

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: P1217258

Luminaire Tested: S122DRP-H1005D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217258  
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-H1005D840-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: -

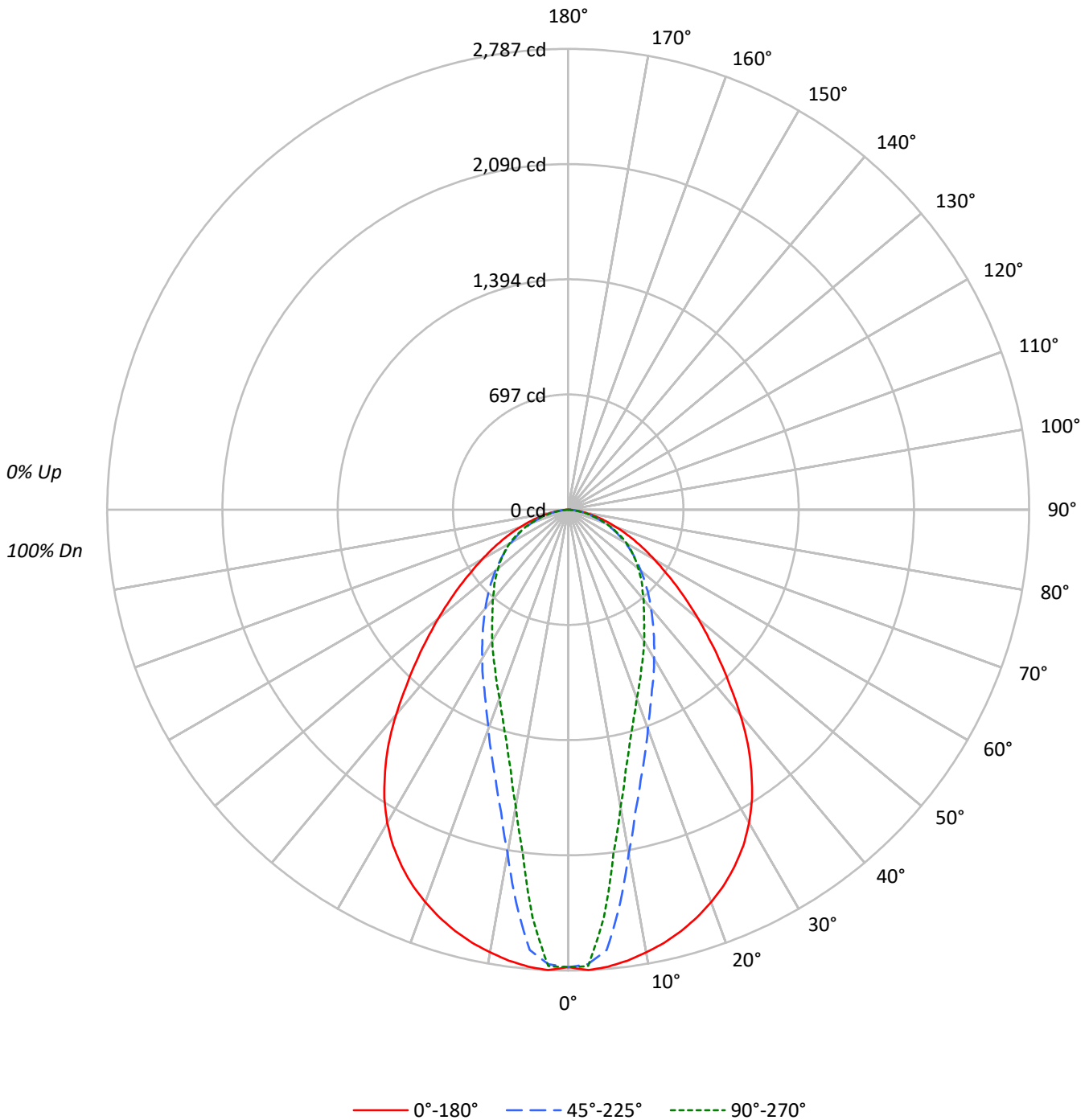
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3717.7 lumens  
Efficiency: N/A  
Efficacy: 101.6 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): 36.6  
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

TEST NUMBER: P1217258

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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°	52416	52416	52416
5°	52753	50832	47072
10°	52280	40591	35094
15°	51744	33175	28335
20°	50921	28400	24442
25°	49748	25071	21933
30°	47864	22732	20111
35°	44661	20827	18491
40°	40049	19239	17525
45°	34840	17981	16899
50°	30244	16886	16291
55°	26171	15971	15875
60°	22693	15039	15475
65°	19864	14103	14623
70°	17106	12951	13433
75°	14260	11412	11829
80°	11183	9285	8979
85°	6913	5956	5956

