

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: P1584228

Luminaire Tested: 14CZSP-32HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584228
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-32HE-L945-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

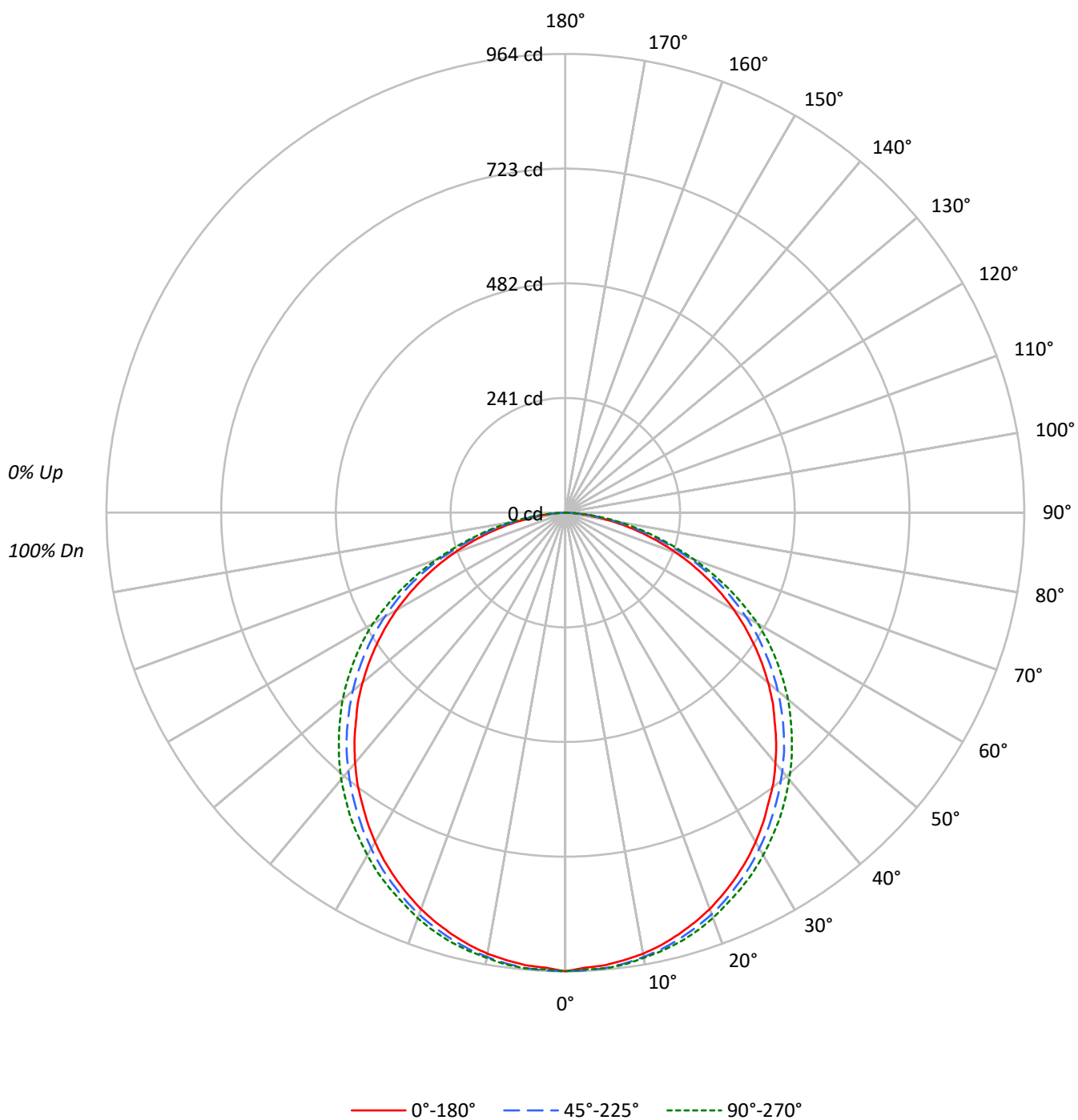
Lumens per Lamp: N/A
Luminaire Lumens: 2786.0 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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: P1584228

CATALOG NUMBER: 14CZSP-32HE-L945-S

Luminous Intensity Polar Plot



TEST NUMBER: P1584228

CATALOG NUMBER: 14CZSP-32HE-L945-S

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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69	65	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3247	3247	3247
5°	3229	3250	3253
10°	3220	3244	3251
15°	3202	3234	3257
20°	3179	3222	3251
25°	3147	3197	3241
30°	3111	3172	3234
35°	3062	3144	3229
40°	3021	3119	3220
45°	2964	3091	3207
50°	2915	3055	3201
55°	2845	3011	3180
60°	2758	2952	3148
65°	2635	2870	3018
70°	2456	2711	2832
75°	2194	2445	2584
80°	1799	2061	2261
85°	1206	1508	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3207 cd/sqm

