

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: P1058159

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058159
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-S865D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

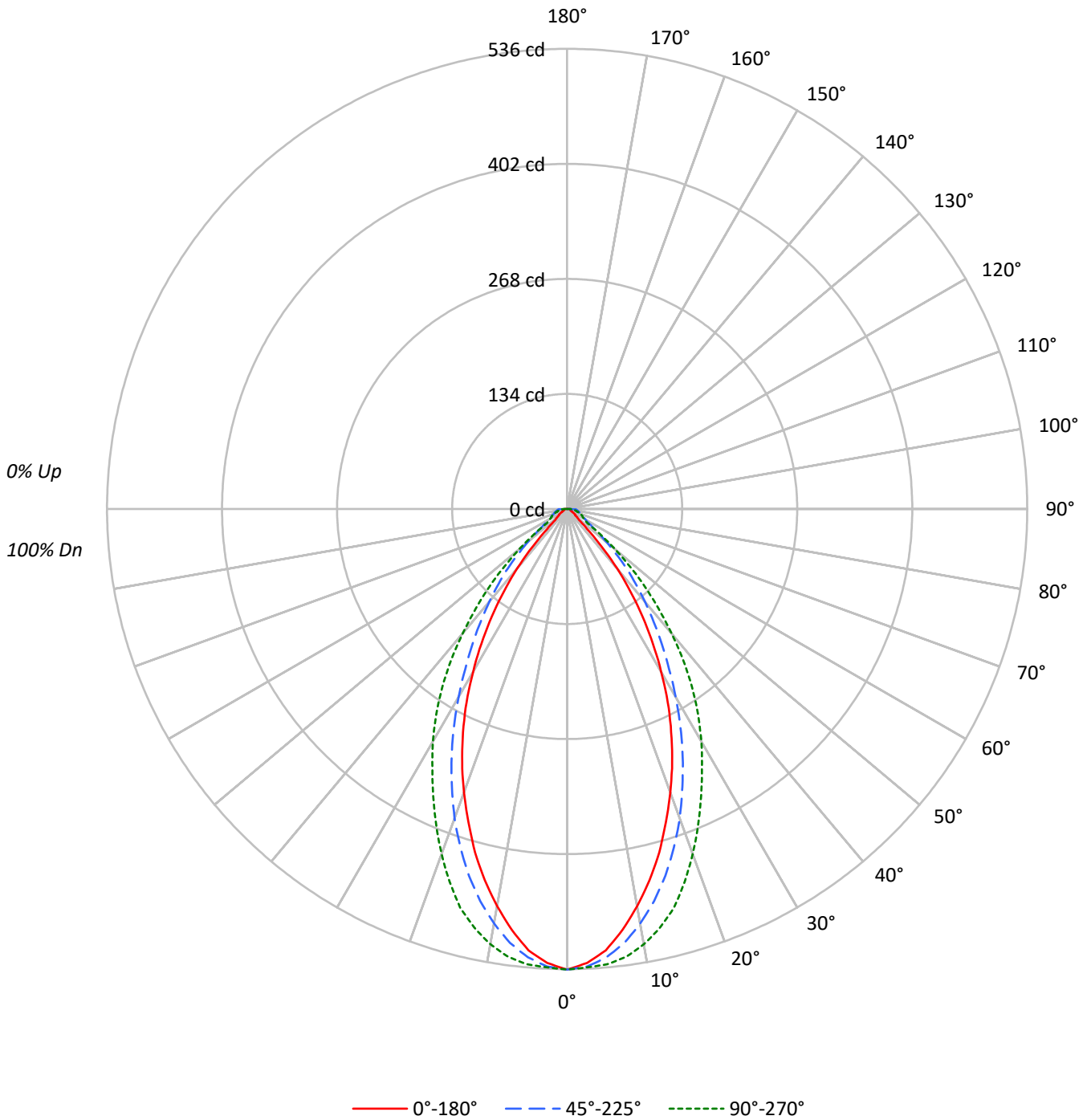
Lumens per Lamp: N/A
Luminaire Lumens: 578.3 lumens
Efficiency: N/A
Efficacy: 16.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9900	9900	9900
5°	9558	9710	9862
10°	8801	9187	9648
15°	7913	8444	9189
20°	6902	7529	8397
25°	5839	6487	7513
30°	4664	5386	6658
35°	3449	4330	5719
40°	2178	3392	4555
45°	859	2547	3353
50°	442	1711	2064
55°	364	1123	927
60°	266	912	834
65°	223	851	851
70°	221	885	831
75°	292	1027	877
80°	436	1307	988
85°	656	2181	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4357 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	8.5
10°-20°	124.0	21.4
20°-30°	147.3	25.5
30°-40°	122.5	21.2
40°-50°	68.4	11.8
50°-60°	27.6	4.8
60°-70°	17.7	3.1
70°-80°	13.3	2.3
80°-90°	8.5	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°	320.3	55.4
0°-40°	442.8	76.6
0°-60°	538.9	93.2
0°-90°	578.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	516	525	524	528	532	48
15°	414	426	442	465	481	115
25°	287	298	319	343	369	131
35°	153	168	192	224	254	95
45°	33	56	98	114	128	31
55°	11	24	35	34	29	10
65°	5	21	20	18	20	5
75°	4	14	14	13	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.5	536.5	536.5	536.5	536.5
2.5°	529.3	537.5	533.4	533.4	534.5
5°	516.0	525.2	524.2	528.3	532.4
7.5°	494.4	504.7	509.8	519.0	526.2
10°	469.7	481.0	490.3	504.7	514.9
12.5°	443.0	454.3	467.7	486.2	499.5
15°	414.2	426.5	442.0	464.6	481.0
17.5°	382.3	395.7	413.2	437.8	455.3
20°	351.5	364.9	383.4	408.0	427.6
22.5°	319.6	331.0	350.5	375.1	398.8
25°	286.8	298.1	318.6	343.3	369.0
27.5°	253.9	265.2	285.7	311.4	340.2
30°	218.9	231.3	252.8	281.6	312.5
32.5°	186.0	198.4	221.0	252.8	283.7
