

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: P1058498

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

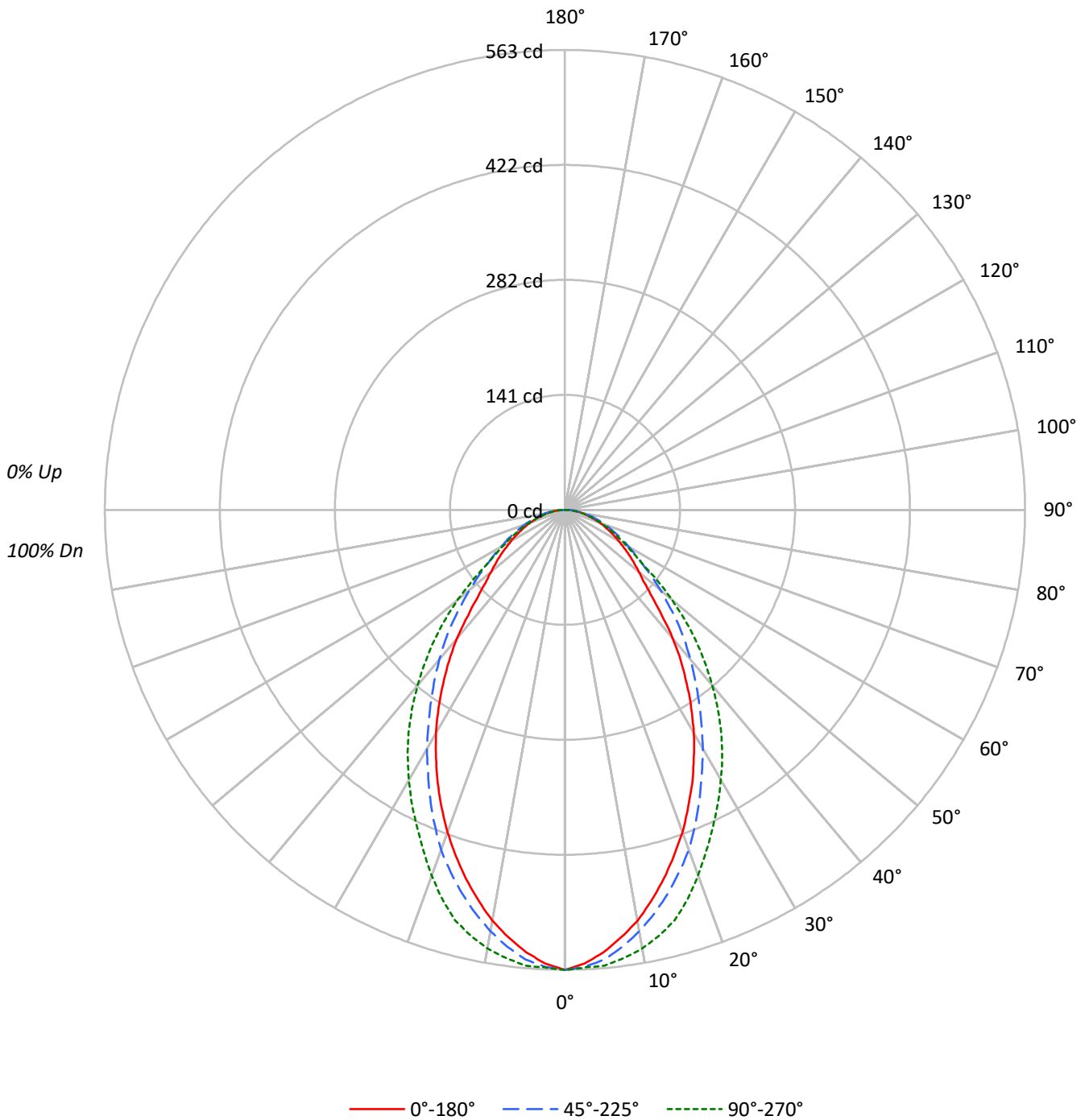
Lumens per Lamp: N/A
Luminaire Lumens: 917.1 lumens
Efficiency: N/A
Efficacy: 39.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10392	10392	10392
5°	10067	10234	10371
10°	9571	9816	10215
15°	8931	9290	9930
20°	8249	8699	9357
25°	7505	7938	8720
30°	6722	7193	8133
35°	5855	6427	7513
40°	4943	5750	6754
45°	3925	5076	5908
50°	3379	4363	4903
55°	3076	3735	3761
60°	2805	3318	3196
65°	2567	3000	2821
70°	2379	2778	2514
75°	2217	2624	2217
80°	2083	2518	1998
85°	2075	2604	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5908 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	5.7
10°-20°	137.4	15.0
20°-30°	180.9	19.7
30°-40°	181.9	19.8
40°-50°	147.4	16.1
50°-60°	101.5	11.1
60°-70°	66.5	7.2
70°-80°	37.0	4.0
80°-90°	12.5	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°	370.3	40.4
0°-40°	552.1	60.2
0°-60°	801.0	87.3
0°-90°	917.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	917.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	544	554	552	555	560	51
15°	468	479	486	504	520	131
25°	369	378	390	407	428	169
35°	260	272	285	311	334	162
45°	150	168	194	212	226	119
55°	96	106	116	118	117	86
65°	59	70	69	65	65	59
75°	31	38	37	33	31	33
85°	10	13	12	11	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	563.2	563.2	563.2	563.2	563.2
2.5°	555.8	565.6	559.9	559.9	560.7
5°	543.5	554.2	552.5	555.0	559.9
7.5°	528.0	539.5	539.5	546.8	553.4
10°	510.8	522.3	523.9	535.4	545.2
12.5°	489.6	501.0	505.9	520.7	533.7
15°	467.5	479.0	486.3	504.3	519.8
17.5°	443.8	455.3	465.1	483.9	499.4
20°	420.1	430.7	443.0	459.4	476.5
22.5°	394.0	405.4	416.9	432.4	452.0
25°	368.6	378.4	389.9	407.0	428.3
27.5°	341.7	352.3	362.9	383.3	405.4
30°	315.5	326.1	337.6	358.8	381.7
32.5°	287.7	299.2	310.6	334.3	358.0
35°	259.9	272.2	285.3	310.6	333.5
