

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: P1588847

Luminaire Tested: 24CZSP-A-70VHE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-70VHE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

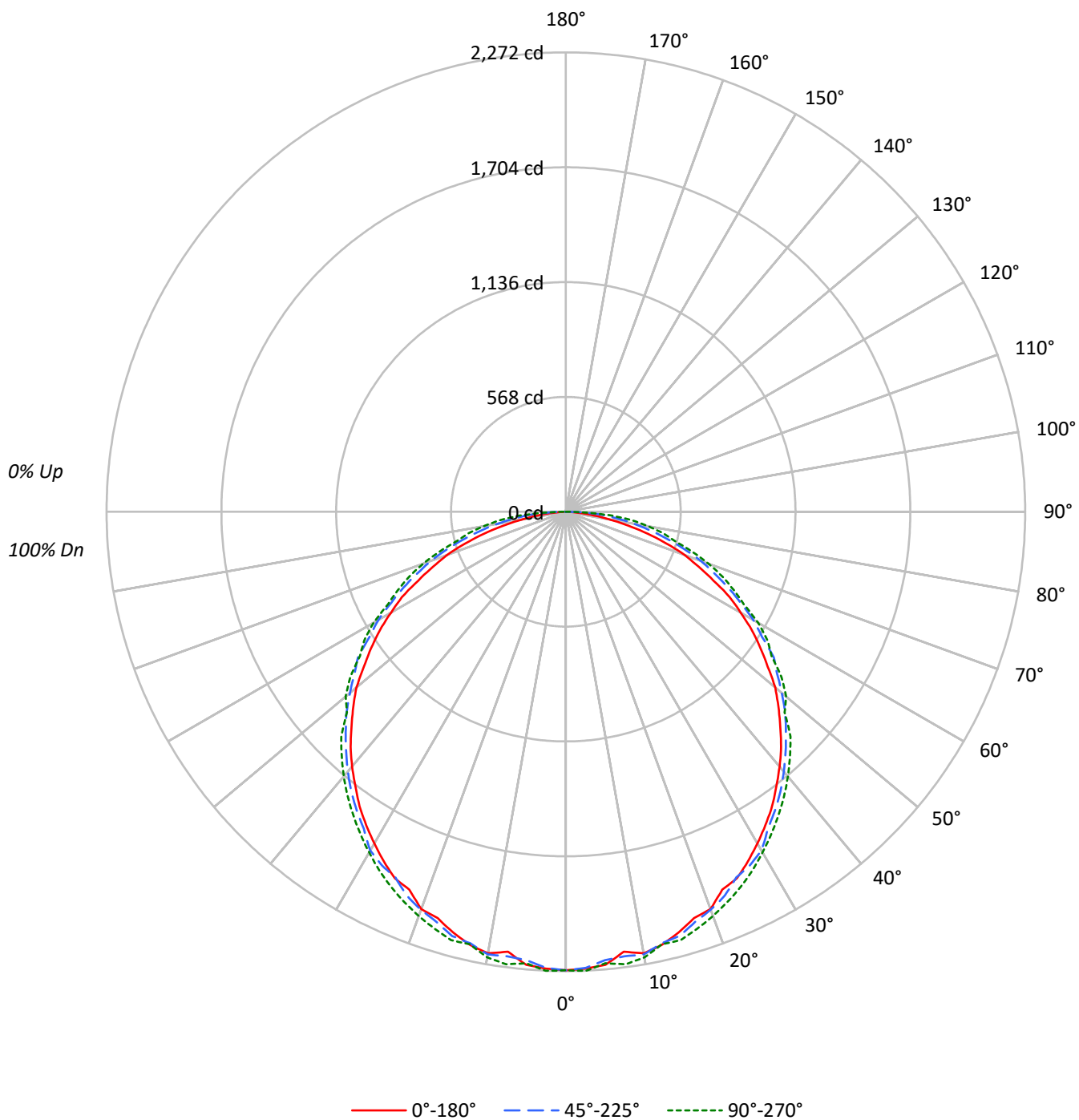
Lumens per Lamp: N/A
Luminaire Lumens: 6770.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 53.3
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	0
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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3473	3473	3473
5°	3458	3423	3446
10°	3448	3457	3481
15°	3416	3444	3478
20°	3408	3414	3468
25°	3381	3372	3459
30°	3351	3423	3442
35°	3325	3372	3427
40°	3289	3353	3416
45°	3248	3335	3403
50°	3221	3322	3388
55°	3140	3352	3317
60°	3060	3280	3365
65°	2922	3210	3320
70°	2802	3182	3368
75°	2481	3087	3299
80°	1959	3016	3650
85°	1199	3223	4161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4161 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.2	3.2
10°-20°	611.8	9.0
20°-30°	932.1	13.8
30°-40°	1134.6	16.8
40°-50°	1189.7	17.6
50°-60°	1102.0	16.3
60°-70°	869.0	12.8
70°-80°	537.6	7.9
80°-90°	179.0	2.6
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°	1758.1	26.0
0°-40°	2892.7	42.7
0°-60°	5184.4	76.6
0°-90°	6770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6770.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2268	2268	2268	2268	2268	
5°	2249	2248	2226	2275	2241	212
15°	2154	2166	2172	2156	2193	608
25°	2001	2012	1995	2050	2047	919
35°	1778	1795	1803	1838	1833	1111
45°	1499	1527	1540	1557	1571	1158
55°	1176	1211	1255	1266	1242	1052
65°	806	838	886	919	916	802
75°	419	452	522	561	558	443
85°	68	116	183	223	237	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2267.8	2267.8	2267.8	2267.8	2267.8
2.5°	2261.4	2275.2	2257.7	2272.4	2272.4
5°	2249.4	2248.5	2226.4	2275.2	2241.1
7.5°	2194.1	2232.8	2217.2	2277.1	2256.8
10°	2217.2	2207.0	2222.7	2263.2	2238.4
12.5°	2194.1	2210.7	2185.8	2165.6	2191.4
15°	2154.5	2165.6	2172.0	2156.3	2193.2
17.5°	2107.5	2149.0	2126.8	2119.5	2161.9
20°	2090.9	2092.8	2094.6	2132.4	2127.8
22.5°	2022.7	2059.6	2055.0	2085.4	2089.1
25°	2000.6	2011.7	1995.1	2050.4	2046.7
27.5°	1949.9	1973.9	1971.1	1989.5	1999.7
