

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: P1057927

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057927
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: S122RDRP-S290D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

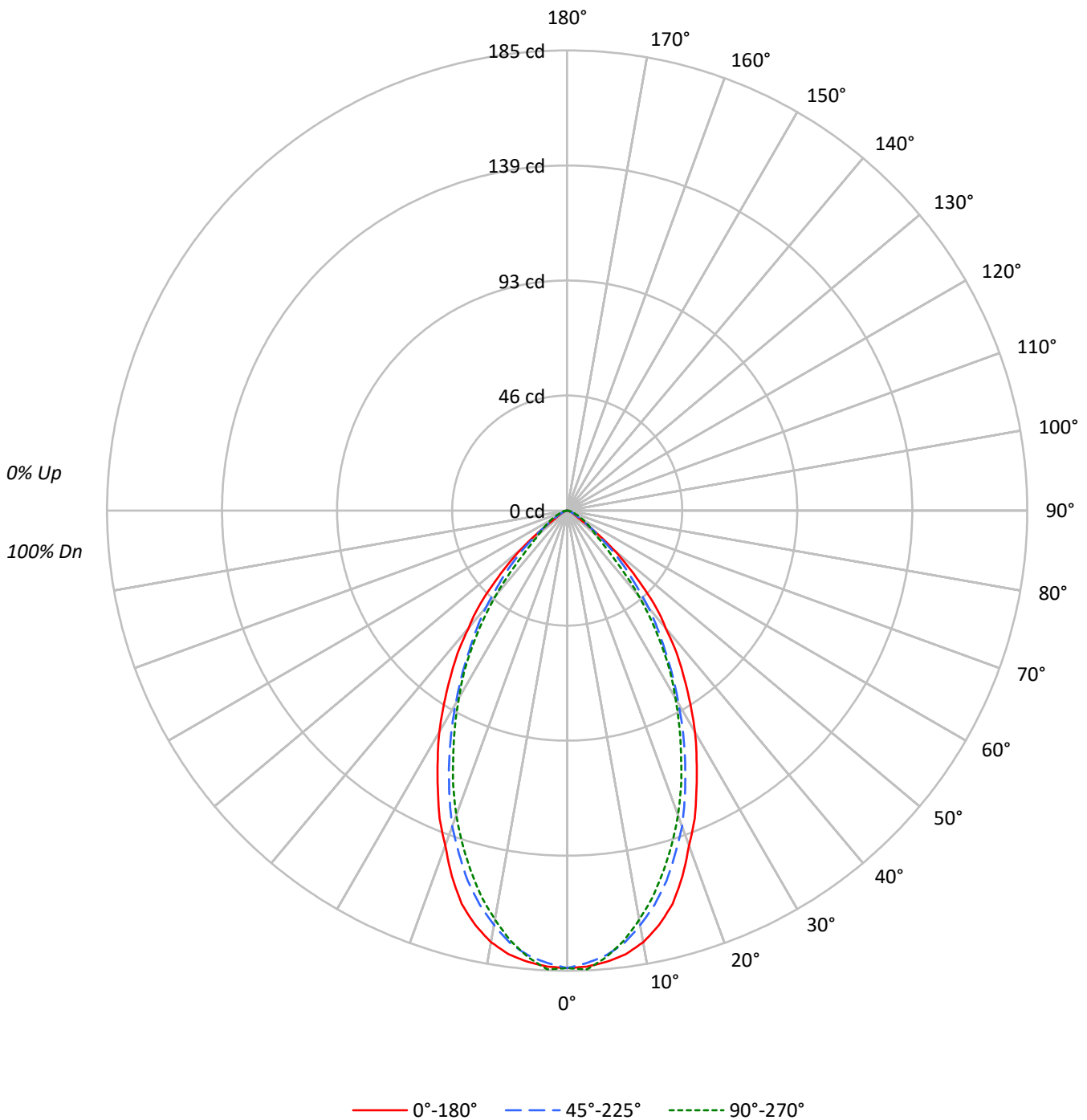
Lumens per Lamp: N/A
Luminaire Lumens: 197.8 lumens
Efficiency: N/A
Efficacy: 15.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	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°	3393	3393	3393
5°	3373	3325	3338
10°	3301	3170	3129
15°	3127	2946	2862
20°	2812	2653	2559
25°	2504	2286	2205
30°	2190	1909	1854
35°	1845	1545	1496
40°	1486	1221	1079
45°	1112	882	642
50°	695	568	422
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: 1112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.9	8.6
10°-20°	43.4	21.9
20°-30°	52.3	26.4
30°-40°	44.6	22.6
40°-50°	26.2	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°	112.6	56.9
0°-40°	157.2	79.5
0°-60°	192.9	97.5
0°-90°	197.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	197.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	184	184	184	184	184	
5°	182	182	180	180	180	17
15°	164	161	154	151	150	45
25°	123	118	112	110	108	56
35°	82	76	69	68	66	51
45°	43	38	34	28	25	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	183.9	183.9	183.9	183.9	183.9
2.5°	183.5	183.9	182.1	183.9	184.6
5°	182.1	182.4	179.5	180.2	180.2
7.5°	179.9	179.5	175.5	174.7	174.4
10°	176.2	175.1	169.2	168.1	167.0
12.5°	170.7	168.5	162.3	160.4	159.0
15°	163.7	161.2	154.2	151.2	149.8
