

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058127

Luminaire Tested: S122RDRP-S865D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058127
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

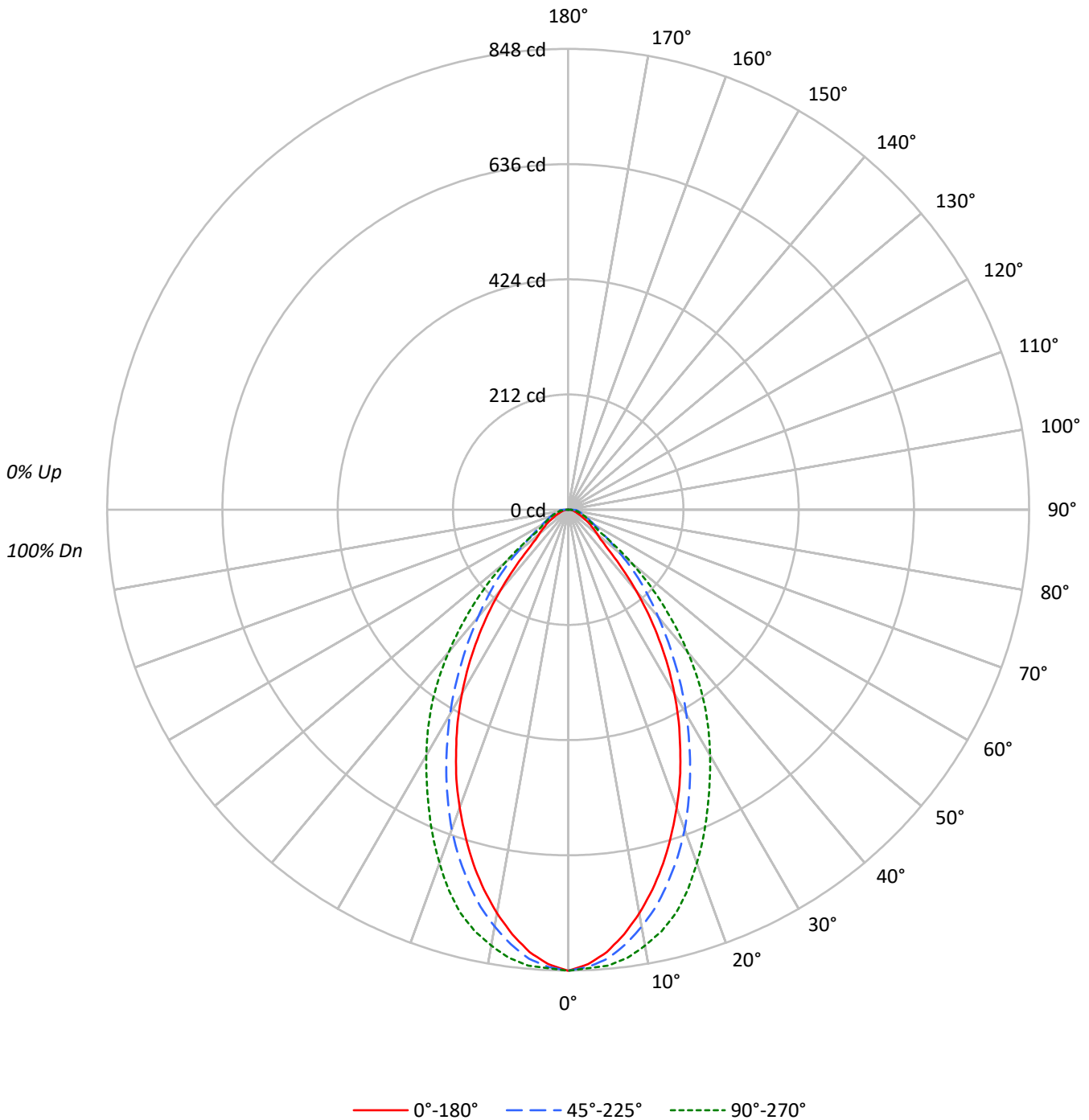
Lumens per Lamp: N/A
Luminaire Lumens: 1029.1 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	15655	15655	15655
5°	15131	15365	15598
10°	14126	14598	15260
15°	12883	13558	14666
20°	11462	12302	13591
25°	9934	10805	12346
30°	8327	9266	11120
35°	6560	7668	9853
40°	4675	6195	8228
45°	2764	4901	6383
50°	1989	3545	4343
55°	1663	2554	2191
60°	1351	2048	1860
65°	1100	1816	1707
70°	950	1770	1635
75°	898	1797	1618
80°	935	2147	1743
85°	1334	3472	2138

