

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: P1588809

Luminaire Tested: 24CZSP-A-65-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588809
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-65-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

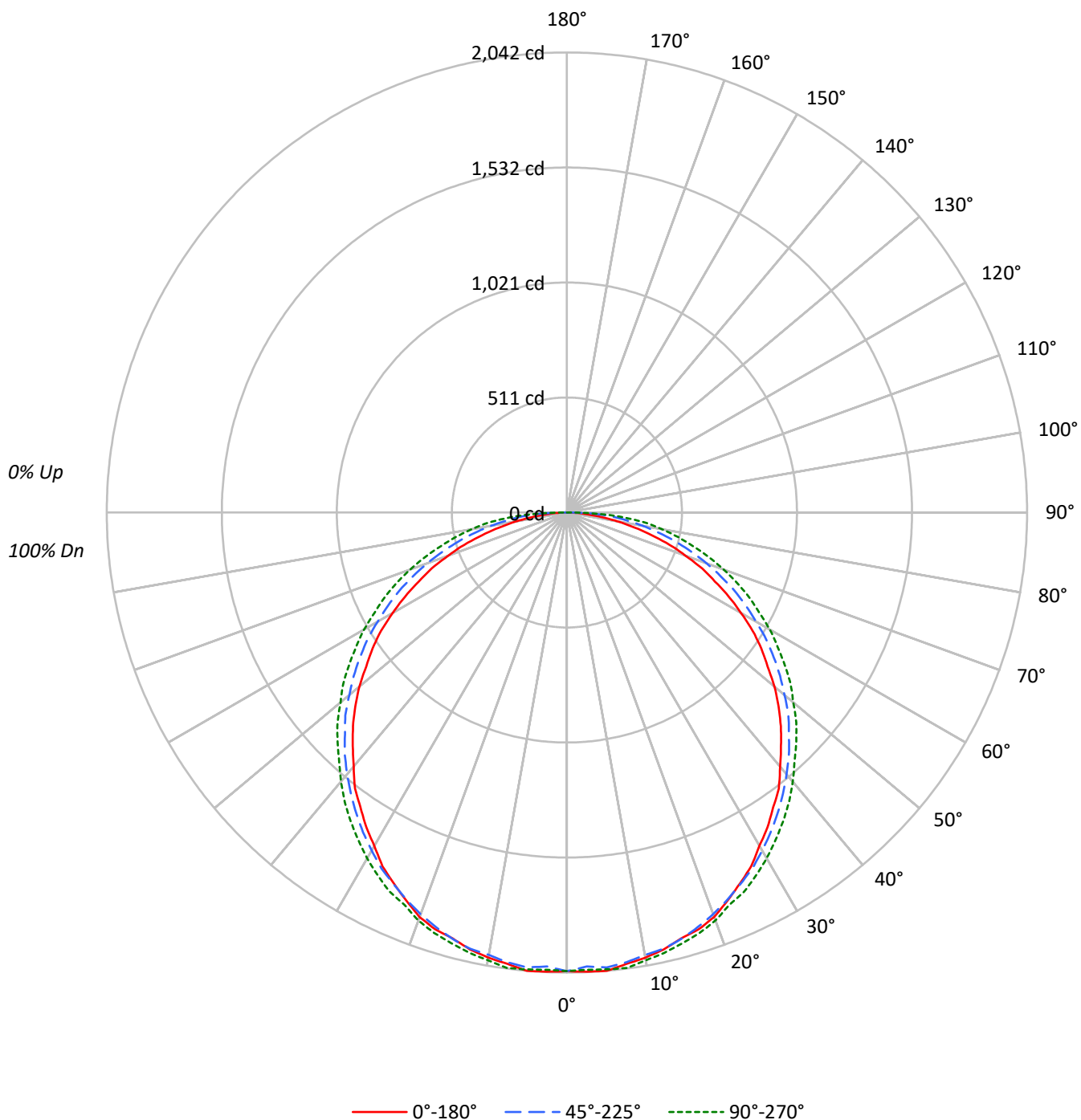
Lumens per Lamp: N/A
Luminaire Lumens: 6214.0 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 47.9
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
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	98	94	105	100	96	92	96	93	89		92	89	87		89
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3118	3118	3118
5°	3139	3116	3130
10°	3120	3101	3139
15°	3103	3108	3138
20°	3114	3093	3141
25°	3071	3076	3141
30°	3021	3064	3135
35°	2986	3047	3128
40°	2943	3032	3118
45°	2907	3017	3117
50°	2865	3004	3124
55°	2813	2992	3151
60°	2735	2972	3186
65°	2626	2972	3236
70°	2506	2952	3312
75°	2307	2959	3435
80°	2022	3019	3780
85°	1543	3478	4525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 5018 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	3.1
10°-20°	555.6	8.9
20°-30°	844.1	13.6
30°-40°	1022.5	16.5
40°-50°	1075.7	17.3
50°-60°	1000.2	16.1
60°-70°	805.3	13.0
70°-80°	521.7	8.4
80°-90°	195.6	3.1
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°	1593.0	25.6
0°-40°	2615.5	42.1
0°-60°	4691.3	75.5
0°-90°	6214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2042	2039	2027	2039	2036	193
15°	1957	1964	1960	1984	1979	554
25°	1817	1816	1820	1851	1859	838
35°	1597	1609	1630	1658	1673	1000
45°	1342	1360	1393	1423	1439	1035
55°	1054	1080	1121	1165	1180	940
65°	725	758	820	869	893	721
75°	390	429	500	558	580	414
85°	88	130	198	247	258	108
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2035.8	2035.8	2035.8	2035.8	2035.8
2.5°	2040.3	2040.3	2016.5	2041.8	2031.4
5°	2041.8	2038.8	2026.9	2038.8	2035.8
7.5°	2021.0	2023.9	2013.5	2028.4	2038.8
10°	2006.1	2009.1	1994.2	2018.0	2018.0
12.5°	1986.7	1989.7	1983.8	2006.1	2001.6
15°	1957.0	1964.4	1959.9	1983.8	1979.3
17.5°	1940.6	1934.6	1930.2	1948.0	1957.0
20°	1910.8	1897.4	1897.4	1921.3	1927.2
22.5°	1863.2	1858.8	1860.2	1890.0	1884.1
25°	1817.1	1815.6	1820.1	1851.3	1858.8
27.5°	1770.9	1768.0	1781.4	1811.1	1817.1
