

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: P1217330

Luminaire Tested: S122DRP-S675D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217330
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-S675D840-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

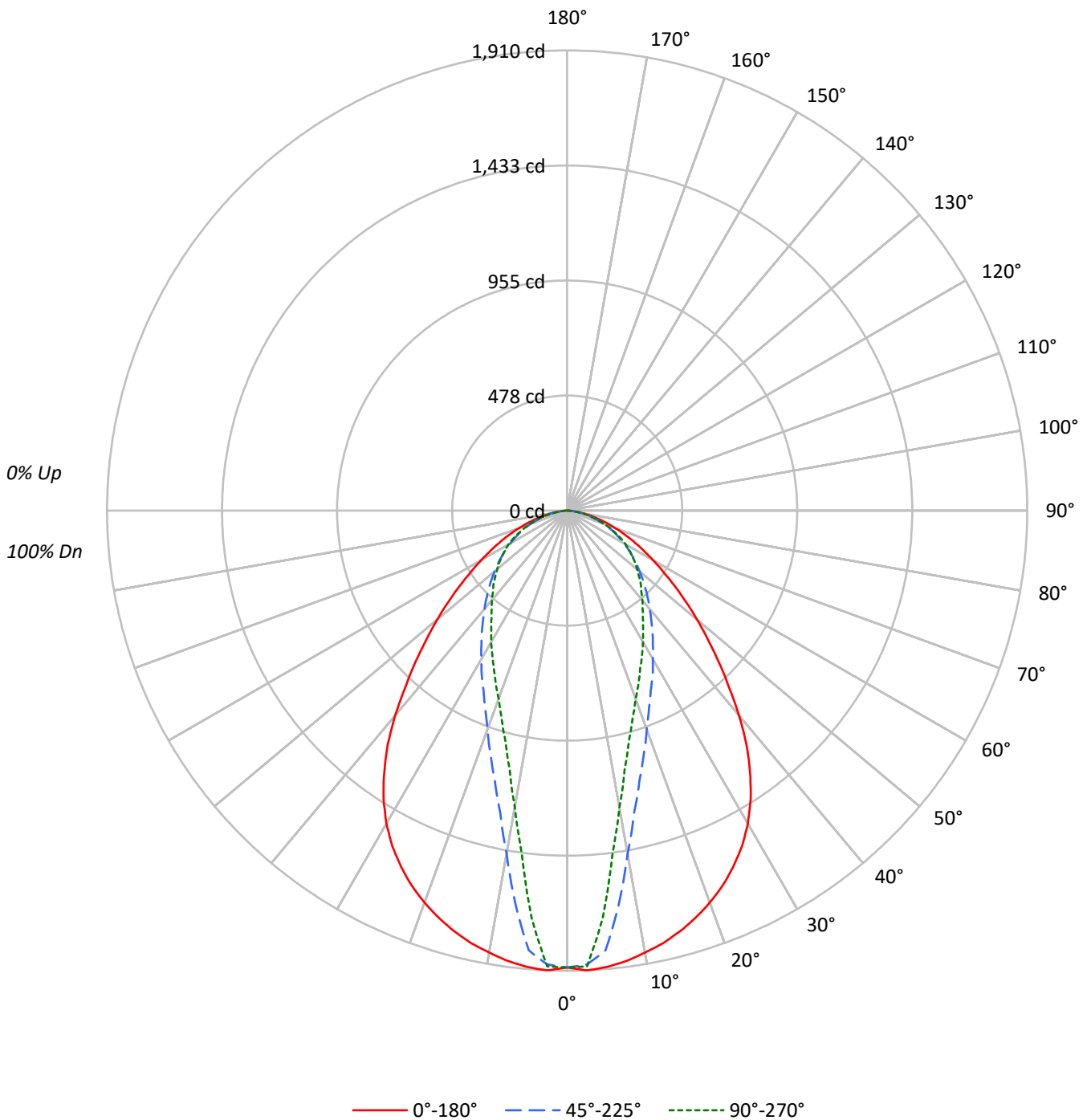
Lumens per Lamp: N/A
Luminaire Lumens: 2548.4 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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	100	100	100	100	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75	75	75	75	75	75	75		
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65		
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57	57	57	57	57	57	57		
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	50	50	50	50	50		
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45		
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41	41	41	41	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37	37	37	37	37		
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34	34	34	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31	31	31	31	31	31	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35929	35929	35929
5°	36159	34843	32264
10°	35835	27824	24055
15°	35468	22741	19422
20°	34904	19466	16754
25°	34101	17186	15034
30°	32809	15583	13785
35°	30613	14277	12674
40°	27450	13187	12012
45°	23881	12325	11583
50°	20732	11575	11168
55°	17939	10947	10880
60°	15555	10307	10610
65°	13615	9670	10024
70°	11727	8880	9206
75°	9772	7818	8111
80°	7659	6372	6154
85°	4739	4087	4087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23881 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	6.4
10°-20°	360.0	14.1
20°-30°	441.7	17.3
30°-40°	456.5	17.9
40°-50°	412.3	16.2
50°-60°	334.1	13.1
60°-70°	234.2	9.2
70°-80°	120.8	4.7
80°-90°	25.5	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°	965.0	37.9
0°-40°	1421.5	55.8
0°-60°	2167.9	85.1
0°-90°	2548.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2548.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1896	1896	1896	1896	1896	
5°	1901	1897	1832	1750	1696	180
15°	1808	1524	1159	1034	990	510
25°	1631	1083	822	744	719	749
35°	1324	800	617	565	548	823
45°	891	577	460	434	432	690
55°	543	395	331	327	329	489
65°	304	243	216	221	224	304
75°	134	115	107	110	111	144
85°	22	19	19	19	19	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1896.4	1896.4	1896.4	1896.4	1896.4
2.5°	1910.2	1903.3	1885.5	1902.3	1893.4
5°	1901.3	1897.4	1832.1	1750.0	1696.5
