

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: P1217397

Luminaire Tested: S124DRP-S1005D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217397
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-S1005D935-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

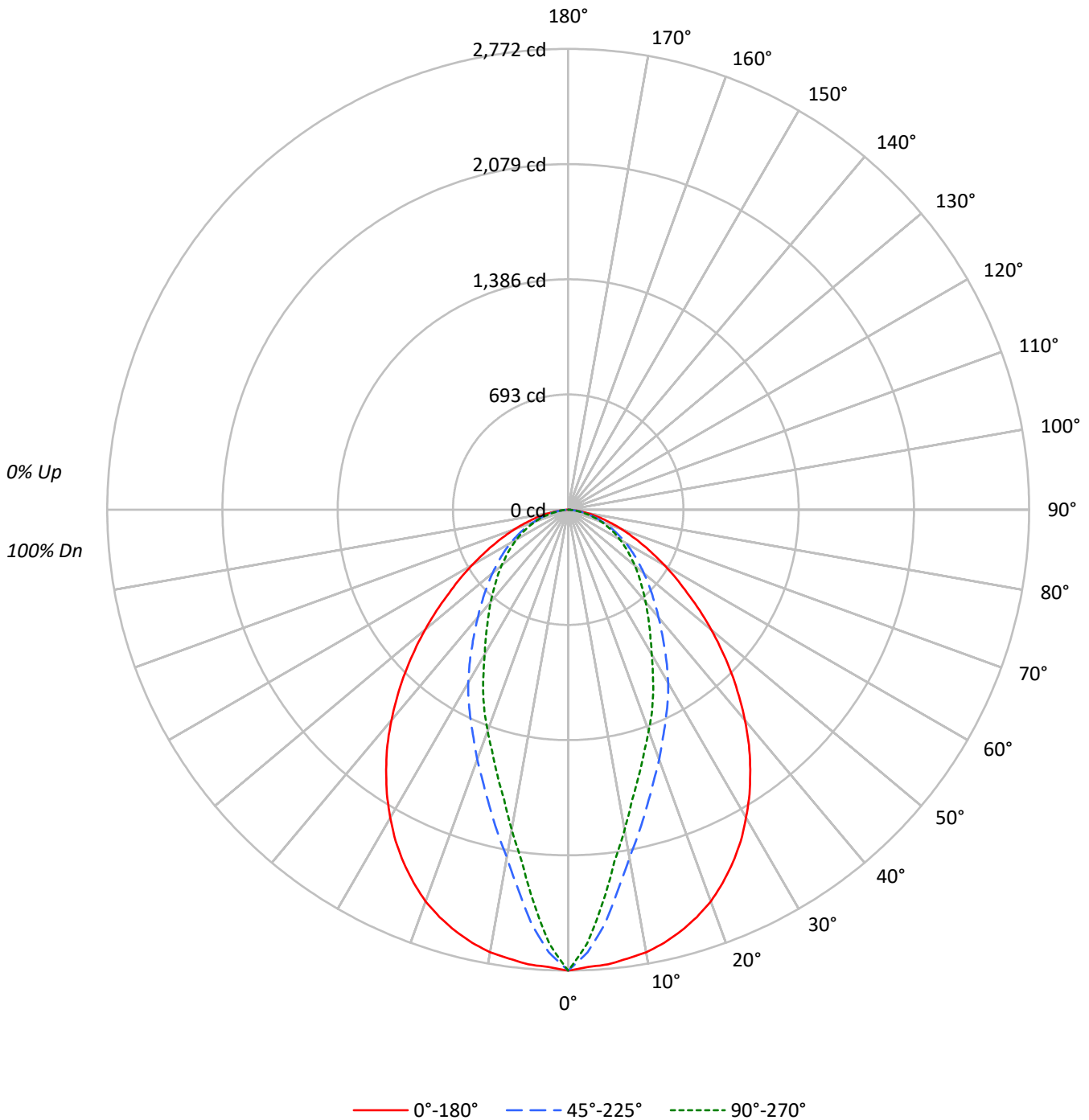
Lumens per Lamp: N/A
Luminaire Lumens: 3888.3 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (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	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°	24512	24512	24512
5°	24368	22233	21074
10°	24266	19060	17536
15°	24014	16817	15085
20°	23593	15047	13324
25°	22842	13541	11802
30°	21836	12276	10245
35°	20595	10884	9171
40°	19078	9750	8355
45°	17340	8869	7708
50°	15448	8161	7203
55°	13474	7584	6736
60°	11830	7059	6346
65°	10241	6513	5925
70°	8867	5902	5460
75°	7382	5213	4796
80°	5718	4226	3915
85°	3591	2851	2597

