

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058189

Luminaire Tested: S122RDRP-S865D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058189
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: S122RDRP-S865D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

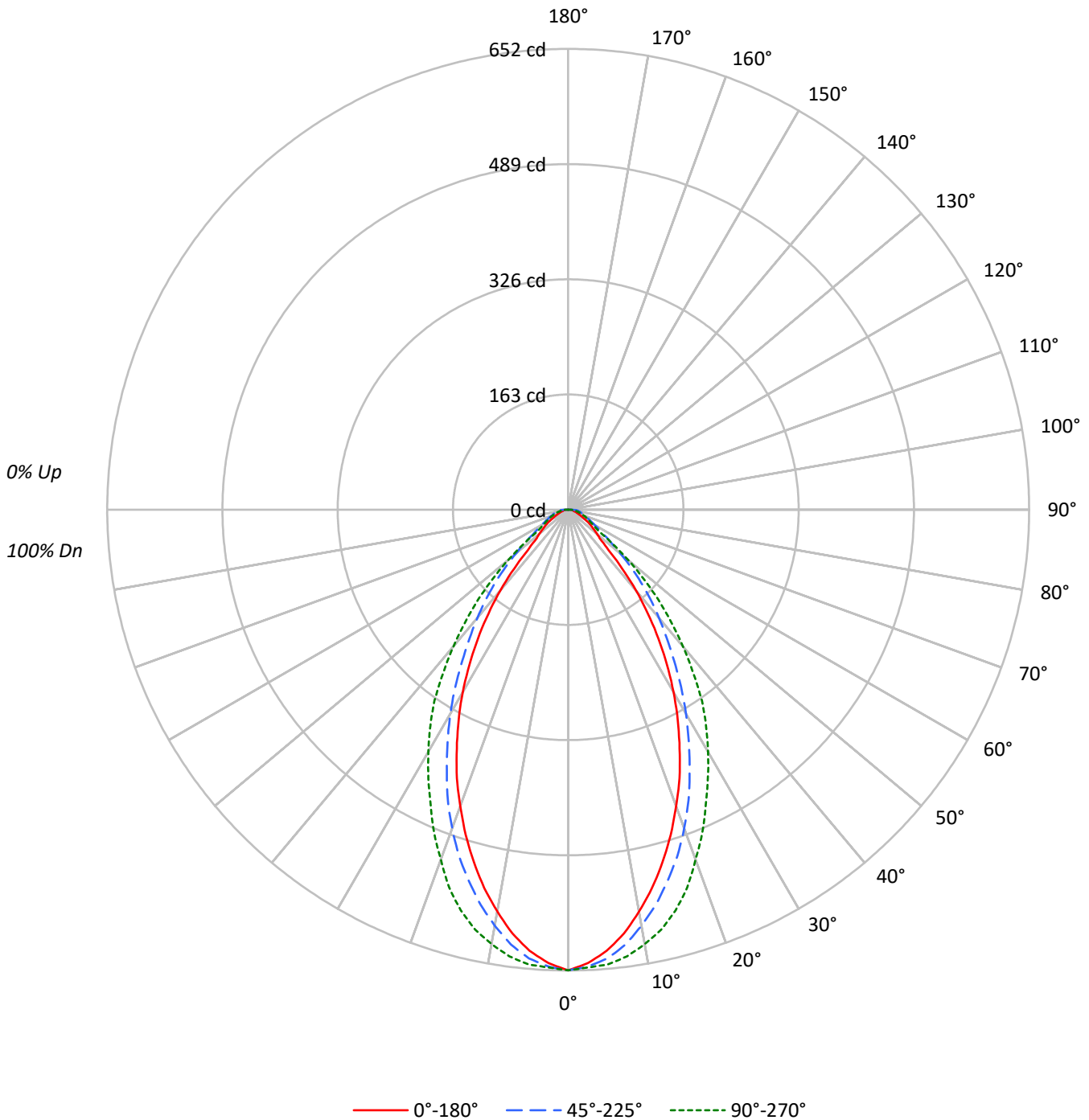
Lumens per Lamp: N/A
Luminaire Lumens: 786.2 lumens
Efficiency: N/A
Efficacy: 22.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	12025	12025	12025
5°	11605	11805	11960
10°	10815	11197	11694
15°	9855	10383	11210
20°	8760	9422	10343
25°	7590	8274	9376
30°	6354	7097	8429
35°	5012	5877	7422
40°	3592	4808	6082
45°	2103	3797	4708
50°	1519	2762	3175
55°	1277	1972	1663
60°	1022	1598	1421
65°	838	1419	1314
70°	712	1365	1230
75°	684	1454	1198
80°	765	1785	1275
85°	1270	2795	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4708 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	7.6
10°-20°	153.0	19.5
20°-30°	188.0	23.9
30°-40°	166.2	21.1
40°-50°	106.1	13.5
50°-60°	51.8	6.6
60°-70°	30.9	3.9
70°-80°	19.7	2.5
80°-90°	10.8	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°	400.8	51.0
0°-40°	567.0	72.1
0°-60°	724.9	92.2
0°-90°	786.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	626	640	637	640	646	58
15°	516	530	544	568	587	144
25°	373	386	406	432	460	171
35°	222	234	261	297	330	138
45°	81	103	146	164	180	68
55°	40	53	61	58	52	36
65°	19	36	32	30	30	19
75°	10	22	20	18	17	11
85°	6	12	13	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.7	651.7	651.7	651.7	651.7
2.5°	642.1	654.1	646.9	646.9	648.1
5°	626.5	639.7	637.3	639.7	645.7
7.5°	604.8	618.1	620.5	630.1	637.3
10°	577.2	590.4	597.6	613.3	624.1
12.5°	548.3	561.6	572.4	592.8	608.5
15°	515.9	530.3	543.5	567.6	586.8
17.5°	482.2	496.6	513.5	537.5	560.4
20°	446.1	459.3	479.8	502.6	526.7
22.5°	411.2	423.3	444.9	466.6	495.4
25°	372.8	386.0	406.4	431.7	460.5
27.5°	335.5	348.7	369.2	398.0	428.1
30°	298.2	310.2	333.1	363.1	395.6
32.5°	259.7	271.8	297.0	329.5	363.1
