

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: P1058595

Luminaire Tested: S122RDR-H865D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058595
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-H865D950-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

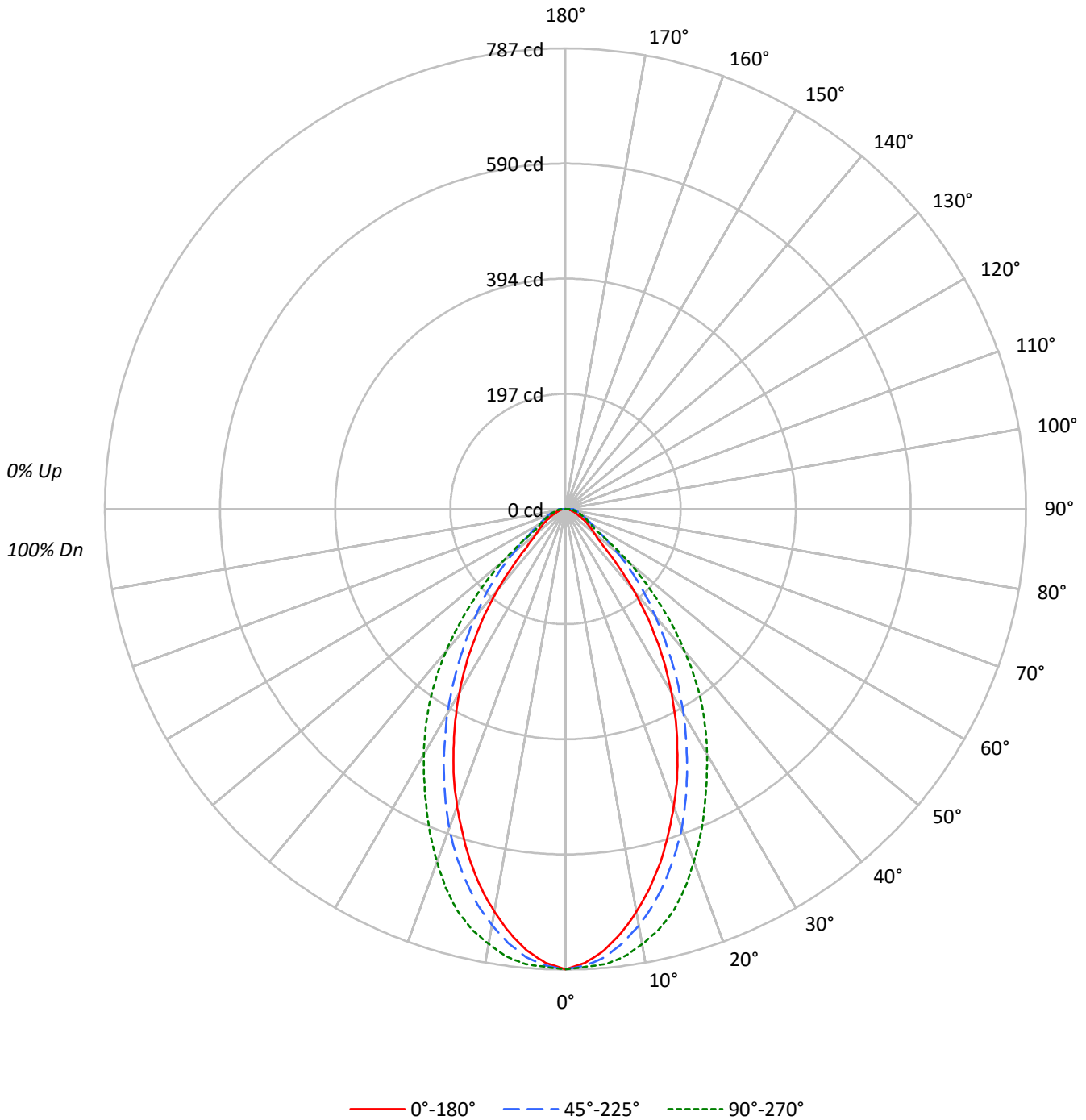
Lumens per Lamp: N/A
Luminaire Lumens: 954.1 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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		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°	14515	14515	14515
5°	14029	14244	14461
10°	13095	13534	14147
15°	11945	12570	13598
20°	10625	11407	12599
25°	9209	10017	11446
30°	7720	8591	10310
35°	6082	7109	9137
40°	4336	5743	7629
45°	2563	4543	5916
50°	1846	3287	4028
55°	1541	2368	2030
60°	1251	1897	1727
65°	1022	1685	1581
70°	885	1640	1516
75°	834	1668	1497
80°	871	1987	1615
85°	1228	3218	1990

