

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: P1217278

Luminaire Tested: S122DRP-H485D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217278  
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-H485D927-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: -

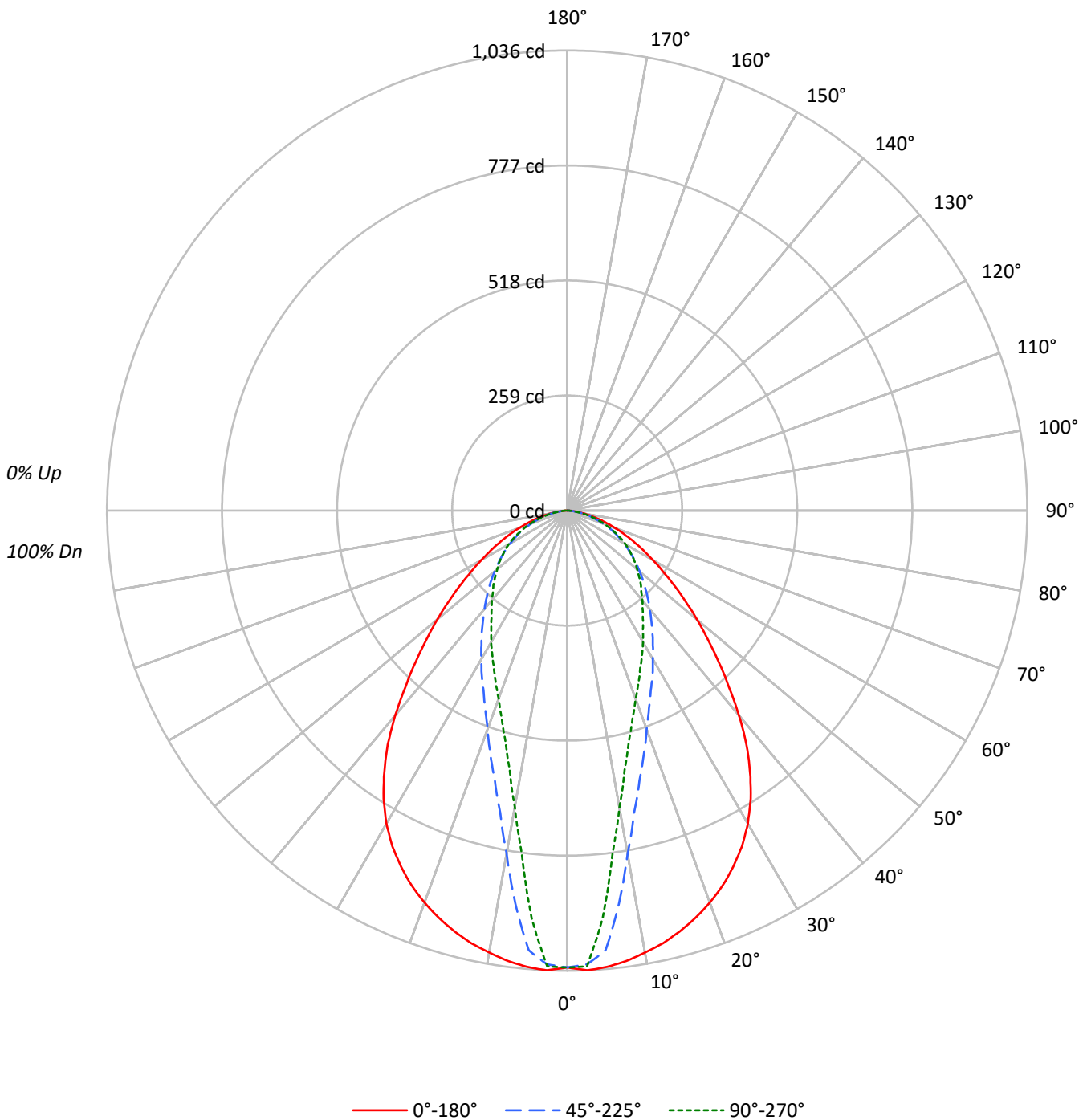
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1382.2 lumens  
Efficiency: N/A  
Efficacy: 79.9 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 (A<sub>in</sub>): 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°	19488	19488	19488
5°	19613	18898	17501
10°	19438	15092	13047
15°	19238	12335	10535
20°	18932	10559	9087
25°	18496	9321	8155
30°	17795	8451	7477
35°	16604	7743	6876
40°	14889	7153	6517
45°	12952	6685	6283
50°	11245	6278	6057
55°	9731	5939	5903
60°	8438	5593	5752
65°	7383	5245	5438
70°	6359	4814	4991
75°	5300	4238	4399
80°	4157	3459	3339
85°	2565	2217	2217