37.5°	232.9	246.0	261.6	287.7	307.3
40°	205.2	219.1	238.7	261.6	280.4
42.5°	175.7	192.9	216.6	236.2	253.4
45°	150.4	167.6	194.5	211.7	226.4
47.5°	131.6	145.5	171.6	186.4	198.6
50°	117.7	128.3	152.0	162.7	170.8
52.5°	106.3	116.9	133.2	140.6	143.0
55°	95.6	106.3	116.1	118.5	116.9
57.5°	85.0	96.4	102.2	99.7	99.7
60°	76.0	88.3	89.9	86.6	86.6
62.5°	67.0	79.3	79.3	75.2	75.2
65°	58.8	70.3	68.7	65.4	64.6
67.5°	51.5	62.1	59.7	56.4	55.6
70°	44.1	53.9	51.5	47.4	46.6
72.5°	37.6	46.6	43.3	40.1	38.4
75°	31.1	38.4	36.8	32.7	31.1
77.5°	25.3	31.1	29.4	26.2	24.5
80°	19.6	24.5	23.7	20.4	18.8
82.5°	14.7	18.8	18.0	15.5	13.1
85°	9.8	13.1	12.3	10.6	8.2
87.5°	4.9	9.0	8.2	7.4	4.1
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	14.86	16.30	15.23	16.61	16.93	15.22	16.66	15.59	16.97	17.29
	3H	16.40	17.69	16.78	18.02	18.39	16.57	17.86	16.95	18.19	18.55
	4H	16.98	18.18	17.38	18.53	18.91	17.05	18.26	17.45	18.61	18.99
	6H	17.41	18.52	17.82	18.89	19.28	17.41	18.52	17.82	18.89	19.28
	8H	17.56	18.62	17.99	19.01	19.41	17.52	18.58	17.95	18.97	19.37
	12H	17.68	18.69	18.11	19.07	19.50	17.60	18.61	18.03	18.99	19.42
4H	2H	15.45	16.66	15.85	17.01	17.39	15.74	16.94	16.14	17.29	17.67
	3H	17.27	18.27	17.68	18.67	19.07	17.31	18.31	17.72	18.71	19.11
	4H	18.02	18.92	18.45	19.33	19.77	17.91	18.82	18.35	19.23	19.67
	6H	18.60	19.39	19.06	19.83	20.29	18.40	19.18	18.86	19.62	20.09
	8H	18.81	19.54	19.28	19.99	20.46	18.56	19.29	19.03	19.74	20.21
	12H	18.98	19.63	19.46	20.11	20.58	18.68	19.33	19.17	19.81	20.29
8H	4H	18.30	19.03	18.77	19.48	19.95	18.22	18.95	18.68	19.39	19.86
	6H	19.06	19.66	19.56	20.15	20.63	18.83	19.44	19.33	19.93	20.41
	8H	19.38	19.92	19.90	20.43	20.92	19.08	19.62	19.60	20.14	20.62
	12H	19.67	20.15	20.18	20.64	21.21	19.29	19.77	19.80	20.27	20.83
12H	4H	18.32	18.97	18.80	19.45	19.92	18.25	18.90	18.73	19.38	19.85
	6H	19.12	19.66	19.63	20.17	20.66	18.91	19.45	19.43	19.96	20.45
	8H	19.52	20.00	20.03	20.49	21.06	19.23	19.71	19.74	20.20	20.77