

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: P1058138

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058138
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-S865D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

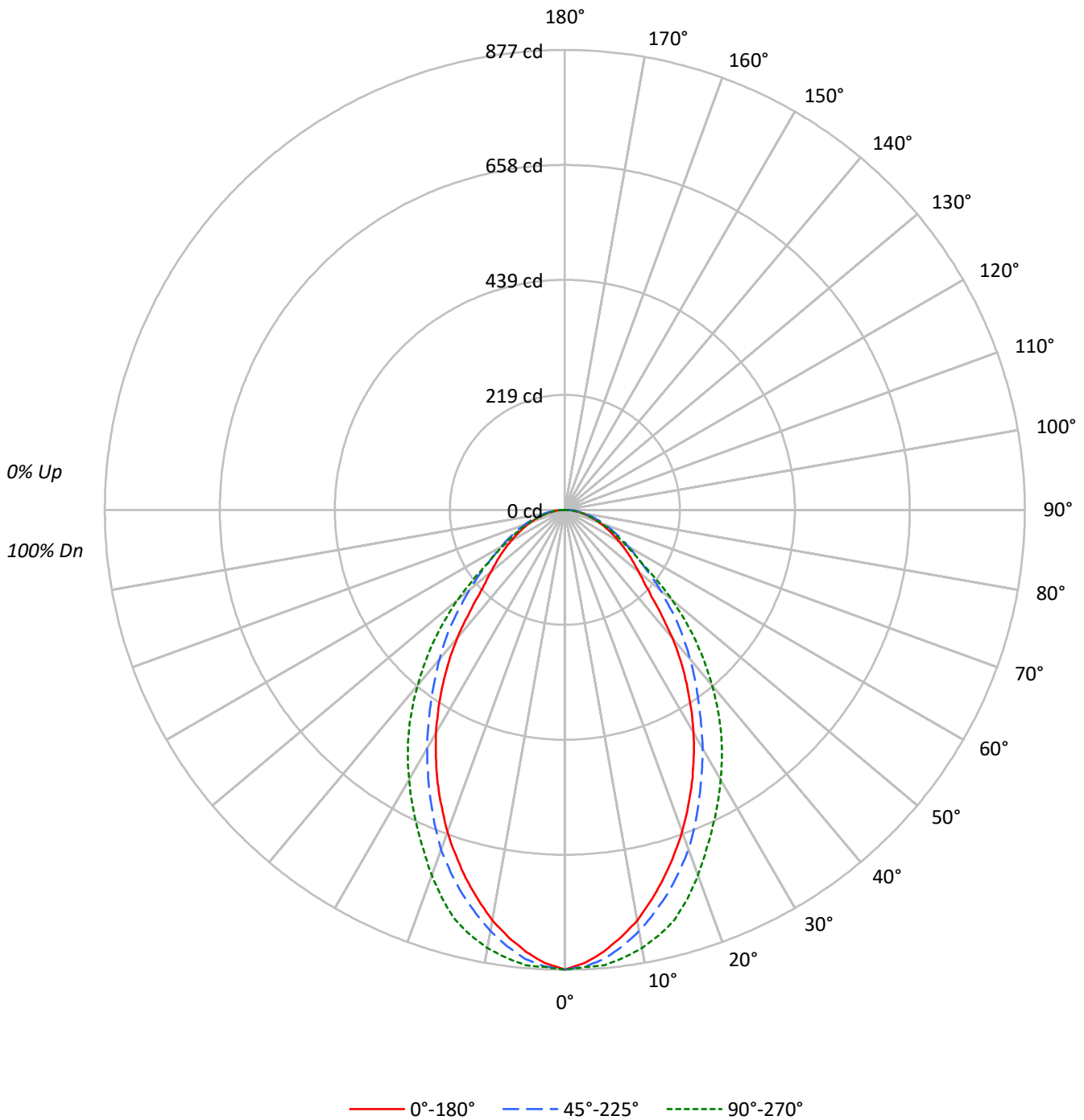
Lumens per Lamp: N/A
Luminaire Lumens: 1427.3 lumens
Efficiency: N/A
Efficacy: 40.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16175	16175	16175
5°	15670	15930	16143
10°	14898	15280	15900
15°	13902	14461	15457
20°	12840	13540	14565
25°	11683	12354	13572
30°	10464	11195	12659
35°	9114	10002	11693
40°	7691	8949	10512
45°	6109	7902	9196
50°	5259	6792	7633
55°	4787	5813	5852
60°	4366	5163	4978
65°	3999	4667	4388
70°	3706	4322	3911
75°	3444	4078	3444
80°	3241	3921	3114
85°	3239	4044	2689

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9196 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	5.7
10°-20°	213.9	15.0
20°-30°	281.5	19.7
30°-40°	283.1	19.8
40°-50°	229.4	16.1
50°-60°	158.0	11.1
60°-70°	103.4	7.2
70°-80°	57.6	4.0
80°-90°	19.5	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°	576.3	40.4
0°-40°	859.4	60.2
0°-60°	1246.8	87.4
0°-90°	1427.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1427.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	846	863	860	864	872	79
15°	728	746	757	785	809	204
25°	574	589	607	634	667	263
35°	405	424	444	483	519	252
45°	234	261	303	330	352	185
55°	149	165	181	184	182	133
65°	92	109	107	102	100	91
75°	48	60	57	51	48	52
85°	15	20	19	16	13	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.6	876.6	876.6	876.6	876.6
2.5°	865.1	880.4	871.5	871.5	872.7
5°	846.0	862.6	860.0	863.8	871.5
7.5°	821.8	839.7	839.7	851.1	861.3
10°	795.1	812.9	815.5	833.3	848.6
12.5°	762.1	779.9	787.5	810.4	830.8
15°	727.7	745.5	757.0	785.0	809.1
17.5°	690.8	708.6	723.9	753.1	777.3
20°	653.9	670.5	689.5	715.0	741.7
22.5°	613.2	631.0	648.8	673.0	703.5
25°	573.8	589.0	606.8	633.6	666.6
27.5°	531.8	548.3	564.9	596.7	631.0
30°	491.1	507.6	525.4	558.5	594.1
32.5°	447.8	465.6	483.4	520.3	557.2
35°	404.6	423.6	444.0	483.4	519.1
37.5°	362.6	382.9	407.1	447.8	478.3
40°	319.3	341.0	371.5	407.1	436.4
42.5°	273.5	300.2	337.1	367.7	394.4
45°	234.1	260.8	302.8	329.5	352.4
47.5°	204.8	226.5	267.2	290.1	309.1
50°	183.2	199.7	236.6	253.2	265.9
52.5°	165.4	181.9	207.4	218.8	222.6
55°	148.8	165.4	180.7	184.5	181.9
57.5°	132.3	150.1	159.0	155.2	155.2
60°	118.3	137.4	139.9	134.9	134.9
62.5°	104.3	123.4	123.4	117.0	117.0
65°	91.6	109.4	106.9	101.8	100.5
67.5°	80.1	96.7	92.9	87.8	86.5
70°	68.7	84.0	80.1	73.8	72.5
72.5°	58.5	72.5	67.4	62.3	59.8
75°	48.3	59.8	57.2	50.9	48.3
77.5°	39.4	48.3	45.8	40.7	38.2
80°	30.5	38.2	36.9	31.8	29.3
82.5°	22.9	29.3	28.0	24.2	20.4
85°	15.3	20.4	19.1	16.5	12.7
87.5°	7.6	14.0	12.7	11.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)