

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: P1058362

Luminaire Tested: S122RDRP-H485D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058362
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-H485D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

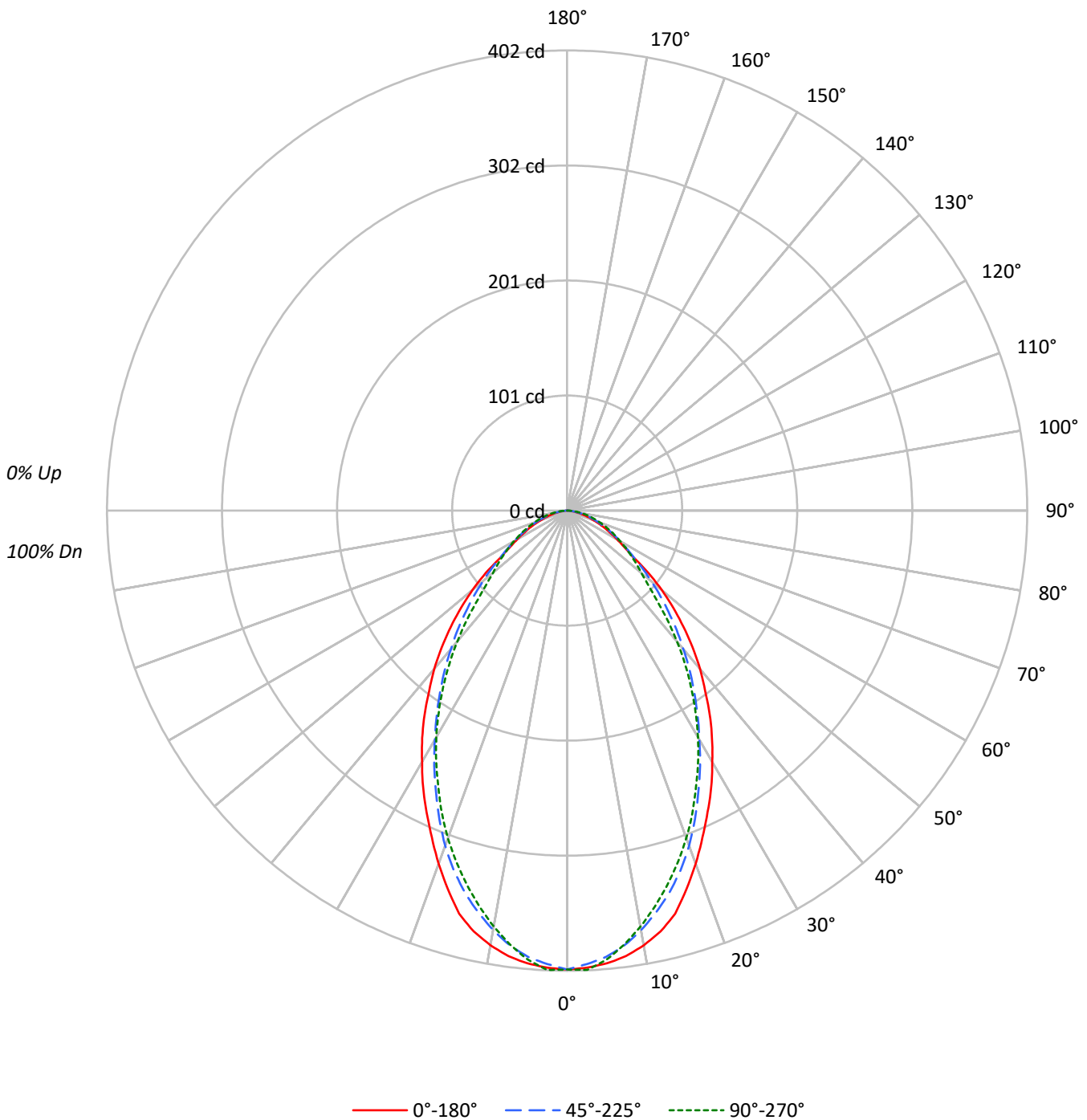
Lumens per Lamp: N/A
Luminaire Lumens: 608.9 lumens
Efficiency: N/A
Efficacy: 35.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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°	7398	7398	7398
5°	7355	7250	7296
10°	7225	6974	6914
15°	6965	6598	6465
20°	6445	6119	5979
25°	5915	5524	5420
30°	5401	4924	4871
35°	4890	4357	4257
40°	4353	3799	3599
45°	3747	3265	2884
50°	3097	2750	2420
55°	2239	2281	2178
60°	1860	1956	1978
65°	1589	1698	1812
70°	1311	1516	1651
75°	1091	1276	1504
80°	818	1020	1360
85°	275	550	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3747 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	6.1
10°-20°	97.6	16.0
20°-30°	126.3	20.7
30°-40°	123.9	20.3
40°-50°	97.6	16.0
50°-60°	63.9	10.5
60°-70°	38.9	6.4
70°-80°	19.5	3.2
80°-90°	4.2	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°	261.0	42.9
0°-40°	384.9	63.2
0°-60°	546.4	89.7
0°-90°	608.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	608.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	401	401	401	401	401	
5°	397	397	391	394	394	38
15°	365	359	345	341	338	102
25°	290	281	271	270	266	134
35°	217	205	193	193	189	135
45°	144	135	125	116	110	111
55°	70	73	71	68	68	66
65°	36	37	39	41	42	36
75°	15	16	18	20	21	16
85°	1	2	3	4	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.9	400.9	400.9	400.9	400.9
2.5°	399.7	400.3	396.5	400.3	401.6
5°	397.1	397.1	391.4	393.9	393.9
7.5°	392.6	392.0	383.1	383.1	382.4
10°	385.6	383.1	372.2	370.3	369.0
12.5°	376.7	372.2	359.4	356.3	354.3
15°	364.6	359.4	345.4	340.9	338.4
17.5°	346.7	341.6	329.4	324.3	321.8
20°	328.2	320.5	311.6	307.1	304.5
22.5°	309.0	300.1	291.8	288.6	286.0
25°	290.5	280.9	271.3	270.1	266.2
27.5°	272.6	261.1	251.5	250.9	247.7