17.5°	154.2	151.2	144.6	141.7	140.2
20°	143.2	140.2	135.1	131.8	130.3
22.5°	134.0	129.2	123.7	121.5	119.7
25°	123.0	117.8	112.3	110.5	108.3
27.5°	112.7	106.5	101.0	99.5	97.6
30°	102.8	96.2	89.6	89.6	87.0
32.5°	92.1	85.9	78.9	78.6	77.1
35°	81.9	75.6	68.6	67.9	66.4
37.5°	72.3	66.1	59.5	57.3	55.4
40°	61.7	56.2	50.7	47.0	44.8
42.5°	53.2	47.0	41.5	37.1	34.1
45°	42.6	38.2	33.8	28.3	24.6
47.5°	33.0	30.1	26.4	20.2	18.4
50°	24.2	22.8	19.8	15.1	14.7
52.5°	15.4	16.2	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	1.26	0.46	1.57	1.89	3.54	4.70	3.90	5.01	5.33
	3H	0.62	1.64	1.00	1.97	2.34	4.27	5.29	4.65	5.62	5.99
	4H	0.75	1.69	1.15	2.05	2.43	4.48	5.43	4.89	5.78	6.17
	6H	0.82	1.68	1.23	2.06	2.45	4.63	5.50	5.05	5.87	6.27
	8H	0.83	1.65	1.27	2.04	2.45	4.66	5.48	5.09	5.87	6.28
	12H	0.80	1.58	1.23	1.96	2.40	4.66	5.44	5.10	5.83	6.26
4H	2H	0.40	1.35	0.80	1.70	2.08	3.50	4.45	3.90	4.80	5.19
	3H	1.06	1.83	1.48	2.24	2.64	4.38	5.14	4.79	5.55	5.96
	4H	1.30	1.98	1.74	2.41	2.85	4.66	5.34	5.10	5.76	6.21
	6H	1.42	2.00	1.89	2.45	2.92	4.88	5.47	5.35	5.92	6.39
	8H	1.45	2.00	1.92	2.44	2.92	4.92	5.47	5.40	5.92	6.39
	12H	1.42	1.90	1.91	2.38	2.86	4.95	5.43	5.44	5.91	6.39
8H	4H	1.41	1.95	1.88	2.40	2.88	4.59	5.13	5.06	5.58	6.06
	6H	1.57	2.02	2.08	2.52	3.00	4.84	5.28	5.35	5.79	6.27
	8H	1.64	2.04	2.17	2.56	3.05	4.90	5.30	5.43	5.82	6.31
	12H	1.62	1.97	2.14	2.47	3.05	4.98	5.32	5.49	5.82	6.40
12H	4H	1.39	1.87	1.88	2.35	2.83	4.54	5.02	5.03	5.50	5.98
	6H	1.57	1.97	2.10	2.49	2.98	4.79	5.19	5.32	5.71	6.20
	8H	1.67	2.02	2.19	2.51	3.09	4.88	5.23	5.40	5.73	6.30