

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: P1439703

Luminaire Tested: S122DR-S675D935-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439703
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-S675D935-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

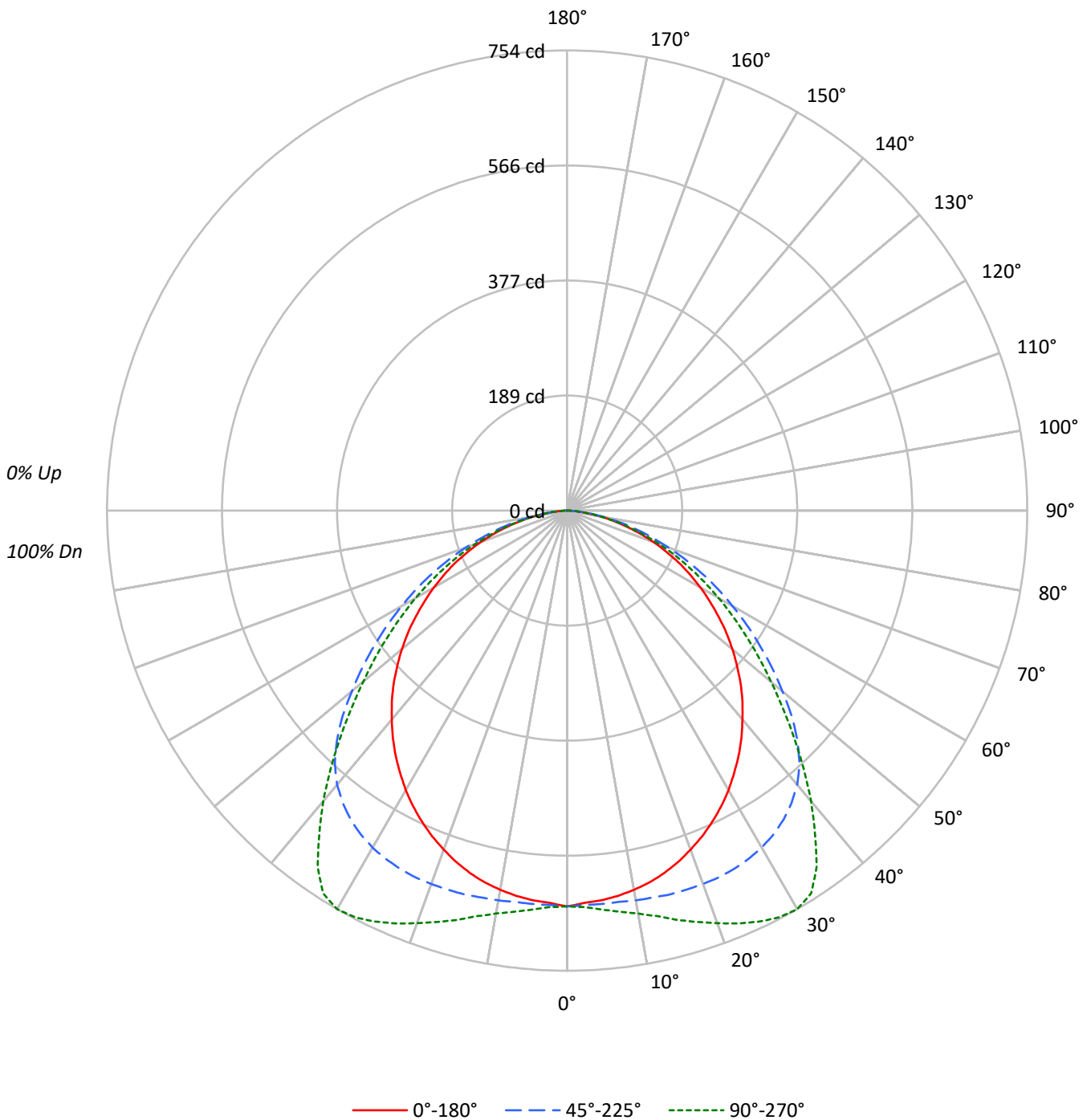
Lumens per Lamp: N/A
Luminaire Lumens: 1994.8 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (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	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°	12288	12288	12288
5°	12191	12303	12480
10°	12137	12478	12899
15°	12059	12771	13614
20°	11920	13127	14504
25°	11761	13540	15532
30°	11568	13949	16495
35°	11333	14298	16484
40°	11055	14498	15373
45°	10779	14305	14077
50°	10416	13573	12851
55°	10002	12730	11812
60°	9556	11856	10867
65°	9038	10925	9907
70°	8315	9766	8874
75°	7349	8455	7657
80°	6077	6721	6077
85°	4043	4391	4217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 14418 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	3.1
10°-20°	185.3	9.3
20°-30°	300.6	15.1
30°-40°	380.4	19.1
40°-50°	380.9	19.1
50°-60°	319.1	16.0
60°-70°	224.9	11.3
70°-80°	116.0	5.8
80°-90°	25.7	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°	547.9	27.5
0°-40°	928.2	46.5
0°-60°	1628.2	81.6
0°-90°	1994.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	641	652	647	650	656	61
15°	615	633	651	677	694	173
25°	563	593	648	711	743	259
35°	490	530	618	698	713	306
45°	402	444	534	538	525	310
55°	303	340	385	369	358	271
65°	202	224	244	229	221	199
75°	100	110	116	107	105	107
85°	19	20	20	20	19	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	648.6	648.6	648.6	648.6	648.6
2.5°	643.5	653.6	646.9	647.7	650.3
5°	641.0	652.0	646.9	650.3	656.2
7.5°	636.8	648.6	646.9	653.6	662.9
10°	630.9	644.4	648.6	660.4	670.5
12.5°	624.1	638.5	649.4	668.0	680.6
15°	614.8	632.6	651.1	677.3	694.1
17.5°	603.9	625.0	651.1	687.4	706.8
20°	591.2	615.7	651.1	695.8	719.4
22.5°	577.7	604.7	650.3	703.4	732.1
25°	562.6	592.9	647.7	711.0	743.0
27.5°	546.5	579.4	643.5	716.9	751.5
30°	528.8	564.2	637.6	719.4	754.0