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12952 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.6	6.4
10°-20°	195.3	14.1
20°-30°	239.6	17.3
30°-40°	247.6	17.9
40°-50°	223.6	16.2
50°-60°	181.2	13.1
60°-70°	127.0	9.2
70°-80°	65.5	4.7
80°-90°	13.8	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°	523.4	37.9
0°-40°	771.0	55.8
0°-60°	1175.9	85.1
0°-90°	1382.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1382.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1031	1029	994	949	920	98
15°	981	827	629	561	537	276
25°	885	588	446	404	390	406
35°	718	434	335	306	297	446
45°	483	313	250	236	234	374
55°	295	214	180	178	179	265
65°	165	132	117	120	121	165
75°	72	62	58	60	60	78
85°	12	10	10	10	10	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1036.1	1032.4	1022.7	1031.8	1027.0
5°	1031.3	1029.1	993.7	949.2	920.2
7.5°	1022.7	1015.2	892.8	808.6	780.2
10°	1010.4	972.8	784.5	706.1	678.2
12.5°	997.5	908.9	697.0	623.5	598.3
15°	980.8	826.9	628.9	560.7	537.1
17.5°	961.5	755.5	574.7	509.2	490.4
20°	939.0	693.8	523.7	466.3	450.7
22.5°	914.3	641.7	481.3	434.6	420.1
25°	884.8	587.5	445.9	403.5	390.1
27.5°	852.1	546.2	416.4	376.7	365.4
30°	813.4	506.0	386.3	350.9	341.8
32.5°	769.4	468.4	359.5	328.4	317.6
35°	717.9	434.1	334.8	306.4	297.3
37.5°	663.2	400.3	311.2	286.5	279.0
40°	602.0	370.8	289.2	267.2	263.5
42.5°	539.3	341.3	269.4	250.6	247.4
45°	483.4	312.8	249.5	235.6	234.5
47.5°	429.3	287.1	231.3	220.5	219.5
50°	381.5	260.2	213.0	206.0	205.5
52.5°	335.9	236.6	195.8	192.1	193.2
55°	294.6	214.1	179.8	177.6	178.7
57.5°	256.5	193.2	163.7	164.2	165.8
60°	222.7	171.7	147.6	149.7	151.8
62.5°	193.2	151.8	132.0	135.2	137.4
65°	164.7	132.0	117.0	119.7	121.3
67.5°	139.5	113.2	101.9	105.2	105.7
70°	114.8	96.0	86.9	90.1	90.1
72.5°	93.4	78.3	72.4	74.0	74.6
75°	72.4	62.2	57.9	59.6	60.1
77.5°	54.7	47.2	44.0	45.6	45.1
80°	38.1	33.3	31.7	31.1	30.6
82.5°	23.6	20.9	19.3	19.9	19.3
85°	11.8	10.2	10.2	10.2	10.2
87.5°	3.8	3.8	3.8	3.8	3.8
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	18.82	20.32	19.18	20.63	20.94	17.31	18.81	17.68	19.13	19.44
	3H	20.40	21.75	20.78	22.08	22.44	19.03	20.37	19.40	20.70	21.06
	4H	20.93	22.19	21.33	22.54	22.92	19.61	20.87	20.01	21.22	21.60
	6H	21.25	22.42	21.67	22.79	23.18	19.96	21.12	20.37	21.49	21.88
	8H	21.33	22.44	21.75	22.83	23.23	20.03	21.14	20.46	21.53	21.93
	12H	21.35	22.42	21.78	22.80	23.23	20.06	21.12	20.49	21.50	21.93
4H	2H	19.13	20.39	19.53	20.74	21.12	17.87	19.14	18.27	19.49	19.86
	3H	20.91	21.95	21.32	22.35	22.76	19.79	20.84	20.20	21.24	21.64
	4H	21.53	22.48	21.97	22.89	23.33	20.49	21.43	20.92	21.85	22.28
	6H	21.97	22.79	22.43	23.23	23.69	20.94	21.76	21.40	22.20	22.66
	8H	22.07	22.84	22.54	23.29	23.75	21.04	21.81	21.51	22.25	22.72
	12H	22.13	22.81	22.61	23.29	23.76	21.10	21.78	21.58	22.26	22.73
8H	4H	21.68	22.45	22.15	22.89	23.36	20.73	21.49	21.19	21.94	22.40
	6H	22.19	22.82	22.69	23.31	23.79	21.26	21.90	21.76	22.39	22.86
	8H	22.34	22.90	22.85	23.41	23.90	21.41	21.98	21.93	22.49	22.98
	12H	22.43	22.92	22.94	23.42	23.98	21.51	22.01	22.02	22.50	23.07
12H	4H	21.68	22.37	22.17	22.84	23.32	20.74	21.42	21.22	21.90	22.37
	6H	22.19	22.76	22.71	23.27	23.76	21.29	21.85	21.80	22.36	22.85
	8H	22.38	22.88	22.89	23.37	23.93	21.48	21.98	21.99	22.47	23.03