

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: P1057796

Luminaire Tested: S122RDRP-S1005D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

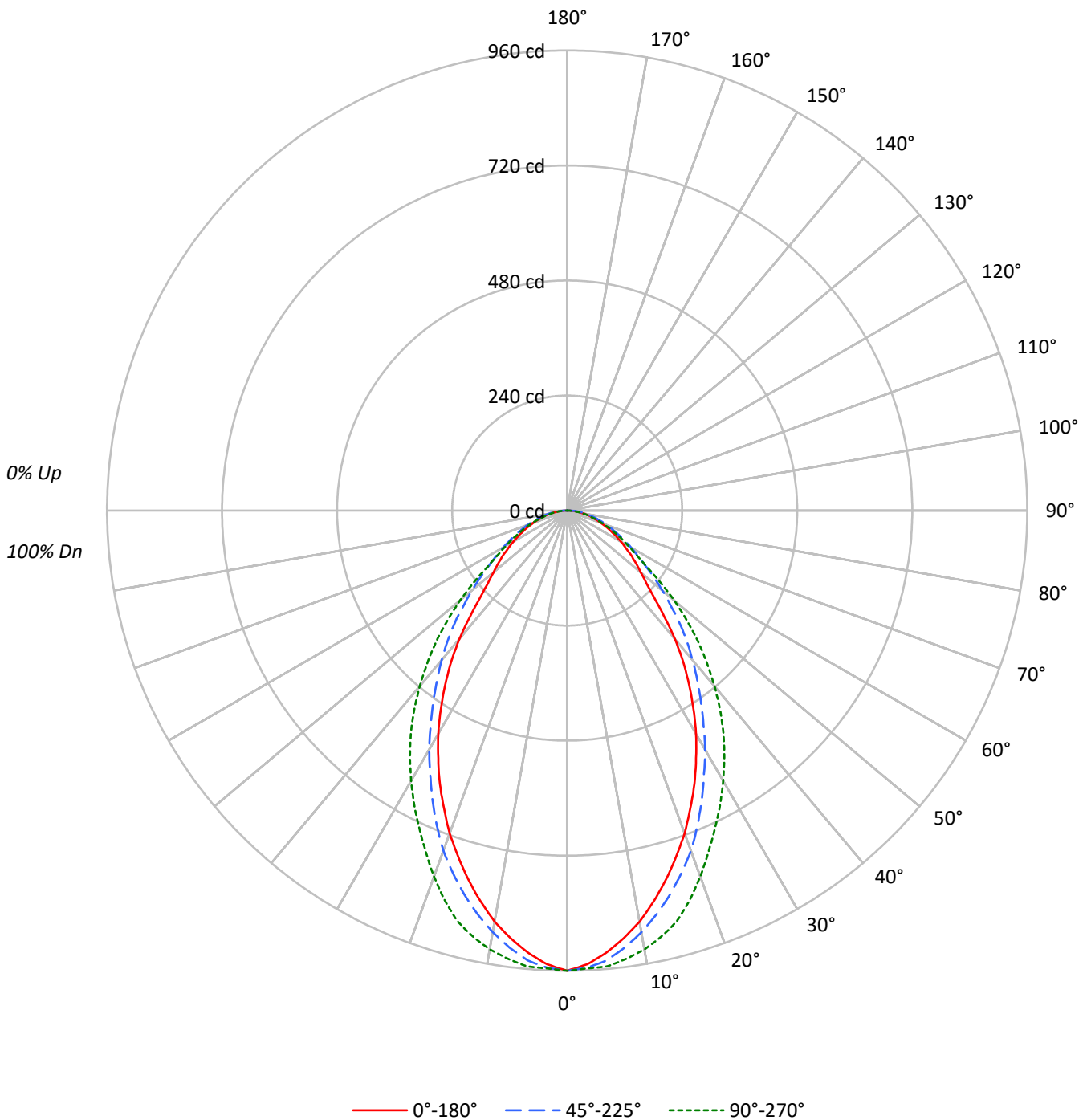
Lumens per Lamp: N/A
Luminaire Lumens: 1563.5 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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	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					100			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87					87			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76					76			
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66					66			
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47					47			
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43					43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17716	17716	17716
5°	17165	17449	17682
10°	16320	16738	17416
15°	15227	15839	16931
20°	14066	14832	15953
25°	12796	13533	14867
30°	11461	12262	13867
35°	9981	10955	12808
40°	8426	9801	11514
45°	6691	8656	10073
50°	5761	7441	8359
55°	5244	6367	6412
60°	4783	5658	5451
65°	4379	5113	4807
70°	4063	4737	4284
75°	3779	4470	3779
80°	3549	4293	3411
85°	3536	4425	2943

