

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: P1217419

Luminaire Tested: S124DRP-S675D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217419
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S675D835-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

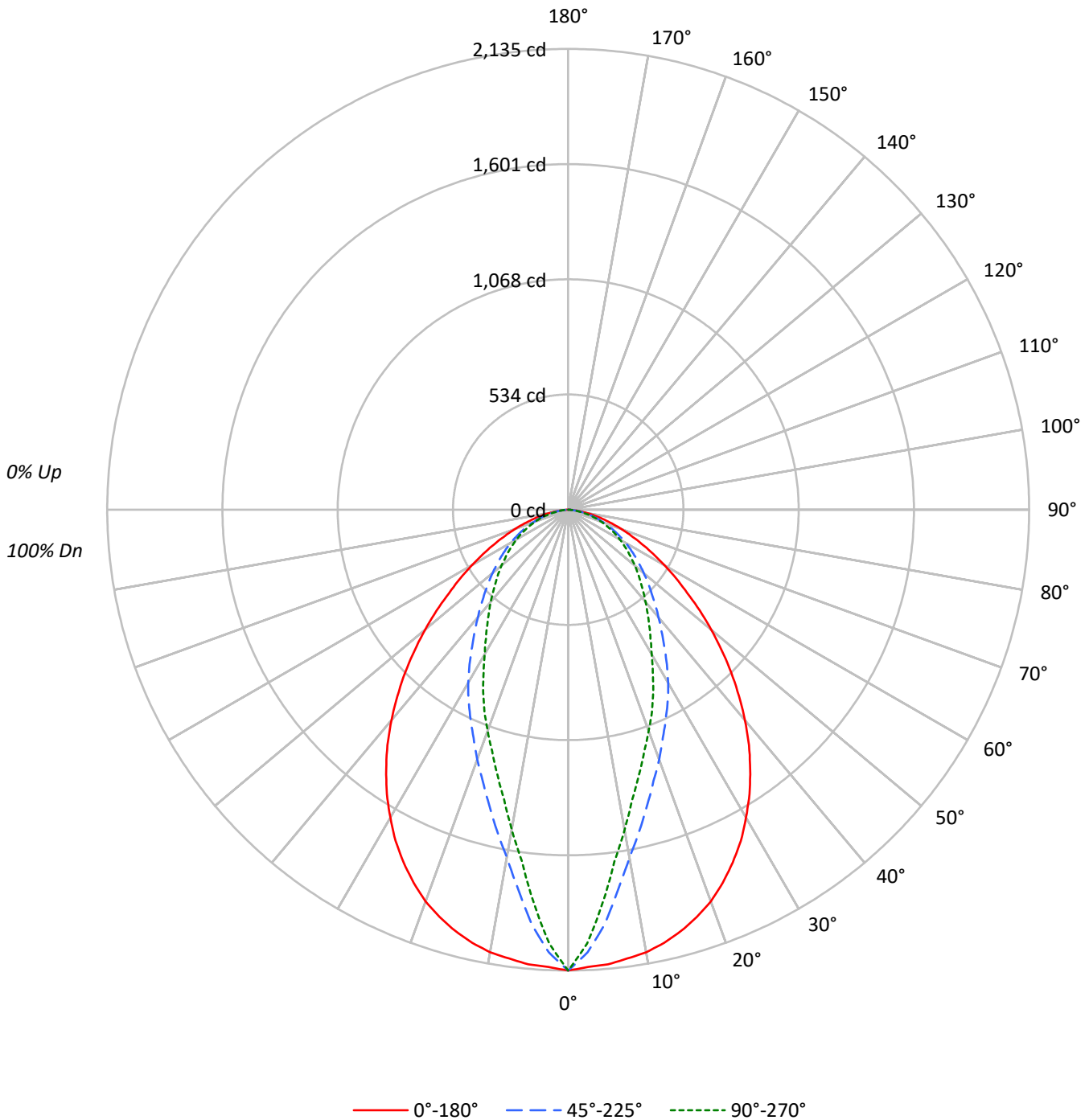
Lumens per Lamp: N/A
Luminaire Lumens: 2994.4 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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	94	92	92	90	89	87				87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75				75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				65
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57				57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51				51
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45				45
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41				41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37				37
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34				34
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18877	18877	18877
5°	18766	17122	16229
10°	18687	14678	13504
15°	18493	12951	11617
20°	18169	11588	10261
25°	17591	10429	9089
30°	16815	9455	7890
35°	15861	8382	7062
40°	14692	7509	6434
45°	13354	6829	5937
50°	11896	6285	5547
55°	10377	5841	5189
60°	9110	5436	4888
65°	7887	5015	4563
70°	6830	4545	4203
75°	5684	4014	3693
80°	4404	3253	3014
85°	2769	2191	1998

