

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: P1058128

Luminaire Tested: S122RDRP-S865D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058128
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-S865D835-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

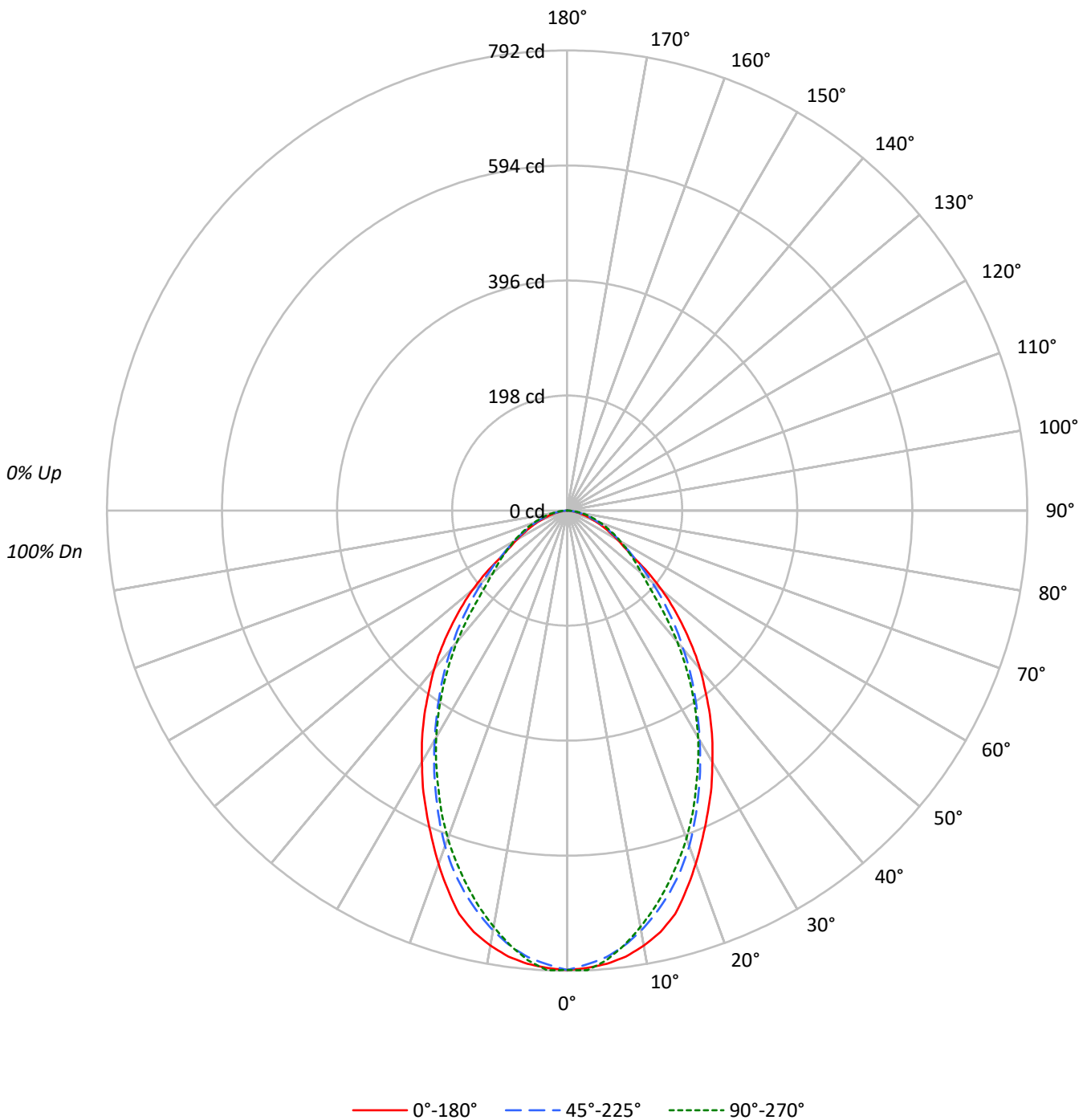
Lumens per Lamp: N/A
Luminaire Lumens: 1200.7 lumens
Efficiency: N/A
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	14589	14589	14589
5°	14503	14294	14387
10°	14248	13751	13633
15°	13732	13011	12746
20°	12707	12063	11792
25°	11662	10893	10689
30°	10649	9710	9603
35°	9641	8592	8393
40°	8583	7489	7096
45°	7390	6438	5684
50°	6109	5420	4771
55°	4414	4494	4292
60°	3672	3857	3901
65°	3135	3353	3572
70°	2579	2989	3259
75°	2153	2510	2959
80°	1605	2008	2678
85°	529	1059	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7390 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	6.1
10°-20°	192.5	16.0
20°-30°	249.1	20.7
30°-40°	244.3	20.3
40°-50°	192.3	16.0
50°-60°	126.1	10.5
60°-70°	76.8	6.4
70°-80°	38.4	3.2
80°-90°	8.3	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°	514.6	42.9
0°-40°	758.9	63.2
0°-60°	1077.3	89.7
0°-90°	1200.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1200.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	783	783	772	777	777	74
15°	719	709	681	672	667	200
25°	573	554	535	532	525	263
35°	428	404	381	380	373	267
45°	283	266	247	229	218	218
55°	137	145	140	135	133	130
65°	72	73	77	81	82	71
75°	30	32	35	40	42	32
85°	2	4	5	9	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.6	790.6	790.6	790.6	790.6
2.5°	788.1	789.3	781.8	789.3	791.8
5°	783.0	783.0	771.7	776.7	776.7
7.5°	774.2	773.0	755.3	755.3	754.1
10°	760.4	755.3	733.9	730.2	727.6
12.5°	742.7	733.9	708.8	702.5	698.7
15°	718.8	708.8	681.1	672.2	667.2
17.5°	683.6	673.5	649.6	639.5	634.5
20°	647.1	632.0	614.3	605.5	600.5
22.5°	609.3	591.7	575.3	569.0	564.0
25°	572.8	553.9	535.0	532.5	525.0
27.5°	537.5	514.9	496.0	494.7	488.4
30°	499.8	475.9	455.7	457.0	450.7
