

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: P1217281

Luminaire Tested: S122DRP-H485D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217281  
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-H485D940-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

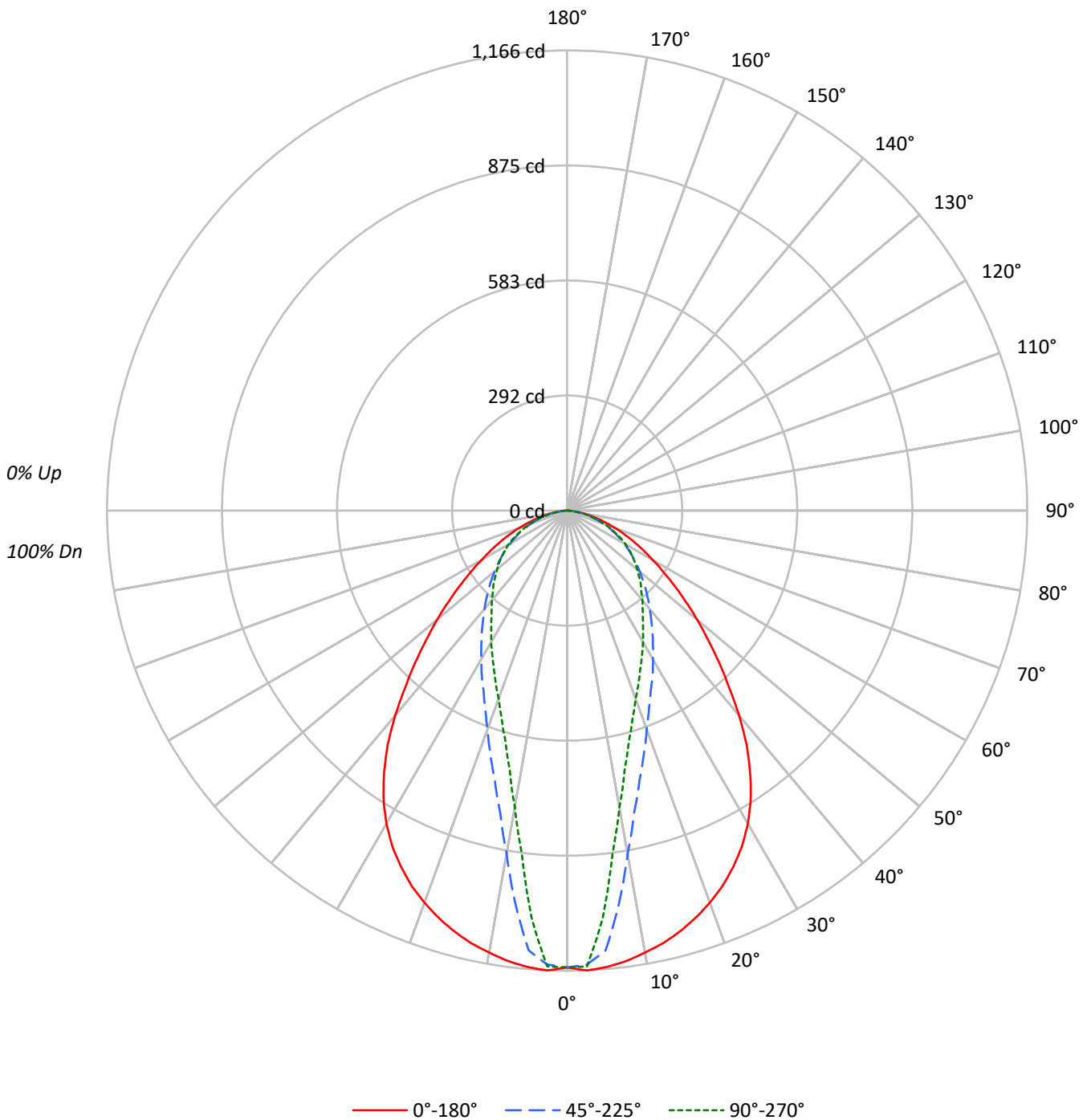
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1555.9 lumens  
Efficiency: N/A  
Efficacy: 89.9 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°	21936	21936	21936
5°	22078	21274	19699
10°	21880	16987	14686
15°	21656	13885	11859
20°	21311	11885	10228
25°	20821	10492	9179
30°	20030	9514	8416
35°	18690	8717	7739
40°	16761	8050	7336
45°	14581	7526	7071
50°	12656	7068	6817
55°	10953	6682	6643
60°	9499	6294	6476
65°	8311	5904	6119
70°	7162	5418	5622
75°	5966	4773	4948
80°	4681	3884	3753
85°	2891	2500	2500

