

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: P1058251

Luminaire Tested: S122RDR-H1005D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

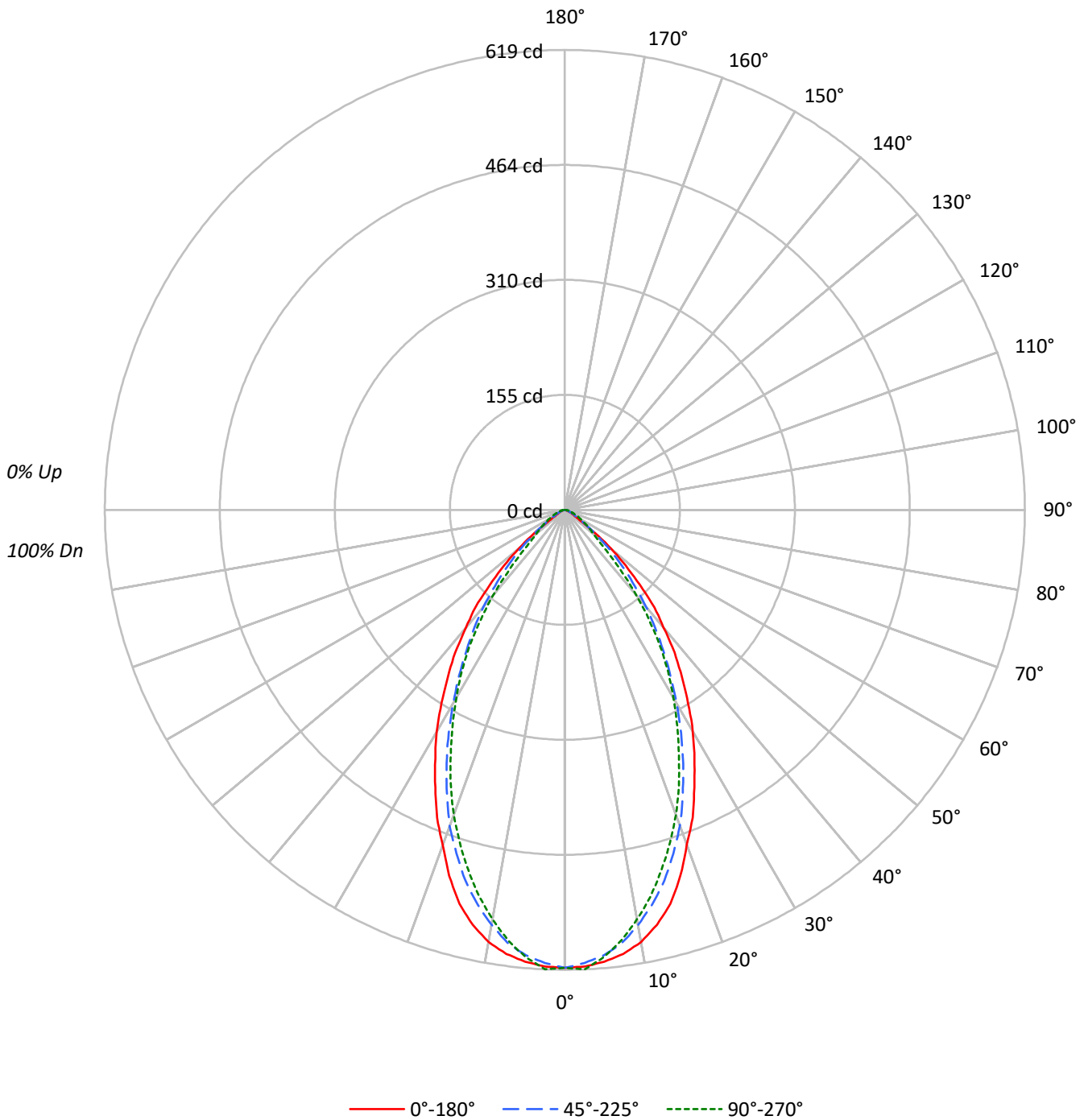
Lumens per Lamp: N/A
Luminaire Lumens: 663.0 lumens
Efficiency: N/A
Efficacy: 18.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11374	11374	11374
5°	11305	11145	11190
10°	11066	10628	10489
15°	10484	9873	9590
20°	9424	8892	8577
25°	8392	7666	7391
30°	7340	6396	6213
35°	6181	5183	5017
40°	4979	4090	3616
45°	3724	2954	2150
50°	2331	1906	1412
55°	791	1029	1149
60°	454	635	908
65°	323	428	699
70°	264	334	529
75°	178	264	442
80°	128	266	393
85°	0	0	254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3724 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	8.6
10°-20°	145.4	21.9
20°-30°	175.1	26.4
30°-40°	149.6	22.6
40°-50°	87.7	13.2
50°-60°	31.7	4.8
60°-70°	11.3	1.7
70°-80°	4.5	0.7
80°-90°	0.8	0.1
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°	377.4	56.9
0°-40°	527.0	79.5
0°-60°	646.4	97.5
0°-90°	663.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	663.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	610	612	602	604	604	58
15°	549	540	517	507	502	152
25°	412	395	376	370	363	189
35°	274	254	230	228	223	171
45°	143	128	113	95	82	110
55°	25	34	32	33	36	31
65°	7	9	10	14	16	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.4	616.4	616.4	616.4	616.4
2.5°	615.2	616.4	610.3	616.4	618.9
5°	610.3	611.5	601.7	604.1	604.1
7.5°	602.9	601.7	588.1	585.7	584.4
10°	590.6	586.9	567.2	563.5	559.8
12.5°	572.1	564.8	543.8	537.7	532.8
15°	548.8	540.1	516.8	506.9	502.0
17.5°	516.8	506.9	484.8	474.9	470.0
20°	479.9	470.0	452.8	441.7	436.8
22.5°	449.1	433.1	414.6	407.3	401.1
25°	412.2	395.0	376.5	370.4	363.0
27.5°	377.7	356.8	338.4	333.4	327.3
30°	344.5	322.4	300.2	300.2	291.6