35°	153.1	167.5	192.2	224.1	253.9
37.5°	121.3	137.7	165.5	195.3	222.0
40°	90.4	107.9	140.8	166.5	189.1
42.5°	59.6	80.2	118.2	139.8	157.3
45°	32.9	55.5	97.6	114.1	128.5
47.5°	18.5	36.0	77.1	90.4	98.7
50°	15.4	26.7	59.6	68.9	71.9
52.5°	12.3	24.7	45.2	50.4	48.3
55°	11.3	23.6	34.9	33.9	28.8
57.5°	9.3	23.6	27.8	24.7	24.7
60°	7.2	22.6	24.7	21.6	22.6
62.5°	6.2	21.6	22.6	20.6	20.6
65°	5.1	20.6	19.5	18.5	19.5
67.5°	4.1	18.5	18.5	17.5	17.5
70°	4.1	17.5	16.4	15.4	15.4
72.5°	4.1	15.4	15.4	14.4	14.4
75°	4.1	14.4	14.4	13.4	12.3
77.5°	4.1	12.3	13.4	12.3	11.3
80°	4.1	11.3	12.3	11.3	9.3
82.5°	4.1	10.3	11.3	10.3	8.2
85°	3.1	9.3	10.3	9.3	6.2
87.5°	3.1	9.3	10.3	8.2	5.1
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	6.32	7.54	6.69	7.85	8.17	7.41	8.63	7.78	8.95	9.26
	3H	7.66	8.74	8.04	9.07	9.44	9.44	10.53	9.82	10.86	11.22
	4H	8.23	9.24	8.64	9.59	9.98	10.39	11.41	10.80	11.76	12.14
	6H	8.80	9.73	9.21	10.10	10.49	11.34	12.27	11.76	12.64	13.04
	8H	9.12	10.00	9.55	10.39	10.80	11.79	12.67	12.22	13.06	13.47
	12H	9.43	10.27	9.86	10.66	11.09	12.21	13.06	12.65	13.44	13.87
4H	2H	7.29	8.30	7.69	8.65	9.03	8.09	9.10	8.49	9.45	9.83
	3H	9.32	10.15	9.73	10.55	10.96	10.37	11.20	10.78	11.61	12.01
	4H	10.40	11.15	10.83	11.57	12.01	11.52	12.26	11.95	12.69	13.13
	6H	11.27	11.92	11.73	12.36	12.83	12.69	13.33	13.15	13.78	14.25
	8H	11.68	12.29	12.15	12.73	13.21	13.25	13.85	13.72	14.30	14.77
	12H	12.06	12.60	12.55	13.08	13.56	13.79	14.33	14.28	14.81	15.29
8H	4H	11.17	11.78	11.64	12.22	12.70	12.07	12.67	12.54	13.12	13.59
	6H	12.51	13.00	13.01	13.50	13.98	13.52	14.02	14.02	14.51	15.00
	8H	13.23	13.67	13.75	14.19	14.68	14.29	14.73	14.81	15.25	15.74
	12H	13.92	14.32	14.44	14.81	15.39	15.08	15.47	15.59	15.97	16.54
12H	4H	11.33	11.86	11.81	12.35	12.82	12.17	12.71	12.66	13.19	13.67
	6H	12.83	13.28	13.35	13.79	14.29	13.75	14.19	14.27	14.71	15.20
	8H	13.74	14.13	14.25	14.62	15.20	14.65	15.05	15.17	15.54	16.12