

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: P1217323

Luminaire Tested: S122DRP-S485D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217323
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-S485D927-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

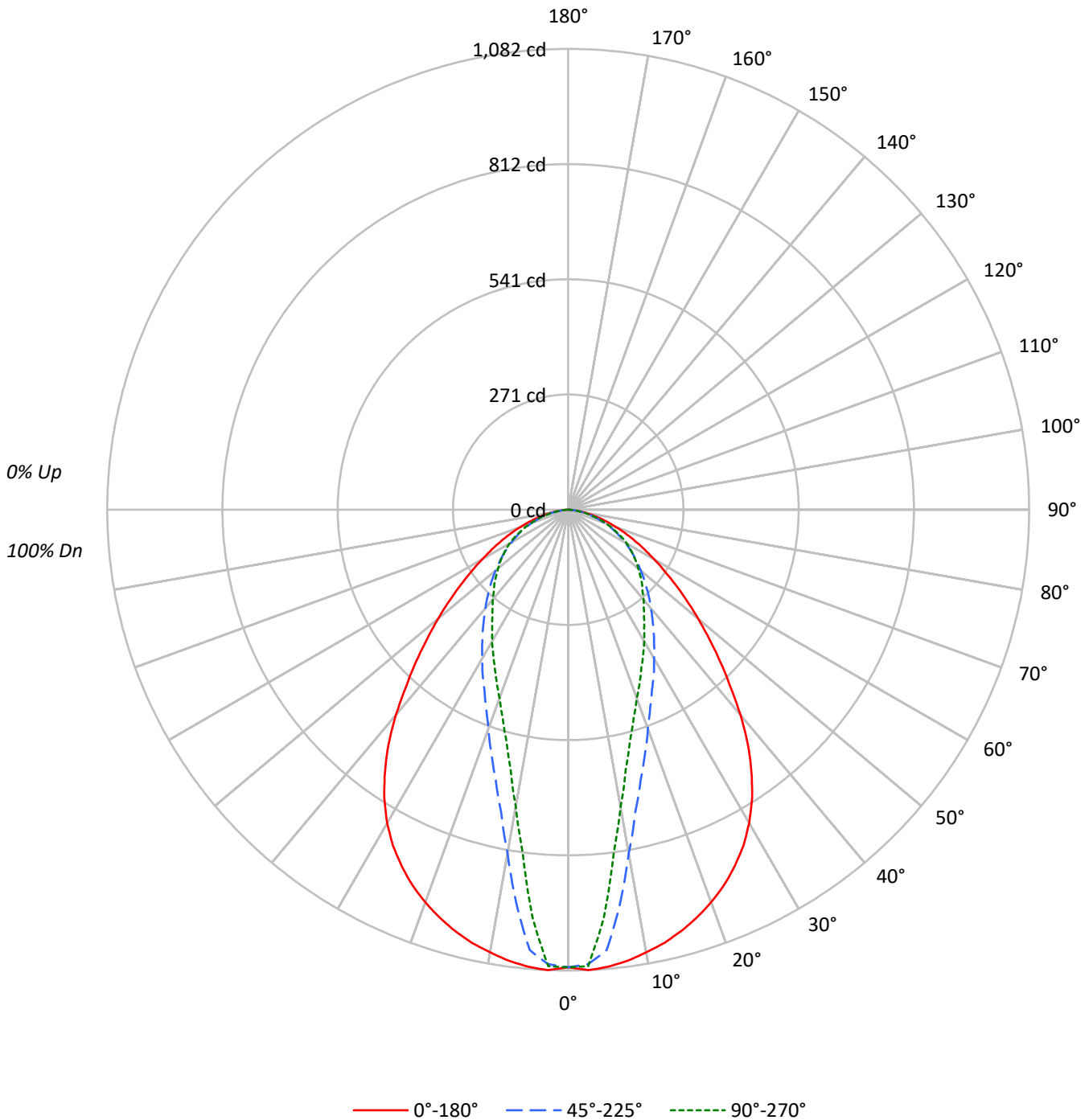
Lumens per Lamp: N/A
Luminaire Lumens: 1443.6 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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

TEST NUMBER: P1217323

CATALOG NUMBER: S122DRP-S485D927-X4F0-XX-UDD-G-W

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				
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°	20354	20354	20354
5°	20485	19737	18278
10°	20300	15762	13626
15°	20093	12883	11002
20°	19773	11026	9490
25°	19318	9735	8516
30°	18584	8827	7810
35°	17342	8088	7181
40°	15552	7469	6804
45°	13528	6982	6562
50°	11743	6558	6325
55°	10164	6200	6164
60°	8814	5839	6010
65°	7711	5478	5675
70°	6642	5030	5213
75°	5541	4429	4597
80°	4342	3611	3480
85°	2674	2304	2304

