

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: P1059726

Luminaire Tested: S123RDRP-H560D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059726
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-H560D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 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

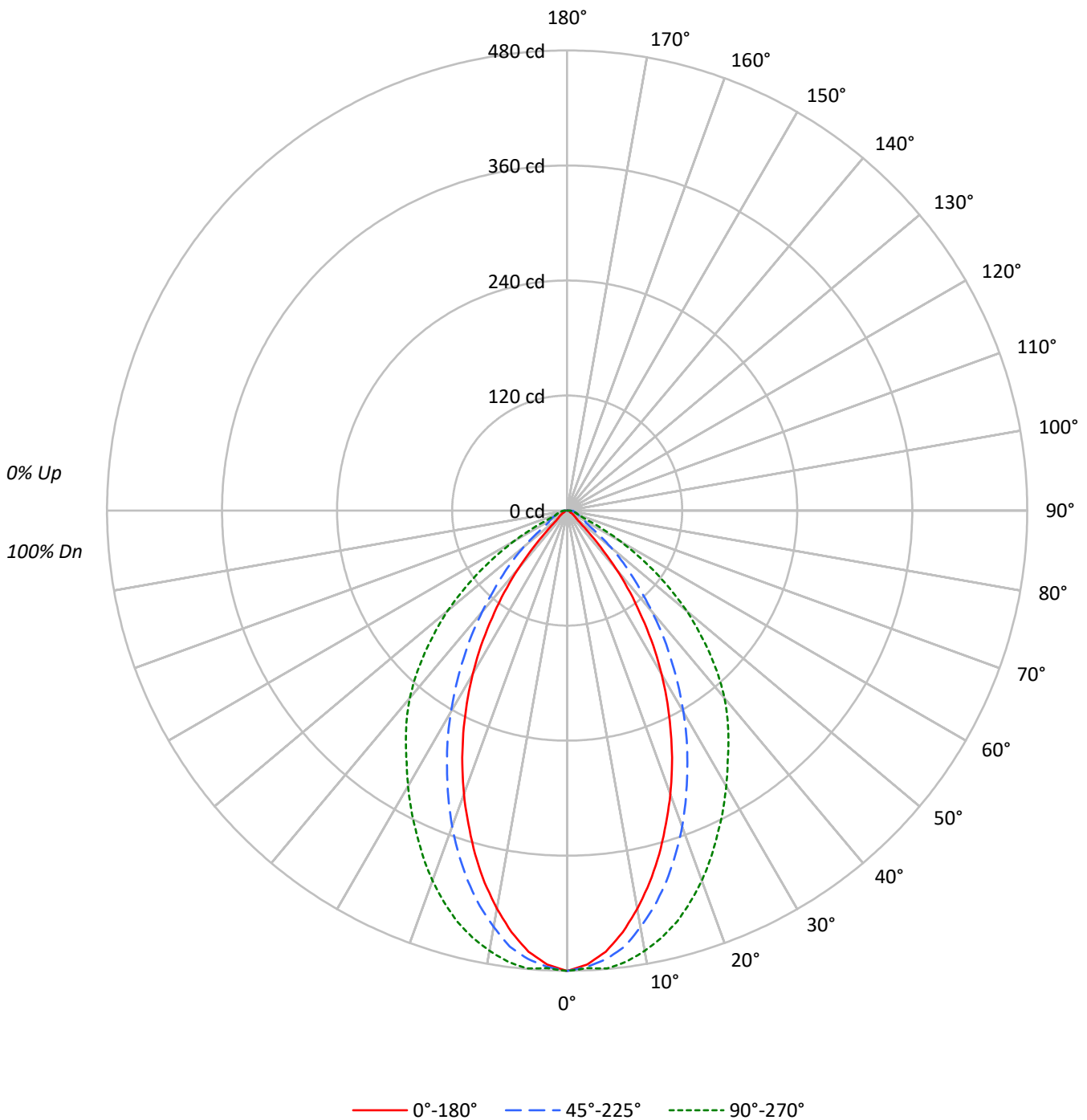
Lumens per Lamp: N/A
Luminaire Lumens: 576.5 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059726

CATALOG NUMBER: S123RDRP-H560D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059726

CATALOG NUMBER: S123RDRP-H560D950-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	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5639	5639	5639
5°	5445	5534	5652
10°	5026	5259	5560
15°	4510	4863	5393
20°	3935	4384	5133
25°	3319	3843	4815
30°	2670	3285	4500
35°	1954	2705	4206
40°	1219	2109	3916
45°	462	1571	3489
50°	219	1083	2974
55°	168	594	2299
60°	117	505	1512
65°	89	439	631
70°	86	412	412
75°	113	431	431
80°	169	514	467
85°	337	849	674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3489 cd/sqm



