

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: P1058241

Luminaire Tested: S122RDR-H1005D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

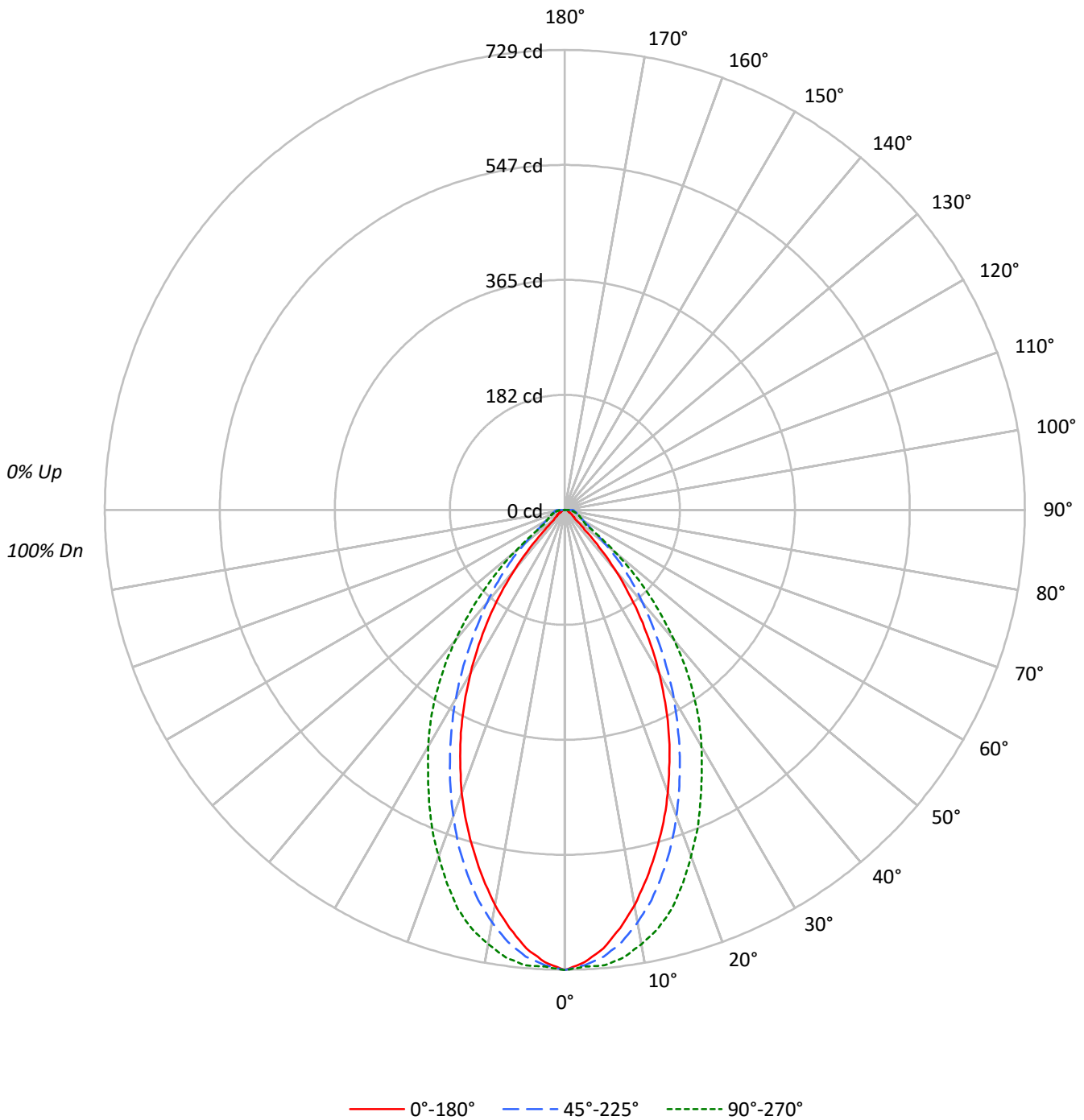
Lumens per Lamp: N/A
Luminaire Lumens: 793.9 lumens
Efficiency: N/A
Efficacy: 21.8 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13459	13459	13459
5°	12927	13164	13425
10°	11919	12443	13099
15°	10679	11414	12507
20°	9373	10152	11482
25°	7936	8769	10359
30°	6367	7362	9226
35°	4706	5888	7992
40°	2951	4610	6494
45°	1156	3471	4812
50°	568	2345	2948
55°	450	1541	1313
60°	343	1247	1207
65°	253	1170	1170
70°	313	1198	1198
75°	335	1333	1248
80°	499	1732	1360
85°	995	2964	1969

