

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: P1439704

Luminaire Tested: S122DR-S675D940-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439704
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-S675D940-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

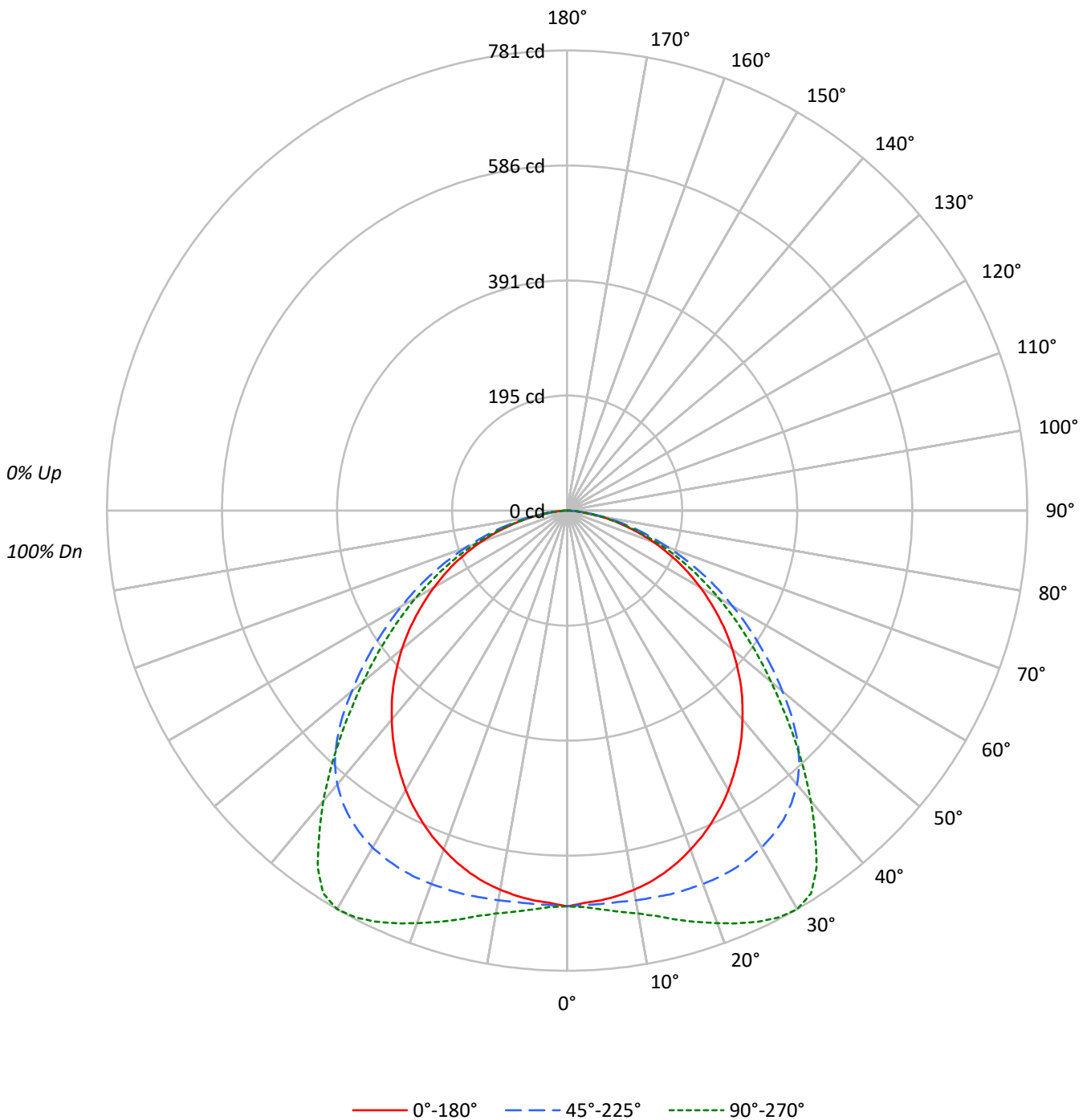
Lumens per Lamp: N/A
Luminaire Lumens: 2066.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	12726	12726	12726
5°	12626	12742	12925
10°	12570	12922	13359
15°	12490	13226	14101
20°	12345	13595	15023
25°	12179	14023	16088
30°	11982	14447	17084
35°	11738	14809	17071
40°	11451	15015	15922
45°	11165	14814	14581
50°	10788	14056	13311
55°	10359	13186	12235
60°	9897	12281	11254
65°	9360	11315	10262
70°	8614	10115	9195
75°	7606	8762	7928
80°	6295	6961	6295
85°	4174	4565	4369

