

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: P1058191

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

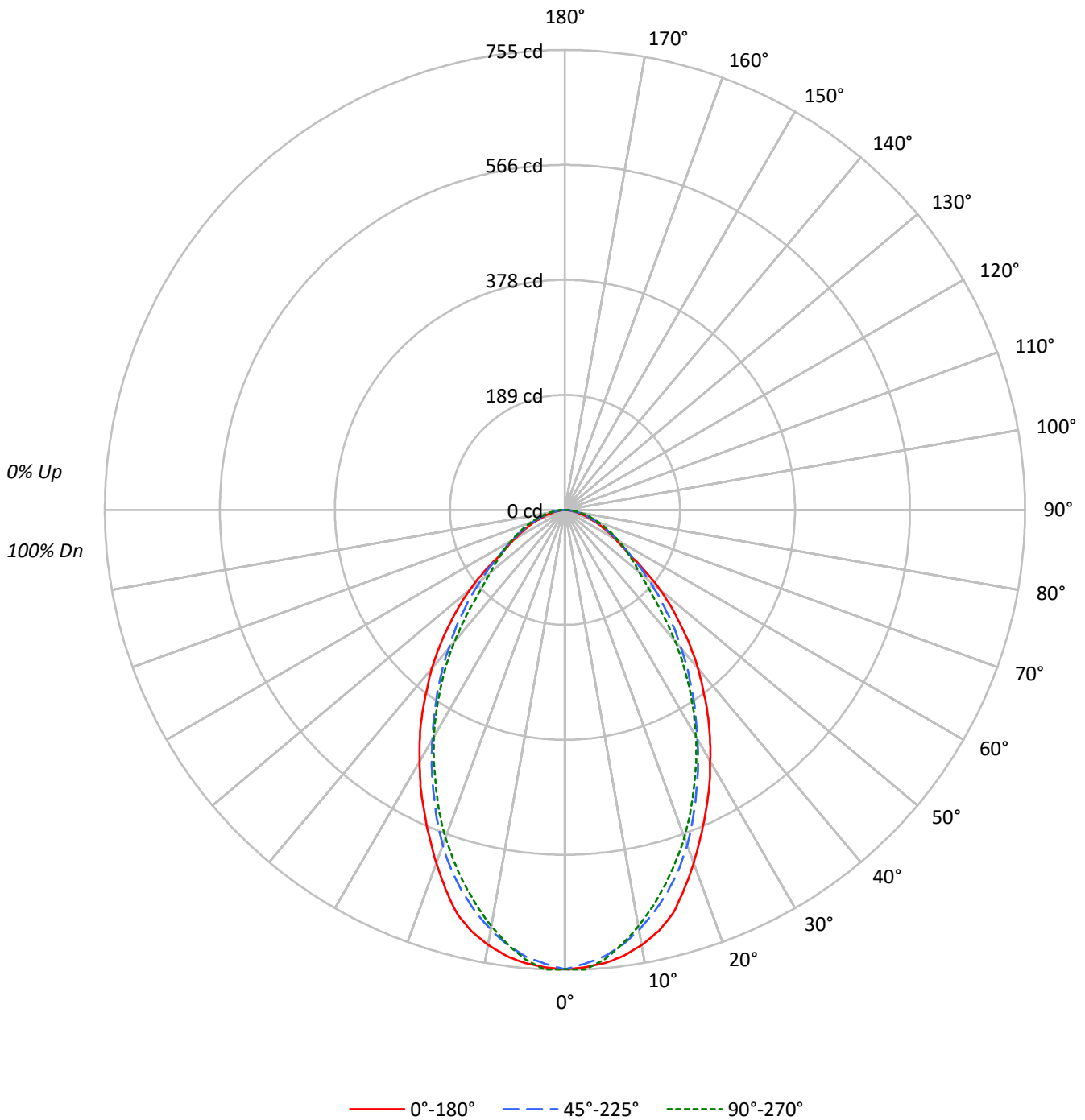
Lumens per Lamp: N/A
Luminaire Lumens: 1145.4 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13917	13917	13917
5°	13837	13637	13726
10°	13592	13120	13007
15°	13101	12411	12159
20°	12122	11509	11250
25°	11125	10392	10196
30°	10159	9264	9160
35°	9197	8197	8008
40°	8188	7144	6769
45°	7051	6143	5423
50°	5828	5170	4550
55°	4211	4288	4095
60°	3502	3679	3724
65°	2991	3200	3410
70°	2460	2849	3108
75°	2053	2396	2823
80°	1530	1913	2550
85°	508	1016	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7051 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	6.1
10°-20°	183.6	16.0
20°-30°	237.6	20.7
30°-40°	233.0	20.3
40°-50°	183.5	16.0
50°-60°	120.3	10.5
60°-70°	73.2	6.4
70°-80°	36.6	3.2
80°-90°	7.9	0.7
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°	490.9	42.9
0°-40°	724.0	63.2
0°-60°	1027.7	89.7
0°-90°	1145.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1145.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	747	747	736	741	741	71
15°	686	676	650	641	636	191
25°	546	528	510	508	501	251
35°	408	386	364	363	356	255
45°	270	253	235	219	208	208
55°	131	138	133	128	127	124
65°	68	70	73	77	78	68
75°	29	30	34	38	40	31
85°	2	4	5	8	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.2	754.2	754.2	754.2	754.2
2.5°	751.8	753.0	745.8	753.0	755.4
5°	747.0	747.0	736.2	741.0	741.0
7.5°	738.6	737.4	720.6	720.6	719.4
10°	725.4	720.6	700.2	696.6	694.2
12.5°	708.6	700.2	676.1	670.1	666.5
15°	685.8	676.1	649.7	641.3	636.5
17.5°	652.1	642.5	619.7	610.1	605.3
20°	617.3	602.9	586.1	577.7	572.9
22.5°	581.3	564.5	548.8	542.8	538.0
25°	546.4	528.4	510.4	508.0	500.8
27.5°	512.8	491.2	473.2	472.0	466.0
30°	476.8	454.0	434.8	436.0	429.9
32.5°	443.2	421.5	398.7	399.9	392.7
35°	408.3	385.5	363.9	362.7	355.5
37.5°	372.3	350.7	330.3	325.5	318.3
40°	339.9	318.3	296.6	288.2	281.0
42.5°	305.0	285.8	266.6	253.4	243.8
45°	270.2	253.4	235.4	218.6	207.8
47.5°	236.6	223.4	207.8	187.4	180.1
50°	203.0	193.4	180.1	162.1	158.5
52.5°	168.1	164.5	156.1	144.1	142.9
55°	130.9	138.1	133.3	128.5	127.3
57.5°	110.5	111.7	115.3	114.1	114.1
60°	94.9	94.9	99.7	100.9	100.9
62.5°	80.5	81.7	86.5	88.9	88.9
65°	68.5	69.7	73.3	76.9	78.1
67.5°	56.4	58.8	62.5	66.1	67.3
70°	45.6	48.0	52.8	56.4	57.6
72.5°	37.2	38.4	43.2	46.8	48.0
75°	28.8	30.0	33.6	38.4	39.6
77.5°	20.4	22.8	26.4	30.0	32.4
80°	14.4	15.6	18.0	22.8	24.0
82.5°	8.4	9.6	12.0	15.6	16.8
85°	2.4	3.6	4.8	8.4	10.8
87.5°	0.0	0.0	0.0	2.4	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)