

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: P1217298

Luminaire Tested: S122DRP-H865D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217298  
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-H865D935-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

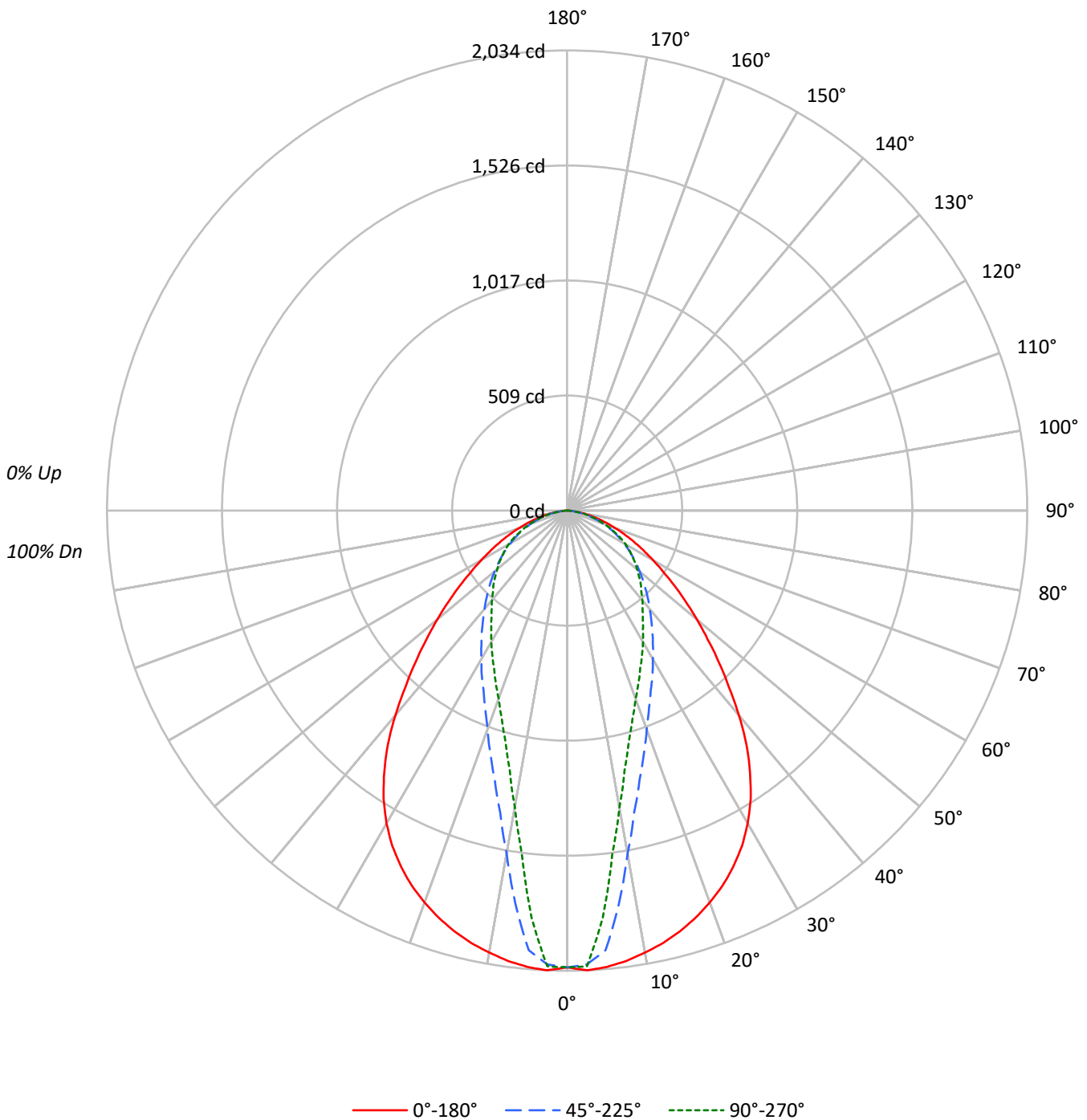
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2713.4 lumens  
Efficiency: N/A  
Efficacy: 87.8 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): 30.9  
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

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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°	38255	38255	38255
5°	38500	37099	34355
10°	38157	29625	25614
15°	37765	24214	20679
20°	37164	20726	17839
25°	36309	18298	16007
30°	34933	16591	14677
35°	32595	15202	13496
40°	29228	14040	12791
45°	25427	13123	12333
50°	22073	12326	11890
55°	19102	11657	11584
60°	16562	10977	11296
65°	14498	10293	10669
70°	12486	9450	9805
75°	10409	8330	8638
80°	8161	6775	6546
85°	5043	4348	4348

