

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: P1058062

Luminaire Tested: S122RDRP-S675D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058062
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

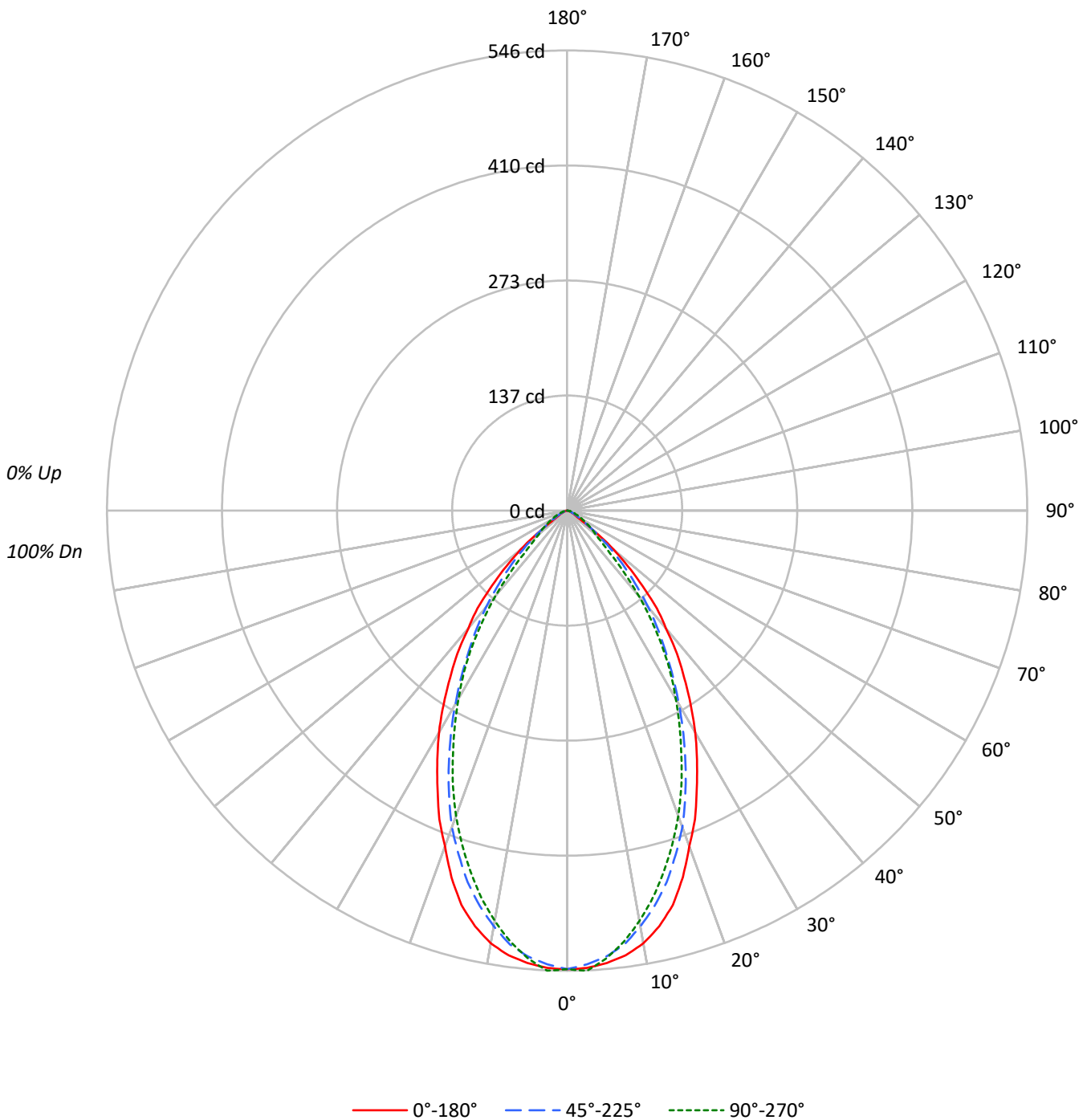
Lumens per Lamp: N/A
Luminaire Lumens: 585.3 lumens
Efficiency: N/A
Efficacy: 22.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10042	10042	10042
5°	9980	9839	9880
10°	9770	9384	9262
15°	9256	8717	8467
20°	8320	7851	7572
25°	7409	6768	6525
30°	6482	5649	5487
35°	5456	4575	4429
40°	4396	3611	3192
45°	3288	2607	1900
50°	2058	1685	1249
55°	698	907	1013
60°	402	561	801
65°	284	380	616
70°	232	291	469
75°	157	235	385
80°	117	234	351
85°	0	0	233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	8.6
10°-20°	128.4	21.9
20°-30°	154.6	26.4
30°-40°	132.1	22.6
40°-50°	77.4	13.2
50°-60°	28.0	4.8
60°-70°	9.9	1.7
70°-80°	4.0	0.7
80°-90°	0.7	0.1
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°	333.2	56.9
0°-40°	465.3	79.5
0°-60°	570.7	97.5
0°-90°	585.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	585.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	544	544	544	544	544	
5°	539	540	531	533	533	51
15°	484	477	456	448	443	135
25°	364	349	332	327	320	167
35°	242	224	203	201	197	151
45°	126	113	100	84	73	97
55°	22	30	28	29	32	27
65°	6	8	9	12	14	7
75°	2	3	3	4	5	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	544.2	544.2	544.2	544.2	544.2
2.5°	543.2	544.2	538.8	544.2	546.4
5°	538.8	539.9	531.2	533.4	533.4
7.5°	532.3	531.2	519.3	517.1	516.0
10°	521.4	518.2	500.8	497.5	494.3
12.5°	505.1	498.6	480.2	474.7	470.4
15°	484.5	476.9	456.3	447.6	443.2
17.5°	456.3	447.6	428.0	419.3	415.0
20°	423.7	415.0	399.8	390.0	385.6
22.5°	396.5	382.4	366.1	359.6	354.1
25°	363.9	348.7	332.4	327.0	320.5
27.5°	333.5	315.0	298.7	294.4	289.0
