

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: P1058191

Luminaire Tested: S122RDRP-S865D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058191
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-S865D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

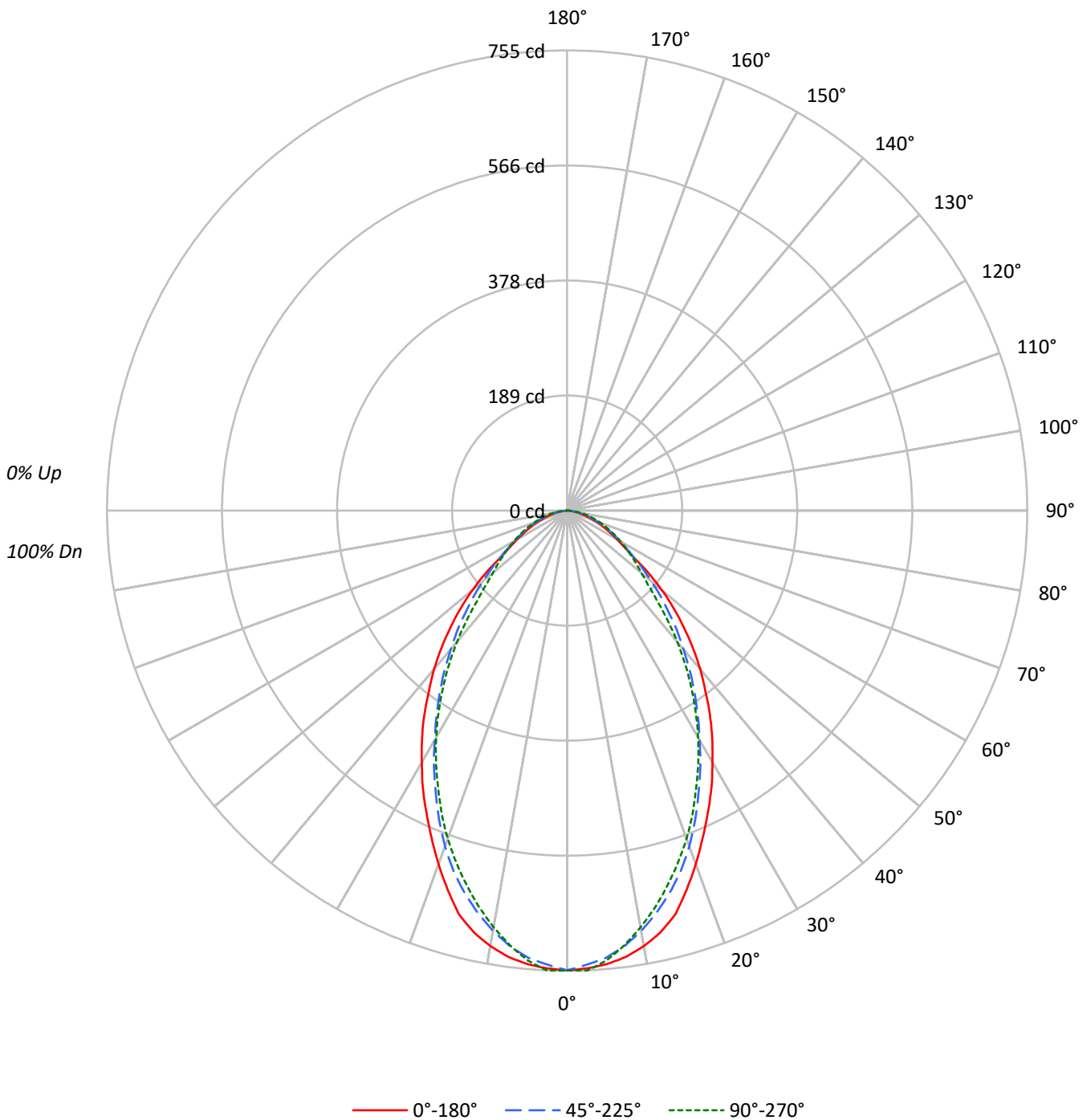
Lumens per Lamp: N/A
Luminaire Lumens: 1145.4 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13917	13917	13917
5°	13837	13637	13726
10°	13592	13120	13007
15°	13101	12411	12159
20°	12122	11509	11250
25°	11125	10392	10196
30°	10159	9264	9160
35°	9197	8197	8008
40°	8188	7144	6769
45°	7051	6143	5423
50°	5828	5170	4550
55°	4211	4288	4095
60°	3502	3679	3724
65°	2991	3200	3410
70°	2460	2849	3108
75°	2053	2396	2823
80°	1530	1913	2550
85°	508	1016	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7051 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	6.1
10°-20°	183.6	16.0
20°-30°	237.6	20.7
30°-40°	233.0	20.3
40°-50°	183.5	16.0
50°-60°	120.3	10.5
60°-70°	73.2	6.4
70°-80°	36.6	3.2
80°-90°	7.9	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°	490.9	42.9
0°-40°	724.0	63.2
0°-60°	1027.7	89.7
0°-90°	1145.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1145.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	747	747	736	741	741	71
15°	686	676	650	641	636	191
25°	546	528	510	508	501	251
35°	408	386	364	363	356	255
45°	270	253	235	219	208	208
55°	131	138	133	128	127	124
65°	68	70	73	77	78	68
75°	29	30	34	38	40	31
85°	2	4	5	8	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.2	754.2	754.2	754.2	754.2
2.5°	751.8	753.0	745.8	753.0	755.4
5°	747.0	747.0	736.2	741.0	741.0
7.5°	738.6	737.4	720.6	720.6	719.4
10°	725.4	720.6	700.2	696.6	694.2
12.5°	708.6	700.2	676.1	670.1	666.5
15°	685.8	676.1	649.7	641.3	636.5
17.5°	652.1	642.5	619.7	610.1	605.3
20°	617.3	602.9	586.1	577.7	572.9
22.5°	581.3	564.5	548.8	542.8	538.0
25°	546.4	528.4	510.4	508.0	500.8
27.5°	512.8	491.2	473.2	472.0	466.0
30°	476.8	454.0	434.8	436.0	429.9
32.5°	443.2	421.5	398.7	399.9	392.7
