

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: P1217285

Luminaire Tested: S122DRP-H675D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217285
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-H675D840-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

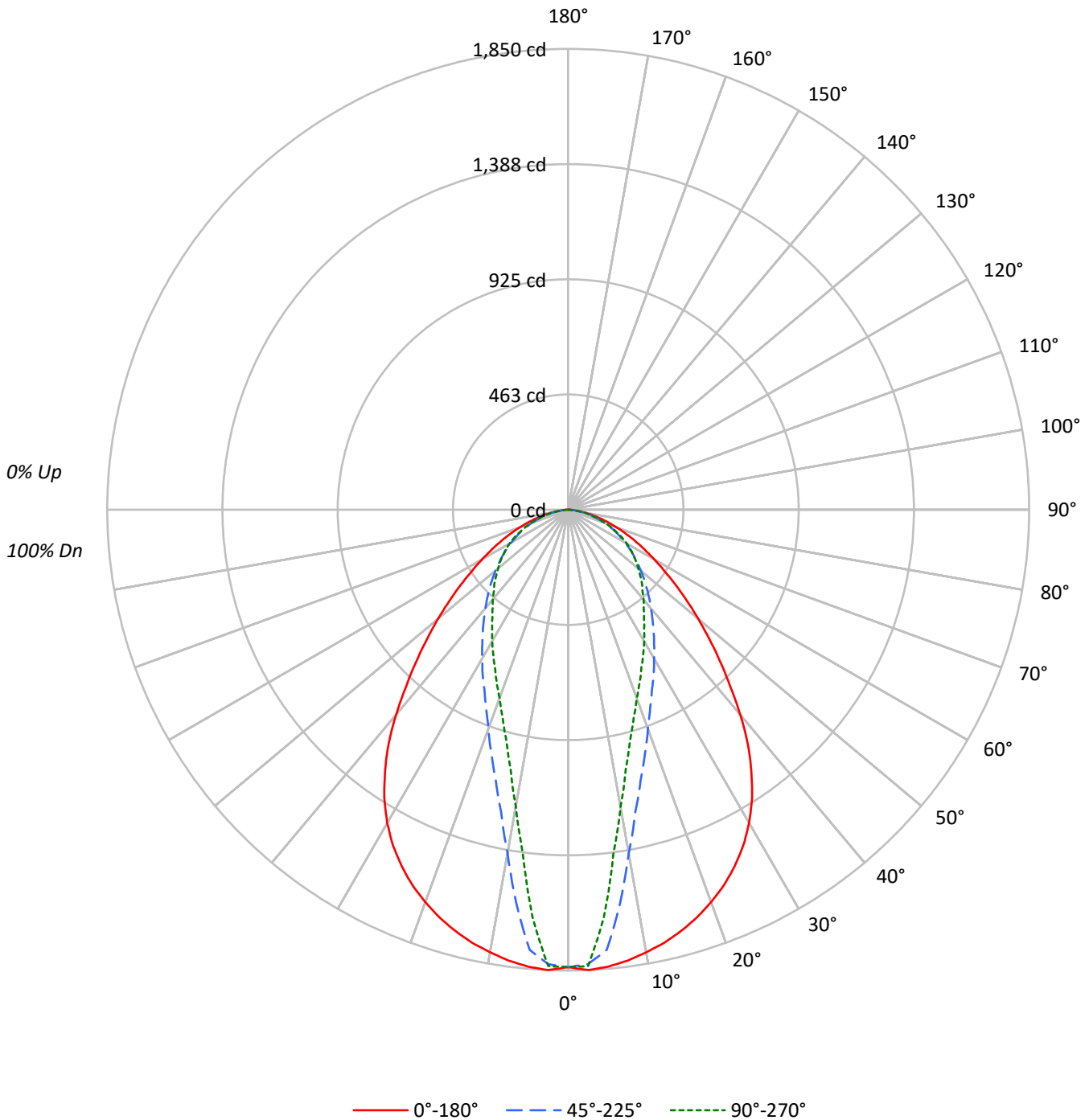
Lumens per Lamp: N/A
Luminaire Lumens: 2467.7 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34792	34792	34792
5°	35016	33740	31245
10°	34702	26943	23295
15°	34346	22021	18808
20°	33799	18851	16224
25°	33023	16642	14558
30°	31772	15088	13349
35°	29644	13826	12274
40°	26582	12769	11634
45°	23125	11934	11216
50°	20075	11209	10814
55°	17371	10600	10537
60°	15066	9981	10272
65°	13184	9360	9706
70°	11356	8597	8913
75°	9465	7576	7854
80°	7419	6164	5957
85°	4587	3956	3956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23125 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.1	6.4
10°-20°	348.6	14.1
20°-30°	427.7	17.3
30°-40°	442.0	17.9
40°-50°	399.2	16.2
50°-60°	323.5	13.1
60°-70°	226.8	9.2
70°-80°	117.0	4.7
80°-90°	24.7	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
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0°-30°	934.5	37.9
0°-40°	1376.5	55.8
0°-60°	2099.3	85.1
0°-90°	2467.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2467.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1836	1836	1836	1836	1836	
5°	1841	1837	1774	1695	1643	175
15°	1751	1476	1123	1001	959	493
25°	1580	1049	796	720	696	726
35°	1282	775	598	547	531	797
45°	863	558	445	420	419	668
55°	526	382	321	317	319	474
65°	294	236	209	214	216	294
75°	129	111	104	106	107	140
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°	1836.4	1836.4	1836.4	1836.4	1836.4
2.5°	1849.8	1843.1	1825.9	1842.1	1833.5
5°	1841.2	1837.4	1774.1	1694.6	1642.9
7.5°	1825.9	1812.4	1594.0	1443.6	1392.9
10°	1803.8	1736.8	1400.5	1260.7	1210.9
12.5°	1780.8	1622.8	1244.4	1113.1	1068.1
15°	1751.1	1476.2	1122.7	1001.1	958.9
17.5°	1716.6	1348.8	1026.0	909.1	875.6
20°	1676.4	1238.6	935.0	832.5	804.7
22.5°	1632.4	1145.7	859.3	775.9	750.1
25°	1579.7	1049.0	796.1	720.4	696.4
27.5°	1521.2	975.2	743.4	672.5	652.4
