

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: P1589756

Luminaire Tested: 24CZSP-SB-43HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-43HE-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

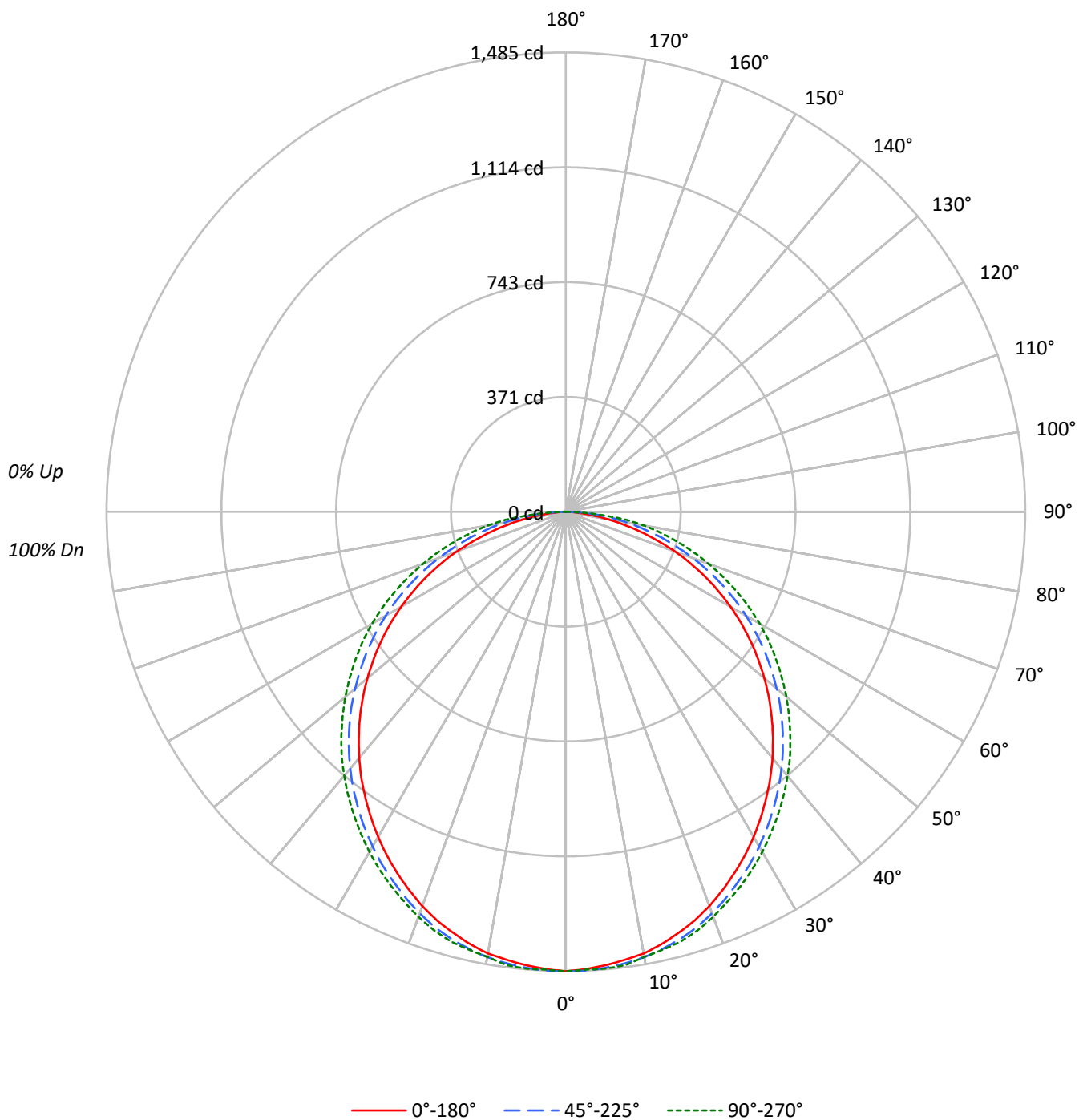
Lumens per Lamp: N/A
Luminaire Lumens: 4321.0 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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: P1589756

CATALOG NUMBER: 24CZSP-SB-43HE-L840-S

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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2275	2275	2275
5°	2262	2275	2279
10°	2255	2274	2273
15°	2235	2267	2280
20°	2211	2251	2271
25°	2179	2229	2257
30°	2147	2209	2246
35°	2112	2188	2235
40°	2078	2169	2228
45°	2040	2146	2223
50°	1996	2120	2217
55°	1946	2092	2214
60°	1885	2062	2215
65°	1799	2018	2203
70°	1682	1957	2198
75°	1491	1881	2206
80°	1214	1787	2271
85°	784	1650	1959

