

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: P1217331

Luminaire Tested: S122DRP-S675D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217331
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2511-596-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DRP-S675D850-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

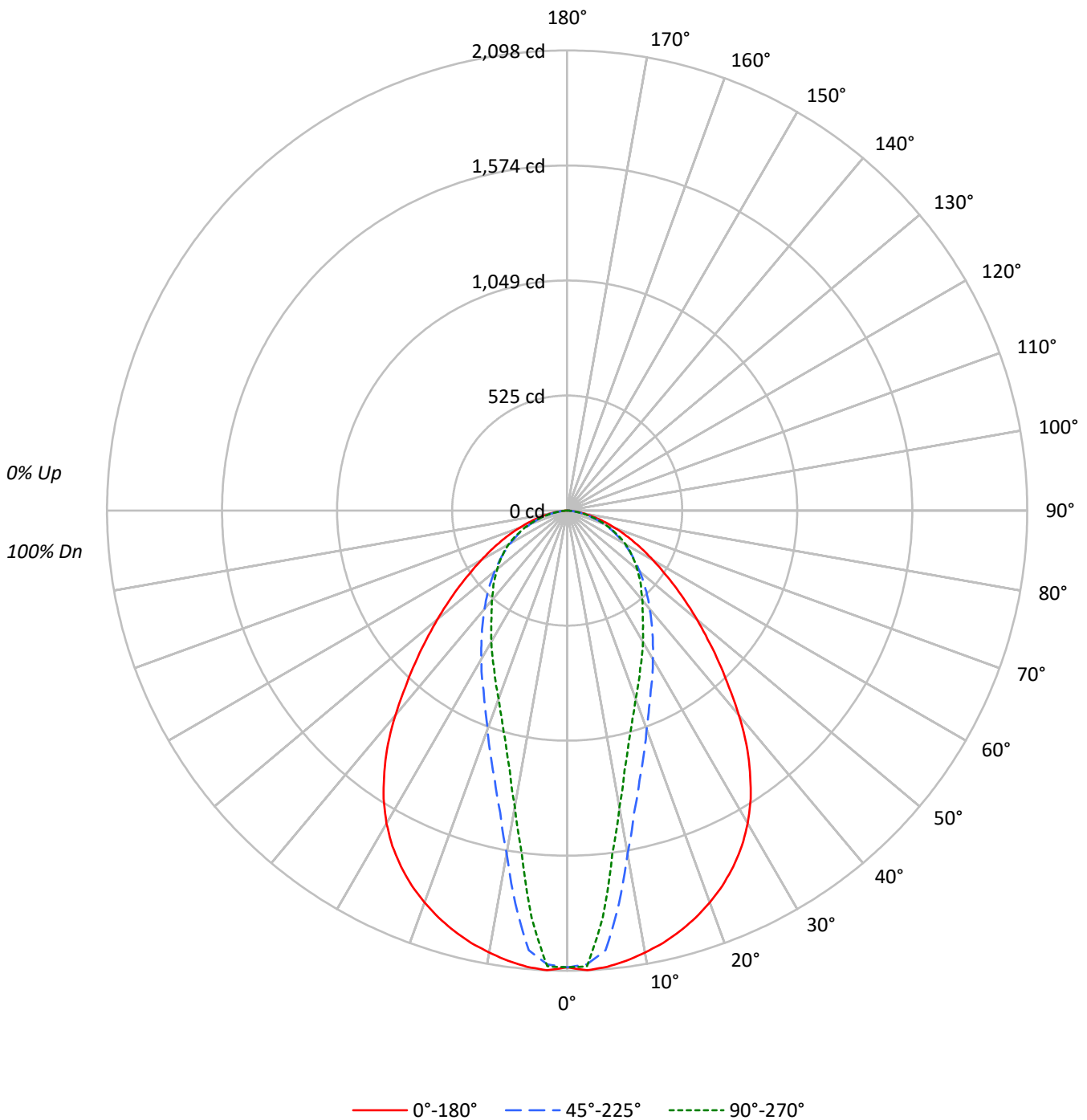
Lumens per Lamp: N/A
Luminaire Lumens: 2798.5 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1217331

CATALOG NUMBER: S122DRP-S675D850-X4F0-XX-UDD-G-W

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	100	100	100	100	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75	75	75	75	75	75	75		
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65		
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57	57	57	57	57	57	57		
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	50	50	50	50	50		
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45		
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41	41	41	41	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37	37	37	37	37		
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34	34	34	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31	31	31	31	31	31	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39455	39455	39455
5°	39710	38263	35433
10°	39354	30554	26416
15°	38950	24973	21328
20°	38330	21378	18398
25°	37448	18873	16510
30°	36029	17112	15139
35°	33617	15679	13919
40°	30146	14481	13192
45°	26225	13536	12719
50°	22766	12712	12264
55°	19700	12020	11951
60°	17082	11318	11648
65°	14951	10616	11006
70°	12879	9749	10109
75°	10739	8586	8909
80°	8412	6994	6754
85°	5195	4478	4478

