

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P261296

Luminaire Tested: **24CZ-LD5-50-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4528.0 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

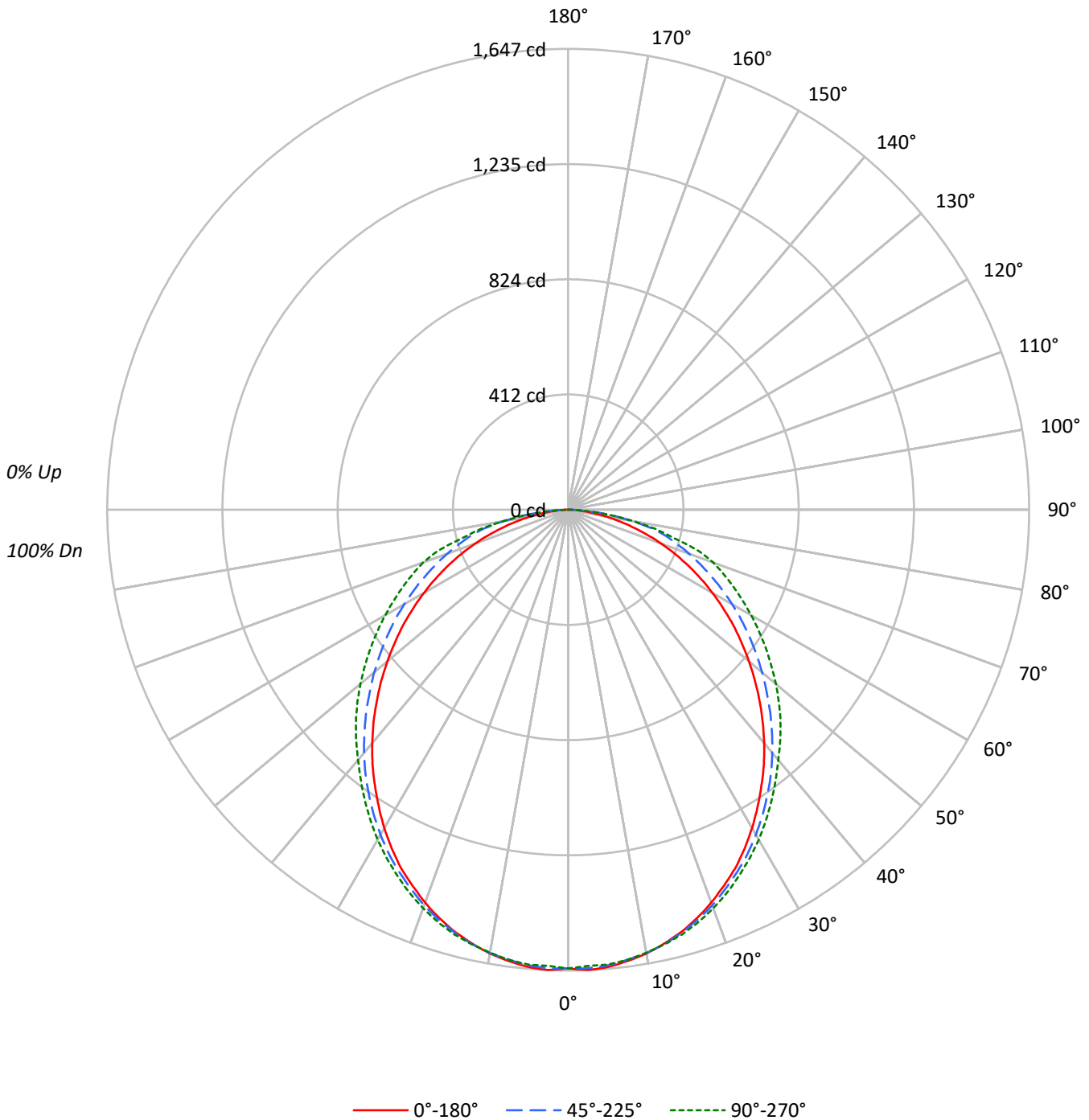
Input Watts (W): 36.084  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2206	2206	2206
5°	2216	2208	2204
10°	2200	2198	2196
15°	2176	2181	2189
20°	2140	2155	2170
25°	2098	2120	2143
30°	2041	2083	2116
35°	1977	2039	2081
40°	1913	1993	2051
45°	1841	1941	2041
50°	1766	1892	2028
55°	1689	1852	2022
60°	1601	1820	2031
65°	1506	1799	2072
70°	1387	1808	2169
75°	1229	1872	2021
80°	1027	1774	1821
85°	767	1419	1303



