

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: P1217276

Luminaire Tested: S122DRP-H485D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217276  
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-H485D840-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

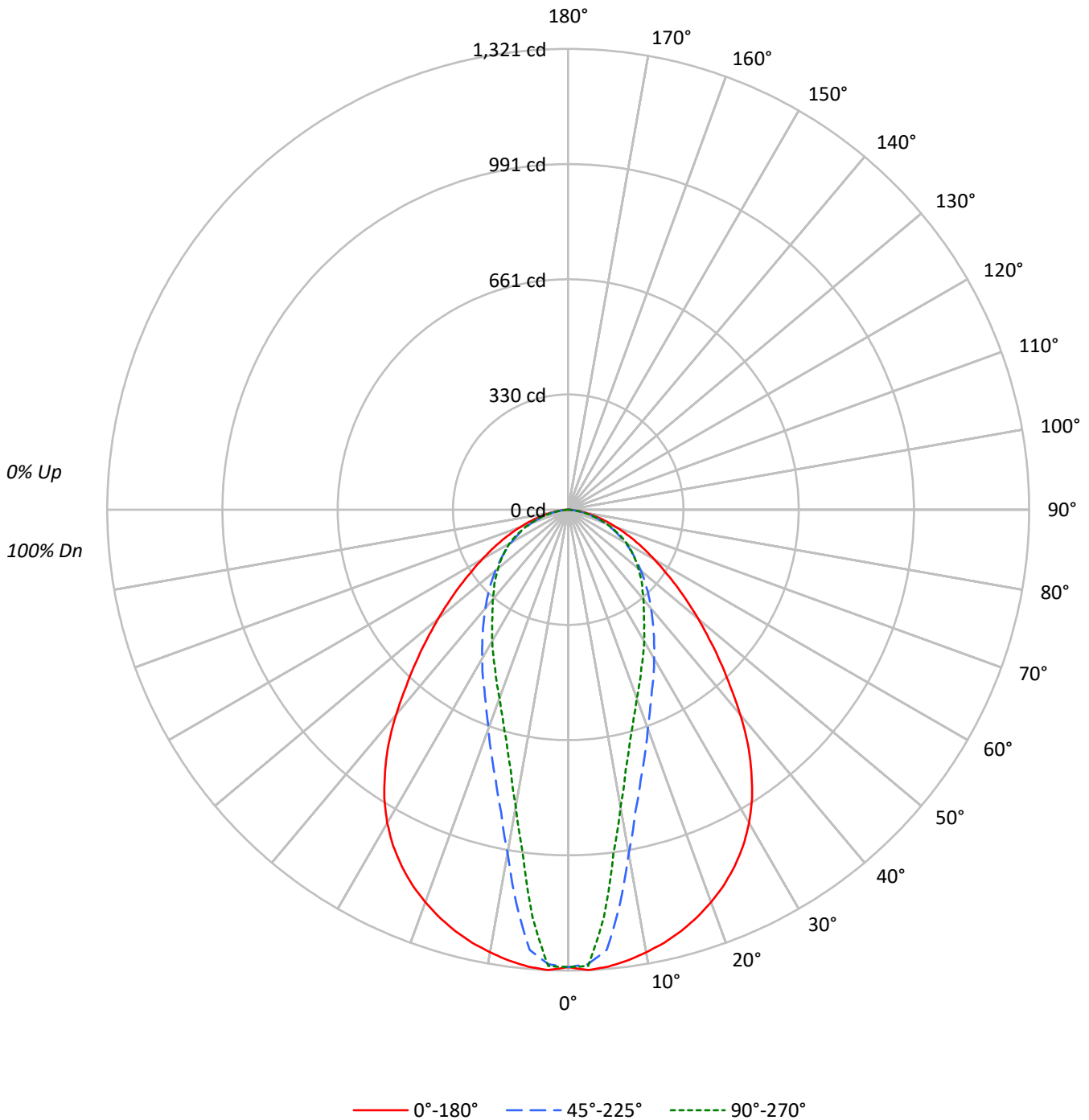
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1762.1 lumens  
Efficiency: N/A  
Efficacy: 101.9 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 (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°	24844	24844	24844
5°	25003	24092	22310
10°	24779	19238	16633
15°	24526	15725	13430
20°	24134	13460	11585
25°	23578	11882	10396
30°	22686	10774	9532
35°	21167	9871	8763
40°	18982	9119	8305
45°	16513	8523	8009
50°	14333	8005	7722
55°	12403	7567	7524
60°	10757	7127	7336
65°	9414	6684	6931
70°	8110	6138	6365
75°	6756	5410	5607
80°	5302	4408	4255
85°	3261	2826	2826

