

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: P1057954

Luminaire Tested: S122RDRP-S485D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057954
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-S485D830-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

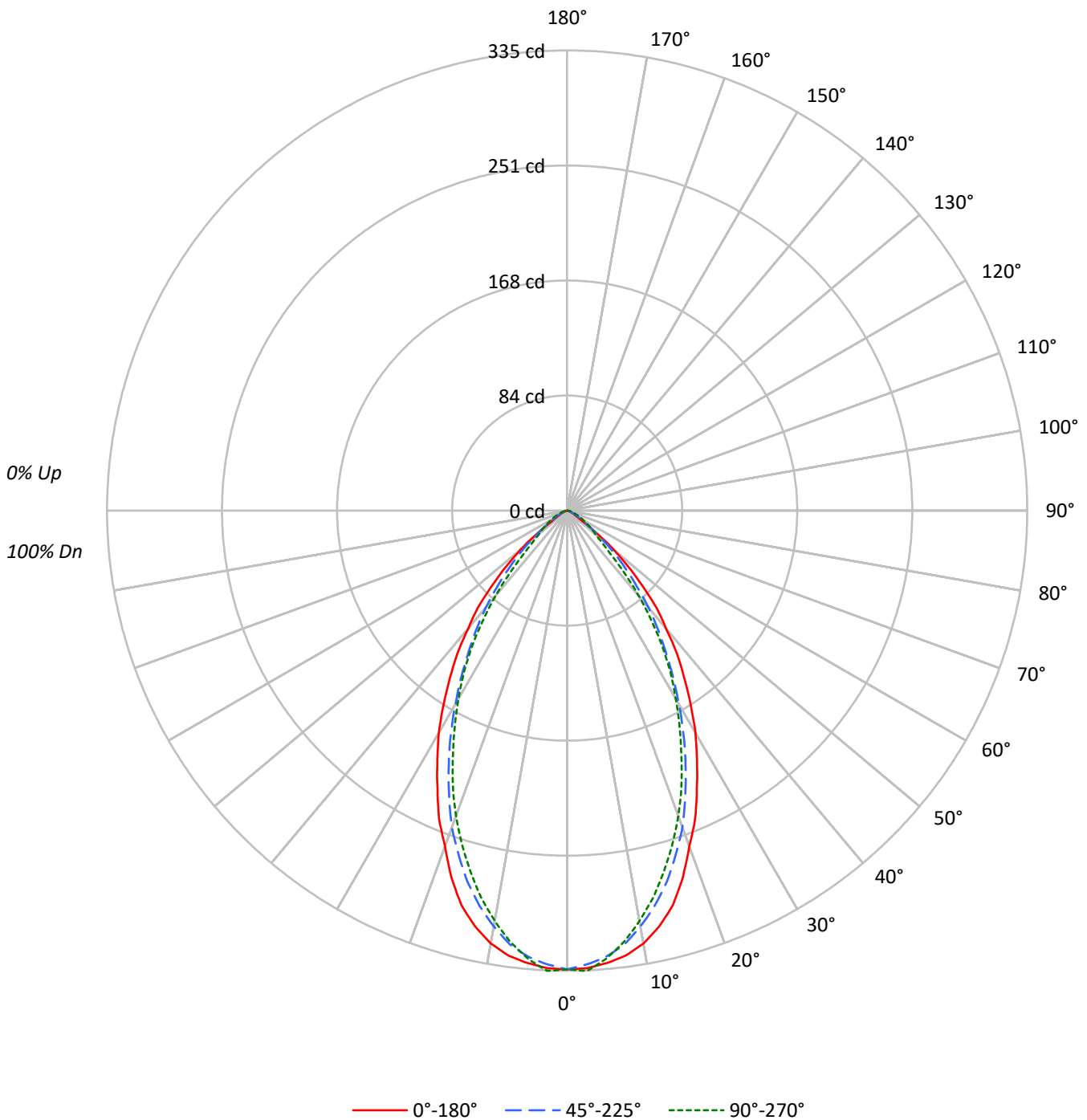
Lumens per Lamp: N/A
Luminaire Lumens: 359.2 lumens
Efficiency: N/A
Efficacy: 18.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	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°	6163	6163	6163
5°	6126	6038	6064
10°	5996	5760	5685
15°	5681	5349	5196
20°	5106	4819	4648
25°	4548	4153	4005
30°	3978	3467	3367
35°	3350	2809	2719
40°	2698	2216	1958
45°	2017	1600	1166
50°	1263	1033	766
55°	428	557	621
60°	247	343	491
65°	175	231	380
70°	146	178	286
75°	93	143	235
80°	74	138	213
85°	0	0	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2017 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	8.6
10°-20°	78.8	21.9
20°-30°	94.9	26.4
30°-40°	81.1	22.6
40°-50°	47.5	13.2
50°-60°	17.2	4.8
60°-70°	6.1	1.7
70°-80°	2.4	0.7
80°-90°	0.4	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°	204.5	56.9
0°-40°	285.6	79.5
0°-60°	350.3	97.5
0°-90°	359.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	359.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	334	334	334	334	334	
5°	331	331	326	327	327	31
15°	297	293	280	275	272	83
25°	223	214	204	201	197	103
35°	149	137	125	123	121	93
45°	77	69	61	51	45	60
55°	13	19	17	18	19	17
65°	4	5	5	7	9	4
75°	1	2	2	3	3	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°	334.0	334.0	334.0	334.0	334.0
2.5°	333.4	334.0	330.7	334.0	335.4
5°	330.7	331.4	326.0	327.4	327.4
7.5°	326.7	326.0	318.7	317.4	316.7
10°	320.0	318.0	307.4	305.4	303.4
12.5°	310.0	306.0	294.7	291.4	288.7
15°	297.4	292.7	280.0	274.7	272.0
17.5°	280.0	274.7	262.7	257.4	254.7
20°	260.0	254.7	245.4	239.4	236.7
