

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: P1057961

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

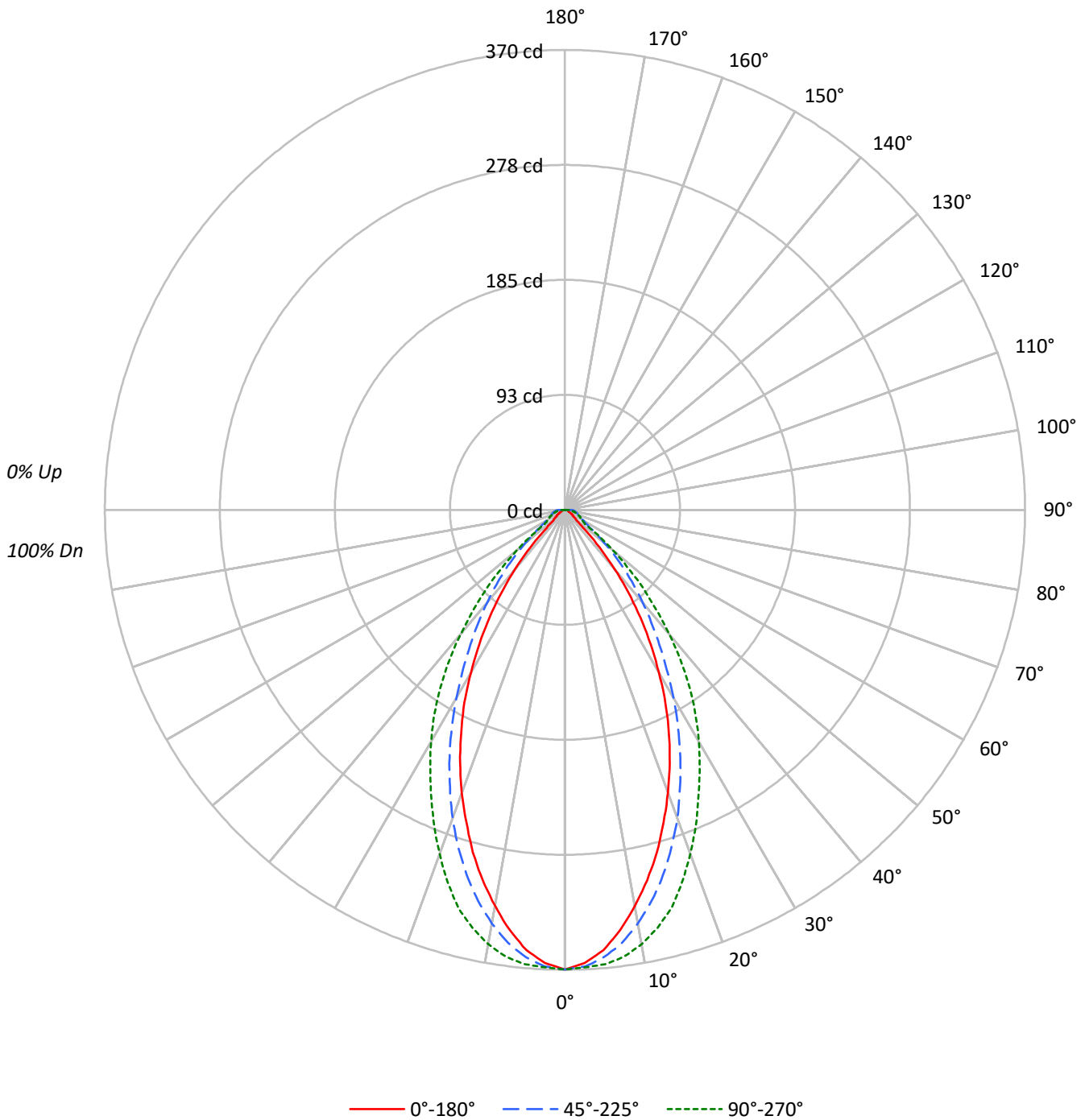
Lumens per Lamp: N/A
Luminaire Lumens: 398.6 lumens
Efficiency: N/A
Efficacy: 20.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6824	6824	6824
5°	6587	6692	6798
10°	6065	6331	6650
15°	5454	5819	6333
20°	4758	5188	5787
25°	4023	4471	5178
30°	3215	3714	4590
35°	2379	2985	3942
40°	1501	2339	3139
45°	592	1756	2312
50°	304	1180	1424
55°	251	775	637
60°	185	627	576
65°	153	589	589
70°	151	610	572
75°	200	706	606
80°	298	903	680
85°	445	1503	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3004 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	8.5
10°-20°	85.4	21.4
20°-30°	101.5	25.5
30°-40°	84.5	21.2
40°-50°	47.2	11.8
50°-60°	19.1	4.8
60°-70°	12.2	3.1
70°-80°	9.1	2.3
80°-90°	5.8	1.5
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°	220.8	55.4
0°-40°	305.2	76.6
0°-60°	371.5	93.2
0°-90°	398.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	398.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	356	362	361	364	367	33
15°	286	294	305	320	332	79
25°	198	205	220	237	254	90
35°	106	116	132	154	175	66
45°	23	38	67	79	89	21
55°	8	16	24	23	20	7
65°	4	14	14	13	14	4
75°	3	10	10	9	8	3
85°	2	6	7	6	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	369.8	369.8	369.8	369.8	369.8
2.5°	364.8	370.5	367.7	367.7	368.4
5°	355.6	362.0	361.3	364.1	367.0
7.5°	340.8	347.8	351.4	357.8	362.7
10°	323.7	331.5	337.9	347.8	354.9
12.5°	305.3	313.1	322.3	335.1	344.3
15°	285.5	294.0	304.6	320.2	331.5
17.5°	263.5	272.7	284.8	301.8	313.8
20°	242.3	251.5	264.2	281.2	294.7
22.5°	220.3	228.1	241.6	258.6	274.9
25°	197.6	205.4	219.6	236.6	254.3
27.5°	175.0	182.8	196.9	214.7	234.5
30°	150.9	159.4	174.3	194.1	215.4
32.5°	128.2	136.7	152.3	174.3	195.5
35°	105.6	115.5	132.5	154.4	175.0
37.5°	83.6	94.9	114.1	134.6	153.0
40°	62.3	74.4	97.1	114.8	130.3
42.5°	41.1	55.3	81.5	96.3	108.4
45°	22.7	38.3	67.3	78.6	88.6
47.5°	12.8	24.8	53.1	62.3	68.0
50°	10.6	18.4	41.1	47.5	49.6
52.5°	8.5	17.0	31.2	34.7	33.3
55°	7.8	16.3	24.1	23.4	19.8
57.5°	6.4	16.3	19.1	17.0	17.0
60°	5.0	15.6	17.0	14.9	15.6
62.5°	4.3	14.9	15.6	14.2	14.2
65°	3.5	14.2	13.5	12.8	13.5
67.5°	2.8	12.8	12.8	12.0	12.0
70°	2.8	12.0	11.3	10.6	10.6
72.5°	2.8	10.6	10.6	9.9	9.9
75°	2.8	9.9	9.9	9.2	8.5
77.5°	2.8	8.5	9.2	8.5	7.8
80°	2.8	7.8	8.5	7.8	6.4
82.5°	2.8	7.1	7.8	7.1	5.7
85°	2.1	6.4	7.1	6.4	4.3
87.5°	2.1	6.4	7.1	5.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)