

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: P1058576

Luminaire Tested: S122RDR-H865D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058576
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-H865D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

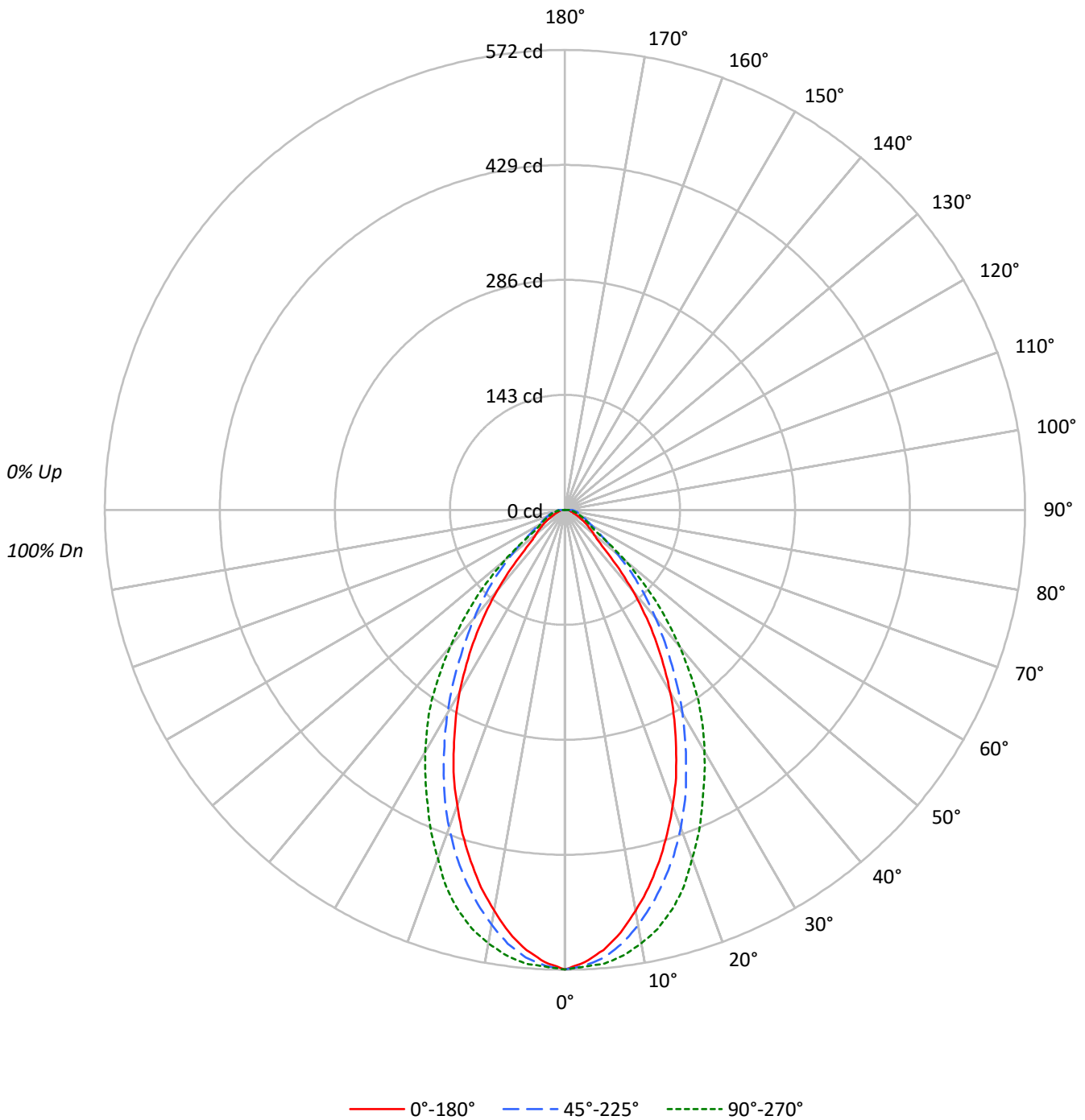
Lumens per Lamp: N/A
Luminaire Lumens: 689.6 lumens
Efficiency: N/A
Efficacy: 22.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	10547	10547	10547
5°	10178	10354	10491
10°	9485	9822	10257
15°	8644	9107	9833
20°	7684	8263	9070
25°	6656	7258	8223
30°	5574	6224	7394
35°	4395	5156	6510
40°	3151	4218	5335
45°	1845	3330	4128
50°	1332	2423	2785
55°	1120	1731	1461
60°	897	1402	1244
65°	738	1244	1153
70°	626	1192	1079
75°	599	1276	1055
80°	669	1573	1116
85°	1122	2456	1567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4128 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	7.6
10°-20°	134.2	19.5
20°-30°	164.9	23.9
30°-40°	145.8	21.1
40°-50°	93.1	13.5
50°-60°	45.4	6.6
60°-70°	27.0	3.9
70°-80°	17.2	2.5
80°-90°	9.5	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°	351.5	51.0
0°-40°	497.3	72.1
0°-60°	635.8	92.2
0°-90°	689.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	689.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	550	561	559	561	566	51
15°	452	465	477	498	515	126
25°	327	338	356	379	404	150
35°	195	206	229	260	289	121
45°	71	91	128	143	158	60
55°	35	46	54	51	45	31
65°	17	32	28	26	26	17
75°	8	19	18	16	15	9
85°	5	10	12	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.6	571.6	571.6	571.6	571.6
2.5°	563.2	573.7	567.4	567.4	568.5
5°	549.5	561.1	559.0	561.1	566.4
7.5°	530.5	542.1	544.2	552.6	559.0
10°	506.2	517.8	524.2	537.9	547.4
12.5°	480.9	492.5	502.0	520.0	533.7
15°	452.5	465.1	476.7	497.8	514.7
17.5°	422.9	435.6	450.3	471.4	491.5
20°	391.3	402.9	420.8	440.9	461.9
22.5°	360.7	371.2	390.2	409.2	434.5
25°	326.9	338.5	356.5	378.6	403.9
27.5°	294.3	305.9	323.8	349.1	375.5
30°	261.6	272.1	292.1	318.5	347.0
