

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: P1059140

Luminaire Tested: S123RDR-S1165D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059140
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-S1165D935-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

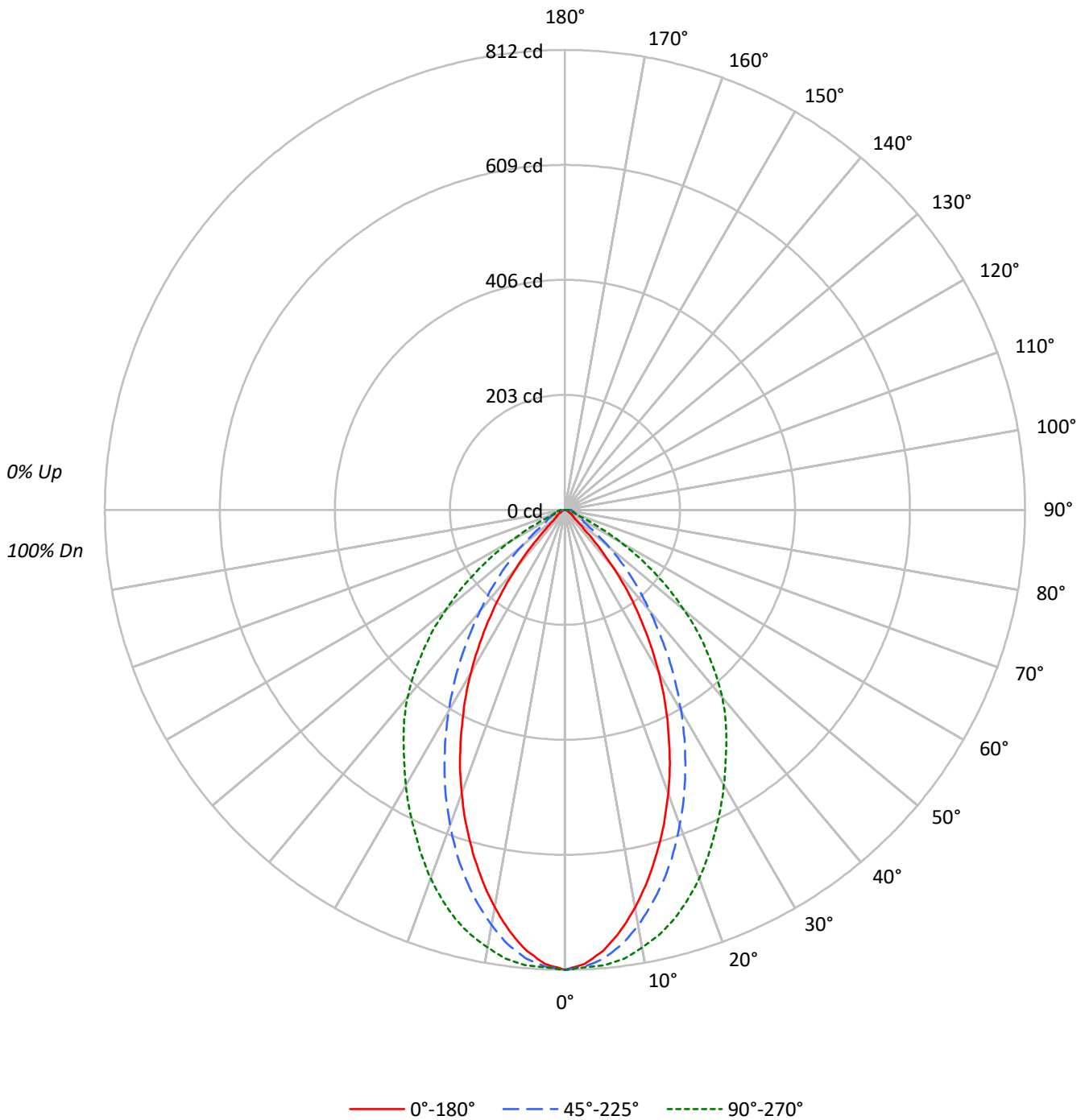
Lumens per Lamp: N/A
Luminaire Lumens: 975.5 lumens
Efficiency: N/A
Efficacy: 23.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	9536	9536	9536
5°	9207	9367	9514
10°	8499	8883	9358
15°	7623	8212	9087
20°	6657	7401	8659
25°	5598	6516	8125
30°	4495	5556	7611
35°	3293	4574	7120
40°	2037	3559	6624
45°	784	2680	5897
50°	385	1838	4991
55°	305	1017	3914
60°	204	845	2626
65°	172	759	1173
70°	172	683	683
75°	227	730	676
80°	338	926	757
85°	498	1509	1010

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5897 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	7.6
10°-20°	190.6	19.5
20°-30°	236.6	24.3
30°-40°	212.0	21.7
40°-50°	139.3	14.3
50°-60°	69.8	7.2
60°-70°	27.6	2.8
70°-80°	15.4	1.6
80°-90°	9.7	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°	501.7	51.4
0°-40°	713.6	73.2
0°-60°	922.8	94.6
0°-90°	975.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	975.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	781	794	795	800	807	72
15°	627	647	676	722	748	175
25°	432	459	503	574	627	198
35°	230	261	319	417	497	142
45°	47	78	161	272	355	45
55°	15	17	50	134	191	13
65°	6	17	27	35	42	6
75°	5	16	16	15	15	5
85°	4	11	11	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	812.1	812.1	812.1	812.1	812.1
2.5°	802.2	813.3	807.1	807.1	808.4
5°	781.1	793.5	794.7	799.7	807.1
7.5°	750.0	766.2	773.6	788.5	799.7
10°	712.8	730.1	745.0	771.1	784.8
12.5°	671.8	689.2	711.5	747.5	768.6
15°	627.1	647.0	675.5	721.5	747.5
17.5°	581.1	601.0	635.8	687.9	721.5
20°	532.7	555.1	592.3	651.9	692.9
22.5°	484.3	509.1	548.9	613.4	660.6
25°	432.1	459.4	502.9	573.7	627.1
27.5°	382.5	411.0	457.0	534.0	594.8
30°	331.5	360.1	409.8	493.0	561.3
32.5°	279.4	311.7	363.8	454.5	527.7
35°	229.7	260.8	319.1	417.2	496.7
37.5°	181.3	212.3	273.2	381.2	465.7
40°	132.9	165.2	232.2	346.4	432.1
42.5°	86.9	120.4	196.2	311.7	394.9
45°	47.2	78.2	161.4	271.9	355.1
47.5°	26.1	42.2	130.4	234.7	316.6
50°	21.1	23.6	100.6	199.9	273.2
52.5°	17.4	19.9	72.0	166.4	233.4
55°	14.9	17.4	49.7	134.1	191.2
57.5°	12.4	14.9	39.7	103.1	150.3
60°	8.7	14.9	36.0	75.7	111.8
62.5°	7.5	14.9	31.0	52.2	74.5
65°	6.2	17.4	27.3	34.8	42.2
67.5°	5.0	17.4	23.6	22.4	22.4
70°	5.0	17.4	19.9	18.6	19.9
72.5°	5.0	18.6	18.6	17.4	17.4
75°	5.0	16.1	16.1	14.9	14.9
77.5°	5.0	14.9	14.9	13.7	13.7
80°	5.0	13.7	13.7	12.4	11.2
82.5°	5.0	12.4	12.4	11.2	9.9
85°	3.7	11.2	11.2	11.2	7.5
87.5°	3.7	9.9	11.2	9.9	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)