

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: P1059383

Luminaire Tested: S123RDRP-S775D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

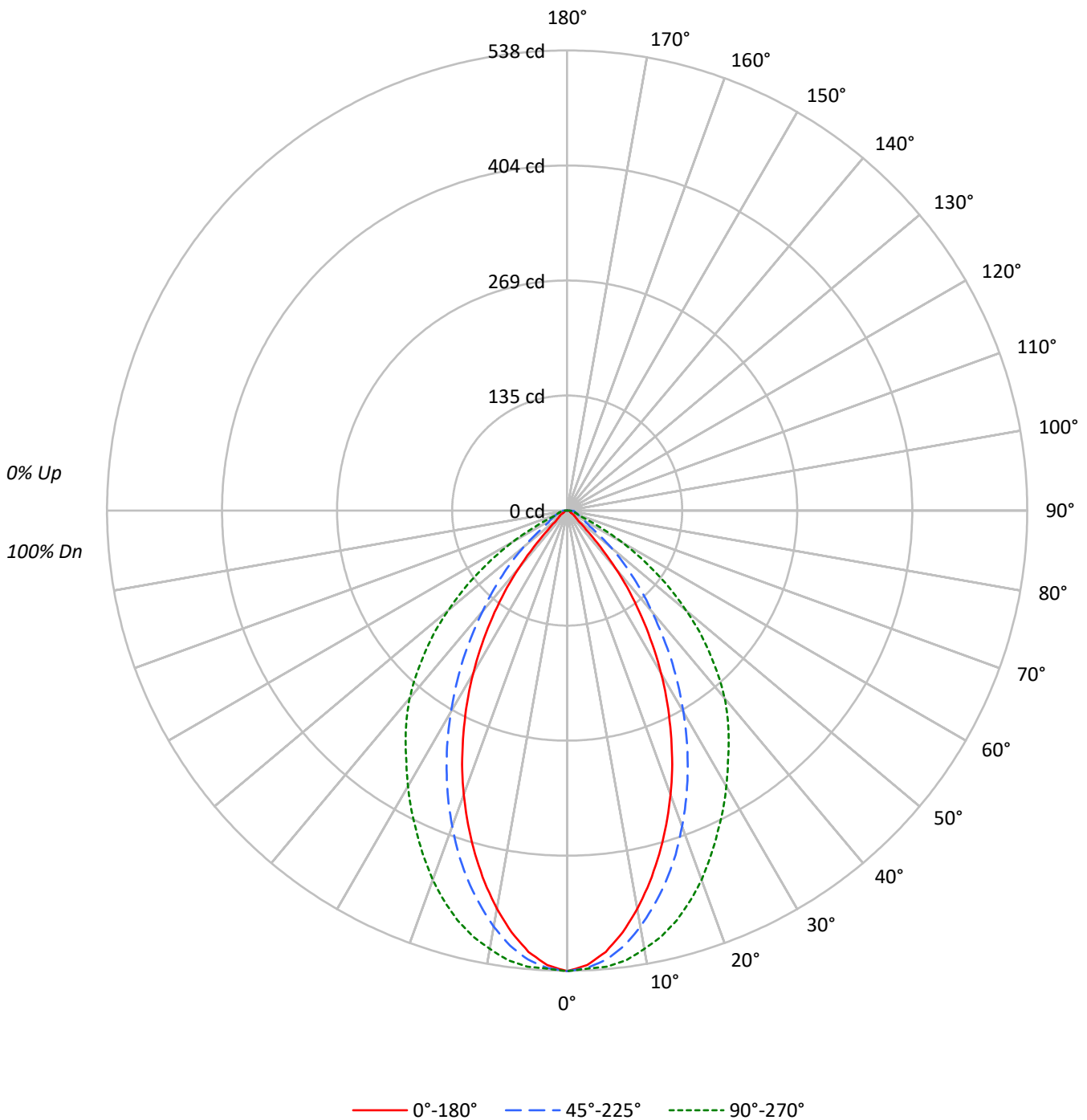
Lumens per Lamp: N/A
Luminaire Lumens: 646.8 lumens
Efficiency: N/A
Efficacy: 25.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
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	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6323	6323	6323
5°	6105	6211	6309
10°	5635	5890	6205
15°	5055	5445	6026
20°	4414	4907	5741
25°	3712	4321	5387
30°	2980	3684	5047
35°	2183	3033	4720
40°	1350	2361	4392
45°	520	1777	3911
50°	256	1218	3308
55°	203	674	2596
60°	136	561	1740
65°	114	503	778
70°	113	453	453
75°	150	485	449
80°	223	615	500
85°	337	997	660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3911 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	7.6
10°-20°	126.4	19.5
20°-30°	156.9	24.3
30°-40°	140.5	21.7
40°-50°	92.4	14.3
50°-60°	46.3	7.2
60°-70°	18.3	2.8
70°-80°	10.3	1.6
80°-90°	6.4	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°	332.6	51.4
0°-40°	473.2	73.2
0°-60°	611.9	94.6
0°-90°	646.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	646.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	518	526	527	530	535	48
15°	416	429	448	478	496	116
25°	286	305	334	380	416	131
35°	152	173	212	277	329	94
45°	31	52	107	180	236	30
55°	10	12	33	89	127	9
65°	4	12	18	23	28	4
75°	3	11	11	10	10	3
85°	2	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	538.5	538.5	538.5	538.5	538.5
2.5°	531.9	539.3	535.2	535.2	536.0
5°	517.9	526.1	526.9	530.2	535.2
7.5°	497.3	508.0	513.0	522.8	530.2
10°	472.6	484.1	494.0	511.3	520.4
12.5°	445.4	457.0	471.8	495.7	509.7
15°	415.8	429.0	447.9	478.4	495.7
17.5°	385.3	398.5	421.6	456.1	478.4
20°	353.2	368.0	392.7	432.3	459.4
22.5°	321.1	337.6	363.9	406.7	438.0
25°	286.5	304.6	333.5	380.4	415.8
27.5°	253.6	272.5	303.0	354.0	394.4
