

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058494

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058494
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: S122RDR-H675D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

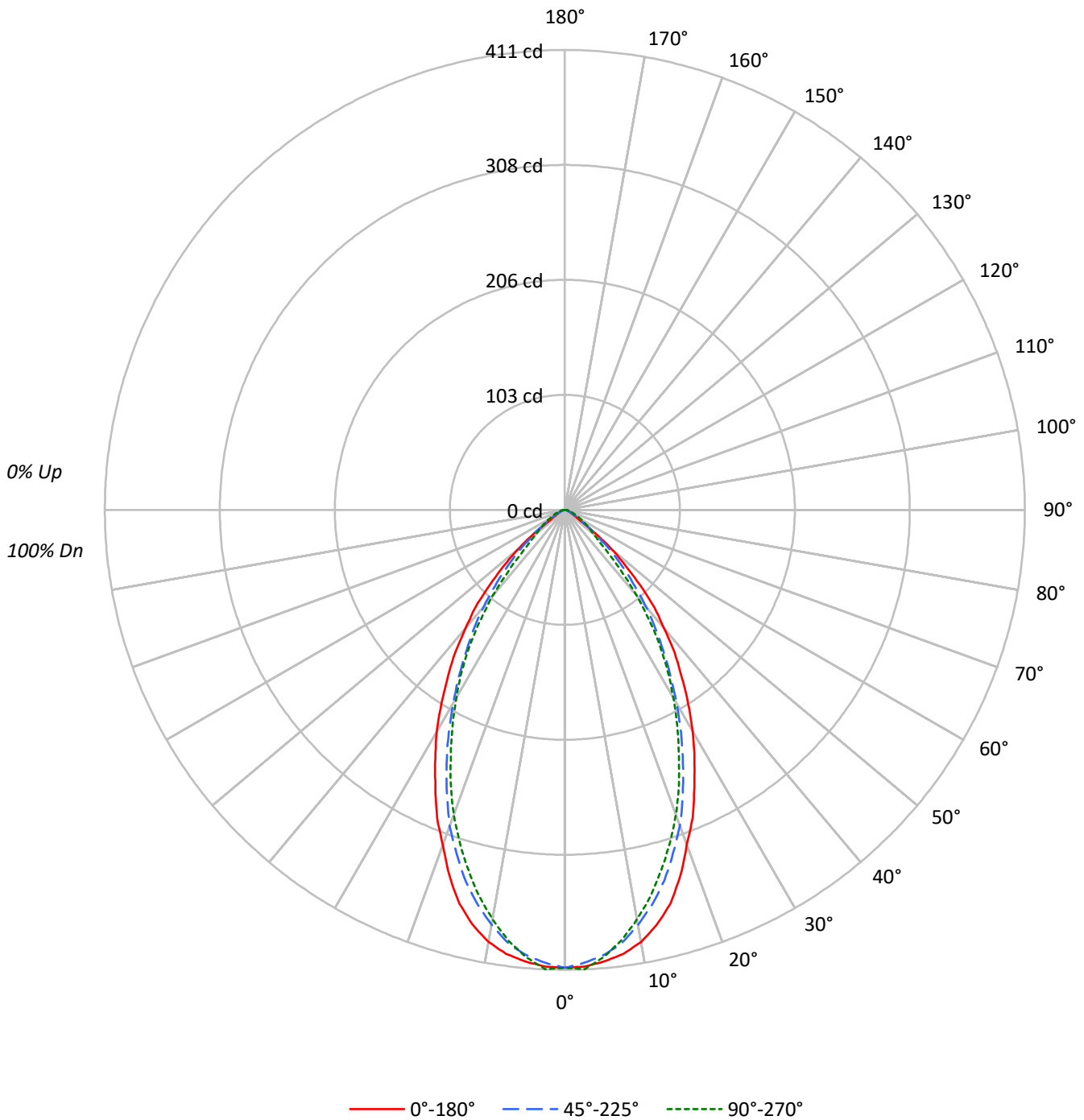
Lumens per Lamp: N/A
Luminaire Lumens: 440.1 lumens
Efficiency: N/A
Efficacy: 18.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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									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	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°	7551	7551	7551
5°	7504	7398	7428
10°	7345	7055	6963
15°	6959	6552	6365
20°	6254	5903	5693
25°	5571	5088	4905
30°	4873	4246	4125
35°	4102	3440	3329
40°	3305	2715	2399
45°	2471	1960	1427
50°	1547	1266	939
55°	524	682	762
60°	303	421	602
65°	214	284	463
70°	178	221	351
75°	114	178	292
80°	85	170	266
85°	0	0	169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2471 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	8.6
10°-20°	96.5	21.9
20°-30°	116.2	26.4
30°-40°	99.3	22.6
40°-50°	58.2	13.2
50°-60°	21.1	4.8
60°-70°	7.5	1.7
70°-80°	3.0	0.7
80°-90°	0.5	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°	250.5	56.9
0°-40°	349.8	79.5
0°-60°	429.1	97.5
0°-90°	440.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	440.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	405	406	399	401	401	38
15°	364	358	343	336	333	101
25°	274	262	250	246	241	126
35°	182	168	153	151	148	114
45°	95	85	75	63	55	73
55°	16	23	21	22	24	20
65°	5	6	6	9	11	5
75°	2	2	2	3	4	2
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°	409.2	409.2	409.2	409.2	409.2
2.5°	408.4	409.2	405.1	409.2	410.8
5°	405.1	405.9	399.4	401.0	401.0
7.5°	400.2	399.4	390.4	388.8	387.9
10°	392.0	389.6	376.5	374.1	371.6
12.5°	379.8	374.9	361.0	356.9	353.6
15°	364.3	358.5	343.0	336.5	333.2
17.5°	343.0	336.5	321.8	315.3	312.0
