

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: P1586789

Luminaire Tested: 22CZSP-A-60HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586789
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-60HE-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

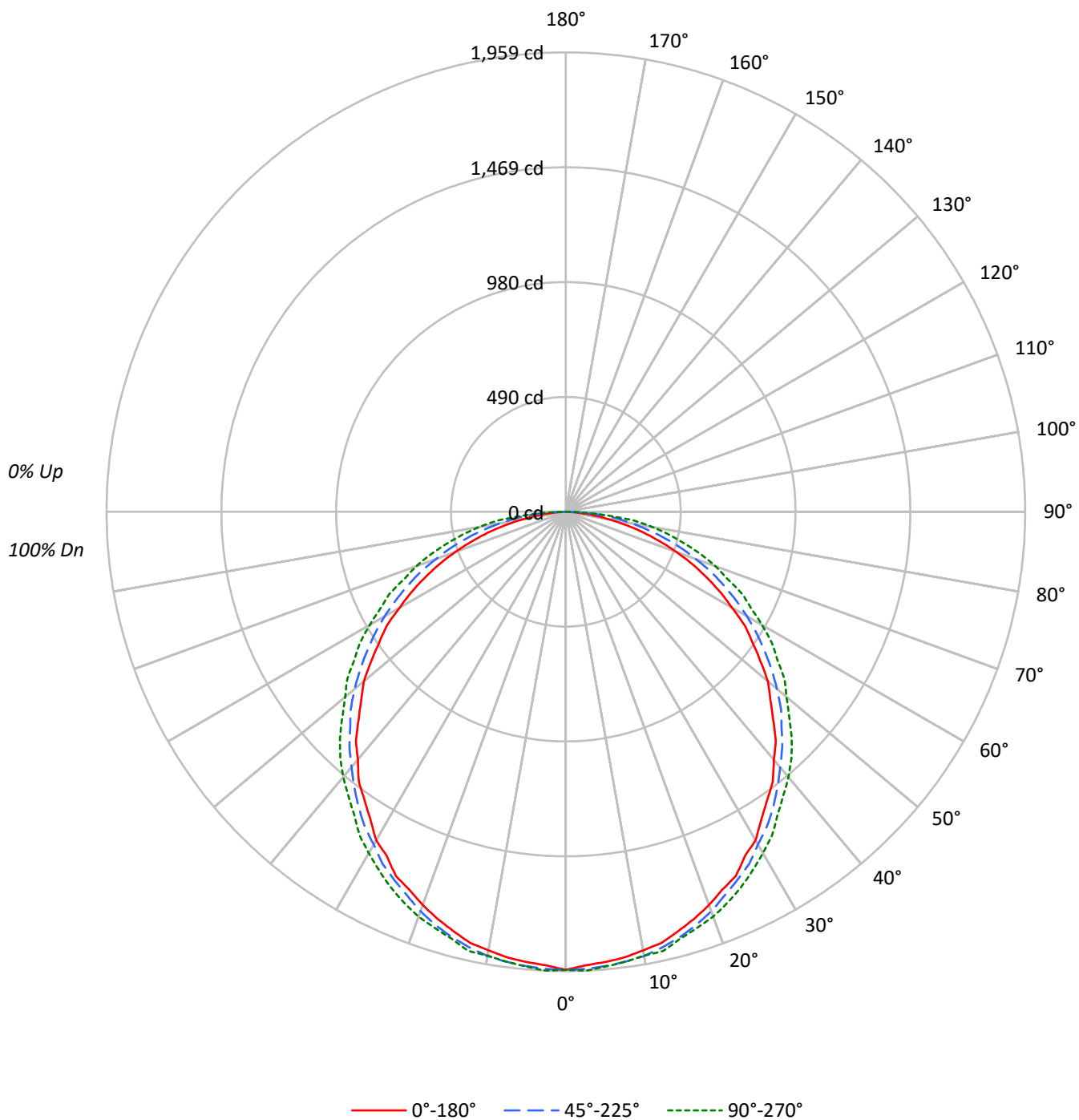
Lumens per Lamp: N/A
Luminaire Lumens: 5754.0 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	6117	6117	6117
5°	6057	6113	6118
10°	6038	6116	6111
15°	6002	6088	6110
20°	5947	6040	6123
25°	5923	5983	6105
30°	5848	5924	6077
35°	5725	5886	6021
40°	5640	5813	6036
45°	5534	5760	6032
50°	5478	5727	5984
55°	5304	5649	6015
60°	5125	5588	6051
65°	4903	5503	6155
70°	4608	5398	6219
75°	4152	5302	6346
80°	3396	5204	6760
85°	2213	5184	6323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 7094 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	3.2
10°-20°	528.8	9.2
20°-30°	799.1	13.9
30°-40°	963.8	16.8
40°-50°	1007.6	17.5
50°-60°	929.1	16.1
60°-70°	736.2	12.8
70°-80°	460.3	8.0
80°-90°	144.4	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°	1512.5	26.3
0°-40°	2476.3	43.0
0°-60°	4413.0	76.7
0°-90°	5754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1954	1954	1954	1954	1954	
5°	1927	1936	1945	1952	1946	183
15°	1852	1860	1878	1890	1885	522
25°	1714	1709	1732	1756	1767	786
35°	1498	1515	1540	1566	1575	939
45°	1250	1267	1301	1334	1362	967
55°	972	994	1035	1091	1102	871
65°	662	690	743	801	831	656
75°	343	371	438	500	524	362
85°	62	88	144	169	176	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1953.5	1953.5	1953.5	1953.5	1953.5
2.5°	1935.9	1944.7	1951.8	1950.0	1958.8
5°	1927.1	1935.9	1944.7	1951.8	1946.5
7.5°	1916.6	1925.4	1935.9	1946.5	1935.9
10°	1899.0	1904.3	1923.6	1925.4	1921.9
12.5°	1883.1	1888.4	1902.5	1914.8	1918.3
15°	1851.5	1860.3	1877.9	1890.2	1884.9
17.5°	1819.8	1832.1	1847.9	1860.3	1860.3
20°	1784.6	1793.4	1812.7	1821.5	1837.4
22.5°	1744.1	1754.7	1770.5	1795.1	1803.9
25°	1714.2	1708.9	1731.8	1756.4	1767.0
27.5°	1654.3	1661.4	1693.1	1715.9	1724.7
30°	1617.4	1620.9	1638.5	1670.2	1680.7
32.5°	1552.3	1562.8	1594.5	1617.4	1636.7
