

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: P1217341

Luminaire Tested: S122DRP-S865D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217341
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-S865D927-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

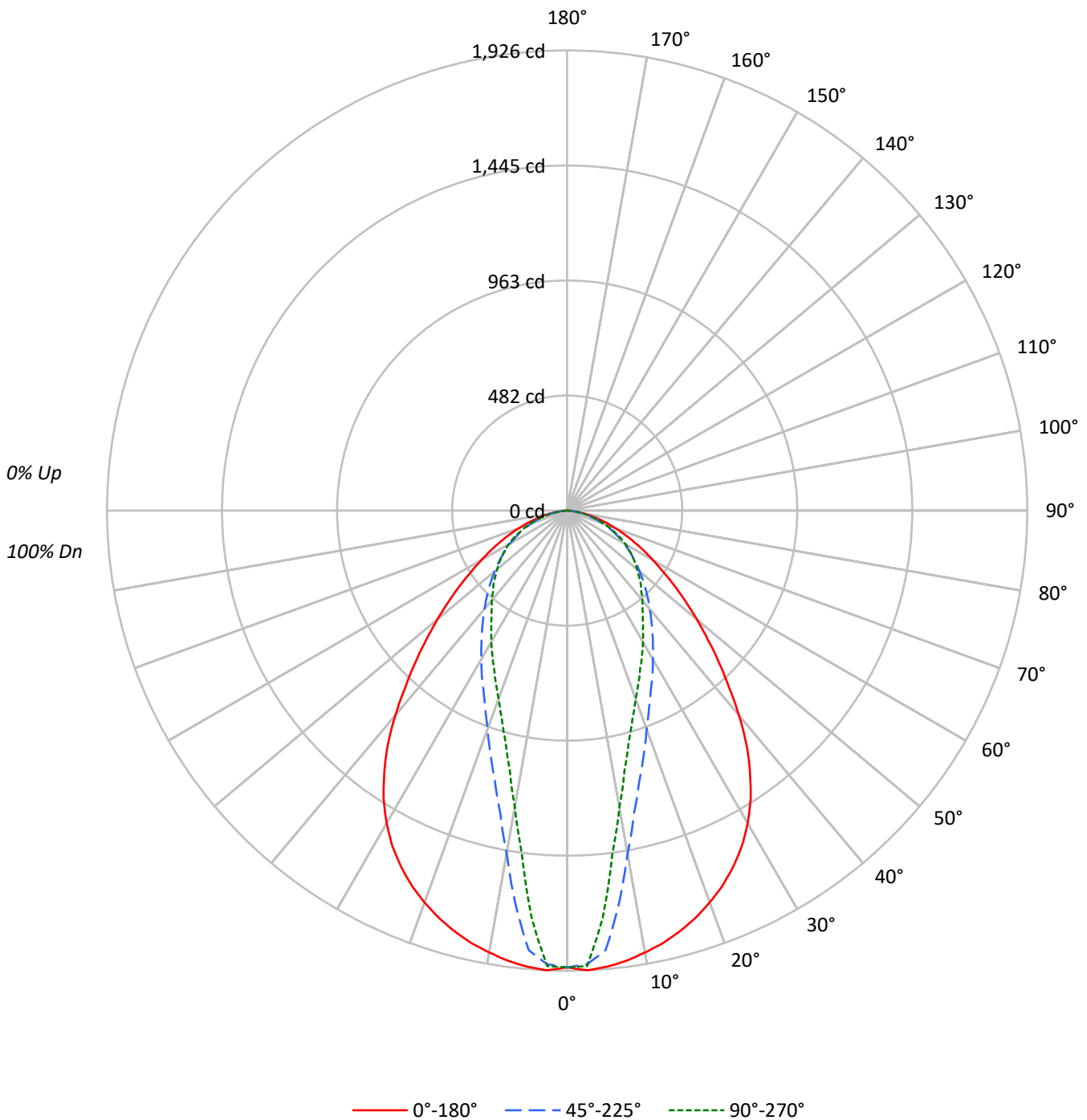
Lumens per Lamp: N/A
Luminaire Lumens: 2568.9 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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

