

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: P1588233

Luminaire Tested: 24CZSP-37HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588233
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 3500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

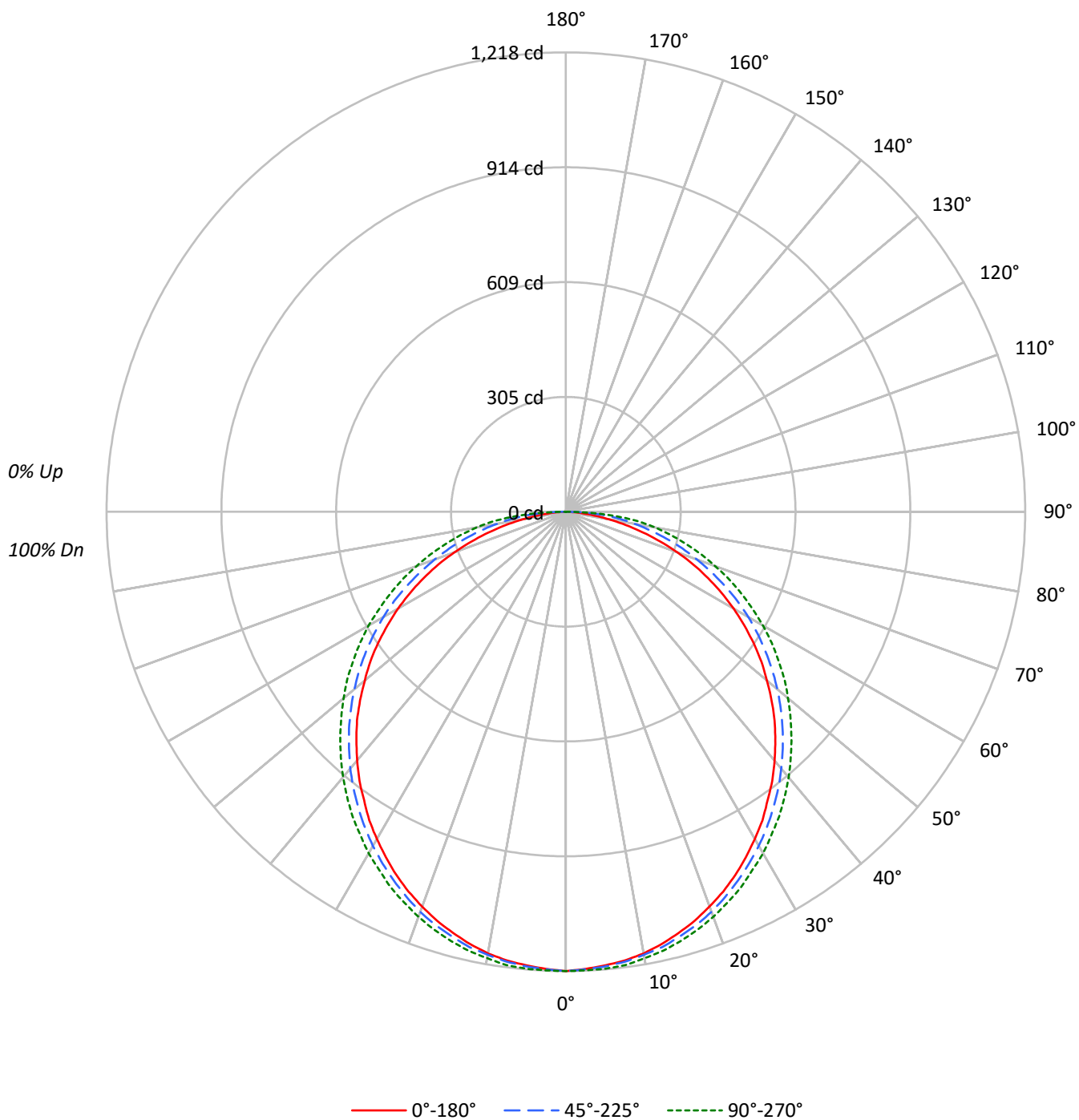
Lumens per Lamp: N/A
Luminaire Lumens: 3613.1 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1866	1866	1866
5°	1856	1860	1870
10°	1849	1855	1869
15°	1833	1849	1868
20°	1816	1840	1863
25°	1796	1823	1857
30°	1772	1809	1850
35°	1744	1793	1844
40°	1721	1777	1837
45°	1696	1761	1832
50°	1658	1744	1832
55°	1624	1728	1837
60°	1575	1712	1850
65°	1508	1685	1863
70°	1411	1657	1885
75°	1255	1633	1947
80°	1032	1641	2117
85°	703	1828	2337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 2337 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	3.2
10°-20°	330.0	9.1
20°-30°	499.1	13.8
30°-40°	602.2	16.7
40°-50°	629.7	17.4
50°-60°	581.0	16.1
60°-70°	462.0	12.8
70°-80°	291.6	8.1
80°-90°	102.2	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°	944.4	26.1
0°-40°	1546.6	42.8
0°-60°	2757.3	76.3
0°-90°	3613.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3613.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1207	1216	1210	1213	1216	115
15°	1156	1169	1166	1175	1178	326
25°	1063	1079	1079	1093	1099	490
35°	933	953	959	978	986	585
45°	783	800	813	837	846	603
55°	608	626	647	678	688	543
65°	416	435	465	504	514	411
75°	212	236	276	317	329	225
85°	40	66	104	129	133	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218	1218	1218	1218	1218
2.5°	1213	1221	1214	1218	1217
5°	1207	1216	1210	1213	1216
7.5°	1200	1210	1203	1208	1212
10°	1189	1199	1193	1199	1202
12.5°	1174	1186	1182	1189	1192
15°	1156	1169	1166	1175	1178
17.5°	1137	1151	1149	1159	1162
20°	1114	1130	1129	1139	1143
22.5°	1090	1106	1105	1116	1121
25°	1063	1079	1079	1093	1099
27.5°	1033	1051	1052	1066	1071
