

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: P1059359

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

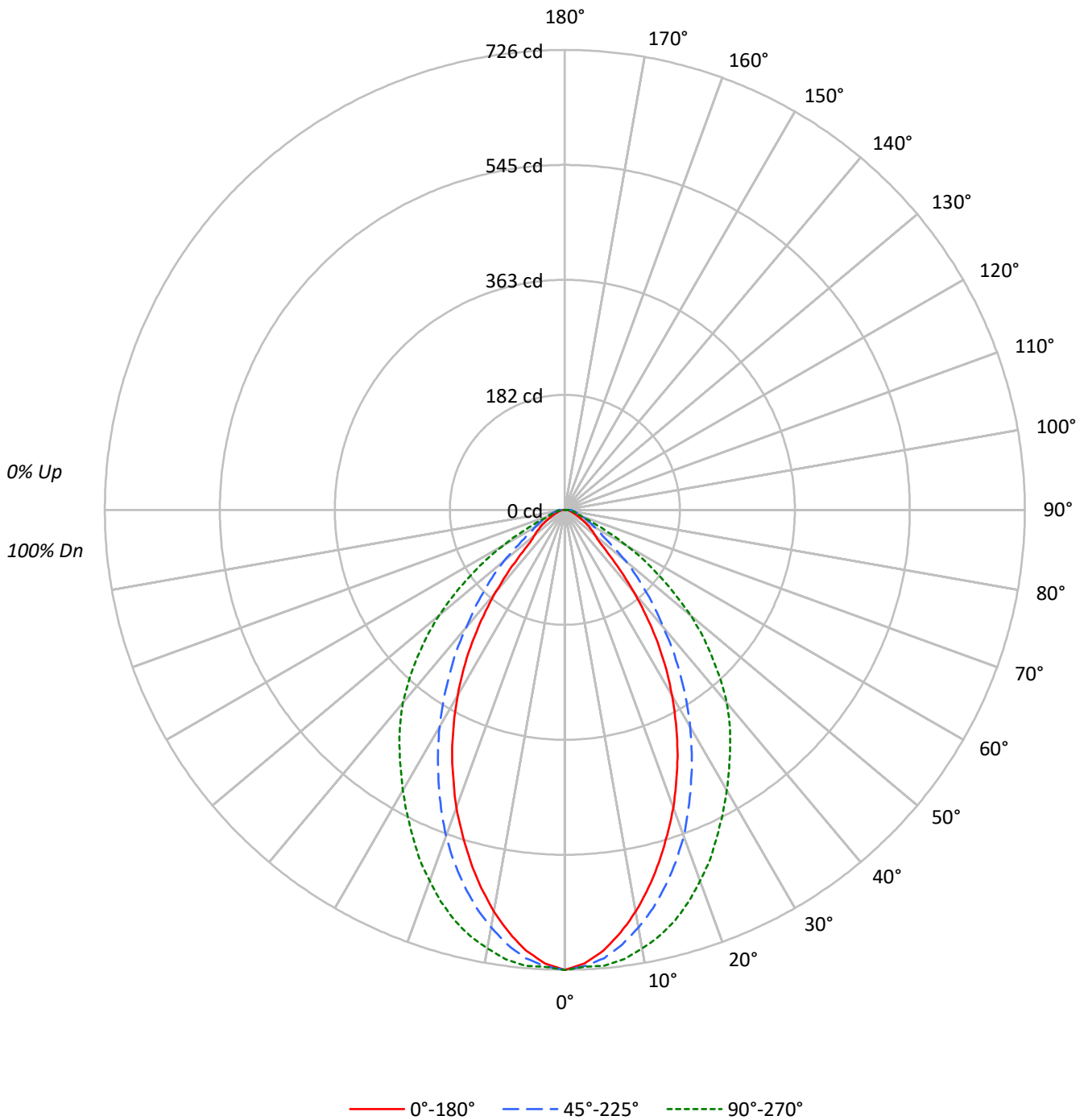
Lumens per Lamp: N/A
Luminaire Lumens: 972.7 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58				58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8529	8529	8529
5°	8236	8374	8512
10°	7674	7978	8382
15°	6986	7463	8160
20°	6254	6850	7791
25°	5453	6113	7363
30°	4586	5363	6930
35°	3648	4544	6521
40°	2600	3705	6095
45°	1549	2976	5458
50°	1144	2267	4726
55°	956	1542	3755
60°	773	1271	2640
65°	620	1089	1414
70°	508	948	872
75°	481	912	817
80°	500	1001	791
85°	714	1428	997

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5458 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	6.9
10°-20°	173.3	17.8
20°-30°	221.1	22.7
30°-40°	208.0	21.4
40°-50°	149.4	15.4
50°-60°	85.7	8.8
60°-70°	39.2	4.0
70°-80°	19.7	2.0
80°-90°	9.6	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°	461.1	47.4
0°-40°	669.1	68.8
0°-60°	904.2	93.0
0°-90°	972.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	972.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	699	712	710	716	722	65
15°	575	595	614	647	671	161
25°	421	440	472	523	568	192
35°	254	272	317	389	455	158
45°	93	114	179	264	329	78
55°	47	48	75	139	183	42
65°	22	31	39	44	51	22
75°	11	21	20	18	18	12
85°	5	11	11	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.3	726.3	726.3	726.3	726.3
2.5°	716.8	727.4	721.0	721.0	722.1
5°	698.7	712.5	710.4	715.7	722.1
7.5°	673.3	688.1	692.4	705.1	715.7
10°	643.6	660.6	669.1	689.2	703.0
12.5°	610.7	629.8	643.6	669.1	689.2
15°	574.7	594.8	613.9	646.8	671.2
17.5°	537.6	557.7	582.1	620.3	648.9
20°	500.5	520.6	548.2	588.5	623.5
22.5°	460.2	480.3	510.0	555.6	598.0
25°	420.9	440.0	471.8	522.7	568.3
27.5°	379.6	398.7	433.7	488.8	539.7
30°	338.2	357.3	395.5	454.9	511.1
32.5°	296.9	314.9	356.3	422.0	482.4
35°	254.5	272.5	317.0	389.1	454.9
37.5°	211.0	229.0	281.0	359.4	427.3
40°	169.6	189.8	241.7	329.8	397.6
42.5°	129.4	150.6	209.9	297.9	363.7
45°	93.3	113.5	179.2	264.0	328.7
47.5°	71.0	81.6	151.6	230.1	294.8
50°	62.6	63.6	124.1	199.3	258.7
52.5°	54.1	55.1	96.5	169.6	220.5
55°	46.7	47.7	75.3	138.9	183.4
57.5°	39.2	41.4	61.5	110.3	147.4
60°	32.9	37.1	54.1	83.8	112.4
62.5°	26.5	33.9	46.7	61.5	80.6
65°	22.3	30.7	39.2	43.5	50.9
67.5°	18.0	28.6	32.9	30.7	30.7
70°	14.8	25.4	27.6	25.4	25.4
72.5°	12.7	24.4	23.3	21.2	21.2
75°	10.6	21.2	20.1	18.0	18.0
77.5°	9.5	18.0	17.0	15.9	14.8
80°	7.4	14.8	14.8	13.8	11.7
82.5°	6.4	12.7	12.7	11.7	9.5
85°	5.3	10.6	10.6	9.5	7.4
87.5°	4.2	9.5	9.5	8.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)