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14581 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	6.4
10°-20°	219.8	14.1
20°-30°	269.7	17.3
30°-40°	278.7	17.9
40°-50°	251.7	16.2
50°-60°	204.0	13.1
60°-70°	143.0	9.2
70°-80°	73.7	4.7
80°-90°	15.6	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°	589.2	37.9
0°-40°	867.9	55.8
0°-60°	1323.6	85.1
0°-90°	1555.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1555.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1161	1158	1119	1068	1036	110
15°	1104	931	708	631	605	311
25°	996	661	502	454	439	458
35°	808	489	377	345	335	502
45°	544	352	281	265	264	421
55°	332	241	202	200	201	299
65°	185	149	132	135	136	185
75°	82	70	65	67	68	88
85°	13	12	12	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.8	1157.8	1157.8	1157.8	1157.8
2.5°	1166.3	1162.1	1151.2	1161.5	1156.0
5°	1160.9	1158.4	1118.6	1068.4	1035.8
7.5°	1151.2	1142.7	1005.0	910.2	878.2
10°	1137.3	1095.0	883.0	794.8	763.4
12.5°	1122.8	1023.1	784.6	701.8	673.4
15°	1104.1	930.7	707.9	631.2	604.6
17.5°	1082.3	850.4	646.9	573.2	552.0
20°	1057.0	780.9	589.5	524.9	507.3
22.5°	1029.2	722.4	541.8	489.2	472.9
25°	996.0	661.4	501.9	454.2	439.1
27.5°	959.1	614.9	468.7	424.0	411.3
30°	915.6	569.6	434.9	395.0	384.7
32.5°	866.1	527.3	404.7	369.6	357.6
35°	808.1	488.6	376.9	344.9	334.6
37.5°	746.5	450.6	350.3	322.5	314.1
40°	677.7	417.4	325.5	300.8	296.6
42.5°	607.0	384.1	303.2	282.1	278.4
45°	544.2	352.1	280.9	265.1	263.9
47.5°	483.2	323.1	260.3	248.2	247.0
50°	429.4	292.9	239.8	231.9	231.3
52.5°	378.1	266.4	220.5	216.2	217.4
55°	331.6	241.0	202.3	199.9	201.1
57.5°	288.7	217.4	184.2	184.8	186.6
60°	250.7	193.3	166.1	168.5	170.9
62.5°	217.4	170.9	148.6	152.2	154.6
65°	185.4	148.6	131.7	134.7	136.5
67.5°	157.0	127.4	114.8	118.4	119.0
70°	129.3	108.1	97.8	101.5	101.5
72.5°	105.1	88.2	81.5	83.3	84.0
75°	81.5	70.1	65.2	67.0	67.6
77.5°	61.6	53.2	49.5	51.3	50.7
80°	42.9	37.4	35.6	35.0	34.4
82.5°	26.6	23.6	21.7	22.3	21.7
85°	13.3	11.5	11.5	11.5	11.5
87.5°	4.2	4.2	4.2	4.2	4.2
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	19.23	20.73	19.59	21.04	21.35	17.72	19.22	18.09	19.54	19.85
	3H	20.81	22.16	21.19	22.49	22.85	19.44	20.78	19.82	21.11	21.47
	4H	21.34	22.60	21.74	22.95	23.33	20.02	21.28	20.42	21.63	22.01
	6H	21.66	22.83	22.08	23.20	23.59	20.37	21.53	20.78	21.90	22.29
	8H	21.74	22.85	22.17	23.24	23.64	20.44	21.55	20.87	21.94	22.34
	12H	21.76	22.83	22.20	23.21	23.64	20.47	21.53	20.90	21.91	22.34
4H	2H	19.54	20.80	19.94	21.15	21.53	18.28	19.55	18.68	19.90	20.28
	3H	21.32	22.37	21.73	22.77	23.17	20.20	21.25	20.61	21.65	22.05
	4H	21.95	22.89	22.38	23.31	23.74	20.90	21.84	21.33	22.26	22.69
	6H	22.38	23.20	22.84	23.64	24.10	21.35	22.17	21.81	22.61	23.07
	8H	22.49	23.25	22.95	23.70	24.16	21.45	22.22	21.91	22.66	23.13
	12H	22.54	23.22	23.02	23.70	24.17	21.50	22.19	21.99	22.67	23.14
8H	4H	22.10	22.86	22.56	23.31	23.77	21.14	21.90	21.60	22.35	22.81
	6H	22.60	23.23	23.10	23.73	24.20	21.67	22.30	22.17	22.80	23.27
	8H	22.75	23.31	23.26	23.83	24.31	21.82	22.39	22.34	22.90	23.39
	12H	22.84	23.34	23.35	23.83	24.40	21.92	22.42	22.43	22.91	23.47
12H	4H	22.09	22.78	22.58	23.26	23.73	21.15	21.83	21.63	22.31	22.78
	6H	22.60	23.17	23.12	23.68	24.17	21.69	22.26	22.21	22.77	23.26
	8H	22.79	23.29	23.30	23.78	24.35	21.89	22.38	22.40	22.88	23.44