

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: P1589755

Luminaire Tested: 24CZSP-SB-43HE-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-43HE-L835
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

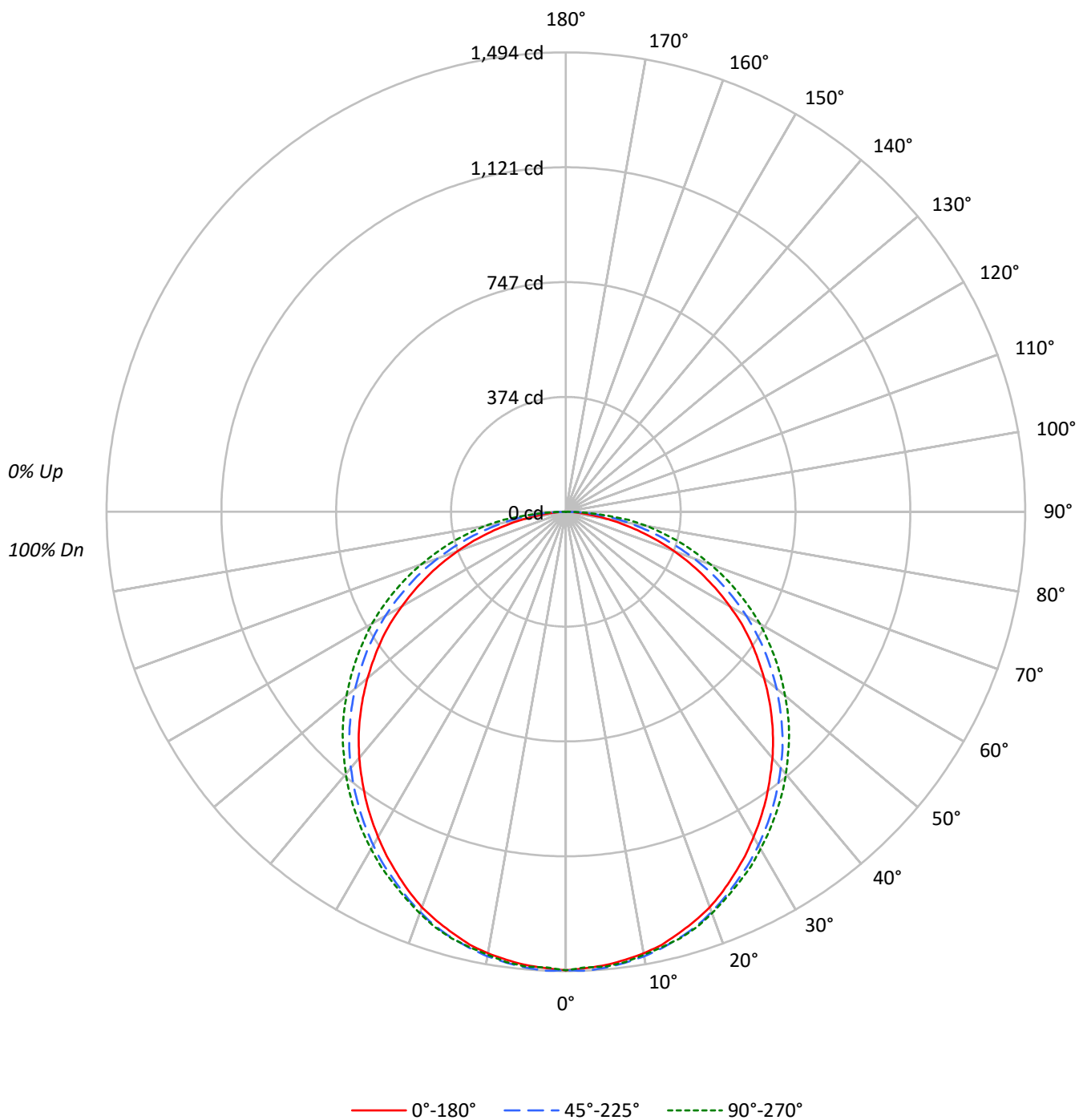
Lumens per Lamp: N/A
Luminaire Lumens: 4352.0 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	68
3	89	79	70	63	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°	2284	2284	2284
5°	2276	2289	2283
10°	2268	2283	2275
15°	2251	2274	2277
20°	2231	2258	2265
25°	2195	2234	2249
30°	2160	2215	2240
35°	2125	2194	2232
40°	2090	2175	2227
45°	2051	2155	2225
50°	2006	2131	2219
55°	1960	2108	2218
60°	1888	2077	2232
65°	1799	2036	2233
70°	1679	1980	2240
75°	1494	1908	2278
80°	1227	1828	2364
85°	810	1715	2137

