

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: P1217319

Luminaire Tested: S122DRP-S485D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217319
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-S485D830-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

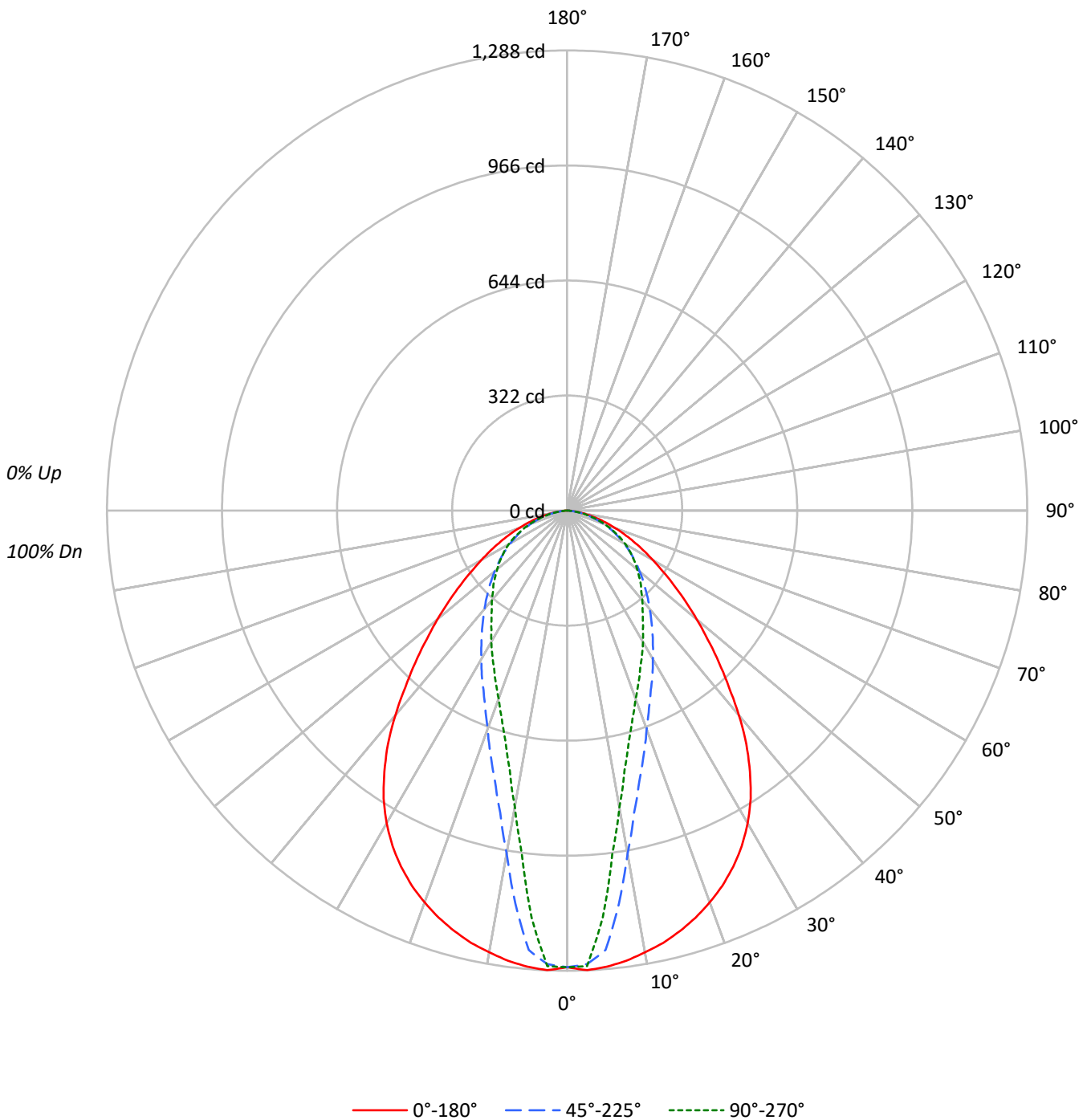
Lumens per Lamp: N/A
Luminaire Lumens: 1717.6 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
Input Voltage (V): 120
Input Current (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	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°	24217	24217	24217
5°	24372	23484	21747
10°	24153	18753	16214
15°	23906	15327	13091
20°	23525	13119	11293
25°	22984	11583	10132
30°	22113	10503	9291
35°	20633	9624	8544
40°	18502	8889	8097
45°	16095	8306	7808
50°	13974	7802	7528
55°	12089	7379	7333
60°	10485	6949	7150
65°	9177	6518	6756
70°	7905	5983	6204
75°	6588	5270	5468
80°	5161	4288	4146
85°	3195	2761	2761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	6.4
10°-20°	242.7	14.1
20°-30°	297.7	17.3
30°-40°	307.7	17.9
40°-50°	277.9	16.2
50°-60°	225.2	13.1
60°-70°	157.9	9.2
70°-80°	81.4	4.7
80°-90°	17.2	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°	650.4	37.9
0°-40°	958.1	55.8
0°-60°	1461.1	85.1
0°-90°	1717.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1717.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1282	1279	1235	1180	1144	121
15°	1219	1028	781	697	667	343
25°	1100	730	554	501	485	505
35°	892	539	416	381	369	555
45°	601	389	310	293	291	465
55°	366	266	223	221	222	330
65°	205	164	145	149	151	205
75°	90	77	72	74	75	97
85°	15	13	13	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.2	1278.2	1278.2	1278.2	1278.2
2.5°	1287.5	1282.8	1270.8	1282.2	1276.2
5°	1281.5	1278.8	1234.8	1179.5	1143.5
7.5°	1270.8	1261.5	1109.5	1004.8	969.5
10°	1255.5	1208.8	974.8	877.4	842.8
12.5°	1239.5	1129.5	866.1	774.8	743.4
15°	1218.8	1027.5	781.4	696.8	667.4
17.5°	1194.8	938.8	714.1	632.7	609.4
20°	1166.8	862.1	650.7	579.4	560.1
22.5°	1136.1	797.4	598.1	540.1	522.1
25°	1099.5	730.1	554.1	501.4	484.7
27.5°	1058.8	678.8	517.4	468.1	454.1
