

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: P1057916

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

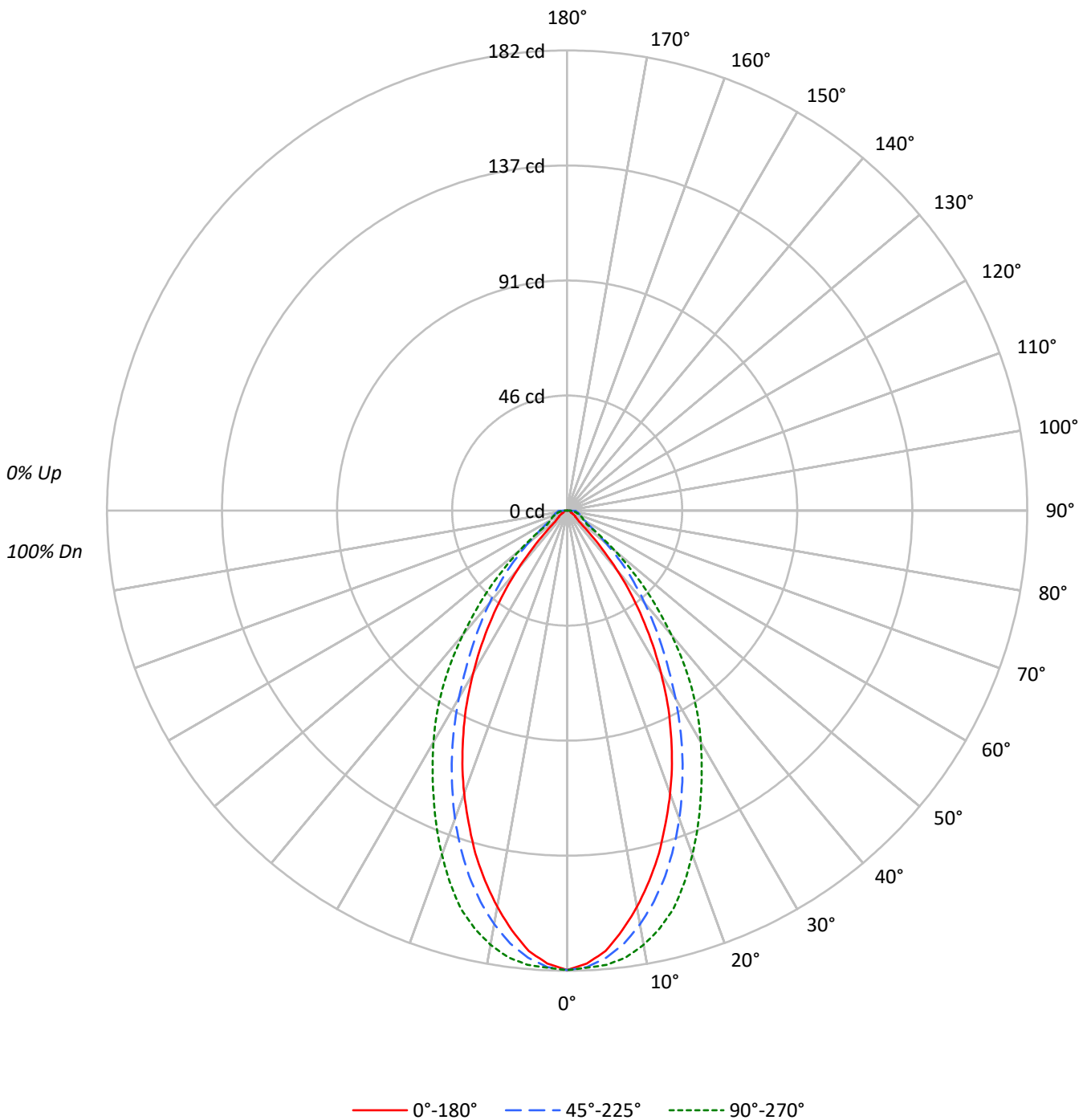
Lumens per Lamp: N/A
Luminaire Lumens: 195.9 lumens
Efficiency: N/A
Efficacy: 15.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	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	77	82	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	68	64	71	67	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58					57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47					45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3353	3353	3353
5°	3238	3288	3340
10°	2981	3112	3268
15°	2680	2860	3112
20°	2339	2549	2843
25°	1977	2197	2545
30°	1581	1824	2254
35°	1169	1466	1937
40°	737	1149	1544
45°	290	864	1135
50°	149	580	700
55°	122	380	312
60°	89	310	284
65°	74	288	288
70°	76	302	281
75°	100	349	299
80°	149	446	329
85°	212	741	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1481 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.6	8.5
10°-20°	42.0	21.4
20°-30°	49.9	25.5
30°-40°	41.5	21.2
40°-50°	23.2	11.8
50°-60°	9.4	4.8
60°-70°	6.0	3.1
70°-80°	4.5	2.3
80°-90°	2.9	1.5
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°	108.5	55.4
0°-40°	150.0	76.6
0°-60°	182.5	93.2
0°-90°	195.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	195.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	182	182	182	182	182	
5°	175	178	178	179	180	16
15°	140	144	150	157	163	39
25°	97	101	108	116	125	44
35°	52	57	65	76	86	32
45°	11	19	33	39	44	10
55°	4	8	12	12	10	3
65°	2	7	7	6	7	2
75°	1	5	5	4	4	1
85°	1	3	4	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	181.7	181.7	181.7	181.7	181.7
2.5°	179.3	182.1	180.7	180.7	181.0
5°	174.8	177.9	177.5	178.9	180.3
7.5°	167.4	170.9	172.7	175.8	178.2
10°	159.1	162.9	166.1	170.9	174.4
12.5°	150.0	153.9	158.4	164.7	169.2
15°	140.3	144.5	149.7	157.4	162.9
17.5°	129.5	134.0	139.9	148.3	154.2
