

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: P1058252

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058252
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-H1005D935-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

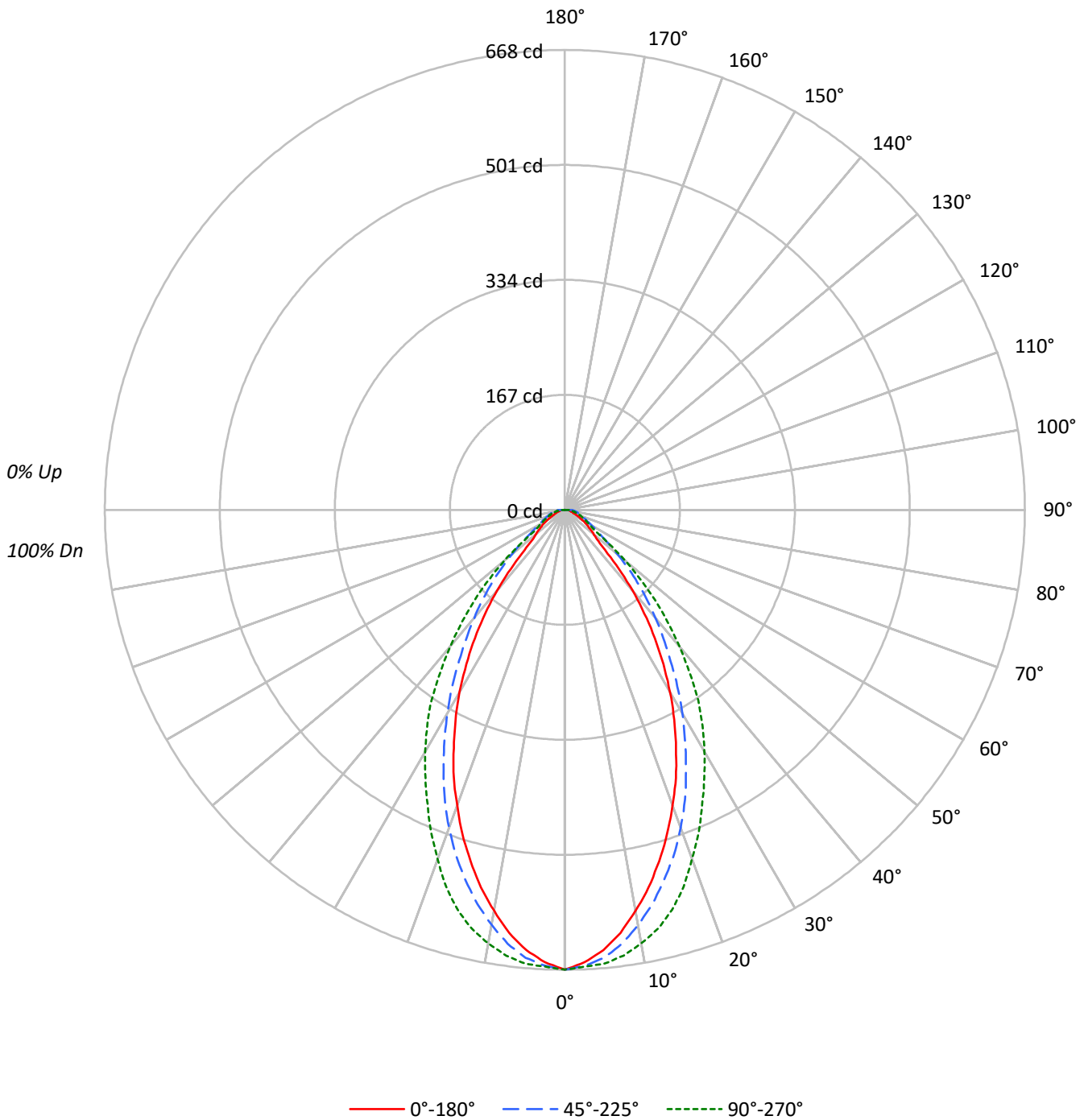
Lumens per Lamp: N/A
Luminaire Lumens: 805.6 lumens
Efficiency: N/A
Efficacy: 22.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	12323	12323	12323
5°	11890	12095	12255
10°	11081	11473	11981
15°	10096	10639	11485
20°	8976	9653	10596
25°	7776	8478	9608
30°	6509	7272	8636
35°	5134	6024	7605
40°	3681	4926	6232
45°	2153	3891	4822
50°	1556	2831	3252
55°	1309	2020	1705
60°	1044	1639	1454
65°	860	1454	1345
70°	734	1397	1262
75°	706	1490	1226
80°	786	1828	1307
85°	1313	2879	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4822 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	7.6
10°-20°	156.8	19.5
20°-30°	192.7	23.9
30°-40°	170.3	21.1
40°-50°	108.7	13.5
50°-60°	53.0	6.6
60°-70°	31.6	3.9
70°-80°	20.2	2.5
80°-90°	11.1	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°	410.6	51.0
0°-40°	580.9	72.1
0°-60°	742.7	92.2
0°-90°	805.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	642	655	653	655	662	60
15°	528	543	557	582	601	147
25°	382	396	416	442	472	175
35°	228	240	267	304	338	141
45°	82	106	149	168	185	70
55°	41	54	63	59	53	36
65°	20	37	33	31	31	20
75°	10	22	21	18	17	11
85°	6	12	14	12	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	667.8	667.8	667.8	667.8	667.8
2.5°	657.9	670.2	662.8	662.8	664.1
5°	641.9	655.4	653.0	655.4	661.6
7.5°	619.7	633.3	635.7	645.6	653.0
10°	591.4	604.9	612.3	628.3	639.4
12.5°	561.8	575.4	586.5	607.4	623.4
15°	528.5	543.3	556.9	581.5	601.2
17.5°	494.1	508.8	526.1	550.7	574.1
20°	457.1	470.6	491.6	515.0	539.6
22.5°	421.4	433.7	455.9	478.0	507.6
25°	381.9	395.5	416.4	442.3	471.9
27.5°	343.7	357.3	378.2	407.8	438.6
30°	305.5	317.9	341.3	372.1	405.3
32.5°	266.1	278.4	304.3	337.6	372.1
