

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: P1588484

Luminaire Tested: 24CZSP-65VHE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588484
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-65VHE-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 7000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

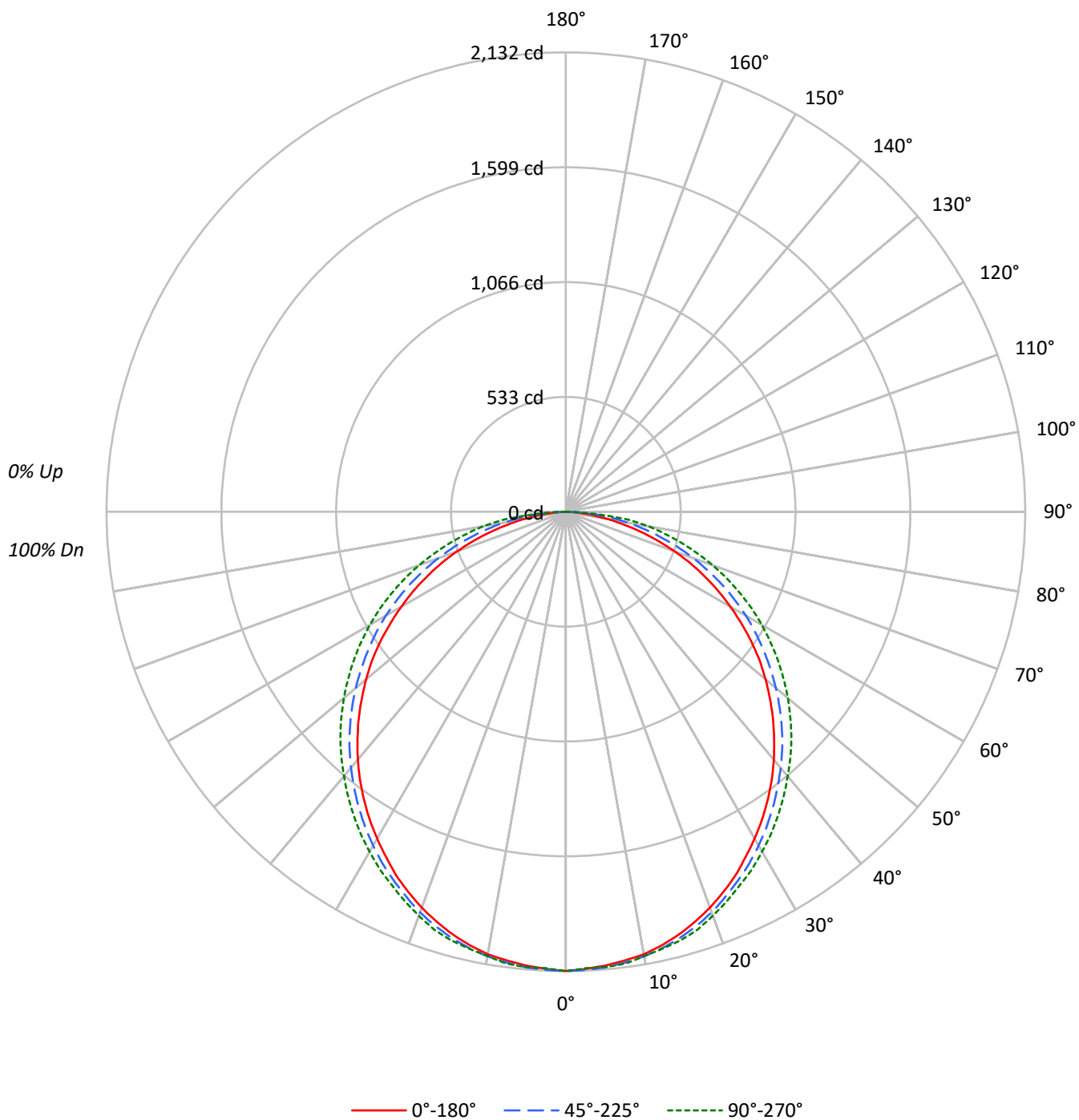
Lumens per Lamp: N/A
Luminaire Lumens: 6223.0 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 50.1
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	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°	3265	3265	3265
5°	3250	3263	3260
10°	3243	3258	3256
15°	3220	3246	3265
20°	3187	3225	3252
25°	3148	3191	3231
30°	3098	3164	3222
35°	3054	3133	3212
40°	3003	3101	3202
45°	2946	3070	3206
50°	2883	3032	3205
55°	2808	2990	3209
60°	2702	2957	3217
65°	2578	2900	3227
70°	2403	2819	3241
75°	2142	2707	3273
80°	1770	2577	3433
85°	1151	2328	3000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3541 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	3.2
10°-20°	577.2	9.3
20°-30°	870.6	14.0
30°-40°	1048.6	16.8
40°-50°	1095.1	17.6
50°-60°	1005.7	16.2
60°-70°	792.1	12.7
70°-80°	486.0	7.8
80°-90°	146.2	2.4
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°	1649.4	26.5
0°-40°	2697.9	43.4
0°-60°	4798.7	77.1
0°-90°	6223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6223.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2132	2132	2132	2132	2132	
5°	2114	2116	2122	2129	2121	201
15°	2030	2035	2047	2059	2059	573
25°	1862	1867	1888	1912	1912	857
35°	1633	1641	1676	1710	1718	1021
45°	1360	1375	1417	1466	1480	1049
55°	1051	1071	1120	1182	1202	939
65°	711	736	800	867	890	704
75°	362	390	457	530	553	384
85°	66	90	132	168	171	86
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2131.5	2131.5	2131.5	2131.5	2131.5
2.5°	2123.4	2127.4	2128.8	2130.2	2120.6
5°	2113.8	2116.5	2122.0	2128.8	2120.6
7.5°	2100.1	2102.9	2109.7	2119.3	2115.2
10°	2085.1	2086.5	2094.7	2101.5	2093.3
12.5°	2060.5	2064.6	2074.2	2079.7	2076.9
15°	2030.5	2034.6	2046.9	2059.2	2059.2
17.5°	1995.0	2000.5	2015.5	2031.9	2033.2
20°	1955.4	1959.5	1978.6	1995.0	1995.0
22.5°	1910.3	1915.8	1934.9	1952.7	1955.4
25°	1862.5	1866.6	1888.5	1911.7	1911.7
