

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: P1058173

Luminaire Tested: S122RDR-S865D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058173
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-S865D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

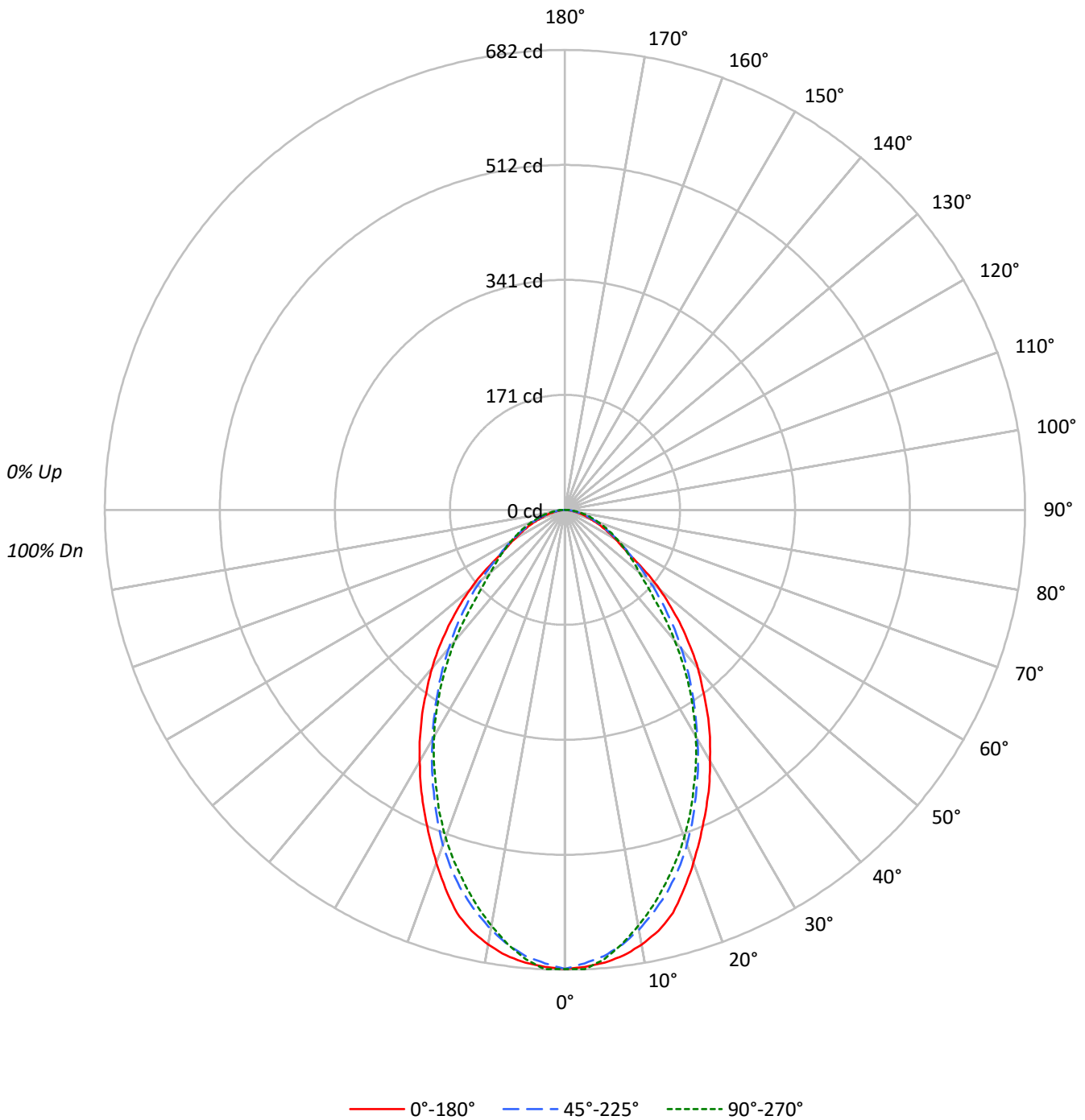
Lumens per Lamp: N/A
Luminaire Lumens: 1033.8 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12561	12561	12561
5°	12488	12307	12388
10°	12267	11840	11739
15°	11823	11202	10975
20°	10940	10386	10152
25°	10042	9380	9203
30°	9168	8361	8267
35°	8301	7398	7226
40°	7388	6448	6109
45°	6365	5543	4893
50°	5259	4668	4108
55°	3799	3870	3696
60°	3159	3321	3358
65°	2698	2886	3078
70°	2223	2573	2805
75°	1854	2160	2552
80°	1381	1732	2306
85°	466	910	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	6.1
10°-20°	165.7	16.0
20°-30°	214.5	20.7
30°-40°	210.3	20.3
40°-50°	165.6	16.0
50°-60°	108.6	10.5
60°-70°	66.1	6.4
70°-80°	33.0	3.2
80°-90°	7.1	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°	443.1	42.9
0°-40°	653.4	63.2
0°-60°	927.5	89.7
0°-90°	1033.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	674	674	664	669	669	64
15°	619	610	586	579	574	172
25°	493	477	461	458	452	227
35°	368	348	328	327	321	230
45°	244	229	212	197	188	188
55°	118	125	120	116	115	112
65°	62	63	66	69	70	61
75°	26	27	30	35	36	28
85°	2	3	4	8	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.7	680.7	680.7	680.7	680.7
2.5°	678.5	679.6	673.1	679.6	681.8
5°	674.2	674.2	664.4	668.8	668.8
7.5°	666.6	665.5	650.3	650.3	649.3
10°	654.7	650.3	631.9	628.7	626.5
12.5°	639.5	631.9	610.2	604.8	601.6
15°	618.9	610.2	586.4	578.8	574.5
17.5°	588.6	579.9	559.3	550.6	546.3
20°	557.1	544.1	528.9	521.4	517.0
22.5°	524.6	509.4	495.3	489.9	485.6
25°	493.2	476.9	460.7	458.5	452.0
27.5°	462.8	443.3	427.1	426.0	420.6
30°	430.3	409.7	392.4	393.5	388.0
32.5°	400.0	380.4	359.9	360.9	354.4
35°	368.5	347.9	328.4	327.3	320.8
37.5°	336.0	316.5	298.1	293.7	287.2
40°	306.7	287.2	267.7	260.1	253.6
42.5°	275.3	258.0	240.6	228.7	220.0
45°	243.9	228.7	212.4	197.3	187.5
47.5°	213.5	201.6	187.5	169.1	162.6
50°	183.2	174.5	162.6	146.3	143.1
52.5°	151.7	148.5	140.9	130.1	129.0
55°	118.1	124.6	120.3	116.0	114.9
57.5°	99.7	100.8	104.1	103.0	103.0
60°	85.6	85.6	90.0	91.0	91.0
62.5°	72.6	73.7	78.0	80.2	80.2
65°	61.8	62.9	66.1	69.4	70.5
67.5°	50.9	53.1	56.4	59.6	60.7
70°	41.2	43.4	47.7	50.9	52.0
72.5°	33.6	34.7	39.0	42.3	43.4
75°	26.0	27.1	30.3	34.7	35.8
77.5°	18.4	20.6	23.8	27.1	29.3
80°	13.0	14.1	16.3	20.6	21.7
82.5°	7.6	8.7	10.8	14.1	15.2
85°	2.2	3.3	4.3	7.6	9.8
87.5°	0.0	0.0	0.0	2.2	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)