

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: P1059097

Luminaire Tested: S123RDRP-S1165D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

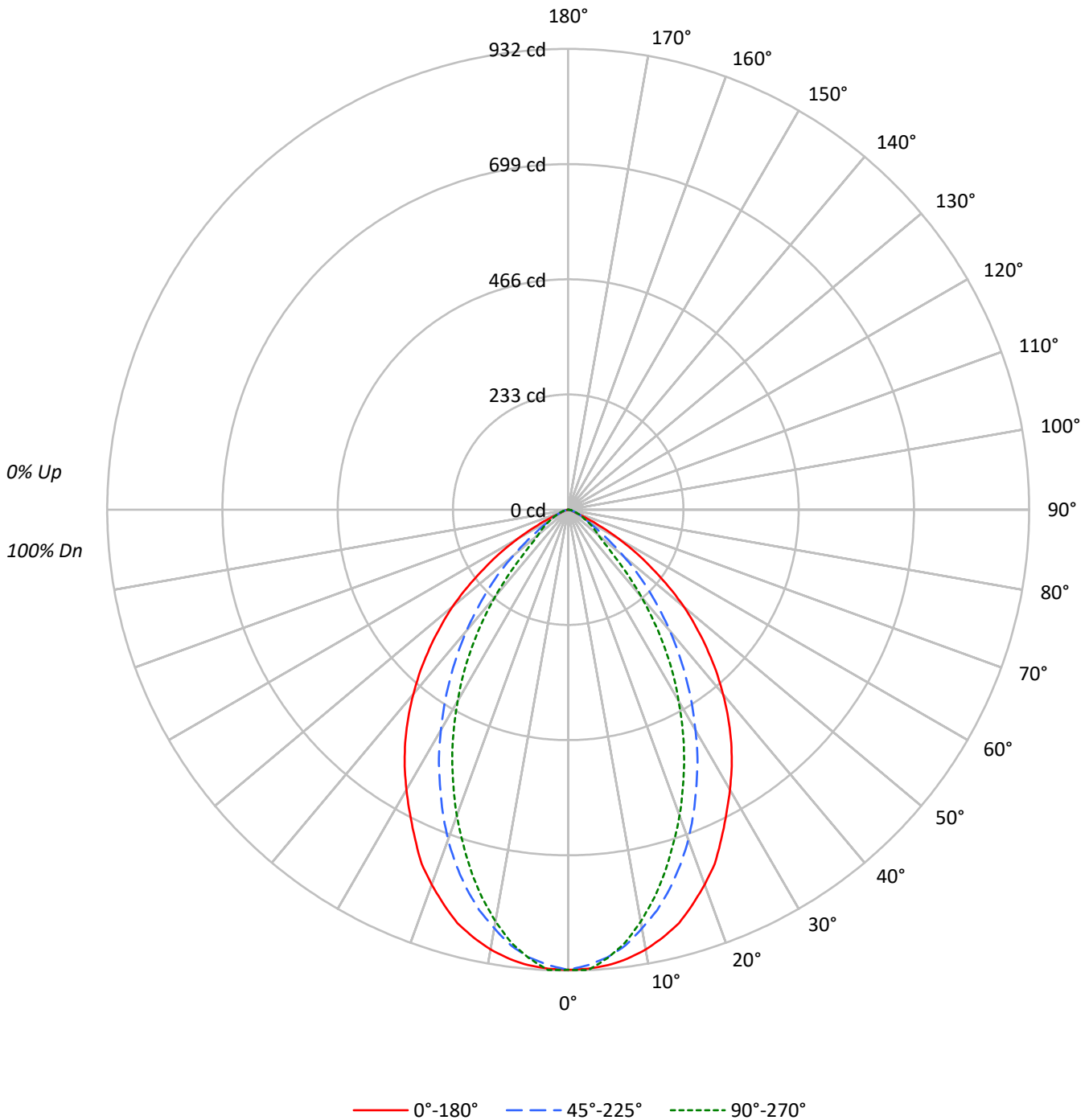
Lumens per Lamp: N/A
Luminaire Lumens: 1201.2 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10926	10926	10926
5°	10900	10713	10730
10°	10768	10253	10081
15°	10524	9649	9211
20°	10079	8873	8226
25°	9500	7950	7186
30°	8866	6972	6054
35°	8238	5946	4872
40°	7464	4902	3533
45°	6578	3803	2129
50°	5579	2658	1447
55°	4246	1593	1210
60°	2774	1015	946
65°	1161	761	761
70°	395	542	594
75°	327	390	458
80°	196	291	392
85°	189	189	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6578 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	7.2
10°-20°	224.9	18.7
20°-30°	288.4	24.0
30°-40°	270.6	22.5
40°-50°	188.8	15.7
50°-60°	97.6	8.1
60°-70°	33.4	2.8
70°-80°	9.5	0.8
80°-90°	2.0	0.2
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°	599.2	49.9
0°-40°	869.9	72.4
0°-60°	1156.3	96.3
0°-90°	1201.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1201.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	925	923	909	913	910	88
15°	866	844	794	768	758	243
25°	733	687	614	572	555	337
35°	575	504	415	362	340	358
45°	396	324	229	158	128	305
55°	207	156	78	60	59	187
65°	42	36	27	26	27	49
75°	7	7	9	10	10	7
85°	1	1	1	1	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.5	930.5	930.5	930.5	930.5
2.5°	929.1	930.5	921.9	930.5	931.9
5°	924.7	923.3	908.9	913.2	910.3
7.5°	916.1	911.8	888.7	883.0	883.0
10°	903.1	894.5	859.9	849.8	845.5
12.5°	885.8	874.3	829.7	810.9	803.7
15°	865.7	844.1	793.7	767.7	757.7
17.5°	836.9	808.1	753.3	723.1	707.2
20°	806.6	770.6	710.1	674.1	658.3
22.5°	774.9	731.7	662.6	623.7	606.4
25°	733.2	687.1	613.6	571.8	554.6
27.5°	692.8	643.9	566.1	518.5	501.3
30°	653.9	596.3	514.2	468.1	446.5
32.5°	615.1	550.2	465.3	414.8	394.7
35°	574.7	504.1	414.8	361.5	339.9
