

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: P1058522

Luminaire Tested: S122RDR-H865D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058522
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-H865D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

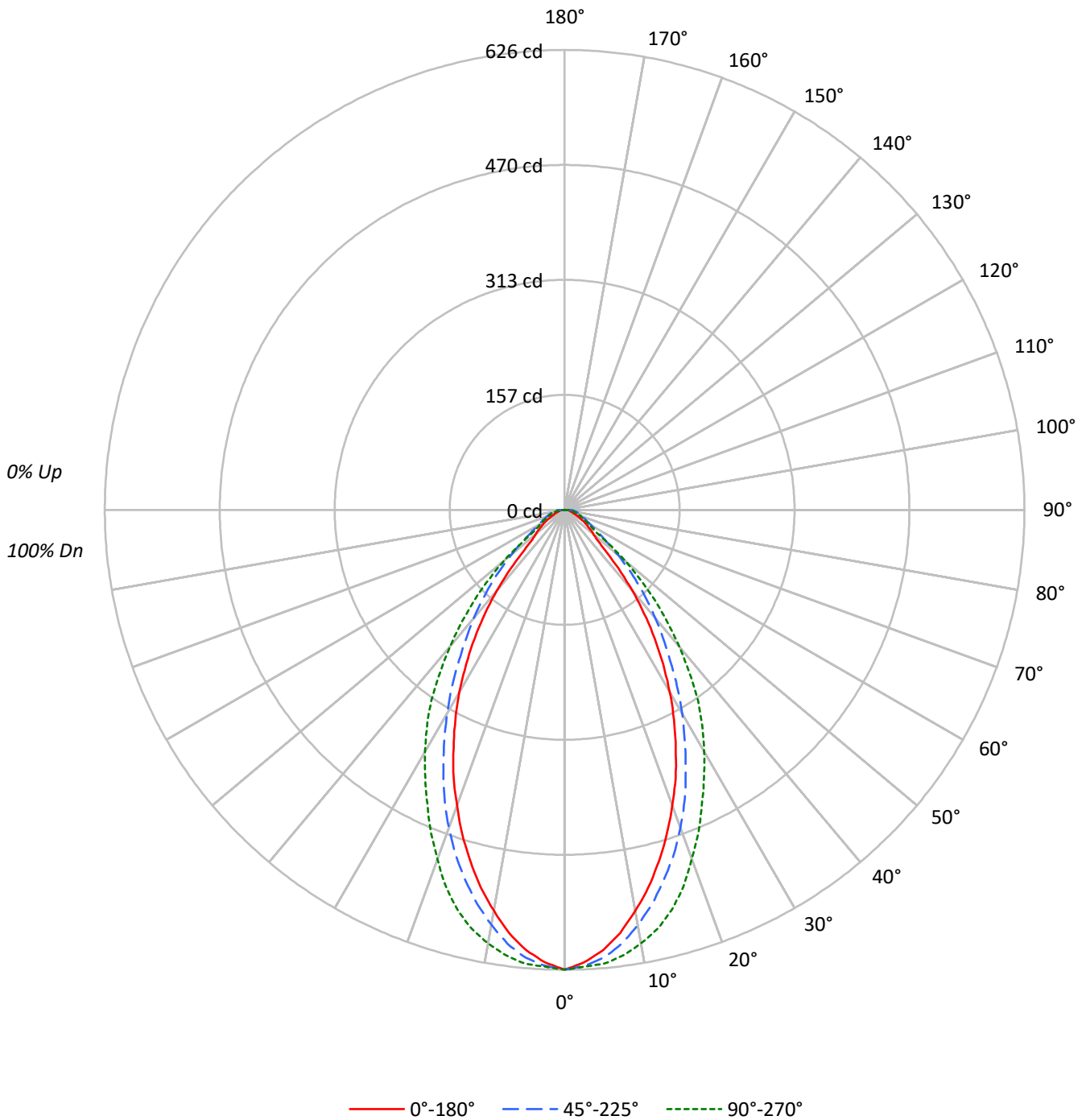
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 754.9 lumens
Efficiency: N/A
Efficacy: 24.2 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	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	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	11548	11548	11548
5°	11142	11334	11484
10°	10384	10751	11227
15°	9462	9970	10763
20°	8410	9047	9930
25°	7287	7944	9003
30°	6100	6814	8092
35°	4812	5643	7125
40°	3449	4618	5841
45°	2020	3646	4520
50°	1458	2653	3049
55°	1226	1895	1596
60°	982	1535	1362
65°	808	1362	1262
70°	685	1306	1182
75°	656	1397	1155
80°	733	1721	1222
85°	1228	2689	1715

