

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: P1058571

Luminaire Tested: S122RDR-H865D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058571
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-H865D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

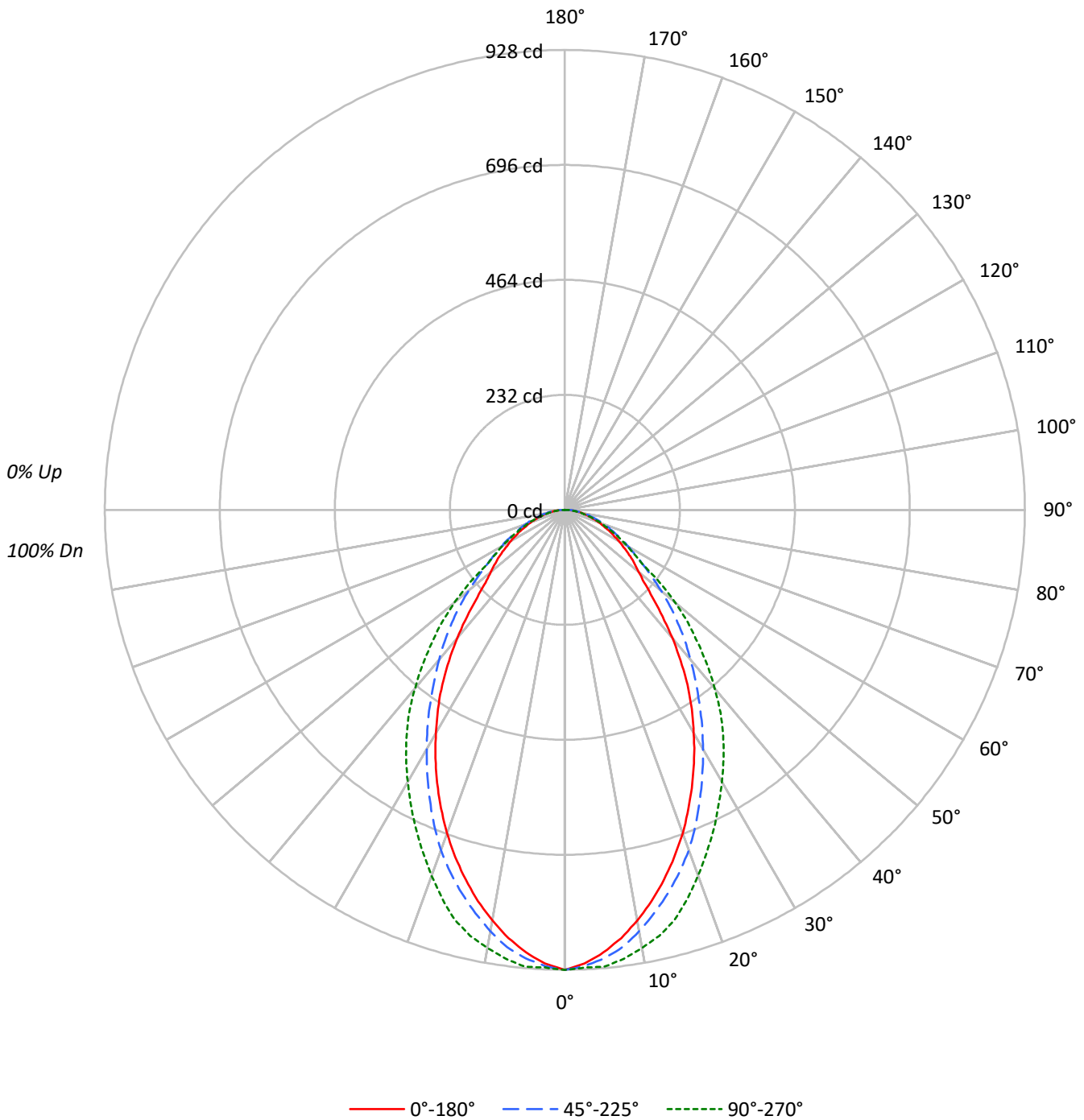
Lumens per Lamp: N/A
Luminaire Lumens: 1513.5 lumens
Efficiency: N/A
Efficacy: 48.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	39	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17129	17129	17129
5°	16604	16826	17139
10°	15767	16178	16815
15°	14759	15313	16362
20°	13644	14349	15427
25°	12397	13128	14470
30°	11082	11868	13507
35°	9713	10637	12547
40°	8127	9498	11326
45°	6513	8413	9898
50°	5589	7249	8311
55°	5106	6167	6135
60°	4643	5451	5340
65°	4227	4881	4663
70°	3879	4473	4149
75°	3629	4128	3629
80°	3390	3815	3177
85°	3387	4023	2752

