

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: P1057863

Luminaire Tested: S122RDRP-S1005D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057863
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

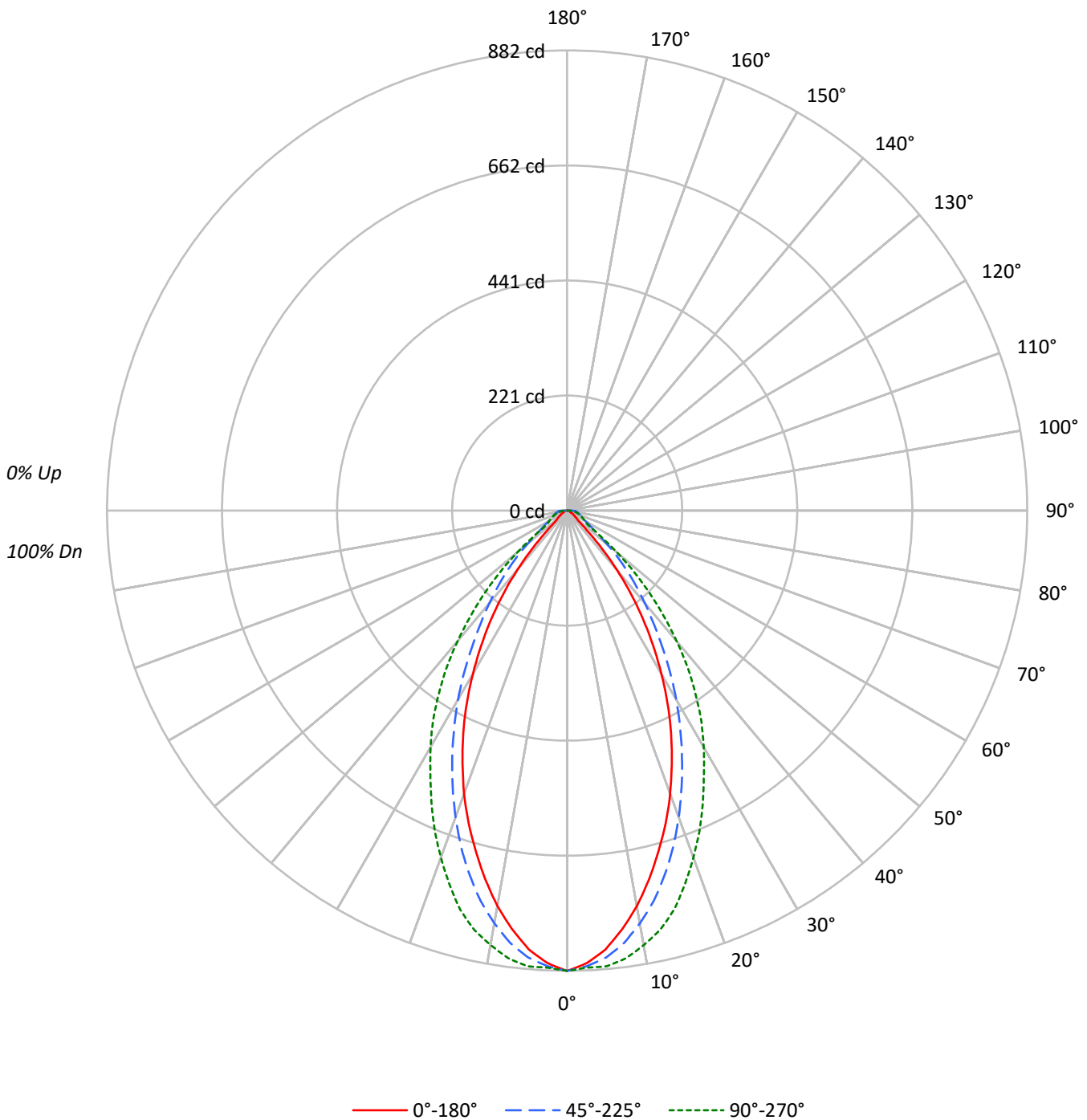
Lumens per Lamp: N/A
Luminaire Lumens: 960.4 lumens
Efficiency: N/A
Efficacy: 23.0 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	76	81	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	67	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45					45			
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16281	16281	16281
5°	15637	15926	16239
10°	14416	15052	15844
15°	12918	13808	15130
20°	11338	12281	13889
25°	9600	10606	12532
30°	7700	8904	11161
35°	5692	7123	9668
40°	3570	5576	7855
45°	1399	4199	5822
50°	689	2836	3565
55°	544	1863	1589
60°	417	1509	1458
65°	310	1419	1419
70°	383	1446	1446
75°	399	1611	1511
80°	595	2104	1647
85°	1186	3578	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6557 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	8.4
10°-20°	203.7	21.2
20°-30°	243.7	25.4
30°-40°	205.1	21.4
40°-50°	116.8	12.2
50°-60°	46.1	4.8
60°-70°	29.0	3.0
70°-80°	21.6	2.2
80°-90°	13.7	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°	528.1	55.0
0°-40°	733.2	76.3
0°-60°	896.1	93.3
0°-90°	960.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	844	863	860	870	877	78
15°	676	700	723	765	792	189
25°	472	493	521	575	616	215
35°	253	275	316	384	429	157
45°	54	95	161	202	223	51
55°	17	37	58	59	49	15
65°	7	32	32	31	32	8
75°	6	23	23	21	21	6
85°	6	16	17	16	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.3	882.3	882.3	882.3	882.3
2.5°	868.2	883.8	873.9	875.3	876.7
5°	844.2	862.6	859.8	869.6	876.7
7.5°	808.9	828.7	835.8	852.7	865.4
10°	769.4	792.0	803.3	830.1	845.6
12.5°	724.2	749.6	766.6	800.5	823.0
15°	676.2	700.2	722.8	765.2	792.0
17.5°	628.2	652.2	676.2	722.8	751.0
20°	577.4	600.0	625.4	674.8	707.3
22.5°	523.8	547.8	573.2	624.0	663.5
25°	471.5	492.7	520.9	574.6	615.5
27.5°	416.5	437.6	468.7	523.8	567.5
