

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: P1058531

Luminaire Tested: S122RDR-H865D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058531
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-H865D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

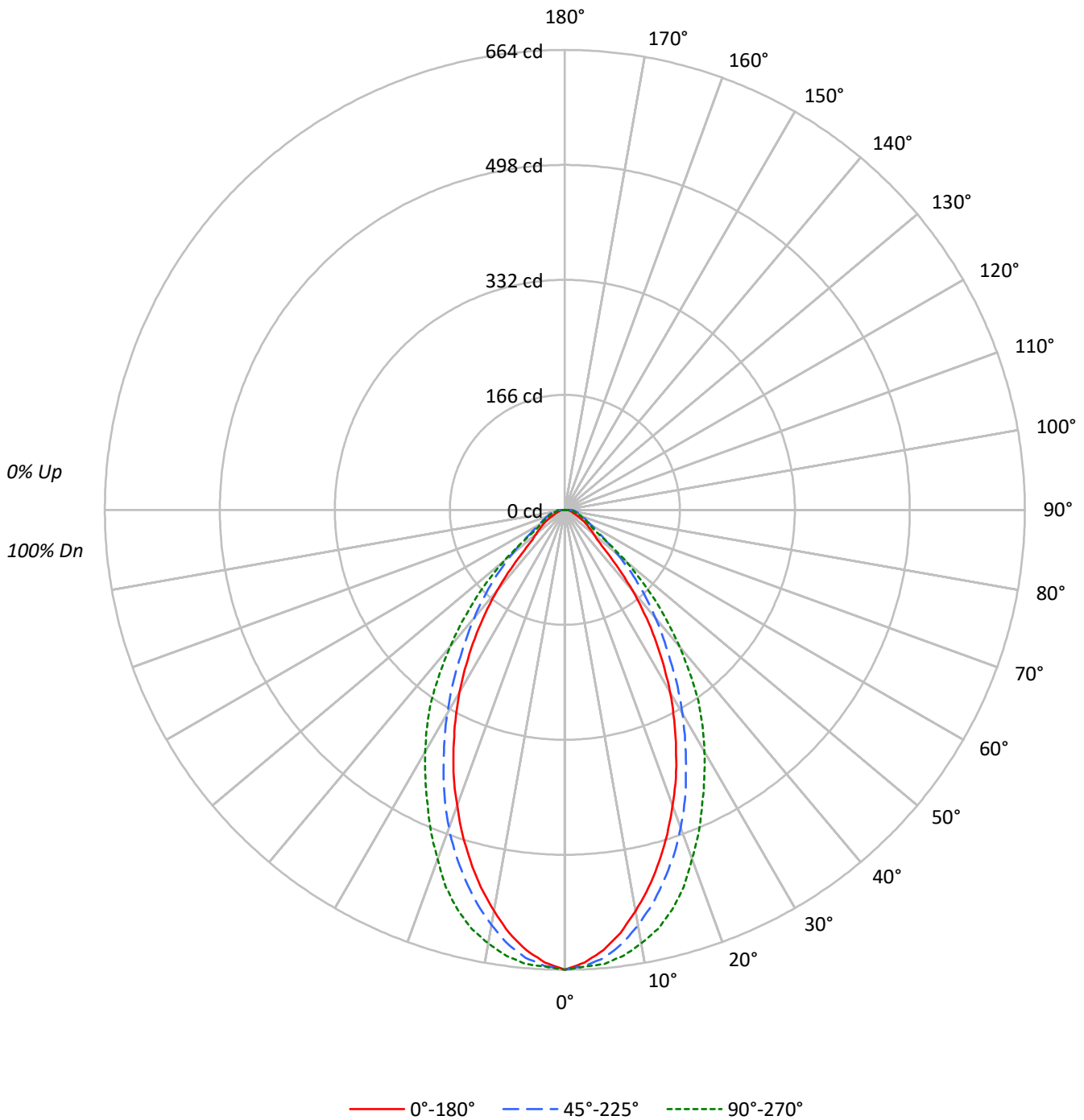
Lumens per Lamp: N/A
Luminaire Lumens: 800.9 lumens
Efficiency: N/A
Efficacy: 25.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	12251	12251	12251
5°	11821	12025	12184
10°	11017	11407	11911
15°	10039	10578	11420
20°	8925	9596	10535
25°	7731	8429	9551
30°	6473	7229	8587
35°	5104	5987	7560
40°	3659	4897	6195
45°	2142	3867	4794
50°	1547	2813	3235
55°	1300	2011	1695
60°	1041	1628	1447
65°	856	1445	1336
70°	728	1387	1257
75°	699	1483	1219
80°	776	1817	1296
85°	1291	2858	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4794 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	7.6
10°-20°	155.8	19.5
20°-30°	191.5	23.9
30°-40°	169.3	21.1
40°-50°	108.1	13.5
50°-60°	52.7	6.6
60°-70°	31.4	3.9
70°-80°	20.0	2.5
80°-90°	11.0	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°	408.2	51.0
0°-40°	577.6	72.1
0°-60°	738.4	92.2
0°-90°	800.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	664	664	664	664	664	
5°	638	652	649	652	658	59
15°	526	540	554	578	598	147
25°	380	393	414	440	469	174
35°	227	239	266	303	336	141
45°	82	105	148	167	184	69
55°	40	54	62	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°	663.9	663.9	663.9	663.9	663.9
2.5°	654.1	666.4	659.0	659.0	660.2
5°	638.2	651.7	649.2	651.7	657.8
7.5°	616.1	629.6	632.1	641.9	649.2
10°	588.0	601.4	608.8	624.7	635.7
12.5°	558.6	572.0	583.1	603.9	619.8
15°	525.5	540.2	553.7	578.2	597.8
17.5°	491.2	505.9	523.0	547.5	570.8
20°	454.5	467.9	488.7	512.0	536.5
22.5°	418.9	431.2	453.2	475.3	504.7
25°	379.7	393.2	414.0	439.8	469.1
27.5°	341.8	355.2	376.1	405.5	436.1
30°	303.8	316.0	339.3	369.9	403.0
32.5°	264.6	276.8	302.6	335.6	369.9