30°	1894.6	1918.6	1935.2	1914.9	1946.2
32.5°	1837.5	1878.0	1859.6	1897.4	1890.9
35°	1778.5	1795.1	1803.4	1837.5	1832.9
37.5°	1710.3	1738.9	1743.5	1795.1	1773.0
40°	1644.9	1673.5	1677.2	1707.6	1708.5
42.5°	1575.8	1589.6	1609.0	1644.0	1641.2
45°	1499.3	1526.9	1539.8	1557.4	1571.2
47.5°	1425.6	1455.1	1471.7	1500.2	1468.0
50°	1351.9	1373.1	1394.2	1424.7	1421.9
52.5°	1258.8	1306.7	1316.8	1333.4	1344.5
55°	1175.8	1210.9	1255.1	1266.2	1242.2
57.5°	1092.0	1118.7	1151.0	1185.1	1182.3
60°	998.9	1031.2	1070.8	1096.6	1098.4
62.5°	914.1	936.3	974.0	1011.8	992.5
65°	806.3	837.7	885.6	918.7	916.0
67.5°	710.5	744.6	793.4	836.7	838.6
70°	625.7	644.1	710.5	743.7	752.0
72.5°	521.6	553.8	612.8	649.7	653.4
75°	419.3	452.5	521.6	561.2	557.5
77.5°	315.2	363.1	430.3	477.3	493.0
80°	222.1	265.4	341.9	388.0	413.8
82.5°	140.1	185.2	259.9	317.0	332.7
85°	68.2	116.1	183.4	223.0	236.8
87.5°	17.5	47.9	84.8	104.1	112.4
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	16.13	17.80	16.49	18.11	18.43	16.56	18.23	16.92	18.55	18.86
	3H	17.93	19.44	18.30	19.77	20.13	18.63	20.15	19.01	20.47	20.83
	4H	18.57	20.00	18.97	20.35	20.73	19.47	20.91	19.87	21.25	21.63
	6H	18.98	20.31	19.39	20.68	21.07	20.26	21.59	20.67	21.96	22.35
	8H	19.09	20.36	19.51	20.75	21.14	20.61	21.88	21.03	22.27	22.67
	12H	19.13	20.35	19.56	20.73	21.16	20.91	22.13	21.33	22.51	22.94
4H	2H	16.87	18.30	17.26	18.65	19.02	17.20	18.63	17.60	18.98	19.35
	3H	18.90	20.11	19.31	20.51	20.90	19.52	20.72	19.92	21.12	21.52
	4H	19.67	20.77	20.10	21.18	21.62	20.52	21.62	20.95	22.03	22.46
	6H	20.21	21.17	20.66	21.61	22.06	21.47	22.43	21.92	22.87	23.33
	8H	20.35	21.25	20.81	21.70	22.16	21.90	22.80	22.35	23.24	23.70
	12H	20.43	21.25	20.91	21.72	22.19	22.28	23.09	22.75	23.56	24.03
8H	4H	20.12	21.02	20.58	21.47	21.93	20.86	21.76	21.32	22.20	22.67
	6H	20.80	21.56	21.29	22.04	22.52	21.98	22.73	22.47	23.21	23.69
	8H	21.02	21.70	21.53	22.20	22.69	22.52	23.20	23.03	23.70	24.19
	12H	21.17	21.77	21.67	22.26	22.82	23.04	23.64	23.55	24.13	24.69
12H	4H	20.21	21.02	20.69	21.49	21.96	20.89	21.71	21.37	22.18	22.65
	6H	20.94	21.61	21.44	22.12	22.60	22.04	22.72	22.55	23.22	23.71
	8H	21.23	21.83	21.74	22.32	22.88	22.67	23.27	23.17	23.75	24.31