

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



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: P1058235

Luminaire Tested: S122RDR-H1005D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058235
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: S122RDR-H1005D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

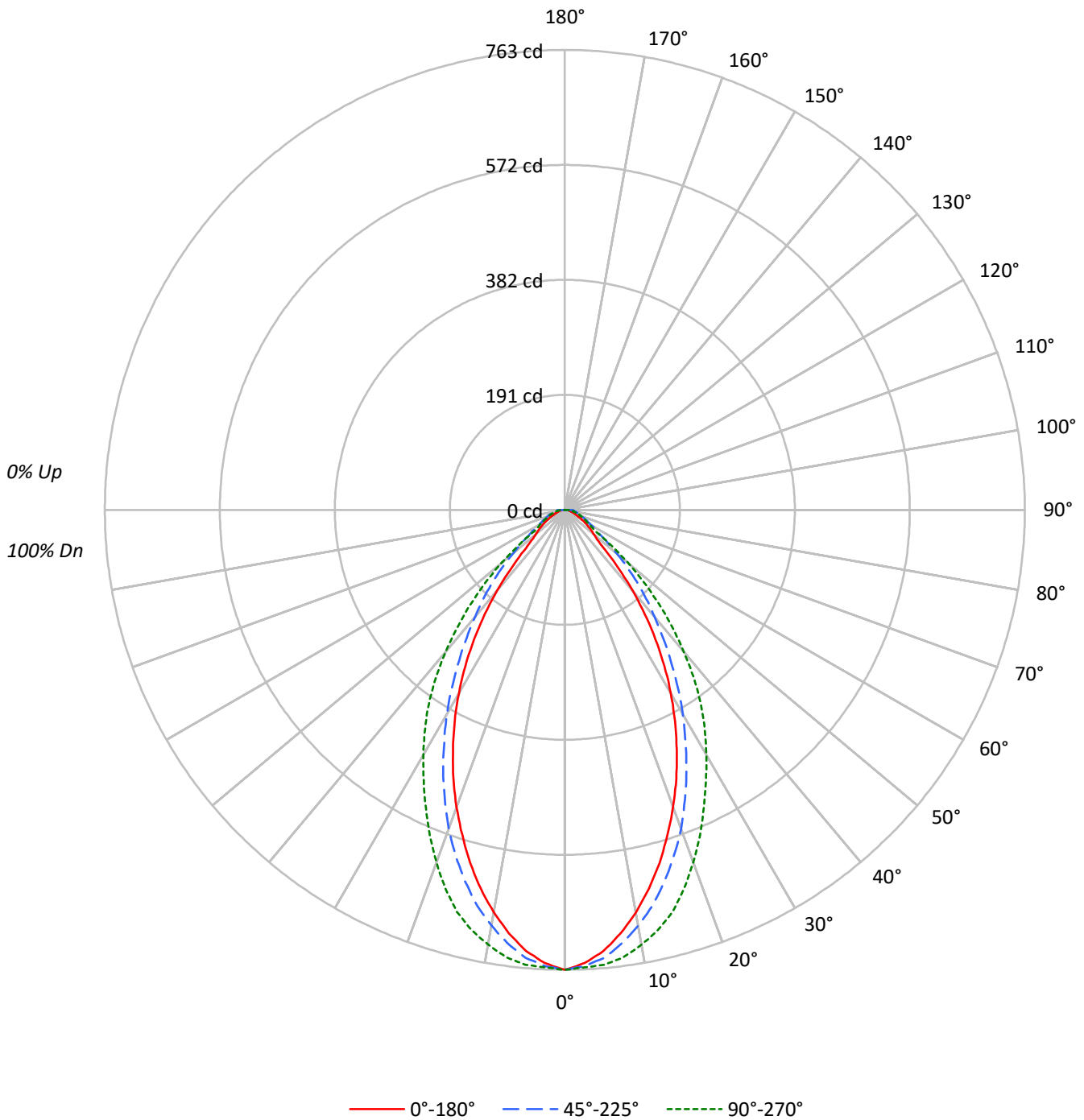
Lumens per Lamp: N/A
Luminaire Lumens: 925.5 lumens
Efficiency: N/A
Efficacy: 25.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14079	14079	14079
5°	13609	13818	14027
10°	12704	13127	13723
15°	11586	12194	13189
20°	10307	11065	12222
25°	8934	9718	11102
30°	7489	8333	10002
35°	5900	6895	8862
40°	4206	5572	7400
45°	2484	4408	5738
50°	1791	3189	3904
55°	1496	2297	1969
60°	1214	1842	1672
65°	991	1633	1533
70°	858	1592	1467
75°	806	1618	1454
80°	839	1923	1562
85°	1207	3112	1927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5738 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	7.6
10°-20°	179.8	19.4
20°-30°	221.8	24.0
30°-40°	197.3	21.3
40°-50°	125.9	13.6
50°-60°	60.5	6.5
60°-70°	35.5	3.8
70°-80°	22.7	2.4
80°-90°	12.1	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°	471.6	51.0
0°-40°	668.9	72.3
0°-60°	855.3	92.4
0°-90°	925.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	735	748	746	750	757	68
15°	606	621	638	668	690	169
25°	439	456	477	511	545	201
35°	262	282	306	353	393	163
45°	95	124	169	196	220	80
55°	46	60	71	69	61	42
65°	23	41	37	34	35	23
75°	11	25	23	22	20	12
85°	6	14	15	12	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.0	763.0	763.0	763.0	763.0
2.5°	752.8	765.3	757.3	757.3	759.6
5°	734.7	748.3	746.0	750.5	757.3
7.5°	708.6	723.3	725.6	738.1	748.3
10°	678.0	693.8	700.6	718.8	732.4
12.5°	644.0	659.8	672.3	695.0	714.3
15°	606.5	621.3	638.3	667.8	690.4
17.5°	565.7	585.0	602.0	632.6	658.7
20°	524.9	543.1	563.5	592.9	622.4
22.5°	483.0	500.0	520.4	551.0	585.0
25°	438.8	455.8	477.3	511.3	545.3
27.5°	395.7	412.7	433.1	470.5	506.8
30°	351.5	368.5	391.1	429.7	469.4