35°	408.3	385.5	363.9	362.7	355.5
37.5°	372.3	350.7	330.3	325.5	318.3
40°	339.9	318.3	296.6	288.2	281.0
42.5°	305.0	285.8	266.6	253.4	243.8
45°	270.2	253.4	235.4	218.6	207.8
47.5°	236.6	223.4	207.8	187.4	180.1
50°	203.0	193.4	180.1	162.1	158.5
52.5°	168.1	164.5	156.1	144.1	142.9
55°	130.9	138.1	133.3	128.5	127.3
57.5°	110.5	111.7	115.3	114.1	114.1
60°	94.9	94.9	99.7	100.9	100.9
62.5°	80.5	81.7	86.5	88.9	88.9
65°	68.5	69.7	73.3	76.9	78.1
67.5°	56.4	58.8	62.5	66.1	67.3
70°	45.6	48.0	52.8	56.4	57.6
72.5°	37.2	38.4	43.2	46.8	48.0
75°	28.8	30.0	33.6	38.4	39.6
77.5°	20.4	22.8	26.4	30.0	32.4
80°	14.4	15.6	18.0	22.8	24.0
82.5°	8.4	9.6	12.0	15.6	16.8
85°	2.4	3.6	4.8	8.4	10.8
87.5°	0.0	0.0	0.0	2.4	4.8
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	15.27	16.67	15.64	16.98	17.30	15.45	16.85	15.82	17.16	17.47
	3H	16.40	17.65	16.78	17.98	18.34	16.91	18.16	17.29	18.48	18.85
	4H	16.75	17.92	17.15	18.27	18.65	17.45	18.61	17.85	18.96	19.35
	6H	16.94	18.01	17.35	18.38	18.77	17.86	18.93	18.28	19.30	19.70
	8H	16.96	17.98	17.39	18.37	18.77	17.99	19.01	18.42	19.40	19.80
	12H	16.95	17.92	17.38	18.30	18.73	18.07	19.05	18.51	19.43	19.86
4H	2H	15.73	16.89	16.13	17.24	17.62	15.88	17.04	16.28	17.39	17.77
	3H	17.07	18.03	17.48	18.43	18.83	17.55	18.51	17.96	18.91	19.31
	4H	17.51	18.37	17.94	18.79	19.23	18.21	19.07	18.65	19.49	19.93
	6H	17.78	18.53	18.24	18.97	19.43	18.75	19.49	19.21	19.93	20.40
	8H	17.83	18.52	18.29	18.97	19.44	18.92	19.61	19.38	20.05	20.52
	12H	17.82	18.44	18.31	18.92	19.39	19.04	19.65	19.52	20.13	20.61
8H	4H	17.72	18.42	18.19	18.86	19.33	18.36	19.06	18.83	19.50	19.97
	6H	18.07	18.64	18.57	19.13	19.61	18.99	19.56	19.49	20.06	20.54
	8H	18.15	18.66	18.67	19.17	19.66	19.23	19.74	19.74	20.25	20.74
	12H	18.16	18.61	18.68	19.11	19.68	19.41	19.86	19.92	20.35	20.92
12H	4H	17.74	18.35	18.22	18.83	19.31	18.35	18.96	18.83	19.44	19.92
	6H	18.09	18.61	18.61	19.12	19.61	18.99	19.50	19.50	20.01	20.50
	8H	18.21	18.66	18.72	19.16	19.72	19.26	19.71	19.77	20.21	20.77