

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: P1217280

Luminaire Tested: S122DRP-H485D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217280
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-H485D935-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

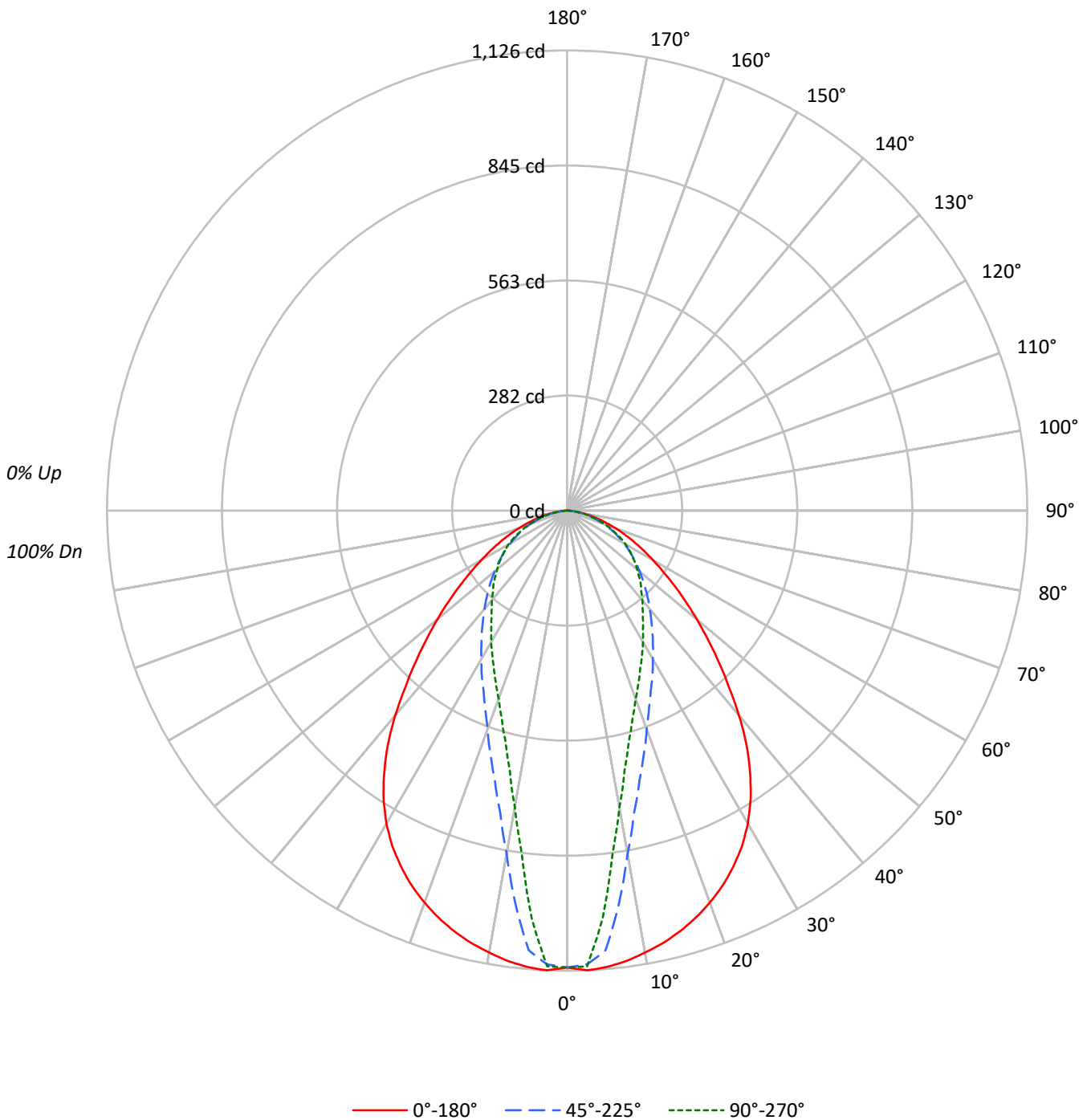
Lumens per Lamp: N/A
Luminaire Lumens: 1502.3 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 17.3
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°	21181	21181	21181
5°	21318	20540	19022
10°	21125	16402	14180
15°	20911	13406	11451
20°	20577	11476	9877
25°	20104	10130	8863
30°	19341	9186	8127
35°	18047	8417	7473
40°	16182	7773	7081
45°	14077	7266	6827
50°	12220	6823	6585
55°	10577	6454	6415
60°	9170	6078	6252
65°	8025	5698	5909
70°	6913	5235	5429
75°	5761	4612	4780
80°	4517	3753	3622
85°	2782	2413	2413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14077 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	6.4
10°-20°	212.2	14.1
20°-30°	260.4	17.3
30°-40°	269.1	17.9
40°-50°	243.0	16.2
50°-60°	197.0	13.1
60°-70°	138.1	9.2
70°-80°	71.2	4.7
80°-90°	15.0	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°	568.9	37.9
0°-40°	838.0	55.8
0°-60°	1278.0	85.1
0°-90°	1502.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1502.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1121	1118	1080	1032	1000	106
15°	1066	899	684	609	584	300
25°	962	639	485	439	424	442
35°	780	472	364	333	323	485
45°	525	340	271	256	255	406
55°	320	233	195	193	194	288
65°	179	144	127	130	132	179
75°	79	68	63	65	65	85
85°	13	11	11	11	11	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.0	1118.0	1118.0	1118.0	1118.0
2.5°	1126.1	1122.0	1111.5	1121.5	1116.2
5°	1120.9	1118.5	1080.0	1031.6	1000.2
7.5°	1111.5	1103.4	970.4	878.9	847.9
10°	1098.1	1057.3	852.6	767.5	737.1
12.5°	1084.1	987.9	757.5	677.7	650.2
15°	1066.1	898.7	683.5	609.4	583.8
17.5°	1045.1	821.1	624.6	553.4	533.0
20°	1020.6	754.1	569.2	506.8	489.9
22.5°	993.7	697.5	523.1	472.4	456.6
25°	961.7	638.6	484.6	438.6	424.0
27.5°	926.1	593.7	452.5	409.4	397.1
