

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: P1058450

Luminaire Tested: S122RDR-H675D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

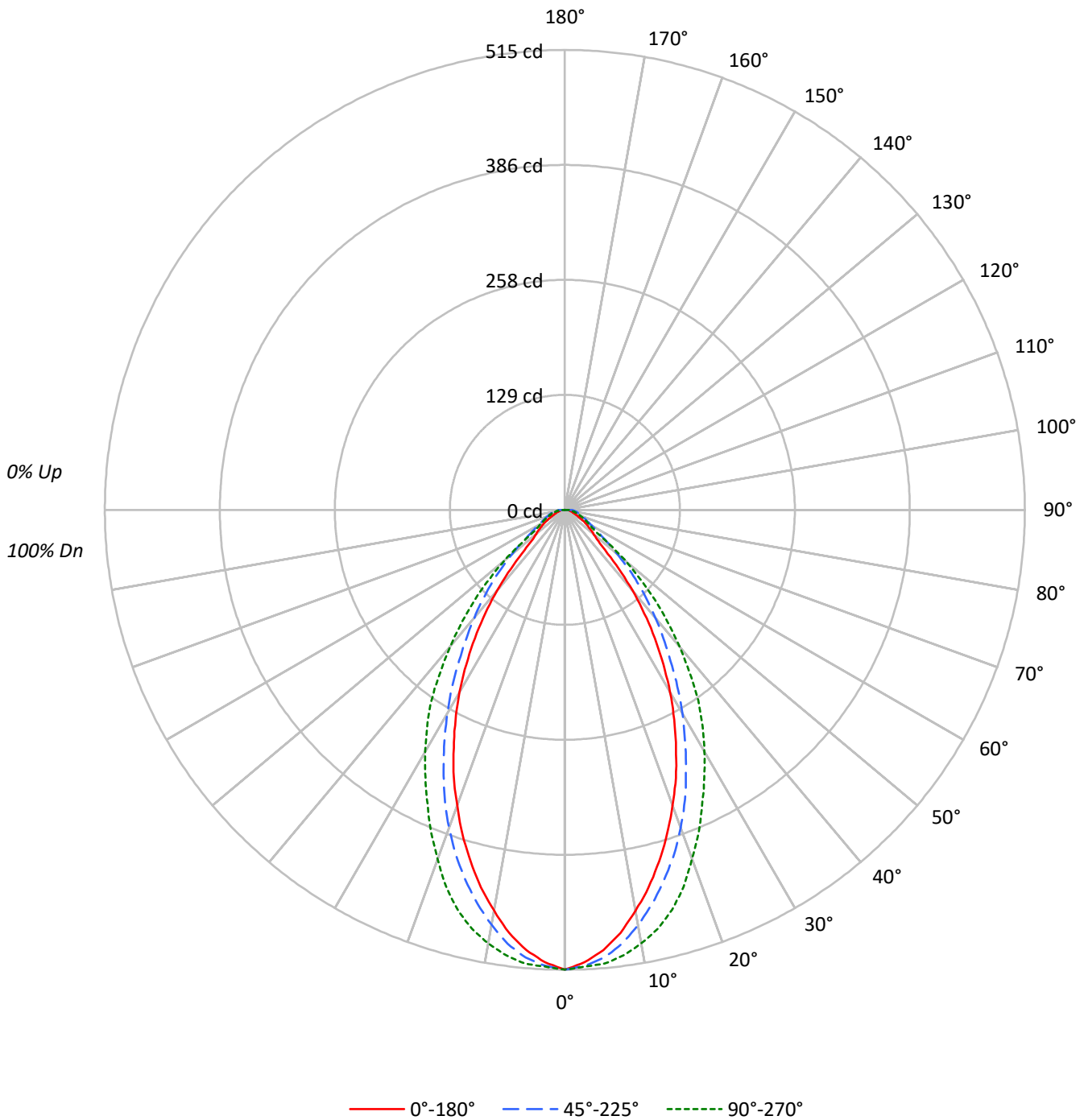
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 621.0 lumens
Efficiency: N/A
Efficacy: 26.4 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
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	
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9499	9499	9499
5°	9167	9324	9449
10°	8542	8846	9237
15°	7785	8201	8854
20°	6920	7442	8169
25°	5994	6536	7407
30°	5020	5606	6658
35°	3958	4643	5864
40°	2838	3799	4806
45°	1660	2998	3719
50°	1200	2182	2509
55°	1007	1557	1313
60°	805	1262	1122
65°	664	1118	1035
70°	561	1074	971
75°	542	1148	948
80°	606	1413	1010
85°	995	2202	1397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3719 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	7.6
10°-20°	120.8	19.5
20°-30°	148.5	23.9
30°-40°	131.3	21.1
40°-50°	83.8	13.5
50°-60°	40.9	6.6
60°-70°	24.3	3.9
70°-80°	15.5	2.5
80°-90°	8.6	1.4
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°	316.6	51.0
0°-40°	447.9	72.1
0°-60°	572.6	92.2
0°-90°	621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	515	515	515	515	515	
5°	495	505	503	505	510	46
15°	408	419	429	448	464	114
25°	294	305	321	341	364	135
35°	176	185	206	235	260	109
45°	64	82	115	129	142	54
55°	31	42	48	46	41	28
65°	15	28	26	24	24	15
75°	8	17	16	14	13	8
85°	5	10	10	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	514.8	514.8	514.8	514.8	514.8
2.5°	507.2	516.7	511.0	511.0	512.0
5°	494.9	505.3	503.4	505.3	510.1
7.5°	477.8	488.2	490.1	497.7	503.4
10°	455.9	466.4	472.1	484.4	493.0
12.5°	433.1	443.6	452.1	468.3	480.6
15°	407.5	418.9	429.3	448.3	463.5
17.5°	380.9	392.3	405.6	424.6	442.6
20°	352.4	362.8	379.0	397.0	416.0
22.5°	324.8	334.3	351.4	368.5	391.3
25°	294.4	304.9	321.0	341.0	363.8
27.5°	265.0	275.5	291.6	314.4	338.1
30°	235.6	245.1	263.1	286.8	312.5