35°	1497.7	1515.3	1539.9	1566.3	1575.1
37.5°	1450.2	1453.7	1481.9	1517.1	1524.1
40°	1379.8	1400.9	1422.0	1466.0	1476.6
42.5°	1325.2	1335.8	1365.7	1408.0	1423.8
45°	1249.6	1267.2	1300.6	1334.0	1362.2
47.5°	1182.7	1200.3	1244.3	1286.5	1291.8
50°	1124.6	1131.6	1175.6	1223.2	1228.4
52.5°	1045.4	1063.0	1105.2	1158.0	1175.6
55°	971.5	994.4	1034.8	1091.2	1101.7
57.5°	906.4	916.9	964.4	1020.8	1041.9
60°	818.4	848.3	892.3	946.8	966.2
62.5°	742.7	770.9	818.4	869.4	890.5
65°	661.7	689.9	742.7	800.8	830.7
67.5°	584.3	607.2	670.5	730.4	744.5
70°	503.3	529.7	589.6	651.2	679.3
72.5°	418.9	448.8	515.7	573.7	603.7
75°	343.2	371.3	438.2	499.8	524.5
77.5°	264.0	295.7	360.8	422.4	450.5
80°	188.3	220.0	288.6	350.2	374.9
82.5°	121.4	154.9	220.0	274.6	295.7
85°	61.6	88.0	144.3	169.0	176.0
87.5°	19.4	31.7	49.3	56.3	56.3
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	17.82	19.48	18.18	19.80	20.11	18.61	20.27	18.97	20.59	20.90
	3H	19.60	21.11	19.98	21.44	21.80	20.75	22.26	21.13	22.59	22.95
	4H	20.24	21.66	20.63	22.01	22.39	21.67	23.10	22.07	23.45	23.82
	6H	20.66	21.99	21.07	22.35	22.74	22.50	23.83	22.91	24.19	24.58
	8H	20.78	22.04	21.20	22.43	22.83	22.85	24.11	23.27	24.50	24.90
	12H	20.83	22.05	21.26	22.43	22.86	23.09	24.30	23.52	24.69	25.11
4H	2H	18.59	20.02	18.99	20.36	20.74	19.20	20.63	19.60	20.98	21.35
	3H	20.60	21.80	21.01	22.20	22.60	21.59	22.79	22.00	23.19	23.59
	4H	21.36	22.45	21.79	22.87	23.30	22.68	23.77	23.11	24.18	24.62
	6H	21.91	22.87	22.36	23.31	23.76	23.67	24.63	24.13	25.07	25.53
	8H	22.06	22.96	22.52	23.40	23.87	24.10	25.00	24.56	25.44	25.90
	12H	22.15	22.96	22.63	23.43	23.90	24.41	25.22	24.89	25.70	26.17
8H	4H	21.84	22.74	22.30	23.18	23.64	22.98	23.88	23.44	24.32	24.79
	6H	22.53	23.28	23.02	23.77	24.24	24.15	24.90	24.64	25.38	25.86
	8H	22.76	23.43	23.27	23.94	24.42	24.69	25.37	25.20	25.87	26.36
	12H	22.91	23.50	23.41	23.99	24.55	25.12	25.72	25.63	26.21	26.77
12H	4H	21.94	22.75	22.42	23.22	23.69	23.01	23.82	23.49	24.30	24.76
	6H	22.68	23.35	23.19	23.86	24.34	24.21	24.88	24.71	25.38	25.87
	8H	22.98	23.58	23.49	24.07	24.63	24.82	25.42	25.33	25.91	26.47