

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: P1588421

Luminaire Tested: 24CZSP-60VHE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588421
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-60VHE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

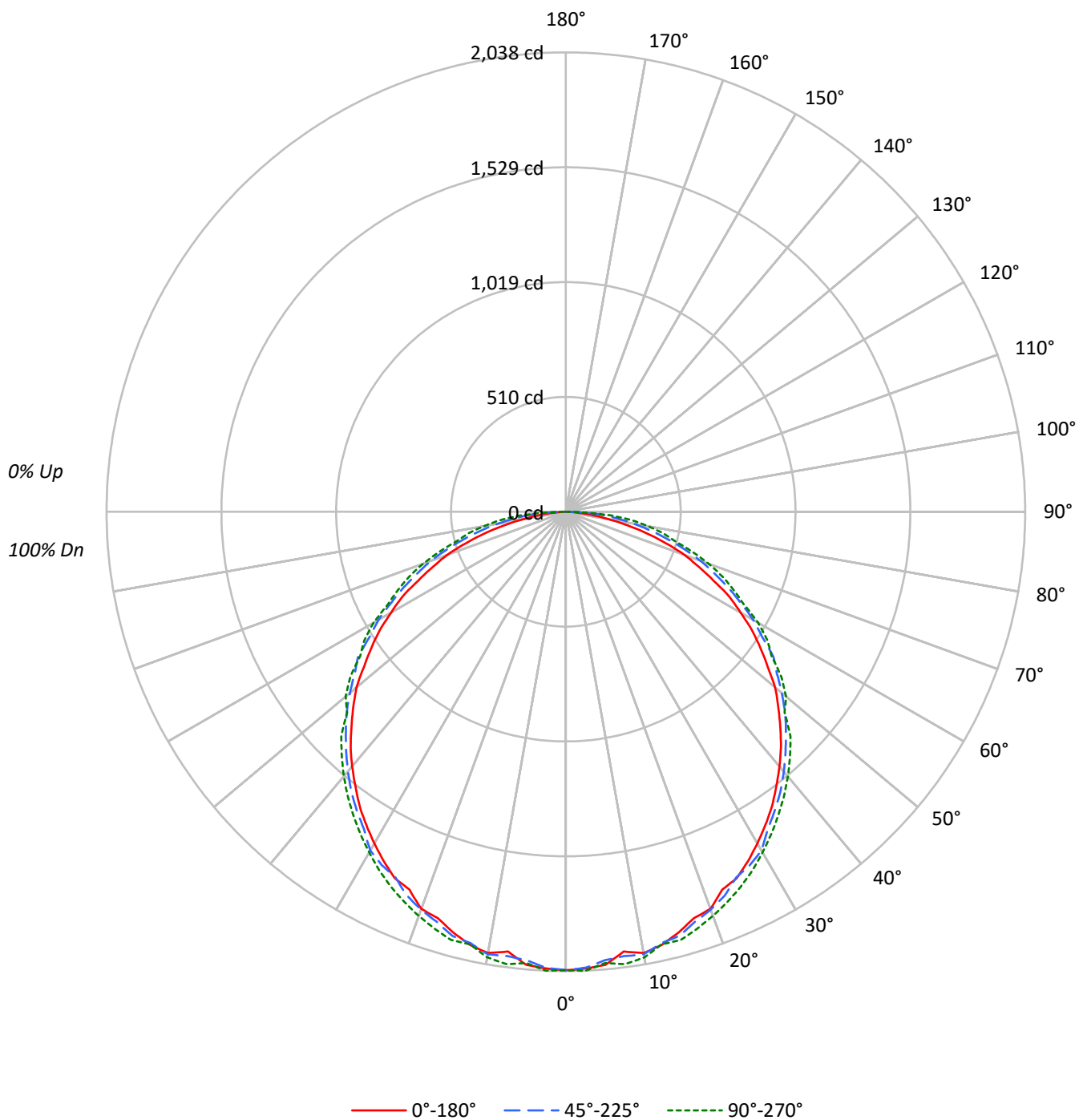
Lumens per Lamp: N/A
Luminaire Lumens: 6071.0 lumens
Efficiency: N/A
Efficacy: 139.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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°	3115	3115	3115
5°	3101	3070	3090
10°	3092	3100	3122
15°	3063	3088	3119
20°	3056	3061	3110
25°	3032	3024	3102
30°	3005	3069	3087
35°	2982	3024	3073
40°	2949	3007	3063
45°	2912	2991	3052
50°	2889	2979	3038
55°	2816	3005	2974
60°	2744	2941	3017
65°	2621	2878	2977
70°	2513	2853	3020
75°	2225	2768	2959
80°	1757	2704	3272
85°	1075	2889	3733