TEST NUMBER: P1584228

CATALOG NUMBER: 14CZSP-32HE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	3.3
10°-20°	261.7	9.4
20°-30°	396.2	14.2
30°-40°	478.4	17.2
40°-50°	500.0	17.9
50°-60°	458.2	16.4
60°-70°	353.7	12.7
70°-80°	199.0	7.1
80°-90°	47.6	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°	749.1	26.9
0°-40°	1227.6	44.1
0°-60°	2185.8	78.5
0°-90°	2786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2786.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	955	962	961	962	962	91
15°	918	925	927	931	934	259
25°	846	854	860	864	872	390
35°	744	754	764	775	785	466
45°	622	634	649	662	673	481
55°	484	497	513	529	541	433
65°	330	345	360	374	378	327
75°	168	184	188	196	198	179
85°	31	36	39	43	44	40
90°	0	0	0	0	0	

TEST NUMBER: P1584228

CATALOG NUMBER: 14CZSP-32HE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.7	963.7	963.7	963.7	963.7
2.5°	957.1	964.5	962.9	965.3	960.8
5°	954.7	961.6	960.8	961.6	961.6
7.5°	948.5	955.9	955.5	956.7	957.5
10°	941.1	948.1	948.1	949.3	950.1
12.5°	930.9	938.3	939.1	941.1	942.8
15°	917.8	925.1	927.2	930.9	933.7
17.5°	903.0	910.8	914.1	917.8	921.4
20°	886.6	893.6	898.5	901.3	906.7
22.5°	867.3	875.1	880.4	883.3	889.0
25°	846.4	853.8	859.9	864.4	871.8
27.5°	824.3	831.6	839.0	844.3	853.0
30°	799.6	807.4	815.2	823.4	831.2
32.5°	773.0	782.0	790.6	799.6	808.3
35°	744.3	753.7	764.4	774.6	784.9
37.5°	717.6	726.2	737.3	748.4	758.6
40°	686.9	696.3	709.0	721.3	732.0
42.5°	655.7	666.0	679.9	691.8	703.3
45°	622.1	634.4	648.7	661.9	672.9
47.5°	590.9	601.6	615.9	630.3	641.8
50°	556.1	568.0	582.7	597.9	610.6
52.5°	520.8	533.1	548.3	563.4	576.6
55°	484.3	497.0	512.6	528.6	541.3
57.5°	447.0	460.5	476.5	492.5	505.2
60°	409.3	422.8	438.0	455.6	467.1
62.5°	369.9	385.1	399.4	415.8	422.8
65°	330.5	344.9	360.0	374.4	378.5
67.5°	290.3	305.1	318.6	328.1	333.4
70°	249.3	265.3	275.2	284.2	287.5
72.5°	208.7	224.7	230.5	239.1	242.4
75°	168.5	184.1	187.8	195.6	198.5
77.5°	129.6	143.9	145.2	154.2	156.6
80°	92.7	104.2	106.2	114.8	116.5
82.5°	59.5	67.7	70.5	77.9	80.4
85°	31.2	35.7	39.0	42.6	43.5
87.5°	10.3	12.7	10.7	11.1	10.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1584228

CATALOG NUMBER: 14CZSP-32HE-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	15.80	17.45	16.17	17.77	18.08	16.34	17.99	16.71	18.31	18.62
	3H	17.58	19.07	17.96	19.40	19.76	18.20	19.69	18.58	20.02	20.38
	4H	18.21	19.61	18.60	19.96	20.34	18.87	20.28	19.27	20.62	21.00
	6H	18.61	19.92	19.03	20.28	20.67	19.35	20.65	19.76	21.02	21.41
	8H	18.72	19.96	19.14	20.35	20.75	19.49	20.74	19.92	21.13	21.53
	12H	18.77	19.96	19.20	20.34	20.77	19.58	20.77	20.00	21.15	21.58
4H	2H	16.53	17.94	16.93	18.28	18.66	16.95	18.36	17.35	18.71	19.08
	3H	18.52	19.70	18.93	20.10	20.50	19.02	20.20	19.43	20.60	21.00
	4H	19.28	20.35	19.71	20.76	21.20	19.82	20.89	20.25	21.30	21.74
	6H	19.81	20.74	20.26	21.18	21.64	20.42	21.36	20.87	21.80	22.25
	8H	19.95	20.82	20.41	21.26	21.73	20.61	21.49	21.07	21.93	22.39
	12H	20.03	20.81	20.51	21.29	21.76	20.73	21.52	21.21	21.99	22.46
8H	4H	19.62	20.49	20.08	20.93	21.40	20.10	20.97	20.55	21.41	21.88
	6H	20.26	20.98	20.75	21.47	21.95	20.81	21.53	21.30	22.02	22.50
	8H	20.46	21.11	20.97	21.61	22.10	21.06	21.72	21.57	22.22	22.71
	12H	20.59	21.16	21.09	21.65	22.21	21.25	21.82	21.75	22.31	22.87
12H	4H	19.65	20.44	20.13	20.91	21.38	20.12	20.90	20.60	21.38	21.85
	6H	20.31	20.97	20.82	21.47	21.96	20.84	21.50	21.35	22.00	22.49
	8H	20.56	21.14	21.07	21.63	22.19	21.15	21.73	21.66	22.22	22.78