

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: P1059405

Luminaire Tested: S123RDRP-S775D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

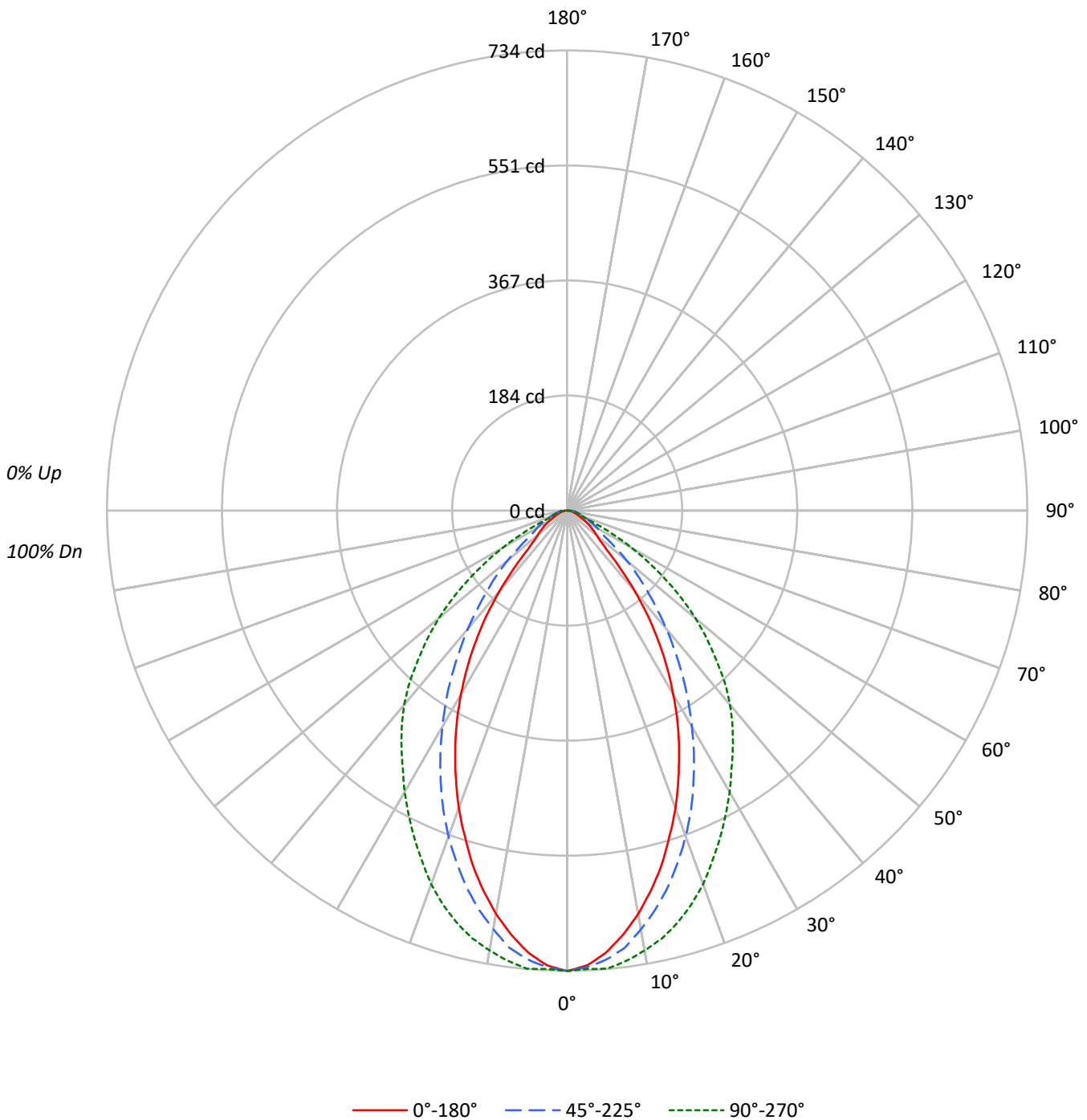
Lumens per Lamp: N/A
Luminaire Lumens: 985.9 lumens
Efficiency: N/A
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1059405

CATALOG NUMBER: S123RDRP-S775D950-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot



TEST NUMBER: P1059405

CATALOG NUMBER: S123RDRP-S775D950-X4F0-XX-UDD-SVL-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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8624	8624	8624
5°	8345	8474	8646
10°	7788	8083	8496
15°	7098	7553	8274
20°	6315	6909	7924
25°	5473	6181	7471
30°	4590	5394	7026
35°	3635	4590	6604
40°	2574	3775	6196
45°	1514	2984	5575
50°	1133	2267	4883
55°	952	1531	3922
60°	770	1308	2785
65°	608	1114	1470
70°	532	972	910
75°	495	912	871
80°	494	987	866
85°	620	1469	1105