30°	219.8	238.8	271.7	326.9	372.2
32.5°	185.3	206.7	241.2	301.3	349.9
35°	152.3	172.9	211.6	276.6	329.3
37.5°	120.2	140.8	181.1	252.8	308.8
40°	88.1	109.5	154.0	229.7	286.5
42.5°	57.6	79.9	130.1	206.7	261.8
45°	31.3	51.9	107.0	180.3	235.5
47.5°	17.3	28.0	86.5	155.6	210.0
50°	14.0	15.6	66.7	132.6	181.1
52.5°	11.5	13.2	47.8	110.3	154.8
55°	9.9	11.5	32.9	88.9	126.8
57.5°	8.2	9.9	26.3	68.3	99.6
60°	5.8	9.9	23.9	50.2	74.1
62.5°	4.9	9.9	20.6	34.6	49.4
65°	4.1	11.5	18.1	23.1	28.0
67.5°	3.3	11.5	15.6	14.8	14.8
70°	3.3	11.5	13.2	12.4	13.2
72.5°	3.3	12.4	12.4	11.5	11.5
75°	3.3	10.7	10.7	9.9	9.9
77.5°	3.3	9.9	9.9	9.1	9.1
80°	3.3	9.1	9.1	8.2	7.4
82.5°	3.3	8.2	8.2	7.4	6.6
85°	2.5	7.4	7.4	7.4	4.9
87.5°	2.5	6.6	7.4	6.6	4.1
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	0.00	0.13	0.00	0.44	0.76	12.95	14.21	13.32	14.52	14.84
	3H	1.39	2.50	1.77	2.83	3.20	13.03	14.14	13.41	14.47	14.84
	4H	2.56	3.59	2.96	3.94	4.33	13.09	14.13	13.50	14.48	14.86
	6H	3.61	4.56	4.03	4.94	5.33	13.19	14.14	13.61	14.51	14.91
	8H	4.15	5.05	4.58	5.44	5.85	13.25	14.15	13.68	14.54	14.95
	12H	4.64	5.50	5.07	5.88	6.31	13.32	14.18	13.75	14.56	14.99
4H	2H	2.13	3.16	2.53	3.51	3.90	12.81	13.85	13.21	14.20	14.58
	3H	4.59	5.44	5.00	5.84	6.25	12.99	13.83	13.40	14.24	14.64
	4H	5.94	6.69	6.37	7.11	7.56	13.11	13.87	13.55	14.29	14.74
	6H	7.07	7.73	7.54	8.17	8.64	13.33	13.98	13.79	14.43	14.90
	8H	7.58	8.19	8.05	8.64	9.11	13.45	14.07	13.93	14.51	14.99
	12H	8.04	8.58	8.53	9.06	9.54	13.61	14.15	14.10	14.64	15.11
8H	4H	6.86	7.47	7.33	7.91	8.39	13.12	13.73	13.59	14.18	14.65
	6H	8.46	8.96	8.96	9.46	9.94	13.45	13.95	13.95	14.45	14.93
	8H	9.28	9.73	9.81	10.25	10.74	13.68	14.13	14.20	14.64	15.14
	12H	10.06	10.46	10.58	10.96	11.53	14.00	14.40	14.52	14.89	15.47
12H	4H	7.02	7.56	7.51	8.05	8.52	13.11	13.65	13.59	14.13	14.61
	6H	8.77	9.23	9.30	9.74	10.24	13.48	13.93	14.00	14.45	14.94
	8H	9.78	10.18	10.29	10.67	11.24	13.79	14.19	14.30	14.68	15.26