

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: P1584408

Luminaire Tested: 14CZSP-54VHE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584408
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-54VHE-L945-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 5200 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

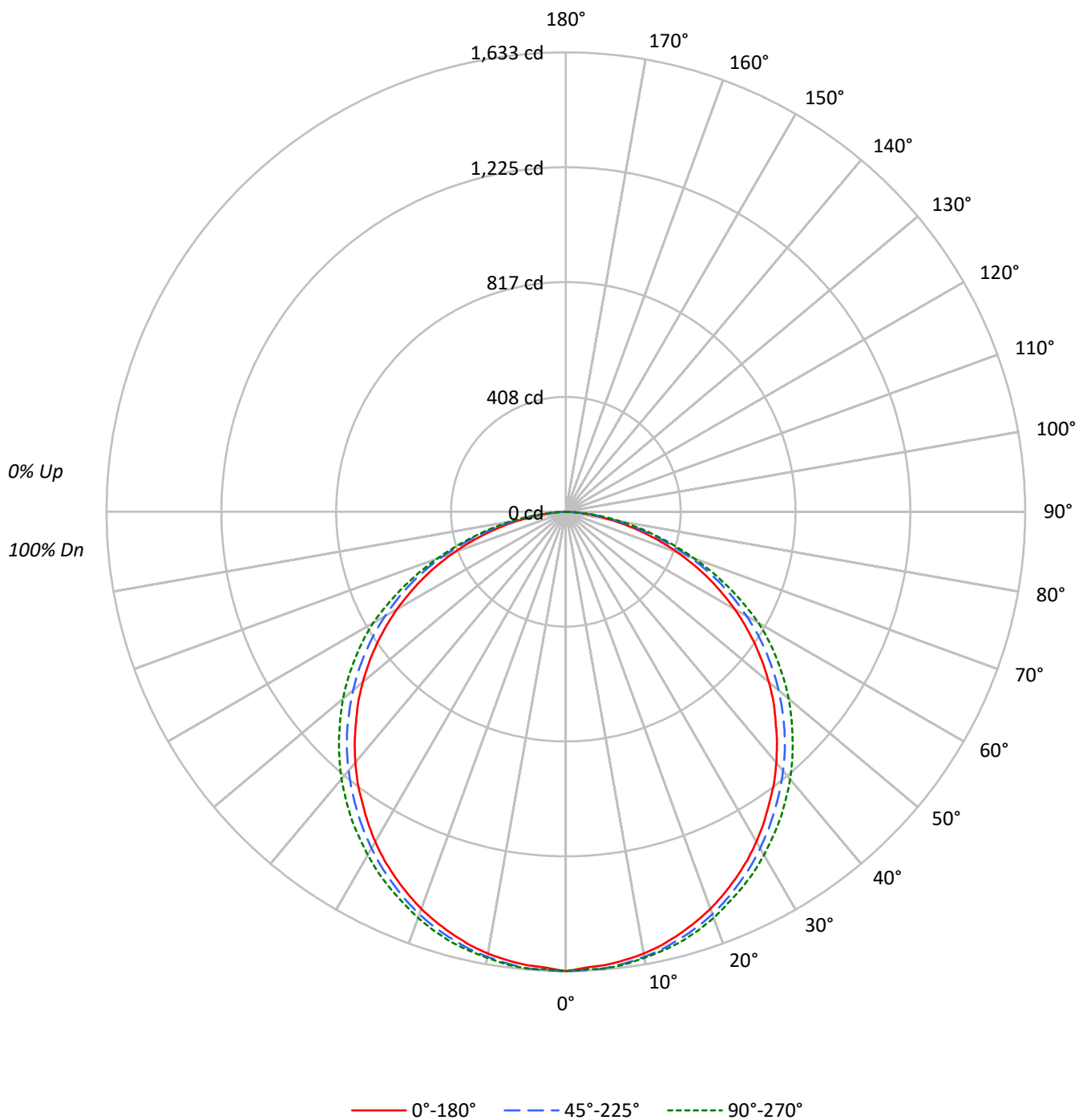
Lumens per Lamp: N/A
Luminaire Lumens: 4721.0 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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: P1584408

CATALOG NUMBER: 14CZSP-54VHE-L945-S

Luminous Intensity Polar Plot



TEST NUMBER: P1584408

CATALOG NUMBER: 14CZSP-54VHE-L945-S

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°	5503	5503	5503
5°	5472	5507	5512
10°	5457	5497	5509
15°	5425	5481	5520
20°	5387	5459	5509
25°	5333	5418	5492
30°	5272	5375	5480
35°	5188	5328	5471
40°	5120	5285	5456
45°	5024	5238	5434
50°	4940	5176	5424
55°	4821	5103	5389
60°	4674	5001	5334
65°	4466	4864	5114
70°	4162	4594	4799
75°	3718	4144	4378
80°	3047	3493	3829
85°	2041	2552	2849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5434 cd/sqm