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.0	3.4
10°-20°	440.8	9.7
20°-30°	656.9	14.5
30°-40°	773.2	17.1
40°-50°	785.8	17.4
50°-60°	706.5	15.6
60°-70°	558.1	12.3
70°-80°	354.1	7.8
80°-90°	97.7	2.2
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°	1252.6	27.7
0°-40°	2025.8	44.7
0°-60°	3518.1	77.7
0°-90°	4528.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4528.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1641	1627	1635	1632	1632	156
15°	1562	1555	1565	1570	1571	440
25°	1413	1412	1428	1437	1443	650
35°	1204	1211	1242	1255	1267	753
45°	967	981	1020	1050	1073	746
55°	720	738	790	841	862	643
65°	473	497	565	627	651	469
75°	236	277	360	392	389	252
85°	50	86	92	84	84	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1639.2	1639.2	1639.2	1639.2	1639.2
2.5°	1646.8	1634.7	1640.7	1637.7	1631.7
5°	1640.7	1627.2	1634.7	1631.7	1631.7
7.5°	1627.2	1616.6	1622.6	1621.1	1622.6
10°	1610.6	1600.0	1609.1	1609.1	1607.6
12.5°	1588.0	1579.0	1589.5	1589.5	1591.0
15°	1562.4	1554.8	1565.4	1569.9	1571.4
17.5°	1530.7	1523.2	1536.8	1541.3	1545.8
20°	1494.6	1491.6	1505.1	1509.6	1515.7
22.5°	1453.9	1453.9	1467.5	1473.5	1482.5
25°	1413.2	1411.7	1428.3	1437.3	1443.4
27.5°	1365.0	1366.5	1387.6	1396.7	1404.2
30°	1313.8	1316.8	1340.9	1351.5	1362.0
32.5°	1259.5	1265.6	1292.7	1304.7	1315.3
35°	1203.8	1211.3	1241.5	1255.0	1267.1
37.5°	1148.1	1158.6	1190.2	1203.8	1217.4
40°	1089.3	1098.3	1134.5	1151.1	1167.6
42.5°	1029.0	1041.1	1077.2	1101.4	1120.9
45°	967.3	980.8	1020.0	1050.1	1072.7
47.5°	905.5	923.6	961.2	1001.9	1021.5
50°	843.7	861.8	904.0	949.2	968.8
52.5°	780.4	798.5	846.7	893.4	914.5
55°	720.2	738.3	789.5	840.7	861.8
57.5°	656.9	676.5	733.7	786.5	807.6
60°	595.1	614.7	676.5	732.2	754.8
62.5°	534.9	555.9	620.7	679.5	702.1
65°	473.1	497.2	565.0	626.8	650.9
67.5°	412.8	439.9	510.7	575.5	601.1
70°	352.6	384.2	459.5	525.8	551.4
72.5°	293.8	328.4	408.3	474.6	488.1
75°	236.5	277.2	360.1	391.7	388.7
77.5°	182.3	227.5	305.8	311.9	320.9
80°	132.6	182.3	229.0	241.1	235.0
82.5°	87.4	137.1	164.2	158.2	156.7
85°	49.7	85.9	91.9	84.4	84.4
87.5°	21.1	34.7	30.1	22.6	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)