

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059133

Luminaire Tested: S123RDRP-S1165D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059133
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

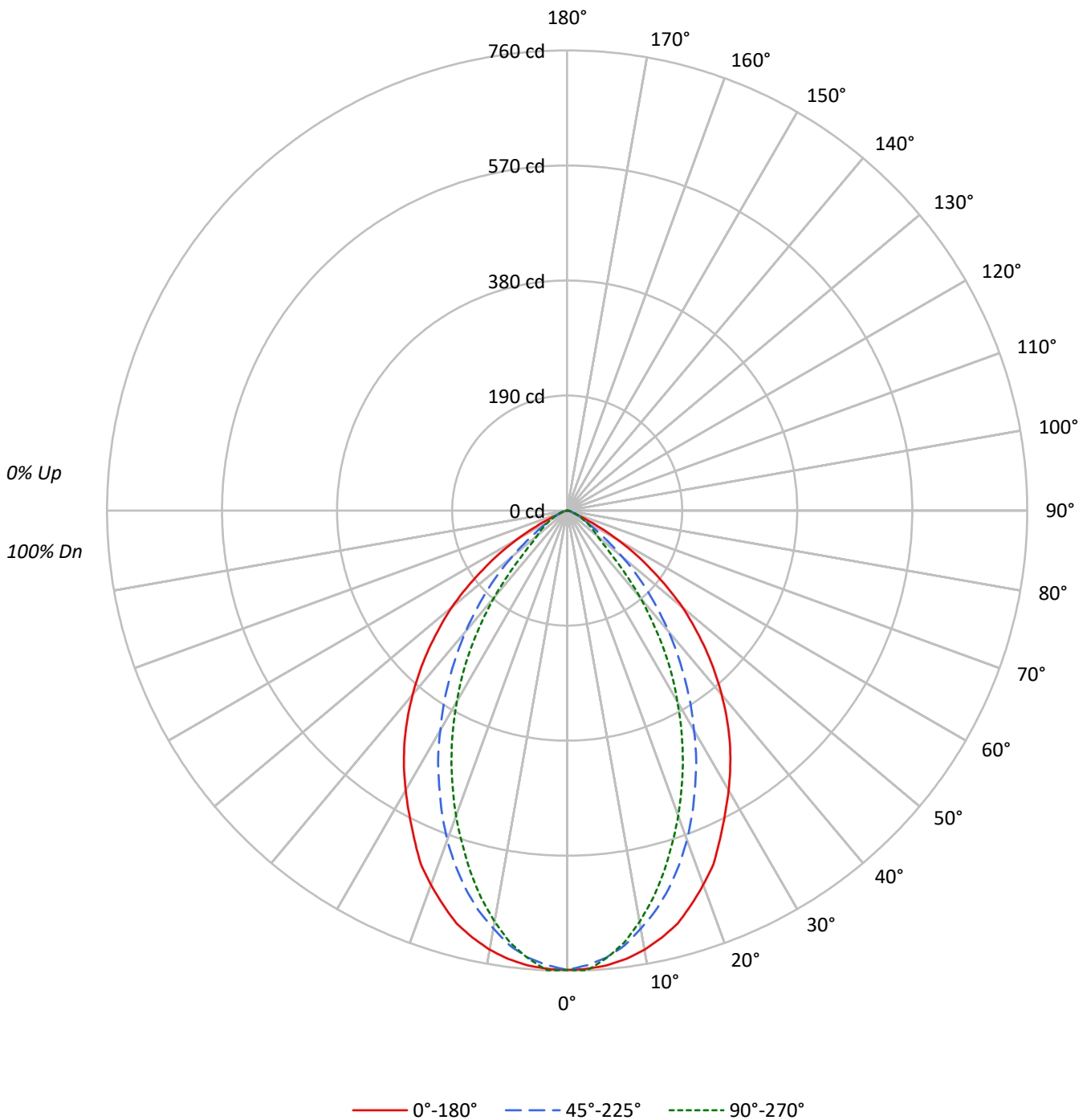
Lumens per Lamp: N/A
Luminaire Lumens: 979.4 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8908	8908	8908
5°	8886	8734	8749
10°	8779	8360	8219
15°	8580	7867	7509
20°	8217	7235	6707
25°	7744	6482	5858
30°	7230	5684	4937
35°	6717	4848	3972
40°	6084	3996	2880
45°	5362	3100	1735
50°	4549	2167	1180
55°	3462	1298	985
60°	2262	827	773
65°	947	620	620
70°	323	443	484
75°	268	318	372
80°	156	237	318
85°	162	162	310

