

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: P1058172

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058172
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: S122RDRP-S865D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

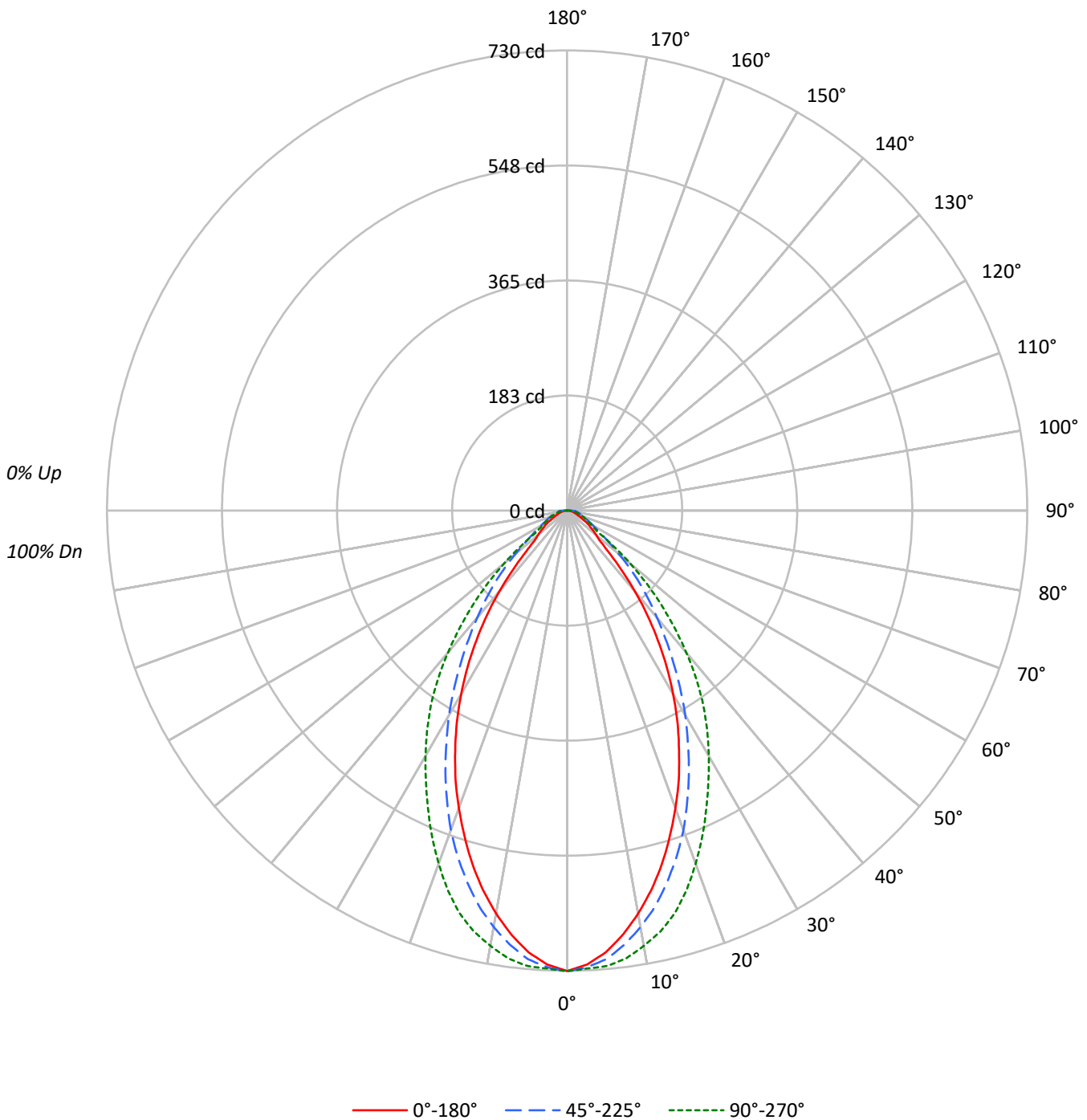
Lumens per Lamp: N/A
Luminaire Lumens: 886.0 lumens
Efficiency: N/A
Efficacy: 25.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13480	13480	13480
5°	13027	13229	13431
10°	12162	12569	13138
15°	11093	11674	12627
20°	9867	10592	11702
25°	8553	9305	10630
30°	7170	7979	9575
35°	5647	6602	8483
40°	4028	5333	7084
45°	2380	4220	5496
50°	1714	3054	3738
55°	1432	2200	1885
60°	1163	1764	1602
65°	947	1563	1467
70°	820	1521	1403
75°	777	1547	1390
80°	808	1849	1498
85°	1143	2985	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5496 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	7.6
10°-20°	172.1	19.4
20°-30°	212.3	24.0
30°-40°	188.9	21.3
40°-50°	120.6	13.6
50°-60°	57.9	6.5
60°-70°	34.0	3.8
70°-80°	21.7	2.4
80°-90°	11.6	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°	451.5	51.0
0°-40°	640.4	72.3
0°-60°	818.8	92.4
0°-90°	886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	703	716	714	718	725	65
15°	581	595	611	639	661	162
25°	420	436	457	490	522	192
35°	251	270	293	338	377	156
45°	91	118	162	188	211	76
55°	44	58	68	66	59	40
65°	22	39	36	33	34	22
75°	11	24	22	21	20	12
85°	5	13	14	12	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.5	730.5	730.5	730.5	730.5
2.5°	720.7	732.7	725.1	725.1	727.2
5°	703.3	716.4	714.2	718.5	725.1
7.5°	678.4	692.5	694.7	706.6	716.4
10°	649.1	664.3	670.8	688.1	701.2
12.5°	616.5	631.7	643.6	665.4	683.8
15°	580.7	594.8	611.1	639.3	661.0
17.5°	541.6	560.1	576.4	605.7	630.6
20°	502.5	519.9	539.4	567.7	595.9
22.5°	462.4	478.7	498.2	527.5	560.1
25°	420.1	436.3	457.0	489.5	522.1
27.5°	378.8	395.1	414.6	450.4	485.2
30°	336.5	352.8	374.5	411.4	449.4
32.5°	294.1	311.5	333.2	373.4	413.5
