

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: P1057979

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057979
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-S485D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

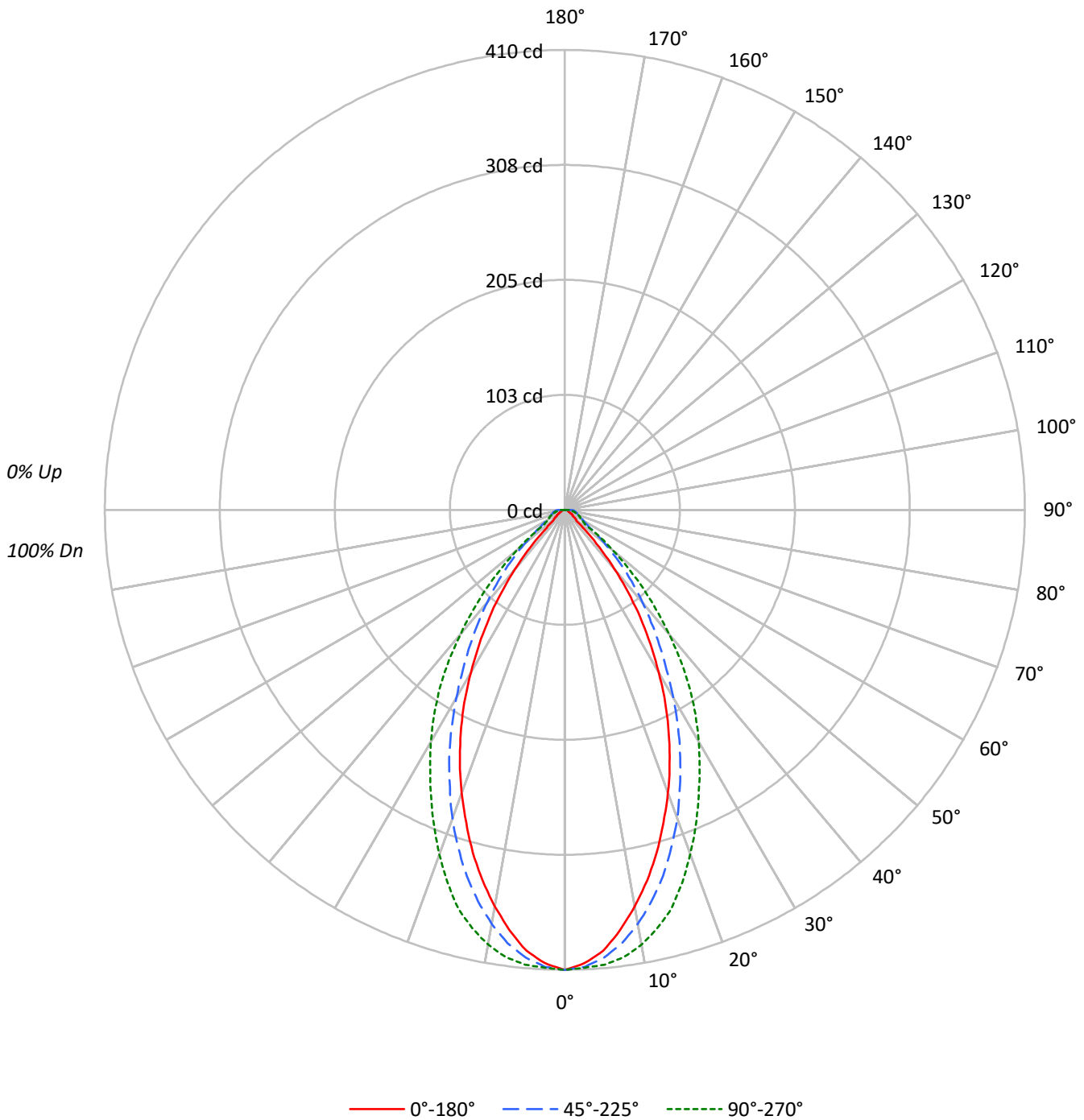
Lumens per Lamp: N/A
Luminaire Lumens: 442.1 lumens
Efficiency: N/A
Efficacy: 22.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90		90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81		81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74		74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67		67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61		61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57		57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52		52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48		48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45		45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7567	7567	7567
5°	7305	7422	7539
10°	6727	7023	7375
15°	6048	6453	7024
20°	5276	5754	6417
25°	4463	4958	5742
30°	3565	4119	5088
35°	2638	3309	4372
40°	1664	2592	3483
45°	655	1947	2563
50°	339	1309	1579
55°	277	859	708
60°	203	698	638
65°	170	651	651
70°	167	680	637
75°	221	784	670
80°	329	999	754
85°	508	1673	995

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3342 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	8.5
10°-20°	94.7	21.4
20°-30°	112.6	25.5
30°-40°	93.7	21.2
40°-50°	52.3	11.8
50°-60°	21.1	4.8
60°-70°	13.5	3.1
70°-80°	10.1	2.3
80°-90°	6.5	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°	244.8	55.4
0°-40°	338.5	76.6
0°-60°	411.9	93.2
0°-90°	442.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	442.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	394	402	401	404	407	36
15°	317	326	338	355	368	88
25°	219	228	244	262	282	100
35°	117	128	147	171	194	73
45°	25	42	75	87	98	24
55°	9	18	27	26	22	8
65°	4	16	15	14	15	4
75°	3	11	11	10	9	3
85°	2	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	410.1	410.1	410.1	410.1	410.1
2.5°	404.6	410.9	407.7	407.7	408.5
5°	394.4	401.5	400.7	403.8	407.0
7.5°	377.9	385.7	389.7	396.7	402.2
10°	359.0	367.7	374.8	385.7	393.6
12.5°	338.6	347.3	357.5	371.6	381.8
15°	316.6	326.0	337.8	355.1	367.7
17.5°	292.3	302.5	315.8	334.7	348.0
20°	268.7	278.9	293.0	311.9	326.8
22.5°	244.3	253.0	267.9	286.8	304.8
25°	219.2	227.8	243.5	262.4	282.0
27.5°	194.1	202.7	218.4	238.0	260.0
30°	167.3	176.8	193.3	215.3	238.8
32.5°	142.2	151.6	168.9	193.3	216.8
35°	117.1	128.1	146.9	171.3	194.1
37.5°	92.7	105.3	126.5	149.3	169.7
40°	69.1	82.5	107.6	127.3	144.6
42.5°	45.6	61.3	90.3	106.8	120.2
45°	25.1	42.4	74.6	87.2	98.2
47.5°	14.1	27.5	58.9	69.1	75.4
50°	11.8	20.4	45.6	52.6	55.0
52.5°	9.4	18.9	34.6	38.5	36.9
55°	8.6	18.1	26.7	25.9	22.0
57.5°	7.1	18.1	21.2	18.9	18.9
60°	5.5	17.3	18.9	16.5	17.3
62.5°	4.7	16.5	17.3	15.7	15.7
65°	3.9	15.7	14.9	14.1	14.9
67.5°	3.1	14.1	14.1	13.4	13.4
70°	3.1	13.4	12.6	11.8	11.8
72.5°	3.1	11.8	11.8	11.0	11.0
75°	3.1	11.0	11.0	10.2	9.4
77.5°	3.1	9.4	10.2	9.4	8.6
80°	3.1	8.6	9.4	8.6	7.1
82.5°	3.1	7.9	8.6	7.9	6.3
85°	2.4	7.1	7.9	7.1	4.7
87.5°	2.4	7.1	7.9	6.3	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)