32.5°	307.2	325.4	348.1	390.0	432.0
35°	261.9	282.3	306.1	352.6	393.4
37.5°	217.7	238.1	267.6	312.9	351.5
40°	174.6	198.4	231.3	272.1	307.2
42.5°	132.6	158.7	199.5	232.4	263.0
45°	95.2	123.6	168.9	196.1	219.9
47.5°	72.6	93.0	139.4	161.0	178.0
50°	62.4	74.8	111.1	127.0	136.0
52.5°	54.4	65.8	88.4	96.4	96.4
55°	46.5	60.1	71.4	69.2	61.2
57.5°	39.7	54.4	59.0	49.9	52.2
60°	32.9	49.9	49.9	44.2	45.3
62.5°	27.2	46.5	43.1	38.5	39.7
65°	22.7	40.8	37.4	34.0	35.1
67.5°	18.1	36.3	32.9	30.6	30.6
70°	15.9	32.9	29.5	27.2	27.2
72.5°	13.6	28.3	26.1	23.8	23.8
75°	11.3	24.9	22.7	21.5	20.4
77.5°	10.2	21.5	20.4	18.1	17.0
80°	7.9	18.1	18.1	17.0	14.7
82.5°	6.8	15.9	15.9	14.7	12.5
85°	5.7	13.6	14.7	12.5	9.1
87.5°	4.5	12.5	12.5	10.2	6.8
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	10.86	12.14	11.22	12.45	12.76	10.65	11.93	11.02	12.24	12.56
	3H	12.09	13.23	12.47	13.56	13.92	12.24	13.38	12.62	13.71	14.07
	4H	12.54	13.60	12.95	13.95	14.34	12.96	14.02	13.36	14.37	14.75
	6H	12.92	13.89	13.34	14.27	14.66	13.61	14.58	14.02	14.95	15.35
	8H	13.08	14.00	13.51	14.39	14.79	13.94	14.86	14.37	15.25	15.66
	12H	13.23	14.12	13.67	14.50	14.93	14.24	15.12	14.67	15.50	15.93
4H	2H	11.41	12.47	11.81	12.82	13.20	11.25	12.30	11.65	12.65	13.04
	3H	13.10	13.98	13.52	14.38	14.78	13.08	13.95	13.49	14.36	14.76
	4H	13.90	14.68	14.33	15.10	15.54	13.95	14.73	14.39	15.15	15.60
	6H	14.54	15.21	15.00	15.66	16.13	14.79	15.47	15.26	15.92	16.39
	8H	14.79	15.42	15.26	15.87	16.34	15.22	15.85	15.69	16.30	16.77
	12H	15.04	15.60	15.52	16.08	16.55	15.62	16.18	16.11	16.67	17.14
8H	4H	14.31	14.95	14.78	15.40	15.87	14.37	15.00	14.84	15.45	15.92
	6H	15.29	15.81	15.79	16.31	16.79	15.45	15.97	15.96	16.47	16.95
	8H	15.78	16.25	16.30	16.76	17.26	16.04	16.51	16.57	17.03	17.52
	12H	16.29	16.70	16.80	17.19	17.77	16.65	17.06	17.16	17.56	18.13
12H	4H	14.38	14.94	14.87	15.42	15.90	14.44	15.00	14.93	15.49	15.96
	6H	15.46	15.93	15.98	16.44	16.93	15.62	16.08	16.14	16.60	17.09
	8H	16.10	16.51	16.61	17.00	17.58	16.33	16.74	16.84	17.24	17.81