

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: P1586546

Luminaire Tested: 22CZSP-60HE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586546
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-60HE-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 6700 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

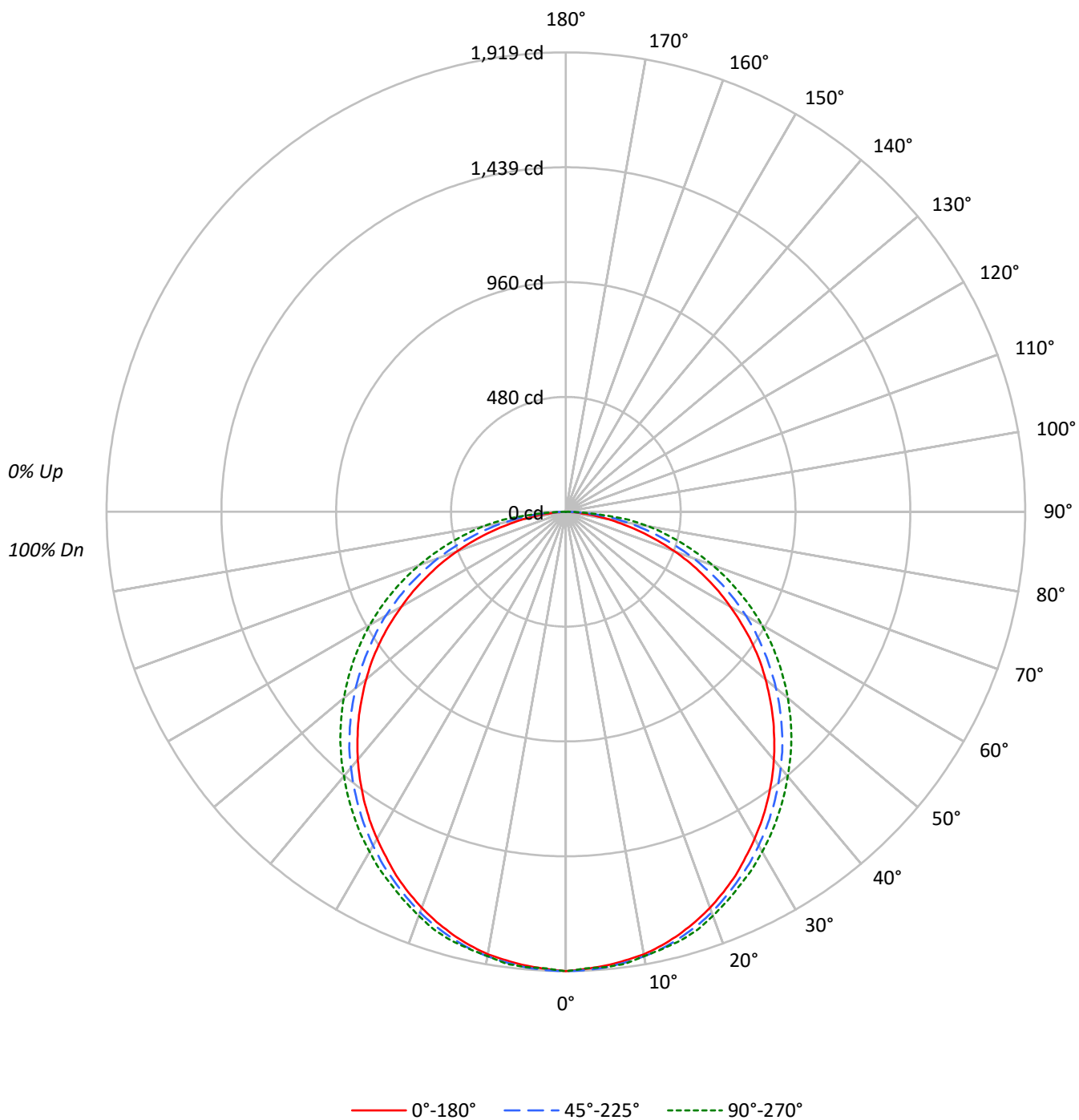
Lumens per Lamp: N/A
Luminaire Lumens: 5603.0 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	6010	6010	6010
5°	5982	6006	6001
10°	5969	5997	5993
15°	5927	5975	6010
20°	5867	5936	5985
25°	5794	5875	5947
30°	5703	5824	5930
35°	5621	5766	5912
40°	5528	5709	5895
45°	5423	5651	5902
50°	5307	5582	5899
55°	5168	5504	5906
60°	4974	5443	5921
65°	4746	5338	5939
70°	4424	5189	5966
75°	3942	4983	6024
80°	3258	4744	6319
85°	2120	4286	5522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6518 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.2
10°-20°	519.7	9.3
20°-30°	783.8	14.0
30°-40°	944.1	16.8
40°-50°	986.0	17.6
50°-60°	905.5	16.2
60°-70°	713.2	12.7
70°-80°	437.6	7.8
80°-90°	131.7	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°	1485.0	26.5
0°-40°	2429.1	43.4
0°-60°	4320.6	77.1
0°-90°	5603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1903	1906	1911	1917	1909	181
15°	1828	1832	1843	1854	1854	516
25°	1677	1681	1700	1721	1721	772
35°	1470	1478	1508	1539	1547	920
45°	1224	1238	1276	1320	1333	944
55°	947	964	1008	1065	1082	845
65°	640	663	720	781	802	634
75°	326	352	412	477	498	345
85°	59	81	119	151	154	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1919.2	1919.2	1919.2	1919.2	1919.2
2.5°	1911.8	1915.5	1916.7	1917.9	1909.3
5°	1903.2	1905.7	1910.6	1916.7	1909.3
7.5°	1890.9	1893.4	1899.5	1908.1	1904.4
10°	1877.4	1878.6	1886.0	1892.1	1884.8
12.5°	1855.2	1858.9	1867.5	1872.5	1870.0
15°	1828.2	1831.9	1843.0	1854.0	1854.0
17.5°	1796.2	1801.1	1814.7	1829.4	1830.7
20°	1760.6	1764.3	1781.5	1796.2	1796.2
22.5°	1720.0	1724.9	1742.1	1758.1	1760.6
25°	1677.0	1680.7	1700.3	1721.2	1721.2
27.5°	1626.6	1633.9	1658.5	1679.4	1684.4
30°	1577.4	1583.5	1610.6	1636.4	1640.1
32.5°	1525.8	1533.1	1561.4	1589.7	1595.8
