

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: P276174

Luminaire Tested: **24CZ2-50-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4920.1 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

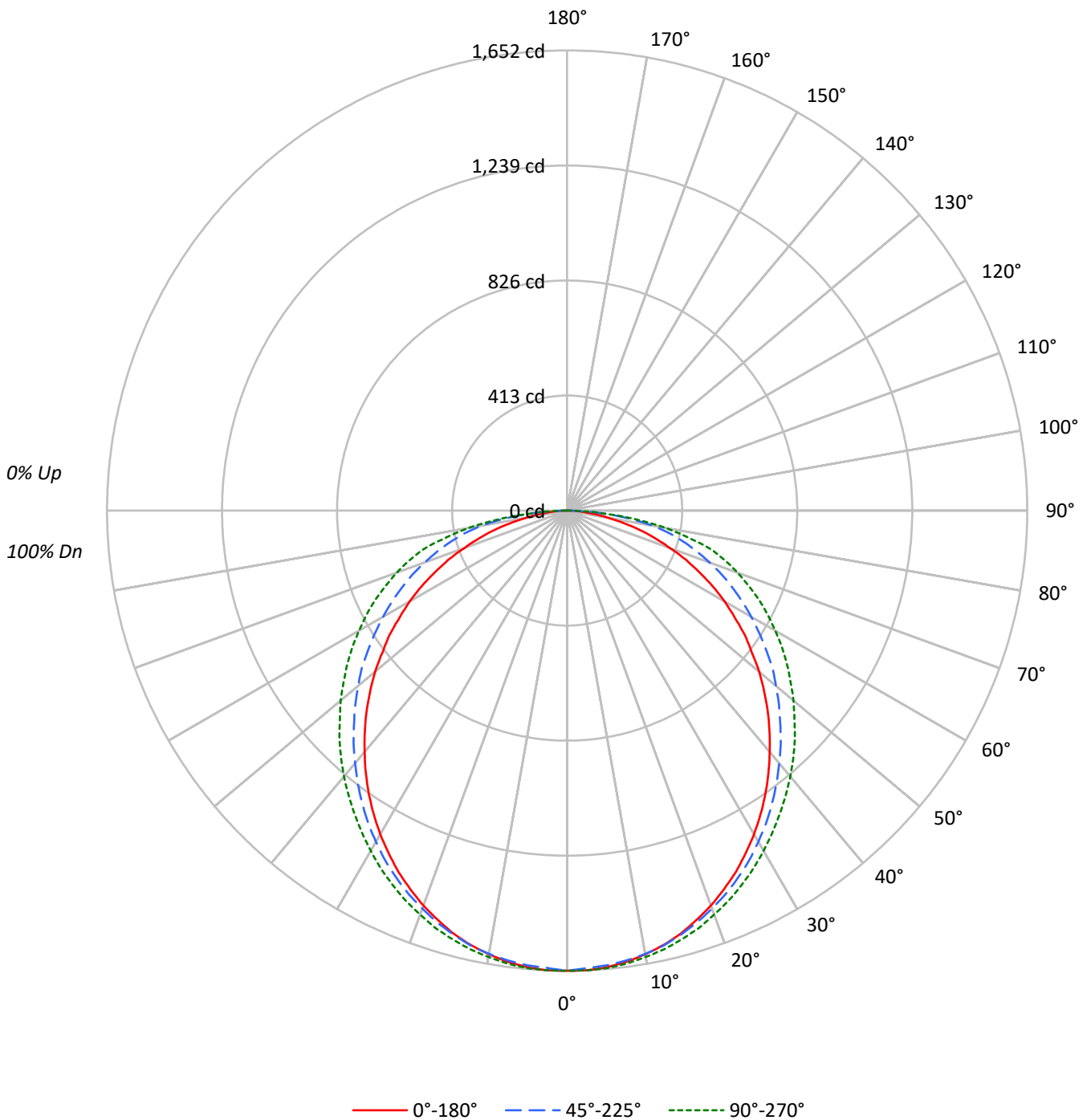
Input Watts (W): 40.827  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	2223	2223	2223
5°	2222	2213	2227
10°	2210	2208	2223
15°	2191	2196	2219
20°	2161	2177	2210
25°	2126	2157	2201
30°	2084	2133	2191
35°	2039	2107	2185
40°	1987	2079	2189
45°	1937	2059	2200
50°	1884	2049	2220
55°	1826	2045	2261
60°	1754	2055	2320
65°	1663	2086	2421
70°	1544	2138	2558
75°	1408	2245	2774
80°	1158	2417	2774
85°	888	2231	2384