TEST NUMBER: P1059726

CATALOG NUMBER: S123RDRP-H560D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	7.6
10°-20°	113.0	19.6
20°-30°	139.9	24.3
30°-40°	125.4	21.8
40°-50°	82.2	14.3
50°-60°	41.2	7.1
60°-70°	16.1	2.8
70°-80°	9.0	1.6
80°-90°	5.6	1.0
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°	297.0	51.5
0°-40°	422.4	73.3
0°-60°	545.8	94.7
0°-90°	576.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	480	480	480	480	480	
5°	462	470	470	474	480	43
15°	371	386	400	426	444	103
25°	256	272	297	339	372	117
35°	136	155	189	246	293	85
45°	28	45	95	162	210	26
55°	8	10	29	80	112	8
65°	3	10	16	21	23	3
75°	2	10	10	10	10	3
85°	2	6	6	6	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1059726

CATALOG NUMBER: S123RDRP-H560D950-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	480.2	480.2	480.2	480.2	480.2
2.5°	473.9	480.8	476.4	477.0	477.7
5°	461.9	469.5	469.5	474.5	479.5
7.5°	443.6	452.4	458.7	467.6	474.5
10°	421.5	432.2	441.1	456.8	466.3
12.5°	397.5	410.8	422.1	443.0	456.2
15°	371.0	386.2	400.0	426.5	443.6
17.5°	342.6	357.8	376.1	407.0	427.8
20°	314.9	330.0	350.8	385.5	410.8
22.5°	285.8	301.6	323.7	362.2	391.8
25°	256.2	272.0	296.6	338.8	371.6
27.5°	226.5	242.3	270.1	316.1	352.1
30°	196.9	212.6	242.3	291.5	331.9
32.5°	167.2	184.2	215.2	268.8	311.7
35°	136.3	154.6	188.7	245.5	293.4
37.5°	107.9	124.9	163.4	225.3	275.1
40°	79.5	97.8	137.6	205.7	255.5
42.5°	51.7	71.3	114.2	184.2	233.5
45°	27.8	44.8	94.6	162.2	210.1
47.5°	15.1	24.6	76.3	138.8	186.1
50°	12.0	13.9	59.3	118.6	162.8
52.5°	10.1	11.4	42.3	99.7	136.9
55°	8.2	10.1	29.0	79.5	112.3
57.5°	6.9	8.8	22.7	61.8	87.7
60°	5.0	7.6	21.5	45.4	64.4
62.5°	3.8	8.2	18.9	31.5	42.3
65°	3.2	9.5	15.8	20.8	22.7
67.5°	2.5	10.1	13.9	13.3	13.3
70°	2.5	9.5	12.0	11.4	12.0
72.5°	2.5	10.1	10.7	10.1	10.7
75°	2.5	9.5	9.5	9.5	9.5
77.5°	2.5	8.8	8.8	8.2	8.2
80°	2.5	7.6	7.6	7.6	6.9
82.5°	2.5	6.9	6.9	6.9	5.7
85°	2.5	6.3	6.3	6.3	5.0
87.5°	1.9	5.7	6.3	5.7	3.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059726
 CATALOG NUMBER: S123RDRP-H560D950-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	0.00	0.00	0.00	0.00	0.22	12.61	13.87	12.98	14.18	14.49
	3H	0.68	1.79	1.06	2.12	2.49	12.69	13.80	13.07	14.13	14.50
	4H	1.79	2.82	2.19	3.17	3.56	12.77	13.80	13.17	14.16	14.54
	6H	2.77	3.72	3.19	4.09	4.49	12.87	13.82	13.29	14.19	14.59
	8H	3.25	4.15	3.68	4.54	4.95	12.93	13.83	13.36	14.22	14.63
	12H	3.80	4.66	4.24	5.05	5.48	13.01	13.87	13.45	14.25	14.68
4H	2H	1.61	2.65	2.02	3.00	3.38	12.47	13.50	12.87	13.85	14.24
	3H	3.93	4.78	4.35	5.18	5.59	12.64	13.49	13.06	13.89	14.30
	4H	5.31	6.06	5.74	6.48	6.93	12.80	13.55	13.23	13.97	14.42
	6H	6.39	7.04	6.85	7.49	7.96	13.02	13.67	13.49	14.12	14.59
	8H	6.84	7.45	7.31	7.90	8.37	13.14	13.75	13.62	14.20	14.67
	12H	7.33	7.87	7.82	8.35	8.83	13.32	13.86	13.80	14.34	14.81
8H	4H	6.28	6.89	6.75	7.34	7.81	12.79	13.40	13.26	13.85	14.32
	6H	7.80	8.30	8.30	8.80	9.28	13.13	13.63	13.63	14.13	14.61
	8H	8.57	9.02	9.09	9.53	10.02	13.36	13.81	13.88	14.33	14.82
	12H	9.37	9.76	9.88	10.26	10.83	13.69	14.09	14.21	14.59	15.16
12H	4H	6.46	7.00	6.95	7.48	7.95	12.78	13.32	13.26	13.80	14.27
	6H	8.11	8.56	8.64	9.08	9.57	13.15	13.60	13.67	14.12	14.61
	8H	9.06	9.46	9.58	9.95	10.53	13.46	13.86	13.97	14.35	14.92