

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: P1059097

Luminaire Tested: S123RDR-S1165D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

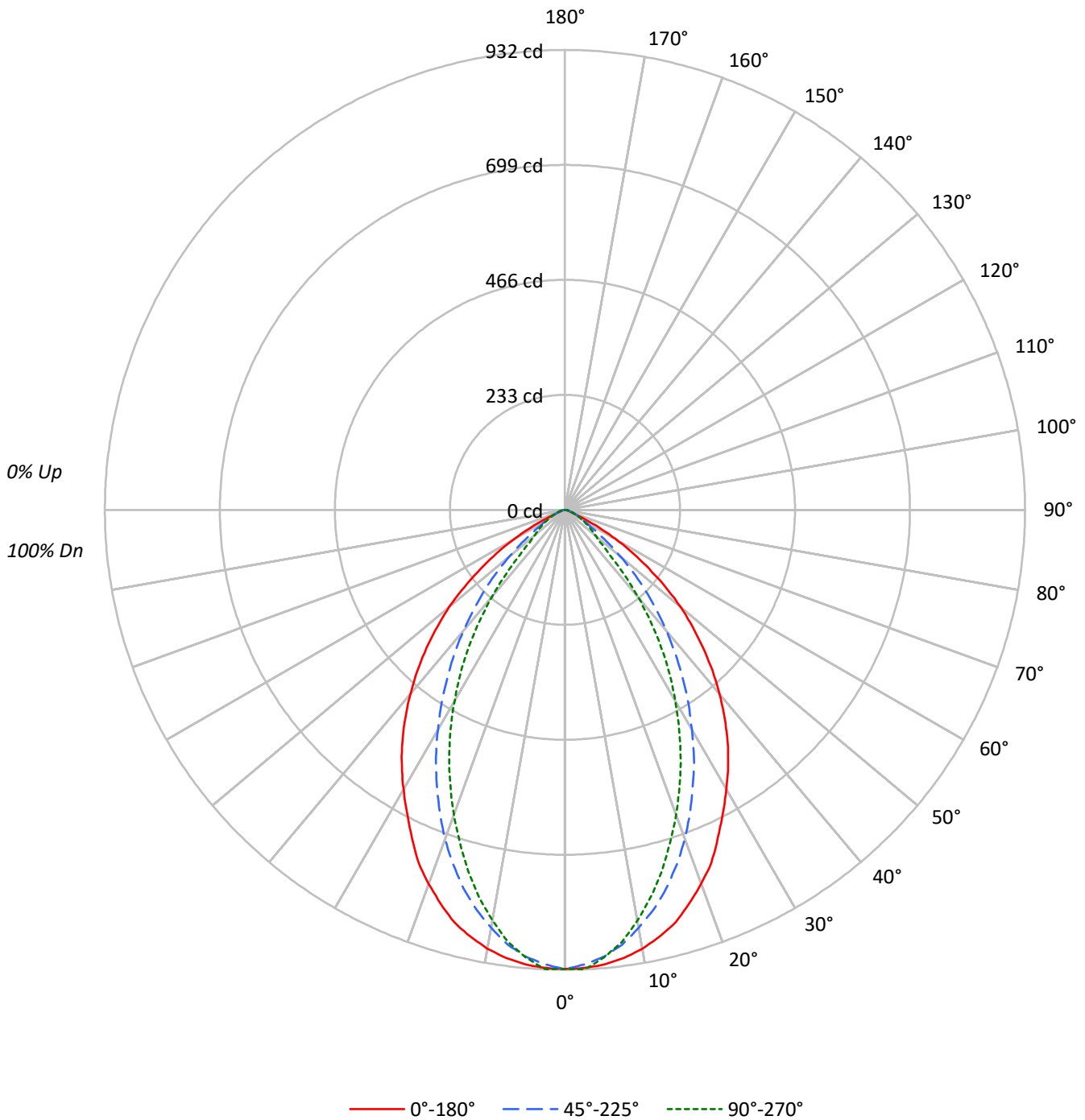
Lumens per Lamp: N/A
Luminaire Lumens: 1201.2 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10926	10926	10926
5°	10900	10713	10730
10°	10768	10253	10081
15°	10524	9649	9211
20°	10079	8873	8226
25°	9500	7950	7186
30°	8866	6972	6054
35°	8238	5946	4872
40°	7464	4902	3533
45°	6578	3803	2129
50°	5579	2658	1447
55°	4246	1593	1210
60°	2774	1015	946
65°	1161	761	761
70°	395	542	594
75°	327	390	458
80°	196	291	392
85°	189	189	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6578 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	7.2
10°-20°	224.9	18.7
20°-30°	288.4	24.0
30°-40°	270.6	22.5
40°-50°	188.8	15.7
50°-60°	97.6	8.1
60°-70°	33.4	2.8
70°-80°	9.5	0.8
80°-90°	2.0	0.2
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°	599.2	49.9
0°-40°	869.9	72.4
0°-60°	1156.3	96.3
0°-90°	1201.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1201.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	925	923	909	913	910	88
15°	866	844	794	768	758	243
25°	733	687	614	572	555	337
35°	575	504	415	362	340	358
45°	396	324	229	158	128	305
55°	207	156	78	60	59	187
65°	42	36	27	26	27	49
75°	7	7	9	10	10	7
85°	1	1	1	1	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.5	930.5	930.5	930.5	930.5
2.5°	929.1	930.5	921.9	930.5	931.9
5°	924.7	923.3	908.9	913.2	910.3
7.5°	916.1	911.8	888.7	883.0	883.0
10°	903.1	894.5	859.9	849.8	845.5
12.5°	885.8	874.3	829.7	810.9	803.7
15°	865.7	844.1	793.7	767.7	757.7
17.5°	836.9	808.1	753.3	723.1	707.2
20°	806.6	770.6	710.1	674.1	658.3
22.5°	774.9	731.7	662.6	623.7	606.4
25°	733.2	687.1	613.6	571.8	554.6
27.5°	692.8	643.9	566.1	518.5	501.3
30°	653.9	596.3	514.2	468.1	446.5
32.5°	615.1	550.2	465.3	414.8	394.7
35°	574.7	504.1	414.8	361.5	339.9
37.5°	531.5	459.5	367.3	309.7	283.8
40°	486.9	412.0	319.8	255.0	230.5
42.5°	442.2	368.7	272.2	206.0	177.2
45°	396.1	324.1	229.0	158.4	128.2
47.5°	350.0	279.4	187.3	115.2	96.5
50°	305.4	237.7	145.5	85.0	79.2
52.5°	256.4	197.3	109.5	70.6	69.1
55°	207.4	155.6	77.8	60.5	59.1
57.5°	164.2	121.0	56.2	50.4	49.0
60°	118.1	86.4	43.2	41.8	40.3
62.5°	77.8	59.1	34.6	33.1	33.1
65°	41.8	36.0	27.4	25.9	27.4
67.5°	17.3	20.2	20.2	21.6	21.6
70°	11.5	13.0	15.8	17.3	17.3
72.5°	8.6	10.1	11.5	13.0	13.0
75°	7.2	7.2	8.6	10.1	10.1
77.5°	4.3	5.8	5.8	7.2	8.6
80°	2.9	4.3	4.3	5.8	5.8
82.5°	1.4	2.9	2.9	4.3	4.3
85°	1.4	1.4	1.4	1.4	2.9
87.5°	0.0	0.0	0.0	0.0	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)