

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: P1586454

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586454
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: 22CZSP-49HE-L835-S
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

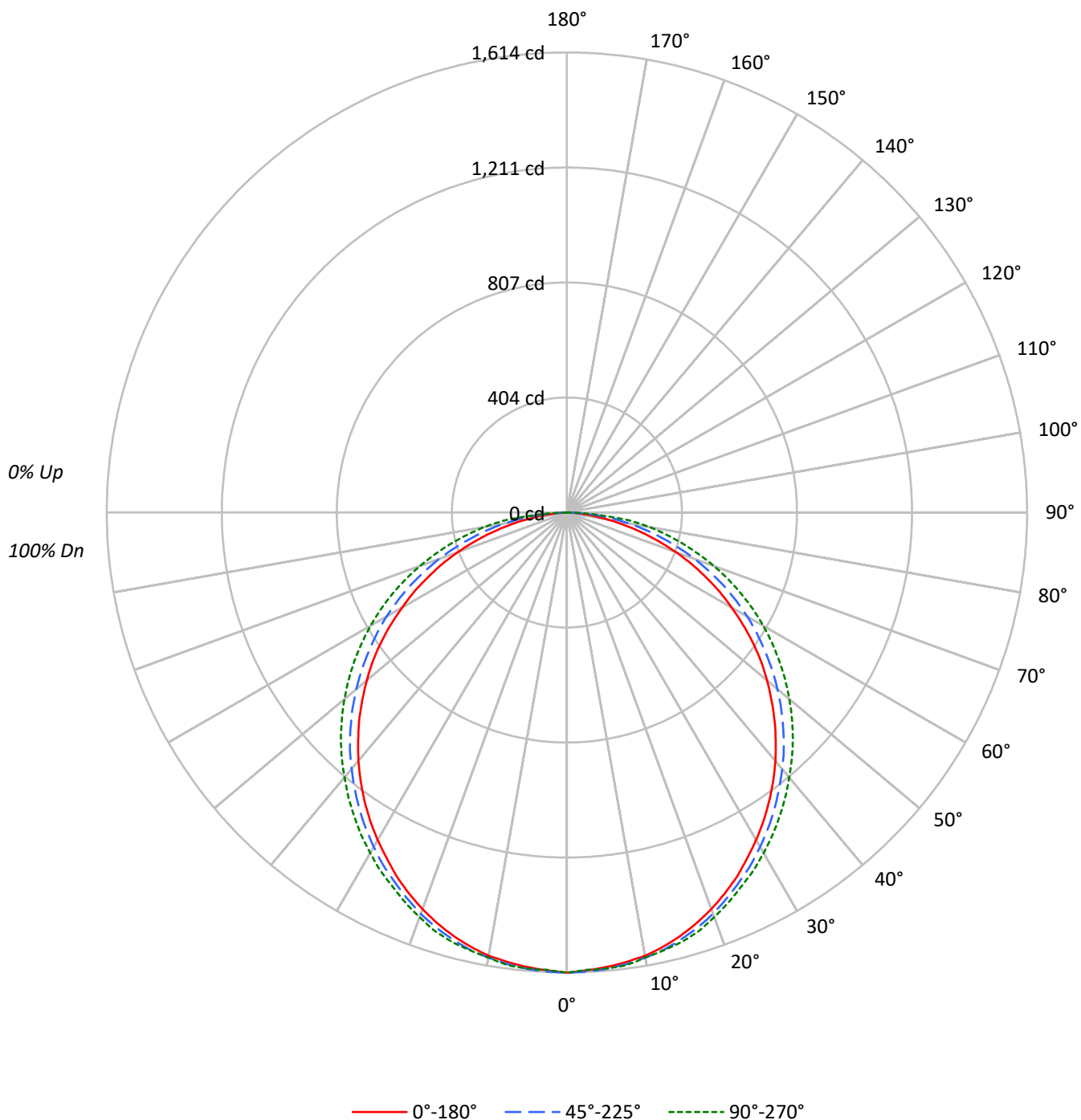
Lumens per Lamp: N/A
Luminaire Lumens: 4713.0 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	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°	5055	5055	5055
5°	5032	5052	5048
10°	5021	5044	5041
15°	4985	5025	5056
20°	4935	4993	5035
25°	4874	4941	5002
30°	4797	4899	4988
35°	4728	4851	4973
40°	4650	4802	4959
45°	4561	4754	4964
50°	4464	4695	4963
55°	4347	4629	4969
60°	4184	4579	4981
65°	3992	4490	4996
70°	3721	4364	5018
75°	3316	4191	5067
80°	2741	3991	5314
85°	1782	3604	4645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5484 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.7	3.2
10°-20°	437.2	9.3
20°-30°	659.3	14.0
30°-40°	794.1	16.8
40°-50°	829.4	17.6
50°-60°	761.7	16.2
60°-70°	599.9	12.7
70°-80°	368.0	7.8
80°-90°	110.8	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°	1249.2	26.5
0°-40°	2043.3	43.4
0°-60°	3634.3	77.1
0°-90°	4713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4713.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1601	1603	1607	1612	1606	152
15°	1538	1541	1550	1560	1560	434
25°	1411	1414	1430	1448	1448	649
35°	1237	1243	1269	1295	1301	774
45°	1030	1041	1074	1111	1121	794
55°	796	811	848	896	910	711
65°	539	557	606	657	674	533
75°	274	296	346	401	419	291
85°	50	68	100	127	129	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1614.3	1614.3	1614.3	1614.3	1614.3
2.5°	1608.1	1611.2	1612.3	1613.3	1606.1
5°	1600.9	1603.0	1607.1	1612.3	1606.1
7.5°	1590.5	1592.6	1597.8	1605.0	1601.9
10°	1579.2	1580.2	1586.4	1591.6	1585.4
12.5°	1560.6	1563.7	1570.9	1575.0	1573.0
15°	1537.8	1540.9	1550.2	1559.5	1559.5
17.5°	1510.9	1515.0	1526.4	1538.8	1539.9
20°	1480.9	1484.0	1498.5	1510.9	1510.9
22.5°	1446.8	1450.9	1465.4	1478.9	1480.9
25°	1410.6	1413.7	1430.2	1447.8	1447.8
27.5°	1368.2	1374.4	1395.1	1412.7	1416.8
30°	1326.8	1332.0	1354.8	1376.5	1379.6
