

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: P1058495

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058495
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-H675D935-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

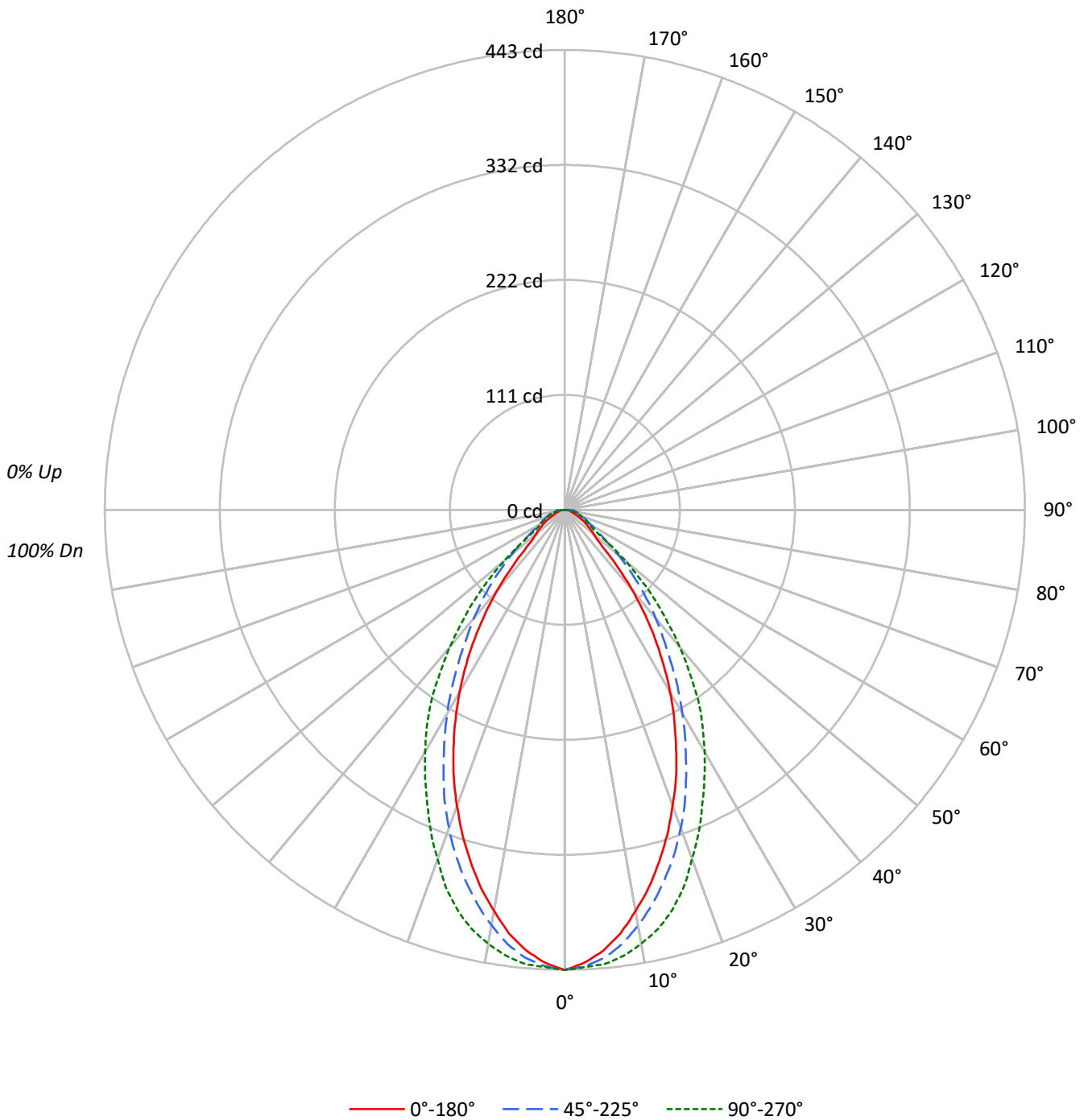
Lumens per Lamp: N/A
Luminaire Lumens: 534.7 lumens
Efficiency: N/A
Efficacy: 22.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	0	
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°	8178	8178	8178
5°	7893	8028	8135
10°	7354	7615	7952
15°	6701	7061	7624
20°	5958	6407	7034
25°	5161	5628	6377
30°	4321	4826	5734
35°	3408	3998	5048
40°	2443	3271	4136
45°	1430	2583	3202
50°	1033	1877	2159
55°	869	1342	1132
60°	694	1085	967
65°	572	965	891
70°	486	928	836
75°	463	991	813
80°	521	1211	871
85°	868	1905	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3202 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	7.6
10°-20°	104.0	19.5
20°-30°	127.9	23.9
30°-40°	113.1	21.1
40°-50°	72.2	13.5
50°-60°	35.2	6.6
60°-70°	21.0	3.9
70°-80°	13.4	2.5
80°-90°	7.4	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°	272.6	51.0
0°-40°	385.6	72.1
0°-60°	493.0	92.2
0°-90°	534.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	426	435	433	435	439	40
15°	351	361	370	386	399	98
25°	254	262	276	294	313	116
35°	151	160	178	202	224	94
45°	55	70	99	111	123	46
55°	27	36	42	39	35	24
65°	13	24	22	20	20	13
75°	6	15	14	12	11	7
85°	4	8	9	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	443.2	443.2	443.2	443.2	443.2
2.5°	436.7	444.9	440.0	440.0	440.8
5°	426.1	435.1	433.4	435.1	439.2
7.5°	411.4	420.3	422.0	428.5	433.4
10°	392.5	401.5	406.4	417.1	424.4
12.5°	372.9	381.9	389.3	403.2	413.8
15°	350.8	360.7	369.6	386.0	399.1
17.5°	327.9	337.8	349.2	365.6	381.1
20°	303.4	312.4	326.3	341.8	358.2
22.5°	279.7	287.9	302.6	317.3	336.9
25°	253.5	262.5	276.4	293.6	313.2
27.5°	228.2	237.2	251.1	270.7	291.1
30°	202.8	211.0	226.5	247.0	269.1
32.5°	176.6	184.8	202.0	224.1	247.0
