

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: P1588627

Luminaire Tested: 24CZSP-A-43HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-43HE-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

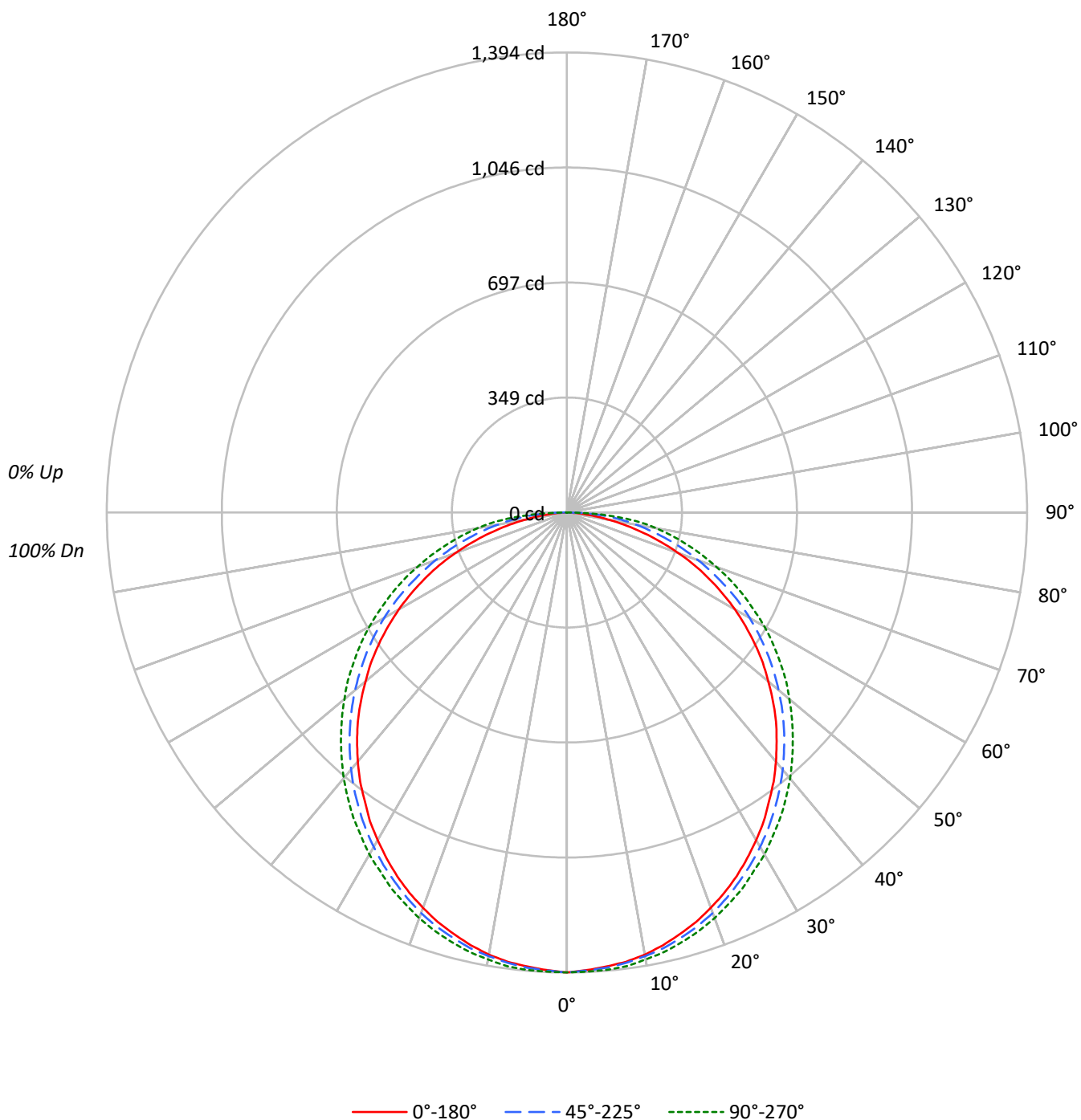
Lumens per Lamp: N/A
Luminaire Lumens: 4134.0 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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

TEST NUMBER: P1588627

CATALOG NUMBER: 24CZSP-A-43HE-L940

Luminous Intensity Polar Plot



TEST NUMBER: P1588627

CATALOG NUMBER: 24CZSP-A-43HE-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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	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	29
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°	2134	2134	2134
5°	2123	2128	2139
10°	2116	2123	2139
15°	2097	2115	2137
20°	2077	2106	2132
25°	2055	2086	2125
30°	2027	2070	2117
35°	1996	2052	2109
40°	1970	2034	2102
45°	1941	2015	2097
50°	1897	1996	2097
55°	1857	1977	2102
60°	1801	1959	2117
65°	1725	1928	2131
70°	1614	1896	2157
75°	1436	1869	2227
80°	1181	1877	2422
85°	805	2091	2675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2675 cd/sqm

