

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: P1058445

Luminaire Tested: S122RDR-H675D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058445
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-H675D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

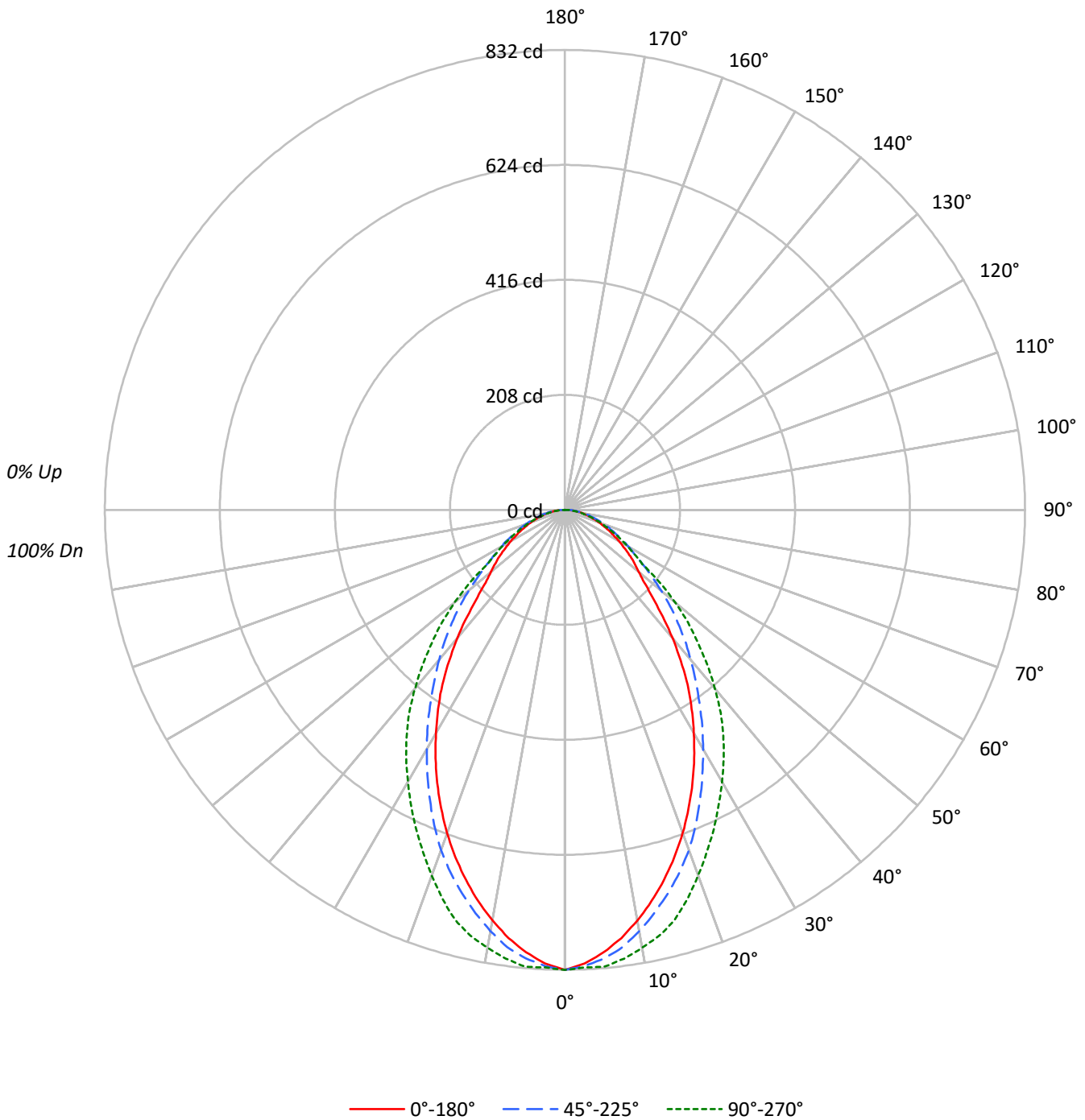
Lumens per Lamp: N/A
Luminaire Lumens: 1356.7 lumens
Efficiency: N/A
Efficacy: 57.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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

