

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: P1058569

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK 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

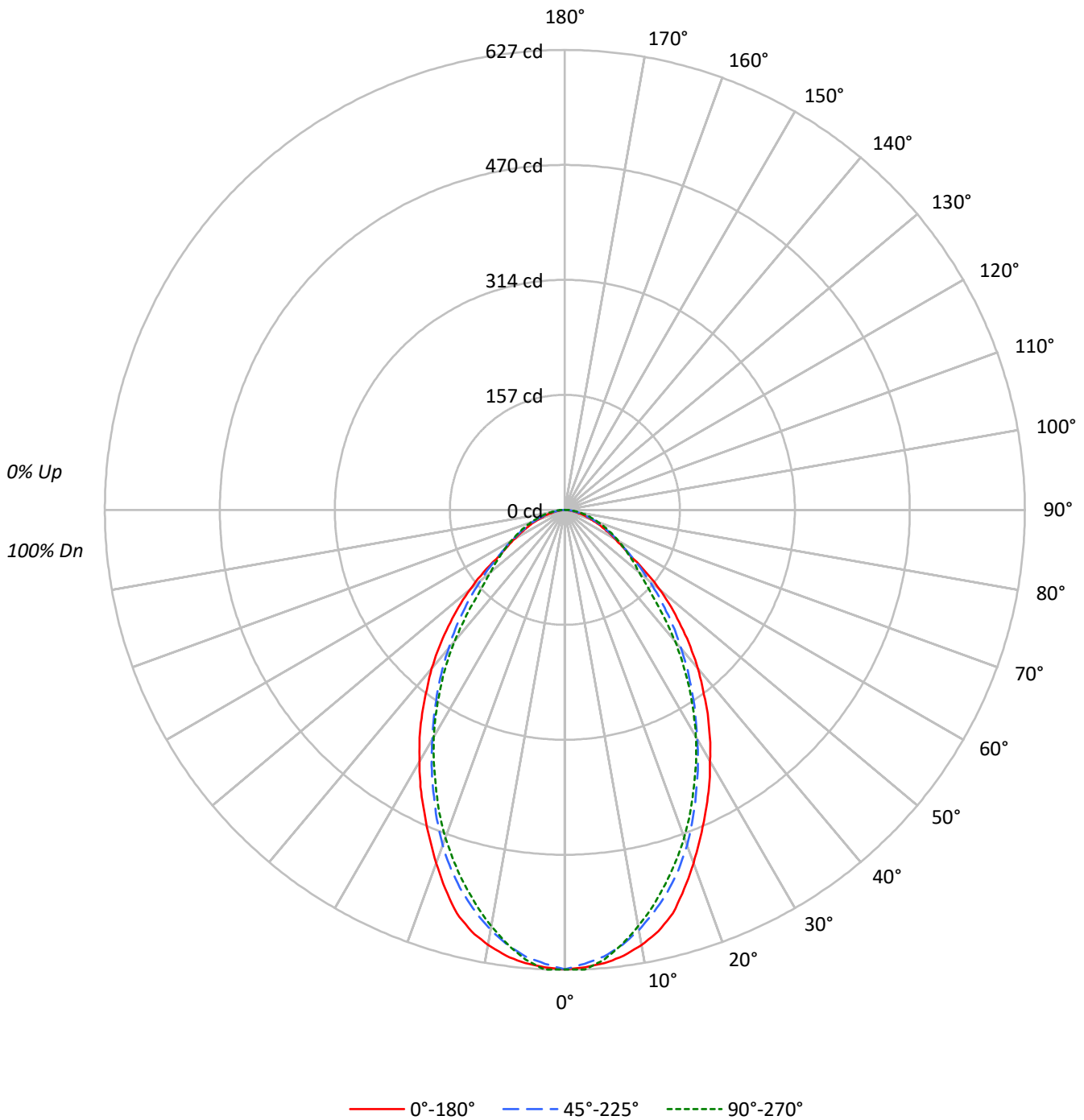
Lumens per Lamp: N/A
Luminaire Lumens: 951.3 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88	
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77			77	
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68			68	
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61			61	
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54			54	
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49			49	
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44			44	
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41			41	
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37			37	
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34			34	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11559	11559	11559
5°	11492	11325	11399
10°	11289	10896	10802
15°	10879	10308	10098
20°	10068	9557	9343
25°	9239	8631	8468
30°	8438	7694	7609
35°	7639	6807	6650
40°	6800	5935	5622
45°	5856	5102	4504
50°	4840	4295	3781
55°	3497	3561	3400
60°	2908	3056	3093
65°	2484	2655	2829
70°	2045	2368	2584
75°	1704	1989	2346
80°	1275	1594	2115
85°	423	847	1905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5856 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	6.1
10°-20°	152.5	16.0
20°-30°	197.3	20.7
30°-40°	193.5	20.3
40°-50°	152.4	16.0
50°-60°	99.9	10.5
60°-70°	60.8	6.4
70°-80°	30.4	3.2
80°-90°	6.6	0.7
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°	407.7	42.9
0°-40°	601.3	63.2
0°-60°	853.6	89.7
0°-90°	951.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	951.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	620	620	611	615	615	59
15°	570	562	540	533	529	159
25°	454	439	424	422	416	209
35°	339	320	302	301	295	211
45°	224	210	196	182	173	173
55°	109	115	111	107	106	103
65°	57	58	61	64	65	57
75°	24	25	28	32	33	25
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.4	626.4	626.4	626.4	626.4
2.5°	624.4	625.4	619.4	625.4	627.4
5°	620.4	620.4	611.4	615.4	615.4
7.5°	613.4	612.4	598.5	598.5	597.5
10°	602.5	598.5	581.5	578.5	576.5
12.5°	588.5	581.5	561.6	556.6	553.6
