

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: P1588458

Luminaire Tested: 24CZSP-65-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588458
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-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

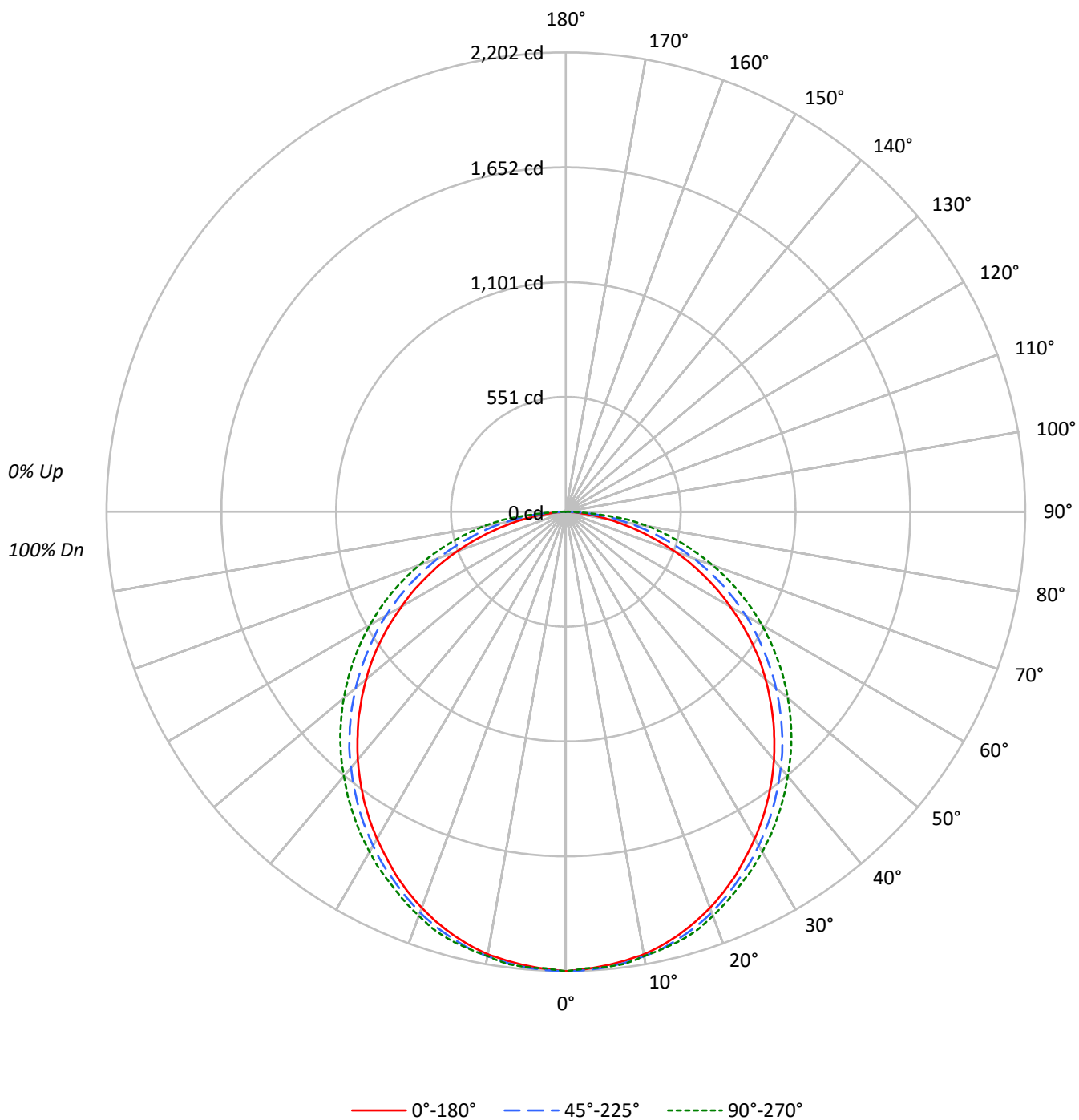
Lumens per Lamp: N/A
Luminaire Lumens: 6430.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3373	3373	3373
5°	3358	3371	3369
10°	3351	3366	3364
15°	3327	3354	3374
20°	3293	3332	3360
25°	3252	3298	3338
30°	3201	3269	3329
35°	3155	3237	3319
40°	3103	3205	3309
45°	3044	3172	3313
50°	2979	3133	3312
55°	2901	3090	3315
60°	2792	3056	3324
65°	2664	2996	3334
70°	2483	2913	3349
75°	2213	2797	3381
80°	1829	2663	3547
85°	1190	2406	3100