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13528 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.5	6.4
10°-20°	203.9	14.1
20°-30°	250.2	17.3
30°-40°	258.6	17.9
40°-50°	233.5	16.2
50°-60°	189.3	13.1
60°-70°	132.7	9.2
70°-80°	68.4	4.7
80°-90°	14.4	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°	546.7	37.9
0°-40°	805.3	55.8
0°-60°	1228.0	85.1
0°-90°	1443.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1443.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1077	1075	1038	991	961	102
15°	1024	864	657	586	561	289
25°	924	614	466	421	407	425
35°	750	453	350	320	310	466
45°	505	327	261	246	245	391
55°	308	224	188	186	187	277
65°	172	138	122	125	127	172
75°	76	65	60	62	63	82
85°	12	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°	1074.3	1074.3	1074.3	1074.3	1074.3
2.5°	1082.1	1078.2	1068.1	1077.6	1072.6
5°	1077.1	1074.8	1037.8	991.3	961.1
7.5°	1068.1	1060.2	932.5	844.5	814.8
10°	1055.2	1016.0	819.3	737.5	708.3
12.5°	1041.8	949.3	727.9	651.2	624.8
15°	1024.4	863.6	656.8	585.6	560.9
17.5°	1004.2	789.0	600.2	531.8	512.2
20°	980.7	724.6	546.9	487.0	470.7
22.5°	954.9	670.2	502.7	453.9	438.8
25°	924.1	613.6	465.7	421.4	407.4
27.5°	889.9	570.5	434.9	393.4	381.6
30°	849.5	528.4	403.5	366.5	357.0
32.5°	803.6	489.2	375.5	343.0	331.7
35°	749.8	453.4	349.7	320.0	310.5
37.5°	692.6	418.0	325.0	299.2	291.4
40°	628.8	387.2	302.0	279.1	275.1
42.5°	563.2	356.4	281.3	261.7	258.3
45°	504.9	326.7	260.6	246.0	244.9
47.5°	448.3	299.8	241.5	230.3	229.2
50°	398.4	271.8	222.5	215.2	214.6
52.5°	350.8	247.1	204.5	200.6	201.7
55°	307.7	223.6	187.7	185.5	186.6
57.5°	267.9	201.7	170.9	171.5	173.2
60°	232.6	179.3	154.1	156.3	158.6
62.5°	201.7	158.6	137.9	141.2	143.5
65°	172.0	137.9	122.2	125.0	126.6
67.5°	145.7	118.2	106.5	109.8	110.4
70°	119.9	100.3	90.8	94.1	94.1
72.5°	97.5	81.8	75.7	77.3	77.9
75°	75.7	65.0	60.5	62.2	62.8
77.5°	57.2	49.3	46.0	47.6	47.1
80°	39.8	34.7	33.1	32.5	31.9
82.5°	24.7	21.9	20.2	20.7	20.2
85°	12.3	10.6	10.6	10.6	10.6
87.5°	3.9	3.9	3.9	3.9	3.9
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	18.97	20.47	19.33	20.78	21.09	17.47	18.97	17.83	19.28	19.59
	3H	20.55	21.90	20.93	22.23	22.59	19.18	20.52	19.56	20.85	21.21
	4H	21.08	22.34	21.48	22.69	23.07	19.76	21.02	20.16	21.37	21.75
	6H	21.40	22.57	21.82	22.94	23.33	20.11	21.27	20.52	21.64	22.03
	8H	21.48	22.59	21.91	22.98	23.38	20.18	21.29	20.61	21.68	22.08
	12H	21.50	22.57	21.94	22.95	23.38	20.21	21.27	20.64	21.66	22.08
4H	2H	19.28	20.54	19.68	20.89	21.27	18.03	19.29	18.43	19.64	20.02
	3H	21.06	22.11	21.47	22.51	22.91	19.94	20.99	20.35	21.39	21.79
	4H	21.69	22.63	22.12	23.05	23.48	20.64	21.58	21.07	22.00	22.43
	6H	22.12	22.94	22.58	23.38	23.84	21.09	21.91	21.55	22.35	22.81
	8H	22.23	22.99	22.69	23.44	23.90	21.19	21.96	21.66	22.40	22.87
	12H	22.28	22.96	22.76	23.44	23.91	21.25	21.93	21.73	22.41	22.88
8H	4H	21.84	22.60	22.30	23.05	23.51	20.88	21.64	21.34	22.09	22.55
	6H	22.34	22.97	22.84	23.47	23.94	21.42	22.05	21.91	22.54	23.02
	8H	22.49	23.05	23.00	23.57	24.05	21.57	22.13	22.08	22.64	23.13
	12H	22.58	23.08	23.09	23.57	24.13	21.66	22.16	22.17	22.65	23.22
12H	4H	21.83	22.52	22.32	23.00	23.47	20.89	21.57	21.37	22.05	22.52
	6H	22.34	22.91	22.86	23.42	23.91	21.44	22.00	21.95	22.51	23.00
	8H	22.53	23.03	23.04	23.52	24.09	21.63	22.13	22.14	22.62	23.18