37.5°	531.5	459.5	367.3	309.7	283.8
40°	486.9	412.0	319.8	255.0	230.5
42.5°	442.2	368.7	272.2	206.0	177.2
45°	396.1	324.1	229.0	158.4	128.2
47.5°	350.0	279.4	187.3	115.2	96.5
50°	305.4	237.7	145.5	85.0	79.2
52.5°	256.4	197.3	109.5	70.6	69.1
55°	207.4	155.6	77.8	60.5	59.1
57.5°	164.2	121.0	56.2	50.4	49.0
60°	118.1	86.4	43.2	41.8	40.3
62.5°	77.8	59.1	34.6	33.1	33.1
65°	41.8	36.0	27.4	25.9	27.4
67.5°	17.3	20.2	20.2	21.6	21.6
70°	11.5	13.0	15.8	17.3	17.3
72.5°	8.6	10.1	11.5	13.0	13.0
75°	7.2	7.2	8.6	10.1	10.1
77.5°	4.3	5.8	5.8	7.2	8.6
80°	2.9	4.3	4.3	5.8	5.8
82.5°	1.4	2.9	2.9	4.3	4.3
85°	1.4	1.4	1.4	1.4	2.9
87.5°	0.0	0.0	0.0	0.0	1.4
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	14.64	15.90	15.01	16.21	16.53	8.15	9.41	8.51	9.72	10.03
	3H	14.59	15.70	14.97	16.03	16.40	8.92	10.03	9.30	10.36	10.73
	4H	14.54	15.57	14.94	15.92	16.31	9.12	10.15	9.53	10.51	10.89
	6H	14.47	15.41	14.89	15.79	16.18	9.27	10.21	9.68	10.58	10.98
	8H	14.43	15.32	14.86	15.71	16.12	9.30	10.19	9.73	10.59	10.99
	12H	14.38	15.24	14.82	15.62	16.05	9.32	10.17	9.75	10.55	10.99
4H	2H	14.49	15.52	14.89	15.87	16.25	8.40	9.43	8.81	9.78	10.17
	3H	14.47	15.31	14.89	15.71	16.12	9.31	10.15	9.72	10.55	10.95
	4H	14.42	15.16	14.86	15.58	16.03	9.58	10.33	10.02	10.75	11.19
	6H	14.36	15.00	14.83	15.45	15.92	9.80	10.44	10.27	10.89	11.36
	8H	14.31	14.91	14.78	15.35	15.83	9.86	10.46	10.33	10.91	11.38
	12H	14.27	14.79	14.75	15.27	15.75	9.90	10.42	10.39	10.91	11.38
8H	4H	14.31	14.90	14.78	15.35	15.82	9.57	10.16	10.04	10.61	11.08
	6H	14.25	14.73	14.75	15.23	15.71	9.84	10.32	10.34	10.82	11.30
	8H	14.19	14.63	14.72	15.15	15.64	9.94	10.38	10.47	10.90	11.39
	12H	14.16	14.54	14.67	15.04	15.61	10.02	10.40	10.53	10.90	11.47
12H	4H	14.26	14.79	14.75	15.27	15.74	9.53	10.05	10.02	10.54	11.01
	6H	14.19	14.62	14.71	15.14	15.63	9.80	10.23	10.32	10.75	11.24
	8H	14.16	14.54	14.67	15.04	15.61	9.94	10.32	10.45	10.82	11.39