

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: P1217320

Luminaire Tested: S122DRP-S485D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217320
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-S485D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

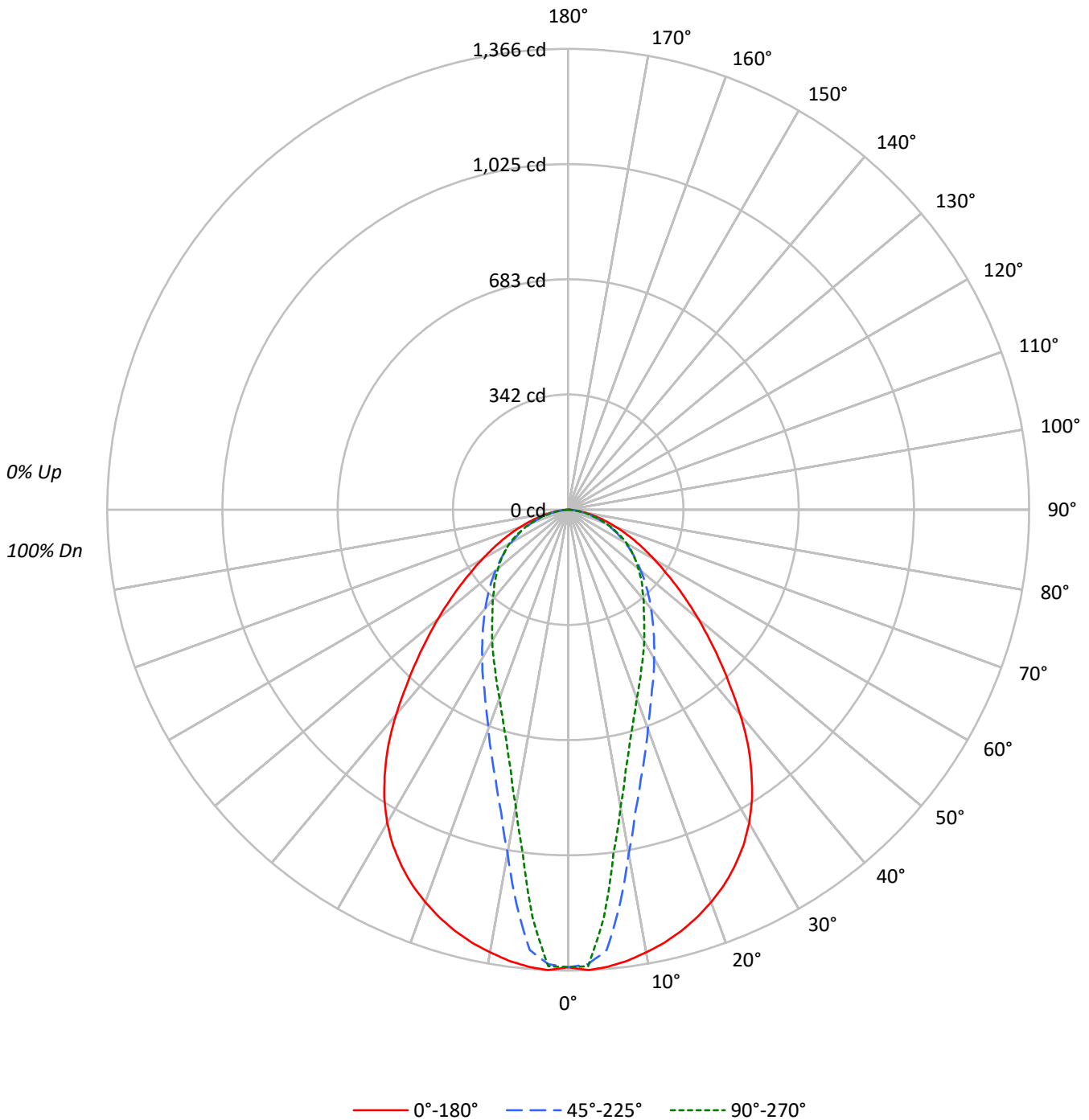
Lumens per Lamp: N/A
Luminaire Lumens: 1822.3 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57													57															
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50													50															
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45													45															
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41													41															
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37													37															
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34													34															
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25692	25692	25692
5°	25857	24916	23073
10°	25625	19896	17201
15°	25363	16262	13889
20°	24958	13920	11980
25°	24385	12288	10751
30°	23461	11142	9858
35°	21891	10209	9064
40°	19630	9430	8589
45°	17078	8812	8282
50°	14826	8276	7985
55°	12829	7828	7782
60°	11125	7370	7586
65°	9737	6913	7168
70°	8387	6348	6581
75°	6991	5593	5798
80°	5477	4550	4397
85°	3391	2913	2913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17078 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	6.4
10°-20°	257.4	14.1
20°-30°	315.9	17.3
30°-40°	326.4	17.9
40°-50°	294.8	16.2
50°-60°	238.9	13.1
60°-70°	167.5	9.2
70°-80°	86.4	4.7
80°-90°	18.2	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°	690.1	37.9
0°-40°	1016.5	55.8
0°-60°	1550.2	85.1
0°-90°	1822.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1822.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1360	1357	1310	1251	1213	129
15°	1293	1090	829	739	708	364
25°	1166	775	588	532	514	536
35°	946	572	441	404	392	588
45°	637	412	329	310	309	493
55°	388	282	237	234	236	350
65°	217	174	154	158	160	217
75°	96	82	76	78	79	103
85°	16	13	13	13	13	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.1	1356.1	1356.1	1356.1	1356.1
2.5°	1366.0	1361.0	1348.3	1360.3	1354.0
5°	1359.6	1356.8	1310.1	1251.4	1213.2
7.5°	1348.3	1338.4	1177.1	1066.0	1028.6
10°	1332.0	1282.5	1034.2	930.9	894.1
12.5°	1315.0	1198.3	918.9	822.0	788.7
