

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: P1057792

Luminaire Tested: S122RDRP-S1005D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057792
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-S1005D830-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

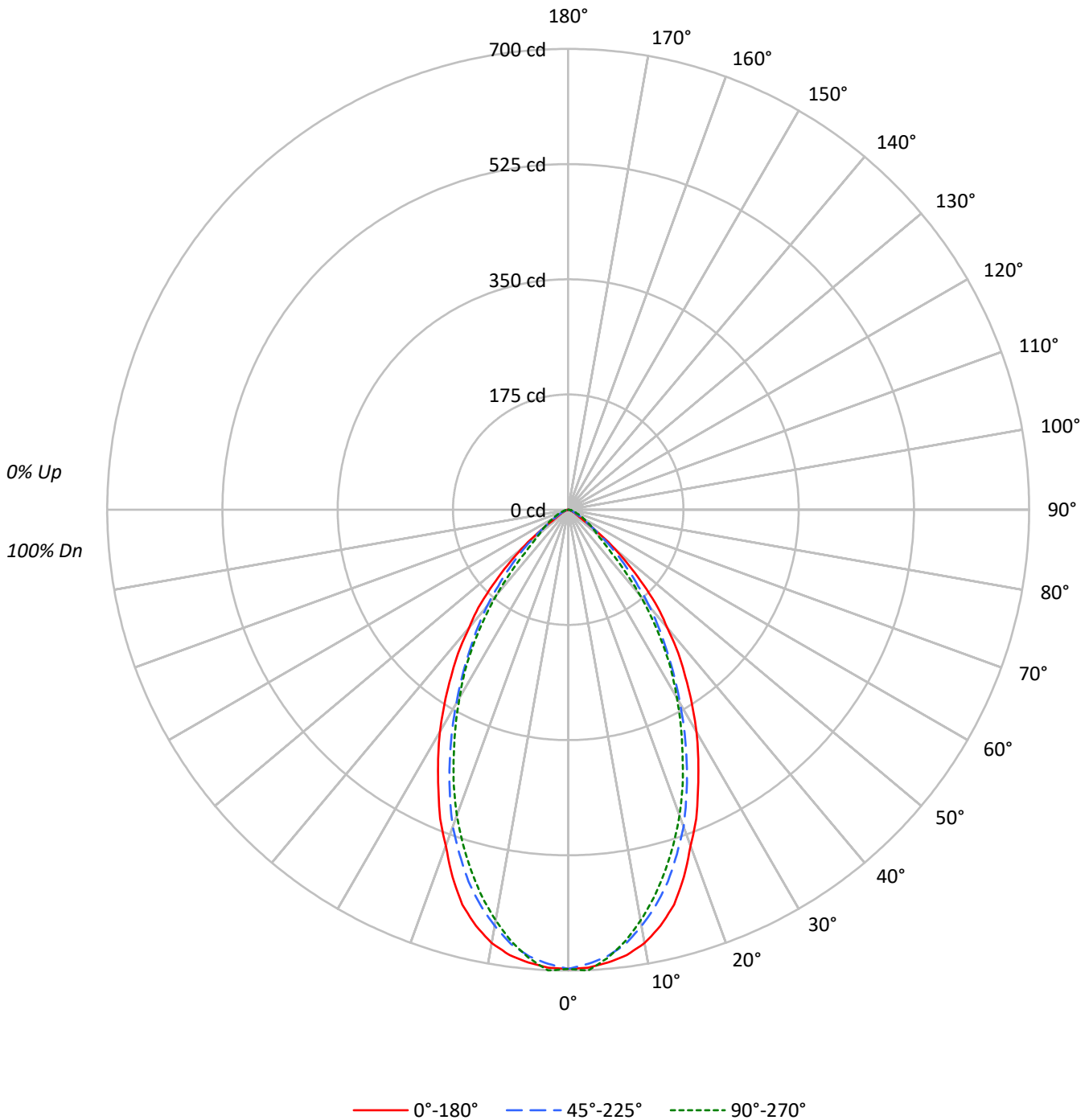
Lumens per Lamp: N/A
Luminaire Lumens: 750.3 lumens
Efficiency: N/A
Efficacy: 17.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	12872	12872	12872
5°	12792	12612	12664
10°	12524	12027	11872
15°	11863	11172	10853
20°	10663	10062	9706
25°	9498	8675	8364
30°	8308	7240	7031
35°	6994	5866	5677
40°	5634	4630	4093
45°	4214	3343	2435
50°	2638	2159	1599
55°	894	1165	1300
60°	513	720	1026
65°	367	485	790
70°	302	378	599
75°	200	299	499
80°	149	298	446
85°	0	0	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4214 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	8.6
10°-20°	164.6	21.9
20°-30°	198.2	26.4
30°-40°	169.3	22.6
40°-50°	99.2	13.2
50°-60°	35.9	4.8
60°-70°	12.7	1.7
70°-80°	5.1	0.7
80°-90°	0.9	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°	427.1	56.9
0°-40°	596.4	79.5
0°-60°	731.5	97.5
0°-90°	750.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	691	692	681	684	684	65
15°	621	611	585	574	568	172
25°	466	447	426	419	411	214
35°	310	287	260	258	252	194
45°	162	145	128	107	93	125
55°	28	39	36	38	40	35
65°	8	10	11	15	18	9
75°	3	4	4	6	7	4
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	697.6	697.6	697.6	697.6	697.6
2.5°	696.2	697.6	690.6	697.6	700.4
5°	690.6	692.0	680.9	683.7	683.7
7.5°	682.3	680.9	665.6	662.8	661.4
10°	668.4	664.2	641.9	637.7	633.6
12.5°	647.5	639.1	615.5	608.5	602.9
15°	621.0	611.3	584.8	573.7	568.1
17.5°	584.8	573.7	548.6	537.5	531.9
20°	543.0	531.9	512.4	499.9	494.3
22.5°	508.2	490.1	469.2	460.9	453.9
25°	466.5	447.0	426.1	419.1	410.8
