

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: P1058026

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058026
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-S485D950-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

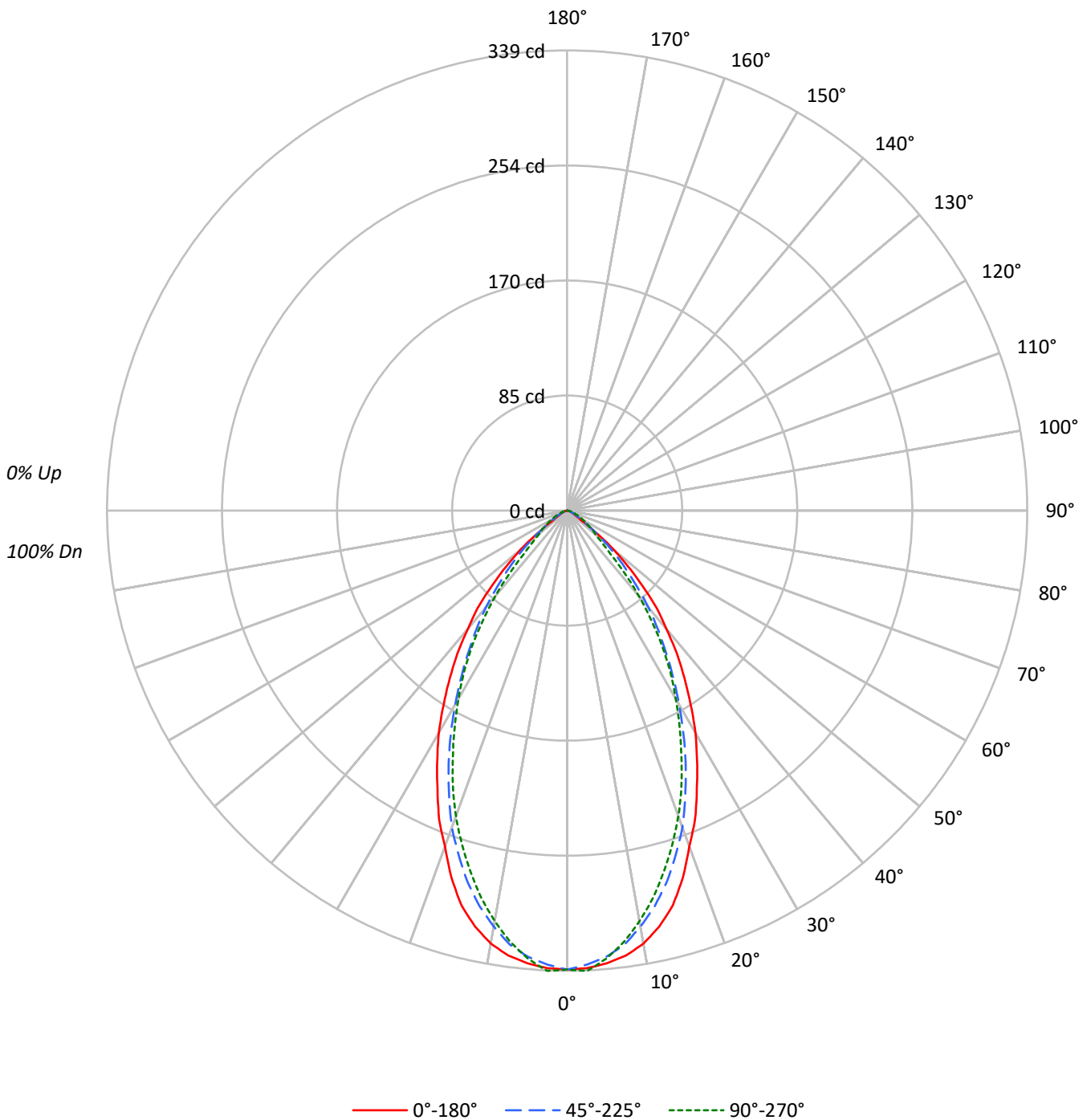
Lumens per Lamp: N/A
Luminaire Lumens: 363.6 lumens
Efficiency: N/A
Efficacy: 18.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	6239	6239	6239
5°	6200	6113	6137
10°	6069	5829	5754
15°	5750	5414	5259
20°	5168	4876	4705
25°	4603	4204	4054
30°	4027	3509	3407
35°	3390	2843	2750
40°	2732	2243	1982
45°	2043	1621	1180
50°	1277	1045	775
55°	434	563	631
60°	247	347	498
65°	175	236	384
70°	146	183	291
75°	93	143	242
80°	74	138	213
85°	0	0	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2043 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	8.6
10°-20°	79.8	21.9
20°-30°	96.1	26.4
30°-40°	82.1	22.6
40°-50°	48.1	13.2
50°-60°	17.4	4.8
60°-70°	6.2	1.7
70°-80°	2.4	0.7
80°-90°	0.4	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°	207.0	56.9
0°-40°	289.0	79.5
0°-60°	354.5	97.5
0°-90°	363.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	335	335	330	331	331	32
15°	301	296	283	278	275	84
25°	226	217	206	203	199	104
35°	150	139	126	125	122	94
45°	78	70	62	52	45	60
55°	14	19	18	18	20	17
65°	4	5	5	7	9	4
75°	1	2	2	3	3	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	338.1	338.1	338.1	338.1	338.1
2.5°	337.4	338.1	334.7	338.1	339.4
5°	334.7	335.4	330.0	331.3	331.3
7.5°	330.7	330.0	322.6	321.2	320.5
10°	323.9	321.9	311.1	309.1	307.1
12.5°	313.8	309.7	298.3	294.9	292.2
15°	301.0	296.3	283.4	278.0	275.3
17.5°	283.4	278.0	265.9	260.5	257.8
20°	263.2	257.8	248.3	242.3	239.6
22.5°	246.3	237.5	227.4	223.4	220.0
25°	226.1	216.6	206.5	203.1	199.1