32.5°	464.5	441.9	417.9	419.2	411.7
35°	428.0	404.1	381.4	380.2	372.6
37.5°	390.3	367.6	346.2	341.2	333.6
40°	356.3	333.6	310.9	302.1	294.6
42.5°	319.8	299.6	279.5	265.6	255.6
45°	283.2	265.6	246.7	229.1	217.8
47.5°	248.0	234.2	217.8	196.4	188.8
50°	212.8	202.7	188.8	169.9	166.2
52.5°	176.2	172.5	163.7	151.1	149.8
55°	137.2	144.8	139.7	134.7	133.4
57.5°	115.8	117.1	120.9	119.6	119.6
60°	99.5	99.5	104.5	105.7	105.7
62.5°	84.3	85.6	90.6	93.2	93.2
65°	71.8	73.0	76.8	80.6	81.8
67.5°	59.2	61.7	65.5	69.2	70.5
70°	47.8	50.4	55.4	59.2	60.4
72.5°	39.0	40.3	45.3	49.1	50.4
75°	30.2	31.5	35.2	40.3	41.5
77.5°	21.4	23.9	27.7	31.5	34.0
80°	15.1	16.4	18.9	23.9	25.2
82.5°	8.8	10.1	12.6	16.4	17.6
85°	2.5	3.8	5.0	8.8	11.3
87.5°	0.0	0.0	0.0	2.5	5.0
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	15.44	16.83	15.80	17.15	17.46	15.61	17.01	15.98	17.32	17.64
	3H	16.57	17.81	16.95	18.14	18.51	17.07	18.32	17.45	18.65	19.01
	4H	16.92	18.08	17.32	18.43	18.81	17.62	18.78	18.02	19.13	19.51
	6H	17.10	18.17	17.52	18.54	18.94	18.03	19.10	18.44	19.47	19.86
	8H	17.13	18.15	17.56	18.54	18.94	18.16	19.17	18.58	19.56	19.97
	12H	17.12	18.09	17.55	18.47	18.90	18.24	19.21	18.67	19.59	20.02
4H	2H	15.89	17.06	16.29	17.41	17.79	16.04	17.20	16.44	17.55	17.93
	3H	17.23	18.19	17.65	18.59	19.00	17.71	18.67	18.12	19.07	19.47
	4H	17.68	18.54	18.11	18.95	19.40	18.38	19.24	18.81	19.65	20.10
	6H	17.95	18.69	18.41	19.14	19.60	18.91	19.66	19.37	20.10	20.56
	8H	17.99	18.69	18.46	19.13	19.60	19.08	19.77	19.55	20.22	20.69
	12H	17.99	18.60	18.47	19.08	19.56	19.20	19.82	19.69	20.30	20.77
8H	4H	17.89	18.58	18.36	19.03	19.50	18.53	19.22	18.99	19.67	20.14
	6H	18.24	18.81	18.74	19.30	19.78	19.16	19.73	19.66	20.22	20.70
	8H	18.32	18.83	18.84	19.34	19.83	19.39	19.90	19.91	20.42	20.91
	12H	18.33	18.78	18.85	19.28	19.85	19.58	20.03	20.09	20.52	21.09
12H	4H	17.90	18.52	18.39	19.00	19.47	18.51	19.13	19.00	19.61	20.08
	6H	18.26	18.77	18.78	19.29	19.78	19.15	19.66	19.67	20.18	20.67
	8H	18.38	18.83	18.89	19.32	19.89	19.43	19.88	19.94	20.37	20.94