

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: P1058150

Luminaire Tested: S122RDRP-S865D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058150
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

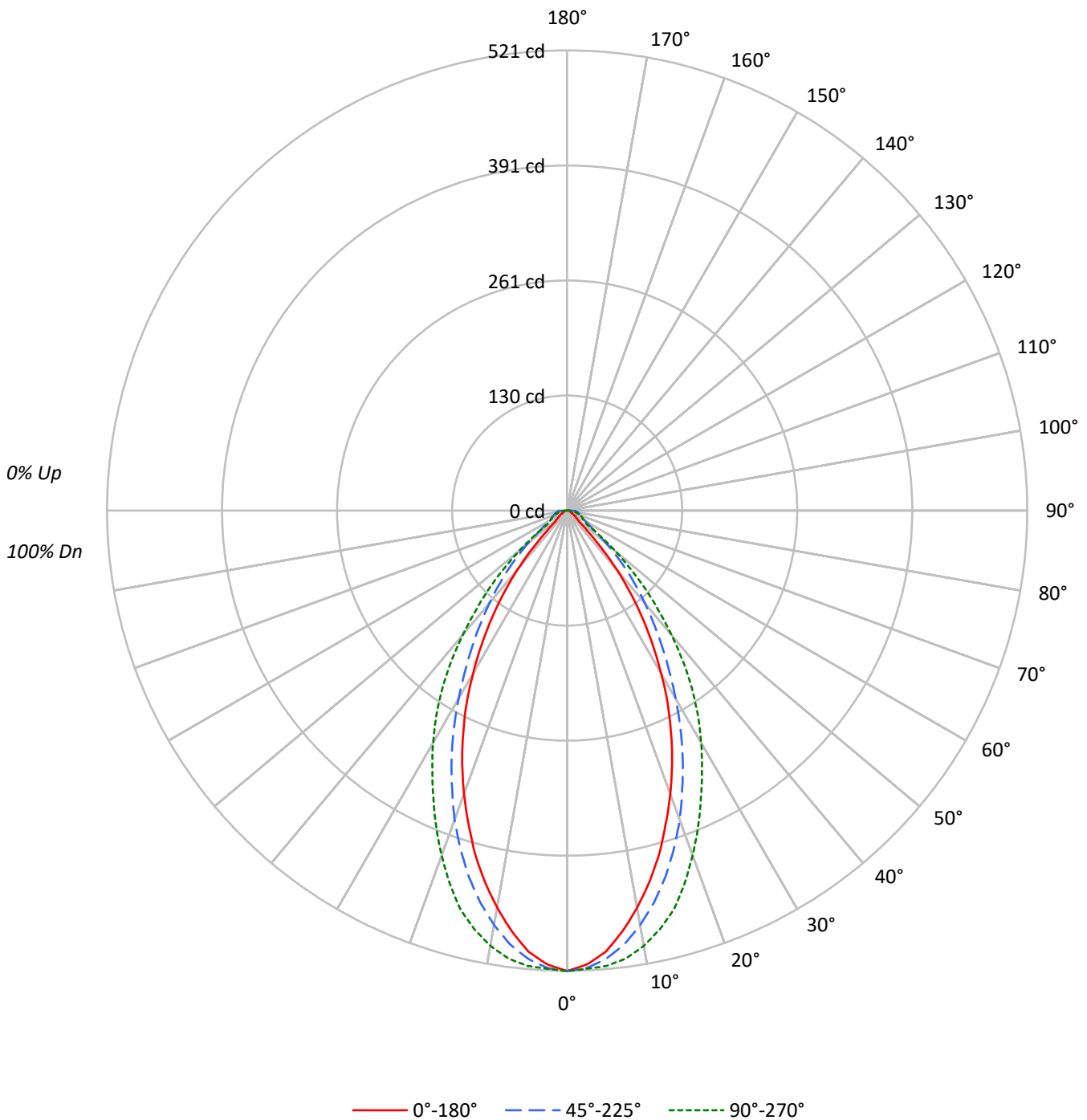
Lumens per Lamp: N/A
Luminaire Lumens: 562.0 lumens
Efficiency: N/A
Efficacy: 16.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9619	9619	9619
5°	9286	9434	9582
10°	8552	8926	9374
15°	7689	8203	8929
20°	6706	7315	8157
25°	5672	6303	7299
30°	4532	5235	6469
35°	3352	4206	5557
40°	2117	3295	4427
45°	835	2476	3257
50°	431	1662	2007
55°	354	1094	901
60°	258	886	812
65°	218	830	830
70°	216	863	809
75°	285	998	856
80°	425	1275	956
85°	635	2117	1270

