

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: P1584488

Luminaire Tested: 14CZSP-70VHE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-70VHE-L945-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 7200 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

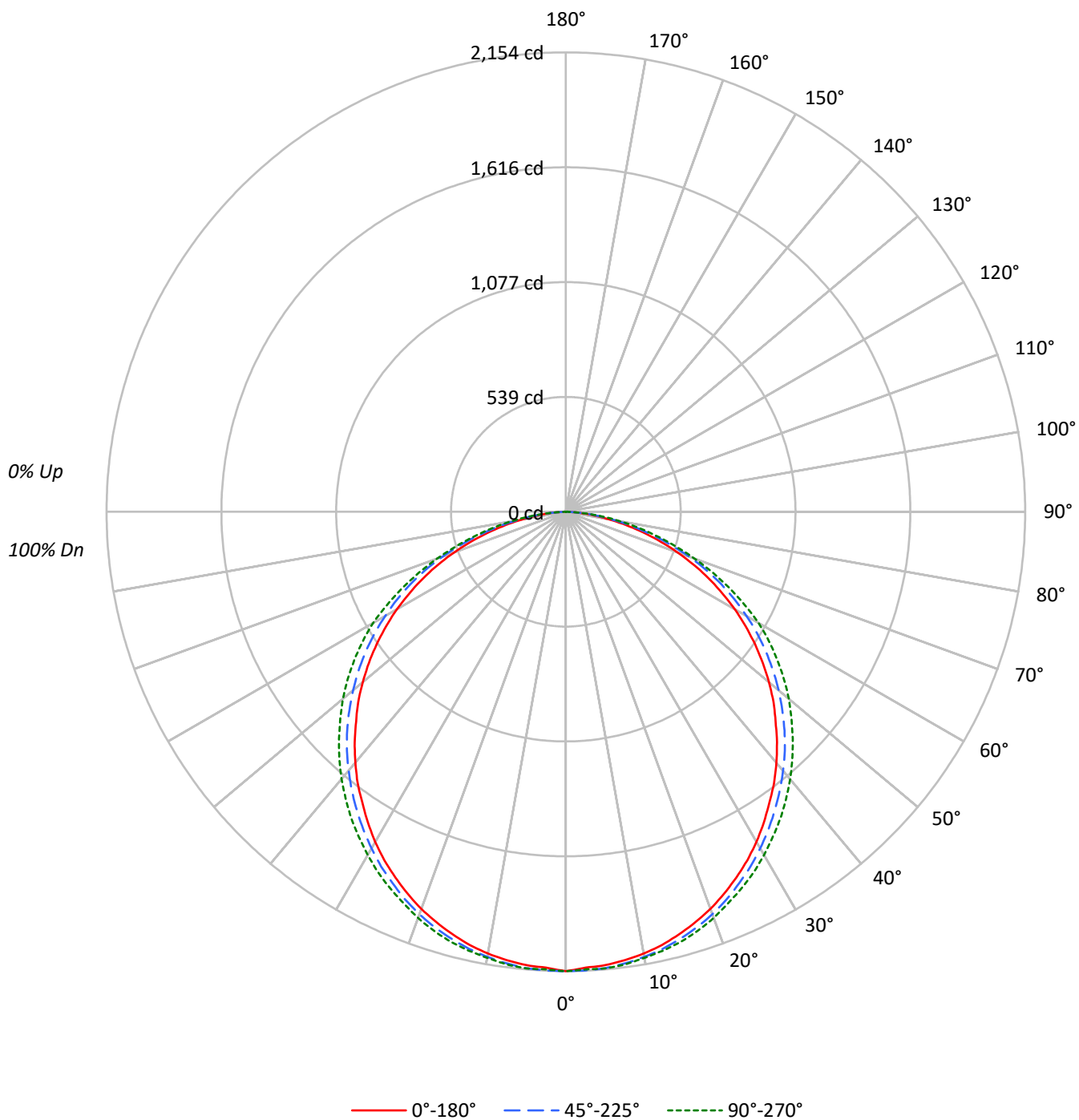
Lumens per Lamp: N/A
Luminaire Lumens: 6228.0 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 51.9
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
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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7259	7259	7259
5°	7218	7265	7271
10°	7199	7252	7267
15°	7157	7230	7282
20°	7107	7202	7268
25°	7035	7147	7246
30°	6955	7091	7230
35°	6844	7029	7218
40°	6754	6972	7198
45°	6627	6911	7168
50°	6516	6828	7156
55°	6360	6732	7109
60°	6166	6598	7036
65°	5891	6418	6746
70°	5491	6060	6331
75°	4906	5467	5777
80°	4021	4607	5051
85°	2695	3367	3758

