

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: P1587738

Luminaire Tested: 22CZSP-SB-49HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-49HE-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

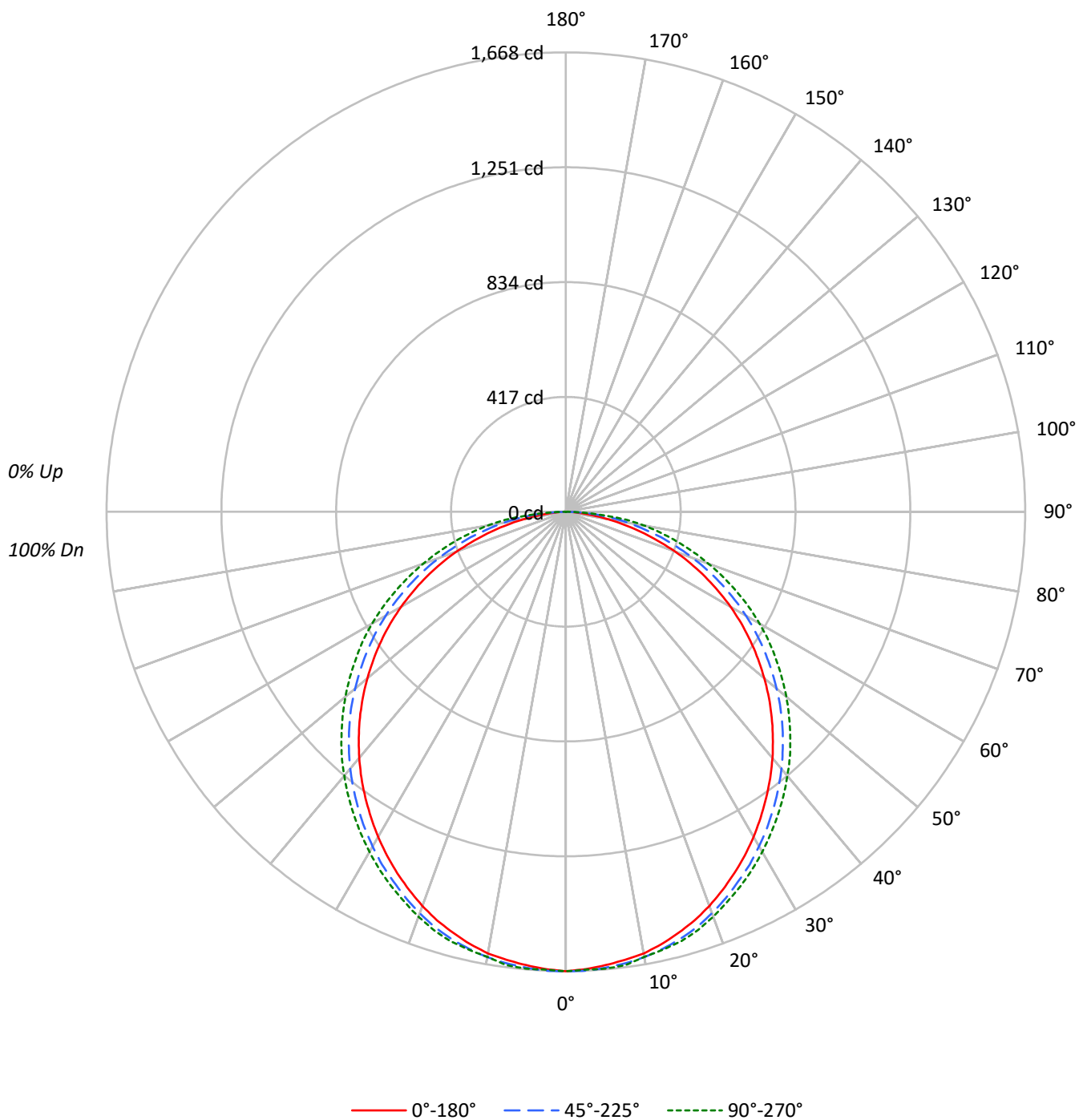
Lumens per Lamp: N/A
Luminaire Lumens: 4853.0 lumens
Efficiency: N/A
Efficacy: 150.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	106	101	97	93	97	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5224	5224	5224
5°	5195	5224	5234
10°	5178	5222	5218
15°	5131	5205	5235
20°	5076	5170	5215
25°	5003	5118	5183
30°	4930	5073	5156
35°	4849	5024	5132
40°	4771	4980	5117
45°	4683	4928	5104
50°	4582	4867	5091
55°	4468	4805	5084
60°	4328	4733	5087
65°	4131	4633	5059
70°	3862	4493	5046
75°	3423	4319	5064
80°	2786	4104	5215
85°	1800	3787	4502

