

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: P1217329

Luminaire Tested: S122DRP-S675D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217329
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-S675D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

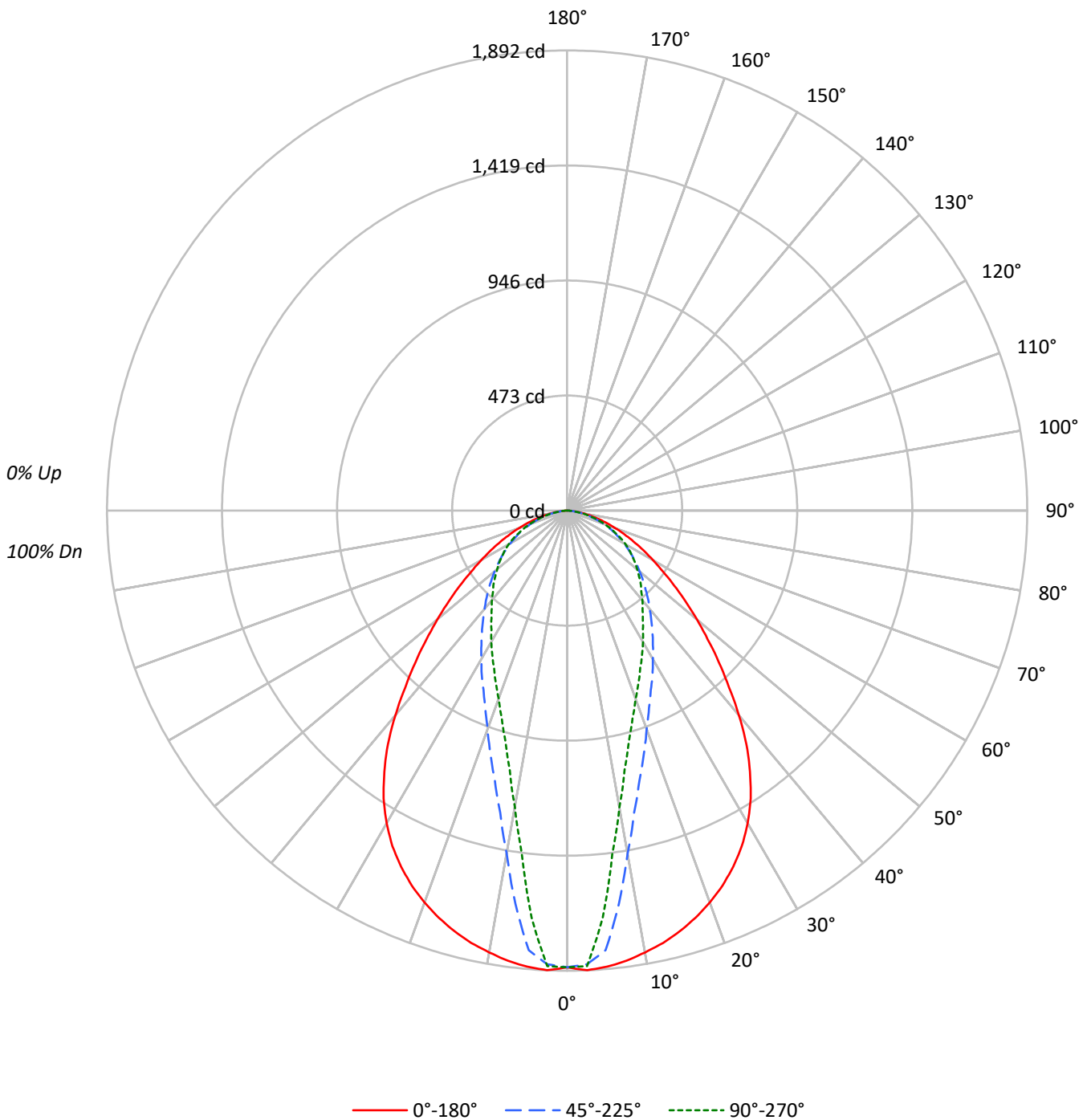
Lumens per Lamp: N/A
Luminaire Lumens: 2523.5 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1217329

CATALOG NUMBER: S122DRP-S675D835-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217329

CATALOG NUMBER: S122DRP-S675D835-X4F0-XX-UDD-G-W

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			
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°	35577	35577	35577
5°	35806	34503	31951
10°	35485	27551	23821
15°	35123	22519	19234
20°	34563	19277	16589
25°	33767	17016	14888
30°	32487	15430	13651
35°	30315	14139	12552
40°	27183	13059	11896
45°	23648	12204	11470
50°	20529	11463	11059
55°	17764	10841	10775
60°	15403	10208	10504
65°	13480	9571	9925
70°	11611	8791	9118
75°	9677	7745	8030
80°	7583	6306	6088
85°	4695	4043	4043

