

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: P1439678

Luminaire Tested: S122DR-S1005D950-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439678
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2602-702-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/2/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-S1005D950-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

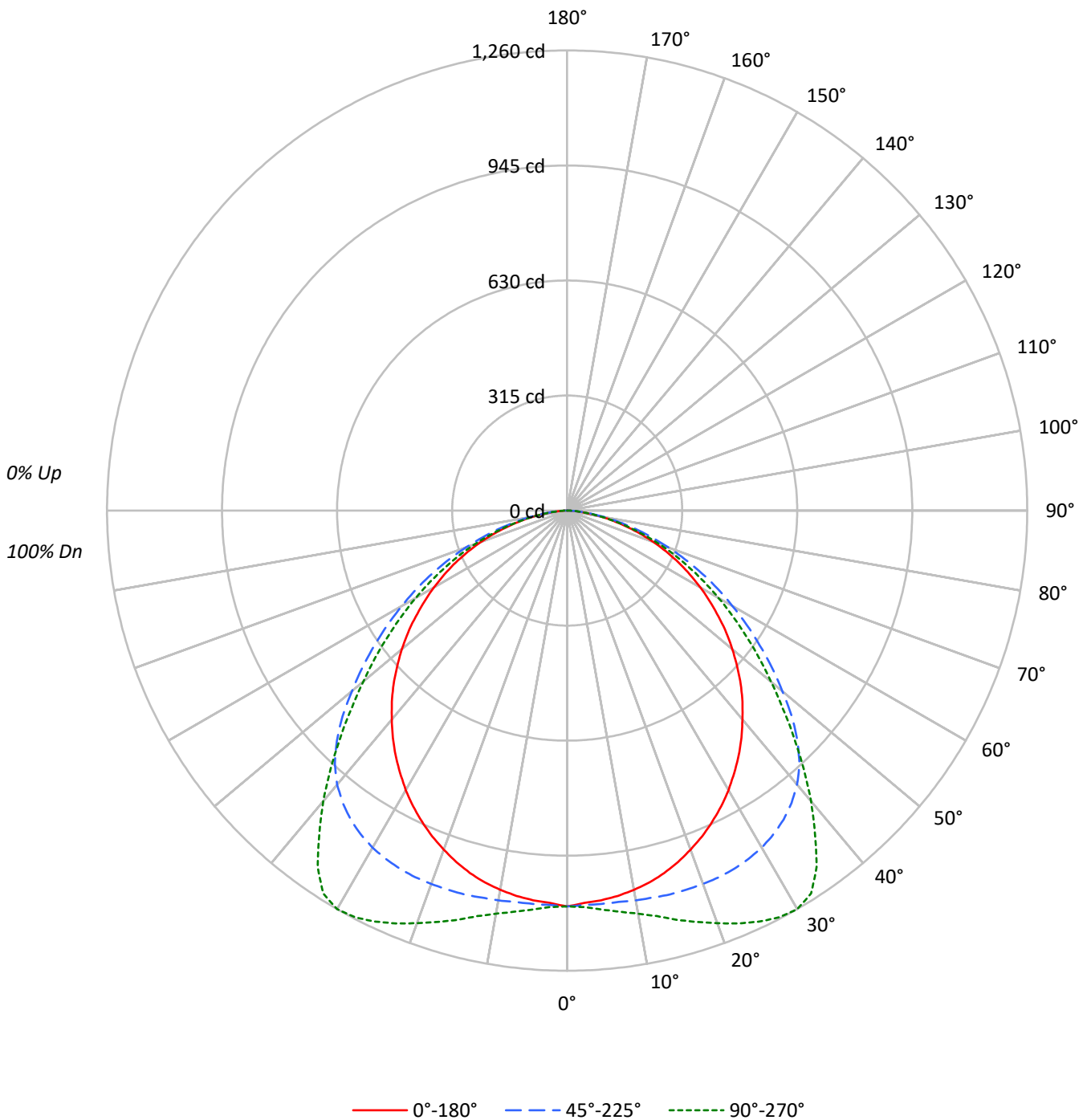
Lumens per Lamp: N/A
Luminaire Lumens: 3333.4 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	91	85	79	97	90	84	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20534	20534	20534
5°	20370	20559	20853
10°	20281	20850	21556
15°	20152	21342	22750
20°	19920	21938	24238
25°	19652	22627	25957
30°	19333	23310	27565
35°	18940	23894	27544
40°	18475	24225	25689
45°	18013	23902	23527
50°	17405	22681	21478
55°	16714	21275	19739
60°	15968	19814	18158
65°	15099	18259	16556
70°	13898	16319	14835
75°	12276	14135	12796
80°	10147	11227	10147
85°	6739	7347	7043