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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°	36219	36219	36219
5°	36450	35123	32525
10°	36125	28047	24250
15°	35755	22923	19579
20°	35184	19623	16890
25°	34375	17324	15156
30°	33073	15708	13896
35°	30861	14393	12779
40°	27673	13293	12109
45°	24074	12424	11677
50°	20897	11669	11256
55°	18085	11036	10970
60°	15680	10390	10693
65°	13722	9746	10105
70°	11821	8946	9278
75°	9853	7884	8177
80°	7725	6415	6197
85°	4761	4108	4108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24074 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.6	6.4
10°-20°	362.9	14.1
20°-30°	445.3	17.3
30°-40°	460.2	17.9
40°-50°	415.6	16.2
50°-60°	336.8	13.1
60°-70°	236.1	9.2
70°-80°	121.8	4.7
80°-90°	25.7	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°	972.8	37.9
0°-40°	1433.0	55.8
0°-60°	2185.3	85.1
0°-90°	2568.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2568.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1917	1913	1847	1764	1710	182
15°	1823	1537	1169	1042	998	514
25°	1644	1092	829	750	725	755
35°	1334	807	622	569	552	829
45°	898	581	464	438	436	695
55°	548	398	334	330	332	493
65°	306	245	217	222	225	306
75°	135	116	108	111	112	145
85°	22	19	19	19	19	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1911.7	1911.7	1911.7	1911.7	1911.7
2.5°	1925.6	1918.6	1900.7	1917.6	1908.7
5°	1916.6	1912.7	1846.8	1764.1	1710.2
7.5°	1900.7	1886.7	1659.4	1502.8	1449.9
10°	1877.8	1807.9	1457.9	1312.3	1260.5
12.5°	1853.8	1689.3	1295.4	1158.8	1111.9
15°	1822.9	1536.7	1168.7	1042.1	998.2
17.5°	1787.0	1404.1	1068.0	946.4	911.5
20°	1745.1	1289.4	973.3	866.6	837.7
22.5°	1699.3	1192.7	894.5	807.7	780.8
25°	1644.4	1091.9	828.7	749.9	725.0
27.5°	1583.6	1015.2	773.8	700.0	679.1
30°	1511.8	940.4	718.0	652.2	635.2
32.5°	1430.0	870.6	668.1	610.3	590.4
35°	1334.3	806.7	622.3	569.4	552.5
37.5°	1232.6	743.9	578.4	532.5	518.6
40°	1118.9	689.1	537.5	496.6	489.6
42.5°	1002.2	634.2	500.6	465.7	459.7
45°	898.5	581.4	463.7	437.8	435.8
47.5°	797.8	533.5	429.8	409.9	407.9
50°	709.0	483.6	395.9	382.9	381.9
52.5°	624.3	439.8	364.0	357.0	359.0
55°	547.5	397.9	334.1	330.1	332.1
57.5°	476.7	359.0	304.2	305.1	308.1
60°	413.8	319.1	274.2	278.2	282.2
62.5°	359.0	282.2	245.3	251.3	255.3
65°	306.1	245.3	217.4	222.4	225.4
67.5°	259.3	210.4	189.5	195.5	196.5
70°	213.4	178.5	161.5	167.5	167.5
72.5°	173.5	145.6	134.6	137.6	138.6
75°	134.6	115.7	107.7	110.7	111.7
77.5°	101.7	87.8	81.8	84.8	83.8
80°	70.8	61.8	58.8	57.8	56.8
82.5°	43.9	38.9	35.9	36.9	35.9
85°	21.9	18.9	18.9	18.9	18.9
87.5°	7.0	7.0	7.0	7.0	7.0
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	20.97	22.47	21.33	22.78	23.10	19.47	20.97	19.83	21.28	21.59
	3H	22.56	23.90	22.93	24.23	24.59	21.18	22.53	21.56	22.85	23.22
	4H	23.08	24.34	23.48	24.69	25.07	21.76	23.02	22.16	23.37	23.75
	6H	23.41	24.57	23.82	24.94	25.33	22.11	23.27	22.52	23.64	24.03
	8H	23.48	24.59	23.91	24.98	25.38	22.18	23.29	22.61	23.68	24.08
	12H	23.51	24.57	23.94	24.95	25.38	22.21	23.28	22.64	23.66	24.09
4H	2H	21.28	22.54	21.68	22.89	23.27	20.03	21.29	20.43	21.64	22.02
	3H	23.06	24.11	23.47	24.51	24.91	21.94	22.99	22.35	23.39	23.79
	4H	23.69	24.63	24.12	25.05	25.49	22.64	23.58	23.07	24.00	24.44
	6H	24.12	24.94	24.58	25.39	25.85	23.09	23.91	23.55	24.35	24.81
	8H	24.23	24.99	24.69	25.44	25.91	23.19	23.96	23.66	24.40	24.87
	12H	24.28	24.96	24.76	25.44	25.91	23.25	23.93	23.73	24.41	24.88
8H	4H	23.84	24.60	24.30	25.05	25.52	22.88	23.64	23.34	24.09	24.56
	6H	24.35	24.98	24.84	25.47	25.95	23.42	24.05	23.91	24.54	25.02
	8H	24.49	25.06	25.01	25.57	26.06	23.57	24.13	24.08	24.64	25.13
	12H	24.58	25.08	25.09	25.57	26.14	23.66	24.16	24.17	24.65	25.22
12H	4H	23.84	24.52	24.32	25.00	25.47	22.89	23.57	23.37	24.05	24.52
	6H	24.35	24.91	24.86	25.42	25.91	23.44	24.00	23.95	24.51	25.00
	8H	24.53	25.03	25.04	25.52	26.09	23.63	24.13	24.14	24.62	25.19