27.5°	207.2	195.7	185.6	182.9	179.5
30°	189.0	176.8	164.7	164.7	159.9
32.5°	169.4	157.9	145.1	144.4	141.7
35°	150.5	139.0	126.2	124.8	122.1
37.5°	132.9	121.5	109.3	105.3	101.9
40°	113.4	103.2	93.1	86.4	82.3
42.5°	97.9	86.4	76.3	68.2	62.8
45°	78.3	70.2	62.1	52.0	45.2
47.5°	60.7	55.3	48.6	37.1	33.7
50°	44.5	41.8	36.4	27.7	27.0
52.5°	28.3	29.7	26.3	21.6	23.6
55°	13.5	18.9	17.5	18.2	19.6
57.5°	8.8	9.4	12.8	14.8	16.2
60°	6.7	6.7	9.4	12.1	13.5
62.5°	5.4	5.4	7.4	10.1	10.8
65°	4.0	4.7	5.4	7.4	8.8
67.5°	3.4	3.4	4.0	6.1	6.7
70°	2.7	2.7	3.4	4.7	5.4
72.5°	2.0	2.0	2.7	4.0	4.0
75°	1.3	2.0	2.0	2.7	3.4
77.5°	1.3	1.3	1.3	2.0	2.7
80°	0.7	0.7	1.3	1.3	2.0
82.5°	0.7	0.7	0.7	0.7	1.3
85°	0.0	0.0	0.0	0.7	0.7
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	2.22	3.38	2.58	3.69	4.01	5.62	6.79	5.99	7.10	7.41
	3H	2.75	3.77	3.13	4.10	4.47	6.35	7.38	6.73	7.71	8.07
	4H	2.88	3.82	3.28	4.18	4.56	6.57	7.52	6.98	7.87	8.26
	6H	2.94	3.81	3.36	4.18	4.58	6.72	7.59	7.14	7.96	8.35
	8H	2.95	3.77	3.39	4.16	4.57	6.75	7.56	7.18	7.96	8.36
	12H	2.92	3.70	3.35	4.08	4.51	6.75	7.53	7.18	7.91	8.34
4H	2H	2.53	3.48	2.94	3.83	4.22	5.59	6.54	6.00	6.89	7.28
	3H	3.20	3.97	3.61	4.37	4.78	6.47	7.23	6.88	7.64	8.05
	4H	3.43	4.11	3.87	4.54	4.98	6.75	7.43	7.19	7.85	8.30
	6H	3.54	4.13	4.01	4.58	5.05	6.97	7.55	7.44	8.00	8.47
	8H	3.57	4.11	4.04	4.56	5.03	7.01	7.56	7.48	8.00	8.48
	12H	3.53	4.01	4.02	4.50	4.97	7.03	7.51	7.52	8.00	8.47
8H	4H	3.53	4.08	4.00	4.53	5.00	6.68	7.22	7.15	7.67	8.15
	6H	3.69	4.13	4.20	4.63	5.12	6.93	7.37	7.44	7.87	8.35
	8H	3.75	4.14	4.28	4.66	5.16	6.99	7.38	7.52	7.90	8.40
	12H	3.73	4.07	4.25	4.57	5.15	7.05	7.40	7.57	7.90	8.47
12H	4H	3.52	3.99	4.00	4.48	4.96	6.63	7.11	7.12	7.59	8.07
	6H	3.69	4.09	4.22	4.60	5.10	6.88	7.27	7.41	7.79	8.29
	8H	3.77	4.12	4.29	4.62	5.19	6.96	7.31	7.48	7.81	8.38