15°	1293.1	1090.1	829.1	739.2	708.1
17.5°	1267.7	996.0	757.6	671.3	646.6
20°	1237.9	914.7	690.4	614.7	594.2
22.5°	1205.4	846.0	634.5	573.0	553.9
25°	1166.5	774.6	587.8	532.0	514.3
27.5°	1123.3	720.1	548.9	496.6	481.7
30°	1072.4	667.1	509.3	462.6	450.6
32.5°	1014.4	617.6	474.0	432.9	418.8
35°	946.5	572.3	441.4	403.9	391.9
37.5°	874.3	527.7	410.3	377.7	367.8
40°	793.7	488.8	381.3	352.3	347.3
42.5°	710.9	449.9	355.1	330.4	326.1
45°	637.4	412.4	328.9	310.5	309.1
47.5°	565.9	378.5	304.9	290.7	289.3
50°	503.0	343.1	280.8	271.6	270.9
52.5°	442.8	312.0	258.2	253.2	254.7
55°	388.4	282.3	237.0	234.1	235.6
57.5°	338.1	254.7	215.8	216.5	218.6
60°	293.6	226.4	194.5	197.4	200.2
62.5°	254.7	200.2	174.0	178.3	181.1
65°	217.2	174.0	154.2	157.7	159.9
67.5°	183.9	149.3	134.4	138.6	139.4
70°	151.4	126.6	114.6	118.8	118.8
72.5°	123.1	103.3	95.5	97.6	98.3
75°	95.5	82.1	76.4	78.5	79.2
77.5°	72.2	62.3	58.0	60.1	59.4
80°	50.2	43.9	41.7	41.0	40.3
82.5°	31.1	27.6	25.5	26.2	25.5
85°	15.6	13.4	13.4	13.4	13.4
87.5°	5.0	5.0	5.0	5.0	5.0
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	19.78	21.28	20.14	21.59	21.90	18.28	19.77	18.64	20.09	20.40
	3H	21.36	22.71	21.74	23.04	23.40	19.99	21.33	20.36	21.66	22.02
	4H	21.89	23.15	22.29	23.50	23.88	20.57	21.83	20.97	22.18	22.56
	6H	22.21	23.38	22.63	23.75	24.14	20.91	22.08	21.33	22.45	22.84
	8H	22.29	23.40	22.72	23.79	24.19	20.99	22.10	21.42	22.49	22.89
	12H	22.31	23.38	22.75	23.76	24.19	21.02	22.08	21.45	22.46	22.89
4H	2H	20.09	21.35	20.49	21.70	22.08	18.83	20.10	19.23	20.45	20.83
	3H	21.87	22.92	22.28	23.32	23.72	20.75	21.80	21.16	22.20	22.60
	4H	22.50	23.44	22.93	23.86	24.29	21.45	22.39	21.88	22.80	23.24
	6H	22.93	23.75	23.39	24.19	24.65	21.90	22.72	22.35	23.16	23.62
	8H	23.04	23.80	23.50	24.25	24.71	22.00	22.77	22.46	23.21	23.68
	12H	23.09	23.77	23.57	24.25	24.72	22.05	22.74	22.54	23.22	23.69
8H	4H	22.65	23.41	23.11	23.86	24.32	21.69	22.45	22.15	22.90	23.36
	6H	23.15	23.78	23.65	24.28	24.75	22.22	22.85	22.72	23.35	23.82
	8H	23.30	23.86	23.81	24.38	24.86	22.37	22.94	22.89	23.45	23.94
	12H	23.39	23.89	23.90	24.38	24.94	22.47	22.97	22.98	23.46	24.03
12H	4H	22.64	23.33	23.13	23.81	24.28	21.70	22.38	22.18	22.86	23.33
	6H	23.16	23.72	23.67	24.23	24.72	22.24	22.81	22.76	23.32	23.81
	8H	23.34	23.84	23.85	24.33	24.90	22.44	22.93	22.95	23.43	23.99