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5415 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	8.4
10°-20°	168.4	21.2
20°-30°	201.5	25.4
30°-40°	169.6	21.4
40°-50°	96.6	12.2
50°-60°	38.1	4.8
60°-70°	24.0	3.0
70°-80°	17.8	2.2
80°-90°	11.3	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°	436.5	55.0
0°-40°	606.1	76.3
0°-60°	740.8	93.3
0°-90°	793.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	793.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	698	713	711	719	725	65
15°	559	579	598	633	655	156
25°	390	407	431	475	509	178
35°	209	228	261	317	355	130
45°	44	78	133	167	184	42
55°	14	30	48	49	41	13
65°	6	27	27	26	27	6
75°	5	19	19	18	18	5
85°	5	13	14	13	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.4	729.4	729.4	729.4	729.4
2.5°	717.8	730.6	722.4	723.6	724.8
5°	697.9	713.1	710.7	718.9	724.8
7.5°	668.7	685.1	690.9	704.9	715.4
10°	636.1	654.7	664.1	686.2	699.1
12.5°	598.7	619.7	633.7	661.7	680.4
15°	559.0	578.9	597.5	632.6	654.7
17.5°	519.3	539.2	559.0	597.5	620.9
20°	477.3	496.0	517.0	557.9	584.7
22.5°	433.0	452.8	473.8	515.8	548.5
25°	389.8	407.3	430.7	475.0	508.8
27.5°	344.3	361.8	387.5	433.0	469.2
30°	298.8	316.3	345.5	392.1	433.0
32.5°	253.3	271.9	303.4	354.8	395.6
35°	208.9	227.6	261.4	317.4	354.8
37.5°	165.7	186.7	224.1	278.9	313.9
40°	122.5	147.1	191.4	240.4	269.6
42.5°	81.7	112.0	161.1	201.9	226.4
45°	44.3	78.2	133.0	166.9	184.4
47.5°	24.5	50.2	106.2	133.0	143.6
50°	19.8	35.0	81.7	101.5	102.7
52.5°	16.3	31.5	60.7	72.4	66.5
55°	14.0	30.3	47.9	49.0	40.8
57.5°	11.7	29.2	39.7	35.0	35.0
60°	9.3	29.2	33.8	31.5	32.7
62.5°	7.0	29.2	30.3	28.0	29.2
65°	5.8	26.8	26.8	25.7	26.8
67.5°	5.8	24.5	24.5	23.3	24.5
70°	5.8	23.3	22.2	22.2	22.2
72.5°	4.7	21.0	21.0	19.8	19.8
75°	4.7	18.7	18.7	17.5	17.5
77.5°	4.7	17.5	17.5	16.3	15.2
80°	4.7	15.2	16.3	15.2	12.8
82.5°	4.7	14.0	15.2	14.0	10.5
85°	4.7	12.8	14.0	12.8	9.3
87.5°	3.5	12.8	12.8	10.5	7.0
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	6.73	7.95	7.10	8.26	8.58	8.75	9.97	9.11	10.28	10.59
	3H	8.27	9.35	8.65	9.68	10.05	10.72	11.80	11.10	12.14	12.50
	4H	8.83	9.84	9.23	10.19	10.57	11.63	12.64	12.04	13.00	13.38
	6H	9.39	10.32	9.80	10.69	11.08	12.52	13.45	12.93	13.82	14.21
	8H	9.68	10.56	10.11	10.95	11.36	12.92	13.80	13.35	14.19	14.60
	12H	10.04	10.89	10.48	11.27	11.70	13.36	14.20	13.79	14.59	15.02
4H	2H	7.91	8.92	8.31	9.27	9.66	9.36	10.38	9.77	10.73	11.11
	3H	10.11	10.94	10.52	11.35	11.75	11.61	12.44	12.02	12.85	13.25
	4H	11.16	11.91	11.60	12.33	12.78	12.68	13.43	13.12	13.85	14.29
	6H	12.06	12.71	12.53	13.16	13.63	13.79	14.44	14.26	14.89	15.36
	8H	12.45	13.06	12.92	13.50	13.98	14.31	14.92	14.79	15.37	15.84
	12H	12.87	13.41	13.36	13.89	14.37	14.89	15.42	15.38	15.91	16.38
8H	4H	11.97	12.57	12.44	13.02	13.49	13.17	13.78	13.64	14.23	14.70
	6H	13.35	13.85	13.85	14.34	14.83	14.57	15.07	15.08	15.57	16.05
	8H	14.07	14.52	14.59	15.03	15.53	15.31	15.76	15.83	16.27	16.77
	12H	14.82	15.21	15.34	15.71	16.28	16.14	16.53	16.66	17.03	17.60
12H	4H	12.13	12.66	12.62	13.15	13.62	13.27	13.81	13.76	14.29	14.77
	6H	13.68	14.13	14.20	14.64	15.14	14.79	15.24	15.31	15.75	16.24
	8H	14.60	14.99	15.11	15.49	16.06	15.68	16.07	16.19	16.56	17.14