32.5°	509.4	548.2	629.2	714.4	743.9
35°	490.0	529.7	618.2	698.3	712.7
37.5°	468.9	510.3	603.9	667.1	667.1
40°	447.0	489.2	586.2	624.1	621.6
42.5°	425.1	467.3	563.4	582.0	573.5
45°	402.3	444.5	533.9	538.1	525.4
47.5°	377.8	419.2	499.3	493.4	479.1
50°	353.4	393.9	460.5	450.4	436.0
52.5°	328.9	367.7	423.4	409.1	396.4
55°	302.8	339.9	385.4	369.4	357.6
57.5°	277.5	312.1	349.2	331.5	321.3
60°	252.2	283.4	312.9	296.0	286.8
62.5°	226.9	253.9	278.3	261.5	253.0
65°	201.6	224.3	243.7	228.6	221.0
67.5°	175.4	195.7	209.2	195.7	190.6
70°	150.1	166.2	176.3	164.5	160.2
72.5°	124.8	138.3	145.1	135.8	131.6
75°	100.4	110.5	115.5	107.1	104.6
77.5°	76.8	84.3	86.9	81.0	77.6
80°	55.7	59.9	61.6	57.4	55.7
82.5°	34.6	38.0	39.6	36.3	35.4
85°	18.6	20.2	20.2	20.2	19.4
87.5°	6.7	8.4	8.4	8.4	7.6
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	20.20	21.81	20.57	22.13	22.44	20.71	22.33	21.08	22.64	22.96
	3H	21.77	23.23	22.15	23.55	23.91	22.18	23.64	22.56	23.96	24.32
	4H	22.31	23.67	22.71	24.02	24.40	22.67	24.04	23.07	24.39	24.77
	6H	22.65	23.92	23.06	24.28	24.67	22.98	24.24	23.39	24.61	25.00
	8H	22.73	23.94	23.16	24.33	24.73	23.05	24.26	23.47	24.64	25.04
	12H	22.77	23.93	23.20	24.31	24.74	23.08	24.24	23.51	24.62	25.05
4H	2H	20.96	22.32	21.35	22.67	23.05	21.35	22.72	21.75	23.07	23.44
	3H	22.73	23.87	23.14	24.26	24.66	23.02	24.16	23.43	24.56	24.96
	4H	23.37	24.40	23.81	24.82	25.25	23.61	24.64	24.04	25.05	25.49
	6H	23.82	24.71	24.27	25.15	25.61	24.01	24.91	24.47	25.35	25.80
	8H	23.93	24.76	24.39	25.21	25.67	24.11	24.95	24.57	25.39	25.86
	12H	23.99	24.74	24.47	25.22	25.68	24.17	24.92	24.65	25.40	25.87
8H	4H	23.66	24.49	24.12	24.94	25.40	23.87	24.71	24.33	25.15	25.62
	6H	24.20	24.89	24.69	25.38	25.85	24.36	25.05	24.85	25.54	26.01
	8H	24.35	24.98	24.87	25.48	25.97	24.50	25.12	25.01	25.63	26.12
	12H	24.46	25.01	24.97	25.50	26.06	24.60	25.15	25.11	25.64	26.20
12H	4H	23.67	24.42	24.15	24.90	25.37	23.89	24.64	24.37	25.11	25.58
	6H	24.22	24.85	24.73	25.36	25.84	24.38	25.01	24.89	25.51	26.00
	8H	24.43	24.98	24.94	25.47	26.03	24.57	25.12	25.08	25.61	26.17