

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: P1058255

Luminaire Tested: S122RDR-H1005D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

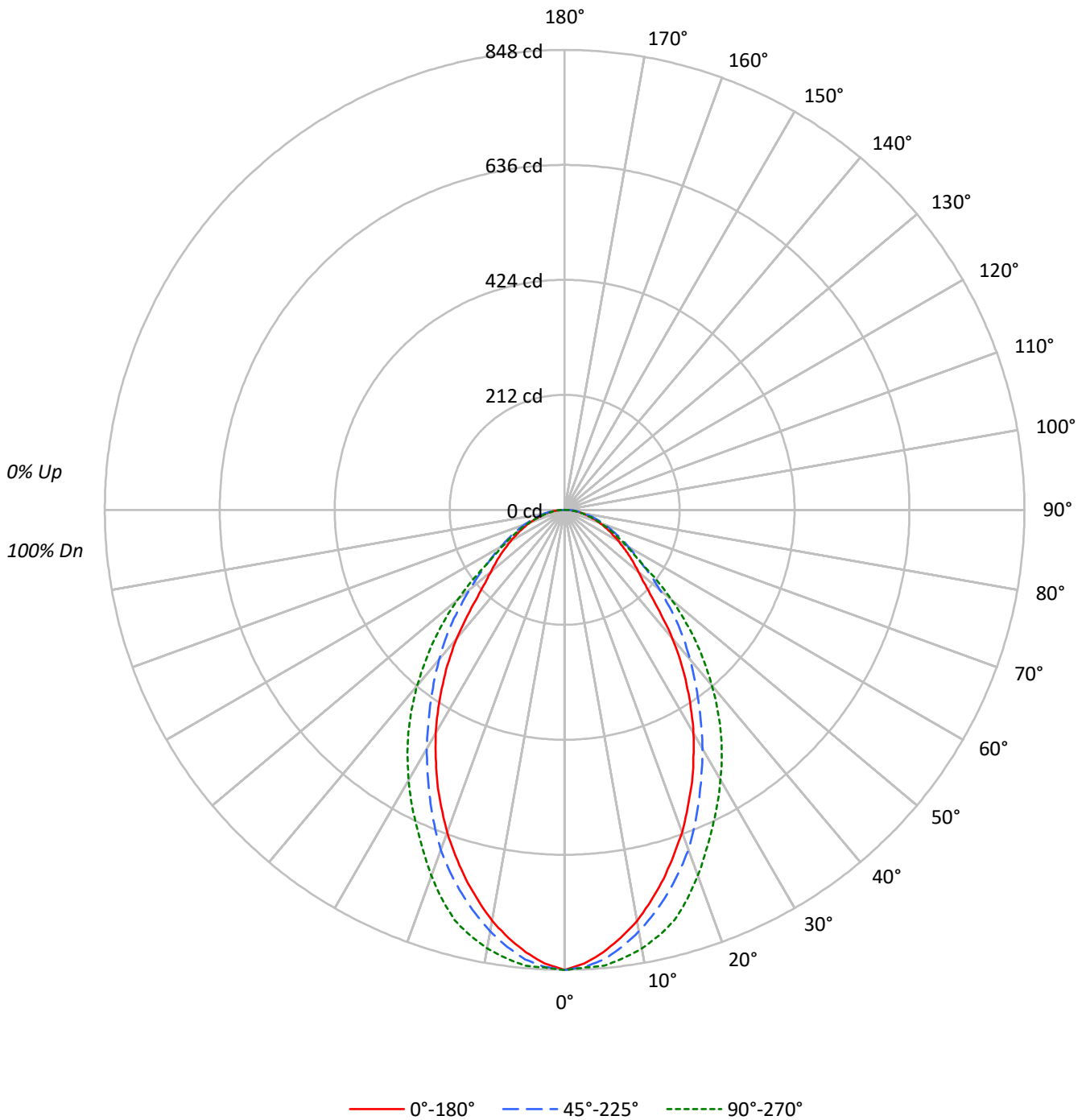
Lumens per Lamp: N/A
Luminaire Lumens: 1381.5 lumens
Efficiency: N/A
Efficacy: 37.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15655	15655	15655
5°	15168	15419	15624
10°	14420	14789	15389
15°	13455	13997	14962
20°	12428	13106	14097
25°	11308	11959	13136
30°	10127	10837	12254
35°	8821	9682	11317
40°	7446	8662	10175
45°	5913	7649	8901
50°	5090	6574	7389
55°	4636	5627	5665
60°	4226	5001	4816
65°	3873	4515	4248
70°	3588	4187	3787
75°	3337	3950	3337
80°	3145	3794	3007
85°	3133	3917	2604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8901 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	5.7
10°-20°	207.0	15.0
20°-30°	272.5	19.7
30°-40°	274.0	19.8
40°-50°	222.0	16.1
50°-60°	152.9	11.1
60°-70°	100.1	7.2
70°-80°	55.8	4.0
80°-90°	18.9	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°	557.8	40.4
0°-40°	831.8	60.2
0°-60°	1206.8	87.4
0°-90°	1381.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1381.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	819	835	832	836	844	77
15°	704	722	733	760	783	197
25°	555	570	587	613	645	254
35°	392	410	430	468	502	244
45°	227	252	293	319	341	179
55°	144	160	175	178	176	129
65°	89	106	103	98	97	88
75°	47	58	55	49	47	50
85°	15	20	18	16	12	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	848.4	848.4	848.4	848.4	848.4
2.5°	837.3	852.1	843.5	843.5	844.7
5°	818.9	834.9	832.4	836.1	843.5
7.5°	795.5	812.7	812.7	823.8	833.6
10°	769.6	786.9	789.3	806.6	821.3
12.5°	737.6	754.8	762.2	784.4	804.1
15°	704.3	721.6	732.7	759.8	783.2
17.5°	668.6	685.9	700.7	729.0	752.4
20°	632.9	648.9	667.4	692.0	717.9
22.5°	593.5	610.8	628.0	651.4	681.0
25°	555.4	570.1	587.4	613.2	645.2
27.5°	514.7	530.7	546.7	577.5	610.8
30°	475.3	491.3	508.6	540.6	575.1
32.5°	433.4	450.7	467.9	503.6	539.3
35°	391.6	410.0	429.8	467.9	502.4