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3659 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.3	3.2
10°-20°	596.4	9.3
20°-30°	899.5	14.0
30°-40°	1083.4	16.8
40°-50°	1131.5	17.6
50°-60°	1039.2	16.2
60°-70°	818.5	12.7
70°-80°	502.1	7.8
80°-90°	151.1	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°	1704.2	26.5
0°-40°	2787.7	43.4
0°-60°	4958.3	77.1
0°-90°	6430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2184	2187	2193	2200	2191	208
15°	2098	2102	2115	2128	2128	592
25°	1924	1929	1951	1975	1975	886
35°	1688	1696	1731	1766	1775	1055
45°	1405	1421	1464	1515	1529	1083
55°	1086	1106	1157	1222	1242	970
65°	735	760	827	896	920	727
75°	374	404	473	547	571	396
85°	68	93	137	174	176	88
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2202.4	2202.4	2202.4	2202.4	2202.4
2.5°	2194.0	2198.2	2199.6	2201.0	2191.2
5°	2184.1	2186.9	2192.6	2199.6	2191.2
7.5°	2170.0	2172.8	2179.9	2189.7	2185.5
10°	2154.5	2155.9	2164.4	2171.4	2162.9
12.5°	2129.1	2133.3	2143.2	2148.8	2146.0
15°	2098.0	2102.3	2115.0	2127.7	2127.7
17.5°	2061.4	2067.0	2082.5	2099.4	2100.9
20°	2020.4	2024.7	2044.4	2061.4	2061.4
22.5°	1973.9	1979.5	1999.3	2017.6	2020.4
25°	1924.5	1928.7	1951.3	1975.3	1975.3
27.5°	1866.6	1875.1	1903.3	1927.3	1933.0
30°	1810.2	1817.3	1848.3	1877.9	1882.2
32.5°	1751.0	1759.4	1791.9	1824.3	1831.4
35°	1687.5	1695.9	1731.2	1766.5	1774.9
37.5°	1621.1	1631.0	1667.7	1708.6	1717.1
40°	1552.0	1563.3	1602.8	1646.5	1655.0
42.5°	1478.6	1494.2	1536.5	1581.6	1594.3
45°	1405.3	1420.8	1464.5	1515.3	1529.4
47.5°	1327.7	1346.0	1391.2	1444.8	1460.3
50°	1250.1	1268.4	1315.0	1372.8	1389.8
52.5°	1171.1	1189.4	1237.4	1298.0	1316.4
55°	1086.4	1106.2	1157.0	1221.9	1241.6
57.5°	998.9	1024.3	1077.9	1144.3	1164.0
60°	911.5	936.9	997.5	1062.4	1085.0
62.5°	825.4	849.4	911.5	980.6	1004.6
65°	735.1	760.5	826.8	895.9	919.9
67.5°	646.2	671.6	737.9	809.9	835.3
70°	554.5	582.7	650.4	722.4	747.8
72.5°	462.8	492.4	561.5	634.9	658.9
75°	373.9	403.5	472.7	547.4	571.4
77.5°	286.4	318.9	386.6	462.8	485.4
80°	207.4	238.4	301.9	376.7	402.1
82.5°	132.6	159.4	222.9	293.5	311.8
85°	67.7	93.1	136.9	173.5	176.4
87.5°	21.2	29.6	45.1	67.7	69.1
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	15.70	17.36	16.07	17.68	17.99	16.53	18.20	16.90	18.51	18.82
	3H	17.46	18.97	17.83	19.29	19.65	18.65	20.16	19.03	20.48	20.84
	4H	18.08	19.50	18.47	19.85	20.22	19.54	20.96	19.94	21.31	21.68
	6H	18.49	19.81	18.90	20.17	20.56	20.32	21.64	20.73	22.00	22.39
	8H	18.60	19.86	19.02	20.25	20.64	20.64	21.90	21.06	22.29	22.69
	12H	18.65	19.86	19.08	20.24	20.67	20.85	22.06	21.28	22.44	22.87
4H	2H	16.47	17.90	16.87	18.24	18.62	17.12	18.54	17.52	18.89	19.26
	3H	18.45	19.65	18.86	20.05	20.45	19.48	20.67	19.88	21.07	21.47
	4H	19.19	20.27	19.62	20.69	21.12	20.53	21.61	20.96	22.03	22.46
	6H	19.72	20.67	20.17	21.11	21.56	21.48	22.43	21.93	22.87	23.33
	8H	19.86	20.76	20.32	21.20	21.66	21.88	22.77	22.34	23.21	23.67
	12H	19.95	20.75	20.43	21.22	21.69	22.15	22.96	22.63	23.43	23.90
8H	4H	19.65	20.54	20.11	20.98	21.44	20.82	21.71	21.28	22.15	22.61
	6H	20.31	21.05	20.80	21.54	22.01	21.93	22.67	22.42	23.16	23.63
	8H	20.52	21.19	21.03	21.69	22.18	22.44	23.11	22.95	23.61	24.10
	12H	20.66	21.25	21.16	21.74	22.30	22.83	23.42	23.33	23.91	24.47
12H	4H	19.74	20.54	20.22	21.01	21.48	20.84	21.64	21.32	22.12	22.59
	6H	20.44	21.11	20.95	21.61	22.10	21.98	22.65	22.48	23.15	23.63
	8H	20.72	21.31	21.22	21.80	22.36	22.55	23.15	23.06	23.64	24.19