

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: P1057957

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

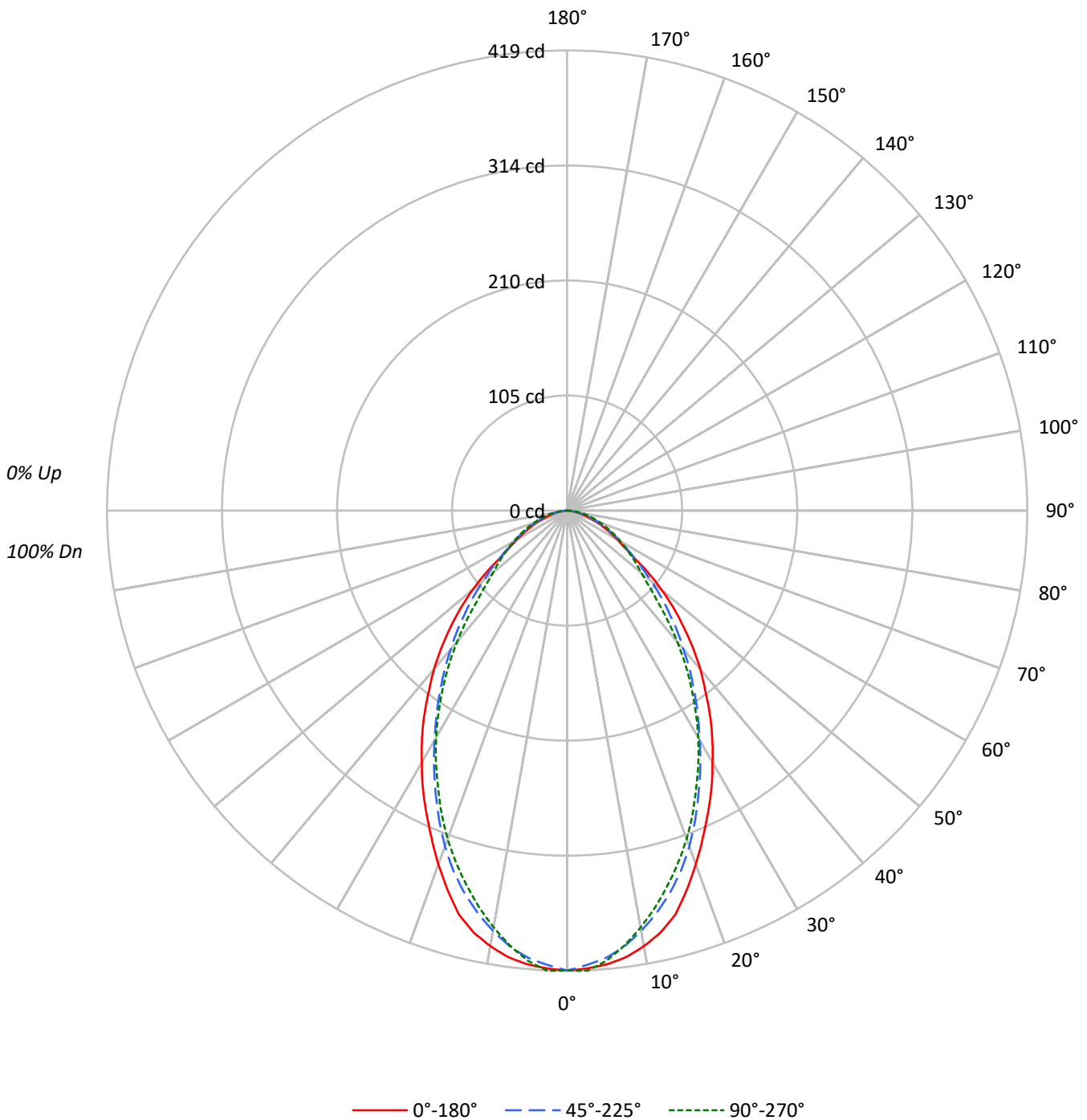
Lumens per Lamp: N/A
Luminaire Lumens: 635.9 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7726	7726	7726
5°	7681	7570	7620
10°	7545	7283	7221
15°	7273	6891	6751
20°	6729	6390	6246
25°	6177	5770	5660
30°	5640	5144	5086
35°	5107	4550	4447
40°	4545	3967	3758
45°	3914	3411	3011
50°	3235	2871	2526
55°	2339	2381	2274
60°	1945	2041	2067
65°	1659	1777	1891
70°	1365	1581	1726
75°	1141	1333	1568
80°	850	1063	1413
85°	275	572	1270

