

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: P1217305

Luminaire Tested: S122DRP-S1005D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217305  
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-S1005D927-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: -

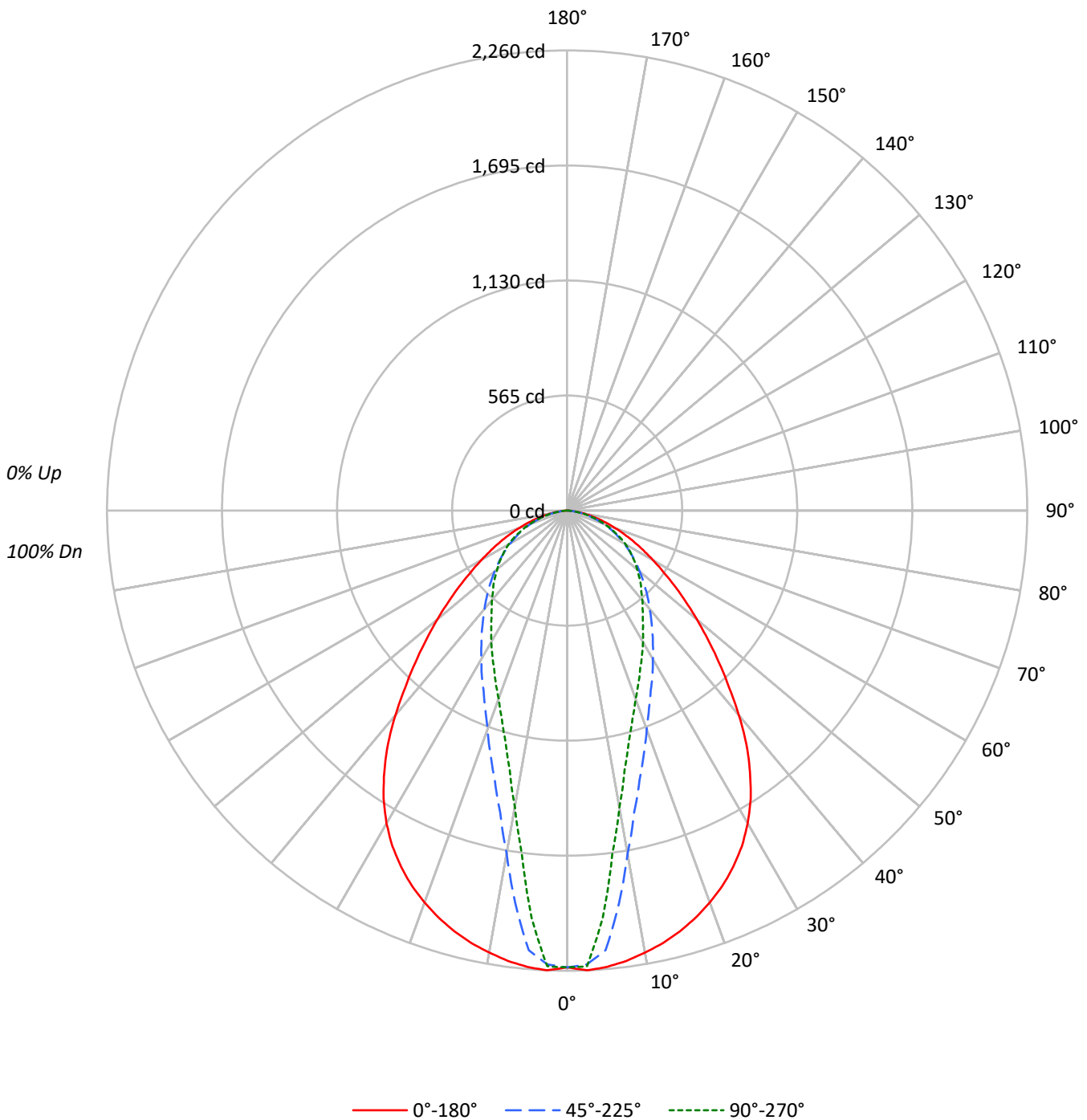
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3014.8 lumens  
Efficiency: N/A  
Efficacy: 72.0 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): 41.9  
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	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°	42505	42505	42505
5°	42780	41222	38171
10°	42395	32916	28459
15°	41963	26903	22978
20°	41293	23029	19821
25°	40343	20330	17785
30°	38814	18433	16309
35°	36217	16891	14997
40°	32476	15601	14211
45°	28254	14581	13702
50°	24526	13694	13210
55°	21222	12951	12872
60°	18404	12194	12550
65°	16107	11436	11857
70°	13876	10503	10890
75°	11566	9253	9597
80°	9067	7528	7277
85°	5587	4826	4826

