

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1588495

Luminaire Tested: 24CZSP-70VHE-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588495
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-70VHE-L835
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 7500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

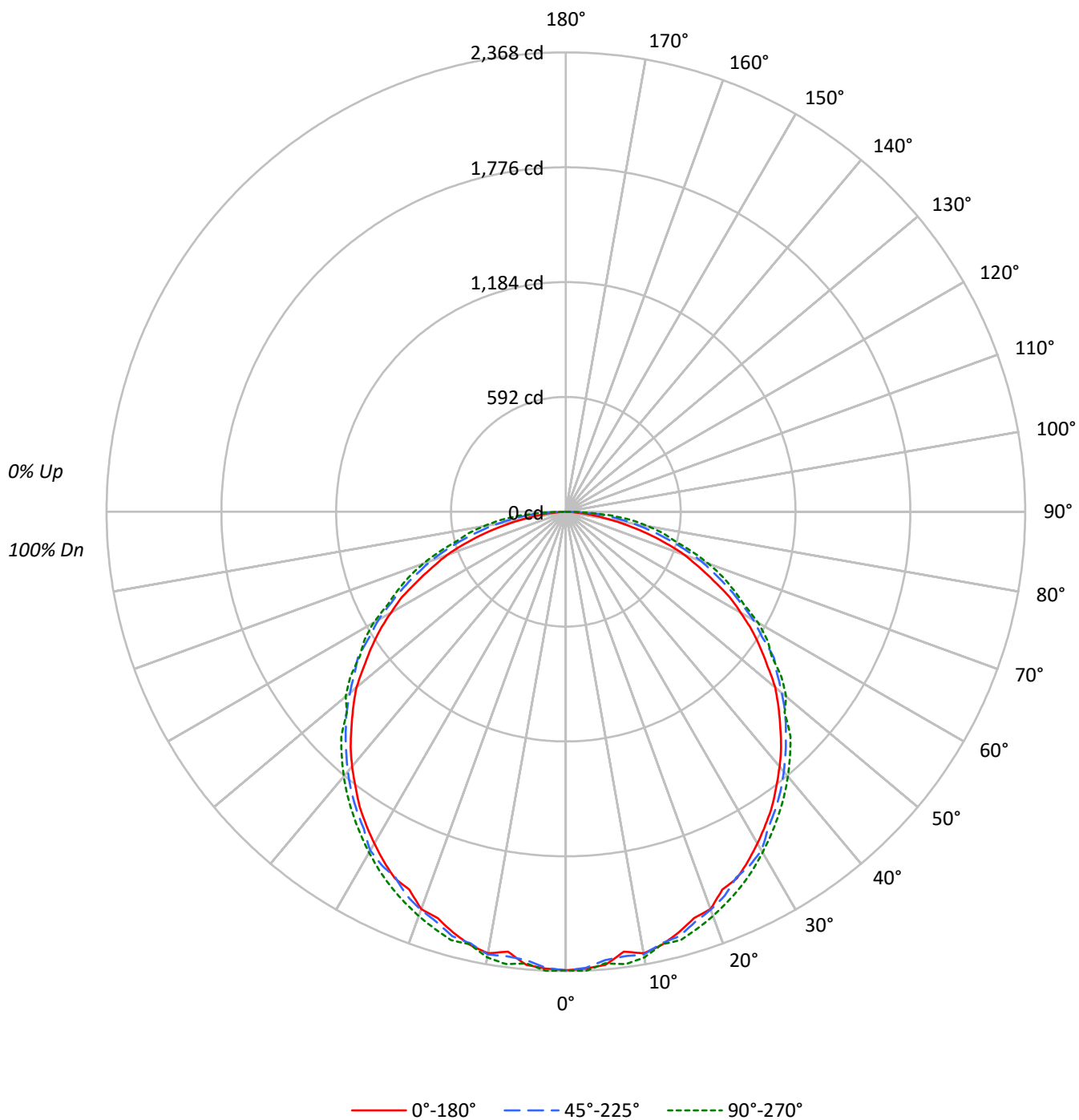
Lumens per Lamp: N/A
Luminaire Lumens: 7056.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 53.3
Input Voltage (V): NR
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: P1588495

CATALOG NUMBER: 24CZSP-70VHE-L835

Luminous Intensity Polar Plot



TEST NUMBER: P1588495

CATALOG NUMBER: 24CZSP-70VHE-L835

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3620	3620	3620
5°	3604	3568	3591
10°	3594	3603	3628
15°	3561	3590	3624
20°	3552	3558	3615
25°	3524	3514	3605
30°	3492	3567	3588
35°	3466	3514	3572
40°	3428	3495	3560
45°	3385	3476	3547
50°	3357	3462	3531
55°	3272	3493	3457
60°	3189	3419	3507
65°	3046	3345	3460
70°	2920	3316	3510
75°	2586	3217	3439
80°	2042	3143	3803
85°	1249	3358	4337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4337 cd/sqm

