

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



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: P1058496

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

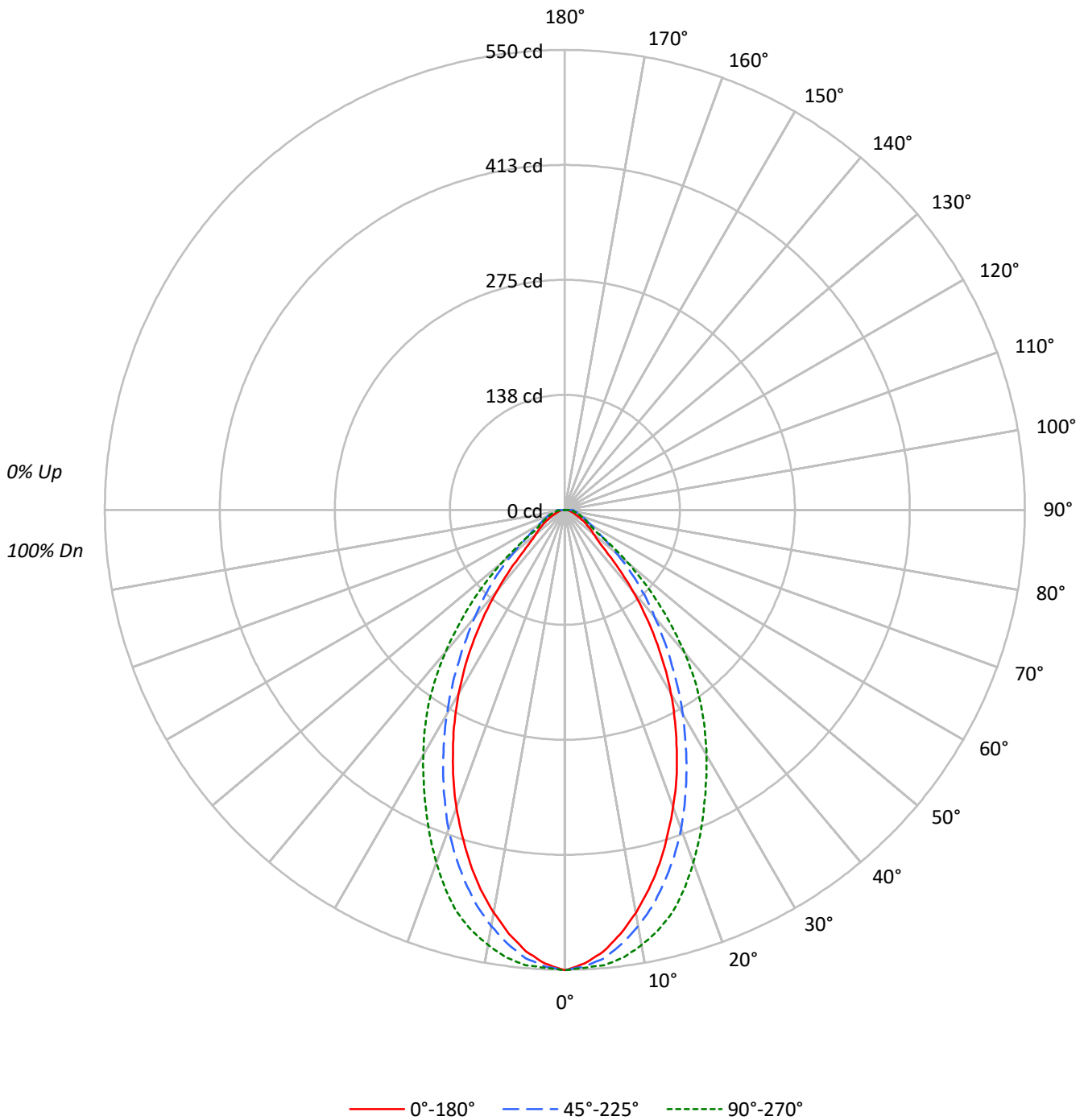
Lumens per Lamp: N/A
Luminaire Lumens: 667.7 lumens
Efficiency: N/A
Efficacy: 28.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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

