

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: P1057799

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

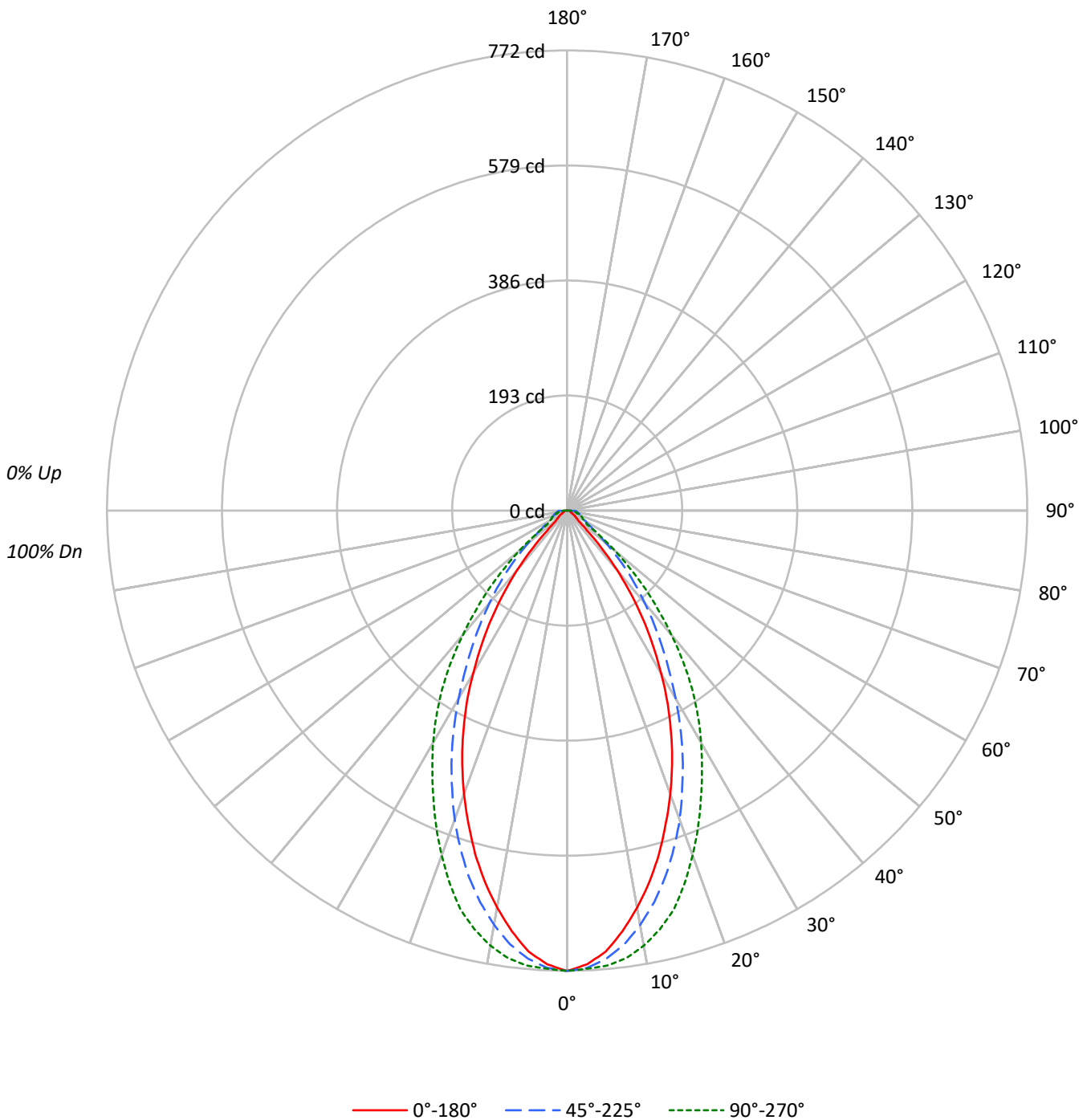
Lumens per Lamp: N/A
Luminaire Lumens: 832.5 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57					57			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14251	14251	14251
5°	13757	13976	14196
10°	12668	13223	13888
15°	11389	12154	13227
20°	9936	10837	12086
25°	8405	9337	10813
30°	6714	7756	9584
35°	4965	6233	8231
40°	3136	4883	6557
45°	1234	3669	4825
50°	637	2463	2974
55°	524	1618	1332
60°	384	1310	1199
65°	323	1227	1227
70°	318	1279	1198
75°	421	1476	1269
80°	627	1891	1413
85°	932	3133	1884