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	3.2
10°-20°	548.6	9.0
20°-30°	835.9	13.8
30°-40°	1017.5	16.8
40°-50°	1066.8	17.6
50°-60°	988.2	16.3
60°-70°	779.3	12.8
70°-80°	482.1	7.9
80°-90°	160.5	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°	1576.5	26.0
0°-40°	2594.0	42.7
0°-60°	4649.1	76.6
0°-90°	6071.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6071.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2034	2034	2034	2034	2034	
5°	2017	2016	1996	2040	2010	190
15°	1932	1942	1948	1934	1967	545
25°	1794	1804	1789	1839	1835	824
35°	1595	1610	1617	1648	1644	997
45°	1344	1369	1381	1397	1409	1039
55°	1054	1086	1126	1135	1114	943
65°	723	751	794	824	821	720
75°	376	406	468	503	500	397
85°	61	104	164	200	212	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2033.7	2033.7	2033.7	2033.7	2033.7
2.5°	2027.9	2040.3	2024.6	2037.8	2037.8
5°	2017.2	2016.3	1996.5	2040.3	2009.7
7.5°	1967.6	2002.3	1988.2	2041.9	2023.8
10°	1988.2	1979.1	1993.2	2029.6	2007.2
12.5°	1967.6	1982.5	1960.1	1942.0	1965.1
15°	1932.0	1942.0	1947.7	1933.7	1966.8
17.5°	1889.9	1927.1	1907.3	1900.6	1938.7
20°	1875.0	1876.7	1878.3	1912.2	1908.1
22.5°	1813.9	1846.9	1842.8	1870.1	1873.4
25°	1794.0	1804.0	1789.1	1838.7	1835.4
27.5°	1748.6	1770.1	1767.6	1784.1	1793.2
30°	1699.0	1720.5	1735.4	1717.2	1745.3
32.5°	1647.8	1684.1	1667.6	1701.5	1695.7
35°	1594.9	1609.8	1617.2	1647.8	1643.6
37.5°	1533.7	1559.4	1563.5	1609.8	1589.9
40°	1475.1	1500.7	1504.0	1531.3	1532.1
42.5°	1413.1	1425.5	1442.8	1474.2	1471.8
45°	1344.5	1369.3	1380.9	1396.6	1409.0
47.5°	1278.4	1304.8	1319.7	1345.3	1316.4
50°	1212.3	1231.3	1250.3	1277.6	1275.1
52.5°	1128.8	1171.8	1180.9	1195.8	1205.7
55°	1054.4	1085.8	1125.5	1135.4	1113.9
57.5°	979.2	1003.2	1032.1	1062.7	1060.2
60°	895.8	924.7	960.2	983.4	985.0
62.5°	819.8	839.6	873.5	907.3	890.0
65°	723.1	751.2	794.1	823.9	821.4
67.5°	637.1	667.7	711.5	750.3	752.0
70°	561.1	577.6	637.1	666.9	674.3
72.5°	467.7	496.6	549.5	582.6	585.9
75°	376.0	405.7	467.7	503.3	500.0
77.5°	282.6	325.6	385.9	428.1	442.1
80°	199.2	238.0	306.6	347.9	371.0
82.5°	125.6	166.1	233.0	284.3	298.3
85°	61.2	104.1	164.4	200.0	212.4
87.5°	15.7	43.0	76.0	93.4	100.8
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	15.75	17.42	16.12	17.74	18.05	16.18	17.85	16.55	18.17	18.48
	3H	17.55	19.07	17.93	19.39	19.75	18.25	19.77	18.63	20.10	20.46
	4H	18.19	19.63	18.59	19.97	20.35	19.10	20.53	19.49	20.87	21.25
	6H	18.60	19.93	19.01	20.30	20.69	19.88	21.21	20.29	21.58	21.97
	8H	18.71	19.98	19.13	20.37	20.76	20.23	21.50	20.65	21.89	22.29
	12H	18.75	19.97	19.18	20.35	20.78	20.53	21.75	20.96	22.13	22.56
4H	2H	16.49	17.92	16.89	18.27	18.64	16.82	18.25	17.22	18.60	18.98
	3H	18.52	19.73	18.93	20.13	20.53	19.14	20.34	19.55	20.74	21.14
	4H	19.29	20.39	19.73	20.80	21.24	20.14	21.24	20.57	21.65	22.08
	6H	19.83	20.79	20.28	21.23	21.68	21.09	22.05	21.55	22.49	22.95
	8H	19.97	20.88	20.43	21.32	21.78	21.52	22.42	21.98	22.86	23.32
	12H	20.06	20.87	20.53	21.34	21.81	21.90	22.71	22.38	23.18	23.65
8H	4H	19.74	20.65	20.20	21.09	21.55	20.48	21.38	20.94	21.82	22.29
	6H	20.42	21.18	20.92	21.66	22.14	21.60	22.35	22.09	22.84	23.31
	8H	20.64	21.32	21.15	21.82	22.31	22.14	22.82	22.65	23.32	23.81
	12H	20.79	21.39	21.29	21.88	22.44	22.66	23.26	23.17	23.75	24.31
12H	4H	19.83	20.64	20.31	21.11	21.58	20.52	21.33	20.99	21.80	22.27
	6H	20.56	21.24	21.06	21.74	22.22	21.66	22.34	22.17	22.85	23.33
	8H	20.85	21.45	21.36	21.94	22.50	22.29	22.89	22.79	23.38	23.93