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17340 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.1	6.0
10°-20°	551.3	14.2
20°-30°	704.5	18.1
30°-40°	715.5	18.4
40°-50°	634.3	16.3
50°-60°	498.4	12.8
60°-70°	339.4	8.7
70°-80°	174.2	4.5
80°-90°	38.6	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°	1487.9	38.3
0°-40°	2203.4	56.7
0°-60°	3336.0	85.8
0°-90°	3888.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3888.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2772	2772	2772	2772	2772	
5°	2746	2676	2505	2409	2374	261
15°	2624	2190	1837	1686	1648	739
25°	2342	1716	1388	1255	1210	1076
35°	1908	1300	1008	880	850	1191
45°	1387	936	709	636	616	1068
55°	874	624	492	448	437	789
65°	490	378	311	289	283	490
75°	216	178	153	145	140	232
85°	35	33	28	28	26	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2772.4	2772.4	2772.4	2772.4	2772.4
2.5°	2752.9	2756.6	2665.0	2632.1	2612.5
5°	2745.6	2676.0	2505.1	2408.6	2374.5
7.5°	2723.6	2572.2	2302.4	2169.4	2134.0
10°	2702.9	2453.8	2123.0	1991.1	1953.3
12.5°	2668.7	2323.2	1978.9	1827.5	1782.4
15°	2623.5	2190.1	1837.3	1685.9	1648.1
17.5°	2569.8	2063.2	1709.1	1563.9	1522.3
20°	2507.5	1946.0	1599.3	1450.3	1416.1
22.5°	2429.4	1830.0	1486.9	1352.7	1314.8
25°	2341.5	1716.5	1388.1	1255.0	1209.8
27.5°	2247.5	1606.6	1296.5	1148.8	1101.2
30°	2138.9	1501.6	1202.5	1047.5	1003.5
32.5°	2029.0	1397.8	1103.6	957.1	921.7
35°	1908.1	1300.2	1008.4	880.2	849.7
37.5°	1786.0	1206.2	922.9	810.6	783.8
40°	1653.0	1114.6	844.8	745.9	723.9
42.5°	1519.9	1023.0	774.0	688.5	667.8
45°	1386.8	936.4	709.3	636.0	616.5
47.5°	1252.5	850.9	649.5	584.8	568.9
50°	1123.1	770.3	593.3	537.2	523.7
52.5°	997.4	694.6	539.6	492.0	477.3
55°	874.1	623.8	492.0	448.0	437.0
57.5°	769.1	557.9	444.4	406.5	398.0
60°	669.0	494.4	399.2	367.5	358.9
62.5°	575.0	435.8	354.0	328.4	322.3
65°	489.5	378.4	311.3	289.3	283.2
67.5°	411.4	326.0	267.4	251.5	246.6
70°	343.0	273.5	228.3	214.9	211.2
72.5°	274.7	223.4	189.2	179.5	175.8
75°	216.1	178.2	152.6	145.3	140.4
77.5°	162.4	135.5	117.2	111.1	107.4
80°	112.3	96.4	83.0	80.6	76.9
82.5°	70.8	61.0	53.7	52.5	48.8
85°	35.4	33.0	28.1	28.1	25.6
87.5°	12.2	11.0	11.0	11.0	9.8
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	20.02	21.51	20.38	21.82	22.13	17.34	18.83	17.71	19.14	19.46
	3H	21.61	22.95	21.99	23.27	23.64	18.94	20.28	19.32	20.60	20.97
	4H	22.14	23.39	22.54	23.74	24.12	19.50	20.75	19.90	21.10	21.48
	6H	22.47	23.63	22.89	23.99	24.39	19.86	21.01	20.27	21.38	21.77
	8H	22.55	23.65	22.98	24.04	24.44	19.94	21.04	20.37	21.43	21.83
	12H	22.58	23.63	23.01	24.01	24.44	19.98	21.03	20.41	21.41	21.84
4H	2H	20.25	21.50	20.65	21.85	22.23	18.02	19.27	18.42	19.62	20.00
	3H	22.03	23.07	22.44	23.47	23.87	19.81	20.84	20.22	21.25	21.65
	4H	22.67	23.60	23.10	24.02	24.46	20.47	21.40	20.90	21.82	22.26
	6H	23.12	23.93	23.58	24.37	24.83	20.93	21.74	21.39	22.18	22.64
	8H	23.23	23.99	23.69	24.43	24.90	21.04	21.80	21.51	22.25	22.71
	12H	23.29	23.96	23.77	24.44	24.91	21.11	21.78	21.59	22.26	22.73
8H	4H	22.78	23.53	23.24	23.98	24.44	20.77	21.53	21.24	21.97	22.44
	6H	23.29	23.92	23.79	24.41	24.89	21.32	21.94	21.82	22.44	22.91
	8H	23.45	24.01	23.96	24.52	25.01	21.49	22.05	22.00	22.56	23.05
	12H	23.55	24.04	24.06	24.53	25.10	21.60	22.09	22.11	22.58	23.15
12H	4H	22.77	23.44	23.25	23.92	24.39	20.80	21.47	21.28	21.95	22.42
	6H	23.29	23.85	23.80	24.36	24.85	21.36	21.92	21.87	22.43	22.92
	8H	23.48	23.97	23.99	24.47	25.03	21.57	22.06	22.08	22.56	23.12