

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: P1587828

Luminaire Tested: 22CZSP-SB-60HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587828
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-60HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

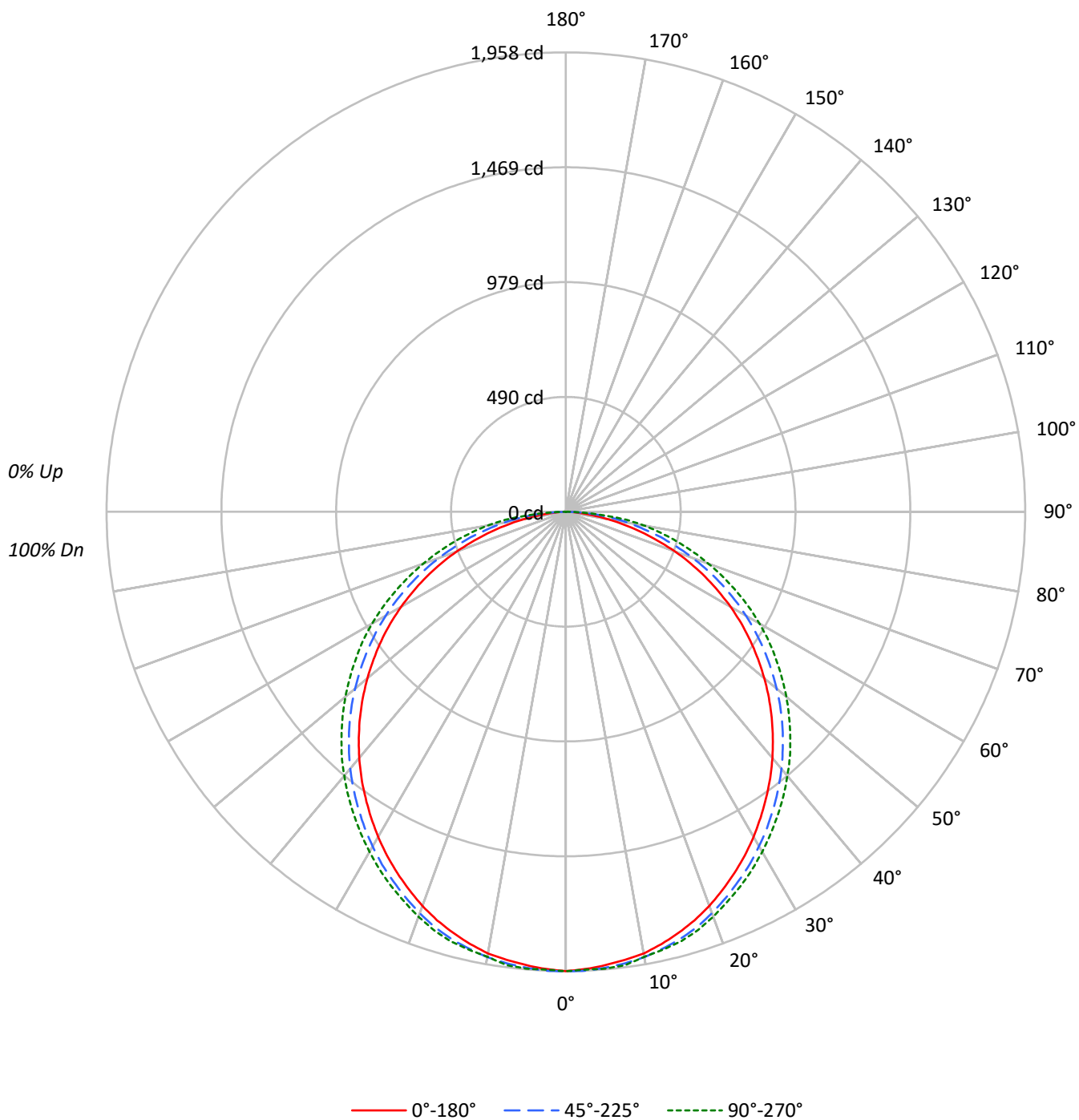
Lumens per Lamp: N/A
Luminaire Lumens: 5696.0 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 41.5
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: P1587828

CATALOG NUMBER: 22CZSP-SB-60HE-L945-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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6131	6131	6131
5°	6097	6132	6143
10°	6078	6129	6125
15°	6022	6109	6145
20°	5957	6067	6121
25°	5872	6008	6084
30°	5786	5955	6052
35°	5691	5897	6024
40°	5600	5845	6006
45°	5497	5784	5991
50°	5378	5712	5975
55°	5245	5639	5967
60°	5080	5556	5970
65°	4848	5438	5938
70°	4532	5273	5924
75°	4018	5070	5945
80°	3269	4817	6120
85°	2113	4448	5281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6201 cd/sqm

