

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: P1588486

Luminaire Tested: 24CZSP-65VHE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588486
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-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

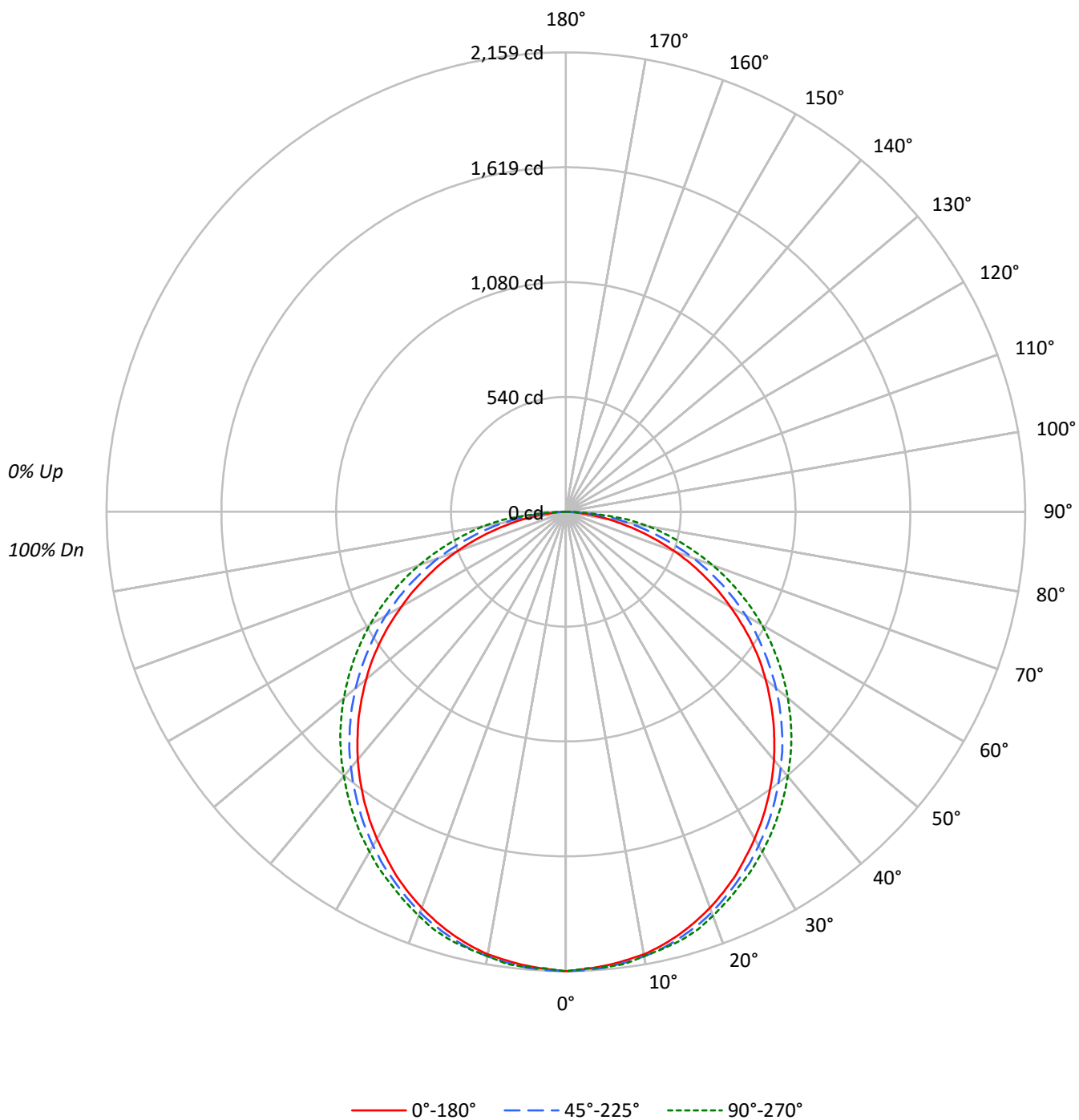
Lumens per Lamp: N/A
Luminaire Lumens: 6304.0 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1588486

CATALOG NUMBER: 24CZSP-65VHE-L940-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588486

CATALOG NUMBER: 24CZSP-65VHE-L940-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	3307	3307	3307
5°	3292	3305	3303
10°	3285	3300	3298
15°	3262	3288	3308
20°	3229	3267	3294
25°	3189	3233	3273
30°	3139	3205	3264
35°	3093	3174	3254
40°	3042	3142	3244
45°	2984	3110	3248
50°	2920	3072	3247
55°	2844	3029	3251
60°	2737	2996	3258
65°	2612	2938	3269
70°	2434	2856	3283
75°	2169	2742	3315
80°	1793	2611	3477
85°	1167	2358	3038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3587 cd/sqm

