

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: P1058594

Luminaire Tested: S122RDR-H865D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H865D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

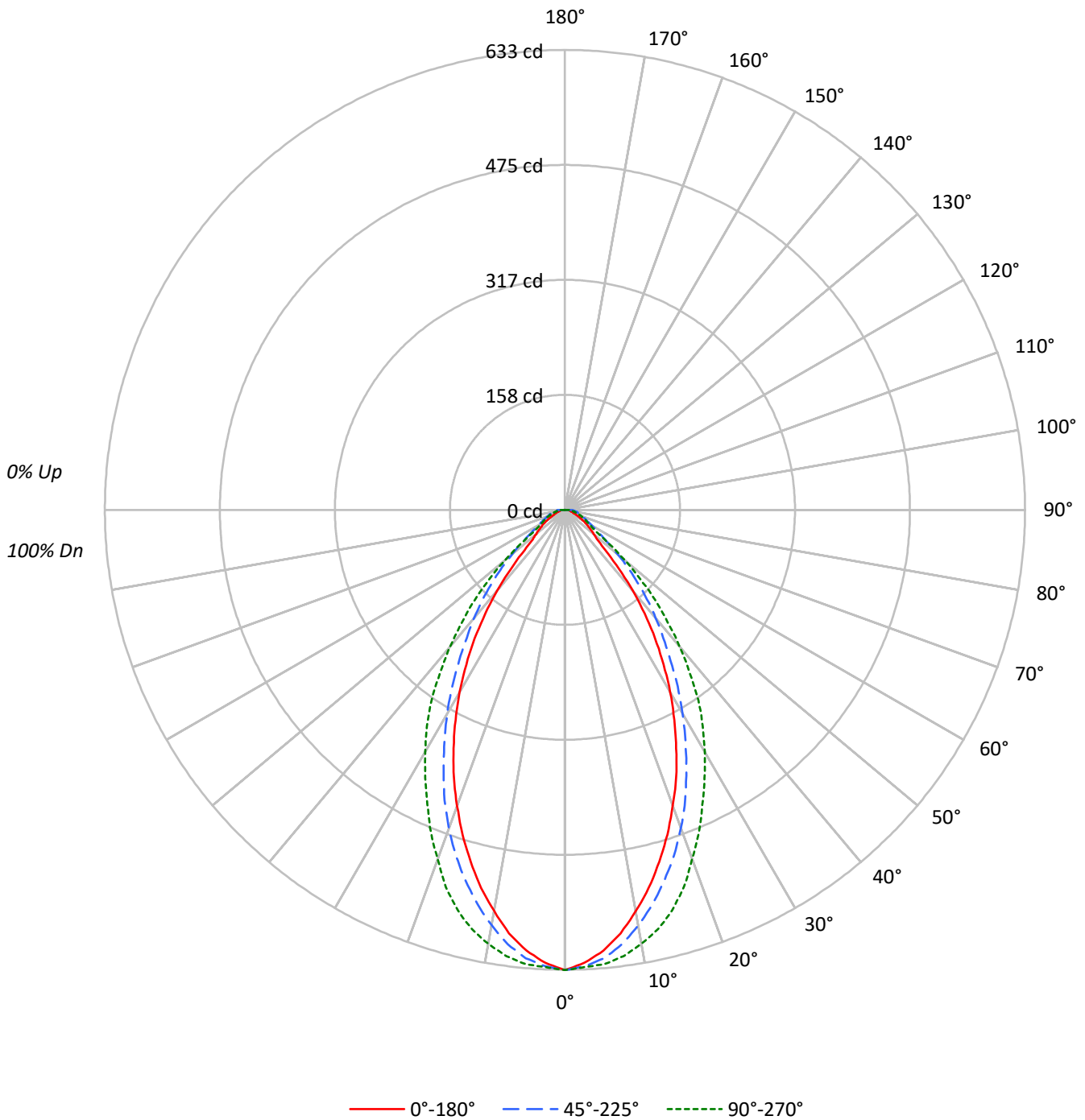
Lumens per Lamp: N/A
Luminaire Lumens: 764.1 lumens
Efficiency: N/A
Efficacy: 24.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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

