

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: P1057945

Luminaire Tested: S122RDRP-S290D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057945
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

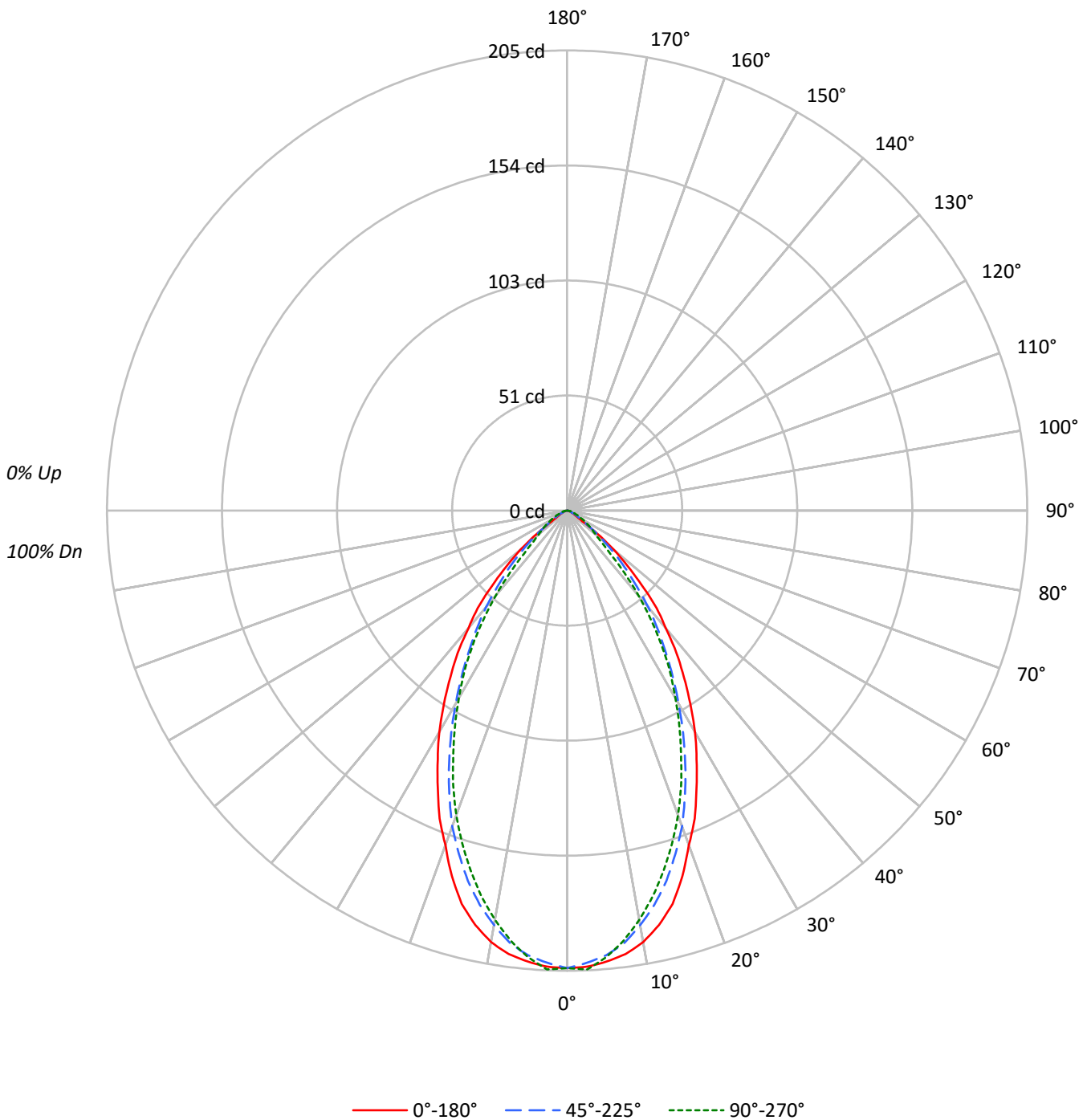
Lumens per Lamp: N/A
Luminaire Lumens: 219.1 lumens
Efficiency: N/A
Efficacy: 17.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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	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	81	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°	3761	3761	3761
5°	3736	3684	3699
10°	3657	3513	3468
15°	3465	3263	3171
20°	3114	2940	2836
25°	2775	2535	2443
30°	2427	2114	2054
35°	2043	1714	1658
40°	1645	1351	1195
45°	1232	976	712
50°	769	632	468
55°	261	341	380
60°	151	210	299
65°	105	144	231
70°	86	108	178
75°	57	86	143
80°	43	85	128
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1232 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.8	8.6
10°-20°	48.1	21.9
20°-30°	57.9	26.4
30°-40°	49.5	22.6
40°-50°	29.0	13.2
50°-60°	10.5	4.8
60°-70°	3.7	1.7
70°-80°	1.5	0.7
80°-90°	0.3	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°	124.8	56.9
0°-40°	174.2	79.5
0°-60°	213.7	97.5
0°-90°	219.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	219.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	204	204	204	204	204	
5°	202	202	199	200	200	19
15°	181	179	171	168	166	50
25°	136	131	124	122	120	63
35°	91	84	76	75	74	57
45°	47	42	37	31	27	36
55°	8	11	11	11	12	10
65°	2	3	3	4	5	3
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°	203.8	203.8	203.8	203.8	203.8
2.5°	203.4	203.8	201.7	203.8	204.6
5°	201.7	202.2	198.9	199.7	199.7
7.5°	199.3	198.9	194.4	193.6	193.2
10°	195.2	194.0	187.5	186.3	185.1
12.5°	189.1	186.7	179.8	177.7	176.1
15°	181.4	178.6	170.8	167.6	166.0
17.5°	170.8	167.6	160.3	157.0	155.4
