

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: P1058570

Luminaire Tested: S122RDR-H865D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058570
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-H865D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

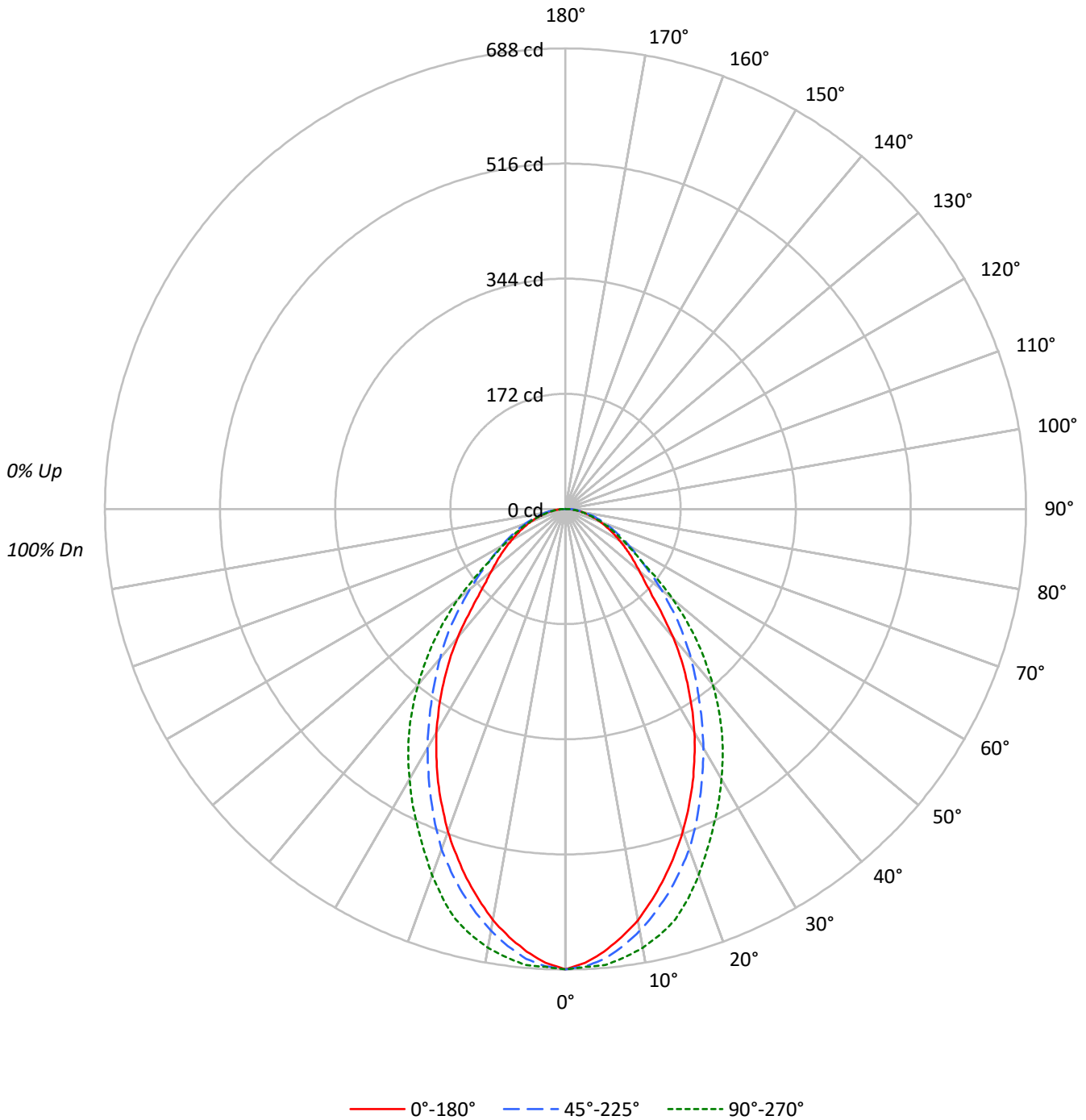
Lumens per Lamp: N/A
Luminaire Lumens: 1119.9 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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

TEST NUMBER: P1058570

CATALOG NUMBER: S122RDR-H865D930-X4F0-XX-UDD-WVL-S

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				
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°	12690	12690	12690
5°	12296	12497	12664
10°	11688	11988	12475
15°	10906	11346	12127
20°	10074	10623	11427
25°	9166	9693	10648
30°	8210	8783	9931
35°	7150	7848	9173
40°	6034	7022	8248
45°	4794	6200	7215
50°	4125	5331	5988
55°	3758	4559	4591
60°	3425	4052	3905
65°	3139	3659	3445
70°	2908	3394	3070
75°	2702	3201	2702
80°	2550	3071	2444
85°	2541	3176	2117

