

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: P1058559

Luminaire Tested: S122RDR-H865D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058559
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-H865D927-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

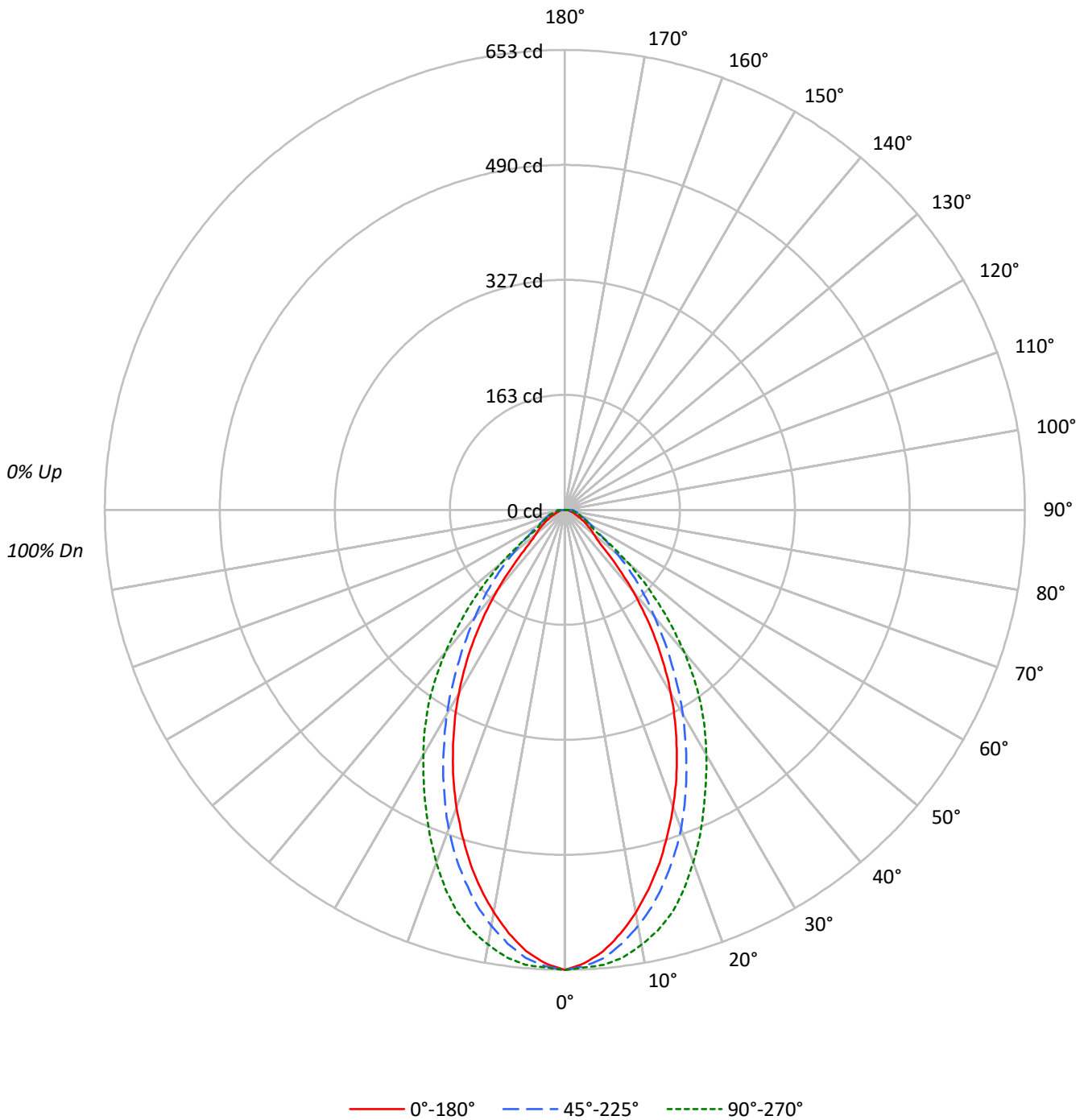
Lumens per Lamp: N/A
Luminaire Lumens: 792.2 lumens
Efficiency: N/A
Efficacy: 25.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	0	
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°	12053	12053	12053
5°	11649	11829	12008
10°	10875	11239	11746
15°	9918	10438	11290
20°	8823	9471	10462
25°	7647	8319	9504
30°	6411	7134	8561
35°	5050	5902	7587
40°	3601	4769	6335
45°	2127	3773	4914
50°	1533	2730	3344
55°	1280	1966	1686
60°	1037	1576	1432
65°	847	1397	1314
70°	734	1360	1257
75°	692	1383	1248
80°	723	1647	1339
85°	1037	2668	1651

