

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: P1058271

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058271
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-H1005D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

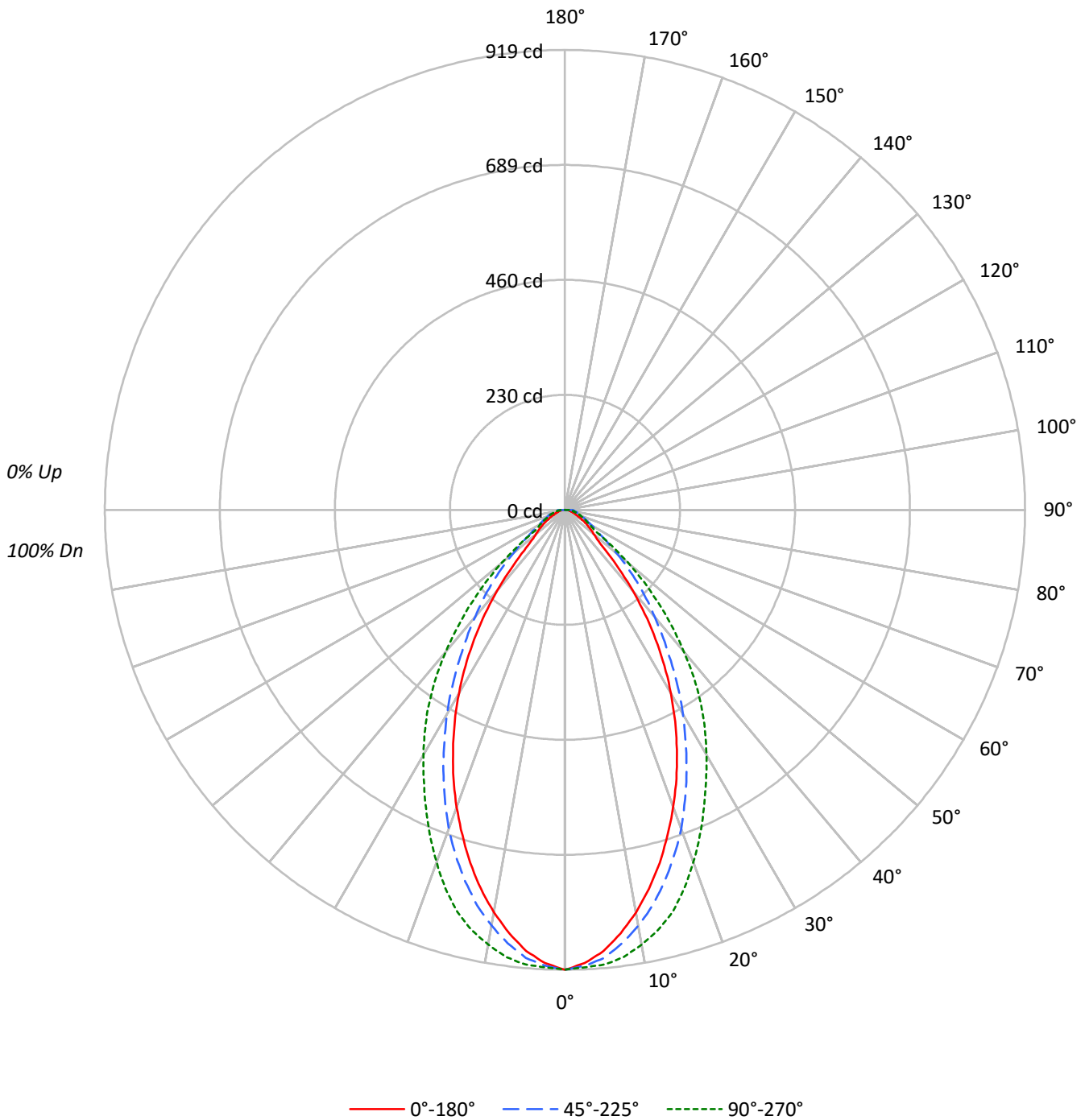
Lumens per Lamp: N/A
Luminaire Lumens: 1114.5 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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
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°	16956	16956	16956
5°	16387	16641	16893
10°	15299	15810	16526
15°	13953	14685	15884
20°	12412	13325	14720
25°	10758	11703	13370
30°	9017	10036	12043
35°	7105	8303	10673
40°	5066	6709	8913
45°	2993	5308	6913
50°	2156	3841	4702
55°	1802	2767	2371
60°	1461	2218	2015
65°	1192	1969	1847
70°	1030	1915	1770
75°	977	1946	1754
80°	1020	2317	1881
85°	1440	3747	2308

