

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: P1058173

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

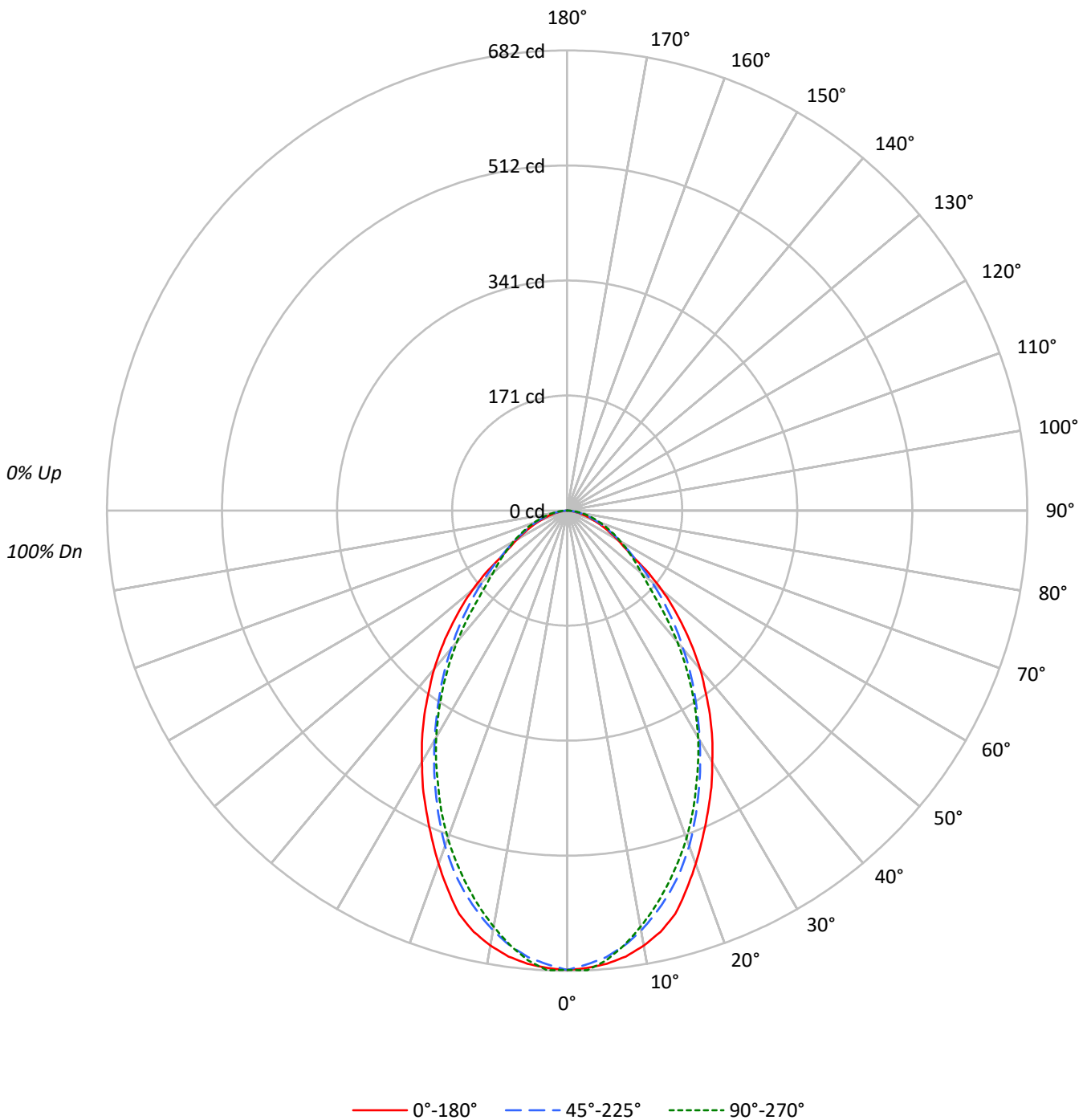
Lumens per Lamp: N/A
Luminaire Lumens: 1033.8 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54					54			
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49					49			
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44					44			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12561	12561	12561
5°	12488	12307	12388
10°	12267	11840	11739
15°	11823	11202	10975
20°	10940	10386	10152
25°	10042	9380	9203
30°	9168	8361	8267
35°	8301	7398	7226
40°	7388	6448	6109
45°	6365	5543	4893
50°	5259	4668	4108
55°	3799	3870	3696
60°	3159	3321	3358
65°	2698	2886	3078
70°	2223	2573	2805
75°	1854	2160	2552
80°	1381	1732	2306
85°	466	910	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	6.1
10°-20°	165.7	16.0
20°-30°	214.5	20.7
30°-40°	210.3	20.3
40°-50°	165.6	16.0
50°-60°	108.6	10.5
60°-70°	66.1	6.4
70°-80°	33.0	3.2
80°-90°	7.1	0.7
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°	443.1	42.9
0°-40°	653.4	63.2
0°-60°	927.5	89.7
0°-90°	1033.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	674	674	664	669	669	64
15°	619	610	586	579	574	172
25°	493	477	461	458	452	227
35°	368	348	328	327	321	230
45°	244	229	212	197	188	188
55°	118	125	120	116	115	112
65°	62	63	66	69	70	61
75°	26	27	30	35	36	28
85°	2	3	4	8	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.7	680.7	680.7	680.7	680.7
2.5°	678.5	679.6	673.1	679.6	681.8
5°	674.2	674.2	664.4	668.8	668.8
7.5°	666.6	665.5	650.3	650.3	649.3
10°	654.7	650.3	631.9	628.7	626.5
12.5°	639.5	631.9	610.2	604.8	601.6
15°	618.9	610.2	586.4	578.8	574.5
17.5°	588.6	579.9	559.3	550.6	546.3
20°	557.1	544.1	528.9	521.4	517.0
22.5°	524.6	509.4	495.3	489.9	485.6
25°	493.2	476.9	460.7	458.5	452.0
27.5°	462.8	443.3	427.1	426.0	420.6
30°	430.3	409.7	392.4	393.5	388.0
32.5°	400.0	380.4	359.9	360.9	354.4
35°	368.5	347.9	328.4	327.3	320.8
