

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: P1217324

Luminaire Tested: S122DRP-S485D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217324
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-S485D930-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

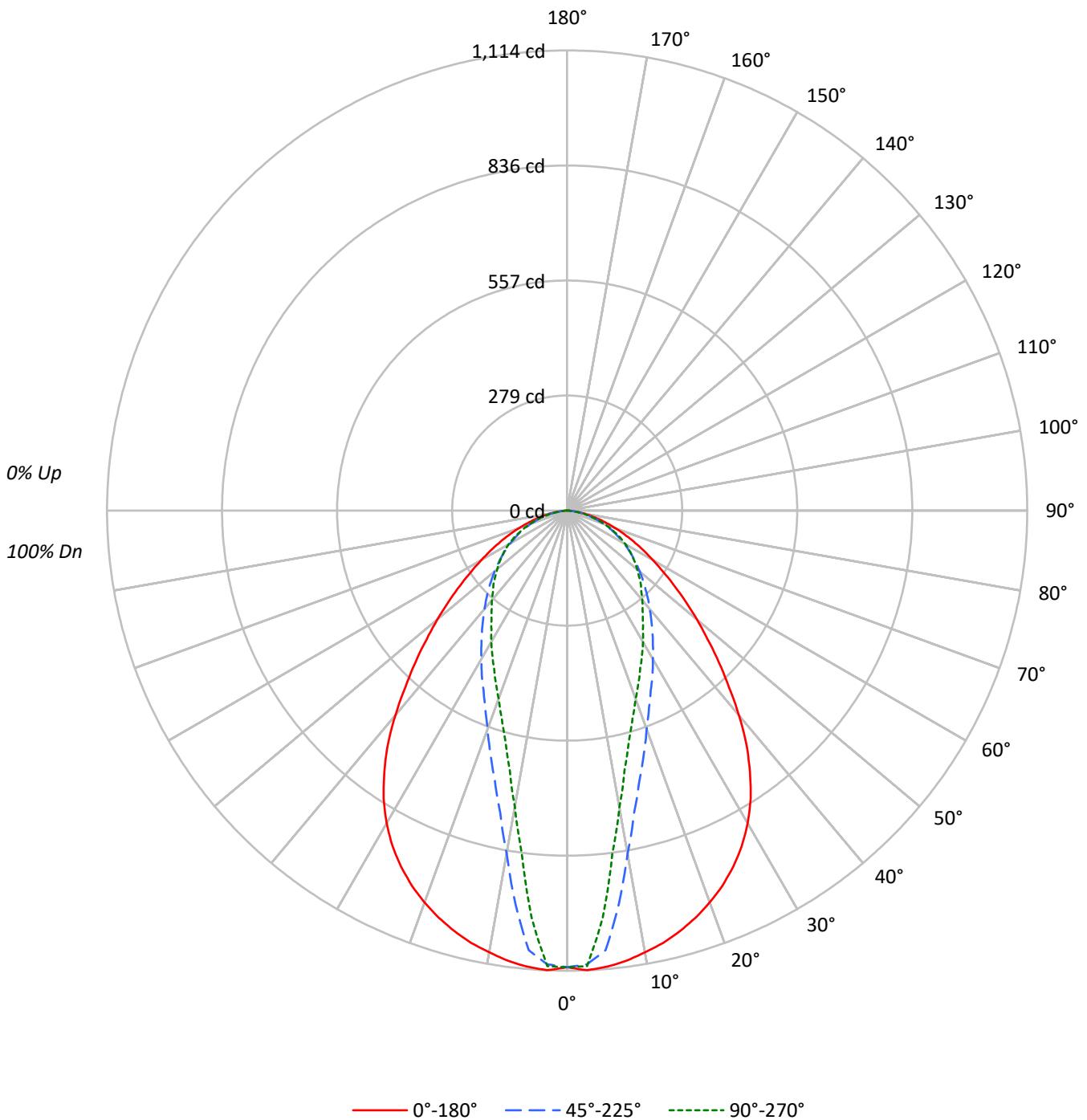
Lumens per Lamp: N/A
Luminaire Lumens: 1485.7 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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	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°	20947	20947	20947
5°	21082	20313	18811
10°	20893	16222	14025
15°	20679	13257	11323
20°	20349	11349	9768
25°	19880	10019	8765
30°	19127	9085	8038
35°	17848	8324	7390
40°	16004	7689	7004
45°	13922	7186	6752
50°	12087	6750	6511
55°	10458	6382	6345
60°	9067	6010	6184
65°	7939	5635	5841
70°	6836	5174	5368
75°	5702	4560	4729
80°	4462	3710	3590
85°	2761	2391	2391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13922 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	6.4
10°-20°	209.9	14.1
20°-30°	257.5	17.3
30°-40°	266.1	17.9
40°-50°	240.4	16.2
50°-60°	194.8	13.1
60°-70°	136.5	9.2
70°-80°	70.4	4.7
80°-90°	14.9	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°	562.6	37.9
0°-40°	828.8	55.8
0°-60°	1263.9	85.1
0°-90°	1485.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1485.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1108	1106	1068	1020	989	105
15°	1054	889	676	603	577	297
25°	951	632	479	434	419	437
35°	772	467	360	329	320	480
45°	520	336	268	253	252	402
55°	317	230	193	191	192	285
65°	177	142	126	129	130	177
75°	78	67	62	64	65	84
85°	13	11	11	11	11	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1105.6	1105.6	1105.6	1105.6	1105.6
2.5°	1113.7	1109.6	1099.3	1109.1	1103.9
5°	1108.5	1106.2	1068.1	1020.2	989.1
7.5°	1099.3	1091.2	959.7	869.1	838.6
10°	1086.0	1045.6	843.2	759.0	729.0
12.5°	1072.2	977.0	749.2	670.2	643.1
15°	1054.3	888.8	675.9	602.7	577.3
17.5°	1033.5	812.0	617.7	547.3	527.1
20°	1009.3	745.7	562.9	501.2	484.5
22.5°	982.8	689.8	517.3	467.2	451.6
25°	951.0	631.5	479.3	433.7	419.3
27.5°	915.9	587.1	447.5	404.9	392.8