TEST NUMBER: P1584408

CATALOG NUMBER: 14CZSP-54VHE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	3.3
10°-20°	443.4	9.4
20°-30°	671.4	14.2
30°-40°	810.8	17.2
40°-50°	847.3	17.9
50°-60°	776.4	16.4
60°-70°	599.3	12.7
70°-80°	337.1	7.1
80°-90°	80.7	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°	1269.4	26.9
0°-40°	2080.2	44.1
0°-60°	3703.9	78.5
0°-90°	4721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1618	1630	1628	1630	1630	154
15°	1555	1568	1571	1577	1582	439
25°	1434	1447	1457	1465	1477	661
35°	1261	1277	1295	1313	1330	790
45°	1054	1075	1099	1122	1140	815
55°	821	842	869	896	917	733
65°	560	584	610	634	641	553
75°	286	312	318	332	336	303
85°	53	60	66	72	74	68
90°	0	0	0	0	0	

TEST NUMBER: P1584408

CATALOG NUMBER: 14CZSP-54VHE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1633.0	1633.0	1633.0	1633.0	1633.0
2.5°	1621.9	1634.4	1631.6	1635.8	1628.1
5°	1617.7	1629.5	1628.1	1629.5	1629.5
7.5°	1607.3	1619.8	1619.1	1621.2	1622.6
10°	1594.8	1606.6	1606.6	1608.7	1610.1
12.5°	1577.4	1589.9	1591.3	1594.8	1597.6
15°	1555.2	1567.7	1571.2	1577.4	1582.3
17.5°	1530.2	1543.4	1548.9	1555.2	1561.4
20°	1502.4	1514.2	1522.5	1527.4	1536.4
22.5°	1469.7	1482.9	1491.9	1496.8	1506.5
25°	1434.3	1446.8	1457.2	1464.8	1477.3
27.5°	1396.7	1409.2	1421.8	1430.8	1445.4
30°	1355.0	1368.2	1381.4	1395.3	1408.5
32.5°	1309.9	1325.2	1339.8	1355.0	1369.6
35°	1261.2	1277.2	1295.3	1312.7	1330.0
37.5°	1216.1	1230.7	1249.4	1268.2	1285.6
40°	1163.9	1179.9	1201.5	1222.3	1240.4
42.5°	1111.1	1128.5	1152.1	1172.3	1191.7
45°	1054.2	1075.0	1099.3	1121.6	1140.3
47.5°	1001.3	1019.4	1043.7	1068.1	1087.5
50°	942.3	962.4	987.4	1013.2	1034.7
52.5°	882.5	903.4	929.1	954.8	977.0
55°	820.7	842.2	868.6	895.7	917.3
57.5°	757.4	780.4	807.5	834.6	856.1
60°	693.5	716.4	742.1	772.0	791.5
62.5°	626.8	652.5	676.8	704.6	716.4
65°	560.1	584.4	610.1	634.4	641.4
67.5°	492.0	517.0	539.9	555.9	564.9
70°	422.5	449.6	466.3	481.6	487.1
72.5°	353.7	380.8	390.5	405.1	410.7
75°	285.6	312.0	318.3	331.5	336.3
77.5°	219.6	243.9	246.0	261.3	265.4
80°	157.0	176.5	180.0	194.6	197.3
82.5°	100.8	114.7	119.5	132.0	136.2
85°	52.8	60.5	66.0	72.3	73.7
87.5°	17.4	21.5	18.1	18.8	17.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1584408

CATALOG NUMBER: 14CZSP-54VHE-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	17.64	19.29	18.00	19.60	19.92	18.18	19.83	18.54	20.14	20.46
	3H	19.41	20.91	19.79	21.23	21.59	20.03	21.53	20.41	21.85	22.21
	4H	20.04	21.45	20.44	21.79	22.17	20.70	22.11	21.10	22.46	22.83
	6H	20.45	21.75	20.86	22.12	22.51	21.18	22.48	21.59	22.85	23.24
	8H	20.55	21.80	20.98	22.19	22.58	21.32	22.57	21.75	22.96	23.36
	12H	20.60	21.80	21.03	22.18	22.61	21.41	22.60	21.84	22.98	23.41
4H	2H	18.36	19.77	18.76	20.12	20.49	18.78	20.19	19.18	20.54	20.91
	3H	20.36	21.54	20.76	21.93	22.33	20.85	22.04	21.26	22.43	22.83
	4H	21.11	22.18	21.54	22.59	23.03	21.65	22.72	22.08	23.13	23.57
	6H	21.64	22.57	22.09	23.01	23.47	22.25	23.19	22.71	23.63	24.08
	8H	21.78	22.65	22.24	23.10	23.56	22.45	23.32	22.90	23.76	24.23
	12H	21.86	22.64	22.34	23.12	23.59	22.57	23.35	23.05	23.83	24.30
8H	4H	21.45	22.32	21.91	22.77	23.23	21.93	22.80	22.39	23.24	23.71
	6H	22.09	22.82	22.58	23.30	23.78	22.64	23.37	23.13	23.85	24.33
	8H	22.29	22.94	22.80	23.45	23.93	22.90	23.55	23.41	24.05	24.54
	12H	22.42	22.99	22.93	23.49	24.04	23.08	23.65	23.58	24.14	24.70
12H	4H	21.49	22.27	21.97	22.75	23.22	21.95	22.74	22.43	23.21	23.68
	6H	22.15	22.80	22.65	23.30	23.79	22.68	23.33	23.18	23.83	24.32
	8H	22.40	22.97	22.90	23.46	24.02	22.98	23.56	23.49	24.05	24.61