32.5°	1283.4	1289.6	1313.4	1337.2	1342.3
35°	1236.9	1243.1	1268.9	1294.8	1301.0
37.5°	1188.3	1195.5	1222.4	1252.4	1258.6
40°	1137.6	1145.9	1174.8	1206.9	1213.1
42.5°	1083.8	1095.2	1126.2	1159.3	1168.6
45°	1030.0	1041.4	1073.5	1110.7	1121.0
47.5°	973.1	986.6	1019.7	1059.0	1070.4
50°	916.3	929.7	963.8	1006.2	1018.7
52.5°	858.4	871.8	907.0	951.4	964.9
55°	796.3	810.8	848.0	895.6	910.1
57.5°	732.2	750.8	790.1	838.7	853.2
60°	668.1	686.7	731.2	778.7	795.3
62.5°	605.0	622.6	668.1	718.7	736.3
65°	538.8	557.4	606.0	656.7	674.3
67.5°	473.6	492.3	540.9	593.6	612.2
70°	406.4	427.1	476.7	529.5	548.1
72.5°	339.2	360.9	411.6	465.4	483.0
75°	274.1	295.8	346.4	401.3	418.8
77.5°	209.9	233.7	283.4	339.2	355.8
80°	152.0	174.8	221.3	276.1	294.7
82.5°	97.2	116.9	163.4	215.1	228.6
85°	49.6	68.3	100.3	127.2	129.3
87.5°	15.5	21.7	33.1	49.6	50.7
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	17.11	18.77	17.47	19.08	19.40	17.94	19.60	18.30	19.91	20.23
	3H	18.86	20.37	19.24	20.70	21.06	20.05	21.56	20.43	21.89	22.25
	4H	19.48	20.90	19.88	21.25	21.63	20.94	22.37	21.34	22.71	23.09
	6H	19.89	21.21	20.30	21.58	21.97	21.72	23.05	22.13	23.41	23.80
	8H	20.00	21.26	20.42	21.65	22.05	22.04	23.31	22.47	23.70	24.09
	12H	20.05	21.26	20.48	21.64	22.07	22.26	23.47	22.68	23.85	24.28
4H	2H	17.88	19.30	18.28	19.65	20.02	18.53	19.95	18.92	20.30	20.67
	3H	19.86	21.05	20.27	21.45	21.85	20.88	22.08	21.29	22.48	22.87
	4H	20.59	21.68	21.02	22.09	22.53	21.93	23.02	22.36	23.43	23.87
	6H	21.12	22.07	21.57	22.51	22.97	22.89	23.84	23.34	24.28	24.73
	8H	21.27	22.16	21.73	22.60	23.07	23.28	24.17	23.74	24.62	25.08
	12H	21.35	22.16	21.83	22.63	23.10	23.56	24.36	24.04	24.84	25.31
8H	4H	21.05	21.94	21.51	22.39	22.85	22.22	23.11	22.68	23.56	24.02
	6H	21.71	22.46	22.21	22.94	23.42	23.33	24.08	23.83	24.56	25.04
	8H	21.92	22.59	22.43	23.10	23.58	23.85	24.51	24.35	25.02	25.50
	12H	22.06	22.66	22.57	23.15	23.70	24.23	24.82	24.74	25.31	25.87
12H	4H	21.14	21.95	21.62	22.42	22.89	22.25	23.05	22.73	23.52	23.99
	6H	21.85	22.52	22.35	23.02	23.50	23.38	24.05	23.89	24.56	25.04
	8H	22.12	22.72	22.63	23.21	23.76	23.96	24.55	24.46	25.04	25.60