

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: P1217282

Luminaire Tested: S122DRP-H485D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217282
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-H485D950-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

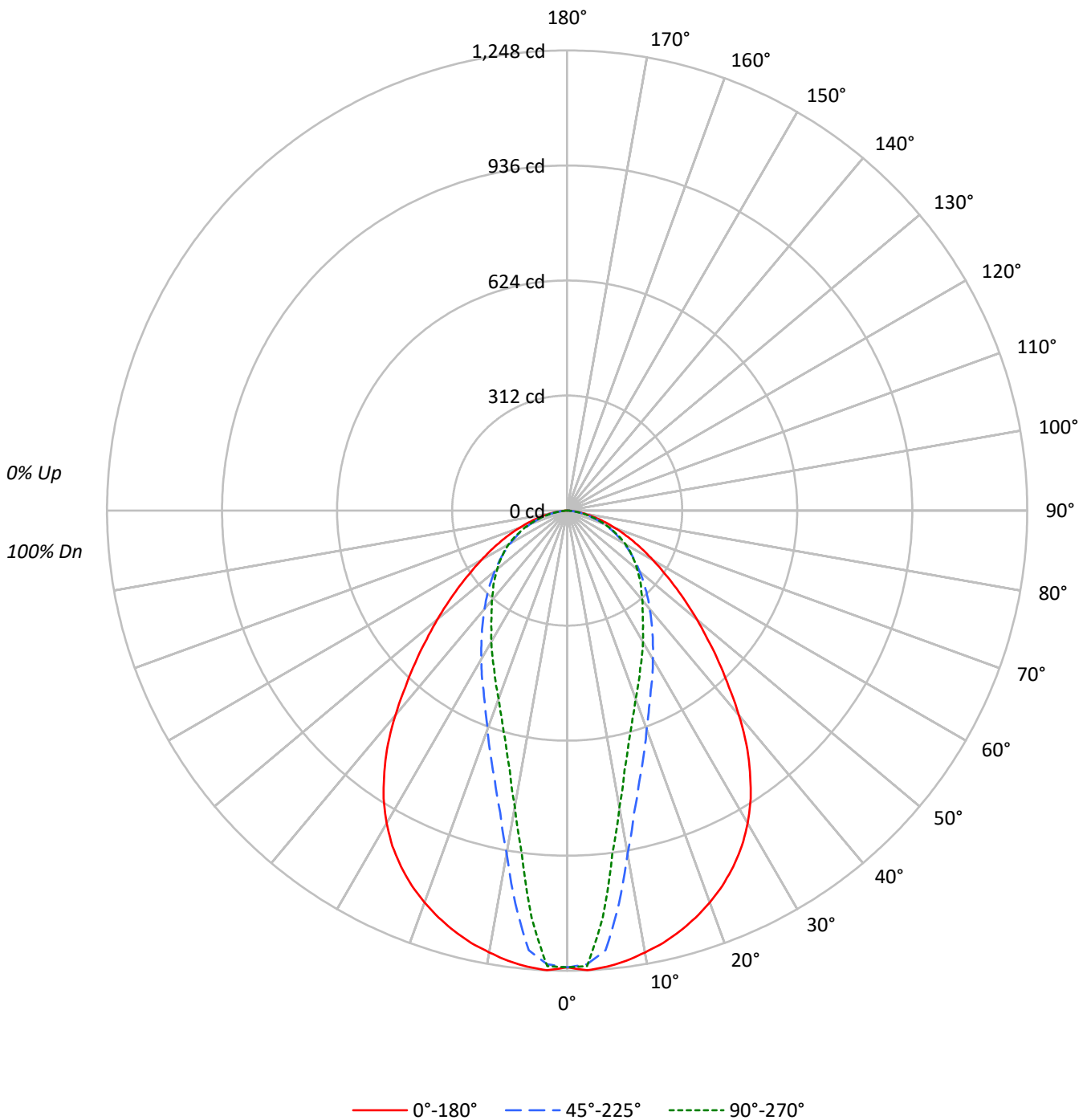
Lumens per Lamp: N/A
Luminaire Lumens: 1664.6 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 17.3
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	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°	23468	23468	23468
5°	23619	22759	21076
10°	23407	18174	15714
15°	23168	14854	12686
20°	22799	12716	10944
25°	22274	11226	9821
30°	21430	10177	9004
35°	19997	9325	8280
40°	17931	8614	7847
45°	15599	8051	7566
50°	13541	7560	7295
55°	11716	7151	7108
60°	10163	6733	6930
65°	8894	6317	6545
70°	7661	5800	6016
75°	6383	5109	5300
80°	5008	4157	4015
85°	3087	2674	2674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15599 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	6.4
10°-20°	235.2	14.1
20°-30°	288.5	17.3
30°-40°	298.2	17.9
40°-50°	269.3	16.2
50°-60°	218.2	13.1
60°-70°	153.0	9.2
70°-80°	78.9	4.7
80°-90°	16.6	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°	630.3	37.9
0°-40°	928.5	55.8
0°-60°	1416.1	85.1
0°-90°	1664.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1664.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1242	1239	1197	1143	1108	118
15°	1181	996	757	675	647	333
25°	1066	708	537	486	470	490
35°	865	523	403	369	358	537
45°	582	377	300	284	282	450
55°	355	258	216	214	215	320
65°	198	159	141	144	146	198
75°	87	75	70	72	72	94
85°	14	12	12	12	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1238.7	1238.7	1238.7	1238.7	1238.7
2.5°	1247.8	1243.2	1231.6	1242.6	1236.8
5°	1241.9	1239.4	1196.7	1143.1	1108.2
7.5°	1231.6	1222.6	1075.2	973.8	939.5
10°	1216.7	1171.5	944.7	850.4	816.8
12.5°	1201.2	1094.6	839.4	750.9	720.5
15°	1181.2	995.8	757.3	675.2	646.8
17.5°	1157.9	909.8	692.1	613.2	590.6
20°	1130.8	835.5	630.7	561.5	542.8
22.5°	1101.1	772.8	579.6	523.4	506.0
25°	1065.5	707.6	537.0	485.9	469.8
27.5°	1026.1	657.8	501.4	453.6	440.0