30°	361.4	382.6	417.9	474.3	523.8
32.5°	306.3	328.9	367.1	429.2	478.6
35°	252.7	275.3	316.2	384.0	429.2
37.5°	200.5	225.9	271.1	337.4	379.8
40°	148.2	177.9	231.5	290.8	326.1
42.5°	98.8	135.5	194.8	244.2	273.9
45°	53.6	94.6	160.9	201.9	223.1
47.5°	29.6	60.7	128.5	160.9	173.6
50°	24.0	42.4	98.8	122.8	124.2
52.5°	19.8	38.1	73.4	87.5	80.5
55°	16.9	36.7	57.9	59.3	49.4
57.5°	14.1	35.3	48.0	42.4	42.4
60°	11.3	35.3	40.9	38.1	39.5
62.5°	8.5	35.3	36.7	33.9	35.3
65°	7.1	32.5	32.5	31.1	32.5
67.5°	7.1	29.6	29.6	28.2	29.6
70°	7.1	28.2	26.8	26.8	26.8
72.5°	5.6	25.4	25.4	24.0	24.0
75°	5.6	22.6	22.6	21.2	21.2
77.5°	5.6	21.2	21.2	19.8	18.4
80°	5.6	18.4	19.8	18.4	15.5
82.5°	5.6	16.9	18.4	16.9	12.7
85°	5.6	15.5	16.9	15.5	11.3
87.5°	4.2	15.5	15.5	12.7	8.5
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	7.39	8.61	7.75	8.92	9.23	9.42	10.64	9.78	10.95	11.26
	3H	8.93	10.01	9.31	10.35	10.71	11.38	12.47	11.76	12.80	13.16
	4H	9.48	10.49	9.89	10.84	11.23	12.30	13.31	12.70	13.66	14.05
	6H	10.04	10.97	10.45	11.34	11.73	13.18	14.11	13.60	14.48	14.88
	8H	10.33	11.21	10.76	11.60	12.00	13.59	14.47	14.02	14.86	15.26
	12H	10.68	11.52	11.12	11.91	12.34	14.03	14.87	14.46	15.25	15.68
4H	2H	8.57	9.58	8.98	9.94	10.32	10.04	11.05	10.44	11.40	11.78
	3H	10.77	11.60	11.18	12.01	12.41	12.27	13.11	12.69	13.51	13.92
	4H	11.82	12.57	12.26	12.99	13.44	13.35	14.10	13.78	14.52	14.96
	6H	12.72	13.37	13.18	13.81	14.28	14.46	15.11	14.92	15.55	16.02
	8H	13.10	13.71	13.57	14.16	14.63	14.98	15.59	15.45	16.04	16.51
	12H	13.52	14.05	14.01	14.54	15.01	15.56	16.09	16.04	16.58	17.05
8H	4H	12.63	13.23	13.10	13.68	14.15	13.84	14.45	14.31	14.89	15.37
	6H	14.01	14.51	14.51	15.00	15.49	15.24	15.74	15.74	16.23	16.72
	8H	14.73	15.17	15.25	15.69	16.18	15.98	16.42	16.50	16.94	17.43
	12H	15.47	15.87	15.99	16.36	16.93	16.81	17.20	17.32	17.70	18.27
12H	4H	12.79	13.32	13.28	13.81	14.28	13.94	14.48	14.43	14.96	15.43
	6H	14.34	14.79	14.87	15.31	15.80	15.46	15.90	15.98	16.42	16.91
	8H	15.25	15.65	15.77	16.14	16.72	16.34	16.73	16.86	17.23	17.80