

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: P1588569

Luminaire Tested: 24CZSP-80-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588569
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-80-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 8000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

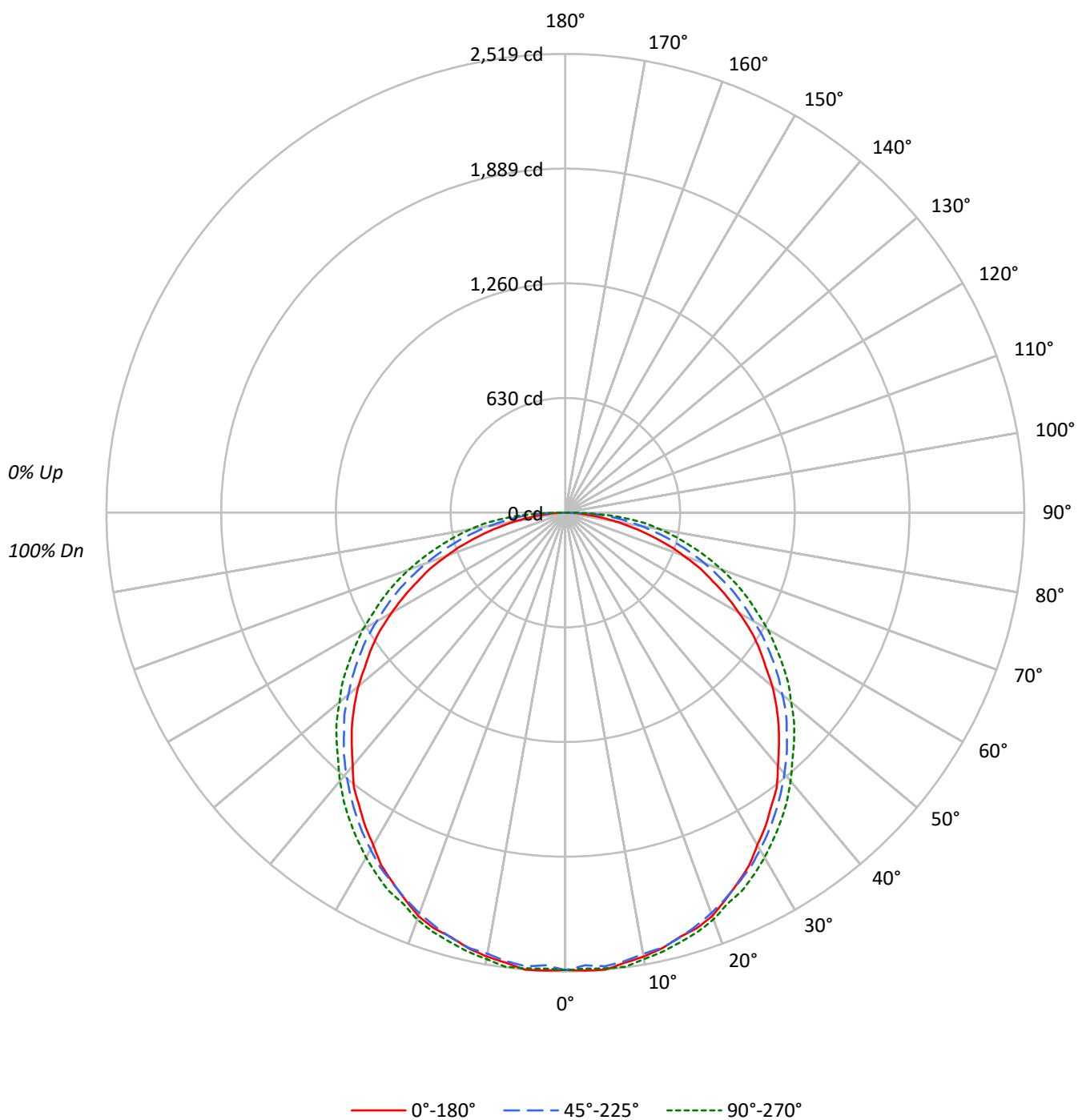
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7666.0 lumens
Efficiency: N/A
Efficacy: 122.3 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): 62.7
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	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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82		
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67		
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56		
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48		
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41		
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36		
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32		
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28		
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25		
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3847	3847	3847
5°	3873	3844	3862
10°	3849	3826	3872
15°	3828	3834	3872
20°	3842	3815	3875
25°	3788	3794	3875
30°	3728	3779	3867
35°	3683	3759	3858
40°	3630	3740	3847
45°	3587	3722	3845
50°	3535	3705	3854
55°	3471	3692	3888
60°	3374	3667	3931
65°	3240	3666	3992
70°	3091	3642	4086
75°	2846	3651	4237
80°	2493	3725	4663
85°	1903	4291	5581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 6187 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.5	3.1
10°-20°	685.5	8.9
20°-30°	1041.3	13.6
30°-40°	1261.4	16.5
40°-50°	1327.1	17.3
50°-60°	1233.9	16.1
60°-70°	993.5	13.0
70°-80°	643.6	8.4
80°-90°	241.4	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°	1965.2	25.6
0°-40°	3226.6	42.1
0°-60°	5787.6	75.5
0°-90°	7666.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7666.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2512	2512	2512	2512	2512	
5°	2519	2515	2500	2515	2512	239
15°	2414	2423	2418	2447	2442	684
25°	2242	2240	2245	2284	2293	1033
35°	1970	1985	2010	2045	2064	1234
45°	1656	1678	1718	1755	1775	1277
55°	1300	1333	1382	1438	1456	1159
65°	894	934	1012	1072	1102	889
75°	481	529	617	688	716	511
85°	108	160	244	305	318	133
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2511.6	2511.6	2511.6	2511.6	2511.6
2.5°	2517.1	2517.1	2487.7	2518.9	2506.0
5°	2518.9	2515.2	2500.5	2515.2	2511.6