TEST NUMBER: P1588486

CATALOG NUMBER: 24CZSP-65VHE-L940-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.2	3.2
10°-20°	584.7	9.3
20°-30°	881.9	14.0
30°-40°	1062.2	16.8
40°-50°	1109.3	17.6
50°-60°	1018.8	16.2
60°-70°	802.4	12.7
70°-80°	492.3	7.8
80°-90°	148.1	2.3
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°	1670.8	26.5
0°-40°	2733.1	43.4
0°-60°	4861.2	77.1
0°-90°	6304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6304.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2159	2159	2159	2159	2159	
5°	2141	2144	2150	2156	2148	203
15°	2057	2061	2074	2086	2086	580
25°	1887	1891	1913	1937	1937	869
35°	1654	1663	1697	1732	1740	1035
45°	1378	1393	1436	1486	1500	1062
55°	1065	1084	1134	1198	1217	951
65°	721	746	811	878	902	713
75°	367	396	463	537	560	389
85°	66	91	134	170	173	87
90°	0	0	0	0	0	

TEST NUMBER: P1588486

CATALOG NUMBER: 24CZSP-65VHE-L940-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2159.3	2159.3	2159.3	2159.3	2159.3
2.5°	2151.0	2155.1	2156.5	2157.9	2148.2
5°	2141.3	2144.1	2149.6	2156.5	2148.2
7.5°	2127.5	2130.2	2137.2	2146.8	2142.7
10°	2112.3	2113.6	2121.9	2128.9	2120.6
12.5°	2087.4	2091.5	2101.2	2106.7	2104.0
15°	2056.9	2061.1	2073.5	2086.0	2086.0
17.5°	2021.0	2026.5	2041.7	2058.3	2059.7
20°	1980.8	1985.0	2004.4	2021.0	2021.0
22.5°	1935.2	1940.7	1960.1	1978.1	1980.8
25°	1886.8	1890.9	1913.1	1936.6	1936.6
27.5°	1830.1	1838.4	1866.0	1889.6	1895.1
30°	1774.7	1781.7	1812.1	1841.1	1845.3
32.5°	1716.6	1724.9	1756.8	1788.6	1795.5
35°	1654.4	1662.7	1697.3	1731.9	1740.2
37.5°	1589.4	1599.1	1635.0	1675.1	1683.4
40°	1521.6	1532.7	1571.4	1614.3	1622.6
42.5°	1449.7	1464.9	1506.4	1550.6	1563.1
45°	1377.7	1393.0	1435.8	1485.6	1499.5
47.5°	1301.7	1319.6	1363.9	1416.5	1431.7
50°	1225.6	1243.6	1289.2	1345.9	1362.5
52.5°	1148.1	1166.1	1213.1	1272.6	1290.6
55°	1065.1	1084.5	1134.3	1197.9	1217.3
57.5°	979.4	1004.3	1056.8	1121.8	1141.2
60°	893.6	918.5	978.0	1041.6	1063.7
62.5°	809.2	832.7	893.6	961.4	984.9
65°	720.7	745.6	810.6	878.4	901.9
67.5°	633.5	658.4	723.5	794.0	818.9
70°	543.6	571.3	637.7	708.2	733.1
72.5°	453.7	482.8	550.5	622.5	646.0
75°	366.6	395.6	463.4	536.7	560.2
77.5°	280.8	312.6	379.0	453.7	475.8
80°	203.3	233.8	296.0	369.3	394.2
82.5°	130.0	156.3	218.6	287.7	305.7
85°	66.4	91.3	134.2	170.1	172.9
87.5°	20.7	29.0	44.3	66.4	67.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588486

CATALOG NUMBER: 24CZSP-65VHE-L940-S

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	15.63	17.30	16.00	17.61	17.92	16.46	18.13	16.83	18.44	18.75
	3H	17.39	18.90	17.77	19.22	19.58	18.58	20.09	18.96	20.41	20.77
	4H	18.01	19.43	18.41	19.78	20.15	19.47	20.89	19.87	21.24	21.61
	6H	18.42	19.74	18.83	20.10	20.49	20.25	21.57	20.66	21.93	22.32
	8H	18.53	19.79	18.95	20.18	20.58	20.57	21.83	20.99	22.22	22.62
	12H	18.58	19.79	19.01	20.17	20.60	20.78	21.99	21.21	22.37	22.80
4H	2H	16.41	17.83	16.80	18.18	18.55	17.05	18.47	17.45	18.82	19.20
	3H	18.38	19.58	18.79	19.98	20.38	19.41	20.60	19.82	21.00	21.40
	4H	19.12	20.21	19.55	20.62	21.05	20.46	21.55	20.89	21.96	22.39
	6H	19.65	20.60	20.10	21.04	21.49	21.41	22.36	21.86	22.80	23.26
	8H	19.79	20.69	20.25	21.13	21.59	21.81	22.70	22.27	23.14	23.61
	12H	19.88	20.68	20.36	21.16	21.62	22.09	22.89	22.56	23.36	23.83
8H	4H	19.58	20.47	20.04	20.91	21.38	20.75	21.64	21.21	22.08	22.55
	6H	20.24	20.98	20.73	21.47	21.94	21.86	22.60	22.35	23.09	23.56
	8H	20.45	21.12	20.96	21.62	22.11	22.37	23.04	22.88	23.54	24.03
	12H	20.59	21.18	21.09	21.67	22.23	22.76	23.35	23.26	23.84	24.40
12H	4H	19.67	20.47	20.15	20.95	21.41	20.77	21.58	21.25	22.05	22.52
	6H	20.37	21.04	20.88	21.55	22.03	21.91	22.58	22.41	23.08	23.57
	8H	20.65	21.24	21.16	21.73	22.29	22.49	23.08	22.99	23.57	24.13