

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: P1058042

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058042
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-S675D835-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

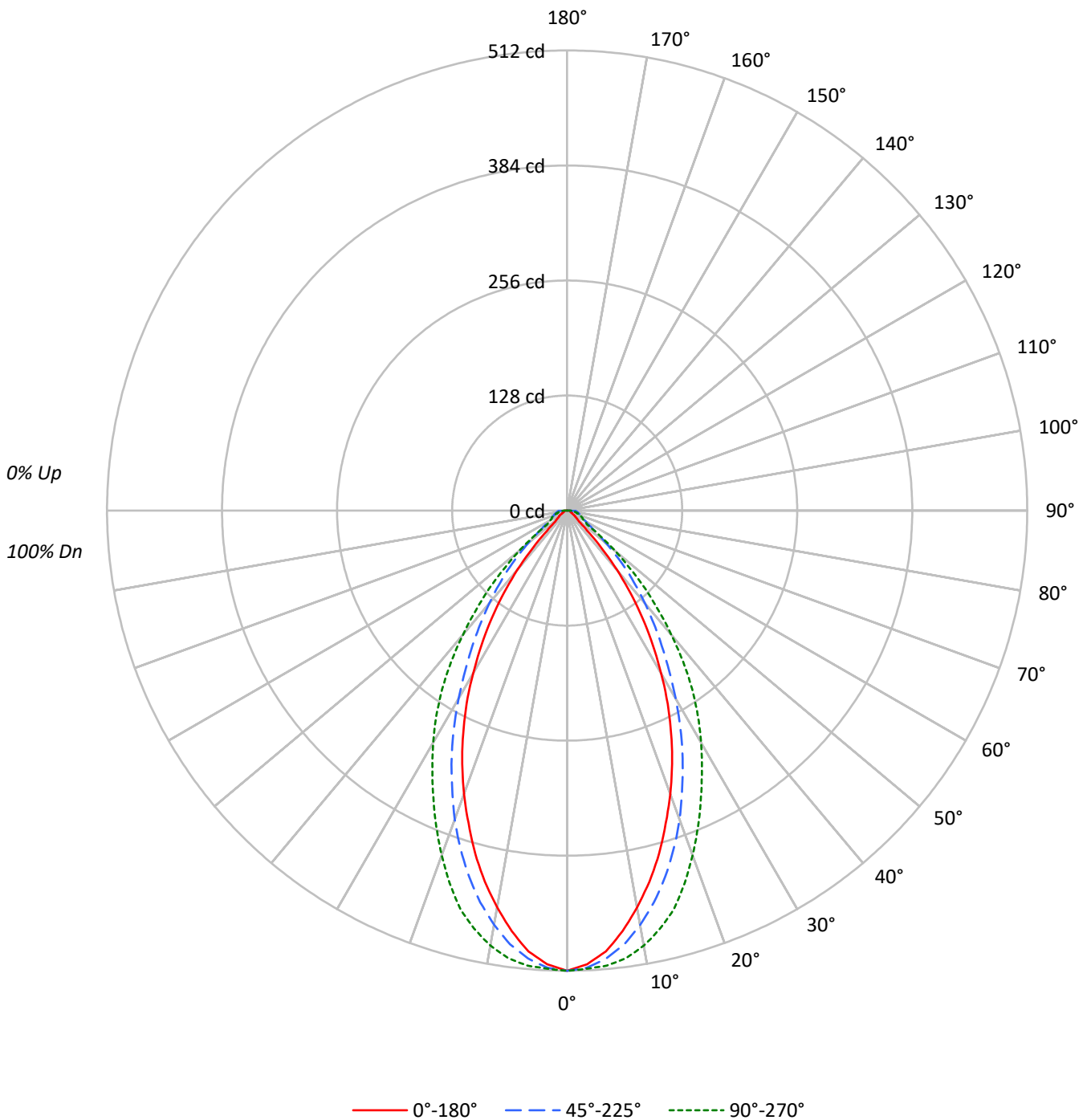
Lumens per Lamp: N/A
Luminaire Lumens: 552.0 lumens
Efficiency: N/A
Efficacy: 21.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	9450	9450	9450
5°	9123	9267	9413
10°	8400	8767	9209
15°	7552	8058	8770
20°	6588	7185	8014
25°	5573	6191	7171
30°	4453	5141	6354
35°	3293	4131	5458
40°	2079	3237	4348
45°	819	2432	3199
50°	422	1633	1972
55°	347	1075	885
60°	255	867	797
65°	214	812	812
70°	210	847	793
75°	278	977	841
80°	414	1254	935
85°	614	2075	1249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4146 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	8.5
10°-20°	118.3	21.4
20°-30°	140.6	25.5
30°-40°	116.9	21.2
40°-50°	65.3	11.8
50°-60°	26.4	4.8
60°-70°	16.9	3.1
70°-80°	12.7	2.3
80°-90°	8.1	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°	305.7	55.4
0°-40°	422.7	76.6
0°-60°	514.4	93.2
0°-90°	552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	492	501	500	504	508	46
15°	395	407	422	443	459	110
25°	274	284	304	328	352	125
35°	146	160	183	214	242	91
45°	31	53	93	109	123	30
55°	11	23	33	32	28	9
65°	5	20	19	18	19	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°	512.1	512.1	512.1	512.1	512.1
2.5°	505.2	513.1	509.1	509.1	510.1
5°	492.5	501.3	500.3	504.2	508.2
7.5°	471.9	481.7	486.6	495.4	502.3
10°	448.3	459.1	467.9	481.7	491.5
12.5°	422.8	433.6	446.4	464.0	476.8
15°	395.3	407.1	421.8	443.4	459.1
17.5°	364.9	377.7	394.4	417.9	434.6
20°	335.5	348.3	365.9	389.5	408.1
22.5°	305.1	315.9	334.5	358.1	380.6
25°	273.7	284.5	304.1	327.7	352.2
27.5°	242.3	253.1	272.7	297.2	324.7
30°	209.0	220.7	241.3	268.8	298.2
32.5°	177.6	189.3	210.9	241.3	270.8