22.5°	243.4	234.7	224.7	220.7	217.4
25°	223.4	214.0	204.0	200.7	196.7
27.5°	204.7	193.4	183.4	180.7	177.4
30°	186.7	174.7	162.7	162.7	158.0
32.5°	167.3	156.0	143.3	142.7	140.0
35°	148.7	137.3	124.7	123.3	120.7
37.5°	131.3	120.0	108.0	104.0	100.7
40°	112.0	102.0	92.0	85.3	81.3
42.5°	96.7	85.3	75.3	67.3	62.0
45°	77.3	69.3	61.3	51.3	44.7
47.5°	60.0	54.7	48.0	36.7	33.3
50°	44.0	41.3	36.0	27.3	26.7
52.5°	28.0	29.3	26.0	21.3	23.3
55°	13.3	18.7	17.3	18.0	19.3
57.5°	8.7	9.3	12.7	14.7	16.0
60°	6.7	6.7	9.3	12.0	13.3
62.5°	5.3	5.3	7.3	10.0	10.7
65°	4.0	4.7	5.3	7.3	8.7
67.5°	3.3	3.3	4.0	6.0	6.7
70°	2.7	2.7	3.3	4.7	5.3
72.5°	2.0	2.0	2.7	4.0	4.0
75°	1.3	2.0	2.0	2.7	3.3
77.5°	1.3	1.3	1.3	2.0	2.7
80°	0.7	0.7	1.3	1.3	2.0
82.5°	0.7	0.7	0.7	0.7	1.3
85°	0.0	0.0	0.0	0.7	0.7
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	2.19	3.35	2.55	3.66	3.98	5.61	6.77	5.98	7.08	7.40
	3H	2.71	3.73	3.09	4.06	4.43	6.34	7.36	6.72	7.69	8.06
	4H	2.84	3.79	3.25	4.14	4.53	6.55	7.50	6.96	7.85	8.24
	6H	2.91	3.78	3.33	4.15	4.55	6.71	7.57	7.12	7.95	8.34
	8H	2.92	3.74	3.36	4.13	4.54	6.73	7.55	7.17	7.94	8.35
	12H	2.89	3.67	3.32	4.05	4.48	6.74	7.52	7.17	7.90	8.33
4H	2H	2.49	3.44	2.90	3.79	4.18	5.57	6.52	5.98	6.87	7.26
	3H	3.16	3.92	3.57	4.33	4.74	6.45	7.22	6.86	7.62	8.03
	4H	3.39	4.08	3.83	4.50	4.95	6.73	7.41	7.17	7.84	8.28
	6H	3.51	4.10	3.98	4.55	5.02	6.96	7.54	7.42	7.99	8.46
	8H	3.54	4.08	4.01	4.53	5.01	7.00	7.55	7.47	7.99	8.47
	12H	3.50	3.98	3.99	4.47	4.94	7.02	7.50	7.51	7.99	8.46
8H	4H	3.50	4.05	3.97	4.50	4.97	6.66	7.21	7.13	7.66	8.13
	6H	3.67	4.11	4.17	4.61	5.09	6.92	7.36	7.43	7.86	8.34
	8H	3.73	4.12	4.25	4.64	5.13	6.98	7.38	7.51	7.89	8.39
	12H	3.71	4.05	4.22	4.55	5.13	7.05	7.39	7.56	7.89	8.47
12H	4H	3.49	3.96	3.97	4.45	4.93	6.61	7.09	7.10	7.58	8.05
	6H	3.67	4.06	4.19	4.58	5.08	6.87	7.26	7.40	7.78	8.28
	8H	3.75	4.10	4.27	4.60	5.17	6.95	7.30	7.47	7.80	8.38