

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: P1217266

Luminaire Tested: S122DRP-H290D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217266
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-H290D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

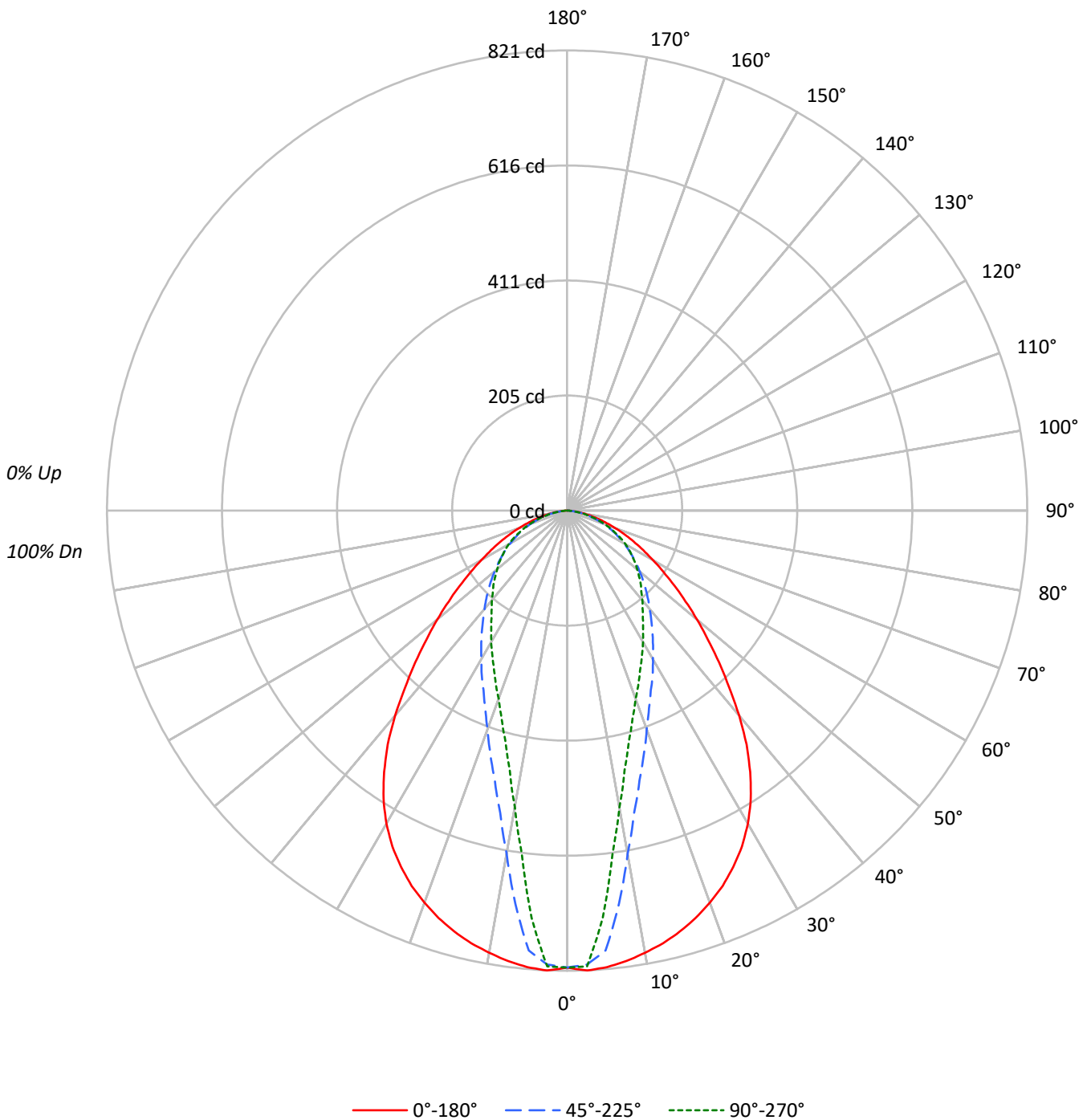
Lumens per Lamp: N/A
Luminaire Lumens: 1095.7 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	15447	15447	15447
5°	15547	14981	13872
10°	15408	11962	10342
15°	15250	9778	8352
20°	15006	8369	7204
25°	14662	7388	6464
30°	14106	6699	5926
35°	13162	6138	5449
40°	11802	5671	5164
45°	10267	5300	4981
50°	8913	4978	4801
55°	7713	4707	4677
60°	6688	4433	4562
65°	5855	4156	4308
70°	5041	3817	3961
75°	4202	3360	3484
80°	3295	2739	2640
85°	2043	1761	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	6.4
10°-20°	154.8	14.1
20°-30°	189.9	17.3
30°-40°	196.3	17.9
40°-50°	177.3	16.2
50°-60°	143.6	13.1
60°-70°	100.7	9.2
70°-80°	51.9	4.7
80°-90°	11.0	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°	414.9	37.9
0°-40°	611.2	55.8
0°-60°	932.1	85.1
0°-90°	1095.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1095.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	818	816	788	752	729	77
15°	778	655	498	444	426	219
25°	701	466	353	320	309	322
35°	569	344	265	243	236	354
45°	383	248	198	187	186	296
55°	234	170	142	141	142	210
65°	131	105	93	95	96	130
75°	57	49	46	47	48	62
85°	9	8	8	8	8	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.3	815.3	815.3	815.3	815.3
2.5°	821.3	818.3	810.7	817.9	814.1
5°	817.5	815.8	787.7	752.4	729.4
7.5°	810.7	804.7	707.7	641.0	618.4
10°	800.9	771.1	621.8	559.7	537.6
12.5°	790.7	720.5	552.5	494.2	474.2
15°	777.5	655.4	498.5	444.5	425.8
17.5°	762.2	598.9	455.5	403.6	388.7
20°	744.3	549.9	415.1	369.6	357.3
22.5°	724.8	508.7	381.5	344.5	333.0
25°	701.4	465.7	353.4	319.8	309.2
27.5°	675.4	433.0	330.1	298.6	289.6
30°	644.8	401.1	306.2	278.2	270.9
32.5°	609.9	371.3	285.0	260.3	251.8
35°	569.1	344.1	265.4	242.9	235.6