35°	146.2	159.9	183.4	213.9	242.3
37.5°	115.8	131.5	157.9	186.4	211.9
40°	86.3	103.0	134.4	158.9	180.5
42.5°	56.9	76.5	112.8	133.4	150.1
45°	31.4	53.0	93.2	108.9	122.6
47.5°	17.7	34.3	73.6	86.3	94.2
50°	14.7	25.5	56.9	65.7	68.7
52.5°	11.8	23.5	43.2	48.1	46.1
55°	10.8	22.6	33.4	32.4	27.5
57.5°	8.8	22.6	26.5	23.5	23.5
60°	6.9	21.6	23.5	20.6	21.6
62.5°	5.9	20.6	21.6	19.6	19.6
65°	4.9	19.6	18.6	17.7	18.6
67.5°	3.9	17.7	17.7	16.7	16.7
70°	3.9	16.7	15.7	14.7	14.7
72.5°	3.9	14.7	14.7	13.7	13.7
75°	3.9	13.7	13.7	12.8	11.8
77.5°	3.9	11.8	12.8	11.8	10.8
80°	3.9	10.8	11.8	10.8	8.8
82.5°	3.9	9.8	10.8	9.8	7.8
85°	2.9	8.8	9.8	8.8	5.9
87.5°	2.9	8.8	9.8	7.8	4.9
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	6.18	7.40	6.54	7.71	8.02	7.23	8.45	7.60	8.76	9.08
	3H	7.51	8.59	7.89	8.92	9.29	9.27	10.35	9.65	10.68	11.05
	4H	8.08	9.09	8.48	9.44	9.82	10.23	11.24	10.63	11.59	11.97
	6H	8.64	9.57	9.06	9.94	10.34	11.17	12.10	11.59	12.47	12.87
	8H	8.96	9.84	9.39	10.23	10.64	11.62	12.50	12.05	12.89	13.30
	12H	9.26	10.11	9.70	10.49	10.92	12.04	12.88	12.47	13.27	13.70
4H	2H	7.13	8.14	7.54	8.50	8.88	7.91	8.92	8.31	9.27	9.66
	3H	9.16	9.99	9.58	10.40	10.80	10.20	11.03	10.61	11.44	11.84
	4H	10.24	10.98	10.67	11.41	11.85	11.35	12.10	11.79	12.52	12.96
	6H	11.11	11.76	11.57	12.20	12.67	12.52	13.17	12.99	13.62	14.09
	8H	11.52	12.12	11.99	12.57	13.04	13.08	13.69	13.55	14.13	14.61
	12H	11.89	12.43	12.38	12.91	13.39	13.62	14.16	14.11	14.64	15.12
8H	4H	11.01	11.62	11.48	12.06	12.54	11.90	12.51	12.37	12.96	13.43
	6H	12.35	12.85	12.86	13.35	13.83	13.36	13.86	13.86	14.35	14.84
	8H	13.07	13.51	13.59	14.03	14.52	14.12	14.57	14.64	15.08	15.58
	12H	13.75	14.14	14.27	14.64	15.21	14.90	15.30	15.42	15.79	16.37
12H	4H	11.17	11.70	11.65	12.19	12.66	12.01	12.55	12.50	13.03	13.51
	6H	12.67	13.12	13.20	13.64	14.13	13.59	14.03	14.11	14.55	15.04
	8H	13.57	13.97	14.09	14.46	15.04	14.49	14.88	15.01	15.38	15.95