35°	1470.4	1477.8	1508.5	1539.3	1546.7
37.5°	1412.6	1421.2	1453.2	1488.9	1496.2
40°	1352.4	1362.2	1396.7	1434.8	1442.1
42.5°	1288.5	1302.0	1338.9	1378.2	1389.3
45°	1224.5	1238.1	1276.2	1320.4	1332.7
47.5°	1156.9	1172.9	1212.2	1259.0	1272.5
50°	1089.3	1105.3	1145.9	1196.3	1211.0
52.5°	1020.4	1036.4	1078.2	1131.1	1147.1
55°	946.7	963.9	1008.2	1064.7	1081.9
57.5°	870.5	892.6	939.3	997.1	1014.3
60°	794.2	816.4	869.2	925.8	945.4
62.5°	719.2	740.1	794.2	854.5	875.4
65°	640.5	662.7	720.5	780.7	801.6
67.5°	563.1	585.2	643.0	705.7	727.8
70°	483.2	507.8	566.8	629.5	651.6
72.5°	403.3	429.1	489.3	553.3	574.2
75°	325.8	351.6	411.9	477.0	497.9
77.5°	249.6	277.9	336.9	403.3	422.9
80°	180.7	207.8	263.1	328.3	350.4
82.5°	115.6	138.9	194.3	255.7	271.7
85°	59.0	81.1	119.3	151.2	153.7
87.5°	18.4	25.8	39.3	59.0	60.2
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	17.71	19.37	18.07	19.69	20.00	18.54	20.20	18.90	20.52	20.83
	3H	19.46	20.97	19.84	21.30	21.66	20.66	22.16	21.03	22.49	22.85
	4H	20.08	21.51	20.48	21.85	22.23	21.54	22.97	21.94	23.31	23.69
	6H	20.49	21.81	20.90	22.18	22.57	22.33	23.65	22.74	24.01	24.40
	8H	20.60	21.86	21.03	22.25	22.65	22.65	23.91	23.07	24.30	24.69
	12H	20.65	21.86	21.08	22.25	22.67	22.86	24.07	23.29	24.45	24.88
4H	2H	18.48	19.90	18.88	20.25	20.63	19.13	20.55	19.52	20.90	21.27
	3H	20.46	21.66	20.87	22.05	22.45	21.48	22.68	21.89	23.08	23.48
	4H	21.19	22.28	21.63	22.69	23.13	22.53	23.62	22.96	24.03	24.47
	6H	21.72	22.68	22.18	23.12	23.57	23.49	24.44	23.94	24.88	25.33
	8H	21.87	22.76	22.33	23.20	23.67	23.88	24.78	24.34	25.22	25.68
	12H	21.95	22.76	22.43	23.23	23.70	24.16	24.96	24.64	25.44	25.91
8H	4H	21.65	22.55	22.11	22.99	23.45	22.82	23.72	23.28	24.16	24.62
	6H	22.31	23.06	22.81	23.55	24.02	23.93	24.68	24.43	25.17	25.64
	8H	22.53	23.19	23.03	23.70	24.18	24.45	25.12	24.95	25.62	26.10
	12H	22.66	23.26	23.17	23.75	24.30	24.83	25.42	25.34	25.91	26.47
12H	4H	21.74	22.55	22.22	23.02	23.49	22.85	23.65	23.33	24.13	24.59
	6H	22.45	23.12	22.95	23.62	24.11	23.98	24.65	24.49	25.16	25.64
	8H	22.73	23.32	23.23	23.81	24.37	24.56	25.15	25.07	25.64	26.20