

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: P1057972

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

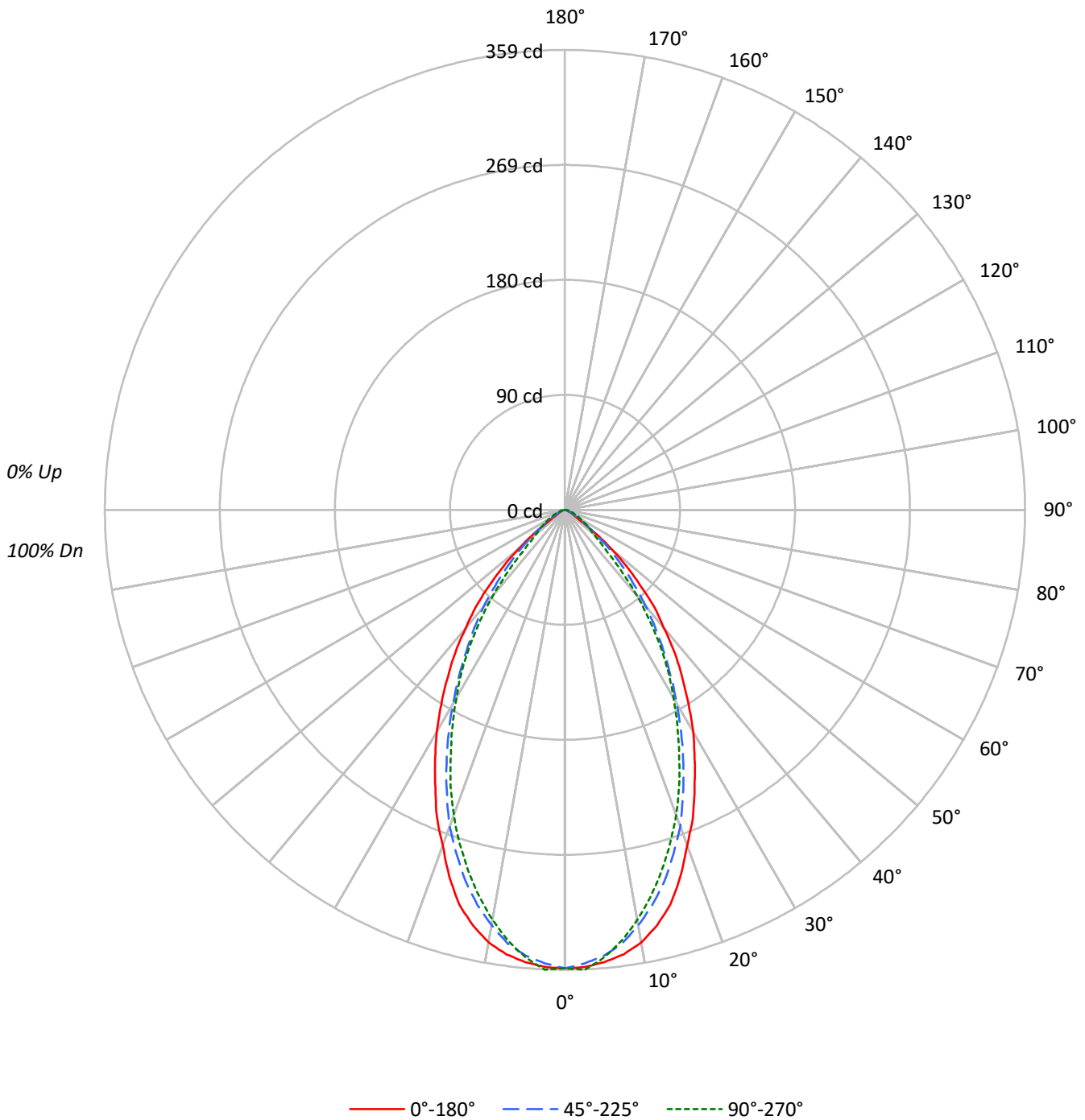
Lumens per Lamp: N/A
Luminaire Lumens: 384.9 lumens
Efficiency: N/A
Efficacy: 19.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6604	6604	6604
5°	6563	6470	6496
10°	6425	6170	6090
15°	6086	5731	5569
20°	5471	5162	4980
25°	4872	4451	4290
30°	4261	3714	3607
35°	3588	3010	2913
40°	2891	2375	2100
45°	2163	1714	1250
50°	1352	1108	821
55°	460	598	666
60°	262	369	528
65°	188	249	406
70°	156	194	308
75°	100	150	257
80°	74	149	223
85°	0	0	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2163 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.0	8.6
10°-20°	84.4	21.9
20°-30°	101.7	26.4
30°-40°	86.9	22.6
40°-50°	50.9	13.2
50°-60°	18.4	4.8
60°-70°	6.5	1.7
70°-80°	2.6	0.7
80°-90°	0.5	0.1
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°	219.1	56.9
0°-40°	306.0	79.5
0°-60°	375.3	97.5
0°-90°	384.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	384.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	354	355	349	351	351	33
15°	319	314	300	294	292	88
25°	239	229	219	215	211	110
35°	159	147	134	132	129	99
45°	83	74	66	55	48	64
55°	14	20	19	19	21	18
65°	4	5	6	8	9	5
75°	1	2	2	3	4	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.9	357.9	357.9	357.9	357.9
2.5°	357.2	357.9	354.3	357.9	359.3
5°	354.3	355.0	349.3	350.7	350.7
7.5°	350.0	349.3	341.5	340.0	339.3
10°	342.9	340.7	329.3	327.2	325.0
12.5°	332.2	327.9	315.7	312.2	309.3
15°	318.6	313.6	300.0	294.3	291.5
17.5°	300.0	294.3	281.5	275.7	272.9
20°	278.6	272.9	262.9	256.5	253.6
22.5°	260.7	251.5	240.7	236.5	232.9
25°	239.3	229.3	218.6	215.0	210.7
27.5°	219.3	207.2	196.4	193.6	190.0
30°	200.0	187.2	174.3	174.3	169.3
32.5°	179.3	167.2	153.6	152.9	150.0
35°	159.3	147.2	133.6	132.2	129.3
37.5°	140.7	128.6	115.7	111.4	107.9
40°	120.0	109.3	98.6	91.4	87.2
42.5°	103.6	91.4	80.7	72.1	66.4
45°	82.9	74.3	65.7	55.0	47.9
47.5°	64.3	58.6	51.4	39.3	35.7
50°	47.1	44.3	38.6	29.3	28.6
52.5°	30.0	31.4	27.9	22.9	25.0
55°	14.3	20.0	18.6	19.3	20.7
57.5°	9.3	10.0	13.6	15.7	17.1
60°	7.1	7.1	10.0	12.9	14.3
62.5°	5.7	5.7	7.9	10.7	11.4
65°	4.3	5.0	5.7	7.9	9.3
67.5°	3.6	3.6	4.3	6.4	7.1
70°	2.9	2.9	3.6	5.0	5.7
72.5°	2.1	2.1	2.9	4.3	4.3
75°	1.4	2.1	2.1	2.9	3.6
77.5°	1.4	1.4	1.4	2.1	2.9
80°	0.7	0.7	1.4	1.4	2.1
82.5°	0.7	0.7	0.7	0.7	1.4
85°	0.0	0.0	0.0	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)