30°	874.3	543.9	415.3	377.2	367.4
32.5°	827.0	503.5	386.4	353.0	341.4
35°	771.7	466.6	359.9	329.3	319.5
37.5°	712.8	430.2	334.5	308.0	299.9
40°	647.1	398.5	310.9	287.2	283.2
42.5°	579.6	366.8	289.5	269.3	265.9
45°	519.6	336.2	268.2	253.2	252.0
47.5°	461.4	308.6	248.6	237.0	235.9
50°	410.1	279.7	229.0	221.5	220.9
52.5°	361.0	254.3	210.5	206.5	207.6
55°	316.6	230.1	193.2	190.9	192.1
57.5°	275.7	207.6	175.9	176.5	178.2
60°	239.3	184.6	158.6	160.9	163.2
62.5°	207.6	163.2	141.9	145.3	147.6
65°	177.1	141.9	125.7	128.6	130.3
67.5°	150.0	121.7	109.6	113.0	113.6
70°	123.4	103.2	93.4	96.9	96.9
72.5°	100.4	84.2	77.9	79.6	80.2
75°	77.9	66.9	62.3	64.0	64.6
77.5°	58.8	50.8	47.3	49.0	48.4
80°	40.9	35.8	34.0	33.5	32.9
82.5°	25.4	22.5	20.8	21.3	20.8
85°	12.7	11.0	11.0	11.0	11.0
87.5°	4.0	4.0	4.0	4.0	4.0
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	19.07	20.57	19.43	20.88	21.19	17.56	19.06	17.93	19.38	19.69
	3H	20.65	22.00	21.03	22.33	22.69	19.28	20.62	19.66	20.95	21.31
	4H	21.18	22.44	21.58	22.79	23.17	19.86	21.12	20.26	21.47	21.85
	6H	21.50	22.67	21.92	23.04	23.43	20.21	21.37	20.62	21.74	22.13
	8H	21.58	22.69	22.01	23.08	23.48	20.28	21.39	20.71	21.78	22.18
	12H	21.60	22.67	22.04	23.05	23.48	20.31	21.37	20.74	21.76	22.19
4H	2H	19.38	20.64	19.78	20.99	21.37	18.12	19.39	18.52	19.74	20.12
	3H	21.16	22.21	21.57	22.61	23.01	20.04	21.09	20.45	21.49	21.89
	4H	21.79	22.73	22.22	23.15	23.58	20.74	21.68	21.17	22.10	22.53
	6H	22.22	23.04	22.68	23.48	23.94	21.19	22.01	21.65	22.45	22.91
	8H	22.33	23.09	22.79	23.54	24.00	21.29	22.06	21.76	22.50	22.97
	12H	22.38	23.06	22.86	23.54	24.01	21.35	22.03	21.83	22.51	22.98
8H	4H	21.94	22.70	22.40	23.15	23.61	20.98	21.74	21.44	22.19	22.65
	6H	22.44	23.07	22.94	23.57	24.04	21.52	22.15	22.01	22.64	23.12
	8H	22.59	23.15	23.10	23.67	24.15	21.67	22.23	22.18	22.74	23.23
	12H	22.68	23.18	23.19	23.67	24.24	21.76	22.26	22.27	22.75	23.32
12H	4H	21.93	22.62	22.42	23.10	23.57	20.99	21.67	21.47	22.15	22.62
	6H	22.45	23.01	22.96	23.52	24.01	21.54	22.10	22.05	22.61	23.10
	8H	22.63	23.13	23.14	23.62	24.19	21.73	22.23	22.24	22.72	23.28