TEST NUMBER: P1058445

CATALOG NUMBER: S122RDR-H675D830-X4F0-XX-UDD-WVL-W

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	100	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°	15356	15356	15356
5°	14885	15083	15365
10°	14133	14503	15072
15°	13231	13726	14668
20°	12230	12862	13828
25°	11113	11770	12971
30°	9933	10639	12107
35°	8709	9535	11247
40°	7287	8515	10153
45°	5838	7542	8873
50°	5009	6499	7449
55°	4578	5527	5498
60°	4159	4886	4787
65°	3790	4375	4178
70°	3474	4009	3717
75°	3251	3700	3251
80°	3039	3422	2848
85°	3028	3599	2456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8873 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	5.7
10°-20°	203.4	15.0
20°-30°	268.3	19.8
30°-40°	270.1	19.9
40°-50°	219.9	16.2
50°-60°	149.9	11.0
60°-70°	97.3	7.2
70°-80°	53.6	3.9
80°-90°	17.5	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°	548.5	40.4
0°-40°	818.6	60.3
0°-60°	1188.3	87.6
0°-90°	1356.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1356.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	804	819	814	821	830	75
15°	693	710	718	748	768	194
25°	546	564	578	604	637	250
35°	387	406	423	460	499	240
45°	224	251	289	314	340	176
55°	142	157	172	173	171	127
65°	87	103	100	95	96	86
75°	46	56	52	46	46	48
85°	14	19	17	13	12	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	832.2	832.2	832.2	832.2	832.2
2.5°	821.4	834.9	825.9	826.8	828.6
5°	803.6	818.8	814.3	821.4	829.5
7.5°	781.2	796.4	798.2	808.9	818.8
10°	754.3	771.3	774.0	790.1	804.4
12.5°	724.8	743.6	747.2	770.4	789.2
15°	692.6	710.5	718.5	748.1	767.8
17.5°	658.6	675.6	688.1	715.0	737.3
20°	622.8	638.9	655.0	679.2	704.2
22.5°	584.3	602.2	617.4	641.6	670.2
25°	545.8	563.7	578.1	604.0	637.1
27.5°	506.5	524.4	538.7	566.4	602.2
30°	466.2	485.0	499.3	530.6	568.2
32.5°	426.8	445.6	461.7	494.8	534.2
35°	386.6	406.2	423.3	459.9	499.3
37.5°	343.6	366.0	387.5	424.1	462.6
40°	302.5	327.5	353.5	387.5	421.5
42.5°	261.3	289.0	321.2	349.9	381.2
45°	223.7	251.4	289.0	314.1	340.0
47.5°	194.2	217.4	257.7	278.3	301.6
50°	174.5	190.6	226.4	242.5	259.5
52.5°	158.4	171.8	196.9	207.6	216.5
55°	142.3	156.6	171.8	172.7	170.9
57.5°	126.2	142.3	150.3	144.1	147.6
60°	112.7	128.9	132.4	126.2	129.7
62.5°	98.4	116.3	116.3	110.1	111.9
65°	86.8	102.9	100.2	94.9	95.7
67.5°	75.2	91.3	86.8	81.4	81.4
70°	64.4	79.6	74.3	68.9	68.9
72.5°	54.6	67.1	63.5	57.3	56.4
75°	45.6	56.4	51.9	46.5	45.6
77.5°	36.7	45.6	42.1	37.6	35.8
80°	28.6	36.7	32.2	28.6	26.8
82.5°	21.5	27.7	24.2	20.6	18.8
85°	14.3	18.8	17.0	13.4	11.6
87.5°	7.2	12.5	10.7	8.9	7.2
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	16.21	17.65	16.58	17.96	18.28	16.46	17.90	16.82	18.21	18.52
	3H	17.74	19.03	18.12	19.35	19.72	17.81	19.10	18.19	19.43	19.79
	4H	18.30	19.50	18.70	19.85	20.23	18.30	19.50	18.70	19.85	20.23
	6H	18.72	19.84	19.14	20.20	20.60	18.64	19.76	19.06	20.12	20.52
	8H	18.88	19.93	19.30	20.32	20.73	18.75	19.81	19.18	20.20	20.60
	12H	18.99	20.00	19.42	20.38	20.81	18.82	19.83	19.25	20.21	20.64
4H	2H	16.78	17.99	17.18	18.34	18.72	16.98	18.18	17.38	18.53	18.91
	3H	18.59	19.58	19.00	19.98	20.39	18.56	19.55	18.97	19.95	20.36
	4H	19.33	20.22	19.76	20.64	21.08	19.15	20.05	19.58	20.46	20.90
	6H	19.91	20.69	20.37	21.14	21.60	19.62	20.40	20.08	20.84	21.30
	8H	20.12	20.85	20.59	21.30	21.77	19.77	20.50	20.23	20.94	21.41
	12H	20.29	20.94	20.77	21.42	21.89	19.88	20.52	20.36	21.00	21.48
8H	4H	19.59	20.32	20.06	20.77	21.24	19.44	20.17	19.90	20.61	21.08
	6H	20.35	20.95	20.85	21.44	21.92	20.03	20.63	20.53	21.12	21.60
	8H	20.67	21.21	21.19	21.72	22.21	20.25	20.79	20.77	21.30	21.79
	12H	20.95	21.43	21.47	21.92	22.49	20.43	20.91	20.94	21.40	21.97
12H	4H	19.61	20.26	20.09	20.74	21.21	19.47	20.12	19.96	20.60	21.07
	6H	20.39	20.93	20.91	21.45	21.93	20.10	20.64	20.61	21.15	21.64
	8H	20.79	21.27	21.30	21.76	22.33	20.38	20.86	20.89	21.35	21.92