

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: P1059383

Luminaire Tested: S123RDR-S775D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

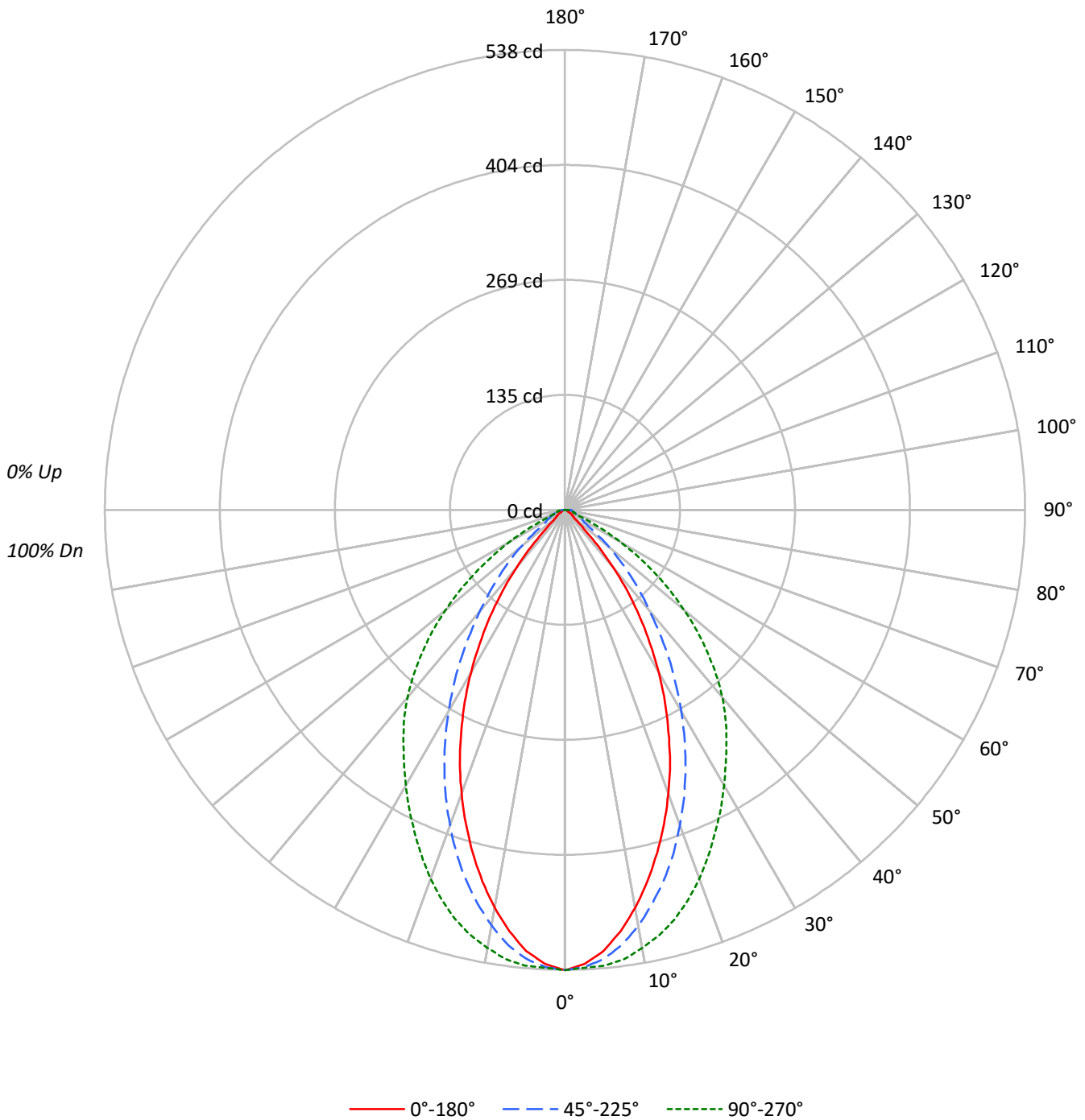
Lumens per Lamp: N/A
Luminaire Lumens: 646.8 lumens
Efficiency: N/A
Efficacy: 25.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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: P1059383

CATALOG NUMBER: S123RDR-S775D935-X4F0-XX-UDD-BVL-S

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	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

(END OF REPORT)