

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: P1057952

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057952
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-S485D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

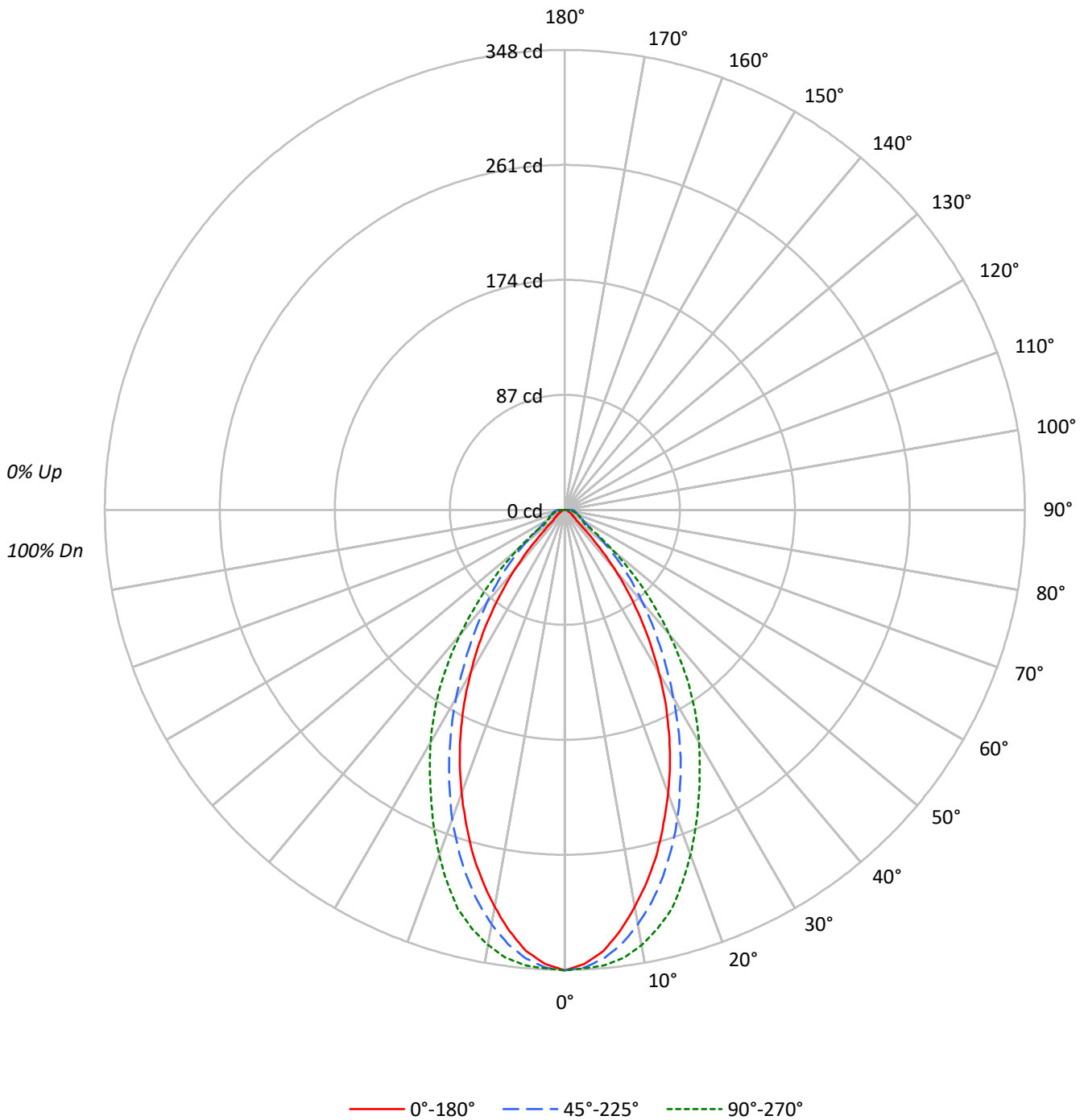
Lumens per Lamp: N/A
Luminaire Lumens: 375.7 lumens
Efficiency: N/A
Efficacy: 19.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057952

CATALOG NUMBER: S122RDR-S485D830-X4F0-XX-UDD-BVL-S

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°	6431	6431	6431
5°	6209	6307	6407
10°	5717	5968	6268
15°	5141	5485	5970
20°	4485	4892	5455
25°	3793	4215	4880
30°	3030	3501	4325
35°	2241	2814	3715
40°	1416	2204	2960
45°	558	1654	2179
50°	287	1111	1341
55°	235	730	602
60°	173	590	543
65°	144	555	555
70°	146	577	540
75°	192	663	570
80°	287	850	638
85°	423	1419	847

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 2834 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	8.5
10°-20°	80.5	21.4
20°-30°	95.7	25.5
30°-40°	79.6	21.2
40°-50°	44.5	11.8
50°-60°	18.0	4.8
60°-70°	11.5	3.1
70°-80°	8.6	2.3
80°-90°	5.5	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°	208.1	55.4
0°-40°	287.7	76.6
0°-60°	350.1	93.2
0°-90°	375.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	375.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	335	341	340	343	346	31
15°	269	277	287	302	312	75
25°	186	194	207	223	240	85
35°	100	109	125	146	165	62
45°	21	36	63	74	84	20
55°	7	15	23	22	19	6
65°	3	13	13	12	13	3
75°	3	9	9	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°	348.5	348.5	348.5	348.5	348.5
2.5°	343.9	349.2	346.5	346.5	347.2
5°	335.2	341.2	340.5	343.2	345.9
7.5°	321.2	327.8	331.2	337.2	341.9
10°	305.1	312.5	318.5	327.8	334.5
12.5°	287.8	295.1	303.8	315.8	324.5
15°	269.1	277.1	287.1	301.8	312.5
17.5°	248.4	257.1	268.4	284.4	295.8
20°	228.4	237.0	249.1	265.1	277.8
22.5°	207.7	215.0	227.7	243.7	259.1
25°	186.3	193.6	207.0	223.0	239.7
27.5°	164.9	172.3	185.6	202.3	221.0
30°	142.2	150.2	164.3	183.0	203.0
32.5°	120.9	128.9	143.6	164.3	184.3
35°	99.5	108.8	124.9	145.6	164.9
37.5°	78.8	89.5	107.5	126.9	144.2
40°	58.8	70.1	91.5	108.2	122.9
42.5°	38.7	52.1	76.8	90.8	102.2
45°	21.4	36.1	63.4	74.1	83.5
47.5°	12.0	23.4	50.1	58.8	64.1
50°	10.0	17.4	38.7	44.7	46.7
52.5°	8.0	16.0	29.4	32.7	31.4
55°	7.3	15.4	22.7	22.0	18.7
57.5°	6.0	15.4	18.0	16.0	16.0
60°	4.7	14.7	16.0	14.0	14.7
62.5°	4.0	14.0	14.7	13.4	13.4
65°	3.3	13.4	12.7	12.0	12.7
67.5°	2.7	12.0	12.0	11.4	11.4
70°	2.7	11.4	10.7	10.0	10.0
72.5°	2.7	10.0	10.0	9.3	9.3
75°	2.7	9.3	9.3	8.7	8.0
77.5°	2.7	8.0	8.7	8.0	7.3
80°	2.7	7.3	8.0	7.3	6.0
82.5°	2.7	6.7	7.3	6.7	5.3
85°	2.0	6.0	6.7	6.0	4.0
87.5°	2.0	6.0	6.7	5.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)