

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: P1058332

Luminaire Tested: S122RDR-H290D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H290D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

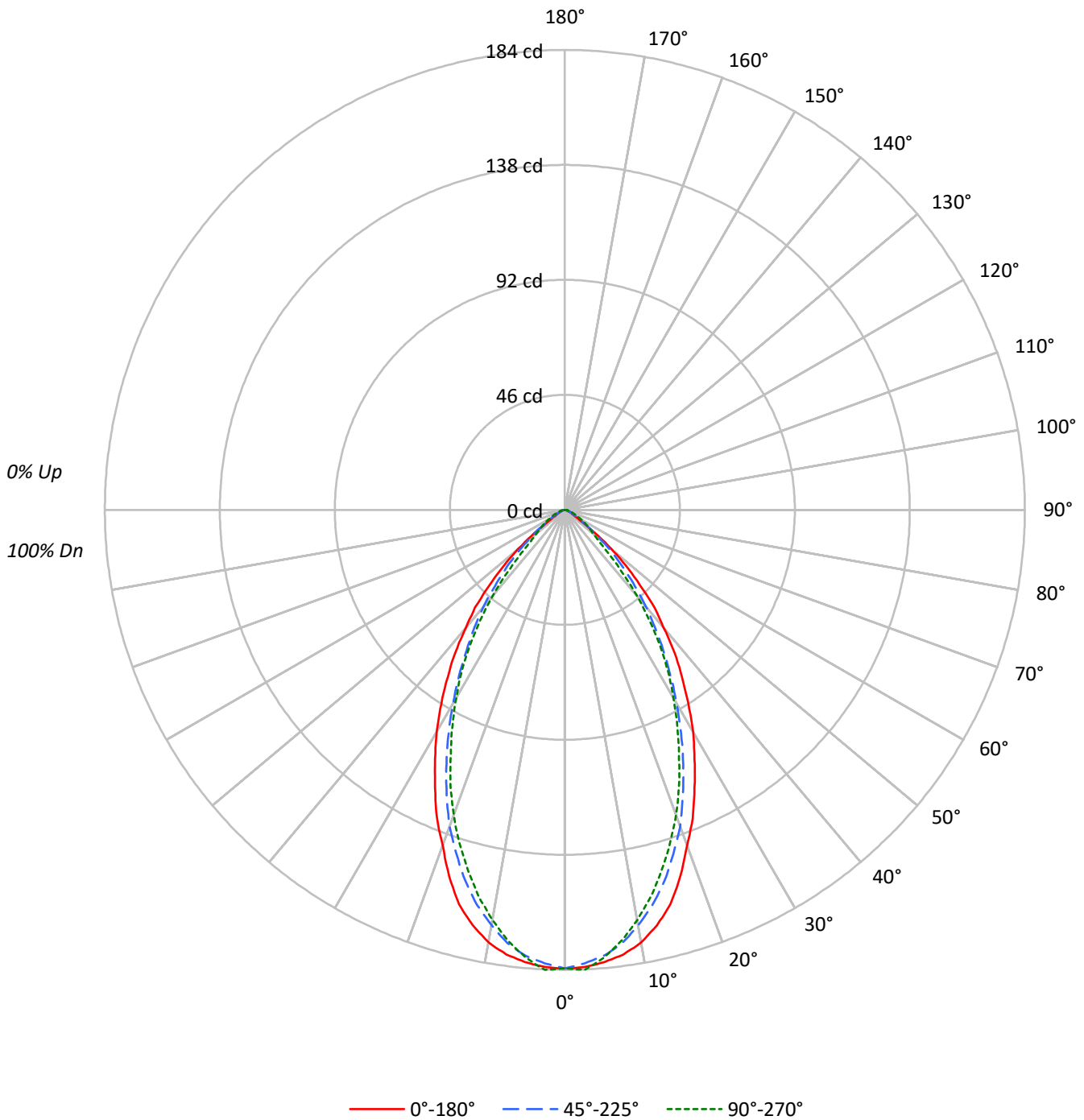
Lumens per Lamp: N/A
Luminaire Lumens: 197.3 lumens
Efficiency: N/A
Efficacy: 16.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92		
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84		
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76		
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70		
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64		
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59		
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54		
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50		
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47		
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3386	3386	3386
5°	3364	3317	3330
10°	3294	3163	3122
15°	3120	2938	2854
20°	2804	2647	2553
25°	2498	2282	2199
30°	2184	1905	1849
35°	1840	1543	1493
40°	1481	1216	1077
45°	1109	879	639
50°	695	568	419
55°	235	306	341
60°	137	188	269
65°	96	127	210
70°	81	97	156
75°	50	78	128
80°	43	74	117
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1109 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.9	8.6
10°-20°	43.3	21.9
20°-30°	52.1	26.4
30°-40°	44.5	22.6
40°-50°	26.1	13.2
50°-60°	9.5	4.8
60°-70°	3.4	1.7
70°-80°	1.3	0.7
80°-90°	0.2	0.1
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°	112.3	56.9
0°-40°	156.8	79.5
0°-60°	192.4	97.5
0°-90°	197.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	197.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	184	184	184	184	184	
5°	182	182	179	180	180	17
15°	163	161	154	151	149	45
25°	123	118	112	110	108	56
35°	82	75	68	68	66	51
45°	42	38	34	28	24	33
55°	7	10	10	10	11	9
65°	2	3	3	4	5	2
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1058332

