

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: P1058048

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058048
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-S675D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

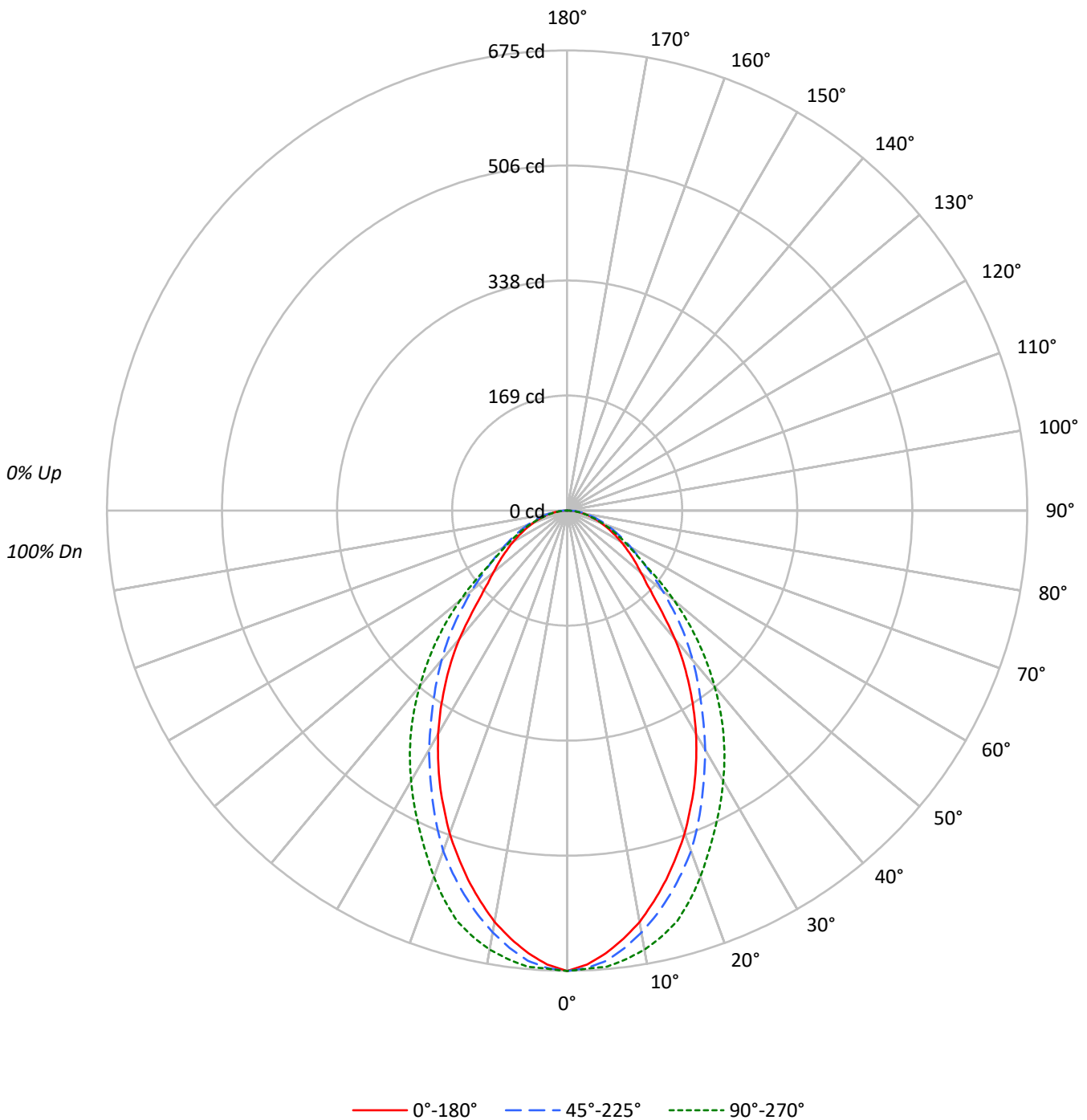
Lumens per Lamp: N/A
Luminaire Lumens: 1099.9 lumens
Efficiency: N/A
Efficacy: 42.6 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12463	12463	12463
5°	12075	12275	12438
10°	11480	11774	12252
15°	10711	11143	11911
20°	9895	10433	11222
25°	9001	9520	10459
30°	8063	8627	9754
35°	7021	7706	9011
40°	5928	6896	8101
45°	4708	6088	7085
50°	4053	5233	5882
55°	3690	4478	4510
60°	3366	3978	3834
65°	3083	3593	3379
70°	2854	3334	3016
75°	2659	3144	2659
80°	2497	3018	2391
85°	2498	3112	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	5.7
10°-20°	164.8	15.0
20°-30°	216.9	19.7
30°-40°	218.1	19.8
40°-50°	176.8	16.1
50°-60°	121.8	11.1
60°-70°	79.7	7.2
70°-80°	44.4	4.0
80°-90°	15.0	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°	444.1	40.4
0°-40°	662.2	60.2
0°-60°	960.7	87.4
0°-90°	1099.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1099.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	652	665	663	666	672	61
15°	561	574	583	605	624	157
25°	442	454	468	488	514	203
35°	312	326	342	372	400	194
45°	180	201	233	254	272	143
55°	115	127	139	142	140	103
65°	71	84	82	78	77	70
75°	37	46	44	39	37	40
85°	12	16	15	13	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.4	675.4	675.4	675.4	675.4
2.5°	666.6	678.4	671.5	671.5	672.5
5°	651.9	664.7	662.7	665.6	671.5
7.5°	633.3	647.0	647.0	655.8	663.7
10°	612.7	626.4	628.4	642.1	653.9
12.5°	587.2	600.9	606.8	624.5	640.2
15°	560.7	574.5	583.3	604.9	623.5
17.5°	532.3	546.0	557.8	580.4	599.0
20°	503.9	516.6	531.3	550.9	571.5
22.5°	472.5	486.2	500.0	518.6	542.1
25°	442.1	453.9	467.6	488.2	513.7
27.5°	409.8	422.5	435.3	459.8	486.2
30°	378.4	391.1	404.9	430.4	457.8
32.5°	345.1	358.8	372.5	401.0	429.4
35°	311.7	326.4	342.1	372.5	400.0