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10073 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	5.7
10°-20°	234.3	15.0
20°-30°	308.3	19.7
30°-40°	310.1	19.8
40°-50°	251.3	16.1
50°-60°	173.1	11.1
60°-70°	113.3	7.2
70°-80°	63.1	4.0
80°-90°	21.4	1.4
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°	631.3	40.4
0°-40°	941.3	60.2
0°-60°	1365.7	87.4
0°-90°	1563.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1563.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	927	945	942	946	955	87
15°	797	817	829	860	886	223
25°	628	645	665	694	730	288
35°	443	464	486	530	569	276
45°	256	286	332	361	386	203
55°	163	181	198	202	199	146
65°	100	120	117	112	110	100
75°	53	66	63	56	53	57
85°	17	22	21	18	14	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.1	960.1	960.1	960.1	960.1
2.5°	947.6	964.3	954.6	954.6	956.0
5°	926.7	944.8	942.0	946.2	954.6
7.5°	900.2	919.7	919.7	932.3	943.4
10°	871.0	890.5	893.3	912.8	929.5
12.5°	834.7	854.2	862.6	887.7	910.0
15°	797.1	816.6	829.1	859.8	886.3
17.5°	756.7	776.2	792.9	825.0	851.4
20°	716.3	734.4	755.3	783.2	812.4
22.5°	671.7	691.2	710.7	737.2	770.6
25°	628.5	645.2	664.7	694.0	730.2
27.5°	582.5	600.6	618.7	653.6	691.2
30°	537.9	556.0	575.5	611.8	650.8
32.5°	490.5	510.0	529.5	570.0	610.4
35°	443.1	464.0	486.3	529.5	568.6
37.5°	397.2	419.5	445.9	490.5	524.0
40°	349.8	373.5	406.9	445.9	478.0
42.5°	299.6	328.9	369.3	402.7	432.0
45°	256.4	285.7	331.7	360.9	386.0
47.5°	224.4	248.0	292.6	317.7	338.6
50°	200.7	218.8	259.2	277.3	291.2
52.5°	181.2	199.3	227.1	239.7	243.9
55°	163.0	181.2	197.9	202.1	199.3
57.5°	144.9	164.4	174.2	170.0	170.0
60°	129.6	150.5	153.3	147.7	147.7
62.5°	114.3	135.2	135.2	128.2	128.2
65°	100.3	119.8	117.1	111.5	110.1
67.5°	87.8	105.9	101.7	96.2	94.8
70°	75.3	92.0	87.8	80.8	79.4
72.5°	64.1	79.4	73.9	68.3	65.5
75°	53.0	65.5	62.7	55.7	53.0
77.5°	43.2	53.0	50.2	44.6	41.8
80°	33.4	41.8	40.4	34.8	32.1
82.5°	25.1	32.1	30.7	26.5	22.3
85°	16.7	22.3	20.9	18.1	13.9
87.5°	8.4	15.3	13.9	12.5	7.0
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	16.71	18.16	17.08	18.47	18.78	17.08	18.52	17.44	18.83	19.14
	3H	18.26	19.55	18.64	19.88	20.24	18.42	19.71	18.80	20.04	20.40
	4H	18.83	20.04	19.23	20.39	20.77	18.90	20.11	19.31	20.46	20.84
	6H	19.26	20.38	19.68	20.75	21.14	19.26	20.37	19.67	20.74	21.14
	8H	19.42	20.48	19.84	20.87	21.27	19.38	20.44	19.80	20.83	21.23
	12H	19.53	20.55	19.96	20.93	21.36	19.45	20.47	19.88	20.85	21.28
4H	2H	17.30	18.51	17.70	18.86	19.24	17.59	18.80	17.99	19.15	19.53
	3H	19.12	20.13	19.54	20.53	20.93	19.16	20.17	19.58	20.57	20.97
	4H	19.87	20.77	20.31	21.19	21.63	19.77	20.67	20.20	21.09	21.53
	6H	20.46	21.24	20.92	21.69	22.15	20.25	21.03	20.71	21.48	21.94
	8H	20.67	21.40	21.13	21.85	22.31	20.41	21.15	20.88	21.59	22.06
	12H	20.84	21.49	21.32	21.97	22.44	20.53	21.19	21.02	21.67	22.14
8H	4H	20.16	20.89	20.62	21.33	21.80	20.07	20.80	20.53	21.25	21.71
	6H	20.91	21.52	21.41	22.01	22.49	20.69	21.29	21.19	21.78	22.26
	8H	21.24	21.78	21.75	22.29	22.78	20.94	21.48	21.45	21.99	22.48
	12H	21.52	22.00	22.03	22.50	23.06	21.15	21.63	21.66	22.12	22.69
12H	4H	20.18	20.83	20.66	21.31	21.78	20.10	20.76	20.59	21.24	21.71
	6H	20.97	21.52	21.49	22.03	22.52	20.76	21.31	21.28	21.82	22.31
	8H	21.37	21.85	21.88	22.34	22.91	21.08	21.56	21.59	22.06	22.62