27.5°	427.5	403.8	382.9	377.3	370.4
30°	389.9	364.8	339.8	339.8	330.0
32.5°	349.5	325.8	299.4	298.0	292.4
35°	310.5	286.8	260.4	257.6	252.0
37.5°	274.3	250.6	225.6	217.2	210.3
40°	233.9	213.0	192.2	178.2	169.9
42.5°	201.9	178.2	157.3	140.6	129.5
45°	161.5	144.8	128.1	107.2	93.3
47.5°	125.3	114.2	100.3	76.6	69.6
50°	91.9	86.3	75.2	57.1	55.7
52.5°	58.5	61.3	54.3	44.6	48.7
55°	27.8	39.0	36.2	37.6	40.4
57.5°	18.1	19.5	26.5	30.6	33.4
60°	13.9	13.9	19.5	25.1	27.8
62.5°	11.1	11.1	15.3	20.9	22.3
65°	8.4	9.7	11.1	15.3	18.1
67.5°	7.0	7.0	8.4	12.5	13.9
70°	5.6	5.6	7.0	9.7	11.1
72.5°	4.2	4.2	5.6	8.4	8.4
75°	2.8	4.2	4.2	5.6	7.0
77.5°	2.8	2.8	2.8	4.2	5.6
80°	1.4	1.4	2.8	2.8	4.2
82.5°	1.4	1.4	1.4	1.4	2.8
85°	0.0	0.0	0.0	1.4	1.4
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	4.76	5.92	5.13	6.24	6.55	8.15	9.31	8.52	9.63	9.94
	3H	5.29	6.31	5.67	6.64	7.01	8.88	9.90	9.26	10.23	10.60
	4H	5.42	6.37	5.83	6.72	7.11	9.10	10.05	9.50	10.40	10.78
	6H	5.50	6.37	5.92	6.74	7.14	9.25	10.12	9.67	10.49	10.89
	8H	5.51	6.32	5.94	6.71	7.12	9.28	10.10	9.72	10.49	10.90
	12H	5.47	6.25	5.90	6.63	7.07	9.28	10.06	9.72	10.45	10.88
4H	2H	5.07	6.01	5.47	6.37	6.75	8.12	9.06	8.52	9.42	9.80
	3H	5.74	6.50	6.15	6.91	7.31	8.99	9.76	9.41	10.17	10.57
	4H	5.98	6.66	6.42	7.08	7.53	9.28	9.96	9.71	10.38	10.83
	6H	6.10	6.69	6.57	7.13	7.60	9.51	10.09	9.97	10.54	11.01
	8H	6.12	6.66	6.59	7.11	7.58	9.55	10.10	10.02	10.55	11.02
	12H	6.08	6.56	6.57	7.05	7.52	9.57	10.05	10.06	10.54	11.01
8H	4H	6.09	6.63	6.56	7.08	7.56	9.21	9.75	9.68	10.20	10.68
	6H	6.26	6.70	6.76	7.20	7.68	9.47	9.91	9.98	10.41	10.90
	8H	6.30	6.70	6.83	7.22	7.71	9.53	9.93	10.06	10.45	10.94
	12H	6.28	6.63	6.80	7.12	7.70	9.60	9.94	10.12	10.44	11.02
12H	4H	6.07	6.55	6.56	7.04	7.51	9.16	9.64	9.65	10.12	10.60
	6H	6.25	6.65	6.78	7.17	7.66	9.42	9.82	9.95	10.34	10.83
	8H	6.33	6.68	6.85	7.17	7.75	9.51	9.86	10.03	10.35	10.93