

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: P1588487

Luminaire Tested: 24CZSP-65VHE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588487
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-65VHE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

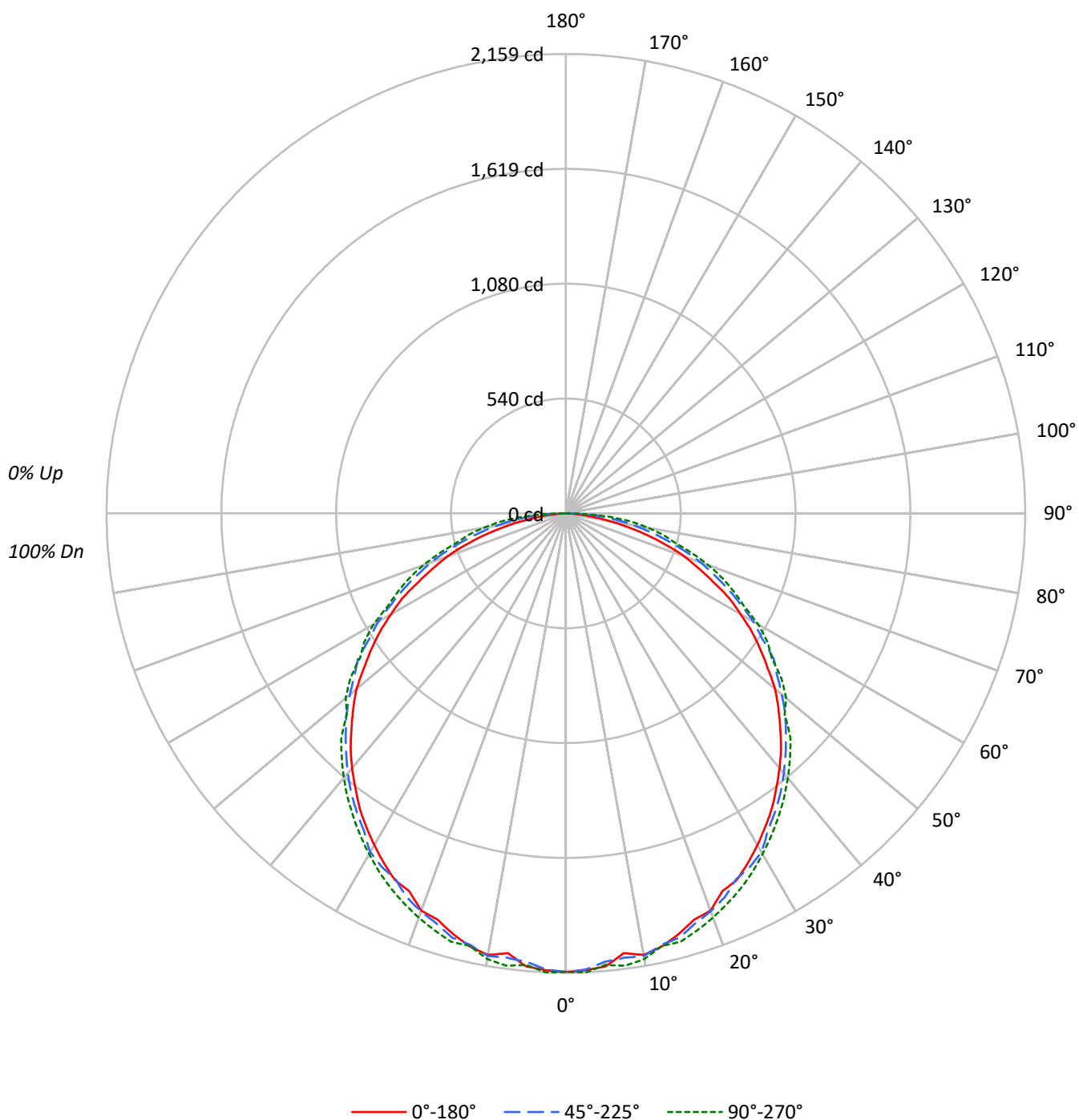
Lumens per Lamp: N/A
Luminaire Lumens: 6433.0 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1588487

CATALOG NUMBER: 24CZSP-65VHE-L940

Luminous Intensity Polar Plot



TEST NUMBER: P1588487

CATALOG NUMBER: 24CZSP-65VHE-L940

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°	3301	3301	3301
5°	3286	3253	3274
10°	3277	3285	3308
15°	3246	3273	3305
20°	3238	3244	3296
25°	3213	3204	3287
30°	3184	3252	3271
35°	3160	3204	3256
40°	3125	3186	3246
45°	3086	3169	3234
50°	3061	3157	3219
55°	2984	3185	3152
60°	2908	3117	3197
65°	2777	3050	3154
70°	2663	3023	3200
75°	2358	2933	3135
80°	1861	2866	3468
85°	1139	3063	3954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3954 cd/sqm

