

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: P1217415

Luminaire Tested: S124DRP-S485D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217415
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-S485D935-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

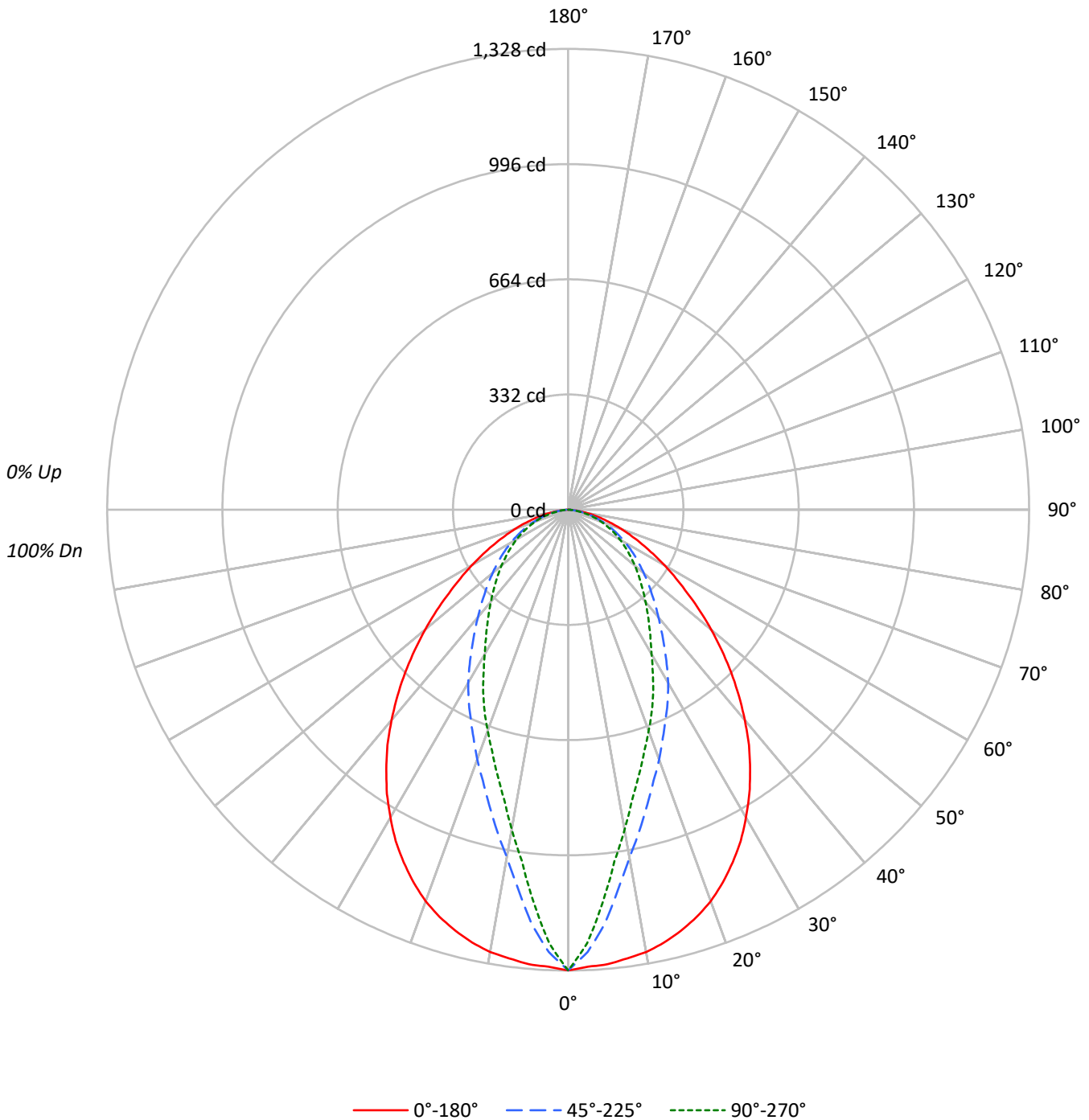
Lumens per Lamp: N/A
Luminaire Lumens: 1861.8 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77				75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67				65	
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59				57	
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53				51	
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47				45	
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43				41	
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39				37	
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36				34	
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11737	11737	11737
5°	11668	10646	10091
10°	11619	9126	8397
15°	11498	8053	7223
20°	11297	7205	6380
25°	10938	6483	5651
30°	10455	5878	4905
35°	9862	5211	4391
40°	9135	4669	4000
45°	8304	4246	3691
50°	7397	3908	3450
55°	6451	3632	3226
60°	5664	3379	3040
65°	4904	3119	2837
70°	4247	2825	2613
75°	3536	2497	2296
80°	2739	2021	1874
85°	1725	1359	1248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8304 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	6.0
10°-20°	264.0	14.2
20°-30°	337.3	18.1
30°-40°	342.6	18.4
40°-50°	303.7	16.3
50°-60°	238.7	12.8
60°-70°	162.5	8.7
70°-80°	83.4	4.5
80°-90°	18.5	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°	712.4	38.3
0°-40°	1055.0	56.7
0°-60°	1597.4	85.8
0°-90°	1861.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1315	1281	1200	1153	1137	125
15°	1256	1049	880	807	789	354
25°	1121	822	665	601	579	515
35°	914	622	483	422	407	570
45°	664	448	340	305	295	512
55°	418	299	236	214	209	378
65°	234	181	149	138	136	235
75°	104	85	73	70	67	111
85°	17	16	13	13	12	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1318.2	1319.9	1276.1	1260.3	1250.9
5°	1314.7	1281.3	1199.5	1153.3	1137.0
7.5°	1304.1	1231.7	1102.5	1038.8	1021.8
10°	1294.2	1175.0	1016.5	953.4	935.3
12.5°	1277.8	1112.4	947.6	875.1	853.4
15°	1256.2	1048.7	879.8	807.3	789.1
17.5°	1230.5	987.9	818.4	748.8	728.9
