

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: P1058562

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058562
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H865D927-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

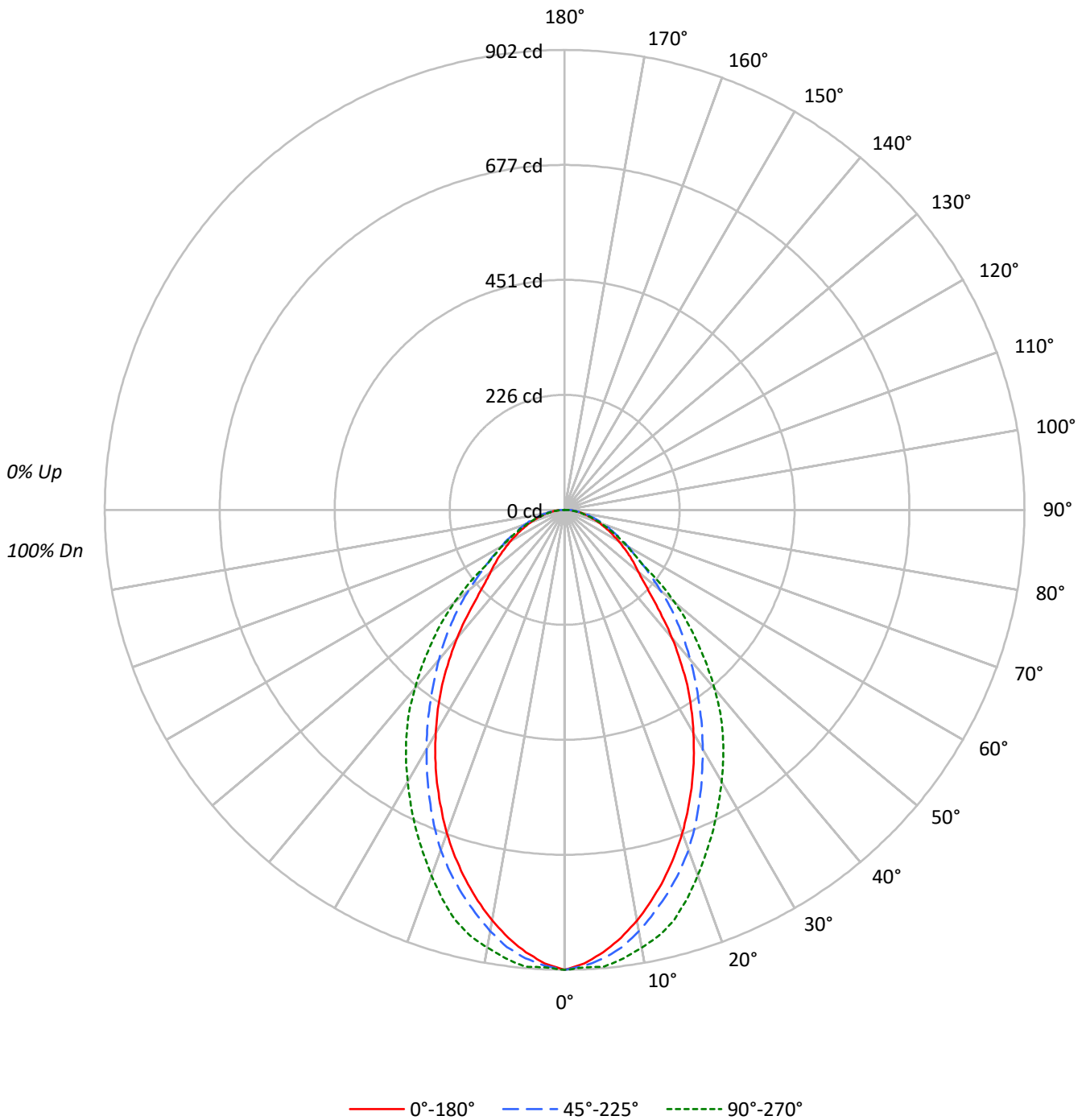
Lumens per Lamp: N/A
Luminaire Lumens: 1470.5 lumens
Efficiency: N/A
Efficacy: 47.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16644	16644	16644
5°	16133	16348	16654
10°	15319	15720	16337
15°	14341	14878	15898
20°	13257	13942	14989
25°	12045	12758	14061
30°	10766	11531	13123
35°	9439	10335	12191
40°	7896	9228	11003
45°	6328	8176	9619
50°	5428	7045	8075
55°	4961	5990	5961
60°	4510	5296	5189
65°	4109	4742	4532
70°	3766	4343	4030
75°	3529	4014	3529
80°	3294	3709	3092
85°	3282	3896	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9619 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	5.7
10°-20°	220.5	15.0
20°-30°	290.8	19.8
30°-40°	292.8	19.9
40°-50°	238.3	16.2
50°-60°	162.5	11.0
60°-70°	105.5	7.2
70°-80°	58.1	3.9
80°-90°	18.9	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°	594.5	40.4
0°-40°	887.3	60.3
0°-60°	1288.0	87.6
0°-90°	1470.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	902	902	902	902	902	
5°	871	888	883	890	899	81
15°	751	770	779	811	832	210
25°	592	611	627	655	691	271
35°	419	440	459	498	541	260
45°	242	272	313	340	369	191
55°	154	170	186	187	185	138
65°	94	112	109	103	104	94
75°	50	61	56	50	50	52
85°	16	20	18	14	13	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.0	902.0	902.0	902.0	902.0
2.5°	890.4	904.9	895.2	896.2	898.1
5°	871.0	887.5	882.6	890.4	899.1
7.5°	846.7	863.2	865.2	876.8	887.5
10°	817.6	836.1	839.0	856.4	871.9
12.5°	785.6	806.0	809.9	835.1	855.5
15°	750.7	770.1	778.8	810.8	832.2
17.5°	713.8	732.3	745.9	775.0	799.2
20°	675.1	692.5	710.0	736.2	763.3
22.5°	633.3	652.7	669.2	695.4	726.5
25°	591.6	611.0	626.6	654.7	690.6
27.5°	549.0	568.4	583.9	613.9	652.7
30°	505.3	525.7	541.2	575.2	615.9
32.5°	462.6	483.0	500.5	536.4	579.0
