

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: P1588754

Luminaire Tested: 24CZSP-A-60VHE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-60VHE-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

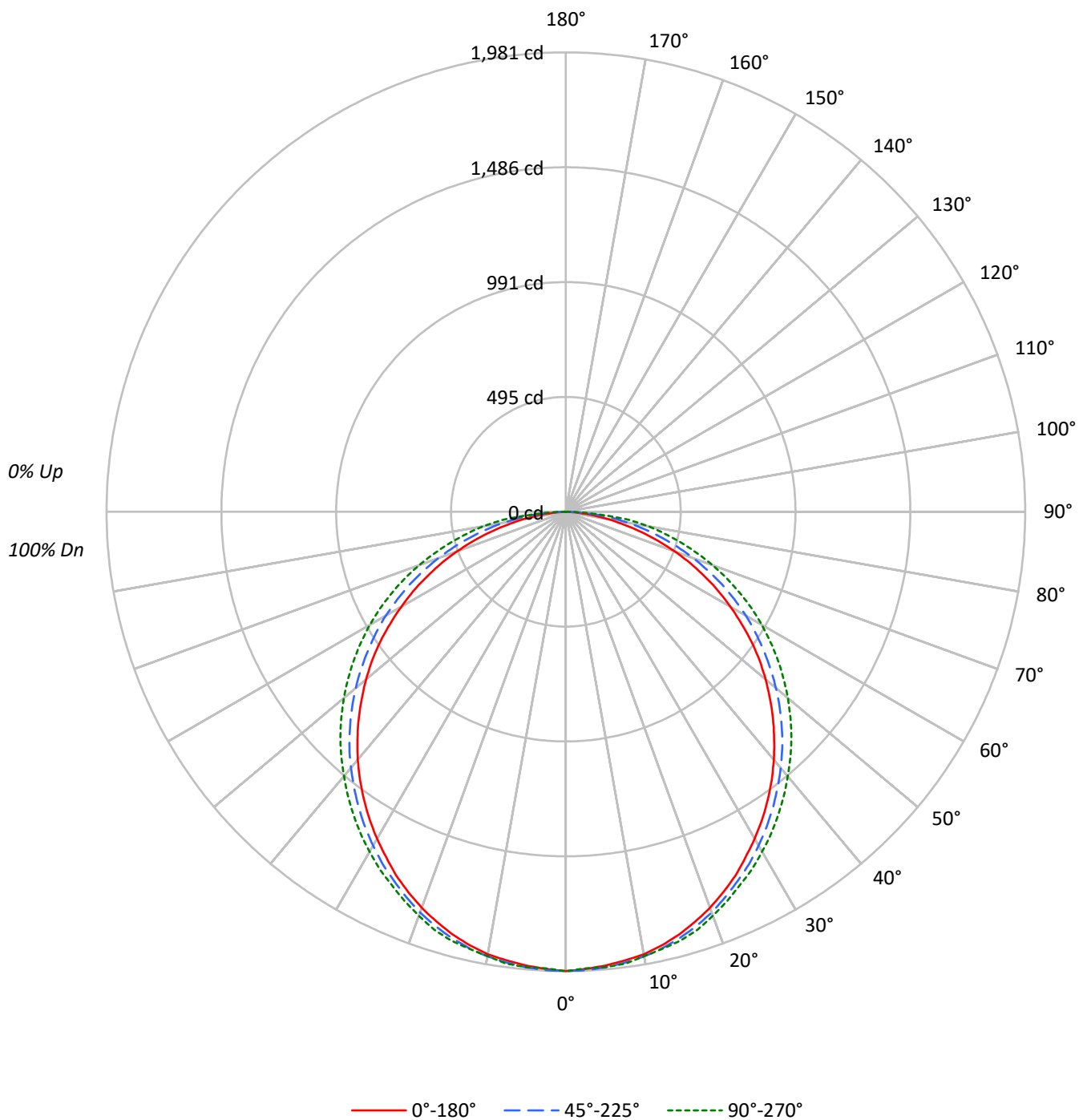
Lumens per Lamp: N/A
Luminaire Lumens: 5783.0 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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: P1588754

CATALOG NUMBER: 24CZSP-A-60VHE-L835-S

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	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	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3034	3034	3034
5°	3020	3032	3030
10°	3014	3027	3025
15°	2992	3016	3034
20°	2962	2997	3022
25°	2925	2966	3002
30°	2879	2940	2994
35°	2838	2911	2985
40°	2791	2882	2976
45°	2738	2853	2979
50°	2679	2818	2978
55°	2609	2778	2982
60°	2511	2748	2989
65°	2396	2695	2999
70°	2233	2620	3012
75°	1990	2516	3041
80°	1645	2396	3190
85°	1070	2163	2787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3290 cd/sqm

