

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: P1058023

Luminaire Tested: S122RDRP-S485D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

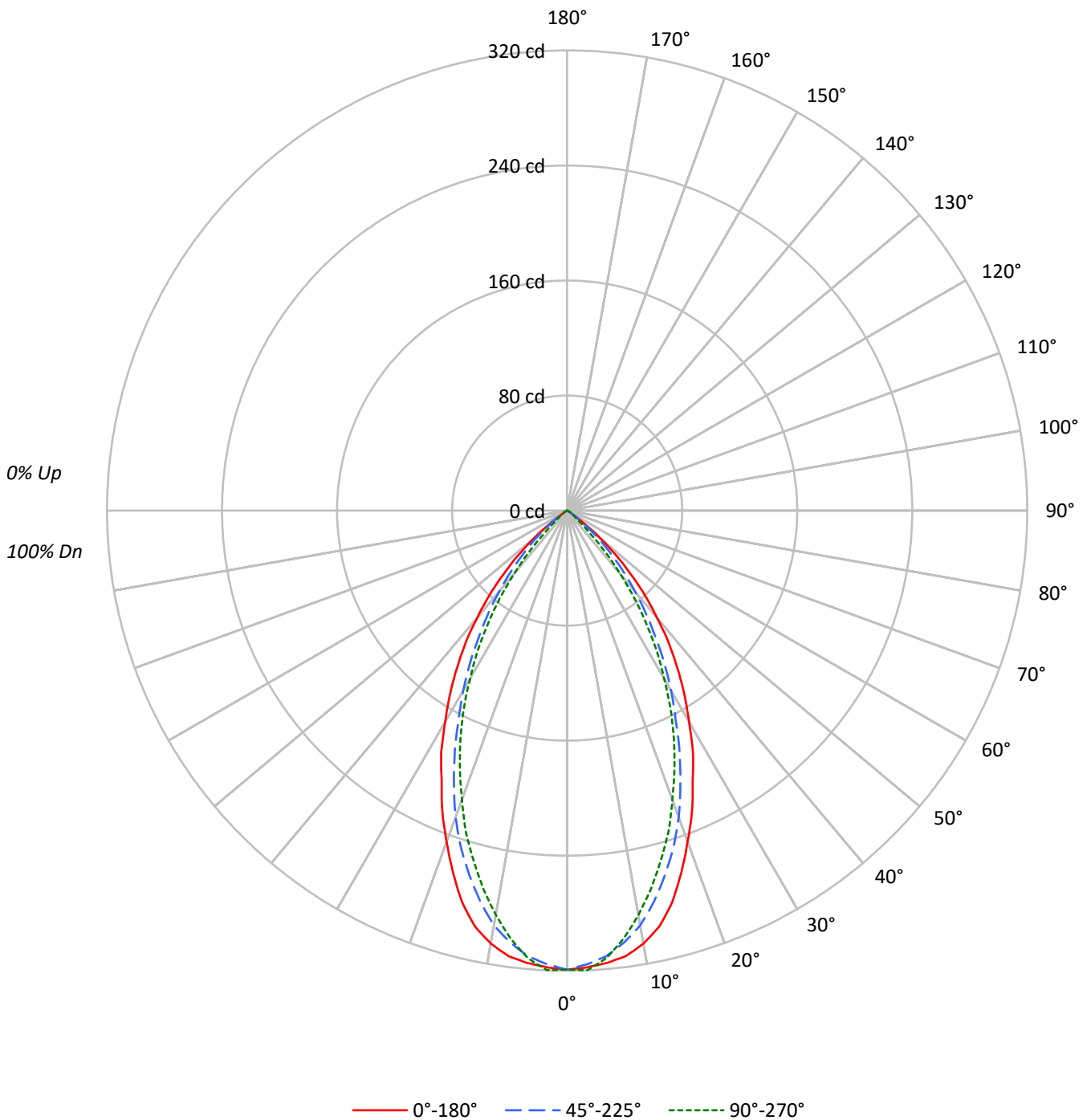
Lumens per Lamp: N/A
Luminaire Lumens: 300.2 lumens
Efficiency: N/A
Efficacy: 15.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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
RW	70	50	30	10	70	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
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5890	5890	5890
5°	5850	5762	5788
10°	5728	5488	5349
15°	5389	5015	4808
20°	4811	4454	4200
25°	4204	3765	3573
30°	3609	3077	2876
35°	3010	2401	2158
40°	2341	1773	1383
45°	1639	1180	598
50°	890	620	212
55°	129	216	151
60°	26	48	100
65°	0	31	57
70°	0	0	38
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	9.8
10°-20°	73.9	24.6
20°-30°	86.2	28.7
30°-40°	69.1	23.0
40°-50°	34.3	11.4
50°-60°	6.8	2.3
60°-70°	0.6	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	189.4	63.1
0°-40°	258.4	86.1
0°-60°	299.5	99.8
0°-90°	300.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	300.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	319	319	319	319	319	
5°	316	316	311	312	312	30
15°	282	277	262	256	252	78
25°	206	196	185	181	176	95
35°	134	120	107	102	96	83
45°	63	55	45	30	23	48
55°	4	8	7	4	5	8
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
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°	319.2	319.2	319.2	319.2	319.2
2.5°	317.9	319.2	315.8	319.2	319.9
5°	315.8	315.8	311.1	311.8	312.5
7.5°	312.5	311.1	303.0	301.7	300.3
10°	305.7	303.0	292.9	287.5	285.5
12.5°	296.3	292.2	278.7	272.6	269.3
15°	282.1	276.7	262.5	255.8	251.7
17.5°	263.9	259.1	245.7	238.2	234.2
20°	245.0	238.2	226.8	219.3	213.9
22.5°	226.8	218.0	205.8	200.4	195.0
25°	206.5	196.4	184.9	180.9	175.5
27.5°	189.6	176.8	163.3	160.6	155.9
30°	169.4	157.2	144.4	140.4	135.0
32.5°	151.8	138.3	125.5	120.8	116.1
35°	133.6	120.1	106.6	101.9	95.8
37.5°	116.1	103.3	89.8	82.3	76.9
40°	97.2	86.4	73.6	64.1	57.4
42.5°	80.3	70.9	58.7	46.6	39.8
45°	62.8	55.3	45.2	30.4	22.9
47.5°	46.6	41.2	33.1	17.5	12.1
50°	31.0	29.0	21.6	8.8	7.4
52.5°	16.9	18.2	12.8	5.4	6.1
55°	4.0	8.1	6.7	4.0	4.7
57.5°	0.7	1.3	3.4	3.4	3.4
60°	0.7	0.7	1.3	2.0	2.7
62.5°	0.7	0.0	0.7	1.3	2.0
65°	0.0	0.0	0.7	0.7	1.3
67.5°	0.0	0.0	0.0	0.7	0.7
70°	0.0	0.0	0.0	0.7	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00