7.5°	2493.2	2496.9	2484.0	2502.4	2515.2
10°	2474.8	2478.5	2460.1	2489.5	2489.5
12.5°	2451.0	2454.6	2447.3	2474.8	2469.3
15°	2414.3	2423.4	2417.9	2447.3	2441.8
17.5°	2394.1	2386.7	2381.2	2403.2	2414.3
20°	2357.3	2340.8	2340.8	2370.2	2377.5
22.5°	2298.6	2293.1	2294.9	2331.6	2324.3
25°	2241.7	2239.8	2245.3	2283.9	2293.1
27.5°	2184.8	2181.1	2197.6	2234.3	2241.7
30°	2107.7	2115.0	2137.0	2177.4	2186.6
32.5°	2043.4	2056.2	2076.4	2115.0	2126.0
35°	1970.0	1984.6	2010.3	2045.2	2063.6
37.5°	1905.7	1914.9	1942.4	1975.5	1997.5
40°	1815.7	1839.6	1870.8	1918.5	1924.1
42.5°	1735.0	1758.8	1799.2	1850.6	1845.1
45°	1656.0	1678.0	1718.4	1755.2	1775.3
47.5°	1571.6	1591.8	1645.0	1689.1	1703.7
50°	1483.4	1509.1	1555.0	1600.9	1617.5
52.5°	1384.3	1411.8	1470.6	1520.2	1544.0
55°	1299.8	1332.9	1382.5	1437.5	1455.9
57.5°	1206.2	1233.7	1294.3	1349.4	1367.8
60°	1101.6	1134.6	1197.0	1255.8	1283.3
62.5°	1000.6	1037.3	1103.4	1164.0	1186.0
65°	894.1	934.5	1011.6	1072.2	1101.6
67.5°	802.3	835.3	910.6	978.6	1009.8
70°	690.3	734.4	813.3	888.6	912.5
72.5°	591.2	629.7	712.3	787.6	817.0
75°	481.0	528.7	616.9	688.5	716.0
77.5°	380.0	429.6	517.7	593.0	624.2
80°	282.7	330.5	422.3	499.4	528.7
82.5°	190.9	238.7	330.5	405.7	438.8
85°	108.3	159.7	244.2	304.8	317.6
87.5°	47.7	91.8	137.7	165.2	176.2
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	16.36	18.05	16.73	18.36	18.67	17.04	18.72	17.40	19.04	19.35
	3H	18.22	19.75	18.60	20.07	20.43	19.26	20.79	19.63	21.11	21.47
	4H	18.91	20.35	19.30	20.70	21.07	20.22	21.67	20.62	22.01	22.39
	6H	19.40	20.74	19.81	21.10	21.49	21.11	22.46	21.52	22.82	23.21
	8H	19.54	20.83	19.97	21.22	21.62	21.52	22.80	21.94	23.19	23.59
	12H	19.63	20.87	20.06	21.25	21.68	21.88	23.11	22.30	23.49	23.92
4H	2H	17.16	18.60	17.56	18.95	19.32	17.68	19.12	18.08	19.47	19.84
	3H	19.25	20.47	19.65	20.86	21.26	20.14	21.36	20.55	21.76	22.15
	4H	20.07	21.18	20.50	21.59	22.02	21.27	22.38	21.70	22.79	23.22
	6H	20.69	21.67	21.14	22.11	22.56	22.34	23.31	22.79	23.75	24.20
	8H	20.89	21.80	21.35	22.24	22.71	22.83	23.74	23.29	24.18	24.65
	12H	21.02	21.85	21.50	22.32	22.79	23.28	24.11	23.76	24.58	25.05
8H	4H	20.57	21.49	21.03	21.93	22.39	21.61	22.52	22.07	22.97	23.43
	6H	21.36	22.13	21.85	22.61	23.09	22.86	23.63	23.35	24.11	24.59
	8H	21.64	22.33	22.15	22.84	23.32	23.48	24.17	23.99	24.68	25.16
	12H	21.86	22.47	22.36	22.96	23.52	24.09	24.71	24.60	25.19	25.75
12H	4H	20.68	21.51	21.16	21.98	22.45	21.65	22.47	22.13	22.95	23.42
	6H	21.53	22.22	22.03	22.72	23.21	22.93	23.63	23.44	24.13	24.61
	8H	21.90	22.51	22.40	23.00	23.55	23.64	24.25	24.14	24.74	25.30