

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: P1588614

Luminaire Tested: 24CZSP-A-43HE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588614
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-43HE-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

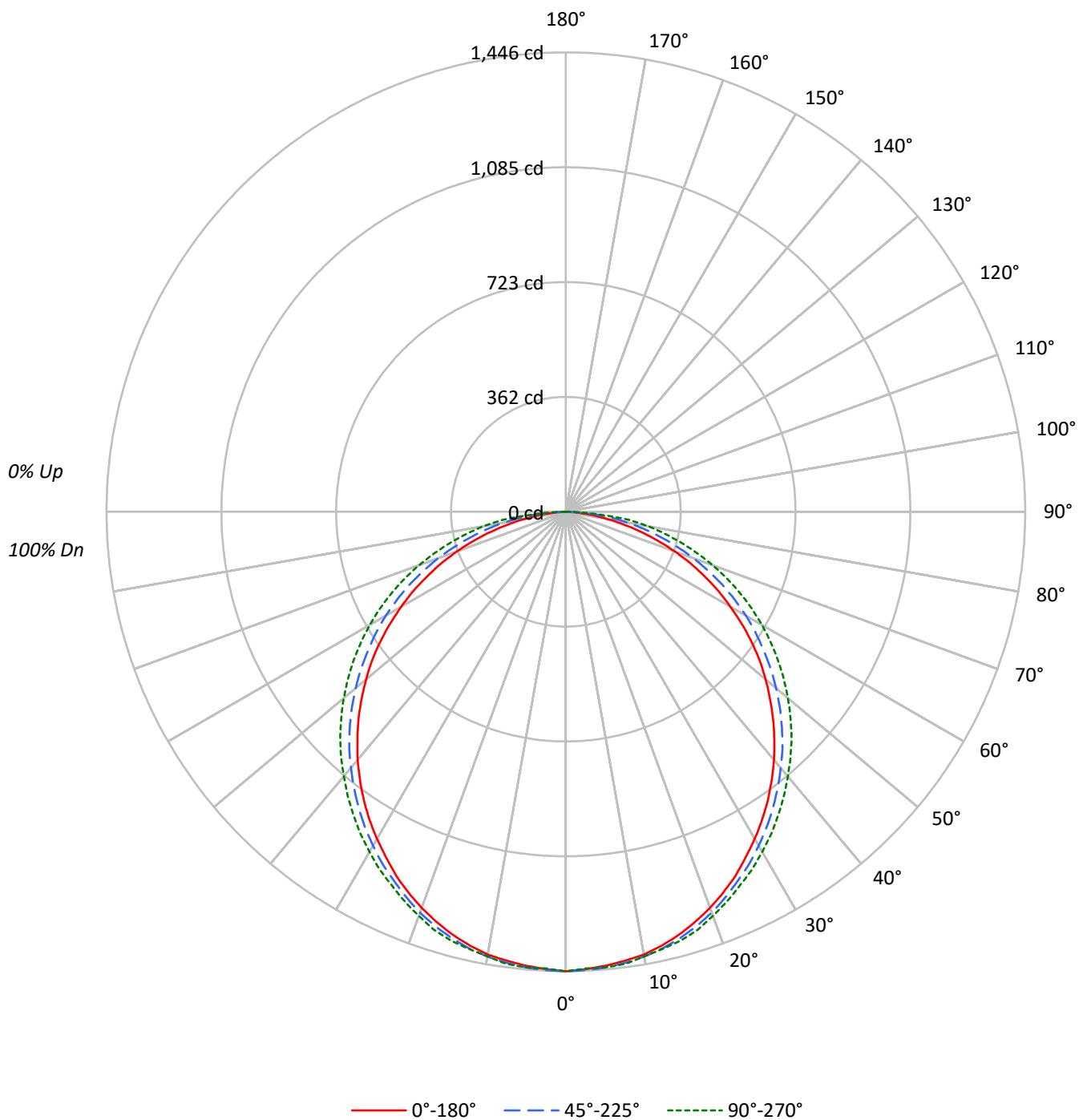
Lumens per Lamp: N/A
Luminaire Lumens: 4223.0 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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: P1588614

CATALOG NUMBER: 24CZSP-A-43HE-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°	2215	2215	2215
5°	2205	2214	2213
10°	2201	2211	2209
15°	2185	2202	2216
20°	2163	2188	2207
25°	2136	2166	2192
30°	2103	2147	2186
35°	2072	2126	2180
40°	2038	2105	2173
45°	1999	2084	2176
50°	1956	2058	2175
55°	1905	2029	2177
60°	1834	2007	2183
65°	1750	1968	2190
70°	1631	1913	2199
75°	1453	1837	2221
80°	1201	1749	2329
85°	782	1580	2035