32.5°	227.8	238.4	260.5	289.0	318.5
35°	195.1	205.7	228.9	260.5	289.0
37.5°	162.4	174.0	200.4	229.9	254.2
40°	130.8	144.5	175.1	200.4	221.5
42.5°	99.1	118.1	150.8	171.9	188.8
45°	70.7	90.7	127.6	143.4	158.2
47.5°	53.8	69.6	105.5	117.1	126.6
50°	46.4	57.0	84.4	92.8	97.0
52.5°	40.1	50.6	67.5	70.7	68.6
55°	34.8	46.4	53.8	50.6	45.4
57.5°	29.5	43.2	44.3	38.0	39.0
60°	24.3	39.0	38.0	32.7	33.7
62.5°	20.0	35.9	32.7	29.5	29.5
65°	16.9	31.6	28.5	26.4	26.4
67.5°	13.7	28.5	25.3	23.2	23.2
70°	11.6	25.3	22.1	20.0	20.0
72.5°	10.5	22.1	20.0	17.9	17.9
75°	8.4	19.0	17.9	15.8	14.8
77.5°	7.4	15.8	15.8	14.8	12.7
80°	6.3	13.7	14.8	12.7	10.5
82.5°	6.3	12.7	12.7	11.6	8.4
85°	5.3	10.5	11.6	10.5	7.4
87.5°	3.2	9.5	9.5	8.4	5.3
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	10.21	11.49	10.57	11.80	12.11	9.74	11.02	10.11	11.33	11.65
	3H	11.39	12.52	11.77	12.85	13.22	11.30	12.44	11.68	12.77	13.13
	4H	11.81	12.88	12.22	13.23	13.61	11.98	13.05	12.39	13.40	13.78
	6H	12.16	13.14	12.57	13.51	13.90	12.63	13.61	13.05	13.98	14.38
	8H	12.35	13.28	12.78	13.67	14.08	12.92	13.85	13.35	14.24	14.64
	12H	12.57	13.46	13.01	13.84	14.27	13.24	14.12	13.67	14.51	14.94
4H	2H	10.71	11.77	11.11	12.12	12.51	10.34	11.40	10.75	11.76	12.14
	3H	12.36	13.23	12.77	13.64	14.04	12.14	13.01	12.55	13.42	13.82
	4H	13.12	13.91	13.56	14.33	14.77	12.98	13.76	13.41	14.18	14.63
	6H	13.72	14.40	14.19	14.85	15.32	13.84	14.52	14.30	14.96	15.43
	8H	14.02	14.66	14.49	15.10	15.58	14.23	14.86	14.69	15.31	15.78
	12H	14.34	14.90	14.82	15.38	15.86	14.66	15.22	15.15	15.71	16.18
8H	4H	13.54	14.17	14.01	14.62	15.09	13.44	14.07	13.90	14.52	14.99
	6H	14.49	15.01	14.99	15.51	15.99	14.55	15.07	15.05	15.57	16.05
	8H	15.04	15.51	15.56	16.02	16.51	15.13	15.59	15.65	16.11	16.60
	12H	15.60	16.02	16.12	16.51	17.08	15.79	16.21	16.31	16.70	17.27
12H	4H	13.61	14.17	14.10	14.66	15.13	13.52	14.08	14.01	14.56	15.04
	6H	14.67	15.14	15.19	15.66	16.15	14.73	15.20	15.26	15.72	16.21
	8H	15.37	15.78	15.88	16.28	16.85	15.44	15.86	15.96	16.35	16.92