

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: P1058190

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
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-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

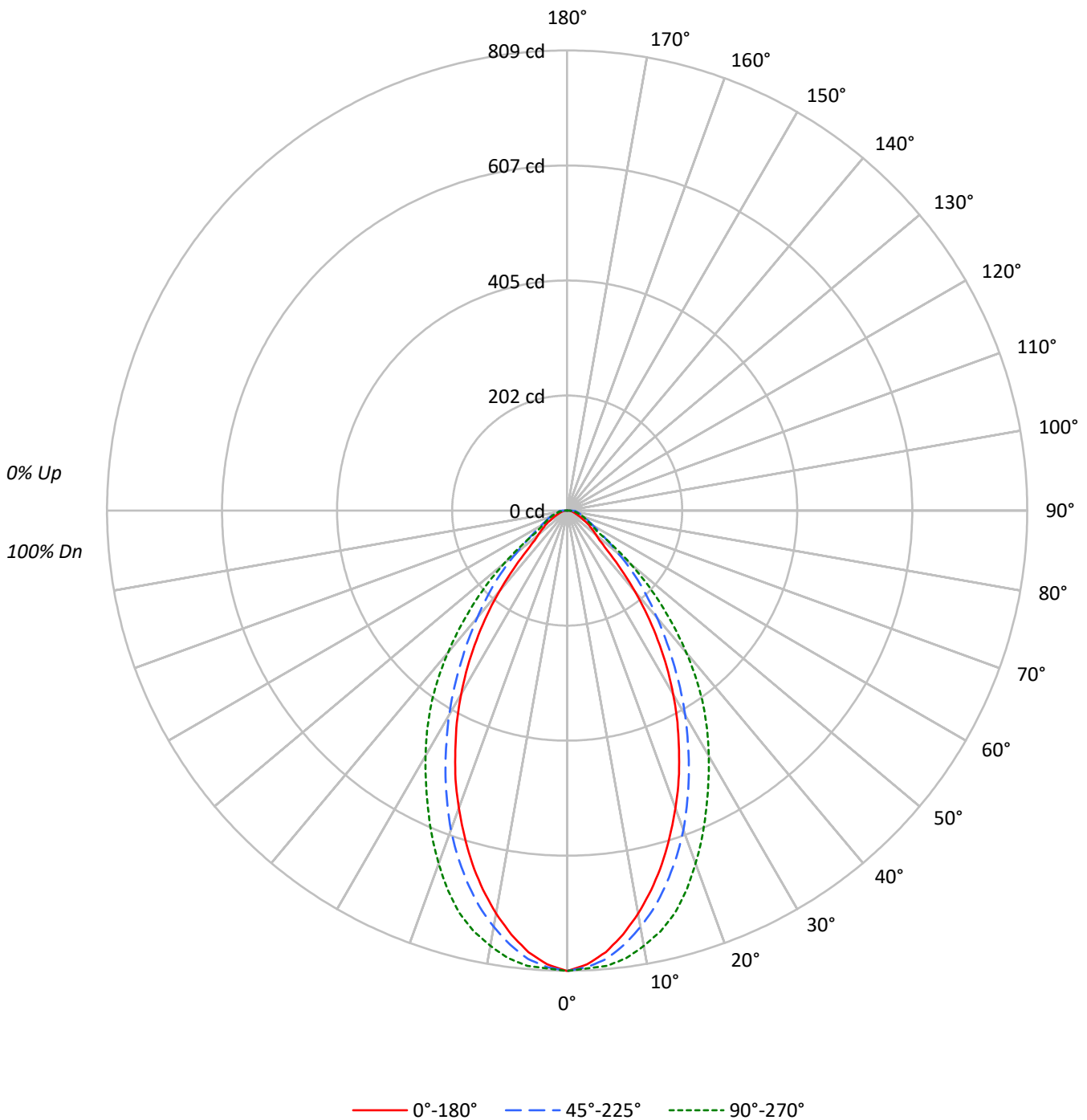
Lumens per Lamp: N/A
Luminaire Lumens: 981.7 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	14935	14935	14935
5°	14435	14657	14881
10°	13476	13925	14557
15°	12291	12935	13991
20°	10934	11737	12966
25°	9476	10308	11778
30°	7943	8840	10609
35°	6258	7314	9400
40°	4461	5909	7850
45°	2636	4676	6088
50°	1898	3385	4142
55°	1586	2439	2088
60°	1288	1952	1775
65°	1052	1733	1629
70°	906	1689	1559
75°	856	1718	1540
80°	893	2040	1658
85°	1270	3303	2032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6088 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	7.6
10°-20°	190.7	19.4
20°-30°	235.3	24.0
30°-40°	209.3	21.3
40°-50°	133.6	13.6
50°-60°	64.1	6.5
60°-70°	37.7	3.8
70°-80°	24.1	2.5
80°-90°	12.8	1.3
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°	500.2	51.0
0°-40°	709.5	72.3
0°-60°	907.2	92.4
0°-90°	981.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	981.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	779	794	791	796	803	72
15°	643	659	677	708	732	179
25°	465	484	506	542	578	213
35°	278	300	325	374	417	173
45°	101	131	179	208	233	85
55°	49	64	76	73	65	45
65°	24	43	40	36	37	24
75°	12	26	24	23	22	13
85°	6	14	16	13	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.4	809.4	809.4	809.4	809.4
2.5°	798.6	811.8	803.4	803.4	805.8
5°	779.3	793.8	791.3	796.2	803.4
7.5°	751.7	767.3	769.7	782.9	793.8
10°	719.2	736.0	743.2	762.5	776.9
12.5°	683.1	699.9	713.2	737.2	757.7
15°	643.4	659.1	677.1	708.4	732.4
17.5°	600.1	620.6	638.6	671.1	698.7
20°	556.8	576.1	597.7	629.0	660.3
22.5°	512.3	530.4	552.0	584.5	620.6
25°	465.4	483.5	506.3	542.4	578.5
27.5°	419.7	437.8	459.4	499.1	537.6
30°	372.8	390.9	414.9	455.8	497.9
32.5°	325.9	345.2	369.2	413.7	458.2