20°	318.5	312.0	300.6	293.2	289.9
22.5°	298.1	287.5	275.2	270.3	266.2
25°	273.6	262.2	249.9	245.8	240.9
27.5°	250.7	236.8	224.6	221.3	217.2
30°	228.7	214.0	199.3	199.3	193.6
32.5°	205.0	191.1	175.6	174.8	171.5
35°	182.1	168.2	152.7	151.1	147.8
37.5°	160.9	147.0	132.3	127.4	123.3
40°	137.2	125.0	112.7	104.5	99.6
42.5°	118.4	104.5	92.3	82.5	76.0
45°	94.7	84.9	75.1	62.9	54.7
47.5°	73.5	67.0	58.8	44.9	40.8
50°	53.9	50.6	44.1	33.5	32.7
52.5°	34.3	35.9	31.9	26.1	28.6
55°	16.3	22.9	21.2	22.1	23.7
57.5°	10.6	11.4	15.5	18.0	19.6
60°	8.2	8.2	11.4	14.7	16.3
62.5°	6.5	6.5	9.0	12.3	13.1
65°	4.9	5.7	6.5	9.0	10.6
67.5°	4.1	4.1	4.9	7.4	8.2
70°	3.3	3.3	4.1	5.7	6.5
72.5°	2.5	2.5	3.3	4.9	4.9
75°	1.6	2.5	2.5	3.3	4.1
77.5°	1.6	1.6	1.6	2.5	3.3
80°	0.8	0.8	1.6	1.6	2.5
82.5°	0.8	0.8	0.8	0.8	1.6
85°	0.0	0.0	0.0	0.8	0.8
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	2.89	4.05	3.26	4.37	4.68	6.31	7.48	6.68	7.79	8.10
	3H	3.42	4.44	3.80	4.78	5.14	7.04	8.06	7.42	8.40	8.76
	4H	3.56	4.51	3.96	4.86	5.25	7.26	8.21	7.67	8.56	8.95
	6H	3.63	4.49	4.04	4.87	5.26	7.42	8.28	7.83	8.66	9.05
	8H	3.63	4.45	4.06	4.84	5.25	7.45	8.26	7.88	8.66	9.06
	12H	3.59	4.37	4.03	4.76	5.19	7.44	8.22	7.88	8.61	9.04
4H	2H	3.20	4.15	3.60	4.50	4.88	6.28	7.22	6.68	7.58	7.96
	3H	3.87	4.64	4.29	5.05	5.45	7.15	7.92	7.57	8.33	8.73
	4H	4.12	4.80	4.56	5.23	5.67	7.44	8.12	7.88	8.54	8.99
	6H	4.23	4.82	4.70	5.27	5.74	7.67	8.25	8.14	8.70	9.17
	8H	4.24	4.79	4.72	5.24	5.71	7.71	8.26	8.18	8.71	9.18
	12H	4.21	4.69	4.70	5.17	5.65	7.73	8.21	8.22	8.69	9.17
8H	4H	4.23	4.77	4.70	5.22	5.70	7.37	7.92	7.84	8.36	8.84
	6H	4.38	4.82	4.89	5.33	5.81	7.63	8.07	8.14	8.57	9.06
	8H	4.42	4.82	4.95	5.34	5.83	7.69	8.09	8.22	8.61	9.10
	12H	4.40	4.75	4.92	5.25	5.82	7.75	8.09	8.26	8.59	9.17
12H	4H	4.21	4.69	4.70	5.18	5.65	7.32	7.80	7.81	8.29	8.76
	6H	4.38	4.78	4.91	5.29	5.79	7.58	7.98	8.11	8.50	8.99
	8H	4.45	4.80	4.97	5.29	5.87	7.66	8.01	8.18	8.51	9.08