

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: P1586695

Luminaire Tested: 22CZSP-A-49HE-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-49HE-L835
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

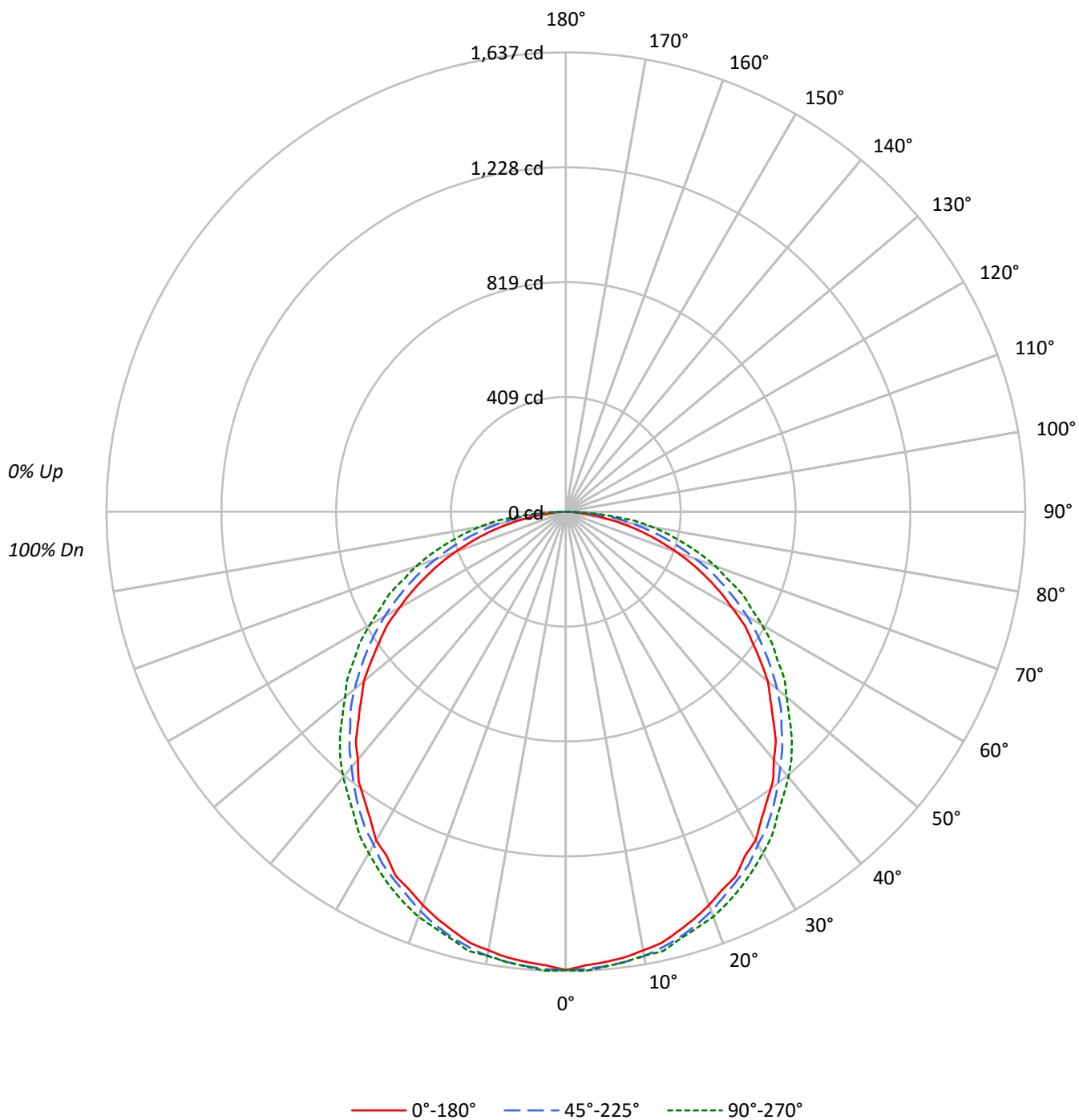
Lumens per Lamp: N/A
Luminaire Lumens: 4809.0 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
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

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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	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	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5113	5113	5113
5°	5063	5109	5114
10°	5046	5112	5107
15°	5016	5088	5107
20°	4970	5048	5117
25°	4950	5001	5102
30°	4888	4951	5079
35°	4785	4920	5033
40°	4714	4858	5045
45°	4625	4814	5042
50°	4579	4787	5002
55°	4432	4722	5027
60°	4284	4670	5057
65°	4098	4599	5144
70°	3852	4512	5198
75°	3470	4432	5303
80°	2838	4349	5650
85°	1850	4333	5285

