

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: P1058035

Luminaire Tested: S122RDRP-S675D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

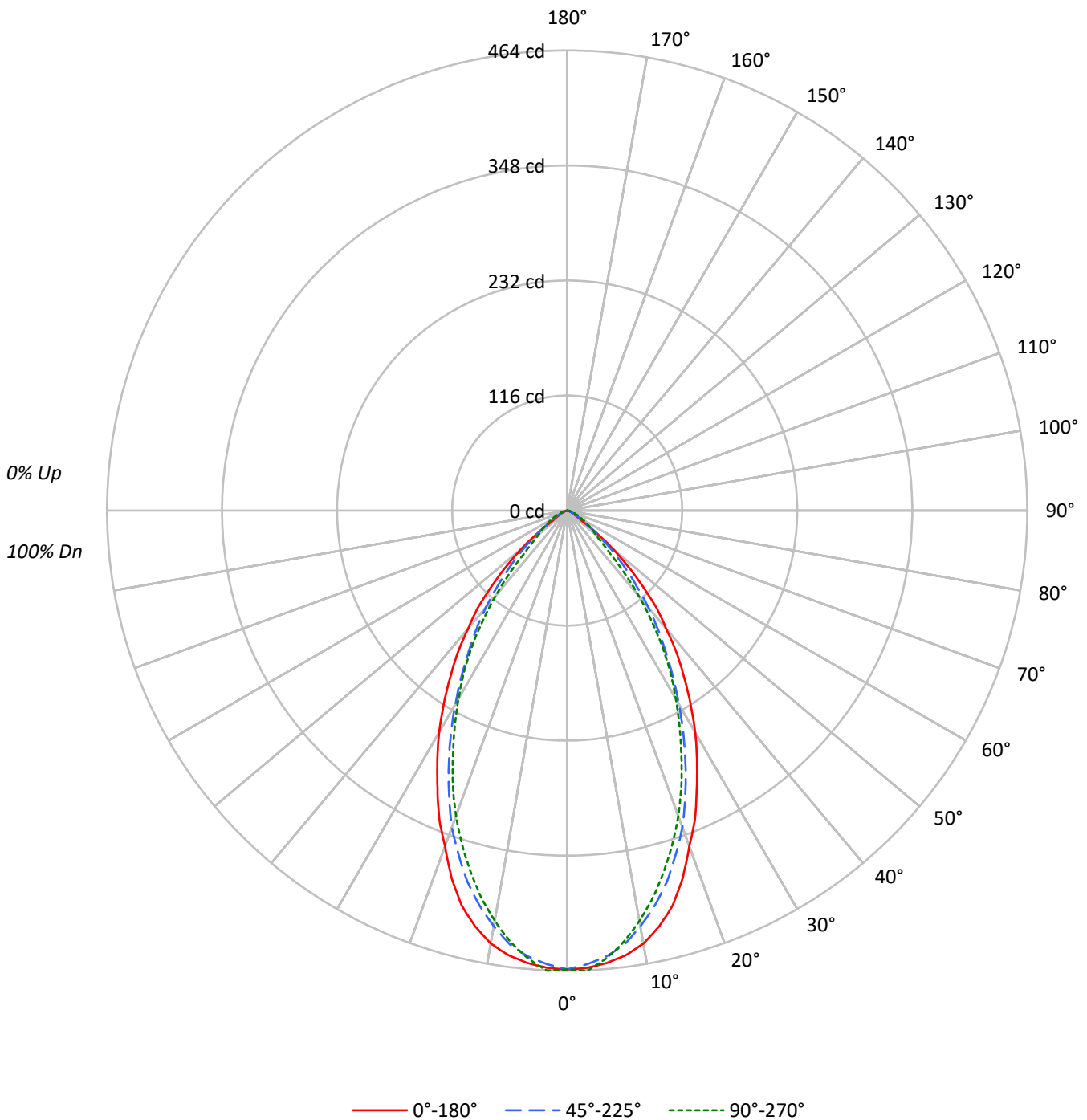
Lumens per Lamp: N/A
Luminaire Lumens: 497.5 lumens
Efficiency: N/A
Efficacy: 19.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8536	8536	8536
5°	8482	8363	8396
10°	8304	7975	7871
15°	7867	7408	7196
20°	7071	6673	6437
25°	6297	5752	5546
30°	5508	4800	4662
35°	4638	3890	3764
40°	3736	3069	2712
45°	2795	2216	1615
50°	1748	1432	1059
55°	595	772	862
60°	340	476	683
65°	240	323	524
70°	200	248	399
75°	128	200	328
80°	96	191	298
85°	0	0	191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2795 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	8.6
10°-20°	109.1	21.9
20°-30°	131.4	26.4
30°-40°	112.3	22.6
40°-50°	65.8	13.2
50°-60°	23.8	4.8
60°-70°	8.5	1.7
70°-80°	3.4	0.7
80°-90°	0.6	0.1
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°	283.2	56.9
0°-40°	395.5	79.5
0°-60°	485.1	97.5
0°-90°	497.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	497.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	458	459	452	453	453	43
15°	412	405	388	380	377	114
25°	309	296	282	278	272	142
35°	206	190	173	171	167	129
45°	107	96	85	71	62	83
55°	18	26	24	25	27	23
65°	6	6	7	10	12	6
75°	2	3	3	4	5	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	462.6	462.6	462.6	462.6	462.6
2.5°	461.6	462.6	457.9	462.6	464.4
5°	457.9	458.9	451.5	453.3	453.3
7.5°	452.4	451.5	441.3	439.5	438.6
10°	443.2	440.4	425.6	422.9	420.1
12.5°	429.3	423.8	408.1	403.5	399.8
15°	411.8	405.3	387.8	380.4	376.7
17.5°	387.8	380.4	363.8	356.4	352.7
20°	360.1	352.7	339.8	331.5	327.8
22.5°	337.0	325.0	311.1	305.6	301.0
25°	309.3	296.4	282.5	277.9	272.4
27.5°	283.4	267.7	253.9	250.2	245.6
