

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: P1217337

Luminaire Tested: S122DRP-S865D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217337
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-S865D830-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

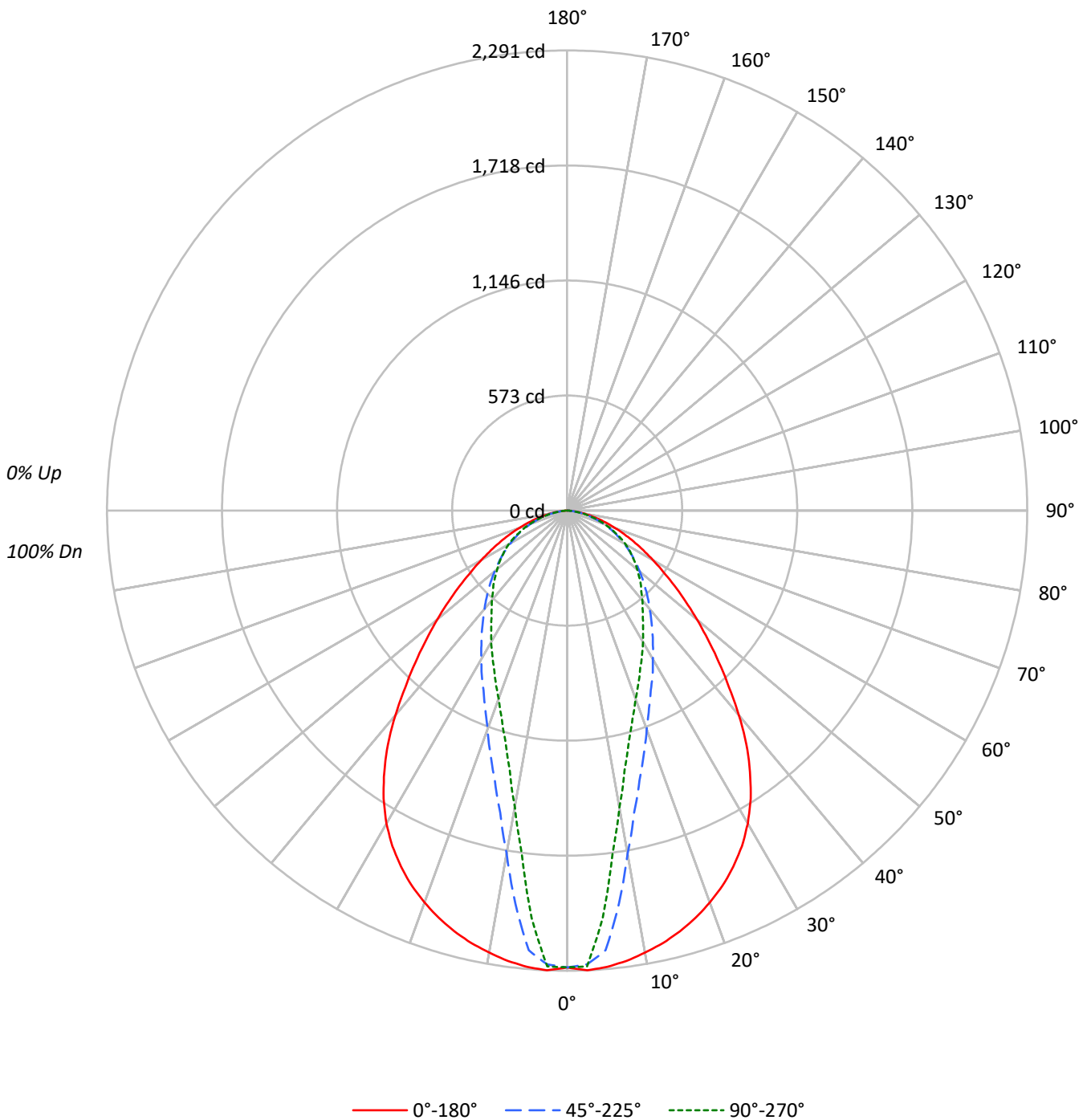
Lumens per Lamp: N/A
Luminaire Lumens: 3056.4 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	43092	43092	43092
5°	43369	41791	38698
10°	42982	33372	28851
15°	42541	27275	23296
20°	41864	23347	20095
25°	40900	20612	18032
30°	39350	18689	16534
35°	36717	17124	15202
40°	32923	15816	14409
45°	28642	14782	13892
50°	24865	13882	13393
55°	21516	13130	13051
60°	18658	12364	12724
65°	16331	11597	12019
70°	14065	10647	11040
75°	11727	9377	9728
80°	9187	7637	7375
85°	5674	4891	4891

