

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: P1217396

Luminaire Tested: S124DRP-S1005D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217396
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S1005D930-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

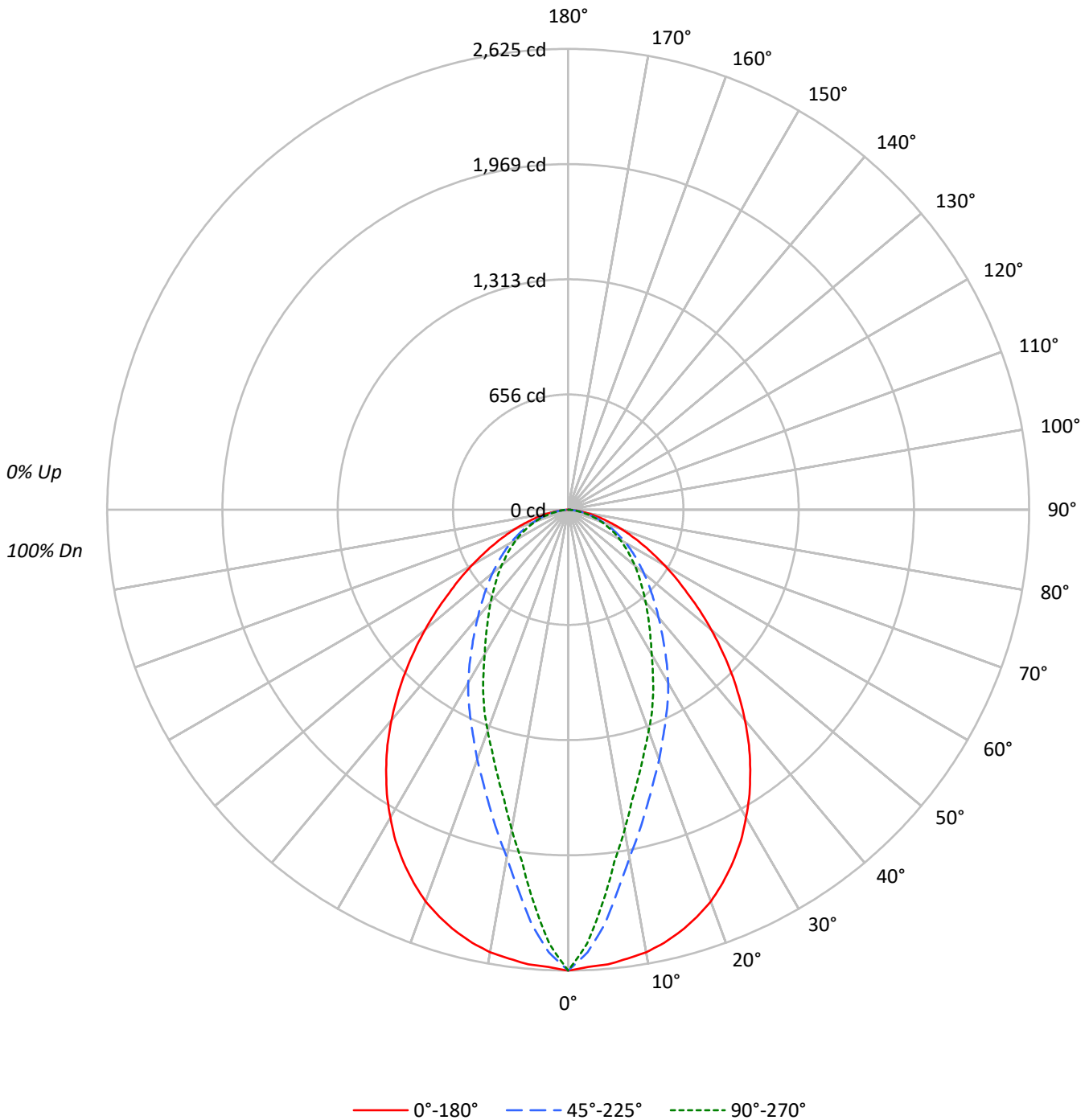
Lumens per Lamp: N/A
Luminaire Lumens: 3681.9 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (A_{in}): 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	94	92	92	90	89	87					87			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75					75			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65					65			
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57					57			
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45					45			
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37					37			
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34					34			
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23211	23211	23211
5°	23075	21053	19955
10°	22978	18048	16605
15°	22739	15925	14285
20°	22340	14249	12617
25°	21630	12822	11176
30°	20677	11625	9701
35°	19501	10307	8684
40°	18065	9233	7912
45°	16420	8397	7300
50°	14628	7727	6821
55°	12759	7182	6380
60°	11202	6684	6010
65°	9699	6167	5611
70°	8396	5589	5170
75°	6989	4936	4540
80°	5417	4002	3707
85°	3398	2698	2465

