

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: P1439698

Luminaire Tested: S122DR-S675D835-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439698
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2602-702-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/2/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-S675D835-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

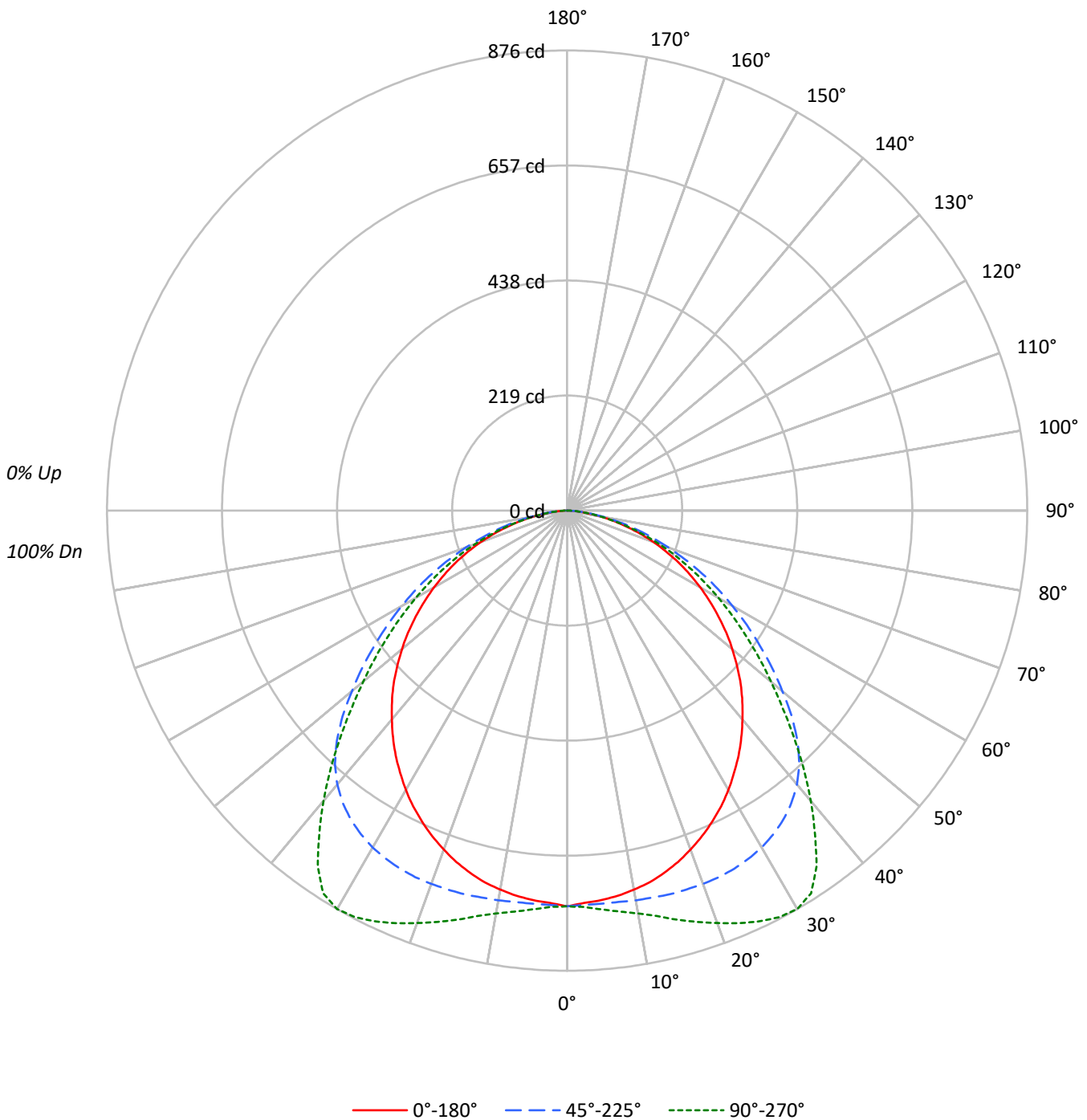
Lumens per Lamp: N/A
Luminaire Lumens: 2316.8 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	91	85	79	97	90	84	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14272	14272	14272
5°	14159	14288	14494
10°	14096	14492	14983
15°	14006	14832	15813
20°	13845	15246	16847
25°	13659	15726	18041
30°	13437	16202	19158
35°	13162	16606	19144
40°	12841	16838	17854
45°	12521	16615	16352
50°	12096	15763	14926
55°	11617	14788	13718
60°	11098	13770	12622
65°	10495	12691	11503
70°	9661	11339	10309
75°	8535	9824	8894
80°	7059	7801	7059
85°	4695	5108	4891