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5575 cd/sqm



TEST NUMBER: P1059405

CATALOG NUMBER: S123RDRP-S775D950-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.6	6.9
10°-20°	175.7	17.8
20°-30°	223.7	22.7
30°-40°	210.4	21.3
40°-50°	151.5	15.4
50°-60°	87.5	8.9
60°-70°	40.0	4.1
70°-80°	20.0	2.0
80°-90°	9.4	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°	467.0	47.4
0°-40°	677.4	68.7
0°-60°	916.5	93.0
0°-90°	985.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	985.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	708	720	719	726	734	66
15°	584	605	621	656	681	163
25°	422	444	477	530	577	193
35°	254	276	320	394	461	157
45°	91	114	180	270	336	77
55°	46	48	75	142	192	42
65°	22	31	40	45	53	22
75°	11	21	20	19	19	12
85°	5	10	11	10	8	5
90°	0	0	0	0	0	

TEST NUMBER: P1059405

CATALOG NUMBER: S123RDRP-S775D950-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	734.4	734.4	734.4	734.4	734.4
2.5°	726.2	735.3	729.0	729.9	731.7
5°	708.0	719.8	718.9	726.2	733.5
7.5°	682.4	696.1	703.4	714.4	724.4
10°	653.2	668.7	677.9	697.9	712.5
12.5°	619.5	639.5	651.4	677.9	698.8
15°	583.9	604.9	621.3	656.0	680.6
17.5°	543.7	566.6	587.5	628.6	658.7
20°	505.4	527.3	552.9	597.6	634.1
22.5°	463.5	487.2	516.4	563.8	604.9
25°	422.4	444.3	477.1	530.1	576.6
27.5°	381.4	403.3	437.9	496.3	547.4
30°	338.5	361.3	397.8	462.6	518.2
32.5°	296.5	318.4	359.5	429.7	488.1
35°	253.6	275.5	320.2	394.1	460.7
37.5°	211.7	234.5	281.9	364.9	433.4
40°	167.9	192.5	246.3	334.8	404.2
42.5°	126.8	153.3	210.7	303.8	372.2
45°	91.2	114.0	179.7	270.1	335.7
47.5°	71.2	83.0	151.4	235.4	302.0
50°	62.0	63.9	124.1	203.5	267.3
52.5°	53.8	55.7	97.6	173.3	230.8
55°	46.5	48.4	74.8	142.3	191.6
57.5°	39.2	42.0	62.0	113.1	154.2
60°	32.8	36.5	55.7	86.7	118.6
62.5°	26.5	32.8	47.4	63.9	84.8
65°	21.9	31.0	40.1	44.7	52.9
67.5°	18.2	28.3	33.8	31.9	31.0
70°	15.5	25.5	28.3	25.5	26.5
72.5°	12.8	23.7	23.7	21.9	21.9
75°	10.9	21.0	20.1	19.2	19.2
77.5°	9.1	18.2	17.3	16.4	15.5
80°	7.3	14.6	14.6	13.7	12.8
82.5°	6.4	11.9	11.9	11.9	10.0
85°	4.6	10.0	10.9	10.0	8.2
87.5°	3.6	9.1	9.1	8.2	5.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059405

CATALOG NUMBER: S123RDRP-S775D950-X4F0-XX-UDD-SVL-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	7.46	8.78	7.82	9.09	9.41	14.82	16.14	15.18	16.45	16.76
	3H	8.84	10.01	9.22	10.34	10.71	15.05	16.22	15.43	16.55	16.91
	4H	9.40	10.49	9.80	10.84	11.22	15.16	16.25	15.57	16.61	16.99
	6H	9.83	10.83	10.24	11.20	11.60	15.28	16.28	15.69	16.65	17.04
	8H	10.01	10.96	10.44	11.35	11.75	15.33	16.28	15.76	16.67	17.08
	12H	10.16	11.07	10.60	11.46	11.89	15.39	16.30	15.82	16.68	17.11
4H	2H	8.56	9.65	8.96	10.00	10.38	14.78	15.87	15.18	16.22	16.60
	3H	10.22	11.11	10.63	11.51	11.92	15.14	16.03	15.55	16.43	16.84
	4H	11.03	11.83	11.46	12.25	12.69	15.33	16.13	15.77	16.55	17.00
	6H	11.66	12.35	12.12	12.80	13.26	15.56	16.25	16.02	16.70	17.16
	8H	11.90	12.54	12.37	12.99	13.46	15.67	16.31	16.13	16.76	17.23
	12H	12.11	12.68	12.60	13.17	13.64	15.79	16.36	16.28	16.85	17.32
8H	4H	11.47	12.11	11.94	12.56	13.03	15.37	16.02	15.84	16.46	16.94
	6H	12.38	12.91	12.88	13.41	13.89	15.70	16.23	16.20	16.73	17.21
	8H	12.80	13.28	13.32	13.79	14.28	15.89	16.37	16.41	16.88	17.37
	12H	13.22	13.64	13.73	14.14	14.71	16.14	16.56	16.65	17.06	17.63
12H	4H	11.53	12.10	12.01	12.58	13.05	15.36	15.93	15.85	16.42	16.89
	6H	12.51	12.99	13.04	13.51	14.00	15.72	16.19	16.24	16.71	17.20
	8H	13.06	13.48	13.57	13.97	14.54	15.97	16.40	16.49	16.89	17.46