30°	1010.8	628.7	480.1	436.1	424.7
32.5°	956.1	582.1	446.7	408.1	394.7
35°	892.1	539.4	416.1	380.7	369.4
37.5°	824.1	497.4	386.7	356.0	346.7
40°	748.1	460.7	359.4	332.0	327.4
42.5°	670.1	424.1	334.7	311.4	307.4
45°	600.7	388.7	310.0	292.7	291.4
47.5°	533.4	356.7	287.4	274.0	272.7
50°	474.1	323.4	264.7	256.0	255.4
52.5°	417.4	294.0	243.4	238.7	240.0
55°	366.0	266.0	223.4	220.7	222.0
57.5°	318.7	240.0	203.4	204.0	206.0
60°	276.7	213.4	183.4	186.0	188.7
62.5°	240.0	188.7	164.0	168.0	170.7
65°	204.7	164.0	145.4	148.7	150.7
67.5°	173.4	140.7	126.7	130.7	131.3
70°	142.7	119.3	108.0	112.0	112.0
72.5°	116.0	97.3	90.0	92.0	92.7
75°	90.0	77.3	72.0	74.0	74.7
77.5°	68.0	58.7	54.7	56.7	56.0
80°	47.3	41.3	39.3	38.7	38.0
82.5°	29.3	26.0	24.0	24.7	24.0
85°	14.7	12.7	12.7	12.7	12.7
87.5°	4.7	4.7	4.7	4.7	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	19.57	21.07	19.93	21.38	21.70	18.07	19.57	18.43	19.88	20.20
	3H	21.16	22.50	21.53	22.83	23.19	19.78	21.13	20.16	21.45	21.82
	4H	21.68	22.94	22.08	23.29	23.67	20.36	21.62	20.76	21.97	22.35
	6H	22.01	23.17	22.42	23.54	23.93	20.71	21.88	21.12	22.24	22.63
	8H	22.08	23.19	22.51	23.58	23.98	20.78	21.89	21.21	22.28	22.69
	12H	22.11	23.17	22.54	23.55	23.98	20.81	21.88	21.25	22.26	22.69
4H	2H	19.88	21.14	20.28	21.49	21.87	18.63	19.89	19.03	20.24	20.62
	3H	21.66	22.71	22.07	23.11	23.51	20.54	21.59	20.96	21.99	22.39
	4H	22.29	23.23	22.72	23.65	24.09	21.24	22.18	21.67	22.60	23.04
	6H	22.72	23.54	23.18	23.99	24.45	21.69	22.51	22.15	22.96	23.42
	8H	22.83	23.60	23.29	24.04	24.51	21.80	22.56	22.26	23.01	23.47
	12H	22.88	23.56	23.36	24.04	24.51	21.85	22.53	22.33	23.01	23.48
8H	4H	22.44	23.20	22.90	23.65	24.12	21.48	22.25	21.94	22.69	23.16
	6H	22.95	23.58	23.44	24.07	24.55	22.02	22.65	22.52	23.14	23.62
	8H	23.09	23.66	23.61	24.17	24.66	22.17	22.73	22.68	23.24	23.73
	12H	23.18	23.68	23.69	24.17	24.74	22.27	22.76	22.78	23.26	23.82
12H	4H	22.44	23.12	22.92	23.60	24.07	21.49	22.18	21.97	22.65	23.13
	6H	22.95	23.51	23.46	24.02	24.51	22.04	22.61	22.55	23.12	23.60
	8H	23.13	23.63	23.64	24.12	24.69	22.23	22.73	22.74	23.22	23.79