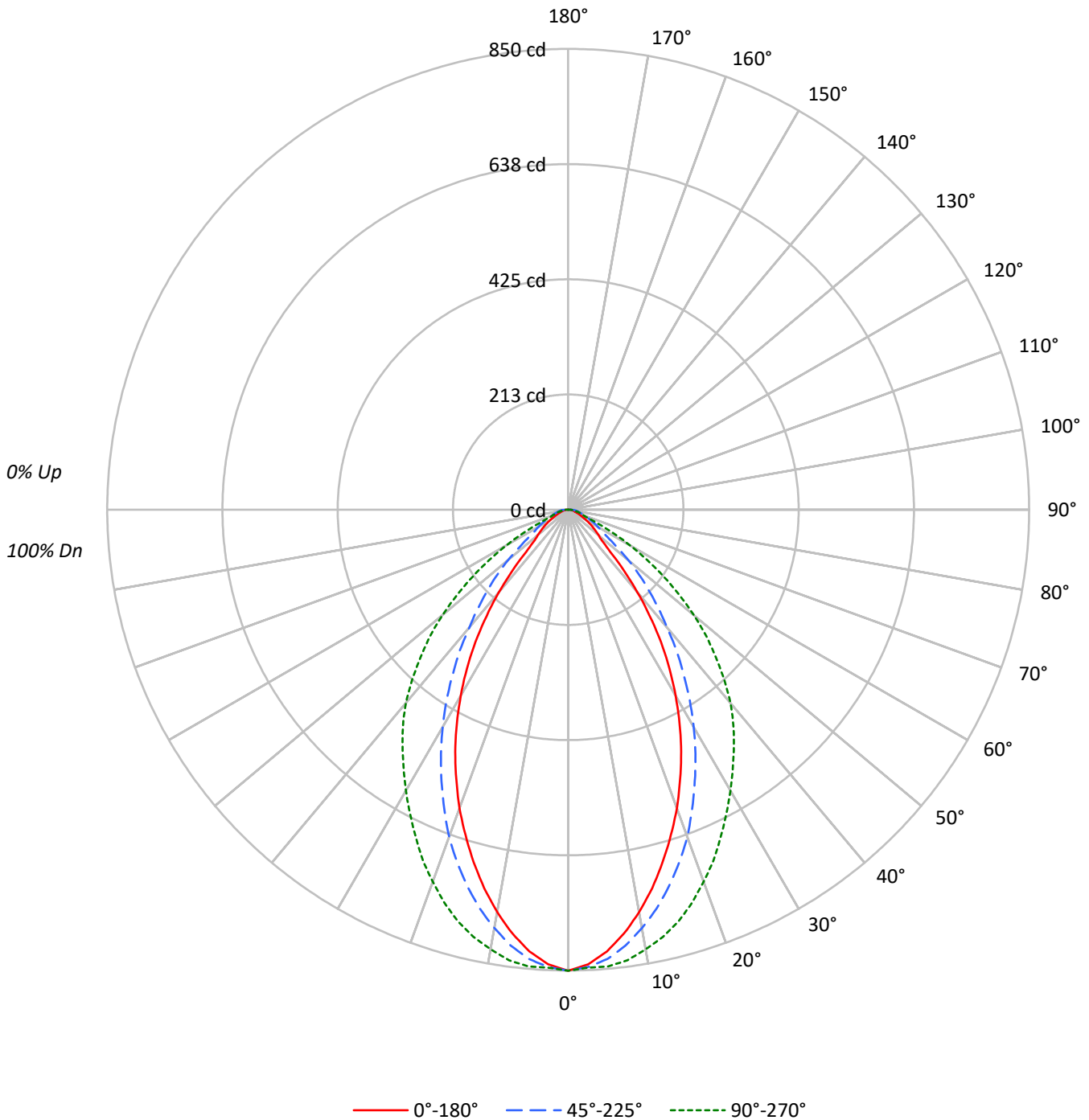
Lumens per Lamp: N/A
Luminaire Lumens: 1138.9 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	9986	9986	9986
5°	9643	9805	9966
10°	8986	9341	9814
15°	8180	8738	9554
20°	7323	8021	9122
25°	6386	7158	8621
30°	5369	6279	8114
35°	4272	5321	7635
40°	3044	4340	7137
45°	1815	3484	6392
50°	1337	2654	5533
55°	1118	1804	4397
60°	904	1487	3091
65°	725	1275	1656
70°	597	1109	1023
75°	563	1071	957
80°	588	1177	926
85°	835	1671	1172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6392 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	6.9
10°-20°	202.9	17.8
20°-30°	258.9	22.7
30°-40°	243.5	21.4
40°-50°	175.0	15.4
50°-60°	100.3	8.8
60°-70°	45.9	4.0
70°-80°	23.1	2.0
80°-90°	11.3	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°	539.9	47.4
0°-40°	783.5	68.8
0°-60°	1058.8	93.0
0°-90°	1138.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	818	834	832	838	846	76
15°	673	696	719	757	786	188
25°	493	515	552	612	665	225
35°	298	319	371	456	533	184
45°	109	133	210	309	385	92
55°	55	56	88	163	215	49
65°	26	36	46	51	60	26
75°	12	25	24	21	21	14
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°	850.4	850.4	850.4	850.4	850.4
2.5°	839.3	851.7	844.2	844.2	845.5
5°	818.1	834.3	831.8	838.0	845.5
7.5°	788.4	805.7	810.7	825.6	838.0
10°	753.6	773.5	783.4	807.0	823.1
12.5°	715.1	737.5	753.6	783.4	807.0
15°	672.9	696.5	718.8	757.3	785.9
17.5°	629.4	653.0	681.6	726.3	759.8
20°	586.0	609.6	641.9	689.0	730.0
22.5°	538.8	562.4	597.2	650.5	700.2
25°	492.9	515.2	552.5	612.1	665.4
27.5°	444.5	466.8	507.8	572.3	631.9
30°	396.0	418.4	463.1	532.6	598.4
32.5°	347.6	368.7	417.1	494.1	564.9
35°	298.0	319.1	371.2	455.6	532.6
37.5°	247.1	268.2	329.0	420.9	500.3
40°	198.6	222.2	283.1	386.1	465.6
42.5°	151.5	176.3	245.8	348.9	425.8
45°	109.3	132.8	209.8	309.1	384.9