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 28642 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	6.4
10°-20°	431.8	14.1
20°-30°	529.8	17.3
30°-40°	547.5	17.9
40°-50°	494.5	16.2
50°-60°	400.7	13.1
60°-70°	280.9	9.2
70°-80°	144.9	4.7
80°-90°	30.6	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°	1157.4	37.9
0°-40°	1704.9	55.8
0°-60°	2600.1	85.1
0°-90°	3056.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3056.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2274	2274	2274	2274	2274	
5°	2280	2276	2197	2099	2035	216
15°	2169	1828	1391	1240	1188	611
25°	1956	1299	986	892	863	899
35°	1588	960	740	678	657	987
45°	1069	692	552	521	518	827
55°	651	473	398	393	395	587
65°	364	292	259	265	268	364
75°	160	138	128	132	133	173
85°	26	22	22	22	22	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2274.5	2274.5	2274.5	2274.5	2274.5
2.5°	2291.1	2282.8	2261.5	2281.6	2270.9
5°	2280.4	2275.7	2197.4	2098.9	2034.8
7.5°	2261.5	2244.8	1974.3	1788.0	1725.2
10°	2234.2	2151.1	1734.7	1561.4	1499.7
12.5°	2205.7	2009.9	1541.3	1378.7	1322.9
15°	2168.9	1828.4	1390.6	1239.9	1187.7
17.5°	2126.2	1670.6	1270.7	1126.0	1084.5
20°	2076.4	1534.1	1158.0	1031.1	996.7
22.5°	2021.8	1419.0	1064.3	961.1	929.0
25°	1956.5	1299.2	986.0	892.2	862.6
27.5°	1884.1	1207.8	920.7	832.9	808.0
30°	1798.7	1118.9	854.3	776.0	755.8
32.5°	1701.4	1035.8	794.9	726.1	702.4
35°	1587.5	959.9	740.4	677.5	657.3
37.5°	1466.5	885.1	688.2	633.6	617.0
40°	1331.2	819.9	639.5	590.9	582.6
42.5°	1192.4	754.6	595.6	554.1	547.0
45°	1069.0	691.7	551.7	520.9	518.5
47.5°	949.2	634.8	511.4	487.6	485.3
50°	843.6	575.4	471.0	455.6	454.4
52.5°	742.7	523.2	433.1	424.8	427.1
55°	651.4	473.4	397.5	392.7	395.1
57.5°	567.1	427.1	361.9	363.1	366.6
60°	492.4	379.7	326.3	331.0	335.8
62.5°	427.1	335.8	291.9	299.0	303.7
65°	364.3	291.9	258.7	264.6	268.1
67.5°	308.5	250.3	225.4	232.6	233.7
70°	253.9	212.4	192.2	199.3	199.3
72.5°	206.4	173.2	160.2	163.7	164.9
75°	160.2	137.6	128.1	131.7	132.9
77.5°	121.0	104.4	97.3	100.9	99.7
80°	84.2	73.6	70.0	68.8	67.6
82.5°	52.2	46.3	42.7	43.9	42.7
85°	26.1	22.5	22.5	22.5	22.5
87.5°	8.3	8.3	8.3	8.3	8.3
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	21.57	23.07	21.94	23.39	23.70	20.07	21.57	20.44	21.88	22.20
	3H	23.16	24.51	23.54	24.83	25.20	21.78	23.13	22.16	23.46	23.82
	4H	23.68	24.95	24.08	25.29	25.67	22.36	23.63	22.76	23.98	24.35
	6H	24.01	25.18	24.42	25.54	25.93	22.71	23.88	23.12	24.24	24.64
	8H	24.08	25.19	24.51	25.58	25.99	22.79	23.90	23.21	24.29	24.69
	12H	24.11	25.17	24.54	25.55	25.98	22.82	23.88	23.25	24.26	24.69
4H	2H	21.88	23.14	22.28	23.49	23.87	20.63	21.89	21.03	22.24	22.62
	3H	23.66	24.71	24.07	25.11	25.51	22.55	23.60	22.96	24.00	24.40
	4H	24.29	25.24	24.72	25.65	26.09	23.24	24.19	23.68	24.60	25.04
	6H	24.73	25.55	25.18	25.99	26.45	23.70	24.51	24.15	24.96	25.42
	8H	24.83	25.60	25.30	26.04	26.51	23.80	24.56	24.26	25.01	25.48
	12H	24.88	25.57	25.37	26.05	26.52	23.85	24.53	24.33	25.01	25.48
8H	4H	24.44	25.21	24.91	25.65	26.12	23.48	24.25	23.95	24.69	25.16
	6H	24.95	25.58	25.45	26.07	26.55	24.02	24.65	24.52	25.14	25.62
	8H	25.10	25.66	25.61	26.17	26.66	24.17	24.74	24.69	25.25	25.74
	12H	25.18	25.68	25.70	26.17	26.74	24.27	24.76	24.78	25.26	25.82
12H	4H	24.44	25.12	24.92	25.60	26.07	23.50	24.18	23.98	24.66	25.13
	6H	24.95	25.52	25.47	26.03	26.52	24.04	24.61	24.56	25.12	25.61
	8H	25.14	25.63	25.65	26.13	26.69	24.23	24.73	24.74	25.22	25.79