

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: P1058198

Luminaire Tested: S122RDR-H1005D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058198
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-H1005D830-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

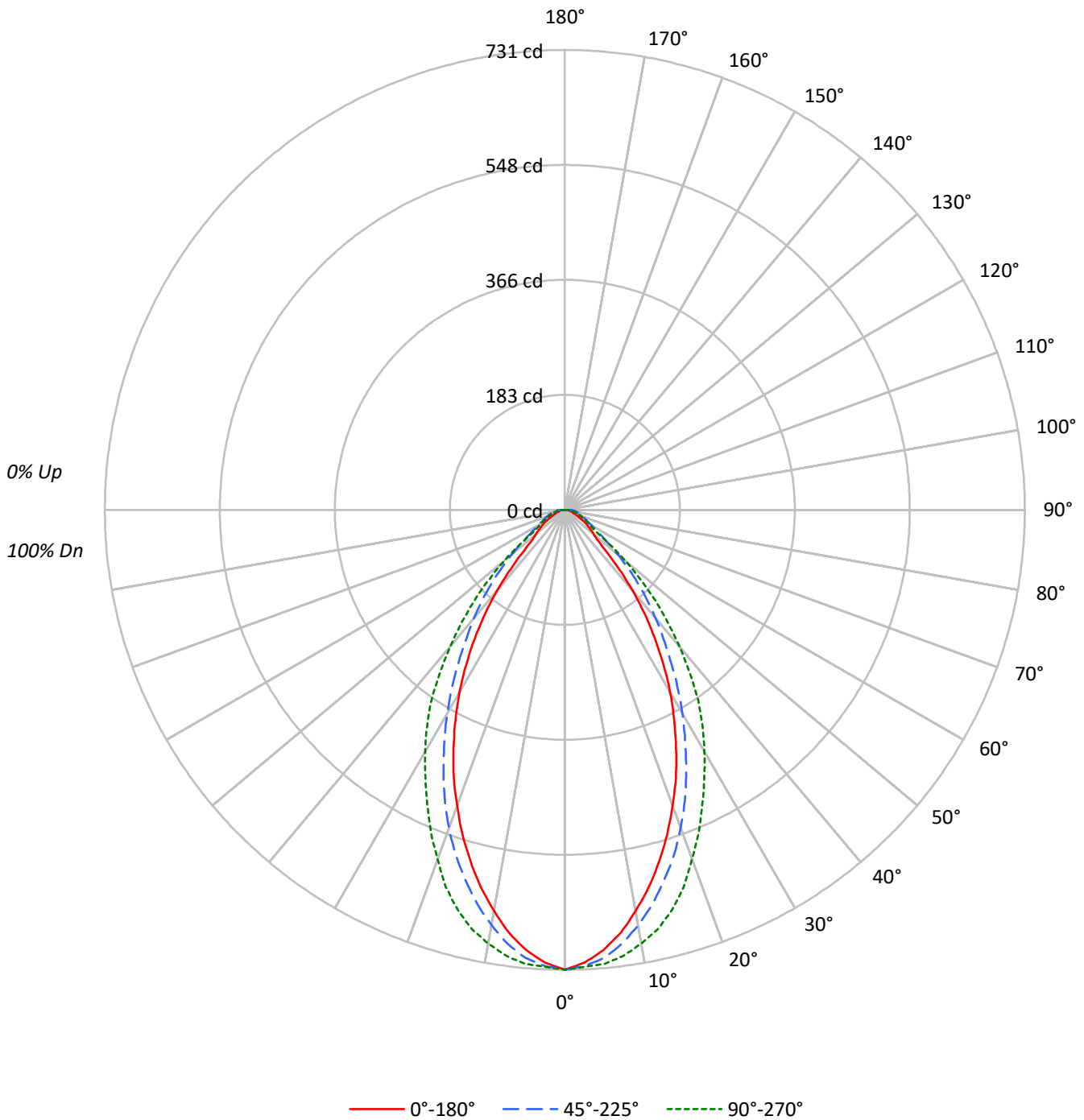
Lumens per Lamp: N/A
Luminaire Lumens: 881.8 lumens
Efficiency: N/A
Efficacy: 24.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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
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°	13489	13489	13489
5°	13016	13240	13416
10°	12130	12559	13116
15°	11053	11645	12574
20°	9826	10567	11599
25°	8513	9282	10518
30°	7127	7960	9454
35°	5620	6593	8326
40°	4028	5393	6822
45°	2359	4259	5279
50°	1702	3097	3563
55°	1432	2213	1866
60°	1144	1794	1594
65°	943	1589	1471
70°	798	1527	1381
75°	770	1633	1347
80°	861	2008	1435
85°	1419	3133	1990