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16420 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.8	6.0
10°-20°	522.0	14.2
20°-30°	667.1	18.1
30°-40°	677.5	18.4
40°-50°	600.6	16.3
50°-60°	472.0	12.8
60°-70°	321.4	8.7
70°-80°	165.0	4.5
80°-90°	36.6	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°	1408.9	38.3
0°-40°	2086.4	56.7
0°-60°	3159.0	85.8
0°-90°	3681.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3681.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2625	2625	2625	2625	2625	
5°	2600	2534	2372	2281	2248	247
15°	2484	2074	1740	1596	1561	700
25°	2217	1625	1314	1188	1146	1019
35°	1807	1231	955	834	805	1127
45°	1313	887	672	602	584	1012
55°	828	591	466	424	414	747
65°	464	358	295	274	268	464
75°	205	169	144	138	133	220
85°	34	31	27	27	24	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2625.3	2625.3	2625.3	2625.3	2625.3
2.5°	2606.8	2610.3	2523.6	2492.4	2473.9
5°	2599.9	2534.0	2372.1	2280.8	2248.4
7.5°	2579.1	2435.7	2180.2	2054.2	2020.7
10°	2559.4	2323.6	2010.3	1885.4	1849.6
12.5°	2527.0	2199.9	1873.9	1730.5	1687.8
15°	2484.3	2073.9	1739.8	1596.4	1560.6
17.5°	2433.4	1953.7	1618.4	1480.8	1441.5
20°	2374.4	1842.7	1514.4	1373.3	1341.0
22.5°	2300.5	1732.9	1408.0	1280.9	1245.0
25°	2217.2	1625.3	1314.4	1188.4	1145.6
27.5°	2128.2	1521.3	1227.7	1087.8	1042.7
30°	2025.3	1421.9	1138.7	991.9	950.2
32.5°	1921.3	1323.6	1045.0	906.3	872.8
35°	1806.8	1231.1	954.9	833.5	804.6
37.5°	1691.2	1142.1	873.9	767.6	742.2
40°	1565.2	1055.4	800.0	706.3	685.5
42.5°	1439.2	968.7	732.9	652.0	632.3
45°	1313.2	886.7	671.6	602.3	583.8
47.5°	1186.1	805.7	615.0	553.7	538.7
50°	1063.5	729.4	561.8	508.6	495.9
52.5°	944.5	657.8	511.0	465.9	452.0
55°	827.7	590.7	465.9	424.3	413.9
57.5°	728.3	528.3	420.8	385.0	376.9
60°	633.5	468.2	378.0	348.0	339.9
62.5°	544.5	412.7	335.2	311.0	305.2
65°	463.6	358.4	294.8	274.0	268.2
67.5°	389.6	308.7	253.2	238.1	233.5
70°	324.8	258.9	216.2	203.5	200.0
72.5°	260.1	211.5	179.2	169.9	166.5
75°	204.6	168.8	144.5	137.6	132.9
77.5°	153.7	128.3	111.0	105.2	101.7
80°	106.4	91.3	78.6	76.3	72.8
82.5°	67.0	57.8	50.9	49.7	46.2
85°	33.5	31.2	26.6	26.6	24.3
87.5°	11.6	10.4	10.4	10.4	9.2
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	19.83	21.32	20.20	21.63	21.95	17.16	18.64	17.52	18.96	19.27
	3H	21.42	22.76	21.80	23.08	23.45	18.75	20.09	19.13	20.42	20.78
	4H	21.95	23.20	22.35	23.55	23.93	19.31	20.56	19.71	20.91	21.29
	6H	22.28	23.44	22.70	23.81	24.20	19.67	20.82	20.08	21.19	21.58
	8H	22.36	23.46	22.79	23.85	24.25	19.75	20.85	20.18	21.24	21.64
	12H	22.39	23.44	22.82	23.82	24.25	19.79	20.84	20.22	21.22	21.65
4H	2H	20.06	21.31	20.46	21.66	22.04	17.83	19.08	18.23	19.43	19.81
	3H	21.84	22.88	22.25	23.28	23.68	19.62	20.66	20.03	21.06	21.46
	4H	22.48	23.42	22.92	23.83	24.27	20.28	21.21	20.72	21.63	22.07
	6H	22.93	23.74	23.39	24.18	24.64	20.74	21.55	21.20	21.99	22.45
	8H	23.04	23.80	23.50	24.24	24.71	20.85	21.61	21.32	22.06	22.52
	12H	23.10	23.77	23.58	24.25	24.72	20.92	21.59	21.40	22.07	22.54
8H	4H	22.59	23.34	23.05	23.79	24.26	20.58	21.34	21.05	21.78	22.25
	6H	23.10	23.73	23.60	24.22	24.70	21.13	21.75	21.63	22.25	22.72
	8H	23.26	23.82	23.77	24.33	24.82	21.30	21.86	21.81	22.37	22.86
	12H	23.36	23.85	23.87	24.35	24.91	21.41	21.90	21.92	22.39	22.96
12H	4H	22.58	23.25	23.06	23.73	24.20	20.61	21.28	21.09	21.76	22.23
	6H	23.10	23.66	23.61	24.17	24.66	21.17	21.73	21.68	22.24	22.73
	8H	23.29	23.78	23.80	24.28	24.84	21.38	21.87	21.89	22.37	22.93