

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: P1588468

Luminaire Tested: 24CZSP-65-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-65-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

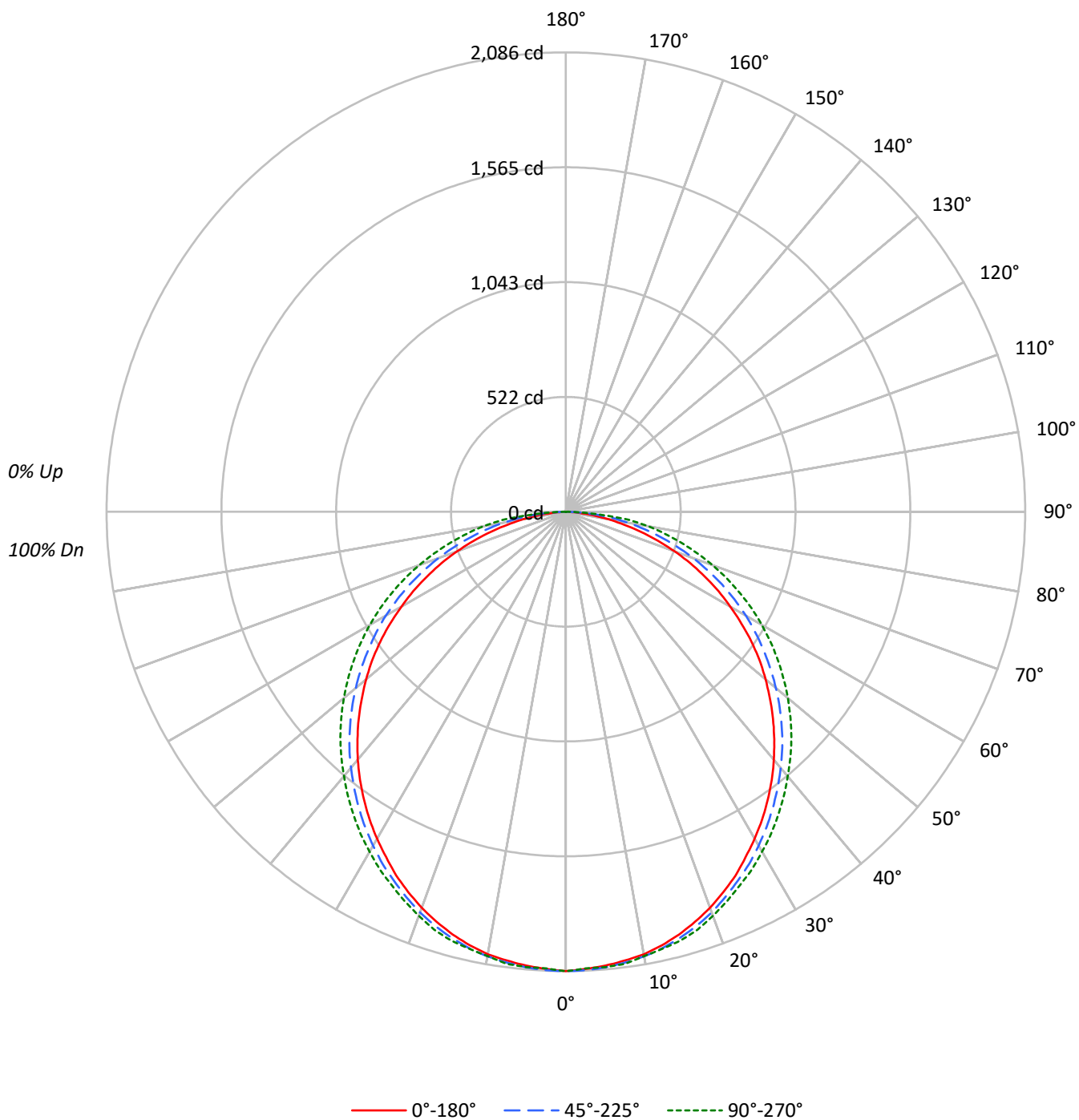
Lumens per Lamp: N/A
Luminaire Lumens: 6090.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
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	69		
3	89	79	70	64	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°	3195	3195	3195
5°	3180	3193	3191
10°	3174	3188	3186
15°	3151	3176	3195
20°	3119	3156	3182
25°	3080	3123	3162
30°	3032	3096	3153
35°	2988	3066	3143
40°	2939	3035	3134
45°	2883	3005	3138
50°	2821	2968	3136
55°	2748	2926	3140
60°	2645	2894	3148
65°	2523	2838	3158
70°	2352	2759	3171
75°	2095	2649	3203
80°	1732	2523	3359
85°	1126	2278	2935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3465 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.3	3.2
10°-20°	564.9	9.3
20°-30°	851.9	14.0
30°-40°	1026.2	16.8
40°-50°	1071.7	17.6
50°-60°	984.2	16.2
60°-70°	775.2	12.7
70°-80°	475.6	7.8
80°-90°	143.1	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°	1614.1	26.5
0°-40°	2640.3	43.4
0°-60°	4696.1	77.1
0°-90°	6090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2069	2071	2077	2083	2075	197
15°	1987	1991	2003	2015	2015	560
25°	1823	1827	1848	1871	1871	839
35°	1598	1606	1640	1673	1681	1000
45°	1331	1346	1387	1435	1449	1026
55°	1029	1048	1096	1157	1176	919
65°	696	720	783	849	871	689
75°	354	382	448	518	541	375
85°	64	88	130	164	167	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2086.0	2086.0	2086.0	2086.0	2086.0
2.5°	2078.0	2082.0	2083.3	2084.7	2075.3
5°	2068.6	2071.3	2076.6	2083.3	2075.3
7.5°	2055.3	2057.9	2064.6	2074.0	2070.0
10°	2040.6	2041.9	2049.9	2056.6	2048.6
12.5°	2016.5	2020.5	2029.9	2035.2	2032.5
15°	1987.1	1991.1	2003.1	2015.2	2015.2
17.5°	1952.4	1957.7	1972.4	1988.4	1989.8
20°	1913.6	1917.6	1936.3	1952.4	1952.4
22.5°	1869.5	1874.8	1893.6	1910.9	1913.6
25°	1822.7	1826.7	1848.1	1870.8	1870.8
27.5°	1767.9	1776.0	1802.7	1825.4	1830.8
30°	1714.5	1721.2	1750.6	1778.6	1782.6
32.5°	1658.4	1666.4	1697.1	1727.9	1734.5