TEST NUMBER: P1587828

CATALOG NUMBER: 22CZSP-SB-60HE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.3	3.3
10°-20°	530.6	9.3
20°-30°	800.1	14.0
30°-40°	962.7	16.9
40°-50°	1004.2	17.6
50°-60°	920.4	16.2
60°-70°	722.8	12.7
70°-80°	439.9	7.7
80°-90°	130.1	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°	1516.0	26.6
0°-40°	2478.7	43.5
0°-60°	4403.2	77.3
0°-90°	5696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5696.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1958	1958	1958	1958	1958	
5°	1940	1952	1951	1948	1954	184
15°	1858	1876	1885	1887	1896	524
25°	1700	1723	1739	1750	1761	783
35°	1489	1512	1543	1565	1576	932
45°	1241	1267	1306	1337	1353	957
55°	961	985	1033	1075	1093	858
65°	654	679	734	783	801	647
75°	332	363	419	469	491	352
85°	59	83	124	138	147	77
90°	0	0	0	0	0	

TEST NUMBER: P1587828

CATALOG NUMBER: 22CZSP-SB-60HE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1958.1	1958.1	1958.1	1958.1	1958.1
2.5°	1950.7	1960.5	1958.1	1949.5	1953.2
5°	1939.7	1952.0	1950.7	1948.3	1954.4
7.5°	1926.2	1939.7	1940.9	1940.9	1948.3
10°	1911.5	1925.0	1927.5	1923.8	1926.2
12.5°	1887.0	1902.9	1907.8	1907.8	1911.5
15°	1857.6	1876.0	1884.6	1887.0	1895.6
17.5°	1825.8	1845.4	1856.4	1862.5	1869.9
20°	1787.8	1808.6	1820.8	1828.2	1836.8
22.5°	1744.9	1768.2	1781.6	1789.0	1798.8
25°	1699.5	1722.8	1738.8	1749.8	1760.8
27.5°	1651.8	1673.8	1695.9	1709.3	1719.1
30°	1600.3	1623.6	1646.9	1664.0	1673.8
32.5°	1545.1	1569.7	1596.6	1615.0	1626.0
35°	1488.8	1512.1	1542.7	1564.8	1575.8
37.5°	1431.2	1455.7	1487.6	1510.8	1524.3
40°	1369.9	1395.7	1430.0	1455.7	1469.2
42.5°	1306.2	1330.7	1368.7	1398.1	1414.0
45°	1241.3	1267.0	1306.2	1336.8	1352.8
47.5°	1173.9	1198.4	1241.3	1276.8	1290.3
50°	1104.0	1127.3	1172.6	1210.6	1226.6
52.5°	1033.0	1057.5	1102.8	1143.2	1160.4
55°	960.7	985.2	1033.0	1074.6	1093.0
57.5°	887.1	911.7	960.7	1003.6	1025.6
60°	811.2	835.7	887.1	931.3	953.3
62.5°	732.8	758.5	811.2	856.5	879.8
65°	654.3	678.8	734.0	783.0	801.4
67.5°	575.9	600.4	654.3	703.3	725.4
70°	495.0	523.2	575.9	627.4	647.0
72.5°	410.5	442.3	495.0	549.0	568.6
75°	332.1	362.7	419.1	469.3	491.4
77.5°	254.9	288.0	340.6	392.1	414.2
80°	181.3	213.2	267.1	316.1	339.4
82.5°	115.2	143.4	197.3	241.4	258.5
85°	58.8	83.3	123.8	138.5	147.0
87.5°	17.2	29.4	44.1	55.1	61.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1587828

CATALOG NUMBER: 22CZSP-SB-60HE-L945-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	17.80	19.46	18.16	19.77	20.09	18.54	20.20	18.90	20.51	20.82
	3H	19.57	21.07	19.95	21.40	21.76	20.61	22.12	20.99	22.45	22.81
	4H	20.19	21.61	20.59	21.95	22.33	21.48	22.90	21.88	23.25	23.62
	6H	20.60	21.91	21.01	22.28	22.67	22.22	23.54	22.63	23.91	24.30
	8H	20.70	21.96	21.12	22.35	22.75	22.52	23.78	22.94	24.17	24.57
	12H	20.75	21.96	21.18	22.34	22.77	22.71	23.92	23.14	24.30	24.73
4H	2H	18.57	19.99	18.97	20.34	20.71	19.14	20.56	19.54	20.91	21.28
	3H	20.56	21.75	20.97	22.15	22.55	21.45	22.65	21.86	23.04	23.44
	4H	21.30	22.39	21.73	22.80	23.23	22.47	23.56	22.90	23.97	24.40
	6H	21.83	22.78	22.28	23.22	23.67	23.38	24.33	23.83	24.77	25.22
	8H	21.97	22.86	22.43	23.30	23.77	23.74	24.63	24.20	25.07	25.54
	12H	22.05	22.85	22.53	23.33	23.80	24.00	24.80	24.48	25.27	25.74
8H	4H	21.75	22.64	22.21	23.08	23.54	22.77	23.66	23.23	24.10	24.56
	6H	22.41	23.15	22.90	23.64	24.11	23.83	24.57	24.32	25.05	25.53
	8H	22.62	23.29	23.13	23.79	24.28	24.30	24.96	24.81	25.47	25.95
	12H	22.76	23.35	23.26	23.84	24.39	24.65	25.24	25.16	25.73	26.29
12H	4H	21.83	22.63	22.31	23.10	23.57	22.80	23.60	23.27	24.07	24.54
	6H	22.53	23.20	23.04	23.71	24.19	23.88	24.54	24.38	25.05	25.53
	8H	22.81	23.40	23.32	23.89	24.45	24.41	25.00	24.92	25.49	26.05