35°	222.5	234.5	260.9	297.0	329.5
37.5°	185.2	198.4	228.5	262.1	289.8
40°	149.1	164.7	199.6	228.5	252.5
42.5°	113.0	134.7	172.0	196.0	215.2
45°	80.6	103.4	145.5	163.5	180.4
47.5°	61.3	79.4	120.2	133.5	144.3
50°	52.9	64.9	96.2	105.8	110.6
52.5°	45.7	57.7	77.0	80.6	78.2
55°	39.7	52.9	61.3	57.7	51.7
57.5°	33.7	49.3	50.5	43.3	44.5
60°	27.7	44.5	43.3	37.3	38.5
62.5°	22.8	40.9	37.3	33.7	33.7
65°	19.2	36.1	32.5	30.1	30.1
67.5°	15.6	32.5	28.9	26.5	26.5
70°	13.2	28.9	25.3	22.8	22.8
72.5°	12.0	25.3	22.8	20.4	20.4
75°	9.6	21.6	20.4	18.0	16.8
77.5°	8.4	18.0	18.0	16.8	14.4
80°	7.2	15.6	16.8	14.4	12.0
82.5°	7.2	14.4	14.4	13.2	9.6
85°	6.0	12.0	13.2	12.0	8.4
87.5°	3.6	10.8	10.8	9.6	6.0
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.67	11.95	11.04	12.26	12.58	10.20	11.48	10.56	11.79	12.10
	3H	11.85	12.98	12.23	13.31	13.68	11.76	12.90	12.14	13.23	13.59
	4H	12.27	13.34	12.68	13.69	14.07	12.44	13.50	12.84	13.85	14.24
	6H	12.62	13.59	13.03	13.97	14.36	13.08	14.06	13.50	14.43	14.83
	8H	12.81	13.74	13.24	14.13	14.54	13.37	14.30	13.80	14.69	15.09
	12H	13.03	13.92	13.46	14.30	14.73	13.69	14.57	14.12	14.96	15.39
4H	2H	11.17	12.24	11.58	12.59	12.97	10.80	11.86	11.20	12.21	12.59
	3H	12.82	13.69	13.23	14.10	14.50	12.60	13.47	13.01	13.87	14.28
	4H	13.58	14.37	14.02	14.79	15.23	13.43	14.22	13.87	14.64	15.08
	6H	14.18	14.86	14.64	15.31	15.77	14.29	14.97	14.75	15.41	15.88
	8H	14.48	15.11	14.95	15.56	16.03	14.68	15.31	15.14	15.76	16.23
	12H	14.79	15.35	15.28	15.84	16.31	15.11	15.67	15.60	16.16	16.63
8H	4H	14.00	14.63	14.47	15.08	15.55	13.89	14.53	14.36	14.97	15.44
	6H	14.94	15.46	15.44	15.96	16.44	15.00	15.52	15.50	16.01	16.49
	8H	15.49	15.96	16.01	16.47	16.96	15.57	16.04	16.09	16.56	17.05
	12H	16.05	16.47	16.57	16.96	17.53	16.24	16.66	16.76	17.15	17.72
12H	4H	14.07	14.63	14.55	15.11	15.59	13.97	14.53	14.46	15.02	15.49
	6H	15.12	15.59	15.65	16.11	16.60	15.18	15.65	15.70	16.16	16.66
	8H	15.82	16.23	16.33	16.73	17.30	15.89	16.30	16.40	16.80	17.37