

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: P1217290

Luminaire Tested: S122DRP-H675D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217290  
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-H675D940-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: -

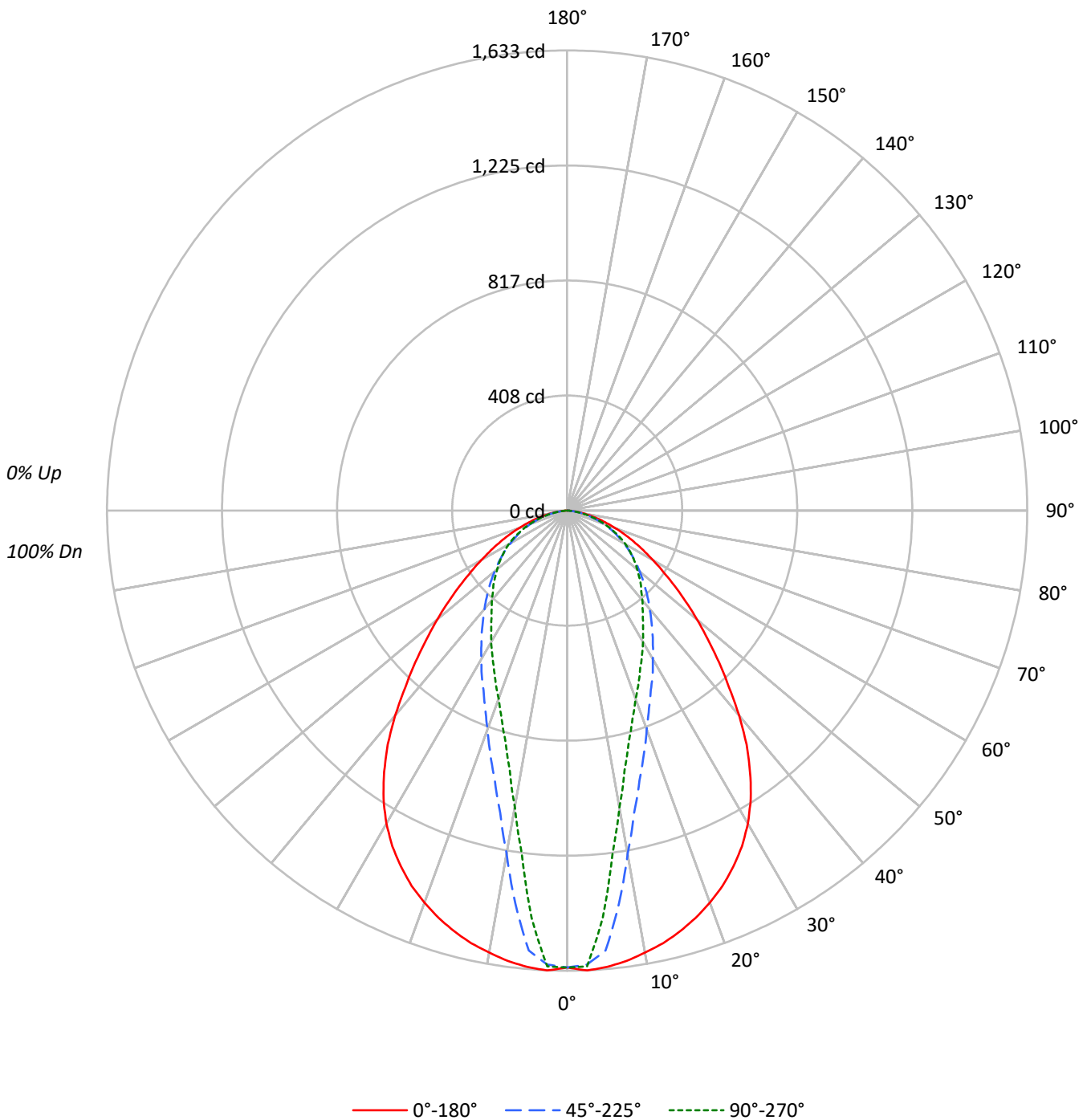
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2179.0 lumens  
Efficiency: N/A  
Efficacy: 91.6 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): 23.8  
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	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													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57													57															
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50													50															
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45													45															
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41													41															
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37													37															
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34													34															
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31													31															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	30721	30721	30721
5°	30920	29794	27590
10°	30642	23792	20569
15°	30329	19446	16607
20°	29845	16646	14325
25°	29158	14694	12854
30°	28053	13323	11787
35°	26177	12207	10838
40°	23473	11275	10271
45°	20419	10538	9903
50°	17726	9898	9550
55°	15340	9361	9305
60°	13300	8814	9071
65°	11642	8267	8571
70°	10026	7589	7871
75°	8360	6691	6932
80°	6557	5444	5259
85°	4043	3500	3500

