

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: P1058165

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058165
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-S865D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

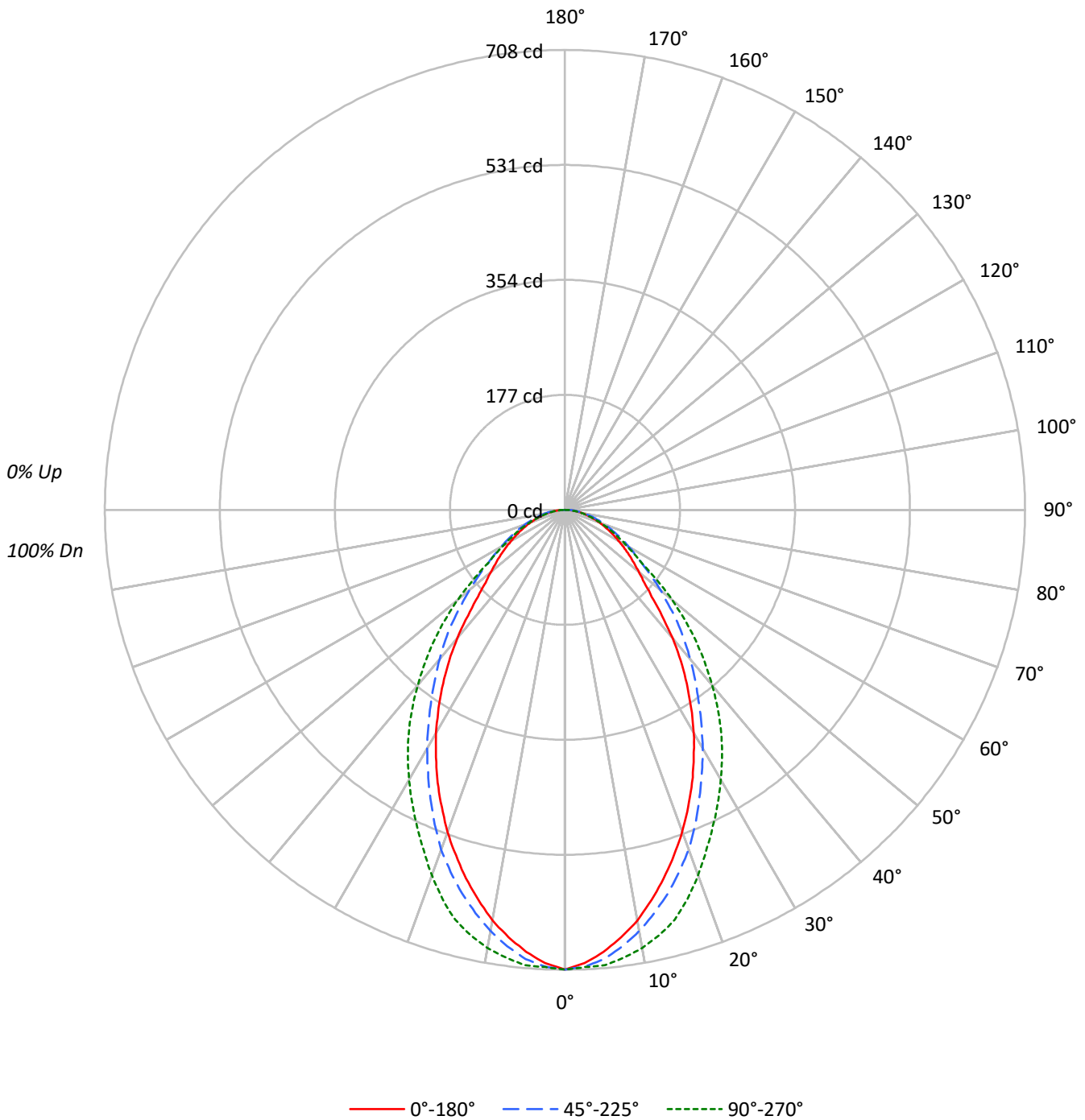
Lumens per Lamp: N/A
Luminaire Lumens: 1152.3 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058165

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-WVL-S

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°	13059	13059	13059
5°	12651	12860	13033
10°	12027	12337	12837
15°	11223	11674	12478
20°	10366	10932	11758
25°	9431	9974	10958
30°	8448	9038	10221
35°	7357	8076	9441
40°	6210	7224	8486
45°	4932	6378	7424
50°	4246	5483	6163
55°	3867	4691	4726
60°	3524	4170	4019
65°	3231	3768	3541
70°	2994	3491	3156
75°	2780	3294	2780
80°	2625	3167	2508
85°	2604	3260	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7424 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	5.7
10°-20°	172.7	15.0
20°-30°	227.3	19.7
30°-40°	228.5	19.8
40°-50°	185.2	16.1
50°-60°	127.6	11.1
60°-70°	83.5	7.2
70°-80°	46.5	4.0
80°-90°	15.7	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°	465.3	40.4
0°-40°	693.8	60.2
0°-60°	1006.6	87.4
0°-90°	1152.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1152.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	683	696	694	697	704	64
15°	588	602	611	634	653	165
25°	463	476	490	512	538	212
35°	327	342	358	390	419	204
45°	189	211	244	266	284	149
55°	120	134	146	149	147	108
65°	74	88	86	82	81	74
75°	39	48	46	41	39	42
85°	12	16	15	13	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.7	707.7	707.7	707.7	707.7
2.5°	698.4	710.7	703.6	703.6	704.6
5°	683.0	696.4	694.3	697.4	703.6
7.5°	663.5	677.9	677.9	687.1	695.3
10°	641.9	656.3	658.4	672.7	685.1
12.5°	615.2	629.6	635.8	654.3	670.7
15°	587.5	601.9	611.1	633.7	653.2
17.5°	557.7	572.1	584.4	608.0	627.6
20°	527.9	541.3	556.7	577.2	598.8
22.5°	495.1	509.4	523.8	543.3	568.0
25°	463.2	475.5	489.9	511.5	538.2
27.5°	429.3	442.7	456.0	481.7	509.4
30°	396.5	409.8	424.2	450.9	479.7
32.5°	361.5	375.9	390.3	420.1	449.9
35°	326.6	342.0	358.5	390.3	419.1
37.5°	292.7	309.2	328.7	361.5	386.2
40°	257.8	275.3	299.9	328.7	352.3
42.5°	220.8	242.4	272.2	296.8	318.4
45°	189.0	210.6	244.4	266.0	284.5
47.5°	165.4	182.8	215.7	234.2	249.6
50°	147.9	161.3	191.0	204.4	214.7
52.5°	133.5	146.9	167.4	176.7	179.7
55°	120.2	133.5	145.8	148.9	146.9
57.5°	106.8	121.2	128.4	125.3	125.3
60°	95.5	110.9	113.0	108.9	108.9
62.5°	84.2	99.6	99.6	94.5	94.5
65°	74.0	88.3	86.3	82.2	81.1
67.5°	64.7	78.1	75.0	70.9	69.8
70°	55.5	67.8	64.7	59.6	58.5
72.5°	47.2	58.5	54.4	50.3	48.3
75°	39.0	48.3	46.2	41.1	39.0
77.5°	31.8	39.0	37.0	32.9	30.8
80°	24.7	30.8	29.8	25.7	23.6
82.5°	18.5	23.6	22.6	19.5	16.4
85°	12.3	16.4	15.4	13.4	10.3
87.5°	6.2	11.3	10.3	9.2	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)