20°	158.6	155.4	149.7	146.0	144.4
22.5°	148.5	143.2	137.1	134.6	132.6
25°	136.3	130.6	124.5	122.4	120.0
27.5°	124.9	118.0	111.9	110.2	108.2
30°	113.9	106.6	99.2	99.2	96.4
32.5°	102.1	95.2	87.5	87.0	85.4
35°	90.7	83.8	76.1	75.2	73.6
37.5°	80.1	73.2	65.9	63.5	61.4
40°	68.3	62.2	56.1	52.1	49.6
42.5°	59.0	52.1	46.0	41.1	37.8
45°	47.2	42.3	37.4	31.3	27.3
47.5°	36.6	33.4	29.3	22.4	20.3
50°	26.8	25.2	22.0	16.7	16.3
52.5°	17.1	17.9	15.9	13.0	14.2
55°	8.1	11.4	10.6	11.0	11.8
57.5°	5.3	5.7	7.7	8.9	9.8
60°	4.1	4.1	5.7	7.3	8.1
62.5°	3.3	3.3	4.5	6.1	6.5
65°	2.4	2.8	3.3	4.5	5.3
67.5°	2.0	2.0	2.4	3.7	4.1
70°	1.6	1.6	2.0	2.8	3.3
72.5°	1.2	1.2	1.6	2.4	2.4
75°	0.8	1.2	1.2	1.6	2.0
77.5°	0.8	0.8	0.8	1.2	1.6
80°	0.4	0.4	0.8	0.8	1.2
82.5°	0.4	0.4	0.4	0.4	0.8
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	0.50	1.66	0.86	1.97	2.29	3.86	5.02	4.22	5.33	5.65
	3H	0.99	2.02	1.38	2.35	2.71	4.60	5.62	4.98	5.95	6.32
	4H	1.12	2.07	1.53	2.42	2.81	4.81	5.76	5.21	6.11	6.49
	6H	1.19	2.06	1.61	2.43	2.83	4.95	5.82	5.37	6.19	6.59
	8H	1.20	2.01	1.63	2.40	2.81	4.98	5.80	5.42	6.19	6.60
	12H	1.16	1.94	1.59	2.32	2.75	4.98	5.76	5.41	6.14	6.58
4H	2H	0.82	1.77	1.22	2.12	2.50	3.83	4.78	4.24	5.13	5.52
	3H	1.45	2.22	1.86	2.62	3.03	4.71	5.48	5.13	5.89	6.29
	4H	1.68	2.36	2.12	2.78	3.23	4.98	5.67	5.42	6.09	6.53
	6H	1.79	2.38	2.26	2.83	3.30	5.20	5.79	5.67	6.23	6.71
	8H	1.80	2.35	2.28	2.80	3.27	5.24	5.79	5.72	6.24	6.71
	12H	1.77	2.25	2.26	2.73	3.21	5.26	5.74	5.75	6.22	6.70
8H	4H	1.78	2.32	2.25	2.77	3.25	4.91	5.46	5.38	5.91	6.38
	6H	1.94	2.38	2.44	2.88	3.36	5.16	5.60	5.67	6.10	6.59
	8H	1.98	2.37	2.51	2.89	3.39	5.22	5.62	5.75	6.13	6.63
	12H	1.96	2.30	2.47	2.80	3.38	5.28	5.63	5.80	6.12	6.70
12H	4H	1.76	2.24	2.25	2.73	3.20	4.86	5.34	5.35	5.83	6.30
	6H	1.93	2.33	2.46	2.85	3.34	5.11	5.51	5.64	6.03	6.52
	8H	2.00	2.35	2.52	2.85	3.42	5.19	5.54	5.71	6.04	6.61