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13354 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.7	6.0
10°-20°	424.6	14.2
20°-30°	542.5	18.1
30°-40°	551.0	18.4
40°-50°	488.4	16.3
50°-60°	383.8	12.8
60°-70°	261.4	8.7
70°-80°	134.2	4.5
80°-90°	29.7	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°	1145.8	38.3
0°-40°	1696.8	56.7
0°-60°	2569.1	85.8
0°-90°	2994.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2994.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2135	2135	2135	2135	2135	
5°	2114	2061	1929	1855	1829	201
15°	2020	1687	1415	1298	1269	569
25°	1803	1322	1069	966	932	829
35°	1470	1001	777	678	654	917
45°	1068	721	546	490	475	823
55°	673	480	379	345	337	608
65°	377	291	240	223	218	377
75°	166	137	118	112	108	179
85°	27	25	22	22	20	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2135.1	2135.1	2135.1	2135.1	2135.1
2.5°	2120.0	2122.9	2052.4	2027.0	2011.9
5°	2114.4	2060.8	1929.2	1854.9	1828.6
7.5°	2097.5	1980.9	1773.1	1670.7	1643.4
10°	2081.5	1889.7	1634.9	1533.4	1504.2
12.5°	2055.2	1789.1	1524.0	1407.4	1372.6
15°	2020.4	1686.6	1414.9	1298.4	1269.2
17.5°	1979.0	1588.9	1316.2	1204.3	1172.4
20°	1931.1	1498.6	1231.6	1116.9	1090.6
22.5°	1870.9	1409.3	1145.1	1041.7	1012.5
25°	1803.2	1321.9	1069.0	966.5	931.7
27.5°	1730.8	1237.2	998.4	884.7	848.0
30°	1647.1	1156.4	926.1	806.7	772.8
32.5°	1562.5	1076.5	849.9	737.1	709.8
35°	1469.5	1001.3	776.6	677.9	654.3
37.5°	1375.4	928.9	710.8	624.3	603.6
40°	1273.0	858.4	650.6	574.4	557.5
42.5°	1170.5	787.8	596.1	530.2	514.3
45°	1068.0	721.1	546.2	489.8	474.8
47.5°	964.6	655.3	500.2	450.3	438.1
50°	864.9	593.2	456.9	413.7	403.3
52.5°	768.1	534.9	415.5	378.9	367.6
55°	673.2	480.4	378.9	345.0	336.6
57.5°	592.3	429.7	342.2	313.1	306.5
60°	515.2	380.8	307.4	283.0	276.4
62.5°	442.8	335.6	272.6	252.9	248.2
65°	377.0	291.4	239.7	222.8	218.1
67.5°	316.8	251.0	205.9	193.7	189.9
70°	264.2	210.6	175.8	165.5	162.6
72.5°	211.5	172.0	145.7	138.2	135.4
75°	166.4	137.3	117.5	111.9	108.1
77.5°	125.0	104.4	90.3	85.6	82.7
80°	86.5	74.3	63.9	62.1	59.2
82.5°	54.5	47.0	41.4	40.4	37.6
85°	27.3	25.4	21.6	21.6	19.7
87.5°	9.4	8.5	8.5	8.5	7.5
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	19.11	20.60	19.48	20.91	21.23	16.44	17.92	16.80	18.24	18.55
	3H	20.70	22.04	21.08	22.37	22.73	18.04	19.37	18.41	19.70	20.06
	4H	21.23	22.48	21.63	22.83	23.21	18.59	19.84	18.99	20.19	20.57
	6H	21.57	22.72	21.98	23.09	23.48	18.95	20.10	19.36	20.47	20.86
	8H	21.64	22.74	22.07	23.13	23.53	19.04	20.13	19.46	20.52	20.93
	12H	21.67	22.72	22.10	23.11	23.54	19.07	20.12	19.50	20.50	20.93
4H	2H	19.34	20.59	19.74	20.94	21.32	17.11	18.36	17.51	18.71	19.09
	3H	21.12	22.16	21.54	22.56	22.96	18.90	19.94	19.31	20.34	20.74
	4H	21.76	22.70	22.20	23.11	23.55	19.56	20.50	20.00	20.91	21.35
	6H	22.21	23.02	22.67	23.46	23.92	20.02	20.83	20.48	21.27	21.73
	8H	22.32	23.08	22.79	23.52	23.99	20.14	20.89	20.60	21.34	21.81
	12H	22.38	23.05	22.86	23.53	24.01	20.20	20.87	20.68	21.35	21.82
8H	4H	21.87	22.62	22.33	23.07	23.54	19.86	20.62	20.33	21.06	21.53
	6H	22.39	23.01	22.88	23.50	23.98	20.41	21.04	20.91	21.53	22.01
	8H	22.54	23.10	23.06	23.61	24.10	20.58	21.14	21.10	21.65	22.14
	12H	22.64	23.14	23.15	23.63	24.19	20.69	21.18	21.20	21.67	22.24
12H	4H	21.86	22.53	22.34	23.01	23.48	19.89	20.56	20.37	21.04	21.51
	6H	22.38	22.94	22.90	23.45	23.94	20.45	21.01	20.97	21.52	22.01
	8H	22.57	23.07	23.08	23.56	24.12	20.66	21.16	21.17	21.65	22.21