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 24093 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	3.1
10°-20°	309.6	9.3
20°-30°	502.3	15.1
30°-40°	635.6	19.1
40°-50°	636.6	19.1
50°-60°	533.2	16.0
60°-70°	375.7	11.3
70°-80°	193.8	5.8
80°-90°	43.0	1.3
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°	915.6	27.5
0°-40°	1551.2	46.5
0°-60°	2720.9	81.6
0°-90°	3333.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3333.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1071	1090	1081	1087	1096	102
15°	1027	1057	1088	1132	1160	290
25°	940	991	1082	1188	1242	433
35°	819	885	1033	1167	1191	512
45°	672	743	892	899	878	518
55°	506	568	644	617	598	453
65°	337	375	407	382	369	333
75°	168	185	193	179	175	178
85°	31	34	34	34	32	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1083.8	1083.8	1083.8	1083.8	1083.8
2.5°	1075.4	1092.3	1081.0	1082.4	1086.6
5°	1071.1	1089.5	1081.0	1086.6	1096.5
7.5°	1064.1	1083.8	1081.0	1092.3	1107.8
10°	1054.2	1076.8	1083.8	1103.6	1120.5
12.5°	1043.0	1066.9	1085.2	1116.2	1137.4
15°	1027.4	1057.0	1088.1	1131.7	1159.9
17.5°	1009.1	1044.4	1088.1	1148.7	1181.1
20°	988.0	1028.9	1088.1	1162.8	1202.2
22.5°	965.4	1010.5	1086.6	1175.4	1223.4
25°	940.1	990.8	1082.4	1188.1	1241.7
27.5°	913.3	968.3	1075.4	1198.0	1255.8
30°	883.7	942.9	1065.5	1202.2	1260.0
32.5°	851.3	916.1	1051.4	1193.8	1243.1
35°	818.9	885.1	1033.1	1167.0	1190.9
37.5°	783.6	852.7	1009.1	1114.8	1114.8
40°	747.0	817.4	979.5	1043.0	1038.7
42.5°	710.3	780.8	941.5	972.5	958.4
45°	672.3	742.8	892.1	899.2	878.1
47.5°	631.4	700.5	834.4	824.5	800.5
50°	590.5	658.2	769.5	752.6	728.7
52.5°	549.7	614.5	707.5	683.6	662.4
55°	506.0	568.0	644.1	617.3	597.6
57.5°	463.7	521.5	583.5	553.9	537.0
60°	421.4	473.6	522.9	494.7	479.2
62.5°	379.1	424.2	465.1	436.9	422.8
65°	336.8	374.9	407.3	381.9	369.3
67.5°	293.2	327.0	349.5	327.0	318.5
70°	250.9	277.7	294.6	274.8	267.8
72.5°	208.6	231.1	242.4	226.9	219.9
75°	167.7	184.6	193.1	179.0	174.8
77.5°	128.3	140.9	145.2	135.3	129.7
80°	93.0	100.1	102.9	95.8	93.0
82.5°	57.8	63.4	66.2	60.6	59.2
85°	31.0	33.8	33.8	33.8	32.4
87.5°	11.3	14.1	14.1	14.1	12.7
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	21.98	23.60	22.35	23.91	24.23	22.50	24.11	22.86	24.42	24.74
	3H	23.56	25.01	23.93	25.34	25.70	23.97	25.42	24.34	25.75	26.11
	4H	24.09	25.46	24.49	25.81	26.18	24.46	25.82	24.86	26.17	26.55
	6H	24.44	25.70	24.85	26.06	26.46	24.76	26.02	25.17	26.39	26.78
	8H	24.52	25.72	24.94	26.11	26.51	24.83	26.04	25.26	26.43	26.83
	12H	24.55	25.71	24.98	26.09	26.52	24.87	26.02	25.30	26.40	26.83
4H	2H	22.74	24.11	23.14	24.45	24.83	23.14	24.50	23.54	24.85	25.23
	3H	24.51	25.65	24.92	26.05	26.45	24.80	25.94	25.21	26.34	26.74
	4H	25.16	26.19	25.59	26.60	27.04	25.40	26.42	25.83	26.84	27.28
	6H	25.60	26.50	26.06	26.94	27.39	25.79	26.69	26.25	27.13	27.59
	8H	25.71	26.55	26.17	26.99	27.46	25.89	26.73	26.36	27.17	27.64
	12H	25.77	26.52	26.25	27.00	27.47	25.95	26.70	26.43	27.18	27.65
8H	4H	25.44	26.28	25.90	26.72	27.19	25.66	26.49	26.12	26.94	27.40
	6H	25.98	26.67	26.47	27.16	27.64	26.14	26.83	26.63	27.32	27.80
	8H	26.14	26.76	26.65	27.27	27.75	26.28	26.91	26.79	27.41	27.90
	12H	26.24	26.79	26.75	27.28	27.85	26.38	26.93	26.89	27.43	27.99
12H	4H	25.46	26.21	25.94	26.68	27.15	25.67	26.42	26.15	26.90	27.37
	6H	26.01	26.63	26.52	27.14	27.63	26.17	26.79	26.68	27.30	27.78
	8H	26.21	26.76	26.72	27.25	27.82	26.35	26.91	26.86	27.40	27.96