

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: P1588239

Luminaire Tested: 24CZSP-37HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588239
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-37HE-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

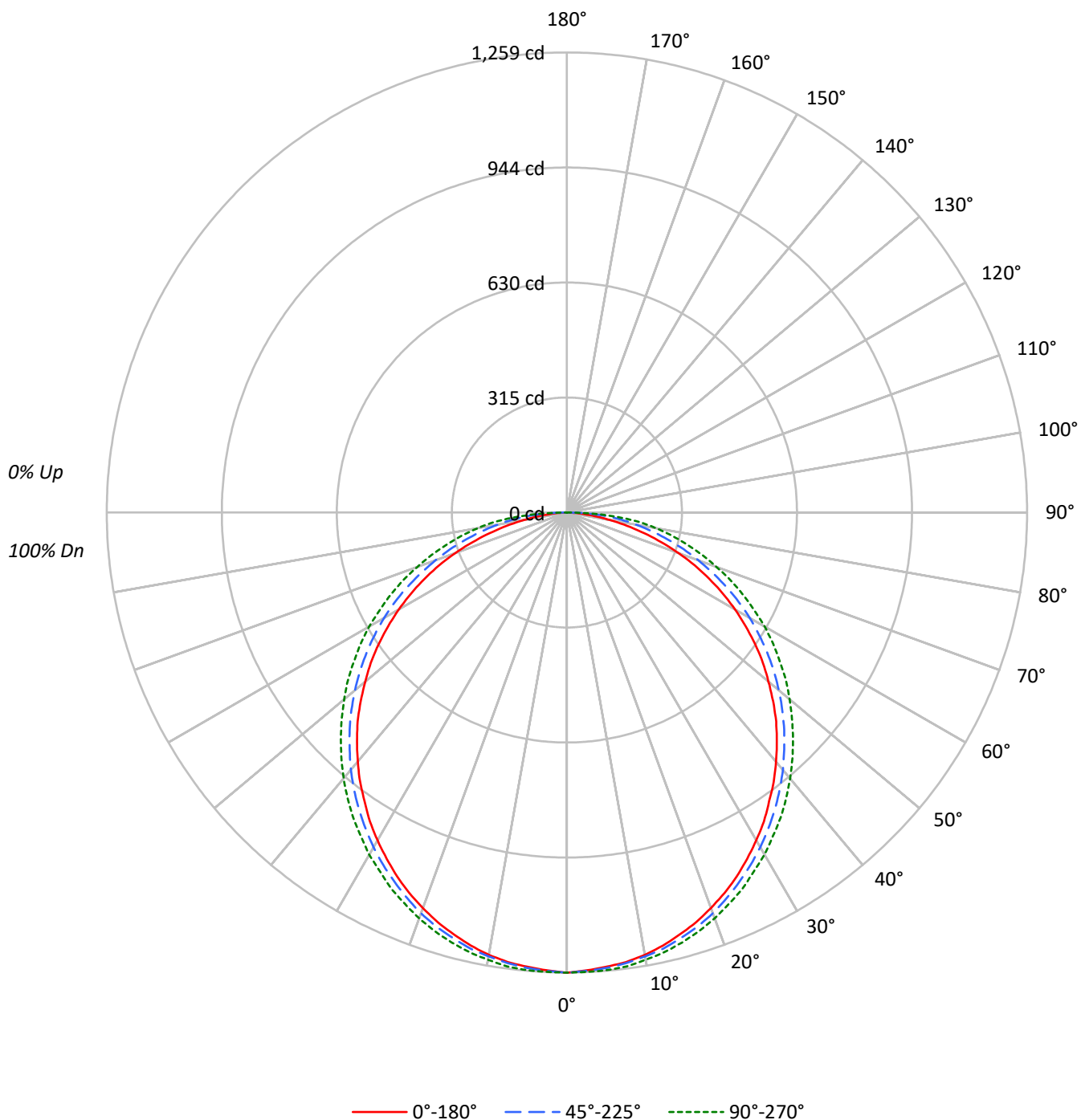
Lumens per Lamp: N/A
Luminaire Lumens: 3736.0 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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	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°	1929	1929	1929
5°	1919	1924	1933
10°	1912	1919	1933
15°	1895	1912	1931
20°	1878	1903	1926
25°	1857	1885	1920
30°	1832	1871	1913
35°	1804	1854	1906
40°	1780	1838	1900
45°	1754	1821	1895
50°	1715	1804	1895
55°	1679	1786	1900
60°	1628	1771	1913
65°	1559	1742	1926
70°	1459	1713	1949
75°	1297	1689	2013
80°	1067	1696	2189
85°	728	1889	2416