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28254 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.2	6.4
10°-20°	425.9	14.1
20°-30°	522.6	17.3
30°-40°	540.1	17.9
40°-50°	487.7	16.2
50°-60°	395.3	13.1
60°-70°	277.1	9.2
70°-80°	142.9	4.7
80°-90°	30.1	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°	1141.7	37.9
0°-40°	1681.7	55.8
0°-60°	2564.7	85.1
0°-90°	3014.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3014.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2244	2244	2244	2244	2244	
5°	2249	2245	2168	2070	2007	213
15°	2139	1804	1372	1223	1172	603
25°	1930	1282	972	880	851	887
35°	1566	947	730	668	648	973
45°	1054	682	544	514	511	816
55°	642	467	392	387	390	579
65°	359	288	255	261	264	359
75°	158	136	126	130	131	171
85°	26	22	22	22	22	35
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2243.5	2243.5	2243.5	2243.5	2243.5
2.5°	2259.9	2251.7	2230.7	2250.5	2240.0
5°	2249.4	2244.7	2167.5	2070.3	2007.1
7.5°	2230.7	2214.3	1947.4	1763.7	1701.7
10°	2203.7	2121.8	1711.0	1540.2	1479.3
12.5°	2175.6	1982.5	1520.3	1359.9	1304.9
15°	2139.4	1803.5	1371.6	1223.0	1171.5
17.5°	2097.2	1647.8	1253.4	1110.6	1069.7
20°	2048.1	1513.2	1142.2	1017.0	983.1
22.5°	1994.2	1399.7	1049.8	948.0	916.4
25°	1929.9	1281.5	972.5	880.1	850.8
27.5°	1858.5	1191.4	908.2	821.6	797.0
30°	1774.2	1103.6	842.6	765.4	745.5
32.5°	1678.3	1021.7	784.1	716.2	692.8
35°	1565.9	946.8	730.3	668.3	648.4
37.5°	1446.5	873.1	678.8	625.0	608.6
40°	1313.1	808.7	630.8	582.8	574.6
42.5°	1176.2	744.3	587.5	546.5	539.5
45°	1054.5	682.3	544.2	513.8	511.4
47.5°	936.3	626.1	504.4	481.0	478.7
50°	832.1	567.6	464.6	449.4	448.2
52.5°	732.6	516.1	427.2	419.0	421.3
55°	642.5	467.0	392.1	387.4	389.7
57.5°	559.4	421.3	357.0	358.1	361.6
60°	485.7	374.5	321.8	326.5	331.2
62.5°	421.3	331.2	287.9	294.9	299.6
65°	359.3	287.9	255.1	261.0	264.5
67.5°	304.3	246.9	222.4	229.4	230.6
70°	250.5	209.5	189.6	196.6	196.6
72.5°	203.6	170.9	158.0	161.5	162.7
75°	158.0	135.8	126.4	129.9	131.1
77.5°	119.4	103.0	96.0	99.5	98.3
80°	83.1	72.6	69.0	67.9	66.7
82.5°	51.5	45.6	42.1	43.3	42.1
85°	25.7	22.2	22.2	22.2	22.2
87.5°	8.2	8.2	8.2	8.2	8.2
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	21.53	23.02	21.89	23.34	23.65	20.02	21.52	20.39	21.84	22.15
	3H	23.11	24.46	23.49	24.79	25.15	21.74	23.08	22.11	23.41	23.77
	4H	23.64	24.90	24.04	25.25	25.63	22.32	23.58	22.72	23.93	24.31
	6H	23.96	25.13	24.38	25.50	25.89	22.66	23.83	23.08	24.20	24.59
	8H	24.04	25.15	24.46	25.54	25.94	22.74	23.85	23.17	24.24	24.64
	12H	24.06	25.13	24.49	25.51	25.94	22.77	23.83	23.20	24.21	24.64
4H	2H	21.83	23.10	22.23	23.45	23.82	20.58	21.85	20.98	22.19	22.57
	3H	23.62	24.66	24.03	25.06	25.47	22.50	23.55	22.91	23.95	24.35
	4H	24.24	25.19	24.68	25.60	26.04	23.19	24.14	23.63	24.55	24.99
	6H	24.68	25.50	25.14	25.94	26.40	23.65	24.47	24.10	24.91	25.37
	8H	24.79	25.55	25.25	26.00	26.46	23.75	24.52	24.21	24.96	25.43
	12H	24.84	25.52	25.32	26.00	26.47	23.80	24.49	24.29	24.97	25.44
8H	4H	24.39	25.16	24.86	25.60	26.07	23.44	24.20	23.90	24.65	25.11
	6H	24.90	25.53	25.40	26.02	26.50	23.97	24.60	24.47	25.10	25.57
	8H	25.05	25.61	25.56	26.12	26.61	24.12	24.69	24.64	25.20	25.69
	12H	25.14	25.64	25.65	26.13	26.69	24.22	24.72	24.73	25.21	25.77
12H	4H	24.39	25.08	24.88	25.55	26.03	23.45	24.13	23.93	24.61	25.08
	6H	24.90	25.47	25.42	25.98	26.47	23.99	24.56	24.51	25.07	25.56
	8H	25.09	25.59	25.60	26.08	26.64	24.19	24.68	24.70	25.18	25.74