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 16746 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	3.1
10°-20°	215.2	9.3
20°-30°	349.1	15.1
30°-40°	441.8	19.1
40°-50°	442.4	19.1
50°-60°	370.6	16.0
60°-70°	261.2	11.3
70°-80°	134.7	5.8
80°-90°	29.9	1.3
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°	636.3	27.5
0°-40°	1078.1	46.5
0°-60°	1891.1	81.6
0°-90°	2316.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2316.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	744	757	751	755	762	71
15°	714	735	756	787	806	201
25°	653	689	752	826	863	301
35°	569	615	718	811	828	356
45°	467	516	620	625	610	360
55°	352	395	448	429	415	315
65°	234	261	283	266	257	231
75°	117	128	134	124	122	124
85°	22	24	24	24	22	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	753.3	753.3	753.3	753.3	753.3
2.5°	747.4	759.2	751.3	752.3	755.3
5°	744.5	757.2	751.3	755.3	762.1
7.5°	739.6	753.3	751.3	759.2	769.9
10°	732.7	748.4	753.3	767.0	778.8
12.5°	724.9	741.5	754.3	775.8	790.5
15°	714.1	734.7	756.2	786.6	806.2
17.5°	701.4	725.9	756.2	798.4	820.9
20°	686.7	715.1	756.2	808.2	835.6
22.5°	671.0	702.4	755.3	817.0	850.3
25°	653.4	688.6	752.3	825.8	863.0
27.5°	634.8	673.0	747.4	832.6	872.8
30°	614.2	655.3	740.6	835.6	875.7
32.5°	591.7	636.7	730.8	829.7	864.0
35°	569.1	615.2	718.0	811.1	827.7
37.5°	544.6	592.6	701.4	774.8	774.8
40°	519.2	568.2	680.8	724.9	721.9
42.5°	493.7	542.7	654.4	675.9	666.1
45°	467.3	516.2	620.1	625.0	610.3
47.5°	438.9	486.9	579.9	573.1	556.4
50°	410.4	457.5	534.8	523.1	506.4
52.5°	382.0	427.1	491.7	475.1	460.4
55°	351.7	394.8	447.7	429.1	415.3
57.5°	322.3	362.4	405.5	385.0	373.2
60°	292.9	329.1	363.4	343.8	333.1
62.5°	263.5	294.9	323.3	303.7	293.9
65°	234.1	260.6	283.1	265.5	256.6
67.5°	203.8	227.3	242.9	227.3	221.4
70°	174.4	193.0	204.7	191.0	186.1
72.5°	145.0	160.7	168.5	157.7	152.8
75°	116.6	128.3	134.2	124.4	121.5
77.5°	89.1	98.0	100.9	94.0	90.1
80°	64.7	69.6	71.5	66.6	64.7
82.5°	40.2	44.1	46.0	42.1	41.1
85°	21.6	23.5	23.5	23.5	22.5
87.5°	7.8	9.8	9.8	9.8	8.8
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	20.72	22.33	21.08	22.65	22.96	21.23	22.85	21.60	23.16	23.47
	3H	22.29	23.74	22.67	24.07	24.43	22.70	24.16	23.08	24.48	24.84
	4H	22.83	24.19	23.23	24.54	24.92	23.19	24.56	23.59	24.91	25.29
	6H	23.17	24.44	23.58	24.80	25.19	23.50	24.76	23.91	25.12	25.52
	8H	23.25	24.46	23.68	24.85	25.25	23.57	24.77	23.99	25.16	25.56
	12H	23.29	24.45	23.72	24.83	25.26	23.60	24.76	24.03	25.14	25.57
4H	2H	21.47	22.84	21.87	23.19	23.56	21.87	23.24	22.27	23.59	23.96
	3H	23.25	24.39	23.66	24.78	25.18	23.54	24.68	23.95	25.08	25.48
	4H	23.89	24.92	24.33	25.34	25.77	24.13	25.16	24.56	25.57	26.01
	6H	24.34	25.23	24.79	25.67	26.13	24.53	25.43	24.98	25.87	26.32
	8H	24.45	25.28	24.91	25.73	26.19	24.63	25.47	25.09	25.91	26.38
	12H	24.51	25.26	24.99	25.73	26.20	24.69	25.44	25.17	25.92	26.39
8H	4H	24.18	25.01	24.64	25.46	25.92	24.39	25.23	24.85	25.67	26.14
	6H	24.72	25.41	25.21	25.90	26.37	24.87	25.57	25.37	26.06	26.53
	8H	24.87	25.50	25.39	26.00	26.49	25.02	25.64	25.53	26.15	26.64
	12H	24.98	25.53	25.49	26.02	26.58	25.12	25.67	25.63	26.16	26.72
12H	4H	24.19	24.94	24.67	25.42	25.89	24.41	25.16	24.89	25.63	26.10
	6H	24.74	25.37	25.25	25.88	26.36	24.90	25.53	25.41	26.03	26.52
	8H	24.95	25.50	25.46	25.99	26.55	25.09	25.64	25.60	26.13	26.69