TEST NUMBER: P1588754

CATALOG NUMBER: 24CZSP-A-60VHE-L835-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.3	3.2
10°-20°	536.4	9.3
20°-30°	809.0	14.0
30°-40°	974.4	16.8
40°-50°	1017.6	17.6
50°-60°	934.6	16.2
60°-70°	736.1	12.7
70°-80°	451.6	7.8
80°-90°	135.9	2.4
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°	1532.7	26.5
0°-40°	2507.2	43.4
0°-60°	4459.4	77.1
0°-90°	5783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1981	1981	1981	1981	1981	
5°	1964	1967	1972	1978	1971	187
15°	1887	1891	1902	1914	1914	532
25°	1731	1735	1755	1776	1776	797
35°	1518	1525	1557	1589	1596	949
45°	1264	1278	1317	1363	1376	974
55°	977	995	1040	1099	1117	872
65°	661	684	744	806	827	654
75°	336	363	425	492	514	357
85°	61	84	123	156	159	80
90°	0	0	0	0	0	

TEST NUMBER: P1588754

CATALOG NUMBER: 24CZSP-A-60VHE-L835-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1980.8	1980.8	1980.8	1980.8	1980.8
2.5°	1973.2	1977.0	1978.3	1979.6	1970.7
5°	1964.3	1966.9	1971.9	1978.3	1970.7
7.5°	1951.6	1954.2	1960.5	1969.4	1965.6
10°	1937.7	1939.0	1946.6	1952.9	1945.3
12.5°	1914.8	1918.7	1927.5	1932.6	1930.1
15°	1886.9	1890.7	1902.2	1913.6	1913.6
17.5°	1853.9	1859.0	1873.0	1888.2	1889.5
20°	1817.1	1820.9	1838.7	1853.9	1853.9
22.5°	1775.3	1780.3	1798.1	1814.6	1817.1
25°	1730.8	1734.7	1755.0	1776.5	1776.5
27.5°	1678.8	1686.4	1711.8	1733.4	1738.5
30°	1628.1	1634.4	1662.3	1689.0	1692.8
32.5°	1574.8	1582.4	1611.6	1640.8	1647.1
35°	1517.7	1525.3	1557.0	1588.7	1596.3
37.5°	1458.0	1466.9	1499.9	1536.7	1544.3
40°	1395.8	1406.0	1441.5	1480.9	1488.5
42.5°	1329.9	1343.8	1381.9	1422.5	1433.9
45°	1263.9	1277.8	1317.2	1362.9	1375.5
47.5°	1194.1	1210.6	1251.2	1299.4	1313.4
50°	1124.3	1140.8	1182.7	1234.7	1249.9
52.5°	1053.2	1069.7	1112.9	1167.4	1183.9
55°	977.1	994.9	1040.5	1098.9	1116.7
57.5°	898.4	921.3	969.5	1029.1	1046.9
60°	819.7	842.6	897.1	955.5	975.8
62.5°	742.3	763.9	819.7	881.9	903.5
65°	661.1	684.0	743.6	805.8	827.4
67.5°	581.2	604.0	663.7	728.4	751.2
70°	498.7	524.1	585.0	649.7	672.5
72.5°	416.2	442.9	505.0	571.0	592.6
75°	336.3	362.9	425.1	492.4	513.9
77.5°	257.6	286.8	347.7	416.2	436.5
80°	186.5	214.5	271.6	338.8	361.7
82.5°	119.3	143.4	200.5	263.9	280.4
85°	60.9	83.8	123.1	156.1	158.6
87.5°	19.0	26.6	40.6	60.9	62.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588754

CATALOG NUMBER: 24CZSP-A-60VHE-L835-S

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	15.33	17.00	15.70	17.31	17.62	16.16	17.83	16.53	18.14	18.45
	3H	17.09	18.60	17.47	18.92	19.28	18.28	19.79	18.66	20.11	20.47
	4H	17.71	19.13	18.11	19.48	19.85	19.17	20.59	19.57	20.94	21.31
	6H	18.12	19.44	18.53	19.80	20.19	19.95	21.27	20.36	21.63	22.03
	8H	18.23	19.49	18.65	19.88	20.28	20.27	21.53	20.69	21.92	22.32
	12H	18.28	19.49	18.71	19.87	20.30	20.48	21.69	20.91	22.07	22.50
4H	2H	16.11	17.53	16.50	17.88	18.25	16.75	18.17	17.15	18.52	18.90
	3H	18.08	19.28	18.49	19.68	20.08	19.11	20.31	19.52	20.70	21.10
	4H	18.82	19.91	19.25	20.32	20.75	20.16	21.25	20.59	21.66	22.09
	6H	19.35	20.30	19.80	20.74	21.19	21.11	22.06	21.56	22.50	22.96
	8H	19.49	20.39	19.95	20.83	21.29	21.51	22.40	21.97	22.84	23.31
	12H	19.58	20.38	20.06	20.86	21.32	21.79	22.59	22.26	23.06	23.53
8H	4H	19.28	20.17	19.74	20.61	21.08	20.45	21.34	20.91	21.78	22.25
	6H	19.94	20.68	20.43	21.17	21.64	21.56	22.30	22.05	22.79	23.26
	8H	20.15	20.82	20.66	21.32	21.81	22.07	22.74	22.58	23.25	23.73
	12H	20.29	20.88	20.80	21.37	21.93	22.46	23.05	22.96	23.54	24.10
12H	4H	19.37	20.17	19.85	20.65	21.11	20.47	21.28	20.95	21.75	22.22
	6H	20.07	20.74	20.58	21.25	21.73	21.61	22.28	22.11	22.78	23.27
	8H	20.35	20.94	20.86	21.43	21.99	22.19	22.78	22.69	23.27	23.83