32.5°	205.2	214.7	234.6	260.3	286.8
35°	175.7	185.2	206.1	234.6	260.3
37.5°	146.3	156.7	180.5	207.1	228.9
40°	117.8	130.1	157.7	180.5	199.5
42.5°	89.3	106.4	135.8	154.8	170.0
45°	63.6	81.7	114.9	129.2	142.5
47.5°	48.4	62.7	95.0	105.4	114.0
50°	41.8	51.3	76.0	83.6	87.4
52.5°	36.1	45.6	60.8	63.6	61.7
55°	31.3	41.8	48.4	45.6	40.8
57.5°	26.6	38.9	39.9	34.2	35.1
60°	21.8	35.1	34.2	29.4	30.4
62.5°	18.0	32.3	29.4	26.6	26.6
65°	15.2	28.5	25.6	23.7	23.7
67.5°	12.3	25.6	22.8	20.9	20.9
70°	10.4	22.8	19.9	18.0	18.0
72.5°	9.5	19.9	18.0	16.1	16.1
75°	7.6	17.1	16.1	14.2	13.3
77.5°	6.6	14.2	14.2	13.3	11.4
80°	5.7	12.3	13.3	11.4	9.5
82.5°	5.7	11.4	11.4	10.4	7.6
85°	4.7	9.5	10.4	9.5	6.6
87.5°	2.8	8.5	8.5	7.6	4.7
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	9.84	11.12	10.21	11.43	11.75	9.37	10.65	9.74	10.97	11.28
	3H	11.02	12.16	11.40	12.49	12.85	10.94	12.07	11.32	12.40	12.77
	4H	11.45	12.51	11.85	12.86	13.24	11.62	12.68	12.02	13.03	13.41
	6H	11.79	12.77	12.21	13.14	13.53	12.27	13.24	12.68	13.61	14.01
	8H	11.99	12.91	12.42	13.30	13.71	12.55	13.48	12.98	13.87	14.28
	12H	12.20	13.09	12.64	13.47	13.90	12.87	13.75	13.30	14.14	14.57
4H	2H	10.34	11.41	10.75	11.76	12.14	9.97	11.03	10.37	11.38	11.77
	3H	11.99	12.86	12.40	13.27	13.67	11.77	12.64	12.18	13.05	13.45
	4H	12.75	13.54	13.19	13.96	14.40	12.61	13.39	13.04	13.81	14.26
	6H	13.35	14.03	13.82	14.48	14.95	13.47	14.15	13.93	14.59	15.06
	8H	13.65	14.29	14.12	14.74	15.21	13.86	14.49	14.33	14.94	15.41
	12H	13.96	14.53	14.45	15.01	15.48	14.29	14.85	14.78	15.34	15.81
8H	4H	13.17	13.81	13.64	14.25	14.72	13.06	13.70	13.53	14.15	14.62
	6H	14.12	14.64	14.62	15.13	15.62	14.18	14.70	14.68	15.19	15.68
	8H	14.66	15.13	15.19	15.65	16.14	14.75	15.22	15.28	15.74	16.23
	12H	15.23	15.64	15.74	16.14	16.71	15.42	15.84	15.94	16.33	16.90
12H	4H	13.24	13.80	13.73	14.29	14.76	13.15	13.71	13.63	14.19	14.67
	6H	14.30	14.77	14.82	15.28	15.78	14.36	14.83	14.88	15.35	15.84
	8H	15.00	15.41	15.51	15.90	16.48	15.07	15.49	15.59	15.98	16.55