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4914 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	7.6
10°-20°	153.9	19.4
20°-30°	189.9	24.0
30°-40°	168.9	21.3
40°-50°	107.8	13.6
50°-60°	51.8	6.5
60°-70°	30.4	3.8
70°-80°	19.4	2.4
80°-90°	10.3	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°	403.7	51.0
0°-40°	572.6	72.3
0°-60°	732.1	92.4
0°-90°	792.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	792.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	653	653	653	653	653	
5°	629	640	639	642	648	58
15°	519	532	546	572	591	145
25°	376	390	409	438	467	172
35°	224	242	262	302	337	139
45°	82	106	145	168	188	68
55°	40	51	61	59	52	36
65°	19	35	32	29	30	20
75°	10	21	19	18	18	11
85°	5	12	13	11	8	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	653.2	653.2	653.2	653.2	653.2
2.5°	644.4	655.1	648.3	648.3	650.2
5°	628.9	640.5	638.6	642.5	648.3
7.5°	606.6	619.2	621.1	631.8	640.5
10°	580.4	594.0	599.8	615.3	626.9
12.5°	551.2	564.8	575.5	594.9	611.4
15°	519.2	531.8	546.4	571.6	591.0
17.5°	484.3	500.8	515.3	541.5	563.9
20°	449.3	464.9	482.3	507.6	532.8
22.5°	413.4	428.0	445.5	471.7	500.8
25°	375.6	390.1	408.6	437.7	466.8
27.5°	338.7	353.3	370.7	402.8	433.8
30°	300.9	315.4	334.8	367.8	401.8
32.5°	263.0	278.5	297.9	333.9	369.8
35°	224.2	241.7	262.0	301.8	336.8
37.5°	186.3	203.8	229.0	267.9	300.9
40°	149.5	169.8	198.0	232.9	263.0
42.5°	113.5	135.9	170.8	199.0	225.2
45°	81.5	105.8	144.6	167.9	188.3
47.5°	62.1	79.6	119.4	137.8	152.4
50°	53.4	64.1	95.1	108.7	116.5
52.5°	46.6	56.3	75.7	82.5	82.5
55°	39.8	51.4	61.1	59.2	52.4
57.5°	34.0	46.6	50.5	42.7	44.6
60°	28.1	42.7	42.7	37.8	38.8
62.5°	23.3	39.8	36.9	33.0	34.0
65°	19.4	34.9	32.0	29.1	30.1
67.5°	15.5	31.1	28.1	26.2	26.2
70°	13.6	28.1	25.2	23.3	23.3
72.5°	11.6	24.3	22.3	20.4	20.4
75°	9.7	21.4	19.4	18.4	17.5
77.5°	8.7	18.4	17.5	15.5	14.6
80°	6.8	15.5	15.5	14.6	12.6
82.5°	5.8	13.6	13.6	12.6	10.7
85°	4.9	11.6	12.6	10.7	7.8
87.5°	3.9	10.7	10.7	8.7	5.8
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	10.32	11.60	10.69	11.91	12.23	10.11	11.38	10.47	11.70	12.01
	3H	11.55	12.69	11.93	13.02	13.38	11.70	12.84	12.08	13.17	13.53
	4H	12.01	13.06	12.41	13.42	13.80	12.42	13.48	12.82	13.83	14.21
	6H	12.38	13.36	12.80	13.73	14.12	13.07	14.05	13.49	14.42	14.81
	8H	12.54	13.46	12.97	13.85	14.26	13.40	14.32	13.83	14.72	15.12
	12H	12.70	13.58	13.13	13.96	14.39	13.70	14.58	14.13	14.97	15.40
4H	2H	10.87	11.93	11.27	12.28	12.66	10.70	11.76	11.10	12.11	12.49
	3H	12.56	13.44	12.98	13.84	14.24	12.54	13.41	12.95	13.81	14.22
	4H	13.36	14.14	13.80	14.56	15.01	13.41	14.19	13.85	14.61	15.06
	6H	14.00	14.68	14.46	15.13	15.59	14.26	14.94	14.72	15.38	15.85
	8H	14.25	14.88	14.72	15.33	15.80	14.68	15.32	15.15	15.76	16.23
	12H	14.50	15.06	14.98	15.54	16.02	15.09	15.65	15.57	16.13	16.60
8H	4H	13.78	14.41	14.25	14.86	15.33	13.83	14.46	14.30	14.91	15.38
	6H	14.75	15.27	15.26	15.77	16.25	14.92	15.44	15.42	15.93	16.41
	8H	15.24	15.71	15.77	16.23	16.72	15.51	15.98	16.03	16.49	16.98
	12H	15.75	16.16	16.26	16.65	17.23	16.11	16.53	16.63	17.02	17.59
12H	4H	13.85	14.41	14.33	14.89	15.36	13.90	14.46	14.39	14.95	15.42
	6H	14.92	15.39	15.44	15.90	16.40	15.08	15.55	15.60	16.06	16.56
	8H	15.56	15.97	16.07	16.47	17.04	15.79	16.21	16.31	16.70	17.27