35°	1598.2	1606.3	1639.7	1673.1	1681.1
37.5°	1535.4	1544.8	1579.5	1618.3	1626.3
40°	1469.9	1480.6	1518.1	1559.5	1567.5
42.5°	1400.5	1415.2	1455.2	1498.0	1510.0
45°	1331.0	1345.7	1387.1	1435.2	1448.6
47.5°	1257.5	1274.8	1317.6	1368.4	1383.1
50°	1184.0	1201.3	1245.4	1300.2	1316.3
52.5°	1109.1	1126.5	1171.9	1229.4	1246.8
55°	1029.0	1047.7	1095.8	1157.2	1176.0
57.5°	946.1	970.2	1020.9	1083.8	1102.5
60°	863.3	887.3	944.8	1006.2	1027.6
62.5°	781.7	804.5	863.3	928.7	951.5
65°	696.2	720.3	783.1	848.6	871.3
67.5°	612.0	636.1	698.9	767.0	791.1
70°	525.2	551.9	616.0	684.2	708.2
72.5°	438.3	466.4	531.9	601.3	624.1
75°	354.1	382.2	447.7	518.5	541.2
77.5°	271.3	302.0	366.2	438.3	459.7
80°	196.4	225.8	286.0	356.8	380.8
82.5°	125.6	151.0	211.1	278.0	295.3
85°	64.1	88.2	129.6	164.4	167.0
87.5°	20.0	28.1	42.8	64.1	65.5
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	15.51	17.18	15.88	17.49	17.80	16.34	18.01	16.71	18.32	18.63
	3H	17.27	18.78	17.65	19.10	19.46	18.46	19.97	18.84	20.29	20.65
	4H	17.89	19.31	18.29	19.66	20.03	19.35	20.77	19.75	21.12	21.49
	6H	18.30	19.62	18.71	19.98	20.37	20.13	21.45	20.54	21.81	22.21
	8H	18.41	19.67	18.83	20.06	20.46	20.45	21.71	20.87	22.10	22.50
	12H	18.46	19.67	18.89	20.05	20.48	20.66	21.87	21.09	22.25	22.68
4H	2H	16.29	17.71	16.68	18.06	18.43	16.93	18.35	17.33	18.70	19.08
	3H	18.26	19.46	18.67	19.86	20.26	19.29	20.49	19.70	20.88	21.28
	4H	19.00	20.09	19.43	20.50	20.93	20.34	21.43	20.77	21.84	22.27
	6H	19.53	20.48	19.98	20.92	21.37	21.29	22.24	21.74	22.68	23.14
	8H	19.67	20.57	20.13	21.01	21.47	21.69	22.58	22.15	23.02	23.49
	12H	19.76	20.56	20.24	21.04	21.50	21.97	22.77	22.44	23.24	23.71
8H	4H	19.46	20.35	19.92	20.79	21.26	20.63	21.52	21.09	21.96	22.43
	6H	20.12	20.86	20.61	21.35	21.82	21.74	22.48	22.23	22.97	23.44
	8H	20.33	21.00	20.84	21.50	21.99	22.25	22.92	22.76	23.42	23.91
	12H	20.47	21.06	20.97	21.55	22.11	22.64	23.23	23.14	23.72	24.28
12H	4H	19.55	20.35	20.03	20.83	21.29	20.65	21.46	21.13	21.93	22.40
	6H	20.25	20.92	20.76	21.43	21.91	21.79	22.46	22.29	22.96	23.45
	8H	20.53	21.12	21.04	21.61	22.17	22.37	22.96	22.87	23.45	24.01