

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: P1057836

Luminaire Tested: S122RDRP-S1005D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057836
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-S1005D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

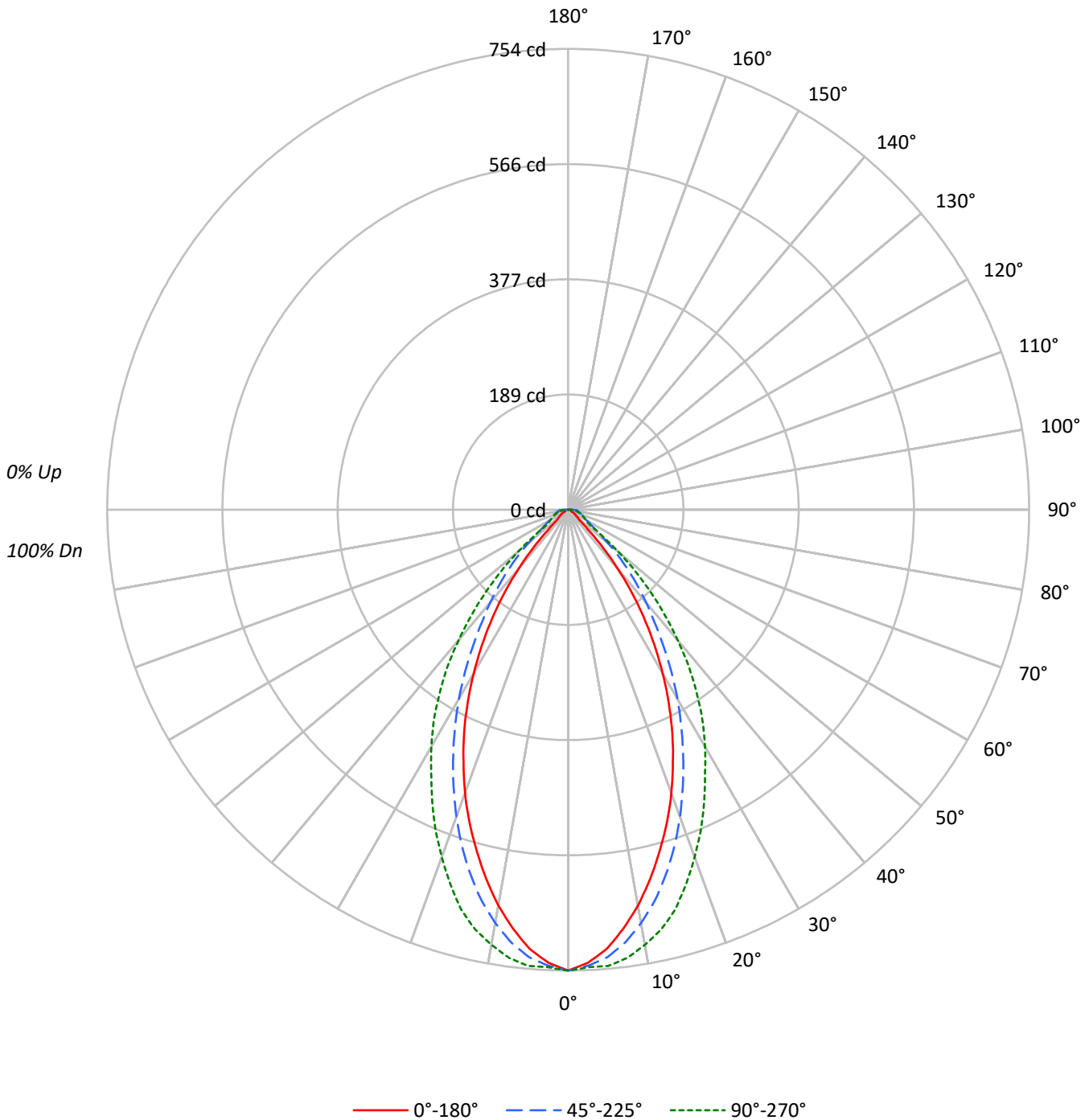
Lumens per Lamp: N/A
Luminaire Lumens: 820.7 lumens
Efficiency: N/A
Efficacy: 19.6 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057836

CATALOG NUMBER: S122RDRP-S1005D930-X4F0-XX-UDD-BVL-W

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°	13915	13915	13915
5°	13364	13611	13877
10°	12320	12863	13541
15°	11040	11800	12929
20°	9691	10496	11870
25°	8205	9064	10709
30°	6582	7609	9537
35°	4866	6089	8263
40°	3052	4767	6713
45°	1195	3588	4974
50°	588	2426	3049
55°	466	1592	1358
60°	358	1292	1247
65°	262	1209	1209
70°	324	1235	1235
75°	342	1376	1290
80°	510	1796	1413
85°	1016	3070	2054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5626 cd/sqm