TEST NUMBER: P1058496

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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				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10158	10158	10158
5°	9817	9969	10121
10°	9164	9472	9901
15°	8360	8797	9515
20°	7436	7982	8817
25°	6444	7010	8010
30°	5403	6013	7215
35°	4255	4974	6393
40°	3035	4020	5340
45°	1793	3181	4141
50°	1292	2302	2819
55°	1078	1657	1422
60°	875	1329	1207
65°	716	1179	1109
70°	620	1149	1057
75°	585	1169	1048
80°	606	1392	1126
85°	868	2244	1376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4141 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	7.6
10°-20°	129.7	19.4
20°-30°	160.0	24.0
30°-40°	142.3	21.3
40°-50°	90.9	13.6
50°-60°	43.6	6.5
60°-70°	25.6	3.8
70°-80°	16.4	2.4
80°-90°	8.7	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°	340.2	51.0
0°-40°	482.5	72.3
0°-60°	617.0	92.4
0°-90°	667.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	530	540	538	542	546	49
15°	438	448	460	482	498	122
25°	316	329	344	369	393	145
35°	189	204	221	254	284	117
45°	69	89	122	142	159	58
55°	34	43	52	50	44	30
65°	16	29	27	24	25	16
75°	8	18	16	16	15	9
85°	4	10	11	9	6	4
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.5	550.5	550.5	550.5	550.5
2.5°	543.1	552.1	546.4	546.4	548.0
5°	530.0	539.8	538.2	541.5	546.4
7.5°	511.2	521.8	523.5	532.5	539.8
10°	489.1	500.6	505.5	518.6	528.4
12.5°	464.6	476.0	485.0	501.4	515.3
15°	437.6	448.2	460.5	481.8	498.1
17.5°	408.1	422.0	434.3	456.4	475.2
20°	378.7	391.8	406.5	427.8	449.0
22.5°	348.4	360.7	375.4	397.5	422.0
25°	316.5	328.8	344.3	368.9	393.4
27.5°	285.5	297.7	312.4	339.4	365.6
30°	253.6	265.8	282.2	310.0	338.6
32.5°	221.7	234.7	251.1	281.4	311.6
35°	188.9	203.7	220.8	254.4	283.8
37.5°	157.0	171.8	193.0	225.7	253.6
40°	126.0	143.1	166.9	196.3	221.7
42.5°	95.7	114.5	144.0	167.7	189.8
45°	68.7	89.2	121.9	141.5	158.7
47.5°	52.3	67.1	100.6	116.1	128.4
50°	45.0	54.0	80.2	91.6	98.2
52.5°	39.3	47.4	63.8	69.5	69.5
55°	33.5	43.3	51.5	49.9	44.2
57.5°	28.6	39.3	42.5	36.0	37.6
60°	23.7	36.0	36.0	31.9	32.7
62.5°	19.6	33.5	31.1	27.8	28.6
65°	16.4	29.4	27.0	24.5	25.4
67.5°	13.1	26.2	23.7	22.1	22.1
70°	11.5	23.7	21.3	19.6	19.6
72.5°	9.8	20.4	18.8	17.2	17.2
75°	8.2	18.0	16.4	15.5	14.7
77.5°	7.4	15.5	14.7	13.1	12.3
80°	5.7	13.1	13.1	12.3	10.6
82.5°	4.9	11.5	11.5	10.6	9.0
85°	4.1	9.8	10.6	9.0	6.5
87.5°	3.3	9.0	9.0	7.4	4.9
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	9.73	11.01	10.10	11.32	11.63	9.52	10.79	9.88	11.11	11.42
	3H	10.96	12.10	11.34	12.43	12.79	11.11	12.24	11.49	12.57	12.94
	4H	11.41	12.47	11.82	12.82	13.21	11.82	12.88	12.23	13.23	13.62
	6H	11.79	12.77	12.21	13.14	13.53	12.48	13.45	12.89	13.82	14.22
	8H	11.95	12.87	12.38	13.26	13.67	12.81	13.73	13.24	14.12	14.52
	12H	12.11	12.99	12.54	13.37	13.80	13.10	13.98	13.53	14.37	14.80
4H	2H	10.28	11.34	10.68	11.69	12.07	10.11	11.17	10.51	11.52	11.90
	3H	11.97	12.84	12.39	13.25	13.65	11.95	12.82	12.36	13.22	13.63
	4H	12.77	13.55	13.20	13.97	14.41	12.82	13.60	13.25	14.02	14.46
	6H	13.41	14.09	13.87	14.53	15.00	13.66	14.34	14.13	14.79	15.25
	8H	13.66	14.29	14.13	14.74	15.21	14.09	14.72	14.56	15.17	15.64
	12H	13.91	14.47	14.39	14.95	15.42	14.49	15.05	14.97	15.53	16.00
8H	4H	13.19	13.82	13.65	14.27	14.74	13.24	13.87	13.70	14.32	14.79
	6H	14.16	14.68	14.67	15.18	15.66	14.32	14.84	14.83	15.34	15.82
	8H	14.66	15.12	15.18	15.64	16.13	14.91	15.38	15.44	15.90	16.39
	12H	15.16	15.57	15.67	16.07	16.64	15.51	15.93	16.03	16.42	16.99
12H	4H	13.25	13.81	13.74	14.30	14.77	13.31	13.87	13.80	14.35	14.83
	6H	14.33	14.80	14.85	15.31	15.81	14.49	14.96	15.01	15.47	15.96
	8H	14.97	15.38	15.49	15.88	16.45	15.20	15.61	15.71	16.11	16.68