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2403 cd/sqm

TEST NUMBER: P1588614

CATALOG NUMBER: 24CZSP-A-43HE-L835-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.2
10°-20°	391.7	9.3
20°-30°	590.8	14.0
30°-40°	711.6	16.8
40°-50°	743.1	17.6
50°-60°	682.5	16.2
60°-70°	537.5	12.7
70°-80°	329.8	7.8
80°-90°	99.2	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°	1119.3	26.5
0°-40°	1830.8	43.4
0°-60°	3256.5	77.1
0°-90°	4223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4223.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1434	1436	1440	1445	1439	136
15°	1378	1381	1389	1397	1397	389
25°	1264	1267	1282	1297	1297	582
35°	1108	1114	1137	1160	1166	693
45°	923	933	962	995	1004	712
55°	714	726	760	802	815	637
65°	483	500	543	588	604	478
75°	246	265	310	360	375	260
85°	44	61	90	114	116	58
90°	0	0	0	0	0	

TEST NUMBER: P1588614

CATALOG NUMBER: 24CZSP-A-43HE-L835-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.5	1446.5	1446.5	1446.5	1446.5
2.5°	1440.9	1443.7	1444.6	1445.6	1439.1
5°	1434.4	1436.3	1440.0	1444.6	1439.1
7.5°	1425.2	1427.0	1431.7	1438.2	1435.4
10°	1415.0	1415.9	1421.5	1426.1	1420.5
12.5°	1398.3	1401.1	1407.6	1411.3	1409.4
15°	1377.9	1380.7	1389.0	1397.4	1397.4
17.5°	1353.8	1357.5	1367.7	1378.8	1379.8
20°	1327.0	1329.7	1342.7	1353.8	1353.8
22.5°	1296.4	1300.1	1313.1	1325.1	1327.0
25°	1263.9	1266.7	1281.5	1297.3	1297.3
27.5°	1225.9	1231.5	1250.0	1265.8	1269.5
30°	1188.9	1193.5	1213.9	1233.4	1236.1
32.5°	1150.0	1155.5	1176.8	1198.1	1202.8
35°	1108.3	1113.8	1137.0	1160.2	1165.7
37.5°	1064.7	1071.2	1095.3	1122.2	1127.7
40°	1019.3	1026.7	1052.7	1081.4	1087.0
42.5°	971.1	981.3	1009.1	1038.8	1047.1
45°	922.9	933.1	961.9	995.2	1004.5
47.5°	872.0	884.0	913.7	948.9	959.1
50°	821.0	833.1	863.6	901.6	912.7
52.5°	769.1	781.2	812.7	852.5	864.6
55°	713.5	726.5	759.8	802.5	815.4
57.5°	656.1	672.7	708.0	751.5	764.5
60°	598.6	615.3	655.1	697.8	712.6
62.5°	542.1	557.8	598.6	644.0	659.8
65°	482.8	499.5	543.0	588.4	604.2
67.5°	424.4	441.1	484.6	531.9	548.6
70°	364.2	382.7	427.2	474.4	491.1
72.5°	303.9	323.4	368.8	417.0	432.7
75°	245.6	265.0	310.4	359.5	375.3
77.5°	188.1	209.4	253.9	303.9	318.8
80°	136.2	156.6	198.3	247.4	264.1
82.5°	87.1	104.7	146.4	192.7	204.8
85°	44.5	61.2	89.9	114.0	115.8
87.5°	13.9	19.5	29.7	44.5	45.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588614

CATALOG NUMBER: 24CZSP-A-43HE-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	14.24	15.90	14.61	16.22	16.53	15.07	16.73	15.44	17.05	17.36
	3H	16.00	17.50	16.37	17.83	18.19	17.19	18.70	17.56	19.02	19.38
	4H	16.62	18.04	17.01	18.39	18.76	18.08	19.50	18.47	19.85	20.22
	6H	17.03	18.35	17.44	18.71	19.10	18.86	20.18	19.27	20.54	20.93
	8H	17.13	18.40	17.56	18.79	19.18	19.18	20.44	19.60	20.83	21.23
	12H	17.19	18.40	17.62	18.78	19.21	19.39	20.60	19.82	20.98	21.41
4H	2H	15.01	16.44	15.41	16.78	17.16	15.66	17.08	16.06	17.43	17.80
	3H	16.99	18.19	17.40	18.59	18.98	18.01	19.21	18.42	19.61	20.01
	4H	17.73	18.81	18.16	19.23	19.66	19.07	20.15	19.50	20.57	21.00
	6H	18.26	19.21	18.71	19.65	20.10	20.02	20.97	20.47	21.41	21.86
	8H	18.40	19.29	18.86	19.74	20.20	20.42	21.31	20.88	21.75	22.21
	12H	18.49	19.29	18.97	19.76	20.23	20.69	21.50	21.17	21.97	22.44
8H	4H	18.19	19.08	18.65	19.52	19.98	19.36	20.25	19.81	20.69	21.15
	6H	18.85	19.59	19.34	20.08	20.55	20.47	21.21	20.96	21.70	22.17
	8H	19.06	19.73	19.57	20.23	20.72	20.98	21.65	21.49	22.15	22.64
	12H	19.20	19.79	19.70	20.28	20.84	21.37	21.96	21.87	22.45	23.01
12H	4H	18.28	19.08	18.75	19.55	20.02	19.38	20.18	19.86	20.66	21.13
	6H	18.98	19.65	19.49	20.15	20.64	20.51	21.18	21.02	21.69	22.17
	8H	19.26	19.85	19.76	20.34	20.90	21.09	21.68	21.60	22.17	22.73