TEST NUMBER: P1057836

CATALOG NUMBER: S122RDRP-S1005D930-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	8.4
10°-20°	174.1	21.2
20°-30°	208.3	25.4
30°-40°	175.3	21.4
40°-50°	99.8	12.2
50°-60°	39.4	4.8
60°-70°	24.8	3.0
70°-80°	18.4	2.2
80°-90°	11.7	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°	451.3	55.0
0°-40°	626.6	76.3
0°-60°	765.8	93.3
0°-90°	820.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	820.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	722	737	735	743	749	67
15°	578	598	618	654	677	161
25°	403	421	445	491	526	184
35°	216	235	270	328	367	134
45°	46	81	138	172	191	43
55°	14	31	50	51	42	13
65°	6	28	28	26	28	7
75°	5	19	19	18	18	5
85°	5	13	14	13	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.1	754.1	754.1	754.1	754.1
2.5°	742.0	755.3	746.8	748.0	749.2
5°	721.5	737.2	734.8	743.2	749.2
7.5°	691.3	708.2	714.2	728.7	739.6
10°	657.5	676.8	686.5	709.4	722.7
12.5°	618.9	640.6	655.1	684.1	703.4
15°	577.9	598.4	617.7	653.9	676.8
17.5°	536.9	557.4	577.9	617.7	641.9
20°	493.5	512.8	534.5	576.7	604.5
22.5°	447.6	468.1	489.8	533.3	567.1
25°	403.0	421.1	445.2	491.0	526.0
27.5°	355.9	374.0	400.6	447.6	485.0
30°	308.9	327.0	357.1	405.4	447.6
32.5°	261.8	281.1	313.7	366.8	409.0
35°	216.0	235.3	270.3	328.2	366.8
37.5°	171.3	193.0	231.6	288.4	324.5
40°	126.7	152.0	197.9	248.5	278.7
42.5°	84.5	115.8	166.5	208.7	234.1
45°	45.8	80.8	137.5	172.5	190.6
47.5°	25.3	51.9	109.8	137.5	148.4
50°	20.5	36.2	84.5	105.0	106.2
52.5°	16.9	32.6	62.7	74.8	68.8
55°	14.5	31.4	49.5	50.7	42.2
57.5°	12.1	30.2	41.0	36.2	36.2
60°	9.7	30.2	35.0	32.6	33.8
62.5°	7.2	30.2	31.4	29.0	30.2
65°	6.0	27.7	27.7	26.5	27.7
67.5°	6.0	25.3	25.3	24.1	25.3
70°	6.0	24.1	22.9	22.9	22.9
72.5°	4.8	21.7	21.7	20.5	20.5
75°	4.8	19.3	19.3	18.1	18.1
77.5°	4.8	18.1	18.1	16.9	15.7
80°	4.8	15.7	16.9	15.7	13.3
82.5°	4.8	14.5	15.7	14.5	10.9
85°	4.8	13.3	14.5	13.3	9.7
87.5°	3.6	13.3	13.3	10.9	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	6.85	8.07	7.21	8.38	8.70	8.86	10.09	9.23	10.40	10.71
	3H	8.38	9.47	8.76	9.80	10.17	10.83	11.92	11.21	12.25	12.62
	4H	8.94	9.95	9.34	10.30	10.68	11.75	12.76	12.15	13.11	13.50
	6H	9.49	10.42	9.91	10.79	11.19	12.63	13.56	13.05	13.94	14.33
	8H	9.78	10.66	10.22	11.06	11.46	13.04	13.92	13.47	14.31	14.72
	12H	10.14	10.98	10.57	11.37	11.80	13.49	14.33	13.92	14.71	15.14
4H	2H	8.03	9.04	8.43	9.39	9.78	9.48	10.49	9.89	10.85	11.23
	3H	10.22	11.06	10.64	11.46	11.86	11.72	12.56	12.14	12.96	13.37
	4H	11.27	12.02	11.71	12.44	12.89	12.80	13.54	13.23	13.96	14.41
	6H	12.17	12.82	12.63	13.26	13.73	13.91	14.56	14.37	15.00	15.47
	8H	12.56	13.16	13.03	13.61	14.08	14.44	15.04	14.91	15.49	15.96
	12H	12.98	13.51	13.46	13.99	14.47	15.02	15.55	15.50	16.03	16.51
8H	4H	12.08	12.68	12.55	13.13	13.60	13.29	13.89	13.76	14.34	14.81
	6H	13.46	13.96	13.96	14.45	14.94	14.69	15.19	15.19	15.68	16.17
	8H	14.18	14.63	14.70	15.14	15.64	15.43	15.88	15.96	16.39	16.89
	12H	14.93	15.33	15.45	15.82	16.39	16.27	16.66	16.78	17.16	17.73
12H	4H	12.24	12.78	12.73	13.26	13.73	13.39	13.92	13.88	14.41	14.88
	6H	13.79	14.24	14.32	14.76	15.25	14.91	15.35	15.43	15.87	16.36
	8H	14.71	15.10	15.23	15.60	16.17	15.80	16.19	16.31	16.69	17.26