TEST NUMBER: P1588627

CATALOG NUMBER: 24CZSP-A-43HE-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	3.2
10°-20°	377.6	9.1
20°-30°	571.0	13.8
30°-40°	689.1	16.7
40°-50°	720.5	17.4
50°-60°	664.8	16.1
60°-70°	528.6	12.8
70°-80°	333.6	8.1
80°-90°	117.0	2.8
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°	1080.5	26.1
0°-40°	1769.6	42.8
0°-60°	3154.8	76.3
0°-90°	4134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1381	1391	1384	1388	1391	131
15°	1323	1338	1334	1344	1348	373
25°	1216	1234	1234	1251	1257	560
35°	1068	1090	1097	1119	1128	669
45°	896	915	930	958	968	690
55°	696	716	740	776	787	621
65°	476	498	532	577	588	470
75°	243	270	316	363	376	257
85°	46	76	119	148	152	58
90°	0	0	0	0	0	

TEST NUMBER: P1588627

CATALOG NUMBER: 24CZSP-A-43HE-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.6	1393.6	1393.6	1393.6	1393.6
2.5°	1387.9	1397.0	1389.0	1393.6	1392.4
5°	1381.0	1391.3	1384.4	1387.9	1391.3
7.5°	1373.0	1384.4	1376.4	1382.1	1386.7
10°	1360.4	1371.8	1365.0	1371.8	1375.3
12.5°	1343.2	1357.0	1352.4	1360.4	1363.8
15°	1322.6	1337.5	1334.1	1344.4	1347.8
17.5°	1300.9	1316.9	1314.6	1326.1	1329.5
20°	1274.6	1292.9	1291.8	1303.2	1307.8
22.5°	1247.1	1265.4	1264.3	1276.9	1282.6
25°	1216.2	1234.5	1234.5	1250.6	1257.4
27.5°	1181.9	1202.5	1203.7	1219.7	1225.4
30°	1146.4	1167.0	1170.5	1187.6	1196.8
32.5°	1109.8	1129.3	1135.0	1154.5	1161.3
35°	1067.5	1090.4	1097.2	1119.0	1128.1
37.5°	1028.6	1049.2	1058.3	1081.2	1090.4
40°	985.1	1006.9	1017.2	1042.3	1051.5
42.5°	940.5	962.2	973.7	1001.1	1010.3
45°	895.9	915.3	930.2	957.7	968.0
47.5°	846.7	868.4	884.4	914.2	924.5
50°	796.3	819.2	837.5	869.6	879.9
52.5°	748.3	768.9	789.5	824.9	836.4
55°	695.6	716.2	740.3	775.7	787.2
57.5°	641.9	662.5	689.9	727.7	740.3
60°	588.1	608.7	639.6	678.5	691.1
62.5°	532.0	552.6	587.0	627.0	638.4
65°	476.0	497.7	532.0	576.7	588.1
67.5°	418.8	440.5	477.1	524.0	536.6
70°	360.4	384.4	423.3	470.2	481.7
72.5°	299.8	327.2	370.7	416.5	430.2
75°	242.6	270.0	315.8	362.7	376.4
77.5°	186.5	217.4	263.2	312.4	327.2
80°	133.9	164.8	212.8	260.9	274.6
82.5°	85.8	117.8	165.9	211.7	223.1
85°	45.8	75.5	119.0	147.6	152.2
87.5°	14.9	38.9	53.8	70.9	72.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588627

CATALOG NUMBER: 24CZSP-A-43HE-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	14.19	15.86	14.56	16.18	16.49	14.91	16.58	15.28	16.90	17.21
	3H	15.98	17.50	16.35	17.82	18.18	17.08	18.60	17.46	18.92	19.28
	4H	16.61	18.04	17.01	18.39	18.76	18.01	19.45	18.41	19.79	20.17
	6H	17.03	18.36	17.44	18.73	19.12	18.87	20.20	19.28	20.57	20.96
	8H	17.14	18.42	17.57	18.81	19.20	19.25	20.52	19.67	20.91	21.31
	12H	17.20	18.42	17.63	18.81	19.23	19.56	20.78	19.99	21.16	21.59
4H	2H	14.96	16.39	15.35	16.74	17.11	15.52	16.95	15.91	17.30	17.67
	3H	16.98	18.19	17.39	18.58	18.98	17.93	19.14	18.34	19.53	19.93
	4H	17.74	18.84	18.17	19.25	19.69	19.03	20.13	19.46	20.54	20.98
	6H	18.29	19.26	18.75	19.70	20.15	20.07	21.04	20.52	21.48	21.93
	8H	18.45	19.36	18.91	19.80	20.26	20.54	21.44	20.99	21.88	22.35
	12H	18.55	19.37	19.03	19.84	20.31	20.93	21.75	21.41	22.22	22.69
8H	4H	18.23	19.13	18.69	19.57	20.04	19.35	20.25	19.81	20.69	21.16
	6H	18.94	19.69	19.43	20.18	20.65	20.57	21.32	21.06	21.81	22.28
	8H	19.18	19.86	19.69	20.36	20.85	21.16	21.84	21.67	22.35	22.83
	12H	19.35	19.95	19.85	20.44	21.00	21.71	22.31	22.21	22.80	23.36
12H	4H	18.33	19.15	18.81	19.62	20.09	19.38	20.20	19.86	20.67	21.14
	6H	19.10	19.78	19.60	20.28	20.77	20.63	21.31	21.14	21.82	22.30
	8H	19.42	20.03	19.93	20.51	21.07	21.31	21.91	21.81	22.40	22.96