TEST NUMBER: P1588487

CATALOG NUMBER: 24CZSP-65VHE-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	3.2
10°-20°	581.3	9.0
20°-30°	885.7	13.8
30°-40°	1078.1	16.8
40°-50°	1130.4	17.6
50°-60°	1047.2	16.3
60°-70°	825.8	12.8
70°-80°	510.9	7.9
80°-90°	170.1	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°	1670.6	26.0
0°-40°	2748.7	42.7
0°-60°	4926.3	76.6
0°-90°	6433.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6433.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2155	2155	2155	2155	2155	
5°	2137	2137	2116	2162	2130	202
15°	2047	2058	2064	2049	2084	578
25°	1901	1912	1896	1948	1945	874
35°	1690	1706	1714	1746	1742	1056
45°	1425	1451	1463	1480	1493	1101
55°	1117	1151	1193	1203	1180	999
65°	766	796	842	873	870	762
75°	398	430	496	533	530	421
85°	65	110	174	212	225	87
90°	0	0	0	0	0	

TEST NUMBER: P1588487

CATALOG NUMBER: 24CZSP-65VHE-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2155.0	2155.0	2155.0	2155.0	2155.0
2.5°	2148.8	2162.0	2145.3	2159.3	2159.3
5°	2137.4	2136.6	2115.5	2162.0	2129.6
7.5°	2084.9	2121.7	2106.8	2163.7	2144.4
10°	2106.8	2097.2	2112.0	2150.6	2126.9
12.5°	2084.9	2100.7	2077.0	2057.8	2082.3
15°	2047.2	2057.8	2063.9	2049.0	2084.0
17.5°	2002.6	2042.0	2021.0	2014.0	2054.3
20°	1986.8	1988.6	1990.3	2026.2	2021.9
22.5°	1922.0	1957.1	1952.7	1981.6	1985.1
25°	1901.0	1911.5	1895.8	1948.3	1944.8
27.5°	1852.9	1875.6	1873.0	1890.5	1900.1
30°	1800.3	1823.1	1838.8	1819.6	1849.4
32.5°	1746.0	1784.6	1767.0	1802.9	1796.8
35°	1690.0	1705.7	1713.6	1746.0	1741.6
37.5°	1625.2	1652.3	1656.7	1705.7	1684.7
40°	1563.0	1590.2	1593.7	1622.6	1623.4
42.5°	1497.3	1510.5	1528.9	1562.1	1559.5
45°	1424.7	1450.9	1463.2	1479.8	1493.0
47.5°	1354.6	1382.6	1398.4	1425.5	1394.9
50°	1284.6	1304.7	1324.8	1353.7	1351.1
52.5°	1196.1	1241.7	1251.3	1267.1	1277.6
55°	1117.3	1150.6	1192.6	1203.1	1180.4
57.5°	1037.6	1063.0	1093.7	1126.1	1123.4
60°	949.2	979.8	1017.5	1042.0	1043.8
62.5°	868.6	889.7	925.6	961.5	943.1
65°	766.2	796.0	841.5	873.0	870.4
67.5°	675.1	707.5	753.9	795.1	796.8
70°	594.6	612.1	675.1	706.6	714.5
72.5°	495.6	526.3	582.3	617.3	620.8
75°	398.4	429.9	495.6	533.3	529.8
77.5°	299.5	345.0	408.9	453.6	468.5
80°	211.0	252.2	324.9	368.6	393.2
82.5°	133.1	176.0	246.9	301.2	316.1
85°	64.8	110.3	174.3	211.9	225.0
87.5°	16.6	45.5	80.6	98.9	106.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588487

CATALOG NUMBER: 24CZSP-65VHE-L940

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	15.95	17.62	16.32	17.94	18.25	16.38	18.05	16.75	18.37	18.68
	3H	17.75	19.27	18.13	19.59	19.95	18.45	19.97	18.83	20.30	20.66
	4H	18.40	19.83	18.79	20.17	20.55	19.30	20.73	19.69	21.08	21.45
	6H	18.81	20.14	19.22	20.50	20.89	20.09	21.42	20.50	21.78	22.17
	8H	18.91	20.18	19.33	20.57	20.97	20.43	21.70	20.85	22.09	22.49
	12H	18.95	20.17	19.38	20.55	20.98	20.73	21.95	21.16	22.33	22.76
4H	2H	16.69	18.12	17.09	18.47	18.84	17.02	18.46	17.42	18.80	19.18
	3H	18.72	19.93	19.13	20.33	20.73	19.34	20.54	19.75	20.94	21.34
	4H	19.50	20.59	19.93	21.00	21.44	20.34	21.44	20.77	21.85	22.29
	6H	20.03	20.99	20.48	21.43	21.89	21.29	22.26	21.75	22.70	23.15
	8H	20.18	21.08	20.63	21.52	21.98	21.72	22.62	22.18	23.06	23.52
	12H	20.26	21.07	20.74	21.54	22.01	22.10	22.91	22.58	23.38	23.85
8H	4H	19.95	20.85	20.40	21.29	21.75	20.68	21.58	21.14	22.02	22.49
	6H	20.63	21.38	21.12	21.86	22.34	21.80	22.55	22.29	23.04	23.51
	8H	20.84	21.52	21.35	22.02	22.51	22.34	23.02	22.85	23.53	24.01
	12H	20.99	21.59	21.50	22.08	22.64	22.86	23.46	23.37	23.95	24.51
12H	4H	20.03	20.84	20.51	21.32	21.78	20.72	21.53	21.19	22.00	22.47
	6H	20.76	21.44	21.27	21.94	22.43	21.86	22.54	22.37	23.05	23.53
	8H	21.05	21.65	21.56	22.14	22.70	22.49	23.09	22.99	23.58	24.13