

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: P1217338

Luminaire Tested: S122DRP-S865D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217338
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-S865D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

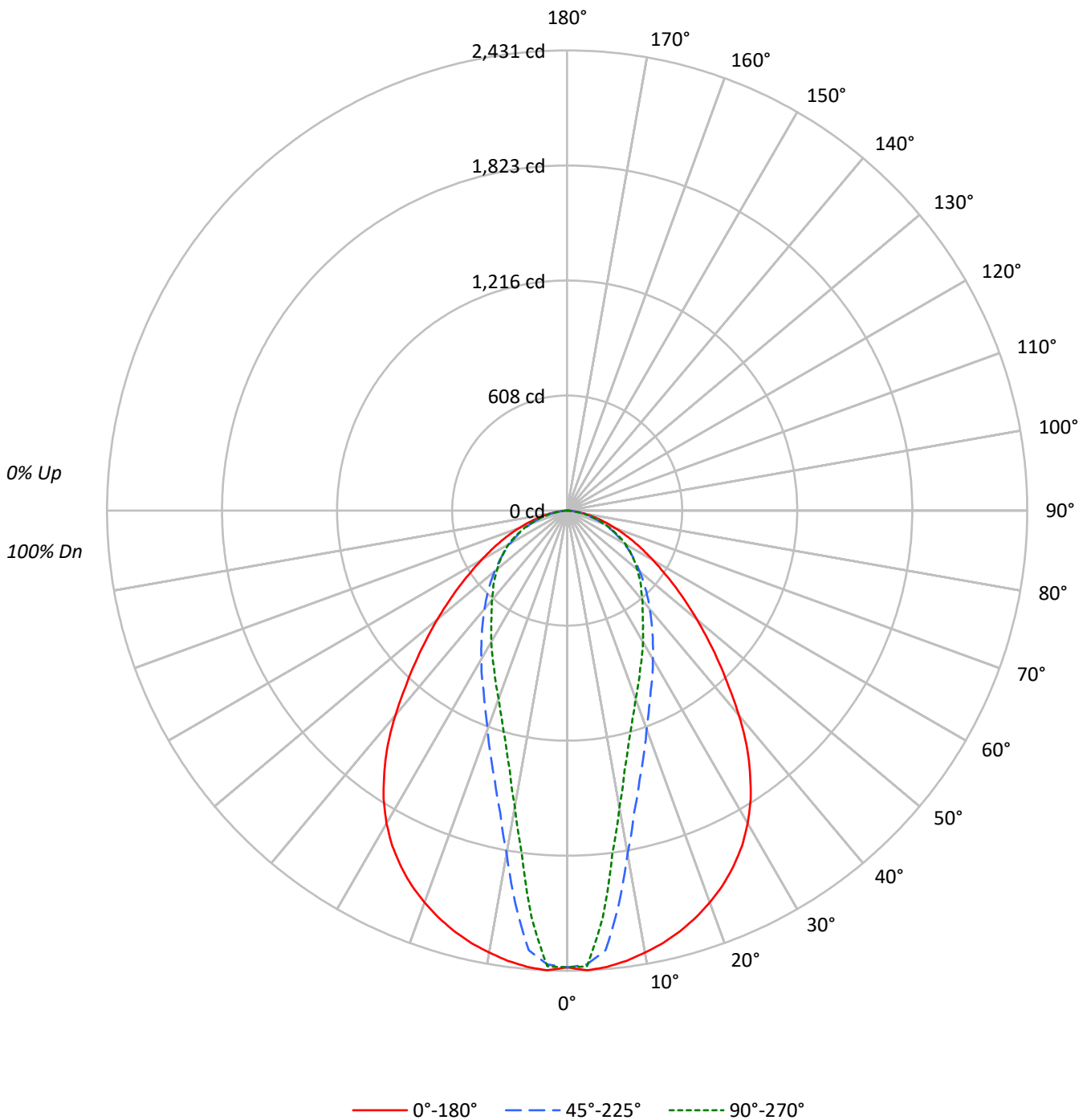
Lumens per Lamp: N/A
Luminaire Lumens: 3242.8 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	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	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°	45720	45720	45720
5°	46015	44337	41058
10°	45602	35406	30610
15°	45134	28937	24716
20°	44414	24771	21319
25°	43393	21868	19132
30°	41750	19829	17543
35°	38956	18168	16130
40°	34932	16781	15287
45°	30389	15685	14739
50°	26380	14731	14210
55°	22828	13929	13847
60°	19795	13118	13497
65°	17327	12301	12754
70°	14923	11295	11716
75°	12437	9955	10321
80°	9754	8106	7834
85°	6021	5195	5195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30389 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.8	6.4
10°-20°	458.1	14.1
20°-30°	562.1	17.3
30°-40°	580.9	17.9
40°-50°	524.6	16.2
50°-60°	425.1	13.1
60°-70°	298.0	9.2
70°-80°	153.7	4.7
80°-90°	32.4	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°	1228.0	37.9
0°-40°	1808.9	55.8
0°-60°	2758.6	85.1
0°-90°	3242.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3242.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2413	2413	2413	2413	2413	
5°	2420	2414	2331	2227	2159	229
15°	2301	1940	1475	1316	1260	648
25°	2076	1378	1046	947	915	954
35°	1684	1018	786	719	697	1047
45°	1134	734	585	553	550	877
55°	691	502	422	417	419	622
65°	386	310	274	281	284	386
75°	170	146	136	140	141	184
85°	28	24	24	24	24	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2413.2	2413.2	2413.2	2413.2	2413.2
2.5°	2430.8	2422.0	2399.3	2420.7	2409.4
5°	2419.5	2414.4	2331.3	2226.9	2158.9
7.5°	2399.3	2381.7	2094.7	1897.0	1830.3
10°	2370.4	2282.2	1840.4	1656.6	1591.1
12.5°	2340.1	2132.4	1635.2	1462.7	1403.6
15°	2301.1	1939.8	1475.3	1315.5	1260.1
17.5°	2255.8	1772.4	1348.2	1194.6	1150.6
20°	2202.9	1627.7	1228.6	1093.9	1057.4
22.5°	2145.0	1505.5	1129.2	1019.6	985.7
25°	2075.8	1378.4	1046.1	946.6	915.2