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9898 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	5.7
10°-20°	226.9	15.0
20°-30°	299.3	19.8
30°-40°	301.3	19.9
40°-50°	245.3	16.2
50°-60°	167.2	11.0
60°-70°	108.5	7.2
70°-80°	59.8	3.9
80°-90°	19.5	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°	611.8	40.4
0°-40°	913.2	60.3
0°-60°	1325.6	87.6
0°-90°	1513.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1513.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	896	913	908	916	925	84
15°	773	793	802	834	856	216
25°	609	629	645	674	711	279
35°	431	453	472	513	557	268
45°	250	280	322	350	379	197
55°	159	175	192	193	191	142
65°	97	115	112	106	107	96
75°	51	63	58	52	51	54
85°	16	21	19	15	13	17
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.3	928.3	928.3	928.3	928.3
2.5°	916.4	931.3	921.3	922.3	924.3
5°	896.4	913.4	908.4	916.4	925.3
7.5°	871.4	888.4	890.4	902.4	913.4
10°	841.5	860.5	863.4	881.4	897.4
12.5°	808.5	829.5	833.5	859.5	880.4
15°	772.6	792.6	801.6	834.5	856.5
17.5°	734.7	753.6	767.6	797.6	822.5
20°	694.8	712.7	730.7	757.6	785.6
22.5°	651.8	671.8	688.8	715.7	747.7
25°	608.9	628.9	644.8	673.8	710.7
27.5°	565.0	584.9	600.9	631.9	671.8
30°	520.1	541.0	557.0	591.9	633.9
32.5°	476.1	497.1	515.1	552.0	595.9
35°	431.2	453.2	472.2	513.1	557.0
37.5°	383.3	408.3	432.2	473.1	516.1
40°	337.4	365.3	394.3	432.2	470.2
42.5°	291.5	322.4	358.4	390.3	425.2
45°	249.6	280.5	322.4	350.4	379.3
47.5°	216.6	242.6	287.5	310.4	336.4
50°	194.7	212.6	252.5	270.5	289.5
52.5°	176.7	191.7	219.6	231.6	241.6
55°	158.7	174.7	191.7	192.7	190.7
57.5°	140.7	158.7	167.7	160.7	164.7
60°	125.8	143.7	147.7	140.7	144.7
62.5°	109.8	129.8	129.8	122.8	124.8
65°	96.8	114.8	111.8	105.8	106.8
67.5°	83.8	101.8	96.8	90.8	90.8
70°	71.9	88.8	82.9	76.9	76.9
72.5°	60.9	74.9	70.9	63.9	62.9
75°	50.9	62.9	57.9	51.9	50.9
77.5°	40.9	50.9	46.9	41.9	39.9
80°	31.9	40.9	35.9	31.9	29.9
82.5°	24.0	30.9	27.0	23.0	21.0
85°	16.0	21.0	19.0	15.0	13.0
87.5°	8.0	14.0	12.0	10.0	8.0
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	16.59	18.03	16.95	18.34	18.65	16.84	18.27	17.20	18.59	18.90
	3H	18.12	19.40	18.49	19.73	20.09	18.19	19.48	18.57	19.81	20.17
	4H	18.68	19.88	19.08	20.23	20.61	18.67	19.88	19.08	20.23	20.61
	6H	19.10	20.21	19.51	20.58	20.97	19.02	20.13	19.44	20.50	20.90
	8H	19.25	20.31	19.68	20.70	21.10	19.13	20.19	19.56	20.58	20.98
	12H	19.37	20.38	19.80	20.76	21.19	19.20	20.21	19.63	20.59	21.02
4H	2H	17.16	18.37	17.56	18.71	19.10	17.36	18.56	17.76	18.91	19.29
	3H	18.96	19.96	19.38	20.36	20.77	18.94	19.93	19.35	20.33	20.74
	4H	19.71	20.60	20.14	21.02	21.46	19.53	20.43	19.96	20.84	21.28
	6H	20.29	21.07	20.75	21.52	21.98	20.00	20.78	20.46	21.22	21.68
	8H	20.50	21.23	20.97	21.68	22.15	20.15	20.88	20.61	21.32	21.79
	12H	20.67	21.32	21.15	21.80	22.27	20.26	20.91	20.74	21.39	21.86
8H	4H	19.97	20.70	20.44	21.15	21.61	19.82	20.55	20.28	20.99	21.46
	6H	20.73	21.33	21.22	21.82	22.30	20.41	21.01	20.91	21.50	21.98
	8H	21.05	21.59	21.57	22.10	22.59	20.63	21.17	21.15	21.68	22.17
	12H	21.33	21.81	21.84	22.30	22.87	20.81	21.29	21.33	21.78	22.35
12H	4H	19.99	20.63	20.47	21.11	21.59	19.85	20.50	20.34	20.98	21.45
	6H	20.77	21.31	21.29	21.82	22.31	20.48	21.02	20.99	21.53	22.02
	8H	21.17	21.65	21.68	22.14	22.71	20.76	21.24	21.27	21.73	22.30