

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: P1058430

Luminaire Tested: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058430
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

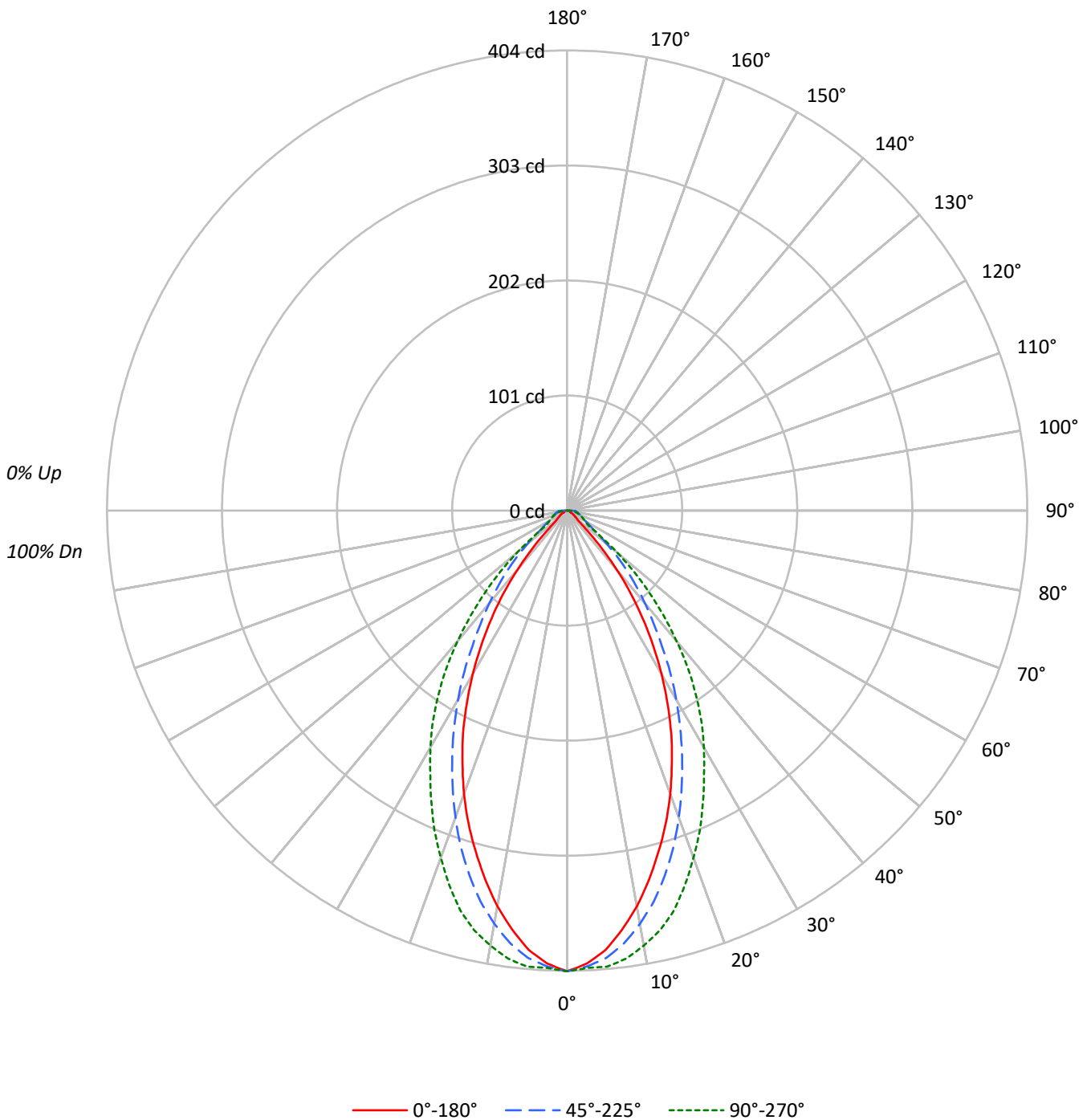
Lumens per Lamp: N/A
Luminaire Lumens: 440.3 lumens
Efficiency: N/A
Efficacy: 25.3 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

TEST NUMBER: P1058430

CATALOG NUMBER: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058430

CATALOG NUMBER: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

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	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	76	81	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	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7464	7464	7464
5°	7170	7302	7444
10°	6610	6901	7264
15°	5922	6331	6936
20°	5198	5630	6368
25°	4402	4862	5746
30°	3531	4082	5116
35°	2611	3266	4433
40°	1638	2556	3601
45°	642	1926	2670
50°	316	1300	1636
55°	251	853	730
60°	192	694	668
65°	140	651	651
70°	173	664	664
75°	185	741	692
80°	276	967	754
85°	550	1651	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3004 cd/sqm



