

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: P1057951

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

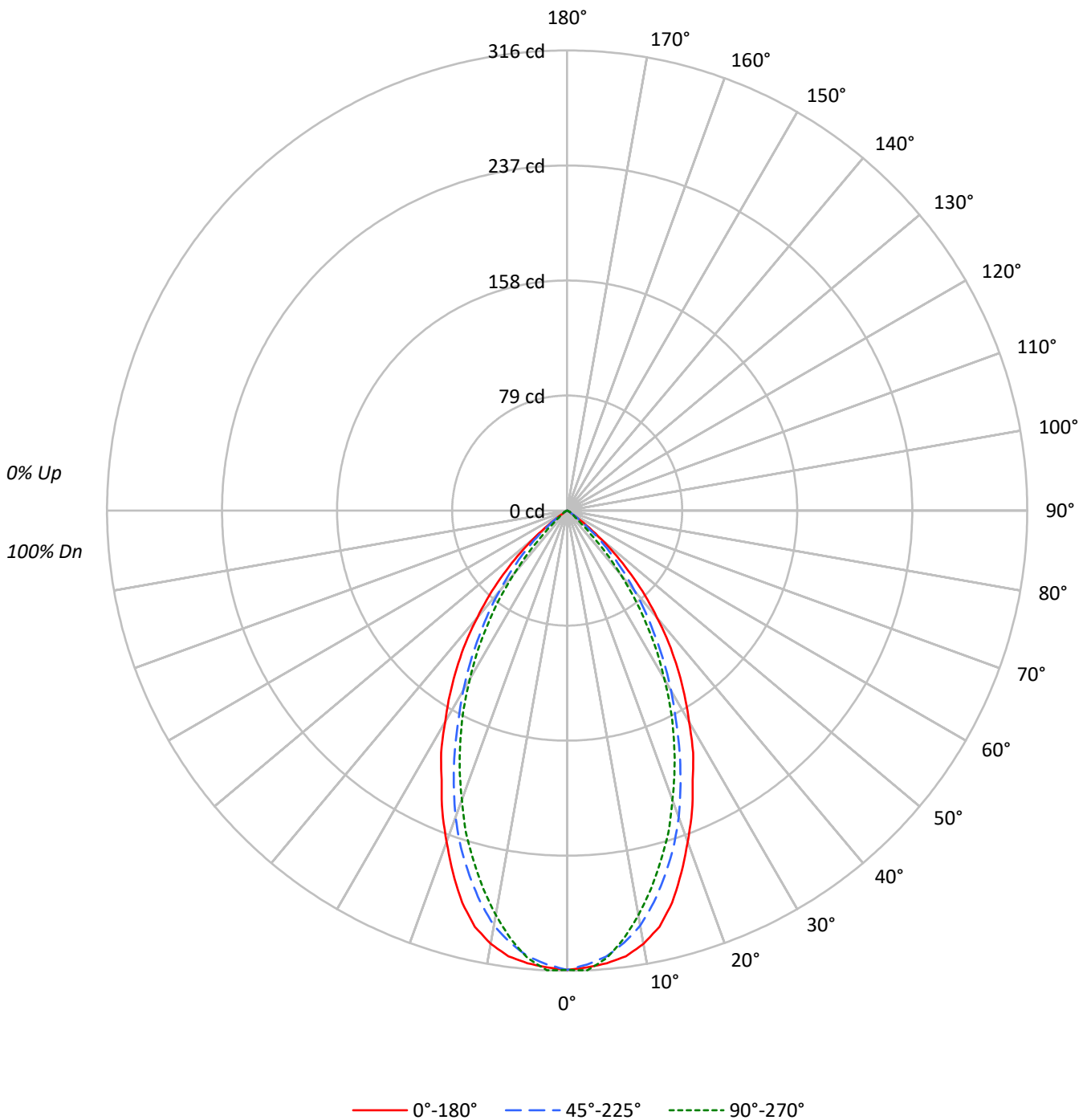
Lumens per Lamp: N/A
Luminaire Lumens: 296.6 lumens
Efficiency: N/A
Efficacy: 15.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5820	5820	5820
5°	5779	5694	5718
10°	5659	5423	5284
15°	5324	4955	4751
20°	4752	4399	4151
25°	4153	3720	3530
30°	3567	3041	2842
35°	2973	2372	2133
40°	2312	1751	1366
45°	1618	1166	592
50°	881	611	210
55°	129	216	151
60°	26	48	100
65°	0	31	57
70°	0	0	38
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1618 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	9.8
10°-20°	73.0	24.6
20°-30°	85.1	28.7
30°-40°	68.2	23.0
40°-50°	33.9	11.4
50°-60°	6.7	2.3
60°-70°	0.6	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	187.1	63.1
0°-40°	255.3	86.1
0°-60°	295.9	99.8
0°-90°	296.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	296.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	315	315	315	315	315	
5°	312	312	307	308	309	29
15°	279	273	259	253	249	77
25°	204	194	183	179	173	94
35°	132	119	105	101	95	82
45°	62	55	45	30	23	48
55°	4	8	7	4	5	8
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	315.4	315.4	315.4	315.4	315.4
2.5°	314.0	315.4	312.0	315.4	316.0
5°	312.0	312.0	307.4	308.0	308.7
7.5°	308.7	307.4	299.4	298.0	296.7
10°	302.0	299.4	289.4	284.0	282.0
12.5°	292.7	288.7	275.4	269.4	266.0
15°	278.7	273.4	259.4	252.7	248.7
17.5°	260.7	256.0	242.7	235.4	231.4
20°	242.0	235.4	224.0	216.7	211.4
22.5°	224.0	215.4	203.4	198.0	192.7
25°	204.0	194.0	182.7	178.7	173.4
27.5°	187.4	174.7	161.4	158.7	154.0
30°	167.4	155.4	142.7	138.7	133.4
32.5°	150.0	136.7	124.0	119.3	114.7
35°	132.0	118.7	105.3	100.7	94.7
37.5°	114.7	102.0	88.7	81.3	76.0
40°	96.0	85.3	72.7	63.3	56.7
42.5°	79.3	70.0	58.0	46.0	39.3
45°	62.0	54.7	44.7	30.0	22.7
47.5°	46.0	40.7	32.7	17.3	12.0
50°	30.7	28.7	21.3	8.7	7.3
52.5°	16.7	18.0	12.7	5.3	6.0
55°	4.0	8.0	6.7	4.0	4.7
57.5°	0.7	1.3	3.3	3.3	3.3
60°	0.7	0.7	1.3	2.0	2.7
62.5°	0.7	0.0	0.7	1.3	2.0
65°	0.0	0.0	0.7	0.7	1.3
67.5°	0.0	0.0	0.0	0.7	0.7
70°	0.0	0.0	0.0	0.7	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00