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3914 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	6.1
10°-20°	101.9	16.0
20°-30°	131.9	20.7
30°-40°	129.4	20.3
40°-50°	101.9	16.0
50°-60°	66.8	10.5
60°-70°	40.7	6.4
70°-80°	20.3	3.2
80°-90°	4.4	0.7
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°	272.6	42.9
0°-40°	401.9	63.2
0°-60°	570.6	89.7
0°-90°	635.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	635.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	415	415	409	411	411	39
15°	381	375	361	356	353	106
25°	303	293	283	282	278	139
35°	227	214	202	201	197	141
45°	150	141	131	121	115	116
55°	73	77	74	71	71	69
65°	38	39	41	43	43	38
75°	16	17	19	21	22	17
85°	1	2	3	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.7	418.7	418.7	418.7	418.7
2.5°	417.4	418.1	414.1	418.1	419.4
5°	414.7	414.7	408.7	411.4	411.4
7.5°	410.1	409.4	400.1	400.1	399.4
10°	402.7	400.1	388.7	386.7	385.4
12.5°	393.4	388.7	375.4	372.1	370.1
15°	380.7	375.4	360.7	356.1	353.4
17.5°	362.1	356.7	344.1	338.7	336.1
20°	342.7	334.7	325.4	320.7	318.1
22.5°	322.7	313.4	304.7	301.4	298.7
25°	303.4	293.4	283.4	282.0	278.0
27.5°	284.7	272.7	262.7	262.0	258.7
30°	264.7	252.0	241.4	242.0	238.7
32.5°	246.0	234.0	221.4	222.0	218.0
35°	226.7	214.0	202.0	201.4	197.4
37.5°	206.7	194.7	183.4	180.7	176.7
40°	188.7	176.7	164.7	160.0	156.0
42.5°	169.4	158.7	148.0	140.7	135.4
45°	150.0	140.7	130.7	121.4	115.4
47.5°	131.4	124.0	115.4	104.0	100.0
50°	112.7	107.4	100.0	90.0	88.0
52.5°	93.3	91.3	86.7	80.0	79.3
55°	72.7	76.7	74.0	71.3	70.7
57.5°	61.3	62.0	64.0	63.3	63.3
60°	52.7	52.7	55.3	56.0	56.0
62.5°	44.7	45.3	48.0	49.3	49.3
65°	38.0	38.7	40.7	42.7	43.3
67.5°	31.3	32.7	34.7	36.7	37.3
70°	25.3	26.7	29.3	31.3	32.0
72.5°	20.7	21.3	24.0	26.0	26.7
75°	16.0	16.7	18.7	21.3	22.0
77.5°	11.3	12.7	14.7	16.7	18.0
80°	8.0	8.7	10.0	12.7	13.3
82.5°	4.7	5.3	6.7	8.7	9.3
85°	1.3	2.0	2.7	4.7	6.0
87.5°	0.0	0.0	0.0	1.3	2.7
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	13.23	14.62	13.59	14.93	15.25	13.40	14.80	13.77	15.11	15.43
	3H	14.36	15.60	14.74	15.93	16.30	14.86	16.11	15.24	16.44	16.80
	4H	14.71	15.87	15.11	16.22	16.60	15.40	16.57	15.81	16.92	17.30
	6H	14.89	15.96	15.31	16.33	16.73	15.82	16.89	16.23	17.26	17.65
	8H	14.92	15.94	15.35	16.33	16.73	15.94	16.96	16.37	17.35	17.75
	12H	14.91	15.88	15.34	16.26	16.69	16.03	17.00	16.46	17.38	17.81
4H	2H	13.68	14.85	14.09	15.20	15.58	13.83	14.99	14.23	15.34	15.72
	3H	15.02	15.98	15.44	16.38	16.79	15.50	16.46	15.91	16.86	17.26
	4H	15.47	16.33	15.90	16.74	17.19	16.17	17.02	16.60	17.44	17.88
	6H	15.74	16.48	16.20	16.93	17.39	16.70	17.44	17.16	17.89	18.35
	8H	15.78	16.48	16.25	16.92	17.39	16.87	17.56	17.34	18.01	18.48
	12H	15.78	16.39	16.26	16.88	17.35	16.99	17.61	17.48	18.09	18.56
8H	4H	15.68	16.38	16.15	16.82	17.29	16.32	17.01	16.78	17.46	17.92
	6H	16.03	16.60	16.53	17.09	17.57	16.95	17.52	17.45	18.01	18.49
	8H	16.11	16.62	16.63	17.13	17.62	17.18	17.69	17.70	18.21	18.70
	12H	16.12	16.57	16.64	17.07	17.64	17.37	17.82	17.88	18.31	18.88
12H	4H	15.69	16.31	16.18	16.79	17.26	16.30	16.92	16.79	17.40	17.87
	6H	16.05	16.57	16.57	17.08	17.57	16.94	17.45	17.46	17.97	18.46
	8H	16.17	16.62	16.68	17.12	17.68	17.22	17.67	17.73	18.16	18.73