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7168 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.0	3.3
10°-20°	584.9	9.4
20°-30°	885.7	14.2
30°-40°	1069.6	17.2
40°-50°	1117.8	17.9
50°-60°	1024.3	16.4
60°-70°	790.7	12.7
70°-80°	444.8	7.1
80°-90°	106.4	1.7
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°	1674.6	26.9
0°-40°	2744.2	44.1
0°-60°	4886.2	78.5
0°-90°	6228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6228.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2154	2154	2154	2154	2154	
5°	2134	2150	2148	2150	2150	203
15°	2052	2068	2073	2081	2087	579
25°	1892	1909	1922	1932	1949	872
35°	1664	1685	1709	1732	1755	1043
45°	1391	1418	1450	1480	1504	1075
55°	1083	1111	1146	1182	1210	967
65°	739	771	805	837	846	730
75°	377	412	420	437	444	399
85°	70	80	87	95	97	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2154.3	2154.3	2154.3	2154.3	2154.3
2.5°	2139.6	2156.1	2152.4	2157.9	2147.9
5°	2134.1	2149.7	2147.9	2149.7	2149.7
7.5°	2120.4	2136.9	2135.9	2138.7	2140.5
10°	2103.9	2119.4	2119.4	2122.2	2124.0
12.5°	2080.9	2097.4	2099.3	2103.9	2107.5
15°	2051.6	2068.1	2072.7	2080.9	2087.4
17.5°	2018.6	2036.0	2043.3	2051.6	2059.8
20°	1981.9	1997.5	2008.5	2014.9	2026.8
22.5°	1938.8	1956.3	1968.2	1974.6	1987.4
25°	1892.1	1908.6	1922.3	1932.4	1948.9
27.5°	1842.6	1859.1	1875.6	1887.5	1906.8
30°	1787.6	1805.0	1822.4	1840.8	1858.2
32.5°	1728.0	1748.2	1767.4	1787.6	1806.8
35°	1663.8	1684.9	1708.7	1731.7	1754.6
37.5°	1604.2	1623.5	1648.2	1673.0	1695.9
40°	1535.5	1556.6	1585.0	1612.5	1636.3
42.5°	1465.8	1488.7	1519.9	1546.5	1572.2
45°	1390.7	1418.2	1450.2	1479.6	1504.3
47.5°	1321.0	1344.8	1376.9	1409.0	1434.7
50°	1243.1	1269.6	1302.6	1336.6	1365.0
52.5°	1164.2	1191.7	1225.6	1259.6	1288.9
55°	1082.6	1111.1	1145.9	1181.6	1210.1
57.5°	999.2	1029.5	1065.2	1101.0	1129.4
60°	914.9	945.1	979.0	1018.5	1044.1
62.5°	826.9	860.8	892.9	929.5	945.1
65°	738.9	771.0	804.9	837.0	846.1
67.5°	649.0	682.0	712.3	733.4	745.3
70°	557.4	593.1	615.1	635.3	642.6
72.5°	466.6	502.4	515.2	534.4	541.8
75°	376.8	411.6	419.9	437.3	443.7
77.5°	289.7	321.8	324.5	344.7	350.2
80°	207.2	232.8	237.4	256.7	260.3
82.5°	132.9	151.3	157.7	174.2	179.7
85°	69.7	79.8	87.1	95.3	97.2
87.5°	22.9	28.4	23.8	24.8	22.9
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	18.60	20.25	18.96	20.56	20.88	19.14	20.79	19.50	21.10	21.42
	3H	20.38	21.87	20.75	22.19	22.55	21.00	22.49	21.37	22.82	23.18
	4H	21.00	22.41	21.40	22.76	23.13	21.67	23.07	22.06	23.42	23.79
	6H	21.41	22.72	21.82	23.08	23.47	22.14	23.45	22.55	23.81	24.20
	8H	21.51	22.76	21.94	23.15	23.55	22.29	23.53	22.71	23.92	24.32
	12H	21.56	22.76	21.99	23.14	23.57	22.37	23.57	22.80	23.95	24.38
4H	2H	19.32	20.73	19.72	21.08	21.45	19.75	21.15	20.14	21.50	21.88
	3H	21.32	22.50	21.73	22.90	23.30	21.82	23.00	22.23	23.40	23.79
	4H	22.08	23.14	22.51	23.56	23.99	22.61	23.68	23.04	24.10	24.53
	6H	22.60	23.54	23.06	23.98	24.43	23.22	24.15	23.67	24.59	25.05
	8H	22.74	23.62	23.20	24.06	24.52	23.41	24.28	23.87	24.72	25.19
	12H	22.82	23.61	23.30	24.08	24.55	23.53	24.31	24.01	24.79	25.26
8H	4H	22.41	23.29	22.87	23.73	24.19	22.89	23.76	23.35	24.21	24.67
	6H	23.05	23.78	23.55	24.27	24.74	23.60	24.33	24.10	24.82	25.29
	8H	23.25	23.90	23.76	24.41	24.90	23.86	24.51	24.37	25.02	25.50
	12H	23.38	23.96	23.89	24.45	25.01	24.04	24.62	24.55	25.11	25.67
12H	4H	22.45	23.24	22.93	23.71	24.18	22.91	23.70	23.39	24.17	24.64
	6H	23.11	23.76	23.62	24.27	24.75	23.64	24.29	24.15	24.80	25.28
	8H	23.36	23.93	23.87	24.43	24.98	23.95	24.52	24.45	25.01	25.57