

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: P1217327

Luminaire Tested: S122DRP-S485D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217327  
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-S485D950-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

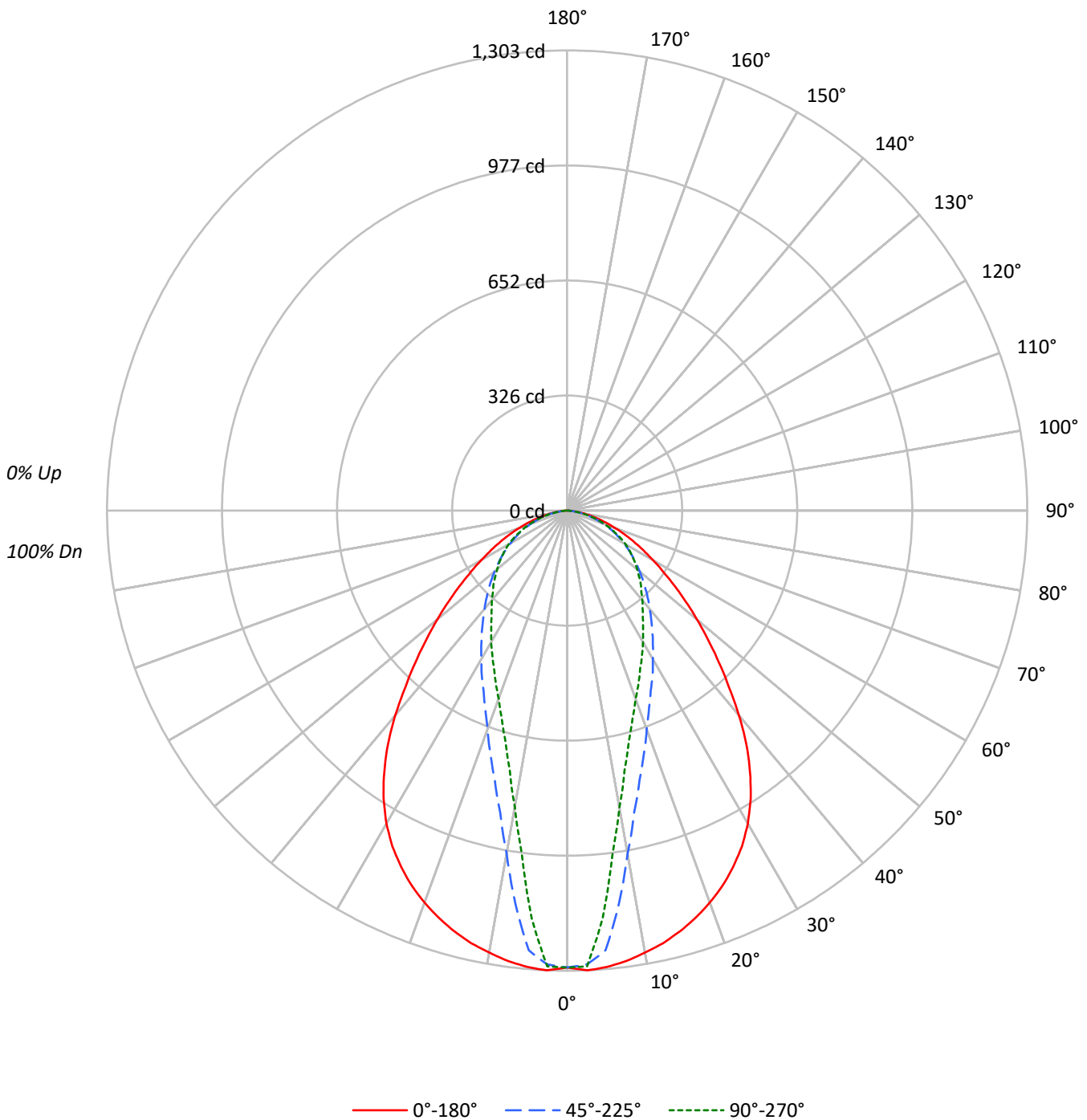
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1738.4 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

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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°	24510	24510	24510
5°	24669	23769	22012
10°	24448	18980	16410
15°	24196	15513	13249
20°	23811	13281	11430
25°	23262	11723	10256
30°	22382	10630	9405
35°	20885	9739	8648
40°	18727	8995	8196
45°	16290	8408	7901
50°	14142	7896	7619
55°	12238	7468	7422
60°	10613	7033	7237
65°	9289	6594	6837
70°	7999	6055	6282
75°	6669	5336	5534
80°	5226	4342	4201
85°	3217	2782	2782