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 14932 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	3.1
10°-20°	191.9	9.3
20°-30°	311.3	15.1
30°-40°	393.9	19.1
40°-50°	394.5	19.1
50°-60°	330.4	16.0
60°-70°	232.9	11.3
70°-80°	120.1	5.8
80°-90°	26.6	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°	567.4	27.5
0°-40°	961.4	46.5
0°-60°	1686.3	81.6
0°-90°	2066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	664	675	670	674	680	63
15°	637	655	674	701	719	180
25°	583	614	671	736	770	268
35°	508	549	640	723	738	317
45°	417	460	553	557	544	321
55°	314	352	399	383	370	281
65°	209	232	252	237	229	206
75°	104	114	120	111	108	111
85°	19	21	21	21	20	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	671.7	671.7	671.7	671.7	671.7
2.5°	666.5	677.0	670.0	670.8	673.5
5°	663.9	675.2	670.0	673.5	679.6
7.5°	659.5	671.7	670.0	677.0	686.6
10°	653.4	667.4	671.7	684.0	694.4
12.5°	646.4	661.2	672.6	691.8	704.9
15°	636.8	655.1	674.3	701.4	718.9
17.5°	625.4	647.3	674.3	711.9	732.0
20°	612.3	637.7	674.3	720.6	745.1
22.5°	598.3	626.3	673.5	728.5	758.2
25°	582.6	614.1	670.8	736.4	769.6
27.5°	566.0	600.1	666.5	742.5	778.3
30°	547.7	584.4	660.4	745.1	780.9
32.5°	527.6	567.8	651.6	739.9	770.4
35°	507.5	548.6	640.3	723.3	738.1
37.5°	485.7	528.5	625.4	690.9	690.9
40°	463.0	506.6	607.1	646.4	643.8
42.5°	440.2	483.9	583.5	602.7	594.0
45°	416.7	460.3	552.9	557.3	544.2
47.5°	391.3	434.1	517.1	511.0	496.1
50°	366.0	407.9	476.9	466.4	451.6
52.5°	340.7	380.8	438.5	423.6	410.5
55°	313.6	352.0	399.2	382.6	370.4
57.5°	287.4	323.2	361.6	343.3	332.8
60°	261.2	293.5	324.1	306.6	297.0
62.5°	235.0	262.9	288.3	270.8	262.0
65°	208.8	232.4	252.4	236.7	228.9
67.5°	181.7	202.7	216.6	202.7	197.4
70°	155.5	172.1	182.6	170.3	166.0
72.5°	129.3	143.3	150.2	140.6	136.3
75°	103.9	114.4	119.7	110.9	108.3
77.5°	79.5	87.3	90.0	83.9	80.4
80°	57.7	62.0	63.8	59.4	57.7
82.5°	35.8	39.3	41.1	37.6	36.7
85°	19.2	21.0	21.0	21.0	20.1
87.5°	7.0	8.7	8.7	8.7	7.9
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	20.32	21.94	20.69	22.25	22.56	20.84	22.45	21.20	22.76	23.08
	3H	21.89	23.35	22.27	23.67	24.03	22.30	23.76	22.68	24.08	24.44
	4H	22.43	23.80	22.83	24.14	24.52	22.80	24.16	23.19	24.51	24.89
	6H	22.77	24.04	23.18	24.40	24.79	23.10	24.36	23.51	24.73	25.12
	8H	22.86	24.06	23.28	24.45	24.85	23.17	24.38	23.60	24.77	25.17
	12H	22.89	24.05	23.32	24.43	24.86	23.20	24.36	23.63	24.74	25.17
4H	2H	21.08	22.44	21.48	22.79	23.17	21.47	22.84	21.87	23.19	23.56
	3H	22.85	23.99	23.26	24.39	24.79	23.14	24.28	23.55	24.68	25.08
	4H	23.50	24.52	23.93	24.94	25.37	23.73	24.76	24.17	25.18	25.61
	6H	23.94	24.83	24.39	25.28	25.73	24.13	25.03	24.59	25.47	25.93
	8H	24.05	24.89	24.51	25.33	25.79	24.23	25.07	24.69	25.51	25.98
	12H	24.11	24.86	24.59	25.34	25.81	24.29	25.04	24.77	25.52	25.99
8H	4H	23.78	24.61	24.24	25.06	25.52	23.99	24.83	24.45	25.27	25.74
	6H	24.32	25.01	24.81	25.50	25.98	24.48	25.17	24.97	25.66	26.14
	8H	24.48	25.10	24.99	25.61	26.09	24.62	25.24	25.13	25.75	26.24
	12H	24.58	25.13	25.09	25.62	26.18	24.72	25.27	25.23	25.76	26.33
12H	4H	23.79	24.54	24.27	25.02	25.49	24.01	24.76	24.49	25.24	25.71
	6H	24.35	24.97	24.86	25.48	25.96	24.50	25.13	25.01	25.64	26.12
	8H	24.55	25.10	25.06	25.59	26.15	24.69	25.24	25.20	25.73	26.30