30°	304.2	284.6	265.1	265.1	257.5
32.5°	272.7	254.2	233.6	232.5	228.1
35°	242.2	223.8	203.1	201.0	196.6
37.5°	214.0	195.5	176.0	169.5	164.0
40°	182.5	166.2	149.9	139.0	132.5
42.5°	157.5	139.0	122.8	109.7	101.0
45°	126.0	113.0	99.9	83.6	72.8
47.5°	97.8	89.1	78.2	59.7	54.3
50°	71.7	67.4	58.7	44.5	43.5
52.5°	45.6	47.8	42.4	34.8	38.0
55°	21.7	30.4	28.2	29.3	31.5
57.5°	14.1	15.2	20.6	23.9	26.1
60°	10.9	10.9	15.2	19.6	21.7
62.5°	8.7	8.7	11.9	16.3	17.4
65°	6.5	7.6	8.7	11.9	14.1
67.5°	5.4	5.4	6.5	9.8	10.9
70°	4.3	4.3	5.4	7.6	8.7
72.5°	3.3	3.3	4.3	6.5	6.5
75°	2.2	3.3	3.3	4.3	5.4
77.5°	2.2	2.2	2.2	3.3	4.3
80°	1.1	1.1	2.2	2.2	3.3
82.5°	1.1	1.1	1.1	1.1	2.2
85°	0.0	0.0	0.0	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0
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	3.89	5.06	4.26	5.37	5.68	7.30	8.46	7.66	8.77	9.09
	3H	4.41	5.43	4.79	5.76	6.13	8.03	9.05	8.41	9.38	9.75
	4H	4.55	5.49	4.95	5.85	6.23	8.24	9.19	8.65	9.54	9.93
	6H	4.62	5.49	5.04	5.87	6.26	8.39	9.26	8.81	9.63	10.03
	8H	4.63	5.45	5.06	5.84	6.25	8.43	9.24	8.86	9.63	10.04
	12H	4.60	5.38	5.03	5.76	6.19	8.43	9.21	8.86	9.59	10.02
4H	2H	4.20	5.15	4.61	5.50	5.89	7.26	8.21	7.67	8.56	8.95
	3H	4.85	5.62	5.27	6.03	6.43	8.14	8.91	8.55	9.31	9.72
	4H	5.10	5.79	5.54	6.21	6.66	8.42	9.10	8.85	9.52	9.97
	6H	5.23	5.82	5.70	6.26	6.73	8.64	9.23	9.11	9.68	10.15
	8H	5.25	5.79	5.72	6.24	6.72	8.69	9.24	9.16	9.69	10.16
	12H	5.21	5.69	5.70	6.18	6.65	8.71	9.19	9.20	9.68	10.15
8H	4H	5.21	5.76	5.69	6.21	6.68	8.35	8.89	8.82	9.34	9.82
	6H	5.39	5.83	5.89	6.33	6.81	8.61	9.05	9.12	9.55	10.04
	8H	5.43	5.83	5.96	6.35	6.84	8.68	9.07	9.20	9.59	10.09
	12H	5.41	5.76	5.93	6.26	6.83	8.74	9.09	9.26	9.58	10.16
12H	4H	5.20	5.68	5.69	6.16	6.64	8.30	8.78	8.79	9.26	9.74
	6H	5.39	5.78	5.91	6.30	6.80	8.56	8.96	9.09	9.48	9.97
	8H	5.46	5.81	5.98	6.31	6.88	8.65	9.00	9.17	9.50	10.07