

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059403

Luminaire Tested: S123RDR-S775D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 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

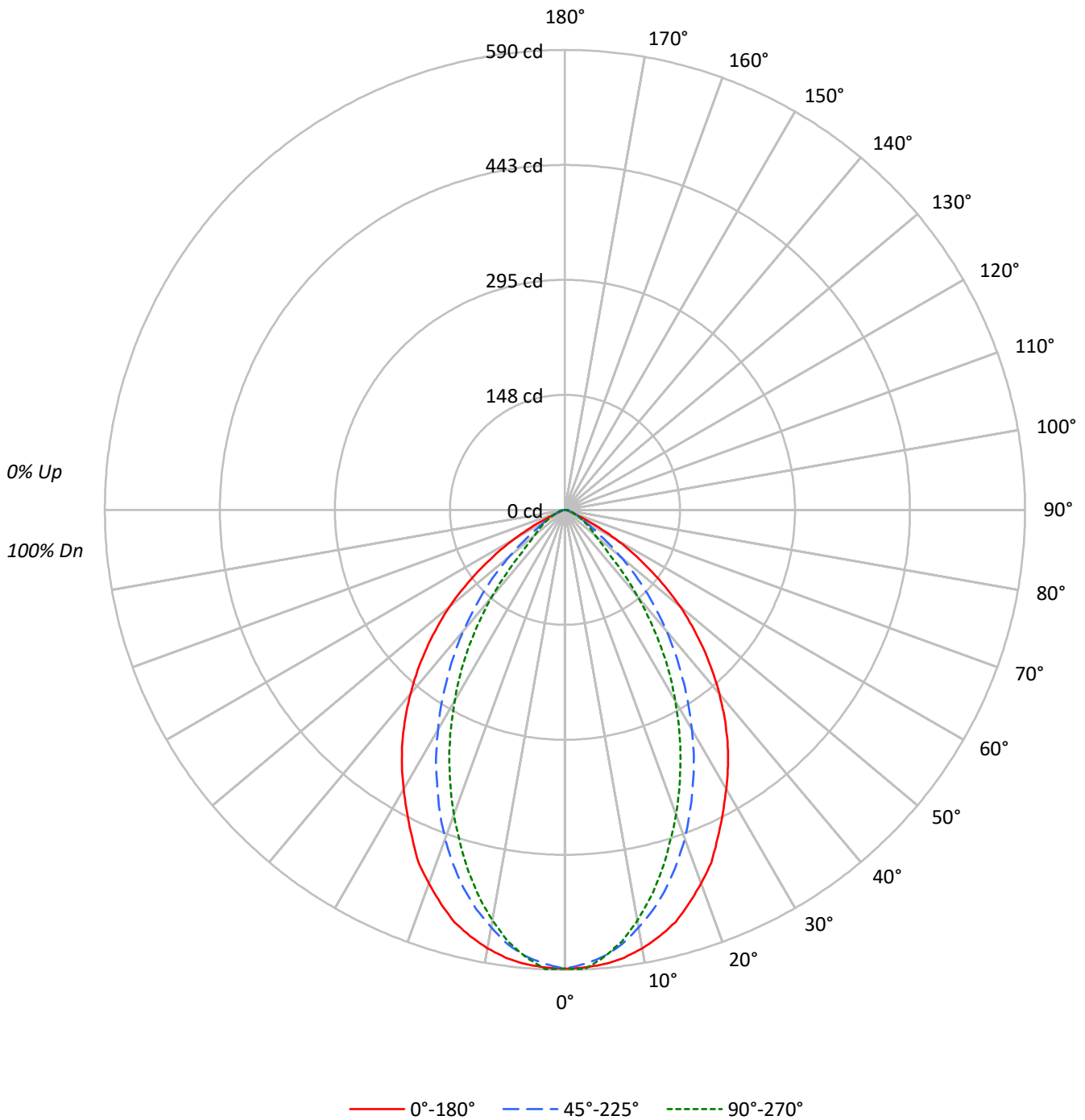
Lumens per Lamp: N/A
Luminaire Lumens: 759.9 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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

TEST NUMBER: P1059403

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-SVL-B

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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6912	6912	6912
5°	6896	6777	6787
10°	6812	6486	6377
15°	6657	6103	5827
20°	6375	5613	5203
25°	6009	5028	4545
30°	5609	4411	3830
35°	5211	3761	3082
40°	4721	3101	2235
45°	4162	2406	1347
50°	3529	1681	915
55°	2686	1007	766
60°	1754	641	599
65°	734	481	481
70°	251	343	374
75°	209	250	290
80°	122	183	243
85°	121	121	243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4162 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	7.2
10°-20°	142.3	18.7
20°-30°	182.4	24.0
30°-40°	171.2	22.5
40°-50°	119.4	15.7
50°-60°	61.8	8.1
60°-70°	21.1	2.8
70°-80°	6.0	0.8
80°-90°	1.3	0.2
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°	379.1	49.9
0°-40°	550.3	72.4
0°-60°	731.5	96.3
0°-90°	759.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	759.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	585	584	575	578	576	55
15°	548	534	502	486	479	153
25°	464	435	388	362	351	213
35°	364	319	262	229	215	226
45°	251	205	145	100	81	193
55°	131	98	49	38	37	118
65°	26	23	17	16	17	31
75°	5	5	6	6	6	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.6	588.6	588.6	588.6	588.6
2.5°	587.7	588.6	583.1	588.6	589.5
5°	585.0	584.0	574.9	577.7	575.8
7.5°	579.5	576.8	562.2	558.5	558.5
10°	571.3	565.8	544.0	537.6	534.8
12.5°	560.4	553.1	524.8	513.0	508.4
15°	547.6	533.9	502.0	485.6	479.3
17.5°	529.4	511.2	476.5	457.4	447.4
20°	510.2	487.5	449.2	426.4	416.4
22.5°	490.2	462.9	419.1	394.5	383.6
25°	463.8	434.6	388.1	361.7	350.8
27.5°	438.3	407.3	358.1	328.0	317.1
30°	413.7	377.2	325.3	296.1	282.5
32.5°	389.1	348.1	294.3	262.4	249.7
35°	363.5	318.9	262.4	228.7	215.0
37.5°	336.2	290.7	232.3	195.9	179.5
40°	308.0	260.6	202.3	161.3	145.8
42.5°	279.7	233.3	172.2	130.3	112.1
45°	250.6	205.0	144.9	100.2	81.1
47.5°	221.4	176.8	118.4	72.9	61.0
50°	193.2	150.3	92.0	53.8	50.1
52.5°	162.2	124.8	69.2	44.6	43.7
55°	131.2	98.4	49.2	38.3	37.4
57.5°	103.9	76.5	35.5	31.9	31.0
60°	74.7	54.7	27.3	26.4	25.5
62.5°	49.2	37.4	21.9	21.0	21.0
65°	26.4	22.8	17.3	16.4	17.3
67.5°	10.9	12.8	12.8	13.7	13.7
70°	7.3	8.2	10.0	10.9	10.9
72.5°	5.5	6.4	7.3	8.2	8.2
75°	4.6	4.6	5.5	6.4	6.4
77.5°	2.7	3.6	3.6	4.6	5.5
80°	1.8	2.7	2.7	3.6	3.6
82.5°	0.9	1.8	1.8	2.7	2.7
85°	0.9	0.9	0.9	0.9	1.8
87.5°	0.0	0.0	0.0	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)