37.5°	350.9	370.6	394.0	433.4	463.0
40°	309.1	330.0	359.6	394.0	422.4
42.5°	264.7	290.6	326.3	355.9	381.7
45°	226.6	252.4	293.1	318.9	341.1
47.5°	198.3	219.2	258.6	280.8	299.2
50°	177.3	193.3	229.0	245.0	257.4
52.5°	160.1	176.1	200.7	211.8	215.5
55°	144.1	160.1	174.9	178.5	176.1
57.5°	128.1	145.3	153.9	150.2	150.2
60°	114.5	133.0	135.5	130.5	130.5
62.5°	101.0	119.4	119.4	113.3	113.3
65°	88.7	105.9	103.4	98.5	97.3
67.5°	77.6	93.6	89.9	85.0	83.7
70°	66.5	81.3	77.6	71.4	70.2
72.5°	56.6	70.2	65.3	60.3	57.9
75°	46.8	57.9	55.4	49.3	46.8
77.5°	38.2	46.8	44.3	39.4	36.9
80°	29.6	36.9	35.7	30.8	28.3
82.5°	22.2	28.3	27.1	23.4	19.7
85°	14.8	19.7	18.5	16.0	12.3
87.5°	7.4	13.5	12.3	11.1	6.2
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	16.29	17.73	16.65	18.04	18.36	16.64	18.09	17.01	18.40	18.71
	3H	17.83	19.12	18.21	19.45	19.81	17.99	19.28	18.37	19.61	19.97
	4H	18.40	19.61	18.80	19.96	20.34	18.47	19.68	18.88	20.03	20.41
	6H	18.83	19.95	19.25	20.32	20.71	18.83	19.94	19.24	20.31	20.70
	8H	18.99	20.05	19.42	20.44	20.84	18.94	20.00	19.37	20.39	20.80
	12H	19.10	20.12	19.53	20.50	20.93	19.02	20.03	19.45	20.42	20.85
4H	2H	16.87	18.08	17.27	18.43	18.81	17.16	18.37	17.56	18.72	19.10
	3H	18.70	19.70	19.11	20.10	20.50	18.73	19.73	19.14	20.14	20.54
	4H	19.44	20.34	19.88	20.76	21.20	19.34	20.24	19.77	20.66	21.10
	6H	20.03	20.81	20.49	21.26	21.72	19.82	20.60	20.28	21.05	21.51
	8H	20.24	20.97	20.70	21.42	21.88	19.98	20.71	20.45	21.16	21.63
	12H	20.41	21.06	20.89	21.54	22.01	20.10	20.76	20.59	21.24	21.71
8H	4H	19.73	20.46	20.19	20.90	21.37	19.64	20.37	20.10	20.82	21.28
	6H	20.48	21.09	20.98	21.58	22.06	20.26	20.86	20.75	21.35	21.83
	8H	20.81	21.35	21.32	21.86	22.35	20.51	21.05	21.02	21.56	22.05
	12H	21.09	21.57	21.60	22.06	22.63	20.72	21.20	21.23	21.69	22.26
12H	4H	19.75	20.40	20.23	20.88	21.35	19.67	20.33	20.16	20.81	21.28
	6H	20.54	21.09	21.06	21.60	22.09	20.33	20.88	20.85	21.39	21.88
	8H	20.94	21.42	21.45	21.91	22.48	20.65	21.13	21.16	21.63	22.19