

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: P1217284

Luminaire Tested: S122DRP-H675D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217284
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-H675D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

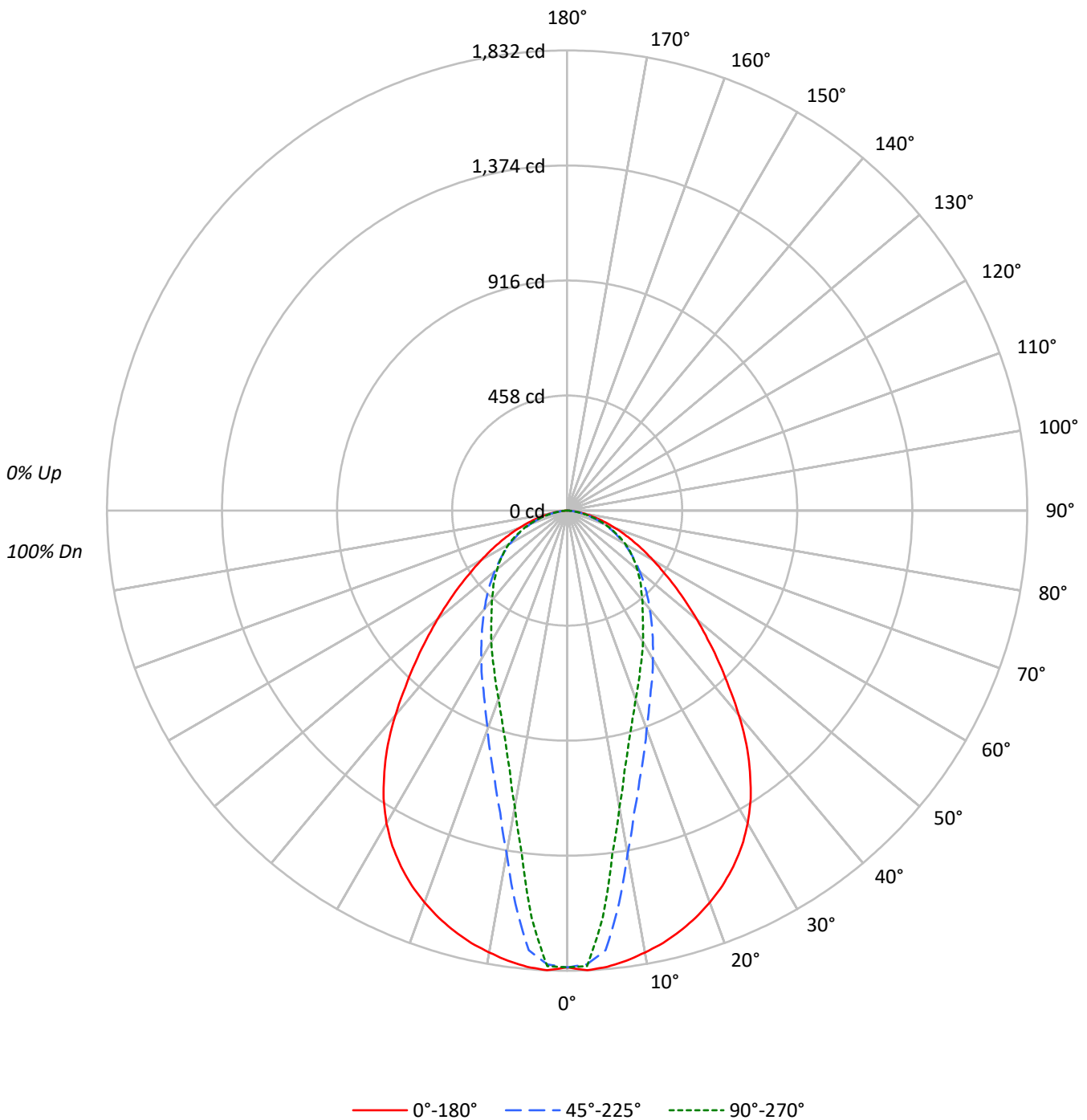
Lumens per Lamp: N/A
Luminaire Lumens: 2443.6 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 23.8
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34453	34453	34453
5°	34674	33411	30939
10°	34363	26679	23067
15°	34011	21807	18624
20°	33469	18666	16065
25°	32699	16479	14416
30°	31461	14942	13220
35°	29355	13690	12154
40°	26322	12645	11520
45°	22900	11819	11106
50°	19878	11100	10708
55°	17203	10497	10435
60°	14918	9886	10174
65°	13054	9271	9611
70°	11245	8514	8830
75°	9377	7496	7774
80°	7354	6110	5903
85°	4543	3913	3913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	6.4
10°-20°	345.2	14.1
20°-30°	423.6	17.3
30°-40°	437.7	17.9
40°-50°	395.3	16.2
50°-60°	320.4	13.1
60°-70°	224.6	9.2
70°-80°	115.8	4.7
80°-90°	24.4	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°	925.4	37.9
0°-40°	1363.1	55.8
0°-60°	2078.8	85.1
0°-90°	2443.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2443.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1823	1819	1757	1678	1627	173
15°	1734	1462	1112	991	950	489
25°	1564	1039	788	713	690	719
35°	1269	767	592	542	526	789
45°	855	553	441	416	414	661
55°	521	378	318	314	316	469
65°	291	233	207	212	214	291
75°	128	110	102	105	106	138
85°	21	18	18	18	18	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.5	1818.5	1818.5	1818.5	1818.5
2.5°	1831.7	1825.1	1808.0	1824.1	1815.6
5°	1823.2	1819.4	1756.8	1678.1	1626.8
7.5°	1808.0	1794.7	1578.5	1429.5	1379.3
10°	1786.2	1719.8	1386.8	1248.3	1199.0
12.5°	1763.4	1606.9	1232.2	1102.3	1057.7
15°	1734.0	1461.8	1111.8	991.3	949.5
17.5°	1699.9	1335.6	1015.9	900.2	867.0
20°	1660.0	1226.5	925.8	824.3	796.8
22.5°	1616.4	1134.5	850.9	768.4	742.7
25°	1564.2	1038.7	788.3	713.3	689.6
27.5°	1506.4	965.7	736.1	665.9	646.0
30°	1438.1	894.5	683.0	620.4	604.3