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20419 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.6	6.4
10°-20°	307.8	14.1
20°-30°	377.7	17.3
30°-40°	390.3	17.9
40°-50°	352.5	16.2
50°-60°	285.7	13.1
60°-70°	200.3	9.2
70°-80°	103.3	4.7
80°-90°	21.8	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°	825.2	37.9
0°-40°	1215.5	55.8
0°-60°	1853.7	85.1
0°-90°	2179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2179.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1622	1622	1622	1622	1622	
5°	1626	1622	1567	1496	1451	154
15°	1546	1304	991	884	847	436
25°	1395	926	703	636	615	641
35°	1132	684	528	483	469	704
45°	762	493	393	371	370	590
55°	464	338	283	280	282	418
65°	260	208	184	189	191	260
75°	114	98	91	94	95	123
85°	19	16	16	16	16	25
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1621.5	1621.5	1621.5	1621.5	1621.5
2.5°	1633.4	1627.5	1612.2	1626.6	1619.0
5°	1625.8	1622.4	1566.6	1496.3	1450.7
7.5°	1612.2	1600.4	1407.5	1274.7	1229.9
10°	1592.8	1533.6	1236.7	1113.2	1069.2
12.5°	1572.5	1432.9	1098.8	982.9	943.1
15°	1546.3	1303.5	991.4	883.9	846.7
17.5°	1515.8	1191.0	905.9	802.7	773.1
20°	1480.3	1093.7	825.6	735.1	710.5
22.5°	1441.4	1011.7	758.7	685.2	662.3
25°	1394.8	926.2	702.9	636.1	614.9
27.5°	1343.2	861.1	656.4	593.8	576.0
30°	1282.3	797.7	609.0	553.2	538.8
32.5°	1213.0	738.4	566.7	517.7	500.8
35°	1131.8	684.3	527.8	483.0	468.6
37.5°	1045.5	631.0	490.6	451.7	439.9
40°	949.1	584.5	455.9	421.2	415.3
42.5°	850.1	538.0	424.6	395.0	389.9
45°	762.1	493.1	393.3	371.3	369.6
47.5°	676.7	452.5	364.6	347.7	346.0
50°	601.4	410.2	335.8	324.8	324.0
52.5°	529.5	373.0	308.7	302.8	304.5
55°	464.4	337.5	283.4	280.0	281.7
57.5°	404.3	304.5	258.0	258.8	261.4
60°	351.0	270.7	232.6	236.0	239.4
62.5°	304.5	239.4	208.1	213.2	216.5
65°	259.7	208.1	184.4	188.6	191.2
67.5°	219.9	178.5	160.7	165.8	166.6
70°	181.0	151.4	137.0	142.1	142.1
72.5°	147.2	123.5	114.2	116.7	117.6
75°	114.2	98.1	91.4	93.9	94.7
77.5°	86.3	74.4	69.4	71.9	71.1
80°	60.1	52.4	49.9	49.1	48.2
82.5°	37.2	33.0	30.5	31.3	30.5
85°	18.6	16.1	16.1	16.1	16.1
87.5°	5.9	5.9	5.9	5.9	5.9
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	20.40	21.90	20.76	22.21	22.52	18.89	20.39	19.26	20.71	21.02
	3H	21.98	23.33	22.36	23.66	24.02	20.61	21.95	20.99	22.28	22.64
	4H	22.51	23.77	22.91	24.12	24.50	21.19	22.45	21.59	22.80	23.18
	6H	22.83	24.00	23.25	24.37	24.76	21.54	22.70	21.95	23.07	23.46
	8H	22.91	24.02	23.34	24.41	24.81	21.61	22.72	22.04	23.11	23.51
	12H	22.94	24.00	23.37	24.38	24.81	21.64	22.70	22.07	23.09	23.52
4H	2H	20.71	21.97	21.11	22.32	22.70	19.45	20.72	19.85	21.07	21.45
	3H	22.49	23.54	22.90	23.94	24.34	21.37	22.42	21.78	22.82	23.22
	4H	23.12	24.06	23.55	24.48	24.91	22.07	23.01	22.50	23.43	23.86
	6H	23.55	24.37	24.01	24.81	25.27	22.52	23.34	22.98	23.78	24.24
	8H	23.66	24.42	24.12	24.87	25.33	22.62	23.39	23.09	23.83	24.30
	12H	23.71	24.39	24.19	24.87	25.34	22.68	23.36	23.16	23.84	24.31
8H	4H	23.27	24.03	23.73	24.48	24.94	22.31	23.07	22.77	23.52	23.98
	6H	23.77	24.40	24.27	24.90	25.37	22.85	23.48	23.34	23.97	24.45
	8H	23.92	24.48	24.43	25.00	25.48	23.00	23.56	23.51	24.07	24.56
	12H	24.01	24.51	24.52	25.00	25.56	23.09	23.59	23.60	24.08	24.65
12H	4H	23.26	23.95	23.75	24.43	24.90	22.32	23.00	22.80	23.48	23.95
	6H	23.78	24.34	24.29	24.85	25.34	22.87	23.43	23.38	23.94	24.43
	8H	23.96	24.46	24.47	24.95	25.52	23.06	23.56	23.57	24.05	24.61