30°	253.5	241.3	231.1	231.8	228.6
32.5°	235.6	224.1	212.0	212.6	208.8
35°	217.1	204.9	193.4	192.8	189.0
37.5°	197.9	186.4	175.6	173.0	169.2
40°	180.7	169.2	157.7	153.2	149.4
42.5°	162.2	151.9	141.7	134.7	129.6
45°	143.6	134.7	125.1	116.2	110.5
47.5°	125.8	118.8	110.5	99.6	95.8
50°	107.9	102.8	95.8	86.2	84.3
52.5°	89.4	87.5	83.0	76.6	76.0
55°	69.6	73.4	70.9	68.3	67.7
57.5°	58.7	59.4	61.3	60.7	60.7
60°	50.4	50.4	53.0	53.6	53.6
62.5°	42.8	43.4	46.0	47.2	47.2
65°	36.4	37.0	38.9	40.9	41.5
67.5°	30.0	31.3	33.2	35.1	35.8
70°	24.3	25.5	28.1	30.0	30.6
72.5°	19.8	20.4	23.0	24.9	25.5
75°	15.3	16.0	17.9	20.4	21.1
77.5°	10.9	12.1	14.0	16.0	17.2
80°	7.7	8.3	9.6	12.1	12.8
82.5°	4.5	5.1	6.4	8.3	8.9
85°	1.3	1.9	2.6	4.5	5.7
87.5°	0.0	0.0	0.0	1.3	2.6
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	13.08	14.47	13.44	14.79	15.10	13.26	14.66	13.62	14.97	15.28
	3H	14.21	15.45	14.59	15.78	16.15	14.72	15.96	15.10	16.29	16.66
	4H	14.56	15.72	14.96	16.07	16.45	15.26	16.42	15.66	16.77	17.15
	6H	14.75	15.82	15.16	16.19	16.58	15.67	16.74	16.09	17.11	17.50
	8H	14.77	15.79	15.20	16.18	16.58	15.80	16.81	16.23	17.21	17.61
	12H	14.76	15.73	15.19	16.11	16.54	15.88	16.85	16.31	17.23	17.66
4H	2H	13.53	14.70	13.93	15.05	15.43	13.68	14.85	14.09	15.20	15.58
	3H	14.87	15.83	15.28	16.23	16.64	15.35	16.31	15.77	16.72	17.12
	4H	15.32	16.18	15.75	16.59	17.04	16.02	16.88	16.45	17.30	17.74
	6H	15.59	16.33	16.05	16.78	17.24	16.55	17.30	17.01	17.74	18.21
	8H	15.63	16.33	16.10	16.77	17.24	16.72	17.42	17.19	17.86	18.33
	12H	15.63	16.25	16.11	16.73	17.20	16.84	17.46	17.33	17.94	18.41
8H	4H	15.53	16.22	16.00	16.67	17.14	16.17	16.86	16.63	17.31	17.78
	6H	15.88	16.45	16.38	16.94	17.42	16.80	17.37	17.30	17.86	18.34
	8H	15.96	16.47	16.48	16.98	17.47	17.03	17.54	17.55	18.06	18.55
	12H	15.97	16.42	16.49	16.92	17.49	17.22	17.67	17.73	18.16	18.73
12H	4H	15.54	16.16	16.03	16.64	17.11	16.15	16.77	16.64	17.25	17.72
	6H	15.90	16.41	16.42	16.93	17.42	16.79	17.30	17.31	17.82	18.31
	8H	16.02	16.47	16.53	16.96	17.53	17.07	17.52	17.58	18.01	18.58