30°	1002	1020	1023	1038	1046
32.5°	970	987	992	1009	1015
35°	933	953	959	978	986
37.5°	899	917	925	945	953
40°	861	880	889	911	919
42.5°	822	841	851	875	883
45°	783	800	813	837	846
47.5°	740	759	773	799	808
50°	696	716	732	760	769
52.5°	654	672	690	721	731
55°	608	626	647	678	688
57.5°	561	579	603	636	647
60°	514	532	559	593	604
62.5°	465	483	513	548	558
65°	416	435	465	504	514
67.5°	366	385	417	458	469
70°	315	336	370	411	421
72.5°	262	286	324	364	376
75°	212	236	276	317	329
77.5°	163	190	230	273	286
80°	117	144	186	228	240
82.5°	75	103	145	185	195
85°	40	66	104	129	133
87.5°	13	34	47	62	63
90°	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	13.72	15.39	14.09	15.71	16.02	14.44	16.12	14.81	16.43	16.74
	3H	15.51	17.03	15.89	17.35	17.71	16.61	18.13	16.99	18.45	18.81
	4H	16.14	17.57	16.54	17.92	18.30	17.54	18.98	17.94	19.32	19.70
	6H	16.56	17.90	16.97	18.26	18.65	18.40	19.74	18.81	20.10	20.49
	8H	16.68	17.95	17.10	18.34	18.74	18.78	20.05	19.20	20.44	20.84
	12H	16.73	17.96	17.16	18.34	18.77	19.09	20.31	19.52	20.69	21.12
4H	2H	14.49	15.92	14.89	16.27	16.64	15.05	16.48	15.45	16.83	17.20
	3H	16.51	17.72	16.92	18.12	18.51	17.46	18.67	17.87	19.07	19.46
	4H	17.27	18.37	17.70	18.78	19.22	18.56	19.66	18.99	20.07	20.51
	6H	17.83	18.79	18.28	19.23	19.68	19.60	20.57	20.06	21.01	21.46
	8H	17.99	18.89	18.44	19.33	19.79	20.07	20.97	20.53	21.41	21.88
	12H	18.08	18.90	18.56	19.37	19.84	20.46	21.28	20.94	21.75	22.22
8H	4H	17.76	18.66	18.22	19.11	19.57	18.88	19.78	19.34	20.22	20.69
	6H	18.47	19.23	18.96	19.71	20.18	20.10	20.85	20.59	21.34	21.81
	8H	18.71	19.39	19.22	19.89	20.38	20.70	21.38	21.20	21.88	22.36
	12H	18.88	19.49	19.39	19.97	20.53	21.24	21.84	21.74	22.33	22.89
12H	4H	17.86	18.68	18.34	19.15	19.62	18.91	19.73	19.39	20.20	20.67
	6H	18.63	19.31	19.14	19.82	20.30	20.16	20.84	20.67	21.35	21.83
	8H	18.95	19.56	19.46	20.05	20.60	20.84	21.44	21.34	21.93	22.49