

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: P1586788

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586788
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-A-60HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

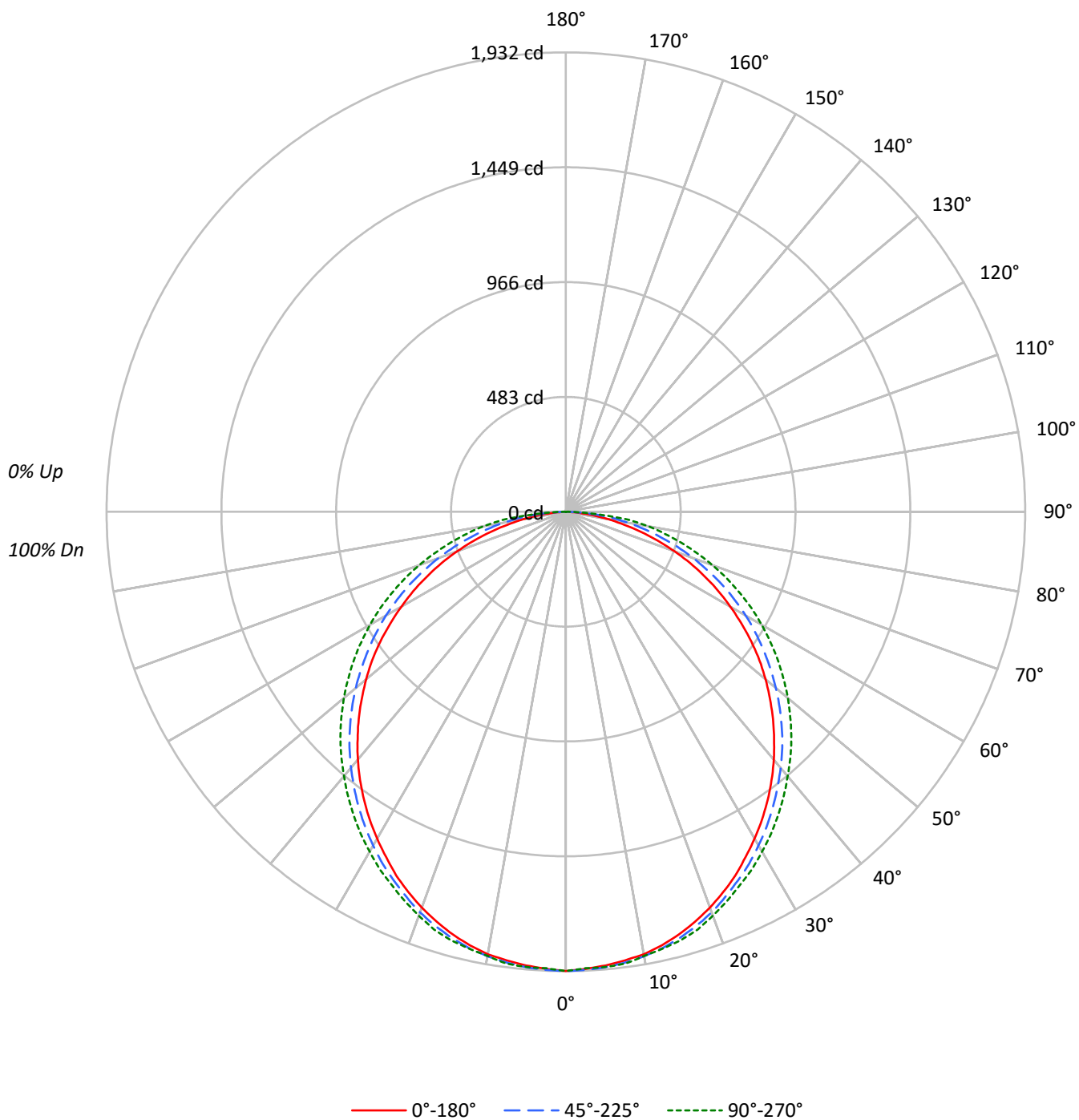
Lumens per Lamp: N/A
Luminaire Lumens: 5639.0 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	6048	6048	6048
5°	6021	6044	6040
10°	6008	6035	6031
15°	5965	6013	6049
20°	5904	5974	6024
25°	5831	5913	5985
30°	5740	5861	5968
35°	5657	5804	5950
40°	5564	5746	5933
45°	5458	5688	5940
50°	5341	5618	5937
55°	5202	5539	5945
60°	5006	5479	5959
65°	4777	5373	5978
70°	4452	5222	6004
75°	3967	5015	6063
80°	3280	4775	6358
85°	2134	4311	5558

