

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: P1058115

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

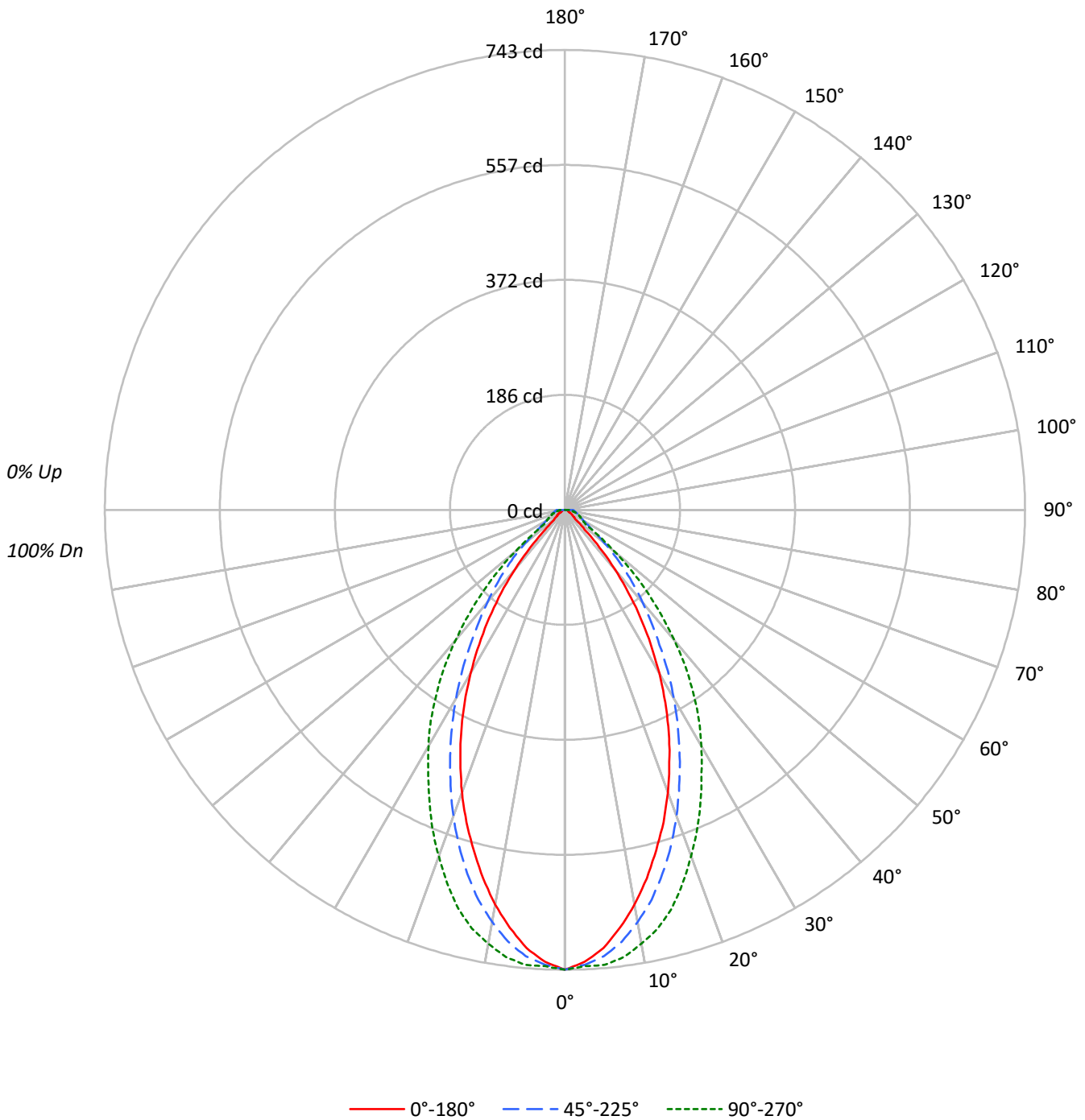
Lumens per Lamp: N/A
Luminaire Lumens: 808.5 lumens
Efficiency: N/A
Efficacy: 23.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13706	13706	13706
5°	13164	13407	13670
10°	12136	12670	13339
15°	10876	11624	12736
20°	9545	10339	11692
25°	8081	8928	10551
30°	6482	7496	9394
35°	4791	5997	8139
40°	3006	4695	6612
45°	1180	3536	4901
50°	580	2388	3003
55°	460	1567	1338
60°	351	1273	1229
65°	258	1192	1192
70°	318	1219	1219
75°	342	1355	1269
80°	510	1764	1392
85°	1016	3028	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5542 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	8.4
10°-20°	171.5	21.2
20°-30°	205.2	25.4
30°-40°	172.7	21.4
40°-50°	98.3	12.2
50°-60°	38.8	4.8
60°-70°	24.4	3.0
70°-80°	18.1	2.2
80°-90°	11.6	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°	444.5	55.0
0°-40°	617.2	76.3
0°-60°	754.4	93.3
0°-90°	808.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	711	726	724	732	738	66
15°	569	590	608	644	667	159
25°	397	415	438	484	518	181
35°	213	232	266	323	361	132
45°	45	80	136	170	188	43
55°	14	31	49	50	42	13
65°	6	27	27	26	27	7
75°	5	19	19	18	18	5
85°	5	13	14	13	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.8	742.8	742.8	742.8	742.8
2.5°	730.9	744.0	735.7	736.9	738.0
5°	710.7	726.2	723.8	732.1	738.0
7.5°	681.0	697.6	703.6	717.8	728.5
10°	647.7	666.7	676.2	698.8	711.9
12.5°	609.7	631.1	645.3	673.9	692.9
15°	569.3	589.5	608.5	644.1	666.7
17.5°	528.9	549.1	569.3	608.5	632.3
20°	486.1	505.1	526.5	568.1	595.4
22.5°	440.9	461.1	482.5	525.3	558.6
25°	396.9	414.8	438.5	483.7	518.2
27.5°	350.6	368.4	394.6	440.9	477.8
30°	304.2	322.1	351.8	399.3	440.9
32.5°	257.9	276.9	309.0	361.3	402.9
35°	212.7	231.8	266.2	323.3	361.3
37.5°	168.8	190.2	228.2	284.0	319.7
40°	124.8	149.7	194.9	244.8	274.5
42.5°	83.2	114.1	164.0	205.6	230.6
45°	45.2	79.6	135.5	170.0	187.8
47.5°	25.0	51.1	108.2	135.5	146.2
50°	20.2	35.7	83.2	103.4	104.6
52.5°	16.6	32.1	61.8	73.7	67.7
55°	14.3	30.9	48.7	49.9	41.6
57.5°	11.9	29.7	40.4	35.7	35.7
60°	9.5	29.7	34.5	32.1	33.3
62.5°	7.1	29.7	30.9	28.5	29.7
65°	5.9	27.3	27.3	26.1	27.3
67.5°	5.9	25.0	25.0	23.8	25.0
70°	5.9	23.8	22.6	22.6	22.6
72.5°	4.8	21.4	21.4	20.2	20.2
75°	4.8	19.0	19.0	17.8	17.8
77.5°	4.8	17.8	17.8	16.6	15.5
80°	4.8	15.5	16.6	15.5	13.1
82.5°	4.8	14.3	15.5	14.3	10.7
85°	4.8	13.1	14.3	13.1	9.5
87.5°	3.6	13.1	13.1	10.7	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)