

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: P1217297

Luminaire Tested: S122DRP-H865D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217297
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-H865D930-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

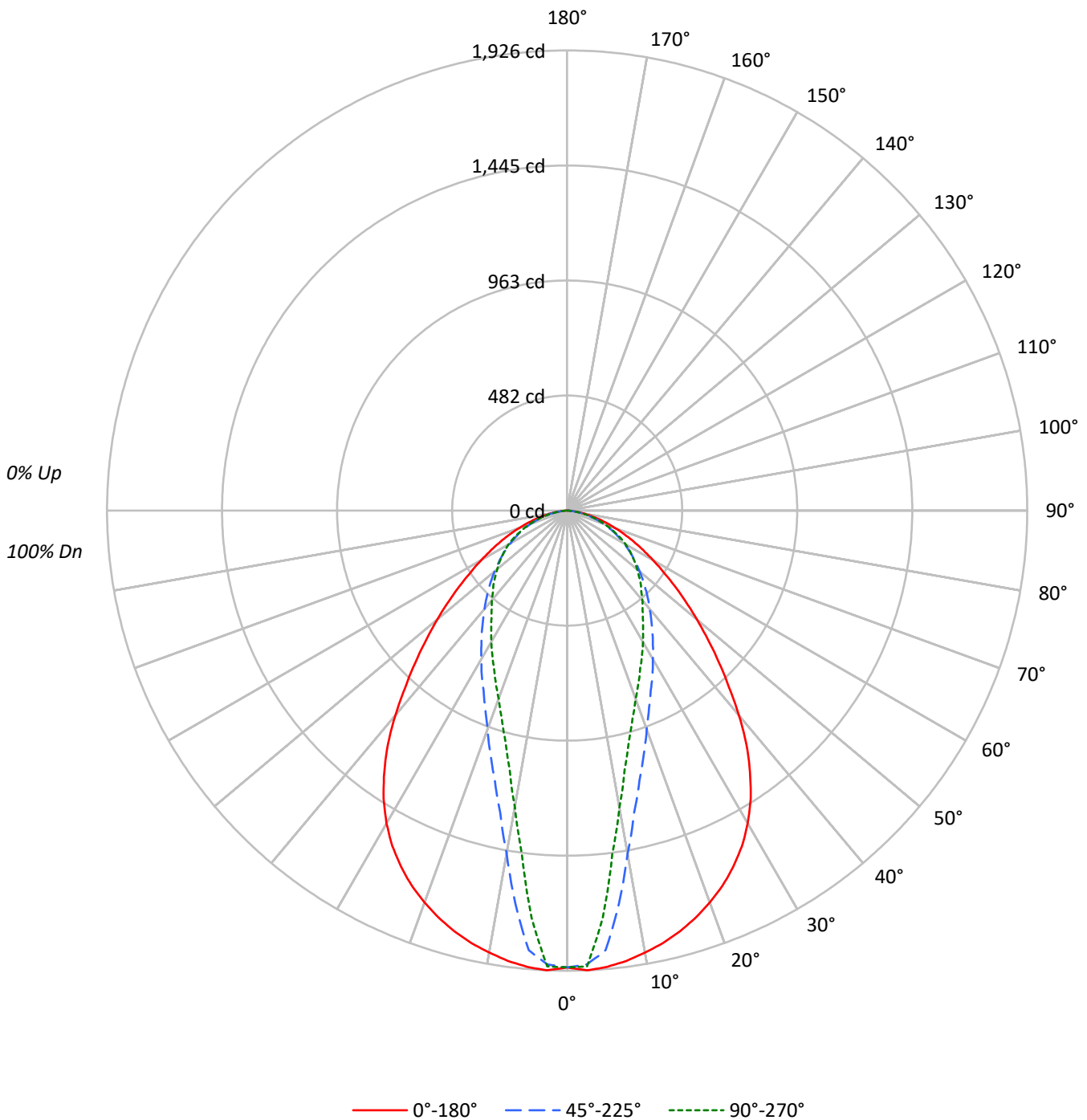
Lumens per Lamp: N/A
Luminaire Lumens: 2569.3 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
Input Voltage (V): 120
Input Current (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

TEST NUMBER: P1217297

CATALOG NUMBER: S122DRP-H865D930-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217297

CATALOG NUMBER: S122DRP-H865D930-X4F0-XX-UDD-G-W

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°	36224	36224	36224
5°	36458	35130	32531
10°	36131	28053	24253
15°	35761	22927	19583
20°	35190	19627	16892
25°	34382	17326	15158
30°	33078	15710	13898
35°	30865	14395	12781
40°	27678	13296	12111
45°	24077	12427	11679
50°	20900	11672	11259
55°	18088	11036	10970
60°	15683	10394	10697
65°	13727	9746	10105
70°	11821	8952	9284
75°	9853	7884	8177
80°	7725	6415	6208
85°	4761	4130	4130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24077 cd/sqm