15°	569.5	561.6	539.6	532.6	528.6
17.5°	541.6	533.6	514.7	506.7	502.7
20°	512.7	500.7	486.7	479.8	475.8
22.5°	482.8	468.8	455.8	450.8	446.9
25°	453.8	438.9	423.9	421.9	415.9
27.5°	425.9	408.0	393.0	392.0	387.0
30°	396.0	377.0	361.1	362.1	357.1
32.5°	368.1	350.1	331.1	332.1	326.2
35°	339.1	320.2	302.2	301.2	295.2
37.5°	309.2	291.3	274.3	270.3	264.3
40°	282.3	264.3	246.4	239.4	233.4
42.5°	253.3	237.4	221.4	210.5	202.5
45°	224.4	210.5	195.5	181.5	172.6
47.5°	196.5	185.5	172.6	155.6	149.6
50°	168.6	160.6	149.6	134.7	131.7
52.5°	139.6	136.6	129.7	119.7	118.7
55°	108.7	114.7	110.7	106.7	105.7
57.5°	91.8	92.8	95.8	94.8	94.8
60°	78.8	78.8	82.8	83.8	83.8
62.5°	66.8	67.8	71.8	73.8	73.8
65°	56.9	57.9	60.8	63.8	64.8
67.5°	46.9	48.9	51.9	54.9	55.9
70°	37.9	39.9	43.9	46.9	47.9
72.5°	30.9	31.9	35.9	38.9	39.9
75°	23.9	24.9	27.9	31.9	32.9
77.5°	17.0	19.0	21.9	24.9	26.9
80°	12.0	13.0	15.0	19.0	19.9
82.5°	7.0	8.0	10.0	13.0	14.0
85°	2.0	3.0	4.0	7.0	9.0
87.5°	0.0	0.0	0.0	2.0	4.0
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	14.63	16.02	14.99	16.34	16.65	14.81	16.20	15.17	16.52	16.83
	3H	15.76	17.01	16.14	17.33	17.70	16.27	17.51	16.65	17.84	18.21
	4H	16.11	17.27	16.51	17.62	18.01	16.81	17.97	17.21	18.32	18.70
	6H	16.30	17.37	16.71	17.74	18.13	17.22	18.29	17.63	18.66	19.05
	8H	16.32	17.34	16.75	17.73	18.13	17.35	18.36	17.78	18.76	19.16
	12H	16.31	17.28	16.74	17.66	18.09	17.43	18.40	17.86	18.79	19.22
4H	2H	15.08	16.25	15.49	16.60	16.98	15.23	16.40	15.63	16.75	17.13
	3H	16.42	17.38	16.84	17.78	18.19	16.91	17.86	17.32	18.27	18.67
	4H	16.87	17.73	17.30	18.14	18.58	17.57	18.43	18.00	18.85	19.29
	6H	17.14	17.88	17.60	18.33	18.79	18.10	18.85	18.56	19.29	19.76
	8H	17.19	17.88	17.65	18.32	18.79	18.27	18.97	18.74	19.41	19.88
	12H	17.18	17.80	17.66	18.28	18.75	18.39	19.01	18.88	19.49	19.96
8H	4H	17.08	17.77	17.55	18.22	18.69	17.72	18.41	18.18	18.86	19.33
	6H	17.43	18.00	17.93	18.49	18.97	18.35	18.92	18.85	19.41	19.89
	8H	17.51	18.02	18.03	18.53	19.02	18.58	19.09	19.10	19.61	20.10
	12H	17.52	17.97	18.04	18.47	19.04	18.77	19.22	19.28	19.71	20.28
12H	4H	17.09	17.71	17.58	18.19	18.66	17.70	18.32	18.19	18.80	19.27
	6H	17.45	17.96	17.97	18.48	18.97	18.34	18.85	18.86	19.37	19.86
	8H	17.57	18.02	18.08	18.52	19.08	18.62	19.07	19.13	19.56	20.13