

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: P260744

Luminaire Tested: **24CZ-LD5-50-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260744  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5226.0 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

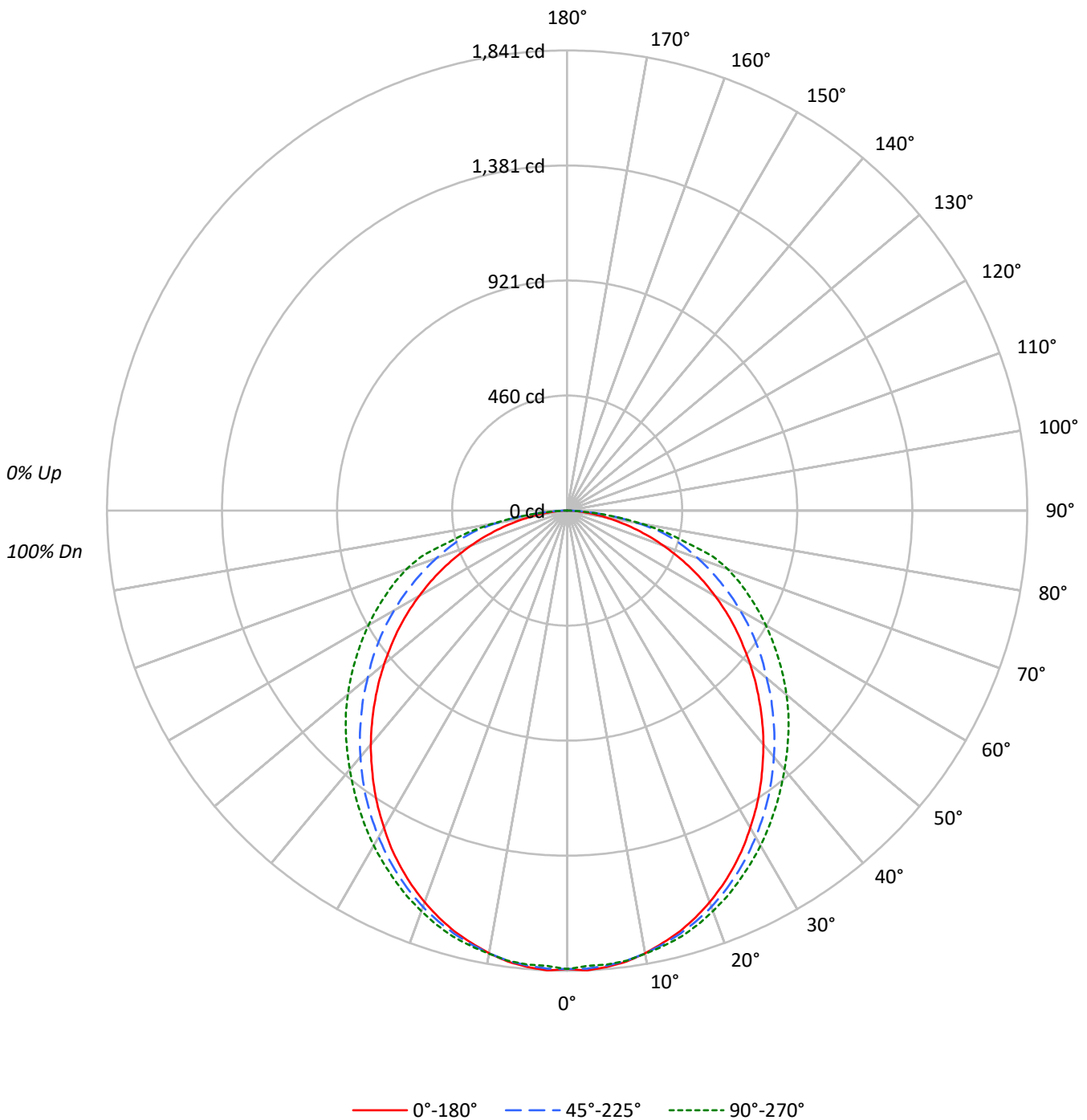
Input Watts (W): 36.735  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	2468	2468	2468
5°	2475	2467	2463
10°	2457	2457	2459
15°	2428	2440	2458
20°	2388	2416	2442
25°	2338	2383	2423
30°	2277	2344	2405
35°	2213	2304	2386
40°	2147	2260	2376
45°	2073	2216	2383
50°	2000	2180	2397
55°	1927	2166	2422
60°	1839	2152	2470
65°	1743	2153	2552
70°	1612	2189	2689
75°	1442	2288	2558
80°	1206	2190	2343
85°	911	1684	1602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.3	3.3
10°-20°	493.3	9.4
20°-30°	737.4	14.1
30°-40°	874.8	16.7
40°-50°	900.4	17.2
50°-60°	826.0	15.8
60°-70°	667.8	12.8
70°-80°	433.4	8.3
80°-90°	119.5	2.3
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°	1404.0	26.9
0°-40°	2278.8	43.6
0°-60°	4005.2	76.6
0°-90°	5226.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5226.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1832	1820	1827	1825	1823	174
15°	1743	1736	1752	1759	1764	491
25°	1575	1576	1605	1619	1632	725
35°	1347	1358	1403	1433	1453	843
45°	1090	1108	1165	1220	1252	841
55°	821	846	923	998	1032	734
65°	548	580	676	766	802	541
75°	277	329	440	492	492	295