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25427 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.8	6.4
10°-20°	383.3	14.1
20°-30°	470.3	17.3
30°-40°	486.0	17.9
40°-50°	439.0	16.2
50°-60°	355.7	13.1
60°-70°	249.4	9.2
70°-80°	128.6	4.7
80°-90°	27.1	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°	1027.5	37.9
0°-40°	1513.5	55.8
0°-60°	2308.2	85.1
0°-90°	2713.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2713.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2019	2019	2019	2019	2019	
5°	2024	2020	1951	1863	1806	192
15°	1925	1623	1234	1101	1054	543
25°	1737	1153	875	792	766	798
35°	1409	852	657	601	584	876
45°	949	614	490	462	460	734
55°	578	420	353	349	351	521
65°	323	259	230	235	238	323
75°	142	122	114	117	118	154
85°	23	20	20	20	20	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2019.2	2019.2	2019.2	2019.2	2019.2
2.5°	2033.9	2026.5	2007.6	2025.5	2016.0
5°	2024.4	2020.2	1950.7	1863.3	1806.4
7.5°	2007.6	1992.8	1752.7	1587.3	1531.5
10°	1983.4	1909.6	1539.9	1386.1	1331.4
12.5°	1958.1	1784.3	1368.2	1223.9	1174.4
15°	1925.4	1623.1	1234.5	1100.7	1054.3
17.5°	1887.5	1483.0	1128.1	999.6	962.7
20°	1843.3	1361.9	1028.0	915.3	884.8
22.5°	1794.8	1259.7	944.8	853.2	824.7
25°	1736.9	1153.4	875.3	792.1	765.7
27.5°	1672.6	1072.3	817.4	739.4	717.3
30°	1596.8	993.3	758.4	688.9	670.9
32.5°	1510.4	919.5	705.7	644.6	623.5
35°	1409.3	852.1	657.3	601.4	583.5
37.5°	1301.9	785.8	610.9	562.5	547.7
40°	1181.8	727.8	567.7	524.5	517.2
42.5°	1058.6	669.9	528.8	491.9	485.6
45°	949.0	614.1	489.8	462.4	460.3
47.5°	842.6	563.5	454.0	432.9	430.8
50°	748.9	510.8	418.2	404.5	403.4
52.5°	659.4	464.5	384.5	377.1	379.2
55°	578.3	420.3	352.9	348.6	350.7
57.5°	503.5	379.2	321.3	322.3	325.5
60°	437.1	337.1	289.7	293.9	298.1
62.5°	379.2	298.1	259.1	265.4	269.6
65°	323.4	259.1	229.6	234.9	238.0
67.5°	273.9	222.2	200.1	206.4	207.5
70°	225.4	188.5	170.6	177.0	177.0
72.5°	183.3	153.8	142.2	145.4	146.4
75°	142.2	122.2	113.8	116.9	118.0
77.5°	107.4	92.7	86.4	89.5	88.5
80°	74.8	65.3	62.1	61.1	60.0
82.5°	46.3	41.1	37.9	39.0	37.9
85°	23.2	20.0	20.0	20.0	20.0
87.5°	7.4	7.4	7.4	7.4	7.4
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	21.16	22.66	21.52	22.97	23.29	19.66	21.16	20.02	21.47	21.78
	3H	22.75	24.09	23.12	24.42	24.78	21.37	22.72	21.75	23.04	23.41
	4H	23.27	24.53	23.67	24.88	25.26	21.95	23.21	22.35	23.56	23.94
	6H	23.60	24.76	24.01	25.13	25.52	22.30	23.46	22.71	23.83	24.22
	8H	23.67	24.78	24.10	25.17	25.57	22.37	23.48	22.80	23.87	24.27
	12H	23.70	24.76	24.13	25.14	25.57	22.40	23.47	22.83	23.85	24.28
4H	2H	21.47	22.73	21.87	23.08	23.46	20.22	21.48	20.62	21.83	22.21
	3H	23.25	24.30	23.66	24.70	25.10	22.13	23.18	22.54	23.58	23.98
	4H	23.88	24.82	24.31	25.24	25.68	22.83	23.77	23.26	24.19	24.63
	6H	24.31	25.13	24.77	25.58	26.04	23.28	24.10	23.74	24.54	25.00
	8H	24.42	25.18	24.88	25.63	26.10	23.38	24.15	23.85	24.59	25.06
	12H	24.47	25.15	24.95	25.63	26.10	23.44	24.12	23.92	24.60	25.07
8H	4H	24.03	24.79	24.49	25.24	25.71	23.07	23.84	23.53	24.28	24.75
	6H	24.54	25.17	25.03	25.66	26.14	23.61	24.24	24.11	24.73	25.21
	8H	24.68	25.25	25.20	25.76	26.25	23.76	24.32	24.27	24.83	25.32
	12H	24.77	25.27	25.28	25.76	26.33	23.85	24.35	24.36	24.84	25.41
12H	4H	24.03	24.71	24.51	25.19	25.66	23.08	23.76	23.56	24.24	24.71
	6H	24.54	25.10	25.05	25.61	26.10	23.63	24.19	24.14	24.70	25.19
	8H	24.72	25.22	25.23	25.71	26.28	23.82	24.32	24.33	24.81	25.38