

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: P1217296

Luminaire Tested: S122DRP-H865D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217296
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-H865D927-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

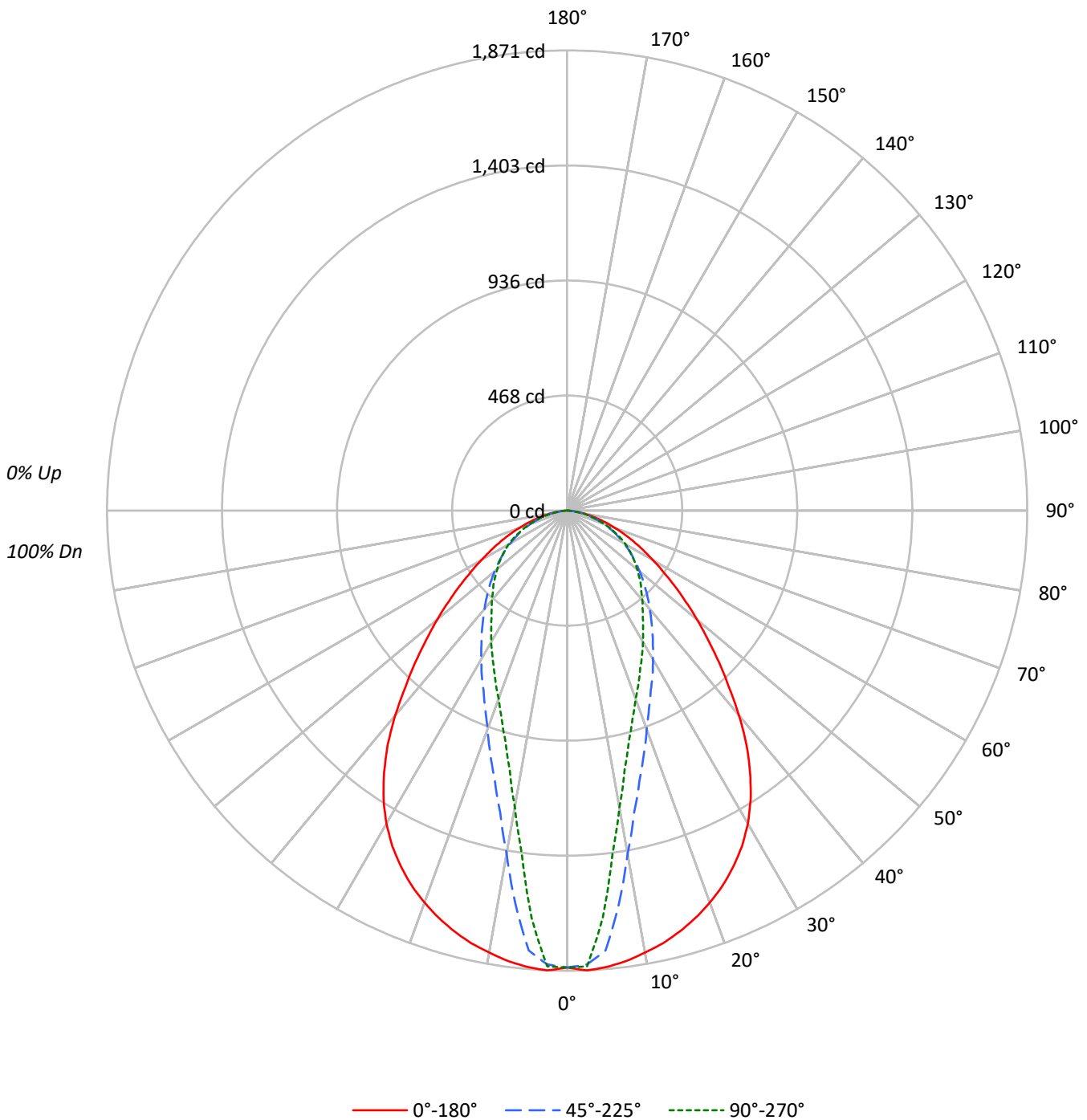
Lumens per Lamp: N/A
Luminaire Lumens: 2496.5 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35198	35198	35198
5°	35423	34134	31608
10°	35106	27257	23567
15°	34747	22278	19028
20°	34192	19069	16414
25°	33407	16834	14727
30°	32141	15266	13505
35°	29991	13986	12418
40°	26891	12918	11768
45°	23396	12073	11347
50°	20308	11339	10941
55°	17573	10725	10659
60°	15240	10098	10394
65°	13337	9473	9818
70°	11489	8697	9018
75°	9575	7664	7942
80°	7506	6241	6023
85°	4630	4000	4000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.9	6.4
10°-20°	352.7	14.1
20°-30°	432.7	17.3
30°-40°	447.2	17.9
40°-50°	403.9	16.2
50°-60°	327.3	13.1
60°-70°	229.4	9.2
70°-80°	118.3	4.7
80°-90°	25.0	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°	945.4	37.9
0°-40°	1392.6	55.8
0°-60°	2123.7	85.1
0°-90°	2496.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2496.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1863	1859	1795	1714	1662	177
15°	1772	1493	1136	1013	970	499
25°	1598	1061	805	729	704	734
35°	1297	784	605	553	537	806
45°	873	565	451	425	424	675
55°	532	387	325	321	323	479
65°	298	238	211	216	219	297
75°	131	112	105	108	108	141
85°	21	18	18	18	18	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1857.8	1857.8	1857.8	1857.8	1857.8
2.5°	1871.3	1864.6	1847.1	1863.6	1854.9
5°	1862.6	1858.7	1794.8	1714.4	1662.0
7.5°	1847.1	1833.6	1612.6	1460.4	1409.1
10°	1824.8	1757.0	1416.8	1275.3	1225.0
12.5°	1801.6	1641.7	1258.9	1126.1	1080.6
15°	1771.5	1493.4	1135.8	1012.7	970.1
17.5°	1736.6	1364.5	1037.9	919.7	885.8
20°	1695.9	1253.1	945.8	842.2	814.1
22.5°	1651.4	1159.1	869.3	785.0	758.8
25°	1598.1	1061.2	805.3	728.8	704.5
27.5°	1538.9	986.6	752.0	680.3	660.0
30°	1469.2	913.9	697.8	633.8	617.3