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5916 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	7.6
10°-20°	185.4	19.4
20°-30°	228.6	24.0
30°-40°	203.4	21.3
40°-50°	129.8	13.6
50°-60°	62.3	6.5
60°-70°	36.6	3.8
70°-80°	23.4	2.4
80°-90°	12.5	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°	486.1	51.0
0°-40°	689.5	72.3
0°-60°	881.7	92.4
0°-90°	954.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	757	771	769	774	781	70
15°	625	640	658	688	712	174
25°	452	470	492	527	562	207
35°	270	291	316	364	406	168
45°	98	127	174	202	227	82
55°	48	62	74	71	63	43
65°	23	42	39	35	36	24
75°	12	26	23	22	21	13
85°	6	14	15	13	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	786.6	786.6	786.6	786.6	786.6
2.5°	776.1	788.9	780.7	780.7	783.1
5°	757.4	771.4	769.0	773.7	780.7
7.5°	730.5	745.7	748.0	760.9	771.4
10°	698.9	715.3	722.3	741.0	755.0
12.5°	663.9	680.2	693.1	716.4	736.3
15°	625.3	640.5	658.0	688.4	711.8
17.5°	583.2	603.1	620.6	652.2	679.0
20°	541.1	559.8	580.9	611.3	641.6
22.5°	497.9	515.4	536.5	568.0	603.1
25°	452.3	469.8	492.0	527.1	562.2
27.5°	407.9	425.4	446.5	485.0	522.4
30°	362.3	379.8	403.2	443.0	483.9
32.5°	316.7	335.4	358.8	402.1	445.3
35°	270.0	291.0	315.6	363.5	405.6
37.5°	224.4	245.4	275.8	322.6	362.3
40°	180.0	204.5	238.4	280.5	316.7
42.5°	136.7	163.6	205.7	239.6	271.2
45°	98.2	127.4	174.1	202.2	226.7
47.5°	74.8	95.8	143.8	166.0	183.5
50°	64.3	77.1	114.5	130.9	140.3
52.5°	56.1	67.8	91.2	99.3	99.3
55°	47.9	61.9	73.6	71.3	63.1
57.5°	40.9	56.1	60.8	51.4	53.8
60°	33.9	51.4	51.4	45.6	46.8
62.5°	28.1	47.9	44.4	39.7	40.9
65°	23.4	42.1	38.6	35.1	36.2
67.5°	18.7	37.4	33.9	31.6	31.6
70°	16.4	33.9	30.4	28.1	28.1
72.5°	14.0	29.2	26.9	24.5	24.5
75°	11.7	25.7	23.4	22.2	21.0
77.5°	10.5	22.2	21.0	18.7	17.5
80°	8.2	18.7	18.7	17.5	15.2
82.5°	7.0	16.4	16.4	15.2	12.9
85°	5.8	14.0	15.2	12.9	9.4
87.5°	4.7	12.9	12.9	10.5	7.0
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	10.97	12.24	11.33	12.55	12.87	10.75	12.03	11.12	12.34	12.66
	3H	12.20	13.33	12.58	13.66	14.03	12.35	13.49	12.73	13.82	14.18
	4H	12.65	13.71	13.05	14.06	14.44	13.07	14.12	13.47	14.48	14.86
	6H	13.03	14.00	13.45	14.37	14.77	13.72	14.69	14.13	15.06	15.46
	8H	13.18	14.11	13.62	14.50	14.90	14.05	14.97	14.48	15.36	15.77
	12H	13.34	14.22	13.77	14.61	15.04	14.35	15.23	14.78	15.61	16.04
4H	2H	11.52	12.57	11.92	12.93	13.31	11.35	12.41	11.75	12.76	13.14
	3H	13.21	14.08	13.62	14.49	14.89	13.19	14.06	13.60	14.46	14.87
	4H	14.01	14.79	14.44	15.21	15.65	14.06	14.84	14.50	15.26	15.71
	6H	14.65	15.33	15.11	15.77	16.24	14.90	15.58	15.37	16.03	16.49
	8H	14.90	15.53	15.37	15.98	16.45	15.33	15.96	15.80	16.41	16.88
	12H	15.14	15.70	15.63	16.19	16.66	15.73	16.29	16.22	16.78	17.25
8H	4H	14.42	15.06	14.89	15.50	15.97	14.48	15.11	14.95	15.56	16.03
	6H	15.40	15.92	15.90	16.42	16.90	15.56	16.08	16.06	16.58	17.06
	8H	15.89	16.36	16.42	16.88	17.37	16.15	16.62	16.68	17.14	17.63
	12H	16.39	16.81	16.91	17.30	17.87	16.76	17.17	17.28	17.67	18.24
12H	4H	14.49	15.05	14.98	15.53	16.01	14.55	15.11	15.04	15.60	16.07
	6H	15.57	16.04	16.09	16.55	17.04	15.73	16.19	16.25	16.71	17.20
	8H	16.21	16.62	16.72	17.12	17.69	16.44	16.85	16.96	17.35	17.92