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7215 cd/sqm

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CATALOG NUMBER: S122RDR-H865D930-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	5.7
10°-20°	167.8	15.0
20°-30°	220.9	19.7
30°-40°	222.1	19.8
40°-50°	180.0	16.1
50°-60°	124.0	11.1
60°-70°	81.1	7.2
70°-80°	45.2	4.0
80°-90°	15.3	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°	452.2	40.4
0°-40°	674.2	60.2
0°-60°	978.2	87.4
0°-90°	1119.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1119.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	664	677	675	678	684	62
15°	571	585	594	616	635	160
25°	450	462	476	497	523	206
35°	317	332	348	379	407	198
45°	184	205	238	258	276	145
55°	117	130	142	145	143	105
65°	72	86	84	80	79	72
75°	38	47	45	40	38	41
85°	12	16	15	13	10	13
90°	0	0	0	0	0	

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CATALOG NUMBER: S122RDR-H865D930-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	687.7	687.7	687.7	687.7	687.7
2.5°	678.7	690.7	683.7	683.7	684.7
5°	663.8	676.7	674.7	677.7	683.7
7.5°	644.8	658.8	658.8	667.8	675.7
10°	623.8	637.8	639.8	653.8	665.8
12.5°	597.9	611.9	617.9	635.8	651.8
15°	570.9	584.9	593.9	615.9	634.8
17.5°	542.0	556.0	567.9	590.9	609.9
20°	513.0	526.0	541.0	561.0	581.9
22.5°	481.1	495.1	509.1	528.0	552.0
25°	450.2	462.1	476.1	497.1	523.0
27.5°	417.2	430.2	443.2	468.1	495.1
30°	385.3	398.3	412.2	438.2	466.1
32.5°	351.3	365.3	379.3	408.2	437.2
35°	317.4	332.4	348.4	379.3	407.2
37.5°	284.5	300.4	319.4	351.3	375.3
40°	250.5	267.5	291.5	319.4	342.4
42.5°	214.6	235.6	264.5	288.5	309.4
45°	183.7	204.6	237.6	258.5	276.5
47.5°	160.7	177.7	209.6	227.6	242.5
50°	143.7	156.7	185.7	198.6	208.6
52.5°	129.8	142.7	162.7	171.7	174.7
55°	116.8	129.8	141.7	144.7	142.7
57.5°	103.8	117.8	124.8	121.8	121.8
60°	92.8	107.8	109.8	105.8	105.8
62.5°	81.8	96.8	96.8	91.8	91.8
65°	71.9	85.8	83.8	79.9	78.9
67.5°	62.9	75.9	72.9	68.9	67.9
70°	53.9	65.9	62.9	57.9	56.9
72.5°	45.9	56.9	52.9	48.9	46.9
75°	37.9	46.9	44.9	39.9	37.9
77.5°	30.9	37.9	35.9	31.9	29.9
80°	24.0	29.9	28.9	25.0	23.0
82.5°	18.0	23.0	22.0	19.0	16.0
85°	12.0	16.0	15.0	13.0	10.0
87.5°	6.0	11.0	10.0	9.0	5.0
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	15.56	17.00	15.92	17.31	17.63	15.92	17.36	16.28	17.67	17.99
	3H	17.10	18.39	17.48	18.72	19.08	17.26	18.55	17.64	18.88	19.25
	4H	17.67	18.88	18.07	19.23	19.61	17.75	18.95	18.15	19.30	19.68
	6H	18.10	19.22	18.52	19.59	19.98	18.10	19.22	18.51	19.58	19.98
	8H	18.26	19.32	18.69	19.71	20.11	18.22	19.28	18.64	19.67	20.07
	12H	18.37	19.39	18.80	19.77	20.20	18.29	19.31	18.72	19.69	20.12
4H	2H	16.14	17.35	16.54	17.70	18.08	16.43	17.64	16.83	17.99	18.37
	3H	17.97	18.97	18.38	19.37	19.77	18.01	19.01	18.42	19.41	19.81
	4H	18.71	19.61	19.15	20.03	20.47	18.61	19.51	19.04	19.93	20.37
	6H	19.30	20.08	19.76	20.52	20.99	19.09	19.87	19.55	20.32	20.78
	8H	19.51	20.24	19.97	20.69	21.15	19.25	19.99	19.72	20.43	20.90
	12H	19.68	20.33	20.16	20.81	21.28	19.38	20.03	19.86	20.51	20.98
8H	4H	19.00	19.73	19.46	20.17	20.64	18.91	19.64	19.37	20.09	20.55
	6H	19.75	20.36	20.25	20.85	21.33	19.53	20.13	20.03	20.62	21.10
	8H	20.08	20.62	20.59	21.13	21.62	19.78	20.32	20.29	20.83	21.32
	12H	20.36	20.84	20.87	21.34	21.90	19.99	20.47	20.50	20.96	21.53
12H	4H	19.02	19.67	19.50	20.15	20.62	18.94	19.60	19.43	20.08	20.55
	6H	19.81	20.35	20.33	20.87	21.36	19.60	20.15	20.12	20.66	21.15
	8H	20.21	20.69	20.72	21.18	21.75	19.92	20.40	20.44	20.90	21.46