30°	258.5	241.9	225.3	225.3	218.8
32.5°	231.7	216.0	198.5	197.6	193.9
35°	205.9	190.2	172.7	170.8	167.1
37.5°	181.9	166.2	149.6	144.0	139.4
40°	155.1	141.3	127.4	118.2	112.6
42.5°	133.9	118.2	104.3	93.3	85.9
45°	107.1	96.0	84.9	71.1	61.9
47.5°	83.1	75.7	66.5	50.8	46.2
50°	60.9	57.2	49.9	37.9	36.9
52.5°	38.8	40.6	36.0	29.5	32.3
55°	18.5	25.9	24.0	24.9	26.8
57.5°	12.0	12.9	17.5	20.3	22.2
60°	9.2	9.2	12.9	16.6	18.5
62.5°	7.4	7.4	10.2	13.8	14.8
65°	5.5	6.5	7.4	10.2	12.0
67.5°	4.6	4.6	5.5	8.3	9.2
70°	3.7	3.7	4.6	6.5	7.4
72.5°	2.8	2.8	3.7	5.5	5.5
75°	1.8	2.8	2.8	3.7	4.6
77.5°	1.8	1.8	1.8	2.8	3.7
80°	0.9	0.9	1.8	1.8	2.8
82.5°	0.9	0.9	0.9	0.9	1.8
85°	0.0	0.0	0.0	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0
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	3.32	4.48	3.69	4.80	5.11	6.73	7.89	7.09	8.20	8.52
	3H	3.84	4.86	4.22	5.20	5.56	7.46	8.48	7.84	8.81	9.18
	4H	3.98	4.92	4.38	5.28	5.66	7.67	8.62	8.08	8.97	9.36
	6H	4.04	4.91	4.46	5.28	5.68	7.82	8.69	8.24	9.06	9.46
	8H	4.04	4.86	4.48	5.25	5.66	7.85	8.67	8.29	9.06	9.47
	12H	4.01	4.79	4.44	5.17	5.60	7.85	8.63	8.29	9.02	9.45
4H	2H	3.63	4.58	4.04	4.93	5.32	6.70	7.64	7.10	8.00	8.38
	3H	4.29	5.06	4.71	5.47	5.87	7.57	8.34	7.99	8.75	9.15
	4H	4.54	5.22	4.98	5.64	6.09	7.85	8.53	8.29	8.96	9.40
	6H	4.65	5.23	5.11	5.68	6.15	8.08	8.66	8.55	9.11	9.58
	8H	4.66	5.20	5.13	5.65	6.13	8.12	8.67	8.59	9.12	9.59
	12H	4.62	5.10	5.11	5.59	6.06	8.14	8.61	8.63	9.10	9.58
8H	4H	4.64	5.19	5.12	5.64	6.11	7.78	8.33	8.25	8.78	9.25
	6H	4.80	5.24	5.30	5.74	6.22	8.04	8.48	8.55	8.98	9.47
	8H	4.84	5.23	5.36	5.75	6.25	8.10	8.49	8.63	9.01	9.51
	12H	4.81	5.16	5.33	5.66	6.23	8.15	8.50	8.67	9.00	9.57
12H	4H	4.63	5.11	5.12	5.59	6.07	7.73	8.21	8.22	8.70	9.17
	6H	4.79	5.19	5.32	5.71	6.20	7.99	8.39	8.52	8.90	9.40
	8H	4.86	5.21	5.38	5.70	6.28	8.07	8.42	8.59	8.92	9.49