

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: P1217414

Luminaire Tested: S124DRP-S485D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217414
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-S485D930-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

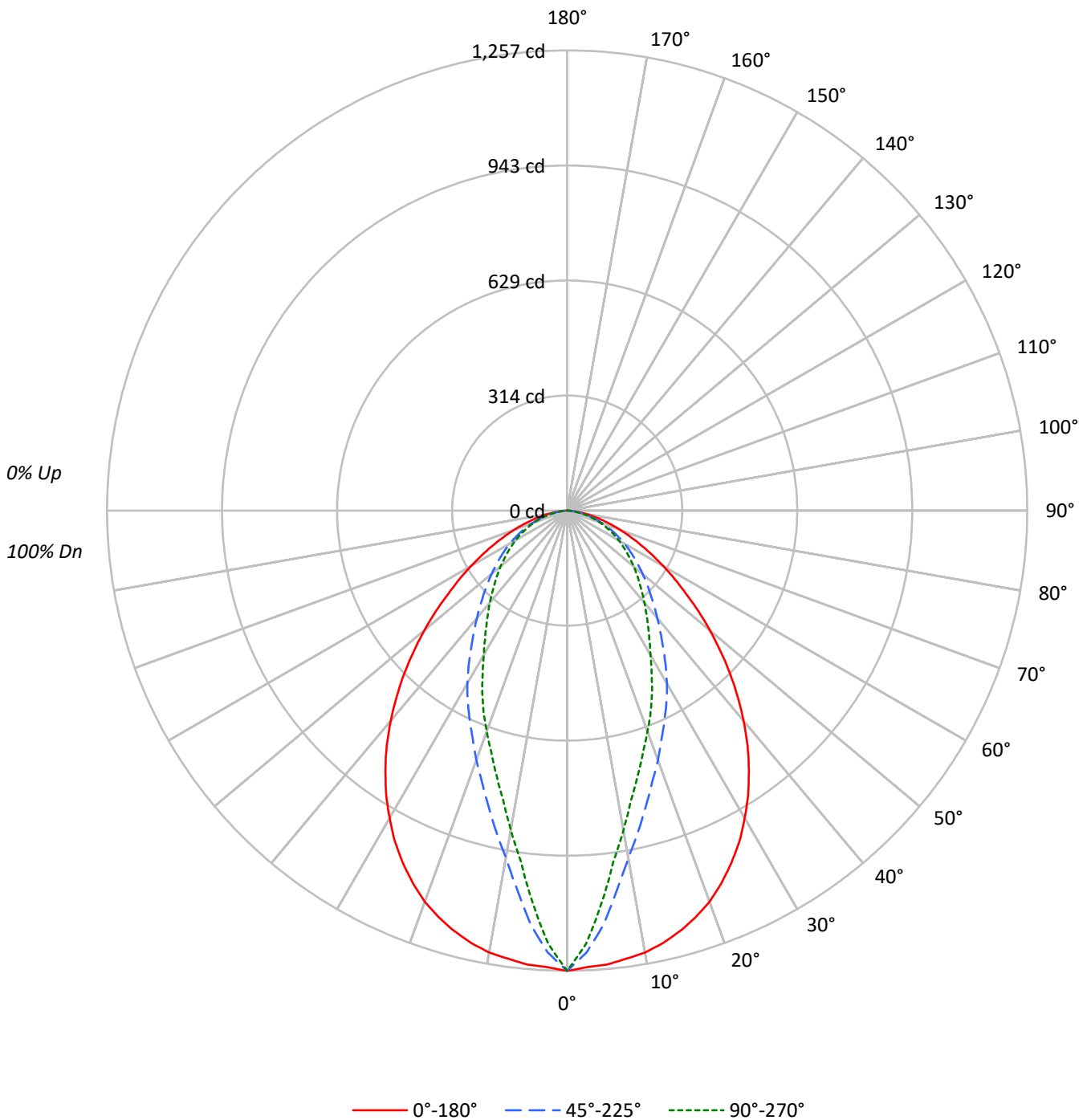
Lumens per Lamp: N/A
Luminaire Lumens: 1763.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	11114	11114	11114
5°	11049	10080	9555
10°	11002	8642	7951
15°	10888	7626	6840
20°	10697	6822	6041
25°	10357	6140	5351
30°	9901	5566	4645
35°	9338	4935	4159
40°	8650	4420	3788
45°	7862	4021	3495
50°	7004	3700	3267
55°	6109	3439	3055
60°	5363	3201	2877
65°	4644	2952	2686
70°	4020	2676	2476
75°	3348	2364	2176
80°	2592	1914	1777
85°	1633	1288	1177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7862 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	6.0
10°-20°	250.0	14.2
20°-30°	319.4	18.1
30°-40°	324.4	18.4
40°-50°	287.6	16.3
50°-60°	226.0	12.8
60°-70°	153.9	8.7
70°-80°	79.0	4.5
80°-90°	17.5	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°	674.6	38.3
0°-40°	999.0	56.7
0°-60°	1512.6	85.8
0°-90°	1763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1245	1213	1136	1092	1077	118
15°	1190	993	833	764	747	335
25°	1062	778	629	569	548	488
35°	865	590	457	399	385	540
45°	629	425	322	288	280	484
55°	396	283	223	203	198	358
65°	222	172	141	131	128	222
75°	98	81	69	66	64	105
85°	16	15	13	13	12	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.1	1257.1	1257.1	1257.1	1257.1
2.5°	1248.2	1249.9	1208.3	1193.4	1184.5
5°	1244.9	1213.3	1135.8	1092.1	1076.6
7.5°	1234.9	1166.3	1044.0	983.6	967.6
10°	1225.5	1112.6	962.6	902.8	885.6
12.5°	1210.0	1053.4	897.3	828.6	808.1
15°	1189.5	993.0	833.1	764.4	747.3
17.5°	1165.2	935.5	774.9	709.1	690.2
20°	1136.9	882.3	725.1	657.6	642.1
22.5°	1101.5	829.7	674.2	613.3	596.1
25°	1061.7	778.3	629.4	569.0	548.5
27.5°	1019.0	728.4	587.8	520.9	499.3
30°	969.8	680.8	545.2	474.9	455.0
32.5°	920.0	633.8	500.4	434.0	417.9
