

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: P1058159

Luminaire Tested: S122RDR-S865D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

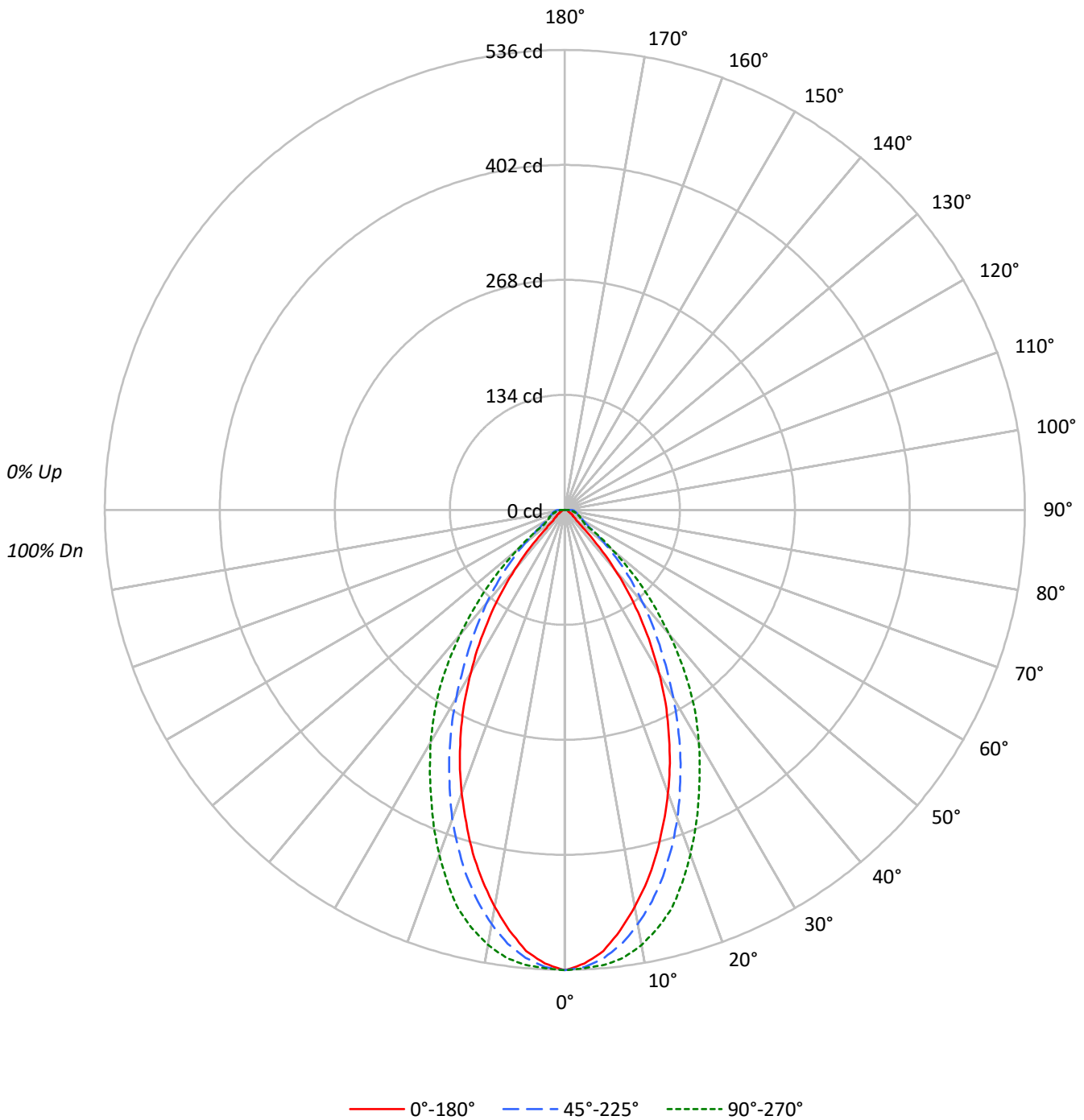
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 578.3 lumens
Efficiency: N/A
Efficacy: 16.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9900	9900	9900
5°	9558	9710	9862
10°	8801	9187	9648
15°	7913	8444	9189
20°	6902	7529	8397
25°	5839	6487	7513
30°	4664	5386	6658
35°	3449	4330	5719
40°	2178	3392	4555
45°	859	2547	3353
50°	442	1711	2064
55°	364	1123	927
60°	266	912	834
65°	223	851	851
70°	221	885	831
75°	292	1027	877
80°	436	1307	988
85°	656	2181	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4357 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	8.5
10°-20°	124.0	21.4
20°-30°	147.3	25.5
30°-40°	122.5	21.2
40°-50°	68.4	11.8
50°-60°	27.6	4.8
60°-70°	17.7	3.1
70°-80°	13.3	2.3
80°-90°	8.5	1.5
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°	320.3	55.4
0°-40°	442.8	76.6
0°-60°	538.9	93.2
0°-90°	578.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	516	525	524	528	532	48
15°	414	426	442	465	481	115
25°	287	298	319	343	369	131
35°	153	168	192	224	254	95
45°	33	56	98	114	128	31
55°	11	24	35	34	29	10
65°	5	21	20	18	20	5
75°	4	14	14	13	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.5	536.5	536.5	536.5	536.5
2.5°	529.3	537.5	533.4	533.4	534.5
5°	516.0	525.2	524.2	528.3	532.4
7.5°	494.4	504.7	509.8	519.0	526.2
10°	469.7	481.0	490.3	504.7	514.9
12.5°	443.0	454.3	467.7	486.2	499.5
15°	414.2	426.5	442.0	464.6	481.0
17.5°	382.3	395.7	413.2	437.8	455.3
20°	351.5	364.9	383.4	408.0	427.6
22.5°	319.6	331.0	350.5	375.1	398.8
25°	286.8	298.1	318.6	343.3	369.0
27.5°	253.9	265.2	285.7	311.4	340.2
30°	218.9	231.3	252.8	281.6	312.5
32.5°	186.0	198.4	221.0	252.8	283.7
35°	153.1	167.5	192.2	224.1	253.9
37.5°	121.3	137.7	165.5	195.3	222.0
40°	90.4	107.9	140.8	166.5	189.1
42.5°	59.6	80.2	118.2	139.8	157.3
45°	32.9	55.5	97.6	114.1	128.5
47.5°	18.5	36.0	77.1	90.4	98.7
50°	15.4	26.7	59.6	68.9	71.9
52.5°	12.3	24.7	45.2	50.4	48.3
55°	11.3	23.6	34.9	33.9	28.8
57.5°	9.3	23.6	27.8	24.7	24.7
60°	7.2	22.6	24.7	21.6	22.6
62.5°	6.2	21.6	22.6	20.6	20.6
65°	5.1	20.6	19.5	18.5	19.5
67.5°	4.1	18.5	18.5	17.5	17.5
70°	4.1	17.5	16.4	15.4	15.4
72.5°	4.1	15.4	15.4	14.4	14.4
75°	4.1	14.4	14.4	13.4	12.3
77.5°	4.1	12.3	13.4	12.3	11.3
80°	4.1	11.3	12.3	11.3	9.3
82.5°	4.1	10.3	11.3	10.3	8.2
85°	3.1	9.3	10.3	9.3	6.2
87.5°	3.1	9.3	10.3	8.2	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)