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 6261 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	8.5
10°-20°	178.4	21.4
20°-30°	212.0	25.5
30°-40°	176.4	21.2
40°-50°	98.5	11.8
50°-60°	39.8	4.8
60°-70°	25.5	3.1
70°-80°	19.1	2.3
80°-90°	12.2	1.5
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°	461.1	55.4
0°-40°	637.5	76.6
0°-60°	775.8	93.2
0°-90°	832.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	743	756	754	760	766	69
15°	596	614	636	669	692	166
25°	413	429	459	494	531	188
35°	220	241	277	322	365	137
45°	47	80	141	164	185	44
55°	16	34	50	49	41	14
65°	7	30	28	27	28	7
75°	6	21	21	19	18	6
85°	4	13	15	13	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.3	772.3	772.3	772.3	772.3
2.5°	761.9	773.8	767.9	767.9	769.3
5°	742.7	756.0	754.5	760.5	766.4
7.5°	711.6	726.4	733.8	747.1	757.5
10°	676.1	692.4	705.7	726.4	741.2
12.5°	637.7	653.9	673.2	699.8	719.0
15°	596.2	614.0	636.2	668.7	692.4
17.5°	550.4	569.6	594.8	630.3	655.4
20°	506.0	525.2	551.9	587.4	615.5
22.5°	460.1	476.4	504.5	540.0	574.0
25°	412.8	429.1	458.6	494.2	531.1
27.5°	365.4	381.7	411.3	448.3	489.7
30°	315.1	332.9	364.0	405.4	449.8
32.5°	267.8	285.5	318.1	364.0	408.3
35°	220.4	241.2	276.7	322.5	365.4
37.5°	174.6	198.3	238.2	281.1	319.6
40°	130.2	155.3	202.7	239.7	272.2
42.5°	85.8	115.4	170.1	201.2	226.4
45°	47.3	79.9	140.6	164.2	184.9
47.5°	26.6	51.8	111.0	130.2	142.0
50°	22.2	38.5	85.8	99.1	103.6
52.5°	17.8	35.5	65.1	72.5	69.5
55°	16.3	34.0	50.3	48.8	41.4
57.5°	13.3	34.0	39.9	35.5	35.5
60°	10.4	32.5	35.5	31.1	32.5
62.5°	8.9	31.1	32.5	29.6	29.6
65°	7.4	29.6	28.1	26.6	28.1
67.5°	5.9	26.6	26.6	25.2	25.2
70°	5.9	25.2	23.7	22.2	22.2
72.5°	5.9	22.2	22.2	20.7	20.7
75°	5.9	20.7	20.7	19.2	17.8
77.5°	5.9	17.8	19.2	17.8	16.3
80°	5.9	16.3	17.8	16.3	13.3
82.5°	5.9	14.8	16.3	14.8	11.8
85°	4.4	13.3	14.8	13.3	8.9
87.5°	4.4	13.3	14.8	11.8	7.4
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	7.59	8.81	7.96	9.12	9.44	8.67	9.89	9.03	10.20	10.52
	3H	8.92	10.01	9.30	10.34	10.70	10.70	11.79	11.09	12.12	12.48
	4H	9.50	10.51	9.90	10.86	11.24	11.66	12.67	12.06	13.02	13.41
	6H	10.06	10.99	10.48	11.36	11.76	12.61	13.54	13.02	13.91	14.30
	8H	10.39	11.27	10.82	11.66	12.07	13.05	13.93	13.49	14.32	14.73
	12H	10.69	11.53	11.13	11.92	12.35	13.48	14.32	13.91	14.70	15.13
4H	2H	8.55	9.56	8.96	9.92	10.30	9.35	10.36	9.75	10.71	11.09
	3H	10.59	11.42	11.00	11.82	12.23	11.63	12.47	12.05	12.87	13.28
	4H	11.67	12.41	12.10	12.83	13.28	12.78	13.53	13.22	13.95	14.39
	6H	12.54	13.19	13.00	13.63	14.10	13.95	14.60	14.42	15.05	15.52
	8H	12.95	13.56	13.42	14.00	14.48	14.51	15.12	14.98	15.57	16.04
	12H	13.33	13.86	13.81	14.35	14.82	15.06	15.59	15.54	16.08	16.55
8H	4H	12.44	13.04	12.91	13.49	13.96	13.33	13.94	13.80	14.38	14.86
	6H	13.78	14.28	14.28	14.77	15.26	14.79	15.29	15.29	15.78	16.27
	8H	14.50	14.94	15.02	15.46	15.95	15.55	16.00	16.07	16.51	17.01
	12H	15.19	15.58	15.70	16.07	16.65	16.34	16.73	16.85	17.23	17.80
12H	4H	12.59	13.13	13.08	13.61	14.09	13.44	13.97	13.93	14.46	14.93
	6H	14.10	14.55	14.63	15.07	15.56	15.02	15.46	15.54	15.98	16.47
	8H	15.01	15.40	15.52	15.89	16.47	15.92	16.31	16.44	16.81	17.38