

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: P1057804

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057804
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-S1005D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

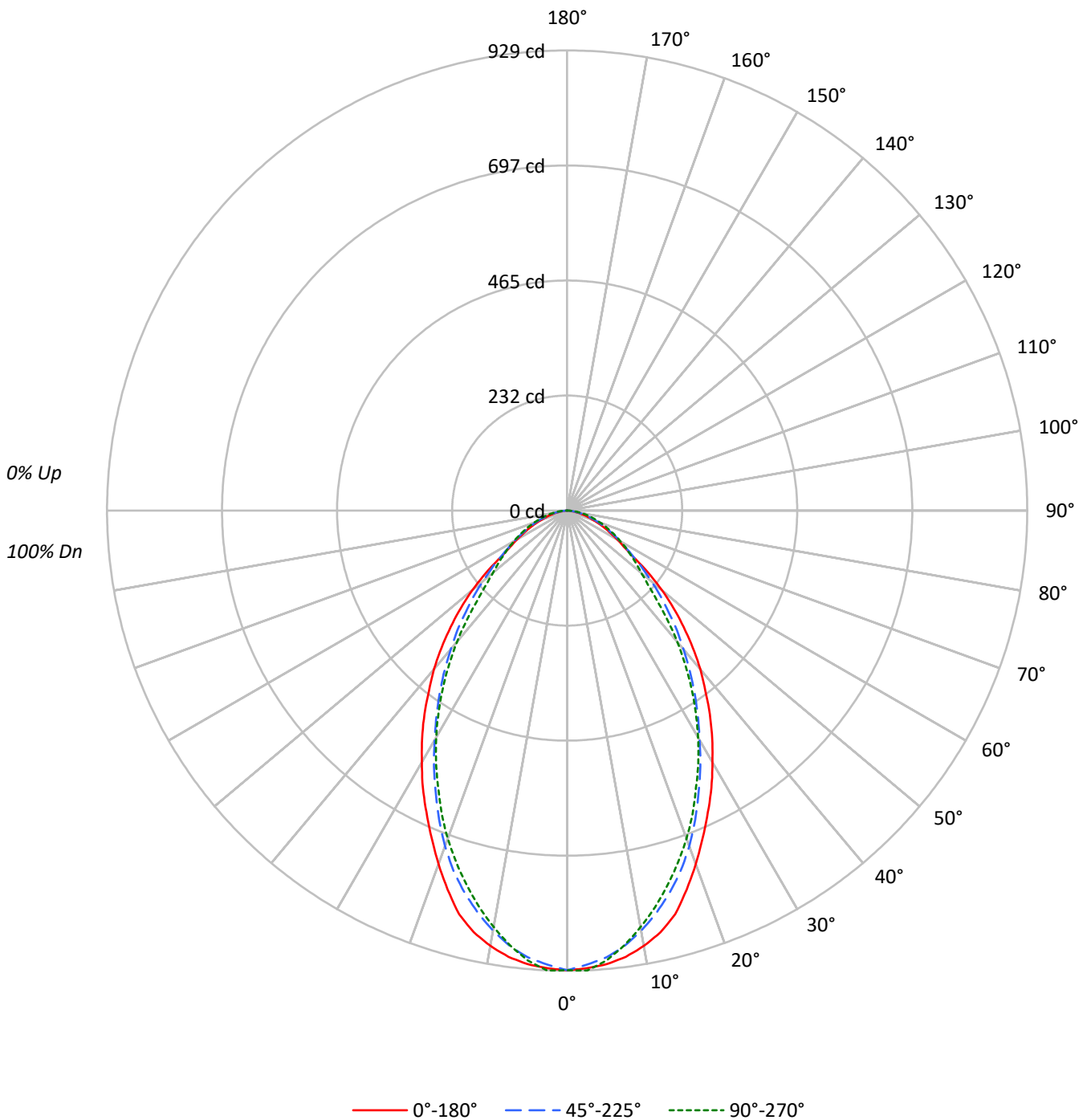
Lumens per Lamp: N/A
Luminaire Lumens: 1409.1 lumens
Efficiency: N/A
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17120	17120	17120
5°	17023	16776	16886
10°	16721	16138	16002
15°	16116	15269	14958
20°	14912	14158	13838
25°	13686	12784	12544
30°	12497	11395	11269
35°	11315	10085	9851
40°	10071	8790	8327
45°	8674	7557	6670
50°	7168	6361	5598
55°	5180	5276	5038
60°	4307	4525	4580
65°	3676	3934	4192
70°	3027	3507	3825
75°	2531	2952	3479
80°	1881	2359	3135
85°	635	1249	2816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8674 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	6.1
10°-20°	225.9	16.0
20°-30°	292.3	20.7
30°-40°	286.7	20.3
40°-50°	225.7	16.0
50°-60°	148.0	10.5
60°-70°	90.1	6.4
70°-80°	45.0	3.2
80°-90°	9.7	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°	603.9	42.9
0°-40°	890.6	63.2
0°-60°	1264.3	89.7
0°-90°	1409.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1409.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	919	919	906	912	912	87
15°	844	832	799	789	783	235
25°	672	650	628	625	616	309
35°	502	474	448	446	437	313
45°	332	312	290	269	256	256
55°	161	170	164	158	157	153
65°	84	86	90	95	96	84
75°	36	37	41	47	49	38
85°	3	4	6	10	13	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.8	927.8	927.8	927.8	927.8
2.5°	924.9	926.3	917.5	926.3	929.3
5°	919.0	919.0	905.7	911.6	911.6
7.5°	908.6	907.1	886.5	886.5	885.0
10°	892.4	886.5	861.3	856.9	854.0
12.5°	871.7	861.3	831.8	824.4	820.0
15°	843.6	831.8	799.3	788.9	783.0
17.5°	802.2	790.4	762.4	750.5	744.6
20°	759.4	741.7	721.0	710.6	704.7
22.5°	715.1	694.4	675.2	667.8	661.9
25°	672.2	650.1	627.9	625.0	616.1
27.5°	630.9	604.3	582.1	580.6	573.2
30°	586.5	558.5	534.8	536.3	528.9
32.5°	545.2	518.6	490.5	492.0	483.1
