

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: P1588431

Luminaire Tested: 24CZSP-60VHE-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588431
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-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

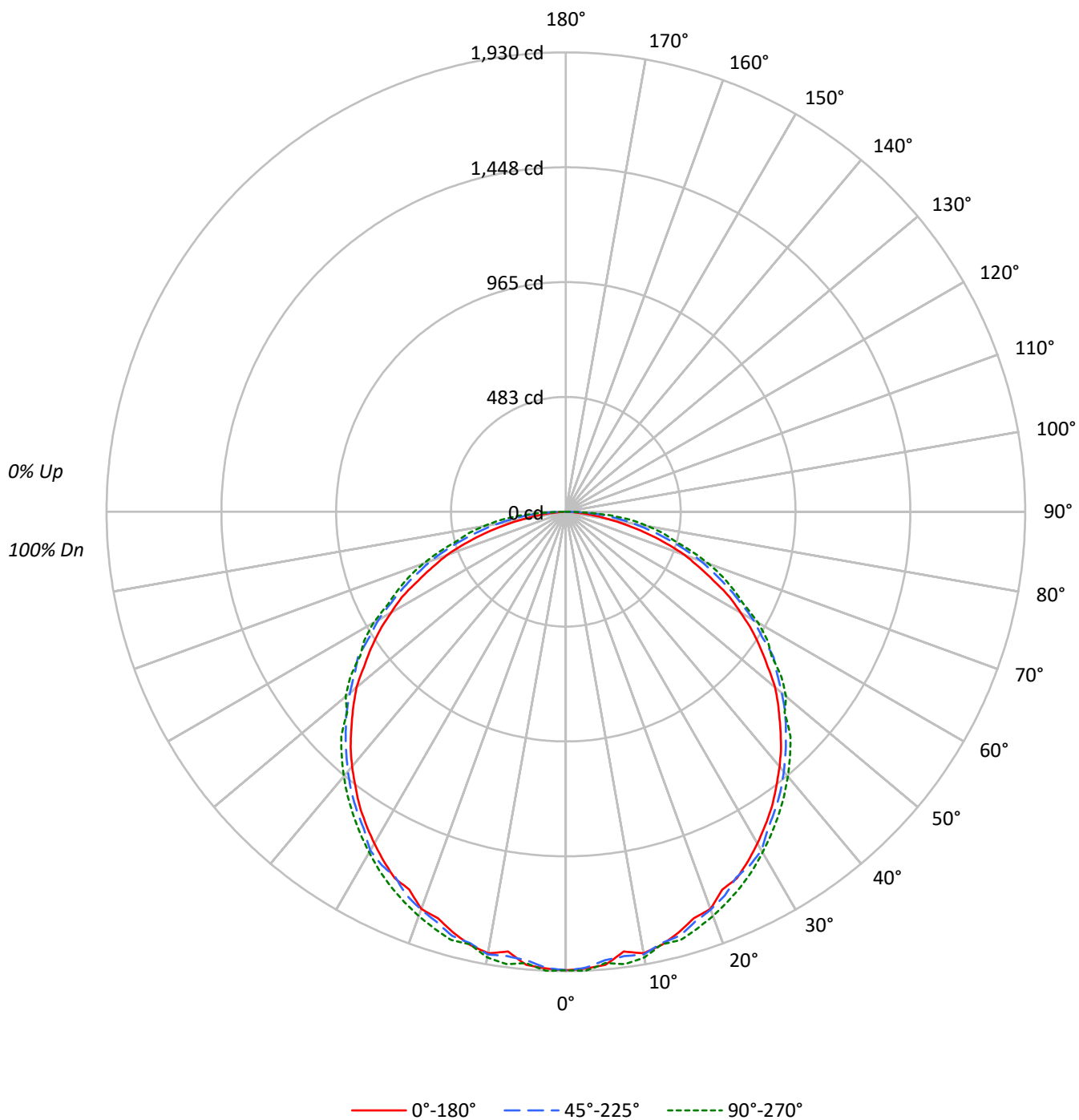
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5750.0 lumens
Efficiency: N/A
Efficacy: 132.2 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°	2950	2950	2950
5°	2937	2907	2927
10°	2929	2936	2957
15°	2902	2925	2954
20°	2895	2900	2946
25°	2872	2864	2938
30°	2846	2907	2923
35°	2824	2864	2911
40°	2793	2848	2901
45°	2758	2833	2891
50°	2736	2822	2878
55°	2667	2847	2817
60°	2599	2786	2858
65°	2482	2726	2820
70°	2380	2702	2860
75°	2107	2622	2802
80°	1664	2561	3099
85°	1018	2738	3534

