

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: P1057816

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

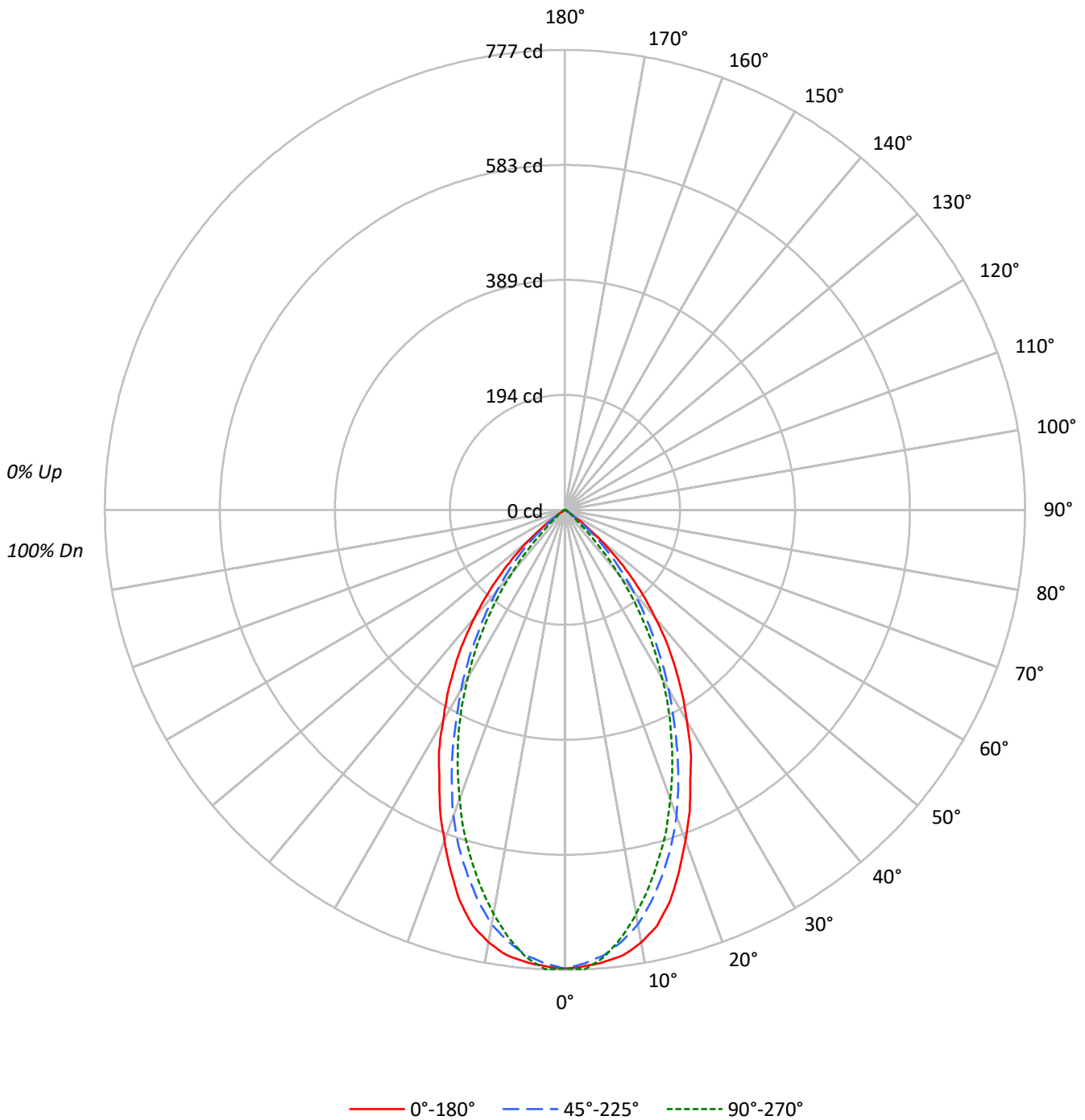
Lumens per Lamp: N/A
Luminaire Lumens: 728.7 lumens
Efficiency: N/A
Efficacy: 17.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14301	14301	14301
5°	14203	13990	14052
10°	13907	13324	12985
15°	13084	12175	11674
20°	11678	10810	10199
25°	10209	9140	8673
30°	8761	7470	6982
35°	7308	5832	5242
40°	5682	4302	3355
45°	3977	2865	1454
50°	2165	1504	517
55°	315	528	370
60°	59	122	244
65°	0	70	144
70°	0	0	86
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3977 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	9.8
10°-20°	179.5	24.6
20°-30°	209.2	28.7
30°-40°	167.6	23.0
40°-50°	83.3	11.4
50°-60°	16.4	2.3
60°-70°	1.4	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	459.8	63.1
0°-40°	627.5	86.1
0°-60°	727.2	99.8
0°-90°	728.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	728.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	767	767	755	757	759	72
15°	685	672	637	621	611	190
25°	501	477	449	439	426	231
35°	324	292	259	247	233	202
45°	152	134	110	74	56	118
55°	10	20	16	10	12	20
65°	0	0	2	2	3	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.0	775.0	775.0	775.0	775.0
2.5°	771.7	775.0	766.8	775.0	776.6
5°	766.8	766.8	755.3	756.9	758.6
7.5°	758.6	755.3	735.6	732.4	729.1
10°	742.2	735.6	711.1	698.0	693.0
12.5°	719.3	709.4	676.7	661.9	653.7
15°	684.9	671.7	637.3	621.0	611.1
17.5°	640.6	629.1	596.4	578.4	568.5
20°	594.7	578.4	550.5	532.5	519.4
22.5°	550.5	529.2	499.7	486.6	473.5
25°	501.4	476.8	448.9	439.1	426.0
27.5°	460.4	429.3	396.5	389.9	378.5
30°	411.2	381.7	350.6	340.8	327.7
32.5°	368.6	335.9	304.7	293.3	281.8
35°	324.4	291.6	258.9	247.4	232.7
37.5°	281.8	250.7	217.9	199.9	186.8
40°	235.9	209.7	178.6	155.6	139.3
42.5°	195.0	172.0	142.5	113.0	96.7
45°	152.4	134.3	109.8	73.7	55.7
47.5°	113.0	99.9	80.3	42.6	29.5
50°	75.4	70.5	52.4	21.3	18.0
52.5°	41.0	44.2	31.1	13.1	14.7
55°	9.8	19.7	16.4	9.8	11.5
57.5°	1.6	3.3	8.2	8.2	8.2
60°	1.6	1.6	3.3	4.9	6.6
62.5°	1.6	0.0	1.6	3.3	4.9
65°	0.0	0.0	1.6	1.6	3.3
67.5°	0.0	0.0	0.0	1.6	1.6
70°	0.0	0.0	0.0	1.6	1.6
72.5°	0.0	0.0	0.0	0.0	1.6
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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)