

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: P1217325

Luminaire Tested: S122DRP-S485D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217325
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-S485D935-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

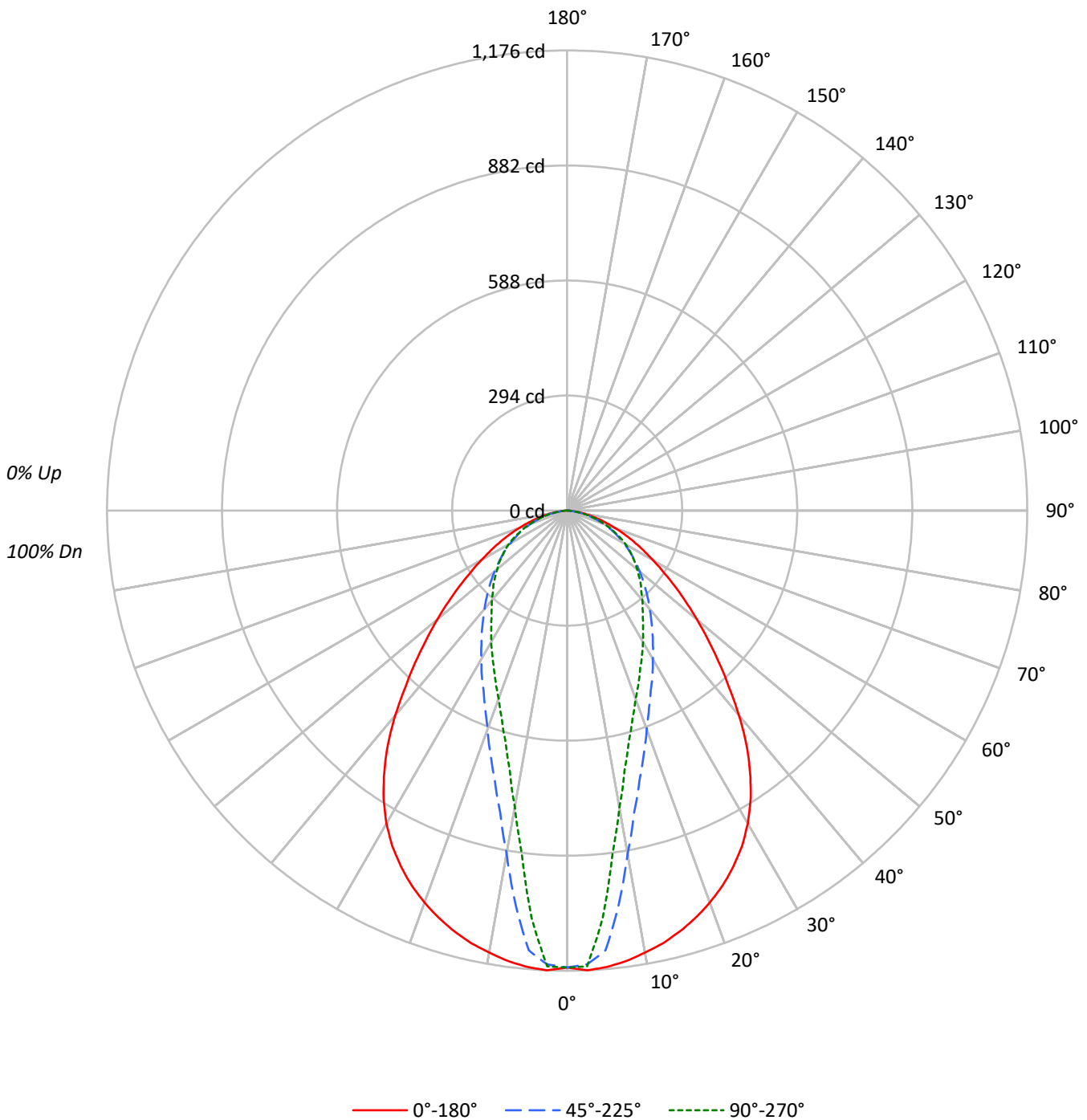
Lumens per Lamp: N/A
Luminaire Lumens: 1569.0 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1217325