CATALOG NUMBER: S122RDR-H290D935-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	183.5	183.5	183.5	183.5	183.5
2.5°	183.1	183.5	181.6	183.5	184.2
5°	181.6	182.0	179.1	179.8	179.8
7.5°	179.4	179.1	175.0	174.3	173.9
10°	175.8	174.7	168.8	167.7	166.6
12.5°	170.3	168.1	161.9	160.0	158.6
15°	163.3	160.8	153.8	150.9	149.4
17.5°	153.8	150.9	144.3	141.4	139.9
20°	142.8	139.9	134.8	131.5	130.0
22.5°	133.7	128.9	123.4	121.2	119.4
25°	122.7	117.5	112.1	110.2	108.0
27.5°	112.4	106.2	100.7	99.2	97.4
30°	102.5	95.9	89.4	89.4	86.8
32.5°	91.9	85.7	78.7	78.4	76.9
35°	81.7	75.4	68.5	67.7	66.3
37.5°	72.1	65.9	59.3	57.1	55.3
40°	61.5	56.0	50.5	46.9	44.7
42.5°	53.1	46.9	41.4	37.0	34.1
45°	42.5	38.1	33.7	28.2	24.5
47.5°	33.0	30.0	26.4	20.1	18.3
50°	24.2	22.7	19.8	15.0	14.6
52.5°	15.4	16.1	14.3	11.7	12.8
55°	7.3	10.3	9.5	9.9	10.6
57.5°	4.8	5.1	7.0	8.1	8.8
60°	3.7	3.7	5.1	6.6	7.3
62.5°	2.9	2.9	4.0	5.5	5.9
65°	2.2	2.6	2.9	4.0	4.8
67.5°	1.8	1.8	2.2	3.3	3.7
70°	1.5	1.5	1.8	2.6	2.9
72.5°	1.1	1.1	1.5	2.2	2.2
75°	0.7	1.1	1.1	1.5	1.8
77.5°	0.7	0.7	0.7	1.1	1.5
80°	0.4	0.4	0.7	0.7	1.1
82.5°	0.4	0.4	0.4	0.4	0.7
85°	0.0	0.0	0.0	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0
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	0.10	1.27	0.47	1.58	1.89	3.55	4.71	3.91	5.02	5.34
	3H	0.63	1.65	1.01	1.98	2.35	4.28	5.30	4.66	5.63	6.00
	4H	0.75	1.70	1.16	2.05	2.44	4.49	5.44	4.89	5.79	6.17
	6H	0.82	1.69	1.24	2.06	2.46	4.64	5.51	5.06	5.88	6.28
	8H	0.84	1.66	1.27	2.05	2.46	4.67	5.49	5.10	5.88	6.29
	12H	0.81	1.59	1.24	1.97	2.40	4.67	5.45	5.11	5.84	6.27
4H	2H	0.41	1.35	0.81	1.71	2.09	3.51	4.46	3.91	4.81	5.19
	3H	1.07	1.84	1.49	2.25	2.65	4.39	5.15	4.80	5.56	5.96
	4H	1.31	1.99	1.75	2.41	2.86	4.67	5.35	5.10	5.77	6.22
	6H	1.43	2.01	1.89	2.46	2.93	4.89	5.48	5.36	5.93	6.40
	8H	1.46	2.00	1.93	2.45	2.93	4.93	5.48	5.41	5.93	6.40
	12H	1.43	1.90	1.92	2.39	2.87	4.96	5.44	5.45	5.92	6.40
8H	4H	1.41	1.96	1.89	2.41	2.88	4.59	5.14	5.07	5.59	6.06
	6H	1.58	2.02	2.09	2.52	3.01	4.85	5.29	5.36	5.79	6.28
	8H	1.65	2.05	2.18	2.56	3.06	4.91	5.31	5.44	5.83	6.32
	12H	1.63	1.98	2.15	2.48	3.05	4.98	5.33	5.50	5.83	6.40
12H	4H	1.40	1.88	1.89	2.36	2.84	4.55	5.03	5.04	5.51	5.99
	6H	1.58	1.98	2.11	2.50	2.99	4.80	5.20	5.33	5.72	6.21
	8H	1.68	2.03	2.20	2.52	3.10	4.89	5.24	5.41	5.73	6.31