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2421 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	3.2
10°-20°	403.8	9.3
20°-30°	608.6	14.0
30°-40°	732.9	16.8
40°-50°	765.7	17.6
50°-60°	703.4	16.2
60°-70°	554.0	12.7
70°-80°	339.6	7.8
80°-90°	103.0	2.4
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°	1153.4	26.5
0°-40°	1886.3	43.3
0°-60°	3355.4	77.1
0°-90°	4352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1491	1491	1491	1491	1491	
5°	1480	1483	1488	1487	1485	141
15°	1419	1425	1434	1440	1436	401
25°	1299	1307	1322	1336	1331	599
35°	1137	1151	1174	1195	1194	711
45°	947	967	995	1022	1027	730
55°	734	755	789	824	831	655
65°	496	522	562	600	616	491
75°	252	282	322	361	385	268
85°	46	68	98	109	122	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.3	1491.3	1491.3	1491.3	1491.3
2.5°	1485.7	1489.4	1494.0	1486.7	1483.0
5°	1480.2	1483.0	1488.5	1486.7	1484.8
7.5°	1470.1	1471.9	1479.3	1479.3	1477.4
10°	1458.1	1461.8	1468.2	1467.3	1462.7
12.5°	1442.4	1445.2	1452.6	1452.6	1449.8
15°	1419.4	1424.9	1434.1	1439.7	1436.0
17.5°	1395.5	1401.0	1413.0	1418.5	1416.6
20°	1368.8	1373.4	1385.3	1393.6	1389.9
22.5°	1335.6	1341.1	1354.9	1364.1	1360.5
25°	1298.7	1307.0	1321.8	1335.6	1331.0
27.5°	1261.9	1271.1	1289.5	1303.4	1301.5
30°	1221.4	1233.3	1252.7	1270.2	1266.5
32.5°	1179.9	1193.7	1214.0	1232.4	1231.5
35°	1136.6	1151.4	1173.5	1194.7	1193.7
37.5°	1090.6	1108.1	1131.1	1154.1	1155.1
40°	1045.4	1062.0	1087.8	1112.7	1113.6
42.5°	997.5	1015.0	1042.7	1068.5	1069.4
45°	946.9	967.2	994.8	1022.4	1027.0
47.5°	895.3	916.5	945.0	974.5	980.0
50°	841.9	864.0	894.4	925.7	931.2
52.5°	787.5	810.6	841.9	873.2	881.5
55°	734.1	755.3	789.4	823.5	830.8
57.5°	677.9	697.3	734.1	770.0	779.2
60°	616.2	640.2	677.9	713.9	728.6
62.5°	556.3	582.1	620.8	656.7	673.3
65°	496.5	522.3	561.9	599.6	616.2
67.5°	435.7	462.4	504.8	540.7	559.1
70°	374.9	401.6	442.1	480.8	500.2
72.5°	314.1	342.6	382.3	421.9	441.2
75°	252.4	281.9	322.4	361.1	385.0
77.5°	194.4	222.9	263.4	303.0	323.3
80°	139.1	167.6	207.2	246.9	268.0
82.5°	88.4	115.1	153.8	187.0	206.3
85°	46.1	68.2	97.6	108.7	121.6
87.5°	13.8	26.7	37.8	42.4	52.5
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	14.38	16.05	14.75	16.36	16.67	15.13	16.79	15.49	17.11	17.42
	3H	16.15	17.65	16.52	17.98	18.34	17.22	18.73	17.60	19.06	19.42
	4H	16.77	18.19	17.17	18.54	18.91	18.11	19.53	18.51	19.88	20.25
	6H	17.18	18.50	17.59	18.87	19.26	18.88	20.20	19.29	20.56	20.95
	8H	17.29	18.55	17.71	18.94	19.34	19.19	20.45	19.61	20.84	21.24
	12H	17.34	18.55	17.77	18.93	19.36	19.40	20.61	19.83	20.99	21.42
4H	2H	15.15	16.58	15.55	16.92	17.30	15.73	17.16	16.13	17.50	17.88
	3H	17.15	18.35	17.56	18.74	19.14	18.06	19.26	18.47	19.66	20.06
	4H	17.90	18.99	18.33	19.40	19.83	19.10	20.18	19.53	20.59	21.03
	6H	18.44	19.39	18.89	19.83	20.28	20.03	20.98	20.48	21.42	21.87
	8H	18.58	19.48	19.04	19.92	20.38	20.41	21.30	20.87	21.74	22.21
	12H	18.67	19.47	19.15	19.95	20.42	20.69	21.49	21.16	21.96	22.43
8H	4H	18.35	19.25	18.81	19.69	20.15	19.40	20.29	19.85	20.73	21.19
	6H	19.03	19.78	19.52	20.26	20.74	20.48	21.22	20.97	21.71	22.18
	8H	19.25	19.92	19.76	20.42	20.91	20.97	21.64	21.48	22.14	22.63
	12H	19.40	19.99	19.90	20.48	21.04	21.34	21.93	21.85	22.42	22.98
12H	4H	18.44	19.24	18.92	19.71	20.18	19.42	20.23	19.90	20.70	21.17
	6H	19.16	19.83	19.66	20.33	20.82	20.53	21.20	21.04	21.71	22.19
	8H	19.45	20.04	19.95	20.53	21.09	21.09	21.68	21.59	22.17	22.73