

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: P1589766

Luminaire Tested: 24CZSP-SB-43HE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589766
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-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

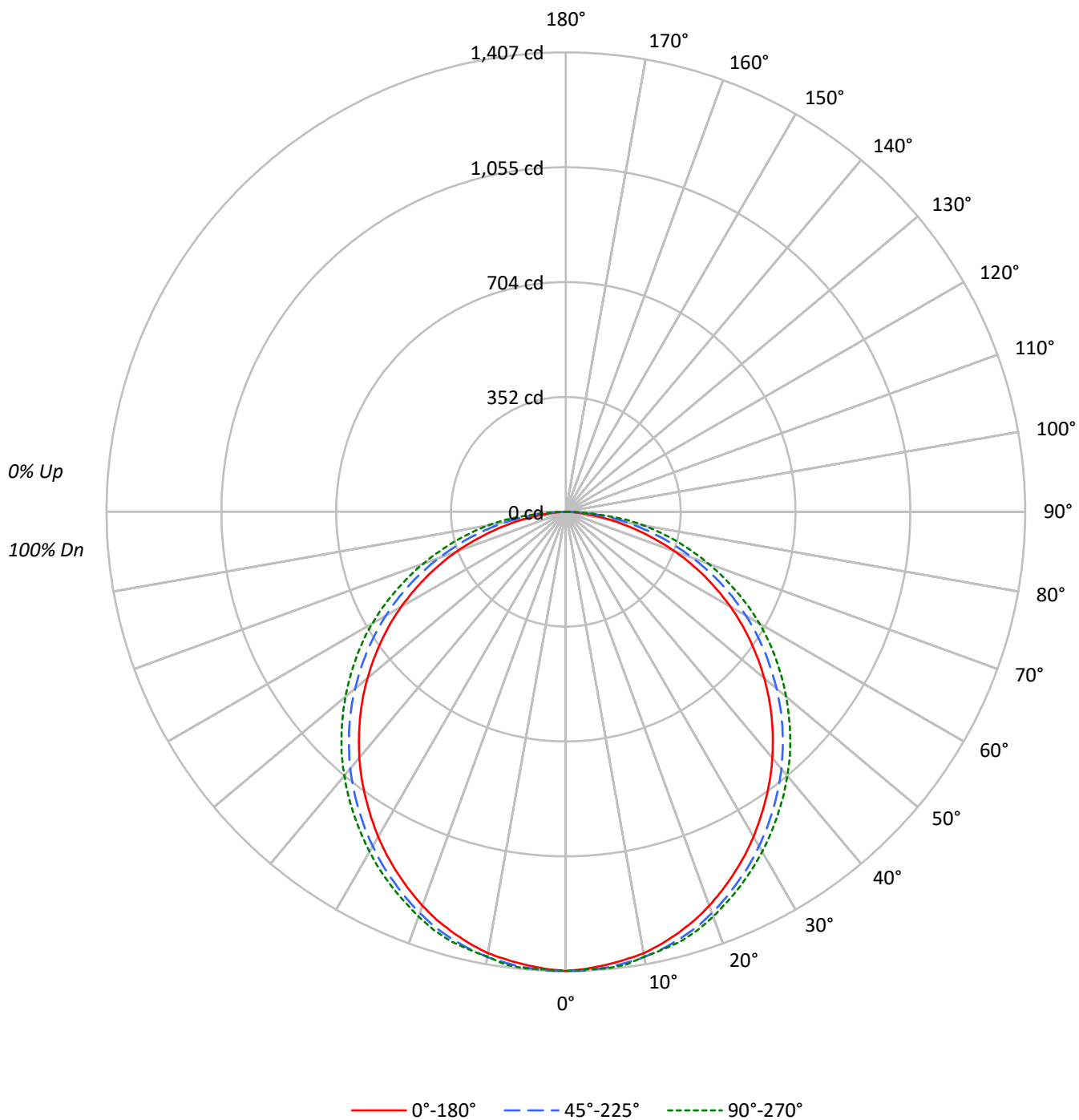
Lumens per Lamp: N/A
Luminaire Lumens: 4092.0 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1589766

CATALOG NUMBER: 24CZSP-SB-43HE-L940-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
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	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2155	2155	2155
5°	2142	2155	2159
10°	2136	2154	2152
15°	2116	2147	2159
20°	2093	2132	2151
25°	2063	2111	2138
30°	2033	2092	2127
35°	2000	2072	2117
40°	1968	2054	2110
45°	1931	2033	2105
50°	1890	2007	2100
55°	1843	1982	2097
60°	1785	1952	2098
65°	1704	1911	2086
70°	1592	1853	2081
75°	1412	1782	2089
80°	1149	1693	2150
85°	743	1562	1856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2179 cd/sqm

