

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: P1439705

Luminaire Tested: S122DR-S675D950-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439705
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-S675D950-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

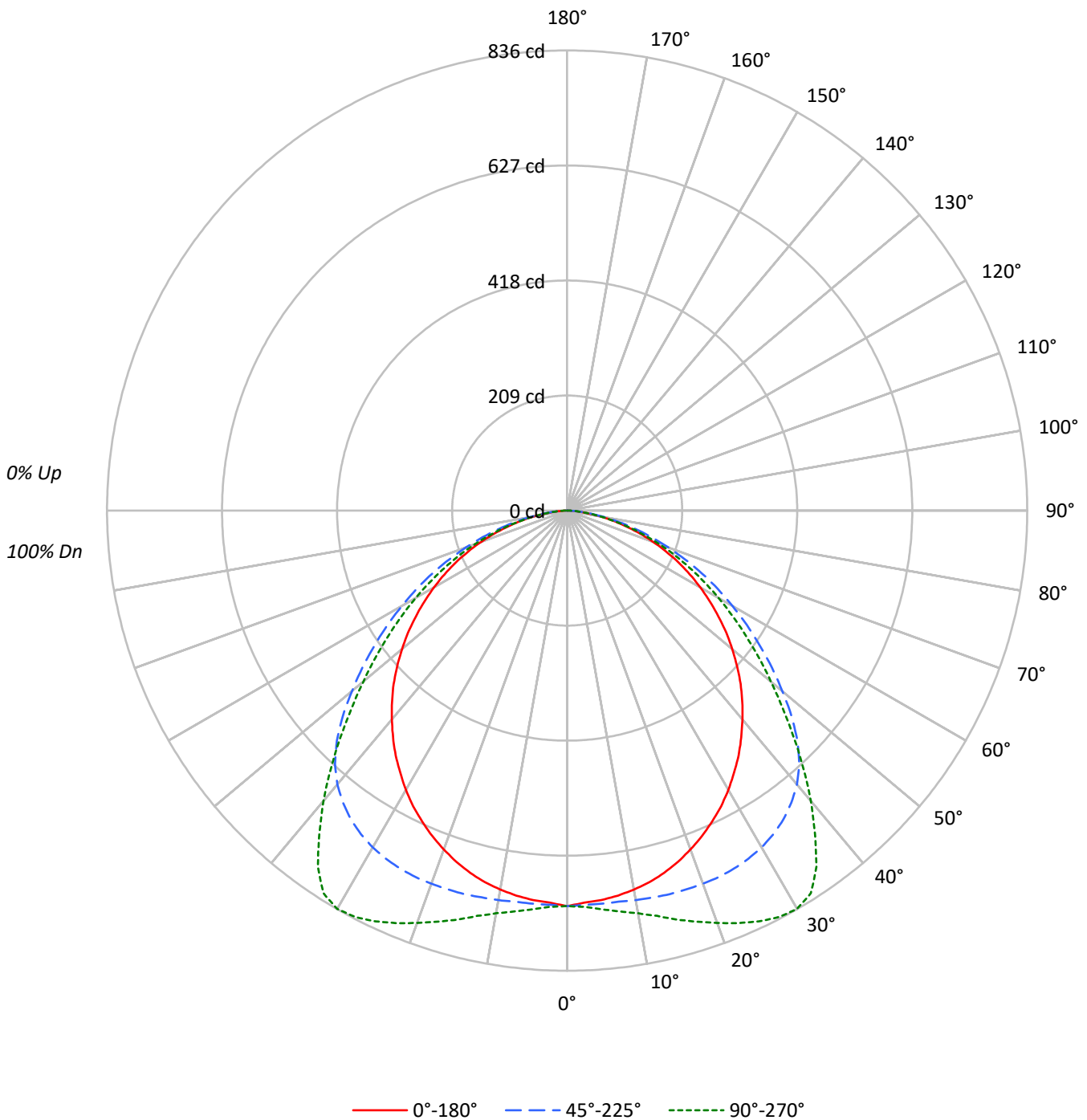
Lumens per Lamp: N/A
Luminaire Lumens: 2210.2 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13614	13614	13614
5°	13507	13632	13828
10°	13447	13825	14292
15°	13363	14150	15085
20°	13208	14545	16071
25°	13030	15003	17211
30°	12818	15456	18278
35°	12559	15843	18265
40°	12250	16063	17033
45°	11945	15848	15599
50°	11542	15038	14239
55°	11082	14108	13087
60°	10587	13137	12038
65°	10010	12109	10974
70°	9212	10818	9838
75°	8140	9370	8484
80°	6732	7441	6732
85°	4478	4869	4674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 15974 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	3.1
10°-20°	205.3	9.3
20°-30°	333.1	15.1
30°-40°	421.4	19.1
40°-50°	422.1	19.1
50°-60°	353.5	16.0
60°-70°	249.1	11.3
70°-80°	128.5	5.8
80°-90°	28.5	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°	607.1	27.5
0°-40°	1028.5	46.5
0°-60°	1804.1	81.6
0°-90°	2210.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2210.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	710	722	717	720	727	67
15°	681	701	721	750	769	192
25°	623	657	718	788	823	287
35°	543	587	685	774	790	339
45°	446	492	592	596	582	343
55°	336	377	427	409	396	300
65°	223	249	270	253	245	221
75°	111	122	128	119	116	118
85°	21	22	22	22	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.6	718.6	718.6	718.6	718.6
2.5°	713.0	724.3	716.8	717.7	720.5
5°	710.2	722.4	716.8	720.5	727.1
7.5°	705.6	718.6	716.8	724.3	734.5
10°	699.0	714.0	718.6	731.7	742.9
12.5°	691.5	707.4	719.6	740.1	754.2
15°	681.3	700.9	721.4	750.4	769.1
17.5°	669.1	692.5	721.4	761.6	783.1
20°	655.1	682.2	721.4	771.0	797.1
22.5°	640.1	670.0	720.5	779.4	811.2
25°	623.3	657.0	717.7	787.8	823.3
27.5°	605.6	642.0	713.0	794.3	832.7
30°	585.9	625.2	706.5	797.1	835.5