35°	419.0	440.3	458.8	498.5	541.2
37.5°	372.4	396.7	420.0	459.7	501.4
40°	327.8	355.0	383.1	420.0	456.8
42.5°	283.2	313.3	348.2	379.2	413.2
45°	242.5	272.5	313.3	340.4	368.6
47.5°	210.5	235.7	279.3	301.6	326.9
50°	189.1	206.6	245.4	262.8	281.3
52.5°	171.7	186.2	213.4	225.0	234.7
55°	154.2	169.7	186.2	187.2	185.3
57.5°	136.8	154.2	162.9	156.2	160.0
60°	122.2	139.7	143.5	136.8	140.6
62.5°	106.7	126.1	126.1	119.3	121.2
65°	94.1	111.5	108.6	102.8	103.8
67.5°	81.5	98.9	94.1	88.3	88.3
70°	69.8	86.3	80.5	74.7	74.7
72.5°	59.2	72.7	68.9	62.1	61.1
75°	49.5	61.1	56.3	50.4	49.5
77.5°	39.8	49.5	45.6	40.7	38.8
80°	31.0	39.8	34.9	31.0	29.1
82.5°	23.3	30.1	26.2	22.3	20.4
85°	15.5	20.4	18.4	14.5	12.6
87.5°	7.8	13.6	11.6	9.7	7.8
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	16.49	17.93	16.85	18.24	18.56	16.74	18.18	17.10	18.49	18.80
	3H	18.02	19.30	18.40	19.63	20.00	18.10	19.38	18.47	19.71	20.07
	4H	18.58	19.78	18.98	20.13	20.51	18.58	19.78	18.98	20.13	20.51
	6H	19.00	20.12	19.42	20.48	20.88	18.92	20.04	19.34	20.40	20.80
	8H	19.16	20.21	19.58	20.60	21.01	19.03	20.09	19.46	20.48	20.88
	12H	19.27	20.28	19.70	20.66	21.09	19.10	20.11	19.53	20.50	20.93
4H	2H	17.06	18.27	17.46	18.62	19.00	17.26	18.47	17.66	18.81	19.20
	3H	18.86	19.86	19.28	20.26	20.67	18.84	19.83	19.25	20.24	20.64
	4H	19.61	20.50	20.04	20.92	21.36	19.43	20.33	19.86	20.74	21.18
	6H	20.19	20.97	20.65	21.42	21.88	19.90	20.68	20.36	21.12	21.58
	8H	20.40	21.13	20.87	21.58	22.05	20.05	20.78	20.51	21.22	21.69
	12H	20.57	21.22	21.05	21.70	22.17	20.16	20.81	20.64	21.29	21.76
8H	4H	19.87	20.60	20.34	21.05	21.51	19.72	20.45	20.19	20.89	21.36
	6H	20.63	21.23	21.13	21.72	22.20	20.31	20.91	20.81	21.40	21.88
	8H	20.95	21.49	21.47	22.01	22.49	20.53	21.07	21.05	21.58	22.07
	12H	21.24	21.71	21.75	22.21	22.77	20.71	21.19	21.23	21.68	22.25
12H	4H	19.89	20.54	20.37	21.02	21.49	19.75	20.40	20.24	20.88	21.36
	6H	20.67	21.21	21.19	21.73	22.22	20.38	20.92	20.89	21.43	21.92
	8H	21.07	21.55	21.58	22.04	22.61	20.66	21.14	21.17	21.63	22.20