27.5°	1999.0	1281.5	976.8	883.7	857.3
30°	1908.4	1187.1	906.4	823.3	801.9
32.5°	1805.1	1098.9	843.4	770.4	745.2
35°	1684.3	1018.4	785.5	718.8	697.4
37.5°	1555.9	939.1	730.1	672.2	654.6
40°	1412.4	869.8	678.5	626.9	618.1
42.5°	1265.1	800.6	631.9	587.9	580.3
45°	1134.2	733.9	585.4	552.6	550.1
47.5°	1007.1	673.5	542.6	517.4	514.9
50°	895.0	610.5	499.8	483.4	482.1
52.5°	788.0	555.1	459.5	450.7	453.2
55°	691.1	502.3	421.7	416.7	419.2
57.5°	601.7	453.2	383.9	385.2	389.0
60°	522.4	402.8	346.2	351.2	356.2
62.5°	453.2	356.2	309.7	317.2	322.3
65°	386.5	309.7	274.4	280.7	284.5
67.5°	327.3	265.6	239.2	246.7	248.0
70°	269.4	225.3	203.9	211.5	211.5
72.5°	219.0	183.8	169.9	173.7	175.0
75°	169.9	146.0	136.0	139.7	141.0
77.5°	128.4	110.8	103.2	107.0	105.7
80°	89.4	78.0	74.3	73.0	71.8
82.5°	55.4	49.1	45.3	46.6	45.3
85°	27.7	23.9	23.9	23.9	23.9
87.5°	8.8	8.8	8.8	8.8	8.8
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	21.78	23.28	22.14	23.59	23.91	20.28	21.78	20.64	22.09	22.40
	3H	23.37	24.71	23.74	25.04	25.40	21.99	23.34	22.37	23.66	24.03
	4H	23.89	25.15	24.29	25.50	25.88	22.57	23.83	22.97	24.18	24.56
	6H	24.22	25.38	24.63	25.75	26.14	22.92	24.08	23.33	24.45	24.84
	8H	24.29	25.40	24.72	25.79	26.19	22.99	24.10	23.42	24.49	24.89
	12H	24.32	25.38	24.75	25.76	26.19	23.02	24.09	23.45	24.47	24.90
4H	2H	22.09	23.35	22.49	23.70	24.08	20.84	22.10	21.24	22.45	22.83
	3H	23.87	24.92	24.28	25.32	25.72	22.75	23.80	23.16	24.20	24.60
	4H	24.50	25.44	24.93	25.86	26.30	23.45	24.39	23.88	24.81	25.25
	6H	24.93	25.75	25.39	26.20	26.66	23.90	24.72	24.36	25.16	25.62
	8H	25.04	25.80	25.50	26.25	26.72	24.00	24.77	24.47	25.21	25.68
	12H	25.09	25.77	25.57	26.25	26.72	24.06	24.74	24.54	25.22	25.69
8H	4H	24.65	25.41	25.11	25.86	26.33	23.69	24.45	24.15	24.90	25.37
	6H	25.15	25.79	25.65	26.28	26.75	24.23	24.86	24.72	25.35	25.83
	8H	25.30	25.87	25.82	26.38	26.87	24.38	24.94	24.89	25.45	25.94
	12H	25.39	25.89	25.90	26.38	26.95	24.47	24.97	24.98	25.46	26.03
12H	4H	24.65	25.33	25.13	25.81	26.28	23.70	24.38	24.18	24.86	25.33
	6H	25.16	25.72	25.67	26.23	26.72	24.25	24.81	24.76	25.32	25.81
	8H	25.34	25.84	25.85	26.33	26.90	24.44	24.94	24.95	25.43	26.00