TEST NUMBER: P1589766

CATALOG NUMBER: 24CZSP-SB-43HE-L940-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.3
10°-20°	381.2	9.3
20°-30°	574.8	14.0
30°-40°	691.6	16.9
40°-50°	721.4	17.6
50°-60°	661.2	16.2
60°-70°	519.2	12.7
70°-80°	316.0	7.7
80°-90°	93.5	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°	1089.1	26.6
0°-40°	1780.7	43.5
0°-60°	3163.3	77.3
0°-90°	4092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1407	1407	1407	1407	1407	
5°	1394	1402	1401	1400	1404	132
15°	1334	1348	1354	1356	1362	376
25°	1221	1238	1249	1257	1265	563
35°	1070	1086	1108	1124	1132	669
45°	892	910	938	960	972	688
55°	690	708	742	772	785	617
65°	470	488	527	562	576	465
75°	239	261	301	337	353	253
85°	42	60	89	100	106	55
90°	0	0	0	0	0	

TEST NUMBER: P1589766

CATALOG NUMBER: 24CZSP-SB-43HE-L940-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1406.7	1406.7	1406.7	1406.7	1406.7
2.5°	1401.4	1408.4	1406.7	1400.5	1403.2
5°	1393.5	1402.3	1401.4	1399.6	1404.0
7.5°	1383.8	1393.5	1394.4	1394.4	1399.6
10°	1373.2	1382.9	1384.7	1382.0	1383.8
12.5°	1355.6	1367.1	1370.6	1370.6	1373.2
15°	1334.5	1347.7	1353.9	1355.6	1361.8
17.5°	1311.6	1325.7	1333.6	1338.0	1343.3
20°	1284.3	1299.3	1308.1	1313.4	1319.5
22.5°	1253.5	1270.2	1279.9	1285.2	1292.3
25°	1220.9	1237.7	1249.1	1257.0	1265.0
27.5°	1186.6	1202.5	1218.3	1228.0	1235.0
30°	1149.6	1166.4	1183.1	1195.4	1202.5
32.5°	1110.0	1127.6	1147.0	1160.2	1168.1
35°	1069.5	1086.3	1108.3	1124.1	1132.0
37.5°	1028.2	1045.8	1068.7	1085.4	1095.1
40°	984.2	1002.6	1027.3	1045.8	1055.5
42.5°	938.4	956.0	983.3	1004.4	1015.8
45°	891.7	910.2	938.4	960.4	971.8
47.5°	843.3	860.9	891.7	917.3	926.9
50°	793.1	809.9	842.4	869.7	881.2
52.5°	742.1	759.7	792.3	821.3	833.6
55°	690.1	707.7	742.1	772.0	785.2
57.5°	637.3	654.9	690.1	720.9	736.8
60°	582.7	600.4	637.3	669.0	684.9
62.5°	526.4	544.9	582.7	615.3	632.0
65°	470.1	487.7	527.3	562.5	575.7
67.5°	413.7	431.3	470.1	505.3	521.1
70°	355.6	375.9	413.7	450.7	464.8
72.5°	294.9	317.8	355.6	394.4	408.5
75°	238.6	260.6	301.1	337.1	353.0
77.5°	183.1	206.9	244.7	281.7	297.5
80°	130.3	153.2	191.9	227.1	243.8
82.5°	82.7	103.0	141.7	173.4	185.7
85°	42.3	59.9	88.9	99.5	105.6
87.5°	12.3	21.1	31.7	39.6	44.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589766

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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	14.17	15.83	14.53	16.14	16.45	14.90	16.56	15.27	16.88	17.19
	3H	15.93	17.44	16.31	17.77	18.13	16.98	18.49	17.36	18.81	19.17
	4H	16.55	17.97	16.95	18.32	18.70	17.85	19.27	18.24	19.61	19.99
	6H	16.96	18.28	17.37	18.64	19.03	18.59	19.91	19.00	20.27	20.66
	8H	17.07	18.33	17.49	18.71	19.11	18.89	20.15	19.31	20.53	20.93
	12H	17.11	18.32	17.54	18.70	19.13	19.08	20.29	19.51	20.67	21.10
4H	2H	14.93	16.35	15.33	16.70	17.08	15.51	16.93	15.90	17.27	17.65
	3H	16.93	18.12	17.33	18.52	18.92	17.82	19.01	18.23	19.41	19.81
	4H	17.67	18.75	18.10	19.16	19.60	18.84	19.92	19.27	20.33	20.77
	6H	18.20	19.15	18.65	19.59	20.04	19.74	20.69	20.20	21.13	21.59
	8H	18.34	19.23	18.80	19.67	20.13	20.11	21.00	20.57	21.44	21.90
	12H	18.42	19.22	18.90	19.69	20.16	20.36	21.16	20.84	21.64	22.11
8H	4H	18.11	19.00	18.57	19.44	19.91	19.13	20.02	19.59	20.47	20.93
	6H	18.78	19.52	19.27	20.01	20.48	20.19	20.93	20.68	21.42	21.89
	8H	18.99	19.65	19.49	20.16	20.64	20.66	21.33	21.17	21.84	22.32
	12H	19.12	19.71	19.63	20.20	20.76	21.02	21.61	21.52	22.10	22.65
12H	4H	18.19	19.00	18.67	19.47	19.94	19.16	19.96	19.64	20.44	20.90
	6H	18.90	19.57	19.41	20.07	20.56	20.24	20.91	20.75	21.42	21.90
	8H	19.18	19.77	19.68	20.26	20.82	20.78	21.37	21.29	21.86	22.42