32.5°	308.8	287.9	264.5	263.3	258.4
35°	274.4	253.5	230.1	227.6	222.7
37.5°	242.4	221.5	199.3	191.9	185.8
40°	206.7	188.3	169.8	157.5	150.1
42.5°	178.4	157.5	139.0	124.3	114.4
45°	142.7	128.0	113.2	94.7	82.4
47.5°	110.7	100.9	88.6	67.7	61.5
50°	81.2	76.3	66.4	50.4	49.2
52.5°	51.7	54.1	48.0	39.4	43.1
55°	24.6	34.5	32.0	33.2	35.7
57.5°	16.0	17.2	23.4	27.1	29.5
60°	12.3	12.3	17.2	22.1	24.6
62.5°	9.8	9.8	13.5	18.5	19.7
65°	7.4	8.6	9.8	13.5	16.0
67.5°	6.2	6.2	7.4	11.1	12.3
70°	4.9	4.9	6.2	8.6	9.8
72.5°	3.7	3.7	4.9	7.4	7.4
75°	2.5	3.7	3.7	4.9	6.2
77.5°	2.5	2.5	2.5	3.7	4.9
80°	1.2	1.2	2.5	2.5	3.7
82.5°	1.2	1.2	1.2	1.2	2.5
85°	0.0	0.0	0.0	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.0
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	4.32	5.49	4.69	5.80	6.11	7.73	8.89	8.10	9.21	9.52
	3H	4.85	5.87	5.23	6.20	6.57	8.46	9.48	8.84	9.81	10.18
	4H	4.99	5.93	5.39	6.29	6.67	8.68	9.62	9.08	9.98	10.36
	6H	5.06	5.93	5.48	6.30	6.70	8.83	9.69	9.24	10.07	10.46
	8H	5.07	5.88	5.50	6.27	6.68	8.86	9.68	9.29	10.07	10.48
	12H	5.03	5.81	5.46	6.19	6.62	8.86	9.64	9.29	10.02	10.45
4H	2H	4.63	5.58	5.03	5.93	6.32	7.70	8.64	8.10	9.00	9.38
	3H	5.29	6.06	5.71	6.47	6.87	8.57	9.34	8.99	9.75	10.15
	4H	5.54	6.22	5.98	6.64	7.09	8.85	9.54	9.29	9.96	10.40
	6H	5.66	6.25	6.13	6.69	7.17	9.08	9.66	9.55	10.11	10.58
	8H	5.67	6.22	6.14	6.67	7.14	9.12	9.67	9.60	10.12	10.59
	12H	5.64	6.11	6.13	6.60	7.08	9.14	9.62	9.63	10.11	10.58
8H	4H	5.65	6.19	6.12	6.64	7.12	8.78	9.33	9.26	9.78	10.25
	6H	5.82	6.26	6.32	6.76	7.24	9.05	9.49	9.55	9.99	10.47
	8H	5.86	6.25	6.38	6.77	7.27	9.11	9.50	9.64	10.02	10.52
	12H	5.83	6.18	6.35	6.68	7.25	9.17	9.51	9.68	10.01	10.59
12H	4H	5.63	6.11	6.12	6.60	7.07	8.74	9.21	9.23	9.70	10.18
	6H	5.81	6.21	6.34	6.73	7.22	9.00	9.39	9.52	9.91	10.41
	8H	5.88	6.23	6.40	6.73	7.30	9.08	9.43	9.60	9.93	10.50