

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: P1057970

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057970
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-S485D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

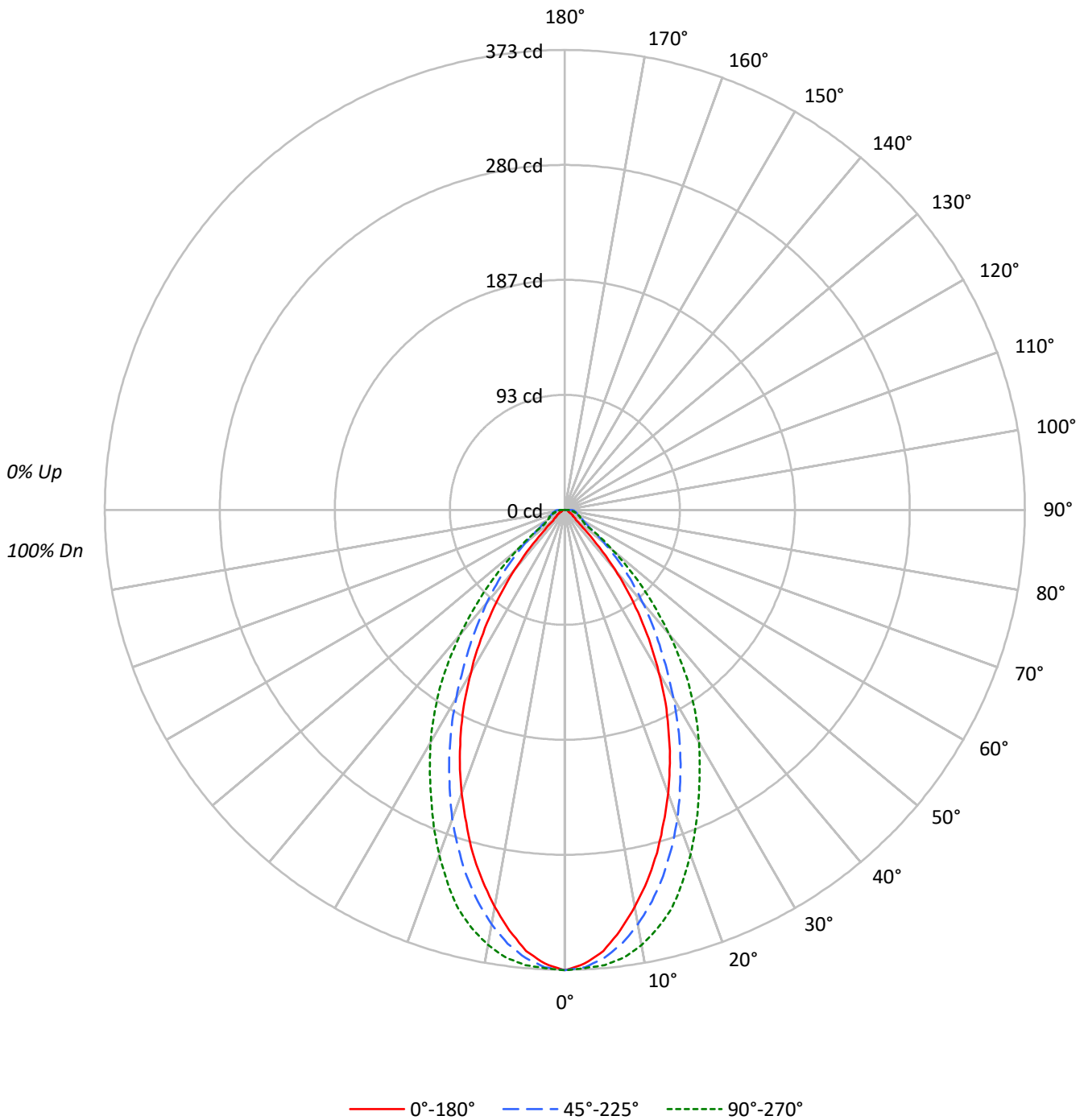
Lumens per Lamp: N/A
Luminaire Lumens: 402.6 lumens
Efficiency: N/A
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	6890	6890	6890
5°	6652	6759	6865
10°	6125	6395	6715
15°	5508	5876	6396
20°	4805	5239	5844
25°	4064	4516	5228
30°	3247	3750	4634
35°	2401	3014	3980
40°	1518	2361	3170
45°	598	1775	2333
50°	307	1191	1438
55°	254	782	643
60°	185	635	579
65°	157	594	594
70°	156	615	577
75°	207	713	613
80°	308	914	680
85°	445	1524	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3046 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	8.5
10°-20°	86.3	21.4
20°-30°	102.5	25.5
30°-40°	85.3	21.2
40°-50°	47.6	11.8
50°-60°	19.2	4.8
60°-70°	12.3	3.1
70°-80°	9.2	2.3
80°-90°	5.9	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°	223.0	55.4
0°-40°	308.3	76.6
0°-60°	375.1	93.2
0°-90°	402.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	402.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	359	366	365	368	371	33
15°	288	297	308	323	335	80
25°	200	208	222	239	257	91
35°	107	117	134	156	177	66
45°	23	39	68	79	89	22
55°	8	16	24	24	20	7
65°	4	14	14	13	14	4
75°	3	10	10	9	9	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°	373.4	373.4	373.4	373.4	373.4
2.5°	368.4	374.2	371.3	371.3	372.0
5°	359.1	365.6	364.9	367.7	370.6
7.5°	344.1	351.3	354.8	361.3	366.3
10°	326.9	334.8	341.3	351.3	358.4
12.5°	308.3	316.2	325.5	338.4	347.7
15°	288.3	296.9	307.6	323.4	334.8
17.5°	266.1	275.4	287.6	304.8	316.9
20°	244.7	254.0	266.8	284.0	297.6
22.5°	222.5	230.4	244.0	261.1	277.6
25°	199.6	207.5	221.8	238.9	256.8
27.5°	176.7	184.6	198.9	216.8	236.8
30°	152.4	161.0	176.0	196.0	217.5
32.5°	129.5	138.1	153.8	176.0	197.5
35°	106.6	116.6	133.8	156.0	176.7
37.5°	84.4	95.9	115.2	135.9	154.5
40°	63.0	75.1	98.0	115.9	131.6
42.5°	41.5	55.8	82.3	97.3	109.5
45°	22.9	38.6	68.0	79.4	89.4
47.5°	12.9	25.0	53.7	63.0	68.7
50°	10.7	18.6	41.5	47.9	50.1
52.5°	8.6	17.2	31.5	35.1	33.6
55°	7.9	16.5	24.3	23.6	20.0
57.5°	6.4	16.5	19.3	17.2	17.2
60°	5.0	15.7	17.2	15.0	15.7
62.5°	4.3	15.0	15.7	14.3	14.3
65°	3.6	14.3	13.6	12.9	13.6
67.5°	2.9	12.9	12.9	12.2	12.2
70°	2.9	12.2	11.4	10.7	10.7
72.5°	2.9	10.7	10.7	10.0	10.0
75°	2.9	10.0	10.0	9.3	8.6
77.5°	2.9	8.6	9.3	8.6	7.9
80°	2.9	7.9	8.6	7.9	6.4
82.5°	2.9	7.2	7.9	7.2	5.7
85°	2.1	6.4	7.2	6.4	4.3
87.5°	2.1	6.4	7.2	5.7	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)