

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058034

Luminaire Tested: S122RDRP-S675D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

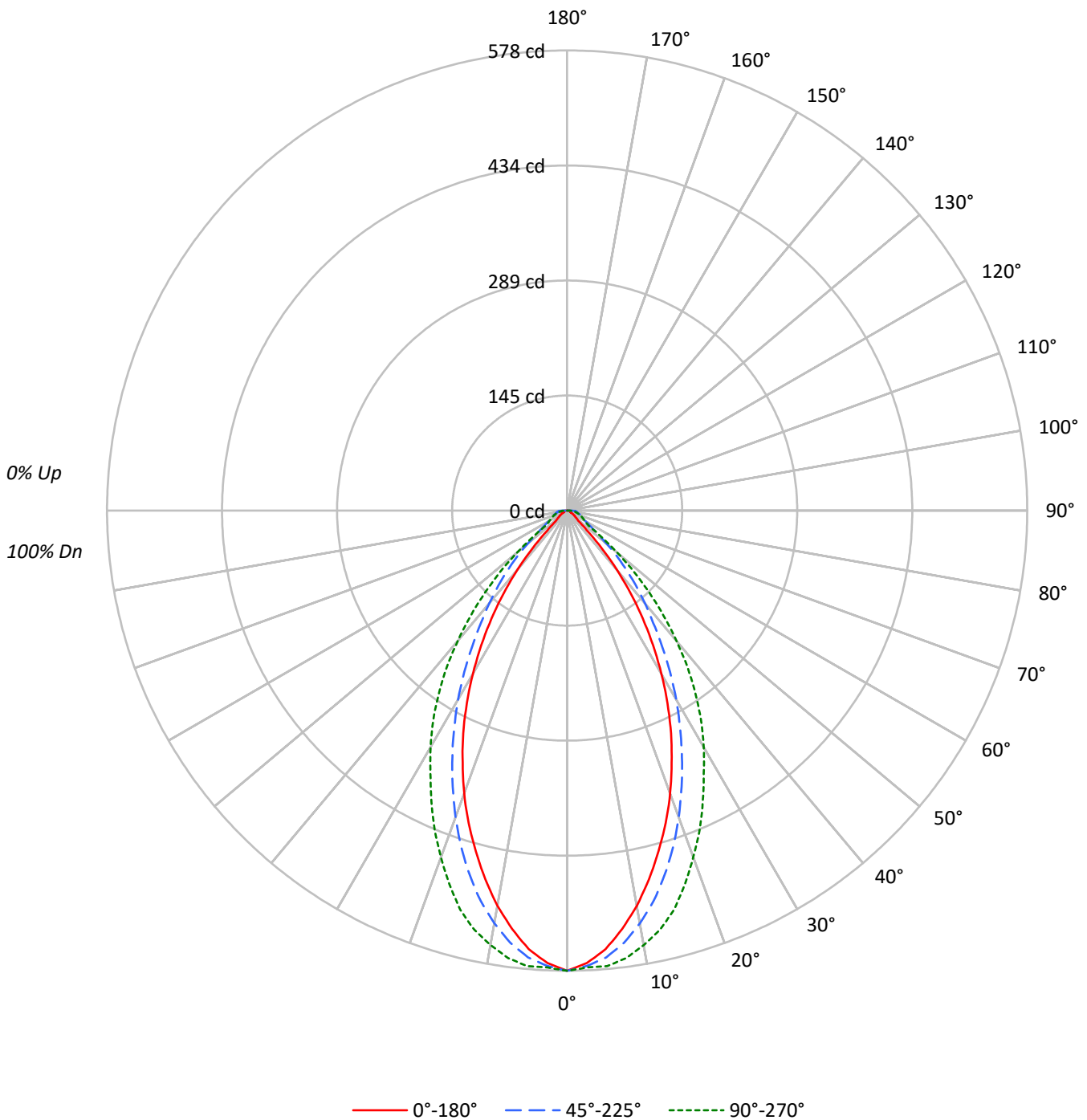
Lumens per Lamp: N/A
Luminaire Lumens: 629.1 lumens
Efficiency: N/A
Efficacy: 24.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10666	10666	10666
5°	10243	10432	10638
10°	9444	9859	10380
15°	8463	9045	9911
20°	7429	8045	9098
25°	6289	6949	8209
30°	5046	5834	7310
35°	3728	4667	6332
40°	2339	3654	5145
45°	916	2750	3813
50°	451	1857	2337
55°	357	1219	1042
60°	273	989	956
65°	201	930	930
70°	248	950	950
75°	264	1055	991
80°	393	1371	1084
85°	783	2350	1567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4315 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	8.4
10°-20°	133.5	21.2
20°-30°	159.7	25.4
30°-40°	134.4	21.4
40°-50°	76.5	12.2
50°-60°	30.2	4.8
60°-70°	19.0	3.0
70°-80°	14.1	2.2
80°-90°	9.0	1.4
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°	345.9	55.0
0°-40°	480.3	76.4
0°-60°	587.0	93.3
0°-90°	629.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	629.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	553	565	563	570	574	51
15°	443	459	474	501	519	124
25°	309	323	341	376	403	141
35°	166	180	207	252	281	103
45°	35	62	105	132	146	33
55°	11	24	38	39	32	10
65°	5	21	21	20	21	5
75°	4	15	15	14	14	4
85°	4	10	11	10	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.0	578.0	578.0	578.0	578.0
2.5°	568.8	578.9	572.5	573.4	574.3
5°	553.0	565.1	563.2	569.7	574.3
7.5°	529.9	542.9	547.5	558.6	566.9
10°	504.0	518.8	526.2	543.8	554.0
12.5°	474.4	491.1	502.2	524.4	539.2
15°	443.0	458.7	473.5	501.3	518.8
17.5°	411.5	427.3	443.0	473.5	492.0
20°	378.3	393.1	409.7	442.1	463.3
22.5°	343.1	358.8	375.5	408.8	434.7
25°	308.9	322.8	341.3	376.4	403.2
27.5°	272.8	286.7	307.0	343.1	371.8
30°	236.8	250.6	273.8	310.7	343.1
32.5°	200.7	215.5	240.5	281.1	313.5