35°	865.2	589.5	457.2	399.1	385.3
37.5°	809.8	546.9	418.5	367.5	355.4
40°	749.5	505.4	383.0	338.2	328.2
42.5°	689.1	463.9	350.9	312.2	302.8
45°	628.8	424.6	321.6	288.4	279.5
47.5°	567.9	385.8	294.5	265.1	257.9
50°	509.2	349.3	269.0	243.6	237.5
52.5°	452.2	315.0	244.7	223.1	216.4
55°	396.3	282.9	223.1	203.1	198.2
57.5°	348.7	253.0	201.5	184.3	180.4
60°	303.3	224.2	181.0	166.6	162.7
62.5°	260.7	197.6	160.5	148.9	146.1
65°	222.0	171.6	141.1	131.2	128.4
67.5°	186.5	147.8	121.2	114.0	111.8
70°	155.5	124.0	103.5	97.4	95.8
72.5°	124.5	101.3	85.8	81.4	79.7
75°	98.0	80.8	69.2	65.9	63.7
77.5°	73.6	61.4	53.1	50.4	48.7
80°	50.9	43.7	37.6	36.5	34.9
82.5°	32.1	27.7	24.4	23.8	22.1
85°	16.1	14.9	12.7	12.7	11.6
87.5°	5.5	5.0	5.0	5.0	4.4
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	17.27	18.76	17.64	19.07	19.39	14.60	16.08	14.96	16.40	16.71
	3H	18.86	20.20	19.24	20.53	20.89	16.19	17.53	16.57	17.86	18.22
	4H	19.39	20.64	19.79	20.99	21.37	16.75	18.00	17.15	18.35	18.73
	6H	19.73	20.88	20.14	21.25	21.64	17.11	18.26	17.52	18.63	19.02
	8H	19.80	20.90	20.23	21.29	21.69	17.20	18.29	17.62	18.68	19.08
	12H	19.83	20.88	20.26	21.26	21.69	17.23	18.28	17.66	18.66	19.09
4H	2H	17.50	18.75	17.90	19.10	19.48	15.27	16.52	15.67	16.87	17.25
	3H	19.28	20.32	19.69	20.72	21.12	17.06	18.10	17.47	18.50	18.90
	4H	19.92	20.86	20.36	21.27	21.71	17.72	18.66	18.16	19.07	19.51
	6H	20.37	21.18	20.83	21.62	22.08	18.18	18.99	18.64	19.43	19.89
	8H	20.48	21.24	20.95	21.68	22.15	18.30	19.05	18.76	19.50	19.96
	12H	20.54	21.21	21.02	21.69	22.16	18.36	19.03	18.84	19.51	19.98
8H	4H	20.03	20.78	20.49	21.23	21.70	18.02	18.78	18.49	19.22	19.69
	6H	20.55	21.17	21.04	21.66	22.14	18.57	19.20	19.07	19.69	20.17
	8H	20.70	21.26	21.22	21.77	22.26	18.74	19.30	19.26	19.81	20.30
	12H	20.80	21.29	21.31	21.79	22.35	18.85	19.34	19.36	19.83	20.40
12H	4H	20.02	20.69	20.50	21.17	21.64	18.05	18.72	18.53	19.20	19.67
	6H	20.54	21.10	21.05	21.61	22.10	18.61	19.17	19.12	19.68	20.17
	8H	20.73	21.22	21.24	21.72	22.28	18.82	19.32	19.33	19.81	20.37