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3534 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.9	3.2
10°-20°	519.6	9.0
20°-30°	791.7	13.8
30°-40°	963.6	16.8
40°-50°	1010.4	17.6
50°-60°	936.0	16.3
60°-70°	738.1	12.8
70°-80°	456.6	7.9
80°-90°	152.1	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°	1493.2	26.0
0°-40°	2456.8	42.7
0°-60°	4403.2	76.6
0°-90°	5750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5750.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1910	1910	1891	1932	1904	180
15°	1830	1839	1845	1832	1863	516
25°	1699	1709	1694	1741	1738	781
35°	1511	1525	1532	1561	1557	944
45°	1273	1297	1308	1323	1334	984
55°	999	1028	1066	1075	1055	893
65°	685	711	752	780	778	681
75°	356	384	443	477	474	376
85°	58	99	156	189	201	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1926.2	1926.2	1926.2	1926.2	1926.2
2.5°	1920.7	1932.4	1917.5	1930.1	1930.1
5°	1910.5	1909.7	1890.9	1932.4	1903.5
7.5°	1863.5	1896.4	1883.1	1934.0	1916.8
10°	1883.1	1874.5	1887.8	1922.2	1901.1
12.5°	1863.5	1877.6	1856.5	1839.3	1861.2
15°	1829.9	1839.3	1844.8	1831.5	1862.8
17.5°	1790.0	1825.2	1806.4	1800.1	1836.1
20°	1775.9	1777.4	1779.0	1811.1	1807.2
22.5°	1718.0	1749.3	1745.4	1771.2	1774.3
25°	1699.2	1708.6	1694.5	1741.4	1738.3
27.5°	1656.1	1676.5	1674.1	1689.8	1698.4
30°	1609.2	1629.5	1643.6	1626.4	1653.0
32.5°	1560.6	1595.1	1579.4	1611.5	1606.0
35°	1510.6	1524.6	1531.7	1560.6	1556.7
37.5°	1452.6	1476.9	1480.8	1524.6	1505.9
40°	1397.1	1421.3	1424.5	1450.3	1451.1
42.5°	1338.4	1350.1	1366.5	1396.3	1393.9
45°	1273.4	1296.9	1307.8	1322.7	1334.5
47.5°	1210.8	1235.8	1249.9	1274.2	1246.8
50°	1148.2	1166.2	1184.2	1210.0	1207.7
52.5°	1069.1	1109.8	1118.4	1132.5	1141.9
55°	998.7	1028.4	1066.0	1075.4	1055.0
57.5°	927.5	950.2	977.6	1006.5	1004.2
60°	848.4	875.8	909.5	931.4	932.9
62.5°	776.4	795.2	827.3	859.4	842.9
65°	684.8	711.4	752.1	780.3	778.0
67.5°	603.4	632.4	673.9	710.7	712.2
70°	531.4	547.1	603.4	631.6	638.7
72.5°	443.0	470.4	520.5	551.8	554.9
75°	356.1	384.3	443.0	476.6	473.5
77.5°	267.7	308.4	365.5	405.4	418.7
80°	188.6	225.4	290.4	329.5	351.4
82.5°	119.0	157.3	220.7	269.2	282.5
85°	57.9	98.6	155.8	189.4	201.1
87.5°	14.9	40.7	72.0	88.4	95.5
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	15.56	17.23	15.93	17.55	17.86	15.99	17.66	16.36	17.98	18.29
	3H	17.36	18.88	17.74	19.20	19.56	18.06	19.58	18.44	19.91	20.27
	4H	18.01	19.44	18.40	19.78	20.16	18.91	20.34	19.30	20.69	21.06
	6H	18.42	19.75	18.83	20.11	20.50	19.70	21.03	20.11	21.39	21.78
	8H	18.52	19.79	18.94	20.18	20.58	20.04	21.31	20.46	21.70	22.10
	12H	18.56	19.78	18.99	20.16	20.59	20.34	21.56	20.77	21.94	22.37
4H	2H	16.30	17.73	16.70	18.08	18.45	16.63	18.07	17.03	18.41	18.79
	3H	18.33	19.54	18.74	19.94	20.34	18.95	20.16	19.36	20.55	20.95
	4H	19.11	20.20	19.54	20.61	21.05	19.95	21.05	20.38	21.46	21.90
	6H	19.64	20.60	20.09	21.04	21.50	20.90	21.87	21.36	22.31	22.76
	8H	19.79	20.69	20.24	21.13	21.59	21.33	22.23	21.79	22.67	23.13
	12H	19.87	20.68	20.35	21.15	21.62	21.71	22.52	22.19	22.99	23.46
8H	4H	19.56	20.46	20.01	20.90	21.36	20.29	21.19	20.75	21.63	22.10
	6H	20.24	20.99	20.73	21.47	21.95	21.41	22.16	21.90	22.65	23.12
	8H	20.45	21.13	20.96	21.63	22.12	21.95	22.63	22.46	23.14	23.62
	12H	20.60	21.20	21.11	21.69	22.25	22.47	23.07	22.98	23.56	24.12
12H	4H	19.64	20.45	20.12	20.93	21.39	20.33	21.14	20.80	21.61	22.08
	6H	20.37	21.05	20.88	21.55	22.04	21.47	22.15	21.98	22.66	23.14
	8H	20.66	21.26	21.17	21.75	22.31	22.10	22.70	22.60	23.19	23.74