

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: P1059356

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059356
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-S775D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

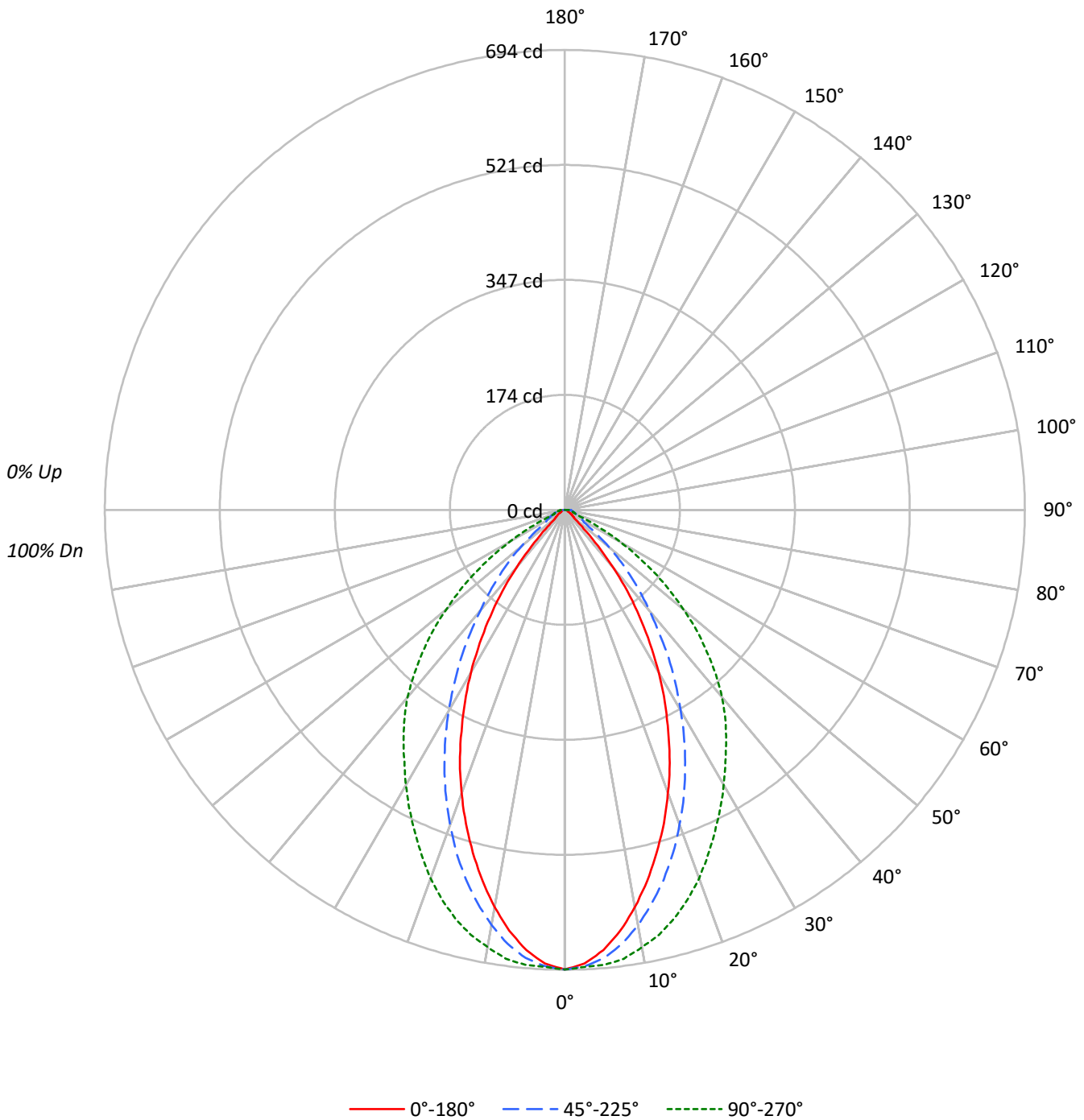
Lumens per Lamp: N/A
Luminaire Lumens: 833.1 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059356

CATALOG NUMBER: S123RDR-S775D850-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°	8145	8145	8145
5°	7863	8000	8125
10°	7258	7587	7991
15°	6511	7013	7761
20°	5686	6322	7395
25°	4782	5565	6939
30°	3840	4746	6500
35°	2813	3908	6081
40°	1740	3040	5658
45°	669	2290	5037
50°	329	1569	4262
55°	260	868	3343
60°	174	723	2240
65°	147	647	1003
70°	144	584	584
75°	191	626	576
80°	284	791	642
85°	431	1280	862

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5037 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	7.6
10°-20°	162.8	19.5
20°-30°	202.1	24.3
30°-40°	181.0	21.7
40°-50°	119.0	14.3
50°-60°	59.6	7.2
60°-70°	23.5	2.8
70°-80°	13.2	1.6
80°-90°	8.3	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°	428.5	51.4
0°-40°	609.5	73.2
0°-60°	788.1	94.6
0°-90°	833.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	833.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	667	678	679	683	689	62
15°	536	552	577	616	638	149
25°	369	392	430	490	536	169
35°	196	223	273	356	424	122
45°	40	67	138	232	303	38
55°	13	15	42	114	163	11
65°	5	15	23	30	36	5
75°	4	14	14	13	13	4
85°	3	10	10	10	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	693.6	693.6	693.6	693.6	693.6
2.5°	685.1	694.6	689.3	689.3	690.4
5°	667.1	677.7	678.7	683.0	689.3
7.5°	640.6	654.3	660.7	673.4	683.0
10°	608.7	623.6	636.3	658.6	670.2
12.5°	573.7	588.6	607.7	638.4	656.5
15°	535.6	552.5	576.9	616.2	638.4
17.5°	496.3	513.3	543.0	587.5	616.2
20°	455.0	474.1	505.9	556.8	591.8
22.5°	413.6	434.8	468.7	523.9	564.2
25°	369.1	392.4	429.5	490.0	535.6
27.5°	326.6	351.0	390.3	456.0	508.0
30°	283.2	307.6	350.0	421.0	479.4
32.5°	238.6	266.2	310.7	388.1	450.7
35°	196.2	222.7	272.6	356.3	424.2
37.5°	154.8	181.3	233.3	325.6	397.7
40°	113.5	141.0	198.3	295.9	369.1
42.5°	74.2	102.9	167.6	266.2	337.2
45°	40.3	66.8	137.9	232.3	303.3
47.5°	22.3	36.1	111.4	200.4	270.4
50°	18.0	20.1	85.9	170.7	233.3
52.5°	14.8	17.0	61.5	142.1	199.4
55°	12.7	14.8	42.4	114.5	163.3
57.5°	10.6	12.7	33.9	88.0	128.3
60°	7.4	12.7	30.8	64.7	95.4
62.5°	6.4	12.7	26.5	44.5	63.6
65°	5.3	14.8	23.3	29.7	36.1
67.5°	4.2	14.8	20.1	19.1	19.1
70°	4.2	14.8	17.0	15.9	17.0
72.5°	4.2	15.9	15.9	14.8	14.8
75°	4.2	13.8	13.8	12.7	12.7
77.5°	4.2	12.7	12.7	11.7	11.7
80°	4.2	11.7	11.7	10.6	9.5
82.5°	4.2	10.6	10.6	9.5	8.5
85°	3.2	9.5	9.5	9.5	6.4
87.5°	3.2	8.5	9.5	8.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)