27.5°	1806.6	1814.7	1842.1	1865.3	1870.7
30°	1751.9	1758.8	1788.8	1817.5	1821.6
32.5°	1694.6	1702.8	1734.2	1765.6	1772.4
35°	1633.1	1641.3	1675.5	1709.6	1717.8
37.5°	1569.0	1578.5	1614.0	1653.6	1661.8
40°	1502.0	1513.0	1551.2	1593.5	1601.7
42.5°	1431.0	1446.1	1487.0	1530.7	1543.0
45°	1360.0	1375.1	1417.4	1466.5	1480.2
47.5°	1284.9	1302.7	1346.4	1398.3	1413.3
50°	1209.8	1227.6	1272.6	1328.6	1345.0
52.5°	1133.4	1151.1	1197.5	1256.3	1274.0
55°	1051.4	1070.6	1119.7	1182.5	1201.6
57.5°	966.8	991.4	1043.2	1107.4	1126.5
60°	882.1	906.7	965.4	1028.2	1050.1
62.5°	798.8	822.0	882.1	949.0	972.2
65°	711.4	736.0	800.2	867.1	890.3
67.5°	625.4	650.0	714.2	783.8	808.4
70°	536.6	564.0	629.5	699.1	723.7
72.5°	447.9	476.6	543.5	614.5	637.7
75°	361.9	390.5	457.4	529.8	553.0
77.5°	277.2	308.6	374.1	447.9	469.7
80°	200.7	230.8	292.2	364.6	389.2
82.5°	128.4	154.3	215.7	284.0	301.8
85°	65.5	90.1	132.5	168.0	170.7
87.5°	20.5	28.7	43.7	65.5	66.9
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	15.59	17.25	15.95	17.57	17.88	16.42	18.08	16.78	18.40	18.71
	3H	17.34	18.85	17.72	19.18	19.54	18.54	20.04	18.91	20.37	20.73
	4H	17.96	19.39	18.36	19.73	20.11	19.42	20.85	19.82	21.19	21.57
	6H	18.37	19.69	18.78	20.06	20.45	20.21	21.53	20.62	21.89	22.28
	8H	18.48	19.74	18.91	20.13	20.53	20.53	21.79	20.95	22.18	22.57
	12H	18.53	19.74	18.96	20.13	20.55	20.74	21.95	21.17	22.33	22.76
4H	2H	16.36	17.78	16.76	18.13	18.51	17.01	18.43	17.40	18.78	19.15
	3H	18.34	19.54	18.75	19.93	20.33	19.36	20.56	19.77	20.96	21.36
	4H	19.07	20.16	19.51	20.57	21.01	20.41	21.50	20.84	21.91	22.35
	6H	19.60	20.56	20.06	21.00	21.45	21.37	22.32	21.82	22.76	23.21
	8H	19.75	20.64	20.21	21.08	21.55	21.76	22.66	22.22	23.10	23.56
	12H	19.83	20.64	20.31	21.11	21.58	22.04	22.84	22.52	23.32	23.79
8H	4H	19.53	20.43	19.99	20.87	21.33	20.70	21.60	21.16	22.04	22.50
	6H	20.19	20.94	20.69	21.43	21.90	21.81	22.56	22.31	23.05	23.52
	8H	20.41	21.07	20.91	21.58	22.06	22.33	23.00	22.83	23.50	23.98
	12H	20.54	21.14	21.05	21.63	22.18	22.71	23.30	23.22	23.79	24.35
12H	4H	19.62	20.43	20.10	20.90	21.37	20.73	21.53	21.21	22.01	22.47
	6H	20.33	21.00	20.83	21.50	21.99	21.86	22.53	22.37	23.04	23.52
	8H	20.61	21.20	21.11	21.69	22.25	22.44	23.03	22.95	23.52	24.08