35°	227.9	240.2	267.4	304.3	337.6
37.5°	189.7	203.3	234.1	268.6	296.9
40°	152.8	168.8	204.5	234.1	258.7
42.5°	115.8	138.0	176.2	200.8	220.5
45°	82.5	106.0	149.1	167.6	184.8
47.5°	62.8	81.3	123.2	136.8	147.8
50°	54.2	66.5	98.6	108.4	113.3
52.5°	46.8	59.1	78.9	82.5	80.1
55°	40.7	54.2	62.8	59.1	53.0
57.5°	34.5	50.5	51.7	44.4	45.6
60°	28.3	45.6	44.4	38.2	39.4
62.5°	23.4	41.9	38.2	34.5	34.5
65°	19.7	37.0	33.3	30.8	30.8
67.5°	16.0	33.3	29.6	27.1	27.1
70°	13.6	29.6	25.9	23.4	23.4
72.5°	12.3	25.9	23.4	20.9	20.9
75°	9.9	22.2	20.9	18.5	17.2
77.5°	8.6	18.5	18.5	17.2	14.8
80°	7.4	16.0	17.2	14.8	12.3
82.5°	7.4	14.8	14.8	13.6	9.9
85°	6.2	12.3	13.6	12.3	8.6
87.5°	3.7	11.1	11.1	9.9	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	10.75	12.03	11.12	12.34	12.66	10.28	11.56	10.65	11.88	12.19
	3H	11.93	13.07	12.31	13.40	13.76	11.84	12.98	12.22	13.31	13.68
	4H	12.36	13.42	12.76	13.77	14.16	12.52	13.59	12.93	13.94	14.32
	6H	12.71	13.68	13.12	14.05	14.45	13.17	14.15	13.59	14.52	14.91
	8H	12.90	13.83	13.33	14.22	14.62	13.46	14.39	13.89	14.78	15.18
	12H	13.12	14.01	13.56	14.39	14.82	13.78	14.66	14.21	15.05	15.48
4H	2H	11.26	12.32	11.66	12.67	13.05	10.88	11.95	11.29	12.30	12.68
	3H	12.90	13.78	13.32	14.18	14.59	12.68	13.56	13.09	13.96	14.36
	4H	13.67	14.45	14.10	14.87	15.32	13.52	14.31	13.96	14.73	15.17
	6H	14.27	14.95	14.73	15.40	15.86	14.38	15.06	14.84	15.50	15.97
	8H	14.57	15.21	15.04	15.65	16.12	14.77	15.40	15.24	15.85	16.32
	12H	14.88	15.45	15.37	15.93	16.40	15.20	15.77	15.69	16.25	16.72
8H	4H	14.09	14.72	14.56	15.17	15.64	13.98	14.61	14.45	15.06	15.53
	6H	15.03	15.55	15.54	16.05	16.53	15.09	15.61	15.59	16.10	16.59
	8H	15.58	16.05	16.10	16.56	17.06	15.67	16.14	16.19	16.65	17.14
	12H	16.15	16.56	16.66	17.06	17.63	16.34	16.75	16.85	17.25	17.82
12H	4H	14.16	14.72	14.64	15.20	15.68	14.06	14.62	14.55	15.11	15.58
	6H	15.22	15.69	15.74	16.20	16.69	15.27	15.74	15.79	16.26	16.75
	8H	15.91	16.32	16.43	16.82	17.39	15.99	16.40	16.50	16.89	17.47