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2416 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	3.2
10°-20°	341.3	9.1
20°-30°	516.0	13.8
30°-40°	622.7	16.7
40°-50°	651.1	17.4
50°-60°	600.8	16.1
60°-70°	477.7	12.8
70°-80°	301.5	8.1
80°-90°	105.7	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°	976.5	26.1
0°-40°	1599.2	42.8
0°-60°	2851.1	76.3
0°-90°	3736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1259	1259	1259	1259	1259	
5°	1248	1257	1251	1254	1257	119
15°	1195	1209	1206	1215	1218	337
25°	1099	1116	1116	1130	1136	506
35°	965	985	992	1011	1020	605
45°	810	827	841	866	875	624
55°	629	647	669	701	711	561
65°	430	450	481	521	532	425
75°	219	244	285	328	340	232
85°	41	68	108	133	138	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1259.4	1259.4	1259.4	1259.4	1259.4
2.5°	1254.2	1262.5	1255.3	1259.4	1258.4
5°	1248.0	1257.3	1251.1	1254.2	1257.3
7.5°	1240.8	1251.1	1243.9	1249.1	1253.2
10°	1229.4	1239.8	1233.6	1239.8	1242.9
12.5°	1213.9	1226.3	1222.2	1229.4	1232.5
15°	1195.3	1208.8	1205.6	1215.0	1218.1
17.5°	1175.7	1190.1	1188.1	1198.4	1201.5
20°	1151.9	1168.4	1167.4	1177.7	1181.9
22.5°	1127.1	1143.6	1142.6	1153.9	1159.1
25°	1099.1	1115.7	1115.7	1130.2	1136.4
27.5°	1068.1	1086.7	1087.8	1102.2	1107.4
30°	1036.1	1054.7	1057.8	1073.3	1081.6
32.5°	1003.0	1020.6	1025.7	1043.3	1049.5
35°	964.7	985.4	991.6	1011.3	1019.5
37.5°	929.6	948.2	956.5	977.1	985.4
40°	890.3	909.9	919.2	942.0	950.3
42.5°	850.0	869.6	879.9	904.8	913.0
45°	809.6	827.2	840.6	865.5	874.8
47.5°	765.2	784.8	799.3	826.2	835.5
50°	719.7	740.3	756.9	785.8	795.1
52.5°	676.2	694.9	713.5	745.5	755.9
55°	628.7	647.3	669.0	701.1	711.4
57.5°	580.1	598.7	623.5	657.6	669.0
60°	531.5	550.1	578.0	613.2	624.5
62.5°	480.8	499.4	530.4	566.6	577.0
65°	430.1	449.8	480.8	521.1	531.5
67.5°	378.4	398.1	431.2	473.6	484.9
70°	325.7	347.4	382.6	425.0	435.3
72.5°	270.9	295.7	335.0	376.4	388.8
75°	219.2	244.0	285.4	327.8	340.2
77.5°	168.5	196.5	237.8	282.3	295.7
80°	121.0	148.9	192.3	235.8	248.2
82.5°	77.6	106.5	149.9	191.3	201.6
85°	41.4	68.2	107.5	133.4	137.5
87.5°	13.4	35.2	48.6	64.1	65.1
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	13.84	15.51	14.20	15.83	16.14	14.56	16.23	14.93	16.55	16.86
	3H	15.63	17.14	16.00	17.47	17.83	16.73	18.24	17.10	18.57	18.93
	4H	16.26	17.69	16.65	18.04	18.41	17.66	19.09	18.06	19.44	19.81
	6H	16.68	18.01	17.09	18.37	18.76	18.52	19.85	18.93	20.21	20.61
	8H	16.79	18.07	17.22	18.45	18.85	18.90	20.17	19.32	20.56	20.96
	12H	16.85	18.07	17.28	18.45	18.88	19.21	20.43	19.64	20.81	21.24
4H	2H	14.60	16.04	15.00	16.38	16.76	15.16	16.60	15.56	16.94	17.32
	3H	16.63	17.84	17.03	18.23	18.63	17.58	18.79	17.99	19.18	19.58
	4H	17.39	18.49	17.82	18.90	19.33	18.68	19.78	19.11	20.19	20.62
	6H	17.94	18.91	18.39	19.35	19.80	19.72	20.68	20.17	21.12	21.58
	8H	18.10	19.01	18.56	19.45	19.91	20.18	21.09	20.64	21.53	21.99
	12H	18.20	19.01	18.68	19.49	19.96	20.58	21.40	21.06	21.87	22.34
8H	4H	17.88	18.78	18.33	19.22	19.69	19.00	19.90	19.45	20.34	20.80
	6H	18.59	19.34	19.08	19.83	20.30	20.21	20.97	20.71	21.46	21.93
	8H	18.83	19.51	19.33	20.01	20.50	20.81	21.49	21.32	22.00	22.48
	12H	19.00	19.60	19.50	20.09	20.65	21.35	21.96	21.86	22.45	23.00
12H	4H	17.98	18.80	18.46	19.27	19.74	19.03	19.84	19.51	20.32	20.79
	6H	18.75	19.43	19.25	19.93	20.42	20.28	20.96	20.78	21.46	21.95
	8H	19.07	19.67	19.57	20.16	20.72	20.95	21.56	21.46	22.05	22.60