35°	502.3	474.3	447.7	446.2	437.3
37.5°	458.0	431.4	406.3	400.4	391.5
40°	418.1	391.5	364.9	354.6	345.7
42.5°	375.3	351.6	328.0	311.7	299.9
45°	332.4	311.7	289.6	268.9	255.6
47.5°	291.1	274.8	255.6	230.5	221.6
50°	249.7	237.9	221.6	199.5	195.0
52.5°	206.8	202.4	192.1	177.3	175.8
55°	161.0	169.9	164.0	158.1	156.6
57.5°	135.9	137.4	141.8	140.4	140.4
60°	116.7	116.7	122.6	124.1	124.1
62.5°	99.0	100.5	106.4	109.3	109.3
65°	84.2	85.7	90.1	94.6	96.0
67.5°	69.4	72.4	76.8	81.3	82.7
70°	56.1	59.1	65.0	69.4	70.9
72.5°	45.8	47.3	53.2	57.6	59.1
75°	35.5	36.9	41.4	47.3	48.8
77.5°	25.1	28.1	32.5	36.9	39.9
80°	17.7	19.2	22.2	28.1	29.5
82.5°	10.3	11.8	14.8	19.2	20.7
85°	3.0	4.4	5.9	10.3	13.3
87.5°	0.0	0.0	0.0	3.0	5.9
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	15.99	17.39	16.36	17.70	18.01	16.17	17.57	16.54	17.88	18.20
	3H	17.12	18.37	17.50	18.70	19.06	17.63	18.88	18.01	19.20	19.57
	4H	17.47	18.64	17.88	18.99	19.37	18.17	19.34	18.57	19.69	20.07
	6H	17.66	18.73	18.07	19.10	19.49	18.59	19.66	19.00	20.03	20.42
	8H	17.69	18.70	18.11	19.09	19.50	18.71	19.73	19.14	20.12	20.52
	12H	17.67	18.64	18.10	19.02	19.45	18.80	19.77	19.23	20.15	20.58
4H	2H	16.45	17.61	16.85	17.96	18.34	16.60	17.76	17.00	18.11	18.49
	3H	17.79	18.75	18.20	19.15	19.55	18.27	19.23	18.68	19.63	20.03
	4H	18.23	19.09	18.67	19.51	19.95	18.93	19.79	19.37	20.21	20.65
	6H	18.50	19.25	18.96	19.69	20.15	19.47	20.21	19.93	20.66	21.12
	8H	18.55	19.24	19.01	19.69	20.16	19.64	20.33	20.10	20.78	21.25
	12H	18.54	19.16	19.03	19.64	20.11	19.76	20.37	20.24	20.85	21.33
8H	4H	18.45	19.14	18.91	19.59	20.05	19.08	19.78	19.55	20.22	20.69
	6H	18.79	19.36	19.29	19.86	20.34	19.71	20.28	20.21	20.78	21.26
	8H	18.87	19.38	19.39	19.89	20.38	19.95	20.46	20.47	20.97	21.46
	12H	18.89	19.34	19.40	19.83	20.40	20.13	20.58	20.65	21.08	21.65
12H	4H	18.46	19.07	18.94	19.55	20.03	19.07	19.69	19.55	20.17	20.64
	6H	18.82	19.33	19.34	19.84	20.33	19.71	20.22	20.23	20.73	21.22
	8H	18.93	19.38	19.45	19.88	20.45	19.98	20.43	20.50	20.93	21.50