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6383 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	7.6
10°-20°	199.9	19.4
20°-30°	246.6	24.0
30°-40°	219.4	21.3
40°-50°	140.0	13.6
50°-60°	67.2	6.5
60°-70°	39.5	3.8
70°-80°	25.2	2.5
80°-90°	13.4	1.3
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°	524.4	51.0
0°-40°	743.7	72.3
0°-60°	951.0	92.4
0°-90°	1029.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1029.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	817	832	830	834	842	76
15°	674	691	710	742	768	188
25°	488	507	531	568	606	223
35°	291	314	340	392	437	181
45°	106	137	188	218	245	89
55°	52	67	79	77	68	47
65°	25	45	42	38	39	25
75°	13	28	25	24	23	14
85°	6	15	16	14	10	6
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°	837.1	850.9	842.1	842.1	844.6
5°	816.9	832.0	829.5	834.5	842.1
7.5°	787.9	804.3	806.8	820.7	832.0
10°	753.9	771.5	779.1	799.2	814.4
12.5°	716.0	733.7	747.6	772.8	794.2
15°	674.4	690.8	709.7	742.5	767.7
17.5°	629.1	650.5	669.4	703.4	732.4
20°	583.7	603.8	626.5	659.3	692.1
22.5°	537.0	555.9	578.6	612.7	650.5
25°	487.9	506.8	530.7	568.5	606.4
27.5°	440.0	458.9	481.6	523.2	563.5
30°	390.8	409.7	434.9	477.8	521.9
32.5°	341.6	361.8	387.0	433.7	480.3
35°	291.2	313.9	340.4	392.1	437.4
37.5°	242.0	264.7	297.5	347.9	390.8
40°	194.1	220.6	257.2	302.6	341.6
42.5°	147.5	176.5	221.9	258.4	292.5
45°	105.9	137.4	187.8	218.1	244.6
47.5°	80.7	103.4	155.1	179.0	197.9
50°	69.3	83.2	123.5	141.2	151.3
52.5°	60.5	73.1	98.3	107.2	107.2
55°	51.7	66.8	79.4	76.9	68.1
57.5°	44.1	60.5	65.6	55.5	58.0
60°	36.6	55.5	55.5	49.2	50.4
62.5°	30.3	51.7	47.9	42.9	44.1
65°	25.2	45.4	41.6	37.8	39.1
67.5°	20.2	40.3	36.6	34.0	34.0
70°	17.6	36.6	32.8	30.3	30.3
72.5°	15.1	31.5	29.0	26.5	26.5
75°	12.6	27.7	25.2	24.0	22.7
77.5°	11.3	24.0	22.7	20.2	18.9
80°	8.8	20.2	20.2	18.9	16.4
82.5°	7.6	17.6	17.6	16.4	13.9
85°	6.3	15.1	16.4	13.9	10.1
87.5°	5.0	13.9	13.9	11.3	7.6
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	11.23	12.50	11.59	12.82	13.13	11.02	12.30	11.39	12.61	12.93
	3H	12.46	13.59	12.84	13.92	14.29	12.61	13.75	12.99	14.08	14.44
	4H	12.91	13.97	13.31	14.32	14.70	13.33	14.39	13.73	14.74	15.12
	6H	13.29	14.26	13.71	14.63	15.03	13.98	14.96	14.40	15.33	15.72
	8H	13.45	14.37	13.88	14.76	15.16	14.31	15.23	14.74	15.63	16.03
	12H	13.60	14.49	14.04	14.87	15.30	14.61	15.49	15.04	15.88	16.31
4H	2H	11.78	12.84	12.18	13.19	13.57	11.61	12.67	12.02	13.02	13.41
	3H	13.47	14.34	13.89	14.75	15.15	13.45	14.32	13.86	14.73	15.13
	4H	14.27	15.05	14.70	15.47	15.91	14.33	15.11	14.76	15.53	15.97
	6H	14.91	15.59	15.37	16.03	16.50	15.17	15.85	15.63	16.29	16.76
	8H	15.16	15.79	15.63	16.24	16.71	15.60	16.23	16.07	16.68	17.15
	12H	15.41	15.97	15.89	16.45	16.92	16.00	16.56	16.49	17.04	17.52
8H	4H	14.69	15.32	15.15	15.77	16.24	14.74	15.38	15.21	15.82	16.30
	6H	15.66	16.18	16.17	16.68	17.16	15.83	16.35	16.33	16.84	17.33
	8H	16.15	16.62	16.68	17.14	17.63	16.42	16.89	16.94	17.40	17.90
	12H	16.66	17.07	17.17	17.56	18.13	17.02	17.44	17.54	17.93	18.50
12H	4H	14.75	15.31	15.24	15.80	16.27	14.82	15.38	15.31	15.86	16.34
	6H	15.83	16.30	16.35	16.81	17.31	15.99	16.46	16.51	16.98	17.47
	8H	16.47	16.88	16.98	17.37	17.95	16.71	17.12	17.22	17.61	18.18