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16290 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.4	6.4
10°-20°	245.6	14.1
20°-30°	301.3	17.3
30°-40°	311.4	17.9
40°-50°	281.2	16.2
50°-60°	227.9	13.1
60°-70°	159.8	9.2
70°-80°	82.4	4.7
80°-90°	17.4	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°	658.3	37.9
0°-40°	969.7	55.8
0°-60°	1478.9	85.1
0°-90°	1738.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1738.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1297	1294	1250	1194	1157	123
15°	1234	1040	791	705	676	348
25°	1113	739	561	508	491	511
35°	903	546	421	385	374	561
45°	608	393	314	296	295	470
55°	370	269	226	223	225	334
65°	207	166	147	150	152	207
75°	91	78	73	75	76	98
85°	15	13	13	13	13	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1293.7	1293.7	1293.7	1293.7	1293.7
2.5°	1303.1	1298.4	1286.3	1297.7	1291.7
5°	1297.1	1294.4	1249.8	1193.8	1157.4
7.5°	1286.3	1276.8	1123.0	1017.0	981.2
10°	1270.8	1223.5	986.6	888.1	853.0
12.5°	1254.6	1143.2	876.6	784.2	752.5
15°	1233.6	1040.0	790.9	705.2	675.5
17.5°	1209.3	950.2	722.8	640.4	616.8
20°	1181.0	872.6	658.7	586.4	566.9
22.5°	1150.0	807.1	605.3	546.6	528.4
25°	1112.8	739.0	560.8	507.5	490.6
27.5°	1071.7	687.0	523.7	473.7	459.6
30°	1023.1	636.4	485.9	441.4	429.9
32.5°	967.7	589.1	452.2	413.0	399.5
35°	903.0	546.0	421.1	385.3	373.9
37.5°	834.1	503.4	391.4	360.4	350.9
40°	757.2	466.3	363.7	336.1	331.4
42.5°	678.2	429.2	338.8	315.2	311.1
45°	608.0	393.4	313.8	296.3	294.9
47.5°	539.9	361.0	290.9	277.4	276.0
50°	479.8	327.3	267.9	259.1	258.5
52.5°	422.5	297.6	246.3	241.6	242.9
55°	370.5	269.3	226.1	223.4	224.7
57.5°	322.6	242.9	205.8	206.5	208.5
60°	280.1	216.0	185.6	188.3	191.0
62.5°	242.9	191.0	166.0	170.1	172.8
65°	207.2	166.0	147.1	150.5	152.5
67.5°	175.5	142.4	128.2	132.3	132.9
70°	144.4	120.8	109.3	113.4	113.4
72.5°	117.4	98.5	91.1	93.1	93.8
75°	91.1	78.3	72.9	74.9	75.6
77.5°	68.8	59.4	55.3	57.4	56.7
80°	47.9	41.8	39.8	39.1	38.5
82.5°	29.7	26.3	24.3	25.0	24.3
85°	14.8	12.8	12.8	12.8	12.8
87.5°	4.7	4.7	4.7	4.7	4.7
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	19.61	21.11	19.98	21.42	21.74	18.11	19.61	18.48	19.92	20.24
	3H	21.20	22.54	21.58	22.87	23.23	19.82	21.17	20.20	21.50	21.86
	4H	21.72	22.99	22.12	23.33	23.71	20.40	21.67	20.80	22.01	22.39
	6H	22.05	23.22	22.46	23.58	23.97	20.75	21.92	21.16	22.28	22.68
	8H	22.12	23.23	22.55	23.62	24.02	20.83	21.94	21.25	22.33	22.73
	12H	22.15	23.21	22.58	23.59	24.02	20.86	21.92	21.29	22.30	22.73
4H	2H	19.92	21.18	20.32	21.53	21.91	18.67	19.93	19.07	20.28	20.66
	3H	21.70	22.75	22.11	23.15	23.55	20.59	21.64	21.00	22.04	22.44
	4H	22.33	23.28	22.76	23.69	24.13	21.28	22.23	21.71	22.64	23.08
	6H	22.77	23.59	23.22	24.03	24.49	21.73	22.55	22.19	23.00	23.46
	8H	22.87	23.64	23.34	24.08	24.55	21.84	22.60	22.30	23.05	23.52
	12H	22.92	23.61	23.41	24.09	24.56	21.89	22.57	22.37	23.05	23.52
8H	4H	22.48	23.25	22.95	23.69	24.16	21.52	22.29	21.99	22.73	23.20
	6H	22.99	23.62	23.49	24.11	24.59	22.06	22.69	22.56	23.18	23.66
	8H	23.13	23.70	23.65	24.21	24.70	22.21	22.78	22.73	23.29	23.78
	12H	23.22	23.72	23.73	24.21	24.78	22.31	22.80	22.82	23.30	23.86
12H	4H	22.48	23.16	22.96	23.64	24.11	21.53	22.22	22.02	22.70	23.17
	6H	22.99	23.56	23.50	24.07	24.55	22.08	22.65	22.60	23.16	23.65
	8H	23.17	23.67	23.68	24.16	24.73	22.27	22.77	22.78	23.26	23.83