35°	165.5	180.3	207.2	251.6	281.1
37.5°	131.3	148.0	177.6	221.0	248.8
40°	97.1	116.5	151.7	190.5	213.6
42.5°	64.7	88.8	127.6	160.0	179.4
45°	35.1	62.0	105.4	132.3	146.1
47.5°	19.4	39.8	84.2	105.4	113.8
50°	15.7	27.7	64.7	80.5	81.4
52.5°	12.9	25.0	48.1	57.3	52.7
55°	11.1	24.0	37.9	38.8	32.4
57.5°	9.2	23.1	31.4	27.7	27.7
60°	7.4	23.1	26.8	25.0	25.9
62.5°	5.5	23.1	24.0	22.2	23.1
65°	4.6	21.3	21.3	20.3	21.3
67.5°	4.6	19.4	19.4	18.5	19.4
70°	4.6	18.5	17.6	17.6	17.6
72.5°	3.7	16.6	16.6	15.7	15.7
75°	3.7	14.8	14.8	13.9	13.9
77.5°	3.7	13.9	13.9	12.9	12.0
80°	3.7	12.0	12.9	12.0	10.2
82.5°	3.7	11.1	12.0	11.1	8.3
85°	3.7	10.2	11.1	10.2	7.4
87.5°	2.8	10.2	10.2	8.3	5.5
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	5.91	7.13	6.27	7.44	7.76	7.93	9.15	8.29	9.46	9.78
	3H	7.45	8.54	7.83	8.87	9.23	9.91	10.99	10.29	11.33	11.69
	4H	8.01	9.02	8.41	9.37	9.75	10.83	11.84	11.23	12.19	12.57
	6H	8.57	9.50	8.98	9.87	10.26	11.71	12.64	12.12	13.01	13.40
	8H	8.86	9.74	9.29	10.13	10.54	12.11	12.99	12.54	13.38	13.79
	12H	9.22	10.06	9.65	10.45	10.88	12.55	13.40	12.99	13.78	14.21
4H	2H	7.10	8.11	7.50	8.46	8.85	8.55	9.57	8.96	9.92	10.30
	3H	9.30	10.13	9.71	10.54	10.94	10.80	11.64	11.22	12.04	12.45
	4H	10.35	11.10	10.79	11.52	11.96	11.88	12.62	12.31	13.05	13.49
	6H	11.25	11.90	11.71	12.34	12.81	12.98	13.63	13.45	14.08	14.55
	8H	11.63	12.24	12.10	12.69	13.16	13.51	14.11	13.98	14.56	15.03
	12H	12.06	12.59	12.54	13.07	13.55	14.08	14.62	14.57	15.10	15.58
8H	4H	11.15	11.76	11.63	12.21	12.68	12.37	12.97	12.84	13.42	13.89
	6H	12.54	13.03	13.04	13.53	14.01	13.76	14.26	14.27	14.76	15.24
	8H	13.26	13.70	13.78	14.22	14.71	14.50	14.95	15.03	15.46	15.96
	12H	14.01	14.40	14.53	14.90	15.47	15.34	15.73	15.85	16.22	16.80
12H	4H	11.32	11.85	11.80	12.34	12.81	12.47	13.00	12.96	13.49	13.96
	6H	12.87	13.31	13.39	13.83	14.32	13.98	14.42	14.50	14.94	15.43
	8H	13.78	14.18	14.30	14.67	15.24	14.86	15.26	15.38	15.75	16.33