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 34840 cd/sqm



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CATALOG NUMBER: S122DRP-H1005D840-X4F0-XX-UDD-G-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.2	6.4
10°-20°	525.2	14.1
20°-30°	644.4	17.3
30°-40°	666.0	17.9
40°-50°	601.5	16.2
50°-60°	487.4	13.1
60°-70°	341.7	9.2
70°-80°	176.2	4.7
80°-90°	37.2	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°	1407.8	37.9
0°-40°	2073.8	55.8
0°-60°	3162.6	85.1
0°-90°	3717.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3717.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2767	2767	2767	2767	2767	
5°	2774	2768	2673	2553	2475	263
15°	2638	2224	1691	1508	1445	743
25°	2380	1580	1199	1085	1049	1093
35°	1931	1168	900	824	800	1200
45°	1300	841	671	634	631	1006
55°	792	576	484	478	481	714
65°	443	355	315	322	326	443
75°	195	167	156	160	162	210
85°	32	27	27	27	27	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2766.6	2766.6	2766.6	2766.6	2766.6
2.5°	2786.8	2776.7	2750.7	2775.2	2762.3
5°	2773.8	2768.0	2672.8	2553.0	2475.1
7.5°	2750.7	2730.5	2401.5	2174.9	2098.4
10°	2717.5	2616.5	2109.9	1899.2	1824.2
12.5°	2682.9	2444.8	1874.7	1677.0	1609.2
15°	2638.1	2224.0	1691.4	1508.1	1444.6
17.5°	2586.2	2032.0	1545.7	1369.6	1319.1
20°	2525.6	1866.0	1408.6	1254.1	1212.3
22.5°	2459.2	1726.1	1294.5	1169.0	1130.0
25°	2379.8	1580.3	1199.3	1085.3	1049.2
27.5°	2291.8	1469.2	1119.9	1013.1	982.8
30°	2187.9	1360.9	1039.1	943.8	919.3
32.5°	2069.5	1259.9	966.9	883.2	854.4
35°	1931.0	1167.5	900.5	824.1	799.5
37.5°	1783.8	1076.6	837.0	770.7	750.5
40°	1619.3	997.2	777.9	718.7	708.6
42.5°	1450.4	917.9	724.5	674.0	665.3
45°	1300.3	841.4	671.1	633.6	630.7
47.5°	1154.5	772.1	622.0	593.1	590.3
50°	1026.1	699.9	572.9	554.2	552.7
52.5°	903.4	636.4	526.8	516.7	519.5
55°	792.3	575.8	483.5	477.7	480.6
57.5°	689.8	519.5	440.2	441.6	445.9
60°	598.9	461.8	396.9	402.6	408.4
62.5°	519.5	408.4	355.0	363.7	369.5
65°	443.1	355.0	314.6	321.8	326.2
67.5°	375.2	304.5	274.2	282.9	284.3
70°	308.8	258.3	233.8	242.5	242.5
72.5°	251.1	210.7	194.8	199.2	200.6
75°	194.8	167.4	155.9	160.2	161.6
77.5°	147.2	127.0	118.3	122.7	121.2
80°	102.5	89.5	85.1	83.7	82.3
82.5°	63.5	56.3	52.0	53.4	52.0
85°	31.8	27.4	27.4	27.4	27.4
87.5°	10.1	10.1	10.1	10.1	10.1
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	22.25	23.75	22.62	24.07	24.38	20.75	22.25	21.12	22.56	22.88
	3H	23.84	25.19	24.22	25.51	25.88	22.46	23.81	22.84	24.14	24.50
	4H	24.36	25.63	24.76	25.97	26.35	23.04	24.31	23.44	24.66	25.03
	6H	24.69	25.86	25.10	26.22	26.62	23.39	24.56	23.80	24.93	25.32
	8H	24.76	25.87	25.19	26.26	26.67	23.47	24.58	23.89	24.97	25.37
	12H	24.79	25.85	25.22	26.24	26.66	23.50	24.56	23.93	24.94	25.37
4H	2H	22.56	23.82	22.96	24.17	24.55	21.31	22.57	21.71	22.92	23.30
	3H	24.34	25.39	24.75	25.79	26.19	23.23	24.28	23.64	24.68	25.08
	4H	24.97	25.92	25.41	26.33	26.77	23.92	24.87	24.36	25.28	25.72
	6H	25.41	26.23	25.86	26.67	27.13	24.38	25.20	24.83	25.64	26.10
	8H	25.51	26.28	25.98	26.72	27.19	24.48	25.24	24.94	25.69	26.16
	12H	25.56	26.25	26.05	26.73	27.20	24.53	25.22	25.02	25.69	26.17
8H	4H	25.12	25.89	25.59	26.33	26.80	24.16	24.93	24.63	25.37	25.84
	6H	25.63	26.26	26.13	26.75	27.23	24.70	25.33	25.20	25.82	26.30
	8H	25.78	26.34	26.29	26.85	27.34	24.85	25.42	25.37	25.93	26.42
	12H	25.87	26.36	26.38	26.86	27.42	24.95	25.45	25.46	25.94	26.50
12H	4H	25.12	25.80	25.60	26.28	26.75	24.18	24.86	24.66	25.34	25.81
	6H	25.63	26.20	26.15	26.71	27.20	24.72	25.29	25.24	25.80	26.29
	8H	25.82	26.31	26.33	26.81	27.37	24.92	25.41	25.43	25.91	26.47