20°	1200.7	931.8	765.8	694.4	678.1
22.5°	1163.3	876.2	712.0	647.7	629.6
25°	1121.2	821.9	664.6	600.9	579.3
27.5°	1076.2	769.3	620.8	550.1	527.3
30°	1024.1	719.0	575.8	501.5	480.5
32.5°	971.5	669.3	528.4	458.3	441.3
35°	913.7	622.5	482.8	421.5	406.8
37.5°	855.2	577.5	441.9	388.1	375.3
40°	791.5	533.7	404.5	357.2	346.6
42.5°	727.8	489.9	370.6	329.7	319.8
45°	664.1	448.4	339.6	304.6	295.2
47.5°	599.8	407.4	311.0	280.0	272.4
50°	537.8	368.9	284.1	257.2	250.8
52.5°	477.6	332.6	258.4	235.6	228.6
55°	418.5	298.7	235.6	214.5	209.3
57.5°	368.3	267.1	212.8	194.7	190.6
60°	320.3	236.7	191.1	176.0	171.9
62.5°	275.3	208.7	169.5	157.2	154.3
65°	234.4	181.2	149.1	138.5	135.6
67.5°	197.0	156.1	128.0	120.4	118.1
70°	164.3	130.9	109.3	102.9	101.1
72.5°	131.5	107.0	90.6	85.9	84.2
75°	103.5	85.3	73.1	69.6	67.2
77.5°	77.7	64.9	56.1	53.2	51.4
80°	53.8	46.2	39.7	38.6	36.8
82.5°	33.9	29.2	25.7	25.1	23.4
85°	17.0	15.8	13.4	13.4	12.3
87.5°	5.8	5.3	5.3	5.3	4.7
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	17.46	18.95	17.83	19.26	19.58	14.79	16.27	15.15	16.59	16.90
	3H	19.05	20.39	19.43	20.71	21.08	16.39	17.72	16.76	18.05	18.41
	4H	19.58	20.83	19.98	21.18	21.56	16.94	18.19	17.34	18.54	18.92
	6H	19.91	21.07	20.33	21.44	21.83	17.30	18.45	17.71	18.82	19.21
	8H	19.99	21.09	20.42	21.48	21.88	17.39	18.48	17.81	18.87	19.27
	12H	20.02	21.07	20.45	21.45	21.88	17.42	18.47	17.85	18.85	19.28
4H	2H	17.69	18.94	18.09	19.29	19.67	15.46	16.71	15.86	17.06	17.44
	3H	19.47	20.51	19.88	20.91	21.31	17.25	18.29	17.66	18.69	19.09
	4H	20.11	21.05	20.55	21.46	21.90	17.91	18.85	18.35	19.26	19.70
	6H	20.56	21.37	21.02	21.81	22.27	18.37	19.18	18.83	19.62	20.08
	8H	20.67	21.43	21.14	21.87	22.34	18.49	19.24	18.95	19.69	20.16
	12H	20.73	21.40	21.21	21.88	22.35	18.55	19.22	19.03	19.70	20.17
8H	4H	20.22	20.97	20.68	21.42	21.89	18.21	18.97	18.68	19.41	19.88
	6H	20.74	21.36	21.23	21.85	22.33	18.76	19.39	19.26	19.88	20.36
	8H	20.89	21.45	21.41	21.96	22.45	18.93	19.49	19.45	20.00	20.49
	12H	20.99	21.48	21.50	21.98	22.54	19.04	19.53	19.55	20.02	20.59
12H	4H	20.21	20.88	20.69	21.36	21.83	18.24	18.91	18.72	19.39	19.86
	6H	20.73	21.29	21.24	21.80	22.29	18.80	19.36	19.31	19.87	20.36
	8H	20.92	21.41	21.43	21.91	22.47	19.01	19.50	19.52	20.00	20.56