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6561 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.7	3.2
10°-20°	523.1	9.3
20°-30°	788.9	14.0
30°-40°	950.2	16.8
40°-50°	992.3	17.6
50°-60°	911.3	16.2
60°-70°	717.8	12.7
70°-80°	440.3	7.8
80°-90°	132.5	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°	1494.6	26.5
0°-40°	2444.7	43.4
0°-60°	4348.4	77.1
0°-90°	5639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1915	1918	1923	1929	1922	182
15°	1840	1844	1855	1866	1866	519
25°	1688	1692	1711	1732	1732	777
35°	1480	1487	1518	1549	1557	926
45°	1232	1246	1284	1329	1341	950
55°	953	970	1015	1072	1089	851
65°	645	667	725	786	807	638
75°	328	354	414	480	501	348
85°	59	82	120	152	155	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.5	1931.5	1931.5	1931.5	1931.5
2.5°	1924.1	1927.8	1929.0	1930.3	1921.6
5°	1915.4	1917.9	1922.8	1929.0	1921.6
7.5°	1903.0	1905.5	1911.7	1920.4	1916.7
10°	1889.4	1890.7	1898.1	1904.3	1896.9
12.5°	1867.2	1870.9	1879.5	1884.5	1882.0
15°	1839.9	1843.7	1854.8	1865.9	1865.9
17.5°	1807.8	1812.7	1826.3	1841.2	1842.4
20°	1771.9	1775.6	1792.9	1807.8	1807.8
22.5°	1731.1	1736.0	1753.3	1769.4	1771.9
25°	1687.7	1691.5	1711.3	1732.3	1732.3
27.5°	1637.0	1644.4	1669.2	1690.2	1695.2
30°	1587.5	1593.7	1620.9	1646.9	1650.6
32.5°	1535.6	1543.0	1571.4	1599.9	1606.1
35°	1479.9	1487.3	1518.2	1549.2	1556.6
37.5°	1421.7	1430.4	1462.6	1498.4	1505.9
40°	1361.1	1371.0	1405.6	1444.0	1451.4
42.5°	1296.7	1310.4	1347.5	1387.1	1398.2
45°	1232.4	1246.0	1284.4	1328.9	1341.3
47.5°	1164.3	1180.4	1220.0	1267.0	1280.7
50°	1096.3	1112.4	1153.2	1203.9	1218.8
52.5°	1027.0	1043.1	1085.2	1138.4	1154.5
55°	952.8	970.1	1014.6	1071.5	1088.9
57.5°	876.0	898.3	945.3	1003.5	1020.8
60°	799.3	821.6	874.8	931.7	951.5
62.5°	723.9	744.9	799.3	860.0	881.0
65°	644.7	666.9	725.1	785.7	806.8
67.5°	566.7	589.0	647.1	710.2	732.5
70°	486.3	511.0	570.4	633.5	655.8
72.5°	405.9	431.8	492.5	556.8	577.8
75°	327.9	353.9	414.5	480.1	501.1
77.5°	251.2	279.6	339.0	405.9	425.6
80°	181.9	209.1	264.8	330.4	352.6
82.5°	116.3	139.8	195.5	257.4	273.5
85°	59.4	81.7	120.0	152.2	154.7
87.5°	18.6	26.0	39.6	59.4	60.6
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	17.73	19.39	18.10	19.71	20.02	18.56	20.22	18.93	20.54	20.85
	3H	19.49	20.99	19.86	21.32	21.68	20.68	22.19	21.05	22.51	22.87
	4H	20.11	21.53	20.50	21.87	22.25	21.57	22.99	21.96	23.34	23.71
	6H	20.52	21.84	20.93	22.20	22.59	22.35	23.67	22.76	24.03	24.42
	8H	20.62	21.89	21.05	22.27	22.67	22.67	23.93	23.09	24.32	24.72
	12H	20.68	21.89	21.10	22.27	22.70	22.88	24.09	23.31	24.47	24.90
4H	2H	18.50	19.93	18.90	20.27	20.65	19.15	20.57	19.55	20.92	21.29
	3H	20.48	21.68	20.89	22.07	22.47	21.50	22.70	21.91	23.10	23.50
	4H	21.22	22.30	21.65	22.72	23.15	22.56	23.64	22.99	24.05	24.49
	6H	21.75	22.70	22.20	23.14	23.59	23.51	24.46	23.96	24.90	25.35
	8H	21.89	22.78	22.35	23.23	23.69	23.91	24.80	24.36	25.24	25.70
	12H	21.98	22.78	22.45	23.25	23.72	24.18	24.99	24.66	25.46	25.93
8H	4H	21.68	22.57	22.13	23.01	23.47	22.85	23.74	23.30	24.18	24.64
	6H	22.34	23.08	22.83	23.57	24.04	23.96	24.70	24.45	25.19	25.66
	8H	22.55	23.22	23.05	23.72	24.21	24.47	25.14	24.98	25.64	26.13
	12H	22.69	23.28	23.19	23.77	24.33	24.85	25.45	25.36	25.94	26.49
12H	4H	21.77	22.57	22.24	23.04	23.51	22.87	23.67	23.35	24.15	24.62
	6H	22.47	23.14	22.98	23.64	24.13	24.00	24.67	24.51	25.18	25.66
	8H	22.75	23.34	23.25	23.83	24.39	24.58	25.17	25.09	25.66	26.22