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5928 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.3	3.2
10°-20°	441.9	9.2
20°-30°	667.9	13.9
30°-40°	805.5	16.8
40°-50°	842.1	17.5
50°-60°	776.6	16.1
60°-70°	615.3	12.8
70°-80°	384.7	8.0
80°-90°	120.7	2.5
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°	1264.1	26.3
0°-40°	2069.6	43.0
0°-60°	3688.3	76.7
0°-90°	4809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1611	1618	1625	1631	1627	153
15°	1547	1555	1570	1580	1575	437
25°	1433	1428	1447	1468	1477	657
35°	1252	1266	1287	1309	1316	785
45°	1044	1059	1087	1115	1138	808
55°	812	831	865	912	921	728
65°	553	577	621	669	694	548
75°	287	310	366	418	438	302
85°	52	74	121	141	147	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1632.7	1632.7	1632.7	1632.7	1632.7
2.5°	1618.0	1625.3	1631.2	1629.8	1637.1
5°	1610.6	1618.0	1625.3	1631.2	1626.8
7.5°	1601.8	1609.2	1618.0	1626.8	1618.0
10°	1587.1	1591.5	1607.7	1609.2	1606.2
12.5°	1573.9	1578.3	1590.0	1600.3	1603.3
15°	1547.4	1554.7	1569.5	1579.7	1575.3
17.5°	1520.9	1531.2	1544.4	1554.7	1554.7
20°	1491.5	1498.8	1515.0	1522.4	1535.6
22.5°	1457.7	1466.5	1479.7	1500.3	1507.7
25°	1432.7	1428.2	1447.4	1468.0	1476.8
27.5°	1382.6	1388.5	1415.0	1434.1	1441.5
30°	1351.8	1354.7	1369.4	1395.9	1404.7
32.5°	1297.3	1306.2	1332.6	1351.8	1367.9
35°	1251.7	1266.4	1287.0	1309.1	1316.5
37.5°	1212.0	1215.0	1238.5	1267.9	1273.8
40°	1153.2	1170.8	1188.5	1225.3	1234.1
42.5°	1107.6	1116.4	1141.4	1176.7	1190.0
45°	1044.3	1059.0	1087.0	1114.9	1138.5
47.5°	988.4	1003.2	1039.9	1075.2	1079.6
50°	939.9	945.8	982.6	1022.3	1026.7
52.5°	873.7	888.4	923.7	967.9	982.6
55°	811.9	831.1	864.9	912.0	920.8
57.5°	757.5	766.3	806.1	853.1	870.8
60°	684.0	709.0	745.7	791.3	807.5
62.5°	620.7	644.3	684.0	726.6	744.3
65°	553.1	576.6	620.7	669.3	694.3
67.5°	488.3	507.5	560.4	610.4	622.2
70°	420.7	442.7	492.8	544.2	567.8
72.5°	350.1	375.1	431.0	479.5	504.5
75°	286.8	310.4	366.3	417.7	438.3
77.5°	220.6	247.1	301.5	353.0	376.6
80°	157.4	183.9	241.2	292.7	313.3
82.5°	101.5	129.4	183.9	229.5	247.1
85°	51.5	73.5	120.6	141.2	147.1
87.5°	16.2	26.5	41.2	47.1	47.1
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	17.19	18.86	17.56	19.18	19.49	17.98	19.65	18.35	19.96	20.28
	3H	18.98	20.49	19.35	20.81	21.17	20.13	21.64	20.50	21.97	22.33
	4H	19.61	21.04	20.01	21.39	21.76	21.05	22.48	21.45	22.83	23.20
	6H	20.04	21.37	20.45	21.73	22.12	21.88	23.20	22.29	23.57	23.96
	8H	20.15	21.42	20.58	21.81	22.21	22.22	23.49	22.65	23.88	24.28
	12H	20.21	21.42	20.64	21.80	22.23	22.47	23.68	22.89	24.06	24.49
4H	2H	17.97	19.39	18.36	19.74	20.12	18.58	20.01	18.98	20.35	20.73
	3H	19.98	21.18	20.39	21.58	21.98	20.97	22.17	21.37	22.57	22.97
	4H	20.74	21.83	21.17	22.24	22.68	22.05	23.15	22.48	23.56	23.99
	6H	21.29	22.24	21.74	22.68	23.14	23.05	24.01	23.50	24.45	24.90
	8H	21.44	22.34	21.90	22.78	23.24	23.48	24.38	23.94	24.82	25.28
	12H	21.53	22.34	22.01	22.81	23.28	23.79	24.60	24.27	25.07	25.54
8H	4H	21.22	22.12	21.68	22.56	23.02	22.36	23.26	22.82	23.70	24.16
	6H	21.91	22.66	22.40	23.14	23.62	23.52	24.27	24.02	24.76	25.23
	8H	22.14	22.81	22.64	23.31	23.80	24.07	24.74	24.58	25.25	25.73
	12H	22.28	22.88	22.79	23.37	23.93	24.50	25.10	25.00	25.59	26.14
12H	4H	21.31	22.12	21.79	22.60	23.07	22.39	23.20	22.87	23.67	24.14
	6H	22.06	22.73	22.56	23.24	23.72	23.58	24.26	24.09	24.76	25.25
	8H	22.36	22.96	22.86	23.44	24.00	24.20	24.79	24.70	25.28	25.84