35°	277.8	299.5	324.7	374.0	417.3
37.5°	230.9	252.6	283.8	331.9	372.8
40°	185.2	210.5	245.3	288.6	325.9
42.5°	140.7	168.4	211.7	246.5	279.0
45°	101.0	131.1	179.2	208.1	233.3
47.5°	77.0	98.6	147.9	170.8	188.8
50°	66.1	79.4	117.9	134.7	144.3
52.5°	57.7	69.8	93.8	102.2	102.2
55°	49.3	63.7	75.8	73.4	64.9
57.5°	42.1	57.7	62.5	52.9	55.3
60°	34.9	52.9	52.9	46.9	48.1
62.5°	28.9	49.3	45.7	40.9	42.1
65°	24.1	43.3	39.7	36.1	37.3
67.5°	19.2	38.5	34.9	32.5	32.5
70°	16.8	34.9	31.3	28.9	28.9
72.5°	14.4	30.1	27.7	25.3	25.3
75°	12.0	26.5	24.1	22.9	21.6
77.5°	10.8	22.9	21.6	19.2	18.0
80°	8.4	19.2	19.2	18.0	15.6
82.5°	7.2	16.8	16.8	15.6	13.2
85°	6.0	14.4	15.6	13.2	9.6
87.5°	4.8	13.2	13.2	10.8	7.2
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	11.06	12.34	11.43	12.65	12.97	10.85	12.13	11.22	12.44	12.76
	3H	12.29	13.43	12.67	13.76	14.12	12.45	13.58	12.83	13.91	14.28
	4H	12.75	13.81	13.15	14.16	14.54	13.17	14.22	13.57	14.58	14.96
	6H	13.13	14.10	13.54	14.47	14.87	13.81	14.79	14.23	15.16	15.55
	8H	13.28	14.20	13.71	14.59	15.00	14.14	15.06	14.57	15.46	15.86
	12H	13.44	14.32	13.87	14.70	15.13	14.44	15.32	14.87	15.70	16.14
4H	2H	11.61	12.67	12.02	13.02	13.41	11.45	12.51	11.85	12.86	13.24
	3H	13.31	14.18	13.72	14.58	14.99	13.29	14.16	13.70	14.56	14.97
	4H	14.11	14.89	14.54	15.31	15.75	14.16	14.94	14.60	15.36	15.81
	6H	14.75	15.43	15.21	15.87	16.34	15.00	15.68	15.47	16.13	16.59
	8H	15.00	15.63	15.47	16.08	16.55	15.43	16.06	15.89	16.51	16.98
	12H	15.24	15.80	15.73	16.28	16.76	15.83	16.39	16.31	16.87	17.34
8H	4H	14.52	15.16	14.99	15.60	16.08	14.58	15.21	15.05	15.66	16.13
	6H	15.50	16.02	16.00	16.52	17.00	15.66	16.18	16.16	16.68	17.16
	8H	15.99	16.46	16.51	16.97	17.46	16.25	16.72	16.77	17.23	17.72
	12H	16.49	16.90	17.00	17.40	17.97	16.85	17.26	17.36	17.76	18.33
12H	4H	14.59	15.15	15.08	15.63	16.11	14.65	15.21	15.14	15.70	16.17
	6H	15.67	16.13	16.19	16.65	17.14	15.82	16.29	16.35	16.81	17.30
	8H	16.30	16.71	16.82	17.21	17.78	16.53	16.95	17.05	17.44	18.01