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2301 cd/sqm

TEST NUMBER: P1589756

CATALOG NUMBER: 24CZSP-SB-43HE-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	3.3
10°-20°	402.5	9.3
20°-30°	606.9	14.0
30°-40°	730.3	16.9
40°-50°	761.8	17.6
50°-60°	698.2	16.2
60°-70°	548.3	12.7
70°-80°	333.7	7.7
80°-90°	98.7	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°	1150.0	26.6
0°-40°	1880.3	43.5
0°-60°	3340.3	77.3
0°-90°	4321.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1485	1485	1485	1485	1485	
5°	1472	1481	1480	1478	1483	140
15°	1409	1423	1430	1432	1438	398
25°	1289	1307	1319	1327	1336	594
35°	1129	1147	1170	1187	1195	707
45°	942	961	991	1014	1026	726
55°	729	747	784	815	829	651
65°	496	515	557	594	608	491
75°	252	275	318	356	373	267
85°	45	63	94	105	112	58
90°	0	0	0	0	0	

TEST NUMBER: P1589756

CATALOG NUMBER: 24CZSP-SB-43HE-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1485.4	1485.4	1485.4	1485.4	1485.4
2.5°	1479.8	1487.3	1485.4	1478.9	1481.7
5°	1471.5	1480.8	1479.8	1478.0	1482.6
7.5°	1461.2	1471.5	1472.4	1472.4	1478.0
10°	1450.1	1460.3	1462.2	1459.4	1461.2
12.5°	1431.5	1443.6	1447.3	1447.3	1450.1
15°	1409.2	1423.1	1429.6	1431.5	1438.0
17.5°	1385.0	1399.9	1408.3	1412.9	1418.5
20°	1356.2	1372.0	1381.3	1386.9	1393.4
22.5°	1323.7	1341.3	1351.6	1357.1	1364.6
25°	1289.3	1306.9	1319.0	1327.4	1335.8
27.5°	1253.0	1269.8	1286.5	1296.7	1304.1
30°	1214.0	1231.6	1249.3	1262.3	1269.8
32.5°	1172.2	1190.7	1211.2	1225.1	1233.5
35°	1129.4	1147.1	1170.3	1187.0	1195.4
37.5°	1085.7	1104.3	1128.5	1146.1	1156.4
40°	1039.2	1058.7	1084.8	1104.3	1114.5
42.5°	990.9	1009.5	1038.3	1060.6	1072.7
45°	941.6	961.1	990.9	1014.1	1026.2
47.5°	890.5	909.1	941.6	968.6	978.8
50°	837.5	855.2	889.6	918.4	930.5
52.5°	783.6	802.2	836.6	867.3	880.3
55°	728.8	747.4	783.6	815.2	829.2
57.5°	673.0	691.6	728.8	761.3	778.0
60°	615.4	633.9	673.0	706.5	723.2
62.5°	555.9	575.4	615.4	649.8	667.4
65°	496.4	515.0	556.8	594.0	607.9
67.5°	436.9	455.5	496.4	533.6	550.3
70°	375.5	396.9	436.9	475.9	490.8
72.5°	311.4	335.6	375.5	416.4	431.3
75°	251.9	275.1	317.9	356.0	372.7
77.5°	193.3	218.4	258.4	297.5	314.2
80°	137.6	161.7	202.6	239.8	257.5
82.5°	87.4	108.8	149.7	183.1	196.1
85°	44.6	63.2	93.9	105.0	111.5
87.5°	13.0	22.3	33.5	41.8	46.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589756

CATALOG NUMBER: 24CZSP-SB-43HE-L840-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	14.36	16.02	14.72	16.33	16.64	15.09	16.75	15.46	17.06	17.38
	3H	16.12	17.63	16.50	17.96	18.31	17.17	18.67	17.55	19.00	19.36
	4H	16.74	18.16	17.14	18.51	18.89	18.04	19.45	18.43	19.80	20.18
	6H	17.15	18.47	17.56	18.83	19.22	18.78	20.10	19.19	20.46	20.85
	8H	17.25	18.51	17.68	18.90	19.30	19.07	20.33	19.50	20.72	21.12
	12H	17.30	18.51	17.73	18.89	19.32	19.27	20.48	19.70	20.86	21.29
4H	2H	15.12	16.54	15.52	16.89	17.27	15.70	17.11	16.09	17.46	17.84
	3H	17.12	18.31	17.52	18.71	19.11	18.01	19.20	18.42	19.60	20.00
	4H	17.86	18.94	18.29	19.35	19.79	19.03	20.11	19.46	20.52	20.96
	6H	18.39	19.34	18.84	19.78	20.23	19.93	20.88	20.38	21.32	21.78
	8H	18.53	19.42	18.99	19.86	20.32	20.30	21.19	20.76	21.63	22.09
	12H	18.61	19.41	19.09	19.88	20.35	20.55	21.35	21.03	21.83	22.30
8H	4H	18.30	19.19	18.76	19.63	20.10	19.32	20.21	19.78	20.65	21.12
	6H	18.97	19.71	19.46	20.19	20.67	20.38	21.12	20.87	21.61	22.08
	8H	19.18	19.84	19.68	20.35	20.83	20.85	21.52	21.36	22.02	22.51
	12H	19.31	19.90	19.82	20.39	20.95	21.21	21.79	21.71	22.28	22.84
12H	4H	18.38	19.18	18.86	19.66	20.13	19.35	20.15	19.83	20.63	21.09
	6H	19.09	19.76	19.60	20.26	20.75	20.43	21.10	20.94	21.60	22.09
	8H	19.37	19.96	19.87	20.45	21.01	20.97	21.56	21.48	22.05	22.61