20°	119.1	123.6	129.8	138.2	144.8
22.5°	108.3	112.1	118.7	127.1	135.1
25°	97.1	101.0	107.9	116.3	125.0
27.5°	86.0	89.8	96.8	105.5	115.2
30°	74.2	78.3	85.6	95.4	105.8
32.5°	63.0	67.2	74.8	85.6	96.1
35°	51.9	56.7	65.1	75.9	86.0
37.5°	41.1	46.6	56.0	66.1	75.2
40°	30.6	36.6	47.7	56.4	64.1
42.5°	20.2	27.2	40.0	47.3	53.3
45°	11.1	18.8	33.1	38.6	43.5
47.5°	6.3	12.2	26.1	30.6	33.4
50°	5.2	9.1	20.2	23.3	24.4
52.5°	4.2	8.4	15.3	17.1	16.4
55°	3.8	8.0	11.8	11.5	9.7
57.5°	3.1	8.0	9.4	8.4	8.4
60°	2.4	7.7	8.4	7.3	7.7
62.5°	2.1	7.3	7.7	7.0	7.0
65°	1.7	7.0	6.6	6.3	6.6
67.5°	1.4	6.3	6.3	5.9	5.9
70°	1.4	5.9	5.6	5.2	5.2
72.5°	1.4	5.2	5.2	4.9	4.9
75°	1.4	4.9	4.9	4.5	4.2
77.5°	1.4	4.2	4.5	4.2	3.8
80°	1.4	3.8	4.2	3.8	3.1
82.5°	1.4	3.5	3.8	3.5	2.8
85°	1.0	3.1	3.5	3.1	2.1
87.5°	1.0	3.1	3.5	2.8	1.7
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	2.56	3.78	2.93	4.09	4.41	3.68	4.90	4.04	5.21	5.53
	3H	3.90	4.99	4.28	5.32	5.68	5.68	6.76	6.06	7.10	7.46
	4H	4.48	5.49	4.88	5.84	6.23	6.64	7.65	7.04	8.00	8.39
	6H	5.05	5.98	5.47	6.35	6.74	7.57	8.50	7.99	8.87	9.27
	8H	5.38	6.26	5.81	6.65	7.05	8.02	8.90	8.45	9.29	9.70
	12H	5.67	6.51	6.10	6.90	7.33	8.45	9.29	8.88	9.67	10.10
4H	2H	3.52	4.53	3.93	4.89	5.27	4.35	5.36	4.75	5.71	6.09
	3H	5.56	6.39	5.97	6.79	7.20	6.61	7.44	7.02	7.85	8.25
	4H	6.65	7.39	7.08	7.82	8.26	7.75	8.50	8.19	8.92	9.37
	6H	7.52	8.17	7.98	8.61	9.08	8.91	9.56	9.38	10.01	10.48
	8H	7.93	8.54	8.40	8.98	9.46	9.48	10.08	9.95	10.53	11.00
	12H	8.30	8.83	8.79	9.32	9.79	10.03	10.56	10.51	11.04	11.52
8H	4H	7.42	8.02	7.89	8.47	8.94	8.31	8.91	8.78	9.36	9.83
	6H	8.75	9.25	9.26	9.75	10.23	9.75	10.25	10.25	10.74	11.23
	8H	9.47	9.92	10.00	10.44	10.93	10.52	10.96	11.04	11.48	11.97
	12H	10.15	10.54	10.67	11.04	11.61	11.30	11.70	11.82	12.19	12.77
12H	4H	7.57	8.11	8.06	8.59	9.07	8.41	8.95	8.90	9.43	9.91
	6H	9.07	9.52	9.60	10.04	10.53	9.98	10.42	10.50	10.94	11.43
	8H	9.98	10.37	10.49	10.87	11.44	10.89	11.28	11.40	11.78	12.35