30°	1452.3	903.3	689.7	626.5	610.2
32.5°	1373.7	836.3	641.8	586.3	567.1
35°	1281.7	775.0	597.8	547.0	530.7
37.5°	1184.0	714.6	555.6	511.5	498.1
40°	1074.8	661.9	516.3	477.1	470.4
42.5°	962.7	609.3	480.9	447.4	441.6
45°	863.1	558.5	445.4	420.5	418.6
47.5°	766.4	512.5	412.9	393.7	391.8
50°	681.1	464.6	380.3	367.9	366.9
52.5°	599.7	422.5	349.7	342.9	344.9
55°	525.9	382.2	320.9	317.1	319.0
57.5°	457.9	344.9	292.2	293.1	296.0
60°	397.6	306.5	263.4	267.3	271.1
62.5°	344.9	271.1	235.7	241.4	245.2
65°	294.1	235.7	208.8	213.6	216.5
67.5°	249.1	202.1	182.0	187.8	188.7
70°	205.0	171.5	155.2	160.9	160.9
72.5°	166.7	139.9	129.3	132.2	133.2
75°	129.3	111.1	103.5	106.3	107.3
77.5°	97.7	84.3	78.6	81.4	80.5
80°	68.0	59.4	56.5	55.6	54.6
82.5°	42.1	37.4	34.5	35.4	34.5
85°	21.1	18.2	18.2	18.2	18.2
87.5°	6.7	6.7	6.7	6.7	6.7
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	20.83	22.33	21.20	22.64	22.96	19.33	20.83	19.69	21.14	21.45
	3H	22.42	23.76	22.79	24.09	24.45	21.04	22.39	21.42	22.71	23.08
	4H	22.94	24.20	23.34	24.55	24.93	21.62	22.88	22.02	23.23	23.61
	6H	23.27	24.43	23.68	24.80	25.19	21.97	23.13	22.38	23.50	23.89
	8H	23.34	24.45	23.77	24.84	25.24	22.04	23.15	22.47	23.54	23.94
	12H	23.37	24.43	23.80	24.81	25.24	22.07	23.14	22.50	23.52	23.95
4H	2H	21.14	22.40	21.54	22.75	23.13	19.89	21.15	20.29	21.50	21.88
	3H	22.92	23.97	23.33	24.37	24.77	21.80	22.85	22.21	23.25	23.65
	4H	23.55	24.49	23.98	24.91	25.35	22.50	23.44	22.93	23.86	24.30
	6H	23.98	24.80	24.44	25.25	25.71	22.95	23.77	23.41	24.21	24.67
	8H	24.09	24.86	24.55	25.30	25.77	23.05	23.82	23.52	24.26	24.73
	12H	24.14	24.82	24.62	25.30	25.77	23.11	23.79	23.59	24.27	24.74
8H	4H	23.70	24.46	24.16	24.91	25.38	22.74	23.51	23.20	23.95	24.42
	6H	24.21	24.84	24.70	25.33	25.81	23.28	23.91	23.78	24.40	24.88
	8H	24.35	24.92	24.87	25.43	25.92	23.43	23.99	23.94	24.50	24.99
	12H	24.44	24.94	24.95	25.43	26.00	23.52	24.02	24.03	24.51	25.08
12H	4H	23.70	24.38	24.18	24.86	25.33	22.75	23.43	23.23	23.91	24.38
	6H	24.21	24.77	24.72	25.28	25.77	23.30	23.86	23.81	24.37	24.86
	8H	24.39	24.89	24.90	25.38	25.95	23.49	23.99	24.00	24.48	25.05