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5285 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.9	3.3
10°-20°	452.1	9.3
20°-30°	681.7	14.0
30°-40°	820.2	16.9
40°-50°	855.5	17.6
50°-60°	784.2	16.2
60°-70°	615.8	12.7
70°-80°	374.8	7.7
80°-90°	110.9	2.3
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°	1291.6	26.6
0°-40°	2111.8	43.5
0°-60°	3751.6	77.3
0°-90°	4853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4853.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1653	1663	1662	1660	1665	157
15°	1583	1598	1606	1608	1615	446
25°	1448	1468	1481	1491	1500	667
35°	1268	1288	1314	1333	1343	794
45°	1058	1080	1113	1139	1153	816
55°	818	839	880	916	931	731
65°	558	578	625	667	683	551
75°	283	309	357	400	419	300
85°	50	71	105	118	125	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1668.3	1668.3	1668.3	1668.3	1668.3
2.5°	1662.0	1670.4	1668.3	1661.0	1664.1
5°	1652.6	1663.1	1662.0	1659.9	1665.2
7.5°	1641.1	1652.6	1653.7	1653.7	1659.9
10°	1628.6	1640.1	1642.2	1639.1	1641.1
12.5°	1607.7	1621.3	1625.5	1625.5	1628.6
15°	1582.7	1598.3	1605.7	1607.7	1615.0
17.5°	1555.5	1572.2	1581.6	1586.9	1593.1
20°	1523.2	1540.9	1551.4	1557.6	1564.9
22.5°	1486.6	1506.5	1518.0	1524.2	1532.6
25°	1448.0	1467.8	1481.4	1490.8	1500.2
27.5°	1407.3	1426.1	1444.9	1456.4	1464.7
30°	1363.4	1383.3	1403.1	1417.7	1426.1
32.5°	1316.5	1337.3	1360.3	1376.0	1385.4
35°	1268.4	1288.3	1314.4	1333.2	1342.6
37.5°	1219.4	1240.3	1267.4	1287.2	1298.7
40°	1167.2	1189.1	1218.3	1240.3	1251.7
42.5°	1112.9	1133.8	1166.1	1191.2	1204.8
45°	1057.6	1079.5	1112.9	1139.0	1152.6
47.5°	1000.1	1021.0	1057.6	1087.8	1099.3
50°	940.6	960.5	999.1	1031.5	1045.0
52.5°	880.1	901.0	939.6	974.0	988.7
55°	818.5	839.4	880.1	915.6	931.2
57.5°	755.8	776.7	818.5	855.0	873.8
60°	691.1	712.0	755.8	793.4	812.2
62.5°	624.3	646.2	691.1	729.7	749.6
65°	557.5	578.4	625.3	667.1	682.8
67.5°	490.7	511.6	557.5	599.2	618.0
70°	421.8	445.8	490.7	534.5	551.2
72.5°	349.7	376.9	421.8	467.7	484.4
75°	282.9	309.0	357.0	399.8	418.6
77.5°	217.1	245.3	290.2	334.1	352.9
80°	154.5	181.7	227.6	269.3	289.2
82.5°	98.1	122.1	168.1	205.7	220.3
85°	50.1	71.0	105.4	118.0	125.3
87.5°	14.6	25.1	37.6	47.0	52.2
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	17.24	18.90	17.61	19.22	19.53	17.98	19.64	18.34	19.95	20.27
	3H	19.01	20.52	19.39	20.84	21.20	20.06	21.56	20.43	21.89	22.25
	4H	19.63	21.05	20.03	21.40	21.77	20.92	22.34	21.32	22.69	23.06
	6H	20.04	21.36	20.45	21.72	22.11	21.67	22.99	22.08	23.35	23.74
	8H	20.14	21.40	20.57	21.79	22.19	21.96	23.22	22.39	23.61	24.01
	12H	20.19	21.40	20.62	21.78	22.21	22.16	23.36	22.59	23.75	24.17
4H	2H	18.01	19.43	18.41	19.78	20.15	18.58	20.00	18.98	20.35	20.72
	3H	20.00	21.20	20.41	21.59	21.99	20.90	22.09	21.30	22.49	22.89
	4H	20.75	21.83	21.18	22.24	22.68	21.91	23.00	22.35	23.41	23.85
	6H	21.27	22.22	21.73	22.66	23.12	22.82	23.77	23.27	24.21	24.66
	8H	21.42	22.31	21.87	22.75	23.21	23.19	24.08	23.65	24.52	24.98
	12H	21.50	22.30	21.98	22.77	23.24	23.44	24.24	23.92	24.72	25.18
8H	4H	21.19	22.08	21.65	22.52	22.99	22.21	23.10	22.67	23.54	24.01
	6H	21.85	22.60	22.35	23.08	23.56	23.27	24.01	23.76	24.50	24.97
	8H	22.06	22.73	22.57	23.23	23.72	23.74	24.41	24.25	24.91	25.40
	12H	22.20	22.79	22.71	23.28	23.84	24.09	24.68	24.60	25.17	25.73
12H	4H	21.27	22.07	21.75	22.55	23.02	22.24	23.04	22.72	23.51	23.98
	6H	21.98	22.65	22.48	23.15	23.63	23.32	23.99	23.83	24.49	24.98
	8H	22.26	22.84	22.76	23.33	23.89	23.86	24.45	24.36	24.94	25.50