

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: P1217287

Luminaire Tested: S122DRP-H675D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217287
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-H675D927-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

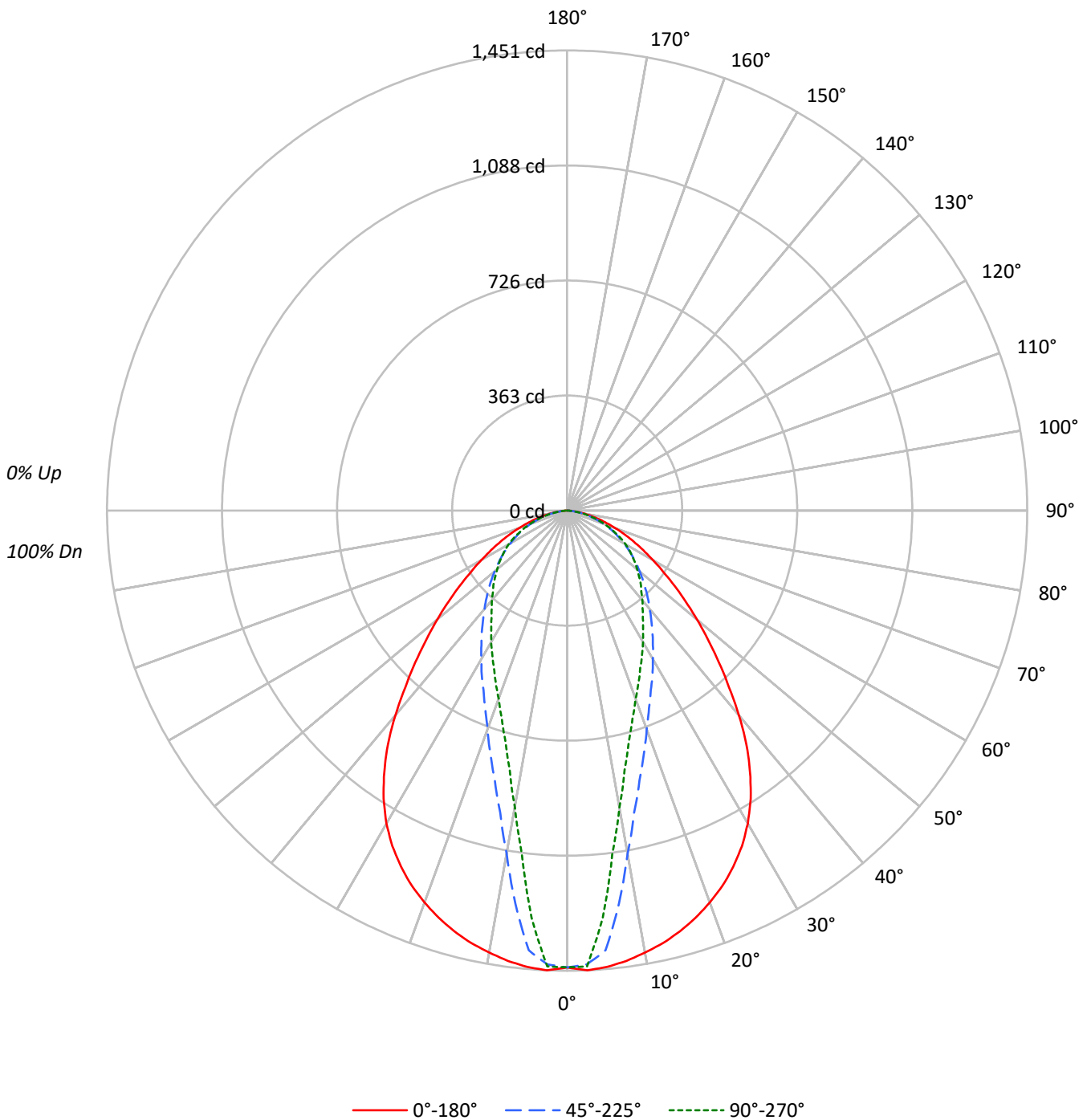
Lumens per Lamp: N/A
Luminaire Lumens: 1935.8 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 23.8
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	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	
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°	27291	27291	27291
5°	27468	26468	24511
10°	27222	21135	18272
15°	26944	17274	14754
20°	26515	14787	12726
25°	25905	13055	11420
30°	24922	11835	10472
35°	23256	10845	9628
40°	20852	10016	9126
45°	18142	9362	8799
50°	15748	8792	8483
55°	13629	8314	8264
60°	11818	7832	8060
65°	10342	7343	7612
70°	8907	6741	6991
75°	7423	5944	6164
80°	5826	4833	4670
85°	3587	3109	3109