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6913 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	7.6
10°-20°	216.5	19.4
20°-30°	267.1	24.0
30°-40°	237.6	21.3
40°-50°	151.6	13.6
50°-60°	72.8	6.5
60°-70°	42.8	3.8
70°-80°	27.3	2.4
80°-90°	14.5	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°	567.9	51.0
0°-40°	805.5	72.3
0°-60°	1029.9	92.4
0°-90°	1114.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1114.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	885	901	898	904	912	82
15°	730	748	769	804	832	204
25°	528	549	575	616	657	242
35°	315	340	369	425	474	196
45°	115	149	203	236	265	96
55°	56	72	86	83	74	51
65°	27	49	45	41	42	27
75°	14	30	27	26	25	15
85°	7	16	18	15	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.9	918.9	918.9	918.9	918.9
2.5°	906.6	921.6	912.0	912.0	914.8
5°	884.7	901.1	898.4	903.8	912.0
7.5°	853.3	871.1	873.8	888.8	901.1
10°	816.5	835.6	843.8	865.6	882.0
12.5°	775.5	794.6	809.6	836.9	860.2
15°	730.4	748.2	768.7	804.2	831.5
17.5°	681.3	704.5	725.0	761.8	793.3
20°	632.1	654.0	678.6	714.1	749.6
22.5°	581.6	602.1	626.7	663.5	704.5
25°	528.4	548.9	574.8	615.8	656.7
27.5°	476.5	497.0	521.6	566.6	610.3
30°	423.2	443.7	471.0	517.5	565.2
32.5°	370.0	391.8	419.2	469.7	520.2
35°	315.4	340.0	368.6	424.6	473.8
37.5°	262.1	286.7	322.2	376.8	423.2
40°	210.3	238.9	278.5	327.7	370.0
42.5°	159.7	191.1	240.3	279.9	316.8
45°	114.7	148.8	203.4	236.2	264.9
47.5°	87.4	112.0	167.9	193.9	214.4
50°	75.1	90.1	133.8	152.9	163.8
52.5°	65.5	79.2	106.5	116.1	116.1
55°	56.0	72.4	86.0	83.3	73.7
57.5°	47.8	65.5	71.0	60.1	62.8
60°	39.6	60.1	60.1	53.2	54.6
62.5°	32.8	56.0	51.9	46.4	47.8
65°	27.3	49.2	45.1	41.0	42.3
67.5°	21.8	43.7	39.6	36.9	36.9
70°	19.1	39.6	35.5	32.8	32.8
72.5°	16.4	34.1	31.4	28.7	28.7
75°	13.7	30.0	27.3	25.9	24.6
77.5°	12.3	25.9	24.6	21.8	20.5
80°	9.6	21.8	21.8	20.5	17.7
82.5°	8.2	19.1	19.1	17.7	15.0
85°	6.8	16.4	17.7	15.0	10.9
87.5°	5.5	15.0	15.0	12.3	8.2
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	11.50	12.78	11.87	13.09	13.41	11.30	12.57	11.66	12.89	13.20
	3H	12.74	13.87	13.12	14.20	14.57	12.89	14.03	13.27	14.36	14.72
	4H	13.19	14.25	13.59	14.60	14.98	13.61	14.67	14.01	15.02	15.40
	6H	13.57	14.54	13.98	14.91	15.31	14.26	15.23	14.67	15.60	16.00
	8H	13.72	14.65	14.15	15.04	15.44	14.59	15.51	15.02	15.90	16.31
	12H	13.88	14.76	14.31	15.15	15.58	14.88	15.77	15.32	16.15	16.58
4H	2H	12.05	13.11	12.46	13.46	13.85	11.89	12.95	12.30	13.30	13.69
	3H	13.75	14.62	14.16	15.02	15.43	13.73	14.60	14.14	15.01	15.41
	4H	14.54	15.33	14.98	15.74	16.19	14.60	15.38	15.04	15.80	16.25
	6H	15.19	15.86	15.65	16.31	16.78	15.44	16.12	15.91	16.57	17.04
	8H	15.44	16.07	15.91	16.52	16.99	15.87	16.50	16.34	16.95	17.42
	12H	15.68	16.24	16.17	16.73	17.20	16.27	16.83	16.75	17.31	17.79
8H	4H	14.96	15.59	15.43	16.04	16.51	15.02	15.65	15.49	16.10	16.57
	6H	15.94	16.46	16.44	16.95	17.43	16.10	16.62	16.61	17.12	17.60
	8H	16.43	16.90	16.95	17.41	17.90	16.69	17.16	17.21	17.67	18.17
	12H	16.93	17.34	17.45	17.84	18.41	17.29	17.71	17.81	18.20	18.77
12H	4H	15.03	15.59	15.51	16.07	16.55	15.09	15.65	15.58	16.14	16.61
	6H	16.11	16.57	16.63	17.09	17.58	16.27	16.73	16.79	17.25	17.74
	8H	16.74	17.15	17.26	17.65	18.22	16.98	17.39	17.49	17.88	18.46