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4520 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	7.6
10°-20°	146.9	19.5
20°-30°	180.5	23.9
30°-40°	159.6	21.1
40°-50°	101.9	13.5
50°-60°	49.7	6.6
60°-70°	29.6	3.9
70°-80°	18.9	2.5
80°-90°	10.4	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°	384.8	51.0
0°-40°	544.4	72.1
0°-60°	696.0	92.2
0°-90°	754.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	754.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	602	614	612	614	620	56
15°	495	509	522	545	563	138
25°	358	371	390	414	442	164
35°	214	225	250	285	316	133
45°	77	99	140	157	173	65
55°	38	51	59	55	50	34
65°	18	35	31	29	29	19
75°	9	21	20	17	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°	625.8	625.8	625.8	625.8	625.8
2.5°	616.5	628.1	621.1	621.1	622.3
5°	601.5	614.2	611.9	614.2	620.0
7.5°	580.7	593.4	595.7	605.0	611.9
10°	554.2	566.9	573.8	588.8	599.2
12.5°	526.5	539.2	549.6	569.2	584.2
15°	495.3	509.2	521.9	544.9	563.4
17.5°	463.0	476.8	493.0	516.1	538.0
20°	428.3	441.0	460.7	482.6	505.7
22.5°	394.9	406.4	427.2	448.0	475.7
25°	357.9	370.6	390.2	414.5	442.2
27.5°	322.1	334.8	354.4	382.2	411.0
30°	286.3	297.9	319.8	348.7	379.8
32.5°	249.4	260.9	285.2	316.3	348.7
35°	213.6	225.1	250.5	285.2	316.3
37.5°	177.8	190.5	219.4	251.7	278.2
40°	143.2	158.2	191.7	219.4	242.5
42.5°	108.5	129.3	165.1	188.2	206.7
45°	77.4	99.3	139.7	157.0	173.2
47.5°	58.9	76.2	115.5	128.2	138.5
50°	50.8	62.3	92.4	101.6	106.2
52.5°	43.9	55.4	73.9	77.4	75.0
55°	38.1	50.8	58.9	55.4	49.6
57.5°	32.3	47.3	48.5	41.6	42.7
60°	26.6	42.7	41.6	35.8	36.9
62.5°	21.9	39.3	35.8	32.3	32.3
65°	18.5	34.6	31.2	28.9	28.9
67.5°	15.0	31.2	27.7	25.4	25.4
70°	12.7	27.7	24.2	21.9	21.9
72.5°	11.5	24.2	21.9	19.6	19.6
75°	9.2	20.8	19.6	17.3	16.2
77.5°	8.1	17.3	17.3	16.2	13.9
80°	6.9	15.0	16.2	13.9	11.5
82.5°	6.9	13.9	13.9	12.7	9.2
85°	5.8	11.5	12.7	11.5	8.1
87.5°	3.5	10.4	10.4	9.2	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	10.52	11.80	10.89	12.11	12.43	10.06	11.34	10.42	11.65	11.96
	3H	11.70	12.84	12.08	13.17	13.53	11.62	12.75	12.00	13.08	13.45
	4H	12.13	13.19	12.53	13.54	13.93	12.30	13.36	12.70	13.71	14.10
	6H	12.47	13.45	12.89	13.82	14.22	12.95	13.93	13.36	14.30	14.69
	8H	12.67	13.60	13.10	13.99	14.39	13.24	14.16	13.67	14.55	14.96
	12H	12.89	13.77	13.32	14.16	14.59	13.55	14.44	13.99	14.82	15.25
4H	2H	11.03	12.09	11.43	12.44	12.82	10.66	11.72	11.06	12.07	12.45
	3H	12.67	13.55	13.09	13.95	14.35	12.45	13.33	12.87	13.73	14.13
	4H	13.44	14.22	13.87	14.64	15.08	13.29	14.08	13.73	14.50	14.94
	6H	14.04	14.72	14.50	15.16	15.63	14.15	14.83	14.61	15.28	15.75
	8H	14.34	14.97	14.81	15.42	15.89	14.54	15.18	15.01	15.62	16.09
	12H	14.65	15.21	15.14	15.70	16.17	14.98	15.54	15.46	16.02	16.50
8H	4H	13.85	14.49	14.32	14.94	15.41	13.75	14.39	14.22	14.83	15.31
	6H	14.80	15.33	15.31	15.82	16.30	14.86	15.39	15.37	15.88	16.36
	8H	15.35	15.82	15.87	16.34	16.83	15.44	15.91	15.96	16.43	16.92
	12H	15.92	16.33	16.43	16.83	17.40	16.11	16.52	16.62	17.02	17.59
12H	4H	13.92	14.49	14.41	14.97	15.44	13.83	14.40	14.32	14.88	15.35
	6H	14.99	15.46	15.51	15.97	16.46	15.05	15.52	15.57	16.03	16.53
	8H	15.68	16.10	16.20	16.59	17.16	15.76	16.17	16.27	16.67	17.24