37.5°	525.7	317.3	246.7	227.1	221.2
40°	477.2	293.9	229.3	211.8	208.8
42.5°	427.5	270.5	213.5	198.6	196.1
45°	383.2	248.0	197.8	186.7	185.9
47.5°	340.3	227.5	183.3	174.8	174.0
50°	302.4	206.3	168.9	163.3	162.9
52.5°	266.3	187.6	155.2	152.3	153.1
55°	233.5	169.7	142.5	140.8	141.6
57.5°	203.3	153.1	129.7	130.1	131.4
60°	176.5	136.1	117.0	118.7	120.4
62.5°	153.1	120.4	104.6	107.2	108.9
65°	130.6	104.6	92.7	94.8	96.1
67.5°	110.6	89.7	80.8	83.4	83.8
70°	91.0	76.1	68.9	71.5	71.5
72.5°	74.0	62.1	57.4	58.7	59.1
75°	57.4	49.3	45.9	47.2	47.6
77.5°	43.4	37.4	34.9	36.2	35.7
80°	30.2	26.4	25.1	24.7	24.2
82.5°	18.7	16.6	15.3	15.7	15.3
85°	9.4	8.1	8.1	8.1	8.1
87.5°	3.0	3.0	3.0	3.0	3.0
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	18.01	19.51	18.37	19.82	20.14	16.50	18.00	16.87	18.32	18.63
	3H	19.59	20.94	19.97	21.27	21.63	18.22	19.57	18.60	19.89	20.26
	4H	20.12	21.38	20.52	21.73	22.11	18.80	20.06	19.20	20.41	20.79
	6H	20.44	21.61	20.86	21.98	22.37	19.15	20.31	19.56	20.68	21.07
	8H	20.52	21.63	20.95	22.02	22.42	19.22	20.33	19.65	20.72	21.12
	12H	20.55	21.61	20.98	21.99	22.42	19.25	20.31	19.68	20.70	21.13
4H	2H	18.32	19.58	18.72	19.93	20.31	17.06	18.33	17.46	18.68	19.05
	3H	20.10	21.15	20.51	21.55	21.95	18.98	20.03	19.39	20.43	20.83
	4H	20.73	21.67	21.16	22.09	22.52	19.68	20.62	20.11	21.04	21.48
	6H	21.16	21.98	21.62	22.42	22.88	20.13	20.95	20.59	21.39	21.85
	8H	21.27	22.03	21.73	22.48	22.95	20.23	21.00	20.70	21.44	21.91
	12H	21.32	22.00	21.80	22.48	22.95	20.29	20.97	20.77	21.45	21.92
8H	4H	20.88	21.64	21.34	22.09	22.55	19.92	20.68	20.38	21.13	21.60
	6H	21.38	22.01	21.88	22.51	22.98	20.46	21.09	20.95	21.58	22.06
	8H	21.53	22.10	22.05	22.61	23.09	20.61	21.17	21.12	21.68	22.17
	12H	21.62	22.12	22.13	22.61	23.18	20.70	21.20	21.21	21.69	22.26
12H	4H	20.87	21.56	21.36	22.04	22.51	19.93	20.61	20.41	21.09	21.56
	6H	21.39	21.95	21.90	22.46	22.95	20.48	21.04	20.99	21.55	22.04
	8H	21.57	22.07	22.08	22.56	23.13	20.67	21.17	21.18	21.66	22.23