30°	1708.4	1714.4	1732.3	1765.0	1772.4
32.5°	1656.4	1666.8	1683.1	1714.4	1723.3
35°	1596.8	1608.7	1629.6	1657.8	1672.7
37.5°	1544.7	1552.2	1574.5	1601.3	1619.2
40°	1471.8	1491.2	1516.5	1555.2	1559.6
42.5°	1406.3	1425.7	1458.4	1500.1	1495.6
45°	1342.3	1360.2	1392.9	1422.7	1439.1
47.5°	1273.9	1290.3	1333.4	1369.1	1381.0
50°	1202.5	1223.3	1260.5	1297.7	1311.1
52.5°	1122.1	1144.4	1192.0	1232.2	1251.6
55°	1053.6	1080.4	1120.6	1165.3	1180.1
57.5°	977.7	1000.1	1049.2	1093.8	1108.7
60°	892.9	919.7	970.3	1017.9	1040.2
62.5°	811.1	840.8	894.4	943.5	961.4
65°	724.7	757.5	820.0	869.1	892.9
67.5°	650.3	677.1	738.1	793.2	818.5
70°	559.6	595.3	659.3	720.3	739.6
72.5°	479.2	510.4	577.4	638.4	662.2
75°	389.9	428.6	500.0	558.1	580.4
77.5°	308.1	348.2	419.7	480.7	506.0
80°	229.2	267.9	342.3	404.8	428.6
82.5°	154.8	193.5	267.9	328.9	355.7
85°	87.8	129.5	197.9	247.0	257.5
87.5°	38.7	74.4	111.6	133.9	142.9
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	15.64	17.32	16.00	17.63	17.95	16.31	17.99	16.67	18.31	18.62
	3H	17.49	19.02	17.87	19.34	19.70	18.53	20.06	18.90	20.38	20.74
	4H	18.18	19.62	18.57	19.97	20.34	19.49	20.94	19.89	21.28	21.66
	6H	18.67	20.01	19.08	20.37	20.76	20.38	21.73	20.79	22.09	22.48
	8H	18.82	20.10	19.24	20.49	20.89	20.79	22.07	21.21	22.46	22.86
	12H	18.90	20.14	19.33	20.52	20.95	21.15	22.38	21.57	22.76	23.19
4H	2H	16.43	17.87	16.83	18.22	18.59	16.95	18.39	17.35	18.74	19.11
	3H	18.52	19.74	18.93	20.13	20.53	19.41	20.63	19.82	21.03	21.42
	4H	19.34	20.45	19.77	20.86	21.29	20.54	21.65	20.97	22.06	22.49
	6H	19.96	20.94	20.41	21.38	21.83	21.61	22.58	22.06	23.02	23.47
	8H	20.16	21.07	20.62	21.51	21.98	22.10	23.01	22.56	23.45	23.92
	12H	20.29	21.12	20.77	21.59	22.06	22.55	23.38	23.03	23.85	24.32
8H	4H	19.84	20.76	20.30	21.20	21.66	20.88	21.79	21.34	22.24	22.70
	6H	20.63	21.40	21.12	21.88	22.36	22.13	22.90	22.62	23.38	23.86
	8H	20.91	21.60	21.42	22.11	22.59	22.75	23.44	23.26	23.95	24.43
	12H	21.13	21.74	21.63	22.23	22.79	23.36	23.98	23.87	24.47	25.02
12H	4H	19.95	20.78	20.43	21.25	21.72	20.92	21.74	21.40	22.22	22.69
	6H	20.80	21.49	21.30	21.99	22.48	22.20	22.90	22.71	23.40	23.88
	8H	21.17	21.78	21.67	22.27	22.83	22.91	23.52	23.41	24.01	24.57