35°	226.6	238.9	265.8	302.6	335.6
37.5°	188.6	202.1	232.7	267.0	295.2
40°	151.9	167.8	203.3	232.7	257.2
42.5°	115.1	137.2	175.2	199.7	219.3
45°	82.1	105.3	148.2	166.6	183.7
47.5°	62.5	80.8	122.5	136.0	147.0
50°	53.9	66.1	98.0	107.8	112.7
52.5°	46.5	58.8	78.4	82.1	79.6
55°	40.4	53.9	62.5	58.8	52.7
57.5°	34.3	50.2	51.4	44.1	45.3
60°	28.2	45.3	44.1	38.0	39.2
62.5°	23.3	41.6	38.0	34.3	34.3
65°	19.6	36.7	33.1	30.6	30.6
67.5°	15.9	33.1	29.4	26.9	26.9
70°	13.5	29.4	25.7	23.3	23.3
72.5°	12.2	25.7	23.3	20.8	20.8
75°	9.8	22.0	20.8	18.4	17.1
77.5°	8.6	18.4	18.4	17.1	14.7
80°	7.3	15.9	17.1	14.7	12.2
82.5°	7.3	14.7	14.7	13.5	9.8
85°	6.1	12.2	13.5	12.2	8.6
87.5°	3.7	11.0	11.0	9.8	6.1
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	10.73	12.01	11.10	12.32	12.64	10.26	11.54	10.62	11.85	12.17
	3H	11.91	13.05	12.29	13.38	13.74	11.82	12.96	12.20	13.29	13.65
	4H	12.34	13.40	12.74	13.75	14.13	12.50	13.56	12.90	13.91	14.30
	6H	12.68	13.66	13.10	14.03	14.42	13.15	14.12	13.56	14.50	14.89
	8H	12.88	13.80	13.31	14.19	14.60	13.44	14.36	13.87	14.75	15.16
	12H	13.09	13.98	13.53	14.36	14.79	13.76	14.64	14.19	15.02	15.45
4H	2H	11.23	12.30	11.64	12.65	13.03	10.86	11.92	11.26	12.27	12.66
	3H	12.88	13.76	13.29	14.16	14.56	12.66	13.53	13.07	13.94	14.34
	4H	13.64	14.43	14.08	14.85	15.29	13.50	14.28	13.93	14.70	15.15
	6H	14.24	14.92	14.71	15.37	15.84	14.35	15.03	14.82	15.48	15.95
	8H	14.54	15.18	15.01	15.62	16.10	14.74	15.38	15.21	15.83	16.30
	12H	14.85	15.42	15.34	15.90	16.37	15.18	15.74	15.67	16.23	16.70
8H	4H	14.06	14.70	14.53	15.14	15.61	13.96	14.59	14.43	15.04	15.51
	6H	15.01	15.53	15.51	16.03	16.51	15.06	15.58	15.57	16.08	16.56
	8H	15.55	16.02	16.08	16.54	17.03	15.64	16.11	16.16	16.63	17.12
	12H	16.12	16.53	16.63	17.03	17.60	16.31	16.73	16.83	17.22	17.79
12H	4H	14.13	14.69	14.62	15.18	15.65	14.04	14.60	14.53	15.09	15.56
	6H	15.19	15.66	15.71	16.18	16.67	15.25	15.72	15.77	16.23	16.72
	8H	15.88	16.30	16.40	16.79	17.36	15.96	16.37	16.48	16.87	17.44