32.5°	1389.7	846.0	649.3	593.1	573.7
35°	1296.7	784.0	604.7	553.4	536.9
37.5°	1197.8	723.0	562.1	517.5	503.9
40°	1087.3	669.7	522.3	482.6	475.8
42.5°	974.0	616.4	486.5	452.6	446.8
45°	873.2	565.0	450.6	425.4	423.5
47.5°	775.3	518.5	417.7	398.3	396.4
50°	689.0	470.0	384.7	372.1	371.2
52.5°	606.7	427.4	353.7	346.9	348.9
55°	532.0	386.7	324.7	320.8	322.7
57.5°	463.2	348.9	295.6	296.5	299.5
60°	402.2	310.1	266.5	270.4	274.3
62.5°	348.9	274.3	238.4	244.2	248.1
65°	297.5	238.4	211.3	216.1	219.0
67.5°	252.0	204.5	184.1	189.9	190.9
70°	207.4	173.5	157.0	162.8	162.8
72.5°	168.6	141.5	130.8	133.7	134.7
75°	130.8	112.4	104.7	107.6	108.5
77.5°	98.8	85.3	79.5	82.4	81.4
80°	68.8	60.1	57.2	56.2	55.2
82.5°	42.6	37.8	34.9	35.9	34.9
85°	21.3	18.4	18.4	18.4	18.4
87.5°	6.8	6.8	6.8	6.8	6.8
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	20.87	22.37	21.23	22.68	23.00	19.37	20.87	19.73	21.18	21.49
	3H	22.46	23.80	22.83	24.13	24.49	21.08	22.43	21.46	22.75	23.12
	4H	22.98	24.24	23.38	24.59	24.97	21.66	22.92	22.06	23.27	23.65
	6H	23.31	24.47	23.72	24.84	25.23	22.01	23.17	22.42	23.54	23.93
	8H	23.38	24.49	23.81	24.88	25.28	22.08	23.19	22.51	23.58	23.98
	12H	23.41	24.47	23.84	24.85	25.28	22.11	23.18	22.54	23.56	23.99
4H	2H	21.18	22.44	21.58	22.79	23.17	19.93	21.19	20.33	21.54	21.92
	3H	22.96	24.01	23.37	24.41	24.81	21.84	22.89	22.25	23.29	23.69
	4H	23.59	24.53	24.02	24.95	25.39	22.54	23.48	22.97	23.90	24.34
	6H	24.02	24.84	24.48	25.29	25.75	22.99	23.81	23.45	24.25	24.71
	8H	24.13	24.90	24.59	25.34	25.81	23.09	23.86	23.56	24.30	24.77
	12H	24.18	24.86	24.66	25.34	25.81	23.15	23.83	23.63	24.31	24.78
8H	4H	23.74	24.50	24.20	24.95	25.42	22.78	23.55	23.24	23.99	24.46
	6H	24.25	24.88	24.74	25.37	25.85	23.32	23.95	23.82	24.44	24.92
	8H	24.39	24.96	24.91	25.47	25.96	23.47	24.03	23.98	24.54	25.03
	12H	24.48	24.98	24.99	25.47	26.04	23.56	24.06	24.07	24.55	25.12
12H	4H	23.74	24.42	24.22	24.90	25.37	22.79	23.47	23.27	23.95	24.42
	6H	24.25	24.81	24.76	25.32	25.81	23.34	23.90	23.85	24.42	24.90
	8H	24.43	24.93	24.94	25.42	25.99	23.53	24.03	24.04	24.52	25.09