

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: P1217286

Luminaire Tested: S122DRP-H675D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217286
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-H675D850-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

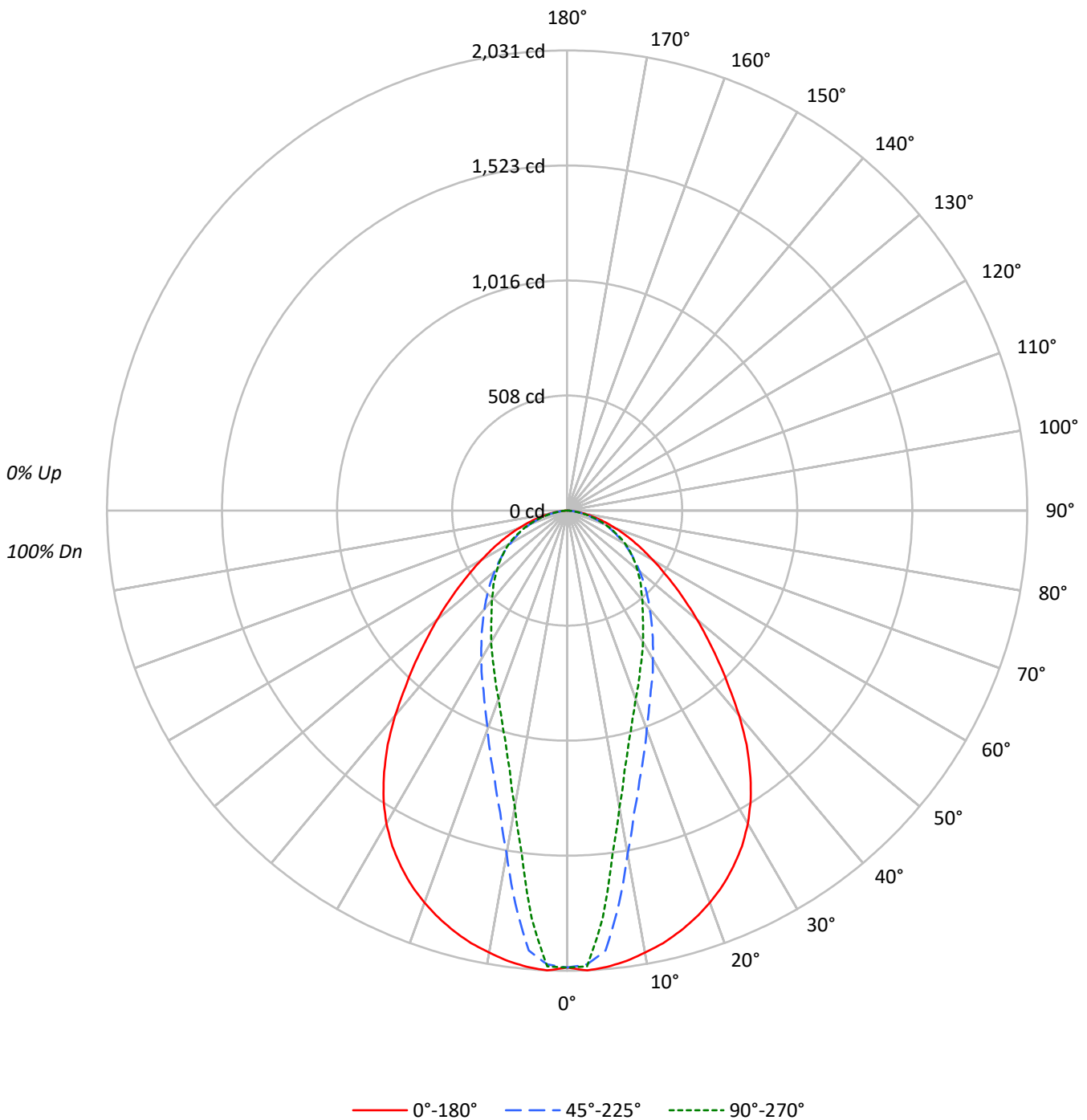
Lumens per Lamp: N/A
Luminaire Lumens: 2710.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	38208	38208	38208
5°	38453	37053	34313
10°	38109	29588	25581
15°	37718	24182	20654
20°	37118	20700	17817
25°	36263	18275	15988
30°	34889	16569	14660
35°	32556	15182	13479
40°	29191	14023	12774
45°	25395	13107	12317
50°	22047	12309	11875
55°	19075	11640	11571
60°	16544	10962	11280
65°	14480	10279	10656
70°	12469	9439	9788
75°	10395	8316	8623
80°	8150	6775	6546
85°	5021	4348	4348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 25395 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	6.4
10°-20°	382.9	14.1
20°-30°	469.7	17.3
30°-40°	485.4	17.9
40°-50°	438.4	16.2
50°-60°	355.3	13.1
60°-70°	249.1	9.2
70°-80°	128.5	4.7
80°-90°	27.1	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°	1026.2	37.9
0°-40°	1511.7	55.8
0°-60°	2305.4	85.1
0°-90°	2710.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2017	2017	2017	2017	2017	
5°	2022	2018	1948	1861	1804	192
15°	1923	1621	1233	1099	1053	542
25°	1735	1152	874	791	765	797
35°	1408	851	656	601	583	875
45°	948	613	489	462	460	733
55°	578	420	352	348	350	520
65°	323	259	229	235	238	323
75°	142	122	114	117	118	153
85°	23	20	20	20	20	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2016.7	2016.7	2016.7	2016.7	2016.7
2.5°	2031.4	2024.0	2005.1	2023.0	2013.5
5°	2021.9	2017.7	1948.3	1861.0	1804.2
7.5°	2005.1	1990.4	1750.5	1585.3	1529.6
10°	1980.9	1907.3	1538.0	1384.4	1329.7
12.5°	1955.6	1782.1	1366.5	1222.4	1173.0
15°	1923.0	1621.1	1232.9	1099.3	1053.0
17.5°	1885.2	1481.2	1126.7	998.3	961.5
20°	1841.0	1360.2	1026.7	914.2	883.7
22.5°	1792.6	1258.2	943.6	852.1	823.7
25°	1734.7	1151.9	874.2	791.1	764.8
27.5°	1670.6	1070.9	816.3	738.5	716.4
30°	1594.8	992.0	757.4	688.0	670.1