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16513 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.9	6.4
10°-20°	248.9	14.1
20°-30°	305.4	17.3
30°-40°	315.6	17.9
40°-50°	285.1	16.2
50°-60°	231.0	13.1
60°-70°	161.9	9.2
70°-80°	83.5	4.7
80°-90°	17.6	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°	667.3	37.9
0°-40°	982.9	55.8
0°-60°	1499.0	85.1
0°-90°	1762.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1315	1312	1267	1210	1173	125
15°	1250	1054	802	715	685	352
25°	1128	749	568	514	497	518
35°	915	553	427	391	379	569
45°	616	399	318	300	299	477
55°	376	273	229	226	228	338
65°	210	168	149	152	155	210
75°	92	79	74	76	77	100
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°	1311.3	1311.3	1311.3	1311.3	1311.3
2.5°	1320.8	1316.0	1303.7	1315.4	1309.2
5°	1314.7	1311.9	1266.8	1210.0	1173.1
7.5°	1303.7	1294.1	1138.2	1030.8	994.6
10°	1288.0	1240.1	1000.0	900.2	864.6
12.5°	1271.6	1158.7	888.5	794.8	762.7
15°	1250.4	1054.1	801.7	714.8	684.7
17.5°	1225.7	963.1	732.6	649.1	625.2
20°	1197.0	884.4	667.6	594.4	574.6
22.5°	1165.6	818.1	613.6	554.0	535.6
25°	1127.9	749.0	568.4	514.4	497.3
27.5°	1086.2	696.3	530.8	480.2	465.8
30°	1037.0	645.0	492.5	447.3	435.7
32.5°	980.9	597.1	458.3	418.6	404.9
35°	915.2	553.4	426.8	390.6	378.9
37.5°	845.4	510.3	396.7	365.3	355.7
40°	767.5	472.7	368.7	340.6	335.8
42.5°	687.4	435.0	343.4	319.4	315.3
45°	616.3	398.8	318.1	300.3	298.9
47.5°	547.2	365.9	294.8	281.1	279.8
50°	486.3	331.7	271.6	262.7	262.0
52.5°	428.2	301.6	249.7	244.9	246.2
55°	375.5	272.9	229.1	226.4	227.8
57.5°	327.0	246.2	208.6	209.3	211.4
60°	283.9	218.9	188.1	190.8	193.6
62.5°	246.2	193.6	168.3	172.4	175.1
65°	210.0	168.3	149.1	152.5	154.6
67.5°	177.8	144.3	130.0	134.1	134.8
70°	146.4	122.4	110.8	114.9	114.9
72.5°	119.0	99.9	92.3	94.4	95.1
75°	92.3	79.3	73.9	75.9	76.6
77.5°	69.8	60.2	56.1	58.1	57.5
80°	48.6	42.4	40.4	39.7	39.0
82.5°	30.1	26.7	24.6	25.3	24.6
85°	15.0	13.0	13.0	13.0	13.0
87.5°	4.8	4.8	4.8	4.8	4.8
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	19.66	21.16	20.02	21.47	21.79	18.16	19.66	18.52	19.97	20.28
	3H	21.25	22.59	21.62	22.92	23.28	19.87	21.22	20.25	21.54	21.91
	4H	21.77	23.03	22.17	23.38	23.76	20.45	21.71	20.85	22.06	22.44
	6H	22.10	23.26	22.51	23.63	24.02	20.80	21.96	21.21	22.33	22.72
	8H	22.17	23.28	22.60	23.67	24.07	20.87	21.98	21.30	22.37	22.78
	12H	22.20	23.26	22.63	23.64	24.07	20.90	21.97	21.33	22.35	22.78
4H	2H	19.97	21.23	20.37	21.58	21.96	18.72	19.98	19.12	20.33	20.71
	3H	21.75	22.80	22.16	23.20	23.60	20.63	21.68	21.04	22.08	22.48
	4H	22.38	23.32	22.81	23.74	24.18	21.33	22.27	21.76	22.69	23.13
	6H	22.81	23.63	23.27	24.08	24.54	21.78	22.60	22.24	23.04	23.50
	8H	22.92	23.68	23.38	24.13	24.60	21.88	22.65	22.35	23.09	23.56
	12H	22.97	23.65	23.45	24.13	24.60	21.94	22.62	22.42	23.10	23.57
8H	4H	22.53	23.29	22.99	23.74	24.21	21.57	22.34	22.03	22.78	23.25
	6H	23.04	23.67	23.53	24.16	24.64	22.11	22.74	22.61	23.23	23.71
	8H	23.18	23.75	23.70	24.26	24.75	22.26	22.82	22.77	23.33	23.82
	12H	23.27	23.77	23.78	24.26	24.83	22.35	22.85	22.86	23.34	23.91
12H	4H	22.53	23.21	23.01	23.69	24.16	21.58	22.26	22.06	22.74	23.21
	6H	23.04	23.60	23.55	24.11	24.60	22.13	22.69	22.64	23.21	23.69
	8H	23.22	23.72	23.73	24.21	24.78	22.32	22.82	22.83	23.31	23.88