30°	884.1	549.9	419.9	381.4	371.5
32.5°	836.3	509.1	390.7	356.9	345.2
35°	780.3	471.8	363.9	333.0	323.1
37.5°	720.8	435.1	338.2	311.4	303.3
40°	654.3	403.0	314.3	290.4	286.3
42.5°	586.1	370.9	292.8	272.3	268.8
45°	525.4	340.0	271.2	256.0	254.8
47.5°	466.5	312.0	251.4	239.7	238.5
50°	414.6	282.8	231.5	223.9	223.4
52.5°	365.1	257.2	212.9	208.8	209.9
55°	320.2	232.7	195.4	193.0	194.2
57.5°	278.8	209.9	177.9	178.5	180.2
60°	242.0	186.6	160.4	162.7	165.0
62.5°	209.9	165.0	143.5	147.0	149.3
65°	179.0	143.5	127.1	130.0	131.8
67.5°	151.6	123.1	110.8	114.3	114.9
70°	124.8	104.4	94.5	98.0	98.0
72.5°	101.5	85.1	78.7	80.5	81.1
75°	78.7	67.6	63.0	64.7	65.3
77.5°	59.5	51.3	47.8	49.6	49.0
80°	41.4	36.2	34.4	33.8	33.2
82.5°	25.7	22.7	21.0	21.6	21.0
85°	12.8	11.1	11.1	11.1	11.1
87.5°	4.1	4.1	4.1	4.1	4.1
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	19.10	20.60	19.47	20.92	21.23	17.60	19.10	17.97	19.42	19.73
	3H	20.69	22.04	21.07	22.37	22.73	19.32	20.66	19.69	20.99	21.35
	4H	21.21	22.48	21.62	22.83	23.21	19.90	21.16	20.30	21.51	21.89
	6H	21.54	22.71	21.95	23.07	23.47	20.24	21.41	20.66	21.78	22.17
	8H	21.62	22.73	22.04	23.12	23.52	20.32	21.43	20.75	21.82	22.22
	12H	21.64	22.71	22.07	23.09	23.52	20.35	21.41	20.78	21.79	22.22
4H	2H	19.41	20.68	19.81	21.02	21.40	18.16	19.43	18.56	19.78	20.15
	3H	21.20	22.24	21.61	22.64	23.05	20.08	21.13	20.49	21.53	21.93
	4H	21.82	22.77	22.26	23.18	23.62	20.78	21.72	21.21	22.13	22.57
	6H	22.26	23.08	22.72	23.52	23.98	21.23	22.05	21.68	22.49	22.95
	8H	22.36	23.13	22.83	23.57	24.04	21.33	22.10	21.79	22.54	23.01
	12H	22.42	23.10	22.90	23.58	24.05	21.38	22.07	21.87	22.55	23.02
8H	4H	21.97	22.74	22.44	23.18	23.65	21.02	21.78	21.48	22.23	22.69
	6H	22.48	23.11	22.98	23.60	24.08	21.55	22.18	22.05	22.68	23.15
	8H	22.63	23.19	23.14	23.70	24.19	21.70	22.27	22.22	22.78	23.27
	12H	22.72	23.21	23.23	23.71	24.27	21.80	22.30	22.31	22.79	23.36
12H	4H	21.97	22.65	22.45	23.13	23.60	21.03	21.71	21.51	22.19	22.66
	6H	22.48	23.05	23.00	23.56	24.05	21.57	22.14	22.09	22.65	23.14
	8H	22.67	23.17	23.18	23.66	24.22	21.77	22.26	22.28	22.76	23.32