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23648 cd/sqm



TEST NUMBER: P1217329

CATALOG NUMBER: S122DRP-S675D835-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.7	6.4
10°-20°	356.5	14.1
20°-30°	437.4	17.3
30°-40°	452.0	17.9
40°-50°	408.2	16.2
50°-60°	330.8	13.1
60°-70°	231.9	9.2
70°-80°	119.6	4.7
80°-90°	25.2	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°	955.6	37.9
0°-40°	1407.6	55.8
0°-60°	2146.7	85.1
0°-90°	2523.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2523.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1878	1878	1878	1878	1878	
5°	1883	1879	1814	1733	1680	178
15°	1791	1510	1148	1024	981	505
25°	1615	1073	814	737	712	742
35°	1311	792	611	559	543	815
45°	883	571	456	430	428	683
55°	538	391	328	324	326	484
65°	301	241	214	218	221	301
75°	132	114	106	109	110	143
85°	22	19	19	19	19	29
90°	0	0	0	0	0	



TEST NUMBER: P1217329

CATALOG NUMBER: S122DRP-S675D835-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1877.8	1877.8	1877.8	1877.8	1877.8
2.5°	1891.6	1884.7	1867.1	1883.7	1874.9
5°	1882.7	1878.8	1814.2	1732.9	1680.0
7.5°	1867.1	1853.4	1630.0	1476.2	1424.3
10°	1844.5	1776.0	1432.1	1289.1	1238.2
12.5°	1821.0	1659.4	1272.5	1138.3	1092.2
15°	1790.7	1509.5	1148.1	1023.7	980.6
17.5°	1755.4	1379.2	1049.1	929.6	895.3
20°	1714.3	1266.6	956.1	851.3	822.8
22.5°	1669.2	1171.6	878.7	793.5	767.0
25°	1615.3	1072.6	814.0	736.6	712.2
27.5°	1555.6	997.2	760.2	687.7	667.1
30°	1485.0	923.7	705.3	640.6	624.0
32.5°	1404.7	855.2	656.3	599.5	579.9
35°	1310.7	792.5	611.3	559.3	542.7
37.5°	1210.8	730.8	568.2	523.1	509.4
40°	1099.1	676.9	528.0	487.8	481.0
42.5°	984.5	623.0	491.7	457.5	451.6
45°	882.6	571.1	455.5	430.0	428.1
47.5°	783.7	524.1	422.2	402.6	400.6
50°	696.5	475.1	388.9	376.2	375.2
52.5°	613.2	432.0	357.5	350.7	352.6
55°	537.8	390.9	328.2	324.2	326.2
57.5°	468.2	352.6	298.8	299.8	302.7
60°	406.5	313.5	269.4	273.3	277.2
62.5°	352.6	277.2	241.0	246.9	250.8
65°	300.7	241.0	213.5	218.4	221.4
67.5°	254.7	206.7	186.1	192.0	193.0
70°	209.6	175.3	158.7	164.6	164.6
72.5°	170.4	143.0	132.2	135.2	136.2
75°	132.2	113.6	105.8	108.7	109.7
77.5°	99.9	86.2	80.3	83.3	82.3
80°	69.5	60.7	57.8	56.8	55.8
82.5°	43.1	38.2	35.3	36.2	35.3
85°	21.6	18.6	18.6	18.6	18.6
87.5°	6.9	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217329

CATALOG NUMBER: S122DRP-S675D835-X4F0-XX-UDD-G-W

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	20.91	22.41	21.27	22.72	23.03	19.41	20.91	19.77	21.22	21.53
	3H	22.49	23.84	22.87	24.17	24.53	21.12	22.46	21.50	22.79	23.15
	4H	23.02	24.28	23.42	24.63	25.01	21.70	22.96	22.10	23.31	23.69
	6H	23.34	24.51	23.76	24.88	25.27	22.05	23.21	22.46	23.58	23.97
	8H	23.42	24.53	23.84	24.92	25.32	22.12	23.23	22.55	23.62	24.02
	12H	23.44	24.51	23.87	24.89	25.32	22.15	23.21	22.58	23.60	24.03
4H	2H	21.22	22.48	21.62	22.83	23.21	19.97	21.23	20.37	21.58	21.96
	3H	23.00	24.05	23.41	24.45	24.85	21.88	22.93	22.29	23.33	23.73
	4H	23.63	24.57	24.06	24.99	25.42	22.58	23.52	23.01	23.94	24.38
	6H	24.06	24.88	24.52	25.32	25.78	23.03	23.85	23.49	24.29	24.75
	8H	24.17	24.93	24.63	25.38	25.84	23.13	23.90	23.60	24.34	24.81
	12H	24.22	24.90	24.70	25.38	25.85	23.19	23.87	23.67	24.35	24.82
8H	4H	23.78	24.54	24.24	24.99	25.45	22.82	23.58	23.28	24.03	24.50
	6H	24.28	24.91	24.78	25.40	25.88	23.36	23.99	23.85	24.48	24.96
	8H	24.43	24.99	24.94	25.50	25.99	23.51	24.07	24.02	24.58	25.07
	12H	24.52	25.02	25.03	25.51	26.07	23.60	24.10	24.11	24.59	25.16
12H	4H	23.77	24.46	24.26	24.94	25.41	22.83	23.51	23.31	23.99	24.46
	6H	24.28	24.85	24.80	25.36	25.85	23.38	23.94	23.89	24.45	24.94
	8H	24.47	24.97	24.98	25.46	26.02	23.57	24.07	24.08	24.56	25.12