35°	151.3	159.5	177.5	202.0	224.1
37.5°	125.9	134.9	155.4	178.3	197.1
40°	101.4	112.0	135.8	155.4	171.7
42.5°	76.9	91.6	116.9	133.3	146.4
45°	54.8	70.3	99.0	111.2	122.7
47.5°	41.7	54.0	81.8	90.8	98.1
50°	36.0	44.2	65.4	72.0	75.2
52.5°	31.1	39.3	52.3	54.8	53.2
55°	27.0	36.0	41.7	39.3	35.2
57.5°	22.9	33.5	34.3	29.4	30.3
60°	18.8	30.3	29.4	25.4	26.2
62.5°	15.5	27.8	25.4	22.9	22.9
65°	13.1	24.5	22.1	20.4	20.4
67.5°	10.6	22.1	19.6	18.0	18.0
70°	9.0	19.6	17.2	15.5	15.5
72.5°	8.2	17.2	15.5	13.9	13.9
75°	6.5	14.7	13.9	12.3	11.4
77.5°	5.7	12.3	12.3	11.4	9.8
80°	4.9	10.6	11.4	9.8	8.2
82.5°	4.9	9.8	9.8	9.0	6.5
85°	4.1	8.2	9.0	8.2	5.7
87.5°	2.5	7.4	7.4	6.5	4.1
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	9.33	10.60	9.69	10.92	11.23	8.85	10.13	9.22	10.44	10.76
	3H	10.50	11.64	10.88	11.97	12.34	10.41	11.55	10.79	11.88	12.25
	4H	10.93	11.99	11.33	12.34	12.73	11.09	12.16	11.50	12.51	12.89
	6H	11.27	12.25	11.69	12.62	13.02	11.74	12.72	12.16	13.09	13.48
	8H	11.47	12.40	11.90	12.79	13.19	12.03	12.96	12.46	13.35	13.75
	12H	11.69	12.58	12.12	12.96	13.39	12.35	13.23	12.78	13.61	14.04
4H	2H	9.83	10.89	10.23	11.24	11.63	9.45	10.51	9.86	10.86	11.25
	3H	11.48	12.35	11.89	12.75	13.16	11.25	12.13	11.66	12.53	12.93
	4H	12.24	13.02	12.67	13.44	13.89	12.09	12.88	12.53	13.30	13.74
	6H	12.84	13.52	13.30	13.97	14.43	12.95	13.63	13.41	14.07	14.54
	8H	13.14	13.77	13.61	14.22	14.69	13.34	13.97	13.81	14.42	14.89
	12H	13.45	14.02	13.94	14.50	14.97	13.77	14.33	14.26	14.82	15.29
8H	4H	12.66	13.29	13.13	13.74	14.21	12.55	13.19	13.02	13.63	14.11
	6H	13.60	14.12	14.11	14.62	15.10	13.66	14.18	14.16	14.68	15.16
	8H	14.15	14.62	14.67	15.13	15.63	14.24	14.71	14.76	15.22	15.71
	12H	14.72	15.13	15.23	15.63	16.20	14.91	15.32	15.42	15.81	16.39
12H	4H	12.73	13.29	13.21	13.77	14.25	12.63	13.20	13.12	13.68	14.15
	6H	13.78	14.25	14.31	14.77	15.26	13.84	14.31	14.36	14.83	15.32
	8H	14.48	14.89	14.99	15.39	15.96	14.55	14.97	15.07	15.46	16.03