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5362 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	7.2
10°-20°	183.4	18.7
20°-30°	235.1	24.0
30°-40°	220.7	22.5
40°-50°	153.9	15.7
50°-60°	79.6	8.1
60°-70°	27.2	2.8
70°-80°	7.8	0.8
80°-90°	1.6	0.2
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°	488.6	49.9
0°-40°	709.2	72.4
0°-60°	942.7	96.3
0°-90°	979.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	754	753	741	744	742	71
15°	706	688	647	626	618	198
25°	598	560	500	466	452	275
35°	469	411	338	295	277	292
45°	323	264	187	129	104	249
55°	169	127	63	49	48	152
65°	34	29	22	21	22	40
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.6	758.6	758.6	758.6	758.6
2.5°	757.5	758.6	751.6	758.6	759.8
5°	753.9	752.8	741.0	744.5	742.2
7.5°	746.9	743.4	724.6	719.9	719.9
10°	736.3	729.3	701.1	692.9	689.3
12.5°	722.2	712.8	676.4	661.2	655.3
15°	705.8	688.2	647.1	625.9	617.7
17.5°	682.3	658.8	614.2	589.5	576.6
20°	657.6	628.3	579.0	549.6	536.7
22.5°	631.8	596.6	540.2	508.5	494.4
25°	597.7	560.2	500.3	466.2	452.1
27.5°	564.9	524.9	461.5	422.8	408.7
30°	533.2	486.2	419.2	381.7	364.1
32.5°	501.5	448.6	379.3	338.2	321.8
35°	468.6	411.0	338.2	294.8	277.1
37.5°	433.3	374.6	299.5	252.5	231.3
40°	396.9	335.9	260.7	207.9	187.9
42.5°	360.5	300.6	222.0	167.9	144.4
45°	322.9	264.2	186.7	129.2	104.5
47.5°	285.4	227.8	152.7	93.9	78.7
50°	249.0	193.8	118.6	69.3	64.6
52.5°	209.0	160.9	89.3	57.5	56.4
55°	169.1	126.8	63.4	49.3	48.1
57.5°	133.9	98.6	45.8	41.1	39.9
60°	96.3	70.5	35.2	34.1	32.9
62.5°	63.4	48.1	28.2	27.0	27.0
65°	34.1	29.4	22.3	21.1	22.3
67.5°	14.1	16.4	16.4	17.6	17.6
70°	9.4	10.6	12.9	14.1	14.1
72.5°	7.0	8.2	9.4	10.6	10.6
75°	5.9	5.9	7.0	8.2	8.2
77.5°	3.5	4.7	4.7	5.9	7.0
80°	2.3	3.5	3.5	4.7	4.7
82.5°	1.2	2.3	2.3	3.5	3.5
85°	1.2	1.2	1.2	1.2	2.3
87.5°	0.0	0.0	0.0	0.0	1.2
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	13.93	15.19	14.29	15.50	15.82	7.44	8.70	7.80	9.01	9.32
	3H	13.88	14.99	14.26	15.32	15.69	8.21	9.32	8.59	9.65	10.02
	4H	13.83	14.86	14.23	15.21	15.60	8.41	9.44	8.82	9.79	10.18
	6H	13.76	14.70	14.17	15.07	15.47	8.55	9.50	8.97	9.87	10.26
	8H	13.72	14.61	14.15	15.00	15.41	8.59	9.48	9.02	9.87	10.28
	12H	13.67	14.52	14.11	14.91	15.34	8.61	9.46	9.04	9.84	10.27
4H	2H	13.78	14.81	14.18	15.16	15.54	7.69	8.72	8.10	9.07	9.46
	3H	13.76	14.60	14.18	15.00	15.40	8.60	9.43	9.01	9.84	10.24
	4H	13.71	14.45	14.15	14.87	15.32	8.87	9.61	9.31	10.04	10.48
	6H	13.65	14.29	14.12	14.74	15.21	9.09	9.73	9.55	10.17	10.64
	8H	13.60	14.19	14.07	14.64	15.11	9.15	9.74	9.62	10.19	10.66
	12H	13.55	14.08	14.04	14.56	15.04	9.18	9.71	9.67	10.19	10.67
8H	4H	13.60	14.19	14.07	14.64	15.11	8.86	9.45	9.33	9.90	10.37
	6H	13.53	14.02	14.04	14.52	15.00	9.12	9.61	9.63	10.11	10.59
	8H	13.48	13.92	14.01	14.43	14.93	9.23	9.66	9.75	10.18	10.68
	12H	13.44	13.83	13.96	14.32	14.90	9.30	9.69	9.82	10.18	10.76
12H	4H	13.55	14.07	14.04	14.56	15.03	8.82	9.34	9.31	9.83	10.30
	6H	13.48	13.91	14.00	14.43	14.92	9.08	9.52	9.61	10.04	10.53
	8H	13.44	13.83	13.96	14.33	14.90	9.22	9.61	9.74	10.10	10.68