32.5°	1508.6	918.4	704.8	643.8	622.8
35°	1407.6	851.1	656.4	600.7	582.8
37.5°	1300.3	784.8	610.2	561.8	547.0
40°	1180.3	726.9	567.0	523.9	516.5
42.5°	1057.3	669.1	528.1	491.3	485.0
45°	947.8	613.3	489.2	461.8	459.7
47.5°	841.6	562.8	453.4	432.4	430.3
50°	748.0	510.2	417.6	404.0	402.9
52.5°	658.5	463.9	384.0	376.6	378.7
55°	577.5	419.7	352.4	348.2	350.3
57.5°	502.9	378.7	320.9	321.9	325.1
60°	436.6	336.6	289.3	293.5	297.7
62.5°	378.7	297.7	258.8	265.1	269.3
65°	323.0	258.8	229.3	234.6	237.7
67.5°	273.5	222.0	199.9	206.2	207.2
70°	225.1	188.3	170.4	176.7	176.7
72.5°	183.0	153.6	142.0	145.2	146.2
75°	142.0	122.0	113.6	116.8	117.8
77.5°	107.3	92.6	86.3	89.4	88.4
80°	74.7	65.2	62.1	61.0	60.0
82.5°	46.3	41.0	37.9	38.9	37.9
85°	23.1	20.0	20.0	20.0	20.0
87.5°	7.4	7.4	7.4	7.4	7.4
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	21.15	22.65	21.52	22.97	23.28	19.65	21.15	20.02	21.47	21.78
	3H	22.74	24.09	23.12	24.42	24.78	21.37	22.71	21.74	23.04	23.40
	4H	23.27	24.53	23.67	24.88	25.26	21.95	23.21	22.35	23.56	23.94
	6H	23.59	24.76	24.00	25.12	25.52	22.29	23.46	22.71	23.83	24.22
	8H	23.67	24.78	24.09	25.17	25.57	22.37	23.48	22.80	23.87	24.27
	12H	23.69	24.75	24.12	25.14	25.57	22.40	23.46	22.83	23.84	24.27
4H	2H	21.46	22.73	21.86	23.08	23.45	20.21	21.48	20.61	21.82	22.20
	3H	23.25	24.29	23.66	24.69	25.10	22.13	23.18	22.54	23.58	23.98
	4H	23.87	24.82	24.31	25.23	25.67	22.82	23.77	23.26	24.18	24.62
	6H	24.31	25.13	24.77	25.57	26.03	23.28	24.10	23.73	24.54	25.00
	8H	24.41	25.18	24.88	25.62	26.09	23.38	24.15	23.84	24.59	25.06
	12H	24.47	25.15	24.95	25.63	26.10	23.43	24.12	23.92	24.60	25.07
8H	4H	24.02	24.79	24.49	25.23	25.70	23.06	23.83	23.53	24.27	24.74
	6H	24.53	25.16	25.03	25.65	26.13	23.60	24.23	24.10	24.73	25.20
	8H	24.68	25.24	25.19	25.75	26.24	23.75	24.32	24.27	24.83	25.32
	12H	24.77	25.26	25.28	25.76	26.32	23.85	24.35	24.36	24.84	25.40
12H	4H	24.02	24.71	24.50	25.18	25.66	23.08	23.76	23.56	24.24	24.71
	6H	24.53	25.10	25.05	25.61	26.10	23.62	24.19	24.14	24.70	25.19
	8H	24.72	25.22	25.23	25.71	26.27	23.82	24.31	24.33	24.81	25.37