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18142 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	6.4
10°-20°	273.5	14.1
20°-30°	335.5	17.3
30°-40°	346.8	17.9
40°-50°	313.2	16.2
50°-60°	253.8	13.1
60°-70°	177.9	9.2
70°-80°	91.8	4.7
80°-90°	19.4	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°	733.0	37.9
0°-40°	1079.8	55.8
0°-60°	1646.8	85.1
0°-90°	1935.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1935.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1444	1441	1392	1329	1289	137
15°	1374	1158	881	785	752	387
25°	1239	823	624	565	546	569
35°	1006	608	469	429	416	625
45°	677	438	349	330	328	524
55°	413	300	252	249	250	372
65°	231	185	164	168	170	231
75°	101	87	81	83	84	110
85°	16	14	14	14	14	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.5	1440.5	1440.5	1440.5	1440.5
2.5°	1451.1	1445.8	1432.3	1445.1	1438.3
5°	1444.3	1441.3	1391.7	1329.3	1288.8
7.5°	1432.3	1421.8	1250.4	1132.4	1092.6
10°	1415.0	1362.4	1098.6	988.9	949.8
12.5°	1397.0	1273.0	976.1	873.2	837.9
15°	1373.7	1158.0	880.7	785.3	752.2
17.5°	1346.6	1058.1	804.8	713.1	686.8
20°	1315.1	971.6	733.4	653.0	631.2
22.5°	1280.5	898.7	674.1	608.7	588.4
25°	1239.2	822.8	624.5	565.1	546.3
27.5°	1193.3	765.0	583.1	527.5	511.7
30°	1139.2	708.6	541.0	491.5	478.7
32.5°	1077.6	656.0	503.5	459.9	444.9
35°	1005.5	607.9	468.9	429.1	416.3
37.5°	928.8	560.6	435.8	401.3	390.8
40°	843.1	519.3	405.0	374.2	369.0
42.5°	755.2	477.9	377.2	350.9	346.4
45°	677.1	438.1	349.4	329.9	328.4
47.5°	601.2	402.0	323.9	308.8	307.3
50°	534.3	364.5	298.3	288.6	287.8
52.5°	470.4	331.4	274.3	269.0	270.5
55°	412.6	299.8	251.7	248.7	250.2
57.5°	359.2	270.5	229.2	229.9	232.2
60°	311.9	240.5	206.7	209.7	212.7
62.5°	270.5	212.7	184.9	189.4	192.4
65°	230.7	184.9	163.8	167.6	169.8
67.5°	195.4	158.6	142.8	147.3	148.0
70°	160.8	134.5	121.7	126.2	126.2
72.5°	130.8	109.7	101.4	103.7	104.5
75°	101.4	87.2	81.2	83.4	84.2
77.5°	76.6	66.1	61.6	63.9	63.1
80°	53.4	46.6	44.3	43.6	42.8
82.5°	33.1	29.3	27.1	27.8	27.1
85°	16.5	14.3	14.3	14.3	14.3
87.5°	5.3	5.3	5.3	5.3	5.3
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	19.99	21.49	20.35	21.80	22.11	18.48	19.98	18.85	20.30	20.61
	3H	21.57	22.92	21.95	23.25	23.61	20.20	21.54	20.57	21.87	22.23
	4H	22.10	23.36	22.50	23.71	24.09	20.78	22.04	21.18	22.39	22.77
	6H	22.42	23.59	22.84	23.96	24.35	21.12	22.29	21.54	22.66	23.05
	8H	22.50	23.61	22.92	24.00	24.40	21.20	22.31	21.63	22.70	23.10
	12H	22.52	23.59	22.95	23.97	24.40	21.23	22.29	21.66	22.67	23.10
4H	2H	20.29	21.56	20.69	21.91	22.29	19.04	20.31	19.44	20.65	21.03
	3H	22.08	23.12	22.49	23.52	23.93	20.96	22.01	21.37	22.41	22.81
	4H	22.71	23.65	23.14	24.06	24.50	21.65	22.60	22.09	23.01	23.45
	6H	23.14	23.96	23.60	24.40	24.86	22.11	22.93	22.56	23.37	23.83
	8H	23.25	24.01	23.71	24.46	24.92	22.21	22.98	22.67	23.42	23.89
	12H	23.30	23.98	23.78	24.46	24.93	22.26	22.95	22.75	23.43	23.90
8H	4H	22.85	23.62	23.32	24.06	24.53	21.90	22.66	22.36	23.11	23.57
	6H	23.36	23.99	23.86	24.48	24.96	22.43	23.06	22.93	23.56	24.03
	8H	23.51	24.07	24.02	24.58	25.07	22.58	23.15	23.10	23.66	24.15
	12H	23.60	24.10	24.11	24.59	25.15	22.68	23.18	23.19	23.67	24.24
12H	4H	22.85	23.54	23.34	24.02	24.49	21.91	22.59	22.39	23.07	23.54
	6H	23.36	23.93	23.88	24.44	24.93	22.45	23.02	22.97	23.53	24.02
	8H	23.55	24.05	24.06	24.54	25.10	22.65	23.14	23.16	23.64	24.20