TEST NUMBER: P1588495

CATALOG NUMBER: 24CZSP-70VHE-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.2	3.2
10°-20°	637.6	9.0
20°-30°	971.5	13.8
30°-40°	1182.5	16.8
40°-50°	1239.9	17.6
50°-60°	1148.6	16.3
60°-70°	905.7	12.8
70°-80°	560.3	7.9
80°-90°	186.6	2.6
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°	1832.3	26.0
0°-40°	3014.9	42.7
0°-60°	5403.3	76.6
0°-90°	7056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2364	2364	2364	2364	2364	
5°	2344	2344	2320	2371	2336	221
15°	2246	2257	2264	2247	2286	634
25°	2085	2097	2079	2137	2133	958
35°	1854	1871	1880	1915	1910	1158
45°	1563	1592	1605	1623	1638	1207
55°	1226	1262	1308	1320	1295	1096
65°	840	873	923	958	955	836
75°	437	472	544	585	581	461
85°	71	121	191	232	247	95
90°	0	0	0	0	0	

TEST NUMBER: P1588495

CATALOG NUMBER: 24CZSP-70VHE-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2363.6	2363.6	2363.6	2363.6	2363.6
2.5°	2356.9	2371.3	2353.1	2368.4	2368.4
5°	2344.4	2343.5	2320.4	2371.3	2335.8
7.5°	2286.8	2327.1	2310.8	2373.2	2352.1
10°	2310.8	2300.3	2316.6	2358.8	2332.9
12.5°	2286.8	2304.1	2278.2	2257.0	2283.9
15°	2245.5	2257.0	2263.8	2247.4	2285.8
17.5°	2196.5	2239.7	2216.7	2209.0	2253.2
20°	2179.2	2181.2	2183.1	2222.5	2217.7
22.5°	2108.2	2146.6	2141.8	2173.5	2177.3
25°	2085.1	2096.6	2079.4	2137.0	2133.1
27.5°	2032.3	2057.3	2054.4	2073.6	2084.2
30°	1974.7	1999.6	2016.9	1995.8	2028.5
32.5°	1915.1	1957.4	1938.2	1977.5	1970.8
35°	1853.7	1870.9	1879.6	1915.1	1910.3
37.5°	1782.6	1812.4	1817.2	1870.9	1847.9
40°	1714.4	1744.2	1748.0	1779.7	1780.7
42.5°	1642.4	1656.8	1676.9	1713.4	1710.5
45°	1562.6	1591.5	1604.9	1623.1	1637.6
47.5°	1485.8	1516.5	1533.8	1563.6	1530.0
50°	1409.0	1431.1	1453.1	1484.8	1482.0
52.5°	1312.0	1361.9	1372.5	1389.8	1401.3
55°	1225.5	1262.0	1308.1	1319.6	1294.7
57.5°	1138.1	1166.0	1199.6	1235.1	1232.2
60°	1041.1	1074.7	1116.0	1142.9	1144.8
62.5°	952.8	975.8	1015.2	1054.6	1034.4
65°	840.4	873.0	923.0	957.6	954.7
67.5°	740.5	776.0	826.9	872.1	874.0
70°	652.1	671.3	740.5	775.1	783.7
72.5°	543.6	577.2	638.7	677.1	681.0
75°	437.0	471.6	543.6	584.9	581.1
77.5°	328.5	378.4	448.5	497.5	513.8
80°	231.5	276.6	356.3	404.3	431.2
82.5°	146.0	193.0	270.8	330.4	346.7
85°	71.1	121.0	191.1	232.4	246.8
87.5°	18.2	49.9	88.4	108.5	117.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588495

CATALOG NUMBER: 24CZSP-70VHE-L835

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	16.27	17.94	16.64	18.26	18.57	16.70	18.37	17.07	18.69	19.00
	3H	18.07	19.59	18.45	19.91	20.27	18.78	20.29	19.15	20.62	20.98
	4H	18.72	20.15	19.11	20.50	20.87	19.62	21.05	20.02	21.40	21.77
	6H	19.13	20.46	19.54	20.82	21.21	20.41	21.74	20.82	22.10	22.49
	8H	19.23	20.50	19.65	20.89	21.29	20.75	22.02	21.17	22.41	22.81
	12H	19.28	20.49	19.70	20.88	21.30	21.05	22.27	21.48	22.65	23.08
4H	2H	17.01	18.44	17.41	18.79	19.16	17.34	18.78	17.74	19.12	19.50
	3H	19.05	20.25	19.45	20.65	21.05	19.66	20.87	20.07	21.26	21.66
	4H	19.82	20.91	20.25	21.33	21.76	20.66	21.76	21.10	22.17	22.61
	6H	20.35	21.31	20.81	21.75	22.21	21.62	22.58	22.07	23.02	23.47
	8H	20.50	21.40	20.96	21.84	22.30	22.04	22.94	22.50	23.38	23.85
	12H	20.58	21.39	21.06	21.86	22.33	22.42	23.23	22.90	23.71	24.17
8H	4H	20.27	21.17	20.73	21.61	22.07	21.00	21.90	21.46	22.35	22.81
	6H	20.95	21.70	21.44	22.19	22.66	22.12	22.87	22.61	23.36	23.83
	8H	21.16	21.84	21.67	22.35	22.83	22.67	23.34	23.17	23.85	24.33
	12H	21.31	21.91	21.82	22.40	22.96	23.18	23.78	23.69	24.27	24.83
12H	4H	20.35	21.16	20.83	21.64	22.11	21.04	21.85	21.52	22.32	22.79
	6H	21.08	21.76	21.59	22.26	22.75	22.18	22.86	22.69	23.37	23.85
	8H	21.38	21.98	21.88	22.46	23.02	22.81	23.41	23.31	23.90	24.46