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.3	6.4
10°-20°	395.4	14.1
20°-30°	485.1	17.3
30°-40°	501.3	17.9
40°-50°	452.7	16.2
50°-60°	366.9	13.1
60°-70°	257.2	9.2
70°-80°	132.7	4.7
80°-90°	28.0	1.0
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°	1059.7	37.9
0°-40°	1561.0	55.8
0°-60°	2380.7	85.1
0°-90°	2798.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2798.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2082	2082	2082	2082	2082	
5°	2088	2084	2012	1922	1863	198
15°	1986	1674	1273	1135	1087	560
25°	1791	1190	903	817	790	823
35°	1454	879	678	620	602	904
45°	979	633	505	477	475	757
55°	596	434	364	360	362	537
65°	334	267	237	242	246	333
75°	147	126	117	121	122	158
85°	24	21	21	21	21	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2082.5	2082.5	2082.5	2082.5	2082.5
2.5°	2097.7	2090.1	2070.6	2089.1	2079.3
5°	2088.0	2083.6	2011.9	1921.8	1863.1
7.5°	2070.6	2055.4	1807.7	1637.1	1579.6
10°	2045.6	1969.6	1588.2	1429.6	1373.1
12.5°	2019.5	1840.3	1411.2	1262.3	1211.3
15°	1985.8	1674.1	1273.2	1135.2	1087.4
17.5°	1946.7	1529.6	1163.5	1030.9	992.9
20°	1901.1	1404.7	1060.3	944.0	912.5
22.5°	1851.1	1299.3	974.5	879.9	850.6
25°	1791.4	1189.6	902.8	816.9	789.8
27.5°	1725.1	1105.9	843.0	762.6	739.8
30°	1646.9	1024.4	782.2	710.5	692.0
32.5°	1557.8	948.4	727.9	664.8	643.1
35°	1453.5	878.9	677.9	620.3	601.8
37.5°	1342.7	810.4	630.1	580.1	564.9
40°	1218.9	750.7	585.5	541.0	533.4
42.5°	1091.8	690.9	545.3	507.3	500.8
45°	978.8	633.3	505.2	476.9	474.7
47.5°	869.1	581.2	468.2	446.5	444.3
50°	772.4	526.9	431.3	417.2	416.1
52.5°	680.1	479.1	396.5	388.9	391.1
55°	596.4	433.5	363.9	359.6	361.8
57.5°	519.3	391.1	331.3	332.4	335.7
60°	450.8	347.6	298.7	303.1	307.4
62.5°	391.1	307.4	267.2	273.8	278.1
65°	333.5	267.2	236.8	242.3	245.5
67.5°	282.5	229.2	206.4	212.9	214.0
70°	232.5	194.5	176.0	182.5	182.5
72.5°	189.0	158.6	146.7	149.9	151.0
75°	146.7	126.0	117.3	120.6	121.7
77.5°	110.8	95.6	89.1	92.3	91.3
80°	77.1	67.4	64.1	63.0	61.9
82.5°	47.8	42.4	39.1	40.2	39.1
85°	23.9	20.6	20.6	20.6	20.6
87.5°	7.6	7.6	7.6	7.6	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	21.27	22.77	21.63	23.08	23.39	19.76	21.26	20.13	21.58	21.89
	3H	22.85	24.20	23.23	24.53	24.89	21.48	22.82	21.85	23.15	23.51
	4H	23.38	24.64	23.78	24.99	25.37	22.06	23.32	22.46	23.67	24.05
	6H	23.70	24.87	24.12	25.24	25.63	22.41	23.57	22.82	23.94	24.33
	8H	23.78	24.89	24.21	25.28	25.68	22.48	23.59	22.91	23.98	24.38
	12H	23.80	24.87	24.24	25.25	25.68	22.51	23.57	22.94	23.96	24.38
4H	2H	21.58	22.84	21.98	23.19	23.57	20.32	21.59	20.72	21.94	22.31
	3H	23.36	24.41	23.77	24.81	25.21	22.24	23.29	22.65	23.69	24.09
	4H	23.99	24.93	24.42	25.35	25.78	22.94	23.88	23.37	24.30	24.73
	6H	24.42	25.24	24.88	25.68	26.14	23.39	24.21	23.85	24.65	25.11
	8H	24.53	25.29	24.99	25.74	26.20	23.49	24.26	23.96	24.70	25.17
	12H	24.58	25.26	25.06	25.74	26.21	23.55	24.23	24.03	24.71	25.18
8H	4H	24.14	24.90	24.60	25.35	25.81	23.18	23.94	23.64	24.39	24.85
	6H	24.64	25.27	25.14	25.77	26.24	23.72	24.35	24.21	24.84	25.32
	8H	24.79	25.35	25.30	25.87	26.35	23.87	24.43	24.38	24.94	25.43
	12H	24.88	25.38	25.39	25.87	26.43	23.96	24.46	24.47	24.95	25.52
12H	4H	24.13	24.82	24.62	25.30	25.77	23.19	23.87	23.67	24.35	24.82
	6H	24.65	25.21	25.16	25.72	26.21	23.74	24.30	24.25	24.81	25.30
	8H	24.83	25.33	25.34	25.82	26.39	23.93	24.43	24.44	24.92	25.48