37.5°	336.0	316.5	298.1	293.7	287.2
40°	306.7	287.2	267.7	260.1	253.6
42.5°	275.3	258.0	240.6	228.7	220.0
45°	243.9	228.7	212.4	197.3	187.5
47.5°	213.5	201.6	187.5	169.1	162.6
50°	183.2	174.5	162.6	146.3	143.1
52.5°	151.7	148.5	140.9	130.1	129.0
55°	118.1	124.6	120.3	116.0	114.9
57.5°	99.7	100.8	104.1	103.0	103.0
60°	85.6	85.6	90.0	91.0	91.0
62.5°	72.6	73.7	78.0	80.2	80.2
65°	61.8	62.9	66.1	69.4	70.5
67.5°	50.9	53.1	56.4	59.6	60.7
70°	41.2	43.4	47.7	50.9	52.0
72.5°	33.6	34.7	39.0	42.3	43.4
75°	26.0	27.1	30.3	34.7	35.8
77.5°	18.4	20.6	23.8	27.1	29.3
80°	13.0	14.1	16.3	20.6	21.7
82.5°	7.6	8.7	10.8	14.1	15.2
85°	2.2	3.3	4.3	7.6	9.8
87.5°	0.0	0.0	0.0	2.2	4.3
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	14.91	16.31	15.28	16.62	16.94	15.10	16.49	15.46	16.80	17.12
	3H	16.05	17.29	16.43	17.62	17.98	16.55	17.80	16.93	18.13	18.49
	4H	16.40	17.56	16.80	17.91	18.29	17.10	18.26	17.50	18.61	18.99
	6H	16.58	17.65	17.00	18.02	18.41	17.51	18.58	17.92	18.95	19.34
	8H	16.61	17.63	17.04	18.02	18.42	17.64	18.65	18.07	19.04	19.45
	12H	16.59	17.57	17.03	17.95	18.38	17.72	18.69	18.15	19.08	19.51
4H	2H	15.37	16.53	15.77	16.88	17.27	15.52	16.68	15.92	17.03	17.42
	3H	16.71	17.67	17.12	18.07	18.47	17.19	18.15	17.60	18.55	18.95
	4H	17.16	18.01	17.59	18.43	18.87	17.86	18.72	18.29	19.13	19.58
	6H	17.43	18.17	17.89	18.62	19.08	18.39	19.14	18.85	19.58	20.05
	8H	17.47	18.17	17.94	18.61	19.08	18.56	19.26	19.03	19.70	20.17
	12H	17.47	18.08	17.95	18.56	19.04	18.68	19.30	19.17	19.78	20.25
8H	4H	17.37	18.06	17.84	18.51	18.98	18.01	18.70	18.47	19.15	19.62
	6H	17.72	18.28	18.22	18.78	19.26	18.64	19.21	19.14	19.70	20.18
	8H	17.79	18.30	18.31	18.82	19.31	18.87	19.38	19.39	19.90	20.39
	12H	17.81	18.26	18.32	18.76	19.32	19.06	19.51	19.57	20.00	20.57
12H	4H	17.38	18.00	17.87	18.48	18.95	17.99	18.61	18.48	19.09	19.56
	6H	17.74	18.25	18.26	18.76	19.26	18.63	19.14	19.15	19.66	20.15
	8H	17.86	18.31	18.37	18.80	19.37	18.91	19.36	19.42	19.85	20.42