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.2	3.2
10°-20°	446.0	9.1
20°-30°	671.2	13.6
30°-40°	804.4	16.3
40°-50°	838.2	17.0
50°-60°	779.9	15.9
60°-70°	642.3	13.1
70°-80°	437.4	8.9
80°-90°	144.4	2.9
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°	1273.5	25.9
0°-40°	2077.8	42.2
0°-60°	3695.9	75.1
0°-90°	4920.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4920.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1645	1645	1639	1647	1649	156
15°	1573	1575	1576	1591	1593	443
25°	1432	1438	1453	1478	1483	659
35°	1241	1256	1282	1317	1330	776
45°	1018	1039	1082	1136	1156	785
55°	778	805	872	941	964	694
65°	522	566	655	732	760	518
75°	271	332	432	509	534	286
85°	58	112	144	154	154	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1651.9	1651.9	1651.9	1651.9	1651.9
2.5°	1651.9	1651.9	1643.7	1651.9	1651.9
5°	1645.4	1645.4	1638.8	1647.0	1648.6
7.5°	1633.9	1635.5	1628.9	1638.8	1640.4
10°	1617.4	1619.1	1615.8	1625.6	1627.3
12.5°	1597.7	1599.4	1599.4	1610.9	1612.5
15°	1573.1	1574.7	1576.4	1591.2	1592.8
17.5°	1541.9	1546.8	1550.1	1568.2	1571.5
20°	1509.1	1514.0	1520.6	1540.3	1543.5
22.5°	1471.3	1477.9	1489.4	1510.7	1515.6
25°	1431.9	1438.5	1453.2	1477.9	1482.8
27.5°	1387.5	1397.4	1415.5	1441.7	1448.3
30°	1341.6	1351.4	1372.8	1400.7	1410.5
32.5°	1292.3	1305.4	1330.1	1361.3	1371.1
35°	1241.4	1256.2	1282.5	1316.9	1330.1
37.5°	1187.2	1203.6	1234.8	1272.6	1289.0
40°	1131.4	1151.1	1183.9	1228.3	1246.3
42.5°	1075.6	1093.6	1134.7	1182.3	1202.0
45°	1018.1	1039.4	1082.1	1136.3	1156.0
47.5°	959.0	980.3	1031.2	1088.7	1106.8
50°	899.9	921.2	978.7	1039.4	1060.8
52.5°	835.8	863.7	929.4	990.2	1011.5
55°	778.3	804.6	871.9	940.9	963.9
57.5°	712.7	743.9	817.8	890.0	914.6
60°	651.9	684.7	763.6	837.5	862.1
62.5°	589.5	625.6	709.4	784.9	812.8
65°	522.2	566.5	655.2	732.4	760.3
67.5°	461.4	507.4	601.0	679.8	704.4
70°	392.5	448.3	543.5	622.3	650.3
72.5°	333.3	389.2	489.3	566.5	594.4
75°	270.9	331.7	431.9	509.0	533.7
77.5°	208.5	275.9	376.0	435.1	443.4
80°	149.4	220.0	312.0	346.5	358.0
82.5°	105.1	169.1	229.9	252.9	259.4
85°	57.5	111.7	144.5	154.4	154.4
87.5°	24.6	47.6	57.5	59.1	60.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)