35°	250.7	270.3	293.1	337.6	376.6
37.5°	208.4	227.9	256.2	299.6	336.5
40°	167.2	189.9	221.4	260.5	294.1
42.5°	127.0	152.0	191.0	222.5	251.8
45°	91.2	118.3	161.7	187.8	210.6
47.5°	69.5	89.0	133.5	154.1	170.4
50°	59.7	71.6	106.4	121.6	130.2
52.5°	52.1	63.0	84.7	92.3	92.3
55°	44.5	57.5	68.4	66.2	58.6
57.5°	38.0	52.1	56.4	47.8	49.9
60°	31.5	47.8	47.8	42.3	43.4
62.5°	26.0	44.5	41.2	36.9	38.0
65°	21.7	39.1	35.8	32.6	33.6
67.5°	17.4	34.7	31.5	29.3	29.3
70°	15.2	31.5	28.2	26.0	26.0
72.5°	13.0	27.1	25.0	22.8	22.8
75°	10.9	23.9	21.7	20.6	19.5
77.5°	9.8	20.6	19.5	17.4	16.3
80°	7.6	17.4	17.4	16.3	14.1
82.5°	6.5	15.2	15.2	14.1	11.9
85°	5.4	13.0	14.1	11.9	8.7
87.5°	4.3	11.9	11.9	9.8	6.5
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	10.71	11.99	11.07	12.30	12.61	10.50	11.78	10.87	12.09	12.41
	3H	11.94	13.08	12.32	13.41	13.77	12.09	13.23	12.47	13.56	13.92
	4H	12.39	13.45	12.80	13.80	14.19	12.81	13.86	13.21	14.22	14.60
	6H	12.78	13.75	13.19	14.12	14.51	13.46	14.43	13.87	14.80	15.20
	8H	12.93	13.85	13.36	14.24	14.65	13.79	14.71	14.22	15.10	15.51
	12H	13.09	13.97	13.52	14.35	14.78	14.09	14.97	14.52	15.35	15.78
4H	2H	11.26	12.32	11.66	12.67	13.05	11.09	12.15	11.50	12.50	12.89
	3H	12.95	13.82	13.37	14.23	14.63	12.93	13.80	13.34	14.20	14.61
	4H	13.75	14.53	14.18	14.95	15.39	13.80	14.58	14.24	15.00	15.45
	6H	14.39	15.07	14.86	15.52	15.98	14.65	15.32	15.11	15.77	16.24
	8H	14.64	15.28	15.11	15.72	16.19	15.07	15.70	15.54	16.15	16.62
	12H	14.89	15.45	15.37	15.93	16.41	15.47	16.03	15.96	16.51	16.99
8H	4H	14.17	14.80	14.64	15.25	15.72	14.22	14.85	14.69	15.30	15.77
	6H	15.15	15.67	15.65	16.16	16.64	15.31	15.83	15.81	16.32	16.80
	8H	15.64	16.10	16.16	16.62	17.11	15.90	16.36	16.42	16.88	17.37
	12H	16.14	16.55	16.65	17.04	17.62	16.50	16.91	17.01	17.40	17.98
12H	4H	14.23	14.79	14.72	15.28	15.75	14.29	14.85	14.78	15.34	15.81
	6H	15.31	15.78	15.84	16.30	16.79	15.47	15.94	15.99	16.45	16.95
	8H	15.95	16.36	16.47	16.86	17.43	16.18	16.59	16.70	17.09	17.66