

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: P1059134

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059134
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-S1165D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

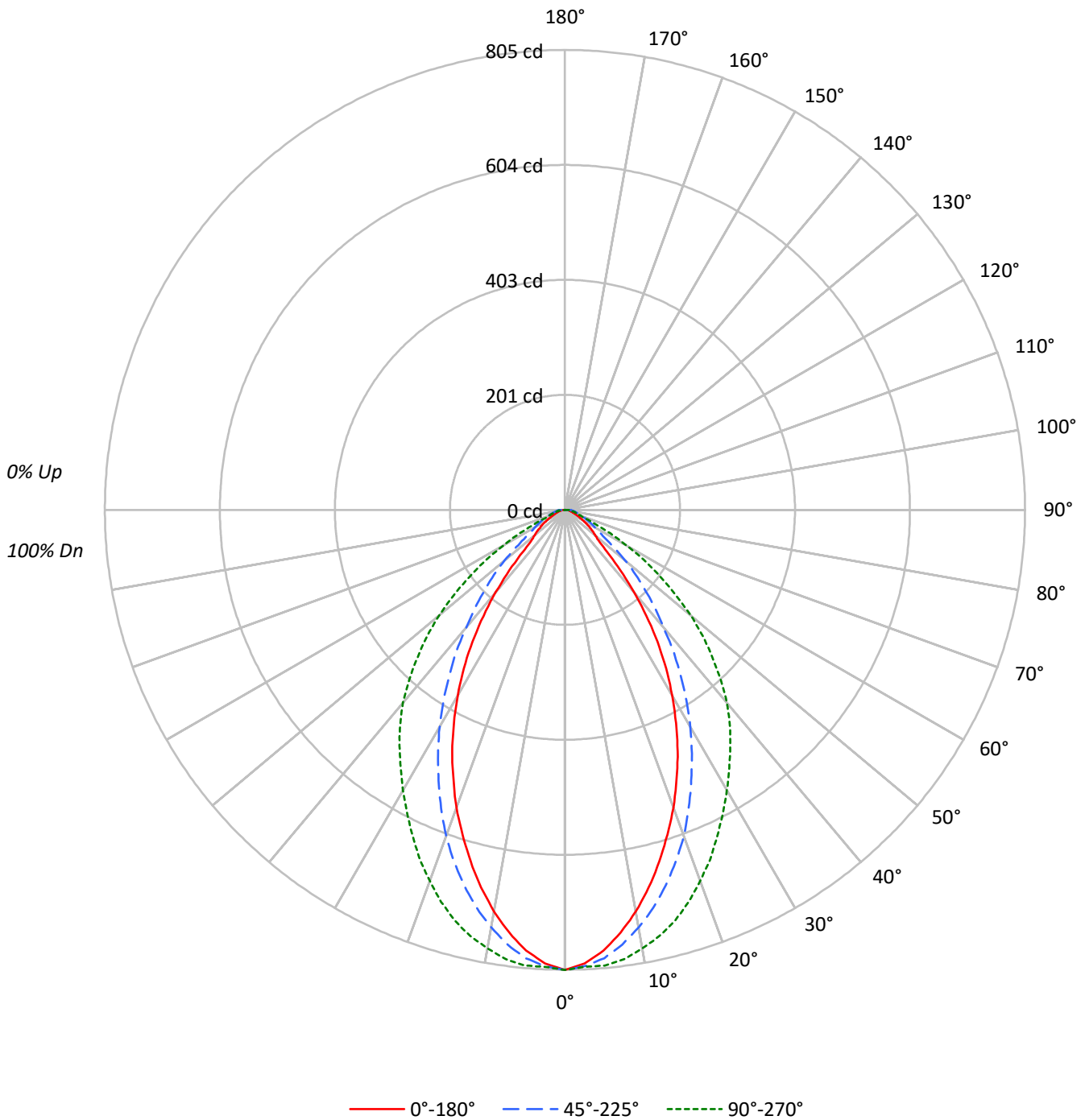
Lumens per Lamp: N/A
Luminaire Lumens: 1078.5 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	58	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°	9456	9456	9456
5°	9132	9285	9437
10°	8509	8845	9293
15°	7746	8275	9047
20°	6934	7595	8639
25°	6047	6777	8164
30°	5085	5946	7683
35°	4044	5039	7229
40°	2883	4108	6758
45°	1719	3300	6051
50°	1268	2512	5239
55°	1058	1709	4164
60°	855	1409	2926
65°	686	1209	1567
70°	566	1051	968
75°	535	1012	907
80°	555	1116	872
85°	795	1590	1105

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6051 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	6.9
10°-20°	192.2	17.8
20°-30°	245.1	22.7
30°-40°	230.6	21.4
40°-50°	165.7	15.4
50°-60°	95.0	8.8
60°-70°	43.4	4.0
70°-80°	21.8	2.0
80°-90°	10.7	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°	511.3	47.4
0°-40°	741.9	68.8
0°-60°	1002.6	93.0
0°-90°	1078.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1078.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	775	790	788	794	801	72
15°	637	660	681	717	744	178
25°	467	488	523	580	630	213
35°	282	302	352	431	504	175
45°	104	126	199	293	364	87
55°	52	53	84	154	203	46
65°	25	34	44	48	56	25
75°	12	24	22	20	20	13
85°	6	12	12	11	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.3	805.3	805.3	805.3	805.3
2.5°	794.7	806.5	799.4	799.4	800.6
5°	774.7	790.0	787.7	793.5	800.6
7.5°	746.5	763.0	767.7	781.8	793.5
10°	713.6	732.4	741.8	764.1	779.4
12.5°	677.1	698.3	713.6	741.8	764.1
15°	637.2	659.5	680.7	717.1	744.2
17.5°	596.0	618.4	645.4	687.7	719.5
20°	554.9	577.2	607.8	652.5	691.3
22.5°	510.2	532.5	565.5	616.0	663.0
25°	466.7	487.9	523.1	579.6	630.1
27.5°	420.9	442.0	480.8	542.0	598.4
30°	375.0	396.2	438.5	504.3	566.6
32.5°	329.2	349.2	395.0	467.9	534.9
35°	282.1	302.1	351.5	431.4	504.3
37.5°	233.9	253.9	311.5	398.5	473.8
40°	188.1	210.4	268.0	365.6	440.9
42.5°	143.4	166.9	232.8	330.3	403.2
45°	103.5	125.8	198.7	292.7	364.4
47.5°	78.8	90.5	168.1	255.1	326.8
50°	69.4	70.5	137.5	221.0	286.8
52.5°	60.0	61.1	107.0	188.1	244.5
55°	51.7	52.9	83.5	154.0	203.4
57.5°	43.5	45.8	68.2	122.3	163.4
60°	36.4	41.1	60.0	92.9	124.6
62.5°	29.4	37.6	51.7	68.2	89.3
65°	24.7	34.1	43.5	48.2	56.4
67.5°	20.0	31.7	36.4	34.1	34.1
70°	16.5	28.2	30.6	28.2	28.2
72.5°	14.1	27.0	25.9	23.5	23.5
75°	11.8	23.5	22.3	20.0	20.0
77.5°	10.6	20.0	18.8	17.6	16.5
80°	8.2	16.5	16.5	15.3	12.9
82.5°	7.1	14.1	14.1	12.9	10.6
85°	5.9	11.8	11.8	10.6	8.2
87.5°	4.7	10.6	10.6	9.4	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)