CATALOG NUMBER: S122DRP-S485D935-X4F0-XX-UDD-G-W

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°	22121	22121	22121
5°	22263	21453	19865
10°	22064	17132	14811
15°	21838	14001	11959
20°	21490	11984	10315
25°	20994	10580	9256
30°	20199	9593	8488
35°	18848	8791	7804
40°	16902	8120	7397
45°	14704	7588	7132
50°	12762	7127	6876
55°	11046	6738	6699
60°	9579	6347	6533
65°	8383	5953	6169
70°	7218	5467	5667
75°	6017	4817	4992
80°	4713	3917	3786
85°	2913	2522	2522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14704 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	6.4
10°-20°	221.7	14.1
20°-30°	271.9	17.3
30°-40°	281.1	17.9
40°-50°	253.8	16.2
50°-60°	205.7	13.1
60°-70°	144.2	9.2
70°-80°	74.4	4.7
80°-90°	15.7	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°	594.1	37.9
0°-40°	875.2	55.8
0°-60°	1334.7	85.1
0°-90°	1569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1171	1168	1128	1077	1044	111
15°	1113	939	714	636	610	314
25°	1004	667	506	458	443	461
35°	815	493	380	348	337	507
45°	549	355	283	267	266	425
55°	334	243	204	202	203	301
65°	187	150	133	136	138	187
75°	82	71	66	68	68	89
85°	13	12	12	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1167.6	1167.6	1167.6	1167.6	1167.6
2.5°	1176.1	1171.8	1160.9	1171.2	1165.8
5°	1170.6	1168.2	1128.0	1077.4	1044.5
7.5°	1160.9	1152.4	1013.5	917.9	885.6
10°	1146.9	1104.2	890.5	801.5	769.9
12.5°	1132.3	1031.8	791.2	707.7	679.1
15°	1113.4	938.6	713.8	636.5	609.7
17.5°	1091.4	857.6	652.3	578.0	556.7
20°	1065.9	787.5	594.4	529.3	511.6
22.5°	1037.8	728.4	546.3	493.3	476.9
25°	1004.3	666.9	506.1	458.0	442.8
27.5°	967.2	620.0	472.6	427.6	414.8
30°	923.3	574.3	438.5	398.3	388.0
32.5°	873.4	531.7	408.1	372.7	360.6
35°	814.9	492.7	380.1	347.8	337.4
37.5°	752.8	454.4	353.3	325.2	316.7
40°	683.4	420.9	328.3	303.3	299.1
42.5°	612.1	387.4	305.8	284.4	280.8
45°	548.8	355.1	283.2	267.4	266.2
47.5°	487.3	325.9	262.5	250.3	249.1
50°	433.0	295.4	241.8	233.9	233.3
52.5°	381.3	268.6	222.3	218.0	219.3
55°	334.4	243.0	204.0	201.6	202.8
57.5°	291.1	219.3	185.8	186.4	188.2
60°	252.8	194.9	167.5	169.9	172.4
62.5°	219.3	172.4	149.8	153.5	155.9
65°	187.0	149.8	132.8	135.8	137.6
67.5°	158.4	128.5	115.7	119.4	120.0
70°	130.3	109.0	98.7	102.3	102.3
72.5°	106.0	88.9	82.2	84.1	84.7
75°	82.2	70.7	65.8	67.6	68.2
77.5°	62.1	53.6	49.9	51.8	51.2
80°	43.2	37.8	35.9	35.3	34.7
82.5°	26.8	23.8	21.9	22.5	21.9
85°	13.4	11.6	11.6	11.6	11.6
87.5°	4.3	4.3	4.3	4.3	4.3
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	19.26	20.76	19.62	21.07	21.38	17.75	19.25	18.12	19.57	19.88
	3H	20.84	22.19	21.22	22.52	22.88	19.47	20.81	19.85	21.14	21.50
	4H	21.37	22.63	21.77	22.98	23.36	20.05	21.31	20.45	21.66	22.04
	6H	21.69	22.86	22.11	23.23	23.62	20.40	21.56	20.81	21.93	22.32
	8H	21.77	22.88	22.19	23.27	23.67	20.47	21.58	20.90	21.97	22.37
	12H	21.79	22.86	22.22	23.24	23.67	20.50	21.56	20.93	21.95	22.37
4H	2H	19.57	20.83	19.97	21.18	21.56	18.31	19.58	18.71	19.93	20.31
	3H	21.35	22.40	21.76	22.80	23.20	20.23	21.28	20.64	21.68	22.08
	4H	21.98	22.92	22.41	23.34	23.77	20.93	21.87	21.36	22.29	22.72
	6H	22.41	23.23	22.87	23.67	24.13	21.38	22.20	21.84	22.64	23.10
	8H	22.52	23.28	22.98	23.73	24.19	21.48	22.25	21.95	22.69	23.16
	12H	22.57	23.25	23.05	23.73	24.20	21.54	22.22	22.02	22.70	23.17
8H	4H	22.13	22.89	22.59	23.34	23.80	21.17	21.93	21.63	22.38	22.84
	6H	22.63	23.26	23.13	23.75	24.23	21.70	22.34	22.20	22.83	23.31
	8H	22.78	23.34	23.29	23.85	24.34	21.85	22.42	22.37	22.93	23.42
	12H	22.87	23.37	23.38	23.86	24.42	21.95	22.45	22.46	22.94	23.51
12H	4H	22.12	22.81	22.61	23.29	23.76	21.18	21.86	21.66	22.34	22.81
	6H	22.63	23.20	23.15	23.71	24.20	21.73	22.29	22.24	22.80	23.29
	8H	22.82	23.32	23.33	23.81	24.38	21.92	22.42	22.43	22.91	23.47