47.5°	83.2	95.6	177.5	269.4	345.1
50°	73.2	74.5	145.3	233.4	302.9
52.5°	63.3	64.6	113.0	198.6	258.2
55°	54.6	55.9	88.1	162.6	214.8
57.5°	45.9	48.4	72.0	129.1	172.6
60°	38.5	43.5	63.3	98.1	131.6
62.5°	31.0	39.7	54.6	72.0	94.4
65°	26.1	36.0	45.9	50.9	59.6
67.5°	21.1	33.5	38.5	36.0	36.0
70°	17.4	29.8	32.3	29.8	29.8
72.5°	14.9	28.6	27.3	24.8	24.8
75°	12.4	24.8	23.6	21.1	21.1
77.5°	11.2	21.1	19.9	18.6	17.4
80°	8.7	17.4	17.4	16.1	13.7
82.5°	7.4	14.9	14.9	13.7	11.2
85°	6.2	12.4	12.4	11.2	8.7
87.5°	5.0	11.2	11.2	9.9	6.2
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	7.98	9.30	8.34	9.61	9.92	15.20	16.52	15.57	16.83	17.15
	3H	9.38	10.55	9.76	10.88	11.24	15.44	16.61	15.82	16.94	17.30
	4H	9.94	11.03	10.34	11.38	11.76	15.55	16.64	15.95	16.99	17.37
	6H	10.40	11.40	10.82	11.77	12.17	15.65	16.65	16.07	17.02	17.42
	8H	10.59	11.53	11.02	11.93	12.33	15.70	16.65	16.13	17.04	17.45
	12H	10.78	11.68	11.21	12.07	12.50	15.75	16.66	16.18	17.04	17.47
4H	2H	9.05	10.14	9.45	10.49	10.87	15.16	16.25	15.57	16.60	16.99
	3H	10.74	11.63	11.15	12.04	12.44	15.53	16.42	15.94	16.83	17.23
	4H	11.57	12.37	12.01	12.79	13.23	15.71	16.51	16.15	16.93	17.38
	6H	12.23	12.93	12.70	13.37	13.84	15.94	16.63	16.40	17.07	17.54
	8H	12.49	13.13	12.96	13.58	14.05	16.04	16.68	16.51	17.13	17.60
	12H	12.74	13.31	13.23	13.80	14.27	16.16	16.73	16.64	17.21	17.68
8H	4H	12.01	12.66	12.48	13.10	13.57	15.76	16.41	16.23	16.85	17.32
	6H	12.96	13.49	13.47	13.99	14.47	16.09	16.62	16.59	17.12	17.60
	8H	13.43	13.90	13.95	14.42	14.91	16.28	16.76	16.80	17.28	17.77
	12H	13.91	14.33	14.42	14.82	15.39	16.52	16.94	17.03	17.43	18.01
12H	4H	12.07	12.64	12.56	13.12	13.60	15.75	16.32	16.24	16.81	17.28
	6H	13.11	13.59	13.63	14.10	14.60	16.12	16.60	16.64	17.11	17.60
	8H	13.70	14.13	14.22	14.62	15.19	16.38	16.80	16.90	17.30	17.87