TEST NUMBER: P1058430

CATALOG NUMBER: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	8.4
10°-20°	93.4	21.2
20°-30°	111.7	25.4
30°-40°	94.1	21.4
40°-50°	53.6	12.2
50°-60°	21.1	4.8
60°-70°	13.3	3.0
70°-80°	9.9	2.2
80°-90°	6.3	1.4
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°	242.1	55.0
0°-40°	336.2	76.3
0°-60°	410.8	93.3
0°-90°	440.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	440.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	387	396	394	399	402	36
15°	310	321	331	351	363	87
25°	216	226	239	263	282	98
35°	116	126	145	176	197	72
45°	25	43	74	93	102	23
55°	8	17	26	27	23	7
65°	3	15	15	14	15	4
75°	3	10	10	10	10	3
85°	3	7	8	7	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1058430

CATALOG NUMBER: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	404.5	404.5	404.5	404.5	404.5
2.5°	398.1	405.2	400.6	401.3	401.9
5°	387.1	395.5	394.2	398.7	401.9
7.5°	370.9	379.9	383.2	390.9	396.8
10°	352.8	363.1	368.3	380.6	387.7
12.5°	332.0	343.7	351.5	367.0	377.3
15°	310.0	321.0	331.4	350.8	363.1
17.5°	288.0	299.0	310.0	331.4	344.3
20°	264.7	275.1	286.7	309.4	324.3
22.5°	240.1	251.1	262.8	286.1	304.2
25°	216.2	225.9	238.8	263.4	282.2
27.5°	190.9	200.6	214.9	240.1	260.2
30°	165.7	175.4	191.6	217.5	240.1
32.5°	140.5	150.8	168.3	196.8	219.4
35°	115.9	126.2	145.0	176.1	196.8
37.5°	91.9	103.6	124.3	154.7	174.1
40°	68.0	81.6	106.1	133.3	149.5
42.5°	45.3	62.1	89.3	112.0	125.6
45°	24.6	43.4	73.8	92.6	102.3
47.5°	13.6	27.8	58.9	73.8	79.6
50°	11.0	19.4	45.3	56.3	57.0
52.5°	9.1	17.5	33.7	40.1	36.9
55°	7.8	16.8	26.5	27.2	22.7
57.5°	6.5	16.2	22.0	19.4	19.4
60°	5.2	16.2	18.8	17.5	18.1
62.5°	3.9	16.2	16.8	15.5	16.2
65°	3.2	14.9	14.9	14.2	14.9
67.5°	3.2	13.6	13.6	12.9	13.6
70°	3.2	12.9	12.3	12.3	12.3
72.5°	2.6	11.7	11.7	11.0	11.0
75°	2.6	10.4	10.4	9.7	9.7
77.5°	2.6	9.7	9.7	9.1	8.4
80°	2.6	8.4	9.1	8.4	7.1
82.5°	2.6	7.8	8.4	7.8	5.8
85°	2.6	7.1	7.8	7.1	5.2
87.5°	1.9	7.1	7.1	5.8	3.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058430
 CATALOG NUMBER: S122RDRP-H485D950-X4F0-XX-UDD-BVL-W

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	4.68	5.91	5.05	6.22	6.53	6.69	7.92	7.06	8.23	8.54
	3H	6.22	7.30	6.60	7.63	8.00	8.67	9.75	9.05	10.08	10.45
	4H	6.78	7.79	7.18	8.14	8.53	9.58	10.59	9.99	10.95	11.33
	6H	7.34	8.27	7.75	8.64	9.03	10.46	11.39	10.88	11.77	12.16
	8H	7.63	8.51	8.06	8.90	9.31	10.87	11.75	11.30	12.14	12.55
	12H	7.99	8.83	8.43	9.22	9.65	11.31	12.15	11.74	12.54	12.97
4H	2H	5.87	6.88	6.27	7.23	7.62	7.32	8.33	7.72	8.68	9.06
	3H	8.06	8.90	8.48	9.30	9.70	9.56	10.40	9.98	10.80	11.20
	4H	9.12	9.87	9.56	10.29	10.74	10.63	11.38	11.07	11.80	12.25
	6H	10.02	10.66	10.48	11.11	11.58	11.74	12.39	12.21	12.84	13.31
	8H	10.40	11.01	10.87	11.46	11.93	12.27	12.87	12.74	13.32	13.79
	12H	10.82	11.36	11.31	11.84	12.32	12.84	13.38	13.33	13.86	14.34
8H	4H	9.92	10.53	10.40	10.98	11.45	11.13	11.73	11.60	12.18	12.65
	6H	11.30	11.80	11.81	12.30	12.78	12.53	13.02	13.03	13.52	14.00
	8H	12.03	12.47	12.55	12.99	13.48	13.27	13.71	13.79	14.23	14.72
	12H	12.78	13.17	13.29	13.67	14.24	14.10	14.49	14.61	14.99	15.56
12H	4H	10.09	10.62	10.58	11.11	11.58	11.23	11.76	11.72	12.25	12.72
	6H	11.64	12.08	12.16	12.60	13.09	12.74	13.19	13.27	13.71	14.20
	8H	12.55	12.95	13.07	13.44	14.02	13.63	14.02	14.15	14.52	15.09