

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: P1058029

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

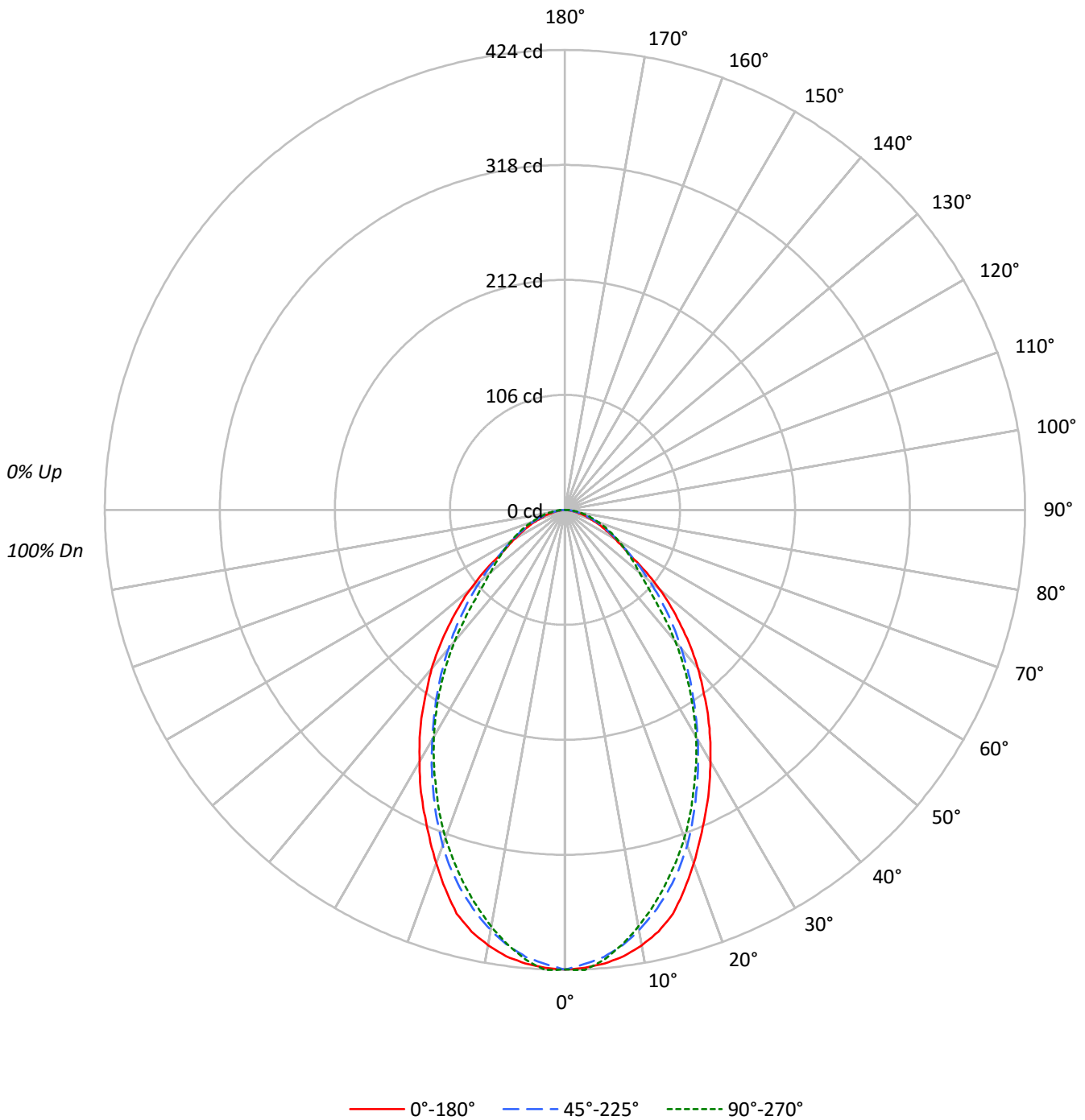
Lumens per Lamp: N/A
Luminaire Lumens: 643.7 lumens
Efficiency: N/A
Efficacy: 32.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7820	7820	7820
5°	7776	7663	7713
10°	7637	7373	7309
15°	7362	6975	6833
20°	6812	6466	6321
25°	6253	5839	5729
30°	5708	5205	5148
35°	5170	4607	4501
40°	4601	4015	3803
45°	3961	3452	3048
50°	3275	2905	2558
55°	2368	2410	2300
60°	1967	2067	2093
65°	1681	1799	1917
70°	1381	1602	1748
75°	1155	1347	1590
80°	861	1073	1435
85°	275	572	1291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	6.1
10°-20°	103.2	16.0
20°-30°	133.5	20.7
30°-40°	131.0	20.3
40°-50°	103.1	16.0
50°-60°	67.6	10.5
60°-70°	41.1	6.4
70°-80°	20.6	3.2
80°-90°	4.4	0.7
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°	275.9	42.9
0°-40°	406.8	63.2
0°-60°	577.5	89.7
0°-90°	643.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	643.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	424	424	424	424	424	
5°	420	420	414	416	416	40
15°	385	380	365	360	358	107
25°	307	297	287	286	281	141
35°	230	217	204	204	200	143
45°	152	142	132	123	117	117
55°	74	78	75	72	72	70
65°	38	39	41	43	44	38
75°	16	17	19	22	22	17
85°	1	2	3	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	423.8	423.8	423.8	423.8	423.8
2.5°	422.5	423.2	419.1	423.2	424.5
5°	419.8	419.8	413.7	416.4	416.4
7.5°	415.1	414.4	404.9	404.9	404.3
10°	407.6	404.9	393.5	391.4	390.1
12.5°	398.2	393.5	380.0	376.6	374.6
15°	385.4	380.0	365.1	360.4	357.7
17.5°	366.5	361.1	348.2	342.8	340.1
20°	346.9	338.8	329.3	324.6	321.9
22.5°	326.6	317.2	308.4	305.0	302.3
25°	307.1	297.0	286.8	285.5	281.4
27.5°	288.2	276.0	265.9	265.2	261.9
30°	267.9	255.1	244.3	245.0	241.6
32.5°	249.0	236.9	224.1	224.7	220.7
35°	229.5	216.6	204.5	203.8	199.8
37.5°	209.2	197.1	185.6	182.9	178.8
40°	191.0	178.8	166.7	162.0	157.9
42.5°	171.4	160.6	149.8	142.4	137.0
45°	151.8	142.4	132.3	122.8	116.8
47.5°	133.0	125.5	116.8	105.3	101.2
50°	114.1	108.7	101.2	91.1	89.1
52.5°	94.5	92.5	87.7	81.0	80.3
55°	73.6	77.6	74.9	72.2	71.5
57.5°	62.1	62.8	64.8	64.1	64.1
60°	53.3	53.3	56.0	56.7	56.7
62.5°	45.2	45.9	48.6	49.9	49.9
65°	38.5	39.1	41.2	43.2	43.9
67.5°	31.7	33.1	35.1	37.1	37.8
70°	25.6	27.0	29.7	31.7	32.4
72.5°	20.9	21.6	24.3	26.3	27.0
75°	16.2	16.9	18.9	21.6	22.3
77.5°	11.5	12.8	14.8	16.9	18.2
80°	8.1	8.8	10.1	12.8	13.5
82.5°	4.7	5.4	6.7	8.8	9.4
85°	1.3	2.0	2.7	4.7	6.1
87.5°	0.0	0.0	0.0	1.3	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)