

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: P1058119

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058119
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-S865D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

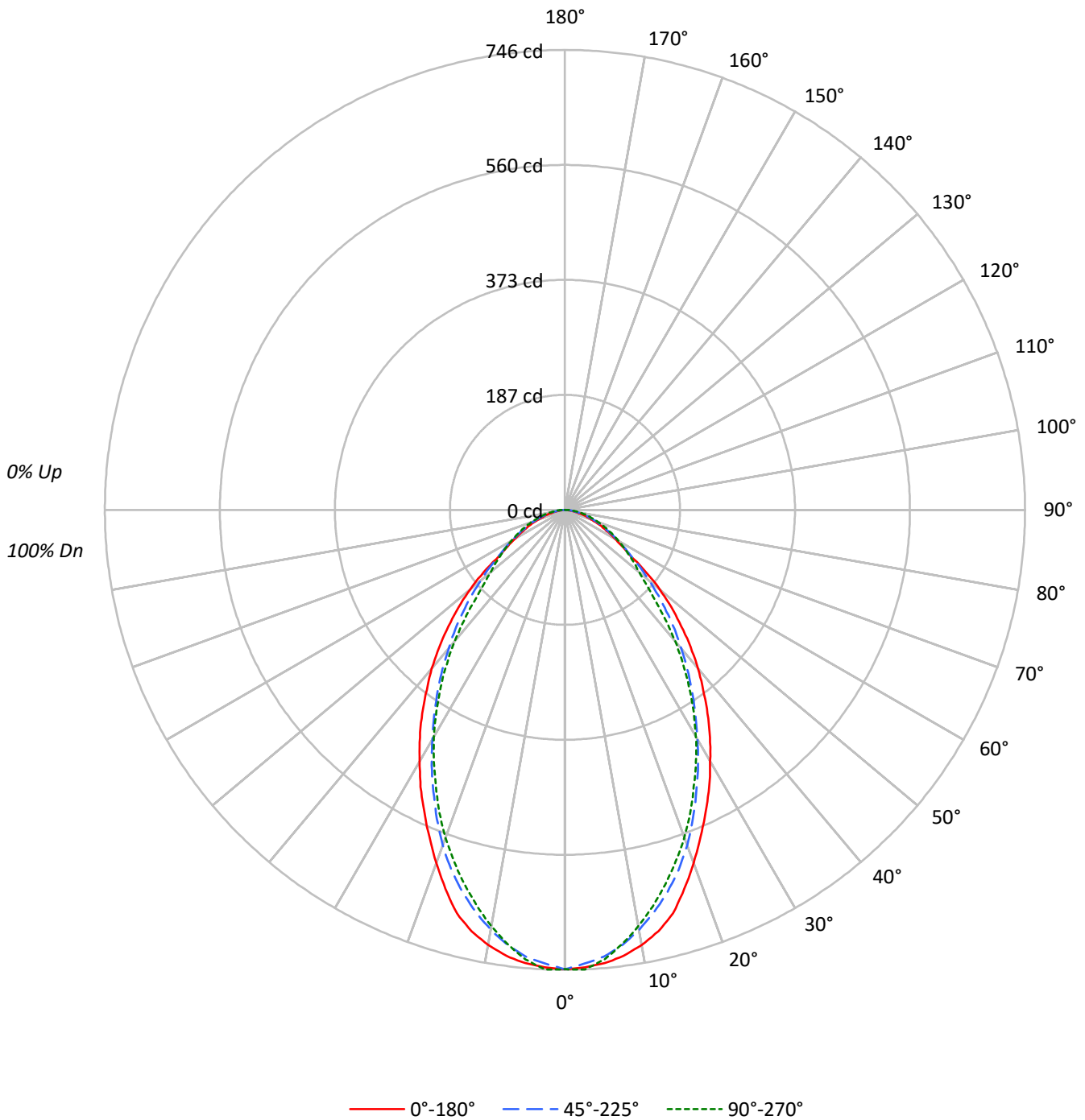
Lumens per Lamp: N/A
Luminaire Lumens: 1131.7 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	13751	13751	13751
5°	13670	13474	13561
10°	13429	12962	12850
15°	12943	12262	12014
20°	11976	11370	11114
25°	10992	10268	10074
30°	10038	9151	9051
35°	9087	8098	7911
40°	8089	7060	6689
45°	6968	6070	5357
50°	5756	5110	4496
55°	4160	4237	4047
60°	3458	3635	3679
65°	2952	3161	3366
70°	2433	2816	3075
75°	2032	2367	2795
80°	1509	1891	2518
85°	508	995	2265

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6968 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	6.1
10°-20°	181.4	16.0
20°-30°	234.8	20.7
30°-40°	230.2	20.3
40°-50°	181.3	16.0
50°-60°	118.8	10.5
60°-70°	72.3	6.4
70°-80°	36.2	3.2
80°-90°	7.8	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°	485.0	42.9
0°-40°	715.3	63.2
0°-60°	1015.4	89.7
0°-90°	1131.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1131.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	738	738	727	732	732	70
15°	678	668	642	634	629	189
25°	540	522	504	502	495	248
35°	403	381	360	358	351	252
45°	267	250	233	216	205	206
55°	129	136	132	127	126	123
65°	68	69	72	76	77	67
75°	28	30	33	38	39	30
85°	2	4	5	8	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	745.2	745.2	745.2	745.2	745.2
2.5°	742.8	744.0	736.8	744.0	746.3
5°	738.0	738.0	727.4	732.1	732.1
7.5°	729.7	728.5	711.9	711.9	710.7
10°	716.7	711.9	691.8	688.2	685.8
12.5°	700.1	691.8	668.0	662.1	658.5
15°	677.5	668.0	641.9	633.6	628.9
17.5°	644.3	634.8	612.3	602.8	598.0
20°	609.9	595.6	579.0	570.7	566.0
22.5°	574.3	557.7	542.3	536.3	531.6
25°	539.9	522.1	504.3	501.9	494.8
27.5°	506.7	485.3	467.5	466.3	460.4
30°	471.1	448.5	429.5	430.7	424.8
32.5°	437.8	416.5	393.9	395.1	388.0
35°	403.4	380.9	359.5	358.3	351.2
37.5°	367.8	346.5	326.3	321.6	314.4
40°	335.8	314.4	293.1	284.8	277.7
42.5°	301.4	282.4	263.4	250.4	240.9
45°	267.0	250.4	232.6	216.0	205.3
47.5°	233.8	220.7	205.3	185.1	178.0
50°	200.5	191.0	178.0	160.2	156.6
52.5°	166.1	162.6	154.3	142.4	141.2
55°	129.3	136.5	131.7	127.0	125.8
57.5°	109.2	110.3	113.9	112.7	112.7
60°	93.7	93.7	98.5	99.7	99.7
62.5°	79.5	80.7	85.4	87.8	87.8
65°	67.6	68.8	72.4	75.9	77.1
67.5°	55.8	58.1	61.7	65.3	66.4
70°	45.1	47.5	52.2	55.8	57.0
72.5°	36.8	38.0	42.7	46.3	47.5
75°	28.5	29.7	33.2	38.0	39.2
77.5°	20.2	22.5	26.1	29.7	32.0
80°	14.2	15.4	17.8	22.5	23.7
82.5°	8.3	9.5	11.9	15.4	16.6
85°	2.4	3.6	4.7	8.3	10.7
87.5°	0.0	0.0	0.0	2.4	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)