TEST NUMBER: P1217297

CATALOG NUMBER: S122DRP-H865D930-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.6	6.4
10°-20°	363.0	14.1
20°-30°	445.3	17.3
30°-40°	460.2	17.9
40°-50°	415.7	16.2
50°-60°	336.8	13.1
60°-70°	236.1	9.2
70°-80°	121.8	4.7
80°-90°	25.7	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°	973.0	37.9
0°-40°	1433.2	55.8
0°-60°	2185.7	85.1
0°-90°	2569.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1917	1913	1847	1764	1710	182
15°	1823	1537	1169	1042	998	514
25°	1645	1092	829	750	725	756
35°	1334	807	622	570	553	830
45°	899	582	464	438	436	695
55°	548	398	334	330	332	493
65°	306	245	217	222	225	306
75°	135	116	108	111	112	145
85°	22	19	19	19	19	29
90°	0	0	0	0	0	



TEST NUMBER: P1217297

CATALOG NUMBER: S122DRP-H865D930-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1912.0	1912.0	1912.0	1912.0	1912.0
2.5°	1926.0	1919.0	1901.0	1918.0	1909.0
5°	1917.0	1913.0	1847.2	1764.4	1710.5
7.5°	1901.0	1887.1	1659.7	1503.1	1450.2
10°	1878.1	1808.3	1458.2	1312.6	1260.7
12.5°	1854.1	1689.6	1295.6	1159.0	1112.1
15°	1823.2	1537.0	1168.9	1042.3	998.4
17.5°	1787.3	1404.3	1068.2	946.5	911.6
20°	1745.4	1289.6	973.5	866.7	837.8
22.5°	1699.5	1192.9	894.7	807.9	781.0
25°	1644.7	1092.1	828.8	750.0	725.1
27.5°	1583.9	1015.3	774.0	700.2	679.2
30°	1512.0	940.5	718.1	652.3	635.3
32.5°	1430.3	870.7	668.2	610.4	590.5
35°	1334.5	806.9	622.4	569.5	552.6
37.5°	1232.8	744.1	578.5	532.6	518.6
40°	1119.1	689.2	537.6	496.7	489.7
42.5°	1002.4	634.3	500.7	465.8	459.8
45°	898.6	581.5	463.8	437.9	435.9
47.5°	797.9	533.6	429.9	409.9	407.9
50°	709.1	483.7	396.0	383.0	382.0
52.5°	624.4	439.8	364.0	357.1	359.1
55°	547.6	398.0	334.1	330.1	332.1
57.5°	476.8	359.1	304.2	305.2	308.2
60°	413.9	319.2	274.3	278.3	282.3
62.5°	359.1	282.3	245.4	251.3	255.3
65°	306.2	245.4	217.4	222.4	225.4
67.5°	259.3	210.4	189.5	195.5	196.5
70°	213.4	178.5	161.6	167.6	167.6
72.5°	173.5	145.6	134.6	137.6	138.6
75°	134.6	115.7	107.7	110.7	111.7
77.5°	101.7	87.8	81.8	84.8	83.8
80°	70.8	61.8	58.8	57.8	56.9
82.5°	43.9	38.9	35.9	36.9	35.9
85°	21.9	19.0	19.0	19.0	19.0
87.5°	7.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217297

CATALOG NUMBER: S122DRP-H865D930-X4F0-XX-UDD-G-W

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	20.97	22.47	21.34	22.78	23.10	19.47	20.97	19.83	21.28	21.60
	3H	22.56	23.90	22.93	24.23	24.59	21.18	22.53	21.56	22.85	23.22
	4H	23.08	24.34	23.48	24.69	25.07	21.76	23.02	22.16	23.37	23.75
	6H	23.41	24.57	23.82	24.94	25.33	22.11	23.28	22.52	23.64	24.03
	8H	23.48	24.59	23.91	24.98	25.38	22.18	23.29	22.61	23.68	24.09
	12H	23.51	24.57	23.94	24.95	25.38	22.21	23.28	22.65	23.66	24.09
4H	2H	21.28	22.54	21.68	22.89	23.27	20.03	21.29	20.43	21.64	22.02
	3H	23.06	24.11	23.47	24.51	24.91	21.94	22.99	22.36	23.39	23.79
	4H	23.69	24.63	24.12	25.05	25.49	22.64	23.58	23.07	24.00	24.44
	6H	24.12	24.94	24.58	25.39	25.85	23.09	23.91	23.55	24.35	24.81
	8H	24.23	24.99	24.69	25.44	25.91	23.20	23.96	23.66	24.41	24.87
	12H	24.28	24.96	24.76	25.44	25.91	23.25	23.93	23.73	24.41	24.88
8H	4H	23.84	24.60	24.30	25.05	25.52	22.88	23.65	23.34	24.09	24.56
	6H	24.35	24.98	24.84	25.47	25.95	23.42	24.05	23.92	24.54	25.02
	8H	24.49	25.06	25.01	25.57	26.06	23.57	24.13	24.08	24.64	25.13
	12H	24.58	25.08	25.09	25.57	26.14	23.66	24.16	24.17	24.65	25.22
12H	4H	23.84	24.52	24.32	25.00	25.47	22.89	23.57	23.37	24.05	24.52
	6H	24.35	24.91	24.86	25.42	25.91	23.44	24.00	23.95	24.52	25.00
	8H	24.53	25.03	25.04	25.52	26.09	23.63	24.13	24.14	24.62	25.19