30°	979.6	609.3	465.2	422.6	411.6
32.5°	926.6	564.1	432.9	395.5	382.5
35°	864.6	522.8	403.2	369.0	358.0
37.5°	798.7	482.0	374.8	345.1	336.0
40°	725.0	446.5	348.3	321.8	317.3
42.5°	649.4	411.0	324.4	301.8	297.9
45°	582.2	376.7	300.5	283.7	282.4
47.5°	516.9	345.7	278.5	265.6	264.3
50°	459.4	313.4	256.5	248.1	247.5
52.5°	404.5	285.0	235.9	231.3	232.6
55°	354.7	257.8	216.5	213.9	215.2
57.5°	308.9	232.6	197.1	197.7	199.7
60°	268.2	206.8	177.7	180.3	182.9
62.5°	232.6	182.9	159.0	162.8	165.4
65°	198.4	159.0	140.9	144.1	146.0
67.5°	168.0	136.3	122.8	126.6	127.3
70°	138.3	115.7	104.7	108.6	108.6
72.5°	112.4	94.3	87.2	89.2	89.8
75°	87.2	75.0	69.8	71.7	72.4
77.5°	65.9	56.9	53.0	54.9	54.3
80°	45.9	40.1	38.1	37.5	36.8
82.5°	28.4	25.2	23.3	23.9	23.3
85°	14.2	12.3	12.3	12.3	12.3
87.5°	4.5	4.5	4.5	4.5	4.5
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	19.46	20.96	19.83	21.27	21.59	17.96	19.46	18.32	19.77	20.09
	3H	21.05	22.39	21.43	22.72	23.08	19.67	21.02	20.05	21.35	21.71
	4H	21.57	22.83	21.97	23.18	23.56	20.25	21.51	20.65	21.86	22.24
	6H	21.90	23.06	22.31	23.43	23.82	20.60	21.77	21.01	22.13	22.53
	8H	21.97	23.08	22.40	23.47	23.87	20.68	21.79	21.10	22.18	22.58
	12H	22.00	23.06	22.43	23.44	23.87	20.71	21.77	21.14	22.15	22.58
4H	2H	19.77	21.03	20.17	21.38	21.76	18.52	19.78	18.92	20.13	20.51
	3H	21.55	22.60	21.96	23.00	23.40	20.44	21.49	20.85	21.89	22.29
	4H	22.18	23.12	22.61	23.54	23.98	21.13	22.07	21.56	22.49	22.93
	6H	22.62	23.44	23.07	23.88	24.34	21.58	22.40	22.04	22.85	23.31
	8H	22.72	23.49	23.19	23.93	24.40	21.69	22.45	22.15	22.90	23.36
	12H	22.77	23.46	23.26	23.94	24.41	21.74	22.42	22.22	22.90	23.37
8H	4H	22.33	23.10	22.79	23.54	24.01	21.37	22.14	21.84	22.58	23.05
	6H	22.84	23.47	23.34	23.96	24.44	21.91	22.54	22.41	23.03	23.51
	8H	22.98	23.55	23.50	24.06	24.55	22.06	22.63	22.58	23.14	23.62
	12H	23.07	23.57	23.58	24.06	24.63	22.16	22.65	22.67	23.15	23.71
12H	4H	22.33	23.01	22.81	23.49	23.96	21.38	22.07	21.87	22.55	23.02
	6H	22.84	23.41	23.35	23.92	24.41	21.93	22.50	22.45	23.01	23.50
	8H	23.02	23.52	23.54	24.02	24.58	22.12	22.62	22.63	23.11	23.68