85°	59	100	109	106	104	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1834.1	1834.1	1834.1	1834.1	1834.1
2.5°	1841.2	1826.9	1834.1	1832.3	1823.3
5°	1832.3	1819.7	1826.9	1825.1	1823.3
7.5°	1819.7	1807.2	1816.2	1814.4	1816.2
10°	1798.3	1787.5	1798.3	1800.1	1800.1
12.5°	1771.4	1762.5	1776.8	1780.4	1784.0
15°	1742.8	1735.6	1751.7	1758.9	1764.3
17.5°	1707.0	1701.6	1721.3	1730.3	1737.4
20°	1667.6	1665.9	1687.3	1696.3	1705.2
22.5°	1622.9	1622.9	1648.0	1658.7	1671.2
25°	1574.6	1576.4	1605.0	1619.3	1631.9
27.5°	1522.7	1524.5	1558.5	1576.4	1590.7
30°	1465.5	1472.6	1508.4	1531.7	1547.8
32.5°	1408.2	1417.1	1456.5	1483.3	1501.2
35°	1347.4	1358.1	1402.8	1433.2	1452.9
37.5°	1284.7	1297.3	1345.6	1379.6	1402.8
40°	1222.1	1236.4	1286.5	1325.9	1352.7
42.5°	1155.9	1172.0	1227.5	1274.0	1302.6
45°	1089.7	1107.6	1164.8	1220.3	1252.5
47.5°	1023.5	1045.0	1105.8	1166.6	1200.6
50°	955.5	977.0	1041.4	1111.2	1145.2
52.5°	887.5	912.6	984.1	1055.7	1089.7
55°	821.3	846.3	923.3	998.4	1032.4
57.5°	753.3	778.4	862.5	941.2	975.2
60°	683.5	712.1	799.8	880.3	917.9
62.5°	615.5	645.9	739.0	824.9	860.7
65°	547.5	579.7	676.4	765.8	801.6
67.5°	477.7	515.3	615.5	706.8	744.4
70°	409.8	450.9	556.5	647.7	683.5
72.5°	343.5	388.3	497.4	590.5	611.9
75°	277.3	329.2	440.2	492.1	492.1
77.5°	214.7	272.0	375.8	395.4	406.2
80°	155.7	218.3	282.7	306.0	302.4
82.5°	103.8	166.4	202.2	202.2	196.8
85°	59.0	100.2	109.1	105.6	103.8
87.5°	25.1	37.6	34.0	26.8	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)