32.5°	564.4	607.4	697.1	791.5	824.2
35°	543.0	586.9	685.0	773.8	789.7
37.5°	519.6	565.4	669.1	739.2	739.2
40°	495.3	542.0	649.5	691.5	688.7
42.5°	471.0	517.7	624.3	644.8	635.5
45°	445.8	492.5	591.5	596.2	582.2
47.5°	418.7	464.5	553.2	546.7	530.8
50°	391.6	436.4	510.2	499.0	483.1
52.5°	364.5	407.4	469.1	453.2	439.2
55°	335.5	376.6	427.1	409.3	396.2
57.5°	307.5	345.8	386.9	367.3	356.1
60°	279.4	314.0	346.7	328.0	317.7
62.5°	251.4	281.3	308.4	289.7	280.4
65°	223.3	248.6	270.1	253.3	244.8
67.5°	194.4	216.8	231.8	216.8	211.2
70°	166.3	184.1	195.3	182.2	177.6
72.5°	138.3	153.3	160.7	150.5	145.8
75°	111.2	122.4	128.0	118.7	115.9
77.5°	85.0	93.5	96.3	89.7	86.0
80°	61.7	66.4	68.2	63.5	61.7
82.5°	38.3	42.1	43.9	40.2	39.2
85°	20.6	22.4	22.4	22.4	21.5
87.5°	7.5	9.3	9.3	9.3	8.4
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	20.56	22.17	20.92	22.48	22.80	21.07	22.68	21.44	23.00	23.31
	3H	22.13	23.58	22.51	23.91	24.27	22.54	23.99	22.92	24.32	24.68
	4H	22.66	24.03	23.06	24.38	24.75	23.03	24.40	23.43	24.75	25.12
	6H	23.01	24.27	23.42	24.64	25.03	23.33	24.60	23.74	24.96	25.35
	8H	23.09	24.30	23.51	24.69	25.09	23.40	24.61	23.83	25.00	25.40
	12H	23.13	24.28	23.56	24.66	25.09	23.44	24.59	23.87	24.98	25.41
4H	2H	21.31	22.68	21.71	23.03	23.40	21.71	23.08	22.11	23.42	23.80
	3H	23.08	24.22	23.49	24.62	25.02	23.38	24.52	23.79	24.91	25.31
	4H	23.73	24.76	24.16	25.17	25.61	23.97	25.00	24.40	25.41	25.85
	6H	24.17	25.07	24.63	25.51	25.97	24.37	25.26	24.82	25.70	26.16
	8H	24.28	25.12	24.74	25.56	26.03	24.47	25.30	24.93	25.75	26.21
	12H	24.34	25.09	24.82	25.57	26.04	24.53	25.28	25.01	25.75	26.22
8H	4H	24.01	24.85	24.47	25.29	25.76	24.23	25.07	24.69	25.51	25.97
	6H	24.55	25.25	25.05	25.73	26.21	24.71	25.41	25.21	25.89	26.37
	8H	24.71	25.33	25.22	25.84	26.33	24.86	25.48	25.37	25.99	26.47
	12H	24.82	25.37	25.32	25.86	26.42	24.96	25.51	25.46	26.00	26.56
12H	4H	24.03	24.78	24.51	25.26	25.73	24.24	24.99	24.72	25.47	25.94
	6H	24.58	25.20	25.09	25.71	26.20	24.74	25.36	25.25	25.87	26.36
	8H	24.79	25.34	25.29	25.83	26.39	24.93	25.48	25.43	25.97	26.53