37.5°	279.4	295.1	313.7	345.1	368.6
40°	246.1	262.7	286.3	313.7	336.3
42.5°	210.8	231.4	259.8	283.3	303.9
45°	180.4	201.0	233.3	253.9	271.5
47.5°	157.8	174.5	205.9	223.5	238.2
50°	141.2	153.9	182.3	195.1	204.9
52.5°	127.4	140.2	159.8	168.6	171.6
55°	114.7	127.4	139.2	142.1	140.2
57.5°	102.0	115.7	122.5	119.6	119.6
60°	91.2	105.9	107.8	103.9	103.9
62.5°	80.4	95.1	95.1	90.2	90.2
65°	70.6	84.3	82.3	78.4	77.4
67.5°	61.8	74.5	71.6	67.6	66.7
70°	52.9	64.7	61.8	56.9	55.9
72.5°	45.1	55.9	52.0	48.0	46.1
75°	37.3	46.1	44.1	39.2	37.3
77.5°	30.4	37.3	35.3	31.4	29.4
80°	23.5	29.4	28.4	24.5	22.5
82.5°	17.6	22.5	21.6	18.6	15.7
85°	11.8	15.7	14.7	12.7	9.8
87.5°	5.9	10.8	9.8	8.8	4.9
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	15.50	16.94	15.86	17.25	17.56	15.85	17.29	16.22	17.61	17.92
	3H	17.04	18.33	17.42	18.66	19.02	17.20	18.49	17.58	18.82	19.18
	4H	17.61	18.82	18.01	19.17	19.55	17.68	18.89	18.08	19.24	19.62
	6H	18.04	19.16	18.46	19.52	19.92	18.04	19.15	18.45	19.52	19.91
	8H	18.19	19.25	18.62	19.65	20.05	18.15	19.21	18.58	19.60	20.01
	12H	18.31	19.32	18.74	19.71	20.14	18.23	19.24	18.66	19.63	20.06
4H	2H	16.08	17.29	16.48	17.64	18.02	16.37	17.58	16.77	17.93	18.31
	3H	17.90	18.90	18.31	19.31	19.71	17.94	18.94	18.35	19.34	19.75
	4H	18.65	19.55	19.08	19.97	20.41	18.55	19.45	18.98	19.86	20.30
	6H	19.24	20.02	19.70	20.46	20.93	19.03	19.81	19.49	20.25	20.72
	8H	19.45	20.18	19.91	20.62	21.09	19.19	19.92	19.66	20.37	20.84
	12H	19.61	20.27	20.10	20.75	21.22	19.31	19.96	19.80	20.44	20.92
8H	4H	18.93	19.67	19.40	20.11	20.58	18.85	19.58	19.31	20.02	20.49
	6H	19.69	20.30	20.19	20.79	21.27	19.46	20.07	19.96	20.56	21.04
	8H	20.01	20.56	20.53	21.07	21.56	19.71	20.26	20.23	20.77	21.26
	12H	20.30	20.78	20.81	21.27	21.84	19.92	20.40	20.43	20.90	21.46
12H	4H	18.95	19.61	19.44	20.09	20.56	18.88	19.53	19.37	20.01	20.49
	6H	19.75	20.29	20.27	20.81	21.30	19.54	20.08	20.06	20.60	21.09
	8H	20.15	20.63	20.66	21.12	21.69	19.86	20.34	20.37	20.83	21.40