

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: P1057985

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057985
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

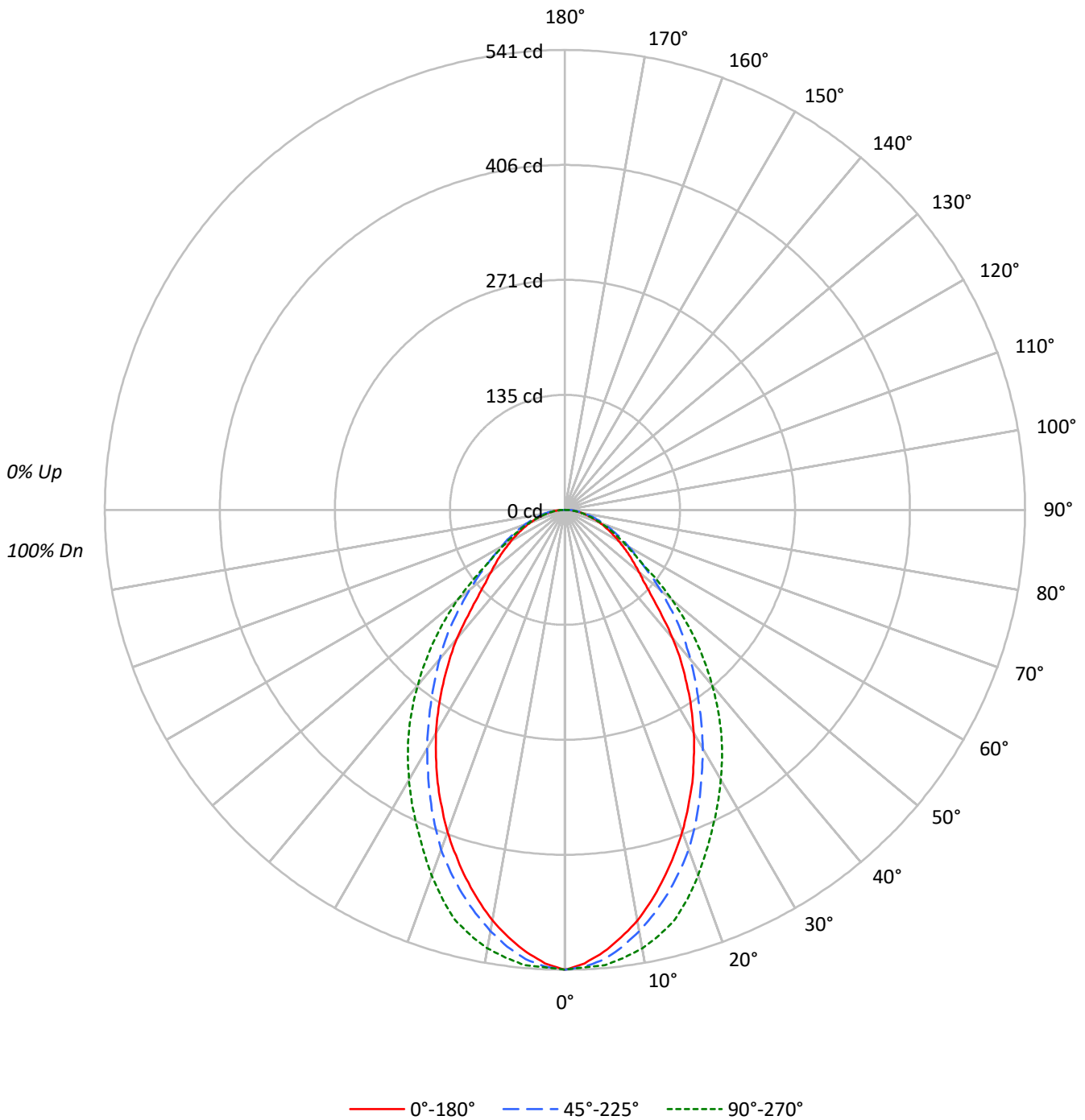
Lumens per Lamp: N/A
Luminaire Lumens: 880.9 lumens
Efficiency: N/A
Efficacy: 44.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9981	9981	9981
5°	9671	9830	9962
10°	9194	9429	9813
15°	8579	8923	9538
20°	7923	8355	8988
25°	7209	7625	8376
30°	6456	6908	7811
35°	5625	6172	7215
40°	4748	5521	6487
45°	3771	4877	5676
50°	3247	4191	4711
55°	2957	3587	3613
60°	2694	3189	3070
65°	2467	2877	2707
70°	2288	2671	2417
75°	2125	2517	2125
80°	1998	2423	1923
85°	1990	2498	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5676 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	5.7
10°-20°	132.0	15.0
20°-30°	173.7	19.7
30°-40°	174.7	19.8
40°-50°	141.6	16.1
50°-60°	97.5	11.1
60°-70°	63.8	7.2
70°-80°	35.6	4.0
80°-90°	12.0	1.4
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°	355.7	40.4
0°-40°	530.3	60.2
0°-60°	769.4	87.3
0°-90°	880.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	880.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	522	532	531	533	538	49
15°	449	460	467	484	499	126
25°	354	364	374	391	411	162
35°	250	261	274	298	320	156
45°	144	161	187	203	218	114
55°	92	102	112	114	112	82
65°	56	68	66	63	62	56
75°	30	37	35	31	30	32
85°	9	13	12	10	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	540.9	540.9	540.9	540.9	540.9
2.5°	533.9	543.3	537.8	537.8	538.6
5°	522.1	532.3	530.7	533.1	537.8
7.5°	507.2	518.2	518.2	525.2	531.5
10°	490.7	501.7	503.2	514.2	523.7
12.5°	470.3	481.3	486.0	500.1	512.7
15°	449.1	460.1	467.1	484.4	499.3
17.5°	426.3	437.3	446.7	464.8	479.7
20°	403.5	413.7	425.5	441.2	457.7
22.5°	378.4	389.4	400.4	415.3	434.2
25°	354.1	363.5	374.5	391.0	411.4
27.5°	328.2	338.4	348.6	368.2	389.4
30°	303.0	313.3	324.2	344.7	366.6
32.5°	276.4	287.3	298.3	321.1	343.9
35°	249.7	261.4	274.0	298.3	320.3
37.5°	223.8	236.3	251.2	276.4	295.2
40°	197.1	210.4	229.2	251.2	269.3
42.5°	168.8	185.3	208.1	226.9	243.4
45°	144.5	160.9	186.9	203.3	217.5
47.5°	126.4	139.7	164.9	179.0	190.8
50°	113.1	123.3	146.0	156.2	164.1
52.5°	102.1	112.3	128.0	135.0	137.4
55°	91.9	102.1	111.5	113.8	112.3
57.5°	81.7	92.6	98.1	95.8	95.8
60°	73.0	84.8	86.4	83.2	83.2
62.5°	64.4	76.2	76.2	72.2	72.2
65°	56.5	67.5	65.9	62.8	62.0
67.5°	49.5	59.7	57.3	54.2	53.4
70°	42.4	51.8	49.5	45.5	44.8
72.5°	36.1	44.8	41.6	38.5	36.9
75°	29.8	36.9	35.3	31.4	29.8
77.5°	24.3	29.8	28.3	25.1	23.6
80°	18.8	23.6	22.8	19.6	18.1
82.5°	14.1	18.1	17.3	14.9	12.6
85°	9.4	12.6	11.8	10.2	7.9
87.5°	4.7	8.6	7.9	7.1	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)