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5279 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	7.6
10°-20°	171.6	19.5
20°-30°	210.9	23.9
30°-40°	186.5	21.1
40°-50°	119.0	13.5
50°-60°	58.1	6.6
60°-70°	34.6	3.9
70°-80°	22.1	2.5
80°-90°	12.2	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°	449.5	51.0
0°-40°	636.0	72.1
0°-60°	813.0	92.2
0°-90°	881.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	703	718	715	718	724	65
15°	579	595	610	637	658	161
25°	418	433	456	484	517	191
35°	250	263	293	333	370	155
45°	90	116	163	183	202	76
55°	44	59	69	65	58	40
65°	22	40	36	34	34	22
75°	11	24	23	20	19	12
85°	7	14	15	14	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	731.0	731.0	731.0	731.0	731.0
2.5°	720.2	733.7	725.6	725.6	727.0
5°	702.7	717.5	714.8	717.5	724.3
7.5°	678.4	693.2	695.9	706.7	714.8
10°	647.4	662.2	670.3	687.9	700.0
12.5°	615.0	629.9	642.0	664.9	682.5
15°	578.6	594.8	609.6	636.6	658.2
17.5°	540.8	557.0	575.9	602.9	628.5
20°	500.4	515.2	538.1	563.8	590.7
22.5°	461.3	474.8	499.0	523.3	555.7
25°	418.1	432.9	455.9	484.2	516.6
27.5°	376.3	391.1	414.1	446.4	480.1
30°	334.5	348.0	373.6	407.3	443.7
32.5°	291.3	304.8	333.1	369.6	407.3
35°	249.5	263.0	292.7	333.1	369.6
37.5°	207.7	222.5	256.3	294.0	325.0
40°	167.2	184.8	223.9	256.3	283.2
42.5°	126.8	151.1	192.9	219.8	241.4
45°	90.4	116.0	163.2	183.4	202.3
47.5°	68.8	89.0	134.9	149.7	161.8
50°	59.3	72.8	107.9	118.7	124.1
52.5°	51.3	64.7	86.3	90.4	87.7
55°	44.5	59.3	68.8	64.7	58.0
57.5°	37.8	55.3	56.6	48.6	49.9
60°	31.0	49.9	48.6	41.8	43.2
62.5°	25.6	45.9	41.8	37.8	37.8
65°	21.6	40.5	36.4	33.7	33.7
67.5°	17.5	36.4	32.4	29.7	29.7
70°	14.8	32.4	28.3	25.6	25.6
72.5°	13.5	28.3	25.6	22.9	22.9
75°	10.8	24.3	22.9	20.2	18.9
77.5°	9.4	20.2	20.2	18.9	16.2
80°	8.1	17.5	18.9	16.2	13.5
82.5°	8.1	16.2	16.2	14.8	10.8
85°	6.7	13.5	14.8	13.5	9.4
87.5°	4.0	12.1	12.1	10.8	6.7
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	11.07	12.35	11.43	12.66	12.98	10.60	11.88	10.96	12.19	12.51
	3H	12.24	13.38	12.62	13.71	14.08	12.16	13.30	12.54	13.63	13.99
	4H	12.67	13.74	13.08	14.09	14.47	12.84	13.90	13.24	14.25	14.64
	6H	13.02	13.99	13.43	14.36	14.76	13.49	14.47	13.90	14.84	15.23
	8H	13.21	14.14	13.64	14.53	14.94	13.78	14.70	14.21	15.09	15.50
	12H	13.43	14.32	13.86	14.70	15.13	14.09	14.98	14.53	15.36	15.79
4H	2H	11.57	12.63	11.97	12.98	13.37	11.20	12.26	11.60	12.61	12.99
	3H	13.21	14.09	13.63	14.49	14.90	12.99	13.87	13.41	14.27	14.68
	4H	13.98	14.76	14.41	15.18	15.63	13.83	14.62	14.27	15.04	15.48
	6H	14.58	15.26	15.04	15.71	16.17	14.69	15.37	15.15	15.82	16.28
	8H	14.88	15.52	15.35	15.96	16.43	15.08	15.72	15.55	16.16	16.64
	12H	15.19	15.75	15.68	16.24	16.71	15.52	16.08	16.00	16.56	17.04
8H	4H	14.40	15.03	14.87	15.48	15.95	14.29	14.93	14.76	15.37	15.85
	6H	15.34	15.87	15.85	16.36	16.84	15.40	15.92	15.90	16.42	16.90
	8H	15.89	16.36	16.41	16.88	17.37	15.98	16.45	16.50	16.96	17.46
	12H	16.46	16.87	16.97	17.37	17.94	16.65	17.06	17.16	17.56	18.13
12H	4H	14.47	15.03	14.95	15.51	15.99	14.37	14.94	14.86	15.42	15.89
	6H	15.53	16.00	16.05	16.51	17.00	15.59	16.06	16.11	16.57	17.06
	8H	16.22	16.64	16.74	17.13	17.70	16.30	16.71	16.81	17.21	17.78