32.5°	1360.3	828.1	635.6	580.5	561.6
35°	1269.2	767.4	591.9	541.6	525.5
37.5°	1172.5	707.7	550.2	506.5	493.3
40°	1064.3	655.5	511.3	472.4	465.8
42.5°	953.3	603.3	476.2	443.0	437.3
45°	854.7	553.0	441.1	416.4	414.5
47.5°	758.9	507.5	408.8	389.9	388.0
50°	674.4	460.1	376.6	364.3	363.3
52.5°	593.8	418.3	346.2	339.6	341.5
55°	520.8	378.5	317.8	314.0	315.9
57.5°	453.4	341.5	289.3	290.3	293.1
60°	393.7	303.5	260.9	264.7	268.5
62.5°	341.5	268.5	233.4	239.0	242.8
65°	291.2	233.4	206.8	211.5	214.4
67.5°	246.6	200.2	180.2	185.9	186.9
70°	203.0	169.8	153.7	159.4	159.4
72.5°	165.1	138.5	128.1	130.9	131.9
75°	128.1	110.0	102.4	105.3	106.2
77.5°	96.8	83.5	77.8	80.6	79.7
80°	67.4	58.8	56.0	55.0	54.1
82.5°	41.7	37.0	34.1	35.1	34.1
85°	20.9	18.0	18.0	18.0	18.0
87.5°	6.6	6.6	6.6	6.6	6.6
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	20.80	22.30	21.16	22.61	22.92	19.29	20.79	19.66	21.11	21.42
	3H	22.38	23.73	22.76	24.06	24.42	21.01	22.35	21.38	22.68	23.04
	4H	22.91	24.17	23.31	24.52	24.90	21.59	22.85	21.99	23.20	23.58
	6H	23.23	24.40	23.65	24.77	25.16	21.93	23.10	22.35	23.47	23.86
	8H	23.31	24.42	23.73	24.81	25.21	22.01	23.12	22.44	23.51	23.91
	12H	23.33	24.40	23.76	24.78	25.21	22.04	23.10	22.47	23.48	23.91
4H	2H	21.10	22.37	21.50	22.72	23.09	19.85	21.12	20.25	21.47	21.84
	3H	22.89	23.93	23.30	24.33	24.74	21.77	22.82	22.18	23.22	23.62
	4H	23.52	24.46	23.95	24.87	25.31	22.47	23.41	22.90	23.83	24.26
	6H	23.95	24.77	24.41	25.21	25.67	22.92	23.74	23.38	24.18	24.64
	8H	24.06	24.82	24.52	25.27	25.73	23.02	23.79	23.48	24.23	24.70
	12H	24.11	24.79	24.59	25.27	25.74	23.07	23.76	23.56	24.24	24.71
8H	4H	23.66	24.43	24.13	24.87	25.34	22.71	23.47	23.17	23.92	24.38
	6H	24.17	24.80	24.67	25.29	25.77	23.24	23.88	23.74	24.37	24.84
	8H	24.32	24.88	24.83	25.39	25.88	23.39	23.96	23.91	24.47	24.96
	12H	24.41	24.91	24.92	25.40	25.96	23.49	23.99	24.00	24.48	25.05
12H	4H	23.66	24.35	24.15	24.82	25.30	22.72	23.40	23.20	23.88	24.35
	6H	24.17	24.74	24.69	25.25	25.74	23.27	23.83	23.78	24.34	24.83
	8H	24.36	24.86	24.87	25.35	25.91	23.46	23.95	23.97	24.45	25.01