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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	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	11688	11688	11688
5°	11277	11473	11623
10°	10510	10883	11364
15°	9577	10090	10895
20°	8513	9157	10050
25°	7376	8042	9113
30°	6175	6897	8193
35°	4870	5713	7213
40°	3490	4673	5911
45°	2043	3690	4575
50°	1476	2684	3086
55°	1242	1917	1615
60°	993	1554	1380
65°	816	1380	1275
70°	696	1322	1198
75°	663	1419	1169
80°	744	1743	1243
85°	1228	2731	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4575 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	7.6
10°-20°	148.7	19.5
20°-30°	182.7	23.9
30°-40°	161.6	21.1
40°-50°	103.1	13.5
50°-60°	50.3	6.6
60°-70°	30.0	3.9
70°-80°	19.1	2.5
80°-90°	10.5	1.4
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°	389.5	51.0
0°-40°	551.0	72.1
0°-60°	704.4	92.2
0°-90°	764.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	609	622	619	622	628	57
15°	501	515	528	552	570	140
25°	362	375	395	420	448	166
35°	216	228	254	289	320	134
45°	78	100	141	159	175	66
55°	39	51	60	56	50	35
65°	19	35	32	29	29	19
75°	9	21	20	18	16	10
85°	6	12	13	12	8	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.4	633.4	633.4	633.4	633.4
2.5°	624.0	635.7	628.7	628.7	629.9
5°	608.8	621.7	619.4	621.7	627.5
7.5°	587.8	600.7	603.0	612.3	619.4
10°	560.9	573.8	580.8	596.0	606.5
12.5°	532.9	545.7	556.2	576.1	591.3
15°	501.3	515.3	528.2	551.6	570.3
17.5°	468.6	482.6	499.0	522.4	544.6
20°	433.5	446.4	466.3	488.5	511.8
22.5°	399.7	411.3	432.4	453.4	481.5
25°	362.3	375.1	395.0	419.5	447.6
27.5°	326.0	338.9	358.8	386.8	416.0
30°	289.8	301.5	323.7	352.9	384.5
32.5°	252.4	264.1	288.6	320.2	352.9
35°	216.2	227.9	253.6	288.6	320.2
37.5°	180.0	192.8	222.0	254.8	281.6
40°	144.9	160.1	194.0	222.0	245.4
42.5°	109.8	130.9	167.1	190.5	209.2
45°	78.3	100.5	141.4	158.9	175.3
47.5°	59.6	77.1	116.9	129.7	140.2
50°	51.4	63.1	93.5	102.8	107.5
52.5°	44.4	56.1	74.8	78.3	76.0
55°	38.6	51.4	59.6	56.1	50.2
57.5°	32.7	47.9	49.1	42.1	43.2
60°	26.9	43.2	42.1	36.2	37.4
62.5°	22.2	39.7	36.2	32.7	32.7
65°	18.7	35.1	31.6	29.2	29.2
67.5°	15.2	31.6	28.0	25.7	25.7
70°	12.9	28.0	24.5	22.2	22.2
72.5°	11.7	24.5	22.2	19.9	19.9
75°	9.3	21.0	19.9	17.5	16.4
77.5°	8.2	17.5	17.5	16.4	14.0
80°	7.0	15.2	16.4	14.0	11.7
82.5°	7.0	14.0	14.0	12.9	9.3
85°	5.8	11.7	12.9	11.7	8.2
87.5°	3.5	10.5	10.5	9.3	5.8
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	10.57	11.85	10.93	12.16	12.47	10.10	11.38	10.46	11.69	12.00
	3H	11.75	12.88	12.13	13.21	13.58	11.66	12.80	12.04	13.13	13.49
	4H	12.17	13.24	12.58	13.59	13.97	12.34	13.40	12.75	13.76	14.14
	6H	12.52	13.50	12.93	13.87	14.26	12.99	13.97	13.41	14.34	14.73
	8H	12.71	13.64	13.15	14.03	14.44	13.28	14.20	13.71	14.59	15.00
	12H	12.93	13.82	13.36	14.20	14.63	13.60	14.48	14.03	14.86	15.29
4H	2H	11.07	12.13	11.48	12.48	12.87	10.70	11.76	11.10	12.11	12.50
	3H	12.72	13.59	13.13	14.00	14.40	12.50	13.37	12.91	13.78	14.18
	4H	13.48	14.26	13.91	14.68	15.13	13.34	14.12	13.77	14.54	14.99
	6H	14.08	14.76	14.54	15.21	15.67	14.19	14.87	14.66	15.32	15.79
	8H	14.38	15.01	14.85	15.46	15.93	14.58	15.22	15.05	15.67	16.14
	12H	14.69	15.25	15.18	15.74	16.21	15.02	15.58	15.51	16.07	16.54
8H	4H	13.90	14.53	14.37	14.98	15.45	13.80	14.43	14.26	14.88	15.35
	6H	14.85	15.37	15.35	15.86	16.35	14.90	15.43	15.41	15.92	16.40
	8H	15.39	15.86	15.91	16.38	16.87	15.48	15.95	16.00	16.47	16.96
	12H	15.96	16.37	16.47	16.87	17.44	16.15	16.57	16.67	17.06	17.63
12H	4H	13.97	14.53	14.45	15.01	15.49	13.88	14.44	14.36	14.92	15.40
	6H	15.03	15.50	15.55	16.01	16.51	15.09	15.56	15.61	16.07	16.57
	8H	15.72	16.14	16.24	16.63	17.20	15.80	16.22	16.32	16.71	17.28