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4230 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	8.5
10°-20°	120.4	21.4
20°-30°	143.1	25.5
30°-40°	119.0	21.2
40°-50°	66.5	11.8
50°-60°	26.9	4.8
60°-70°	17.2	3.1
70°-80°	12.9	2.3
80°-90°	8.2	1.5
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°	311.2	55.4
0°-40°	430.3	76.6
0°-60°	523.7	93.2
0°-90°	562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	562.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	501	510	509	513	517	46
15°	402	414	429	451	467	112
25°	279	290	310	334	358	127
35°	149	163	187	218	247	92
45°	32	54	95	111	125	30
55°	11	23	34	33	28	10
65°	5	20	19	18	19	5
75°	4	14	14	13	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.3	521.3	521.3	521.3	521.3
2.5°	514.3	522.3	518.3	518.3	519.3
5°	501.3	510.3	509.3	513.3	517.3
7.5°	480.4	490.3	495.3	504.3	511.3
10°	456.4	467.4	476.4	490.3	500.3
12.5°	430.4	441.4	454.4	472.4	485.3
15°	402.5	414.4	429.4	451.4	467.4
17.5°	371.5	384.5	401.5	425.4	442.4
20°	341.5	354.5	372.5	396.5	415.4
22.5°	310.6	321.6	340.5	364.5	387.5
25°	278.6	289.6	309.6	333.6	358.5
27.5°	246.7	257.7	277.6	302.6	330.6
30°	212.7	224.7	245.7	273.6	303.6
32.5°	180.8	192.7	214.7	245.7	275.6
35°	148.8	162.8	186.7	217.7	246.7
37.5°	117.8	133.8	160.8	189.7	215.7
40°	87.9	104.9	136.8	161.8	183.8
42.5°	57.9	77.9	114.8	135.8	152.8
45°	32.0	53.9	94.9	110.9	124.8
47.5°	18.0	35.0	74.9	87.9	95.9
50°	15.0	26.0	57.9	66.9	69.9
52.5°	12.0	24.0	43.9	48.9	46.9
55°	11.0	23.0	34.0	33.0	28.0
57.5°	9.0	23.0	27.0	24.0	24.0
60°	7.0	22.0	24.0	21.0	22.0
62.5°	6.0	21.0	22.0	20.0	20.0
65°	5.0	20.0	19.0	18.0	19.0
67.5°	4.0	18.0	18.0	17.0	17.0
70°	4.0	17.0	16.0	15.0	15.0
72.5°	4.0	15.0	15.0	14.0	14.0
75°	4.0	14.0	14.0	13.0	12.0
77.5°	4.0	12.0	13.0	12.0	11.0
80°	4.0	11.0	12.0	11.0	9.0
82.5°	4.0	10.0	11.0	10.0	8.0
85°	3.0	9.0	10.0	9.0	6.0
87.5°	3.0	9.0	10.0	8.0	5.0
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	6.24	7.46	6.60	7.77	8.09	7.31	8.53	7.68	8.85	9.16
	3H	7.57	8.66	7.95	8.99	9.35	9.34	10.43	9.72	10.76	11.12
	4H	8.15	9.16	8.55	9.51	9.89	10.30	11.31	10.70	11.66	12.05
	6H	8.71	9.64	9.13	10.01	10.41	11.25	12.18	11.66	12.55	12.94
	8H	9.04	9.92	9.47	10.31	10.71	11.70	12.57	12.13	12.97	13.37
	12H	9.34	10.19	9.78	10.57	11.00	12.12	12.96	12.55	13.34	13.77
4H	2H	7.20	8.21	7.61	8.56	8.95	7.99	9.00	8.40	9.35	9.74
	3H	9.23	10.06	9.64	10.47	10.87	10.27	11.11	10.69	11.51	11.92
	4H	10.31	11.06	10.75	11.48	11.92	11.42	12.17	11.86	12.59	13.04
	6H	11.18	11.83	11.65	12.28	12.75	12.59	13.24	13.06	13.69	14.16
	8H	11.59	12.20	12.06	12.65	13.12	13.15	13.76	13.62	14.21	14.68
	12H	11.97	12.51	12.46	12.99	13.47	13.70	14.23	14.19	14.72	15.19
8H	4H	11.08	11.69	11.55	12.14	12.61	11.97	12.58	12.44	13.03	13.50
	6H	12.42	12.92	12.93	13.42	13.90	13.43	13.92	13.93	14.42	14.90
	8H	13.14	13.58	13.66	14.10	14.59	14.19	14.64	14.72	15.15	15.65
	12H	13.83	14.22	14.35	14.72	15.29	14.98	15.37	15.50	15.87	16.44
12H	4H	11.24	11.77	11.72	12.26	12.73	12.08	12.62	12.57	13.10	13.57
	6H	12.74	13.19	13.27	13.71	14.20	13.65	14.10	14.18	14.62	15.11
	8H	13.65	14.04	14.16	14.53	15.11	14.56	14.95	15.08	15.45	16.02