

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: P1058135

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058135
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

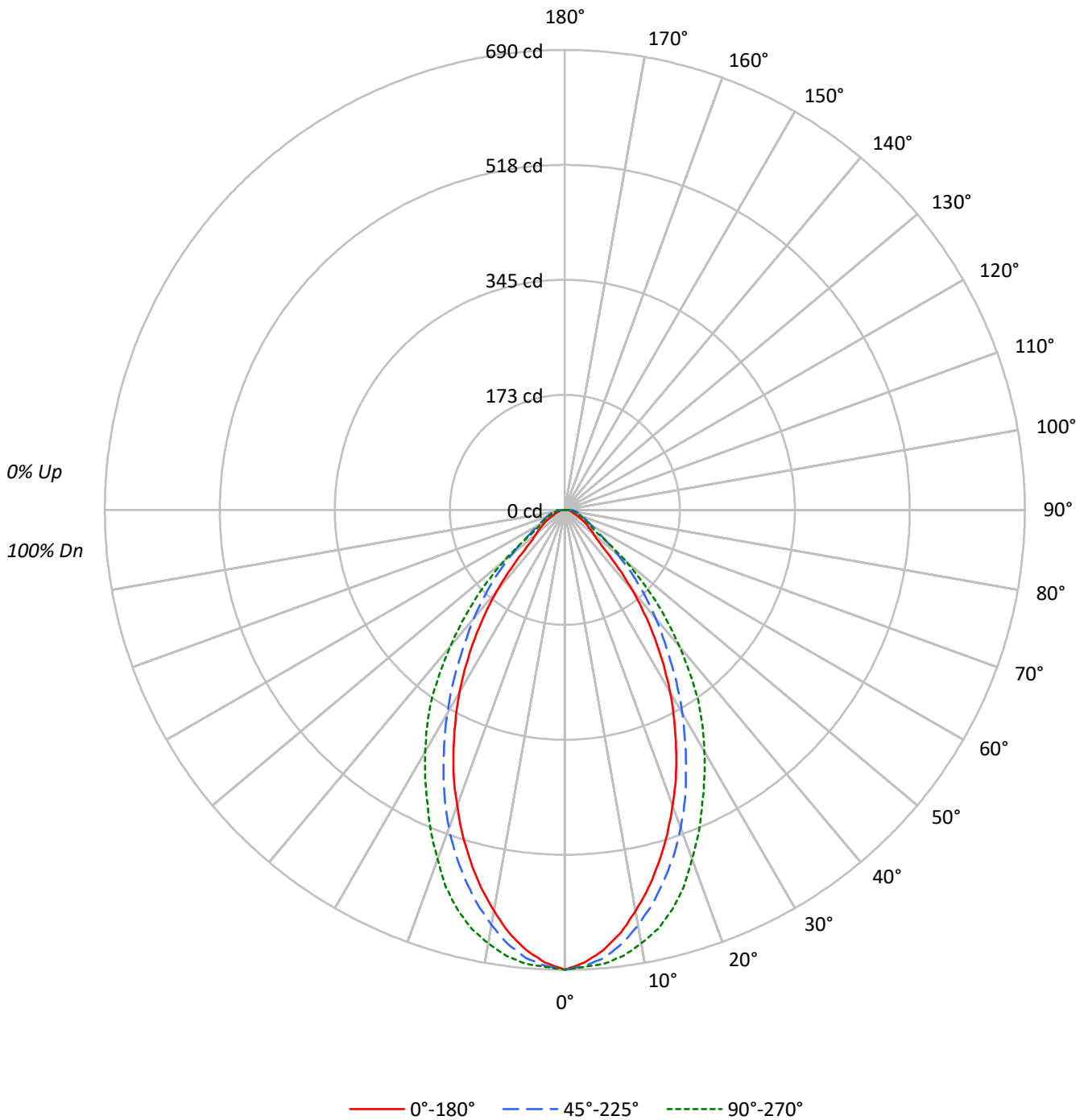
Lumens per Lamp: N/A
Luminaire Lumens: 832.3 lumens
Efficiency: N/A
Efficacy: 23.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12730	12730	12730
5°	12284	12496	12660
10°	11448	11853	12378
15°	10432	10990	11867
20°	9272	9973	10947
25°	8034	8759	9926
30°	6727	7513	8923
35°	5305	6222	7857
40°	3801	5090	6439
45°	2226	4019	4982
50°	1608	2922	3362
55°	1351	2088	1760
60°	1081	1690	1502
65°	891	1502	1388
70°	755	1441	1306
75°	727	1540	1269
80°	808	1891	1350
85°	1355	2964	1884

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4982 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	7.6
10°-20°	161.9	19.5
20°-30°	199.0	23.9
30°-40°	176.0	21.1
40°-50°	112.3	13.5
50°-60°	54.8	6.6
60°-70°	32.6	3.9
70°-80°	20.8	2.5
80°-90°	11.5	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°	424.2	51.0
0°-40°	600.2	72.1
0°-60°	767.3	92.2
0°-90°	832.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	663	677	675	677	684	62
15°	546	561	575	601	621	152
25°	395	409	430	457	488	181
35°	236	248	276	314	349	146
45°	85	110	154	173	191	72
55°	42	56	65	61	55	38
65°	20	38	34	32	32	20
75°	10	23	22	19	18	11
85°	6	13	14	13	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	689.9	689.9	689.9	689.9	689.9
2.5°	679.7	692.5	684.8	684.8	686.1
5°	663.2	677.2	674.6	677.2	683.5
7.5°	640.3	654.3	656.8	667.0	674.6
10°	611.0	625.0	632.6	649.2	660.6
12.5°	580.4	594.4	605.9	627.5	644.1
15°	546.1	561.3	575.3	600.8	621.2
17.5°	510.4	525.7	543.5	569.0	593.2
20°	472.2	486.2	507.9	532.1	557.5
22.5°	435.3	448.1	471.0	493.9	524.4
25°	394.6	408.6	430.2	457.0	487.5
27.5°	355.1	369.1	390.8	421.3	453.2
30°	315.7	328.4	352.6	384.4	418.8
32.5°	274.9	287.7	314.4	348.8	384.4
35°	235.5	248.2	276.2	314.4	348.8
37.5°	196.0	210.0	241.9	277.5	306.8
40°	157.8	174.4	211.3	241.9	267.3
42.5°	119.7	142.6	182.0	207.5	227.8
45°	85.3	109.5	154.0	173.1	190.9
47.5°	64.9	84.0	127.3	141.3	152.7
50°	56.0	68.7	101.8	112.0	117.1
52.5°	48.4	61.1	81.5	85.3	82.7
55°	42.0	56.0	64.9	61.1	54.7
57.5°	35.6	52.2	53.5	45.8	47.1
60°	29.3	47.1	45.8	39.5	40.7
62.5°	24.2	43.3	39.5	35.6	35.6
65°	20.4	38.2	34.4	31.8	31.8
67.5°	16.5	34.4	30.5	28.0	28.0
70°	14.0	30.5	26.7	24.2	24.2
72.5°	12.7	26.7	24.2	21.6	21.6
75°	10.2	22.9	21.6	19.1	17.8
77.5°	8.9	19.1	19.1	17.8	15.3
80°	7.6	16.5	17.8	15.3	12.7
82.5°	7.6	15.3	15.3	14.0	10.2
85°	6.4	12.7	14.0	12.7	8.9
87.5°	3.8	11.5	11.5	10.2	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)