7.5°	1885.5	1871.6	1646.1	1490.8	1438.4
10°	1862.7	1793.5	1446.3	1301.8	1250.4
12.5°	1839.0	1675.8	1285.0	1149.5	1103.0
15°	1808.3	1524.4	1159.4	1033.8	990.2
17.5°	1772.7	1392.9	1059.5	938.8	904.2
20°	1731.2	1279.1	965.5	859.7	831.0
22.5°	1685.7	1183.1	887.3	801.3	774.6
25°	1631.3	1083.2	822.1	743.9	719.2
27.5°	1570.9	1007.0	767.7	694.4	673.7
30°	1499.7	932.9	712.3	647.0	630.1
32.5°	1418.6	863.6	662.8	605.4	585.6
35°	1323.6	800.3	617.3	564.9	548.0
37.5°	1222.7	738.0	573.8	528.3	514.4
40°	1109.9	683.6	533.2	492.6	485.7
42.5°	994.2	629.2	496.6	462.0	456.0
45°	891.3	576.7	460.0	434.3	432.3
47.5°	791.4	529.2	426.4	406.6	404.6
50°	703.4	479.8	392.7	379.9	378.9
52.5°	619.3	436.3	361.1	354.1	356.1
55°	543.1	394.7	331.4	327.4	329.4
57.5°	472.9	356.1	301.7	302.7	305.7
60°	410.5	316.6	272.0	276.0	280.0
62.5°	356.1	280.0	243.4	249.3	253.2
65°	303.7	243.4	215.7	220.6	223.6
67.5°	257.2	208.7	188.0	193.9	194.9
70°	211.7	177.1	160.3	166.2	166.2
72.5°	172.1	144.4	133.5	136.5	137.5
75°	133.5	114.8	106.8	109.8	110.8
77.5°	100.9	87.1	81.1	84.1	83.1
80°	70.2	61.3	58.4	57.4	56.4
82.5°	43.5	38.6	35.6	36.6	35.6
85°	21.8	18.8	18.8	18.8	18.8
87.5°	6.9	6.9	6.9	6.9	6.9
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	20.94	22.44	21.31	22.75	23.07	19.44	20.94	19.80	21.25	21.57
	3H	22.53	23.87	22.91	24.20	24.56	21.15	22.50	21.53	22.83	23.19
	4H	23.05	24.31	23.45	24.66	25.04	21.73	22.99	22.13	23.34	23.72
	6H	23.38	24.54	23.79	24.91	25.30	22.08	23.25	22.49	23.61	24.01
	8H	23.45	24.56	23.88	24.95	25.35	22.16	23.27	22.58	23.66	24.06
	12H	23.48	24.54	23.91	24.92	25.35	22.19	23.25	22.62	23.63	24.06
4H	2H	21.25	22.51	21.65	22.86	23.24	20.00	21.26	20.40	21.61	21.99
	3H	23.03	24.08	23.44	24.48	24.88	21.92	22.96	22.33	23.36	23.77
	4H	23.66	24.60	24.09	25.02	25.46	22.61	23.55	23.04	23.97	24.41
	6H	24.10	24.91	24.55	25.36	25.82	23.06	23.88	23.52	24.33	24.79
	8H	24.20	24.97	24.66	25.41	25.88	23.17	23.93	23.63	24.38	24.84
	12H	24.25	24.94	24.74	25.41	25.89	23.22	23.90	23.70	24.38	24.85
8H	4H	23.81	24.58	24.27	25.02	25.49	22.85	23.62	23.32	24.06	24.53
	6H	24.32	24.95	24.81	25.44	25.92	23.39	24.02	23.89	24.51	24.99
	8H	24.46	25.03	24.98	25.54	26.03	23.54	24.11	24.06	24.62	25.10
	12H	24.55	25.05	25.06	25.54	26.11	23.64	24.13	24.15	24.63	25.19
12H	4H	23.81	24.49	24.29	24.97	25.44	22.86	23.55	23.35	24.03	24.50
	6H	24.32	24.89	24.83	25.40	25.88	23.41	23.98	23.93	24.49	24.98
	8H	24.50	25.00	25.01	25.49	26.06	23.60	24.10	24.11	24.59	25.16